

GREATER MACARTHUR GROWTH AREA

PLANNING PROPOSAL TO REZONE

THE APPIN (PART) PRECINCT FOR URBAN DEVELOPMENT

APPIN ROAD, BROOKS POINT ROAD, ELLADALE ROAD, MACQUARIEDALE ROAD, NORTHAMPTONDALE ROAD, WILTON ROAD, APPIN

14 November 2022



We acknowledge the Traditional Owners of the many lands on which we live and work. We pay respect to First Nations Elders past and present and thank them for their continuing care of Country, culture and community.

This document has been prepared by:

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APPIN (PART) PRECINCT PLAN DOCUMENTS - FOLDER 1

Name	Version	Date
State Environmental Planning Policy (Precincts—Western Parkland City) 2021 Appendix X Appin (Part) Precinct Plan 2022	-	11 11 2022
Land Application Map	2	28 10 2022
Land Zoning Map (Version 1)	2	28 10 2022
Lot Size Map (Version 1)	2	28 10 2022
Sequencing Development Map	2	28 10 2022
Clause Application Map	2	28 10 2022
Additional Permitted Uses Map	2	28 10 2022
Heritage Map	2	28 10 2022
Appin (Part) Precinct Structure Plan	С	28 10 2022

^{*} Appin and North Appin Precincts Indicative Plan is not part of the Appin (Part) Precinct Plan documents. It is provided in the Planning Proposal package to demonstrate the Appin (Part) Precinct can connect to the broader Precinct.

REPORTS – FOLDER 2

#	Report Name		Consultant	Date	Revision
1	Urban Context Report	Appin & North Appin Precincts	Urbis	11 11 22	G
2	Landscape Visual Impact	Appin & North Appin Precincts	Urbis	Oct. 22	Final
3	Sustainable Development Opportunities	Appin (Part) Precinct	Urbis	10 10 22	V1.3
4	Preliminary Geotechnical Investigation	Appin (Part) Precinct	Douglas Partners	12 10 22	Rev.3
5	Site Investigation – Contamination	Appin (Part) Precinct	Douglas Partners	12 10 22	Rev.3
6	Biodiversity Assessment	Appin (Part) Precinct – Version 1	Niche Environment & Heritage	24 10 22	1
7	Water Cycle Management	Appin (Part) Precinct	J. Wyndham Prince	12 10 22	Α
8	Air Quality Assessment	Appin (Part) Precinct	Northstar Air Quality	07 10 22	V.4
9	Acoustic Assessment	Appin & North Appin Precincts	Spectrum Acoustics	06 10 22	Final
10	Strategic Transport Assessment	Appin & North Appin Precincts	WSP	07 10 22	D
11	Bushfire Strategic Study	Appin (Part) Precinct	Eco Logical Australia	11 10 22	V.6
12	Bushfire Evacuation Traffic Study	Appin & North Appin Precincts	WSP	07 10 22	С
13	Urban Heat Assessment	Appin (Part) Precinct	Civille	07 10 22	Α
14	Cultural Values Assessment & Connecting with Country Framework	Appin (Part) Precinct	Waters Consultancy	Under review Registered Ab Parties	,
15	Aboriginal Objects Due Diligence	Appin (Part) Precinct	Niche Environment & Heritage	12 10 22	D3
16	Historic Heritage Constraints	Appin (Part) Precinct	Niche Environment & Heritage	12 10 22	V.2
17	Social Infrastructure and Open Space	Appin & North Appin Precincts and Appin (Part) Precinct	Urbis	14 11 22	V.10
18	Social & Health Impact Assessment	Appin (Part) Precinct	Urbis	07 10 22	V.5
19	Western City Housing Supply Analysis	n/a	Atlas Urban Economics	18 06 21	-
20	Appin Investigation Area – Residential Density Discussion Paper	n/a	Atlas Urban Economics	28 09 21	-
21	Retail and Employment Study	Appin & North Appin Precincts	Urbis	07 10 22	1
22	Infrastructure Phasing Plan	Appin & North Appin Precincts	IDC (Infrastructure Development Consulting)	12 10 22	D
23	Infrastructure Delivery Plan	Appin (Part) Precinct	GLN Planning	14 10 22	Final

ABBREVIATIONS

AHIP Aboriginal Heritage Impact Permit

AHMS Aboriginal Heritage Management Strategy

ALARP As Low As Reasonable Possible

ANEC Australian Noise Exposure Concept

ANEF Australian Noise Exposure Forecast

BA Biodiversity Assessment

BC Act
Biodiversity Conservation Act 2016
C2
Environmental Conservation Zone
CPCP
Cumberland Plain Conservation Plan

CUC Certified Urban Capable
DCP Development Control Plan

DPE Department of Planning and Environment

DPI Department of Primary Industry

EP&A Act Environmental Planning and Assessment Act 1979

EPBC Act Environmental Protection Biodiversity Conservation Act

GANSW Government Architect New South Wales

GCC Greater Cities Commission

GMGA Greater Macarthur Growth Area

GM 2040 Greater Macarthur 2040, an interim plan for the Greater Macarthur Growth Area

GMSIC Greater Macarthur Special Infrastructure Contribution

GSRP Greater Sydney Region Plan

HP High Pressure

ILP Indicative Layout Plan

LGA Local Government Area

LEP Local Environmental Plan

LHS Local Housing Strategy

LSPS Local Strategic Panning Statement

MRA Metropolitan Rural Area

NCA Non-Certified – Avoided

NCE Non-Certified Excluded

NRAR Natural Resources Access Regulator
PBP Planning for Bushfire Protection 2019
SIC Special Infrastructure Contribution
SEPP State Environmental Planning Policy

SHRL Southern Highlands Rail Line
SMS Safety Management Statement

SP2 Infrastructure Zone

SPA State Planning Agreement

SSAL State Significant Agricultural Land

SWGA South West Growth Area

TAP Technical Assurance Panel

TfNSW Transport for NSW

VPA Voluntary Planning Agreement
UDZ Urban Development Zone
WM Act Water Management Act 2000

WPC SEPP State Environmental Planning Policy (Precincts—Western Parkland City) 2021

WSI Western Sydney International Airport

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1. EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

Accommodating population growth within the Greater Macarthur Growth Area

- 1.1 Greater Sydney's population is projected to grow to approximately 6.1 million by 2041 over a million more people in 20 years than currently live in the region.
- 1.2 The NSW Government has identified Growth Areas where new urban areas will accommodate much of this growth. The Greater Macarthur Growth Area (the GMGA) is one Growth Area and is a logical extension of the urban form of south-west Sydney.
- 1.3 The NSW Government declared the Greater Macarthur Growth Area in 2019, with an amendment to the then State Environmental Planning Policy (the **SEPP**) (Sydney Growth Centres) (2006). The SEPP is now incorporated as Chapter 3 within State Environmental Planning Policy (Precincts-Western Parkland City) 2021 (WPC SEPP).
- 1.4 The GMGA is divided into two components. In the north, the urban renewal corridor from Glenfield to Macarthur, and in the south, the development of land release areas from Menangle Park to Appin.
- 1.5 The Appin Precinct and the North Appin Precinct (the **precincts**) are the southernmost land release precincts of the GMGA. The objective is to deliver around 20,000 dwellings catering to the needs of Sydney's growing population and create approximately 4,000+ permanent jobs and over 30,000 construction jobs during the delivery of the precincts. The precincts' anticipated dwellings could increase due to trends in more medium-density development around transport corridors and centres.
- 1.6 The precincts have access to Campbelltown-Macarthur, the Illawarra Shoalhaven region, the proposed Western Sydney International Airport, and the adjoining new city of Bradfield.
- 1.7 The GMGA progresses the strategic planning framework for urban development in the Greater Sydney Region. It is consistent with the Greater Sydney Commission's strategic vision for the Western Parkland City and the priorities and actions under the Western City District Plan.
- 1.8 The draft plan 'Greater Macarthur 2040', an interim plan for the GMGA, builds on this strategic planning framework, provides a framework for land uses, and identifies critical state and local infrastructure items.
- 1.9 Land in the GMGA is to be rezoned and released to supply housing and provide employment to accommodate Sydney's growing population.

The Planning Proposal

- 1.10 A Planning Proposal (the **Proposal**) has been prepared by Walker Corporation Pty Limited and Walker Group Holdings Pty Limited (together the **Proponent**) to rezone 1,378 hectares of land (the **Site**) within the GMGA Appin Precinct, hence the Proposal's identification as the Appin (Part) Precinct.
- 1.11 The Site is to be rezoned from Rural Landscape to three (3) zones comprising (i) Urban Development, (ii) Infrastructure and (iii) Environmental Conservation, to permit housing, roads and environmental management of ecologically significant land.
- 1.12 Within the *Urban Development Zone*, approximately 12,000+ dwellings can be delivered. A planning framework as to how the Site will be developed is provided in the Proposal comprising the *Appin (Part) Precinct Plan (the precinct plan)*, the *Appin (Part) Precinct Structure Plan (the structure plan)* and supporting technical studies and investigations.
- 1.13 The precinct plan establishes the statutory framework by zoning the site for *Urban Development* (**UDZ**), Environmental Conservation (**C2**) and Infrastructure (**SP2**), providing development standards for minimum lot size and clauses for the satisfactory arrangement of services, development sequencing and consistency with the structure plan.
- 1.14 The precinct plan will be incorporated into the State Environmental Planning Policy (Precincts Western Parkland City) 2021 (WPC SEPP). The WPC SEPP will contain the statutory provisions (clauses and maps) that will apply to the Site and is the principal legislation that will control development and planning decisions for the Site.
- 1.15 The Appin (Part) Precinct Structure Plan delivers a strategic vision reflecting government, industry and community priorities. This vision and development framework will be used to guide planning for the development of the Appin (Part) Precinct. For a development application to be approved, the precinct plan provisions will require a Development Control Plan (DCP) to be prepared to be generally in accordance with the Appin (Part) Precinct Structure Plan.
- 1.16 The development of the Appin (Part) Precinct will be staged over many years, with Release Area 1 being the first stage. Release Area 1 envisages the delivery of approximately 3,500+ dwellings providing a diversity of housing, retail and employment centres, a school, open space and a transport network. The pathway of development in Release Area 1 requires the following:
 - Incorporating the Appin (Part) Precinct and Appin (Part) Precinct Structure Plan in the WPC SEPP
 - Adoption of a new DCP for Release Area 1
 - The Secretary of the Department of Planning and Environment is satisfied that development is generally in accordance with the Appin (Part) Precinct Structure Plan
 - The provision of infrastructure in accordance with a planning agreement

Cumberland Plain Conservation Plan

- 1.17 The Cumberland Plain Conservation Plan (**CPCP**) applies to the Site. The strategy to enforce the land categories of the mapped CPCP areas is through rezoning land. The mapped CPCP areas are (i) Certified Urban Capable Land (**CUC**), and the Non-Certified land categories are (ii) Avoided Land (**NCA**) and (iii) Excluded Land (**NCE**).
- 1.18 The Appin (Part) Precinct Plan includes two (2) versions of the proposed zonings over the Site:
 - **Version one (1)** Plan complies with the currently approved CPCP mapping and is consistent with the Ministerial Direction 3.6 Strategic Conservation Planning.
 - Version two (2) proposes an amendment to the CPCP mapping to ensure a rational and efficient layout of the (UDZ) Urban Development zone, (SP2) Infrastructure zone and the (C2) Environmental Conservation zone.
- 1.19 The Proponent is working with the Department of Planning and Environment (**DPE**) to progress an amendment to the CPCP mapping. Version two (2) reflects proposed changes and is the preferred outcome should the proposed CPCP amendments be finalised. The proposed amendments to the CPCP do not impact Release Area 1.
- 1.20 The intention is for Version 1 to be approved with the initial rezoning of the Appin (Part) Precinct. Subject to a future modification of the CPCP mapping; Version 1 would be replaced with Version 2. Version 2 affects land in the northern part of the Appin (Part) Precinct (approximately 1.5%) and will be the subject of an amendment to the CPCP mapping to swap Certified Urban Capable Land (CUC) with Avoided Land and Excluded Land (NCA and NCE).
- 1.21 Should the proposed amendments to the CPCP be finalised, the Appin (Part) Precinct Structure Plan will be updated, noting the structure plan for Release Area 1 remains unchanged.
- 1.22 Subsequent amendments to the WPC SEPP will be required once the proposed amendments to the CPCP mapping are completed. The amended mapping is subject to a separate process which is an action that the NSW Department of Planning and Environment has flagged.

Development Control Plan

1.23 A Development Control Plan (DCP) for the GMGA Area and Release Area 1, generally consistent with the structure plan, will be prepared following the exhibition of the Proposal. The DCP will detail development controls and guidelines for development applications. The DCP will be expanded to the rest of the Site in stages.

Technical Assurance Panel

- 1.24 The Proposal has been prepared with the benefit of the NSW Department of Planning and Environment's (DPE) Technical Assurance Panel (TAP) (a pilot program to undertake strategic investigations for precincts). The program ran over two (2) years and is a new way for state agencies, councils and landowners to work together to undertake strategic studies for precincts, leading to the lodgement of a formal rezoning proposal.
- 1.25 The TAP program required the Proponent to address local, state and strategic matters. Under the TAP program, workshops ensured collaboration and examination of critical issues.
- 1.26 The Proponent prepared a range of technical studies during the program. The TAP members were consulted and assisted with scoping and reviewing the draft studies. The TAP members have had access to the final draft studies as part of the TAP program.
- 1.27 The program saw the Proponent prepare a draft rezoning proposal package for review by the TAP members. The TAP, in response, provided a letter with outcomes and recommendations to the Proponent and concluded the program in September 2022. The Planning Proposal to rezone part of the Appin Precinct is the formal submission responding to the recommendations of the TAP.

The Proposal demonstrates strategic merit

- 1.28 The Proposal demonstrates strategic merit and is an opportunity to:
 - Realise the vision for the Greater Macarthur Growth Area outlined in the Greater Sydney Region Plan,
 Western City District Plan and Greater Macarthur 2040 Plan
 - Contribute to more housing supply and jobs in the Western Parkland City by zoning the Site for urban development (most of the Site is in one sizeable consolidated land holding) and secure the delivery of approximately 12,000+ homes
 - Provide new state, regional and local infrastructure services, amenities and recreational facilities to serve the existing and new communities in the Appin Precinct
 - Provide affordable housing
 - Protect cultural values and heritage significance which follows extensive engagement with the Aboriginal community
 - Protect the Appin Massacre Cultural Landscape (recommended for listing on the State Heritage Register by the NSW Heritage Council) to provide access to Country for truth-sharing and healing
 - Protect koala habitat corridors and biodiversity
 - Implement a significant portion of the Nepean River koala corridor, as per the advice and recommendations of the NSW chief scientist,
 - Provide significant biodiversity habitat expansion and re-vegetation
 - Deliver a regional park (approximately 21ha) as part of Release Area 1
 - Revegetate cleared former rural lands to achieve a 40% tree canopy target

The Proposal is shaped around vision, protection, guiding and delivery

- 1.29 The Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan is shaped around:
 - A vision acknowledging the significance of the landscape, Indigenous history, Designing with Country values and acknowledging European history
 - Protection of the natural environment and the koala population
 - Creating a sustainable built environment
 - Guiding the delivery of infrastructure to the benefit of the community
 - Delivery of residential neighbourhoods set within the landscape corridors of the Nepean and Cataract Rivers supported by local amenities, transit corridors and community infrastructure

The Proposal report is organised into four (4) parts

- 1.30 The Proposal report comprises four (4) parts:
 - Part A: Strategic Positioning of the Planning Proposal
 - Part B: Key findings from technical studies, opportunities, constraints and directions for the structure plan and precinct plan
 - Part C: Explanation of the Appin (Part) Precinct Plan, Appin (Part) Precinct Structure Plan, and the amendment to the WPC SEPP
 - Part D: Proposed application to amend the boundaries of the Cumberland Plain Conservation Plan (CPCP),
 to be submitted under separate cover.
- 1.31 **Part A:** Strategic Positioning includes the following Chapters:
 - Chapter 2: The Site provides an overview of the site, the Appin and North Appin Precincts and land ownership.
 - Chapter 3: Planning Framework summarises the strategic planning policies and directions and statutory planning legislation controls. A contextual overview is provided of the land release precincts of Appin and North Appin and their role and function in the growth of Sydney into a thriving Western Parkland City.
- 1.32 Part B: Studies, opportunities and constraints, and directions include the following Chapters:
 - Chapter 4: Site Investigations, Constraints, Developable Area & Structure summarises the key findings from investigations and studies. It is the evidence base which informs the consolidated developable land area and structuring elements for the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan.
 - Chapter 5: Planning Approach articulates the vision and design principles that guide the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan.

1.33 **Part C:** explains the Appin (Part) Precinct Plan and the Appin (Part) Precinct Structure Plan. This part has been prepared generally in accordance with DPE's Local Environmental Plan Making Guidelines (December 2021). Part C includes the following Chapters:

• Chapter 6:

- Part 1 The objectives and intended outcomes of the amendment to the WPC SEPP
- o Part 2 An explanation of the provisions in the amended WPC SEPP
- o Part 3 The justification for the submission
- o Part 4 Maps that identify the area to be rezoned and other supporting maps
- Part 5 The community consultation which is to be undertaken for the rezoning and associated supporting plans and documents
- Chapter 7: Conclusion
- 1.34 Part D: Provides a package of proposed amendments to the CPCP. Amendments to the CPCP mapping are to be submitted under separate cover and are subject to a different legislative process. The purpose of Part D is to disclose foreshadowed changes to the version 1 zonings in the Appin (Part) Precinct Plan arising from amendments to be formally requested to the mapped NCA and NCE areas. Part D includes the following Chapter:
 - Chapter 8: CPCP Amendment Package This Chapter is a summary of the proposed modifications within the three (3) mapped CPCP areas –(i) Certified Urban Capable (CUC), (ii) Non-Certified Avoided (NCA) and (iii) Non-Certified Excluded (NCE). The amendments entail a land swap between land-zoned (UD) Urban Development and land zoned (C2) Environment Conservation.

Proposed Planning Agreements

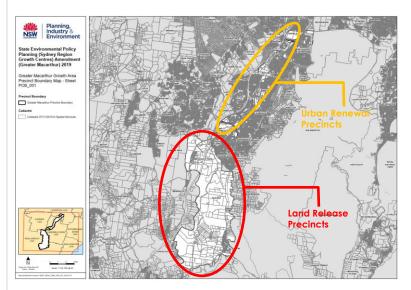
- 1.35 The Proponent intends to enter into three Planning Agreements to support the Proposal as follows:
 - State Planning Agreement (SPA) with the Minister for Planning. The SPA will address the funding, timing and delivery of state and regional infrastructure, such as regional open space, schools, roads, transit corridors, road infrastructure and road upgrades.
 - Cumberland Plain Conservation Plan (CPCP) SPA with the Minister for Planning. The Appin (Part) Precinct Plan includes more than 400 hectares of land to be zoned for *Environmental Conservation* and identified as "avoided land" under the CPCP. The SPA will result in the dedication of the CPCP "avoided land" to the NSW Government, delivering significant ecological and community benefits.
 - Local Voluntary Planning Agreement (VPA). The VPA will address the delivery of infrastructure for Release
 Area 1, including active and passive open space, water cycle management, traffic and transport,
 community facilities and riparian corridors.
- 1.36 The timing and finalisation of the Planning Agreements are yet to be determined.

Conclusion

- 1.37 The Proposal aligns with the NSW Government's strategic land use planning, policies and infrastructure delivery requirements. The development potential is tempered by a landscape-based approach that protects koalas and the environment and respects the Aboriginal cultural values of Country to shape the character of new communities.
- 1.38 Typically, some of the challenges for new developments in Sydney are the urban heat island effect and the lack of green space and infrastructure, such as inadequate public transport, schools, and health services. The Proposal considers these problems and responds by:
 - providing more than 43% of the Site as green infrastructure (conservation land and open space) to mitigate the impacts of urban heat;
 - taking advantage of blue infrastructure in the form of the Nepean and Cataract rivers; and
 - providing an infrastructure delivery plan responsive to Appin's priorities and growth patterns for the staged implementation of utilities, roads, schools and parks.
- 1.39 An analysis of housing supply in the Western City District (the **District**) has found the current planned housing supply across the District, including the Wilton and South West Growth Areas, would not keep up with housing demand. This shortfall was demonstrated to occur before 2036 and was projected to increase significantly before 2041.
- 1.40 The Proposal will zone 887 hectares of land for urban development, capable of providing 12,000+ dwellings, schools, neighbourhood centres, and community facilities. All this will be found in a series of walkable urban residential neighbourhoods within the landscape corridors of the Nepean and Cataract Rivers and will be supported by amenities, transit corridors and community infrastructure.

Hierarchy of plans

THE GREATER MACARTHUR GROWTH AREA





GMGA Boundary - SEPP (Sydney Growth Centres) 2006 (DPE, 2019)

Greater Macarthur 2040 - Structure Plan (Land Release Precincts – Gilead, North Appin & Appin) (DPE, 2018)

The Greater Macarthur Growth Area (GMGA) was declared a growth area in December 2019.

An amendment was made to the *State Environmental Planning Policy (Sydney Region Growth Centres)* (2006) to identify the GMGA, incorporating Glenfield to Macarthur urban renewal precincts and the land release precincts south of Campbelltown, including Gilead, North Appin and Appin.

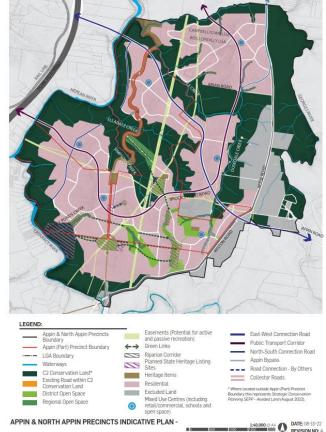
DPE's 2018 Greater Macarthur 2040: An Interim Plan for the Greater Macarthur Growth Area (**GM2040**) provides the strategic planning framework for the GMGA, and the GMGA Structure Plan outlines the development framework for the land release areas.

The GMGA supports the Greater Sydney Commission's strategic vision for the Western Parkland City and the Western City District Plan.

The Greater Macarthur 2040 Structure Plan is currently being updated by the DPE and is anticipated to be released shortly. This Planning Proposal aligns with the updated GM 2040 Structure Plan.

PROPOSAL - APPIN AND NORTH APPIN PRECINCTS INDICATIVE PLAN (3,826 HA)





Location plan - Appin & North Appin Precincts

Appin and North Appin Precincts Indicative Plan (Urbis & Hatch, 2022)

The GMGA is divided into precincts. The Appin Precinct and North Appin Precinct are the southernmost land release precincts. The goal is to deliver around 15,000 dwellings in Appin and around 5,000 in North Appin.

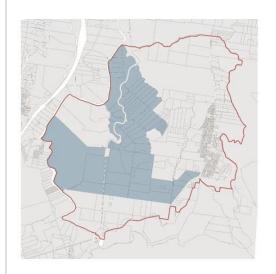
The Appin and North Appin Precincts Indicative Plan, prepared by the Proponent, shows the general structure and arrangement of land uses, vegetation conservation areas, access points and collector roads and infrastructure within the framework of the GMGA Structure Plan.

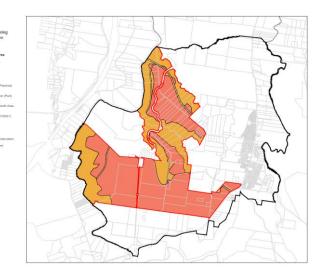
The Indicative Plan demonstrates how the release of the Appin (Part) Precinct can potentially connect to the broader precinct.

The Indicative Plan will likely change over time as landowners prepare planning proposals for their sites.

The Indicative Plan has no statutory weight.

THE PROPOSAL - APPIN (PART) PRECINCT PLAN (1,378 HA) (Version 1)





Location plan - Appin (Part) Precinct

Appin (Part) Precinct Plan - Land Zoning Map (V.1) (Proponent, 2022)

The submission by Walker Corporation Pty limited and Walker Group Holdings Pty Limited (the **proponent**) requests the rezoning of 1,378 hectares of land (the **Site**), i.e. the Appin (Part) Precinct.

The Site is to be rezoned from (RU2) Rural Landscape to (UDZ) Urban Development, (SP2) Infrastructure and C2 Environmental Conservation.

The Site's rezoning envisages the delivery of 12,000+ new homes, new roads and the management of ecologically significant land.

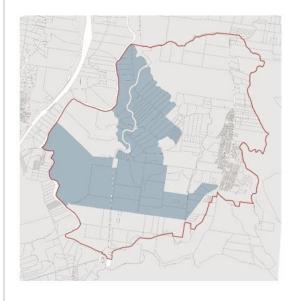
The provisions applying to the carrying out of development in a growth centre precinct are specified in the Appendix of the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (WPC SEPP).

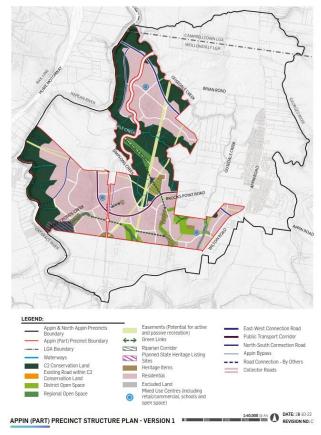
The Appin (Part) Precinct Plan (the **precinct plan**) will be incorporated into the WPC SEPP Appendix. The precinct plan will contain provisions (clauses and maps) to facilitate the Site's development. The maps included are land application, zoning, lot size, development sequencing, heritage, flood and additional permitted uses. The clauses will cover land use zones, permitted or prohibited development, development standards, miscellaneous provisions, urban release areas and additional local provisions.

Areas outside the Site are not proposed to be rezoned or be subject to the Appin (Part) Precinct Plan or Appin (Part) Precinct Structure Plan.

Areas outside the Site will be subject to future Planning Proposals guided by the broader GMGA and GM2040 prepared and issued by the DPE.

THE PROPOSAL - APPIN (PART) PRECINCT PLAN (1,378 HA) - Structure Plan (Version 1)





Location plan – Appin (Part) Precinct

Appin (Part) Precinct Structure Plan (Urbis & Hatch, 2022)

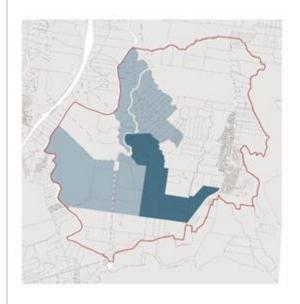
A structure plan has been prepared for the Site and is shown on the Appin (Part) Precinct Structure Plan (the structure plan).

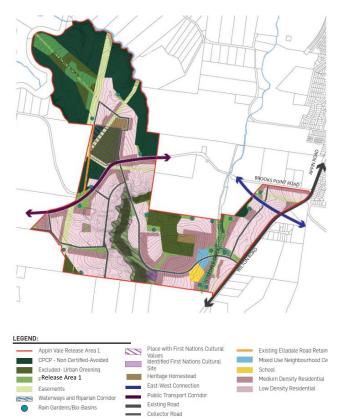
Clauses in the WPC SEPP will require the consent authority must be satisfied in granting consent to development that the development is consistent with the Appin (Part) Precinct Structure plan.

The structure plan informs the proposed rezoning, staging, land use and infrastructure provision. It delivers a vision reflecting government, industry and community priorities.

Following the exhibition of the Planning Proposal, the Appin (Part) Precinct Structure Plan is to be adopted by the Planning Secretary and published on the DPE website. The structure plan is adopted before development consent is granted for subdivision into housing lots.

PROPOSAL – DEVELOPMENT CONTROL PLAN – Release Area 1 (Stage 1)





Appin Part Precinct Structure Plan Release Area 1 (Stage 1) (Urbis & Hatch, 2022)

A draft Greater Macarthur Growth Area (GMGA) Development Control Plan 2022 (DCP) will be prepared, ensuring any new development is consistent with the Greater Macarthur 2040 vision of creating a liveable new urban area set in the natural environment. The DCP will give more detailed design guidelines and controls for residential development in the Appin (Part) Precinct.

The draft DCP will incorporate a Schedule that will initially apply to Release Area 1 – 395 hectares and 3,500 dwellings.

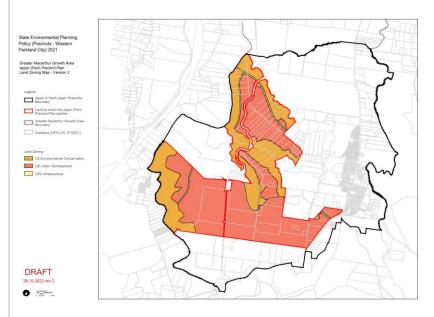
The DCP will be expanded to cover the rest of the Appin and North Appin Precincts.

The Schedule for Release Area 1 will be read in conjunction with the main body of the GMGA DCP. Development typologies and control tables (setbacks, building height, massing and siting, garages and car parking) will be included in the Schedule.

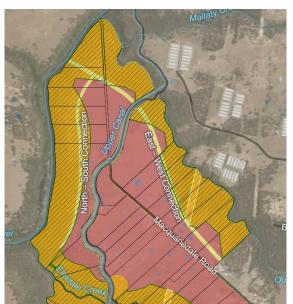
The DCP will implement the Appin (Part) Precinct Structure Plan in greater detail and achieve the intended outcomes of the structure plan.

It is intended that a complying code (similar to existing complying codes in *State Environmental Planning Policy (Exempt and Complying Development Codes)* 2008) will apply to the Site. A decision on the complying code provisions will be made at a later date.

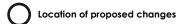
PROPOSED AMENDMENT TO CPCP AND SUBSEQUENT AMENDMENT TO WPC SEPP - APPIN (PART) PRECINCT PLAN (1,378 HA) - ZONING MAP AND STRUCTURE PLAN (Version 2)

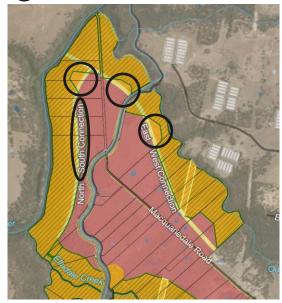


Appin (Part) Precinct Plan - Land Zoning Map (V.2) (Proponent, 2022)



Land Zoning Map – Version 1

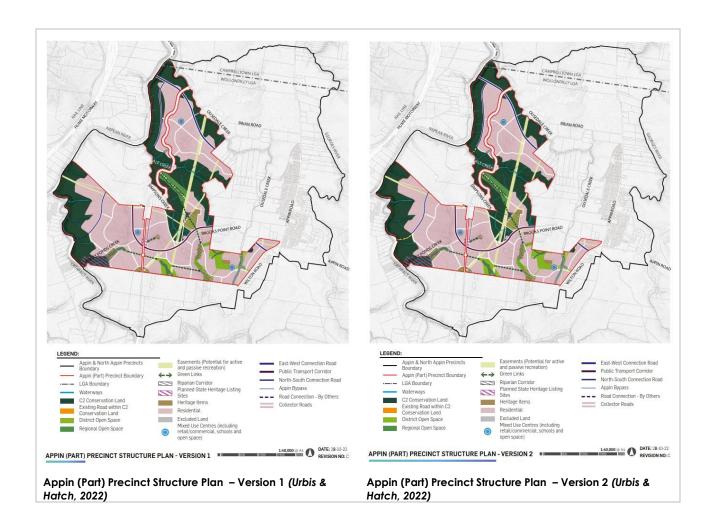




Land Zoning Map – Version 2

Comparison of Version 1 and Version 2 land zoning greas

Land Zone	Version 1 (ha)	Version 2 (ha)
UDI Urban Development Ione	887.13	888.56
SP2 Infastructure Zone	21.19	21.19
C2 Environmental Conservation Ione	470.21	468.78
TOTAL	1,378	1,378

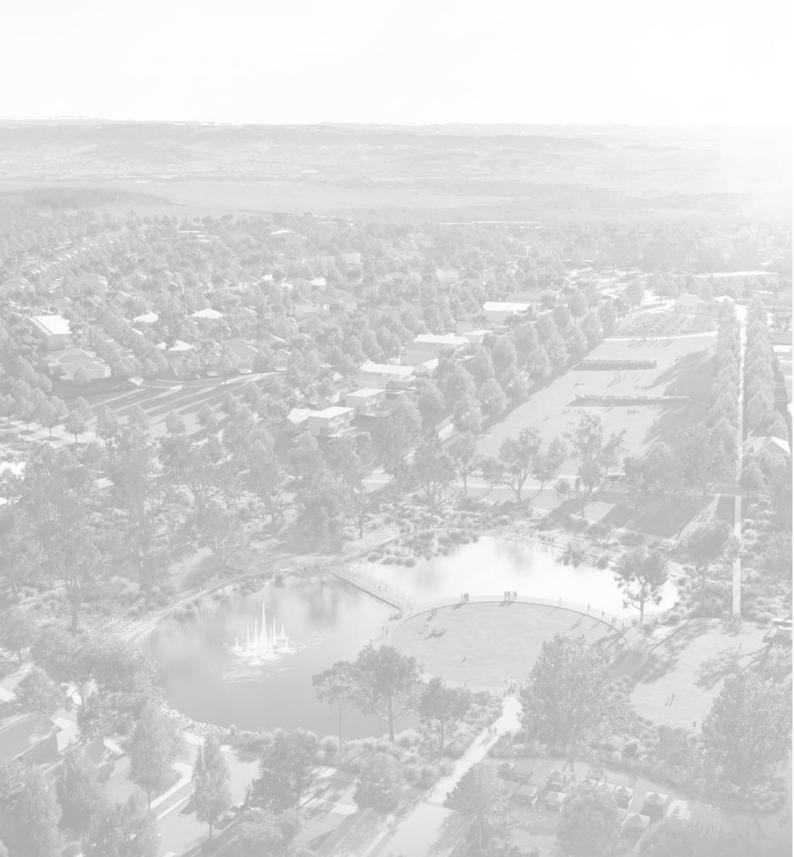


Appin (Part) Precinct Metrics (Version 1)

Land Use	Area (ha)
Site Area	1,378
Proponent Land	1,284
other Land	94
Net Developable Area (including regional park)	802.9 ha
Total Centres & Employment	10.31
Mixed-Use Centres	10.31
Employment Lands	0
Total Residential (12,000 + dwellings & 36,000 people)	654.70 ha
- Medium Density	126.60
- Low Density - Traditional	459.53
- Low Density - Site Responsive	68.57
Rural	0
Schools	7.01
Total Open Space	118.8 (3.09ha per 1,000 people)
- Of which is Active Open Space	52.8(1.37ha per 1,000 people)
Regional Park	20.99
District Parks	76.01
Local Parks	21.80
Additional Other Open Spaces (other green grid elements/easement)	36.70
Total Open Space - Release Area 1	62.09 (6.5ha per 1,000 people)
- Of which is Active Open Space (excluding	17.5 (1.834 ha per 1,000 people)
Total Roads	210.68
East-West connection arterial road (SP2)	11.61
Appin Road upgrade (SP2) / Transit corridor link road	0
North South Connection	11.56
Transit Corridor (SP2)	12.98
Collector Streets	45.29
Local Streets	126.56
Existing Roads to be retained	2.69
Total Proposed Land Zones	1,378
(C2) Environmental Conservation Zone	470.21
(UD) Urban Development Zone	887.13
(SP2) Infrastructure	21.19

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Part A – STRATEGIC POSITIONING



2.0 THE SITE

Overview:

This chapter provides an overview of the Site's context and key features and land ownership.

2.0 THE SITE

CONTEXT – APPIN & NORTH APPIN PRECINCTS

- 2.1 The Site to be rezoned is within the GMGA Appin Precinct. The following discussion includes the Appin and North Appin Precincts because this is the context in which the Site was discussed during the TAP program.
- 2.2 The Appin Precinct and the adjoining North Appin Precinct are the southernmost land release precincts within the Greater Macarthur Growth Area (GMGA). The NSW state government declared Greater Macarthur as a growth area in 2019. An amendment was made to State Environmental Planning Policy (Sydney Growth Centres) (2006) (SEPP Sydney Growth Centres) to identify the Greater Macarthur Growth Area. SEPP Sydney Growth Centres is now incorporated as Chapter 3 within State Environmental Planning Policy (Precincts-Western Parkland City) 2021 (WPC SEPP).
- 2.3 The following information provides an overview of the southern land release precincts of Appin and North Appin summarising land ownership, access and connectivity, topography and waterways and key features. The information provides context for the Site. At the end of the section, land ownership details are provided for the Site.

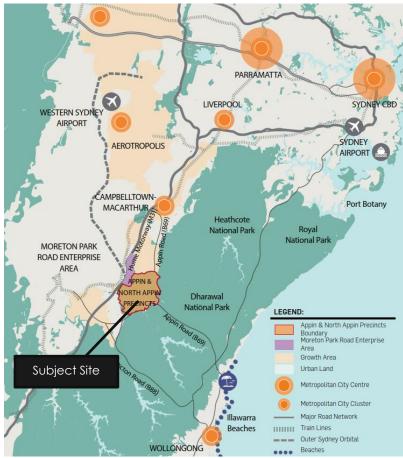


Figure 1: Strategic context within the broader region (Source: Urbis)

Location

- 2.4 The Appin and North Appin Precincts (**the precincts**) have a total area of 3,826 ha and can potentially deliver 20,000 new homes (around 15,000 in Appin and around 5,000 in North Appin) and support approximately 4,130 jobs.
- 2.5 The precincts are approximately 17km from Campbelltown-Macarthur strategic centre, 36km from the Liverpool CBD, 50km from Parramatta CBD and 56km from Sydney CBD. They are also approximately 35km from the future Western Sydney International Airport (WSI) and the adjoining city of Bradfield.
- 2.6 The precincts are strategically located south of the Campbelltown/Macarthur metropolitan cluster, north west of the Illawarra and north of the Southern Highlands. Appin and North Appin are strategic precincts within the Greater Macarthur Growth Area capable of providing new housing, areas for conservation, schools, centres, district open space, physical and social infrastructure, local employment, and regionally significant infrastructure.
- 2.7 The precincts immediately neighbour the suburbs of Gilead to the north, Wilton to the south and Douglas Park to the west. Dharawal National Park, a large protected national park, is located to the east. The precincts are predominately bound by waterways, with Mallaty Creek to the north, Georges River to the east, Nepean River to the west and Cataract River to the south.

Land Ownership

- 2.8 Eleven (11) landowners collectively own over 65% of the land holdings. The balance of the land comprises private, individual landowners or existing roads and infrastructure refer to **Figure 2**. Of the 11 significant landowners, three are developers being:
 - Walker Corporation: The most significant land owner within the Appin Precinct, owning approximately 1,284.23 ha (33.5% of total land area), all of which is within the Appin (Part) Precinct (not including land owned within Appin Village).
 - MIR Group: Own two large parcels, one in the North Appin Precinct and one in the southern part of the Appin Precinct, totalling about 430 ha (11.2%).
 - **Inghams:** Owns one large parcel of 300 ha (7.8%) in the North Appin Precinct.
- 2.9 The Tharawal Local Aboriginal Land Corporation owns an area of land in the southern part of the Appin Precinct comprising 57.37 ha adjacent to the Cataract River.
- 2.10 Appin Village also consists of 189.96 ha (4.8%), of which the proponent owns 20.29 ha of residential-zoned land currently under development.

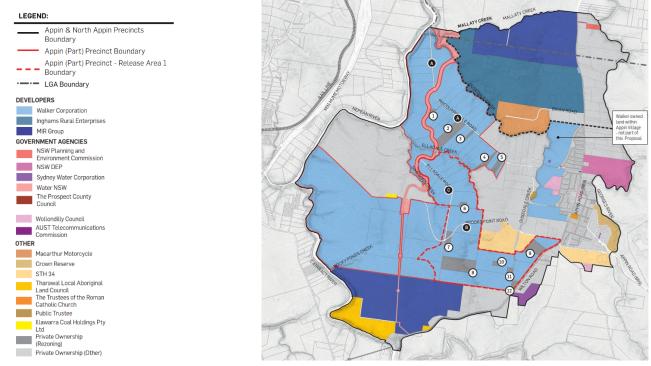


Figure 2: Land Ownership Appin and North Appin Precincts (Source: Urbis & the Proponent)

Access and Connectivity

- 2.11 Appin Road and Wilton Road are the key north-south road connections. They follow a prominent ridge line south and east of the Precincts. Appin Road (B69) continues east, south of Appin Village, connecting to the Illawarra. Appin Village is situated on Appin Road in the eastern part of the Appin Precinct.
- 2.12 The existing road network is broadly spaced and rural in nature, and existing intersections are priority-controlled. The roads within the precincts are:
 - Macquariedale Road
 - Appin Road
 - Wilton Road
 - Brooks Point Road
 - Elladale Road
 - Brian Road
- 2.13 To the west of the precincts are the M31 Hume Motorway and the Southern Highlands Intercity passenger railway connecting Campbelltown to Goulburn. Picton and other small villages are located along these two transport corridors, which connect the region to the urban areas of Campbelltown and southwest Sydney.
- 2.14 The Southern Highlands Rail Line (SHRL) connects to the Sydney Trains metropolitan network at Campbelltown and Macarthur Stations. The SHRL stops at Menagle Park, Menangle, Douglas Park and Picton and continues south to Moss Vale and Goulbourn. The nearest station to the Site on the SHRL is Douglas Park which is 15 kilometres away by road. There is no connecting bus service.

2.15 The precincts are currently served by Bus Route 887, which travels between the Wollongong CBD and University and Campbelltown and Macarthur Stations. It connects the precincts to train services to all metropolitan Sydney destinations. Macarthur Station is 16 kilometres by car.

Topography and waterways

- 2.16 The topography of the precincts is undulating, lies at an elevation of between 70 and 250 metres, and features several steeper secondary ridge lines. Rivers and creeks include the following:
 - Nepean River: a major perennial river forming the western boundary
 - Cataract River: a perennial river that forms the southern boundary
 - **Elladale Creek:** Connects to the Nepean River in the west, Elladale Creek splits into Simpsons Creek, creating two green-blue spines at the centre of the Appin Precinct
 - Ousedale Creek: Connects to the Nepean River in the northwest; Ousedale creek separates Appin from North Appin and stretches to the east before transitioning to a north-south alignment towards Wilton Road
 - Rocky Ponds Creek: Connects to the Cataract River in the southwest

Key Features

- 2.17 Prominent features within the precincts (refer to Figure 3, Figure 4 and Figure 5) include:
 - Appin Village: Along Appin Road is the existing Appin township with low-density housing and a range of local community facilities, services and amenities
 - Extensive grazing land holdings: cleared of vegetation
 - Vegetated areas: along rivers and creek alignments and steep topography
 - Upper Canal: The Upper Canal is a heritage-listed, gravity-fed aqueduct that supplies 20-40% of the potable water for Sydney. The Upper Canal commences by tunnel from Pheasant's Nest Weir on the Nepean River. It extends through the local government areas of Wollondilly, Camden, Campbelltown, Liverpool, Fairfield, and Cumberland to terminate at the Prospect Reservoir. The location of the Upper Canal in the Appin Precinct extends from Broughton Pass in the south at the Cataract River to Ousedale Creek in the north. Just south of Simpsons Creek, it transitions from underground tunnels to an open channel
 - Appin East Colliery: Commencing production in 1962, the Appin Colliery is owned and operated by Endeavour Coal Pty Ltd and mines Bulli seam coals to depths up to 550 metres
 - Appin Power Station: The Appin Power Station is the waste coal mine gas (WCMG) power station run by EDL Energy
 - Macarthur Motorcycle Complex: Off-road motorbike facility located in North Appin with approximately
 70ha of land. It caters for young beginners through to expert motor cross riders
 - Appin Technology Park: An existing light industrial park with various industrial and warehouse uses located on Wilton Road
 - Macarthur Filtration Plant: Located on the eastern side of Wilton Road, it extracts water from the Broughton
 Pass weir to supply potable water for Camden, Campbelltown and Wollondilly LGAs

THE SITE - APPIN (PART) PRECINCT

- 2.18 The Site is 1,378 hectares (ha) of land, principally located in the Local Government Area (LGA) of Wollondilly, with a small area (3ha) in the north located in the LGA of Campbelltown.
- 2.19 The Site is within the land release precinct of Appin, hence the identification of the Site as 'the Appin (Part) Precinct'.
- 2.20 It extends almost the entire width of the Appin Precinct across the southern parts of Appin from the Cataract and Nepean Rivers in the west to Appin and Wilton Road in the east. It also extends through the centre of the Appin Precinct, on either side of the Upper Canal, to the Nepean River and Ousedale creek in the north. At its greatest extent, the Appin (Part) Precinct is approximately 6,130 metres (eastwest) and 5,750 metres (north-south).
- 2.21 It is bound by rivers, creeks, existing roads and adjoining rural land holdings. A small section is opposite the existing industrial land on Wilton Road south of Appin Village. Appin (Part) Precinct includes the following key features:
 - Brooks Point Road, Macquariedale Road, Elladale Road, and Willabong Rise
 - Parts of Ousedale, Elladale and Rocky Ponds Creek
 - A series of buildings and out-buildings, both modern and historical
- 2.22 These features are discussed in more detail in **Chapter 4**.
- 2.23 The submission by the Proponent requests the rezoning of the Site from Rural Landscape to Urban Development, Infrastructure and Environmental Conservation. It is envisaged that 12,000+ homes, new roads and management of ecologically significant lands will be delivered.

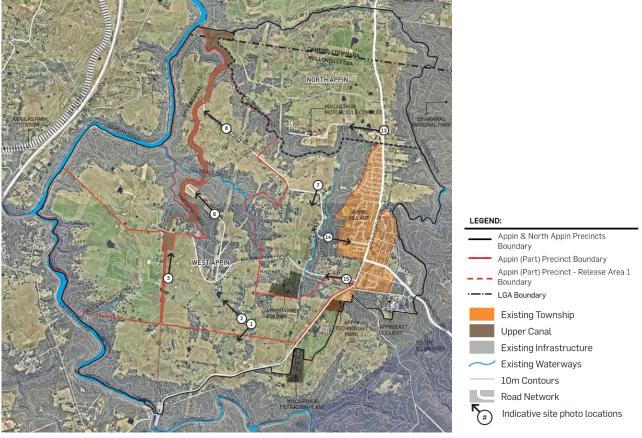


Figure 3: Appin (Part) Precinct within the context of Appin & North Appin Precincts (Source: Urbis)

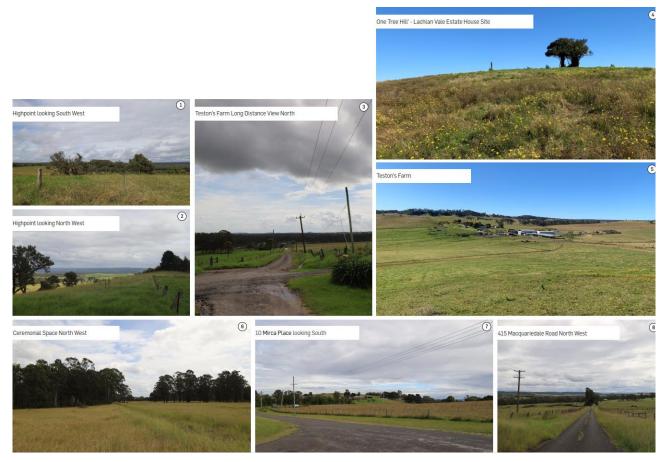


Figure 4: Appin & North Appin Precincts - Photos (Source: Urbis)



Figure 5: Appin & North Appin Precincts - Photos (Source: Urbis)

Land ownership

2.24 The properties comprising the Site are listed in **Table 1**.

Table 1: List of properties that make up the Appin (Part) Precinct

Property Description	Street Address	Land Area	Land Owner
Lot 100 DP 790844	Elladale Road, Appin	18.29 Ha	Walker Corporation P/L
Lot 3 DP 245396	Elladale Road, Appin	13.81 Ha	Walker Corporation P/L
Lot 4 DP 245396	Elladale Road, Appin	13.09 Ha	Walker Corporation P/L
Lot 5 DP 245396	Elladale Road, Appin	10.21 Ha	Walker Corporation P/L
Lot 6 DP 245396	Elladale Road, Appin	10.43 Ha	Walker Corporation P/L
Lot 7 DP 245396	Elladale Road, Appin	10.92 Ha	Walker Corporation P/L
Lot 8 DP 245396	Elladale Road, Appin	11.31 Ha	Walker Corporation P/L
Lot 9 DP 245396	Elladale Road, Appin	11.21 Ha	Walker Corporation P/L
Lot 10 DP 245396	Elladale Road, Appin	10.39 Ha	Walker Corporation P/L
Lot 11 DP 245396	Elladale Road, Appin	10.13 Ha	Walker Corporation P/L
Lot 12 DP 245396	Elladale Road, Appin	10.15 Ha	Walker Corporation P/L
Lot 2 DP 249286	15 Brooks Point Road, Appin	10.31 Ha	Walker Corporation P/L
Lot 2 DP 825014	350 Brooks Point Road, Appin	30.14 Ha	Walker Corporation P/L
Lot 3 DP 825014	230 Brooks Point Road, Appin	30.29 Ha	Walker Group Holdings P/L

Property Description	Street Address	Land Area	Land Owner
Lot 4 DP 825014	200 Brooks Point Road, Appin	13.28 Ha	Walker Corporation P/L
Lot 5 DP 825014	293 Books Point Road, Appin	39.29 Ha	Walker Corporation P/L
Lot 2 DP 808057	265 Brooks Point Road, Appin	37.74 Ha	Walker Corporation P/L
Lot 9 DP 123069	291 Brooks Point Road, Appin	38.92 Ha	Walker Corporation P/L
Lot 60 DP 850925	765 Wilton Road, Appin	54.74 Ha	Walker Corporation P/L
Lot 4 DP 249286	865 Wilton Road, Appin	10.71 Ha	Walker Corporation P/L
Lot 203 DP 819476	60 Northhamptondale Road, Appin	35.28 Ha	Walker Corporation P/L
Lot 9 DP 563605	410 Macquariedale Road, Appin	5.8 Ha	Walker Corporation P/L
Lot 60 DP 1064019	430 Macquariedale Road, Appin	10.75 Ha	Walker Corporation P/L
Lot 62 DP 1064019	430 Macquariedale Road, Appin	54.51 Ha	Walker Corporation P/L
Lot 1 DP 248044	450 Macquariedale Road, Appin	0.2909 Ha	Walker Corporation P/L
Lot 2 DP 248044	450 Macquariedale Road, Appin	0.2428 Ha	Walker Corporation P/L
Lot 3 DP 248044	450 Macquariedale Road, Appin	0.0885 Ha	Walker Corporation P/L
Lot 4 DP 248044	450 Macquariedale Road, Appin	0.1467 Ha	Walker Corporation P/L
Lot 5 DP 248044	450 Macquariedale Road, Appin	0.1593 Ha	Walker Corporation P/L
Lot 1 DP 816861	455 Macquariedale Road, Appin	57.69 Ha	Walker Corporation P/L
Lot 21 DP 242574	345 Macquariedale Road, Appin	10.12 Ha	Walker Corporation P/L
Lot 22 DP 242574	365 Macquariedale Road, Appin	10.14 Ha	Walker Corporation P/L
Lot 23 DP 242574	375 Macquariedale Road, Appin	10.19 Ha	Walker Corporation P/L
Lot 24 DP 242574	395 Macquariedale Road, Appin	10.17 Ha	Walker Corporation P/L
Lot 25 DP 242574	415 Macquariedale Road, Appin	10.12 Ha	Walker Corporation P/L
Lot 26 DP 242574	435 Macquariedale Road, Appin	11.28 Ha	Walker Corporation P/L
Lot 6 DP 557763	335 Macquariedale Road, Appin	11.12 Ha	Walker Group Holdings P/L
Lot 1 DP 825014	365 Brooks Point Road, Appin	44.01 Ha	Walker Group Holdings P/L
Lot 1 DP 32421	435 Brooks Point Road, Appin	117.85 Ha	Walker Corporation P/L
Lot 26 DP 752012	435 Brooks Point Road, Appin	117.85 Ha	Walker Corporation P/L
Lot 28 DP 752012	435 Brooks Point Road, Appin	117.85 Ha	Walker Corporation P/L
Lot 1 DP 57337	435 Brooks Point Road, Appin	304.9 Ha	Walker Corporation P/L
Lot 1 DP816238	635 Wilton Road, Appin	13.56 Ha	S and M Pizutto
Lot 5 DP 209113	256 Macquariedale Road, Appin	5.16 Ha	K Blackwell, B Williscroft
Lot 4 DP 209113	260 Macquariedale Road, Appin	2.764 Ha	A Choudhury
Lot 61 DP 586318	280 Brooks Point Road, Appin	1.66 Ha	K Brewin, H Brewin
Lot 1 DP 808057	285 Brooks Point Road, Appin	2.418 Ha	P Cowgill
Lot 1 DP 986672	289 Brooks Point Road, Appin	21.22Ha	P and A Lawrence
Lot 201 DP 819746	80 Northamptondale Road, Appin	2 Ha	E and D D'arcy
Lot 202 DP 819476	90 Northamptondale Road, Appin	2 Ha	J Mileto
Lot 3 DP 249286	875 Wilton Road, Appin	10.52 Ha	E D'arcy

Property Description	Street Address	Land Area	Land Owner
Lot 61 DP 850925	775 Wilton Road, Appin	2.416 Ha	M Byrne, R Gilmore
Lot 101 DP 790844	80 Elladale Road, Appin	2.232 Ha	S Roberts
Lot 1 DP 209113	272 Macquariedale Road, Appin	4.957 Ha	P Kiszonka, R Kiszonka as joint tenants
Lot 40 DP740878	340 Macquariedale Road, Appin	2 Ha	V Spiteri & Ors
Lot 2 DP 616327	360 Macquariedale Road, Appin	8.4 Ha	Total 10 owners
Lot 1 DP 616327	370 Macquariedale Road, Appin	7.54 Ha	A Brticevich, M Brticevich
Lot 61 DP 1064019	440 Macquariedale Road, Appin	1.276 Ha	F Norjschat
	TOTAL AREA		
	Appin (Part) Precinct	1,378ha	
	(Proponent Land)	1,284 ha	
(Other lands)		94ha	

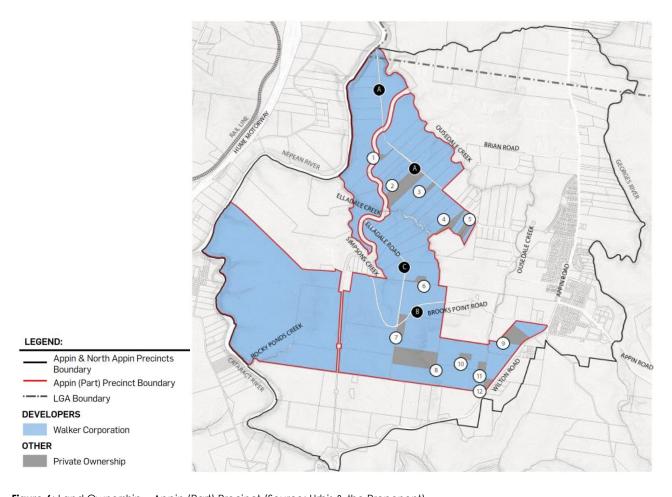


Figure 6: Land Ownership – Appin (Part) Precinct (Source: Urbis & the Proponent)

Table 2: Summary of the key figures

	Location	Key Attributes	
Appin & North Appin Precincts (Context)		Area	3,826 ha
		LGA	Primarily Wollondilly LGA Part Campbelltown LGA
		Ownership	n/a
		# Dwellings	20,000
Appin (Part) Precinct (Site)		Area	1,378 ha
		LGA	Primarily Wollondilly LGA Part Campbelltown LGA
		Ownership	Walker – 1,284ha Private ownership – 94ha
A		# Dwellings	12,000+

3.0 PLANNING FRAMEWORK

Overview:

Planning in NSW is underpinned by overarching state policies and strategic documents, setting out a vision and outcomes.

The strategic merit for developing the Appin (Part) Precinct is supported within these documents.

This chapter outlines an overview of the strategic, statutory and policy framework relevant to the Proposal.

3.0 PLANNING FRAMEWORK

- 3.1 The Proposal to rezone the Site (1,378 hectares of land) has been prepared in the context of strategic and statutory planning documents that manage growth and change in the Greater Sydney Region.
- 3.2 The strategic planning framework starts with a regional strategic plan. It is followed by a district plan, a declaration of a growth area, local strategic planning statements, and local housing strategies. Infrastructure planning documents support this framework, as do NSW statewide policies and guidelines. The framework integrates land use, transport and infrastructure planning between the three (3) tiers of government and across state agencies to align outcomes.
- 3.3 This chapter demonstrates that the precinct plan and the structure plan for the Appin (Part) Precinct align with the strategic planning framework for Greater Sydney.
- 3.4 An overview of the statutory planning framework is provided in this chapter. The framework comprises various Acts, Ministerial Directions, State Planning Policies and Local Environmental Plans.



Figure 7: Hierarchy of Strategic plans (Source: Urbis)

STRATEGIC PLANNING FRAMEWORK

3.5 The strategic planning framework relevant to the Proposal is summarised below:

Strategic Planning Documents

- Greater Sydney Region Plan (A Metropolis of Three Cities)
- Western City District Plan
- Greater Macarthur 2040: An Interim Plan for the Greater Macarthur Growth Area
- Wollondilly 2040: Local Strategic Planning Statement (LSPS)
- Wollondilly Local Housing Strategy (2021)

Greater Sydney Region Plan - A Metropolis of Three Cities &

- 3.6 The Greater Sydney Region Plan (**GSRP**) A Metropolis of Three Cities was finalised in 2018. It provides a 40-year vision to (2056) and establishes a 20-year plan to manage growth and change for the Greater Sydney Region. GSRP A Metropolis of Three Cities was prepared concurrently with Future Transport 2056 and the State Infrastructure Strategy, aligning land use, transport and infrastructure planning to reshape Greater Sydney.
- 3.7 The local government areas of Wollondilly and Campbelltown are located within the Western Parkland City, as is the Site.
- 3.8 The Greater Cities Commission is reviewing the GSRP. It will submit a draft regional strategic plan to the Minister before the end of 2023.
- 3.9 The GSRP forecasts that the Western Parkland City (**WPC**) will grow from 740,000 in 2016 to 1.1 million residents by 2036 and 1.5 million in 2056.
- 3.10 The vision for the Western Parkland City is a polycentric city harnessing the potential of the Western Sydney International Airport (WSI) and the adjoining new city of Bradfield and the metropolitan centres of Liverpool, Greater Penrith and Campbelltown-Macarthur. These centres establish the Western Economic Corridor, complemented by city-shaping transport links such as the North-South Rail Link, east-west mass transit corridor and a potential Outer Sydney Orbital.
- 3.11 The GSRP structure plan identifies the Appin Precinct within a 'Land Release Area.' The WPC is a place of tremendous growth and opportunity, and the 'Land Release Area' will access this economic opportunity and planned city-shaping infrastructure.

- 3.12 There are ten (10) directions in the GSRP:
 - A city supported by infrastructure
 - A collaborative city
 - A city for people
 - Housing the city
 - A city of great places
 - A well-connected city
 - Jobs and skills for the city
 - A city in its landscape
 - An efficient city
 - A resilient city
- 3.13 Under each direction, a series of objectives and actions are identified. The Proposal reflects the directions of the GSRP. A comprehensive assessment is provided in **Chapter 6**.

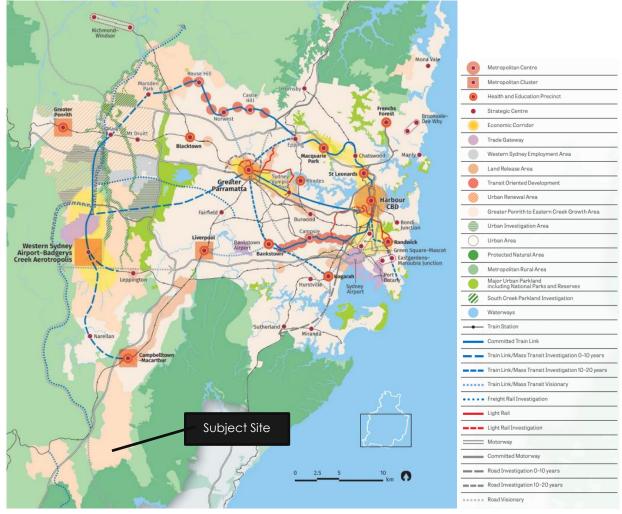


Figure 8: Greater Sydney Region Plan - Structure Plan (Source: DPE)

Western City District Plan

- 3.14 Greater Sydney District planning guides the implementation of the GSRP across the five (5) districts that form the metropolitan area. District Planning helps plan and deliver for growth and change and informs local environmental plans, community strategic plans and the assessment of Planning Proposals.
- 3.15 The Western City District Plan (**District Plan**) was finalised in March 2018. It covers the Local Government Areas (LGAs) of Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly. The Western City district is expected to accommodate 464,450 new residents, 370,200 jobs and 184,500 dwellings by 2036.
- 3.16 The District Plan supports this growth through economic corridors, growth areas, land release areas (the Site is within a land release area), infrastructure links, and connections between strategic and metropolitan clusters and centres.

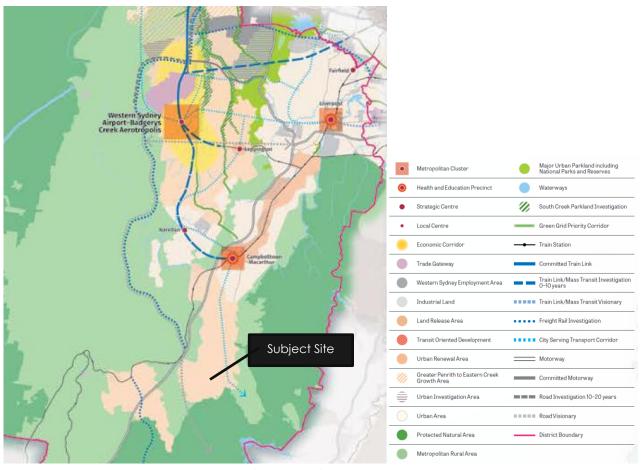


Figure 9: Western City District Plan Structure Plan (Source: DPE)

3.17 The growth and land release areas are vital to ensuring housing supply and securing economic development for the region. The District Plan recognises the opportunities associated with the delivery of new suburbs, including the availability of land for a range of housing choices and connections with the Western Sydney International (WSI) Airport and the Western Sydney Employment Area (WSEA). Several planning initiatives and transport corridors have been commenced to integrate land use, transport and infrastructure along the north-south corridors.

- 3.18 The Appin Precinct is a significant land release area identified in the Western City District Structure Plan, whereby additional housing supply capacity can be delivered.
- 3.19 The potential for a 'city serving transport corridor' is identified, running north-south through the Greater Macarthur Growth Area, connecting from the Campbelltown-Macarthur strategic centre to the southeastern portion of the growth area. This connection will provide better access for the Site to Campbelltown-Macarthur.
- 3.20 The Proposal is consistent with the Western City District Plan. It reflects the planning priorities of "a city supported by infrastructure, fostering culturally rich and socially connected communities, providing housing supply, and protecting and enhancing bushland and biodiversity". A comprehensive assessment is provided in **Chapter 6**.

Greater Macarthur 2040: An Interim Plan for Greater Macarthur Growth Area

- 3.21 The NSW State government declared Greater Macarthur a growth area in 2019. An amendment was made to the then-named State Environmental Planning Policy (the SEPP) (Sydney Growth Centres) (2006) to identify the Greater Macarthur Growth Area. The SEPP is now incorporated as Chapter 3 within State Environmental Planning Policy (Precincts-Western Parkland City) 2021.
- 3.22 The Greater Macarthur Growth Area (**GMGA**) is forecast to deliver at least 40,000 jobs and 58,000 new homes over the next 20 years.
- 3.23 The GMGA is recognised as an opportunity for future housing in the Western Parkland City, responding to the significant growth anticipated through the delivery of the Western Sydney International Airport and Aerotropolis and further establishment of the Liverpool, Penrith and Campbelltown-Macarthur CBDs as key employment areas.
- 3.24 The southern land release areas comprise Appin and North Appin, Gilead, Menangle Park and Glenlee Precincts. The Precincts will transform into neighbourhoods with a range of low to medium-density homes catering for all life stages and employment opportunities (allowing residents to work near home), recreation space and new education and community facilities to meet the needs of new residents.
- 3.25 Greater Macarthur 2040, an interim plan for the Greater Macarthur Growth Area (**GM 2040**), advises the release areas will be developed with a landscape approach that responds to existing environmental corridors and waterways and preserves environmental and cultural heritage. Appin is projected to deliver 15,000 new homes by 2040.
- 3.26 The goals for Appin are:
 - Achieve higher-density residential development around the future centres and along the transport corridor
 - Rezone and release land for urban development
 - Deliver around 15,000 new homes in Appin

- 3.27 Greater Macarthur 2040 guides precinct planning and will support the Greater Sydney Commission's strategic vision for the Western Parkland City outlined in the Greater Sydney Region Plan and the Western City District Plan.
- 3.28 The Department of Planning and Environment (**DPE**) has undertaken additional studies to finalise the plan, and it is anticipated to be released shortly. The Proposal has been informed by the findings of these studies as outlined below:
 - Land Use Safety Study
 - Strategic Bushfire Study
 - Chief Scientist and Engineer's Koala Protection Advice
 - Employment Lands Study
 - Cumberland Plain Conservation Plan
 - Aboriginal Cultural Values of County
 - Greater Macarthur Transport Network Plan
- 3.29 The Proposal aligns with Greater Macarthur 2040 because it has been designed with a landscape approach responding to Country, protects environmental habitats and cultural heritage, accommodates a transport network and utility corridors. Additionally, it has the potential to satisfy the demand for housing to meet anticipated population growth in a co-ordinated manner.

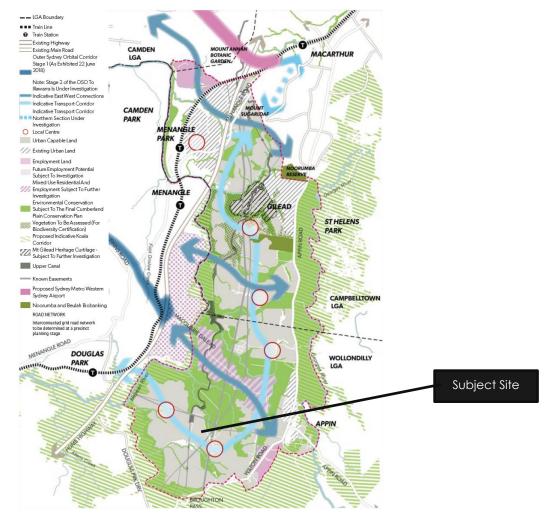


Figure 10: Greater Macarthur Structure Plan – Land Release Areas (Source: DPE)

Local Strategic Planning Statement - Wollondilly 2040

- 3.30 In March 2020, the Greater Sydney Commission confirmed its support for Wollondilly Shire Council's Local Strategic Planning Statement (LSPS) as being consistent with the Greater Sydney Region Plan and Western City District Plan. The Commission's support was based, in part, on Council's intent to deliver the Western City District Plan as set out in the Local Strategic Planning Statement.
- 3.31 Wollondilly 2040 is the LSPS. Wollondilly LSPS was made and came into effect in March 2020. It provides a snapshot of the Wollondilly LGA and sets the land use planning vision for the next 20 years. This vision is for a prosperous, sustainable and resilient future for Wollondilly residents.
- 3.32 Wollondilly 2040 identifies key planning priorities and actions. Planning Priority 3 aims to establish a framework for sustainable, managed growth achieved by providing a greater diversity of housing and jobs, new infrastructure, environmental protection, public transport and social and community facilities, particularly within the new towns and growth areas of Wilton and Greater Macarthur.
- 3.33 Wollondilly 2040 identifies the following amenities to support the Appin Precinct:
 - Investment in transport and social infrastructure
 - Conservation of natural vegetation and protection of koalas
 - Integrated water and wastewater management
 - Connected, walkable and cycling-friendly places
 - Public open spaces
 - Access to jobs, education, health and services
- 3.34 The Proposal responds to Wollondilly 2040 in a considered manner.

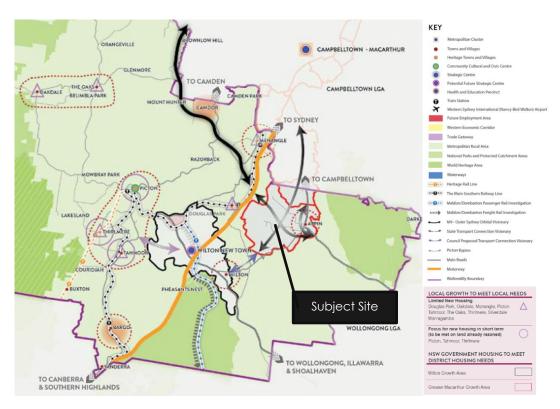


Figure 11: Wollondilly LSPS Structure Plan (Source: Wollondilly Shire Council)

Wollondilly Local Housing Strategy

- 3.35 Wollondilly Shire Council adopted the Wollondilly Local Housing Strategy (**LHS**) in March 2021. It considers the housing needs of the Wollondilly LGA and details how and where housing will be provided. The LHS outlines four directions for housing growth which include:
 - Provide housing in areas that are adequately serviced by infrastructure.
 - Promote housing diversity and affordability
 - Plan and coordinate growth for emerging communities
 - Build sustainable and resilient communities that protect and celebrate our environment
- 3.36 The Department of Planning and Environment (DPE) approved the LHS in September 2021, subject to the following requirements:
 - Within six (6) months of the Council receiving LHS approval, Council is to prepare and submit to DPIE a
 prioritised implementation and Delivery Plan that clearly articulates the actions, capacity, roles and
 responsibilities and timing to facilitate housing supply, diversity and affordability between 2021 and 2026
 and a broader program of 10 years plus.
 - Council is to include new actions in the Implementation and Delivery Plan which reflect and include the outcome of the TAP pilot program for Appin/North Appin.
 - Establish the framework for managing housing across the Metropolitan Rural Area (MRA), including the recommendations of the Rural Lands Strategy when finalised.
 - Council's LHS should be revised and updated shortly after the strategic planning directions and
 infrastructure strategy are determined for the Greater Macarthur Growth Area precincts of Appin and/or
 North Appin. The revised LHS is to reflect, give regard to and support implementation of these directions.
 Council's Implementation Plan should also be updated to reflect actions for Council to progress and set
 directions for these precincts.
 - Future iterations of the LHS are to be informed by detailed land use opportunities, constraints analysis and
 mapping to confirm medium and long term housing opportunities. This should: (a) be contextualised having
 regard to the Greater Sydney Region Plan (as current), Western City District Plan (as current), the Wollondilly
 LSPS (including any updates), Future Transport 2056, Greater Macarthur Interim Plan (as revised), delivered
 infrastructure reinvestments and the outcomes of the Hawkesbury Nepean flood Study.
 - The future LHS as revised should also be informed by the planning and infrastructure outcomes and directions set by the Department's TAP pilot program for North/Appin, as relevant to the Wollondilly LGA.
 - The direction and strategic planning approaches endorsed in any State-led strategies or plans are to prevail in the event of any inconsistency with this approval and/or the Council's LHS (as revised and current).
- 3.37 Technical reports accompanying the Proposal, land use opportunities, constraints analysis and mapping, confirm the Proposal is a housing opportunity strategically aligned within the framework required by the DPE in their response to Wollondilly's LHS.

STRATEGIC INFRASTRUCTURE FRAMEWORK

- 3.38 A review of Infrastructure planning requirements identified the following as relevant to the Proposal:
 - NSW infrastructure Strategy
 - Future Transport Strategy 2056
 - Outer Sydney Orbital
 - Proposed Greater Macarthur Special Infrastructure Contribution

NSW State Infrastructure Strategy 2018 – 2038

- 3.39 Infrastructure NSW's Building Momentum State Infrastructure Strategy 2018-2038 (SIS) provides independent advice on NSW's infrastructure and its needs and priorities over the next 20 years. It establishes six (6) strategic directions.
- 3.40 Direction 1 recommends NSW Government Agencies integrate the infrastructure priorities necessary to support Growth Areas, factor infrastructure and the associated costs into decisions about land rezoning and land release, and maximise opportunities for the co-location of different services.
- 3.41 The Proposal has been prepared with the benefit of the DPE's Technical Assurance Panel, which undertook strategic investigations for the Appin (Part) Precinct, including factoring infrastructure and associated costs, thus giving effect to the SIS

Future Transport Strategy 2056

- 3.42 Future Transport Strategy 2056, by Transport for NSW (TfNSW) (March 2018), has six (6) principles:
 - (1) Customer-focused
 - (2) Successful places
 - (3) Strong economy
 - (4) Safety and performance
 - (5) Accessible services
 - (6) Sustainability
- 3.43 The strategy outlines a vision and objectives to ensure a world-class, safe, efficient and reliable transport system. It acknowledges the need to increase the mode share for public transport, walking and cycling to create healthier and more connected communities. Active transport is a key theme throughout the strategy which will require more significant investment toward continuous green corridor connections.
- 3.44 Appin (Part) Precinct is anchored along a regional transport corridor that connects Campbelltown-Macarthur to the Southern Highlands and Canberra. The corridor is earmarked for the Sydney to Canberra Faster Rail Improvements.

- 3.45 The principles of Future Transport Strategy 2056 guided the preparation of Greater Macarthur 2040.
- 3.46 **Chapter 6** provides an assessment of the Proposal against the Strategy.

Outer Sydney Orbital

- 3.47 The Outer Sydney Orbital (**OSO**) will connect the Greater Sydney region with the Illawarra-Shoalhaven and the Central Coast. The planning for the OSO proposes to identify and protect a corridor of land for a future motorway and freight line in Western Sydney.
- 3.48 Transport for NSW (**TfNSW**) is undertaking planning for the OSO in 3 stages:
 - Stage 1 transport connections between Richmond Road and Marsden Park in the north and the Hume Motorway near Menangle in the south.
 - Stage 2 transport connections between the Hume Motorway and the Illawarra-Shoalhaven
 - Stage 3 transport connections between Richmond Road at Marsden Park and the Central Coast
- 3.49 Some refinements have been made to Stage 1, such as relocating the interchange with the Hume Motorway at Menangle further north to use existing government-owned land. Other improvements are being considered before a corridor is confirmed.
- 3.50 During 2020 and 2021, TfNSW exhibited options for Outer Sydney Orbital Stage 2-Sector 1, with a preferred corridor announced in August 2021.
- 3.51 During the Appin TAP process and presentation of technical studies in late 2021 and early 2022, it was clear the preferred corridor would impact the cultural landscape, potential state heritage listing to recognise the Appin massacre site, koala corridors and housing provision.
- 3.52 In this context, Transport for NSW advised the TAP to protect an alternative road configuration and corridor within the Appin (Part) Precinct for a north-south connection to Picton Road.

Proposed Greater Macarthur Special Infrastructure Contribution

- 3.53 The proposed Greater Macarthur Special Infrastructure Contribution (**GMSIC**) identifies priority infrastructure to be funded and delivered alongside development. Priority infrastructure includes delivery of roads, schools, health facilities, open space, emergency services, transport and pedestrian and cycling connections. Refer to **Figure 12**.
- 3.54 Satisfactory arrangements will be required to contribute to the provision of designated State public infrastructure before the subdivision of land in an urban release area.
- 3.55 The Proposal is consistent with the delivery of planned designated State public infrastructure.

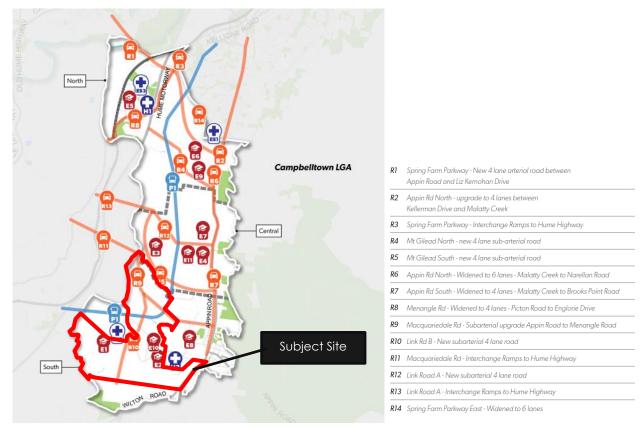


Figure 12: Proposed Greater Macarthur SIC – Road & Transport works (Source: DPE)

Table 3: Draft SIC Infrastructure list applicable to Appin (Part) Precinct

Ref	Description	Delivery	Timing
P1	North/South transport corridor	RMS / Developer	In line with the development
R9	Macquariedale Road Sub arterial upgrade Appin Road to Menangle Road (East-west connection)	RMS / Developer	In line with the development
R10	Link Road B – new sub-arterial four-lane road	RMS	In line with development, when required
R11	Interchange ramps onto the Hume Highway	RMS	In line with the development
E1	School	Dept. of Education	In line with the development
E2	School	Dept. of Education	In line with the development
E10	School	Dept. of Education	In line with the development
ES2	Police Station	NSW Justice / Developer	In line with the development

STRATEGIC POLICIES AND GUIDELINES

3.56 A review of NSW policies and guidelines identified the following as relevant to the Proposal:

NSW state-wide Policy and Guidelines

- NSW Housing Strategy
- New Approach to Precinct Planning
- Connecting with Country / Designing with Country
- Local Character and Place Guideline

NSW Housing Strategy

- 3.57 The NSW Housing Strategy 2041 (Housing 2041) was published in May 2021 and is a 20-year vision to ensure housing needs are met and are planned in suitable locations. It is based on four pillars: supply, diversity, affordability and resilience, ensuring economic and social well-being and health. Housing 2041 seeks to ensure homes are accessible and well-connected to local facilities, jobs and social networks, with infrastructure services and spaces that promote sustainable living. It also identifies the importance of designing homes and communities that respond to the environment, maximise technology and support local character and place.
- 3.58 The Proposal is consistent with Housing 2041.

New Approach to Precinct Planning

3.59 New Approach to Precinct Planning (2020) has been developed by the NSW Department of Planning to provide certainty and a way forward for precincts. It centres the planning system around people, places, public spaces and the environment. The Proposal has been informed by high-level strategic planning work for the GMGA led by the DPE.

Connecting with Country / Designing with Country

- 3.60 Connecting with Country and Design with Country is a draft framework published by the Government Architect NSW (GANSW) for developing connections with Country to inform the planning, design, and delivery of built environment projects. The ambition of Connecting with Country is that everyone who is involved in delivering government projects will adopt the following commitment:
 - Through our projects, we commit to helping support the health and well-being of Country by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country it will take care for us.
- 3.61 The Appin area is the traditional country of the Dharawal people. It is generally accepted that the Aboriginal occupation of Australia dates back at least 40,000 years. This extensive and continued occupation of the Sydney Basin has left vast accumulated depositional evidence. Relationship to Country and place is a living cultural process central to First Nations' identities.

3.62 Appin has a significant cultural landscape. Connecting with Country and Design with Country Framework provides a base to facilitate respectful engagement and practices for future development. Meeting the objectives of the Connecting with Country draft framework has driven the design of the Proposal from the outset.

Local Character and Place Guideline

- 3.63 The DPE released Local Character and Place Guideline in collaboration with the GANSW in February 2019. The guideline reinforces local character as a consideration in strategic planning. Character is defined as "what makes a neighbourhood distinctive and is the identity of Place, encompassing the way it looks and feels".
- 3.64 The guideline contains a Character Assessment Toolkit having five (5) key steps. These include:
 - (1) Hearing from your community,
 - (2) Identifying an area's character,
 - (3) Examine different sources of information and map local characters,
 - (4) Setting desired future character; and,
 - (5) Producing a character assessment.
- 3.65 The Proposal has been developed with the benefit of the Character Assessment toolkit. There is a strong landscape element to the character of the Appin (Part) Precinct. Proximity to the Nepean River and Cataract River's biodiversity corridors presents an opportunity to improve amenity offerings for residents and visitors. The Proposal respects Appin's character and a sense of place.

STATUTORY FRAMEWORK

3.66 The statutory planning framework relevant to the Proposal is summarised below:

Statutory Planning Documents

- Environmental Planning and Assessment Act 1979
- Section 9.1 Directions
- Environment Protection & Biodiversity Conservation Act 1999
- Biodiversity Conservation Act 2016
- Heritage Act 1977
- State Environmental Planning Policy (Precincts Western Parkland City) 2021
- Wollondilly Local Environmental Plan 2011

NSW Environmental Planning and Assessment Act 1979

- 3.67 The Environmental Planning and Assessment Act 1979 (EP&A Act) is NSW's principal planning and assessment legislation. It promotes orderly land use and development and the integration of environmental, social and economic interests within a framework of ecologically sustainable development.
- 3.68 Under Division 3.3 section 3.29(2) of the EP&A Act, the Governor may make a State Environmental Planning Policy (SEPP) to make provision concerning any matter that, in the opinion of the Minister, is of State or regional environmental planning significance or environmental planning significance to the Western Parkland City.
- 3.69 Under section 3.30, the Minister must consult with the Greater Cities Commission (GCC) before making the SEPP.
- 3.70 The provisions of the EP&A Act will be followed in making amendments to the WPC SEPP.

Section 9.1 Directions

- 3.71 Implementing the Western City District Plan successfully requires considering Section 9.1 Ministerial Directions (directions) under the EP&A Act. Planning Proposals are to be prepared in accordance with the directions, which cover nine (9) focus areas, including:
 - Planning Systems
 - Planning Systems Place-Based
 - Design & Place
 - Biodiversity and Conservation
 - Resilience and Hazards

- Transport and Infrastructure
- Housing
- Industry and Employment
- Resources and Energy
- Primary Production
- 3.72 The Proposal is to amend the WPC SEPP by incorporating the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan. Section 9.1 Directions are addressed in **Chapter 7**.

Environment Protection & Biodiversity Conservation Act 1999

- 3.73 The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is the Australian Government's environmental legislation for protecting the Australian environment. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places defined in the EPBC Act as matters of national environmental significance.
- 3.74 The DPE has undertaken strategic conservation planning to develop the Cumberland Plain Conservation Plan (**CPCP**). The CPCP has been prepared to meet strategic assessment obligations under the EPBC Act.
- 3.75 The NSW Department of Planning is pursuing the Australian government's approval for the CPCP under Part 10 of the EPBC Act. Landholders can submit proposals to rezone land, however, construction cannot commence on CPCP land until approval from the Australian government is in place.

Biodiversity Conservation Act 2016 No. 63

- 3.76 The Biodiversity Conservation Act 2016 No. 63 (**BC Act**) is the NSW Governments' principal framework for environmental protection across NSW. It protects and conserves biodiversity and ecosystems in NSW and promotes the use of ecologically sustainable development principles.
- 3.77 The DPE has undertaken strategic conservation planning to develop the CPCP. The CPCP has been prepared to meet strategic biodiversity certification under the BC Act and to provide long-term certainty for biodiversity and development in Western Sydney.
- 3.78 The NSW Environment and Heritage Minister approved the CPCP which provides biodiversity certification under Part 8 of the NSW Biodiversity Conservation Act 2016 (BC Act). This approval removes the need for landholders to seek their own biodiversity approvals under the BC Act for development on certified urban capable land as long as they comply with planning controls under the CPCP, as set out in the Strategic Conservation Chapter of the SEPP (Biodiversity and Conservation) 2021.

Heritage Act 1977

- 3.79 The Heritage Act 1997 affords statutory protection to those items identified as having heritage significance and which form part of the NSW heritage record. Items assessed as having State heritage significance can be listed on the NSW State Heritage Register (SHR).
- 3.80 Proposals to alter, damage, move or destroy heritage items listed on the SHR require approval under section 60 of the *Heritage Act 1977*.
- 3.81 The Upper Nepean Canal, which comprises Lots 1, 2 and 3 DP 71996 and Lots 1 and 2 DP 732571, bisects the Site. The Upper Nepean Canal (the **Canal**) is not included within the Appin (Part) Precinct Plan.
- 3.82 The Site is situated on either side of these lots. The Canal is flanked for over 5km of its length by the Site. The Canal is listed for its importance in developing late 19th-century infrastructure to support a growing Sydney region.
- 3.83 The early decades of the 19th century saw significant unrest and often open hostilities between local Aboriginal groups and European settlers in the Appin region and the wider Cumberland Plain. This period is known as the Cumberland Wars.
- 3.84 Associated with this period is the Appin Massacre. In July 2021, the Heritage Council of NSW and the Aboriginal Advisory Committee (ACHAC) co-nominated the Appin Massacre Cultural Landscape for listing on the State Heritage Register for its shared Aboriginal and non-aboriginal cultural heritage values.
- 3.85 Sites related to the Appin Massacre are located within the Appin (Part) Precinct.
- 3.86 In September 2022, the State Heritage Committee recommended the Minister direct the listing of the item Appin Massacre Cultural Landscape at Appin on the State Heritage Register.

State Environmental Planning Policies

3.87 A detailed review of all applicable State Environmental Planning Policies is provided in **Chapter 7**.

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

- 3.88 State Environmental Planning Policy (Precincts- Western Parkland City) 2021 (WPC-SEPP) provides the statutory framework for the planning of growth centres and the release of land for residential, employment and other urban development in the Growth Areas.
- 3.89 The provisions applying to the carrying out of development in a growth centre precinct are specified in the Appendix of SEPP WPC.
- 3.90 The Appin (Part) Precinct Plan (**the precinct plan**) will be incorporated into the WPC SEPP as a new Appendix. The precinct plan will contain provisions (clauses and maps) to facilitate the Site's development. The maps included are land application, zoning, lot size, development sequencing, heritage and additional permitted uses. The clauses will cover land uses zones, permitted or prohibited development, development standards, miscellaneous provisions, urban release areas and additional local provisions.

- 3.91 A clause will be inserted that development consent must not be granted to the carrying out of development within the (UDZ) *Urban Development Zone* unless the consent authority is satisfied that the development is generally in accordance with the Appin (Part) Precinct Structure Plan.
- 3.92 The Planning Secretary must adopt the Appin (Part) Precinct Structure Plan, and it must be published on DPE's website before development consent is granted for housing lots.

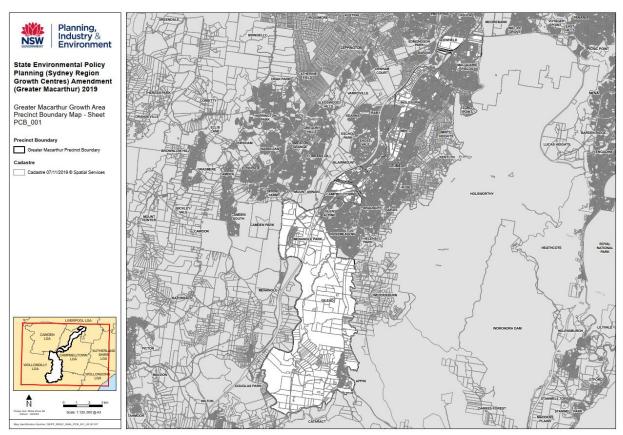


Figure 13: Greater Macarthur Growth Area (Source: DPE)

Wollondilly Local Environmental Plan 2011

3.93 The Wollondilly Local Environmental Plan 2011 (**WLEP 2011**) provides the Site's current statutory planning framework and development standards.

Land Use Zoning

- 3.94 The existing zoning of the Appin (Part) Precinct is RU2 Rural Landscape (Figure 14).
- 3.95 The objectives of the zone are to:
 - To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
 - To maintain the rural landscape character of the land.
 - To provide for a range of compatible land uses, including extensive agriculture.
 - To provide areas where the density of development is limited in order to maintain a separation between urban areas.
 - To support sustainable land management practices and local food production.

3.96 The following land uses are **permitted without consent** under the RU2 Rural Landscape zone:

- Extensive agriculture
- Home occupations

3.97 The following land uses are **permitted with consent** under the RU2 Rural Landscape zone:

Agriculture; Airports; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Boat building and repair facilities; Boat sheds; Cellar door premises; Cemeteries; Community facilities; Crematoria; Depots; Dual occupancies (attached); Dwelling houses; Educational establishments; Environmental facilities; Environmental protection works; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Freight transport facilities; Funeral homes; Group homes; Home-based child care; Home businesses; Home industries; Home occupations (sex services); Hospitals; Information and education facilities; Landscaping material supplies; Mortuaries; Places of public worship; Plant nurseries; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Research stations; Roads; Roadside stalls; Rural industries; Rural supplies; Rural workers' dwellings; Secondary dwellings; Signage; Transport depots; Veterinary hospitals; Water recreation structures; Water supply systems

3.98 The following land uses are **prohibited** under the RU2 Rural Landscape zone:

- Stock and sale yards;
- Turf farming;
- Any other development not specified as permissible.

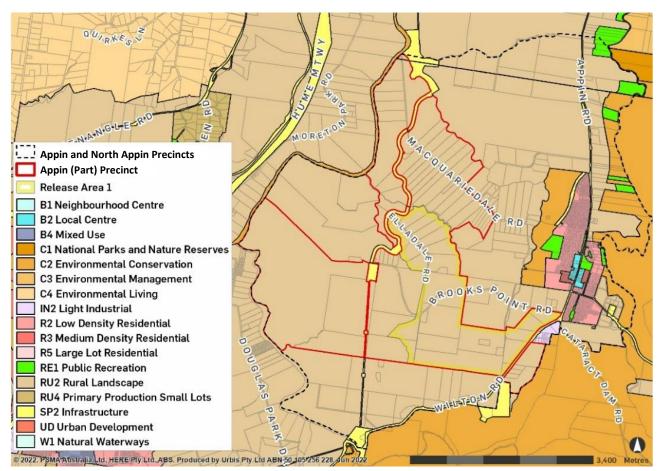


Figure 14: Current Wollondilly LEP 2011 Land Zoning Map (Source: Wollondilly Shire Council)

Height of Building

3.99 No building height control is currently applicable to the Appin (Part) Precinct. The closest area with a height of building control is the Appin village along Appin Road, which has a height control of 9m (**Figure 15**).

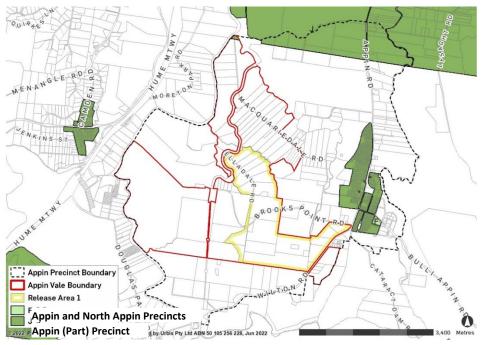


Figure 15: Current Wollondilly LEP 2011 Height of Building Map (Source: Wollondilly Shire Council)

Minimum Lot Size

3.100 A minimum lot size control of 40ha currently applies to the Appin (Part) Precinct. The minimum lot size controls east of Appin village along Appin road range from 450m² – 700m² (**Figure 16**).

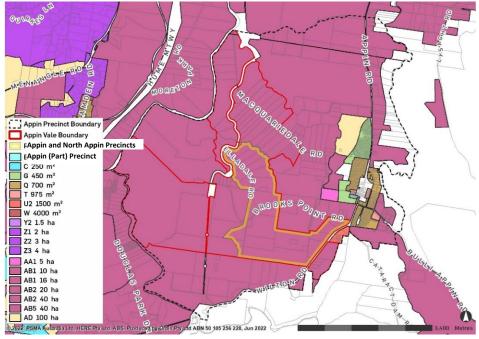


Figure 16: Current Wollandilly LEP 2011 Lot Size Map (Source: Wollandilly Shire Council)

Heritage Conservation

- 3.101 Two (2) local heritage items are within the Appin (Part) Precinct. The items are:
 - Northhamptondale Group (Item#113) a house, trees, slab farm, outbuildings and stables
 - Elladale estate (Item #111)
- 3.102 The Appin (Part) Precinct adjoins one (1) state heritage item, the Upper Nepean Canal.
- 3.103 The Appin (Part) Precinct is close to the Windmill Hill Group of local heritage items (Item #117) to the immediate east, consisting of Brennan's Farm, Larkin's Farm and Winton's Farm.

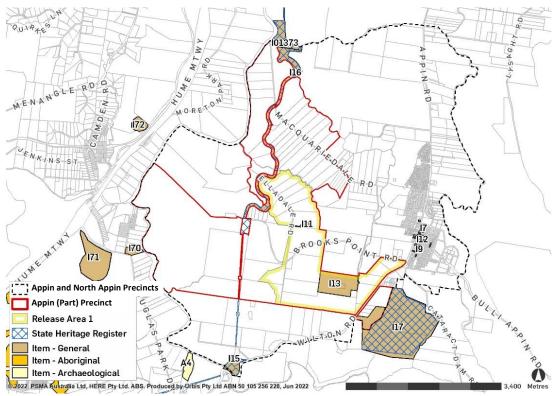


Figure 17: Current Wollondilly LEP 2011 Heritage Map (Source: Wollondilly Shire Council)

Other LEP Provisions

- 3.104 Other LEP provisions of relevance are Part 6 Urban release areas and Clause 7.2 Biodiversity protection as detailed below:
 - Part 6 Urban release areas
 - Clause 6.1 Arrangements for designated State public infrastructure. The objective of this clause is to require satisfactory arrangements to be made for the provision of designated State public infrastructure before the subdivision of land in an urban release area to satisfy needs that arise from development on the land, but only if the land is developed intensively for urban purposes.
 - Clause 6.3 Development control plan. The objective of this clause is to ensure that development on land in an urban release area occurs logically and cost-effectively, in accordance with a staging plan and only after a development control plan that includes specific controls has been prepared for the land. Clause 6.3(3) outlines the requirements of the DCP.

- Part 7 Additional local provisions
 - Clause 7.2(3) Biodiversity protection. Biodiversity protection requires that before a DA is determined, the consent authority must consider any adverse impact of the proposed development on (a) native ecological communities, (b) the habitat of threatened species, populations or ecological community, (c) regionally significant species of fauna and flora or habitat, (d) habitat elements providing connectivity and (e) water quality within drinking water catchments.
- 3.105 The current planning controls under Wollondilly LEP 2011 do not permit the development envisaged by the Proposal.

PART B – INVESTIGATIONS, NET DEVELOPABLE AREA & DESIGN PRINCIPLES



4.0 SITE INVESTIGATIONS, CONSTRAINTS, DEVELOPABLE AREA AND STRUCTURE.

Overview:

Chapter 4 provides a summary of the Site investigations. The Chapter concludes with a consolidated overview of constraints, which provides a net developable area, forming the basis of the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan.

Chapter 5 takes the findings and explains the application of vision and design principles to shape the design and planning approach for the Appin (Part) Precinct.

4.0 SITE INVESTIGATIONS, CONSTRAINTS, DEVELOPABLE AREA AND STRUCTURE

- 4.1 A consultant team was engaged in exploring the Site, involving analysis of data sets and technical studies, review of aerial imagery and fieldwork observations to deliver evidence, insights and recommendations.
- 4.2 Expert reports on urban design, environment, heritage, social needs, economics and infrastructure have been prepared to support the rezoning and structure plan for the Appin (Part) Precinct. The findings of the reports are summarised in this chapter.
- 4.3 The chapter concludes with a consolidated list of site constraints setting out development restrictions.

 A net developable area plan identifies the excluded areas and infrastructure required to facilitate development and informs calculations regarding outcomes such as open space. Recommendations for development are outlined, providing the framework for structure planning.

URBAN DESIGN

- 4.4 The following reports investigate the urban design aspects of the Proposal:
 - Urbis Urban Context Report
 - Urbis Landscape Visual Impact Assessment Statement
 - Urbis Sustainable Development Opportunities

Urban Context

- 4.5 The Urban Context report is organised into four (4) parts:
 - **Part A:** Strategic Alignment Provides an overview of the Proposal, strategic alignment with regional planning and infrastructure initiatives and identifies strategic directions for the Proposal.
 - Part B: Technical Investigations Summarises findings from studies and identifies directions, opportunities and constraints to define developable land and conservation land for the Appin (Part) Precinct Structure Plan and Appin (Part) Precinct Plan.
 - **Part C:** Appin Structure Plan Sets out the key elements and outcomes for the Appin and North Appin Precincts Indicative Plan, the Appin (Part) Precinct Structure Plan and Appin (Part) Precinct Plan.
 - Part D: The Proposal Maps to be incorporated into the WPC SEPP.
- 4.6 The report contains numerous maps and graphic content illustrating the content described above. It establishes the vision and design principles that underpin the Appin (Part) Precinct Structure Plan (the structure plan). It presents the structure plan as a series of layered strategies to demonstrate its consideration of the Appin (Part) Precinct's context in delivering a place-based plan to unlock housing delivery in the Greater Macarthur Growth Area.

Landscape Visual Impact Assessment

4.7 The Landscape Visual Impact Statement investigates the Appin and North Appin Precincts (**the precincts**). It maps scenic resources, unique features, external views to and from the site, internal views and opportunities to determine the visual character of the precincts. An analysis is then provided of the visual impact of future development across the precincts based on the Appin and North Appin Precincts Indicative Plan.

Visual Character

- 4.8 Large areas of the Appin and North Appin Precincts are homogeneous in visual character and scenic quality. These areas are mainly devoid of visually prominent or distinctive resources other than mature vegetation and riparian vegetation bounding the Site to the south and west. In other words, there are few examples of visual components, features or combinations of features to make the majority of the Site visually distinctive, unique or worthy of specific protection.
- 4.9 Landscapes of similar visual character exist to the west, south and east and characterise the majority of southwest Sydney and the GMGA.
- 4.10 The draft Wollondilly Scenic and Cultural Landscape Study highlights current visual amenity and historical and cultural context but little reference to the future character of the Appin (Part) Precinct progressively being transformed by urban development as per its growth centre status and land use infrastructure plan.

External Visibility

- 4.11 Most of the Site is of low visibility from the public domain, surrounding main roads including Appin Road, Wilton Road, Douglas Park Road, M31 and Moreton Park Road. Visibility into the majority of the Site is limited due to intervening undulating topography, low local ridgelines and knolls within the Site, and the presence of dense stands and corridors of mature vegetation.
- 4.12 Urbis believes the presence of such features and large areas of relatively homogenous pastoral landscapes reduces the overall scenic quality of the precinct's visual landscape.
- 4.13 The eastern extent of the Appin (Part) Precinct adjacent to Wilton Road will be of high visibility for a short period from moving vehicles, limiting the overall viewing.

Summary

- 4.14 Urbis advises the Proposal can be supported because of the limited external views of the Site. Close-range views are only available from the north and north-west, and longer-distance views from locations such as Razorback Ridge are viewed within a wide visual catchment over distance.
- 4.15 Additional reasons for support are: the highly modified nature of the Appin (Part) Precinct through historical land use and corresponding limited visually distinctive or unique elements and retention and augmentation of significant site vegetation.

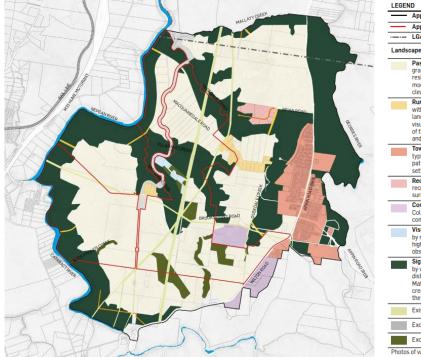


Figure 18: Landscape character areas (Source: Urbis)



Mature vegetation groupings (Wilton Road looking west)



Undulating pastoral landscape (looking south from Brooks Point Road)



Elladale Road looking west

- Appin & North Appin Precincts
- Appin (Part) Precinct

Landscape Character Areas

- Pastoral Landscapes (R1): Open areas of pastoral landscapes, grazing and live-stock, intermittent remnant vegetation, isolated residences and access to distant views. The landscape has been highly modified as a result of agricultural uses with large levels of vegetative objection.
- Rural Small Holdings (R2): Small pockets of semi-rural living with larger lots than Appin township but smaller than surrounding with larger lots than Appin township but smaller than surrounding landscape, often forming small clusters of residential dwellings with visual accessibility to one another and medium to close distance views of the surrounding landscape resulting from surrounding vegetation and townscape.
- and topography.

 Township / Suburban Settlement: Visually established suburb typically characterised by a grid system road layout and settlement pattern of small tol living and mature vegetation and gardens. The settlement is noticeably different from the surrounding

 Recreational: Highly modified landscape for the purposes of recreation in which the landscape is distinctly separate from its surrounds due to the highly specialised nature if its use.

 Commercial Holdings: Commercial enterprises such as the Colliery that are at odds with the surrounding built-form scale (both commercial and residential).

 Wisually Contained Green Area: Visually secluded area characterise

- Visually Contained Green Area: Visually secluded area characterised by mature trees surrounding an open grassed area. Views of the highly modified surrounding landscape and infrastructure are largely obscured, creating a noticeably separate area from the rest of the site.
- Significant Vegetation Groupings: Predominantly characterised by vegetated riparian corridors along creeks and rivers which is distinctive due to form, density and colouration of the tree canopy. Mature vegetation often limits long distance views across the site and creates visually contained and physically separated areas throughout the site.
- Existing Easements
- Excluded Land
- Excluded Urban Greening
- Photos of various Landscape Character Areas are on the following page.



Semi-rural living (400-440 Brooks Point Road)



Macquariedale Road, Appin township



Elevated pastoral land, looking west

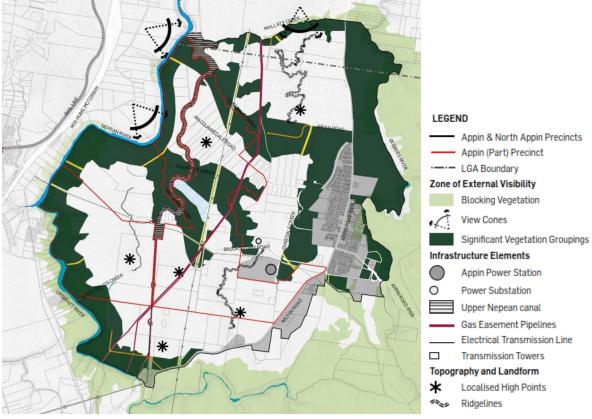


Figure 19: Visual resources and external visibility (Source: Urbis)

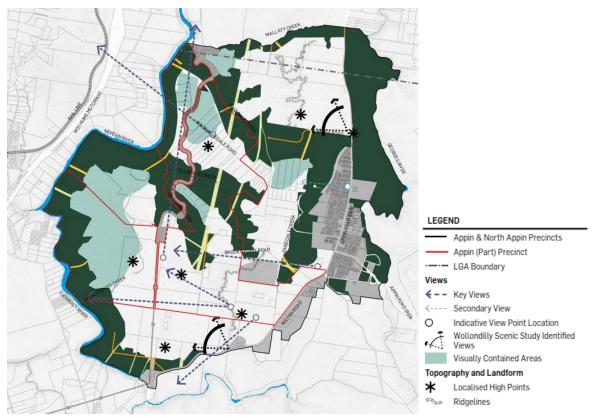


Figure 20: Visual opportunities (Source: Urbis)

Sustainability

- 4.16 The Sustainable Development Opportunities report considers various strategic and policy considerations, including green, blue, and grey infrastructure design metrics (refer to **Table 4**). These measures and priorities will be especially relevant to Western Sydney the Greater Macarthur Growth Area, as these parts of Sydney are greatly susceptible to the impacts of climate change.
- 4.17 The Western Parkland City is heating up twice as fast as the Eastern Harbour City and is experiencing six (6) times the number of days over 35 degrees.
- 4.18 The report identifies options to be explored and incorporated into future development guidelines for the Appin (Part) Precinct regarding the WSROC Urban Heat Planning Toolkit and the Cool Suburbs tool (CST). The CST is a voluntary, industry-based performance (ratings) tool prepared by WSROC in 2022 for place-based heat resilience. The CST has been designed to support improved heat-mitigation outcomes.
- 4.19 Greenfield development provides the opportunity to apply new ideas and processes to prepare for the future. The relevant strategic directions and intended outcomes to minimise the environmental impacts of new development have been used to inform the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan.

Table 4: Potential opportunities (Source: Urbis)

Potential Opportunities	Target / Measures			
Green Infrastructure				
Green Cover It has a major impact on urban heat, increasing evapotranspiration and shading adjacent surfaces Pervious and cooling surfaces Increasing areas of pervious surfaces will	 Target 40% tree canopy cover and increase tree density in the future public domain. Lot areas and dimensions are sized to enable the retention and establishment of trees. Target 65% permeable land across the project area. It increases the opportunity for tree planting and reduces surface run-off. 			
reduce UHI and increase groundwater absorption	The grass is prioritised over paving in areas of open space.			
Retention of existing trees Planted trees can take decades to mature to provide long-term benefits	 Retain existing mature and significant trees where possible to provide shade and biodiversity early in the delivery. Promote early planting of medium and large-size trees to compensate for the loss of existing significant trees. 			
Protect biodiversity and wildlife Biodiversity is vital and must be integrated into our urban areas	 Avoid or minimise impacts on biodiversity. Connect ecosystems by providing cross-corridor wildlife movement across new/existing habitat corridors. 			

Potential Opportunities	Target / Measures
Blue Infrastructure	
Water-sensitive urban design Urban heat mitigation starts with retaining water in the landscape	 Integrate water-sensitive urban design outcomes/ techniques Water is stored and reused in local recycled water systems.
Integration of waterways Existing natural waterways and water bodies should inform and be part of a master plan	 Natural features, including waterways, are integrated into development to promote wellbeing, and climate resilience and benefit from its cooling effects Existing creeks, drainage channels, ponds and wetlands are incorporated into the master plan.
Smart water infrastructure Utilising smart technology can improve operational outcome	 Smart technology is integrated into blue infrastructure to enable monitoring of the environment, increase operational efficiency and enable early warnings of issues from severe weather events.
Grey Infrastructure	
Lot layout Design to maximise the efficiency of passive ventilation and solar access	 Lots oriented to enable solar access for passive heating, lighting and renewable energy generation (solar panels). Site controls promote reduced site coverage.
Active transport Active transport allows for healthier lifestyles and reduced impacts on the environment	 Neighbourhoods should be compact, permeable and logical to minimise travel times, maximise accessibility and a walkable scale to ensure access to amenities. Active transport networks integrated with existing transport.
Roof colour and surfaces Houses with dark roof colours contribute to increased UHI	 Materials used that are light coloured and have a high solar reflective index (SRI) to lower heat absorption. External colours/materials should be natural and muted.
Efficient built form Building more energy-efficient buildings	 Public infrastructure requiring energy supply is of the highest efficiency standard available and integrates smart technology. Minimise future maintenance and upgrade requirements through durable and easily recycled materials choices. Encourage rooftop solar panels and residential battery storage

ENVIRONMENTAL INVESTIGATIONS

- 4.20 The following reports have been prepared to investigate the environmental aspects of the Proposal:
 - Douglas Partners Preliminary Geotechnical Investigations
 - Douglas Partners Preliminary Site Investigation (Contamination)
 - Niche Biodiversity Assessment
 - J. Wyndham Prince Water Cycle Management Strategy Report
 - Northstar Air Quality Opportunities and Constraints Review
 - Spectrum Acoustics Acoustic Assessment
 - WSP Strategic Transport Assessment
 - Ecological Australia Bushfire Strategic Study
 - Civille Urban Heat Assessment

Geotechnical Investigations

4.21 Douglas Partners Pty Ltd (Douglas Partners) have provided a preliminary evaluation of the following geotechnical features of the site (soil characteristics and geotechnical risks) and its suitability for future urban development.

Soils

- 4.22 Three distinct soil landscapes exist refer to Figure 21:
 - Blacktown
 - Luddenham
 - Hawkesbury
- 4.23 The following soil characteristics were observed:
 - Most of the Appin (Part) Precinct is mapped as Blacktown soils (green mapping) associated with the gently undulating rises on Wianamatta Group shales and Hawkesbury Sandstone. Blacktown soils comprise shallow to moderately deep red and brown podzolic soils on crests, upper slopes and well-drained areas, deep yellow podzolic soils and soloths on lower slopes, and poor drainage areas. Such soils are generally moderately reactive, highly plastic subsoils of low soil fertility with poor soil drainage.
 - Also mapped are, Luddenham soils (light pink mapping) in the southeast, northern and western parts of the
 Site, comprising shallow dark podzolic or massive earthy clays on crests and erosional soils. They are
 associated with undulating to rolling low hills of the Wianamatta Group shales and lower slopes and
 drainage lines.
 - Hawkesbury soils (dark pink mapping) which are are colluvial lithosols/siliceous sands comprising podzolic soils, siliceous sands and secondary yellow earths associated with drainage lines dissecting Hawkesbury Sandstones along the Nepean River and tributaries.

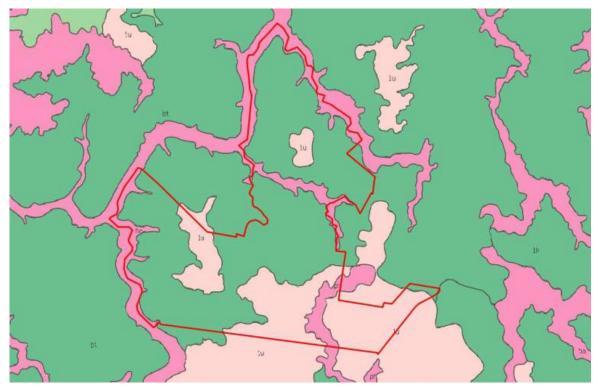


Figure 21: Regional Soils Mapping for the Site (Source: Douglas Partners)

Geology

- 4.24 Regional geology mapping indicates most of the Site is underlain by Ashfield Shale of the Wianamatta Group (dark green mapping) and Bringelly Shale (light blue mapping) in a small part of the site, primarily along ridges and topographical high points throughout the Site. Hawkesbury Sandstone (light green mapping) is mapped around the Site's perimeter and next to the Nepean River and topographical low points refer to Figure 22.
- 4.25 Regional salinity mapping indicates the Site is located in an area mapped as follows refer to **Figure 23**:
 - Very low salinity potential (green mapping)along the Nepean River and tributaries;
 - Moderate salinity potential (Pale yellow) across the majority (approximately 90%) of the site;
 - High salinity potential (orange mapping) along the southernmost portion of Ousedale Creek, an unnamed creek in the south of the site and along a ridgeline in the southwest
- 4.26 The Site has been assessed for salinity risks, indicating that non-saline to slightly saline conditions are present. The results are from a relatively small statistical sample size and are considered adequate for the rezoning assessment. They will require additional support for any future development application before the Site is considered free from salinity concerns.
- 4.27 Preliminary salinity testing indicates salinity potential would be within usually accepted limits, which could be managed by sound engineering and land management practices.



Figure 22: Regional geology Mapping for the Site (Source: Douglas Partners)

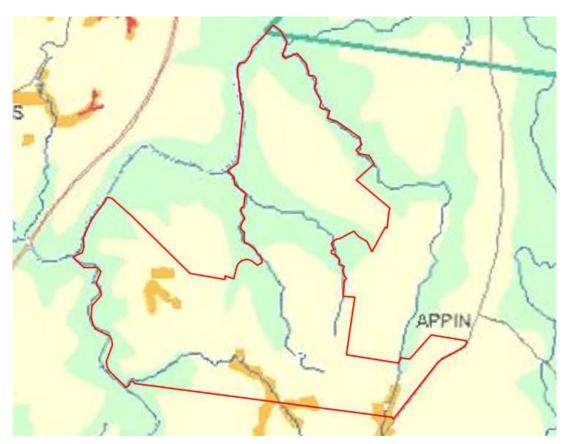


Figure 23: Regional Salinity Mapping for the Site (Source: Douglas Partners)

Acid Sulfate Soils

4.28 The lowest elevation on the Site is RL 70m AHD, which is well above the level at which Acid Sulphate soils are known to occur.

Stability

- 4.29 The following characteristics of stability were observed (refer to **Figure 24**):
 - The landform is predominantly gently sloping undulating terrain of gradual relief, although relief is significant
 on the Site's extremes. Crests and gullies are mostly broad, although deep and steeply incised gullies are
 present along the major creek lines.
 - Generally, the Site is considered stable, with slopes typically less than 5 degrees, occasionally increasing to
 10 degrees and rarely 15 degrees in paddocks adjacent to ridgelines.
 - Two areas of instability were noted:
 - The south-facing slopes of an area in the north of the dairy (the land sloped at between 20 and 25 degrees)
 - the south-facing slopes of the central ridge line in the south-east (the ground sloped at 15-25 degrees, with some areas over 45 degrees.
 - The banks of the Nepean and Cataract Rivers have formed cliffs of up to 30 m in height. Creeks are deeply incised, especially as they approach the Nepean and Cataract Rivers, with depths of greater than 15m
- 4.30 Slope stability is not considered a major geotechnical constraint to the proposed development. Most of the site is developable, with no effect from stability considerations.

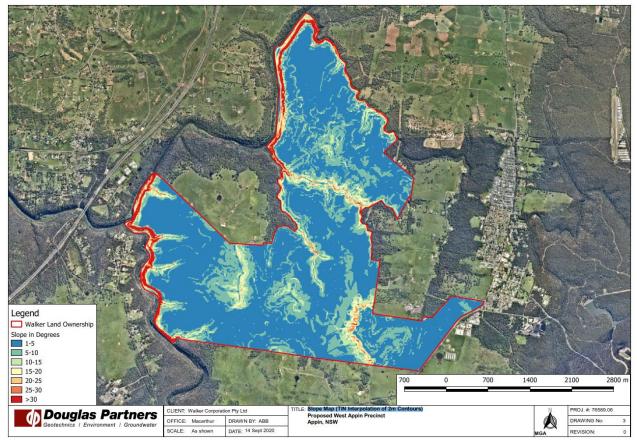


Figure 24: Slope Map (TIN Interpolation of 2m Contours) (Source: Douglas Partners)

Further Investigations

- 4.31 Further investigation will be required at the development application stage. Additional work will also be needed during the project's construction phase. The specific investigation would include (but not necessarily be limited to):
 - Further rock depth and rip ability assessment;
 - Stability assessment of the instability-affected portions of the landform to determine the depth and extent
 of unstable land
 - Additional salinity investigations for site soils and surface waters to increase the density of the data
 - Additional testing of soils and surface water for aggressivity testing and to determine the effects on buried concrete and steel structures
 - Additional testing of soils for erosion and dispersion for the detailed design and construction of future water bodies and the ability of the soils to be used as clay liners or similar
 - Stability analysis of the banks of creek lines if development is proposed within these areas
 - Detailed geotechnical investigations on a stage-by-stage basis to determine pavement thickness designs
 and lot classifications, as well as stage-specific issues, such as deep excavations and construction of roads,
 dwellings/structures on steeper landforms and crests
 - Routine inspections and earthworks monitoring during construction
 - Ongoing consultation with Subsidence Advisory NSW

Results of Assessment

- 4.32 The results of the assessment can be summarised as follows:
 - Some evidence of hillside/slope instability was observed within discrete areas of the site.
 - Shallow rock depth is likely to be a minor constraint to the economical and efficient development of the Site, based on reduced production rates during earthworks and the requirement for additional plant (e.g. large dozers, crushers etc).
 - The presence of erodible soils should not present significant constraints to development, provided they are well managed during site preparation and earthworks.
 - Salinity testing results indicate the salinity levels are sufficiently low to be considered free of significant salinity constraints
 - Although mildly aggressive soil conditions were encountered, aggressivity levels are manageable, subject to appropriate design and construction considerations.
 - Highly sodic and sodic soils appear widespread and require management to reduce dispersion and erosion
 and improve drainage, whilst typical of south-western Sydney, will be managed by good engineering
 practice.

Conclusion

4.33 The results of the land capability assessment have not identified any issue that would preclude the zoning for urban development of the Appin (Part) Precinct.

Contamination Assessment

- 4.34 The Preliminary Site Investigation (Contamination) by Douglas Partners assesses the Site for any significant contamination constraints that would preclude the proposed rezoning. The assessment was conducted through a desk-top review of online databases, published regional information and historical aerial photographs, soil logs, site walkover, and field mapping of possible contamination constraints.
- 4.35 Key findings of source contamination are included in **Table 5**.

Table 5: Sources of contamination

Source of Contamination	Associated Contaminant of Potential Concern (CoPC)
Low-density agricultural land use and localised instances of plant cultivation and a cattle yard	Metals, organochlorine pesticides (OCP), organophosphorus pesticides (OCP) and nutrients
Current and historical farm dams	Metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), total phenols and asbestos
Possible filling	Metals, TRH, BTEX, PAH, pcbs, total phenols and asbestos
Current and historical structures	(For residual building materials) asbestos, pcbs and lead; (for fill in building footprints) metals, TRH, BTEX, PAH, pcbs, total phenols and asbestos.
Stockpiles and soil mounds	Metals, TRH, BTEX, PAH, pcbs, total phenols and asbestos
Coal seam network and wells	Metals, TRH, BTEX and PAH
Coal wash filling on the site surface	Metals, TRH, BTEX and PAH
Illegal dumping and fly-tipping	Metals, TRH, BTEX, PAH, pcbs, total phenols and asbestos
Timber power poles	Metals, TRH, BTEX, PAH and total phenols
Above-ground storage tanks and fuel storage	Metals, TRH, BTEX, PAH and total phenols
Possible livestock burial area	Metals, OCP, OPP, fungicides, nutrients, and bacteria

Conclusion

4.36 The identified contaminants on the Site are typical contaminant sources within rural areas, and Douglas Partners advise the Appin (Part) Precinct is considered suitable for rezoning to allow for urban development.

Biodiversity

- 4.37 The Biodiversity Assessment (**BA**) by Niche consultants provides an overview of the vegetation and biodiversity values recorded within the Proponent's land holdings of 1,283.9 hectares and an assessment of impacts, mitigation measures and recommendations associated with rezoning the Proponent's land.
- 4.38 The Cumberland Plain Conservation Plan (CPCP) applies to the Proponent's land holdings. The CPCP was finalised with NSW approvals in place in August 2022. Commonwealth approval is pending.
- 4.39 Rezoning is the pathway to enforcing the mapped land categories in the CPCP. The categories are: (i)

 Certified Urban Capable Land (CUC), (ii) Non-Certified Avoided land (NCA) and (iii) Non-Certified

 Excluded Land (NCE).
- 4.40 The CPCP land categories on the Proponent's land are shown in Figure 25 and mapped on Figure 26.
 The proposed zoning categories under the CPCP land category are shown in Figure 27 and mapped on Figure 28 and Figure 29.

CPCP land category	Description as stated in CPCP	Area (ha) Proponents Landholdings
Certified— Urban Capable Land	Urban capable land will be subject to strategic biodiversity certification for development under Part 8 of the BC Act. Development in these areas does not require further site by site biodiversity assessment, so long as the approved conservation program detailed in the Plan is implemented by the department.	749.2
Non-certified land	d	
Avoided land	Avoided land is avoided from development due to identified biodiversity values on the site, or because the land cannot legally or feasibly be developed due to its topography or due to an environmental feature such as a riparian corridor. In this instance, 'avoidance' refers to the approach the department has undertaken to avoid and minimise the impacts to biodiversity from development in the nominated areas, as required under the BC Act and EPBC Act.	443.3
Excluded land	Excluded land is excluded from NSW strategic biodiversity certification and strategic assessment under the EPBC Act. These areas will not receive any biodiversity approvals under the Plan due to any of the following factors: the land is already developed for urban use development is already underway on this land under a separate process the land is environmentally protected, including reserves and offset sites Commonwealth land sites (such as the Defence Establishment Orchard Hills) there are roads or easements on this land it has specific urban zoning such as business, industrial, residential or special purpose (either already developed or to be developed).	91.2
Total		1,283.9 ¹

Figure 25: CPCP land category and assessment requirements (Source: Niche Environment and Heritage)

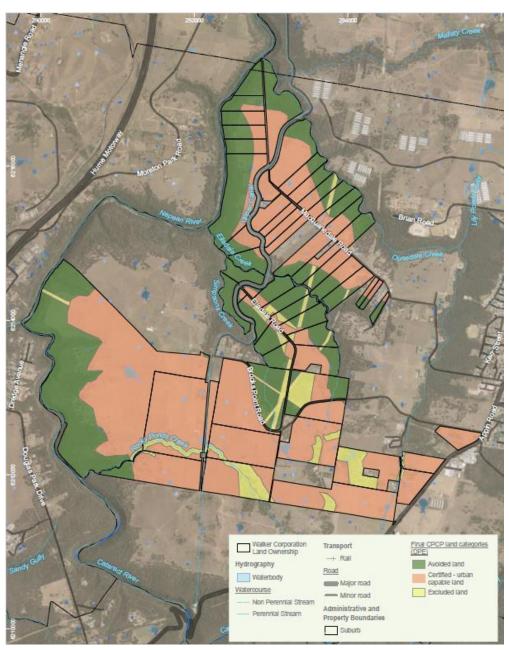


Figure 26: CPCP land categories on Proponent's landholdings (Source: Niche Environment and Heritage)

Final CPCP land category	Proposed scheme rezoning	Area (ha)²	Total (ha)
Not certified			
	C2 Environmental Conservation 433.4		
Avoided land	SP2 Infrastructure UD Urban Development	8.99	443.3
	C2 Environmental Conservation	21.87	
Excluded land	SP2 Infrastructure	0.17	91.2
	UD Urban Development	69.21	
Certified			
Certified - urban capable land	SP2 Infrastructure	10.4	749.2
	UD Urban Development	738.96	
Grand Total		1,283.9	1,283.9

Figure 27: Proposed zoning areas and CPCP land category (Source: Niche Environment and Heritage)

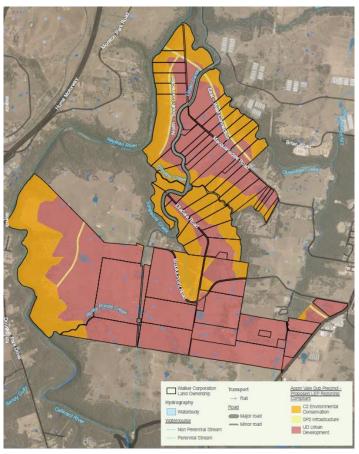


Figure 28: Proposed zonings (Version 1) (Source: Niche Environment and Heritage)

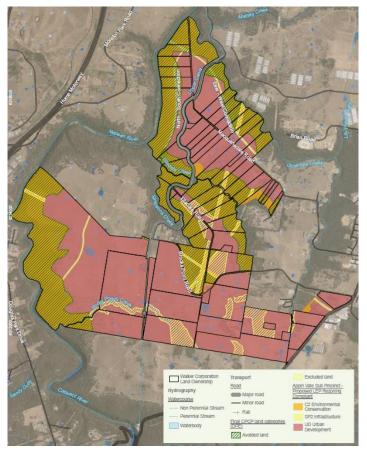


Figure 29: Proposed zoning (Version 1) with CPCP land category overlay (Source: Niche Environment and Heritage)

Existing Environment

4.41 Flora and fauna are described and assessed under the following categories – (i) native vegetation, (ii) threatened ecological communities, (iii) threatened species, (iv) threatened flora (species credits), (v) Matters of National Environmental Significance – flora, (vi) fauna habitat, (vii) threatened fauna, (viii) threatened fauna – koala and (ix) Matters of National Environmental Significance – fauna.

Impacts

- 4.42 The BA notes that biodiversity impacts on (i) Certified Urban Capable Land (CUC) were assessed as part of the CPCP certification process. Thus, CUC land proposed to be zoned (UD) Urban Development requires no further impact assessment. 749.2 hectares of the Proponent's land is mapped as CUC land and is proposed to be zoned (UD) Urban Development and (SP2) Infrastructure; therefore, no impact assessment is required.
- 4.43 No impact assessment is also required of the 455.2 hectares of CPCP mapped Non-Certified Avoided land (NCA) and (iii) Non-Certified Excluded Land (NCE), proposed to be zoned (C2) Environmental Conservation.
- 4.44 The Appin (Part) Precinct Plan shows 69.21 hectares of NCE-mapped land as (UD) *Urban Development* zone (not counted in the 749.2ha). The 69.21 hectares are to be district open space on the Appin (Part) Precinct Structure Plan. At the development application stage, this land may require an assessment of the biodiversity impact.
- 4.45 A total of 443.84 hectares of the Proponent's land is mapped as the region of the Southern Sydney Koala Population. The Appin (Part) Precinct Plan proposes 0.05 hectares of the mapped koala population be zoned (UD) Urban Development.
- 4.46 The impacts of the Proposal requiring biodiversity assessment are those on NCA and NCE land a total of 10 hectares; associated with the provision of the east-west and north-south connections roads proposed as (SP2) Infrastructure zone.
- 4.47 A supplement to the BA summarises potential impacts against the DPE document Cumberland Plain Conservation Plan Guidelines for Infrastructure Development (August 2022).

Mitigation Measures

- 4.48 The BA advises mitigation measures and protocols associated with biodiversity values would be addressed in a Biodiversity Management Plan that would be implemented before the commencement of work, during construction and operational phases of the development. Key components to be incorporated into the management plans include:
 - Vegetation clearing protocol for construction activities
 - Employee education and general environmental controls
 - Weed management
 - Fire management
- 4.49 The management plans could be introduced as a requirement in a DCP.

Recommendations

- 4.50 The recommendations of the BA are summarised as follows:
 - Biodiversity values impacted by the SP2 Infrastructure zone within CPCP NCA and NCE land would need to be assessed in a formal biodiversity impact assessment.
 - The Proponent should continue to consult with the DPE and other relevant authorities to assist with the road network planning
 - Existing trees within the CPCP-certified land be incorporated into the urban design where possible
 - Where possible, restoration and embellishment of open spaces and drainage spaces to include endemic species
 - Prior to the clearing of any native vegetation or habitat, a Biodiversity Management Plan be prepared
 - The Biodiversity Management Plan should contain the protocols listed in Section 5 of the BA report.

Conclusion

4.51 Niche advises the Proposal can be supported subject to the recommendations of the BA report

Water Cycle Management Strategy

4.52 The J. Wyndham Prince (**JWP**) report explains previous studies and relevant guidelines and assesses riparian corridors, water quality and quantity and flooding. The potential impact on ecology and habitat is also considered.

Riparian Corridors

- 4.53 A riparian corridor forms a transition zone between the land (the terrestrial environment) and the river (the watercourse or aquatic environment).
- 4.54 Many of the watercourses and associated riparian corridors are proposed to be located within the proposed (C2) *Environmental Conservation* zone.
- 4.55 NSW uses the Strahler stream classification system, where waterways are given an 'order' according to the number of additional tributaries associated with each waterway (Strahler, 1952).
- 4.56 The water courses have each been assessed for a 'watercourse type,' i.e. 1st to 4th order. The guidelines for controlled activities on waterfront land (National Resources Access Regulator 2018) (NRAR 2018) provide recommended riparian corridor widths corresponding to each water course type.
- 4.57 The NRAR 2018 guidelines state that where a watercourse does not exhibit the features of a defined channel with bed and banks, it may be determined that the watercourse is not waterfront land under the Water Management Act (2000) (WM Act).
- 4.58 Details of the riparian assessment, including riparian mapping and matrix, are provided in Appendix A of the JWP report. Figures 4-1 to 4-4 in Appendix B of the JWP report provide supporting illustrations of the riparian areas.

- 4.59 Given the poor condition of a small number of watercourses on the Site, JWP assessed whether these could be reclassified not to be considered waterfront land and, thus, remove the need for riparian corridor considerations. Maps supported by a riparian assessment matrix have been prepared to support the proposed reclassification. The maps and matrix show the Strahler classifications and watercourses proposed to be reclassified.
- 4.60 JWP completed a site inspection on 23rd July 2020, recording observed riparian characteristics and taking photos at each of the visited watercourses.
- 4.61 Under NRAR 2018 1st order watercourses can be realigned/engineered. Refer to **Table 6.** The 1st order watercourses on mapped CPCP Certified Urban Capable land are proposed to be removed and replaced by street drainage networks (pit and pipe networks). Additionally, any watercourse within 50m of Certified Urban Capable is proposed to be replaced by street drainage networks where suitable.

Table 6: Riparian Corridor Matrix (NRAR, 2018)

Stream order	Vegetated riparian zone (VPZ)	RC offsetting for non-	Cycleways & paths		ention sins	Stormwater outlet structure &	Stream realignment	F	load crossi	ngs
	()	RC users		Only within 50% outer VPZ	Online	essential services		Any	Culvert	Bridge
1 st	10 m	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
2 nd	20 m	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
3 rd	30 m	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
4 th	40 m	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes

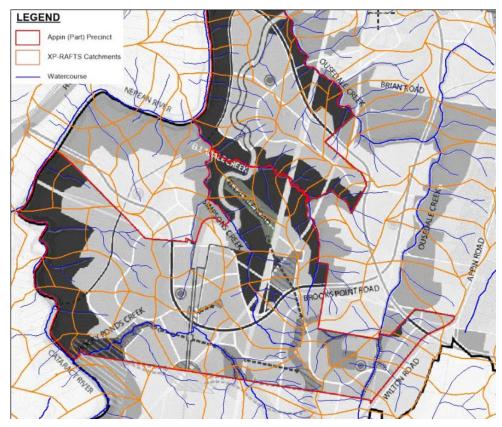


Figure 30: Appin (Part) Precinct Watercourses (Source: JWP)

Water Quality Assessment

- 4.62 The Water Cycle Management Strategy (**WCMS**) report by JWP advises water quality in the Appin (Part) Precinct will be managed by various controls to deliver the adopted water quality objectives, including a "treatment train" of Water Quality Control (**WQC**) devices to treat runoff from the proposed residential development areas before discharge to the downstream environment.
- 4.63 The indicative "treatment train" includes proprietary vortex-style gross pollutant traps (**GPT**) and bioretention rain gardens to be located at each development discharge point.
- 4.64 The "end of pipe" solutions are inconsistent with Wollondilly Shire Council's Integrated Water Management Strategy (IWMS). The IWMS provides limited details on how new approaches (i.e. centralised road swales with increased filtration) can be implemented on steep sites (>5%). There are also challenges with delivering the high pollutant removal targets using the available treatment approaches.
- 4.65 Traditional treatment measures have been used in the stormwater quality analysis to strive towards the elevated water management targets in Council's IWMS. Further discussion will be needed during the preparation of the Development Control Plan (DCP) for the Appin (Part) Precinct to ensure an economical water quality solution can be constructed.
- JWP has provided an indicative treatment train of water quality devices to achieve water quality targetsSee Table 7.
- 4.67 A series of alternate arrangements, such as open water bodies/wetlands, swales or proprietary devices for commercial areas, can deliver a similar water quality outcome and would form part of future iterations of the Appin (Part) Precinct DCP as the Precinct develops over the next 5-10 years.

Table 7:Water quality management measures

Land Use	Management measures
Residential land uses	 5 kL rainwater tanks on each residential lot; GPTs to pre-treat runoff before discharge into bioretention rain gardens;
Commercial land uses	Bioretention Raingarden, which will receive flows from the GPTs For all commercial areas within Appin (Part) Precinct, each development lot will need to deliver water quality management within the lot before discharge to the adjoining public road. Each commercial lot will need to account for its portion of the road reserves and will need to be compensated for with their treatment measures

Adopting the stringent water quality targets in the JWP report will see significant reductions in the pollutants discharged into the natural streams. The results of the water quality assessment show that while targets in Council's IWMS have not been achieved, a solution has been provided that protects the pristine waterways by ensuring a significant reduction in the existing pollutants discharging to the downstream environment. This outcome is highlighted by the neutral or beneficial effect achieved in the water quality solution, which aligns with the objectives of the Council's Integrated Water Management Policy (IIWMP).

Water Quantity Assessment

- 4.69 The objective of the hydrologic analysis was to assess the peak existing, and post-development flows at critical locations to determine whether detention management is needed to ensure no flow impacts occur in the adjoining major water courses.
- 4.70 The JWP report delineates sub-catchments to assess the broad 1,270 square kilometres (km²) Nepean River catchment to which the Appin (Part) Precinct discharges. JWP's approach was to 'book end' the assessment requirements by reporting flow in the 0.5 EY (Exceedances per Year) and 1% AEP (Annual Exceedance Probability) storm events.
- 4.71 A full range of storm durations and temporal ensemble patterns were assessed for each event. Table 6.5 in the JWP report compares "existing" and "developed" condition peak flows at each key comparison location. There are some peak flow increases within the local catchments of the Site. These local flow increases are generally located within the proposed C2 Environmental Conservation zones. Once these flows reach the main waterways (Nepean and Cataract), the localised increases are combined with flows from a significant larger catchment and do not result in overall flow increases.
- 4.72 Given there is no increase in flows within the major water courses (Nepean and Cataract Rivers), JPW advises a merit-based detention approach is considered suitable for the urbanised catchments of the Appin (Part) Precinct. The detention strategy will consist of one of the following strategies, which will provide an appropriate outcome for the catchment conditions rather than a blanket approach:
 - Detention Management Required (Business as Usual)
 - Full detention
 - Partial detention
 - No Detention Approach
 - Ecology Assessment

Ecology and Habitat Management

- 4.73 Given that a merit-based detention strategy is being proposed for the Appin (Part) Precinct, consideration has been given to the potential impacts this might have on local creeks and tributaries. It has been shown that flows in the major receiving waterways (Cataract and Nepean Rivers) are reduced once the Site is developed. However, local increases are experienced in the network of smaller creek systems if a no-detention approach is delivered. The ecology and habitat in these intermediate areas (between the development edge and the major rivers) can be managed as follows:
 - Peak (Infrequent) Flow Management
 - Regular Runoff Management
- 4.74 The context of these increases can be seen in Figure 6-3 in Appendix B of the JWP report. These increases in local peak flows are expected to have minimal impact on the ecological and environmental communities in the receiving waterways due to the infrequent nature in which they occur. Future detailed ecological investigations will confirm whether the natural streams will be resilient to the impacts of local peak flow increases (potential damage to flora and fauna habitats). The landscape will recover due to the short duration of peaks and the likely time that elapses between significant peak events.

- 4.75 The stream erosion index (SEI) is widely accepted as a measure of a development's impacts on the frequency of regular flows discharging to the riparian corridor or downstream watercourses. SEIs are in many DCPs across growth centres. The SEI target has been adopted in the JWP report. The SEI target ensures the ecology in the downstream waterways will be protected from frequent runoff from the proposed urbanisation. The reduced frequency and duration of elevated flows will minimise the stream erosion that occurs in the local creeks, thus ensuring the ecosystem downstream is protected by offsetting the urbanisation of the catchment.
- 4.76 The Water Cycle Management Strategy advanced by J. Wyndham Price is functional; it delivers the required technical performance, lessens environmental degradation and pressure on downstream ecosystems and infrastructure, and provides a 'soft' sustainable solution for water cycle management.

Flooding

- 4.77 The Wollondilly Shire Flood Study Broad Scale Assessment (**the Flood Study**) was prepared by Advisian on behalf of Wollondilly Shire Council in October 2021 to provide an understanding of the existing flood risk across the LGA. The Flood Study provides a basis from which flood planning controls can be applied to the Appin (Part) Precinct.
- 4.78 The Flood Study assesses a range of flood events, including the 10% Annual Exceedance Probability (AEP), 1% AEP, 0.5% AEP and Probable Maximum Flood (PMF). In the Appin (Part) Precinct, the flood mapping shows that the flood extents are contained in the well-defined creeks traversing the Site. Wollondilly Shire Council's flood mapping portal has been used to produce flood maps. The 1% AEP flood depths are shown in **Figure 31**, and the PMF flood depths are shown in **Figure 32**.
- 4.79 The Site comprises numerous short, steep-sided watercourses, draining catchments directly to major watercourses (Nepean River and Cataract River). In addition, the Flood Study mapping shows that the majority of flooding within the catchments is contained within the Cataract and Nepean Rivers riparian corridor suggesting that the development of the Appin (Part) Precinct will not be impacted during the major flood event. As such, it was considered that post-development hydraulic flood assessment is not required.
- 4.80 J. Wyndham Prince (JWP) assessed the catchments across the Appin (Part) Precinct in developed conditions and determined that most of the catchments are likely to be less than 40 hectares (ha) before discharge. However, there are two (2) catchments greater than 40 ha along Rocky Ponds Creek and Ousedale Creek. Careful consideration will be required in the detailed design of the road layouts and associated street drainage infrastructure so that these catchments are limited to around 40 ha, wherever possible, to ensure:
 - A traditional road and street drainage system will deliver the safe passage of flood flows to the Site's major watercourses
 - Acceptable size and cost of pipe infrastructure can be delivered
 - Trunk drainage reserves are avoided.
- 4.81 The increases likely to be experienced in peak flows have been assessed at a high level to determine the impacts that development may have on the flood extents in the natural creek systems and adjoining

- conservation areas. Site discharges are expected to drain from the Site quickly and will not be influenced by backwater from the Nepean River or Cataract River.
- 4.82 Various cross-sections have been assessed at locations downstream of the Site. Manning's equation has been used to compare the existing and developed normal depth of flooding at each cross-section in the 1% AEP event. The flows are derived from the hydrological assessment. The cross-sections in Appendix E of the JWP report illustrate the flood level changes. Each cross-section correlates to different flow-reporting locations in Figure 6-2 in Appendix B of the JWP report.
- 4.83 The cross sections show that the contributing catchments that experience the greatest increase in impervious conditions result in the greatest change in flood depths at the reporting locations (for example, locations "T" and "J" produce up to 1 metre (m) increases in flood depth). Catchments consisting of existing/undeveloped portions typically show that increases are minor flood depth changes of up to 0.3m.
- 4.84 JWP advised the Proposal can be supported.

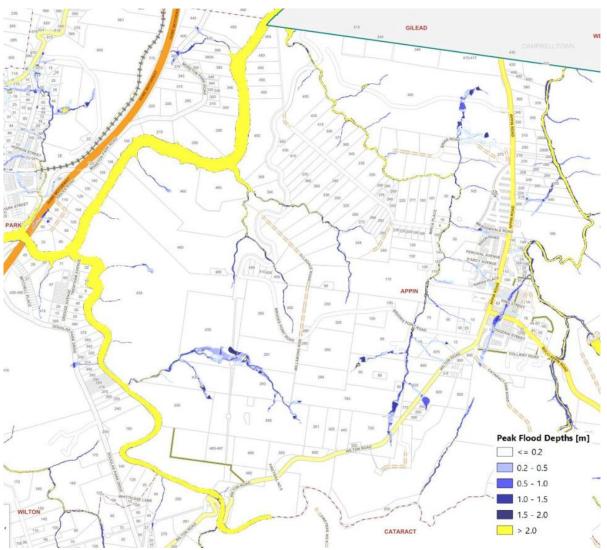


Figure 31: 1% AEP Flood Depth Mapping (Wollondilly Online Mapping System (Source: JWP)

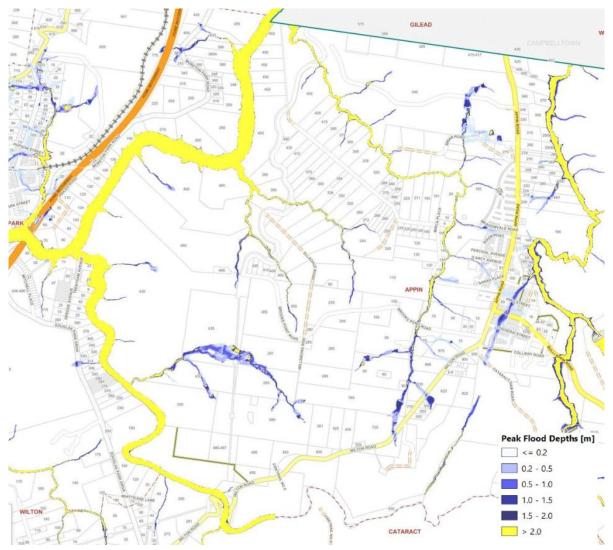


Figure 32: PMF Flood Depth Mapping (Wollondilly Online Mapping System) (Source: JWP)

Air Quality

- 4.85 The Air Quality Opportunities and Constraints Review report is a high-level review. The purpose is to identify potential constraints and opportunities associated with the proposed rezoning of the Appin (Part) Precinct. The report covers the following:
 - Legislation on air quality, planning controls, regulations and guidance
 - Existing environment
 - Air Quality impacts at the construction phase and operational phase
 - Air pollution emission sources
 - Risk assessment of existing emission sources and if they present a constraint
- 4.86 The closest air quality monitoring station (**AQMS**) is Campbelltown West. The AQMS is considered to be reflective of the conditions at the Site. Data over the period 2017 to 2021 has been assessed. A summary of the air quality monitoring data is presented in Table 3 of the report showing periodic exceedance of the 24-hour average PM₁₀ and PM₂₅ criteria in most years. Exceedance is not unexpected and is typical of most monitoring stations across NSW. The exceedances are typically associated with sporadic regional pollutant levels, such as bushfires and dust storms.
- 4.87 Construction activities have the potential to generate short-term emissions of particulates. The report recommends that mitigation measures to manage construction impacts are best undertaken at the Development Application stage in a site-specific Construction Environmental Management Plan.
- 4.88 A review of the land uses in the vicinity of the Site was undertaken. As shown in **Figure 33**, those that may have the potential to impact air quality at the Site have been identified.

Air Pollution Emission Sources

- 4.89 Potential air quality influences are identified around a 5km radius of the Site and are listed in Figure 34.
- 4.90 Several facilities are located within the recommended separation distance guidelines and have the potential to adversely impact the air quality and or odour of the Site.
- 4.91 Facilities within the recommended distance guidelines are listed in **Table 8**, along with the potential magnitude and corresponding risk.

Table 8:Water quality management measures

Facility	Magnitude	Risk
Appin Main Line Gas Valve	Slight	Medium
Appin Methane Power Station	Slight	Medium
Macarthur Water Filtration Plant	Slight	Medium
Esat-West Connection Road & Transit Corridor	Slight	Medium

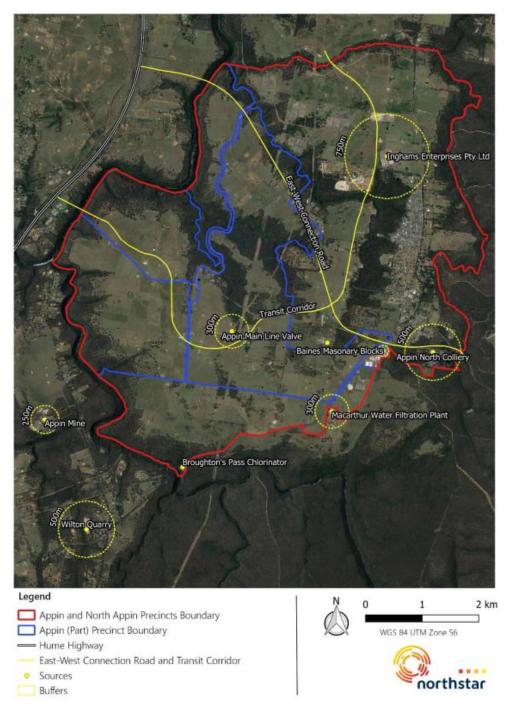


Figure 33: Identified local air quality influences and separation distances. (Source: Northstar)

- 4.92 The report advises that with appropriate land use planning and design and consideration of applicable regulatory standards and guidelines, air quality risks would be further reduced. A review of historical air quality data for the local region indicates exceedances of ozone and particulate matter, coinciding with periods of high temperature. It is anticipated these conditions will prevail during development and not present any other adverse effects on the rezoning application.
- 4.93 The report concludes existing and proposed identified sources of air quality and odour will not form a significant constraint on the rezoning and any proposed development of the Appin (Part) Precinct.

Facility Name	Location	Category	Separation distance guidelines (m)	Approximate distance (m) from Proposal boundary	Main Pollutant of Concern
Appin Main Line Valve	Brooks Point Road, Appin	Gas distribution works	300ª	Within Proposal site	Odour
Appin Coal Seam Methane Power Station	Northampton Dale Road	Electricity generation	-	155 north	VOCs, NO _X , CO
Broughton's Pass Chlorinator	Broughton's Pass	Water chlorination	300°	1 500 south	Odour
Inghams Enterprises Pty Ltd	345 Appin Road	Poultry farm	750ª	1 430 north east	Odour
Appin West Colliery	Douglas Park Drive	Coal mining	250 ^b	1 200 south east	Particulate matter
Baines Masonry Blocks	900 Wilton Road, Appin	Concrete works	100ª	118 m east	Particulate matter
Macarthur Water Filtration Plant	550 Wilton Road, Wilton	Water filtration	300°	70 south east	Odour
Wilton Quarry	155 Wilton Road, Wilton	Mining and extractive industry	500 ^b	2 700 south	Particulate matter
Appin North Colliery	Appin Road, Appin	Mining and extractive industry	500	780 east	Particulate matter
East-West Connection Road & Transit Corridor (Proposed)	Appin Road to proposed Hume Motorway interchange	Road traffic	100 ^d	Within Proposal site	Particulate matter, NO _X

Figure 34: Air quality source and buffer distance (Source: Northstar)

Acoustic Assessment

- 4.94 A Strategic Environmental Noise Assessment prepared by Spectrum Acoustics identified existing and potential future significant noise sources and suggests adopting several strategies to mitigate noise impacts. Overall, ambient noise could be described as commonplace in rural/suburban settings. There are several known existing and proposed significant noises sources in the area:
 - Appin Motorcross Track
 - Appin Power Station
 - South 32 Ventilation Shaft
 - Hume Highway
 - Wilton Road
 - Appin Road

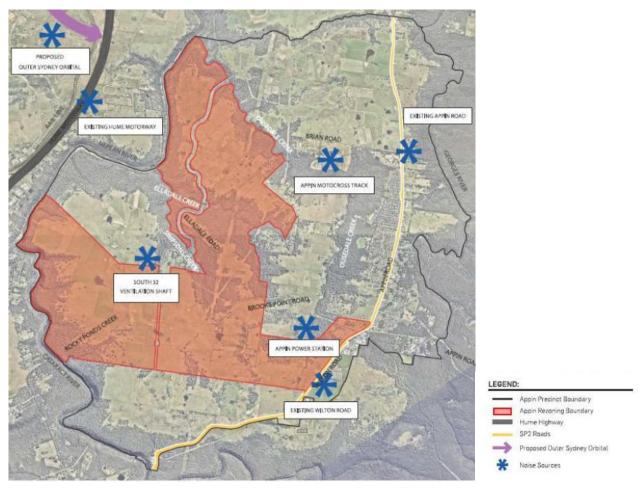


Figure 35: Noise Sources (Source: Spectrum Acoustics)

4.95 An assessment of these has indicated that a combination of relatively common architectural treatments and noise control, such as the construction of noise barriers, can be employed to achieve an adequate acoustic amenity for future residences.

Road Traffic Noise

4.96 Some areas within the study area are exposed to distant traffic noise from the Hume Highway, Wilton Road and Appin Road and will be exposed to future traffic noise associated with the proposed road infrastructure. Noise-contributing road corridors were assessed according to the State Environmental Planning Policy (Transport and Infrastructure) 2021 criteria for noise mitigation options for residential development. Projected traffic volumes for Wilton Road were evaluated and did not meet the criteria to require noise mitigation options. The Hume Highway, Appin Road, M9 Orbital, Internal Sub Arterial Roads and Internal Collector Roads were assessed, and noise screening procedures such as residential acoustic treatments, service roads, and noise walls are recommended for consideration. These measures can be addressed in a Development Control Plan.

Conclusion

4.97 The acoustic report identified several existing and proposed noise sources and their typical noise levels.

Noise control options have been provided. The Noise Report does not raise any issues that would preclude the rezoning of the Site.

Mining

- 4.98 The Appin (Part) Precinct is part of the mining area of the approved Bulli Seam Operations Project.

 Illawarra Metallurgical Coal (IMC), a wholly owned subsidiary of South32 Limited, has approval to extract the coal using longwall mining techniques.
- 4.99 Longwall mining has been completed for much of the Appin (Part) Precinct. Five small longwalls remain to be mined. These are located beneath Macquariedale Road. Based on current extraction rates, extraction could take place between 2035 and 2040. This mining would be constrained by the Nepean River, Ousedale Creek, Upper Canal, Gas pipelines and 330 kV and 66kV Transmission lines. If mining were to occur after development, it is anticipated that it would be designed under Surface Development Guideline 5 (SA NSW, 2018).
- 4.100 Mining operations have progressed northwest of the Appin (Part) Precinct on the western side of the Hume Highway. Mine infrastructure, such as gas pipelines, vent shafts, and coal washery, remains in the Appin (Part) Precinct as coal is transported underground to extractions points east of the Appin Village.
- 4.101 Appin (Part) Precinct is within the Appin Mine Subsidence District (**AMSD**). Being in the AMSDs does not preclude rezoning as there are clear and accepted building standards for all forms of development, particularly housing, to mitigate impacts from subsidence. Future development can be designed and constructed per the relevant standards to reduce and minimise the effects of mine subsidence.

Traffic and Transport

4.102 WSP has completed a Strategic Transport Assessment (**STA**) for the Appin and North Appin Precincts. The STA presents the results of strategic transport modelling, assesses the performance of the existing transport network and future internal road network, reviews the public transport and active transport elements of the transport network and recommends an infrastructure plan.

Existing Site Conditions

- 4.103 The Appin and North Appin Precincts are rural in character and zoning. There is minimal pedestrian activity (outside the zoned residential areas), resulting in low levels of active transport. The existing road network is sparse and rural, and intersections are priority-controlled.
- 4.104 The mode share from the 2016 Census Journey to Work data shows over 82% take a car (driver or passenger), 14% public transport and 4% walk/cycle/do not travel. Confirmed by data some nearby areas like Englorie Park are achieving greater active and public transport mode share. With increased population density and improvements in public transport and the active transport network, there is potential to achieve higher public and active transport mode shares.
- 4.105 Traffic counts confirm the majority of traffic on Appin Road heading through Appin is to/from Church Street rather than further south on Appin Road, heading towards the east coast rather than inland. Most heavy vehicle traffic uses Picton Road rather than Appin Road.

Table 9: Existing Road Characteristics

Road	Function	Standard	Posted Speed	No. lanes
Hume Highway	North-South inland interstate connection from Sydney to Melbourne	Motorway standard, limited access, divided carriageway	110 km/h	2 lanes per direction
Moreton Park Road	North-South local connection supporting farmland access east of Hume Motorway	Rural road, undivided carriageway with direct property access and no shoulders	80 km/h	1 lane per direction
Appin Road	Intra-regional connection from Campbelltown to Appin and Appin to Princes Highway near Bulli and Wollongong	Rural highway, undivided carriageway with some direct property access and priority-controlled intersections	80 km/h (Campbelltown to Appin) 90 km/h (Appin to Bulli)	1 lane per direction Overtaking lanes provided (Appin to Bulli)
Wilton Road- Appin	Intra-regional connection from Wilton to Campbelltown via Appin	Rural highway, undivided carriageway	80 to 100 km/h. 50 km/h through Appin town centre	1 lane per direction

Road Requirements

- 4.106 The 2026, 2036 and 2056 traffic models were developed to understand the road requirements based on the likely staging of land release. The results highlighted the PM peak period to be more critical for informing infrastructure needs and staging requirements. Therefore road requirements are discussed in the context of the PM peak period need.
- 4.107 The traffic modelling results show that by:
 - **2026:** the road network will be sufficient to cater for the forecast traffic demands. The opening of the Spring Farm Parkway extension will relieve traffic congestion on Narellan Road through Campbelltown and the Hume Motorway, and the northern part of Appin Road.
 - 2036: some additional sections of Appin Road require upgrading to four-lanes north of Appin Township. The connection of Stages 2 and 2A to the Hume Motorway via the first part of the East-West Connector Road is required to divert the impact on Appin Road to Campbelltown and the Hume Motorway. At this time, other developments along Appin Road would have commenced and upgraded their respective sections of Appin Road.
 - **2056:** the ultimate strategic road network supports the proposed Appin and North Appin Precincts Indicative Plan with only a short segment of Appin Road approaching capacity.

Road Network Upgrades and Timing

- 4.108 Based on the strategic traffic modelling results, a possible sequencing of development and the timing of road upgrades is recommended to support the growth in regional traffic, traffic from other developments and traffic from the Appin and North Appin Precincts. A map of the road upgrades to be considered is shown in **Figure 36**.
- 4.109 **Figure 36** excludes roads required for a particular development only and wider regional road upgrades such as the widening of the Hume Motorway, M9 Motorway Stages 1 and 2 and the upgrading of Picton Road (by others).
- 4.110 **Figure 37** outlines the investment decisions and staging of road upgrades to support traffic growth. Changes in the release of the timing of lots in the Appin (Part) Precinct), market conditions, access to land parcels and decisions about road upgrades would alter the sequencing.

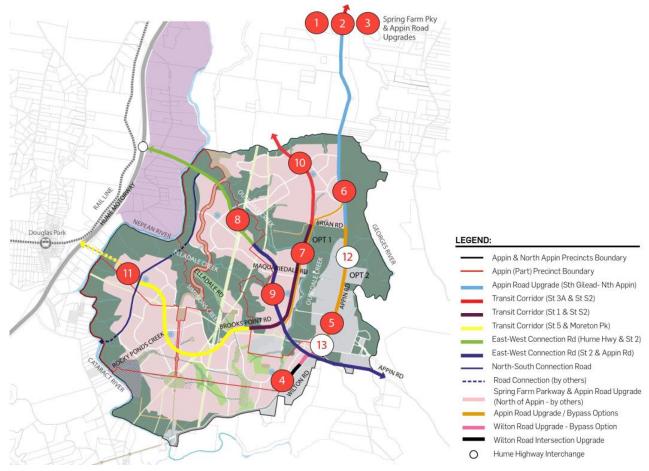


Figure 36: Map of road upgrades (Source: WSP)

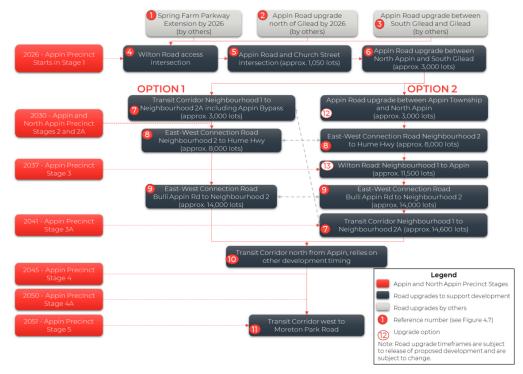


Figure 37: Road network upgrade staging (Source: WSP)

Public Transport

- 4.111 The Appin and North Appin Precincts are some 15 kilometres from the Southern Rail Line; therefore, connections are not convenient. However, if the Transit Corridor proposed in Greater Macarthur 2040 can provide a high-quality service, the convenience will be improved. The Transit Corridor will increase the chance of the Appin and North Appin Precinct population choosing public transport for their journey instead of a private car, reducing the pressure on the road network. An indicative cross section of the public transport corridor in Greater Macarthur 2040 is shown in **Figure 38**.
- 4.112 Delivery of the transit corridor will occur in stages as development progresses. The timing of the whole corridor to Greater Macarthur will depend on the timing of other proposed developments. The early delivery of the infrastructure asset would require early Government funding and the acquisition of various land parcels under multiple ownership. Bringing this asset forward would provide additional benefits of higher adoption of public transport services.



Figure 38: Greater Macarthur Transit Corridor Typical cross-section (Source: WSP and the Proponent)

Active Transport

4.113 The Appin (Part) Precinct Structure Plan (the structure plan) supports walking and cycling. The Wollondilly Shire Council Shared Cycleway Plan contains principles that have been applied to the structure plan.

Appin and North Appin transport plan

4.114 The WSP Strategic Transport Assessment recommends the following infrastructure to support the Appin and North Appin Precincts, as detailed in **Table 10** below.

Table 10: Transport assessment recommendations

#*	Road Corridor	Recommended upgrade
1	Spring Farm Parkway Extension	New four-lane road by 2026 (by others)
2	Appin Road	Widen to four lanes between Gilead and Spring Farm Parkway extension by 2026 (by others)
3	Appin Road	Widen to four lanes between South Gilead and Gilead by 2029 (by others)
4	Wilton Road access intersection	Construct a new access intersection to Stage 1
5	Appin Road/Church Street intersection	Upgrade intersection to traffic signals by the 1,051st residential lot
6	Appin Road	Widen to four lanes between North Appin and South Gilead by the 3,001st residential lot
7	Transit Corridor	New two-lane road (plus future public transport lanes) between Stage 1 and 2A by 3,001 $^{\rm st}$ residential lot.
9	East-West Connection Road	New four-lane road between Stage 2 and Hume Motorway by 8,001st residential lot
12	East-West Connection	New four-lane road between Stage 2 and Bulli-Appin Road by 14,000 th residential lot
13	Transit Corridor	New two-lane road plus public transport lanes north of North Appin Precinct (depends on the timing of other developments)
14	Transit Corridor	New two-lane road plus public transport lanes to Moreton Park Road (Douglas Park)

^{*} numbering intentionally non-sequential

Bushfire and Evacuation

- 4.115 The Appin (Part) Precinct Plan Bushfire Strategic Study (**the study**) assesses the Proposal against Planning for Bushfire Protection (**PBP**) 2019 (NSW Rural Fire Service, 2019).
- 4.116 The study examines whether the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan are 'appropriate' or represent 'inappropriate development,' as defined by PBP.
- 4.117 The study considers the broader bushfire landscape, weather, potential fire behaviour and risk profile for the Appin (Part) Precinct and the feasibility of providing bushfire protection measures. The land use evaluation considers the appropriateness of future land uses and the ability of development to comply with the requirements of PBP.
- 4.118 The study finds Appin (Part) Precinct is not exposed to significantly high bushfire risk because: (i) the risk posed by the bushfire hazard on adjoining lands is moderated by existing and increasing development, (ii) lack of continuity of the hazard and (iii) the effective resistance to fire spread to and within the precinct.

- 4.119 In addition, there is a lack of historical precedence of fire spread to and within the Appin (Part) Precinct.

 Bushfire weather analysis demonstrates a reduced risk from the south and east. Bushfire spread and intensity modelling does not indicate an increased risk at a level that cannot be responded to by the provision of bushfire protection measures. The bushfire hazards that will be retained or rehabilitated are narrow, with convoluted fire pathways limiting the potential for external fires to penetrate the Appin (Part) Precinct.
- 4.120 The study supports the urban development as proposed, finding there is ample capacity to afford future development with bushfire protection measures that meet the requirements of PBP. Much of the proposed urban development will be outside of 'bush fire prone land' (located more than 100 m from the hazard), thus, outside the areas where PBP formally prescribes bushfire protection measures. This further confirms the risk of bushfire is low.
- 4.121 Preliminary traffic modelling indicates the capability for early offsite evacuation, and stage planning recognises the need for evacuation to coincide with timings for the delivery of transport infrastructure. It is not expected that large-scale evacuation of the Appin (Part) Precinct would be required. It is not considered to have a significantly high bushfire risk. The risk level is diminishing with other developments occurring in the locality, adequate capacity for bushfire protection measures is to be provided, and a large proportion of the Appin (Part) Precinct (including the broader precinct) will not be bushfire prone following development.
- 4.122 As an additional bushfire resilience measure, there is ample opportunity for on-site refuge, including for the provision of either built or open space neighbourhood safer places. This capacity allows for differing evacuation and refuge options to be provided to the community, which research into past bushfire incidents indicates is important, and explicitly supports community resilience under rapid onset bushfire attacks, where evacuation may be unable to be undertaken or unsafe.
- 4.123 As planning progresses, further consideration regarding the approach to hazard assessment in a few areas where the slope is greater than 20 degrees should be agreed upon with the Rural Fire Service. However, consideration of this matter is not uncommon in bushfire planning, and given the scale of the Appin (Part) Precinct, there is scope for this to be addressed as stage planning progresses.
- 4.124 The study finds that the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan:
 - Does not trigger the "inappropriate development" exclusion requirements of PBP;
 - That the Acceptable Solution bushfire protection measures within PBP can be met by the future development contemplated, and there is an opportunity for protection measures beyond the minimum compliance of PBP;
 - Compliance with PBP is not reliant on the intervention/response by emergency services or hazard management on adjoining land;
 - The Proposal will not adversely impact the bushfire safety of occupants of nearby existing development and, wherever possible, will lower the risk.

Conclusion

- 4.125 Given the above, the Proposal is assessed as compliant with the strategic bushfire planning requirements of chapter 4 of PBP.
- 4.126 The Bushfire Strategic Study does not raise any matters that would preclude the rezoning of the Site.

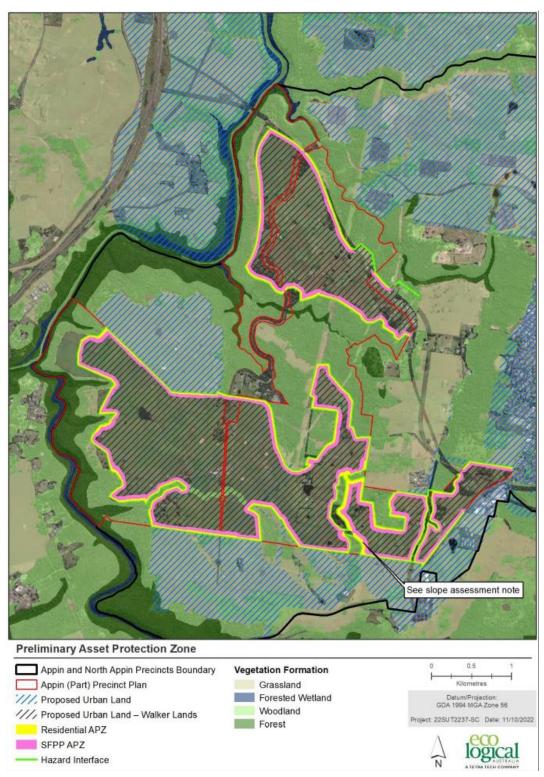


Figure 39: Preliminary residential Asset Protection Zones (Source: Eco Logical)

Urban Heat Island Effect

- 4.127 The Urban Heat Assessment (**the assessment**) examines physical conditions and heat risks, opportunities to address heat and potential measures for the Appin (Part) Precinct to mitigate urban heat.
- 4.128 The Appin (Part) Precinct (**the precinct**) is exposed to heat and cold. Heat is a particular concern due to its health risks for future residents. The precinct experiences an average of 17.1 hot (>35°C) days per year, including 2.9 days where the temperature peaks over 40°C. The number of hot days is expected to increase as the climate changes over the coming decades.
- 4.129 Therefore, the assessment recommends the precinct should be designed to:
 - Reduce the urban heat island effect to minimise overheating of the precinct
 - Promote thermally comfortable conditions at a human scale so that people can adapt to a hotter climate.
- 4.130 The recommendation is consistent with the Western Sydney District Plan Planning Priority (W20) "Adapting to the impacts of urban and natural hazards and climate change."
- 4.131 The assessment advises Green, Blue and Grey infrastructure can all play a role in mitigating the impacts of urban heat, and the following measures are recommended for the precinct:
 - Set energy efficiency benchmarks for non-residential buildings
 - Provide infrastructure to support local use of public transport, active transport, and electric vehicles
 - Adopt canopy cover and green cover targets for the precinct
 - Adopt a target for the precinct to retain water in the landscape
 - Set a cool roof benchmark
 - Encourage the use of 'cool paving' materials with high thermal emittance and or permeability
 - · Consider orientation of site features to catch prevailing breezes and maximise shade in summer
 - Set benchmarks for canopy cover and green cover in streets, parks and on private land
 - Priortise canopy cover where it will shade paved areas and building walls, particularly northern and western
 walls. Where canopy cover is impractical, shade structures can also be effective
 - Encourage irrigation or passive irrigation of trees and other vegetation
 - Encourage the use of WSUD features that retain water in the landscape
 - Set benchmarks for shade cover in key places such as parks, town centres, and transport nodes
 - Provide outdoor 'cool zones' including targeted measures such as additional shade and evaporative cooling
 - Prioritise all the above where people are most likely to be present and active outdoors, particularly vulnerable people
 - Encourage alternative water supplies for non-residential development
- 4.132 The assessment provides guidance on these measures, with specific commitments subject to further analysis as planning for the precinct continues. The report concludes:

- There are opportunities in the precinct's planning and design to reduce the heat island effect and reduce the impacts of urban heat at a human scale
- Green, blue and grey infrastructure all play a role
- A 40% tree canopy target is recommended for the Appin (Part) Precinct
- Appropriate targets for retaining water in the landscape and a cool roof standard should be considered
 as part of further planning.
- 4.133 The measures in the assessment can be incorporated into the DCP for the Greater Macarthur Growth Area and Release Area 1.
- 4.134 Urban heat is a risk to the future community. However, the precinct can be planned and designed to minimise its impact on the urban heat island and improve heat resilience. Civille advise the Proposal can be supported.



Figure 40: Urban Planning and design approaches to reduce urban heat and help people adapt to urban heat (Source: Civille)

HERITAGE INVESTIGATIONS

- The following reports have been prepared to investigate the heritage aspects of the Proposal: 4.135
 - Waters Consultancy Cultural Values Assessment & Connecting with Country Framework
 - Niche Aboriginal Objects Due Diligence Assessment
 - Niche Historic Heritage Constraints Assessment

Cultural Values Assessment & Connecting with Country Framework

Background

- 4.136 The Proposal is within Country with marked cultural sensitivity, particularly associated with the Massacre of 1816 and the specific sites where that event unfolded.
- GHD, Zion Engagement & Planning and Waters Consultancy were engaged by the Department of 4.137 Planning and Environment (DPE) to guide the application of the NSW Government Architect's (NSWGA) draft Connecting with Country Framework (CwC Framework) for the update to the Greater Macarthur 2040 Plan.
- 4.138 The engagement process produced the Greater Macarthur Growth Area (GMGA) cultural sensitivity mapping, which identified areas in the Appin (Part) Precinct with high-level sensitivity where further assessment and engagement were required.
- 4.139 In response, the Proponent engaged Waters Consultancy to prepare - 'The Appin Project: Cultural Values Assessment and Connecting to Country Report' (CVAR).
- 4.140 A draft CVAR has been prepared and is under review by the Registered Aboriginal Parties (RAPs), cultural knowledge holders and cultural knowledge advisors. Hence only a summary is provided.

Cultural Values Assessment and Connecting with Country Framework

- The draft CVAR addresses the Heritage NSW Aboriginal cultural heritage assessment process and the 4.141 CwC Framework. The cultural mapping, findings, aims and recommendations in the draft CVAR were informed and guided by engagement with Registered Aboriginal Parties (RAPs), First Peoples cultural knowledge holders and cultural knowledge advisors with connection to this Country.
- The draft CVAR explains locations, physical features and cultural values identified must be understood 4.142 as interconnected elements within Country that link people, Place and Story. The draft CVAR documents the intangible Aboriginal cultural heritage values in Appin (Part) Precinct and recommends appropriate safeguards. Recommended actions propose to conserve, protect and interpret the seventeen (17) areas of specific cultural value identified within the Appin and North Appin Precincts and within the Appin (Part) Precinct. The aim is to safeguard the cultural values of the cultural sites and support the health and well-being of Country.

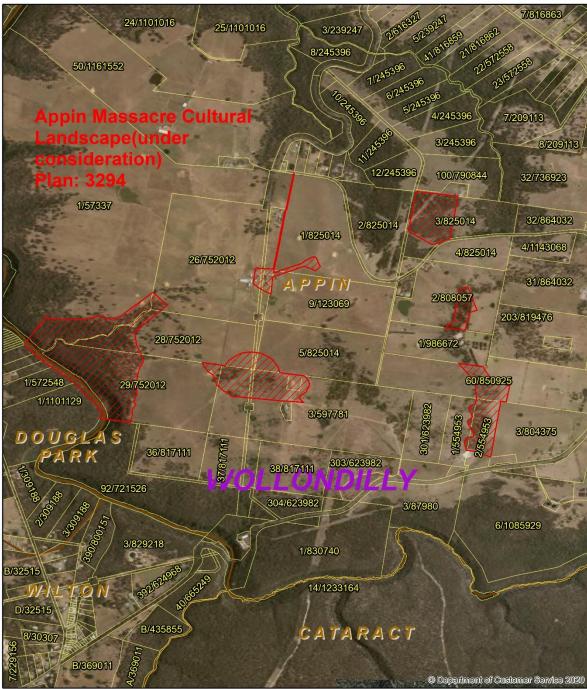
- 4.143 The draft CVAR supports the CwC Framework by setting out ten (10) commitments to inform the implementation of its principles and commitments to strengthen understanding and respect for the Country's cultural values.
- 4.144 Forty-one (41) draft recommended actions are identified to safeguard the specified cultural heritage values and meet the CwC commitments.
- 4.145 The draft CVAR mapping and recommended actions have informed the development of the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan.
- 4.146 The draft CVAR is being reviewed by the RAPs, cultural knowledge holders and cultural knowledge advisors, consistent with the Heritage NSW assessment process. The draft CVAR can be finalised and submitted following the conclusion of this process.

Heritage NSW - The Appin Massacre Cultural Landscape State Listing

- 4.147 In July 2021, the Heritage Council of NSW and the Aboriginal Cultural Heritage Advisory Committee (ACHAC) co-nominated the Appin Massacre Cultural Landscape for listing on the State Heritage Register in recognition of its shared Aboriginal and non-Aboriginal cultural heritage values. The GMGA engagement process and CVAR cultural mapping process contributed to the cultural heritage assessment conducted by Heritage NSW.
- 4.148 In September 2022, the Heritage Council recommended that the Minister for Environment and Heritage direct the listing of the Appin Massacre Cultural Landscape as a State Heritage Register item comprising five (5) areas (refer to **Figure 41**).
- 4.149 The Appin (Part) Precinct Plan (**precinct plan**) and Appin (Part) Precinct Structure Plan (**structure plan**) respond to the recommended listing. The precinct plan and structure plan include five (5) areas in the proposed open space and incorporate view lines, linkages and movement corridors between the five (5) areas to foster appreciation and interpretation of the broader culturally sensitive landscape. View corridors from the five (5) areas to regional landscapes beyond the Appin (Part) Precinct have also been incorporated into the precinct plan and structure plan.

Heritage Council of New South Wales





State Heritage Register - Proposed Curtilage for investigation Appin Massacre Cultural Landscape Legend **Appin** Proposed Curtilage Plan: 3294 LGAs 450 900 1,350 1,800 Suburbs ⊐ Meters Date: 7/09/2022 Land Parcels Scale:1:27,000 @A4 Datum/Projection: GCS GDA 1994

Figure 41: Recommended State Heritage Register listing

Aboriginal Objects Due Diligence Report

- 4.150 The 'Aboriginal Objects Assessment' (**the assessment**) was commissioned to assess the likelihood of Aboriginal objects and Places within or close to the Site.
- 4.151 The assessment found Aboriginal objects within the Appin (Part) Precinct. Several landscape features have a high potential for the presence of surface and sub-surface Aboriginal objects. There are nineteen (19) sites already registered on the Aboriginal Heritage Information Management System (AHIMS). Seven (7) additional, unrecorded sites on terraces above or within drainage lines and creek gullies were identified during the site surveys conducted for the assessment.
- 4.152 The Appin (Part) Precinct has high cultural sensitivity, given its association with the Appin Massacre, and recorded first contact site. It is the traditional Country of the Dharawal people. Their continued occupation of the area over tens of thousands of years has left accumulated depositional evidence. The Appin (Part) Precinct is within 200 metres of water, in proximity to ridge lines and associated sandstone outcrops with rock overhangs and shelters. The potential for in-situ Aboriginal objects is lower on land used predominantly for grazing since European settlement than in adjoining areas along rivers and water courses where original vegetation was not removed.
- 4.153 Aboriginal cultural heritage sites exist in the proposed C2 (Environmental Conservation) zone and the proposed UD (Urban Development) zone and could potentially be impacted by future activities.
- 4.154 Niche recommends undertaking the following measures before any activity occurs in those areas:
 - Aboriginal community consultation should be carried out under the '(DECCW 2010) Aboriginal Cultural Heritage Consultation Guidelines for Proponents 2010.'
 - An Aboriginal Cultural Heritage Assessment (ACHA) will be required to fully assess the impact of the
 proposed works on Aboriginal objects and cultural heritage resources within the activity area. The ACHA
 must be completed following the 'Guide to Investigating, Assessing and Reporting on Aboriginal Cultural
 Heritage in NSW (OEH 2011).'
 - All new Aboriginal cultural heritage sites identified during the site inspection be registered through the Australian Heritage Information Management System (AHIMS).
 - An Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the National Parks and Wildlife Act 1974
 will be required for the identified Aboriginal objects if the proposed harm cannot be avoided.
 - All subsequent Aboriginal cultural heritage assessments should be undertaken following the 'Greater Macarthur Investigation Area: Archaeological Research Design and Management Strategy prepared by AHMS (2017).'

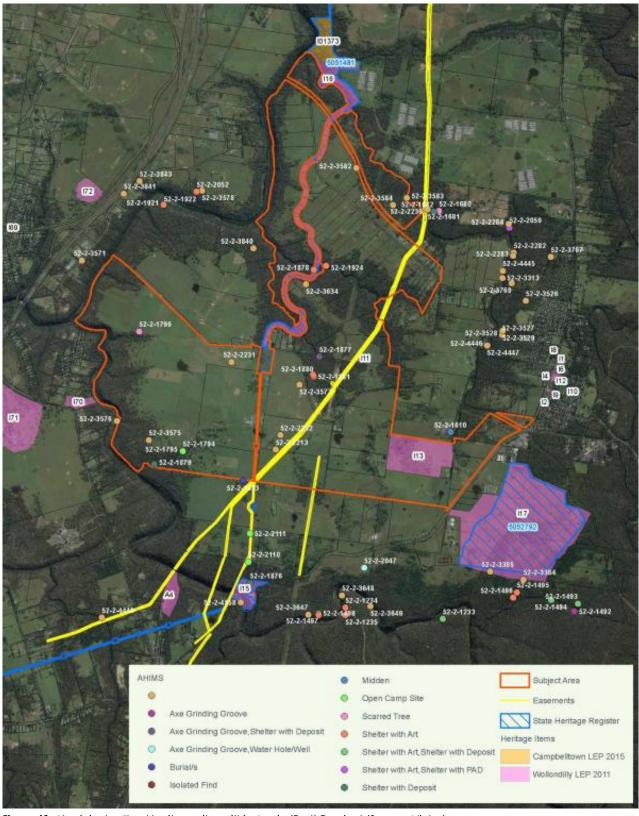


Figure 42: Aboriginal cultural heritage sites within Appin (Part) Precinct (Source: Niche)

European and Shared Heritage

4.155 The Historic Heritage Constraints Assessment (**HHCA**) explains the Site's historical context, identifies constraints and strategies, documents the evidence, and provides conclusions and recommendations.

Historical Framework

- 4.156 The HHCA is conducted within a historical framework that includes the following phases:
 - The Pre-European Landscape
 - Early European Exploration of the Appin area
 - European Settlement and large estates: (1811 to mid-19th century)
 - Subdivision of large estates into smaller estates (mid-19th century to late 19th century)
 - 20th-century farming
- 4.157 The Appin area is the traditional country of the Dharawal people. The Traditional Owners describe the Appin and Douglas Park area as 'Gundunurra and Dharawal tribal country', an area in a transitional boundary between the Dharawal and their westerly neighbours, the Gundungara.
- 4.158 The first Europeans arrived in the Appin region in the 1790s, and expeditions to explore and map the region took place in the early 1800s. Large parts of the subject site were granted to early settlers by Governor Lachlan Macquarie in 1811. The first estates from these grants were the Lachlan Vale and the Macquariedale Estate. As more grants were issued and the larger ones subdivided, other estates such as Teston Farm, Hardwick and Middle Point were formed. The Site was primarily used for agricultural and pastoral purposes, and extensive land clearing occurred.
- 4.159 The early decades of the 19th century saw significant unrest and often open hostilities between local Aboriginal groups and European settlers in the Appin region and the wide Cumberland Plain, referred to as the Cumberland Wars. There are areas within the Appin (Part) Precinct where the events leading up to the Appin Massacre occurred. The Appin Massacre saw at least 14 Aboriginal men, women and children killed at the Cataract Gorge. Oral history indicates that two of the men may have been buried outside of the Appin (Part) Precinct.
- 4.160 By the mid-19th century and early 20th century, many large estates were subdivided into smaller farming lots. Residential dwellings and ancillary buildings related to the 19th and 20th-century occupation still stand today.

Existing heritage items

- 4.161 Two (2) local heritage items listed under *Wollondilly LEP 2011* are within the Appin (Part) Precinct. No State Heritage Register listed items are within the Appin (Part) Precinct. The two (2) local heritage items are as follows:
 - Northhamptondale Group (Item#I13). 60-80 Northamptdondale Road West, Appin. A house, trees, slab
 farm, outbuildings and stables. The Northamptondale cottage was built before 1840, and has undergone
 modern renovations. Many of the outbuildings have fallen into disrepair.

• Elladale estate (Item #I11). 80 Elladale Road, Appin. The cottage was built in 1838 and has undergone modern restoration. The surrounding area has been developed with assorted farming structures and residences.

Adjacent heritage items

- 4.162 There are three (3) State Heritage Register listed items adjacent to the Appin (Part) Precinct as follows:
 - The Upper Nepean Canal. (SHR # 101373). The Upper Canal System (UCS) is a state heritage-listed gravity-fed
 aqueduct that supplies some potable water to Sydney from the Cataract River. The southern half of the UCS
 flows through the Cataract Tunnel and emerges near Brooks Point Road, where it flows for the remainder of the
 Site through an aqueduct.
 - Broughton Pass Weir (SHR # 115). Located at the southern end of the Appin Precinct within the CPCP. It is part of the Upper Nepean Water Supply Scheme.
 - Windmill Hill Group. (SHR # 01931) of to the east, consisting of Brennan's Farm, Larkin's Farm and Winton's Farm
- 4.163 Three (3) local heritage items under Wollondilly Shire LEP 2011 are adjacent the Appin (Part) Precinct as follows:
 - Windmill Hill Group of local heritage items (Item # 117) to the immediate east, consisting of Brennan's Farm, Larkin's Farm and Winton's Farm.
 - Stone cottages (Item # 170) to the immediate west on Douglas Park Drive
 - Upper Nepean Canal (Item # 116)







Figure 43: Existing and adjoining heritage items (Source: Niche)

Potential heritage items

- 4.164 Niche identified potential heritage items (**Figure 44**), which include:
 - Graves associated with the Appin Massacre part of the draft SHR Appin Massacre cultural listing
 - Lachlan Vale Estate (including the estate huts) part of the draft SHR Appin Massacre cultural listing
 - Teston Farm part of the draft SHR Appin Massacre cultural listing
 - Macquariedale Estate (including Moon's cottage)
 - Sandstone quarries
- 4.165 An assessment of significance evaluates the cultural significance of identified heritage items. The assessment is based on a series of values: historical, associative, aesthetic, social, research, rarity and representativeness. The various elements form an inter-related group demonstrating material links to the early history of the European settlement of Appin. These various elements are considered to hold levels of significance from local to State.

Conclusion and recommendations

- 4.166 The HHCA recommends a series of measures before any works commence to mitigate any potential impacts on the heritage significance and value of the items. The recommendations include:
 - Registered Aboriginal Parties (RAPs) be consulted in conjunction with an Aboriginal Cultural Heritage
 Assessment (ACHA) to assist in the documentation of the cultural values of the place and the development
 of mitigation strategies for the potential location of graves associated with the Appin Massacre outside of
 the southern boundary of the subject area
 - Ground Penetrating Radar (GPR) survey be undertaken to confirm the likely absence of the potential location of graves associated with the Appin Massacre within the subject area
 - Statements of Heritage Impact (SoHIs) be undertaken for each of the identified areas of sensitivity before any works are undertaken
 - A photographic archival recording is undertaken for the three sandstone quarries.

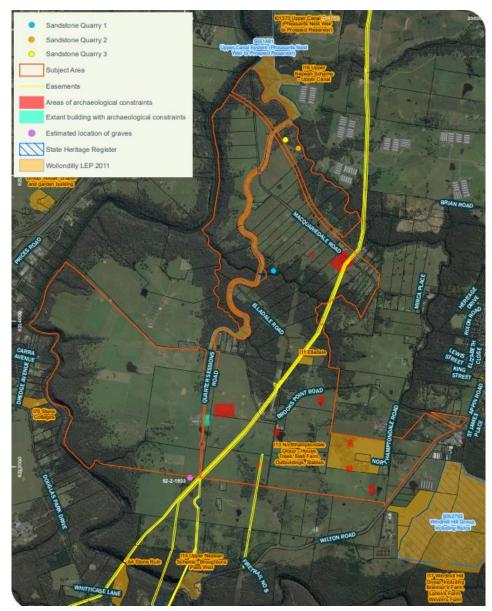


Figure 44 Potential Heritage items (Source: Niche)

SOCIAL INFRASTRUCTURE & OPEN SPACE INVESTIGATIONS

- 4.167 The following reports have been prepared to investigate the social aspects of the Proposal:
 - Urbis Social Infrastructure and Open Space Assessment
 - Urbis Social & Health Impact Assessment

Open Space & Social Infrastructure

4.168 The Social Infrastructure and Open Space Assessment provides guiding directions for the likely provision of social infrastructure and open space required to support the needs of the incoming population within the Appin and North Appin Precincts Indicative Plan. It also develops a plan for the allocation of these facilities within the Appin (Part) Part Precinct Structure Plan to accompany the rezoning of this area.

Population growth and key future demographics

4.169 The assessment has indicated a need for a range of open spaces and social infrastructure within Appin and North Appin Precincts to support the expected population of 65,204 people (refer to **Table 11**). The indicative age profile of the future population is expected to consist predominately of a young workforce (age 24-34) to make up 12.7% of the future population and parents and homebuilders (age 34-49) to make up 23.8%.

Table 11: Expected future population of Appin and North Appin Precincts

Expected dwelling mix	Dwelling yield	Occupancy rate	Expected population
Low-density (neighbourhood and hilltop housing)	16,710 dwellings	3.1 persons per dwelling	51,801 people
Medium density (village housing)	5,155 dwellings	2.6 persons per dwelling	13,403 people
TOTAL	21,865 dwellings	-	65,204 people

Provision of social infrastructure

- 4.170 The following social infrastructure types are included as part of this assessment:
 - Community facilities
 - Education facilities
 - Childcare facilities
 - Health facilities.
- 4.171 Planning for social infrastructure, whether in new or established communities, is a complex task.

 Benchmarks are only one tool that can be used. This study identifies social infrastructure by:
 - Identifying the demographic characteristics of the current community and the likely demographic characteristics of the future population to understand future needs and demands for social infrastructure.
 - Understanding the existing provision of social infrastructure and identifying key gaps in provision

- Understanding the Site and strategic context of the area that are guiding future planning decisions with consideration for stakeholder consultation undertaken
- Considering Council and leading practice principles and benchmarks, and applying these to the Site.
- The future local and district social infrastructure needs are summarised in Table 12 and Figure 45, and 4.172 Figure 46.

Table 12: Social infrastructure Recommendations – Appin and North Appin Precincts

Facility type	Quantity	Indicative Location	Benchmark evidence
District multipurpose community facility and	One multipurpose district community centre with an integrated library of approximately 4,420sqm, comprising approximately:		Adapted from the Wilton Priority Growth Area Community Needs Assessment (2018) and NSW State Library Population- Based Calculator.
library	 2,000sqm multi-purpose community space 		
	 2,000sqm library space 		
	 420sqm shared meeting spaces, staff spaces and amenities. 		
	Nil in Appin (Part) Precinct		
Local multipurpose	Three local level multipurpose facilities of approximately 900sqm	Locate facilities within the neighbourhood's mixed-use	Adapted from the Wilton Priority Growth
community facility	(1 x local multi-purpose facility within the Appin (Part) Precinct)	centres. Facilities should be close to public transport and co-located with other services such as school sites, recreational facilities or retail services.	Area Community Needs Assessment (2018)
Schools	Three primary schools and three community schools (Kindergarten to Year 12). School sites will be of the following approximate sizes:	Co-locate schools with sportsfields within the neighbourhood and local centres as shown in Figure 45 . Adapted from the SINSW School Site Selection and Development	
	Stage 1 primary school: 1.5haStage 2 primary school: 1.5ha Stage	The community schools (K – 12) will be located on the public transport corridor to	Guidelines
	2a community school (K – 12): 4ha	provide maximum	
	 Stage 3 community school (K –12): 4ha 	connectivity to serve the wider school catchment.	
	 Stage 3a community school (K – 12): 4ha 		
	Stage 5 primary school: 1.5ha		
	Future upgrades to Appin Public School, in consultation with SINSW, during the early stages of the Appin Precinct development.		
	(2 x primary schools and 1 x co-located Primary & Highschool within the Appin (Part) Precinct)		
Childcare	Approximately 25 long-day childcare centres with an average of 80 children meet the expected demand for 1,972 places.	Locate facilities within the neighbourhood and local centres to maximise accessibility and user	Adapted from the City of Parramatta Community Infrastructure Strategy
	Approximately 23 out-of-hours school care centres with an average of 80 children to meet the expected demand for 1,811 long places	convenience in line with market demand. Out-of-hours school care centres should be	(2019)
	Can be accommodated throughout the Appin (Part) Precinct.	Accommodated within or colocated with the school sites.	

Facility type	Quantity	Indicative Location	Benchmark evidence	
Community health clinics	Look to provide adaptable spaces within community facilities to accommodate health services.	Located within facilities highly accessible by public transport or co-located with other		
	Larger clinics to be provided by the private market and/or by LHD as required over time.			
	Potential to be localed in Appin (Part) Precinct			
General practice clinics	Up to 13 General Practice clinics, with five GP's in each. The needs of the community could be met through a smaller number of clinics, with a larger number of practitioners working from each.	Located within the neighbourhood and local centres	Adapted from Wollondilly Health Needs Assessment (2014)	
	Can be accommodated throughout the Appin (Part) Precinct.			

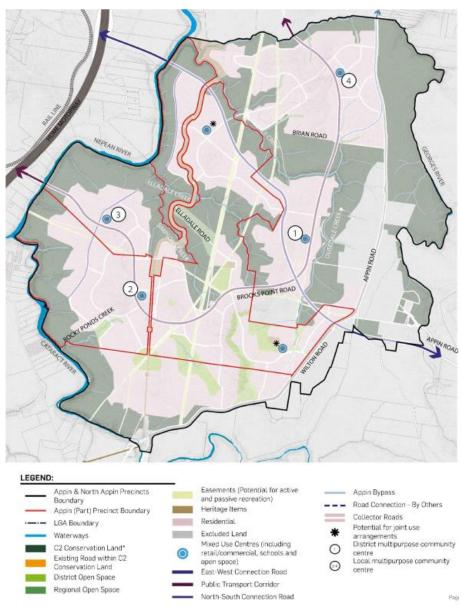


Figure 45: Recommended Provision of Community facilities

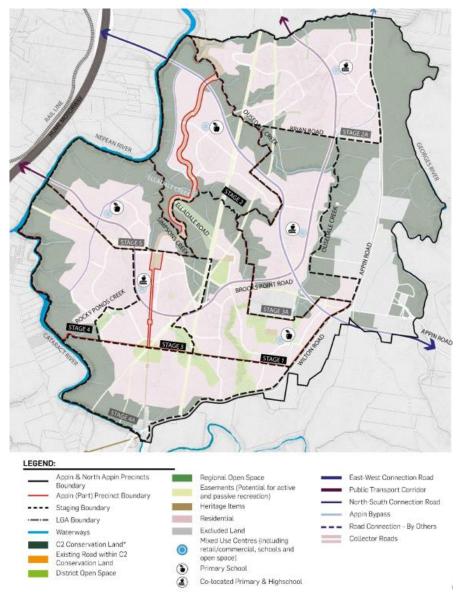


Figure 46: Recommended Provision of new schools

Open Space Assessment

- 4.173 Open space comes in various forms, from natural ecosystems to synthetic sports fields. All open space types have a role in supporting communities' social, environmental and economic needs. The assessment addresses the provision of public open space supporting outdoor recreation uses.
- 4.174 The types of open space that can support outdoor recreation can therefore be classified into two key categories:
 - (1) open space for structured recreation and
 - (2) open space for unstructured recreation.
- 4.175 These are described in **Table 13**. It is important that spaces for structured and unstructured recreation are provided to enable the community to access a range of recreational opportunities and are not dominated by one particular setting.

Table 13: Open space and recreation types

	for structured	

Open space areas predominantly support physical activity such as outdoor sports or formal play. Generally consists of:

- Sports fields and grounds
- Playgrounds
- Outdoor exercise areas

Open space for unstructured recreation

Open space areas predominately support casual, physical, social or cultural activities, such as picnicking, walking or group gatherings. Generally consists of:

- Natural areas and bushland
- Linear trails and accessible riparian areas
- Gardens and parklands
- Beaches and foreshores.

Open Space Hierarchy

- The open space provisioning for Appin and North Appin Precincts includes: 4.176
 - Adopting a hierarchy of provisions for open space based on state and local standards.
 - Considering both performance-based and quantitative spatial standards for open space. Performancebased criteria have been adopted from the draft Greener Places Design Guide. Quantitative spatial standards have been sourced from best practice approaches around Australia.

Quantity Assessment

- 4.177 The Appin and North Appin Precincts Indicative Plan contains 20.99ha of regional open space, 153 ha of district open space and 48 ha of local open space, totalling 223.6ha (3.4ha per 1,000 people).
- 4.178 The Appin (Part) Precinct contains 20.99ha of regional open space, 84.89ha of district open space and 21.8ha of local open space, totalling 118.8ha (3.09ha per 1,000 people). The Appin (Part) Precinct also contains a further 36.7ha of other open space(other green grid elements/easements).

Quality Assessment

- 4.179 The open space areas are generally equitably distributed, with good coverage of district parks and more accessible local spaces. They meet the minimum size requirements in the draft Greener Places Guide and range between 2ha to 31ha in size.
- The Appin and North Appin Precincts include areas identified as linear parks along transmission 4.180 easement corridors. These areas provide opportunities for networks of trails and small gathering spaces, environmental education and cultural expression through nature walks and sculpture walks.
- 4.181 This open space will also be supplemented by an extensive network of walkways and active trails through bushland areas, providing considerable amenity, biodiversity and cooling benefits to the community.

Recreation Requirements

4.182 The provision of recreation requirements has been sourced from the Wilton Priority Growth Area Community Needs Assessment. Based on the benchmarks in Table 14, the incoming population is likely to generate demand for an indoor aquatic centre, six double playing fields, 15 outdoor courts, 25 playspaces and four outdoor fitness stations.

Table 14: Recreation benchmarks Appin and North Appin Precincts

Facility type	Benchmark	Benchmark application	Recommended provision
Aquatic centres	1 for every 30,000 – 60,000 people	1 centre	Demand for a public facility will be met by developing a planned indoor aquatic centre at Wilton. A private learn-to-swim facility is recommended within the Appin Precinct to supplement this provision and accommodate some localised needs of the incoming population.
Indoor recreation facilities	1 for every 50,000 – 100,000 people	0.7 centres	The incoming population will not generate the need for a standalone facility in the Appin Precinct. Demand will likely be met through planned facilities at Menangle Park and Wilton
District sportsgrounds	2 double playing fields and amenities per 10,000 people	Six double-playing fields	To be located adjacent to schools and within the regional park.
Multipurpose outdoor courts	1 for every 4,200 people, 0.05ha per court, plus runoff space and amenities	15 outdoor courts	To be distributed among district and some well-located local open spaces. Some of the latter may be half-court facilities for informal local games. Consideration should also be given to potential joint-use arrangements with schools.
Playspaces	1 playground for every 500 children aged 0 – 4 years 50sqm minimum, within a park 1 play space for every 500 children aged 5 – 11 years 100sqm minimum, within a park	Up to 25 playspaces total	Rather than 22 local playspaces, it is strongly recommended there be a range of play spaces distributed across the Precinct. There is potential for: • A large regional space with a wide range of • play opportunities, located within the regional park and including all abilities play • Nature-based play spaces, incorporated within urban greening areas and linear parks • District play spaces located within larger district parks, preferably co-located with outdoor courts or half courts to provide for a range of age groups and preferences • Local play spaces within walking distance of homes and key destinations
Outdoor fitness stations	1 station per 15,000 people	4 outdoor fitness stations	At least four outdoor fitness stations, to be distributed among district spaces and potentially the linear parks, where free of environmental and topographical constraints.

Social & Health Impact Assessment

- 4.183 The Social and Health Impact Assessment (**SHIA**) was prepared to respond to Wollondilly Shire Council's Social and Health Impact Guidelines. It requires applicants to provide an overview of each assessment category's likely positive and negative impacts and proposed mitigation measures.
- 4.184 **Table 15** outlines the likely positive and negative impacts of each assessment category

Table 15: SHIA summary of assessment categories – Appin and North Appin Precincts

Assessment category	Positive	Negative	Mitigation measures
Population change	In line with State and local strategic planning, the Appin & North Appin Precincts Indicative Plan will provide approximately 21,865 new dwellings across the site and increase the population of Appin by approximately 65,204 people (12,000 new dwellings and approximately 35,800 new people within the Appin (Part) Precinct). The proposal is also expected to be developed over eight stages, enabling the area's growth to be managed.	Pressure on social infrastructure. This is typical for unplanned growth. However, the subject proposal is for planned growth in line with state and local planning.	Engage with state and local agencies Develop a social and open space needs assessment. Prepare a delivery strategy for social infrastructure
Healthy Lifestyle	Access to open space via walking and cycling paths All residents within 2km of district open space Provision of adequate open space to meet the needs of the future population	Nil.	Develop a social and open space needs assessment. Implement Performace standards for access to open space in development control plans which can be assessed at the DA stage
Healthy Communities	The Appin (Part) Precinct Structure plan has been designed around a neighbourhood model to help maximise residents' connection to services and transport.	Delay to the timing of delivery of neighbourhood centres and social infrastructure.	Maintain the design of centres around a mixed-use neighbourhood model. Continue consultation with state and local agencies
Social cohesion and sense of belonging	Appin's natural surroundings, koala habitats, supporting groups and community facilities bring people together and create a sense of community. Retention of the Appin village Provision of adequate open space and social infrastructure in planned locations for ease of access within the community.	Tensions between existing and new residents. Delay to the timing of social infrastructure.	Council lead communication with the existing community to prevent misinformation about the proposal. Engage with service providers early. Prepare a community development plan

Assessment category	Positive	Negative	Mitigation measures
Housing	Increase in the availability, typology and diversity of housing in the locality.	Nil, as the proposed housing provision is in line with strategic planning.	Assess impacts on housing affordability.
Accessibility and mobility	New road and public transport infrastructure proposed to improve access for existing and new communities.	Delay in the delivery of new roads and public transport infrastructure.	Implement the recommendations of the transport reports. Continue to plan for public transport and liaise with state and local
Community safety	The design of the structure plan aligns with safety principles.		authorities regarding delivery. Provide CPTED principles in a Development Control Plan. Complete further assessment at the
			detailed design stage.
Access to employment and training	The provision of new roads and public transport infrastructure improves access to employment and tertiary education providers sub and regional centres north and south of the Site.	The Proposal will not decrease the quantity or diversity of employment or training opportunities available to the existing or future community and is unlikely to create a negative	Nil.
	Provision of new primary and high schools, centres and nearby employment areas.	employment impact.	
Local economy	Provision of new opportunities to work closer to home during the consultation and the ongoing life of the project.	Competition between centres.	Develop an employment strategy.
	Partnership with first nations communities for the delivery of services, materials and new employment opportunities.		
Cultural and community significance	A structure plan that responds to the cultural value and significant sites.	Maintaining and protecting cultural values and key sites from negative impact.	Develop a CwC framework and deliver on recommendations of the CVAR.
	Opportunities to educate new and existing communities about the Site's history.		
Supportive communities and needs of specific population groups	-	-	Implement inclusive design practices for the development of public spaces, open spaces and social infrastructure to meet the needs of different community groups.
			Continual consultation with state and local authorities about the community's needs.
Participation in community life	The provision of a diverse range of open spaces and community facility types in well-accessible places	-	Council lead communication with the existing community to prevent misinformation about the proposal.
	provides the opportunity to meet the needs of a new community.		Engage with service providers early. Prepare a community development plan.

Assessment category	Positive	Negative	Mitigation measures
Impact on amenity (pleasantness) of place and	The Site is currently in private ownership, limiting access to key sites. The Proposal will create a public domain.	Retention of natural features limits negative impacts.	None identified at this stage of the planning process beyond those recommended for other impacts.
surroundings	The Appin (Part) Precinct structure plan responds to its place and setting by recognising the unique Appin landscape, protecting key topographical features, waterways and promoting access to green space.		

Summary

- 4.185 The Planning Proposal for the Appin (Part) Precinct is the first of many planning stages for the Appin and North Appin Precincts. At this stage of the planning process, the social impacts have been appropriately addressed at a high level by suitable social impact practitioners.
- 4.186 The Proposal is aligned with strategic directions for housing and employment growth in the LGA. It will contribute to positive social impacts. The Proposal will accommodate the required social infrastructure and open space areas to support the health and well-being needs of the incoming population.

ECONOMIC INVESTIGATIONS

- 4.187 The following reports have been prepared to investigate the economic aspects of the Proposal:
 - Atlas Urban Economics Western City Housing Supply Analysis
 - Atlas Urban Economics Residential Density Discussion Paper
 - Urbis Retail and Employment Study

Western City Housing Supply Analysis

- 4.188 The Western City Housing Supply Analysis (the analysis) was prepared to understand the likelihood of planned supply meeting projected dwelling demand by 2041. The analysis estimates the Western City District would require some 658,000 dwellings by 2041.
- 4.189 The analysis forecasts a shortfall of just over 118,000 dwellings by 2041.
- 4.190 The analysis recommends the following growth strategies be pursued:
 - Priorities and Augment precinct planning. The analysis observes the misalignment between planned and actual housing supply, evidenced by precincts where land is identified for growth but still to be meaningfully planned so it can be developed.
 - Work with developers with significant land holdings to expedite planning and delivery of housing. Fragmented land ownership is a major driver behind poor take-up of development opportunities across the District's Growth Areas. The release of more housing through the Precinct Acceleration Protocol (PAP) process will assist in addressing the forecasted undersupply of housing. Large sites held in majority ownership will be critical in facilitating new supply.
 - Bring forward release of Investigation Areas. Given the large quantum of theoretical capacity unlikely to be delivered for several reasons, including the time taken for rezonings to occur and lack of services infrastructure, opportunities to unlock additional supply must be investigated and, if found to be viable, prioritised.
- 4.191 The analysis identifies the Appin and North Appin Precincts with a forecast housing supply of around 20,000 dwellings which could be prioritised for development (through the PAP protocols), given they are held in single or majority ownership.
- 4.192 Should population growth exceed that expected in government population projections, the housing supply shortfall (118,000 dwellings) concluded in the analysis would be further exacerbated.
- 4.193 To avoid perpetuating the chronic housing shortfall and unsustainable price escalation, the analysis recommends a review of housing targets, fast-tracked land release planning and forward funding of essential infrastructure.
- 4.194 The analysis is consistent with that undertaken as part of the Technical Assurance Panel program, which found the current planned housing supply across the Western City District, would not keep up with the housing demand for the Western Parkland City.
- 4.195 The Proposal responds to the housing shortfall of 118,000 dwellings by proposing rezoning the Appin (Part) Precinct for 12,000+ homes.

Residential Density Discussion Paper

- 4.196 The Residential Density Discussion Paper (**the paper**) examines potential dwelling densities and typologies suited for the Appin (Part) Precinct.
- 4.197 Fifteen (15) case studies across Western Sydney are examined to understand the densities of established areas and to form a series of benchmarks and trends applicable to the Appin (Part) Precinct. A review of minimum residential density targets provided within the South West Growth Area under the WPC SEPP is provided. The case studies for established and planned areas are characterised by a broad range of land use zones and residential typologies influencing the residential densities.

Table 16: Residential density benchmark analysis

Residential Area	Residential Typologies	Density Range
Established Areas	Rural residential areas	Sub 3 dwellings/ha
	Low density residential	9 – 12 dwellings/ha
	Medium density residential	12 – 31 dwellings/ha
	High density residential	42 – 60 dwellings/ha
Planned Areas	Large lot residential	10 – 12.5 dwellings/ha
	Low density residential	15 – 25 dwellings/ha
	Medium-density residential (1)	25 – 35 dwellings/ha
	Medium-density residential (2)	35 – 45 dwellings/ha
	High density residential	45 dwellings/ha +

Market Context

- 4.198 The paper notes that residential development across the greenfield precincts of south-western Sydney and the Greater Macarthur Growth Area has traditionally focused on low-density and detached housing products. This trend in lower-density typologies is aligned with the increasing issues around housing affordability, which has seen developers respond by progressively delivering smaller lot sizes in the past decade.
- 4.199 The preference for this lower-density typology within south-western Sydney was further accelerated by COVID-19, which saw high sales volumes in the South West Growth Area, primarily due to low-interest rates and various government financial initiatives.

Emerging Residential Typologies

4.200 Market investigations provide emerging trends in housing typologies, such as an increased appetite for medium-density typologies – e.g. townhouses and villas. The trend towards medium to higher-density typologies is starting to emerge within Edmondson Park, Oran Park Town Centre and Narellan, which are well supported by retail amenities and rail transport accessibility.

- 4.201 The paper concludes with the following recommendations:
 - There is strong demand within Wollondilly for larger detached housing on rural/environmental lots. However, these are generally beyond most buyers' purchasing capacity due to the land's size and cost. Whilst the demand is strong within the broader Wollondilly LGA, there is limited opportunity for this typology within Appin.
 - The paper suggests the preferred housing typology for Appin would be detached housing with low residential densities, 15 25 dwellings per ha. The Appin (Part) Precinct Plan has potential market demand for up to 40% 60% of the precinct comprising detached housing.
 - Significant demand for medium-density typologies is anticipated in coming years, ranging from 25 35 dwellings per ha to 45 dwellings/ha in centres. The Appin (Part) Precinct Plan has potential market demand for up to 30% 40% of the precinct comprising medium-density typologies.
 - There is limited demand for higher-density housing typologies within Appin in the short term due to the lack of public transport connections. Shop-top housing would be appropriate within the centres in the short term, with a long-term view to small-scale residential flat buildings and multiple dwelling housing as the Appin (Part) Precinct develops and the transit corridor is delivered. The Appin (Part) Precinct Plan has potential market demand for less than 5% of the Appin (Part) Precinct comprising higher-density typologies.

Retail and Employment Study

- 4.202 The Retail and Employment Study (the study) provides a trade area analysis, retail demand analysis, employment analysis and an assessment of potential impacts on the scale and timing of Wilton Town Centre. The study informs the hierarchy of centres in the Appin & North Appin Precincts Indicative Plan and the Appin (Part) Precinct Structure Plan. The centres will be located within the proposed (UD) Urban Development zone.
- 4.203 The Greater Macarthur 2040 Plan envisages a range of neighbourhood centres across the Appin area, with the potential for the Appin, North Appin or South Gilead Precincts to become a strategic centre.
- 4.204 Significant greenfield residential development in the area will necessitate appropriate retail and employment development to support continued growth, generate jobs and support a strong community.
- 4.205 (**Figure 47**) identifies the Main Trade Area defined for a potential sub-regional scale shopping centre in the Appin (Part) Precinct. The primary and secondary trade areas are referred to as the Main Trade Area.
- 4.206 Currently, residents of Appin must leave the area to undertake higher-order retail shopping, including accessing full-line supermarkets and Discount Department Store (DDS) shopping, apparel and leisure shopping etc. The provision of additional centres within Appin Precinct will cater to the retail needs of future residents.

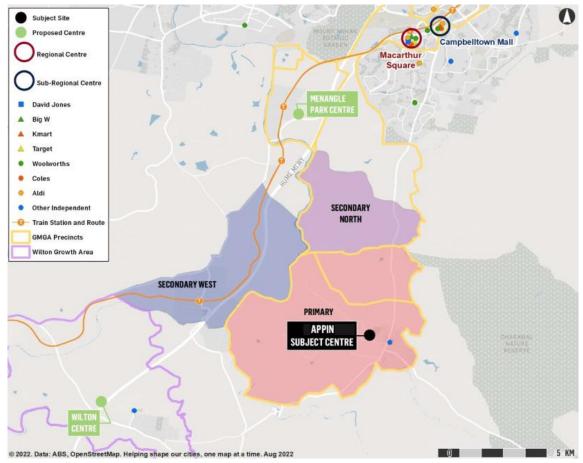


Figure 47: Trade area map (Source: Urbis)

- 4.207 The study provides guiding principles for retail centre locations. The principles include:
 - Accessibility: A prominent location on transit corridors, arterial or major local roads is desirable, with simple and efficient ingress and egress from all directions (not just left in left out) to capitalise on vehicular flows in both directions (to home and to work).
 - **Timing**: Early retail amenity and activation can support residential development and creates a more attractive product for potential residents.
 - Land use mix: collocating centres near public open space, schools, and community and recreation facilities is desirable and facilitates higher levels of cross-utilisation.
- 4.208 The proposed location of centres, incorporates these principles of accessibility, timing and land use mix.

Retail Demand Analysis

- 4.209 The analysis of expected retention rates and market share indicates that the Appin and North Appin Precincts could potentially support a Discount Department Stores (DDS) and around eight supermarkets.
- 4.210 Within Appin Local Centre, Urbis estimate that a DDS, two (2) full-line supermarkets and a small format supermarket could be supported by a range of mini-majors, retail specialties and non-retail and ancillary uses. The local centre could be in the order of 30,000 sq.m of retail and ancillary non-retail floor space.

Employment Outcomes

- 4.211 Developing a 30,000 sq.m local centre would support the ongoing employment of around 1,217 jobs. Further indirect jobs would be generated through suppliers and expenditure of those employed at the local centre.
- 4.212 The local centre, the network of neighbourhood centres, the proposed expansion of the Appin employment zone, and the proposed employment zone of Moreton Park, have the potential to generate more than 12,800 jobs over the long term, with Moreton Park contributing around 10,000 jobs.
- 4.213 The Appin and North Appin Precincts are expected to support around 33,000 resident workers while generating around 4,550 local jobs within the local and neighbourhood centres (about 14% of resident workers).

Impact on Wilton Town Centre (Regional)

- 4.214 An analysis of the trade area likely to be served by Wilton Town Centre (Regional Centre), and indicative dwelling take-up time frames, supports the development of major retail facilities within Wilton over the medium term.
- 4.215 Wilton's main trade area population is expected to reach over 72,000 people by 2029, which would support a single DDS-based shopping centre. By 2044 Wilton Town Centre is estimated to be able to support approximately 50,000 sq.m, serving a population of more than 145,000 persons. Comparatively, by 2044 Appin and North Appin Precincts are expected to serve around 75,000 residents, which is half of Wilton's serving population.
- 4.216 The development of retail facilities within the Appin Precinct will not impede on the scale, mix, role or function of the Wilton Town Centre.

INFRASTRUCTURE INVESTIGATIONS

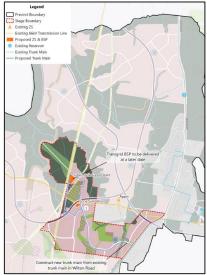
- 4.217 The NSW Government has conducted investigations of the infrastructure needs for the GMGA and is represented in the GM2040 draft infrastructure schedule for the land release precincts.
- 4.218 The Proponent intends to enter into a State Planning Agreement (SPA). The SPA will address the funding, timing and delivery of state and regional infrastructure, such as regional open space, schools, roads, transit corridors, road infrastructure and road upgrades.
- 4.219 The Proponent also intends to enter into a Local Voluntary Planning Agreement (VPA). The VPA will address the delivery of infrastructure for Release Area 1, including active and passive open space, water cycle management, traffic and transport, community facilities and riparian corridors.
- 4.220 The following reports have been prepared to confirm the infrastructure aspects of the Proposal:
 - IDC (Infrastructure & Development Consulting) Infrastructure Phasing Plan
 - GLN Planning Infrastructure Delivery Plan

Infrastructure Phasing

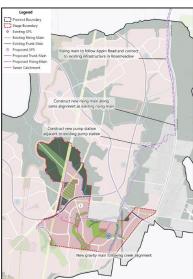
- 4.221 The IDC report has been prepared to support the Appin and North Appin Precincts and Appin (Part) Precinct. The report summarises the investigations relating to the staged implementation of utilities (Electricity, Potable Water, Telecommunications, Sewer), Roads and Schools.
- 4.222 The report outlines:
 - Existing utility services
 - Current and planned utility projects
 - Infrastructure to be provided under the draft Special Infrastructure Contribution (SIC)
 - Implications and potential servicing strategies
- 4.223 The report contemplates the development of the Appin and North Appin Precincts will be delivered over eight (8) stages, providing 21,000+ dwellings. Table 17 summarises the development stages and phasing of infrastructure for the Appin (Part) Precinct only.
- 4.224 The IDC report concludes that the rezoning can be supported as shown in the Proposal.

Table 17: Appin (Part) Precinct Infrastructure Phasing

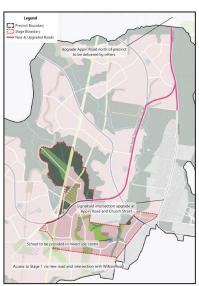
Development	Infrastructure	Delivery
STAGE 1 (Release Area	ı 1)	
 2,140 low-density dwellings 	Electricity	 Capacity in the existing network for initial several hundred dwellings
 1,265 medium- density dwellings 		 It is anticipated that a new zone substation will need to be established to support further growth
• 2,250m² GFA retail	I	 Transgrid Bulk Supply Point land dedication
750m² GFA commercial	Water	 New mains will be constructed off Wilton Road's existing 300mm trunk main.
 Primary school (up to 1,000 students) 	Sewer	 Trunk gravity mains Rising mains (includes mains along Appin Road)
		 Pump stations would be required to transfer flows.
	Roads	 WSP has prepared a Strategic Transport Assessment to support the development of the Appin Precinct. The report makes several recommendations regarding the staging and delivery of SIC roads supporting Appin.
	Education	 Stage 1 includes a primary school with a capacity of 1,000 students. The land for this school will be dedicated as part of the SIC or similar.
	Telecommunications	 NBN Co will provide telecommunications infrastructure. Fixed line technology (subject to changes in technology)



Stage 1 – Water and Electricity Infrastructure

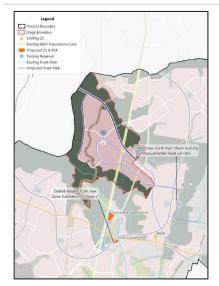


Stage 1- Sewer Infrastructure

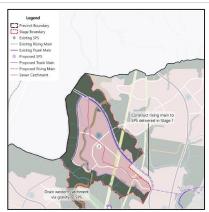


Stage 1- SIC Infrastructure

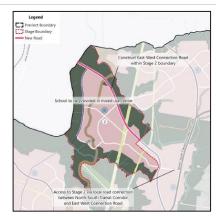
De	velopment	Infrastructure	Delivery	
STA	AGE 2			
•	3,026 low density dwellings	Electricity	0	voltage feeders to be extended from the new zone tation to development fronts.
٠	442 medium density dwellings	Water	• Exte	nding the existing trunk main on Macquaredale Road
•	2,250m² GFA retail	Sewer	• Truni	c gravity mains
•	750m ² GFA		• Risin	g main
	commercial		• Sew	er pump station
•	Primary school (1,000 students)	Roads	• East-	west arterial part 1
		School	• Primo	ary school (1,000 students)
		Telecommunications		Co will provide telecommunications infrastructure. Fixed line nology (subject to changes in technology)



Stage 2 – Water and Electricity Infrastructure

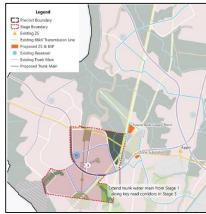


Stage 2- Sewer Infrastructure

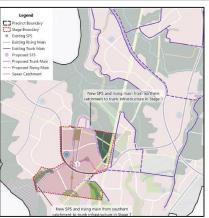


Stage 3- SIC Infrastructure

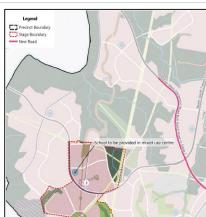
Development		Infrastructure	Delivery
ST	AGE 3		
•	1,287 low density	Electricity	Three feeders required
•	dwellings2,064 medium density dwellings	Water	Trunk mains
		Sewer	Trunk gravity mains
•	2,250m² GFA retail		Rising mains
•	 750m² GFA commercial 		Sewer pump station
•	Combined	Roads	 East-west arterial road part 2 – stage 3 to Appin Road
	primary and secondary school	Education	Combined primary and secondary school (3,000 students)
	(3,000 students)	Telecommunications	NBN Co will provide telecommunications infrastructure. Fixed line technology (subject to changes in technology)



Stage 3 – Water & Electricity Infrastructure



Stage 3- Sewer Infrastructure



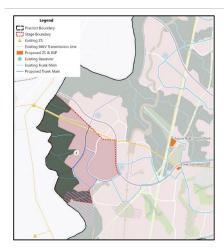
Stage 3- SIC Infrastructure

STAGE 4

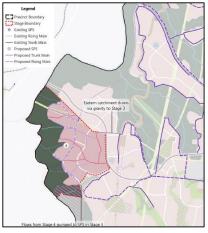
- 2,584 low-density dwellings
- 214 mediumdensity dwellings

Electricity	
-------------	--

- Feeders
- Water Trunk mains
- Sewer
- Trunk gravity mains
- Rising mains
- Sewer pump station
- Telecommunications
- NBN Co will provide telecommunications infrastructure. Fixed line technology (subject to changes in technology)



Stage 4 – Water and Electricity Infrastructure



Stage 4- Sewer Infrastructure

Stage 4- SIC Infrastructure (NA)

Infrastructure Delivery

- 4.225 New and augmented utilities and State and local infrastructure will be needed to support the Appin (Part) Precinct. Wollondilly Shire Council has requested the Appin Infrastructure Delivery Plan (IDP) to assist in consideration of the Proposal. GLN Planning consultants have prepared the IDP.
- 4.226 While the IDP is comprehensive in that it covers all the infrastructure needs of the Appin (Part) Precinct, it focuses on what, when and how local infrastructure will be provided and maintained over the life of the infrastructure.
- 4.227 The IDP is informed by the specialist reports that support the Proposal. The details in the report and the proposed infrastructure schedule, including size, location, staging/timing of delivery, and responsibility for maintenance and ownership, are drafts. They may be subject to further review and amendment during the Planning Proposal process.
- 4.228 The core of the IDP is a schedule of proposed infrastructure that is intended to:
 - Assist the Council in preparing a site-specific s7.11 infrastructure contributions plan for the Appin (Part)
 Precinct or consideration of a planning agreement to deliver infrastructure for Release Area 1 (also referred to as Stage 1).
 - Assist the Proponent, Council and other infrastructure providers when negotiating agreements for infrastructure provision.
- 4.229 The IDP does not include cost estimates for the infrastructure, given the likelihood that further refinement will be required to address matters raised during the assessment of the Proposal. Indicative draft costing information will be provided under separate cover to help inform Council's contribution plan preparation process. The Proponent will collaborate with Council to refine these details.
- 4.230 Wollondilly Shire Council staff have been consulted and have provided advice on what the IDP should address. This advice has been taken into consideration in the preparation of the IDP.
- 4.231 The IDP articulates the infrastructure delivery pathways to deliver the Proponent's vision for the Appin (Part) Precinct and confirms that the Proposal can be supported.

Consolidated Site Constraints

- 4.232 Synthesis of the existing Site conditions and outcomes of the technical studies and ground-truthing have identified a consolidated list of site constraints. The constraints are mapped and explained comprehensively in Part B of the Urbis Appin & North Appin Precincts Urban Context Report.
- 4.233 Assessment of these constraints has confirmed the following:
 - There are no major issues that prevent redevelopment of the precinct
 - The majority of the land within the Appin (Part) Precinct is not constrained to development
 - Areas of 'no development' also present opportunities to incorporate place and cultural values outcomes into the precinct, providing a Connection to Country
 - Existing easements and required buffers can be managed and present the opportunity for active and passive recreation opportunities and urban biodiversity outcomes.
 - Location-specific responses to topography present an opportunity to provide housing diversity and create distinctive neighbourhoods

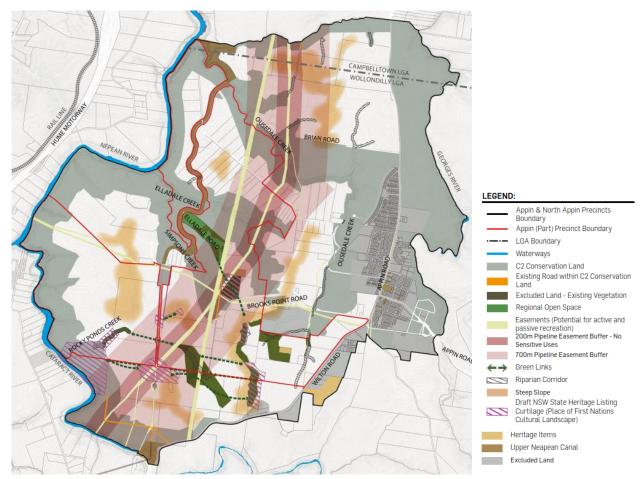
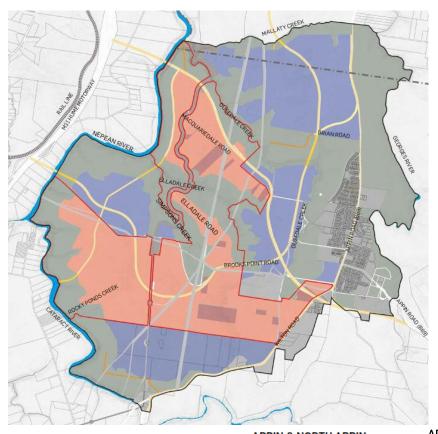


Figure 48: Constraints Summary Plan

Net Developable Area

4.234 The Net Developable Area (NDA) identified for the Appin & North Appin Precincts is the area that is suitable for development after all the excluded areas are removed. For land within the Appin (Part) Precinct, this is based on updated technical information identified within the GMGA 2040 TAP process and the technical studies undertaken to prepare the Proposal. For the balance of the Appin & North Appin Precincts, NDA is indicative only.



	APPIN & NORTH APPIN PRECINCTS		APPIN (PART) PRECINCT REZONING	
CATEGORY	AREA (HA)	AREA (%)	AREA (HA)	AREA (%) GROSS
TOTAL APPIN & NORTH APPIN PRECINCTS (BOUNDARY)	3,826.33	100%	1,378.53	100%
STRUCTURE PLAN EXCLUSIONS	360.40	11.1%	-	-
- Appin Village	246.18	6.43%	-	-
- Employment Land	44.84	1.17%	-	-
- Upper Canal	58.87	1.54%	-	-
- Existing SP2 Roads	34.14	0.89%	-	-
- Water Catchment SEPP Land	13.98	0.37%	-	-
- Power Station	18.28	0.48%	-	-
- Cataract Dam	10.81	0.28%		
NET DEVELOPABLE EXCLUSIONS	1,671.59	43.69%	576.46	41.82%
Conservation Land Dedication	1,489.94	38.94%	493.75	35.82%
Listed Heritage Sites (European)	5.21	0.14%	5.21	0.38%
Proposed Utility Assets	6.00	0.16%	4.65	0.34%
Easements	76.15	1.99%	36.70	2.66%
Proposed SP2 Roads	94.29	2.46%	36.15	2.62%
NET DEVELOPABLE AREA	1,794.34	45.21%	802.07	58.18%

Figure 49: Net Developable Area Plan

Appin and North Appin Precinct Structuring Elements

- 4.235 The following refinements to the structuring elements for the Appin & North Appin Precincts Indicative Plan were identified through technical studies refer to **Figure 50**:
 - Protection of CPCP Non-Certified Avoided land outcomes whilst delivering key infrastructure requirements.
 - A refined alignment for the Macarthur Public Transport Corridor in response to local topography and additional site constraints
 - A Strategic Road Network supported by TfNSW includes:
 - An East-West Connection road through the Macquariedale Road precinct and bypassing to the south of Appin Village to meet Wilton Road.
 - A potential North-South Connection road from the East-West Connection road noting crossing through the CPCP avoided lands, is to be undertaken by others.
 - A confirmed centres network of 6 mixed-use neighbourhood centres with the potential for one of these to become a higher-order local centre
 - Support for proposed employment areas close to the precinct
 - Protection of additional sites of significance, including European Heritage Items and First Nations Cultural Sites.
 - Identification of cultural values and Connecting with Country outcomes for the precinct
 - Identification of open space, social infrastructure and recreational requirements to support the provision of approx 21,000+ homes and 65,000+ people within the precinct
 - Confirmation that infrastructure to support the precinct can be delivered and is being planned for

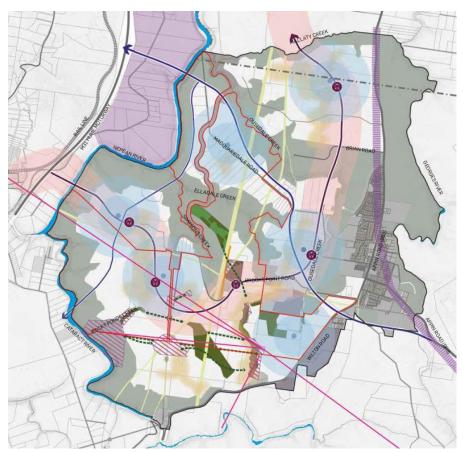


Figure 50: Appin & North Appin Precincts Structuring Elements (Source: Urbis)

Appin and North Appin Precincts - Staging

4.236 Each stage is known as a Release Area. The proposed staging plan for the Appin and North Appin Precincts is provided in Figure 51.

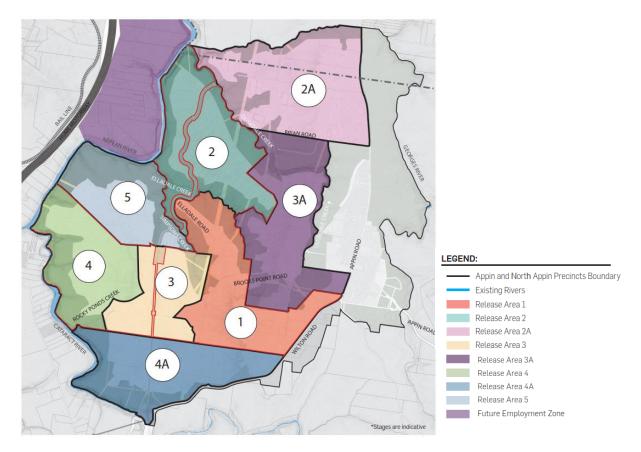


Figure 51: Proposed Staging Plan (Source: the Proponent & Urbis)

- 4.237 Release Areas 1, 2, 3 and 4 represent the Appin (Part) Precinct and are predominantly the Proponent's landholdings. The balance Release Areas (2A, 3A, 4A and 5) are outside the boundary of the Appin (Part) Precinct.
- 4.238 Infrastructure, servicing and utility planning are based upon development across the Appin and North Appin Precincts. The staging recognises development may commence in other Release Areas, outside the Appin (Part) Precinct, alongside this Proposal.
- 4.239 Ultimately, however, the development staging is subject to multiple factors, none of which are under the Proponent's control. For example, market conditions, the pace of construction of key infrastructure items (roads, sewer, water, public transport etc. by others), housing development (which triggers the construction of supporting facilities and uses) and responses from government agencies in terms of budgeting and delivery of key public services.

5.0 PLANNING APPROACH

Overview:

This chapter articulates the vision, design principles and outcomes of the Appin Precinct Structure plan as a series of layered strategies.

5.0 PLANNING APPROACH

- 5.1 The Appin (Part) Precinct Structure Plan aligns leading practice principles with the current planning policy framework and local space characteristics of Appin to create a framework for a unique, resilient, connected and self-contained community.
- 5.2 This Chapter (Chapter 5) articulates:
 - The Vision
 - The Appin (Part) Precinct Design Principles place ethos and starting with Country
 - Design Principle 1 Framed by Nature
 - Design Principle 2 Custodians of Place
 - **Design Principle 3** Healing Landscapes
 - Design Principle 4 Connected, Active and Healthy
 - **Design Principle 5** Resilient Neighbourhoods
 - **Design Principle 6** Housing Choice for the future

THE VISION

"Neighbourhood living in a connected community that celebrates the magnificent natural setting, cares for and connects to Country, embodies the local character and offers a range of unique local attractions and new industries, supported with sustainable infrastructure."

5.3 The vision informs the Planning Proposal and responds to the strategic planning framework's future opportunities, context, and key parameters. An artist's impression of this vision showing the future Appin (Part) Precinct urban form is provided in Figure 52 below.

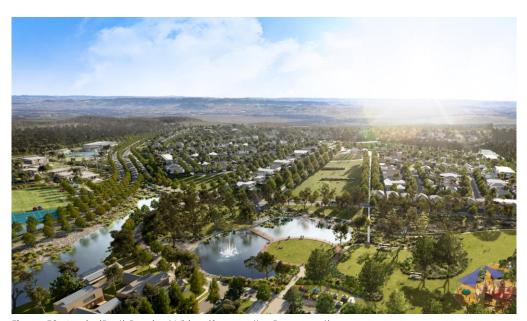


Figure 52: Appin (Part) Precinct Vision (Source: the Proponent)

- 5.4 The Appin (Part) Precinct Structure plan delivers on the vision for the Greater Macarthur Growth Area and contributes to the aims of the Greater Macarthur 2040 Plan of:
 - Providing new homes and local centres,
 - Creating local jobs,
 - Improving transport connections and access,
 - Provision of recreational facilities, including open spaces and parks,
 - Preservation of environmental and biodiversity corridors to protect the koala population.
- Appin (Part) Precinct will become a place of residential living within the GMGA's cultural and natural landscape. The residential communities within Appin (Part) Precinct will be supported by neighbourhood centres. A larger local centre will be located in the Appin Precinct but outside the Appin (Part) Precinct. The centres will provide local services and amenities to cater to future residents' needs. The centres will also provide local jobs and centralised office facilities, strengthening the Appin and North Appin Precincts' and Greater Macarthur's local economy.
- 5.6 In line with the NSW Government's priorities for housing, the Proposal's key component is housing delivery for future generations to live, work and raise a family in the Western Parkland City.
- 5.7 The Appin (Part) Precinct builds on the principles of a self-sufficient community with amenity.

APPIN (PART) PRECINCT DESIGN PRINCIPLES

- 5.8 Appin (Part) Precinct is part of the GMGA and can deliver significant housing opportunities for greater Sydney. Six (6) design principles guide the Appin (Part) Precinct Plan and Structure Plan–refer to **Figure**53. These are presented as a series of layered-themed strategies. They describe the key planning, design and place outcomes shaping the Planning Proposal.
- 5.9 A draft framework for developing connections with Country informing the planning, design, and delivery of the built environment has been developed by the NSW Government Architect. The Planning Proposal aligns with the draft Connecting with Country Framework. The Proponent has taken a Country centred approach to Design. Therefore, for each principle, the Proponent has started with Country.



Figure 53: Appin (Part) Precinct Design Principles (Source: Urbis)

Starting with Country

- 5.10 Starting with Country has been a part of the Precinct and Structure Planning design process. The process aims at realising a key objective of being able to "think differently, work differently, and make decisions that prioritise Country". The landscape-led and designing with Country approach formed the preliminary design's initial stage by identifying the Appin Precinct's cultural places and values within the regional cultural landscape.
- 5.11 The Traditional Owners of the land at Appin, their connection to Country, cultural values and the sensitivities of the land are acknowledged. To move forward respectfully, First Nations cultural mapping and the principles of connecting to Country have formed a primary influence for the Appin Structure Plan, including:
 - Adopting a Country-centred design approach.
 - Respecting Country by respecting topography through the careful alignment of infrastructure and positioning of density to integrate with the landscape and ensuing connectivity with lines of sight and walkable green corridors.
 - Caring for Country (land, plants, animals, sky, water) by:
 - retaining riparian corridors, where possible
 - Recognition of the importance of waterways and the Shale Sandstone Transition Forest, Cumberland Plain Woodland and Koala habitats by setting aside this land for conservation and a commitment to support First Nations people's capacity to manage and care for the Country
 - Reinstating connections across the landscape to allow movement and access
 - Connecting to Country by retaining areas of traditional and ongoing cultural value for passive uses, retaining and integrating ridgeline movement corridors and local and regional lines of sight and connection, and facilitating access to undertake cultural practices on Country.
 - Contribute to reconciliation by acknowledging and telling the shared history of the Appin massacre, preserving identified locations free of development for future planning in conjunction with First Nations people and contributing to economic, educational and other opportunities for First Nations people.
 - Reflecting First Nations' cultural and spatial knowledge of Country by creating walkable and inclusive neighbourhoods with legible centres, edges, and connections, culturally appropriate social infrastructure and an open space network that supports movement, gathering, living cultural practices, storytelling and caring for Country.

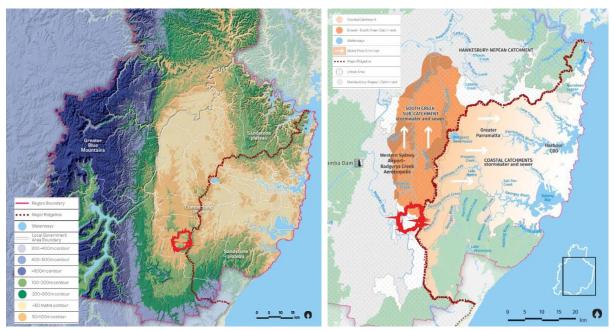
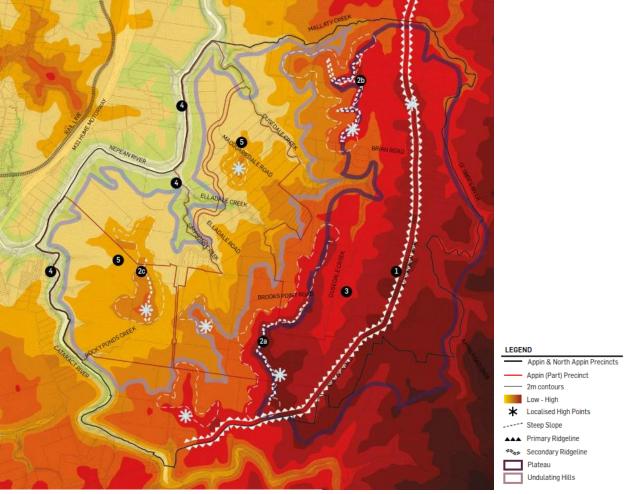


Figure 54: Greater Sydney's Topography and catchment (Source: DPE)



SENSING COUNTRY - APPIN

Retaining and responding to Country is a key strategy of the Structure Plan. This understanding of Country has underpinned the development of infrastructure, neighbourhoods and special places that will connect Appin to Country. There are five distinct topographic features of the site that have been integrated into the Structure Plan. These include:

- The Eastern Plateau the land between the Appin Road ridgeline and the secondary ridgelines to the west form a higher plateau with regional and district views towards the Razorback Ranges. There are three local/ neighbourhood centres within the plateau including the larger local centre. Additional building height in the mixed use zone will benefit from the views.
- Primary ridgelines Appin and Wilton roads are aligned along the primary ridgeline which is where the regional ridgeline touches the eastern extent of Appin & North Appin Precincts.
- Secondary ridgelines A series of secondary ridgelines are located west of the primary ridgeline. The secondary ridgelines are distinctive features of the site and contain localised areas of steep terrain.
 - The southern part of the secondary ridgeline Includes the highest point within the Appin & North Appin Precincts and provides 270 degree views to the south and west. It marks the western extent of the Eastern Plateau.
 - The northern part of the secondary ridgeline provides expansive views to the Razorback Ranges and Blue Mountains and also marks the western extent of the Eastern Plateau.
 - A local ridgeline within the south-western extent of the precinct provides local definition and visual connection into the site and the green riparian areas of the Nepean and Cataract rivers.
- Waterways the lowest areas of the site are along the river and creek corridors. These Nepean and Cataract Rivers and riparian areas define the western extent of the precinct while the Elladale, Simpsons, Rocky Ponds and Ousedale creeks extend into site defining local areas.
- 5 Undulating Hills The areas between the ridgelines and the waterways are predominantly gently undulating land.

Figure 55: Starting with Country – Sensing Country and topography (Source: Urbis)

Design Principle 1 – Framed by Nature

Appin is located amongst the Cumberland Plain woodlands and framed by the gorges of the Nepean and Cataract rivers. This woodland will be protected for Koala corridors, and biodiversity will be enhanced.

- 5.12 The defining landscape character of the Appin (Part) Precinct is a central feature within the Structure Plan. The natural setting of Appin is a major asset in promoting sustainable living and the management of urban heat. The Precinct Plan will be supported by walking trails and active transport along the biodiversity corridors, improving liveability for future residents and visitors.
- 5.13 The outer peripheries of the Site are defined by koala corridors, particularly to the north and west, along Ouesdale Creek and the Nepean River, respectively. This defining feature of the Appin (Part) Precinct adds to its conservation value.
- 5.14 There are pockets of mature canopy in the central areas of the Site. Whilst unsuitable for urban development, these areas provide an opportunity for community access and recognition as recreation areas.
- 5.15 The CPCP's vision is to "support Western Sydney's biodiversity and growth". This includes supporting the delivery of infrastructure, housing and jobs for the people in the Western Parkland City while protecting important biodiversity through a program of conservation actions and commitments.
- 5.16 The delivery of infrastructure, housing and jobs is a key component of this Planning Proposal. However, the following essential infrastructure (i.e. Classified Road in an SP2 infrastructure corridor) will be required partly through land mapped Non-Certified (Avoided) and Non-Certified (Excluded) to service and support the development:
 - Proposed East-West Connection Road
 - Proposed North-South Connection Road
- 5.17 To support this vision, guidelines have been prepared to provide a pathway for delivering essential infrastructure development through land mapped "Non-Certified Avoided land" in the CPCP.
- 5.18 Figure 56 identifies the following:
 - (1) CPCP mapping:
 - Non-Certified (Avoided) land within the Appin Precinct,
 - koala corridors
 - Non-Certified Excluded land
 - easement through the Non-Certified land
 - existing roads through the Non-Certified land
 - (2) Proposed classified roads through the CPCP Non-Certified (Avoided)
 - (3) Representation of the CPCP mapping in the draft Land Zoning map for the Appin (Part) Precinct Plan.

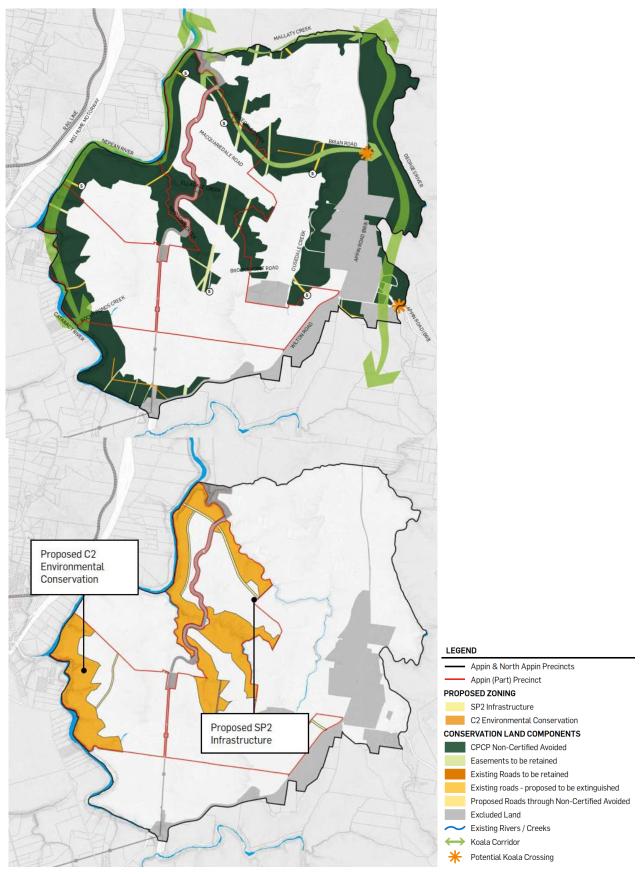


Figure 56: Conservation Area and Koala Corridor Protection (Source: Urbis)

5.19 In addition to the Non-Certified Avoided land (NCA land), the Appin (Part) Precinct contains areas of Non-Certified Excluded (NCE Land) land that will be retained due to their mature canopy coverage and unique characteristics - refer to Figure 57. This land is identified as (UDZ) Urban Development Zone on the land zoning map and district open space on the Appin (Part) Precinct Structure Plan.

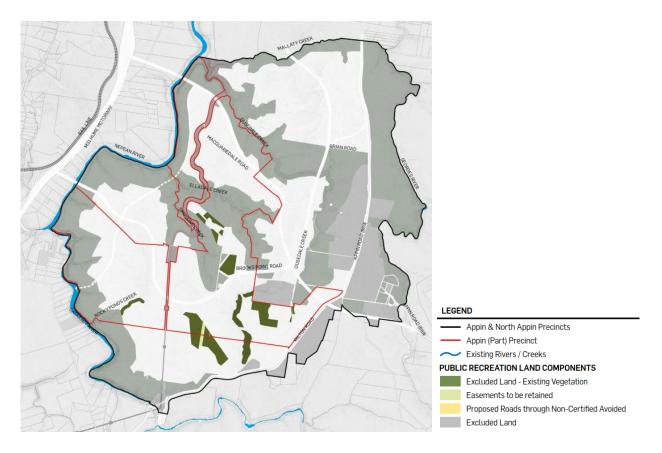


Figure 57: NCE Land and future public recreation land (Source: Urbis)

Design Principle 2 – Custodians of Place

Country is amplified through interpretation, education, shared language and cultural events. Appin is Dharawal land.

5.20 A cultural values mapping and a draft CwC Framework inform the Appin (Part) Precinct Plan and Structure Plan design. This has ensured culturally sensitive areas, movement corridors, view lines, waterways and rivers are acknowledged, celebrated and integrated as part of the Planning Proposal – refer to Figure 58 and Figure 59.

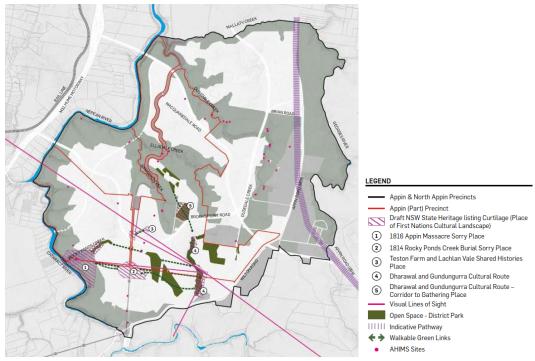


Figure 58: Proposed First Nations Cultural Values (Source: Urbis)

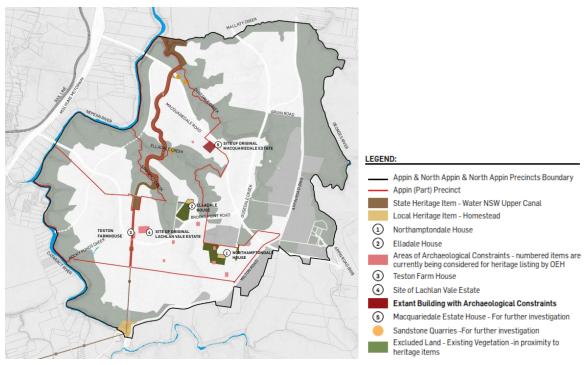


Figure 59: Historic Heritage site (Source: Urbis)

Design Principle 3 – Healing Landscapes

Defined by ridgelines and connected through water, each neighbourhood has its unique character. Healing landscapes weave throughout, connecting the community to place. Retained mature tree canopy is embellished with tree-lined streets and green links. Our neighbourhoods and centres retain water in the landscape to reduce the urban heat island effect.

Multifunctional Landscapes

- 5.21 Appin (Part) Precinct is defined by a strong landscape character, with 626.34ha (45%) of the part precinct dedicated to the green and blue grid, which will supplement the 40% tree canopy target across the Precinct. The existing assets of Appin (Part) Precinct, which include the waterways and environmental corridors, will form part of the green and blue grid network, improving its natural quality and providing recreational amenities for future residents.
- The Site will be supported by high-performance, multi-functional landscapes that produce net-positive 5.22 benefits beyond singular-use spaces. Benefits include clean air, wildlife habitat, biodiversity, carbon storage, urban cooling, water management, human mental and physical health and more. They are living, natural systems integrated into the neighbourhoods and urban centres, offering benefits:
 - Appin (Part) Precinct has a generous green-blue grid 626.34ha (45%) to green and blue grid
 - Natural systems provide services for the ecosystem through a combination of physical and biological processes
 - Re-use and re-purpose the Proponent proposes to re-use materials on the Site. Where this is impossible, the Proponent proposes using locally sourced materials that have a significant connection to the Site.
- 5.23 The Site's cultural and ecological history has multiple layers of healing. The healing opportunities at this Site are ecological, educational and cultural and underpin the overarching principle of connection to Country.

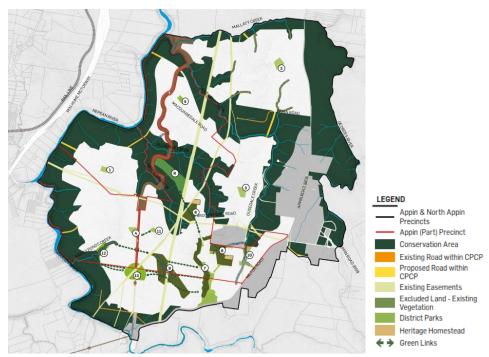


Figure 60: Proposed Multi-Functional Open Space(Source: Urbis) *Numbering corresponds with open space and community facilities report

Blue Grid & Riparian Corridor Outcomes

- 5.24 Detailed investigations and 'ground-truthing' of all waterways and riparian corridors within Appin (Part)
 Precinct reveal that most of these are contained within CPCP or district open space areas (and NonCertified-Excluded land). The following describes the Key Outcomes for the Blue Grid and Riparian
 Corridors:
 - **River awareness and storytelling:** While the Nepean and Cataract rivers will predominately be inaccessible due to containment within the Proposed Conservation Area, there is an opportunity to provide interpretation, story-telling and education about these waterways.
 - **Elladale and Simpsons Creek:** While the creeks remain inaccessible, the Regional Park offers a key opportunity to provide interpretation, story-telling and education about these waterways.
 - **Ousedale Creek:** While the east-west section running between North Appin and Appin remains inaccessible, the north-south section in the east sits alongside the edge of the Conservation Area.
 - Recreation and cycle trails
 - Water management opportunities will provide more visible and accessible water health features. This builds on the Chain of Ponds cultural value
 - Rocky Ponds Creek: the only creek which is accessible. Investigations and ground-truthing reveal that the
 central part is degraded at the centre. Opportunities to reconnect Rocky Ponds creek with a new "natural
 style" drainage corridor.
 - **Riparian Restoration:** Riparian restoration and connection of fragmented vegetation with endemic and native ecological communities and species in the area will enhance biodiversity and reinforce the bluegreen grid strategy.
 - Water Management, Treatment and Health: Treatment of water runoff, cleaning and filtering water and
 managing overland flow will be undertaken through exploring opportunities for bio-retention basins and /or
 wetlands.
 - WSUD: The incorporation of WSUD to the streets creates a whole site water quality treatment system.

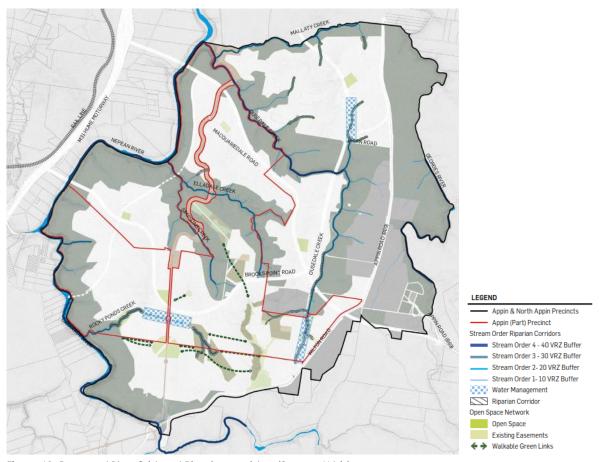


Figure 61: Proposed Blue Grid and Riparian corridors (Source: Urbis)

Recreation for All

- 5.25 The following classifications have been used to consider the provision of open space areas for recreation:
 - Open space for structured recreation: predominately supports directed, physical recreation activity, such
 as outdoor sport or formal play. Generally consists of sports ovals and sports grounds, playgrounds and
 outdoor exercise areas.
 - Open space for unstructured recreation: predominately supports casual, physical, social or cultural activities, such as picnicking, walking or group gatherings. Generally consists of natural areas and bushland, linear trails and accessible riparian areas and gardens and parklands

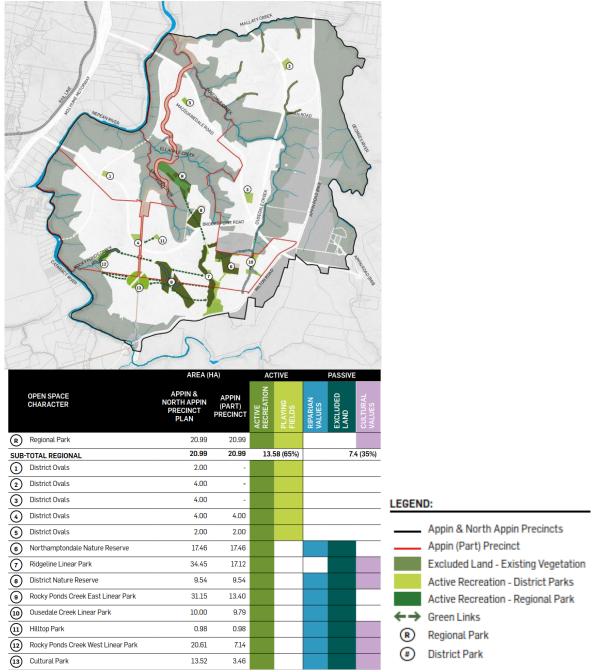
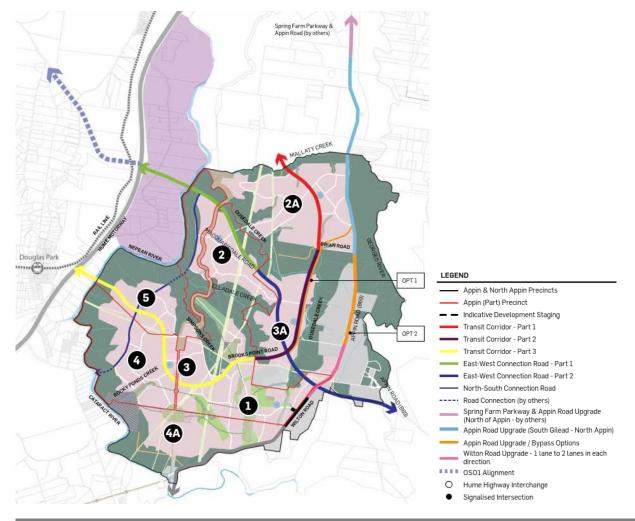


Figure 62: Proposed Open Space Recreation Function Plan (Source: Urbis)

Design Principle 4 – Connected, Active and Healthy

Transit-oriented development makes efficient use of infrastructure investment, prioritising integrated transport solutions. Regional connections link the precinct to jobs, improve interregional connectivity and deliver public transport into the future. Connected, active and healthy, the community choose local adventures to explore bush markets, recreation trails, dramatic river gorges, market gardens and national parks.

5.26 Appin (Part) Precinct will be a well-connected community accessible to future residents, visitors and existing residents. Greater Macarthur 2040 and the draft GMSIC provide the initial framework for the network, and the Planning Proposal builds upon this with the road network detailed in **Figure 63** below.



Stage #	#Cumulative Dwellings (indicative)	Roads	Deliverable required by
1	3,405	Wilton Road access intersection	Any part of subdivision requiring access via Wilton Road
		Appin Rd & Church Street, Appin Signalised Intersection	1,051 registered residential lots
		Appin Rd upgrade between North Appin & South Gilead	3,001 registered residential lots
		North South Transit Corridor Part 1 (Stage 1 to Stage 2A)	3,001 registered residential lots

Stage #	#Cumulative Dwellings (indicative)	Roads	Deliverable required by
2	6,873	East West Connection Rd Part 1 (Hume MWY & Stage 2)	8,001 registered residential lot (whichever development between Stage 2 and Stage 2A triggers the requirement first)
2A	11,227	East West Connection Rd Part 1 (Hume MWY & Stage 2)	8,001 registered residential lot (whichever development between Stage 2 and Stage 2A triggers the requirement first
3	14,578	East West Connection Road Part 2 (Stage 2 to Bulli-Appin Rd)	14,001 registered residential lot
3A	16,878	North South Transit Corridor Part 2 (Stage 3A to North of Stage 2A)	14,601 registered residential lot
4	19,676	N/A	N/A
4A	20,306	N/A	N/A
5	21,865	N/A	N/A
		North South Transit Corridor Part 3 (Stage 5 to Morton Park Road)	Subject to government strategy of delivering the Transit Corridor infrastructure and connections to existing Train Stations.

Figure 63: Strategic Road Network (Source: Urbis and the Proponent)

Public Transport

- 5.27 The transport network structure has been configured to deliver timeless urban neighbourhoods with discernible centres and well-defined edges, placing most daily needs, including schools, within walking distance.
- 5.28 The Public Transport Corridor will provide a high-frequency service with several stops along its length within the precinct – refer to Figure 64 and Figure 65.
- 5.29 The guidance for locating public transport stops, as outlined in the Draft Urban Design Guide (2021), is as follows:
 - Integrate public transport nodes into the heart of centres and clusters
 - Prioritise provision of homes in residential areas with accessible, safe and secure routes to high-servicefrequency public transport within 800 m.
 - In less frequently serviced residential areas, locate homes within 400 m of public transport.
- 5.30 The opportunity for an active and adventurous lifestyle in the Appin Precinct is built into key landscape features and natural topography. Healthy lifestyles can be paired with education, interpretation, and sharing of cultural values and history. The following active recreation trails offer a whole precinct network of pathways to embed active lifestyle opportunities into the community:
 - **Cultural Connections**
 - Regional Active Transport Links
 - Ridgeline to River Exploration
 - The Fitness loop
 - The Water Journey
- These trails have been designed to implement visual and green connections. Several of these trails' 5.31 specific alignments and forms will be subject to a co-design process with the First Nations community. A network of off-road paths through the new urban neighbourhoods will support and link to this trail network.

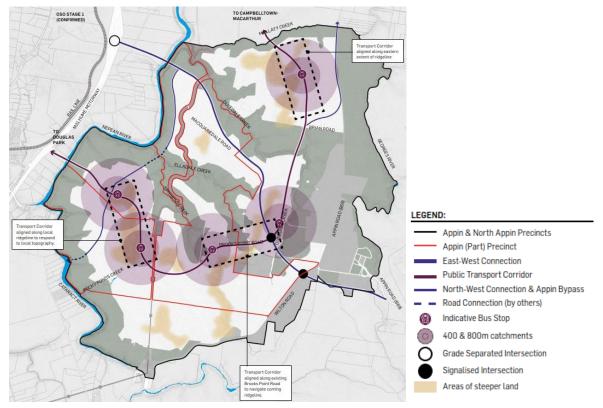


Figure 64: Appin Precinct Public Transport Network (Source: Urbis)

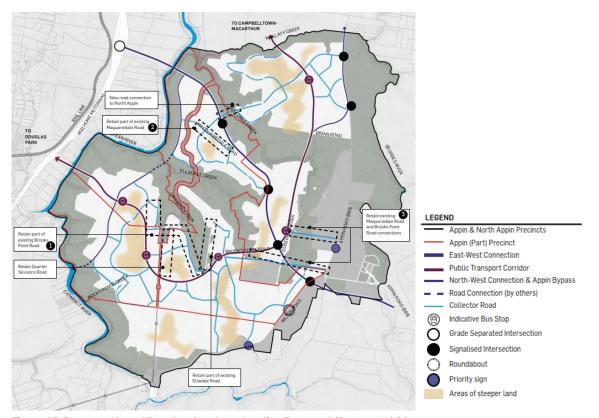


Figure 65: Proposed Local Road Network and Active Transport (Source: Urbis)

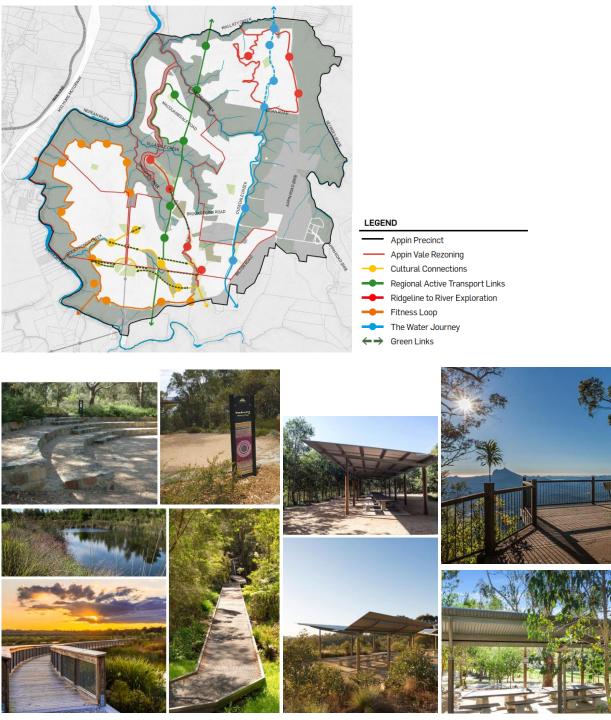


Figure 66: Recreation Trails (Source: Urbis)

Design Principle 5 – Resilient Neighbourhoods

Mixed-use centres anchor a network of distinctive and walkable neighbourhoods. Containing schools and local services, these neighbourhoods offer a range of unique local attractions and foster new industries, local jobs and community shops.

- 5.32 The Site's regional centres and employment context is:
 - Campbelltown-Macarthur: is the Metropolitan Cluster Centre for the Macarthur Region and is home to the highest order health, education, employment and services. Strategic directions for Western Parkland City support the growth of homes close to jobs aligned to the 30-minute city.
 - Wilton Town Centre: A Strategic Centre with a retail core of approximately 50,000m² and supporting commercial and business uses for the Wollondilly LGA and Southern Highlands areas.
 - **Appin Village:** The existing Appin centre provides convenient amenities for residents to undertake top-up shopping. It is estimated there is around 2,600 sq.m of retail floorspace within the existing centre.
 - Moreton Park Road Enterprise Area: 500ha (land area) high-tech business park will provide 10,000 jobs adjacent to the precinct.
- 5.33 The Appin (Part) Precinct will complement these existing centres and employment areas by providing residential growth closer to jobs and centres to achieve a 30-minute city.
- 5.34 The Appin and North Appin Precincts will have of one (1) local centre and five (5) neighbourhood centres, of which three (3) are located within the Appin (Part) Precinct. The three (3) centres will contribute to the 4,000+ jobs anticipated to be delivered for Appin.

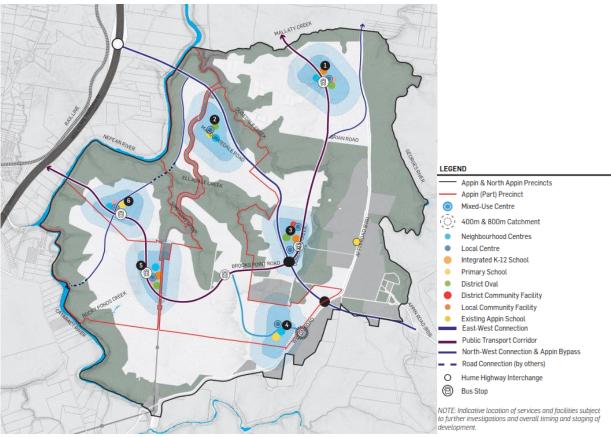


Figure 67: Proposed Mixed-Use Centres (Source: Urbis)

- 5.35 Centres have been spatially located to respond to the Site's topography, transport connections, transmission pipeline setback, and land ownership pattern and to acknowledge cultural values. The Precinct Plan will enable neighbourhood shops in residential areas to accommodate small-scale retail needs to supplement the centre's hierarchy.
- 5.36 Three of the centres are located outside of the Appin (Part) Precinct. A principles approach has been taken to inform the location of these centres. The respective landowners of these planned centres may choose to revisit the planning for their landholdings.
- 5.37 Integrating resilience into the urban form will create communities responsive to hazards:
 - The 1% AEP is contained within the Nepean and Cataract gorges limiting the impact of flooding upon the new community. Detailed planning will contain Rocky Ponds Creek and Ouesdale Creek flows into the drainage network
 - The residual risk after incorporating standard bushfire protection measures (asset protection zones and neighbourhood safer places) under PBP is low and acceptable to allow a future residential community
 - Provision of pipeline protection measures per the AS2885 Safety Management Statement process outcomes minimises risk to the future urban community
 - Canopy coverage in conservation and open space areas comprises 45% of the Appin (Part) Precinct.
 Additional canopy coverage will be provided in future streetscape and residential areas which will assist in managing urban heat.
 - Delivery of neighbourhoods that facilitate micro-mobility
 - Future-proof neighbourhoods for future adoption of technological advancements

Design Principle 6 – Housing Choice for the Future

Housing choice for the future creates an inclusive community. Smart homes, distinctive neighbourhoods and walkable streets provide flexible housing options for the whole-of-life community ties

- 5.38 The 20-minute neighbourhood strategy is based on the principle of "living locally" and allowing residents to meet most of their daily needs in a 20-minute walk from home. In a spatial sense, it stems from an 800metre walking catchment from a collection of local shops, a primary school, public transport and a supermarket or grocery store.
- 5.39 This is a good outcome because:
 - It facilitates local living, grows local economies and promotes walkability
 - It provides for centres and nodes that build social resilience
 - It enables a shift away from car use
 - It enables vibrant and productive communities, including night-time economies.

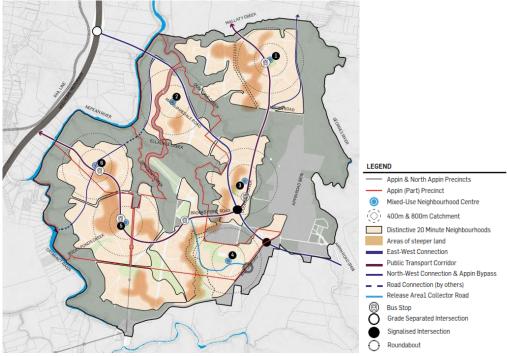
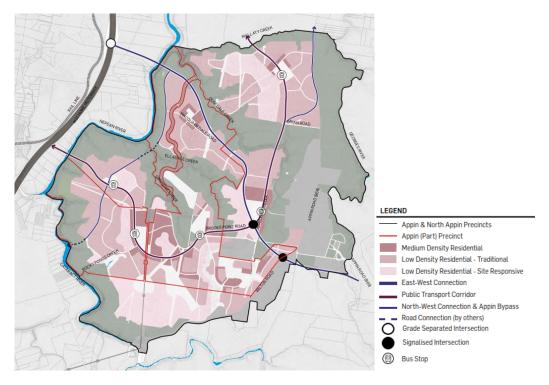


Figure 68: Proposed 20-Minute Neighbourhoods (Source: Urbis)

- 5.40 The Appin (Part) Precinct will provide greater housing supply and diversity in housing choices within each neighbourhood. The proposed residential typologies consist of low-density neighbourhoods ranging from 15-25 dw/ha and medium-density neighbourhoods ranging from 25-45 dw/ha.
- 5.41 Medium-density residential development is proposed closer to areas with higher levels of amenity (e.g. open space, waterways, centres, and schools) and services to improve the quality of living and housing affordability. It will consist of an attached dwelling typology, a lower-scale product that will complement the Site's character. A cluster of medium-density residential areas will frame the local neighbourhood centres within Appin (Part) Precinct to ensure greater access to retail services and facilities.



LOW DENSITY

Density	Area (ha)	Yield (dwellings)	% Of overall yield
Low (15-18 dw/h)	879.27	14,645	70%

Density	Area (ha)	Yield (dwellings)	% Of overall yield
Large Lot (4-8 dw/h)	230.63	1,157	5.5%



MEDIUM DENSITY

Density	Area (ha)	Yield (dwellings)	% Of overall yield
Medium (25-31 dw/h)	175.51	5,106	24.4%%



Key Principles

Low-density housing neighbourhoods are the predominant density type across the Appin (Part) Precinct.

· Traditional Lot Housing:

- **Density band:** 15-25 dw/ha to provide flexibility for long-term development and changes in the housing market and product.
- Lot sizes: Range from 200-600 sq.m.
- No dwelling cap: Density managed through performance outcomes.
- A mix of detached dwelling houses, semi-detached dwellings and dual occupancies (1-2 storeys)
- Potential for secondary dwellings on larger lots.
- Focused areas of small lot dwelling houses in high amenity locations
- Multiple dwellings on corner lots.

Site Responsive Housing:

- Density: 10-15 dw/ha to provide flexibility for site-responsive outcomes and housing diversity.
- Lot sizes: Greater than 600 sq.m.
- Areas near conservation areas and sensitive lands to accommodate suitable buffer distances and steeper topography.

Key Principles

Medium-density housing is located closer to high levels of amenity and services (attached product) to achieve affordability and quality.

Medium Density Housing

- **Density band:** 25 45 dw/ha to provide flexibility for long-term development and changes in the housing market and product.
- Lot sizes: Less than 200 sq.m.
- **No dwelling cap:** Density managed through performance outcomes.

Typical Characteristics

- Located within the walking catchment of centres, high amenity locations include green or blue corridors and public transport routes
- Predominantly small lot housing (2-3 storeys) with some multi-dwelling housing, manor homes and residential flat buildings (4–6 storeys)
- It incorporates laneways, rear access and shared driveways
- Activates the public domain, including streets and public open spaces, through the orientation and design of buildings and communal spaces

Figure 69: Place-based and cultural attractions (Source: Urbis)

Part C – PLANNING PROPOSAL & EXPLANATION OF PROVISIONS



6.0 PLANNING PROPOSAL

This Chapter is structured as follows:

- The Proposal A Summary
- Part 1 Objectives and intended outcomes
- Part 2 An explanation of the provisions
- Part 3 The justification for the Proposal
- Part 4 Mapping
- Part 5 Community consultation

6.0 PLANNING PROPOSAL

SUMMARY

- 6.1 The Proponent has prepared a Planning Proposal (the **Proposal**) to rezone 1,378 hectares of land within the GMGA Appin Precinct, hence the Proposal's identification as the Appin (Part) Precinct.
- 6.2 The Site is to be rezoned from (RU2) Rural Landscape to three (3) zones comprising:
 - (UDZ) Urban Development (887.13ha)
 - (SP2) Infrastructure (21.19ha)
 - (C2) Environmental Conservation (470.21ha)
- 6.3 The Proposal seeks an amendment to the State Environmental Planning Policy (Precincts Western Parkland City) 2021 (WPC SEPP) to incorporate the Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan.
- 6.4 The Proposal has been prepared generally in accordance with the DPE Local Environmental Plan Making Guideline (December 2021).

Appin (Part) Precinct Plan

- 6.5 A new Precinct Plan under the WPC SEPP is proposed for the Appin (Part) Precinct. There will be future Precinct Plans for the other parts of the Appin and North Appin Precincts.
- 6.6 The Precinct Plan establishes the statutory mechanism for implementing land zoning and development standards. A draft of the Precinct Plan and accompanying mapping has been prepared and is provided in **Folder 1**.
- 6.7 The Precinct Plan (**Part 2**) proposes the following zones:
 - (UDZ) Urban Development (887.13ha)
 - (SP2) Infrastructure (21.19ha)
 - (C2) Environmental Conservation (470.21ha)
- 6.8 The Precinct Plan proposes the following development standards and provisions:
 - Part 4: Minimum lot size
 - **Part 5:** Miscellaneous Provisions (including the Structure Plan, consideration of development applications, Heritage conservation, infrastructure development and use of existing buildings)
 - Part 6: Urban release areas (including arrangements for designated State Infrastructure)
 - Part 7: Additional Provisions (including earthworks, public utility infrastructure, koala corridors and affordable housing)
 - Schedules

Appin (Part) Structure Plan

1.41 The Appin (Part) Precinct Structure Plan delivers a strategic vision reflecting government, industry and community priorities. This vision and development framework will be used to guide planning for the development of the Appin (Part) Precinct. For a development application to be approved, the precinct plan provisions will require a Development Control Plan (DCP) to be prepared to be generally in accordance with the Appin (Part) Precinct Structure Plan.

Development Control Plan

- 6.9 A draft Greater Macarthur Growth Area (GMGA) Development Control Plan 2022 (DCP) will be prepared, ensuring any new development is consistent with the Greater Macarthur 2040 vision of creating a liveable new urban area set in the natural environment. The DCP will give more detailed design guidelines and controls for residential development in the Appin (Part) Precinct.
- 6.10 The draft DCP will incorporate a Schedule that will initially apply to Release Area 1 – 395 hectares and 3,500 dwellings.
- 6.11 The DCP will be expanded to cover the rest of the Appin and North Appin Precincts.
- 6.12 The Schedule for Release Area 1 will be read in conjunction with the main body of the GMGA DCP. Development typologies and control tables will be included to address the following:
 - Objectives of the Appin (Part) Precinct Plan
 - General Controls
 - Subdivision
 - Residential Development
 - Other Uses
 - Sustainability and Biodiversity
 - Connecting with Country & Cultural Values
 - Road hierarchy and cross-sections
 - Active transport network
 - Open space & recreation network
 - Water cycle network
 - Riparian
 - Heritage
 - Bushfire Asset Protection Zones (APZ), evacuation and Neighbourhood Safer Places (NSP)
 - Infrastructure
- 6.13 The DCP for the Appin (Part) Precinct will be prepared before development consent is granted for housing lots.

PART 1 – OBJECTIVES AND INTENDED OUTCOMES

- 6.14 The Proposal's intended outcome is to rezone land to permit housing, parks, centres, schools, roads and environmental management of ecologically significant land to accommodate population growth within the Western Parkland City.
- 6.15 The objectives are:
 - Give effect to draft Greater Macarthur 2040:An Interim Plan for the Greater Macarthur Growth Area
 - Identify appropriate zones and development standards for the Site to allow it to be developed for urban, infrastructure and environmental uses
 - Deliver a statutory planning framework that is consistent with growth area planning in NSW

PART 2 – EXPLANATION OF PROVISIONS

6.16 The objectives and intended outcomes of the Planning Proposal will be facilitated through amendments to the Wollondilly Local Environmental Plan 2011 (WLEP 2011) and Campbelltown Local Environmental Plan 2015 (CLEP 2015) and an amendment to SEPP WPC to insert a new precinct plan for the Appin (Part) Precinct. Upon the commencement of the new Appin (Part) Precinct Plan, the WLEP 2011 and CLEP 2015 will cease to apply to the Site.

Land Application Map

6.17 The Land Application Map is for the inclusion of the Appin (Part) Precinct (refer to **Figure 70**) as part of the WPC SEPP.

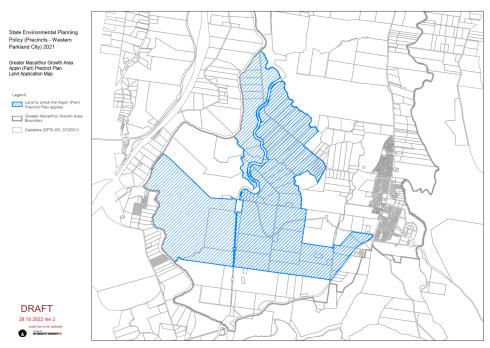


Figure 70: Proposed Land Application Map (Source: Proponent)

Land Use Zones and the Land Use Table

- 6.18 The following land zones are proposed for the Appin (Part) Precinct. The proposed Land Zoning Map is shown in **Figure 71**:
 - (C2) Environmental Conservation
 - (UDZ) Urban Development
 - (SP2) Infrastructure (Road)
- 6.19 The CPCP land categories and Ministerial Direction 3.6 Strategic Conservation Planning have informed the Land Zoning Map. However, this is not the only consideration. The provision of essential infrastructure and services has also informed the land zoning map.
- 6.20 A breakdown of the proposed land use table with the intended permitted uses to be delivered by the proposal is provided in **Table 18**.

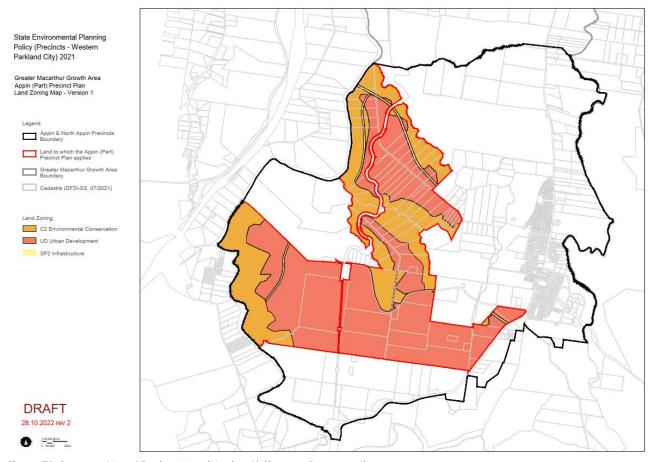


Figure 71: Proposed Land Zoning Map (Version 1) (Source: Proponent)

Table 18: Proposed land use zones

Proposed zone and objectives	Permitted uses	Explanation of provision
UDZ Urban Development		
Objectives:	2 Permitted without consent	This zone applies to:
To manage the transition of land from non-urban uses to urban uses. To encourage the development of well-planned and well-serviced new urban communities in accordance with the Appin structure plan. To ensure a range of uses, and uses located in a way, that are consistent with the strategic planning for the Appin (Part) Precinct. To safeguard land used for non-urban purposes from development that could prejudice the use of the land for future urban purposes. To ensure that land adjacent to environmental conservation areas is developed in a way that enhances biodiversity outcomes for the Precinct.	Any development not specified in item 2 or 4 4 Prohibited Air transport facilities; Animal boarding or training establishments; Boat building and repair facilities; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria: Depots; Electricity generating works; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Heavy industries; Home occupations (sex services); Mooring pens; Moorings; Open cut mining; Port facilities; Rural industries	1) Land identified as Certified – Urban Capable by the CPCP. The zone reflects the degree to which the allocation of land uses can shift during the evolution of the land release process as detailed site engineering occurs. The greenfield nature of the Appin (Part) Precinct requires a degree of flexibility, provided some verification of strategic planning occurs. A specific clause within the Precinct Plar will require concurrence from the planning secretary that a development application is consistent with the Appin Structure Plan. The proposed land use table is consistent with the UDZ Urban Development Zone that applies to the south east, north and town centre precincts of the Wilton Growth Area.
C2 Environmental Conservation		
Objectives: To protect and restore areas of special ecological, scientific or aesthetic values, To conserve biological diversity,	 2 Permitted without consent Nil 3 Permitted with consent Oyster aquaculture; Environmental facilities: Environmental protection 	This zone applies to areas mapped as: 1) Non-Certified – Avoided for Biodiversity and Avoided For Other Purposes in the CPCP The zone will allow these areas to be
native vegetation corridors, aboriginal heritage or cultural values of the land, and its scenic qualities.	works; Flood mitigation works 4 Prohibited Any other development not specified in items 2 or 3	preserved for conservation outcomes as detailed in the CPCP. The proposed land use table is consistent with the CPCP.
SP2 Infrastructure		
 Objectives: To provide for infrastructure and related uses. To prevent development that is not compatible with or that may detract from the provision of infrastructure. 	2 Permitted without consent Nil 3 Permitted with consent The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose 4 Prohibited	This zone applies to: 1) The corridor required for the East-west road connection, linking the Hume Highway to Appin Road 2) The north south road corridor The intent of zoning this corridor is to clarify that the link is being proposed to service the future community.

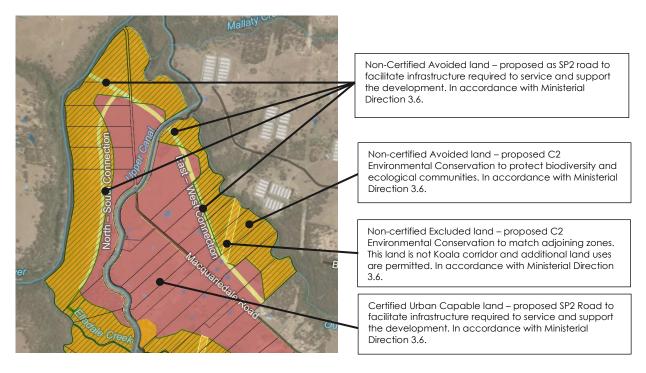


Figure 72: Extract of proposed Land Zoning Map with CPCP land category overlay (Source: Proponent)

Lot Size

- 6.21 The following minimum lot size (LSZ) control is proposed:
 - a 40ha minimum lot size to the C2 Environmental Conservation Zone
 - no minimum lot size control to the (UDZ) Urban development zone and SP2 Infrastructure zone (refer to Figure 73)
- 6.22 This approach is consistent with recent planning in growth areas, allowing flexibility in the urban form outcome and a range of lot sizes to be achieved in Appin (Part) Precinct residential neighbourhoods. The provision of density bands and performance criteria around the urban form and lot sizes can be integrated into a Development Control Plan.

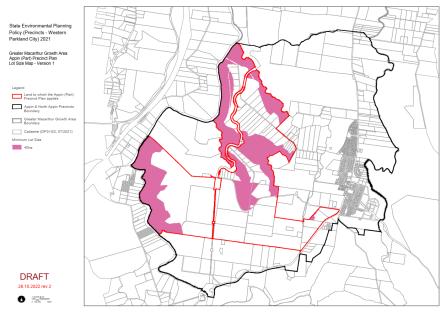
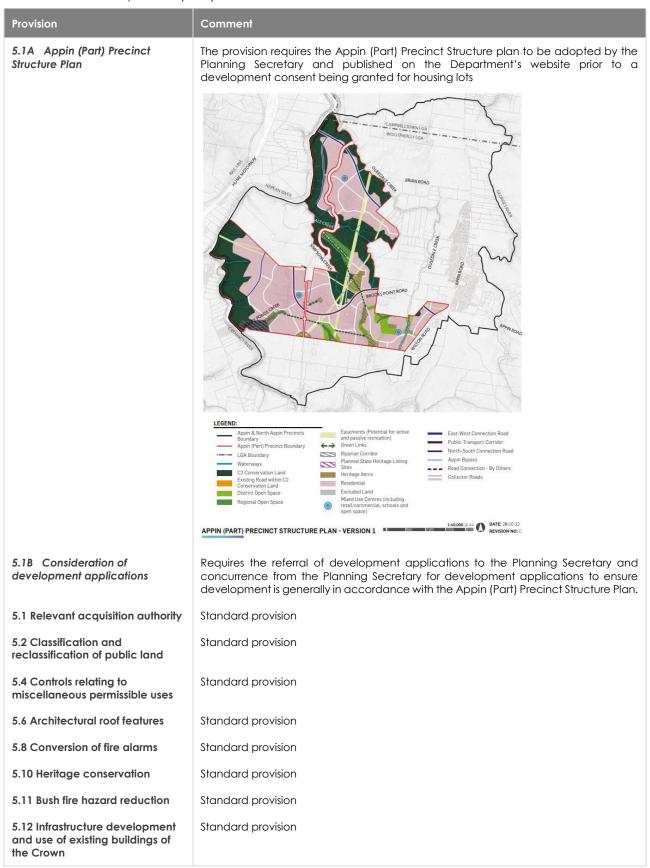


Figure 73: Proposed Minimum Lot Size Map (Source: Urbis)

Other Development Provisions

6.23 The Miscellaneous provisions listed in **Table 19** are proposed:

Table 19: Miscellaneous provisions (Part5)



6.24 The Urban Release Area provisions listed in **Table 20** are proposed:

Table 20: Urban Release Area (Part 6)

Provision	Comment
6.1 Definitions	Standard provision
6.2 Arrangements for designated State public infrastructure	Standard provision
6.3 Relationship between Part and remainder of Precinct Plan	Standard provision

The following additional local provisions are proposed in **Table 21** are proposed: 6.25

 Table 21:
 Additional Local provisions (part 7)

Table 21. Additional Edeal provisions	- (b ~)		
Provision	Comment		
7.1 Earthworks	Standard provision. Consistent with Wilton Growth Area.		
7.2 Public utility infrastructure	Standard provision. Consistent with Wilton Growth Area.		
7.3 Location of Sex Services	Standard provision. Consistent with Wilton Growth Area.		
7.4 Restricted Premises	Standard provision. Consistent with Wilton Growth Area.		
7.5 Concurrence of the Planning Secretary - Koala Corridors	A new provision to apply to land identified on the Clause Application Map.		
	State Environmental Planning Policy (Precincias - Western Parkand City) 2021 Greater Manadric Forenth Area Apport (Plant) Forenth Plan Clauser Application bigs - Version 1 Legand Application bigs - Version 1 Legand Application bigs - Version 1 Consert Natural City Greater (Plant) Consert Natural City Greater (Plant) Consert Natural City Greater (Plant) Report (Plant) Repo		
7.6 Affordable Housing	A new provision to deliver 5% of medium-density residential development (i.e. attached dwellings, multi dwelling housing and residential flat buildings) as affordable housing. The provision allows for this to be achieved by a planning agreement.		

6.26 The following schedules listed in **Table 22** are proposed.

Table 22: Schedules

Provision Comment **Schedule 1 Additional Permitted** The purpose of this schedule is to allow additional land uses on land mapped as C2 Environmental Conservation and outside a koala corridor. uses DRAFT O :----The additional uses permitted are consistent with typical C2 Environmental conservation zones in NSW. Schedule 4 Classification and Standard provision. reclassification of public land **Schedule 5 Environmental** Standard provision. Heritage DRAFT 0 ==== Carries over the items of local heritage significance within the Appin (Part) Precinct from the WLEP2011 to the precinct plan and lists the draft State heritage items.

Section A – Need for the Proposal

Q1. Is the proposal a result of an endorsed local strategic planning statement, strategic study or report?

- 6.27 <u>Yes</u>. Greater Sydney's population is projected to grow to approximately 6.1 million by 2041 over a million more people than currently live in the region.
- 6.28 The Western City District Plan (the **Plan**) anticipates 464,450 new residents and 184,500 dwellings by 2036. To support this growth, the plan seeks to accommodate growth through economic corridors, growth areas and infrastructure links between strategic and metropolitan clusters. Land release growth areas will be vital to ensuring housing supply and securing economic development for the region. Objectives 10 and 11 of the Plan identify the need to provide greater housing supply, diversity and choice in the Western City District.
- 1.42 The NSW Government has identified Growth Areas to assist in accommodating this growth. The GMGA is one such growth area and is a logical extension of the urban form of southwest Sydney. The NSW State government declared Greater Macarthur as a growth area in 2019.
- 6.29 The Site is within the Greater Macarthur Area and will be one of the largest land release areas earmarked to support new communities within the Western City District. The Appin (Part) Precinct comprises 1,378.8ha, of which 93% is within single ownership, which is key to the delivery of a large project. The District Plan identifies the importance of the Greater Macarthur Growth Area as one of the State-led projects planned for additional housing capacity. It also identifies a potential for a 'city serving transport corridor' running north-south through the Greater Macarthur Growth Area, connecting from the Campbelltown-Macarthur strategic centre to the south eastern portion of the growth area. The connection will improve accessibility to/from the Appin (Part) Precinct and adjoining suburbs.
- 6.30 The Greater Macarthur 2040 Plan communicates Appin will become a location for residential living clustered within a landscape setting of cultural and natural significance within the Greater Macarthur region. These new communities will be supported by a series of local centres providing services and amenities to cater to future residents' needs. It will also create local jobs that will strengthen the local economy of Appin and Greater Macarthur.
- 6.31 The planning proposal will build on the principles of a self-sufficient community that contributes to the amenity of broader Appin and complement the existing Appin village, with currently limited facilities and amenities.
- 6.32 The Site is suitable and demonstrates strategic merit through its consistency with plans within the hierarchy of strategic plans. The Proposal provides the opportunity to realise the vision for the Greater Macarthur Growth Area. It makes a critical contribution to greater housing supply and diversity, along with additional local services, amenities and recreational facilities to serve the local communities of Appin (Part) Precinct and the broader Appin and North Appin Precincts.

Q2. Is the proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

- 6.33 Yes, the Proposal is the best means to achieve the intended outcome to rezone land to permit housing, parks, centres, schools, roads and environmental management of ecologically significant land to accommodate population growth within the Western Parkland City. There is no other way to achieve this outcome.
- 6.34 The Proposal seeks to rezone the land within the Appin (Part) Precinct to facilitate urban development, housing and the delivery of regionally significant infrastructure. It is consistent with Government policy at the state and local levels. The Proposal is considered the best means of achieving those policies' objectives, priorities and intended outcomes. It is strategically aligned and consistent with the intent, objectives and principles of the Greater Sydney Region Plan, the Western City District Plan, the draft Greater Macarthur 2040 Plan and the Wollondilly LSPS.
- 6.35 The Proposal will enable the potential benefits for the Greater Macarthur Region and Wollondilly Shire to be unlocked. It fulfils the directions and objectives by rezoning the land within one of the major land release areas within the Western Parkland City, including the Greater Macarthur Growth Area, which is planned for additional housing growth.
- 6.36 The detailed review of the strategic context and land capability to accommodate residential communities within a strategic growth area that responds to the landscape character and natural elements demonstrates strategic merit in achieving a number of key objectives and priorities.
- 6.37 The location within the Greater Macarthur Growth Area allows the Proposal to capitalise on a place earmarked for urban development that contributes to the housing supply within the Western Parkland City and South West Sydney. Future potential transport corridors within the area will establish connections to strategic centres that will provide better access to Campbelltown-Macarthur.
- 6.38 The Residential Density Discussion Paper demonstrates a critical demand for additional housing supply and choice within South Western Sydney and the Greater Macarthur Regions. Housing in these regions, as envisioned by the Proposal, can respond to housing affordability.

Section B – Relationship to Strategic Planning Framework

Q3. Will the proposal give effect to the objectives and actions of the applicable regional or district plan or strategy (including any exhibited draft plan or strategies)?

6.39 Yes, as described in Chapter 3 and summarised in Table 23, the Proposal is consistent with the objectives and actions of A Metropolis of Three Cities: Greater Sydney Region Plan (2018), the Western City District Plan (2018) and draft Greater Macarthur 2040 (2018).

Table 23: Relationship to Strategic Planning Framework

Strategic Plan	Consistency
A Metropolis of Three Cities: Greater Sydney Region	The Proposal is consistent with A Metropolis of Three Cities: Greater Sydney Region Plan (Region Plan) and reflects the following directions:
Plan (2018)	A City Supported By Infrastructure
	The proposal contributes significantly to the community and social infrastructure as supported by the Social Infrastructure and Open Space Assessment prepared by Urbis.
	The Apin (Part) Precinct Structure Plan is anchored by a public transport corridor connecting the site to existing and new centres. The public transport spine will link up with existing heavy rail and bus infrastructure to provide residents with access to employment and recreation opportunities.
	A Collaborative City
	The Proposal has been guided by the Technical Assurance Panel, a collaboration between state and local government departments and industry.
	A City For People
	The Appin and North Appin Precincts seek to create one (1) Local Centre and five (5) neighbourhood centres, six (6) schools, one (1) district and three (3) local community centres to provide facilities and essential services for future residents. Three of the proposed schools and neighbourhood centres are located within the Site.
	Housing The City
	The Region Plan identifies the need for 184,500 new homes in Western Parkland City by 2036. These homes are to be delivered in suitable locations where they can be close to existing and proposed infrastructure.
	The Proposal will provide new housing to meet the growing city's needs. A mix of low, medium and high-density housing types will cater to market preferences and provide diverse and affordable housing options. The Appin (Part) Precinct will deliver 12,000+dwellings.
	A City for Great Places
	One (1) new Local Centre and five (5) neighbourhood centres within the Appin and North Appin Precincts are proposed to be created with essential services, community facilities, and open space provision. Within the Appin (Part) Precinct, three (3) of the neighbourhood centres have co-located community facilities.
	A Well-Connected City
	The Proposal is designed to integrate land use, transport and infrastructure planning so that homes are within a 20-minute walk of a new Local Centre, with access to employment opportunities and open space. The Appin (Part) Precinct Structure Plan provides 400m walking catchments for residential areas to future bus stops that will connect to Campbelltown & Macarthur train stations and strategic centres providing access to employment areas and health facilities within a 30-minute journey. The Proposal is within a 30-minute journey from several existing centres, including Campbelltown Macarthur, Wollongong and Wilton.
	Jobs and Skills for the City
	The Proposal will enable the redevelopment of a large landholding into vibrant mixed-use communities with access to new and existing employment opportunities. The Proposal is

within 30 minutes of several regionally significant employment hubs

Strategic Plan Consistency (Campbelltown/Macarthur, Wollongong) and 60 minutes of the Parramatta and Harbour CBD. The Site's proximity to the Western Sydney Airport and the new City of Bradfield will mean this new infrastructure is utilised efficiently. The Proposal will support the creation of more than 4,000 new jobs within the Appin Precinct, a further 10,000 within the Moreton Park Road Enterprise area and access to more than 43.000m² of retail gross floor grea. This will provide longer-term access to local employment opportunities and the construction phase of employment generation. A city in its landscape The Proposal respects environmental attributes, providing valuable new public open space and urban tree cover. The new public open spaces will be interspersed through the neighbourhoods providing equitable access by walking and cycling paths. Furthermore, conservation will protect and enhance existing green spaces along the Nepean and Cataract rivers. An efficient city Aligning land use and transport planning will positively impact emissions growth by locating homes close to employment opportunities and public transport options, thereby reducing reliance on private car travel. The Structure Plan provides homes within a 400m public transport catchment. The mixed-use nature of the new communities will mean daily needs for essential services and exercise are located close to home. A resilient city Adapting to climate change will be an important feature of resilient and healthy communities. The Proposal includes the preservation of existing natural areas and new green open space to increase the urban tree canopy and mitigate the impacts of climate change.

Strategic Plan Consistency Western City District Plan The Proposal is consistent with Western City District Plan and reflects the following planning priorities: Planning Priority W1: Planning for a city supported by infrastructure The Appin (Part) Precinct will be supported by additional enabling infrastructure such as local road upgrades, public transport corridors and local services and amenities to support the new residential neighbourhoods within the GMGA. This infrastructure will connect future residents to neighbouring centres and attract visitors to the precinct. Planning Priority W4: Fostering healthy, creative, culturally rich and socially connected communities The District Plan recognises cultural richness and diversity as critical to fostering healthy, creative, culturally rich and socially connected communities. The Appin (Part) Precinct Plan will help to enable strong social connections and support greater resilience and healthy lifestyles by celebrating the Site's natural landscape and cultural values. The Proposal is within Country with marked cultural sensitivity, particularly associated with the Appin Massacre of 1816 and the specific sites where that event unfolded. As outlined in **Chapter 4**, a process of engagement with with Registered Aboriginal Parties (RAPs), First Peoples cultural knowledge holders and cultural knowledge advisors with connection to this Country has been underway for this project. This has informed sensitivity mapping, a draft CVAR and CwC Framework. The draft CVAR supports the CwC Framework by setting out ten commitments to inform the implementation of its principles and commitments to strengthen the Proponent's and government agencies' understanding and respect for the Country's cultural values. Forty-one draft recommended actions are identified to safeguard the identified cultural heritage values and meet the CwC commitments. The draft CVAR mapping and recommended actions have informed the development of the proposed precinct and structure plans. The draft CVAR is currently being reviewed in response to the TAP Assurance advice of 21 September 2022. The revised CVAR will be finalised and submitted following review by the RAPs, cultural knowledge holders and cultural knowledge advisors, consistent with the Heritage NSW assessment process. Planning Priority W5: Providing housing supply, choice and affordability, with access to jobs, services and public transport

The District Plan identifies the need for an additional 184,500 dwellings between 2016 and 2036 within the Western City District, with housing to be provided in the right places to meet the demand for different housing types, tenure, price points, preferred locations and designs. The District Plan identifies five housing market demand areas in the Western City District: Fairfield, Liverpool, South West, Penrith-Blue Mountains and North West. The GMGA is identified within the South West housing market demand area.

The Appin (Part) Precinct will contribute to delivering additional dwellings for the Western City District in a housing market demand area that would satisfy the residents' preferred housing location. The Appin (Part) Precinct forms part of the DPE Growth Area programs that aim to guide new communities' development in land release areas.

Planning Priority W6: Creating and renewing great places and local centres and respecting the District's heritage

The Appin (Part) Precinct is defined by heritage elements and environmental corridors of significant biodiversity value. These elements are acknowledged within the Precinct Plan and Structure Plan, contributing to the character of future residential neighbourhoods. The proposed built-form character complements these heritage elements and ensures view corridors are not impeded.

Planning Priority W14: Protecting and enhancing bushland and biodiversity

The District Plan identifies the importance of protecting bushland areas and biodiversity to preserve natural habitat, cool the environment and support cleaner waterways and air auality. Biodiversity corridors run through the Site, including the Nepegn River, Simpsons Creek, Elladale Creek and Ouesdale Creek. These corridors are proposed to be zoned C2 Environmental Conservation under the Appin (Part) Precinct Plan, forming the defining corridors that bound the residential neighbourhoods. These biodiversity corridors will be enhanced and protected by the CPCP. The cultural and environmental values of the biodiversity corridors have been assessed.

Strategic Plan Consistency

Planning Priority W15: Increasing urban tree canopy cover and delivering Greed Grid connections

The District Plan aims to deliver on the Greater Sydney Green Grid for the Western City District. The Green Grid will deliver a network of high-quality green spaces that connects communities to the natural landscape. It will link tree-lined streets, waterways, bushland corridors, parks and open spaces to centres, public transport and public spaces.

The Green Grid network within the Appin (Part) Precinct comprises a combination of natural environmental corridors, waterways, and open space connections linking the proposed residential neighbourhoods to local centres and transport corridors.

The Landscape Plan aims to provide an "Active and Adventurous Lifestyle" and deliver "Spaces for Everyone" by providing community-use areas that respond to the Site's history and key features.

The Landscape Plan identifies walking trails that connect key viewpoints, cultural heritage locations and key open space opportunities with facilities for the community to utilise. These five (5) trails consist of the fitness trail, exploring the skyline trail, the meandering picnic trail, the water trail, and the cultural and educational trail. All trails contain cultural nodes connecting the community to the key culturally sensitive locations.

Planning Priority W18: Delivering high-quality open space

The Precinct Plan will deliver a series of recreational facilities contributing to the Green Grid. This will include a sporting oval, playing fields, hard courts, bush food garden, nature and adventure park, kids playground, skate park, dog park, and flexible open space for weekend market and outdoor community events.

The open space network proposed is essential for visual amenity, recreational use and wildlife corridors. It creates linkages and joins parks, sports fields, road reserves and riparian corridors. It is focused on providing proposed open spaces within a 5-minute walk (400m) from most homes.

Greater Macarthur 2040: An interim plan for the Greater Macarthur Growth Area

The Proposal is consistent with the key themes of the Greater Macarthur 2040, which include Place, Landscape, Built Form, Land Use and Movement. The Appin (Part) Precinct Plan reflects the following objectives of the Greater Macarthur 2040:

PLACE

A connected urban community

The Appin (Part) Precinct Plan will deliver a series of residential neighbourhoods within the defining landscape feature branching off the Nepean River, including the Simpsons, Ousedale and Elladale Creeks. The residential neighbourhoods will be connected through the Green Grid network of Appin, along with a series of district parks and one regional park.

A place where people live near families and friends in places they can afford

The Appin (Part) Precinct Plan and supporting structure plan will establish the planning work for the delivery of greater housing supply and choice in a new land release area within South-Western Sydney, which is identified as experiencing significant market demand. The Appin (Part) Precinct is well supported by social infrastructure and amenities, such as schools, sporting facilities and retail amenities, making it a desirable area for families to locate.

LANDSCAPE

A protected and enhanced environment

Healthy waterways and connected bushland will separate the new residential neighbourhoods of Appin. The Landscape Plan aims to preserve and enhance these natural landscape features of Appin. It is also supported by the Historic Heritage Constraints Assessment and Aboriginal Cultural Values Assessment, which identify key sites of cultural value and significance that will be celebrated and carefully preserved as part of the landscape character.

Heritage conserved for future generations

The draft CVAR supports the CwC Framework by setting out ten commitments to inform the implementation of its principles and commitments to strengthen the Proponent's and government agencies' understanding and respect for the Country's cultural values.

Forty-one draft recommended actions are identified to safeguard the identified cultural heritage values and meet the CwC commitments. The draft CVAR mapping and

Strategic Plan

Consistency

recommended actions have informed the development of the proposed precinct and structure plans.

In July 2021, the Heritage Council of NSW and the Aboriginal Cultural Heritage Advisory Committee (ACHAC) co-nominated the Appin Massacre Cultural Landscape for listing on the State Heritage Register in recognition of its shared Aboriginal and non-Aboriginal cultural heritage values. The GMGA engagement process and CVAR cultural mapping process contributed to the cultural heritage assessment process conducted by Heritage NSW.

In September 2022, the Heritage Council recommended that the Minster for Environment and Heritage direct listing the Appin Massacre Cultural Landscape as a State Heritage Register item comprising five greas.

BUILT FORM

Engaging, well-designed places

The Appin (Part) Precinct will be supported by a series of neighbourhood centres, forming part of a broader network of centres such as Appin Village and Wilton Town Centre. The provision of amenities and services to support the residential communities of Appin will improve the precinct's liveability and attractiveness.

The broader Appin and North Appin Precincts will consist of one (1) local centre and five (5) neighbourhood centres, of which three (3) are located within the Appin (Part) Precinct. These centres will contribute to the 4,000+ jobs anticipated to be delivered for Appin.

LAND USE

A choice of housing

The new residential neighbourhoods proposed within the Appin (Part) Precinct will contribute to a greater housing supply and diversity within the GMGA. The residential neighbourhoods will consist of a range of low and medium-density residential dwellings, given the proximity to amenities, services and biodiversity areas.

MOVEMENT

Transport will form the spine of the Growth Area

The Proposal comprises a road network that is consistent with the network envisaged by Macarthur 2040 and the supporting draft SIC plan for the GMGA.

co Hiç	ast-west corridor connecting the Hume ghway to Appin/Bulli		Subarterial connection to improve
KO	oad (40m corridor)		movement and connections for the Site and wider Appin and North Appin Precincts
(42 all	north-south corridor onnecting to Road #1 2.5m corridor, lowing for two lanes in ach direction)	Consistent with the Greater Macarthur 2040 Plan and Draft SIC	Provides a north-south connection and future provision for connection to Picton Rd from the Hume Highway). The north-south corridor within the Appin (Part) Precinct provides local access and connection, with a crossing over waterways to be delivered as a future connection to Picton Road, if required
3. Tro	ansit Corridor		Provides a north-south connection for rapid public transport to connect Appin, Gilead to The Campbelltown/Metropolitan Cluster

The Appin (Part) Precinct Structure Plan is anchored on a proposed public transport corridor which will link the residential neighbourhoods to the broader GMGA to the north. The medium-density residential uses are also clustered in areas of greater accessibility along this public transport corridor.

Compact, walkable neighbourhoods

The Site comprises a series of compact residential neighbourhood clusters framed by open space and biodiversity corridors. These open-space corridors also provide active transport links throughout the precinct for future residents. The residential neighbourhoods are each supported by a mixed-use centre consisting of a local school and district-level open space.

Q4. Is the proposal consistent with a Council LSPS that has been endorsed by the Planning Secretary or GSC, or another local strategy or strategic plan?

- 6.40 Yes. In March 2020, the Greater Sydney Commission confirmed its support for Wollondilly Shire Council's Local Strategic Planning Statement (LSPS) as being consistent with the Greater Sydney Region Plan and Western City District Plan. The Commission's support was based, in part, on Council's intent to deliver the Western City District Plan as set out in the Local Strategic Planning Statement.
- 6.41 Wollondilly 2040 identifies the following amenities to support the Appin Precinct:
 - Investment in transport and social infrastructure
 - Conservation of natural vegetation and protection of koalas
 - Integrated water and wastewater management
 - Connected, walkable and cycling-friendly places
 - Public open spaces
 - Access to jobs, education, health and services
- 6.42 The Proposal responds to Wollondilly 2040 in a considered manner.

Q5. Is the proposal consistent with any other applicable State and regional studies or strategies?

6.43 Yes, the Proposal is consistent with other relevant State, and regional studies/strategies described in Chapter 3 of this report and summarised in Table 24 below.

Table 24: Other State and regional studies or strategies

Strategic Plan	Consistency
Future Transport Strategy 2056	The Proposal is consistent with the following objectives established within the Future Transport Strategy 2056:
	Accessible Services - Transport enables everyone to get the most out of life, wherever they live and whatever their age, ability or personal circumstances
	Appin (Part) Precinct will provide residential growth in areas of high amenity supported by a range of residential typologies, open space, local amenities and community facilities. The residential typologies proposed will enable a range of household types and are envisioned to cater for residents at different life stages, all of which will be served by accessible transport services.
	The residential areas are anchored by a public transport corridor connecting existing and new centres. It will ensure Appin is accessible to the surrounding regional centres o Campbelltown/Macarthur, Wilton and Wollongong.
	A metropolis of three cities, where people can access the jobs, education and services they need within 30 minutes by public or active transport
	The Proposal is strategically located:
	To existing and proposed transport infrastructure within Western Parkland City
	 It is anchored by the regional transport corridor (M31 Hume Highway) connecting Campbelltown-Macarthur to the Southern Highlands and Canberra, which is earmarked for Sydney to Canberra Faster Rail.
	To achieve a 30-minute city within the Greater Macarthur Growth Area,
	In addition to this planned transport network for the Appin Precinct and Greater Macarthu Growth Area, Transport for NSW has considered the need to protect land for the Oute Sydney Orbital within the Greater Macarthur Growth Area.
	During 2020 and 2021, TfNSW Transport for NSW exhibited options for Outer Sydney Orbita Stage 2-Sector 1, with a preferred corridor announced in August 2021.

Strategic Plan Consistency During the Appin TAP process and presentation of technical studies in late 2021 and early 2022, it was clear that the preferred corridor would have impacts on the cultural landscape, koala corridors and housing provision in accordance with the existing strategic and statutory planning framework. In this context, Transport for NSW advised the TAP to protect an alternative road configuration and corridor within the Appin (Part) Precinct for a northsouth connection to Picton Road. The preferred transport network identified in Greater Macarthur 2040 aligns with this strategy. The transport network within the Appin (Part) Precinct Plan and supporting Structure Plan is consistent with the direction of the TAP, TfNSW discussions and the relevant strategic and statutory framework. The success of our cities and regional towns depends on our network supporting attractive and healthy places The mixed-use nature of the new communities will mean daily needs for essential services and exercise are located close to home. Appin (Part) Precinct will provide homes within a 400m public transport catchment. In addition, the Appin (Part) Precinct will be supported by walking trails and active transport along the biodiversity corridors, improving liveability for future residents and visitors. The natural setting of the Site makes it a potential destination for tourism. This will help set up success for Appin in the future, making it a more attractive local destination that promotes greater use of active and public transport. Moving more people by active and public transport has benefits for all Aligning land use and transport planning by locating homes close to employment opportunities and public transport options reduces reliance on private car travel. The Appin (Part) Precinct Structure Plan is designed to provide homes within a 400m public transport catchment. It will also have a positive impact on emissions growth. The public transport spine will also link up with existing heavy rail and bus infrastructure to provide residents with access to employment and recreation opportunities. Cumberland Plain The Proposal is consistent with the following outcomes established within the Cumberland Conservation Plan Plain Conservation Plan: Efficient delivery of development is supported by streamlined biodiversity approvals and planning certainty The CPCP is a conservation plan for Western Sydney that identifies strategically important biodiversity areas within the Cumberland subregion to offset the biodiversity impacts of future urban development to facilitate a vibrant, green and liveable city. In August 2022, the NSW Environment and Heritage Minister approved the CPCP, which provides biodiversity certification under Part 8 of the BC Act. This approval removes the need for landholders to seek their biodiversity approvals under the BC Act for development on certified - urban capable land as long as they comply with planning controls under the CPCP, as set out in the Strategic Conservation Chapter of the SEPP (Biodiversity and Conservation) 2021. Approval under Part 10 of the EPBC Act is pending. The extent and condition of native vegetation increase and improve in areas of the Cumberland subregion, most likely to support long-term viability and ecological connectivity The Precinct Plan and proposed land zoning map are consistent with the Ministerial Direction - 3.6 Strategic Conservation Planning. The landscape design strategy includes the treatment of water runoff, cleaning and filtering water, managing flood-prone areas and providing habitat for the regeneration of fauna, as well as restoring water-loving native vegetation to the creek and wetland areas. The proposal for green streets supports native vegetation through the precinct with staggered planting of endemic woodland species on the main roads to celebrate its bushland setting.

The condition of riparian areas within the nominated areas improves

The Appin (Part) Precinct is bound by a series of regionally significant riparian corridors with the Georges River to the east, the Nepean River to the west, Mallaty Creek to the north and Cataract Creek to the south. The key principles adopted in relation to natural setting and sustainability include preserving and managing CPCP land and additional bushland and riparian corridors for conservation throughout the Structure Plan.

The Watercycle Management Strategy proposed to support the rezoning has been designed to achieve water quality targets that will see a significant reduction in pollutants and nutrients discharged into riparian corridors.

Q6. Is the proposal consistent with applicable State Environmental Planning Policies?

6.44 Yes, the Planning Proposal is consistent with the applicable State Environmental Planning Policies (SEPP) - refer to **Table 25**.

 Table 25: Consistency with State Environmental Planning Policies

State Environmental Planning Policy (SEPPs)	Assessment	Consistency
SEPP (Housing) 2021	Not applicable to this Proposal.	N/A
SEPP (Precincts – Western Parkland City) 2021	The Site is currently zoned (RU2) Rural Landscape under the WLEP2011 and CLEP2015.	YES
	This proposal aims to rezone the site into (UDZ) Urban Development, (C2) Environmental Conservation, (SP2) Infrastructure (Road) under Chapter 3 Sydney region growth centres of the WPC SEPP. The Proposal is consistent with State and local strategic planning policies and is located within the GMGA. Clause 3.1 (a) of the WPC SEPP aims to coordinate land release for residential, employment and other development. The subject Proposal seeks to facilitate this process.	
SEPP (Precincts – Central River City) 2021	Not applicable to this Proposal.	N/A
SEPP (Precincts – Eastern Harbour City) 2021	Not applicable to this Proposal.	N/A
SEPP (Regional) 2021	Not applicable to this Proposal.	N/A
SEPP (Industry and Employment)	Chapter 3, Advertising and Signage of the Industry and Employment SEPP, detailed compliance with SEPP provisions will be demonstrated within all future development applications relating to signage and advertising on the site.	YES
SEPP (Transport and Infrastructure) 2021	Chapter 2, Infrastructure of the Transport and Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the State by (amongst other things) identifying matters to be considered in the assessment of development adjacent to particular types of development.	YES
	As development on the site will involve subdivisions of 200 or more allotments and the development of 300 or more residential dwellings, future development applications will require concurrence from TfNSW per Schedule 3 of the SEPP.	
	There are various divisions of the SEPP that will be triggered potentially for future development applications, including:	
	Electricity transmission or distribution network (Division 5).	
	 Pipelines and pipeline corridors (Division 12). 	
	 Roads and road infrastructure facilities (Division 17). 	
	Sewerage systems (Division 18).	
	Water supply systems (Division 24).	
	Various development applications will be lodged and require assessment under the Transport and Infrastructure SEPP at the appropriate time.	
	Chapter 3 Education establishments and child care facilities, compliance with the design quality principles contained within Schedule 4 of the SEPP will be addressed in future development applications.	

State Environmental Planning Policy (SEPPs)	Assessment	Consistency
SEPP (Planning Systems) 2021	Chapter 2, State and regional development (SRD) of the Planning Systems SEPP, the application of the SRD SEPP depends on the context of future development applications on the site.	YES
	The rezoning proposal does not prevent the application of this SEPP for state-significant or critical infrastructure projects.	
	Specifically, development for convention centres, exhibition centres and entertainment facilities with a CIV of more than \$30 million and development for other tourism-related purposes with a CIV of more than \$100 million is identified as significant state development (SSD). Future applications will either be progressed through the DPE SSD approval pathway or, if relevant, through the Wollondilly Council traditional approval pathway.	
SEPP (Biodiversity and Conservation) 2021	The Site is the subject of the CPCP, the States' strategic biodiversity certification for planned growth areas in western Sydney. Following the CPCP approval by the State and Federal Ministers for the Environment, construction can commence without prepared biodiversity assessments	YES
	The Proposal is consistent with the CPCP.	
	Chapter 3, Koala habitat Protection 2020 of the Biodiversity and Conservation SEPP, aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.	
	The Proposal aligns with the koala corridors identified in the CPCP and is consistent with protections and directions in Ministerial direction 3.6	
	Niche completed the Ecological Assessment to provide a strategy for protecting and preserving biodiversity and conservation areas.	
	Chapter 8, Drinking Water Catchment of the Biodiversity and Conservation SEPP, aims to protect and maintain healthy water catchments while permitting development compatible with this goal. The Proposal borders the Upper Nepean River subcatchment. There are two areas where the catchment extends into the Growth Area but not the Appin (Part) Precinct. Existing drainage networks within the Appin (Part) Precinct drain away from the catchment land. This drainage pattern will be maintained.	
	Chapter 9, Hawkesbury-Nepean River of the Biodiversity and Conservation SEPP, aims to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context. Clause 9.4 of the SEPP outlines specific planning considerations for preparing environmental planning instruments and development control plans within the applicable area, including the Wollondilly LGA. The Proposal is consistent with clause 9.4 as it implements strategies to manage flora and fauna communities to conserve and enhance the diversity of species and genetics within the catchment. Further assessment will be undertaken at the development application stage.	
	Chapter 13, Strategic Conservation Planning of the Biodiversity and Conservation SEPP, aims to ensure development in nominated areas is consistent with the CPCP biodiversity certification under part 8 of the BC Act and part 10 of the EPBC Act.	
	Part 13.3 outlines development controls for avoided land. The land mapped as avoided by the subject SEPP is proposed to be zoned as (C2) Environmental Conservation. The proposed land use table for this zone is consistent with the recommendations of	

State Environmental Planning	Assessment	Consistency
Policy (SEPPs)	the CPCP, and Chief Scientist reports. This proposed land zoning will implement the planning framework to protect biodiversity in these areas and restrict development opportunities in line with the objectives of part 13.3.	
	The exception to this is part of the mapped avoided land proposed to be zoned SP2 Infrastructure to permit roads that are essential to service the Proposal. An assessment against section 13.9 will be required at the development application stage.	
	Part 13.4 outlines the development controls for strategic conservation areas. The land mapped as a strategic conservation area by the subject SEPP is proposed to be zoned as (C2) Environmental Conservation. The proposed land use table for this zone is consistent with the recommendations of the CPCP, and Chief Scientist reports. This land zoning will implement the planning framework to protect and enhance biodiversity in these areas and restrict development opportunities in line with the objectives of part 13.4	
	The exception to this is part of the mapped strategic conservation land proposed to be zoned SP2 Infrastructure to permit roads essential to service the Proposal. An assessment against section 13.12 will be required at the development application stage.	
	Part 13.5 outlines the development controls for certified urban capable land and requires future development applications to consider the CPCP Mitigation Measures Guidelines. The Proposal accommodates all future asset protection zones within the certified urban capable land.	
SEPP (Resilience and Hazards) 2021	Chapter 4, Remediation of land of the Resilience and Hazards SEPP, Clause 4 requires in the event of a change of land use. The planning authority must consider whether the land is contaminated and if the land can be suitably remediated for the proposed use.	YES
	The Preliminary Site Investigation prepared by Douglas Partners identifies that the potential for significant, widespread contamination is generally low and, as such, the Proposal is deemed suitable (from a contamination perspective) for proposed rezoning for mixed land use, including residential.	
	Localised evidence of contamination was observed (i.e. PAEC low – medium range), which is typical considering previous uses.	
	Douglas Partners concludes that the preliminary site investigation findings are consistent with this SEPP's objectives.	
	Consistent with the SEPP, further investigations of areas with a low potential for contamination are required when development applications are being assessed.	
SEPP (Urban Renewal) 2010	Not applicable to this Proposal.	N/A
SEPP (Exempt and Complying Development Codes) 2008	The Proposal does not contain provisions that will contradict or hinder the application of the SEPP. Noting the SEPP does not automatically apply to the (UDZ) Urban Development Zone. It is anticipated a new code will be prepared for the Appin and North Appin Precincts.	YES
SEPP (Miscellaneous Consent Provisions) 2007	Not applicable to this Proposal.	N/A
SEPP (Resources and Energy) 2021	In relation to Chapter 2 Mining , petroleum production and extractive industries of the Resources and Energy SEPP, the proposed development will be supported by measures to avoid or minimise any incompatibility with future mining uses in the Site's immediate vicinity.	YES

State Environmental Planning Policy (SEPPs)	Assessment	Consistency
	A portion of the Site is above the proposed underground mining (five short longwall panels). A satisfactory arrangement provision requiring the completion of mining before the issue of development consent for residential uses would be an appropriate way to manage this part of the Site.	
SEPP (Building Sustainability Index: BASIX) 2004	Detailed compliance with the BASIX SEPP mandated energy and water efficiency levels will be demonstrated within all future development applications relating to residential uses on the site.	YES
SEPP No. 65 Design Quality of Residential Apartment Development	Not applicable to this Proposal.	N/A
	SEPP 65 will apply at the Development Application stage for the proposed development.	
SEPP (Primary Production and Rural Development) 2019	Not applicable to this Proposal.	N/A
	DPE identified the site as a growth area in 2019 for land release and urban development, reinforcing that the site is not needed for agricultural purposes.	

Q7. Is the proposal consistent with applicable Ministerial Directions (s9.1 directions)?

6.45 Yes. the Proposal is consistent with the applicable Ministerial Directions under section 9.1 of the EP&A Act, as discussed in Table 26 below.

Table 26: Section 9.1 Directions

Ministerial Direction	Assessment	Consistency	
Focus Area 1: Planning Systems			
1.1 Implementation of regional Plans	The Draft Proposal is consistent with the strategy, goals, directions and actions contained within the Western City District Plan, as outlined in Chapter 3 of this report.	YES	
1.2 Development of Aboriginal Land Council Land	Not applicable to the Planning Proposal.	N/A	
1.3 Approval and Referral Requirements	A site-specific Development Control Plan will support the Proposal. It will contain the site-specific controls that allow flexibility and design measures required to achieve the unique design of the Precinct Plan.	YES	
1.4 Site-Specific Provisions	This direction ensures that planning provisions encourage efficient and appropriate development assessment. The relevant requirements of this direction have been considered in preparing this Proposal and proposed amendments to WPC SEPP.	YES	
Focus Area 1: Planning Systems –	Place-Based		
1.5 Parramatta Road Corridor Urban Transformation Strategy	Not applicable to the Planning Proposal.	N/A	
1.6 Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	Not applicable to the Planning Proposal.	N/A	
1.7 Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Not applicable to the Planning Proposal.	N/A	
1.8 Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Not applicable to the Planning Proposal.	N/A	
1.9 Implementation of Glenfield to Macarthur Urban Renewal Corridor	Not applicable to the Planning Proposal.	N/A	
1.10 Implementation of the Western Sydney Aerotropolis Plan	Not applicable to the Planning Proposal.	N/A	
1.11 Implementation of Bayside West Precincts 2036 Plan	Not applicable to the Planning Proposal.	N/A	
1.12 Implementation of Planning Principles for the Cooks Cove Precinct	Not applicable to the Planning Proposal.	N/A	

Ministerial Direction	Assessment	Consistency
1.13 Implementation of St Leonards and Crows Nest 2036 Plan	Not applicable to the Planning Proposal.	N/A
1.14 Implementation of Greater Macarthur 2040	The site forms part of the Greater Macarthur Urban Release Area. This Proposal achieves the overall intent of Greater Macarthur 2040 and proposes a planning framework for the delivery of its planning principles, directions and priorities.	
1.15 Implementation of the Pyrmont Peninsula Place Strategy	Not applicable to the Planning Proposal.	
1.16 North West Rail Link Corridor Strategy	Not applicable to the Planning Proposal.	N/A
1.17 Implementation of the Bays West Place Strategy	Not applicable to the Planning Proposal.	N/A
1.18 Implementation of the Macquarie Park Innovation Precinct	Not applicable to the Planning Proposal.	N/A
Focus Area 2: Design and Place (Focus Area 3: Biodiversity and Co	This Focus Area was blank when the Directions were made)	
3.1 Conservation Zones	The Appin (Part) Precinct Plan applies a C2 Environmental Conservation Zone to areas mapped as Non-Certified (Avoided) and to some Non-Certified (Excuded) in the CPCP to ensure they are protected from development. Essential infrastructure is required to traverse the proposed Environmental Conservation zoned land to deliver infrastructure to support and service the development. The CPCP has provisions and guidelines to guide the process in these circumstances. The impact of this loss has been assessed, and mitigation is suggested. As a result, it is concluded that while there will be an impact, it will be appropriately mitigated in accordance with the legislation and therefore is acceptable.	
		YES

Ministerial Direction	Assessment	Consistency
	Aboriginal cultural value and significance and comprises a framework to mitigate impacts through the development process.	
	The Historic Heritage Constraints Assessment identified a series of potential heritage items, mostly situated within the eastern portion of the Appin (Part) Precinct. A series of measures are recommended to mitigate any potential impacts on these items' heritage significance and value.	
3.3 Sydney Drinking Water Catchments	Not applicable to the Planning Proposal.	
3.4 Application of C2 and C3 Zones and Environmental Overlays in Far North Coast LEPs	Not applicable to the Planning Proposal.	
3.5 Recreation Vehicle Areas	Not applicable to the Planning Proposal.	N/A
3.6 Strategic Conservation Planning	The Appin (Part) Precinct Plan applies a (C2) Environmental Conservation Zone to areas mapped as Non-Certified (Avoided) and some excluded in the CPCP to ensure they are protected from development. Essential infrastructure is required to traverse the proposed environmental conservation zoned land to deliver the infrastructure required to support and service the development.	YES
	The CPCP has provisions and guidelines to guide the process in these circumstances. The impact of this loss has been assessed, and mitigation is suggested. The assessment is part of the Biodiversity Assessment prepared by Niche Environment and Heritage	
	As a result, it is concluded that while there will be an impact, it will be appropriately mitigated in accordance with the legislation and therefore is acceptable.	
Focus Area 4: Resilience and haz	ards	
4.1 Flooding	The Water Cycle Management Strategy confirms that the site can be developed in accordance with the Flood Plan Development Manual 2005.	YES
	The Site is not within a flood planning area. 1 % AEP flows within the Nepean River will not impact the portions of the site proposed for development. The Catchments are generally characterised as small (<40 ha), and consequently, flood risks will be managed by providing a conventional major /minor street drainage system.	
4.2 Coastal Management	Not applicable to the Planning Proposal.	N/A
4.3 Planning for Bushfire Protection	Portions of the Appin (Part) Precinct are identified as bushfire-prone land. The Strategic Bushfire Study prepared for the Proposal confirms the site complies with this ministerial direction.	
4.4 Remediation of contaminated land	A preliminary site investigation has been prepared for this Proposal. It identifies several small areas as Potential Area of Environmental Concern (PAEC) and concludes the common contaminants appear to be consistent with the Site's previous and current use for grazing. The Site can be remediated for use as residential development. Further studies will be required at the development application stages.	
4.5 Acid Sulfate Soils	The Preliminary Geotechnical Report confirms that the site is not mapped as having any acid sulfate soils. Not applicable to the Planning Proposal.	N/A
4.6 Mine Subsidence and Unstable Land	The Appin (Part) Precinct is designated within the Appin Mine Subsidence Area. The majority of the site was mined in the early 2000s. Consultation with Subsidence Advisory will occur during the exhibition of the Proposal.	YES

Ministerial Direction	Assessment	Consistency	
Focus Area 5: Transport and Infrastructure			
5.1 Integrating Land Use and Transport	The Site will benefit from significant investment in road, rail and air-based transport infrastructure in the region anchored by the new western Sydney airport. By providing a residential community within proximity to the proposed transport infrastructure, including the OSO 1 corridor, the Proposal aligns with the objectives of Direction 3.4.	YES	
	The urban design and place ethos of the Appin (Part) Precinct Structure Plan has been to lays the foundation for a series of transit-based, self-contained, compact, connected, mixed-use, walkable urban neighbourhoods. Serviced by a mid-tier transit corridor connecting the urban settlement to the Greater Macarthur urban corridor and framed by the Nepean and Cataract Rivers, the landholdings will support a fully self-sufficient contemporary settlement. A unique lifestyle is envisaged, where residents will enjoy a return to some of the more timeless values of community living with significant local employment opportunities. The Proposal incorporates employment areas that will generate significant local jobs near housing, reducing travel demand and encouraging walking and cycling. The Proposal is designed to allow for local bus services through each stage so that 90% of residents will be within 400m of a bus route.		
5.2 Reserving Land for Public Purposes	This Proposal is consistent with this direction in that it does not create, alter, or reduce existing zoning or reservations of land for public purposes. The Proposal will zone areas of environmentally significant to (C2) Environmental Conservation. The Proposal also identifies land required for public purposes as (SP2) Infrastructure. Under this zone, and as a requirement according to the Precinct Plan, the land shall be acquired by the relevant authority. Provisions are proposed to be included in WPC SEPP, enabling the acquisitions to occur. The Proposal will therefore comply with this Direction	YES	
5.3 Development Near Regulated Airports and Defence Airfields	The Precinct is located approximately 35km south of the future Western Sydney Airport and is not located on land that is in an ANEF or ANEC contour of 20 or greater. The Proposal is, therefore, acceptable and will not impact airport operations.	YES	
5.4 Shooting Ranges	Not applicable to the Planning Proposal.	N/A	
Focus Area 6: Housing			
6.1 Residential Zones	The Site is located in the Greater Macarthur Growth Area and is identified for new housing through State and Local Government Strategic policies and directions.	YES	
	The Proposal encourages various housing types to provide for existing and future housing needs and efficiently uses existing infrastructure and services. The proposed residential development is designed considering the Site's topography, transport connections, centre locations and market need.		
	The Proposal supports low & medium-density residential outcomes:		
	 Low Density: base minimum allotment size of 200sqm in low-density areas (consistent with the Wilton Growth Area DCP) with larger lots and site- responsive housing in areas of challenging topography 		
	Medium-density: predominantly attached products located near areas of higher amenity (open space, riparian corridors, transit options and centres)		
	Multi-dwelling housing and residential flat buildings in centres, noting that this may not be feasible in the initial years of the project, but over time as development progresses, this will be an attractive housing option to assist with the provision of a diverse range of housing		

Ministerial Direction	Assessment	Consistency
	This approach will offer a consistent approach to residential development in Sydney's growth areas while encouraging housing choice, efficient infrastructure use, and minimising impact on environmental lands.	
	A satisfactory arrangement style clause for the provision of essential services (water, wastewater, power and communications), similar to existing provisions in other precinct plans, is proposed for the Appin (Part) Precinct Plan.	
6.2 Caravan Parks and Manufactured Home Estates	Not applicable to the Draft Proposal.	N/A
Focus Area 7: Industry and Emplo	pyment	
7.1 Business and Industrial Zones	The Proposal does not affect land within an existing or proposed business or industrial zone.	YES
	The Proposal will support the delivery of 43,000m² of retail and commercial floor space. Approximately 4,000 centre-based jobs will be provided in the Appin and North Appin Precincts. Additional employment opportunities will be attributed to the self-employed (Tradespersons) working from home.	
7.2 Reduction in non-hosted short-term rental accommodation period	Not applicable to the Planning Proposal.	N/A
7.3 Commercial and Retail Development along the Pacific Highway, North Coast	Not applicable to the Planning Proposal.	N/A
Focus Area 8: Resources and Ene	rgy	
8.1 Mining, Petroleum Production and Extractive	A portion of the Site is located above proposed underground mining (five short longwall panels).	YES
Industries	The Proposal will be supported by measures to avoid or minimise any incompatibility with future mining uses in the site's immediate vicinity.	
	A satisfactory arrangement provision requiring the completion of mining before the issue of development consent for residential uses would be an appropriate way to manage this part of the Site.	
Focus Area 9: Primary Production		
9.1 Rural Zones	The GMGA is located outside the Metropolitan Rural Area and has been identified as a growth area since 2019, reinforcing that the Site is not needed for agricultural purposes.	YES
9.2 Rural Lands	The GMGA is located outside the Metropolitan Rural Area and has been identified as a growth area since 2019, reinforcing that the Site is not needed for agricultural purposes.	
9.3 Oyster Aquaculture	Not applicable to the Planning Proposal.	N/A
P.4 Farmland of State and Regional Significance on the NSW Far North Coast		N/A

Section C – Environmental, Social and Economic Impact

Q8. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

Biodiversity

- 6.46 The CPCP is a conservation plan for Western Sydney that identifies strategically important biodiversity areas within the Cumberland subregion to offset the biodiversity impacts of future urban development.
- 6.47 The CPCP does this by mapping land into three categories: certified - urban capable, non-certified avoided, and non-certified – excluded land. The Site has land mapped in all three categories.
- 6.48 Land that is identified as:
 - Certified Urban Capable is assigned for urban development (Urban Development & SP2 Infrastructure
 - Non-Certified Avoided is assigned for conservation and part essential infrastructure, where it is essential for the delivery and servicing of the development (C2 Conservation Zone and SP2 Infrastructure Zone)
 - Non-Certified Excluded is assigned for Conservation and urban development and SP2 Infrastructure)

Table 27: CPCP Land Categories and Land zoning areas

Final CPCP land category	Proposed scheme rezoning	Area (ha)¹	Total (ha)
Certified			
Certified - urban capable land	SP2 Infrastructure	10.4	749.2
	UD Urban Development	738.96	
Non-Certified			
Avoided land	C2 Environmental Conservation	433.4	443.3
	SP2 Infrastructure	8.99	
	UD Urban Development		
Excluded land	C2 Environmental Conservation	21.87	91.2
	SP2 Infrastructure	0.17	
	UD Urban Development	69.21	
Grand Total		1,283.9	1,283.9

¹ Note that small differences in areas have occurred due to the CPCP shapefiles not neatly following cadastre boundary

- 6.49 Niche Environment and Heritage has prepared a Biodiversity Assessment for the Proposal. This is summarised in Chapter 4.
- 6.50 This Biodiversity Assessment also outlines the approach to mitigation measures associated with the development of the Site with reference to the CPCP.
- 6.51 The impacts and corresponding mitigation measures are summarised in Table 28.

² Total area relates to the Proponent's land only

Table 28: CPCP Land Categories and Land zoning areas

Impact	Mitigation
Zoning of land for the UD Urban development zone	<u>Certified-urban capable</u> – The CPCP has assessed the impact as this land is consistent with the land identified as urban capable. The zoning of this land for urban purposes is consistent with the planning controls to enforce the CPCP
	Non-certified Excluded land – This land is excluded from the CPCP. Whilst the Proposal seeks to zone it for urban development, the accompanying Appin (Part) Precinct Structure Plan identifies it as district open space preventing its development for housing. Furthermore, as this land does not benefit from the CPCP strategic biodiversity certification, approvals from the state and the federal government will be required at the development application stage.
Zoning of land for SP2 Infrastructure	Land proposed SP2 Infrastructure zone will result in 8.99 ha of land mapped as Non-certified – avoided being developed for essential road infrastructure to service the development.
	Approximately 4.29 ha of native vegetation (3.15ha for the east-west road and 1.14ha for the north-South road) may be directly impacted by land zoned for SP2 Infrastructure (road) that occurs in non-certified land. It should be noted, however, that this may be an overestimate, as there would need to be a bridge constructed at the Nepean River, which may avoid vegetation on the bank of the River.
	Ministerial direction 3.6 envisages circumstances where land proposed to be zoned SP2 infrastructure required to service and support the development can be considered acceptable through land mapped as Non-certified-avoided. The infrastructure that will traverse the proposed SP2 Infrastructure corridors is envisaged by government planning for the GMGA and are essential to service and support the Appin (Part) Precinct and land within the rest of the Appin and North Appin Precincts.
Impact on koala corridors	Approximately 9.56 ha of non-certified land associated with the proposed SP2 Infrastructure zone occurs within a mapped Koala corridor.
	In terms of the width of the Koala corridor, the SP2 Infrastructure does reduce the width of the Koala corridor. However, it is not shortened to such an extent that the average corridor width is less than 425 m.
	To minimise obstructions of the Koala corridor, the Proponent proposed bridge locations at the Nepean
	River crossing and the Ousedale Creek Upper Canal to facilitate the movement of Koalas. The design of the bridge layout has not yet been developed. However, it is envisaged that this would be done so with the input of a Koala specialist to ensure the Koala integrity of the corridor is maintained.

Q9. Are there any other likely environmental effects as a result of the proposal, and how are they proposed to be managed?

6.52 Chapter 4 of this report details the potential environmental impacts uncovered through detailed site investigations. Below is a summary of the potential environmental impacts resulting from the Planning Proposal and how they are proposed to be managed:

Flooding

- 6.53 J. Wyndham Prince (JWP) was engaged in preparing the Water Cycle Management Strategy to support the proposed rezoning of the Appin (Part) Precinct. The strategy includes consideration of the Wollondilly Shire Flood Study – Broad Scale Assessment. A summary of this assessment is outlined in Chapter 4.
- 6.54 The nature of the site comprises numerous short, steep-sided watercourses draining catchments directly to major the watercourses (Nepean River and Cataract River) surrounding the project area. In addition, the Flood Study mapping shows that the majority of flooding within the catchment is contained within

the Cataract and Nepean Rivers riparian corridor suggesting that the development of Appin (Part) Precinct will not be impacted during the major flooding event

- 6.55 Within the Rocky Ponds creek and Ouesdaee creek catchments, a more detailed assessment will be required at the development application stage to ensure traditional road and street drainage systems will deliver the safe passage of flood flows to the Site's major watercourses. This approach will also ensure that acceptable size and cost of pipe infrastructure can be delivered and that trunk drainage reserves are avoided.
- 6.56 Based on the information provided in the Water Cycle Management Strategy, the Proposal can be supported in its current form.

Geotechnical

- 6.57 Douglas Partners Pty Ltd (Douglas Partners) was engaged to conduct the Geotechnical Assessment to inform the Proposal. The assessment has found the proposed development is feasible from a geotechnical perspective, with later stages of the detailed design process to be accompanied by additional investigations.
- 6.58 The assessment reveals that non-saline to slightly saline conditions are present. Preliminary salinity testing indicates that the salinity potential of this site would be within usually accepted limits, which could be managed by good engineering and land management practices. Laboratory results indicate non-sodic to highly sodic conditions for the samples tested. These soils are likely to represent the whole of the Site. Accordingly, management strategies will be required to manage the exposure to sodic and highly sodic soils.
- 6.59 The results of the Land Capability Assessment have not identified any issue that would preclude the urban development of the Appin (Part) Precinct. Based on the assessment results thus far, noted numerous features of the Dite and their minor impact on the Proposal. The assessment concludes that the findings encountered on the site are manageable, subject to appropriate design and construction considerations.

Contamination

6.60 Douglas Partners was engaged to conduct the Contamination Assessment to inform the Precinct Plan as part of the Rezoning Proposal. The assessment identified that the contaminants within the site are typical contaminant sources within rural sites and do not preclude the rezoning of the Appin (Part) Precinct.

Cultural Values Assessment and Connecting with Country Framework

- 6.61 The Proposal is within Country with marked cultural sensitivity, particularly associated with the Appin Massacre of 1816 and the specific sites where that event unfolded.
- 6.62 GHD, in partnership with Zion Engagement and Planning (Zion) and Waters Consultancy, was engaged by the DPE to guide the application of the NSWGA CwC Framework during the Greater Macarthur 2040 Plan update and to inform the preparation of the Proposal.
- 6.63 The engagement process produced the Greater Macarthur Growth Area (GMGA) cultural sensitivity mapping, which identified broad areas with high-level sensitivity where further assessment and engagement were required before plans for urban development could be finalised.
- 6.64 To ensure the early engagement of stakeholders, the Proponent engaged Waters Consultancy to prepare simultaneously 'The Appin Project: Cultural Values Assessment and Connecting to Country Report" (CVAR), which addressed the Heritage NSW Aboriginal cultural heritage assessment process and the CwC Framework. The draft cultural mapping, findings, aims and recommendations in the CVAR were informed and guided by engagement with Registered Aboriginal Parties (RAPs), First Peoples cultural knowledge holders and cultural knowledge advisors with connection to this Country.
- 6.65 The draft CVAR supports the CwC Framework by setting out ten commitments to inform the implementation of its principles and commitments to strengthen the Proponent's and government agencies' understanding and respect for the Country's cultural values.
- 6.66 Forty-one draft recommended actions are identified to safeguard the identified cultural heritage values and meet the CwC commitments. The draft CVAR mapping and recommended actions have informed the development of the proposed precinct and structure plans.
- 6.67 The draft CVAR is currently being reviewed in response to the TAP Assurance advice of 21 September 2022. The revised CVAR will be finalised and submitted following review by the RAPs, cultural knowledge holders and cultural knowledge advisors, consistent with the Heritage NSW assessment process.
- 6.68 The mitigation and management measures will be known upon completion of the review process.

Heritage NSW -The Appin Massacre Cultural Landscape State Listing

6.69 In July 2021 the Heritage Council of NSW and the Aboriginal Cultural Heritage Advisory Committee (ACHAC) co-nominated the Appin Massacre Cultural Landscape for listing on the State Heritage Register in recognition of its shared Aboriginal and non-Aboriginal cultural heritage values. The GMGA engagement process and CVAR cultural mapping process contributed to Heritage NSW's cultural heritage assessment process.

- 6.70 In September 2022, the Heritage Council recommended that the Minster for Environment and Heritage direct listing the Appin Massacre Cultural Landscape as a State Heritage Register item comprising five areas
- 6.71 The Appin (Part) Precinct Plan and Appin (Part) Precinct Structure Plan respond to the recommended listing by including the five Areas in the proposed open space and incorporating view lines, linkages and movement corridors between the Areas to foster appreciation and interpretation of the broader culturally sensitive landscape. View corridors from the Areas to regional landscapes beyond the Appin (Part) Precinct have also been incorporated into the precinct and structure plans.
- 6.72 Recognizing the state heritage in the Appin (Part) Precinct Plan establishes further protections of the sites and landscape and continual recognition. It allows the Proposal to progress to the next stage of preparing a Development Control Plan. More precise controls and designs about the use, protection and interpretation of these matters can be pursued through co-design.

Aboriginal Objects

- 6.73 Niche Environment and Heritage has prepared an Aboriginal Objects Due Diligence to help identify heritage constraints and opportunities in the study area relating to Aboriginal archaeology. The assessment results found the prevalence of Aboriginal objects within the activity area. The landscape features indicate a high potential for further Aboriginal objects to be present on the surface and subsurface.
- 6.74 The Site area is significant due to its proximity to the location of the Appin Massacre and as a recorded contact site. According to oral history, the burials associated with this event are located at the southern boundary of the activity area. The extensive and continued occupation of the Sydney Basin has left a vast amount of accumulated depositional evidence.
- 6.75 Niche recommends several measures before development occurs on the land involving Aboriginal community consultation per the Aboriginal Cultural Heritage Consultation Guidelines for Proponents 2010. Additionally, an Aboriginal Cultural Heritage Assessment (ACHA) will be required to fully assess the impact of the proposed works on Aboriginal objects and cultural heritage resources within the activity area. All new Aboriginal cultural heritage sites identified during the site inspection will be registered through the Australian Heritage Information Management System (AHIMS). An Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the National Parks and Wildlife Act 1974 will be required for the identified Aboriginal objects if the proposed harm cannot be avoided.
- 6.76 It is typical for the preparation of an ACHA report to be undertaken for the development application stage of a project. Therefore, the Proposal has addressed all matters required for the precinct planning stage and can progress to the next stage.

European Heritage

- 6.77 Niche Environment and Heritage have prepared a Historic Heritage Constraints Assessment (HHCA) to inform the Appin (Part) Precinct Plan. The HHCA provides management recommendations and mitigation strategies in response to heritage constraints and potential archaeological findings. A historical overview of the site within the context of the broader Appin and North Appin Precincts is provided, further informed by a detailed Site inspection that identified potential heritage items. The evaluation of physical evidence of potential items on the Site has identified various disturbances.
- 6.78 An assessment of significance supports the HHCA in evaluating the cultural significance of identified potential heritage items within the Site according to standard assessment criteria and guidelines. The various elements within the Site form an inter-related group demonstrating material links to the early history of the European settlement of Appin. These various elements are considered to hold levels of significance from local to State.
- 6.79 To protect matters of significance, a heritage impact statement can be prepared to assess the impact at the development application stage. There are no other matters to consider for the Appin (Part) Precinct Plan.

Bushfire

- 6.80 The Appin (Part) Precinct is mapped as bushfire-prone land. Eco Logical has prepared a Strategic Bushfire study. A summary of this study is in **Chapter 4**.
- 6.81 It concludes that while the Site is in a bushfire landscape, it is moderated through various mitigation advantages. Due to planned urban growth and the Precinct's capacity to provide appropriate bushfire protection measures, it has a decreasing risk profile. Traffic modelling has also demonstrated capacity for early offsite evacuation.
- 6.82 The delivery of the transport network proposed as part of the Appin (Part) Precinct Plan will also improve bushfire protection and evacuation for the existing Appin community.
- 6.83 The Proposal to rezone the Site for urban development meets the strategic planning principles outlined in Planning for Bushfire Protection (PBP). There is scope for future development to achieve the required bushfire protection measures, including providing Asset Protection Zones (APZ), perimeter roads, and other bushfire mitigation measures. These measures are standard practice and achievable during the staged development of the Precinct. Statutory provisions under the Environmental Planning and Assessment Act 1997 require a development's impact to be continually considered, assessed and concurrence obtained from the Rural Fire Service at the development application stage.
- 6.84 The precinct's capacity for bushfire protection measures and mitigation, along with a decreasing risk profile moderated by precinct activation and the planned development of surrounding growth areas, presents future planned neighbourhoods that increase bushfire resilience. There are no other matters to consider as part of the Appin (Part) Precinct Plan.

Air Quality

- 6.85 Northstar has prepared an Air Quality Opportunities and Constraints Review to assess the existing environmental conditions and potential air quality pollutants. A summary of this report is in **Chapter 4**.
- 6.86 The review examines the potential risks of both the existing and proposed identified sources of air quality and odour, which conclude the existing and proposed sources of air quality and odour do not present significant constraints to the Site's rezoning.
- 6.87 While the development types are yet to be confirmed, they are assumed to be typical of a populated suburban centre. Major sources of potential air pollutants, such as those resulting from industrial or manufacturing processes that may impact receptors, are considered unlikely. As such, an appropriate design following the relevant guidelines and Australian Standards would be appropriate to manage any potential impacts of these future sources of air emissions at the development application stage.
- 6.88 While a high-level risk review demonstrated that medium (i.e. manageable) air quality risks were associated with identified sources within the relevant recommended separation distances, it is anticipated that with appropriate land use planning and design and consideration of appropriate regulatory standards and guidelines, these would be further reduced. It has been determined that the identified sources of air quality and odour will not form a significant constraint on the Proposal.

Acoustics

- 6.89 Spectrum Acoustics have prepared an Acoustic Report. A summary of this report is in **Chapter 4**.
- 6.90 The assessment has identified several existing and proposed noise sources and their typical noise levels.

 Based on this, general noise control options have been detailed. The assessment has indicated that a combination of relatively common architectural treatments (e.g. window treatment, brick veneer buildings, insulation etc.) and construction of noise barriers, when required, can be employed to achieve an adequate acoustic amenity in future residences.
- 6.91 From an acoustic point of view, the Proposal can be supported, provided the appropriate noise attenuation measures are incorporated at key existing noise-generating sites. Further detailed modelling will be required at key noise sources at the development application stage. To achieve acceptable acoustic levels for the SIte, existing statutory requirements are in place and will be addressed at the development application stage.

Mining

- 6.92 The Site is located within the Appin Mine Subsidence District. This does not preclude development as there are clear and accepted building standards for all forms of development, particularly housing, to mitigate impacts from subsidence. Future development can be designed and constructed in accordance with the relevant standards to mitigate and minimise the effects of mine subsidence.
- 6.93 NSW Subsidence Advisory will be an integrated referral agency for all future development applications for subdivisions and structures. It will monitor, assess and place conditions on development applications to mitigate subsidence impacts upon development within the Site.
- 6.94 The Bulli Seam Operations Project extends into the Site. Illawarra Metallurgical Coal (IMC), a wholly owned subsidiary of South32 Limited, has approval to extract coal in this area (5 short, long walls at the western end of Macquariedale Road) using longwall mining techniques. Mining operations have moved north-west of the Hume Highway, and this section in the Site appears to have been abandoned.

Gas Transmission Lines

6.95 Three gas transmission lines traverse the Appin (Part) Precinct – refer to **Table 29**.

Table 29: Pipeline summary

Pipeline	Ownership	Easement	Measurement Length
Eastern Gas Pipeline (Ø450mm)	owned and maintained by Jemena	20m	562m
JGN License 1 (Ø 864mm)	owned and maintained by Jemena	24.385mm	747m
Sydney Moomba Ethane pipeline (Ø 200mm)	owned and maintained by APA Group	6m (sits inside the JGN 20m wide easement)	600m

6.96 All three pipelines are contained within a 44-metre corridor through the Site – refer to Figure 74.



Figure 74: Pipeline location (Source: Urbis)

- 6.97 The Proposal will result in the classification of the land traversed by the pipelines changing from rural to residential. A residential classification will increase the population living and working near the pipelines.
- 6.98 DPE engaged Arriscar Pty Ltd to complete a Land Use Safety Study to assess the risk. The main objectives of the study were:
 - Estimation of the individual fatality risk and societal risk for the high-pressure pipelines in the GMGA;
 - Assessment of the individual fatality risk and societal risk against the existing criteria for fixed potential hazardous facilities described in Hazardous Industry Planning Advisory Papers No. 4 and 10
 - Generation of sufficient risk-based land use safety information to assist the DPE in understanding the extent and magnitude of the potential risks from HP pipelines to the surrounding land uses in the GMGA.
- 6.99 The recommendations of the Land Use Safety Study assess the pipelines and their current condition without protection measures.
- 6.100 The Proponent completed a Safety Management Study (SMS) under the AS 2885 framework with APA and Jemena in December 2020, and subsequent ALARP (As Low As Reasonably Practical) assessments were completed in 2021. The purpose of the SMS was to assess the risk to the pipelines from the land use change from rural to residential and to make recommendations on pipeline protection measures. The following was discussed in the SMS:
 - The focus of the SMS was on the risk to pipelines during the construction of the development. Risks and damage to the pipelines are substantially reduced upon development completion.
 - Consideration of pipeline measurement length has informed the urban project design e.g.
 - sensitive uses, such as schools being positioned outside the measurement length

- Centres are generally located outside the measurement length where possible as centre location needs to take into urban design outcomes
- The form of residential development around the pipeline would be similar in form to existing residential areas in the Wilton Growth Area refer to **Figure 75**.
- Future encroachment SMS may be required for road crossings through the pipeline easement corridor before development applications
- Recognition of the pipelines in a future Development Control Plan



Figure 75: Example of residential development adjoining transmission pipeline corridor – Maloney Chase, Wilton. This was tabled in the SMS (Source: the Proponent)

- 6.101 The SMS and ALAPR concluded the land use classification to residential is acceptable, subject to the following pipeline protection measures being installed before the commencement of works within the pipeline measurement length:
 - HDPE slabbing along the length of the pipeline
 - Additional pipeline line signage is required to be installed
 - Increased patrolling during the construction period
- 6.102 Schools, child care, hospitals, aged care facilities and other areas where many people may be present will need to be located away from the pipelines.
- 6.103 The Appin (Part) Precinct Plan addresses the outcomes of the SMS. Therefore, the pipeline authorities should be able to support land use change and development. Further SMSs will be required for development approvals when road and service crossings encroach the pipelines.
- 6.104 SEPP (Transport and Infrastructure) 2021 has development controls for consideration and assessment at the development application stage. There are no further considerations for the Appin (Part) Precinct Plan.

Urban Heat Island Effect

- 6.105 Civille conducted an Urban Heat assessment report regarding climate, weather and exposure to heat, as well as opportunities to address and mitigate urban heat. The report is summarised in Chapter 4.
- 6.106 To improve resilience to urban heat, urban areas will be planned and designed to reduce heat at the city scale and its impacts on a human scale. More than 36% of the Site is proposed to be retained for conservation and a further 10% for open space. This provides the foundation for managing urban heat. A 40% tree canopy coverage target in the new urban areas will supplement this.
- 6.107 Other cooling techniques, such as integrating water into the landscape and using cool materials, are other matters that can be explored in preparing a development control plan.

Q10. Has the planning proposal adequately addressed any social and economic effects?

Cultural Recognition

The Draft CVA assessment and CWC Framework developed by Water Consulting is the first step in 6.108 recognising past events and acknowledging the Precinct's significance. The CWC framework provides a structure to integrate recognition and First Nations people into the project as it progresses.

Open Space and Community Facilities

- 6.109 Urbis prepared a detailed Social Infrastructure and Open Space Assessment for the Appin and North Appin Precincts. This report is summarised in **Chapter 4**.
- 6.110 The Appin (Part) Precinct Plan will deliver 12,000+ new dwellings and be supported by open space elements detailed in the Social Infrastructure and Open Space Assessment report, summarised in Chapter 4.
- 6.111 The report provides information on the provision of open space and social infrastructure across the Appin and North Appin Precincts. It is to be used to inform a local contribution plan and provision of open space across the precincts.
- 6.112 The Appin and North Appin Precincts Indicative Plan contains 20.99ha of regional open space, 153ha of district open space and 48ha of local open space, totalling 223.6ha.
- 6.113 The Appin (Part) Precinct contains 20.99ha of regional open space, 84.89ha of district open space and 21.8ha of local open space, totalling 118.8ha (3.09ha per 1,000 people). The Appin (Part) Precinct also contains 36.7ha of other open space (other green grid elements/easements). These other open space areas have an opportunity for use bushland parks, nature trails and linear pedestrian/cyclist routes. This increases the variety and the active op space areas

- 6.114 Regional open space located at the centre of the Appin (Part) Precinct is planned to be delivered in the first release area. This provides a large regional-level facility and sporting fields for the community in the early stages of the development.
- 6.115 Based on a projected population of 38,389 people, the Appin (Part) Precinct provides 3.3ha of local, district and regional open space per 1,000 people. The proposed open space provision exceeds the benchmark contained in Wollondilly Shire Council's Contributions Plan.
- 6.116 Using the Wollondilly Shire Council's Contribution Plan benchmark (2.83ha per 1,000 people) and the current quantity of open spaces provided, the Appin (Part) Precinct could provide open space for approximately 45,000 people.
- 6.117 Open space areas have been distributed throughout the Appin and North Appin Precincts to provide a connected and accessible recreation network. All residents will be within 2km of a district space and 10km of the regional space.
- 6.118 All district sportsfields have been co-located with the neighbourhood, local centre, and school sites to maximise accessibility and encourage greater utilisation. Most district sportsfields are also located on the public transport corridor to enhance accessibility.
- 6.119 The new public open spaces will be interspersed through the neighbourhoods providing equitable access by walking and cycling paths. Furthermore, conservation will protect and enhance existing green spaces along the Nepean and Cataract rivers.

Economic Impacts – Wilton Town Centre

- 6.120 Urbis completed an assessment of the retail floorspace demand and employment potential within the Appin and North Appin Precincts.
- 6.121 Under the current strategic planning context, Wilton Town Centre is earmarked to support up to 50,000 sq.m of floor area by 2046.
- 6.122 Wilton's main trade area population is expected to reach almost 70,000 by 2030 and 90,000 by 2035. Strong forecast population growth over the short to medium term is expected to support a single DDS sub-regional scale town centre in the first stage at Wilton (approximately 2030), supported by greenfield population growth and the established residential population within the Picton and Tahmoor region.
- 6.123 A double DDS sub-regional scale town centre is estimated to be supportable by 2035, with a main trade area population of over 90,000 residents. The population required to support large-scale retail facilities at Wilton Town Centre will be well established before the Appin Precinct, with the Appin and North Appin Precincts only reaching over 50,000 residents within its main trade area by 2040 (Wilton is forecast to achieve this by around 2026).
- 6.124 The development of retail facilities within the Appin (Part) Precinct will be supported by the immediate resident catchments. It will not impede upon the scale, mix, role or function of the Wilton Town Centre.

Economic Impacts – Appin Village Centre

6.125 The existing Appin Centre features an IGA supermarket (approximately 1,400m²) and a small provision of around 12 convenience retail outlets, including a pharmacy, butcher, bakery, newsagency, liquor store, barbershop and a small range of food and beverage outlets. The development of retail facilities within the Appin (Part) Precinct will not impede the Appin Village centre, refer to Table 30.

Table 30: Assessment of impact on Appin Village Centre

Factor	Key Point		
Existing Appin centre	The existing Appin centre is of a limited scale, providing convenient amenities for residents to undertake top-up shopping. It is estimated there is around 2,600 sq.m of retail floor space within the existing centre.		
Retail Demand Study	The retail demand study indicated that around 20,000 sq.m of supermarket floor space was supportable across the trade area over the forecast period, including the existing provision at Appin.		
	On average, centres are estimated to achieve a turnover of \$11,900 per sq.m, reflecting a solid trading performance over the longer term.		
Future Trading Potential	Applying this average trading performance (noting some stores will be better and worse than the average) indicates that at \$18 million, the Appin Village Centre is estimated to achieve a 7.5% market share of retained supermarket spending and a 6% share of total supermarket spending.		
Future Growth	Given the rapid and substantial increase in the spending market within the local area, there will be a much larger pool of expenditure from which Appin can draw trade, even despite future competitive developments.		
	Appin will remain an attractive retail destination, though it will likely need to change and evolve to create a point of difference in the market (e.g. heritage amenities, events and activations).		
Impacts	Impacts are expected to be manageable given the future growth in the market, and the economic viability of Appin is not expected to be impacted to unsustainable levels given this rapid market growth opportunity.		

Economic Benefits

- 6.126 It is estimated that the Proposal will be the catalyst for the following economic benefits:
 - 800 jobs in light industrial and bulk goods precincts in the Appin Precinct.
 - 4,100 population-based jobs
 - 10,000 jobs in the Moreton Park Employment Precinct
 - Retail spending growth will grow from \$77 million (2020) to more than \$1.2 billion upon completion of the GMGA land release Precincts. This spending will support the development of a range of retail centres
 - Additional local retail expenditure associated with the delivery of new residential dwellings are estimated to support significant economic activity, including:
 - Total retail spending is forecast to reach approximately \$1.18 billion upon completion of residential development, from the present estimate of \$77 million
 - Upon completion, the primary trade area is expected to account for more than 75% of the total retail spending in the trade area
 - Food retail accounts for the highest proportion of spending within the trade area at 46%, resulting in \$545 million of expenditure upon completion
- The Proposal will also deliver the following additional social and economic benefits: 6.127

- Appin (Part) Precinct residents will have more options for shopping and dining and receive potential benefits
 in terms of price and quality of offer due to increased retail competition in the area
- Locals will also have better accessibility with enhanced parking and other transport arrangements
- Ancillary and non-retail uses like gyms and medical centres will contribute to the well-being of the community
- With increased retail provision in the area, the residents will no longer need to travel outside of the area for shopping, lowering the travel time and cost, and environmental impacts
- The provision of more jobs closer to home will allow residents to work locally, reducing the need to travel further afield to work and also alleviate pressure on the broader road network

Section D – State and Commonwealth Interests

Q11. Is there adequate public infrastructure for the proposal?

6.128 **Yes**. The Proposal provides adequate infrastructure.

Traffic and Transport

- 6.129 Studies have been completed to assess the impact on the existing traffic and transport network. These are summarised in **Chapter 4**.
- 6.130 Based on the strategic traffic modelling results, staged road upgrades are recommended to support the Proposal. This assessment also factors in background growth and growth from other parts of the Appin and North Appin Precincts (Table 31 and Figure 76).

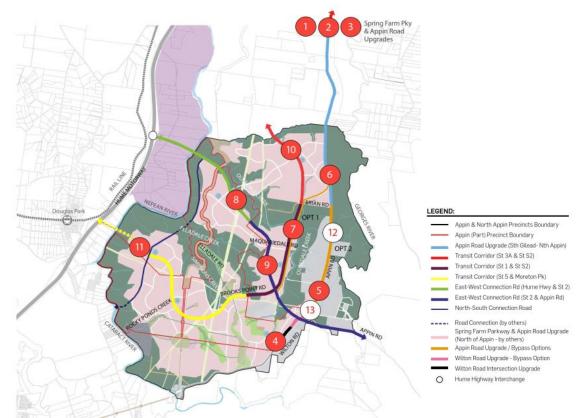


Figure 76: Map of road upgrades (Source: WSP)

Table 31: Transport assessment recommendations

#*	Road Corridor	Recommended upgrade
1	Spring Farm Parkway Extension	New four-lane road by 2026 (by others)
2	Appin Road	Widen to four lanes between Gilead and Spring Farm Parkway extension by 2026 (by others)
3	Appin Road	Widen to four lanes between South Gilead and Gilead by 2029 (by others)
4	Wilton Road access intersection	Construct a new access intersection to Stage 1
5	Appin Road/Church Street intersection	Upgrade intersection to traffic signals by the 1,051st residential lot
6	Appin Road	Widen to four lanes between North Appin and South Gilead by the 3,001st residential lot
7	Transit Corridor	New two-lane road (plus future public transport lanes) between Stage 1 and 2A by 3,001 $^{\rm st}$ residential lot.
9	East-West Connection Road	New four-lane road between Stage 2 and Hume Motorway by 8,001st residential lot
12	East-West Connection	New four-lane road between Stage 2 and Bulli-Appin Road by 14,000 th residential lot
13	Transit Corridor	New two-lane road plus public transport lanes north of North Appin Precinct (depends on the timing of other developments)
14	Transit Corridor	New two-lane road plus public transport lanes to Moreton Park Road (Douglas Park)

^{*} numbering intentionally non-sequential

Utilities - Electricity

- 6.131 Endeavour Energy (EE) have indicated a capacity for 1,200-1,400 dwellings to be serviced using the existing Appin Zone Substation (ZS). After the initial 1,200-1,400 dwellings are delivered, a new zone substation will need to be established to support further growth. Based on the current staging plan, it is anticipated that this zone substation will be required in Stage 1.
- 6.132 The new ZS would be located west of the existing Appin ZS, close to the transmission lines. EE has advised that the current design specification for a new zone substation requires an 8,280m² site.
- In addition to the zone substation, EE has noted that Transgrid will require a site for a future Bulk Supply 6.133 Point (BSP). The BSP will be located north of the future Appin ZS and must be located close to transmission lines. Transgrid has not finalised the site requirements at this stage. However, based on the land used at Macarthur BSP, a site roughly 26,000m² in size to the north of Appin is possible.
- 6.134 High voltage feeders will be extended from the new ZS to development fronts. Based on an assumed 3,405 dwellings, three new 11kV feeders would be required to support development.

Utilities - Water

- 6.135 Sydney Water has advised that the Site will be serviced from the Macarthur Water Filtration Plant (WFP).

 The Macarthur WFP is located on the southern side of Wilton Road, east of Stage 1.
- 6.136 Sydney Water has indicated the Macarthur WFP is being upgraded to improve filtration reliability. These works are due to be completed by 2026. It is expected that the Macarthur WFP will have sufficient capacity to support all development within the Appin (Part) Precinct.

Utilities - Waste Water

- 6.137 Existing development in the Appin Township is serviced by the Glenfield Water Recycling Plant (WRP), located approximately 23km north-east of Appin. The existing Appin infrastructure has not been sized to support the planned growth. Therefore, it is unlikely any development could be serviced using this infrastructure. However, the Macarthur Regional Plan identified multiple servicing options for Appin to accommodate the planned growth.
- 6.138 Sydney Water has advised that in short to medium term, sewer flows from new dwellings will be treated at the Glenfield WRP. This arrangement will likely operate for up to 10 years (until a new Treatment Plant is commissioned) and would therefore support development in Stages 1 and 2.
- 6.139 New trunk infrastructure will be required to transfer flows from Appin (Part) Precinct to the existing sewer infrastructure located within Rosemeadow. This would include a new sewer pump station (SPS) adjacent to the existing SPS in Appin and a rising main following a similar alignment to the existing rising main in Appin Road.

Utilities – Communications

6.140 NBN Co will provide telecommunications infrastructure. It is anticipated that fixed line technology will be constructed within the standard trench allocation (subject to changes in technology).

Utilities - Gas

- 6.141 Jemena has advised there is limited Natural Gas network capacity to support future growth in this region.

 Access to alternative suitable High Pressure 1050kPa Jemena network is located in Campbelltown CBD and deemed unviable to extend the 15kms to Appin.
- 6.142 The existing Appin medium pressure 210kPa feed is supplied from the Moomba to Sydney trunk via a purpose-built offtake station, which could accommodate an additional 600 Lots only.
- 6.143 A new connection off the Moomba to Sydney pipeline will be required to support the ultimate development by constructing a Trunk Receiving Station. Furthermore, extending a 3.5kms of new High

- Pressure 1050kPa steel feeder along Brooks Points Rd and installing a local Secondary District Regulator Station (in the Appin Rd vicinity) will also be required.
- 6.144 As gas is not an essential service and considering the increasing availability of renewable energy, the Proponent is reviewing if gas will be provided for the planned growth in the Appin (Part) Precinct.

Infrastructure Servicing and Staging

- 6.145 An infrastructure Delivery Plan has been prepared for Appin (Part) Precinct. This has been summarised in **Chapter 4**.
- 6.146 Further to this, the proponent intends to enter into three Planning Agreements to support the Proposal as follows:
 - State Planning Agreement (SPA) with the Minister for Planning. The SPA will address the funding, timing and delivery of regional infrastructure, such as regional open space, schools, roads, transit corridors, road infrastructure and road upgrades.
 - Cumberland Plain Conservation Plan (CPCP) SPA with the Minister for Planning. The Appin (Part) Precinct Plan includes approximately 443 hectares of land to be zoned for Environmental Conservation and identified as "avoided land" under the CPCP. The SPA will result in the dedication of the CPCP "non-certified avoided land" and some "non-certified excluded land" to the NSW State Government, delivering significant ecological and community benefits.
 - Local Voluntary Planning Agreement (VPA). The VPA will address the delivery of infrastructure for Release Area 1, including active and passive open space, water cycle management, traffic and transport, community facilities and riparian corridors.
- 6.147 The timing and finalisation of the Planning Agreements is yet to be determined.

Q12. What are the views of state and Commonwealth public authorities?

- 6.148 The relevant state government agencies will be consulted during the public exhibition of the Planning Proposal. Some agencies were consulted as part of the Appin Technical Assurance Panel program.
- 6.149 Engagement with the Commonwealth government under the Cumberland Plain Conservation Plan Strategic Biodiversity certification is underway. There are no further Commonwealth issues that relate to this Proposal.

PART 4 - MAPS

- 6.150 The following maps will be incorporated as part of the amendment to the WPC SEPP:
 - Land Application
 - Land Zoning
 - Lot Size
 - Sequencing development
 - Clause application
 - Additional permitted
 - Heritage
 - Appin (Part) Precinct Structure Plan

PART 5 - COMMUNITY CONSULTATION

- 6.151 There has been significant consultation with the community, landowners, Councils and agencies on planning, structure plans, conservation and infrastructure delivery for the Greater Macarthur Growth Area and Appin since 2015:
 - 2015 Greater Macarthur Land Release Investigation Area & Growth Area Boundary
 - 2016 Greater Macarthur Land Release Investigation Area & amended Growth Area Boundary
 - 2017 Draft Western City District Plan
 - 2018 Greater Macarthur 2040 Interim Land Use Plan and Structure Plan
 - 2018 Greater Macarthur SIC
 - 2019 Greater Macarthur 2040 What We Heard Report
 - 2019 Greater Macarthur Growth Area Boundary gazettal
 - 2020 Draft Cumberland Plain Conservation Plan
 - 2020-21 Outer Sydney Orbital Stage 2 Corridor Options
 - 2021 DPIE published a What We Heard report for Macarthur 2040
 - 2020-22 Engagement with the First Nations community
 - 2020-22 Appin Technical Assurance Panel
 - 2022 The Link road preferred alignment announcement
 - 2022 State Heritage list on the Appin massacre cultural landscape
 - 2022 NSW Environment and Heritage Minister approved the CPCP

7.0 SUMMARY AND CONCLUSION

7.0 SUMMARY AND CONCLUSION

PROPOSAL SUMMARY

- 7.1 Greater Sydney has a growing population. The NSW government has identified growth areas as major development areas that will assist in accommodating this growth. The GMGA in Sydney's south west is one of these growth areas. Appin (Part) Precinct is situated within the GMGA.
- A Proposal has been prepared by Walker Corporation Pty Limited and Walker Group Holdings Pty Limited (together the **Proponent**) to rezone 1,378 hectares of land (the **Site**) within the GMGA Appin precinct; hence the Proposal's identification as the Appin (Part) Precinct.
- 7.3 The Site is to be zoned from Rural Landscape to Urban Development, Infrastructure and Environmental Conservation to permit housing, roads and the environmental management of ecologically significant land. The Proposal provides development standards for minimum lot size and clauses for the satisfactory arrangement of services, development sequencing and consistency with the Appin (Part) Precinct Structure Plan.
- 7.4 Within the (UDZ) *Urban Development Zone*, 12,000+ dwellings can be delivered. A planning framework as to how the site will be developed is provided in the *Appin (Part) Precinct Plan (precinct plan)* and the *Appin (Part) Precinct Structure Plan*. Technical studies and investigations support these plans.
- 7.5 The precinct plan will be incorporated into the State Environmental Planning Policy (Precincts Western Parkland City) 2021 (WPC SEPP). The WPC SEPP will contain the statutory provisions (clauses and maps) that will apply to the site and is the principal legislation that will control development and planning decisions for the Site.
- 7.6 The Appin (Part) Precinct Structure Plan delivers a strategic vision reflecting government, industry and community priorities. This vision and development framework will be used to guide planning for the development of the Appin (Part) Precinct. In order for a development application to be approved, the precinct plan provisions will require the application to be generally in accordance with the Appin (Part) Precinct Structure Plan.

CONCLUSION

- 7.7 The Proposal has been the subject of an iterative design process, informed by the technical investigations and feedback from the TAP.
- 7.8 The culmination of this engagement is a Planning Proposal strategically aligned with the intent, objectives and principles of the Greater Sydney Region Plan, the Western City District Plan, the Greater Macarthur 2040 Plan, and the Wollondilly Local Strategic Planning Statement and satisfies the relevant statutory considerations.
- 1.43 The Proposal demonstrates strategic merit and is an opportunity to:
 - Realise the vision for the Greater Macarthur Growth Area outlined in the Greater Sydney Region Plan, Western City District Plan and Greater Macarthur 2040 Plan
 - Contribute to more housing supply and jobs in the Western Parkland City by zoning the Site for urban development (most of the Site is in one sizeable consolidated land holding) and secure the delivery of the first 3,500 homes
 - Provide new state, regional and local infrastructure services, amenities and recreational facilities to serve the existing and new communities in the Appin Precinct
 - Provide affordable housing
 - Protect cultural values and heritage significance which follows extensive engagement with the Aboriginal community
 - Protect the Appin Massacre Cultural Landscape (recommended for listing on the State Heritage Register by the NSW Heritage Council) to provide access to Country for truth-sharing and healing
 - Protect koala habitat corridors and biodiversity
 - Implement a significant portion of the Nepean River koala corridor, as per the advice and recommendations of the NSW chief scientist.
 - Provide significant biodiversity habitat expansion and re-vegetation
 - Deliver a regional park (approximately 21ha) as part of Release Area 1
 - Revegetate cleared former rural lands to achieve a 40% tree canopy target
- 1.44 The Proposal will zone 887 hectares of land for urban development, capable of providing 12,000+ dwellings, schools, neighbourhood centres, and community facilities. All this will be found in a series of walkable urban residential neighbourhoods within the landscape corridors of the Nepean and Cataract Rivers.

PART D - CPCP AMENDMENT PACKAGE



8.0 CPCP AMENDMENT PACKAGE

APPIN (PART) PRECINCT PLAN VERSION 2– FOLDER 3

#	Name	Revision	Date
1	Land Application Map	2	28 10 22
2	Land Zoning Map (Version 2)	2	28 10 22
3	Lot Size Map (Version 2)	2	28 10 22
4	Sequencing Development Map	2	28 10 22
5	Clause Application Map (Version 2)	2	28 10 22
6	Additional Permitted Uses Map	2	28 10 22
7	Heritage Map	2	28 10 22
8	Appin (Part) Precinct Structure Plan	С	28 10 22
9	Biodiversity Assessment – Appin (Part) Precinct – Version 2	2	24 10 22

8.0 CPCP AMENDMENT PACKAGE

THE CUMBERLAND PLAIN CONSERVATION PLAN

- 8.1 The Cumberland Pain Conservation Plan (CPCP) has been developed to protect western Sydney's biodiversity while supporting the delivery of housing, jobs and infrastructure. It meets the requirements for strategic biodiversity certification under the Biodiversity Conservation Act 2016 (NSW) (BC Act) and strategic assessment under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act).
- 8.2 The CPCP is a 35-year strategic conservation plan that provides long-term investment certainty by taking a landscape-scale approach to assessing and protecting biodiversity upfront in planning for development. This approach provides access to a wider range of actions to offset impacts on biodiversity compared to standard site-by-site assessment and helps ensure these actions are coordinated within the context of the region's ecosystem function needs. The NSW government approved the CPCP in August 2022.
- 8.3 The CPCP applies to the Site. The strategy to enforce the land categories of the mapped CPCP areas – Certified – Urban Capable Land (CUC Land) and the Non-Certified land categories of - Avoided Land and Excluded Land (NCA and NCE Land) is through the rezoning of land.
- 8.4 The NSW Department of Planning and Environment (DPE) is pursuing the Commonwealth government approval for the CPCP under Part 10 of the EPBC Act. Proposals to rezone land can be approved, and development applications lodged and determined, without the Commonwealth's approval in place. However, construction cannot commence on CPCP land until approval from the Commonwealth is obtained.

CPCP modification process

- 8.5 The CPCP includes an action for the DPE to prepare a formal modification to adjust the CUC Land for minor matters.
- 8.6 Any modification will need to ensure no unintended cumulative impacts on biodiversity and that a modification does not undermine the legitimacy of the CPCPs existing development approvals.
- 8.7 Landholders wishing to be considered as part of a modification application will be required to demonstrate how the proposal meets the CPCP's avoidance criteria, that all options to avoid impacts have been considered and that the proposal has no or minimal biodiversity impact.
- 8.8 The DPE will compile and assess requested changes to the CPCPs mapping and then seek a single modification within the CPCP's first 12 months of operation. Requests for modification will incur costs associated with processing applications and for any additional offsetting required.

The Proponent's CPCP amendment

- 8.9 The Proponent has prepared a package of amendments to the CPCP mapping, which will be submitted under separate cover.
- 8.10 A summary of the amendments is provided in this chapter. The summary foreshadows amendments to the Appin (Part) Precinct Plan, should the proposed CPCP amendment be finalised. The proposed amendment to the CPCP does not impact Release Area 1.
- 8.11 The purpose of the amendment is to provide an efficient and orderly arrangement of land to achieve the following benefits:
 - APZ buffer between the Bushland and Residential Development;
 - Koala Protection Corridor (fencing along the road) minimises human interaction with the environmental land;
 - Residential liveability is by having a community together rather than splitting the community by a major road corridor;
 - Minimising large intersection treatments along the main road by only requiring connections on the southern side of the residential community;
 - Better neighbourhood design promoting walkability, connectivity and liveability in a safe, contained environment:
 - Minimising the crossing of a major road by residents to access amenities on the south;
 - Noise attenuation of homes is limited to only one side of the sub-arterial.
- 8.12 The amendments are within the three (3) CPCP areas Certified Urban Capable (**CUC**), Non-Certified Avoided (**NCA**), and Non-Certified Excluded (**NCE**). The NCA land is south of Ousedale Creek and east of the Nepean River, and the NCE Land is near an electrical easement refer to **Figure 77**. The purpose of the amendment is to effect a rational, efficient urban layout to support the future development of the GMGA.
- 8.13 The amendment has no unintended cumulative impacts on biodiversity, and the modification does not undermine the legitimacy of the CPCP's existing development approval.
- 8.14 A Biodiversity Assessment Report has been prepared to support the amended CPCP mapping. The corollary of this is the Land Zoning Map Version 2.

THE DRAFT APPIN (PART) PRECINCT PLAN PROPOSAL - VERSION 2

- 8.15 The Appin (Part) Precinct Plan includes two (2) versions of the proposed zonings over the Site:
 - Version one (1) Plan (the Proposal) is consistent with the Ministerial Direction 3.6 Strategic Conservation Planning and is addressed in parts A, B and C of this report).
 - Version two (2) arises from a proposed amendment to the CPCP mapping refer to Figure 78, Figure 79 and Figure 80.
- 8.16 The intention is for Version 1 to be approved with the initial rezoning of the Appin (Part) Precinct. Subject to a future modification of the CPCP mapping, Version 1 would be replaced with Version 2. Version 2 affects land in the northern part of the Appin (Part) Precinct (approximately 1.5%) and will be the subject of an amendment to the CPCP mapping to swap - Certified Urban Capable Land (CUC) with Avoided Land and Excluded Land (NCA and NCE).

SUMMARY (VERSION 2)

8.17 The amendment (Land Zoning Map Version 2) proposes the changes outlined in Table 32.

Table 32: Amendmended CPCP land categories

Current CPCP land category	Area (ha)*	Proposed CPCP land category	Area (ha)*	Land Zoning (Version 2)
Non-certified Avoided (NCA)	6.34	Certified Urban Capable	6.34	UD Urban Development
Non-certified Avoided (NCA)	8.99	Certified Urban Capable	8.99	SP2 Infrastructure (roads)
Certified Urban Capable (CUC)	4.63	Non-certified Avoided (NCA)	4.63	C2 Environmental Conservation
Total	19.96**		19.96**	

^{*}These areas are approximate

- 8.18 Subsequent amendments to the WPC SEPP will be required once the proposed amendments to the CPCP mapping are undertaken. The amended mapping is subject to a separate process which is an action that the NSW Department of Planning and Environment has flagged to adjust the CPCP mapping for the proposed Precinct Plan Land Zoning map and Structure Plan.
- 8.19 A package of proposed amendments to the CPCP has been prepared and will be submitted under separate cover per the Department's modification to the CPCP process.

^{**}Amendment CPCP land categories represent approximately 1.5% of the Site area

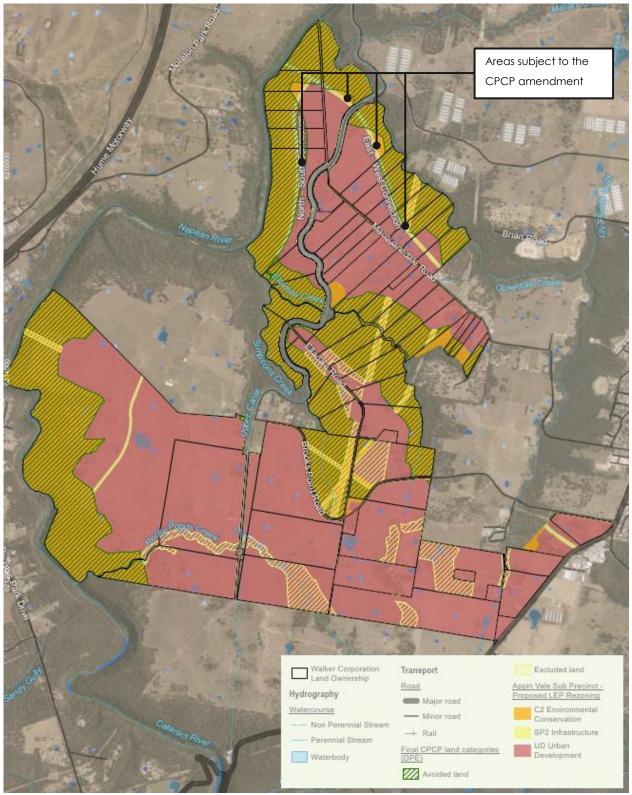


Figure 77: Proposed Land Zoning Version 2 in relation to the CPCP (Source Niche)

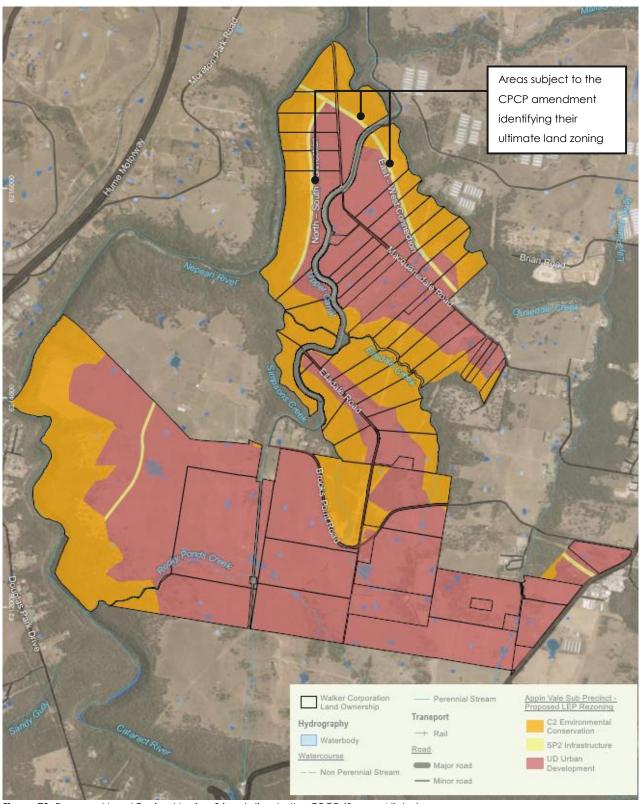


Figure 78: Proposed Land Zoning Version 2 in relation to the CPCP (Source Niche)

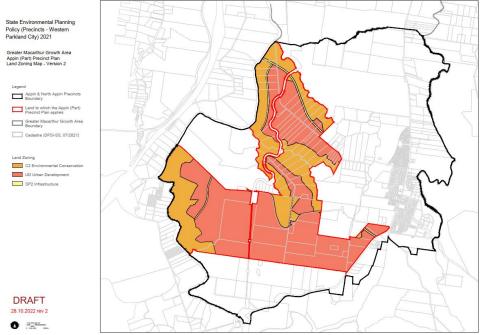


Figure 79: WPC SEPP Precinct Plan Amendment - Land Zoning Version 2 (Source Urbis & the Proponent)

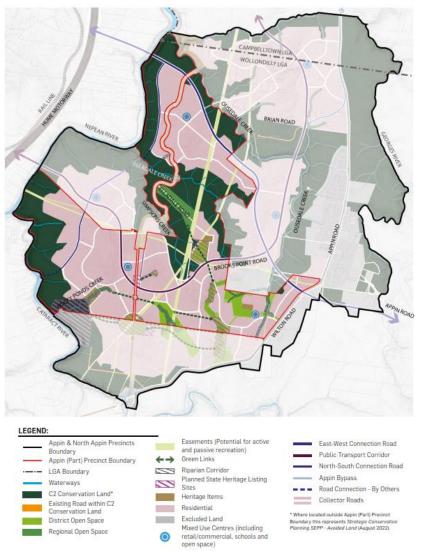


Figure 80: WPC SEPP Precinct Plan Amendment – Structure Plan Version 2 (Source Urbis & the Proponent)

Disclaimer

This report is dated 14 November 2022. It incorporates information and events up to that date only. It excludes any information arising or event occurring after that date that may affect the validity of Walker Corporation Pty Ltd and Walker Group Holdings Pty Ltd (together "Walker") opinion in this report.

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