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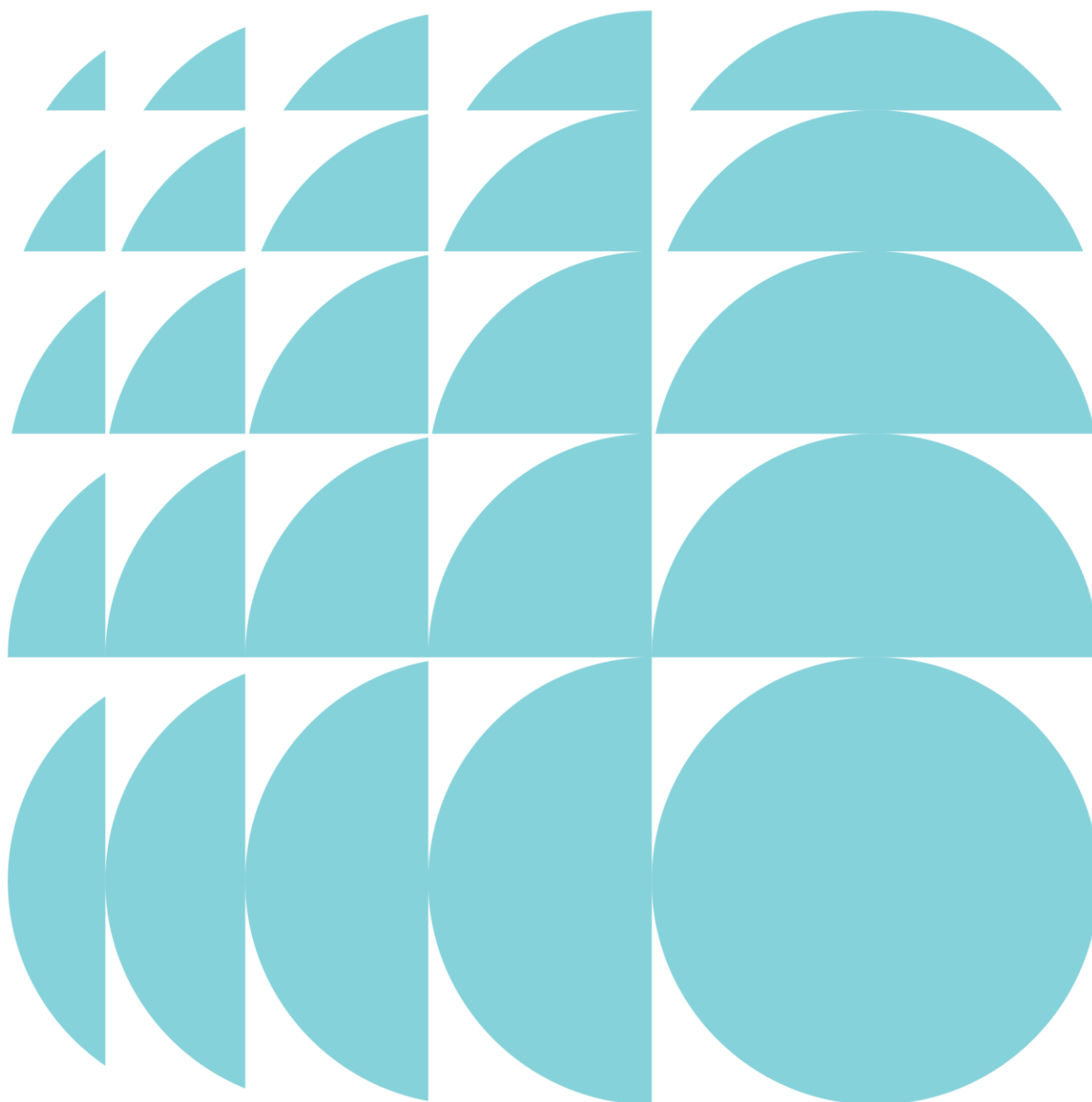
Rezoning Study to support State Environmental Planning Policy amendment to the Great Lakes LEP 2014

North Tuncurry Urban Release Area Rezoning
Report

Submitted to NSW Department of Planning,
Industry and Environment

On behalf of Landcom

November 2021 | 10746



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Abbreviations

Abbreviation	Term in Full
ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIMS	Aboriginal Heritage Information Management System
APZ	Asset Protection Zone
BCAA	Biodiversity Certification Assessment Area (NTURA Site <u>plus</u> FLALC land adjacent to the north)
BCAM	Biodiversity Certification Assessment Methodology
Council	MidCoast Council
CRG	Community Reference Group
Department	Department of Planning, Industry and Environment
EEC	Endangered Ecological Community
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
EPI	Environmental Planning Instrument
DCP	Development Control Plan
DEE	Department of the Environment and Energy (Cth)
FLALC	Forster Local Aboriginal Land Council
HRP 2036	Hunter Regional Plan 2036
ICRMS	Indigenous Cultural Resource Management Services
IWCMS	Integrated Water Cycle Management Strategy
LEP	Local Environmental Plan
LGA	Local Government Area
LoS	Level of Service
NTURA	North Tuncurry Urban Release Area
NPWA	<i>National Parks and Wildlife Act 1979</i> (NSW)
OEH	Office of Environment and Heritage
PDA	Project Delivery Agreement
PMF	Probable Maximum Flood
RMS	Roads and Maritime Services
SEPP	State Environmental Planning Policy
TMO	Tuncurry Midge Orchid
TMAP	Traffic Management and Accessibility Plan
TN	Total Nitrogen
TP	Total Phosphate
TSS	Total Suspended Solids
VPA	Voluntary Planning Agreement

Executive Summary

Purpose of this Report

The NSW Government's Hunter Regional Plan 2036 (HRP 2036) identifies North Tuncurry as a potential new release area to address the housing needs of the MidCoast area. Landcom (the proponent) is therefore seeking to rezone approximately 615ha of land for conservation and urban purposes. The rezoning, referred to as the North Tuncurry Urban Release Area or NTURA, seeks to formalise the Project Delivery Agreement (PDA) entered into between the NSW Department of Industry - Crown Lands and Water and Landcom. A Native Title Agreement signed in late 2010 between the NSW Government and the traditional owners of the land, the Worimi and Birpai People of Forster Tuncurry recognises that development of the NTURA Site can proceed subject to certain conditions.

The Minister for Planning and Public Spaces, the Hon Rob Stokes, endorsed the preparation of a self-repealing SEPP Amendment to Great Lakes Local Environmental Plan (LEP) 2014 on the 18 March 2020. This Rezoning Study is submitted to the Minister for Planning and Public Spaces to set the vision for the NTURA, and outline the extent and scope of the new land use and development control framework proposed to apply to land known as the North Tuncurry Urban Release Area Site.

In preparing this Study, there has been extensive consultation with the community, MidCoast Council (Council), and State and Commonwealth Government agencies. This process has included the establishment of an inter-agency working group, community consultation during the master planning process including two community information days and the establishment of a Community Reference Group (CRG) comprising individuals from MidCoast Council and representatives of local community organisations, and consultation with local Aboriginal groups. Between October 2020 and October 2021, Landcom has continued to regularly engage with Council, the Department of Planning, Industry and Environment's (DPIE) Biodiversity Conservation Division (BCD), Newcastle Regional Office and Project Delivery Unit (PDU) to discuss the proposal. Landcom is committed to continuing to engage with all relevant stakeholders during the on-going planning for the proposal.

The NTURA Site

Tuncurry is located in the MidCoast LGA on the entrance to Wallis Lake, approximately 320 kilometres north of Sydney. The land the subject of this Study is a 615ha parcel of land located on the eastern side of The Lakes Way, directly to the north of, and adjoining, the Tuncurry town centre (herein referred to as the NTURA Site). It is an irregular shaped waterfront parcel of land situated on a peninsula that has been created by the Wallamba River.

The NTURA Site enjoys an ocean beach frontage of more than 4.5 kilometres and has a frontage to The Lakes Way and Northern Parkway. It is located within the coastal zone and is low lying and undulating as a result of the presence of a dunal system.

The NTURA Site was formerly used as a commercial pine plantation established to productively use prison labour, prior to being destroyed by bushfire in 1939. It was subsequently bulldozed in the 1950's and has generally been left unutilised. An 18-hole golf course is currently operational on part of the NTURA Site.

NTURA Vision and Master Plan

The overall vision for the NTURA is a low-medium density coastal community with approximately 2,123 dwellings centred around a new centre, reconfigured golf course and new open space areas. Providing new housing and neighbourhood supermarket and specialty stores to support local residents, future development will integrate with the existing Tuncurry-Forster urban area.

Environmentally sensitive urban design is a prominent feature of the Master Plan that underpins the NTURA with the creation of new conservation lands and incorporation of best practice coastal design. The objective for the NTURA is that it will:

- Be the destination of choice for the NSW 'sea change' market and the aspirational goal for the regional housing market.

- Enhance Forster-Tuncurry as a coastal tourism destination.
- Be an innovative and authentic coastal community with a genuine sense of place that can enhance and expand the existing Tuncurry community.
- Be a new coastal community that reflects local lifestyle, offers housing diversity that is not available elsewhere in the Mid North Coast.
- Provide a unique offering where the beach, golf course and proximity to amenity and services are delivered as an integrated lifestyle package.
- Facilitate the conservation of 327 ha of land for ecological conservation within the NTURA site and provide the opportunity to register this land as Biodiversity Stewardship Sites ensuring long term conservation outcomes.
- Strengthen connections to Nine Mile Beach and the foreshore.
- Celebrate and interpret local culture and heritage.
- Attract employment, tourists, sea- changers and a younger generation.
- Accelerate the growth and activation of a 'heart' at the B2 Local Centre Zone by co- locating daily convenience services and needs with the beach, a new golf clubhouse, community centre, cultural centre, mobile surf club and public gathering places.
- Accommodate a diverse range of residents with shared values as to how they choose to live, move around and recreate.
- Facilitate healthy living through a connected loop of destinations that encourage walking and cycling as a convenient and desirable mode of transport.
- Promote social equity and interaction by rethinking streets, open space and retail as places to meet and gather.

More specifically, the Master Plan comprises:

- the type and location of land uses within the NTURA Site;
- dwelling yield / density (approximately 2,123 dwellings);
- proposed location of retail / commercial / community floor space within the NTURA Site;
- a landscape strategy including identification and location of open space and drainage, environmental conservation lands, and local active and passive recreation facilities;
- transport network layout;
- servicing and infrastructure strategy;
- location and dimensions of Bushfire Asset Protection Zones; and
- appropriate conservation of European and Aboriginal heritage located on the NTURA Site.

Future Development Control Regime

To facilitate realisation of the Master Plan, Landcom is seeking the Minister for Planning introduce a new planning framework for the NTURA Site by amending the Great Lakes Local Environmental Plan 2014 to:

- introduce new land use zones and objectives, including:
 - R2 Low Density Residential,
 - R3 Medium Density Residential,
 - B2 Local Centre,
 - B5 Business Development,
 - IN1 General Industrial,
 - SP3 Tourist,
 - RE2 Public Recreation,

- E2 Environmental Conservation,
- E3 Environmental Management
- identify principal development standards to broadly guide yield, density and built form outcomes, such as:
 - minimum lot size controls to facilitate dwelling typologies on a range of lots from 200-1,000m²;
 - maximum floor space ratio for development within the future B2 Local Centre Zone; and
 - maximum building height controls between 8.5m (2 storeys) and 20m (5 storeys)¹.
- identify matters for consideration that future development must address;
- identify those portions of the NTURA Site to be set aside for conservation purposes; and
- implement a number of other minor changes to local clauses within the LEP to facilitate the proposed development.

In addition, the rezoning proposal is supported by:

- an Amending Development Control Plan (DCP) to guide future built form on the NTURA Site; and
- a Statement of Intent outlining the principles of a future Voluntary Planning Agreement (VPA) Landcom proposes to enter into with Council to establish a developer contributions framework and governance arrangement for the delivery of infrastructure and community facilities.

The Amending DCP has been prepared on behalf of Landcom and is appended to this Study. The Amending DCP includes further design controls for the NTURA Site including:

- detailed design controls for residential dwellings, commercial/retail development and the public domain;
- concept layout of retail / commercial / community floor space within the B2 Local Centre Zone and proposed location for additional employment lands within a separate northern precinct of the NTURA Site;
- road network layout;
- identification and location of open space and drainage, environmental conservation lands, and local active and passive recreation facilities;
- servicing and infrastructure strategy;
- location and dimensions of Bushfire Asset Protection Zones; and
- appropriate conservation of Aboriginal heritage located on the NTURA Site.

Following gazettal of the rezoning, and adoption of the Amending DCP, detailed development applications for subdivision and infrastructure works, buildings and other development will be submitted to the relevant planning authority for approval consistent with the overall rezoning and development control framework established for the NTURA Site.

A Voluntary Planning Agreement (VPA) would be entered into by Landcom with Council in order to ensure that the local and regional infrastructure needs of the future North Tuncurry population are adequately met. It is anticipated that this VPA would include works in kind undertaken by Landcom as part of future development applications, monetary contributions, and land dedication for roads and transport, open space and recreation, stormwater drainage and community facilities. The VPA is also proposed to provide for registration of land as Biodiversity Stewardship Sites for conservation purposes. The proposed Biodiversity Stewardship Agreement is intended to be fully funded for in-perpetuity conservation management. This Study is accompanied by a Statement of Intent which outlines the aims, purposes and proposed outcomes of the future VPA. This will be subject to further discussion and negotiation with the relevant authorities as planning for the precinct progresses.

¹ Refer to Section 6.2 of this Study for more details on the proposed height controls.

Strategic Planning Framework

The NSW Government's Hunter Regional Plan 2036 (HRP 2036) recognises that future housing and urban renewal opportunities manage environmental values and residential growth in North Tuncurry. The commencement of the NTURA will provide a catalyst for development within the mapped future urban release area. The NTURA will deliver a significant component of new residential dwellings and jobs, and the lead in infrastructure required to allow development to proceed. In addition, the NTURA offers the opportunity to potentially set aside ecologically sensitive portions of the NTURA Site, and protect the coast by limiting urban sprawl and by focusing new settlement in areas, consistent with the goals and directions of the HRP 2036.

Environmental, Social and Economic Impacts

In terms of site planning and potential environmental impacts, the key issues are:

- biodiversity and conservation;
- traffic, transport and access;
- heritage;
- social and economic impacts; and
- stormwater, drainage and flooding.

Biodiversity and Conservation

The NTURA Site is predominately characterised as re-growth coastal and heath vegetation. The assessments undertaken for flora and fauna within the NTURA Site have identified three vegetation communities within the site; Blackbutt – Smooth-barked Apple open forest, Banksia dry shrubland and Coast Banksia – Coast Wattle dune scrub. One flora species recorded on the Site and within an area immediately to the north of the Site, *Genoplesium littorale* (Tuncurry Midge Orchid), is listed as Critically Endangered under the *Biodiversity Conservation Act 2016* (NSW) and Critically Endangered under the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth). A total of twelve (14) threatened fauna species have been recorded on site.

In order to ensure that appropriate long-term conservation outcomes are achieved as part of the NTURA, approximately 327 ha of land within the NTURA Site (including approximately 312 ha of mapped vegetation comprising Tuncurry Midge Orchid habitat and other ecologically valuable vegetation) would be placed in permanent conservation. Less than 3% of known Tuncurry Midge Orchid Plants within the Biodiversity Conservation Assessment Area would be impacted by the project, with over 88% of the known on-site population to be protected as a result of the NTURA. Biocertification of the project is proposed as outlined in the Biodiversity Certification Assessment Report and Biodiversity Certification Strategy provided at **Appendix Q**.

Traffic, Transport and Access

Council has previously identified the following upgrades and new road infrastructure works to be implemented as a result of development that is planned in the Forster-Tuncurry area:

- Construction of two additional lanes along The Lakes Way (Manning Street) between Grey Gum Road and approximately 250m north of Chapmans Road;
- An upgrade to the intersection of Manning Street – Grey Gum Road to a roundabout;
- An upgrade to the intersection of Manning Street – Chapmans Road to a roundabout;
- Extension of Beach Street from North Street to Northern Parkway; and
- Duplication of the Wallis Lake Bridge.

The Transport Management and Accessibility Plan accompanying the Study has modelled traffic generation with and without the NTURA. The Transport Management and Accessibility Plan concludes that the NTURA is not required to provide additional or other road upgrade works if the upgrades and new road infrastructure works identified and planned for by Council are implemented along with construction by Landcom of a new roundabout at the NTURA Site's proposed northern access. Landcom has committed to undertaking the Beach Street extension as part of the NTURA.

It is understood that Transport for NSW has access to more recent traffic counts undertaken by another consultant, and that those counts indicate vehicle movements across Wallis Lake Bridge may be higher than those identified in the TMAP supporting this Study. The variance between the two sets of data and implications of the NTURA on the Wallis Lake Bridge are discussed at Section 7 of this Study.

The internal road network has been designed to accommodate bus movements within the NTURA Site, and Landcom will liaise with Transport for New South Wales regarding short and long-term public transport options for the Site. The NTURA includes an extensive new network of pedestrian and cycle paths which provide new connections through to Tuncurry and Nine Mile Beach.

The implementation of the proposed sustainable travel measures is expected to encourage a reduction of car dependency for the future residents of the NTURA, with improved mode shifts towards public transport and walking and cycling modes.

Heritage

An Aboriginal Cultural Heritage Assessment Report has been prepared in accordance with the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW, 2010). The Assessment identified two known Aboriginal sites within the NTURA Site which are registered on the AHIMS database. One of these sites is located adjacent to the Heritage Green, a local pocket park on the central western edge of the proposed development.

The Assessment also indicates that the beach foredunes and back slopes and westernmost portions of the NTURA Site are likely to have archaeological potential based on past Aboriginal use of the area, heavy vegetation cover and natural processes. These areas are therefore proposed to be zoned for environmental conservation purposes to ensure their future protection.

The Assessment concludes the proposed NTURA development footprint will avoid the two known identified items of Aboriginal cultural heritage. Notwithstanding this, to comply with applicable legislative requirements and standards, a suite of recommendations have been made that should be considered when future physical works are being undertaken. It should be noted that these recommendations do not preclude the progression of the rezoning study / planning proposal through to gazettal.

There are no listed European heritage items on, or adjacent to, the NTURA Site. The Site had previously been used as a prison labour camp between 1913 and 1938 and was also the location of the Tuncurry-Forster Aero Club during the 1970s. A European Cultural Heritage Assessment has been prepared to investigate the historical uses on the NTURA Site and subsequently concluded that there are no known or potential historic or archaeological sites associated with either the prison labour camp or the Aero Club located within the proposed development footprint.

Social and Economic Impacts

A range of social planning, community needs, housing and economic studies have been undertaken throughout the site planning process and in preparing this Study to inform the design and delivery of the NTURA.

The proposed planning controls for the Site are anticipated to result in approximately 4,500 people being accommodated within the Site at the completion of the development. The projected population will be large enough to support a local centre with a neighbourhood supermarket and shops, local neighbourhood community facilities and services, and new surf lifesaving club facilities. The technical reports accompanying the Study conclude that the social infrastructure and retail components of the NTURA will be sufficient to cater for the needs of the projected population and will complement rather than compete with facilities provided in established centres within Tuncurry-Forster.

The future VPA will formalise the mechanisms to facilitate delivery of:

- interim and permanent community centre;
- A B2 Local Centre, incorporating convenience shopping and a range of local services, including potential for commercial childcare and medical centres (subject to commercial demand);
- Local parks with a diversity of embellishments, dispersed throughout the site;

- A network of pedestrian and cycle paths;
- Road connections that are safe, appropriately signposted and suitable for bus access;
- A remodelled golf course and club house;
- Potential for an Aboriginal cultural facility.

Other strategies proposed to support the social sustainability of NTURA include:

- A diverse and affordable lot mix to provide housing choice that meets the changing needs of the community and different households;
- Creation of employment opportunities to attract families and young people to the development;
- Strategies to encourage physical connectivity with the surrounding area;
- Strategies to encourage social integration with neighbouring communities and existing areas; and
- Providing facilities that encourage use by both new and existing residents.

Stormwater, Drainage, Flooding and Climate Change

Stormwater will be managed through the establishment of new infrastructure including a number of larger water management basins. These basins will be designed to comprise of a mix of ephemeral and open water zones and will perform detention, water quality improvement, aesthetic functions, and control groundwater levels. It is noted that the basins perform the same water management function irrespective of whether they are open water or ephemeral. A gravity drainage system (the gravity drain) is proposed to manage surplus water from the water management basins, reducing the build-up of large volumes of water during prolonged periods of wet weather and providing a reduction in peak flood levels and durations during shorter more intense rainfall events.

The proposed stormwater management and flood mitigation systems have been independently peer reviewed by DHI on behalf of the DPIE. DHI concluded the concept design has been undertaken with the care and skill of a design engineer that usually undertakes surface and groundwater engineering design and that the level of detail in the reports is considered sufficient for a concept design as part of a rezoning study. DHI identified elements of the proposed concept that would need further consideration and design work, and acknowledged that these would generally be required to be completed during detailed design stages. DHI also identified several risks to successful project implementation, which would need to be resolved as discussed in Section 7.9 of this Study.

The NTURA Site is not directly affected by flooding from the Lower Wallamba River in storm events up to and including the Probable Maximum Flood and has been designed to be above groundwater flooding levels.

The impacts of climate change, including beach regression and expected sea level rise, have also been planned for.

Conclusion

The NTURA is the priority new release area to address the housing needs of the Mid North Coast Region and has been subject to extensive master planning, community and stakeholder consultation and environmental assessment. The proposal will result in a number of positive housing and environmental conservation outcomes.

Landcom is seeking approval for a rezoning to allow for the coordinated development to occur by way of a staged planning and development process over the next 30 years. A SEPP Amendment is considered the most appropriate mechanism to achieve this outcome to amend the underlying Great Lakes LEP 2014.

1.0 Introduction

1.1 Background

On 28 February 2011, pursuant to Clause 8 of the former State Environmental Planning Policy (Major Development) 2005 (now the State Environmental Planning Policy (State Significant Precincts) 2005), the (then) Minister for Planning (the Minister) formed the opinion that the North Tuncurry Urban Release Area (NTURA) was a potential State Significant Site. In doing so, the (then) Minister also formed the opinion that a Study be undertaken to consider a revised planning framework, including amendments to land use zoning and planning controls applicable to the NTURA Site.

It is noted that the State Environmental Planning Policy (Major Developments) 2005 (Major Development SEPP) has now been amended and renamed the State Environmental Planning Policy (State Significant Precincts) 2005. For all intents and purposes, the process and requirements previously set out in Part 2 of the Major Development SEPP were largely transferred to Part 2 of the State Significant Precincts SEPP and are to be construed to be the same thing. The Abbreviations on page 1 and **Section 1.7** of this Study provide further clarity on terms and procedural references.

This Study has been prepared to fulfil the Study Requirements issued by the Director General (now Secretary) on 8 December 2011 for rezoning of approximately 615 ha of land at North Tuncurry in the MidCoast LGA (the Site). It reflects that the proposed land use was declared to have potential State Significant planning significance and that rezoning of the NTURA Site should be addressed through a State led rezoning pathway.

The current Minister for Planning and Public Spaces, the Hon Rob Stokes, endorsed the preparation of a self-repealing SEPP Amendment to Great Lakes LEP 2014 on the 18 March 2020. The DPIE is leading the state-led rezoning of the NTURA. Landcom is the proponent and has prepared this Study, including a range of technical studies on behalf of DPIE to support the rezoning Site.

1.2 Overview of the NTURA Proposal

1.2.1 NTURA Vision

NTURA is envisaged as a model for sensitive and innovative coastal development. It would be an accessible and diverse seaside village with a mix of retail, employment, housing, open space and community uses focussed around a vibrant mixed-use heart. Development would embrace the cultural heritage of the traditional aboriginal owners of the land and integrate with surrounding urban lands as well as the natural qualities of the location. It would provide housing choice and affordability complemented by new local community, recreational and business services.

The Study recommends the amendment of the Great Lakes LEP 2014 to revise the applicable land use zones and planning controls for the NTURA Site.

1.2.2 NTURA Objectives

It seeks rezoning of the NTURA Site to facilitate the establishment of new planning controls on the site, to fulfil the following objectives:

- Be the destination of choice for the NSW 'sea change' market and the aspirational goal for the regional housing market.
- Enhance Forster- Tuncurry as a coastal tourism destination.
- Be an innovative and authentic coastal community with a genuine sense of place that can enhance and expand the existing Tuncurry community.
- Be a new coastal community that reflects local lifestyle, offers housing diversity that is not available elsewhere in the Mid North Coast.
- Provide a unique offering where the beach, golf course and proximity to amenity and services are delivered as an integrated lifestyle package.

- Facilitate the conservation of 327 ha of land for ecologically conservation and provide the opportunity to register this land as Biodiversity Stewardship Sites ensuring long term conservation outcomes.
- Strengthen connections to Nine Mile Beach and the foreshore.
- Celebrate and interpret local culture and heritage.
- Attract employment, tourists, sea- changers and a younger generation.
- Accelerate the growth and activation of a 'heart' at the B2 Local Centre Zone by co- locating daily convenience services and needs with the beach, a new golf clubhouse, community centre, cultural centre, mobile surf club and public gathering places.
- Accommodate a diverse range of residents with shared values as to how they choose to live, move around and recreate.
- Facilitate healthy living through a connected loop of destinations that encourage walking and cycling as a convenient and desirable mode of transport.
- Promote social equity and interaction by rethinking streets, open space and retail as places to meet and gather.

1.2.3 NTURA Proposal

The rezoning of the NTURA Site will enable future development to occur in accordance with a Master Plan prepared by Roberts Day and supporting technical reports which comprises:

- the type and location of land uses within the NTURA Site;
- dwelling yield / density (approximately 2,123 dwellings);
- proposed location of retail / commercial / community floor space within the NTURA Site;
- a landscape strategy including identification and location of open space and drainage, environmental conservation lands, and local active and passive recreation facilities;
- transport network layout;
- servicing and infrastructure strategy;
- location and dimensions of Bushfire Asset Protection Zones; and
- appropriate conservation of European and Aboriginal heritage located on the NTURA Site.

The overall NTURA development will provide housing to accommodate an expected population of approximately 4,500 residents within a range of dwelling types and with a range of price points including moderate income earners and housing for seniors. The NTURA will also provide employment opportunities for 126 full time equivalent workers within a sustainable and cohesive new Local Centre, business and industrial-zoned land.

The NTURA will unlock development on a site identified within local and subregional planning documents as a key contributor to housing supply over the next 25 years. The NTURA is underpinned by an environmental conservation strategy that identifies significant areas of high conservation value that will be protected as part of the NTURA. Once rezoning of the NTURA Site is achieved, environmental offsets including 327 ha of on-site land together with additional offsite land will be registered as Biobank or Biodiversity Stewardship Sites for conservation purposes through a Biodiversity Certification Order, Conservation Agreement or other appropriate mechanism.

1.3 Proponent

This Study is sponsored by Landcom (the proponent) under a Project Delivery Agreement with NSW Department of Industry - Crown Lands and Water who control the land.

A Native Title Agreement was signed between the NSW Government and the traditional owners, the Worimi and Birpai People of Forster Tuncurry, in late-2010 in relation to the majority of the NTURA Site.

1.4 Purpose and Structure of the Study

The Study has been prepared by Ethos Urban (Ethos Urban), for the proponent, Landcom. This Study and the supporting technical information has been prepared to support a proposed SEPP Amendment to the Great Lakes LEP 2014. The amendment seeks to introduce a new land use and development control framework to the NTURA.

This Study is based on information provided by Landcom, urban design information provided by Roberts Day and supporting technical documents provided by the expert consultant team. It:

- Provides an analysis of the site and its immediate surrounds.
- Establishes the basis for change to the existing zoning and planning provisions and includes a proposal to amend Great Lakes LEP 2014 as it relates to the NTURA Site.
- Presents a Master Plan and DCP for the future urban development of the site.
- Provides an assessment of the environmental impacts of the proposed land use change and Master Plan in accordance with the then Director-General's Study Requirements.

Volume 1 of the Study is structured as follows:

- Section 1:** Introduction, background, proponent, assessment and approvals process and overview of the consultation process undertaken by the proponent.
- Section 2:** Strategic justification including an assessment of the State and regional significance of the site and the proposal setting out the rationale for the proposed SEPP Amendment to the Great Lakes LEP 2014.
- Section 3:** Analysis of the site and its surrounds.
- Section 4:** The Master Plan, detailing the future development for which rezoning is sought.
- Section 5:** Outline of proposed development contributions.
- Section 6:** Proposal for amendment to the Great Lakes Local Environmental Plan 2014, including nomination of future land use zones and planning controls.
- Section 7:** Proposed development control strategy.
- Section 8:** Environmental assessment.
- Section 9:** Conclusion.

Volume 2 contains the Appendices which include the technical studies undertaken to inform the proposed land use change and Master Plan and its environmental assessment, including ecology, heritage, engineering (infrastructure, water cycle, flooding), transport, bushfire management, visual impact, contamination, noise and vibration and geotechnical assessments.

The technical studies included at Volume 2 address the then Director General's Study requirements. They provide a detailed analysis of existing site conditions, constraints and opportunities that has informed the proposal. They also provide technical assessment of the environmental impacts of the NTURA and recommend proposed mitigation measures to manage potential environmental impacts associated with the NTURA.

The preparation of the Study, Master Plan and DCP have also drawn upon and had regard to the analysis, findings and recommendations of other technical documentation previously prepared to support the urban release, rezoning and development of the NTURA. These are referenced throughout this Study, where relevant.

1.5 Planning Pathway

As outlined above, Landcom is seeking to introduce a new site-specific planning framework for the NTURA Site, including land use zones, building heights and minimum lot size controls. Future development on the NTURA Site will need to be assessed against the new framework. More specifically, the proposal by Landcom comprises:

- A rezoning proposal consisting of text and maps at Section 6.0 of this Study, which sets out the proposed land use zones and objectives for the NTURA, type of development that is proposed to be permitted and prohibited within each of the zones, development standards relating to the maximum height and development potential within the Site based on minimum lot sizes and density controls, and other matters that will need to be considered when development is proposed in the future. The Great Lakes LEP 2014 is the underlying environmental planning instrument that currently applies to the NTURA Site and would be the principal environmental planning instrument that would apply to all future development.
- *Amendment 1 to the Great Lakes DCP 2014 Forster Tuncurry Site Specific – North Tuncurry* (herein referred to as 'NTURA DCP'), which contains detailed provisions to achieve the purpose of the rezoning and includes built form controls, guidelines for special areas or precincts within the NTURA Site, pedestrian and vehicular access and car parking, landscaping and public domain, and heritage matters. When adopted, the NTURA DCP will be used as a guide to inform future development outcomes.

Importantly, development consent for the construction of buildings or the carrying out of any other physical works does not form part of the rezoning proposal. Development consent will need to be separately obtained in the future for the carrying out of development consistent with the new land use framework following finalisation of the rezoning process.

The DPIE, which administers the functions of the Minister for Planning and Public Spaces will prepare a draft State Environmental Planning Policy (SEPP) and supporting maps containing the proposed new zoning and development controls. The draft SEPP and maps, when made, will amend the Great Lakes Local Environmental Plan 2014, and replace the current planning controls for the NTURA site with a range of land uses and development controls that are consistent with the NTURA Master Plan as outlined in Section 4.0. The NTURA DCP is expected to be subsequently adopted by Council and will amend the existing Great Lakes Development Control Plan 2014 to insert new site-specific provisions to guide future development on the NTURA Site.

A flowchart illustrating the planning pathway undertaken for the rezoning proposal to date, and the remaining steps, is provided at **Figure 1**.

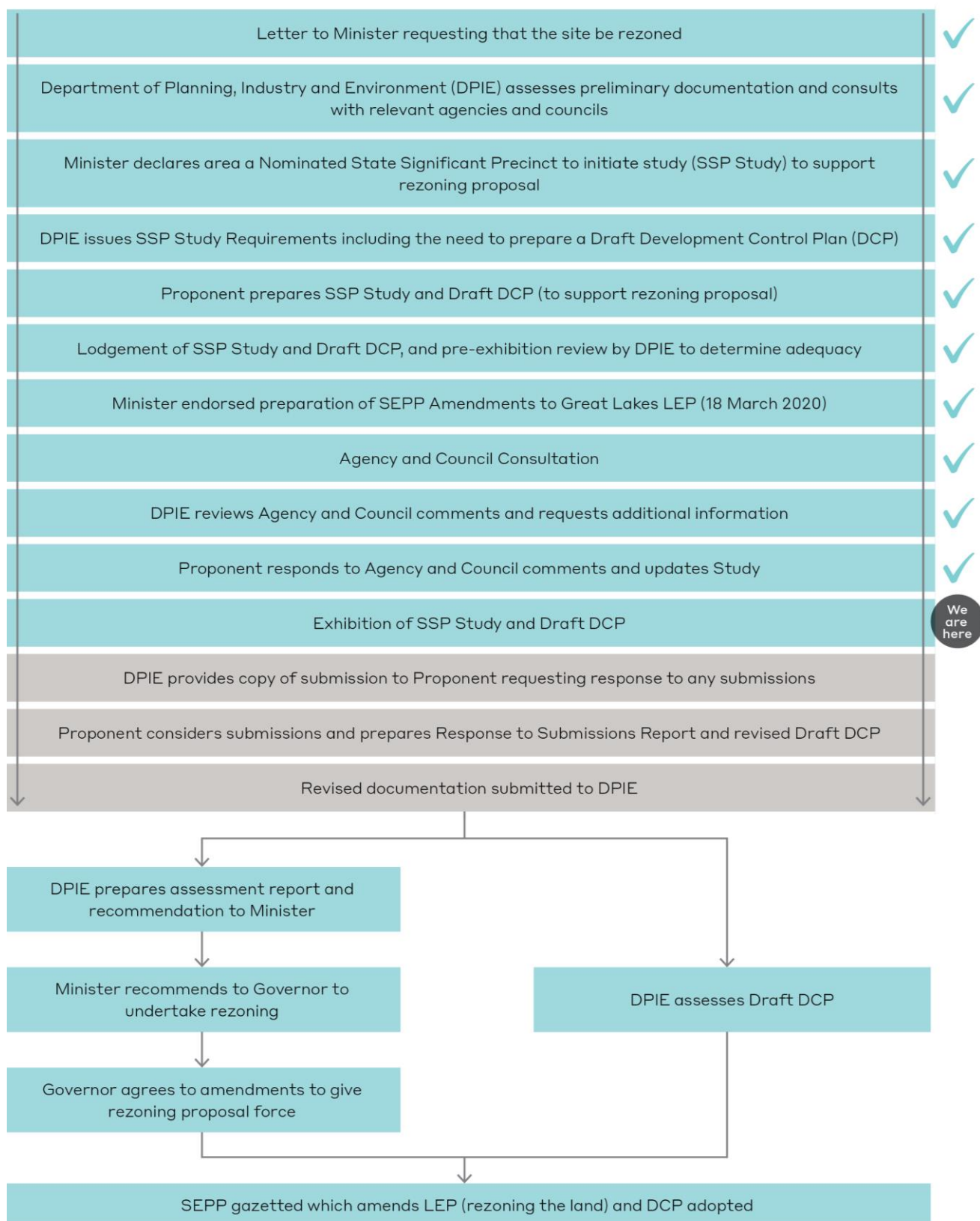


Figure 1 The rezoning process

Source: Ethos Urban

1.6 Consultation and Stakeholder Engagement

Extensive consultation has been undertaken with the community, MidCoast Council and government agencies during the formulation of the rezoning proposal for North Tuncurry since 2011 when the NTURA Site was first recognised as having potential State planning significance.

A Communication and Community Engagement Report has been prepared by KJA (**Appendix E**) which details the involvement of the local community and key stakeholders in the NTURA to date, including details of consultation activities which have occurred since the commencement of project planning in late-2011. These activities will continue to be supplemented by ongoing community consultation during the statutory exhibition and assessment of the Study and, should the proposal proceed, during detailed design, planning applications and construction of individual stages of the proposed development.

A Community Reference Group (CRG) was established in June 2013 to facilitate an exchange of information between key stakeholders and Landcom. To ensure different interests and views were considered an Expression of Interest process was advertised seeking representation from the community for participation in the CRG process. An independent chairperson was appointed and the CRG membership comprises:

- 5 individual community members;
- 2 representatives from the business community including the Chamber of Commerce;
- 1 representative from MidCoast Council;
- 1 representative from The Forster Tuncurry Golf Club;
- 1 representative from a local environmental group;
- 1 representative from an education organisation;
- 1 representative from the Police; and
- 1 representative from Lakkari / Forster Local Aboriginal Land Council (FLALC).

The CRG met twice (July 2013 and March 2014) and has provided feedback and received project updates in the intervening period. The CRG will be re-engaged as the planning process progresses and will continue to be an important point of reference throughout the NTURA planning and delivery phases.

The project team has also engaged formally with a number of key local stakeholders, including the Forster Tuncurry Golf Club and the Forster Tuncurry Business Chamber, as well as local residents and land owners.

In the early phases of the project, Landcom and the project team engaged with former Great Lakes Representatives (most of which are now employed at MidCoast Council) to inform the site investigation and master planning phases, including meeting on a number of occasions to discuss the content and form of the proposed rezoning, development standards, Master Plan and Draft DCP. The documents, as submitted in this Study and several of the supporting technical studies, reflect the outcomes of these previous consultative processes.

The project team also liaised directly with the relevant government agencies during the preparation of the Master Plan and the detailed technical studies which accompany and inform this Study. The Master Plan for the NTURA Site represents the outcomes of this consultation and the result of a master planning process which occurred over a number of years. Consultation undertaken by consultants during the preparation of technical studies is detailed in their respective reports, and where reports have more recently been updated, additional consultation with relevant agencies has been undertaken and is documented in the supporting studies.

The former Department of Environment and Planning established an inter-agency working group to progress planning and development of the proposal with Landcom in 2012. The working group met again in October 2014 following lodgement of this Study to discuss the planning status and key issues to be resolved in the final Study and subsequent assessment phases prior to public exhibition. That meeting provided key directions in relation to the management of biodiversity assessment, coastal management, bush fire risk management and other development planning issues.

Since October 2020, Landcom has continued to engage directly with representatives of the DPIE established inter-agency working group and other key government agencies, including:

- MidCoast Council (following the 2016 local government amalgamations) and prior to that the former Great Lakes Council;
- Department of Planning, Industry and Environment Newcastle Regional Team and Project Delivery Unit;
- Former Roads and Maritime Services (now Transport for NSW);
- Former Office of Environment and Heritage and now Biodiversity Conservation Division (within the DPIE);
- NSW Rural Fire Service; and
- MidCoast Water (now dissolved and subsumed into MidCoast Council).

Aboriginal Consultation

Aboriginal community stakeholders have been consulted in accordance with *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010), as part of the preparation of the Aboriginal Cultural Heritage Assessment by Indigenous Cultural Resource Management Services and RPS (Addendum Aboriginal Cultural Heritage Assessment). This included notification of the DPIE Newcastle Regional Office, The Registrar, Aboriginal Land Rights Act 1983, Native Title Services Corporation Limited, The National Native Title Tribunal, MidCoast Council, Forster Local Aboriginal Land Council, and Hunter Local Land Services, as well as an invitation for Aboriginal stakeholders to register their interest in the proposal via public notices placed in local newspapers. In addition, indigenous representatives from the Government Architects Office were involved in the early formulation of the Master Plan and Landscape Master Plan.

There has been ongoing consultation with the Native Title Claim Group, the Lakkari Traditional Owner Aboriginal Corporation through the implementation of the Native Title Agreement (Section 31 Deed). Under this agreement, Landcom meets with the Lakkari Traditional Owner Aboriginal Corporation on a quarterly basis to provide updates on the Master Plan and technical studies. Further consultation with Aboriginal community stakeholders will occur on an ongoing basis.

Aboriginal Land Claim 41243 is currently under assessment.

1.7 References to Government Agencies

Since the process to rezone the NTURA Site was formally initiated in 2011, a number of government agencies have been restructured or renamed. As a result, references to some government agencies in Volume 2 of this Study are no longer current. A brief explanation of this is provided below:

- **Department of Planning, Industry and Environment** includes references to the former NSW Department of Planning and Environment, the former Planning & Infrastructure Agency with the Department of Premier and Cabinet, the former Department of Planning and Infrastructure, and the former Department of Planning.
- **Secretary** means the position formerly known as the Director General of the (now) Department of Planning and Industry, including in the Department's previous guises. In the present and future-tense, this refers to the position of the Secretary of the Department of Planning and Industry which subsumes all of the statutory powers and responsibilities of the former position of the Director General.
- **Roads and Maritime Services (RMS)** includes references to the former Roads and Traffic Authority (RTA). RMS' functions have most recently been integrated into the Transport for NSW cluster.
- **Office of Environment and Heritage (OEH)** includes references to the former Department of Environment and Climate Change and Department of Environment, Climate Change and Water. OEH's functions have most recently been integrated into the NSW Department of Planning, Industry and Environment cluster.
- **Landcom** was briefly known as UrbanGrowth NSW (a trading name) and has been reconstituted by the State Government (late 2017).
- **NSW Department of Industry - Crown Lands and Water** includes the former Crown Lands Branch of NSW Trade and Investment, Crown Lands and the NSW Department of Primary Industry. The Crown Lands and

Water branches of the former Department of Industry have most recently been integrated into the NSW Department of Planning, Industry and Environment cluster.

- **MidCoast Water** has been dissolved and its functions are now carried out by MidCoast Council.
- **MidCoast Council** was formed by the NSW Government proclamation dated 12 May 2016, which merged the former Great Lakes, Greater Taree and Gloucester Shire Councils. The NTURA Site is located on land that was previously governed by Great Lakes Council and was subject to the Great Lakes LEP 2014. At the time of drafting this study, MidCoast Council had not yet prepared a new LGA-wide LEP and accordingly the Great Lakes LEP 2014 is referenced throughout this Study and supporting appendices.

2.0 Strategic Justification

The vision of the Hunter Regional Plan 2036 (HRP 2036) is to be the leading regional economy in Australia with a vibrant new metropolitan city at its heart. To support this vision, the HRP 2036 outlines its focused goals to deliver thriving communities with greater housing choice and jobs within the region. To achieve this, the Plan recognises the need to identify opportunities for land that is available and appropriately located to sustainably accommodate the projected housing and employment needs of the region's population by 2036. The NTURA Site is one of the single largest sites within the region and is identified as a future housing and urban renewal opportunity within the MidCoast area. The NTURA Site's location and ownership under a single consolidated land holding presents a unique opportunity to make a substantial contribution to regional housing supply in an integrated and coordinated manner.

The Minister for Planning and Public Spaces, the Hon Rob Stokes, endorsed the preparation of a self-repealing SEPP Amendment to Great Lakes LEP 2014 on the 18 March 2020. This decision reflects the NSW Government's planning objectives on major sites that are important to the delivery of the metropolitan strategy or regional strategies. The provisions facilitate significant investment in economic and employment generating development in NSW and in redeveloping major State government sites.

The NTURA's potential to contribute to State and regional planning objectives (and thereby justifying the proposal) can be expressed in terms of the following key considerations, which are further discussed below:

1. The NTURA is a large area of land predominantly within State Government ownership.
2. The NTURA will support the achievement of Government policy objectives, relating to increasing delivery of housing and jobs in the Hunter Region consistent with the HRP 2036.
3. The NTURA is of State environmental and natural resource conservation importance as evidenced in the Biodiversity Certification Assessment supporting this Study.
4. The NTURA will support the achievement of indigenous heritage values through the Project Delivery Agreement executed for the Site.

A large area of land within a single ownership or control, typically Government owned

The NTURA Site is a 615ha parcel of Crown land under the control of the NSW Department of Industry - Crown Lands and Water. Further detail of land ownership and legal description is provided within **Section 3.3**.

Supporting State and regional Government policy objectives, relating to increasing delivery of housing and jobs, consistent with the HRP 2036.

Australia faces a national housing affordability and supply crisis. Recent pronouncements by all levels of Government agree that the contributing causes of the housing affordability crisis are inadequate housing supply in the market, complex planning systems and high infrastructure levies. All levels of Government have developed policy framework to address housing affordability across Australia.

The NTURA will assist in meeting State government policy as once fully developed, the Hunter Region is expected to accommodate 70,000 new dwellings between 2016 and 2036. NTURA is capable of contributing approximately 2,123 of those new dwellings, representing approximately 3% of the new dwelling requirements proposed in the Plan. The NTURA is therefore consistent with and will assist in the delivery of key outcomes of HRP 2036 by ensuring that adequate land is available and appropriately located to sustainably accommodate the projected housing and employment needs of the region's population by 2036.

Strong population growth is anticipated over the coming years, and current projections suggest that MidCoast LGA will see a continuing trend comprising affluent retirees and middle income retirees moving to Forster-Tuncurry, local families trading up, and investors, second home and holiday home buyers being attracted to the area. The NTURA Site is crucial to the delivery of the additional housing required to meet the needs of the rapidly growing population and changing demographic needs of the region. Without new housing supply and diversity to meet demand, prices can be expected to escalate rapidly, with corresponding declines in affordability. The NTURA is capable of speedy and well planned development that caters to the changing needs of a growing population.

In addition, the NTURA Site has the potential to add up to 13.24 ha of industrial and business land to the region, contributing to economic growth and employment within the MidCoast LGA. This is consistent with the HRP 2036's goal becoming the leading regional economy in Australia by promoting economic development and ensuring the availability of sufficient employment lands.

State or regional environmental and natural resource conservation significance

The NTURA Site contains over 60% of the known plant stock of the Tuncurry Midge Orchid (*Genoplesium littorale*) which is identified as Critically Endangered under the EPBC Act and the TSC Act. Almost 63% of the known plants within the Biodiversity Conservation Assessment Area (BCAA) are contained within the approximate 327.7ha (including 312.7ha of mapped vegetation) proposed for conservation and are concentrated in disturbed areas in the northern and western sectors of the site, presenting an opportunity for an active conservation program supported by the development of the remainder of the NTURA Site. It is proposed that the draft SEPP amendment will designate these lands as environmental protection with a commitment to manage the lands when rezoned. The balance of the known TMO population is located on adjoining land owned by the FLALC and located outside of the NTURA Site. The NTURA site will therefore secure 327.7ha (including 312.7ha of mapped vegetation) of land within the BCAA for long term agreed conservation outcomes on-site and additional off-site biodiversity conservation lands will also be provided to facilitate development on the site, consistent with the HRP 2036.

Supporting indigenous heritage values

The NTURA Site is of cultural significance to the traditional land owners, the Worimi and Birpai People of Forster Tuncurry. A Native Title Agreement has been signed between the NSW Government in relation to the majority of the Site, and Landcom is working in close consultation with the traditional owners. The rezoning and development of the site in a timely manner is important to the State in order to ensure that local Aboriginal community can benefit from the cultural and economic benefits of the delivery of the proposal through the Project Delivery Agreement that has been executed for the Site.

3.0 Site Analysis

This section provides an overview of the site's context and provides a description of the site's physical and other features.

3.1 Regional Context

Tuncurry is within the MidCoast LGA on the entrance to Wallis Lake, approximately 320 kilometres north of Sydney. The NTURA Site is located adjacent to and to the north of the Tuncurry urban area as illustrated in **Figure 2**.

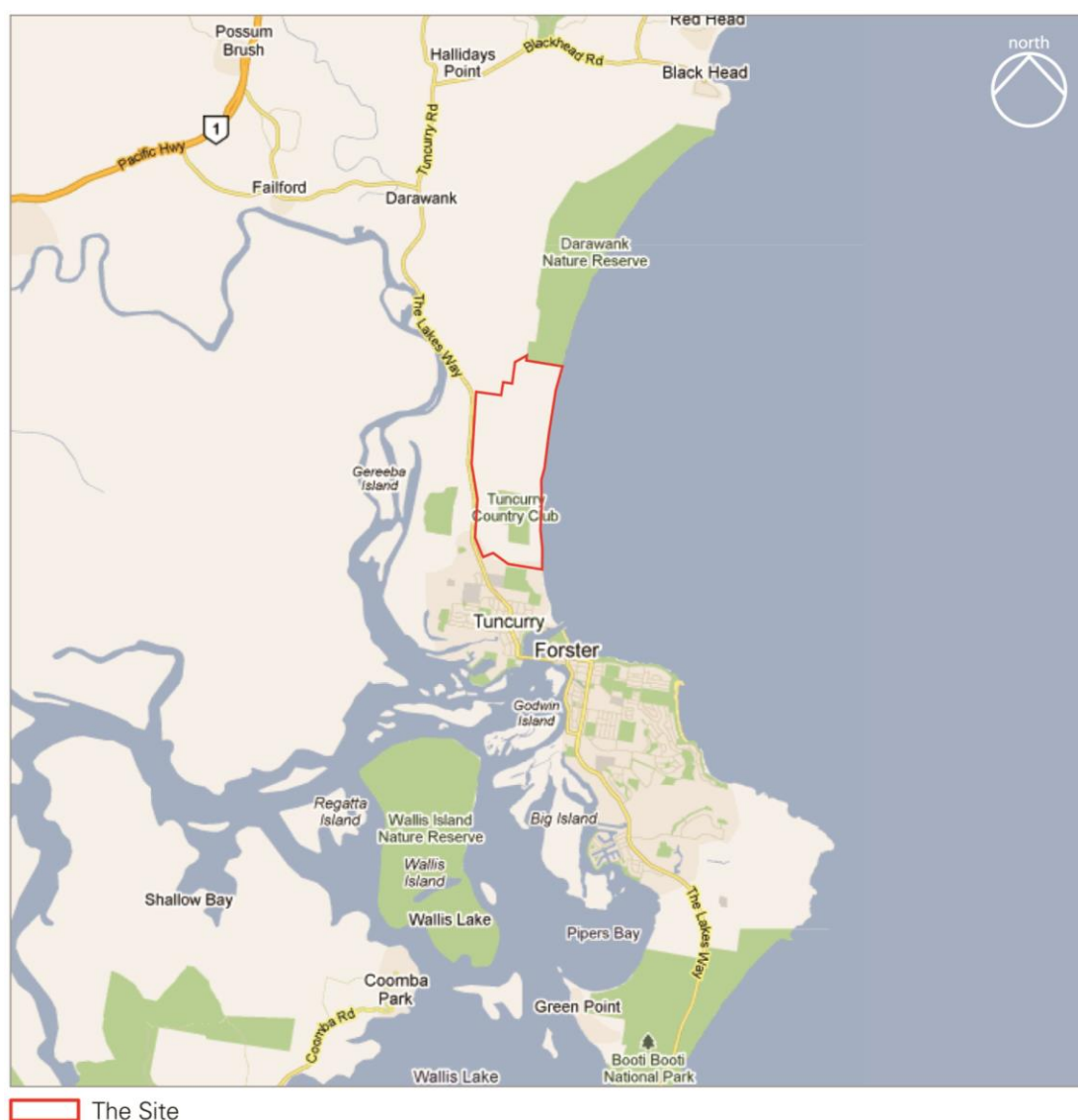


Figure 2 Regional Context Plan

Source: Google Maps and Ethos Urban

3.2 Local Context

The NTURA Site is a 615ha parcel of land located on the eastern side of The Lakes Way, directly to the north of, and adjoining, the Tuncurry town centre. It is an irregular shaped waterfront parcel of land situated on a peninsula that has been created by the Wallamba River to the west and the Pacific Ocean to the east. An aerial photograph of the site and surrounds illustrating the site boundary is provided at **Figure 3** below.

The NTURA Site enjoys an ocean beach frontage of more than 4.5 kilometres and has road frontages to The Lakes Way and Northern Parkway.



Figure 3 Aerial photograph and site

Source: NearMap and Ethos Urban

3.3 Land Ownership and Legal Description

The NTURA Site is Crown land under the control of NSW Department of Industry - Crown Lands and Water, and comprises three allotments. **Table 1** and **Figure 4** summarise the NTURA Site's legal description and ownership details.

Table 1 Land description and ownership

Lot	DP	Landowner
294	43110	Crown (lease to Forster Tuncurry Golf Club)
295	43110	Crown (lease to Forster Tuncurry Golf Club)
331	1104340	Crown Land

This Planning Report and accompanying material distinguish between the NTURA Site boundary, and the Biodiversity Conservation Assessment Area (BCAA). The BCAA is the NTURA Site plus the parcel of land owned by the FLALC immediately to the north, as illustrated in **Figure 4**.

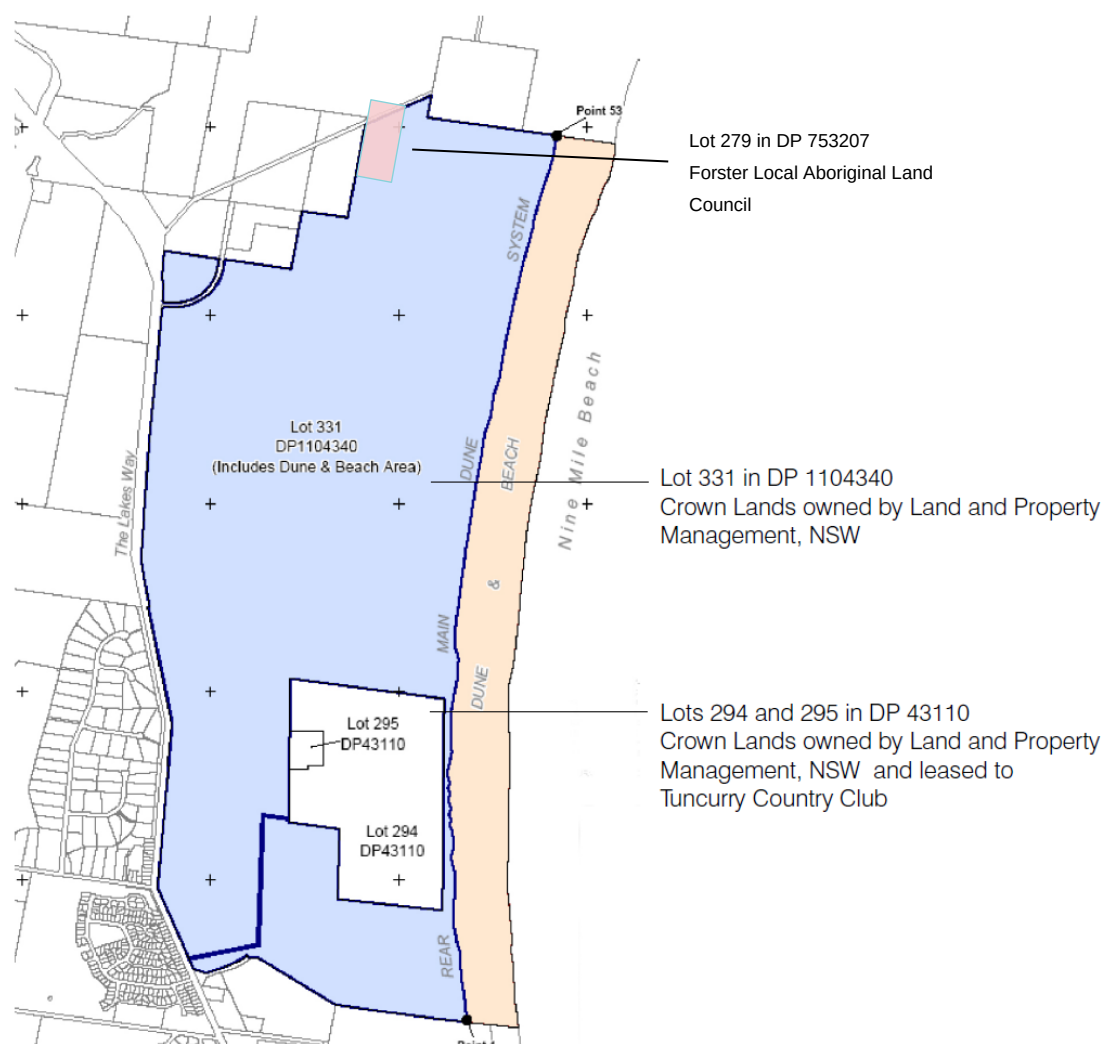


Figure 4 Land ownership details

Source: Allen Jack + Cottier

3.4 Existing Site Characteristics

3.4.1 Development

NTURA Site

The Tuncurry Golf Course is the major developed feature of the NTURA Site, comprising an 18-hole golf course, clubhouse and ancillary facilities which occupy a developed footprint of approximately 60 ha. The Tuncurry Golf Course is accessed from a tar sealed driveway to Northern Parkway to the south.

Surrounding Areas

The NTURA Site is bounded by the existing Tuncurry urban area to the south, Nine Mile Beach to the east, The Lakes Way to the west and the Darawank Nature Reserve and Tuncurry Waste Management Centre to the north.

MidCoast College and North Coast TAFE Great Lakes Campus are located immediately to the south of the NTURA Site across Northern Parkway, with the North Tuncurry Sports Complex centred around the northern end of Beach Street adjoining the NTURA Site's south-east corner. Development across The Lakes Way to the south-west and west is comprised of low-density detached dwelling houses and rural-residential properties.

3.4.2 Topography, Slope and Stability

The topography within the NTURA Site is characterised by undulating aeolian dune systems, with no distinct surface drainage paths as they are shaped by the wind rather than water. The dunes are stabilised by vegetation and are typically orientated along a north-south alignment, parallel to the coast. Spacing between dune crests ranges between 20 and 100m, while the variation in height between a peak and a corresponding trough typically ranges between 0.5 to 2.5m.

Surface levels within the NTURA Site range between 2 to 10m AHD. The highest levels are associated with the fore dune system which is offset from the beach by approximately 100 to 150m. The hind dune area (located to the west of the fore dune system), is characterised by lower topography, with levels typically ranging between 3 to 7m AHD.

The topography is generally higher in the western portion of the hind dune area than the eastern portion.

Geological mapping and sub-surface investigations have been undertaken by Worley Parsons, Douglas Partners and Peter H. Stitt (refer to Soil Contamination Investigation at **Appendix F**, Geotechnical Investigation at **Appendix G**, Technical Note 4 – Heavy Mineral Investigation at **Appendix H** and Coastal Processes Hazards and Planning Study and Addendum at **Appendix I1** and **Appendix I2**). The investigations indicated NTURA Site and surrounding area is predominately made up of quartz marine sands with the deposits being laid during the Holocene period. No offshore rocky features exist in the proximity of Nine Mile Beach, with the entire beach made up of exposed marine sands.

The majority of the NTURA site is classified as either very low or low risk with respect to stability, with construction considered to be relatively straight forward. Slope stability is not considered to present a significant site constraint.

3.4.3 Subsurface and Groundwater Conditions

The NTURA Site is located above an unconfined coastal aquifer. The NTURA's topography and sandy conditions means that all rainfall is either lost to evapotranspiration processes or drains vertically through the upper sand layers into the aquifer through a process referred to as recharge. Water leaves the aquifer through both evapotranspiration processes and lateral groundwater flow to the east (to the Pacific Ocean) and the west (the Wallamba River), as shown in **Figure 5**. The dynamics of these processes vary depending on the groundwater flow characteristics, prevailing rainfall and evapotranspiration rates.

Detailed groundwater monitoring and analysis has been undertaken by SMEC in the preparation of the NTURA to inform the Master Plan and is provided at **Appendix J** and discussed further in the Integrated Water Cycle Management Strategy (**Appendix P1**) and Addendum (**Appendix P2**). In summary:

- an east-west groundwater divide is located in the western portion of the NTURA Site, with groundwater to the east of the divide flowing into the Pacific Ocean to the east and groundwater to the west of the divide flowing into the Wallamba River Estuary to the west;
- peak groundwater levels are predicted to range between 3.75m AHD and 4.75m AHD within the development area depending on rainfall and recharge events;
- groundwater levels were consistently higher in the western portion of the NTURA Site than the eastern portion;
- groundwater levels rise as a result of recharge during high periods of rainfall, and surface ponding can be observed within the NTURA Site during these times.

The subsurface and groundwater conditions necessitate an innovative design solution to manage groundwater flooding.

Existing Conditions Groundwater Regime

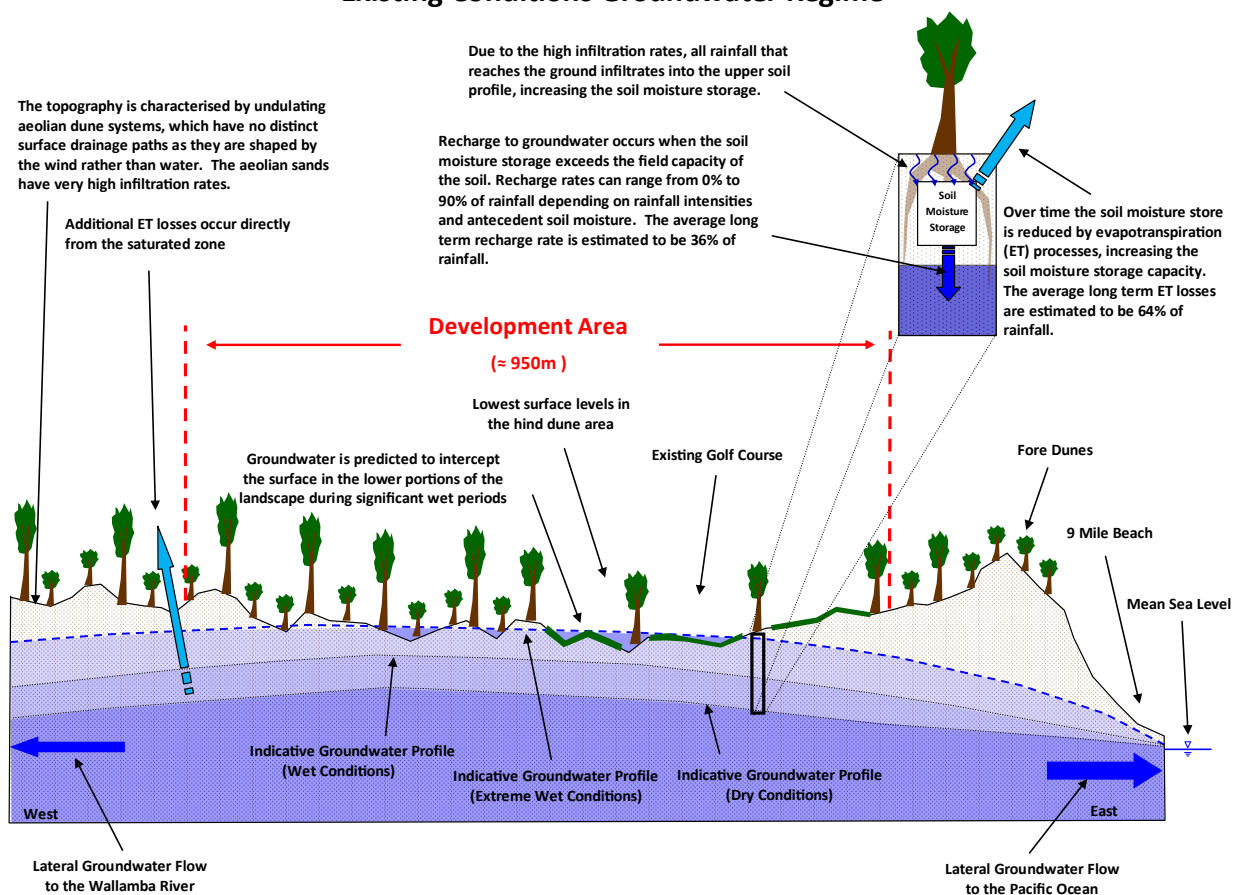


Figure 5 Existing groundwater conditions regime

Source: SMEC

3.4.4 Flooding and Stormwater Drainage

The Lower Wallamba River Flood Study undertaken by WMA Water (**Appendix K**) indicates that the NTURA Site is not affected by flooding from the Wallamba River during storm events up to and including the Probable Maximum Flood. Council's adopted Wallamba Flood Study dates back to 1985, and accordingly the Lower Wallamba River Flood Study prepared for the NTURA is a more contemporary investigation of the Site. It is understood that Council engaged WMA Water (the authors of the North Tuncurry Lower Wallamba River Flood Study provided at **Appendix K**) to prepare an updated flood study for the Wallamba River catchment in 2014, however, it is understood that this study was never publicly exhibited or adopted by Council.

Since the finalisation of **Appendix K**, the Australian Rainfall and Runoff (AR&R) methodology which is a key data input has been revised twice – in 2016 and 2019. State Government Guidelines acknowledge that the AR&R methodology revisions may not apply in some instances. In the case of the NTURA Site, the AR&R updates generally mean slightly lower flood levels for the NTURA Site, however Landcom will be updating **Appendix K** to consider the revisions post exhibition when flooding investigations can be considered holistically in the context of any other feedback received during the consultation process, and in consultation with DPIE's Biodiversity Conservation Division (BCD).

As mentioned above, rainfall across the majority of the NTURA Site currently infiltrates into the ground. Rainwater collected from hard surfaces within the golf course is currently channelled to a small dam used for irrigation.

Further information regarding the existing flooding and drainage environment is contained within the Integrated Water Cycle Management Plan (**Appendix P1**) and Addendum Report (**Appendix P2**).

3.4.5 Contamination Characteristics

A Soil Contamination Investigation report has been prepared by Worley Parsons (**Appendix F**) which draws on the findings of previous Phase 1 and Preliminary Phase 2 Environmental Site Assessments for the Site. Widespread contamination has not been found to be present, with elevated iron levels being consistent with the geology of coastal environments. There are some localised elevations in concentrations of petroleum hydrocarbons and nickel and it is expected that there may be some additional localised contamination associated with illegally dumped waste within the site.

A detailed acid sulphate soils investigation has also been undertaken (**Appendix W**), which confirms low potential acidic conditions to be present on the NTURA Site – see further discussion at Section 7.12.

On this basis, site specific remediation may need to be undertaken during future development, however there is nothing precluding the rezoning of the NTURA Site from proceeding based on the information collected to date.

3.4.6 Ecological Characteristics and Values

The NTURA site is predominately characterised as re-growth coastal and heath vegetation.

There are no Endangered Ecological Communities (EECs) listed under the *Threatened Species Conservation Act 1995* (NSW), *Biodiversity Conservation Act 2016* (NSW) or the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). The assessments undertaken for flora and fauna within the NTURA Site have identified three vegetation communities that have regrown since the cessation of commercial plantation operations in the early 20th century Blackbutt –Smooth-barked Apple open forest, Banksia dry shrubland and Coast Banksia – Coast Wattle dune scrub.

The Tuncurry Midge Orchid (*Genoplesium littorale*) (TMO) is a small terrestrial orchid growing between 10-30cm in height which is currently known to exist only within a small area of the NSW mid-north coast. TMO is listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999* and *Threatened Species Conservation Act 1995*. Based on the result of targeted ecological surveys within the BCAA, it is likely that there are approximately 2,433 TMO plants present, the majority of these concentrated in disturbed areas such as the north-western corner, the vicinity of the electricity transmission lines (see **Section 3.4.11**) and along access tracks. No other threatened flora species have been recorded within the NTURA Site. The distribution of TMO plants is also shown in **Figure 6**.

A total of 14 threatened fauna species listed in the *Threatened Species Conservation Act 1995* and/or the *Environment Protection and Biodiversity Conservation Act 1999* have been recorded in the site, comprising three bird species, three marsupial species and six bat species.

The Biodiversity Certification Assessment Report and Biodiversity Certification Strategy at **Appendix Q** provides full details of the NTURA Site's flora and fauna.

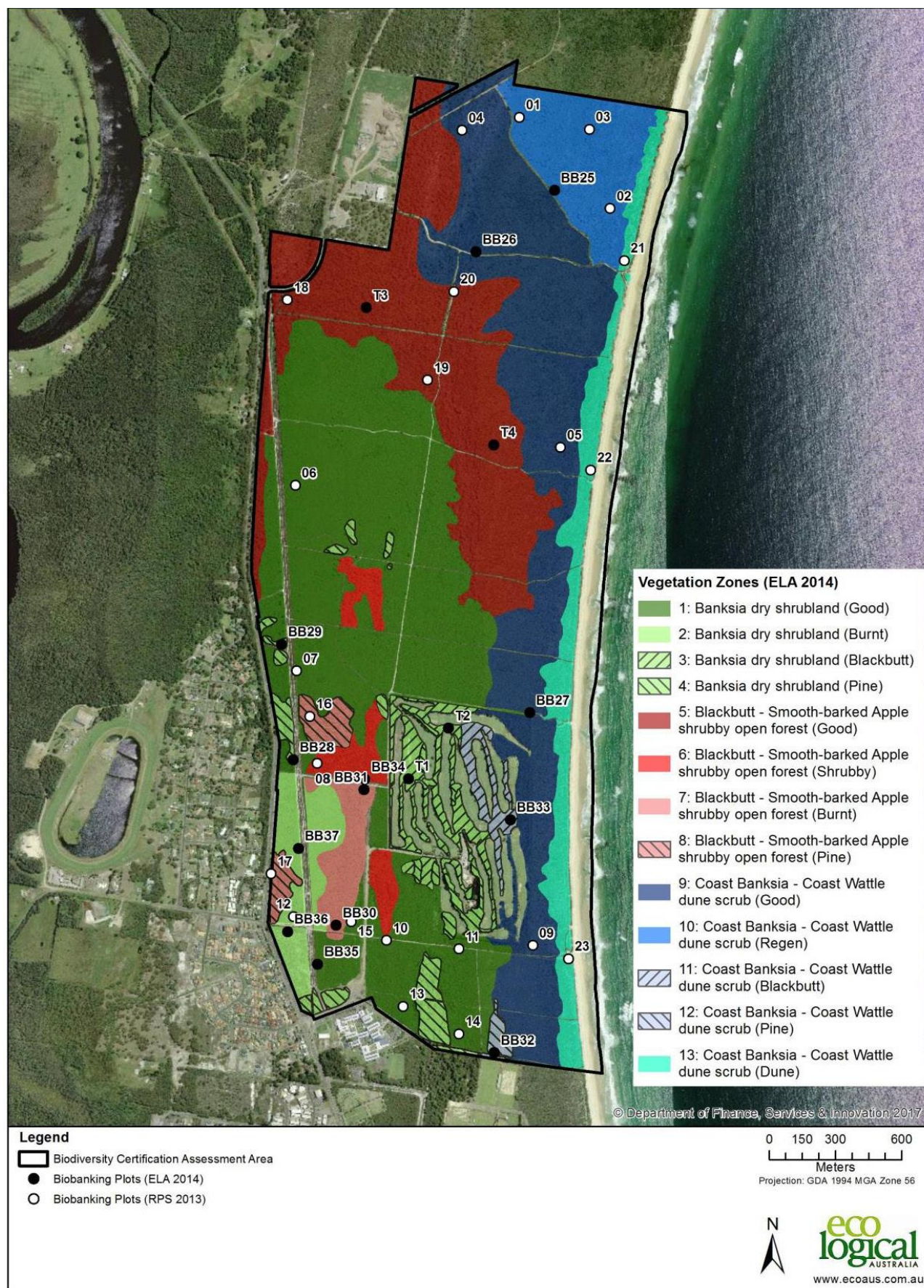


Figure 6 Vegetation community distribution

Source: Eco Logical Australia, North Tuncurry Biodiversity Certification Assessment Report

3.4.7 Bush Fire

As discussed in **Section 3.4.6** above, the NTURA Site is characterised by a range of existing vegetation types, consistent with predominately vegetated areas within the locality to the north and west. As a result, the NTURA Site is subject to potential threats from bushfires and there is evidence of fires directly affecting the NTURA Site in the past.

3.4.8 Minerals

The area of coastline between Newcastle and South East Queensland hosted a significant mineral sand mining industry in the 1960s and 1970s based on valuable heavy mineral sand accumulations. The NTURA Site has previously been the subject of resource exploration for valuable mineral sands under an exploration license issued by the NSW Department of Primary Industries.

A Heavy Minerals Investigation Report prepared by Peter Stitt & Associates (**Appendix H**) has identified two strandlines containing 3 million tonnes of mineral bearing sands within the western edge of the Site adjacent to The Lakes Way. It is estimated that these sands contain a recoverable mineral resource of approximately:

- 4,500 tonnes of Rutile
- 4,500 tonnes of Zircon
- 1,700 tonnes of Ilmenite

However, recovery costs and environmental conflicts render extraction of these resources uneconomic.

3.4.9 Transport, Traffic and Access

At present road and pedestrian access to the NTURA Site is only available formally via The Lakes Way at the Northern Parkway access to the Tuncurry Golf Course. However, a number of access roads and informal tracks also traverse the site and provide access to and from the electricity transmission lines and Nine Mile Beach.

Road Network Performance

The Lakes Way (known as Manning Street adjacent to the NTURA Site and south of the Chapmans Road intersection) is a State Road which forms the western boundary. The road is generally divided with one to two lanes in each direction and links Bulahdelah, Smiths Lake, Forster, Tuncurry, Hallidays Point and Rainbow Flat, with connections to the Pacific Motorway at both its northern and southern ends. Traffic analysis undertaken by AECOM (**Appendix L**) indicate that The Lakes Way operates with spare capacity in the vicinity of the NTURA Site, with existing peak hour traffic volumes generally representing approximately 75-85% of existing capacity through Tuncurry south of Grey Gum Road. Additional road capacity is experienced north of Northern Parkway and to the south across the Wallis Lake Bridge.

The Northern Parkway adjoins the south-west corner of the NTURA Site and provides access to the Tuncurry Golf Course within the NTURA Site. The Northern Parkway is classified as a Local Road and connects to The Lakes Way via a signalised intersection (refer to **Figure 7**).

AECOM undertook traffic analysis for a number of nearby key intersections using SIDRA 8.0, the results of which are summarised in **Table 2**. The traffic study found that local intersections are generally operating at a good or acceptable level of service with spare capacity.

Landcom understands that TNSW has recently provided the DPIE with more recent albeit confidential modelling specifically related to Wallis Lake Bridge, which is discussed further at **Section 7.7**.

Table 2 Summary of Intersection Performance

Intersection	Level of Service	Degree of Saturation
The Lakes Way/Chapmans Road	LoS A-B, good operation/ good with acceptable delays and spare capacity	AM – 0.422 PM – 0.377
The Lakes Way/Northern Parkway/Grandis Drive	AM: LoS B, good with acceptable delays and spare capacity PM: LoS A, good operation	AM – 0.5357 PM – 0.707
The Lakes Way/ Grey Gum Road	LoS A-B, good operation/ good with acceptable delays and spare capacity PM – LoS A, good operation	AM – 0.504 PM – 0.564

Source: AECOM

**Figure 7 Key State and Local roads**

Source: AECOM

Planned Infrastructure Upgrades

The Draft Great Lakes Development Contribution Plan 2014 identifies a number of potential future road infrastructure upgrades in the vicinity of the NTURA Site (illustrated in **Figure 8**) which include:

- Construction of two additional lanes along The Lakes Way (Manning Street) from Grey Gum Road to approximately 250m north of Chapmans Road;
- Upgrade to the intersection of Manning Street/Grey Gum Road to a roundabout;

- Upgrade to the intersection of Manning Street/Chapmans Road to a roundabout;
- Extension of Beach Street from North Street to Northern Parkway; and
- Duplication of the Wallis Lake Bridge.



Figure 8 Planned road network upgrades in Great Lakes DCP 2014

Source: AECOM

Existing Public Transport Services

The nearest train station to the NTURA Site is Taree Railway Station, which is located approximately 30 kilometres to the north. Busways operates coach services between Taree Railway Station and Newcastle via Broadmeadow Railway Station and Tuncurry, with 3 daily services in each direction on weekdays and 2 services in each direction on Saturdays and Sundays. At present, the coach stop in Tuncurry is located at Beach Street, between Manning Street and Parkes Street.

Forster Coaches operates six regular local bus routes in the area (Routes 303 – 308). Routes 304 (Stockland Mall – Tuncurry) and 308 (Forster – Gloucester) operate on The Lakes Way along the western edge of the NTURA Site, with services predominately operating within the middle of the day.

Pedestrian and Cycling Facilities

There are currently limited pedestrian facilities in the immediate vicinity of the NTURA Site. Local streets in the area generally have pedestrian footpaths and, in some cases, shared paths. Off-road shared paths for pedestrians and cyclists are provided along parts of The Lakes Way, and the 'Coastal Cycleway' shared path runs from Forster across the Wallis Lakes Bridge to The Lakes Way via Beach Street and Park Road (**Figure 9**).



Figure 9 Tuncurry-Forster cycle routes

Source: AECOM

3.4.10 Heritage

Indigenous Cultural Heritage and Archaeology

An Aboriginal Cultural Heritage Assessment Report (ACHAR) was prepared by Indigenous Cultural Resource Management Services (ICRMS) (**Appendix M**) in 2011 in accordance with the OEH 'Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation'. An Aboriginal Archaeological Survey of the Site has also previously been undertaken by Theresa Bonhomme (**Appendix N**) and was used for reference purposes in the preparation of the ICRMS report. The ACHAR was peer-reviewed by RPS Group in 2019 and 2021 to make recommendations that the ACHAR remains suitable for further planning purposes (**Appendix M**), which includes recommendations for further post-exhibition consultation and investigation as outlined in **Section 7.10**.

At the time of first European settlement the Tuncurry/ Darawank district was inhabited by the Kattang speaking peoples of the Worimi and Biripi tribes. Available information suggests that a seasonal pattern of movement and resource exploitation was followed, but this may not necessarily have been the case prior to European contact.

Two known Aboriginal archaeological sites within the NTURA Site are registered on the AHIMS database. Based on the understanding of Aboriginal use of the area, heavy vegetation cover and natural coastal processes, there is also potential for more Aboriginal sites to be present within the NTURA Site. In particular, beach fore dunes and back slopes are considered to have high archaeological potential, as are the western-most sand dunes overlooking the Wallamba River wetlands. The inner sand barrier is considered to be of low archaeological significance. There is potential within all of these areas for a range of archaeological sites, including midden deposits, open artefact scatters, burials and isolated finds.

The 2021 ACHAR Addendum was prepared as the 2011 and 2019 ACHARs described AHIMS site cards 38-2-0025 and 38-2-0026 that were outdated and contained a number of superseded references. The 2021 ACHAR Addendum consequently updated the AHIMS site cards and other outdated sections to ensure compliance with the Code of Practice for Archaeological Investigations of Aboriginal Objects. The 2021 ACHAR Addendum also reflects more recent consultation with indigenous community members and Registered Aboriginal Parties. New or additional indigenous cultural heritage items or values were not identified as a result of the 2021 ACHAR Addendum's preparation.

European Cultural Heritage

A European Cultural Heritage Assessment has been prepared by RPS (**Appendix O**) based on a desktop assessment of historical information and a survey of the NTURA Site. There are no statutorily listed heritage items within or adjacent to the NTURA Site.

Between 1913 and 1938 the study area was established as a prison labour camp to develop the first commercial pine plantation in NSW. Subsequent to the closure of the camp, in 1939 a large bushfire destroyed most of the plantation but the camp was not damaged, however structures associated with the camp were removed in the 1950s.

The southern portion of the NTURA Site was developed as an airstrip in the early 1970s for use by the Tuncurry-Forster Aero Club but most likely ceased operation in 1980.

No potential historic or archaeological sites associated with the prison camp or the Aero Club were identified within the NTURA Site during surveys, however, the dense vegetation means that there is still potential for such items to be present.

3.4.11 Utility Services Infrastructure

A 66kV power line traverses the Site in a north-south direction running along the western edge of the site parallel to The Lakes Way. Vegetation in the vicinity of the electricity transmission lines has been actively managed through slashing, and a number of access and management tracks associated with the power lines are also present throughout the site.

Electricity mains supply, water mains, sewer mains and telecommunications services are available along The Lakes Way (western) boundary of the NTURA Site. The required electricity, water, stormwater and other utility services are currently not available within the NTURA Site, other than existing services to the golf course.

3.4.12 Existing Planning Controls

The following planning controls apply to the site under the Great Lakes Local Environmental Plan 2014:

- mix of R2 Low Density Residential, RU2 Rural Landscape, RE1 Public Recreation, E2 Environment Conservation and SP2 Infrastructure zones (**Figure 10**);
- minimum lot size of 40,000m² (with a small area in the south-west of the site zoned R2 Low Density Residential having a minimum of 450m²);
- maximum building height of 8.5m; and
- maximum floor space ratio of 0.4:1.

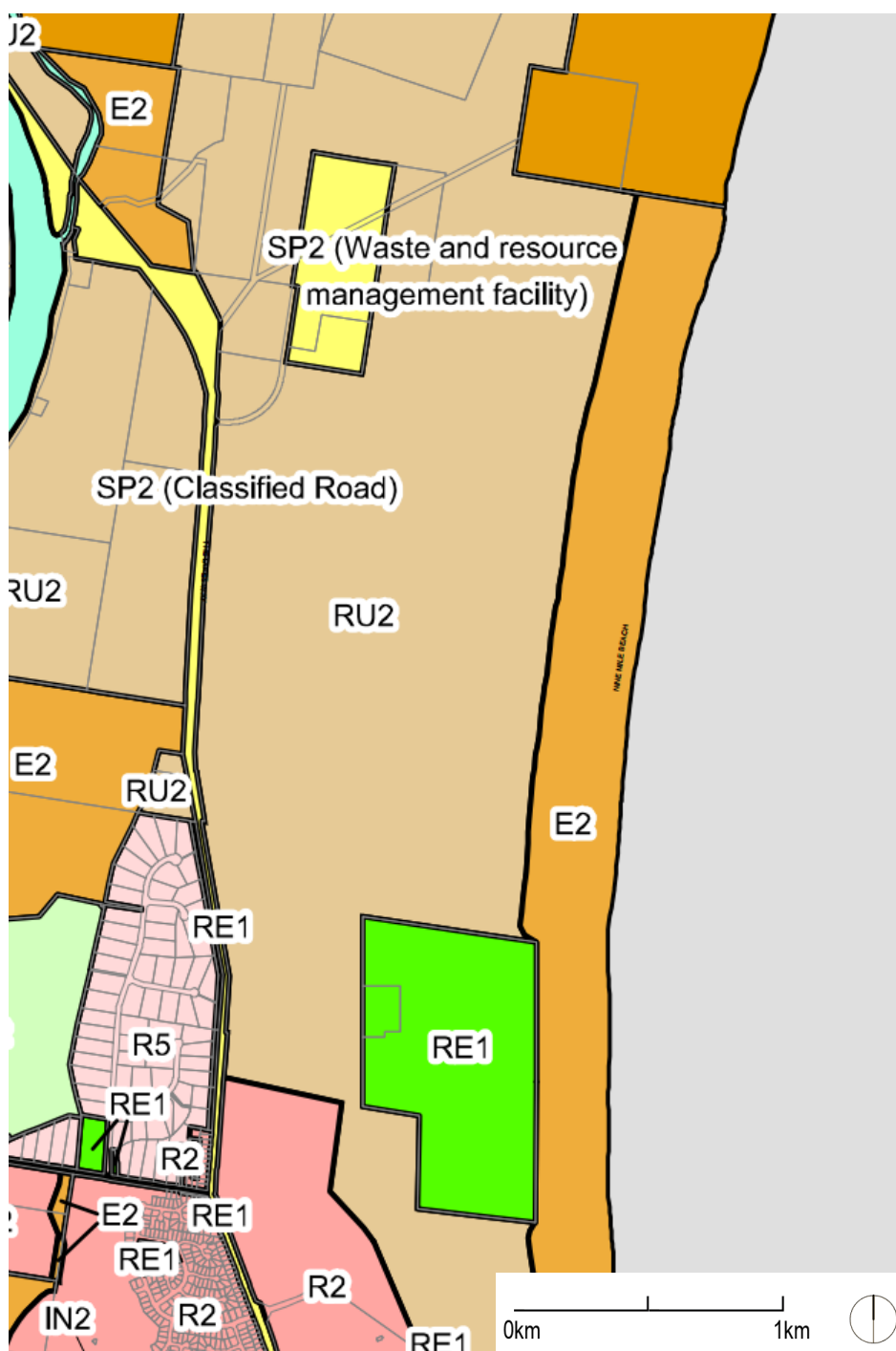


Figure 10 Land zoning map extract from Great Lakes LEP 2014

Source: Great Lakes Local Environmental Plan 2014

3.4.13 Urban Capability Land Analysis

As demonstrated throughout this section, the NTURA Site is characterised by several physical and environmental constraints. **Figure 11** provides an overall summary of the key environmental constraints identified as part of the site analysis. In addition to these constraints, groundwater is also a significant constraint within the NTURA Site and is discussed in **Section 3.4.3**.

The constraints that do exist on the NTURA Site have informed the Master Plan and can be integrated, managed and/or conserved as part of this rezoning proposal and future development applications.



Figure 11 Urban Capability Land Analysis

Source: Ethos Urban

4.0 The NTURA Master Plan

This section provides an overview of the Master Plan for the NTURA, as detailed in full in the Urban Design Report prepared by Roberts Day (**Appendix B**).

The Master Plan responds to the Site Analysis at **Section 3**; identifies the desired parameters and outcomes for future development; and describes key elements of the environmental strategies that are to be implemented. In addition, the Master Plan provides an urban structure that addresses the manner in which site wide environmental issues and relationships including conservation, water cycle management, coastal erosion, infrastructure servicing and heritage protection have been resolved.

Detailed planning and design for neighbourhoods and urban development will be addressed as part of a series of future applications for subdivision, open space, conservation and infrastructure works that will be submitted over time, consistent with the parameters and outcomes for development identified in the Master Plan. Each of these future applications will be required to be generally consistent with the relevant principles established within the Master Plan, but also comply with the zoning and development controls established for the NTURA Site.

The proposed amendments to the existing land use zones will be affected through the rezoning of the NTURA Site and inclusion of new controls in the Great Lakes LEP 2014. The proposal for the amendment to the Great Lakes LEP via a SEPP is included at **Section 6**.

The proposed development contribution strategy including the scope of local infrastructure delivery is included at **Section 5**.

4.1 Urban Design Concept & Key Principles

The NTURA Master Plan is shown in **Figure 12**.

The NTURA proposes a total of approximately 2,123 residential dwellings comprising of both low and medium densities to accommodate an expected population of 4,500 residents. These dwellings surround the remodelled Tuncurry Golf Course and are bordered by Nine Mile Beach to the east and The Lakes Way in the west. Medium density dwellings are proposed in proximity to the new centre and in a second smaller precinct to the south, while Larger lots are proposed in the northern part of the site to provide a transition to the conservation area.

The Master Plan includes the following key elements:

- Residential flat buildings in proximity to the proposed B2 Local Centre Zone and in a smaller precinct to the south.
- Water management basins and ephemeral zones.
- A remodelled Tuncurry Golf Course integrated into the development.
- A new re-positioned golf clubhouse to form part of the proposed centre.
- A looped road network for future bus routes.
- Development of walking and cycling corridors that expand on existing coastal infrastructure in Forster-Tuncurry and link key external destinations with future NTURA destination to create the 'Tuncurry destination loop'.
- Three external site access points at the Northern Parkway, Beach Street and a new northern access.
- Integration of a new surf club, community centre and beach access within the proposed centre.
- Business and Industrial areas to provide employment opportunities.
- A series of high quality parks and open spaces.
- A 4ha TMO reserve to the north of the golf course.

A key feature of the proposed Master Plan is the addition of water management basins and ephemeral zones, mostly surrounding the remodelled Tuncurry Golf Course. These water management basins are necessary from a

drainage perspective and have been integrated into the proposed Master Plan with consideration given to their potential as barriers for transport and access. The location of these water management basins and ephemeral zones means they do not substantially intersect or cut across the site, acting to minimise the impacts on the transport network and the requirement of bridge infrastructure. They also provide an effective buffer between residential areas and the golf course thereby minimising the opportunities for land use conflict, and also enhance connectivity by providing opportunities to provide a continuous pedestrian/cycle shared network.

A centre designed to function as a 'community hub' with cafés, a neighbourhood supermarket and beach access is proposed in the eastern part of the site, and will also include a village green, mobile surf club, community centre and new golf clubhouse. The indicative B2 Local Centre Zone Master Plan is shown in the NTURA DCP (**Appendix A**).

The Master Plan, supported by the land use controls proposed in this Study, is considered to represent a positive outcome from an urban design and land use planning perspective as it:

- presents an integrated vision for building design, streetscapes and public open space to create an environment with good urban amenity;
- provides for a broad range of housing types suitable the needs of a diverse range of ages, lifestyle and socio-economic groups;
- concentrates denser urban forms in the vicinity of the B2 Local Centre Zone, and in proximity to higher amenity (e.g. adjacent to local open space and the water management basins), and proposed public transport access, in order to improve connectivity within the Centre and make efficient use of proposed infrastructure;
- concentrates essential local retail services, community facilities and public facilities within an accessible centre which meets the needs of future residents and compliments the existing retail hierarchy within Forster Tuncurry.

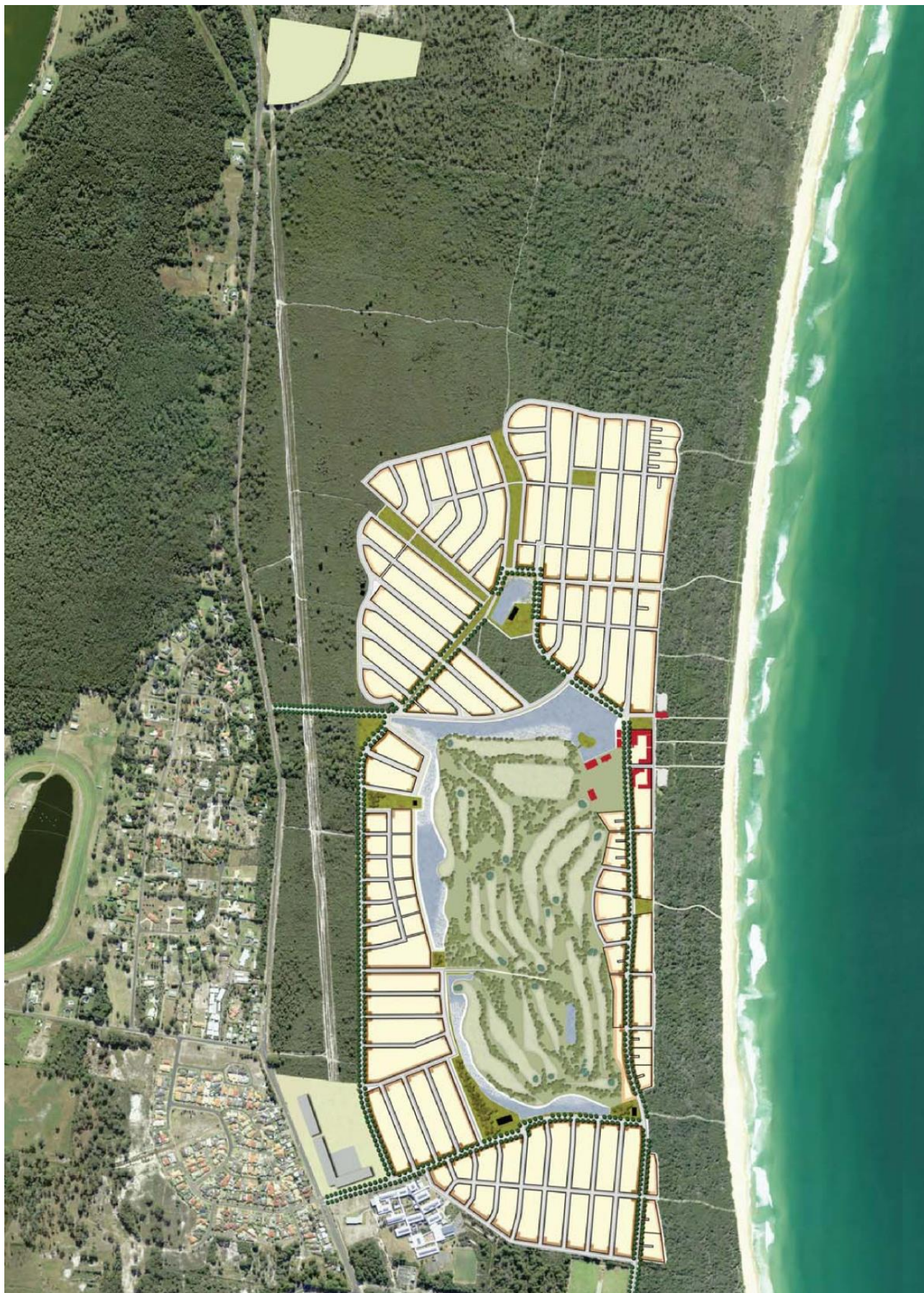


Figure 12 NTURA Master Plan

Source: Roberts Day

4.2 Vision and Desired Outcomes

NTURA is envisaged as a model for sensitive and innovative coastal development. It would be an accessible and diverse seaside village with a mix of retail, employment, housing, open space and community uses focussed around a vibrant mixed use heart. Development would embrace the cultural heritage of the traditional aboriginal owners of the land and integrate with surrounding urban lands as well as the natural qualities of the location. It would provide housing choice and affordability complemented by new local community, recreational and business services.

Table 3 outlines the desired outcomes for the Master Plan.

Table 3 NTURA Desired Outcomes

Element	Desired Outcomes
Urban form	1. A compact, walkable community comprising distinct but connected residential neighbourhoods, a centrally located B2 Local Centre Zone and supporting employment precincts that protect and engage with its environmentally sensitive coastal setting 2. The community integrates with and complements Tuncurry, representing the final and northern-most sea-side development that is contiguous to the existing urban footprint 3. All lots front a street connecting visually and / or physically to the foreshore, conservation areas, Mt Talawahl, the reconfigured Golf Course, park and / or created water management basins
Housing	4. A community of approximately 2,123 dwellings 5. A range of lot sizes, housing types and densities to provide housing choice and affordability 6. Higher density housing is located within the centre and close to areas of highest amenity such as parks and water management basins. 7. Small lots are distributed in clusters and generally face each other to 'complete' streets and create consistent character areas throughout the site and are integrated with the design of neighbourhoods 8. Similar lot sizes and typologies are mirrored across streets to encourage complete streets and consistent streetscape character 9. Innovative housing types and designs are encouraged, particularly those that reflect the coastal character of the site 10. Large lots in the north of the site to provide a transition to the conservation area
B2 Local Centre Zone	11. The centre complements and does not adversely impact on the viability of the Forster/Tuncurry Town Centres 12. The centre is the heart of the community providing a mix of retail, business, residential and community uses that serve the day to day needs of residents, and creates a destination in its own right to supplement the existing tourist attractions of Forster Tuncurry 13. Layout and design creates a comfortable and attractive built form and public domain that encourages social gathering and interaction, facilitates connections between the golf course and beach and reflects the coastal character of the site
Community dune park	14. Provides a community and open space focal point for the southern neighbourhood, including spaces for temporary sales and display, food and beverage and temporary community centre uses
Employment precincts	15. A northern and southern employment precinct provide for a range of low impact local employment opportunities in an environmentally sensitive setting 16. Flexibility is provided in the southern employment precinct for a wide range of employment opportunities such as educational, health and other institutional uses
Transport and accessibility	17. A hierarchy of roads and paths provide clear and convenient links throughout the community, particularly between key urban places 18. An integrated movement network provides equitable access and connects to existing assets in Tuncurry 19. Walking and cycling is encouraged through a connected, safe and comfortable pedestrian and cyclist network, and the incorporation of innovative design measures in the road network that prioritise pedestrian and cyclist movement
Community	20. Community spaces are provided and have a distinct identity 21. Community and social infrastructure, including community facilities, regional and local parks and public art, is provided 22. Community facilities and gathering places are located to create points of visual and experiential interest to encourage walking further and contributing to a healthy community 23. Memorable and enduring places are provided as the basis for local identity and community building

Element	Desired Outcomes
	24. Streets and public spaces are designed for formal and informal engagement 25. A safe and secure environment with high levels of passive surveillance of the public domain is created
Open space	26. An interconnected network of public open spaces connects with and extends the character of surrounding environmentally sensitive areas into the community and provides for a variety of recreation activities 27. Parks are co-located with water management basins
Golf course	28. The existing golf course is retained and enhanced as a central feature of the community 29. Opportunities for pedestrian and cyclist connections between the local centre and golf course are provided
Heritage	30. Important aboriginal heritage is celebrated in public open space and appropriate buffers are provided around known heritage items 31. The importance of the site to its indigenous traditional owners is acknowledged and celebrated throughout the public domain 32. References to the site's former use as a plantation forest are incorporated at appropriate locations in the public domain
Water	33. Water is celebrated as a prominent feature of the site and is a key contributor to the creation of a unique, coastal sense of place 34. Stormwater quality and quantity, including protecting the health of the Tuncurry Aquifer, is managed through an integrated water management system that includes a series of water management basins and ephemeral zones
Sustainability	35. Core biodiversity areas are protected and where possible enhanced 36. The northern portion of the site becomes a registered Biodiversity Stewardship site contiguous with Darawank Nature Reserve. 37. Two fingers of land stretching southwards from the Darawank Nature Reserve frame the community and protect key populations of the Tuncurry Midge Orchid, Nine Mile Beach and its dunal system and protect the scenic amenity of the site 38. Water sensitive urban design measures are incorporated, including options for water supply, wastewater and stormwater servicing 39. Lots are oriented to optimise solar access

4.3 Sustainability

Sustainability is a fundamental element of NTURA. Sustainability objectives and initiatives are included in the sections below.

Environmental Sustainability

- Retention of core biodiversity areas and provision of conservation and open space connectivity with a long-term ownership and maintenance regime.
- Provision of off-site biodiversity conservation offsets within the region in order to ensure the protection of significant vegetation communities at a regional scale.
- Water sensitive urban design measures that will result in improvement in water quality, incorporate the groundwater characteristics of the NTURA Site and integrate with urban design.
- Adoption of potable water demand reduction strategy and identification of integrated options for water supply, wastewater and stormwater servicing.
- Reduction in energy demand by facilitating orientation of lots that can ensure optimal solar access.
- Reduction in travel distances and improved mode share split by:
 - establishing a centre that services the local population but does not compete with the Forster-Tuncurry townships;
 - locating related land uses centrally to maximise the opportunity for multipurpose trips;

- providing a street network with a high level of connectivity and permeability which encourages walking and cycling;
- locating public transport corridors within 400 metres walking distance of the majority of dwellings;
- providing an interconnected network of pedestrian priority streets and open space corridors to encourage walking between residences and facilities; and
- providing a system of on-street and off-street cycleways to encourage bicycle usage.
- The Lakes Way will provide a high level of accessibility to and from other employment lands with job opportunities within the NTURA. The NTURA therefore offers jobs within close proximity to dwellings, and within 10 to 15 minutes of the main Forster and Tuncurry townships.

Social Sustainability

The social sustainability objectives for NTURA are:

- Encourage diversity among new residents, in terms of life cycle stage, household type and socio-economic profile, including:
 - Provision of some smaller and more affordable dwelling types and diverse housing typologies;
 - Provision of 7.5% affordable housing within the Site consistent with Landcom's Housing and Affordability and Diversity Policy, whereby Affordable Housing most commonly refers to rental properties managed by Community Housing Providers and costs less than 30% of residents gross household income;
 - In addition to any State Environmental Planning Policy or legislative requirements, provision of 20% of all dwellings are 'Design' and 'As-Built' Liveable Housing Australian Silver Certified;
 - Provision of 10-15% of diverse housing across the Site consistent with Landcom's diverse housing policy (for example: lower cost market housing, retirement housing and offer housing types that support housing choice); and
 - Continuing to explore opportunities to attract a provider for aged care facilities or independent living units
- Promote the health, well-being and quality of life of new residents of the development;
- Provide access to social infrastructure to meet the needs of the new population;
- Provide access to employment, education, and other facilities and services in the wider region;
- Create a development that has strong character, identity and sense of place;
- Promote community interaction, social networks and connections, and the establishment of community activities and organisations;
- Provide opportunities for residents to participate in planning and developing their community;
- Encourage residents to develop stewardship over open space and public domain areas;
- Ensure physical integration and accessibility between the site and surrounding neighbourhoods;
- Promote social cohesion and integration between NTURA and surrounding neighbourhoods; and
- Ensure the development provides benefits to the wider community.

The full suite of initiatives and actions Landcom is committed to progressing to successfully implement these objectives are provided in the Social Planning Report prepared by Elton and provided at **Appendix T**.

4.4 Land Uses and Distribution

4.4.1 Residential

Dwelling Yield, Typologies and Housing Diversity

The Master Plan will deliver approximately 2,123 dwellings over the next 30 years within a footprint of approximately 256 ha (including the golf course). As described in **Section 4.1** and **4.2**, the Master Plan is underpinned by a series of connected residential neighbourhoods, focussed around open space or a community hub and the remainder of the site is proposed to be set aside for conservation purposes.

A key objective of the NTURA is to provide a new housing and dwelling mix that responds to the changing demographic and housing preferences of the area and which delivers housing that suits all types of family units, all the while being appropriately priced to be accessible to the wider mid North Coast market. Each residential neighbourhood is accordingly proposed to provide a range of lot sizes capable of accommodating a variety of housing types, including attached dwellings, dual occupancies, dwelling houses, multi dwelling housing, residential flat buildings, secondary dwellings, seniors housing and shop top housing. The proposed land uses will determine the location of these housing types (refer to **Section 6.1.4**).

In addition to secondary dwellings, a key component of the NTURA is the ability to deliver separately titled studio dwellings. The ability to be able to strata title studio dwellings is a critical outcome for Landcom, and will contribute to the delivery of the following important housing objectives:

- recognising changing and emerging family and household composition;
- promoting independent living;
- providing ageing in place and whole of lifecycle opportunities; and
- assisting with mortgage repayments by enabling the renting out of the studio dwelling or the principal dwelling.

The translation of 'studio dwelling' into a land use term is further discussed at **Section 6.1.4**.

The Master Plan has been specifically designed to offer a mix of lot sizes including larger lots, medium lots and a proportion of relatively smaller lots and apartments in areas of high amenity. Overall, two-thirds of all lots within the NTURA Site would be larger than 550m² and approximately one-fifth of lots would be smaller than 450m², which is smaller than traditionally delivered to the market in the region. These lot types are not typically present in the MidCoast LGA or the mid North Coast subregion due to existing planning controls.

The mix of housing lots and types will encourage population diversity and help create a socially balanced and stable community. They will also provide housing choice to satisfy household structures at differing life cycle stages, and with varying socio-economic circumstances and lifestyle preferences. The NTURA Master Plan demonstrates that:

- the delivery of a diverse mix of lot sizes and housing typologies can be effectively achieved in an integrated, connected development pattern to meet the needs of varying age, lifestyle and family structures;
- well-designed compact housing directly responds to the increasing demand for a range and mix of dwelling typologies which can accommodate all forms of the family unit, and particularly single person households;
- the development of medium density areas with high amenity can be achieved through a small lot housing concept, which whilst different to traditional subdivision layouts, is capable of delivering an attractive and high quality urban outcome and high levels of amenity for future residents;
- a range of housing types at affordable price points are required to be provided to enable those portions of the market who traditionally could not enter the residential market to purchase a home;
- the proposed subdivision will allow for the future development of the site in accordance with the provisions of the DCP and master plan; and
- an effective and efficient approval and delivery process for housing of all typologies can be achieved through well-conceived subdivision design and use of the DCP controls to guide housing design.

Figure 13 indicatively illustrates how the 2,123 dwellings are intended to be delivered within the NTURA site across varying lot types. For the purposes of the Master Plan, lot types are categorised as being 'urban' (200 – 374m²), 'suburban' (375 – 799m²) or 'large' (800 – 1,00m²). These lot sizes will facilitate a range of dwelling types to suit the needs of a diverse mix of ages, lifestyles and socio-economic groups. Approval is not sought for the indicative mix outlined in **Figure 13**, nor is it Landcom's intention to specifically pre-determine the number of dwellings or mix within each neighbourhood. Dwelling mix is subject to change over the significant time period for implementation of the development as market requirements change. The actual dwelling mix and yield for each dwelling type will therefore be determined as part of future detailed applications for each development stage.

The translation of these lot types into LEP (statutory) controls however is addressed in **Section 6.2.3** through minimum lot size controls. Minimum lot size controls establish an important parameter on lot subdivision, and ensure that the majority of lots can be retained.

Detailed applications for future stages of the development will demonstrate implementation of the dwelling yield targets within the framework of **Figure 13**. Physical infrastructure including roads, parks, drainage and community infrastructure will also be delivered on a stage by stage basis. The timing and staging of key elements are detailed further at **Section 4.11** and in the development contributions strategy at **Section 5**.

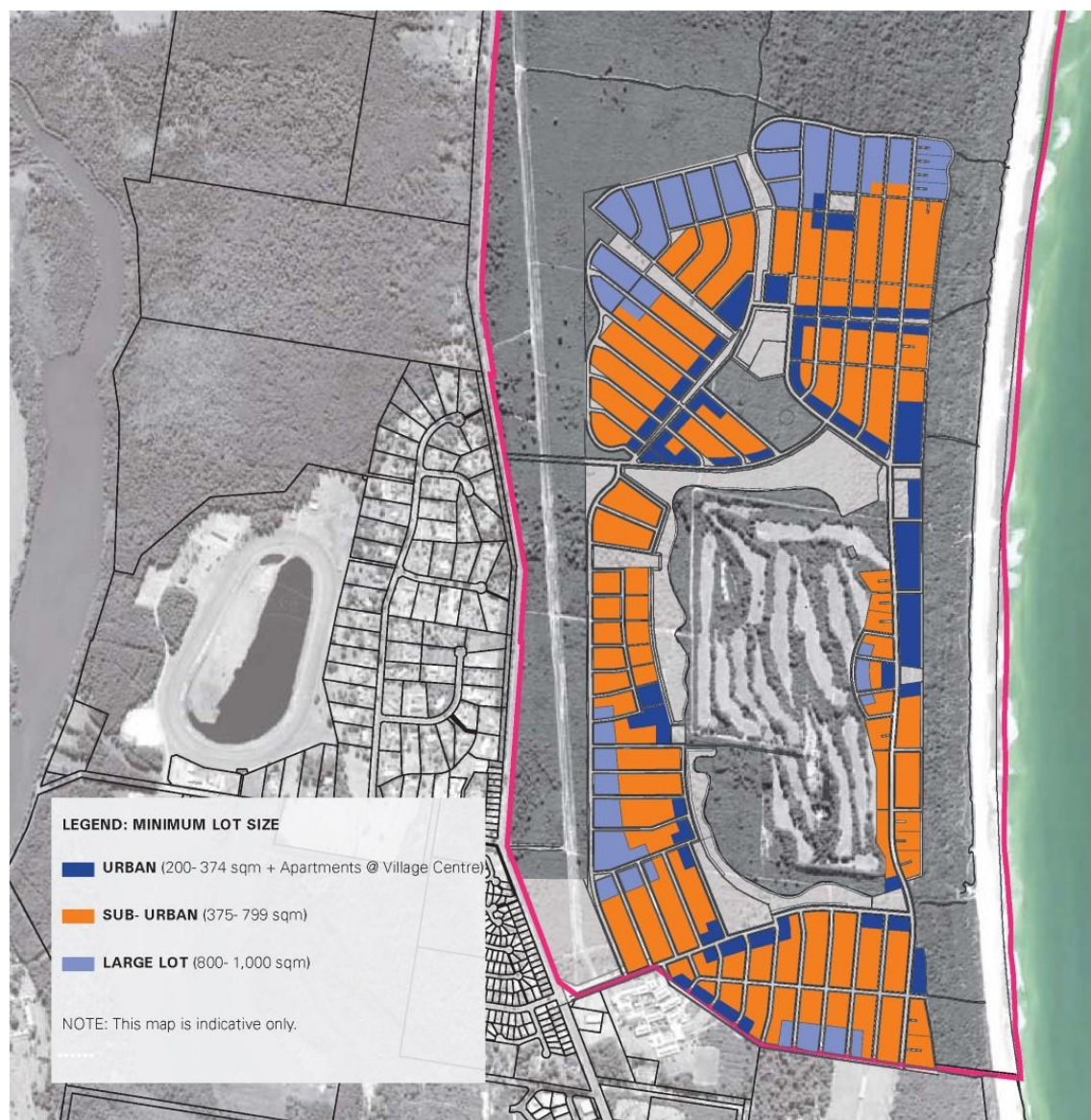


Figure 13 Indicative Lot Typologies

Source: Roberts Day

4.5 B2 Local Centre Zone

The Master Plan provides for a new centre with capacity for a maximum of 2,333m² of commercial floor space for retail, office and business uses over a footprint of 0.68 ha.

It is considered that the stronger and more attractive the centre is, the more desirable it will be to live within walking distance. Commercial, retail, and community uses could be developed as “mixed use” with housing as an integral component. The centre will therefore be the focus of activity and will comprise a mix of land uses, including local retail, residential, office, and community facilities (within proximity), with a high level of integration between uses and functions. The mixed-use nature of the centre will allow living, working and playing to co-exist. Importantly, it and its immediate surrounds will also contain some higher density residential uses, such as shop top housing and residential flat buildings.

This amount of non-residential floor space provides the opportunity for employment generation in the form of over 126 full time equivalent jobs in retail and office uses. The centre will also accommodate the future community centre/surf club building which has been identified as a key piece of new social infrastructure required to support the incoming population. The key features of the urban design concept for the centre are detailed in the Urban Design Report at **Appendix B**.

The translation of the B2 Local Centre into LEP (statutory) controls is addressed in **Section 6.0**.

4.6 Employment Uses

In addition to the B2 Local Centre Zone, the proposed employment uses comprise:

- 6.64 ha of Business land in the south western corner; and
- 6.6 ha of Industrial land in the north western corner.

What is likely to distinguish the NTURA from established business centres within Forster and Tuncurry is that the large consolidated land holding and synergies with adjoining land uses increases the potential for institutional uses within the south eastern portion of the NTURA Site to co-locate with already synergistic uses of a similar kind. More traditional employment uses are proposed in the north western portion of the NTURA Site where they are unlikely to generate any interface or land use conflict issues.

The B2 Local Centre Zone and the 13.24 ha of proposed employment uses in the north west and south eastern corners of the NTURA Site will complement Forster and Tuncurry, by offering additional employment choice that is not currently found in existing urban areas.

The translation of the proposed employment uses into LEP (statutory) controls is addressed in **Section 6.0**.

4.7 Open Space, Recreation and Landscape

A Landscape Master Plan has been prepared by Context (**Appendix C**) which outlines the vision for the public domain and open space network throughout the NTURA.

The existing golf course is proposed to be remodelled into a new 18-hole golf course and underpins the NTURA's open space provision. The remodelling of the 58.96 ha golf course releases some foreshore land, thereby providing opportunities to provide better connectivity between the development and Nine Mile Beach. Public foreshore access will be maintained and improved through public streets, shared streets, dedicated pedestrian/ cycle paths and existing and new beach paths.

Approximately 18 ha of land is required for a combination of open basins, ephemeral areas and associated batters to manage water on site (refer to **Section 4.9** for further detail). These spaces, whilst having an engineering purpose in part, form an integral component of the open space and landscape network, and will be designed to interface with and complement the public domain and other recreation areas.

Nine interconnected parks, equating to a total of 6.2 ha will be distributed across the NTURA Site, and connected to the water management basins, foreshore and the conservation lands via the pedestrian and cycle network. The

parks have been designed to reflect the NTURA Site's natural landscape features, whilst also being sited to maximise the number of dwellings within a 2 minute walk to a park. Each park has been conceptually designed to ensure a range of active informal recreation and intimate passive recreation areas are provided. Each park will have a unique character and will offer different amenities including picnic facilities, outdoor exercise facilities, seating, shade structures, playgrounds, walking paths and public art (refer to Landscape Master Plan for concept plans for each park).

4.8 Environment and Ecology

Approximately 327 ha of land within the NTURA Site would be conserved as part of the Master Plan. Almost 60% of the total known population of the Tuncurry Midge Orchid (including outside of the study area) is to be conserved within the study area, with a further 31% retained on land within the Biocertification Assessment Area. The conserved area also facilitates the retention of wildlife corridors that respond to the Mid North Coast Regional Conservation Plan and protection of the Blackbutt –Smooth-barked Apple open forest, Banksia dry shrubland and Coast Banksia – Coast Wattle dune scrub. These conservation areas have been determined to ensure that the most significant ecological areas are protected and that these areas exceed requirements for sizing and connectivity to allow proper ecological functioning.

The environmental buffer along the eastern boundary will seek to ensure that future development does not impact upon dunal vegetation or the coastal processes discussed in **Section 7.8**. With a width of approximately 200m from the mean high water mark it will protect beach habitats, particularly the Pied Oystercatcher (provided beach activity does not increase) and other dunal species or seasonal migrants. Development within this buffer will be limited to a maximum of 1-2 ha in disturbed areas to accommodate dedicated areas for off street parking, and public assets such as the proposed community centre, surf lifesaving club or amenities, viewing platforms, emergency vehicle access, dedicated pedestrian and cycle paths and beach access.

The development footprint incorporates asset protection zones at the interface between urban and conservation land in order to manage bushfire risk and protection. These areas are wholly contained within the development footprint, and generally contained within perimeter road reserves and a combination of fire trails, shared streets and private lot setbacks.

The establishment and ongoing maintenance of conservation offsets will be formalised through registration of a Biodiversity Stewardship Agreement providing in-perpetuity, fully funded conservation protection and management.

4.9 Water Cycle Management

As outlined at **Section 3.4**, the existing site topography and groundwater regime significantly constrains the water management options for the NTURA. The proposed 256ha development area is located in the hind dune area, where the average surface level is estimated to be 5.1m AHD.

SMEC has prepared an Integrated Water Cycle Management Strategy (IWCMS), Groundwater Modelling Technical Report, Water Servicing Strategy and Wastewater Servicing Strategy to inform and guide the NTURA. EMM has prepared an ICWMS Addendum to address concerns raised by Council, DPIE-Water and DPIE BCD regarding the stormwater and flooding aspects of the NTURA proposal.

The development of these reports has been collectively informed by the following key objectives:

- Manage nuisance flooding within the development area.
- Construct all habitable floor levels at least 500mm above the predicted 100 year ARI groundwater or surface water flood levels and in some cases up to 800mm.
- Prevent groundwater from saturating road bases for extended periods of time.
- Maintain or reduce the existing level of flood risk to the golf course greens and fairway.
- Maintain or reduce the existing level of flood risk to local properties and infrastructure that are in the vicinity of the development area.
- Establish a groundwater and surface water management system that is simple to operate and easy to maintain.

- Establish groundwater management measures to ensure that any groundwater extraction within the development area can be appropriately managed and regulated.
- Establish stormwater and groundwater management controls that mitigate potential water quantity impacts associated with the development.
- Establish preventative measures to minimise the generation of water quality pollutants.
- Establish water quality controls that can operate under elevated groundwater conditions and achieve the proposed pollutant reduction targets.
- Establish ephemeral zones in the water management basins to improve the basins ability to self-regulate water quality.
- Establish measures to discourage groundwater from the golf course entering the water management basins.
- Establish a civil design that responds to the site's constraints, can accommodate the groundwater and stormwater management controls and does not require the importation of fill.
- Establish a water and wastewater servicing strategy that responds to the site's opportunities and constraints and achieves performance objectives.
- Establish measures to reduce the proposal's potable water demand.
- Establish alternative non-potable water sources for both residential allotments and for the irrigation of public open space.

4.9.1 Integrated Water Cycle Management Strategy

The IWCMS (**Appendix P1**) and IWCMS Addendum (**Appendix P2**) aims to ensure that the NTURA will incorporate best practice water cycle management. The Integrated Water Cycle Management Strategy for the NTURA comprises:

- A series of connected basins that will store water and convey flows via a drainage gravity pipe system to the Wallis Lake entrance in larger rainfall events. The gravity drainage pipe system is proposed to manage surplus water from the water management basins, reducing the build-up of large volumes of water during prolonged periods of wet weather and providing a reduction in peak flood levels and durations during shorter more intense rainfall events.
- Water quality treatment via a combination of water tanks, on lot infiltration, streetscape scale raingardens and ephemeral zones within the water management basins.
- Reduction of potable water demand by;
 - rainwater tanks; and
 - potential groundwater harvesting.

Water management basins

Up to 18.1ha of water management basins (including batters) are proposed for flood mitigation purposes and are an integral engineering solution to facilitate the NTURA. The basins will provide surface storage that will attenuate the rise of the basin and adjoining groundwater levels and hydraulically connect the water management system throughout the development area, enabling upstream controls such as subsurface drainage to operate effectively. It is noted that the basins perform the same water management function irrespective of whether they are open water or ephemeral.

Landcom is continuing to explore the future ownership and management of the basins, however, final governance arrangements are not a rezoning matter and do not preclude exhibition or assessment of the Study.

Gravity Drainage

It is proposed to construct a stormwater pipe system that will drain excess water from the water management basins to the Wallis Lake Entrance Channel.

The gravity drainage will only operate during elevated basin levels and will provide significant flood mitigation benefits during major flood events, such as the 100 year ARI event.

Water Quality Management Controls

The following water quality controls are proposed:

- 5KL rainwater tanks are proposed for each dwelling to capture and use runoff from roof areas. Rainwater tanks (and the use of harvested rainwater) will reduce runoff volumes from the development area as well as reducing potable water usage.
- Runoff from all road pavement areas will be treated in raingardens (or biofiltration basins) that will be constructed within the road reserve.
- The water management basins will have ephemeral areas equivalent to 48% of the total wet basin area. The ephemeral zones will enhance the ability of the basins to self-regulate water quality.
- The water management basins will receive runoff from some impervious areas which will elevate the basin level above the adjoining groundwater level, reducing the risk of nutrient laden groundwater from the golf course, or groundwater with elevated iron or hydrogen sulphide levels, entering the basins.

The development area has been divided into the following water management zones (**Figure 14**) that were established based on the proposed land use and stormwater management approach:

- Zone D1 - Golf Course and Open Space - 68.6ha: comprises the golf course and public open space areas.
- Zone D2 - Water Management Area - 18.1ha: comprises the water management basins and associated batters.
- Zone D3 - Development Area (Infiltration Zone) – 62.5ha: Infiltration based stormwater systems are proposed in development areas that are not expected to have significant groundwater flooding constraints under developed conditions. These areas include the eastern portion of the development area (where peak groundwater flooding levels are lower due to the proximity to the sea) and the north-western portion of the site.
- Zone D4 - Development Area (Piped Drainage Zone) – 112.3ha: Piped stormwater drainage is proposed in the central and western portions of the development area where groundwater flooding controls are required to manage peak groundwater levels.

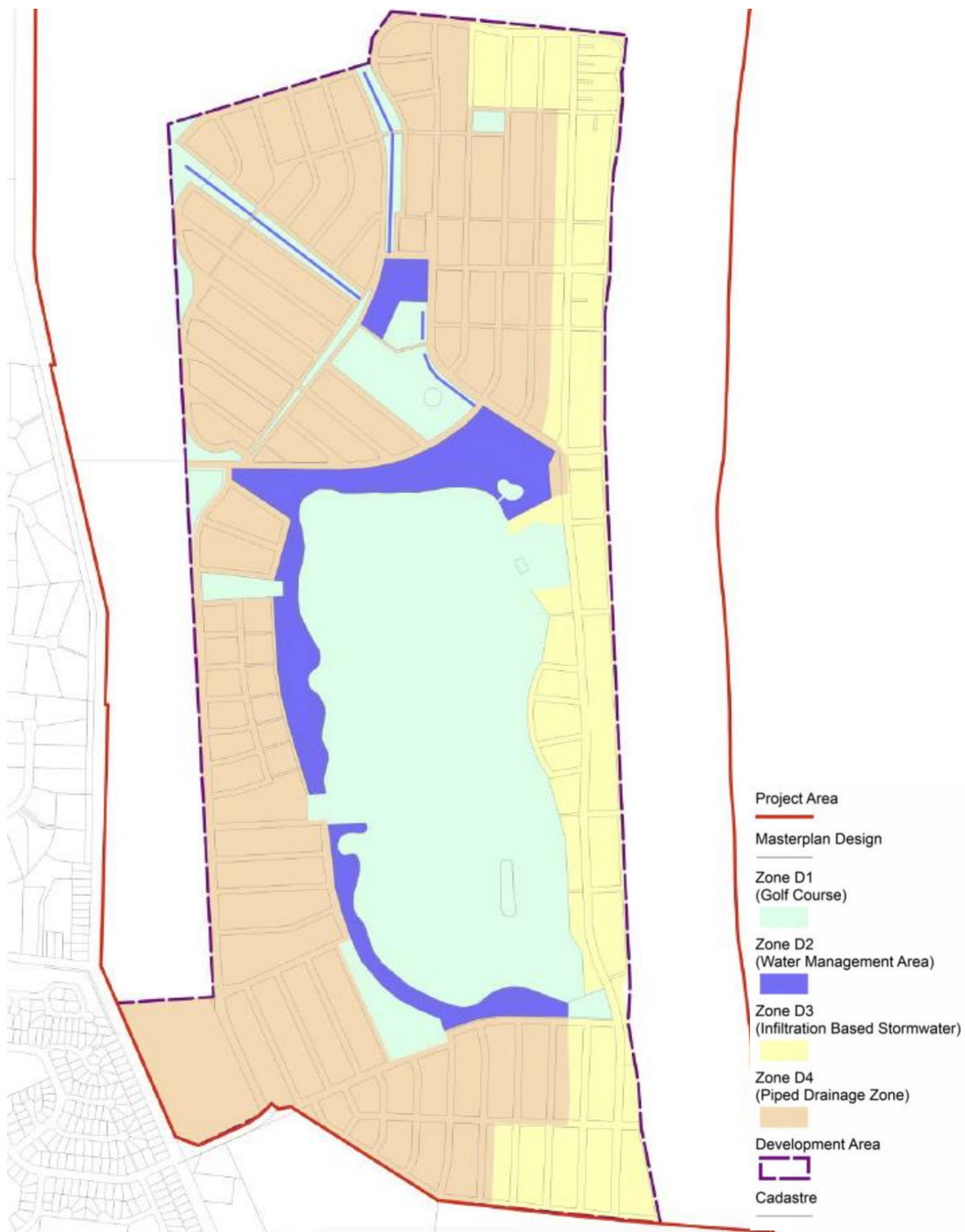


Figure 14 Integrated Water Cycle Management Strategy

Source: SMEC

4.9.2 Water and Wastewater Servicing Strategies

The Water Servicing Strategy and Wastewater Servicing Strategy, both prepared by SMEC, are attached at **Appendix X** and **Appendix Y** respectively. The NTURA will be serviced as part of the Manning Water supply

system via a 4.5ML reservoir north of Tuncurry at Rainbow Flat. A DN600 water main located along the Lakes Way has the capacity to supply the NTURA.

The NTURA staging (**Section 4.11**) proposes development from the south to the north, and as such the water connection would be constructed near the southern portion of the development. A second DN450 connection could be constructed to increase the security of supply at a later stage of the development. The preliminary design of the water reticulation system consists of DN100-DN300 mains.

Options for a wastewater reticulation network and for transporting wastewater to Hallidays Point WWTP have been investigated, and include:

- gravity reticulation sewerage system; and
- vacuum reticulation sewerage system.

A gravity sewerage system is currently the preferred option.

Three trunk main options for wastewater have been investigated, with the preferred ultimate option being a new WWPS and rising main that would transport NTURA wastewater into the Tuncurry No. 23 WWPS. The Tuncurry No. 23 WWPS would transport the existing flow from the NTURA site into the Hallidays Point WWTP to the north. Initial stages of the development will be serviced via the existing Tuncurry No.22 WWPS.

4.10 Access and Transport

The NTURA Master Plan seeks to minimise private vehicle usage and promote a modal shift towards walking, cycling and public transport by providing for a network of streets and shared paths which link key destinations and desire lines whilst ensuring that all travel is supported by adequate infrastructure. The modal shift would promote improved health, street safety and promote usage of local facilities.

4.10.1 Site access and road hierarchy

Access to the NTURA Site is proposed to be provided at three locations as illustrated in **Figure 15**, being:

- Northern Parkway;
- Beach Street extension; and
- New access road connecting to The Lakes Way (approximately 1.2 km north of Chapmans Road) via a new roundabout.

The proposed internal road network features a hierarchy of road types which serve differing functions within the future development context. **Figure 15** illustrates the proposed road layout and details this hierarchy. A series of connected collector roads and avenues would form the spine of the road network within the NTURA Site, encircling the golf course and connecting Beach Street, the B2 Local Centre Zone, the new northern access road and Northern Parkway. These roads will connect key destinations within, and outside, of the NTURA Site to the network of local roads within the NTURA Site.

A notable point of design difference proposed by the NTURA is the proposal to provide reduced kerb radii throughout the Site. Reduced kerb radii and the removal of truncated or splayed corner lots have a significant impact on the function and form of not only intersections but communities generally. The NTURA will therefore have kerb radii of 3.5m on all streets excluding collectors in order to promote safety, walkability and improved social interaction. The Urban Design Report at **Appendix B** provides a detailed analysis and rationale for reduced kerb radii to be provided on the NTURA Site.



Figure 15 Proposed road hierarchy diagram

Source: Roberts Day and AECOM

4.10.2 Public transport network

Collector roads and avenues would be capable of accommodating standard buses, allowing the NTURA Site to be serviced by public transport as it develops. The proposed street layout would permit both short term and long-term options for the extension of public transport if considered appropriate.

4.10.3 Walking and cycling facilities

The Master Plan incorporates an extensive network of cycling and pedestrian paths to promote connectivity and active travel. These are comprised primarily of shared paths linking key destinations within and outside of the NTURA Site. As the network has been designed around a linear grid structure, the regular cross streets with pedestrian footpaths and block sizes will encourage pedestrian activity and achieve a high level of permeability. This network would facilitate walking and cycling for practical journeys, such as trips to the centre and for access to public transport stops, as well as for recreational journeys to parks, Nine Mile Beach and exercise purposes.

4.10.4 Car Parking

On street car parking will generally be available on both sides of the road throughout the NTURA Site with the exception of bushfire perimeter roads, pedestrian passages, shared streets and local streets adjacent to water/parks. Off street car parking will be provided as part of the proposed B2 Local Centre Zone allowing parking for access to the surf club, community centre, beach, neighbourhood supermarket, golf course, village green and speciality retail.

4.10.5 Bushfire Asset Protection Zones

The Master Plan proposes the establishment of maximum Bushfire Asset Protection Zones (APZs) at known areas of bushland/development interfaces as illustrated on **Figure 16**, based on the recommendations of the Bushfire Threat Assessment prepared by RPS (**Appendix R**). Subject to final land uses and detailed design, APZs will be established in accordance with deemed to satisfy or performance-based outcomes under PBP 2006 (or as current at the time of assessment). As outlined above in Section 4.8, APZs are wholly located within the development footprint and will be generally contained within perimeter road reserves, fire trails, shared streets and private lot setbacks.



Figure 16 Asset Protection Zones

Source: RPS

4.11 Indicative Staging

The Master Plan includes an indicative staging plan that indicates logical development parcels within the overall development footprint (**Figure 17**). Detailed staging of the development will be subject to overall market demand as well as demand for specific housing types. Market demand will particularly inform the release and development of the B2 Local Centre and the employment lands, and for this reason, these parcels of land have not been allocated to a specific stage. It is anticipated that should the land be rezoned, land release would commence in 2023. Delivery of open space, infrastructure and retail facilities will be staged to keep pace with housing delivery, however, it is anticipated that initial stages will rely on existing retail and community facilities within Tuncurry until a critical mass of housing within the site is developed to support dedicated facilities for the NTURA Site.



Figure 17 Indicative Staging Diagram

Source: Roberts Day

5.0 Development Contributions Framework

An assessment of the social and community impact of the NTURA has been undertaken by Elton Consulting and is provided at **Section 7.15** and **Appendix T**. The assessment provides a detailed analysis of existing and future demographic trends and a comprehensive audit of the existing scope and level of community facilities in the locality.

Over the course of this Study's preparation, population projections have been revised and updated from time to time. Projections issued by the DPIE and Council do not currently account for the NTURA, however, this is not to be unexpected as population projections typically only factor in projects when they are completed or very well progressed through the approvals process.

There is no doubt that the NTURA will create a new community that will require the investment of social and community infrastructure to cater for the projected worker and resident population. While many of these services and higher order services currently exist in the existing Forster-Tuncurry communities, including schools, child care, aged care, sports complexes, emergency services and cultural and social facilities, Landcom recognises there will be insufficient capacity to accommodate the needs of the new population.

A Voluntary Planning Agreement (VPA) is therefore proposed to be entered into by Landcom with Council in order to ensure that the local and regional infrastructure needs of the future NTURA population are adequately met. It is anticipated that this VPA would include a mix of works in kind and monetary per lot contributions for roads and transport, recreation, conservation and social infrastructure. For the purposes of public exhibition, and seeking stakeholder feedback, a Statement of Intent has been prepared that sets out the key objectives, purpose and proposed provisions of the future VPA (**Appendix AA**).

The Statement of Intent has been informed in large part by the Elton Consulting Report at **Appendix T**, which is based on the most up to date and accurate data sources. This includes the most recent 2020 Forecast.id forecasts commissioned by Council, 2016 ABS Census data and the 2019 DPIE NSW Population Projections. The prevailing trends impacting the population change across the MidCoast LGA and in the North Tuncurry area include:

- a historic decrease in the natural population (with more deaths than births due to the older population); and
- a projected future population increase, driven by net migration (typically older people seeking to move to this Coastal location in retirement).

The only key difference between the most recent 2020 .id forecasts commissioned by Council and the 2019 DPIE NSW Population Projections is that DPIE is forecasting a lower overall net increase in population relative to Forecast.id. The DPIE forecast the LGA population will increase by 8,161 additional residents from 2016-2036 (8.9% increase), whereas Forecast.id projects that the LGA population will increase by 21,189 additional residents from 2016-2036 (23.0% increase). The Elton Consulting report at **Appendix T** generally adopts the higher population growth scenario with respect to planning for increased demand for community facilities and therefore plans for a worst case scenario.

5.1 Biodiversity Conservation

Approximately 327 ha of land within NTURA is proposed to be managed for conservation via registered Biodiversity Stewardship Sites, in addition to off-site biodiversity conservation and management as outlined in **Section 7.6.3**.

The lands fall within the proposed E2 Environmental Conservation land use zone as detailed in **Section 6**. Ownership of the land would likely be a mix of Council and State Government but could also include some private tenure. It would be subject to long term use and management in accordance with a Plan of Management prepared under the NPWA, or other appropriate mechanisms.

Funding for establishment and ongoing maintenance is to be formalised through registration of a Biodiversity Stewardship Agreement and anticipated to be the responsibility of the State Government.

The Statement of Intent identifies Landcom's intention to dedicate the eastern strip of land (referred to as the Eastern Conservation Corridor), including beach access trails, to Council following the completion of a Biodiversity Stewardship Agreement, accompanied by payment of sufficient funding into a Biodiversity Conservation Fund.

5.2 Local Development Contributions

Currently, the NTURA Site is subject to the existing Great Lakes Wide Development Contributions Plan 2007 and Forster District Development Contributions Plan 2014, both administered by MidCoast Council. The current Plans apply to all types of future development, including development within the NTURA. In 2014, prior to being amalgamated with Taree and Gloucester Councils, the former Great Lakes Council also publicly exhibited amendments to the Great Lakes Wide Development Contributions Plan 2007. Under the Plans, Council is currently levying contributions for the provision of the following types of facilities, not all of which would be applicable to the NTURA:

- Library stock;
- Council's headquarter building;
- Major roads;
- Aquatic centre;
- Road haulage;
- Rural firefighting fees;
- Surf lifesaving facilities;
- South Forster drainage works;
- Forster District library;
- District open space;
- Community facilities;
- Parking; and
- Administration fees.

Contributions under the Great Lakes Wide Development Contributions Plan 2007 and Forster District Development Contributions Plan 2014 are based on population increase and increases in traffic generation.

Landcom intends to meet its obligations with respect to local development contributions via a combination of carrying out of works in kind, dedication of land free of cost and provision of material public benefits. Landcom considers that a significant proportion of the works and the proposed land dedication can be in lieu of s7.11 development contributions. Accordingly, it is anticipated that the delivery of infrastructure and facilities within the NTURA will be met by Landcom through a future VPA with Council and as suggested by the Statement of Intent (refer to **Appendix AA**).

The key objectives of the VPA, reflected in the Statement of Intent, will be to facilitate:

- Identify the facilities and infrastructure needed to support development on the site generally in accordance with **Table 4** below.
- Identify where facilities, services and infrastructure will be required and when they will be provided.
- Outline the proposed arrangements and entities responsible for funding and constructing the identified facilities, services and infrastructure, as well as the future ownership and management framework where appropriate.

It is noted there are contributions already being collected under the Contributions Plan for items that the NTURA will not deliver on site (e.g. library, aquatic facilities, district open space). Landcom and the NTURA VPA should not be 100% funding such items. The VPA will therefore need to include monetary contributions that will need to be paid to Council for these items outside of the NTURA Site, however the VPA monetary contribution is likely to only represent an apportioned amount reflective of the nexus generated by the NTURA. The Statement of Intent (**Appendix AA**) reinforces this principle.

Landcom wrote to MidCoast Council on 23 November 2018 outlining the intent to enter into a future VPA, which was considered at Council's meeting of 10 April 2019. Council has advised (**Appendix AA**) that it is prepared to

consider entering into negotiations for a VPA for the NTURA Site for the dedication of some of the identified conservation lands and for the application of development contributions and possible credits for works-in-kind for the provision of services and facilities.

Table 4 Proposed local contributions facilities

Subject	Commitments
Community Facilities	Local Multi-Purpose Community Centre and Surf Club - 360m ² including ancillary storage for mobile surf lifesaving unit. Initially, Landcom proposes to provide a temporary community facility. The Social Planning Report (Elton, 2021) identifies that the NTURA would generate demand for a permanent community centre of 360m ² to service the expected population. The masterplan has identified the most suitable location for future residents of North Tuncurry, to be in or adjacent to the local centre. This location is central to the development and affords the opportunity to collocate surf lifesaving facilities and potentially other public facilities. Council has expressed a preference to locate the permanent community centre in the southern end of the NTURA Site, so that it may better service the future Tuncurry population as a whole and be provided at an earlier stage of development. Landcom has agreed to work with Council to determine the most suitable timing and location and contribution for the permanent community facilities having regard to the needs of the North Tuncurry residents, the needs of the existing Tuncurry residents, traffic impacts, co-location options and site availability. The final location will be determined in the VPA.
Local Parks and Open Space	Eco Green – local park
	Mount Talawahl Park– Passive Area and water management basins – local park
	Orchid Park– local park
	Surf Club and Community Centre – local park
	Village Green– passive recreation and community space – local park
	Heritage Green– local park and cultural heritage interpretative element
	Water's Edge Plaza– local park
	The 5 th Hole Park– local park and land-bridge between water management basins
	The Gateway Park– local park
	Community Dune Park– local park
Regional Conservation and Open Space	Nine Mile Beach Foreshore – passive recreation and foreshore access
	Conservation offset lands of approximately 327 ha of land within the NTURA Site via Biodiversity Stewardship Sites (ownership to be determined) along with additional off site offsets
Road & Traffic Facilities	Monetary contribution to MidCoast Council for district active recreation needs
	Avenue
	Collector Street Type 1
	Collector Street Type 2
	Local Street
	Yield Street
	Shared Street / Public Bushfire Road including any off-road shared paths
	Pedestrian Passage/Fire Trail
	Intersection upgrades for connection to NTURA Site, including: • intersection of The Lakes Way and Northern Parkway (if required) • new northern access road • extension of Beach Street
	Contribution to Forster-Tuncurry road upgrades, including: • duplication of Wallis Lake Bridge • duplication of The Lakes Way from Grey Gum Road to approximately 250m north of Chapmans Road • upgrade of intersection of The Lakes Way and Grey Gum Road • upgrade of intersection of The Lakes Way and Chapmans Road
Drainage Facilities	Construction of drainage infrastructure in an orderly fashion in accordance with the staging plan as the rollout of stages progresses. The southern water management basin and gravity drain will be

Subject	Commitments
	constructed in its entirety as part of the relevant critical stage within the first 5 stages, to mitigate flood impacts and achieve planned stormwater outcomes as identified in the Integrated Water Cycle Management Strategy. Drainage facilities are to be transferred to Council. Contributions will be required to cover the maintenance/life cycle costs of drainage and water quality infrastructure and consequently Landcom has agreed to work with Council to jointly pursue the establishment of a special rate to cover maintenance/life cycle costs of drainage and water quality infrastructure. In the event that the elected Council does not support a special rate variation Landcom will make a one off per lot contribution towards in perpetuity costs. The basis for calculation of the contributions is to be included in the future Planning Agreement.
Coastal zone	Construction of foreshore improvements comprising beach access trails. A one of monetary contribution towards the preparation of a coastal zone management plan, and maintenance of beach access trails only if determined to be required at the relevant stage.

5.3 State Development Contributions

As summarised in **Sections 7.7** and **7.14**, the technical studies that support this Study, including the Transport Management Access Plan (Appendix L) and the Social Planning Report (Appendix T), demonstrate that the NTURA will not generate such significant demand on NSW Government run facilities and infrastructure. Notwithstanding this, Landcom expects the development will be conditioned to contribute to the provision of State infrastructure within any approval of future Development Applications via Great Lakes Local Environmental Plan 2014 Clause 6.1 arrangements for designated State infrastructure.

There is currently no Special Infrastructure Contribution (SIC) in place for the MidCoast LGA.

Long term ownership and ongoing maintenance

As outlined in **Section 4.8**, the establishment and ongoing management of the conservation offsets will be via registered Biodiversity Stewardship Sites. MidCoast Council considered the proposed dedication of conservation management areas at its meeting of 10 April 2019 and resolved that Council is prepared to consider the dedication of only the identified conservation land located between the proposed urban area and Nine Mile Beach (i.e. the Eastern Conservation Corridor), but not other identified conservation offset areas (**Appendix AA**). Accordingly, ownership of the land would likely be a mix of Council and State government but could also include possibly some private tenure.

It is anticipated that land designated as local parks and open space is to be transferred into the ownership of Council and will be managed in accordance with a plan of management prepared in accordance with the *Local Government Act 1993*. An exception to this is the Eastern Perimeter Road which, where publicly accessible, will be retained in private ownership via a Community Title scheme.

Details with respect to the proposed carrying out of all other works such as the community facility, roads and the integrated water cycle strategy will be documented in the VPA and future development applications. Land to be dedicated to Council at the time of the application relating to each subsequent stage of the development would be detailed in the VPA for the NTURA. Landcom and Council will agree the level of embellishment/works for the items in **Table 4** at this time. The Statement of Intent (**Appendix AA**) articulates this future proposed arrangement.

6.0 Proposed SEPP Amendment to the Great Lakes LEP 2014

This section provides a description of the proposed amendments which are sought to the Great Lakes LEP 2014.

6.1 Summary of Proposed Rezoning

Under the Great Lakes LEP 2014, the NTURA Site is subject to a mix of rural landscape, private recreation, low density residential and environmental conservation zonings and a range of development standards relating to minimum subdivision lot sizes, maximum FSR, and maximum building height, as well as special provisions relating to a range of environmental management issues including flooding and vegetation protection.

The proposed rezoning of the NTURA Site will establish a new planning regime for the land, which will supersede the current local environmental planning instrument applying to the land. It is proposed to rezone the whole of the NTURA Site in accordance with the provisions of the Great Lakes LEP 2014, albeit with the inclusion of site-specific provisions to realise the intent of the Master Plan. The new zonings and proposed planning provisions are described in the following sections.

6.1.1 Land to which the SEPP Amendment will Apply

The proposed amendments will apply to the following lots which comprise the NTURA Site:

- Lot 294 in Deposited Plan 43110
- Lot 295 in Deposited Plan 43110
- Lot 331 in Deposited Plan 1104340

6.1.2 Relationship to Other EPIs

It is proposed that the rezoning of the NTURA would have the effect of amending the Great Lakes LEP 2014 to include the proposed zoning and development controls. No other environmental planning instruments (EPIs) would be amended and it is expected that future development would continue to be subject to the existing suite of EPIs which apply to the Great Lakes LGA and the NTURA Site.

Accordingly, the following key SEPPs will apply to future proposals within the development, with detailed consideration of the objectives and provision of these policies required to be addressed in future applications:

- SEPP 55 – Remediation of Land
- SEPP 64 - Advertising and Signage
- SEPP 65 – Design Quality of Residential Flat Development
- SEPP (Infrastructure) 2007
- SEPP (Housing for Seniors or People with a Disability) 2004
- SEPP (BASIX) 2004
- SEPP (Temporary Structures) 2007
- SEPP (Exempt and Complying Development Codes) 2008
- SEPP (Affordable Rental Housing) 2009
- SEPP (State and Regional Development) 2011
- SEPP (Coastal Management) 2018
- SEPP (Educational Establishments and Child Care Facilities) 2017

6.1.3 Future Approvals Regime

Future development would be subject to the existing approvals regime applying to all land within the MidCoast LGA as set out in the Great Lakes LEP 2014, the SEPP (State and Regional Development) 2011 and the SEPP (Exempt and Complying Development Codes) 2008.

Pursuant to the SEPP (Exempt and Complying Development Codes) 2008, renovations and low impact works that meet all relevant development standards would be able to be undertaken as exempt development. Complying development would also be able to be pursued for various works as identified by the SEPP (Exempt and Complying Development Codes) 2008. Most notably, the Low Rise Housing Diversity Code would apply to future development on the NTURA Site and would permit the carrying out of particular housing typologies as complying development, subject to the relevant requirements being satisfied. This would include manor homes², attached dwellings, dual occupancies and dwelling houses. Where works or dwelling designs did not satisfy the provisions of the SEPP (Exempt and Complying Development Codes) 2008, a development application be required. Future development applications would need to be assessed against the Great Lakes LEP 2014, DCP Amendment (once adopted) and relevant State planning policies.

6.1.4 Proposed Land Use Zones

A Draft Land Zoning Map illustrating the intended location of each proposed land use zone is provided at **Figure 18**. The Great Lakes LEP 2014's zone objectives, and range of permissible and prohibited uses for each proposed zone are generally intended to apply to the NTURA, with the exception of minor site-specific variations as described below.

The proposed land use zones and range of permissible/ prohibited uses should avoid unnecessary repetition with the provisions of SEPP (Infrastructure) 2007 and State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. Accordingly, it should be noted that those, and potentially other State policies, identify additional permissible uses that will also apply to the NTURA Site.

R2 Low Density Residential

It is proposed to apply the R2 Low Density Residential Zone to the majority of the residential development areas. The application of the R2 Low Density Residential Zone is proposed on the basis that this zone is most commonly used by Council for its residential housing supply, is broad based, allows for and encourages the provision of the most diverse range of housing, and allows for maximum flexibility for subdivision and development over time.

Application of the R2 Low Density Residential Zone with the accompanying development controls is considered to be an appropriate outcome for the NTURA Site as a whole, given that it is a major urban release area with an implementation time frame of 15+ years. The land use zone applied needs to be flexible and responsive to circumstances that may arise over time and should be established in a manner that is permissive and facilitative without undue restriction and control.

The Master Plan and Amending DCP address distribution of dwelling yield across the NTURA Site and demonstrates the manner in which a dwelling target of 2,123 dwellings can be delivered. The dwelling yield is supported by the height and minimum lot size development standards for the R2 Low Density zone proposed for inclusion in the SEPP. Refer to **Section 6.2** for further discussion.

The parks and water management basins are also proposed to be zoned R2 Low Density Zone, following consultation with Council and agreement that the zoning should not lock in the exact location of such uses until the detailed design and further survey work required by future DA processes are complete.

The R2 Low Density Residential zone objectives also encourage the provision of facilities or services that meet the day-to-day needs of residents, which is considered appropriate in the context of the NTURA Master Plan.

Permissible uses (with consent) in the R2 Low Density Residential Zone (and as defined by the Great Lakes LEP 2014) to facilitate delivery of the NTURA Master Plan include (among others): attached dwellings, community

² SEPP (Exempt and Complying Development Codes) 2008 defines manor house as a residential flat building containing 3 or 4 dwellings, where—
(a) each dwelling is attached to another dwelling by a common wall or floor, and
(b) at least 1 dwelling is partially or wholly located above another dwelling, and
(c) the building contains no more than 2 storeys (excluding any basement).

facilities; dual occupancies; dwelling houses; exhibition homes; home businesses; multi dwelling housing; neighbourhood shops; recreation areas; roads; secondary dwellings; seniors housing; and shop top housing.

A key feature in the mix of dwelling typologies would also be the ability to move within the NTURA Site, and particularly to 'age in place'. This can be achieved through the provision of a range of dwelling typologies as well as seniors housing specifically, which includes a residential care facility, hostel and self-contained dwellings. The Master Plan clusters higher densities of housing to support older people in the vicinity of the centre and around collector roads, promoting walkable neighbourhoods, street activity and public transport use. A seniors housing development would be subject to market demand.

As outlined in **Section 4.4**, a key component of the NTURA is the ability to deliver separately titled studio dwellings. The ability to be able to strata title studio dwellings is a critical outcome for Landcom to facilitate the housing objectives articulated throughout this Study. Accordingly, a new land use term will be required as follows:

studio dwelling means a dwelling that—

- (a) is established in conjunction with another dwelling (the **principal dwelling**), and
- (b) is on its own lot of land, and
- (c) is erected above a garage that is on the same lot of land as the principal dwelling, whether the garage is attached to, or is separate from, the principal dwelling, but does not include a semi-detached dwelling.

The above definition is already adopted in the SEPP (Sydney Region Growth Centres) 2006 and therefore is a suitable precedent. The introduction of studio dwelling could take the form of an Additional Permitted Use via Schedule 1 of the Great Lakes LEP 2014 or an additional local provision in Part 7 of the Great Lakes LEP 2014.

As outlined on **Section 5.0**, Council has indicated its preference for the permanent community centre to be located in the southern stages of the NTURA. Community facilities (the LEP term for community centres) are permissible with consent in the proposed R2 Low Density Residential land that would apply to the NTURA including Council's preferred location for the future community centre.

R3 Medium Density

A fundamental objective for the NTURA is to ensure that minimum dwelling targets and housing diversity are delivered. This will require the provision of a full range of housing types, including medium density dwellings and residential flat development.

Unlike the R2 Low Density Residential Zone, the R3 Medium Density Zone permits residential flat buildings and accordingly is considered the most appropriate zone to facilitate the delivery of additional dwelling typologies.

Permissible uses (with consent) in the R3 Medium Density Residential Zone (and as defined by the Great Lakes LEP 2014) to facilitate delivery of the NTURA Master Plan include (among others): attached dwellings; car parks; centre-based child care facilities; community facilities; dwelling houses; exhibition homes; home businesses; multi dwelling housing; neighbourhood shops; recreation areas; residential accommodation; restaurants or cafes; roads; seniors housing; and serviced apartments.

Height and minimum lot size development standards proposed for the R3 Medium Density Zone are discussed at **Section 6.2**.

B2 Local Centre

The B2 Local Centre Zone is proposed to apply to the centre on the basis that it is considered to reflect the intention to provide a self-contained range of non-residential development to service the NTURA.

As described in the DP&E's LEP Practice Note PN 06-002 the B2 Local Centre Zone is intended for:

"...centres that provide a range of retail, business, entertainment and community functions that typically service a wider catchment than a neighbourhood centre."

The centre is proposed to fulfil this function with respect to its non-residential role within the broader urban context, without competing with the established Forster-Tuncurry townships. The extent of the B2 Local Centre Zone has been carefully considered to limit the risk of oversupplying retail and employment generating land, whilst providing

flexibility of permitted land uses to accommodate a range of mixed activities that are responsive to population density and shifting consumer needs over time with changes in demographics. Mixed use land included within the Master Plan within the future centre is to be used for a wide range of retail, commercial, business, entertainment, civic, community, recreation, residential, tourist and visitor accommodation and mixed use employment. It is therefore considered that the B2 Local Centre zone appropriately supports this intended outcome.

Permissible uses (with consent) in the R3 Medium Density Residential Zone (and as defined by the Great Lakes LEP 2014) to facilitate delivery of the NTURA Master Plan include (among others): centre-based child care facilities; commercial premises; community facilities; seniors housing; and shop top housing.

The Master Plan currently indicates the future community centre would be located within this zone.

New height controls are proposed for the B2 Local Centre Zone as discussed at **Section 6.2.1**. No FSR control is proposed – refer also to **Section 6.2.2**.

RE2 Private Recreation

The reconfigured golf course is proposed to be zoned RE2 Private Recreation as it is privately managed. It is however proposed to amend the Great Lakes LEP 2014 land use table to add 'tourist and visitor accommodation' to the list of land uses permitted with consent within the RE2 Private Recreation zone to facilitate the potential development of short term accommodation affiliated with the reconfigured golf course. This proposed amendment has been discussed with Council officers and agreed in principle.

Permissible uses (with consent) in the B2 Local Centre Zone (and as defined by the Great Lakes LEP 2014) to facilitate delivery of the NTURA Master Plan include (among others): community facilities; food and drink premises; recreation areas; and roads.

New height controls are proposed, however the FSR control is proposed to be removed as discussed in **Section 6.2**.

B5 Business Development

The B5 Business Development Zone is considered the best fit for the south eastern employment lands to facilitate employment generating uses such as offices, warehouses, retail premises (including those with large floor areas). The zone is also a prescribed zone under the Infrastructure SEPP under which development for the purposes of educational establishments and health care facilities are permitted with consent. The B5 Business Development Zone therefore provides a natural extension to the existing school, TAFE and other institutional uses immediately south of the NTURA. It is also considered appropriate as it is located close to existing urban areas and will support (and not detract from) the viability of those areas.

Permissible uses (with consent) in the B2 Local Centre Zone (and as defined by the Great Lakes LEP 2014) to facilitate delivery of the NTURA Master Plan include (among others): business premises; centre-based child care facilities; education establishments; information and education facilities; roads; and specialised retail premises.

New height controls are proposed, however the FSR control is not proposed to be removed as discussed in **Section 6.2**.

IN1 General Industrial

The application of the IN1 General Industrial Zone is proposed to replace the current RU2 Rural Landscape Zone to accommodate a wider range of uses pending market demand, such as industrial and warehouse uses. The location of this Zone is considered suitable as it will provide greater flexibility than currently permitted, recognises the north western portion of the NTURA Site is already being utilised for development, and proposes to distance potentially less amenable activities away from sensitive noise receivers.

Permissible uses (with consent) in the IN1 General Residential Zone (and as defined by the Great Lakes LEP 2014) to facilitate delivery of the NTURA Master Plan include (among others): boat building and repair facilities; car parks; depots; freight transport facilities; garden centres; general industries; hardware and building supplies; industrial retail outlets; industrial training facilities; light industries; roads; storage premises; transport depots; vehicle body repair workshops; veterinary hospitals; and warehouse or distribution centres.

New height controls are not proposed, and the FSR control is proposed to be removed as discussed in **Section 6.2**.

E2 Environmental Conservation

The current RU2 Rural Landscape Zone that applies to the majority of the NTURA Site and strip of E2 Environmental Conservation Zone which are outside the development footprint are proposed to be subject to an E2 Environmental Conservation Zone land use zoning.

The proposed application of the E2 Environmental Conservation Zone is explained in detail and justified at **Sections 4.8** and **7.6**, and at **Appendix Q**. While the Great Lakes LEP 2014 permits a range of land uses in the E2 Environmental Conservation Zone such as bed and breakfast accommodation, community facilities and dwelling houses, the Master Plan does not propose any of these uses given the sensitive ecological attributes of this part of the Site.

As identified above, it is a key outcome of the NTURA that the ecologically sensitive areas be placed in permanent conservation. It is also a key outcome of the project that the NTURA be bio-certified and subject to a Conservation Agreement.

An assessment of the NTURA in relation to the provisions of both a Biodiversity Certification Order and the Conservation Agreement is provided at **Section 7.6** and **Appendix Q**.

Height and FSR controls are not proposed.

E3 Environmental Management

The E3 Environmental Management Zone has been proposed on the recommendation of Council officers to apply to land immediately east of the B2 Local Centre Zone and north of the southern R3 Medium Density site that has environmental or scenic values as it is in the dune area, but where a limited range of development including the mobile surf club, beach car parks, viewing platforms, and dedicated pedestrian and cycle paths and beach access, could be provided.

While the Great Lakes LEP 2014 permits a range of land uses in the E3 Environmental Management Zone, including bed and breakfast accommodation, dual occupancies, dwelling houses and eco-tourist facilities, the Master Plan does not propose any of these uses given the sensitive ecological attributes of this part of the Site.

New height controls are not proposed, and the FSR control is proposed to be removed as discussed in **Section 6.2**.

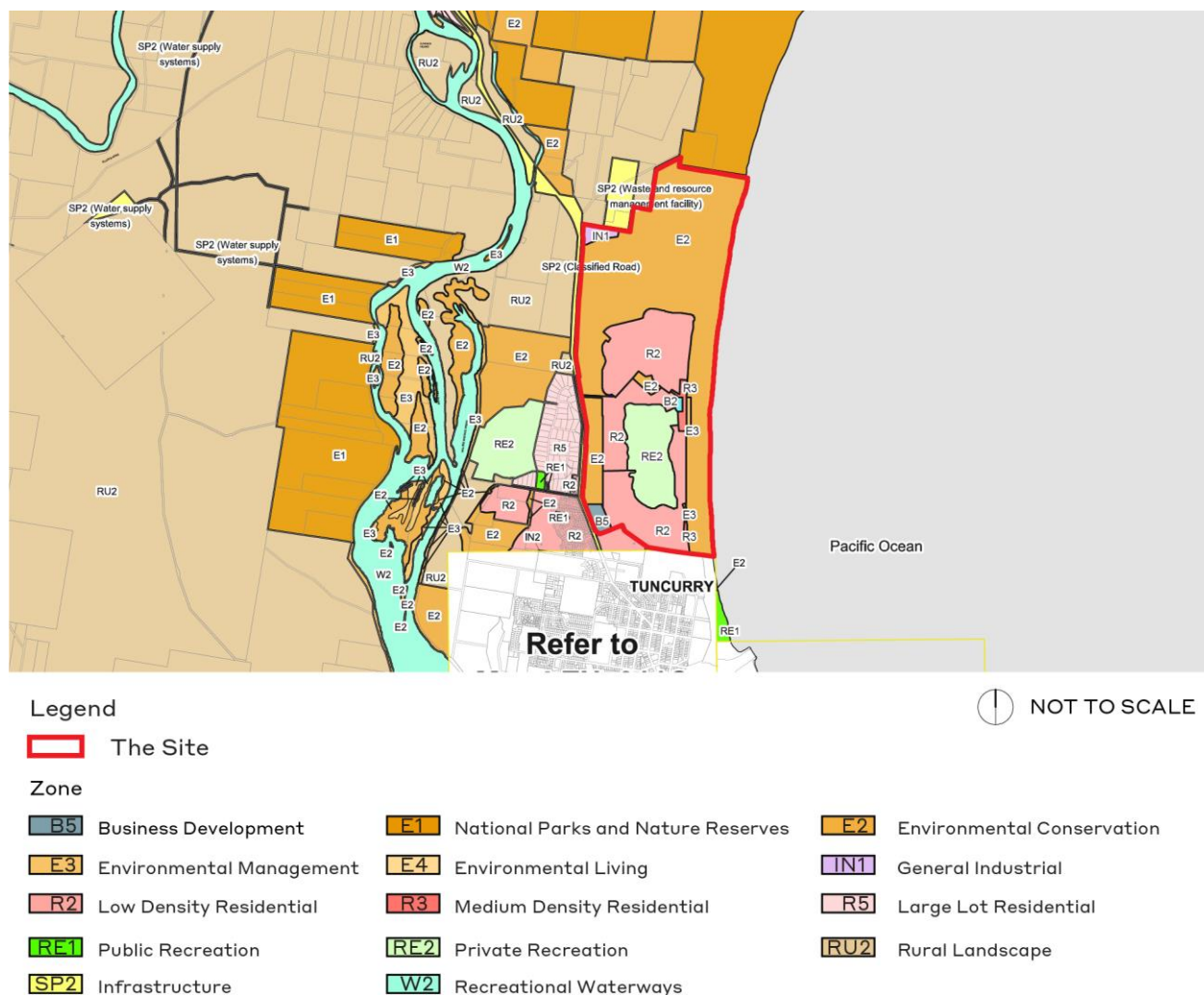


Figure 18 Draft Land Use Zoning Map

Source: Ethos Urban and Landcom

6.2 Principal Development Standards

It is intended that the following principal development standards will apply:

- Maximum height of buildings in the R2 Low Density Zone, R3 Medium Residential Density Zones and B2 Local Centre Zone;
- Minimum lot sizes for residential development in the R2 Low Density Zone and minimum lot sizes for land set aside for conservation purposes; and
- Minimum density target in the R3 Medium Residential Density Zone to ensure a minimum yield is achieved.

6.2.1 Maximum Building Height

The maximum proposed building heights are illustrated in **Figure 19** below and can be summarised as follows:

- a maximum building height of 8.5 metres would apply to the R2 Low Density Residential zone;
- a maximum building height of 10 metres would apply to the IN1 General Industrial Zone in the north-west corner of the site;
- a maximum building height of 12 metres would apply to the B2 Local Centre Zone, RE2 Private Recreation zone, and B5 Business Development zone; and
- a maximum building height limit of 20 metres would apply to the R3 Medium Density Residential zone.

The maximum building height in the B2 Local Centre Zone would facilitate a 4.5 metre ground floor, a 3 metre upper level and a pitched roof form of approximately 3 metre (equating to 11.5 metres). The 12 metre height limit represents a rounding up of the maximum height required within the B2 Local Centre Zone to align with Council's existing suite of building height controls. Increasing the maximum permitted height within the B2 Local Centre Zone to 12 metres is appropriate as this will better allow for up to 2 storeys to be achieved (with a pitched roof form in the B2 Local Centre Zone), with no significant visual impact (see discussion at **Section 7.5**).

The 12 metre height proposed to apply to the RE2 Private Recreation Zone is considered necessary to facilitate the potential tourist and visitor accommodation that may be provided within the golf course site. As identified in the Urban Design Report at **Appendix B**, the reconfigured golf course presents the opportunity to provide some form of short stay accommodation and associated conference facilities to facilitate 'stay and play' packages. In addition, the remodelled golf course will necessitate the relocation of the Golf Clubhouse to the centre.

The nature of facilities proposed for inclusion within the Clubhouse, is yet to be determined but may include dining, refreshments, and other leisure and recreational opportunities for members and their guests. A maximum 12m height limit (3-4 storeys) will provide sufficient flexibility to locate and design both the tourist and visitor accommodation and the future Clubhouse, without being limited to the existing 8.5 metre height control which is typically applied to deliver a maximum 2 storey outcome.

The 12 metre height control in the B5 Business Development Zone is proposed to future proof that portion of the NTURA Site for a range of potential institutional or business development uses that may locate there. While the B5 Business Development Zone permits a wide range of uses (with consent) under the Great Lakes LEP 2014, the proposed application of the Business Development Zone in the south west corner has been proposed to facilitate the natural extension to the existing school, TAFE and other institutional uses immediately south of the NTURA. Institutional uses such as educational establishments and health care facilities typically require more generous floor to ceiling clearances (in the order of 3.5-4 metres) to accommodate technology (such as lighting, communications and medical equipment in consulting and operating suites) than conventional commercial business uses (which require 3-3.5 metres). The proposed 12 metre height limit in the B5 Business Development Zone would enable 3-4 storeys to be achieved, if required.

A 10 metre height control is proposed for the IN1 General Industrial Zone, consistent with the maximum height controls applied to other industrially zoned land across the LGA.

The 20 metre height limit proposed for the R3 Medium Density zoned land equates to 5 storeys. The proposed height control for the future apartment sites to the north and east of the B2 Local Centre Zone and the southern apartment site is consistent with the objectives of the Master Plan and is considered a sound planning response in terms of locating higher densities close to facilities, services and public transport, as well as minimising visual impacts (see discussion at **Section 7.5**). Recognising that shop top housing is likely to be delivered in this Zone, it is worth highlighting that the Apartment Design Guide (ADG) is explicit on how building heights are to be calculated. It provides:

Set building heights by adding together the floor to ceiling heights for the desired number of storeys. Add 0.4m per floor for structure, services, set downs and finishes. Add 1m to the total to allow for rooftop articulation. Add 2m to the total to allow for topographic changes where required. Provide additional height in flood prone areas.

Having regard to the ADG and construction industry general/ best practice standards for floor-to-floor heights, the following assumptions that have been adopted for the purposes of determining the potential height controls are as follows:

- 1 x 3.7m ground level residential + 1- 1.5m raised above ground;
- 1 x 4.4m ground level non-residential for commercial uses;
- 3 x 3.1m residential storeys above ground level (this assumes 0.4m per floor for structure, services, set downs and finishes as per the ADG; less than this results in bulkheads and is not best practice); and

- 1 x 2.1-3m lift overrun and/or occupiable rooftop. This can be construed to also satisfy the 1 x 1m roof articulation requirement as per the ADG.

When the sum of these heights (equating to 5 storeys) is calculated, the maximum height of the building is at least 19.5m but excludes the 1 -1.5m for raising above the ground level. Landcom and its consultant team reviewed the existing height control bands in the Great Lakes LEP 2014. The proposed 20m height control is the closest control to the proposed outcome.

New height controls are not proposed to be introduced to the E2 Environmental Conservation Zone or E3 Environmental Management Zone. The existing maximum height control of 8.5m will remain.



Figure 19 Draft Maximum Building Height Map

Source: Ethos Urban and Landcom

6.2.2 Maximum Floor Space Ratio

The proposed maximum Floor Space Ratio is illustrated in **Figure 20** below.

FSR controls are effective development controls for high density development in urban areas. Medium and low-rise residential development such as compact housing proposed at the NTURA requires a combination of controls to achieve public and private domain outcomes, and different housing types need quite different FSRs. A better alternative to appropriately deal with a range of dwelling types is use of building footprint limits, minimum landscaped area, solar access controls and minimum rear boundary setbacks. These matters are appropriately dealt within the NTURA draft DCP.

The application of an FSR control to the B2 Local Centre Zone, B5 Business Development Zone and IN1 General Industrial Zone is not considered appropriate to provide flexible provisions that can facilitate a diverse range of employment activities within the NTURA Site. Future development will be subject to the extent of the land use zones

and the proposed DCP controls (both existing and proposed) which provide suitable control to guide future development.

It is also noted that elsewhere across the LGA, the Great Lakes LEP 2014 does not apply an FSR control to land zoned RE2 Private Recreation. Land proposed to be zoned E2 Environmental Conservation and E3 Environmental Management will be placed in conservation and subject to a future Plan(s) of Management which will identify the extent and density of any future development; an FSR control is therefore not required in this instance.

Accordingly, it is proposed to:

- amend the FSR map that applies to the NTURA Site by removing the application of the 0.4:1 FSR control; and
- specifically identify that clause 4.4(2A) of the Great Lakes LEP 2014 which identifies that all B2 Local Centre Zones in the MidCoast LGA are subject to a maximum FSR control of 1:1 does not apply to the NTURA Site as identified on the Key Sites Map (refer to Key Sites section below).

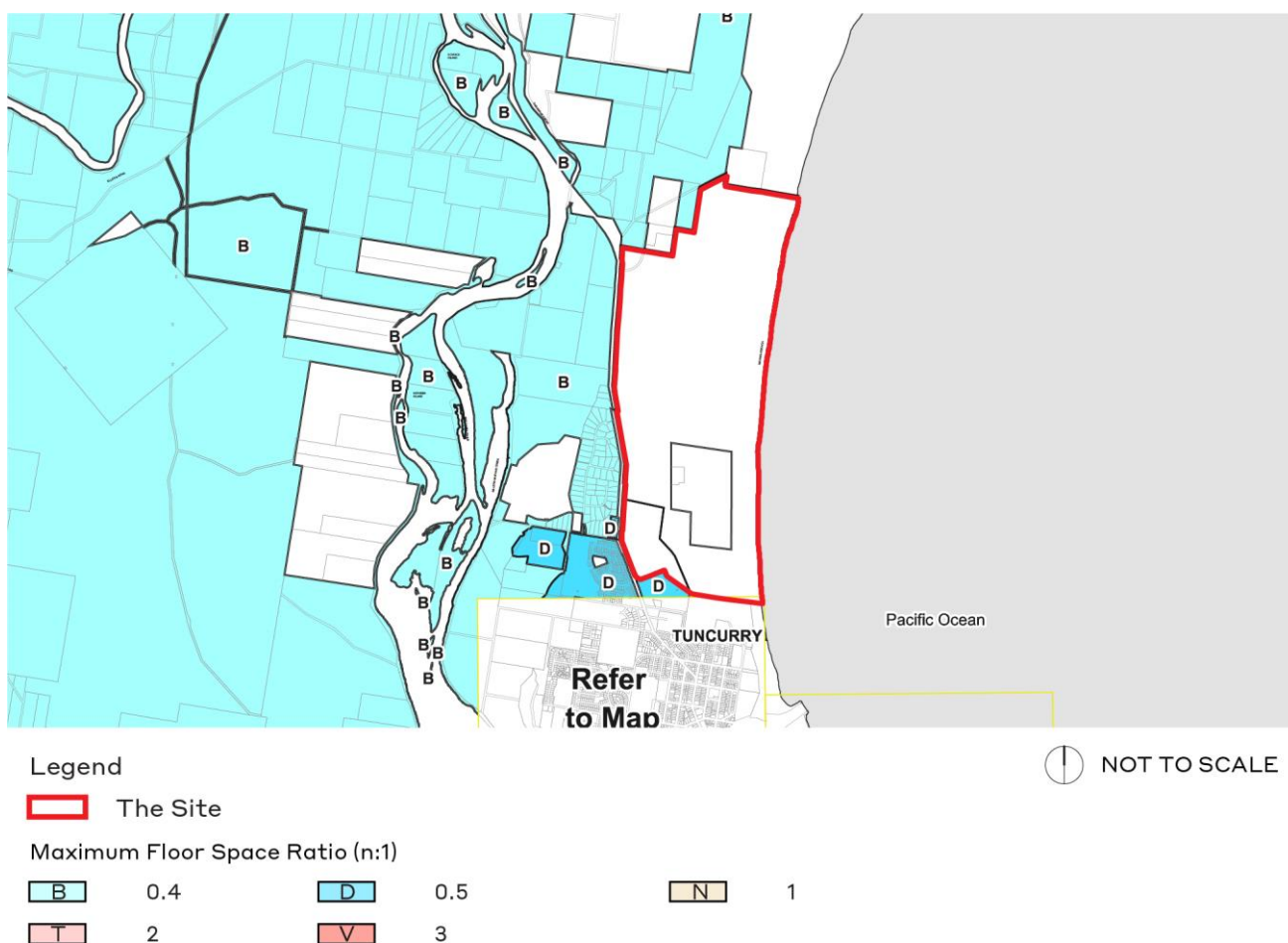


Figure 20 Draft Maximum Floor Space Ratio Map

Source: Ethos Urban and Landcom

6.2.3 Minimum Lot Size

The proposed minimum lot size controls are illustrated in **Figure 21** below.

The proposed minimum lot sizes represent a deviation from Council's typical lot size controls within the R2 Low Density Residential Zone but are required to achieve the housing diversity objectives outlined in **Section 4.4.1**.

The R2 Low Density Zone will primarily be subject to a minimum lot size of 450m², consistent with Council's current controls. In select locations, the minimum lot size will be able to be reduced to 200m² subject to the proponent

satisfying particular requirement and the consent authority being satisfied the proposed lots can accommodate a dwelling (refer to pg. 36-37 and the Amending DCP for more details).

The larger lots will be subject to a minimum lot size of 800m² to ensure these lots retain a larger area that accommodates vegetation stands and responds to the environmental attributes of that part of the site.

The R3 Medium Density Zone will be subject to a minimum 1,000m² lot size to ensure a viable development can be provided.

The remainder of the NTURA site will be subject to a minimum 400,000m² (40 ha) lot size.

Future subdivision applications will need to assess the impacts of particular layouts, and demonstrate that the proposed lot layout arrangements, required asset protection zones, engineering specifications and other requirements can be provided.

To facilitate and encourage the provision of a range of dwelling types within the R2 Low Density Residential and R3 Medium Residential Density zones, it is proposed to amend clause 4.1A Exceptions to Minimum Lot Sizes for Certain Residential Development as follows (new text **bolded**):

- (1) *The objective of this clause is to encourage housing diversity without adversely impacting on residential amenity.*
- (2) *This clause applies to development on land in the following zones:*
Zone R2 Low Density Residential,
Zone R3 Medium Density Residential.
- (3) *Despite clauses 4.1 and 4.1AA, development consent may be granted to a single development application for development to which this clause applies that proposes the subdivision of land into 2 or more lots if:*
 - (a) *One existing dwelling will be located, or one dwelling will be erected, on each lot resulting from the subdivision (other than any lot comprising association property within the meaning of the Community Land Development Act 1989), and*
 - (b) *The size of each lot will be equal to or greater than:*
 - (i) *For development on land in Zone R2 Low Density Residential – 300 square metres, or*
 - (ii) *For development on land in Zone R3 Medium Density Residential – 200 square metres.*
- (4) **Notwithstanding any other clause in this plan, the consent authority may grant consent to the subdivision of land zoned R2 Low Density Residential within the area identified on the Key Sites Map as the North Tuncurry Urban Release Area that will be equal to or greater than 200 square metres if the land adjoins or is only separated by a public road from:**
 - (i) **land within the Zone RE2 Private Recreation, or**
 - (ii) **land within the Zone B2 Local Centre, or**
 - (iii) **land within the Zone RE1 Public Recreation or that has been identified as future open space in the development control plan.**
- (5) **Subclause (4) does not apply to land within the area identified on the Key Sites Map as the North Tuncurry Urban Release Area that is mapped as having a minimum lot size of 800 square metres**

Subdivision proposals seeking to create residential lots less than 250m² will be underpinned by a DCP requirement to submit a detailed dwelling design with the subdivision application showing all parts of the proposed dwelling, including the layout and purpose of all internal spaces, and its relationship with the remainder of the lot, the street and adjoining lots. The submission of detailed dwelling plans with these subdivision proposals will provide the consent authority with the confidence that the dwelling could be constructed. If approved, the intention would be to ultimately have the dwelling design included on the future S88B instrument attached to the created lot.

Subdivision applications that seek to create lots between 250m² and 450m² in area will need to be supported by a Building Envelope Plan (BEP) at subdivision application stage to indicate how the design principles and controls required by the SEPP and DCP can be achieved. The format and content of a BEP is included in the DCP, provided at **Appendix A**.

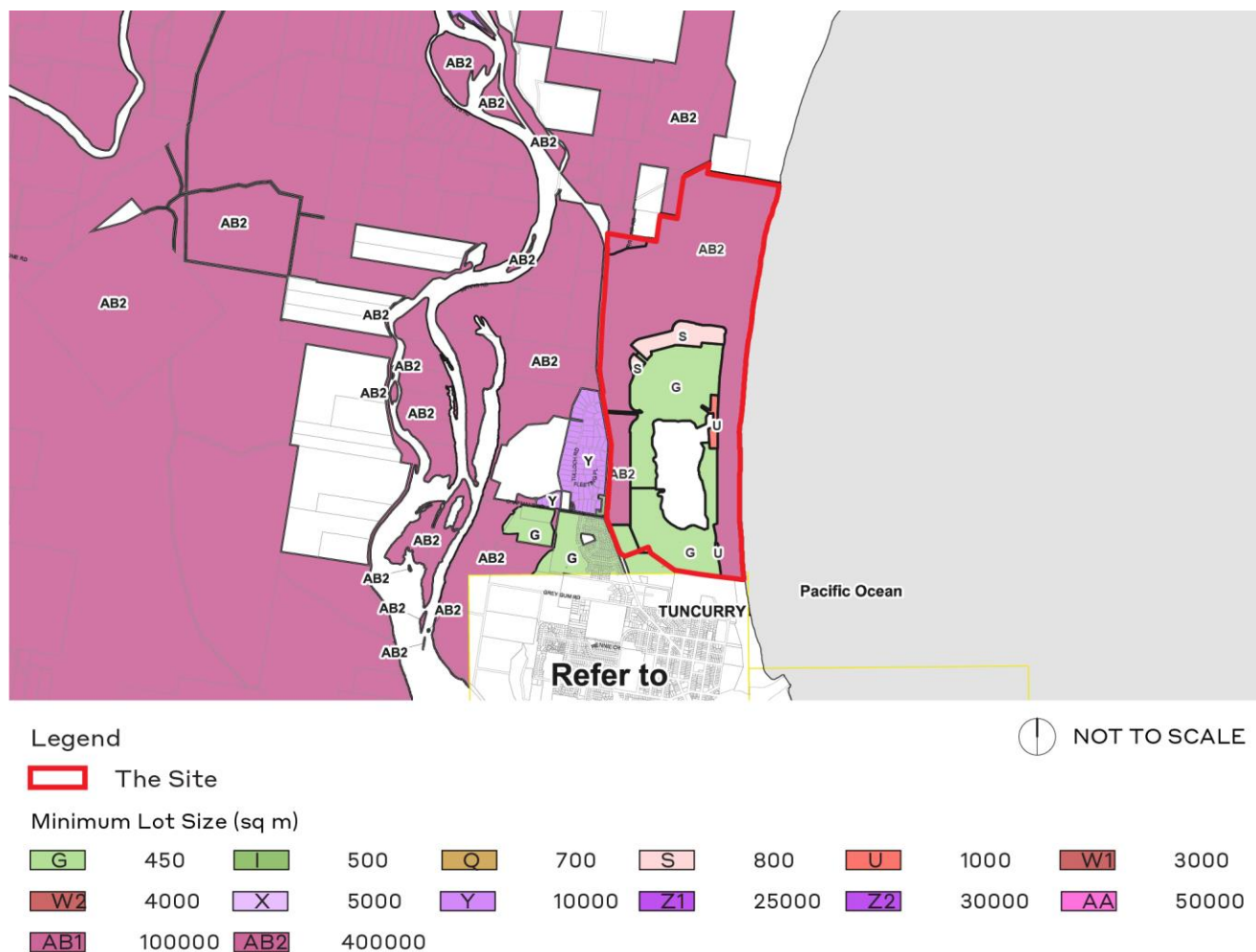


Figure 21 Draft Minimum Lot Size Map

Source: Ethos Urban and Landcom

6.2.4 Minimum Dwelling Density

As illustrated in **Figure 22**, it is proposed to amend the Minimum Dwelling Density Map in order to require a minimum dwelling density of 35 dwellings per hectare for land zoned R3 Medium Density Residential within the NTURA Site³. This will ensure that suitable densities are achieved within the site in accordance with the built form and urban design principles set out in the Amending DCP and Urban Design Report.

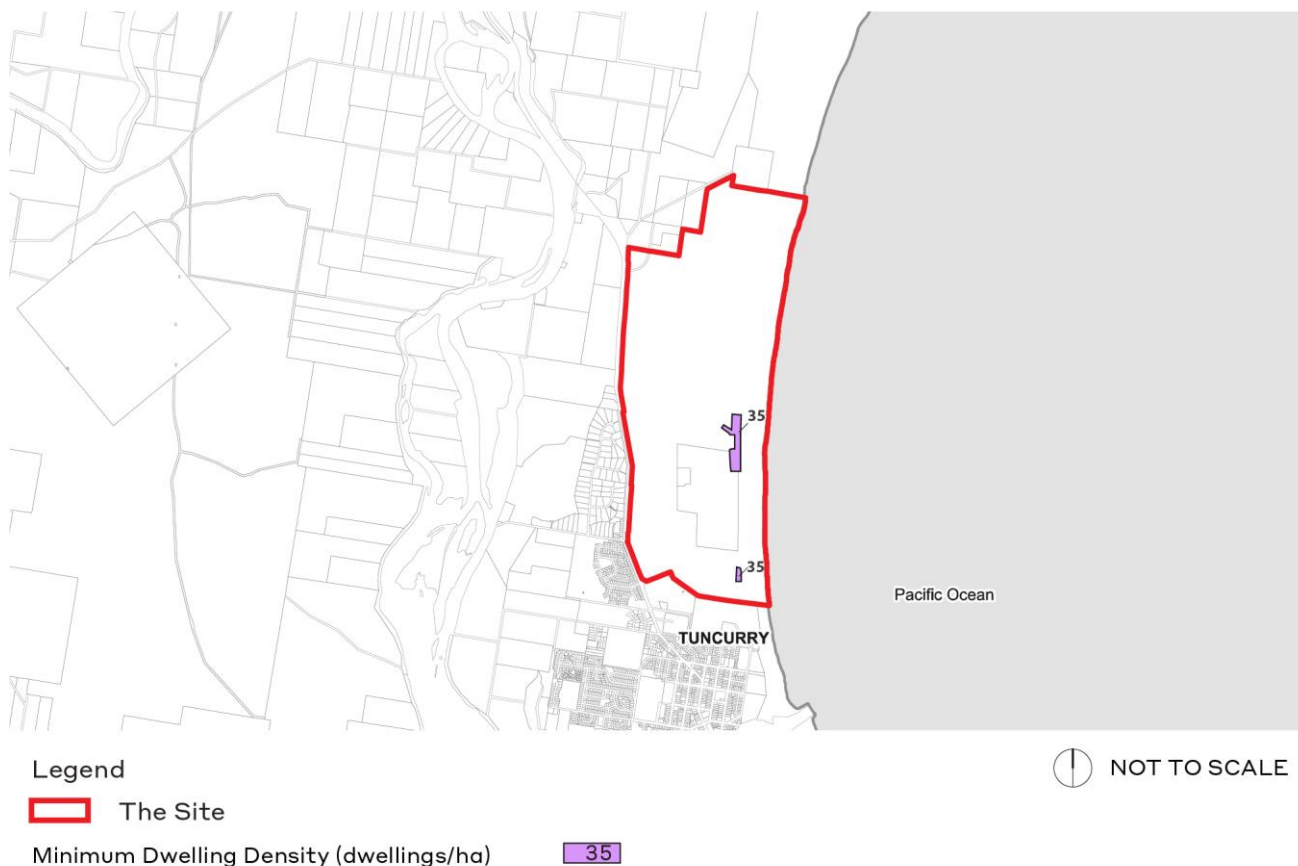


Figure 22 Draft Minimum Dwelling Density Map

Source: Ethos Urban and Landcom

³ Clause 7.23(3) of the existing Great Lakes LEP defines 'dwelling density' as follows:

"dwelling density means the ratio of the number of dwellings to the area of the land to be occupied by the development, including internal streets and half the width of any roads adjoining the development that provide vehicular access to the development but excluding land used for public open space and non-residential purposes"

6.2.5 Key Site Provisions

In order to support the site-specific provisions outlined above in relation to the Maximum Floor Space Ratio and Minimum Lot Size, is proposed to identify the NTURA Site on a new Key Sites Map in order to identify the land to which the proposed provisions apply. **Figure 23** below is consistent with the boundary of the NTURA Site.

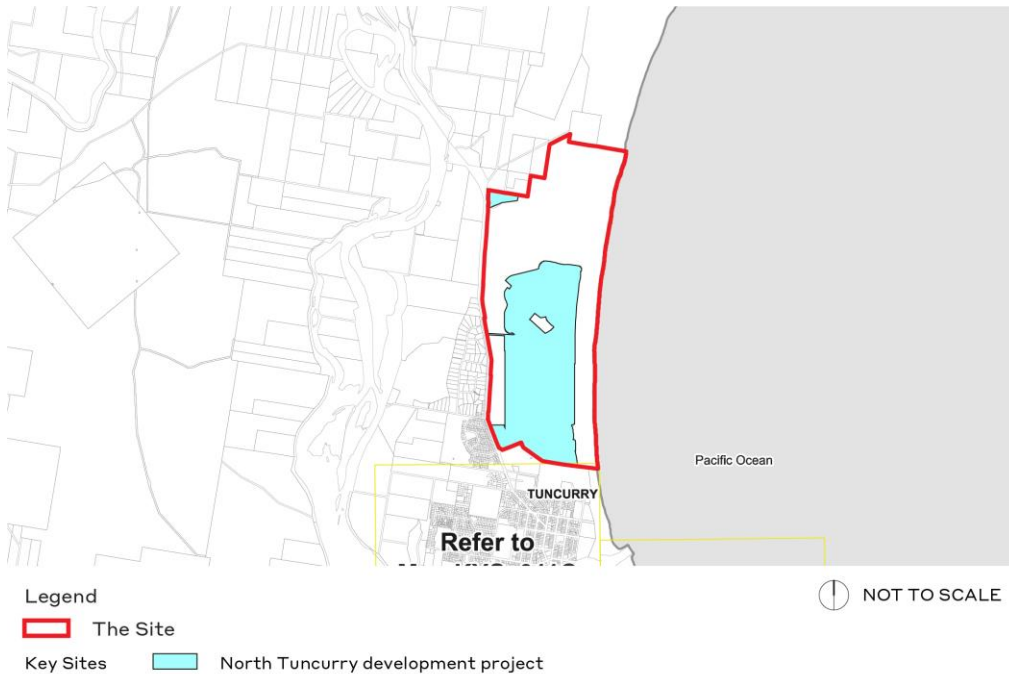


Figure 23 Draft Key Sites Map

Source: Ethos Urban and Landcom

6.2.6 Urban Renewal Area

The NTURA Site would be subject to the Urban Renewal Area provisions of Clauses 6.1-6.4 of Great Lakes LEP 2014, which provide for the provision of designated State public infrastructure, public utility infrastructure and preparation of a site-specific development control plan (**Appendix A**). **Figure 24** below is consistent with the boundary of the NTURA Site.



Figure 24 Draft Urban Renewal Area Map

Source: Ethos Urban and Landcom

7.0 Environmental Assessment

This section of the Study assesses and responds to the environmental impacts of the proposal. It addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements (DGRs) (as then known).

The suitability of the NTURA Site for the proposed development, and implications of the proposed land uses are also considered in this section of the Study

7.1 Study Requirements

The Study has been prepared in accordance with the Study Requirements issued by the (then) Director General of NSW Planning and Infrastructure (now Department of Planning, Industry and Environment). **Table 5** details where these requirements have been addressed in this report and appended technical studies.

Table 5 Study Requirements

Key Study Requirement	Discussion
1. Vision, Strategic Context and Justification	
Outline the vision, strategic context and justification for the proposal.	The NTURA Site is envisaged as a master planned new urban area with a diverse mix of housing and employment, good amenity and urban design, new recreational areas and strong ecological sustainability outcomes that integrates with the existing community of Tuncurry. Refer to Section 2.0, 4.0 and 7.0 and supporting technical information provided at Appendix A and B .
Demonstrate how the development will commit to ecologically sustainable development principles.	The NTURA supports the protection of high-value ecological communities and promotes development which facilitates sustainable travel options, reduces potable water and energy consumption and includes WSUD measures. Refer to Section 4.3, 4.9 and 4.9 and supporting technical information provided at Appendix A, B, O, L, P, Q, T, X and Y .
Assess the proposal against the relevant provisions of the Mid North Coast Regional Strategy, the Forster Tuncurry Conservation and Development Strategy and Forster Employment Land Implementation Strategy.	The NTURA Site is identified as a key area for housing delivery in the Hunter Regional Plan 2036 and is similarly recognised in local strategies. Refer to Section 7.2 and supporting technical information provided at Appendix L, and V .
Undertake an economic assessment to identify opportunities for development to complement and diversify the economic base of the Forster/Tuncurry area and increase the level of services and facilities and employment.	Retail services within the NTURA will meet the daily convenience needs of future residents only, promoting economic growth in the existing Tuncurry town centre as opposed to competition. New land is set aside for long-term business and industrial growth. Refer to Section 7.15.3 and supporting technical information provided at Appendix V .
Undertake an assessment of the community profile to identify the quantity, density and range of housing typologies that accurately reflects the characteristics and likely needs of the future population.	The future demographic profile of NTURA residents is diverse, including everyone from young families to empty-nesters and retirees. As such the NTURA include a range of housing typologies to meet the differing housing needs of these groups and facilitate ageing in place. Refer to Section 7.15 and supporting technical information provided at Appendix T .
Provide details of how the proposal will integrate with and reinforce the role of the Tuncurry town centre.	The proposal includes strong transport linkages, including for walking, cycling and public transport, and the NTURA will rely on local and regional retail facilities in Forster-Tuncurry promoting further economic strengthening of the region. Refer to Section 4.0 and supporting technical information provided at Appendix A,B, T, and V .
2. Land Use and Planning Controls	
Based on the findings of the specialist studies required by these study requirements, undertake a land use suitability / capability assessment and provide constraints mapping identifying the developable and environmental conservation areas of the site.	The NTURA footprint has been informed by a range of technical studies into existing and future site constraints, including ecological, hydrological and bushfire hazards. Refer to Section 3.4.13 and supporting technical information provided at Appendix B, C, I, J, L, M, N, O, P, Q, and S .

Key Study Requirement	Discussion
Based on the land use capacity assessment, outline the proposed land use zones (using the Standard Instrument zones).	The NTURA would include the following zones – R2 Low Density Residential, R3 Medium Density, B2 Local Centre, B5 Business Development, IN1 General Industrial, RE2 Private Recreation, E2 Environmental Conservation, E3 Environmental Management. Refer to Section 6.1.4 .
Demonstrate that proposed zoning and planning controls will complement surrounding existing land uses and incorporate any required buffers including (but not limited to) buffers for odour, noise, vibration, bushfire, adjoining areas of high conservation value.	The proposed development footprint and land uses have been informed by an analysis of the existing and future site constraints, including surrounding land uses. A full assessment of these issues is included in Section 6.0 and 7.0 and supporting technical information provided at Appendix B, 0, L, M, N, O, P, Q, R, S and W .
Details of proposed planning controls e.g. height limits, minimum lot sizes, gross floor areas, minimum setbacks, heritage items etc.	The proposed planning controls for the urban area of the NTURA include a general height limit of 8.5m increasing to 20m in areas of high amenity and minimum lot sizes ranging from 200-800+m ² . Refer to Section 6.2 and supporting technical information provided at Appendix A, B, M, N and O .
Urban design principles and how they have informed the proposed distribution and connections between land uses.	The urban area of the NTURA would comprise a series of spine roads distributing to the local road network and linking key recreational, retail and services destinations located within the site at the B2 Local Centre Zone and outside of the site in Tuncurry and Forster. Refer to Section 4.0 and supporting technical information provided at Appendix A and B .
Prepare a Development Control Plan for the site which includes controls and urban design guidelines to regulate the future development.	A Development Control Plan has been prepared by Ethos Urban in collaboration with MidCoast Council, Landcom and Roberts Day. Refer to Section 4.0 and supporting technical information provided at Appendix A .
3. Transport and Accessibility	
Provide a road network plan identifying the proposed road layout and hierarchy including cycle ways, footpaths and car parking.	The main collector roads encircle the golf course and link the local road network within the NTURA site to key destinations and access points to surrounding areas. Refer to Section 3.4.9 and supporting technical information provided at Appendix A, B and L .
Provide a Transport and Accessibility Impact Assessment and Traffic Management and Accessibility Plan prepared with reference to: - The RTA Guide to Traffic Generating Developments; and - NSW Department of Transport Draft Interim Guidelines on Transport Management and Accessibility Plans.	AECOM has prepared its assessment of traffic and transport issues in accordance with these guidelines. Refer to Section 7.7 and supporting technical information provided at Appendix L .
Identify traffic and transport infrastructure measures, required to support future development. It should identify regional and local intersection and road, pedestrian and cycleway network improvements, public transport needs, the timing and cost of infrastructure works and the identification of funding responsibilities.	The NTURA will contribute to the need for a number of upgrades to the local road network and will add to traffic flows within the broader area. The road network within the NTURA Site has been designed to allow connectivity between new and existing public transport routes and walking/cycle paths. The timely delivery of infrastructure will be facilitated by the development contributions framework discussed in Section 5.0 . Refer also to Section 7.7 and supporting technical information provided at Appendix L .
4. Biodiversity	
Provide an ecological study and assessment which identifies existing native flora and fauna and their habitats, including identified threatened species, within and adjoining the site. Assess the potential impact of development on identified populations and recommend measures to mitigate any impact in line with: OEH threatened species and assessment guidelines including the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities Working Draft November 2004; and	The Tuncurry Midge Orchid is listed as Critically Endangered at a Commonwealth and State level, and an additional fourteen fauna species listed as threatened or endangered have been recorded on the NTURA Site. The assessment of impacts on these species and ecological communities has been undertaken in accordance with the requisite guidelines. Refer to Section 3.4.6 and 7.6 and supporting technical information provided at Appendix Q including the Biocertification Assessment Report

Key Study Requirement	Discussion
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water, DECCW 2010.	
Specifically identify and assess the impact on the Tuncurry Midge Orchid. This should include additional targeted surveys, impact assessment and long-term management requirements.	Almost 60% of all known Tuncurry Midge Orchid stems within the BCAA would be protected within appropriate conservation areas located within the NTURA Site, and additional off-site conservation measures are also proposed to ensure that the rezoning results in no net adverse impact on this species. Refer to Section 7.6 and supporting technical information provided at Appendix Q .
Identify where and how much native habitat should be protected including existing and possible habitat linkages.	Approximately 327 ha of conservation lands (including 312.7ha of mapped vegetation) will be established within the NTURA Site, predominately within the northern portion, as well as additional off-site conservation measures. Refer to Sections 4.8, 5.1 and 7.6 and supporting technical information provided at Appendix Q .
Discuss the development of, and impact on, ecological corridors that link flora and fauna both on and adjoining the site.	The NTURA Master Plan and land use zoning would ensure the protection of the main ecological corridor which runs through the north-western corner of the proposed conservation area. Refer to Section 7.6 and supporting technical information provided at Appendix Q .
Identify opportunities for offsetting biodiversity impacts and propose the mechanism to deliver and secure biodiversity offsets.	A Biodiversity Certification Assessment Report and Biocertification Strategy has been prepared for discussion with the relevant regulatory stakeholders which identifies the proposed conservation strategy. Refer to Section 7.6 and supporting technical information provided at Appendix Q .
Identify the ecological attributes of the lands proposed for dedication and how the potential dedication of these lands would mitigate the impacts of the development.	The Biodiversity Certification Assessment Report and Biocertification Strategy identifies potential off-site lands suitable for conservation and commensurate to the impacts on existing vegetation within the NTURA Site. Refer to Section 7.6 and supporting technical information provided at Appendix Q .
5. Heritage Assessment	
Provide a heritage assessment addressing both European and Aboriginal heritage impacts in line with: - Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005; and - Code of Practice for Archaeological Investigations of Objects in New South Wales 2010	An assessment of Aboriginal archaeological and cultural and European cultural heritage has been undertaken in accordance with the relevant guidelines and these studies have informed the development of the NTURA Master Plan. Refer to Section 7.10 and 7.11 and supporting technical information provided at Appendix M, N and O .
Identify the nature and the extent of impacts on Aboriginal cultural heritage values across the project area and clearly articulate strategies proposed to avoid/minimise these impacts.	Whilst the rezoning does not in itself facilitate any physical impacts on Aboriginal heritage within the NTURA Site, Landcom has been working closely with the traditional owners of the land, the Worimi and Birpai People of Forster Tuncurry, to ensure that Aboriginal cultural heritage values are protected. Refer to Section 7.10 and supporting technical information provided at Appendix M,C and B .
The study must provide documentary evidence to demonstrate that effective community consultation with local Aboriginal communities has been undertaken in accordance with: Aboriginal cultural consultation requirements for proponents, Office of Environment and Heritage, 2010.	This documentation is provided at Appendix M .
6. Visual Assessment	
Provide a visual assessment of the study area, which identifies scenic qualities, the landscapes' capacity to absorb change without significant detriment, and its potential resiliency or likelihood to recover visual qualities after initial disturbance.	The NTURA is predominately a low-scale residential neighbourhood which will not be visible from key coastal views vantage points or The Lakes Way. Views to taller building forms located within and near to the B2 Local Centre Zone will generally be shielded by existing and future vegetation and will have minimal impact on scenic views. Refer to Section 7.5 and supporting technical information provided at Appendix D .

Key Study Requirement	Discussion
The assessment should consider visual prominence visibility and areas where change in vegetation or appearance would be particularly noticeable.	The visual analysis is accompanied by a number of photomontages of more prominent areas which include changes to vegetation. Refer to Section 7.5 and supporting technical information provided at Appendix D .
7. Impact of Coastal and Flood processes	
Undertake a flood and coastal hazard / sea level rise risk assessment for the site. This assessment should be conducted in accordance with: - NSW Government's Flood Prone Land Policy as set out in the Floodplain Development Manual (2005); - NSW Coastal Planning Guideline Adapting to Sea Level Rise (2010) and the Coastline Management Manual (1990), together with the Coastal Risk Management Guide: Incorporating sea level rise benchmarks in coastal risk assessments 2010; and - Flood Risk Management Guide: Incorporating sea level rise benchmarks in flood risk assessments (2010)	The NTURA Site is located outside of the Probable Maximum Flood level for the Wallamba River, including in predicted sea level rise scenarios. The 2014 Great Lakes Coastal Hazard Study and site-specific Coastal Processes, Hazards and Planning Study have informed the provision of an appropriate setback from the ocean to account for natural coastal processes and predicted sea level rise and climate change. Refer to Section 7.8 and supporting technical information provided at Appendix 01, I2, J, K and 01 and P2 .
Identify and map the extent and depth of a suitable range of flood events on and adjoining the site including but not limited to the 1% AEP and PMF flood events.	The North Tuncurry Lower Wallamba Flood Study maps the extent of these flood impacts. Refer to Section 3.4.4 and supporting technical information provided at Appendix J, K and 01 and P2 .
Review and assess any changes to flood behaviour and characteristics, based on the potential urban development of the site.	The Integrated Water Cycle Management Strategy (IWCMS) for the NTURA Site incorporates a series of permanent and ephemeral water management basins which have been designed to detain and discharge stormwater runoff from the proposed urban area in an appropriate manner. The strategy when implemented will improve groundwater flooding characteristics for the golf course and adjoining Tuncurry township. Refer to Section 7.8.2 and supporting technical information provided at Appendix J, K and 01 and P2 .
Areas identified for development should be located outside coastal risk areas (for the 2100 sea level rise projection), unless it can be demonstrated that the potential impacts of sea level rise can be effectively mitigated.	All locations for housing and business development are located outside of the 2100 coastal hazard line, with some non-critical and resilient infrastructure such as shared paths, non-critical roads and recreation areas located just within this hazard line. Refer to Section 7.8 and supporting technical information provided at Appendix 01 and I2 .
8. Water Quality	
Prepare a Concept Stormwater Management Plan that outlines the general measures for stormwater and effluent management in relation to climate, topography, soil types and local geology and identify potential risk issues.	The IWCMS has been prepared which details the conceptual design of stormwater and wastewater disposal based on the relevant design considerations. Refer to Section 0 and supporting technical information provided at Appendix 01 and Appendix P2 .
Provide details of how the proposed Stormwater management system will meet the requirements of the Great Lakes Water Quality Improvement Plan 2009.	The NTURA Site is located outside of the boundaries of this plan. However, the IWCMS is generally consistent with Council's water quality improvement plans and will ensure that stormwater runoff does not adversely impact upon important water-based ecological areas within the locality. Refer to Section 0 and supporting technical information provided at Appendix 01 and Appendix P2 .
Provide details, and an assessment of, impacts of the proposal on any watercourses, wetlands, coastal and riparian land located on or adjacent to the site.	The majority of groundwater flows east to the Pacific Ocean. Groundwater flows to the west of the site toward the Wallamba River Estuary and Wallis Lake system would not result in any adverse water quality impacts. Refer to Section 7.6 and 7.8 and supporting technical information provided at Appendix 01 and Appendix P2 .
Identify riparian corridors and associated buffers in accordance with: Guidelines for Controlled Activities – Riparian Corridors (Department of Water and Energy 2008)	There are no existing riparian corridors within the NTURA Site which would give rise to consideration of the Guidelines for Controlled Activities. Artificial riparian areas are identified in the IWCMS and the NTURA Master Plan. Refer to Section 0 and supporting technical information provided at Appendix B .
Assess impacts of the proposal on ground water. Identify any potential degradation to the groundwater	The majority of groundwater flows east to the Pacific Ocean. Groundwater flows to the west of the site toward the Wallamba River Estuary and Wallis Lake system would not result in any adverse water

Key Study Requirement	Discussion
resource and any impacts on ground water dependant ecosystems.	quality impacts. No groundwater dependent ecosystems have been identified on site. Refer to Section 0 and supporting technical information provided at Appendices J and P .
9. Contamination and Geotechnical Assessment	
Assess the suitability of the site for the proposed land uses in accordance with State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55) and outline any proposed measures for remediation if required.	The NTURA Site is not impacted by widespread contamination and, with the exception of some small, isolated hotspots which will be required to be addressed, is suitable for the proposed use without remediation. Refer to Section 7.12.2 and supporting technical information provided at Appendix F .
Identify areas with risk of soil instability, high erosion potential or potential acid sulphate soils which would render them unsuitable or at risk for urban development and filling.	Overall the geotechnical conditions within the NTURA Site pose minimal constrain in terms of suitability for urban development subject to the undertaking of future bulk earthworks. Regional mapping indicates that there is a low risk that Potential Acid Sulphate Soils (PASS) may be present within the Site and this has been confirmed by recent field investigations although soil analysis indicates that PASS may occur in localised areas Refer to Section 7.12.1 and supporting technical information provided at Appendix G and W .
10. Bushfire	
Undertake a bushfire assessment of the land in accordance with: Planning for Bush Fire Protection Guidelines.	The site is bushfire prone and appropriate asset protection zones have been included within the Master Plan and zoning framework. Future building design will be implemented in accordance with the NSW Rural Fire Service's 2018 Planning for Bush Fire Protection Guidelines. Refer to Section 7.14 and supporting technical information provided at Appendix S .
11. Community Infrastructure	
Undertake an assessment of the current and future community profile of Forster/Tuncurry to identify community infrastructure, including public open space, community facilities, educational and health that will be required to support the future population in the study area and the broader Forster/Tuncurry area.	Based on an assessment of the current and future community profile of the Forster-Tuncurry urban area and the NTURA Site, the needs for recreational, social, education, health and aged care population have been predicted. These predictions have formed the basis for the proposed infrastructure contributions and on-site facilities to be provided as part of future development. Refer to Section 5.0 and 7.15.1 and supporting technical information provided at Appendix T and U .
12. Development Contributions	
Detail the proposed future ownership and management arrangements for land proposed as open space, drainage reserve, and nature reserve.	Land ownership, dedication and funding arrangements will be subject to the ongoing negotiations with Council. Refer to Section 5.0 .
Identify local and State infrastructure upgrades required to support the development, the estimated cost and timing of these works and the mechanism for making the contribution (works in kind or monetary contribution).	A range of local infrastructure upgrades required to support the future population of the NTURA Site have been identified, and mechanisms for determining the funding and timing of the delivery of this infrastructure will be subject to the ongoing negotiations with Council. Refer to Section 4.0 and 5.2 and infrastructure works identified in Appendix B, C and 0 .
Details of consultation and/or agreements with relevant agencies for lands proposed to be dedicated. Identify the likely scope of any planning agreement and/or developer contributions between the proponent, Council and other agencies are to be detailed.	Landcom has engaged with all relevant government agencies in preparing this Study, and will continue to work constructively with key stakeholders throughout the assessment process as discussed in Section 1.6 and Appendix E . Details of a Voluntary Planning Agreement and development contributions framework is subject to ongoing discussions with Council. Refer to Section 5.0 .
13. Utilities and Infrastructure	
Prepare a preliminary utility and infrastructure servicing report and plan for the site that assesses the capacity of existing utility and infrastructure servicing the site and identifies all necessary augmentation works to service the site.	The NTURA Site currently has minimal utility infrastructure provision and the future development of the NTURA Site will involve the amplification and delivery of all required utility services. All services are available within the locality and have existing spare capacity. Refer to Section 5.0 and supporting technical information provided at Appendices R, X, Y and Z .
Address water sustainability and efficiency principles including opportunities for waste water re-use within the development.	The IWCMS includes a number of measures to promote the retention and re-use of stormwater for non-potable purposes, including household needs and golf course irrigation. Refer to Section 0 and

Key Study Requirement	Discussion
	supporting technical information provided at Appendix 01 and Appendix P2 .
Consultation	
An appropriate and justified level of consultation with Council, other relevant State and Federal government agencies and community stakeholders should be undertaken during the preparation of the environmental assessment, having regard to any previous consultation.	Landcom has engaged with all relevant government agencies in preparing this Study and will continue to work constructively with key stakeholders throughout the assessment process. Refer to Section 1.6 and supporting technical information provided at Appendix E .
Attached to these study requirements are copies of the letters from relevant stakeholders that should also be taken into consideration in preparation of the Study.	The matters in these letters have been addressed where relevant throughout this Study and the supporting technical studies.
The Study must include documentary evidence of consultation (including minutes of meetings and formal advice) from Council and government agencies.	The project team has liaised directly with the relevant government agencies during the preparation of the Master Plan and detailed technical studies which accompany this Study. Consultation undertaken by consultants with the relevant government agencies during the preparation of technical studies is detailed in these respective reports. This consultation has occurred over a number of years, and as such there is a large amount of material documenting liaison, a summary of which has been compiled and provided at Appendix E .

Source: Study requirements

7.2 Strategic Planning Framework

7.2.1 Hunter Regional Plan 2036

In October 2016, the NSW Government finalised the Hunter Regional Plan 2036 (the Regional Plan). The Regional Plan provides the blueprint for future growth in the Hunter, aligning land use planning priorities and decisions for the next 20 years. The vision is for the Hunter to be the leading regional economy in Australia with a vibrant new metropolitan city at its heart. To achieve this vision, the NSW Government has acknowledged the growing importance of Greater Newcastle and set the following regionally focused goals:

- The leading regional economy in Australia
- A biodiversity-rich natural environment
- Thriving communities
- Greater housing choice and jobs.

Of particular relevance are the following directions of the Regional Plan:

- **Direction 14: Protect and connect natural areas** - By providing for the protection of areas of high ecological value, including habitat for the critically endangered Tuncurry Midge Orchid, the NTURA will ensure the implementation of an appropriate conservation management strategy for the land.
- **Direction 17: Create healthy built environments through good design** - The NTURA will establish a high quality neighbourhood that integrates new recreational walking and cycling networks into its design to encourage physical activity and provide access to surrounding open space and biodiversity-rich areas.
- **Direction 18: Enhance access to recreational facilities and connect open spaces:** The NTURA envisages a new residential community which integrates with the existing centre of Tuncurry, facilitates the provision of future public transport connections and provides sufficient open space, local retail and community facilities to meet the needs of new residents within the local catchment
- **Direction 19: Identify and protect the region's heritage:** There are two known Aboriginal sites within the NTURA Site which are registered on the AHIMS database. Future Development Applications for subdivision and development of land in the vicinity of the registered sites will be required to ensure that works do not impact on this site unless an Aboriginal Heritage Impact Permit is obtained.

- **Direction 21: Create a compact settlement:** The rezoning and subdivision of the NTURA Site will facilitate the delivery of additional housing on the Mid North Coast to meet future demand for housing and population growth in a planned environment with access to public transport and services.
- **Direction 26: Deliver infrastructure to support growth and communities:** The NTURA will create a new community that will require the investment of social and community infrastructure to cater for the projected worker and resident population. A Voluntary Planning Agreement (VPA) is proposed to be entered into by the proponent with relevant State agencies and Council in order to ensure that the local and regional infrastructure needs of the future NTURA population are adequately met.
- **Direction 27: Strengthen the economic self-determination of Aboriginal communities:** In entering into a Native Title Agreement with the traditional owners, the Worimi and Birpai People of Forster Tuncurry, the NSW Government has made a number of commitments to work with the local Aboriginal community in delivering the NTURA. Landcom will also be investigating the potential for inclusion of an Aboriginal cultural centre or space within the B2 Local Centre Zone and/or other measures such as cultural heritage interpretation within the public domain as part of its ongoing collaboration with the traditional owners of the land, the Worimi and Birpai People of Forster Tuncurry.

The Regional Plan is also predicated on population growth with the MidCoast region (comprising MidCoast and Dungog LGAs), which is projected to have an increase of 5,000 people between 2016 and 2036, requiring an additional 5,000 dwellings.

To guide future growth within the MidCoast region, the NTURA was previously identified as a future urban release area in the Mid North Coast Regional Strategy. The Hunter Regional Plan (Action 21.2) aims to create compact settlements in locations with established services and infrastructure, in sites identified in an endorsed regional or local strategy. The Regional Plan outlines priorities to guide further investigations and implementation. Priorities identified for future housing and urban renewal opportunities in MidCoast, include (with added emphasis):

- *Deliver existing Urban Release Areas at Figtrees on the Manning, Brimbin, Hallidays Point, Old Bar, Manning River Drive Business Park (employment), Tea Gardens and South Forster.*
- **Manage environmental values and residential growth in North Tuncurry.**
- **Investigate renewal and infill housing opportunities in Taree, Forster–Tuncurry, Old Bar and Tea Gardens–Hawks Nest that respond to changing demographics.**

The NTURA will be consistent with these priorities, providing a new urban renewal opportunity that will provide a diverse range of lot sizes and housing types, including attached dwellings, detached dwellings, dual occupancies and multi dwelling housing. This offers housing diversity that is not available elsewhere in MidCoast in order to respond to the changing demographics of the Forster-Tuncurry. The NTURA will also integrate with the existing Tuncurry-Forster urban area and natural environment, with environmentally sensitive urban design being a prominent feature of the Master Plan with the protection of new conservation lands and incorporation of best practice coastal design.



Figure 25 Extract from Hunter Regional Plan 2036 – Taree to Forster-Tuncurry Settlement Plan

Source: NSW Department of Planning, Industry and Environment annotated by Ethos Urban

7.2.2 Draft Mid North Coast Regional Conservation Plan

The Draft Mid North Coast Regional Conservation Plan (MNCRCPP) was developed by the former DECCW to complement the former Mid North Coast Regional Strategy (now replaced by the Hunter Regional Plan 2036) and sets out the regional conservation priorities in the Mid North Coast planning region until 2031. It covers the Clarence Valley, Coffs Harbour, Bellingen, Nambucca, Kempsey, Port Macquarie-Hastings, and the former Greater Taree and Great Lakes (now MidCoast) local government areas and highlights the conservation mechanisms available for private lands that will complement the formal conservation reserve system.

The primary objectives of the draft plan are to identify important conservation values, guide offsetting, and assist local councils and other land managers in strategic conservation planning. The Draft Plan also outlines the means to offset the unavoidable impacts on biodiversity arising from the implementation of the regional strategy. More specifically the Draft MNCRCPP:

- describes the biodiversity values of the Mid North Coast region;

- analyses the current status of biodiversity within the region;
- assesses the potential impacts of development on biodiversity identified in the regional strategy;
- analyses the biodiversity values at a landscape scale;
- identifies regional priority focus areas to offset impacts arising from implementation of the regional strategy;
- ensures that future development will not further deplete the region's biodiversity by encouraging development of conservation investment mechanisms that protect and enhance biodiversity;
- guides local council planning on biodiversity and Aboriginal heritage features, including the determination of development applications, development of local conservation strategies and preparation of new local environmental plans; and
- provides a framework to assist those councils who are considering applying to the Minister for Environment and Heritage for biodiversity certification of local environmental plans and other environmental planning instruments.

Whilst the resolution of the maps within the Draft MNCRCP are poor (refer to Figures 2, 3 and 9 of the MNCRCP), it would appear that the NTURA Site has been identified as land of high ecological value and worthy of protection and conservation in part.

The NTURA's ecological response and how it satisfies the objectives of the Draft MNCRCP is set out in **Sections 4.8 and 7.6**.

7.2.3 Local Strategic Plans

MidCoast Council Local Strategic Planning Statement (2020)

The Local Strategic Planning Statement (LSPS) sets out the basis for strategic planning in the MidCoast Council area, having regard to economic, social and environmental matters, the planning priorities for the region and the actions to achieve those priorities, and the basis for Council's ongoing monitoring and reporting.

North Tuncurry is identified in the LSPS as a significant new major housing precinct that will directly contribute to the delivery of suitable, diverse and high-quality housing to meeting Priority 3 - Delivery Housing Supply, Choice and Diversity. North Tuncurry will also support progress on a number of other Planning Priorities identified by the LSPS as summarised below:

- **Priority 4 – Place making our towns and villages:** The master plan and detailed planning controls contained within the separate Development Control Plan will provide for the delivery of a high-quality local place which delivers a high level of design and environmental quality.
- **Priority 5 – Connect people and places:** As outlined in **Sections 4.10 and 7.7**, the master plan addresses the need to deliver high-quality pedestrian and cyclist infrastructure, support the delivery of public transport over the short- and long-term, and ensure that suitable road network is implemented to facilitate connection within the region.
- **Priority 6 – Protect and improve our environment:** As outlined in **Section 4.0 and 7.0**, this Study has been informed by extensive technical analysis, monitoring and mitigation measures to ensure that the North Tuncurry project leads to high quality environmental outcomes throughout the site and which in particular support priority conservation objectives.
- **Priority 7 – Improve our resilience:** Planning for North Tuncurry factors in the need to embed resilience into local planning with respect to the gamut of environmental hazards associated with coastal processes, flooding, bushfire risk and climate change in order to deliver a resilient community.

MidCoast Council Draft Housing Strategy

MidCoast Council adopted a Housing Strategy in December 2020 that identifies North Tuncurry as a major urban release area that is critical to meeting longer-term housing needs within the LGA. The Housing Strategy states that integration of the NTURA into the broader urban context, including the supporting services and infrastructure such as health and transportation networks remain vital to long-term and sustained growth.

Forster-Tuncurry Employment Lands Strategy

The 2009 Forster-Tuncurry Employment Lands Strategy identifies the potential for land surrounding the Tuncurry Waste Management Centre (including part of the north-east corner of the NTURA Site) to accommodate future industrial growth. In addition, the Strategy recognises the planned development of the NTURA Site for residential uses and notes that a component of retail development (approx. 4,000m²) would be needed to meet the needs of future residents. The Strategy notes that the future centre should be “modest in scale and seek to provide daily ‘top up’ or convenience goods” (p.185).

Sections 4.5 and **7.15** further consider how the NTURA satisfies the objectives of the Forster-Tuncurry Employment Lands Study.

Forster Tuncurry Conservation and Development Strategy

The NTURA Site is identified in the Forster Conservation and Development Strategy identifies the NTURA Site as being potentially suitable for urban development subject to further investigation of the site particularly in regard to flora and fauna, potential mineral resources, bushfire hazard and stormwater and drainage. These issues have been investigated and the results are discussed in this Study and supporting information. The rezoning of the NTURA Site is considered to be consistent with the Strategy in that it:

- supports the regional conservation framework by protecting key habitats for the Critically Endangered TMO;
- ensures that key fauna corridors in the north-western portion of the site are retained for ecological purposes;
- adequate buffers are provided between conservation areas and appropriate ongoing conservation and management strategies will be put in place as discussed in **Section 7.6.1**;
- provides new housing and employment lands within a development precinct identified in the Strategy to meet population and employment growth;
- ensures that community and utility infrastructure will be provided strategically to meet the needs of the future NTURA Site population;
- ensures the protection of key habitat and corridors and ensures that development would protect the existing foreshore area;
- manages potential fire hazards through the provision of appropriate asset protection zones;
- does not compromise the extraction of economically valuable or viable mineral resources;
- identifies appropriate management strategies and processes to address stormwater, flooding, groundwater and soil issues present within the site; and
- provides for an urban form which is generally consistent with the vision for the area identified in the Strategy of low-scale development with taller forms of 4-5 storeys near the B2 Local Centre Zone.

7.3 Commonwealth Legislation

7.3.1 Environment Protection & Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, that are defined in the Act as matters of national environmental significance. The Act requires approval from the federal Minister for Environment for actions that may have impacts on matters of national environmental significance.

The Tuncurry Midge Orchid (TMO) is listed as a critically endangered species under the Act, and its protection is therefore a matter of national environmental significance. As discussed in detail at **Section 7.6**, future development of the NTURA would have both positive and negative impacts on existing TMO plants and TMO habitat.

As a Controlled Action under the *Environment Protection and Biodiversity Conservation Act 1999*, the NTURA will require the approval of the Commonwealth Minister for the Environment prior to the commencement of development works on the NTURA Site. Landcom is preparing a Public Environment Report as required under the Act and will continue to work with OEHS and the Commonwealth Department of Environment, in order to ensure that appropriate

design, offset and mitigation measures are put in place to ensure appropriate conservation outcomes are achieved in accordance with the relevant legislation.

7.4 State Environmental Legislation

A range of State environmental legislation governs the rezoning and future NTURA development. This includes, of particular relevance, the following:

- *National Parks and Wildlife Act 1971* in relation to Aboriginal archaeological resources;
- *Native Vegetation Act 2003* with respect to clearing of native vegetation;
- *Rural Fires Act 1998* with respect to planning for bushfire hazard;
- *Water Management Act 2000* with respect to use, management and impact on water resources;
- *Coastal Management Act 2016* with respect to development within coastal areas;
- *Roads Act 1993* with respect to future road works; and
- *Threatened Species Conservation Act 1997* and *Biodiversity Conservation Act 2016* with respect to identified flora and fauna species and ecological communities.

The *Environmental Planning and Assessment Act 1979* sets out the manner in which this legislation needs to be considered during the rezoning process and will be applied to future detailed applications. The rezoning will establish the land use planning framework with which the assessment of detailed applications for development must comply. The proposed rezoning will not disable any of the above legislative provisions affecting future development within the NTURA Site.

Whilst detailed design and assessment for compliance with the relevant legislation will occur at the subdivision/development approval stages, the proposed land use planning controls, Master Plan and Draft DCP have been developed with a view to ensuring that the planning controls facilitate and do not preclude compliance with relevant applicable legislation at these stages.

7.4.1 State Environmental Planning Policies

Table 6 below addresses the key provisions of the relevant environmental planning instrument.

Table 6 Consistency with key State Environmental Planning Policies

Instrument	Comments
State Planning Instruments and Controls	
State Environmental Planning Policy (Koala Habitat Protection)	The Koala SEPP does not apply to the majority of the North Tuncurry site due to the existing RU2 Rural Landscape zoning, however, the SEPP is applicable to the areas of land within North Tuncurry zoned RE2 Private Recreation and E2 Environmental Conservation. The effect of the Koala SEPP is such that it regulates development at the Development Application stage only, and does not directly regulate rezoning proposals. Notwithstanding this, the proposal is consistent with the requirements of the SEPP in that the Study and master plan has been informed by studies of the likelihood of koala habitat within the site. Whilst koala sightings have been recorded directly south and east of the NTURA Site, no evidence of resident populations of koalas was found during site inspections undertaken by RPS (Appendix Q). Notwithstanding the above, koalas have been 'assumed' to be present on part of the site only on a precautionary basis for the purpose of undertaking credit calculations in the Biodiversity Certification Assessment (refer Section 7.6). This precautionary approach ensures that impacts to potential koala habitat will be offset as part of the broader conservation approach to the site in accordance with the requirements of the <i>Threatened Species Conservation Act 1995</i> and <i>Biodiversity Conservation (Savings and Transitional Provisions) Regulation 2017</i>.
SEPP 55 – Remediation of Land	SEPP 55 ensures that remediation work is considered by the consent authority when a rezoning proposal is being considered. It establishes a range of requirements on planning and consent authorities when considering rezoning and development proposals and it also aims to facilitate the remediation of contaminated land. SEPP 55 is supported by the Managing Land Contamination: Planning Guidelines (Contaminated Land

Instrument	Comments
	Planning Guidelines), which reinforce the requirements of SEPP 55. Worley Parsons undertook a Soil Contamination Assessment, attached at Appendix F . Analysis of onsite soils and foreshore sediment samples indicate that the NTURA Site in its current condition would require minor remediation and other mitigation works to make the NTURA suitable for the proposed land uses, as further discussed at Section 7.12.2 .
Coastal Management SEPP 2018	Introduced in April 2018, the Coastal Management SEPP 2018 sets out a planning framework to manage development in coastal areas and protect the environmental assets of the coast. The eastern edge of the NTURA Site is identified in a coastal management area, specifically, "coastal environment area" and / or "coastal use area". The SEPP specifies provisions and consent requirements for development within the "coastal environment area" and / or "coastal use area" to manage any adverse impacts. An Addendum to the Coastal Processes, Hazards and Planning Study has been prepared by EMM Consulting (Appendix I2) which specifically addresses the objectives of the <i>Coastal Management Act 2016</i> in relation to the 'coastal use area' (and 'coastal environment area' (within which no development is proposed). Subject to detailed design and assessment at the Development Application stage, the NTURA Master Plan provides for development that is consistent with the objectives of the Act and which is capable of compliance with the relevant provisions of the SEPP.
Draft State Planning Instruments and Controls	
Draft Housing Diversity SEPP	Phase 3 of the Draft Housing SEPP envisages the consolidation of five existing housing-related SEPPs and the introduction of a range of new planning provisions to support the delivery of a diverse range of housing typologies and tenures to better meet the housing needs of the community. These changes are not of direct relevance to the proposed rezoning of North Tuncurry, however, it is considered that the NTURA Master Plan supports the principles and objectives of the Draft SEPP by providing for a diverse range of housing typologies to better respond to the housing needs of the MidCoast community.
Draft Design and Place SEPP	The NTURA Master Plan is highly supportive of the five guiding design principles outlined in the Draft Design and Place SEPP of beauty/character, inviting public spaces, production/connected spaces, sustainable/greener places and resilient and diverse places for enduring communities. The Master Plan has been the product of a precinct-based approach informed by extensive technical studies and ongoing stakeholder engagement and design refinement to support the delivery of a place-based approach to project delivery.

7.5 Visual Analysis

Roberts Day have prepared a Visual Assessment Report (**Appendix D**) which considers the visibility and visual impact of the NTURA on key vantage points from surrounding areas. The following sections consider the visual impacts of the NTURA from the foreshore and coastal locations, as well as other key locations.

Coastal Views

In order to assess the visual interface between the NTURA and the Nine Mile Beach coastline, a number of photomontages were prepared based on the Master Plan and Landscape Master Plan from Forster Main Beach and Nine Mile Beach directly adjacent to the proposed B2 Local Centre Zone. The foreshore buffer, which is approximately 200m wide, the use of native screening vegetation and proposed building height restrictions are all key contributors to managing the visual impact between the coast and the NTURA when developed and continuing the predominance of the vegetated coastal setting in this area.

Four key views have been modelled pre- and post- the NTURA. The visual assessment concludes that more than 90% of the future development within the NTURA will not be visible in the context of the coastline when viewed from Nine Mile Beach or from Forster to the south. The NTURA will be most visible from Nine Mile Beach directly east of the B2 Local Centre Zone when standing at the interface of the beach and foreshore (**Figure 26**). The NTURA would be less visible from more distant views, with the centre appearing as a minor protrusion above the height of existing dunal vegetation but below the mature height of new trees.



Figure 26 Proposed view from Nine Mile Beach to North Tuncurry B2 Local Centre Zone

Source: Roberts Day

Bennett's Head

The NTURA would be visible from Bennett's Head as a distant, low-scale urban area sitting behind the existing fore-dune area. It is expected that views to the NTURA from the headland would be similar to those already available of the northern urban area of Tuncurry, with existing and new trees and vegetation being the predominant visual element with intermittent views to development in higher-density areas such as the B2 Local Centre Zone. Given the scale and prominence of Mt Talawahl in the background, it is considered that views to the NTURA would be secondary and have negligible visual impact on views from Bennett's Head.

Other Views

The following sections discuss the potential visual impacts of the NTURA on non-coastal views from key areas identified in **Figure 27**.



Figure 27 Key visual interfaces with NTURA

South-East Residential Neighbourhood

The main inland visual interfaces to the NTURA Site are from Northern Parkway and The Lakes Way. The TAFE Campus and Beach Street sporting fields provide a substantial buffer between the southern edge of the proposed development footprint and existing residential development east of The Lakes Way. The proposed low-scale residential nature of the south-eastern edge of the NTURA will be viewed simply as an extension of the existing urban area and there is unlikely to be any adverse visual impacts from this location.

Northern Parkway Business Zone

It is anticipated that the proposed B5 Business Development zone located at the south-western corner of the NTURA Site adjoining The Lakes Way and Northern Parkway would accommodate a range of larger scale buildings for warehousing, distribution and bulky goods. The same area may also be developed for institutional/ community uses such as an educational establishment or health care facility if a provider is interested. The Draft DCP contains controls to manage future development in this location, including vegetation screening, and accordingly visual impacts as well as bulk and scale considerations can be satisfactorily addressed. Future development in this part of the NTURA is expected to be a natural extension of the TAFE Campus and therefore is unlikely to have any significant visual impact. The Northern Parkway business zone is sufficiently distanced from the foreshore that views from the beach will be unaffected.

The Lakes Way

Views from The Lakes Way will remain largely undisturbed, with the western boundary of the NTURA development footprint (excluding the northern industrial zone) set back by a minimum of 216 metres from The Lakes Way. The extent of existing vegetation within this corridor (all of which will remain undisturbed), and the low-scale residential nature of development along the western edge of the development footprint, will collectively ensure that there would be no visual interface between The Lakes Way and the main development footprint north of Chapman's Road, with the exception of the new access road.

Industrial Zone

The proposed industrial precinct at the north-eastern corner of the Site, which is located nearly 3km to the north of Chapman Street along The Lakes Way is isolated from the existing urban context of Tuncurry. It is anticipated that this precinct could accommodate a range of industrial uses subject to market demand, and the proposed development standards and Draft DCP establish broad development controls for this precinct to facilitate a range of development and building types within this precinct whilst ensuring an appropriate visual interface with The Lakes Way. It is noted that this portion of the NTURA Site is already partially occupied by a waste depot facility, and existing activities provide negligible visual impact. The proposed uses will be screened from The Lakes Way by retention of mature vegetation along that road's frontage.

7.6 Biodiversity, Flora and Fauna

The NTURA Site has been the subject of a number of ecological studies over the years to establish a detailed understanding of the existing ecological characteristics of the NTURA Site, address the Study Requirements, provide an assessment of the impacts of the rezoning, and establish a framework for ensuring that appropriate ecological mitigation measures are implemented in future development.

The Biodiversity Certification Assessment and Biodiversity Certification Strategy prepared by Eco Logical Australia and attached at **Appendix Q**, consolidates the findings of the previous investigations, addresses the Study Requirements issued for the Project, and specifically assesses the impacts of the NTURA Project. The key findings of the Biodiversity Certification Assessment and Biodiversity Conservation Strategy are summarised in the following sections.

7.6.1 Flora

The proposed development footprint would result in the removal and/or disturbance of 198.66 ha of existing vegetation of varying ecological communities. This would include the following biometric vegetation communities:

- 'Blackbutt- Smooth-barked Apple shrubby open forest on coastal sands of the southern NSW North Coast Bioregion' biometric vegetation class;

- 'Banksia dry shrubland on coastal sands of the NSW North Coast Bioregion' vegetation class;
- 'Coast Banksia – Coast Wattle due scrub, Sydney Basin and South East Corner' vegetation class; and

In addition, the development footprint would impact upon 63 individual Tuncurry Midge Orchid plants.

Vegetation Communities

The vegetation communities listed above are not identified as Endangered Ecological Communities (EECs) in the *Biodiversity Conservation Act 2016* (BC Act) or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), however, they are identified as being of regional conservation significance. The proposed offset measures to protect the ecological values of these communities is discussed at **Section 7.6.3**.

Tuncurry Midge Orchid (TMO)

The most important ecological issue for the NTURA Site is the occurrence of the TMO. This species is listed as Critically Endangered under the EPBC and TSC Acts and is only known to occur within the Forster Tuncurry region at a small number of locations. To date, there is a total of 2,636 known TMO stems across the region, of which approximately 1,536 are within the land area where biocertification (as discussed in **Section 7.6.3**) is proposed to be conferred within the NTURA Site. A further 834 known stems are identified within the BCAA on land located adjacent to but outside of the NTURA Site under the ownership of the FLALC. Of the TMO occurring within the BCAA, approximately 2.6% (63 individuals) have been recorded within the proposed development footprint. Over 88% of TMO within the BCAA are proposed to be conserved within the land identified to be subject to the environmental conservation zoning within the NTURA Site, or other biodiversity protection mechanisms. The core TMO population has existed for over 20 years within close proximity to residential and industrial development, and it is not expected that the introduction of additional development in the vicinity of these retained populations would impact upon their ongoing health or viability.

In order to mitigate this impact and ensure a net 'improve or maintain' outcome is achieved, a range of offset and regeneration measures are proposed and discussed below.

7.6.2 Fauna

Of fourteen species listed under the TSC and EPBC Acts that have been recorded on the NTURA Site, only the Brush-tailed Phascogale, Squirrel Glider, Pygmy Possum, Eastern Free-tail Bat and Eastern False Pipistrelle are believed to use the NTURA Site for roosting or breeding purposes. The Threatened Species Habitat Profile prepared by RPS (**Appendix Q**) indicates that there are large areas of habitat suitable for foraging, breeding and roosting by all of the identified species within the Forster Tuncurry region and surrounds. The only exception is the Little Parrot, which has only foraging habitat within the NTURA Site and within the Forster Tuncurry region but does not have any suitable roosting/breeding habitat. The majority of suitable foraging and roosting/breeding habitat for these species is located within the northern portion of the Site outside of the proposed development footprint, in the northern portion of the NTURA Site.

Whilst there have been no sightings of the Koala within the impact area over the course of extensive targeted ecological field surveys of the NTURA Site, this species has been 'assumed' to be present within good condition Blackbutt-Smooth-barked Apple open forest only on a precautionary basis for the purpose of undertaking credit calculations in the Biodiversity Certification Assessment.

Similarly, Section 2.3.6 (page 36) of the Biodiversity Assessment (**Appendix Q**) indicates that three records of the Green Turtle on Nine Mile Beach have been identified (two in May 2007 and one in 2009). The records were all of dead animals found on the beach and likely represent vagrant animals from further north. The Biodiversity Assessment also acknowledged that a single Green Turtle was recorded nesting on Nine Mile Beach, east of the proposed development in November 2011 and goes on to recommend several measures and commitments to reduce the potential impacts of the proposal on the Green Turtle, noting that it appears to utilise areas of the NTURA Site that will not be 'cleared' by the proposal (refer to Section 3.7 of the Biodiversity Assessment).

7.6.3 Biocertification of Development Precinct

The *Biodiversity Conservation Act 2016* commenced on 25 August 2017. The Minister for Environment made the 'Proposed Applications for Biodiversity Certification Order 2017' (the Order) on 21 November 2017, which lists North Tuncurry as a declared application for the purpose of the *Biodiversity Conservation (Savings and Transitional Regulation) 2017* (the Transitional Regulation). The Transitional Regulation has the effect of permitting the project to continue to be the subject of biocertification pursuant to Part 7AA of the former *Threatened Species Act 1995* (TSC Act).

In accordance with the TSC Act it is proposed that the NSW Department of Planning, Industry and Environment would, as the relevant planning authority, apply for the biocertification of the SEPP Amendment for the North Tuncurry Urban Release Area. This will allow for the formalisation of biodiversity conservation measures at the strategic planning level and streamline future ecological assessment requirements at the development assessment stage.

Eco Logical Australia has prepared a Biodiversity Certification Report and Biodiversity Certification Strategy (**Appendix Q**) on behalf of Landcom to facilitate the biocertification of the planning instrument to facilitate the North Tuncurry Urban Release Area. This document has been prepared in response to comments from the NSW Office of the Environment and Heritage (OEH), Commonwealth Department of the Environment and Energy (DEE) and Council using the Biodiversity Certification Assessment Methodology (BCAM).

Biocertification may be conferred on a planning instrument by the Minister for the Environment if the conservation measures proposed in the biocertification application result in an overall 'improvement or maintenance' in biodiversity values. This is referred to under the methodology as satisfying the 'improve or maintain test'.

The proposed Master Plan will impact 198.66 ha of vegetation and threatened species habitat that is generally in moderate to good condition despite previous uses of the land for pine plantation and mineral sand extraction. The impact area includes 63 recorded TMO individuals which represents less than 3% of the known population in the assessment area. Impacts to TMO constitute a 'red flag' under the BCAM and requires a 'variation' from the Minister for the Environment. An application for this variation is included in the Biodiversity Certification Report.

The application proposes to permanently protect and manage for conservation 327.71 ha of land within the assessment area as on-site Biodiversity Stewardship site that include 312.7 ha of mapped native vegetation and threatened species habitat. The proposed Biodiversity Stewardship site comprises the same vegetation types to those being impacted as well as confirmed habitat for the two threatened fauna species and almost 60% of the total known population of TMO.

A two-stage approach is proposed to secure adequate ecosystem and species credits required under BCAM. The first stage entails reliance on the credits attained through the on-site conservation area, whilst the second stage relies on Landcom securing appropriate off-site conservation outcomes to attain sufficient credits for the balance of the development to be completed.

The proposed on-site Biodiversity Stewardship site provides sufficient credits to offset the calculated credit requirements of the initial residential Stages 1-12 and the south-western business park precinct (E1) as illustrated in **Figure 17 of Section 4.11** of this report. The on-site Biodiversity Stewardship site will be registered within 12 months of the conferral of biocertification and commence active management of this area. Accordingly, these development stages are able to proceed whilst arrangements are made to secure the required off-site credits.

A number of options are available to Landcom in order to establish appropriate off-site conservation measures for the remaining stages of development:

- An additional area of between 380 and 400 ha at Nabiac (within a broader landholding of approximately 1,500 ha) formerly owned by MidCoast Water (now owned by MidCoast Council) could be registered as a Biodiversity Stewardship site to meet the full offset requirements for impacted vegetation types and habitat for the Brush-tailed Phascogale and Eastern Pygmy Possum as well as further records of the TMO. Landcom and MidCoast Water had undertaken consultation and reached in-principle agreement to this approach prior to MidCoast Water being dissolved. Landcom will seek to recommence these discussions with MidCoast Council as the new land owner.

- Identification of alternative off-site BioBank or Biodiversity Stewardship sites within the region to provide the balance of the required credits.
- Purchase of credits either from the credit market and/or the Biodiversity Conservation Fund (BCF) established under the BC Act. A number of biobank sites have been registered in recent years on the lower north coast and others are currently being assessed. These sites are also capable of providing the remaining ecosystem and species credits required.

Landcom would be required to demonstrate that sufficient credits have been obtained prior to the commencement of the remaining stages of the development.

Subject to the Minister's approval of the red flag variation request for TMO, and obtaining additional off-site credits either through the establishment of a new Biodiversity Stewardship site(s), purchase of credits from existing sites or purchase of credits from the Biodiversity Conservation Fund, the proposal meets an 'improve or maintain' outcome and is eligible for biodiversity certification. If the Minister confers biocertification on the requested land, MidCoast Council as the consent authority for future development applications, is no longer required to assess impacts to biodiversity values as these have already been addressed by the Minister and conservation areas will be required to be managed in perpetuity for conservation.

7.7 Transport and Accessibility

A Traffic Management and Accessibility Plan (TMAP) has been prepared by AECOM (**Appendix L**) which considers the impact of the proposed rezoning and future development on the existing and future road network within and surrounding the NTURA Site.

A meeting was held between the project team and the RMS on 10 May 2013, where it was agreed that traffic modelling would assume the year 2026 as the date for full development of the NTURA Site. However, based on the current development timeline a 2050 date has been adopted as this is considered more realistic whilst noting that at this rate a 'full development' scenario would not occur until approximately 2060.

7.7.1 Site Access and Network Capacity

As discussed in **Section 3.4.9**, the existing road network and local intersections are generally operating with good levels of performance and spare capacity. Based on travel patterns within Forster Tuncurry LGA, the TMAP estimates that the NTURA would ultimately generate approximately 1,231 and 1,359 external vehicle trips during the AM and PM weekday peak periods respectively. This assumes a rate of 0.58 trips during the AM peak and 0.64 trips during the PM peak (lower than the rate outlined in the RMS Guide to Traffic Generating Developments) based on the Household Travel Survey undertaken by MidCoast Council in 2012, and assuming a level of containment of trips within the site for local trips.

It is expected that nearly half of peak vehicle movements to/from the NTURA would be directed via the new access road to The Lakes Way, with approximately one-third being distributed to The Lakes Way via Northern Parkway and the remainder being distributed south via the proposed Beach Street extension. The largest increases in traffic movements within the local road network will therefore be experienced along The Lakes Way, and in particular between Northern Parkway and the new site access road, where the majority of traffic travels south from the Northern Parkway. Taking into account the road network upgrades proposed Forster District S94 Development Contributions Plan 2009 works schedule, which includes the duplication of The Lakes Way to the north of Chapmans Road, it is anticipated that there would be sufficient capacity within the network to accommodate additional traffic from the NTURA.

By 2050 the TMAP anticipates that the Wallis Lake Bridge would be approaching full capacity under its current configuration irrespective of the rezoning proposed by this Study (i.e. the bridge is expected to reach 85% capacity even without the NTURA). The works scheduled in the Forster District S94 Development Contributions Plan 2009 identifies the Wallis Lake Bridge as being duplicated in 2022, whilst the proposed amendments to the S94 Development Contributions Plan project the Wallis Lake Bridge being duplicated from 2025. Irrespective of the Section 94 Plan projections, existing traffic growth and new traffic from the NTURA is expected to have just exceeded the bridge's current capacity.

Landcom understands that TNSW has recently commissioned another traffic consultant, Arcadis. The project details and full study have not been made available to Landcom, however traffic counts for Wallis Lake Bridge have been shared which indicate that vehicle movements across Wallis Lake Bridge may be higher than indicated in the TMAP supporting this Study (refer to **Table 7**). **Table 7** indicates that differences between the TMAP and the Arcadis investigations represent between 7% and 19% over the AM and PM peak respectively. It is understood that the Arcadis traffic counts were completed in December 2020 and January 2021, during the COVID 19 border restrictions when there was no international travel or interstate travel permitted. This means that there were fewer local residents travelling outside the region and there was a greater influx of tourists from metropolitan and other regional locations that could only travel within NSW. The Arcadis results are therefore considered atypical of normal conditions. Notwithstanding this, the higher counts and implications for the timing of a future duplication of Wallis Lake Bridge are discussed below.

Table 7 Summary of Wallis Lake Bridge traffic survey information

	AM Peak		PM Peak	
	West Bound	East Bound	West Bound	East Bound
Aecom NTURA TMAP	1088	1097	1140	1129
Arcadis	1250	1310	1230	1320

Source: Aecom and Arcadis

Traffic movements along Beach Street would increase substantially from existing levels under the 2050 scenario, however, this road would continue to have substantial spare capacity to support this growth.

7.7.2 Intersection Capacity

The main intersection for access to the NTURA is proposed to be provided approximately 1.2km north of Chapmans Road, connecting to the north-west of the NTURA via a new roundabout. This access will provide the most direct route for those within the NTURA to connect to the Pacific Highway. It is also likely to be utilised by residents in the north as the primary connection to Forster and Tuncurry. This access also provides the most direct connection to the proposed B2 Local Centre Zone from The Lakes Way. An assessment of the 2050 development scenario of this intersection using SIDRA modelling software indicates that this new intersection would perform at a Level of Service B during the AM peak period and Level of Service A during the PM peak period, which is considered to represent a good level of operation with acceptable capacity.

The existing road access via the Northern Parkway will provide a connection to the south west of the NTURA Site and will act as the main access for the initial stages of the development (to be located to the south). This access can be utilised without the need for an intersection upgrade, up until such time as the Lakes Way is duplicated. Notwithstanding this, the NTURA should consider the existing Joint Education Campus (located adjacent to this access) to ensure that road user conflicts are minimised adjacent to the Campus.

7.7.3 Timing of Road Upgrades

The 2050 scenario adopted by AECOM for the purpose of the TMAP network assessment represents a highly conservative scenario whereby lots would be delivered at a rate of approximately 50 lots per year. **Table 8** details the lot thresholds at which intersection upgrades would be required, the current estimates for when these works would be delivered under the Forster District S94 Development Contributions Plan 2009, and an assessment of when these upgrades would be required based on the expected release rate for the NTURA. Based on this assessment, it is likely that a number of these infrastructure upgrades could be substantially delayed, allowing Council to redirect funds to higher priority projects.

The exception to the above would be the delivery of the Beach Street Extension, which is anticipated to be delivered early in the development process to promote good connectivity between new development and the existing Tuncurry urban area.

Table 8 Thresholds for road infrastructure upgrades

Infrastructure Works	Lot Threshold	S94 Plan Estimated Delivery	Delivery with NTURA lots
Construction of two additional lanes along The Lakes Way from Grey Gum Road to approximately 250m north of Chapmans Road	550-800	2021	2033-2038
Upgrade to the intersection of The Lakes Way Grey Gum Road to a roundabout	800-900	2017	2038-2040
Upgrade to the intersection of The Lakes Way Chapmans Road to a roundabout	2,050-2,123	2017	2063-2065
Extension of Beach Street from North Street to Northern Parkway	N/A	2027	2023 (concurrently with initial NTURA stages)
Duplication of the Wallis Lake Bridge	800	2025	2038

Source: AECOM

It is worth highlighting that the TMAP assumes Wallis Lake Bridge duplication is in place by 2034, on the basis that the Contributions Plan's identified 2025 delivery date is probably an unlikely proposition. It is also worth highlighting that the TMAP forecasts that by 2050, traffic movements on the Wallis Lake Bridge are expected to increase as follows without the NTURA:

- 1,449 trips westbound and 1,461 trips eastbound in the AM peak; and
- 1,519 trips westbound and 1,504 trips eastbound in the PM peak.

Under a development scenario, when the NTURA is realised, these trips increase to:

- 1,490 trips westbound and 1,877 trips eastbound in the AM peak; and
- 1,504 trips westbound and 1,594 trips eastbound in the PM peak.

This represents only:

- 9 additional trips westbound and 416 additional trips eastbound in the AM peak; and
- 15 less trips westbound and 90 additional trips eastbound in the PM peak.

Landcom has been verbally advised by the DPIE that TNSW has access to more recent mid-block modelling for Wallis Lake Bridge which indicates that traffic volumes are higher than what the TMAP specifies. While TNSW would not share the modelling with Landcom, it provided the data in **Table 9**.

Table 9 Peak one hour traffic data on Forster-Tuncurry Bridge in 2020, 2030 and 2040

	Years	Weekday AM peak		Weekday PM peak		Saturday peak	
		Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
Forster-Tuncurry Bridge	2020	1,310	1,250	1,320	1,230	1,310	1,390
	2030	1,440	1,370	1,450	1,350	1,500	1,590
	2040	1,570	1,500	1,590	1,470	1,680	1,790

Source: Transport for NSW

By comparison, the TMAP assumes that the current peak flow is around 1,100 vehicles per hour, which means that TNSW's data above indicates that with the introduction of the NTURA and other developments in Forster may result in the bridge reaching capacity at an earlier stage than identified in the TMAP.

Table 26 of the TMAP summarises when infrastructure upgrades are assumed to occur under Council's Section 7.11 Contributions Plan (including the Wallis Lake Bridge duplication). Recognising that the timeframes outlined in the Section 7.11 Contributions Plan are unlikely to be achieved, the TMAP also identifies when the duplication could occur without the NTURA (2048) and with it (2034). Table 26 also identifies that 600 lots could be developed before the bridge duplication would need to occur. Through the Statement of Intent prepared to support the offer to Council to enter into a Planning Agreement, Landcom proposes to pay a monetary contribution to Council that is consistent with the rates in Council's existing Contributions Plan and would presumably be allocated in part to the Bridge's duplication. This is considered a reasonable position based on the published and publicly available level of commitment and funding sources to the Bridge's duplication.

7.7.4 Sustainable Transport

As discussed in **Section 4.10**, key collector and local roads within the NTURA would be designed to accommodate standard buses, allowing extension/diversion of existing or new bus services during the early stages and then more extensively upon completion of the road network. Landcom will work with Transport for NSW and the local service provider to ensure that bus services are provided early in the project delivery to encourage early take-up and the formation of good transport habits.

In addition to the incorporation of public transport within the NTURA, a more extensive Sustainable Travel Strategy has been developed in order to reduce private vehicle usage and promote walking and cycling. These measures include:

- distribution of household information packs, start-up discounts on public transport and bike purchases;
- high quality cycle routes with good connections to the surrounding network and key destinations, and the provision of bike parking at key destinations; and
- permeable and safe pedestrian network linking open space, bus stops and the B2 Local Centre Zone.

The implementation of the above measures is expected to reduce private vehicle usage and assist in the establishment of healthier and more sustainable transport patterns within the NTURA.

7.8 Coastal Processes, Sea Level Rise and Fluvial Flooding

7.8.1 Coastal Processes and Sea Level Rise

Worley Parsons have prepared a Coastal Processes, Hazards and Planning Study (**Appendix 01**) which considers the immediate and longer term implications of coastal processes on the development footprint and the potential impacts of coastal processes on future development within the NTURA Site. The Great Lakes Coastal Hazard Study was also prepared on behalf of Council to inform the Great Lakes LEP 2014. Coastal processes including waves, storm events, currents, onshore and offshore sediment transportation and aeolian (wind) processes all have impacts upon the landform and risk profile for the NTURA. In 2021, EMM undertook a peer review of the Coastal Processes, Hazards and Planning Study prepared by Worley Parsons and prepared a Coastal Processes, Hazards and Planning Study Addendum (**Appendix 12**) to address concerns raised by Council in response to the Worley Parsons report.

In 2009 the (then) NSW Department of Environment, Climate Change and Water (DECCW) adopted the 'Sea Level Rise Policy Statement' (DECCW, 2009) which adopted a sea level rise planning benchmark for the NSW coastline based on the upper limits of the most credible national and international projections. The NSW sea level rise planning benchmark is an increase above 1990 mean sea levels of 0.40m by 2050 and 0.90m by 2100. Since 2009 the NSW Sea Level Rise Policy Statement is no longer NSW Government policy, and any reference to the 'NSW sea level rise planning benchmarks' should be taken as meaning 'council's adopted sea level rise projections' where available. The former Great Lakes Council adopted the benchmarks established in the 2009 benchmarks in June 2011, and as such the 0.40m and 0.90m levels continue to be the most appropriate assessment of sea level rise for the Great Lakes LGA. In addition to sea level rise, climate change has the potential to result in changes to storm patterns with increases in rainfall intensities of between 10-30% and potential changes to the local wave climate.

Worley Parsons undertook an analysis of the existing coastal processes and made an assessment of the immediate and potential long-term hazards to the site from the impact of climate change, including sea level rise and changing

coastal dynamics. Based on this assessment, a series of 'hazard lines' have been identified which relate to the immediate, medium-term (2060) and long-term (2100) hazards posed to future development within the NTURA by coastal processes, accounting for slope adjustment and potential reductions in building foundation capacity. These hazard lines are illustrated in **Figure 28** below.

The Coastal Processes, Hazards and Planning Study does, however, note that the hazard lines should not necessarily exclude all development, and there is the potential to locate some facilities and development within the following areas:

- **Immediate to 2060 hazard line:** this area should be maintained as a vegetated buffer, however, limited commercial activities could be contemplated such as learn to surf schools and fitness training and beach hire (surf boards, beach chairs etc.) and kiosks associated with surf lifesaving club facilities.
- **2060 to 2100 hazard line:** only demountable structures or permanent structures with a lifecycle consistent with the timeframe for coastal risk (i.e. 50 years) should be contemplated within this zone, as well as uses and structures which are not as sensitive such as passive recreation areas, sporting fields, walking trails etc.
- **2100 hazard line landward:** no immediate limitations, however the urban structure should allow retreat from this line if required in the future.

The Master Plan is consistent with these principles in that all development lots would be located landward of the 2100 hazard line as illustrated in **Figure 29**, facilitated by the reconfiguration of Tuncurry Golf Course. Some temporary, non-vital and durable infrastructure, such as minor roads, fire trails and shared paths may be located directly east of the 2100 hazard line, and some demountable structures associated with beach usage and access may be located further east, however these structures can easily be relocated and have asset replacement lifecycles well within the expected risk timeframe. In light of the above, it is considered that the proposed rezoning would not give rise to any significant risks in terms of exposure to coastal processes.

MidCoast Council adopted the Great Lakes Coastal Zone Management Plan (August 2016) under the former *Coastal Management Act 1979*, which includes Nine Mile Beach. MidCoast Council has advised that it aims to produce a single unified Coastal Management Program (CMP) under the current *Coastal Management Act 2016* framework for the entire MidCoast Council coastline by 2021.

The EMM Coastal Processes, Hazards and Planning Study Addendum (**Appendix I2**) concludes the Worley Parsons Study achieves the intended scope, being the consideration of the proposed development footprint for the NTURA Site relative to current and future coastal processes and hazards. Importantly, EMM concludes that the approach is consistent with the statutory provisions and policy intent of the key documents.

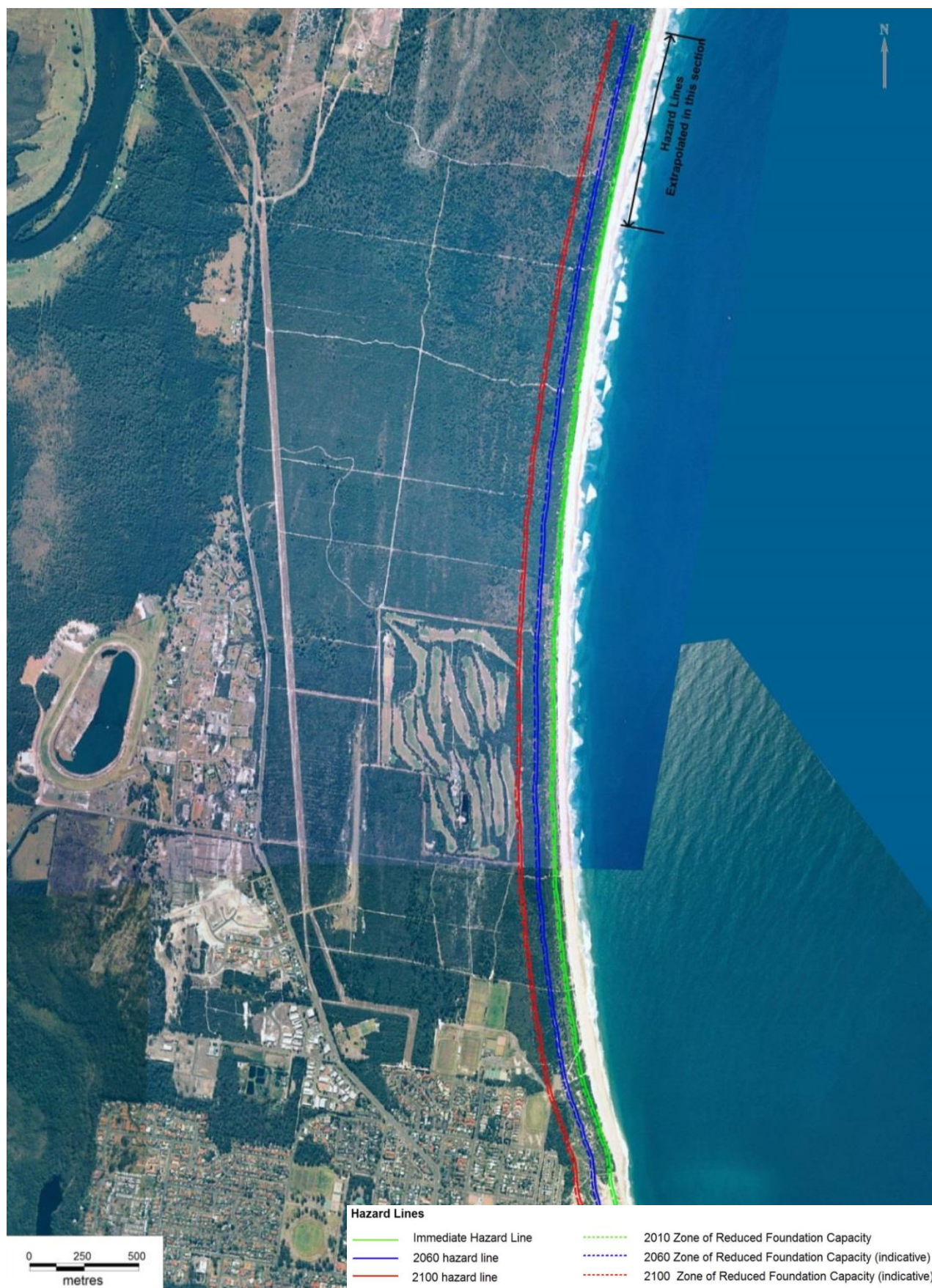


Figure 28 Coastal hazard diagram

Source: Worley Parsons

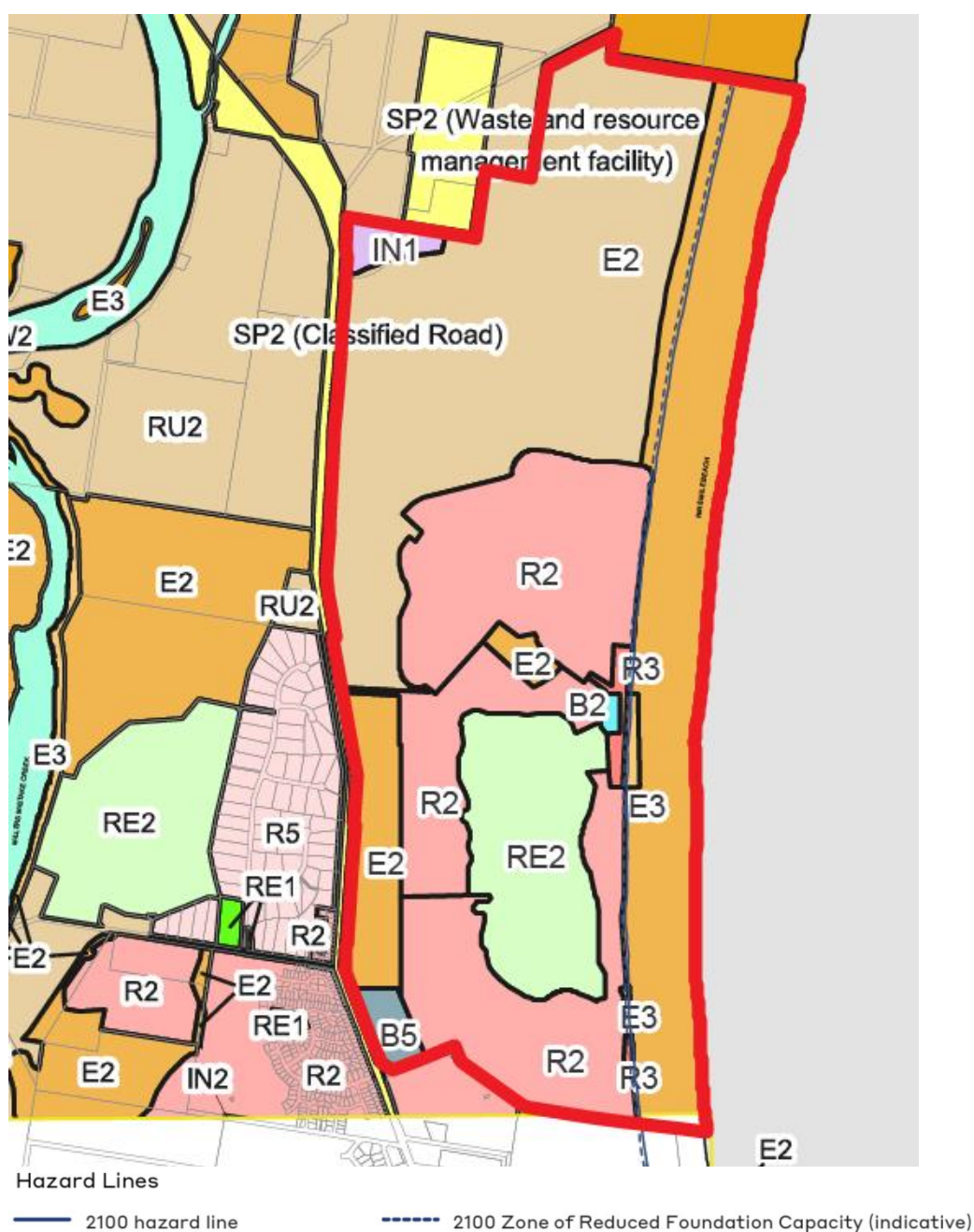


Figure 29 Proposed Land Use Zones and 2100 Coastal Hazard Line

Source: Worley Parsons and Ethos Urban

7.8.2 Fluvial Flooding

As discussed in **Section 3.4.4**, the NTURA is not affected by flooding from the Wallamba River during storm events up to and including the Probable Maximum Flood.

Notwithstanding this, flooding events are expected to impact upon the groundwater table and detention basin capacity and rate of discharge. To assess potential flood risks, the IWCMS and ICWMS Addendum (**Appendix P1** and **Appendix P2**) considered a water balance model that simulates the surface and groundwater regime by applying a long-term rainfall record for the Tuncurry area. The water balance analysis identified a 2 ½ month rainfall sequence that occurred in 1963 as producing the highest groundwater flood levels for both existing and proposed conditions. This rainfall sequence comprised 1,464 mm over 69 days and included four embedded storms, that had 48-hour rainfall totals of between 150 to 250 mm. Analysis of the water balance results assessed this rainfall sequence as being greater than a 1% AEP event. Accordingly, this event was adopted as a pseudo 1% AEP event.

The water balance model and detailed groundwater models were then applied to assess this event, and the model results were used to establish the flood risk management approach for the NTURA. Design storm analysis applying the methods and principles described in Australian Rainfall and Runoff (ARR) were then undertaken to complement the water balance analysis. The design storm analysis assessed a range of AEP storm events that have durations ranging from a few hours to 7 days. The results are used to complement the water balance results and assess:

- flood conditions associated with 1% AEP (1 in 100 year), 0.2% AEP (1 in 500 year) and 0.05% AEP (1 in 2,000 year) events;
- the consequence of a blockage to the proposed drainage gravity pipe;
- sensitivity to antecedent conditions; and
- analysis of the PMF.

The design storm analysis estimated a peak 1% AEP basin level of 4.04 m AHD. The results from the 0.2% and 0.05% AEP events and sensitivity analysis demonstrates that the flood storage within the proposed freeboard zone (i.e. 4.2 to 5.0 m AHD) provides significant contingency for events and/or circumstances that are beyond those applied to the design event simulations. For example, the analysis concluded that peak basin flood levels would not exceed the proposed minimum floor level of 5.0 m AHD during a 0.05% AEP (or 1 in 2000 year) design storm event, or if a 1% AEP event occurred following an extended wet period and the gravity drain was fully blocked.

In the context of the above, design surface levels would, subject to detailed design of the system, be required to adopt the following levels (with reference to **Figure 14** of this Study):

- Within Zone D3:
 - Roads – provisional level of 0.5m above the 1% AEP groundwater level
 - Habitable buildings – provisional level of 1.0 m above the 1% AEP groundwater level or 5m AHD (whichever is higher)
- Within Zone D4:
 - Roads – the 1% AEP basin level or 1% AEP groundwater level (whichever is the greater)
 - Habitable buildings – the greater of 0.8m above the 1% AEP basin level or 0.5m above the adjoining road level.

These design levels will ensure that flooding does not impact upon development or site access up to and including the 100 year average recurrence interval (ARI) rainfall event (including sea level rise of 0.91m).

As noted in Section 3.4.4, the Lower Wallamba River Flood Study provided at **Appendix K** is more contemporaneous than the formally adopted flooding investigations that are publicly available on Council's website and date back to 1985. Appendix K is therefore considered the appropriate reference. Landcom will be updating Appendix K to address the AR&R 2019 revisions in the context of any other feedback received during the consultation process, noting that WMA Water has already advised that the revisions are likely to result in slightly lower flood levels for the NTURA Site. Landcom is committed to updating Appendix K in consultation with DPIE's BCD.

7.9 Water Quality and Management

The proposed water management system described in the IWCMS (SMEC 2019) and IWCMS Addendum (EMM, 2021) seeks to address multiple objectives including flood risk management, water quality management, balancing cut and fill and integration with the proposed land uses. Groundwater and surface water flooding risks were identified as a key constraint in the central and western portions of the site and have been assessed using several modelling methods as described above in Section 7.8.

In terms of water quality and management, the IWCMS (**Appendix P1**) established four water management zones based on proposed land use and site constraints. These zones are described as Zone D1 (golf course and open space), Zone D2 (basins), Zone D3 (urban development, infiltration zone) and Zone D4 (urban development, piped drainage zone) and are illustrated in Figure 14 of this Study. Water management concepts for each of these zones have been established. Overall, the concepts have been developed to a sufficient level of detail to demonstrate functionality and proof of concept and are summarised below.

7.9.1 Water Management

Variations in groundwater levels within the NTURA Site present a challenge to the planning of site-wide stormwater management and disposal systems. Groundwater levels close to the surface, and typical variations of over 1 metre during wet periods result in groundwater reaching the surface on occasion. Detailed groundwater monitoring has been undertaken to inform the water management and quality concept design contained within the Integrated Water Cycle Management Strategy (IWCMS) prepared by SMEC (**Appendix 01**) and as modified by the IWCMS Addendum prepared by EMM (**Appendix P2**), which includes an assessment against the NSW Aquifer Interference Policy.

The IWCMS and ICWMS Addendum outline a conceptual drainage strategy based on the intended land distribution and the underlying groundwater and environmental conditions. In general, the strategy comprises directing stormwater into a series of interconnected water management basins with ephemeral and permanent water storage capacity. It is noted that the basins perform the same water management function irrespective of whether they are open water or ephemeral. The proposed basins would be located along the north, west and southern edges of the golf course and to a lesser extent within the northern portion of the development footprint.

Numerical modelling was undertaken to assess the effectiveness of the proposed integrated stormwater and groundwater management strategy (including water management basins) in managing identified constraints and potential impacts. Modelling results indicate that:

- Under developed conditions, recharge within the development area is expected to increase from 36% of rainfall to 50% of rainfall on an average annual basis. This increase is primarily due to the introduction of impervious surfaces and is expected to result in groundwater levels increasing by 0.3 to 0.4m under developed conditions at all times except for very wet conditions. The predicted higher levels are not expected to materially impact any existing properties or infrastructure.
- The combination of the gravity drainage and attenuation provided in the water management basins will be effective in reducing peak basin water levels below 3.9m AHD. In addition, these controls will enable the basin and adjoining groundwater levels to recede significantly faster than under existing conditions. Accordingly, the proposed controls are expected to be effective in managing groundwater flooding risks within the development area. The controls will also lower local groundwater flood levels, reducing the flood risk to adjoining properties and the Tuncurry Golf Course.
- The proposed stormwater quality controls are expected to exceed relevant pollutant reduction targets when considering runoff from impervious areas only. Relevant targets are not achieved on a whole of development basis due to very high infiltration rates which limit the potential for runoff from pervious areas (and impervious areas that drain to pervious areas) to be collected in a stormwater management system and treated in water quality controls. This limitation is considered to be unavoidable.
- It is expected that nutrient loads in recharge to the groundwater aquifer will increase under developed conditions. This is primarily attributed to the predicted increase in recharge volumes. It is expected that any increases in nitrogen and phosphorus loads in groundwater flowing to the west (into the Wallamba River Estuary) will be attenuated to background levels as groundwater recharges into the significant wetland area that exists to the east of the Wallamba River Channel.
- Proposed rainwater tanks and limited groundwater extraction for the irrigation of public open spaces will reduce the project's potential potable water demand by 70% in a 90th Percentile (typical wet) rainfall year, 62% in an average rainfall year and 54% in a 10th Percentile (typical dry) rainfall year. When combined with water restrictions, the proposed measures are expected to achieve similar demand reductions to a recycled water scheme in both typical and extreme dry years.

A conceptual earthworks model was also developed for the project. The earthworks modelling demonstrated that the proposed water management strategy can be implemented without importing fill provided that an efficient civil design (from an earthworks perspective) is applied.

7.9.2 Water Quality

In terms of water quality, Council's Great Lakes DCP 2014 requires:

- 80% reduction of Total Suspended Solids (TSS)

- 60% reduction of Total Phosphorous (TP)
- 45% reduction of Total Nitrogen (TN)

These targets are considered to be more appropriate to existing urbanised sites and would be very difficult to achieve due to the significant change in land use from a predominately vegetated area to an urbanised one. Based on an ambitious water quality strategy incorporating a combination of non-potable water storage and re-use for dwellings and biofiltration of road and impervious surface runoff, it is expected that within the development footprint (excluding the golf course) there would be a net increase in overall loadings of TSS, TP and TN discharge. Further reductions are considered difficult due to the high infiltration rates within the NTURA Site, negligible benefits associated with substantially increasing biofiltration areas and the fact that increase pollutant loadings are predominately associated with the increase in impervious surfaces.

Approximately 30% of the pollutant load from the NTURA Site would be exported to the west via groundwater flow in the direction of the Wallamba River Estuary and Wallis Lake system. It is expected, however, that this additional pollutant loading would be reduced to existing background levels by the time that it reached these systems as existing aquifer mineral concentrations and nutrient loadings would reduce this stormwater loading to a 'no net increase' in pollutants at these locations.

The stormwater quality strategies detailed in the IWCMS and IWCMS Addendum along with additional options will be further refined during detailed design and planning of the proposed development in collaboration with Council in order to ensure that the optimum environmental outcome is achieved. Section 5 of the IWCMS Addendum indicates that further design development is required for some aspects to establish the optimal design solution, development staging and finalise any planning arrangements. Accordingly, Landcom proposes that concept designs documented in the IWCMS and IWCMS Addendum will be prepared for the gravity drain, basin system and earthworks and staging. It is proposed that the Concept Designs will be finalised after rezoning approval but prior to the detailed design of development stages that will utilise the basin system. The concept designs will be generally in accordance with the concepts described in the rezoning proposal but will be progressed to a sufficient level of detail to enable key design decisions to be made in advance of detailed design, which will occur in stages.

The concept designs will be prepared in consultation with Council and BCD. For the gravity drain and basin system designs, Landcom will also fund external peer reviews to add both value and confidence to the process. The peer reviewer(s) will be selected in consultation with Council and will provide an independent perspective. It is expected that each design process will include a series of workshops attended by all stakeholders.

7.9.3 Water Regulation

The IWCMS Addendum addresses relevant water regulations related to water licensing and the NSW Aquifer Interference Policy (AIP). The IWCMS concludes that the NTURA is consistent with the regulatory requirements of the Water management Act, 2000 and the AIP for this stage of the planning process.

7.9.4 Conclusion

The proposed water quality and management strategy is considered an appropriate solution to support the proposed land uses on the NTURA, subject to the progression of the further detailed design as outlined in the IWCMS Addendum.

7.10 Indigenous Heritage and Archaeology

As discussed in **Section 3.4.10**, an Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Indigenous Cultural Resource Management Services (ICRMS) (**Appendix M**) in 2011 in accordance with the OEH 'Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation'.

The Assessment identified two known Aboriginal sites within the NTURA Site which are registered on the AHIMS database. One of these sites is located adjacent to the Heritage Green, a local pocket park on the central western edge of the proposed development, whilst the other site is located outside of the proposed development footprint. Future Development Applications for subdivision and development of land in the vicinity of the registered site near

Heritage Green will be required to ensure that works do not impact on this site unless an Aboriginal Heritage Impact Permit is obtained.

The ACHAR also indicates that the beach foredunes and back slopes and westernmost portions of the NTURA Site are likely to have archaeological potential based on past Aboriginal use of the area, heavy vegetation cover and natural processes. Under the planning controls proposed in **Section 6.0**, these areas are therefore proposed to be zoned for environmental conservation purposes to ensure their future protection, with little development or physical disturbance envisaged for these areas.

The ACHAR was peer-reviewed by RPS Group in 2019 to make recommendations that the ACHAR remains suitable for further planning purposes (**Appendix M**). This peer review recommended that, following public exhibition of the Rezoning Study, the ACHAR be updated to include the following information.

- Updated Aboriginal community consultation undertaken in line with the Consultation Requirements.
- Update of technical requirements in the ACHAR, including review of previous archaeological studies and the predictive model in order to bring the background research conducted for the project to current standards.
- Site survey of the Project Area with a representative/s of the Forster Local Aboriginal Council and detailed assessment of Aboriginal archaeological potential, in accordance with the Code of Practice.
- No works may commence within the Project Area prior to the addendum ACHAR having been undertaken. Note that the addendum ACHAR may recommend further archaeological assessment.

Any archaeological finds within these areas or unexpected finds elsewhere within the NTURA Site discovered during the development phase would be managed within the existing legislative framework under the *Environmental Planning and Assessment Act 1979*, the *National Parks and Wildlife Act 1974* and the *Heritage Act 1977* as part of the development approvals and construction process.

In 2021 a further ACHAR Addendum was prepared (also provided at **Appendix M**) which has been prepared in accordance with the Consultation Requirements. The ACHAR Addendum concludes that the indicative subdivision design within the Master Plan will avoid the two known identified items of Aboriginal cultural heritage. Notwithstanding this, to comply with the above legislative requirements and standards, the Addendum ACHAR makes a suite of recommendations that should be considered when future physical works are being undertaken. It should be noted that these recommendations do not preclude the progression of the rezoning study / planning proposal through to gazettal and will largely be implemented when physical works commence as part of future development proposals. The recommendations are reproduced below.

Recommendation 1: Minimise harm

Prior to the commencement of any construction works: the two AHIMS sites 35-8-0025 and 35-8-0026 should be temporarily fenced off to ensure foot and vehicle traffic do not disturb the sites and affect the archaeological integrity. A 10 metre buffer should be placed around the site boundaries and placement of the fencing should be conducted in conjunction with the Forster LALC. If the sites will be directly impacted, then Landcom must apply to Heritage NSW for an AHIP under s.90 of the National Parks and Wildlife Act 1974 (NPW Act) prior to any impacts occurring at North Tuncurry.

Recommendation 2: Visual Inspection

Prior to construction works an updated visual inspection should be conducted to verify any potential subsurface impacts caused by sand mining and re-inspect the two AHIMS sites (35-8-0025 and 35-8-0026).

Recommendation 3: Aboriginal cultural heritage induction

All site workers and personnel involved in future works associated with the Project Area should be inducted and briefed on the possible identification of Aboriginal objects during construction and their responsibilities according to the provisions of National Parks and Wildlife Act 1974 and the Heritage Act 1977. An Aboriginal cultural heritage induction led by Forster LALC is recommended and can be arranged via 02 6555 5411.

Recommendation 4: Unexpected finds procedure, Aboriginal object/s

If suspected Aboriginal objects are identified during future construction the following procedures must be followed (Appendix E of the ACHAR Addendum):

1. Immediately cease all activity at the location.

2. Ensure no further harm occurs, secure the area.
3. Notify Environment Protection Authority's Enviro Line on 131 555, Forster LALC on 02 6555 5411 and an archaeologist (RPS +61 2 4940 4200).
4. No further action to be undertaken until Heritage NSW provides written consent.

Recommendation 5: Unexpected finds procedure, human remains

All human remains in, on or under the land must not be harmed. If suspected human remains are located during any stage of the proposed works (Appendix E of the ACHAR Addendum):

- Immediately cease all activity at the site.
- Ensure no further harm occurs, secure the area to avoid further harm to the remains.
- Notify the NSW Police 000.
- Notify the Environment Protection Authority's Enviro Line on 131 555, Forster LALC on 02 6555 5411 and an archaeologist (RPS +61 2 4940 4200).

In addition to the management of archaeology and aboriginal items, Landcom will be investigating the potential for inclusion of an Aboriginal cultural centre or space within the B2 Local Centre Zone and/or other measures such as cultural heritage interpretation within the public domain as part of its ongoing collaboration with the traditional owners of the land, the Worimi and Birpai People of Forster Tuncurry.

In light of the above, it is considered that the proposed rezoning would not give rise to any impacts upon Aboriginal cultural heritage or items that cannot be appropriately managed as part of the detailed design and delivery of the proposed development.

7.11 European Heritage

As discussed in **Section 3.4.10**, there are no listed European heritage items on, or adjacent to, the NTURA Site. The European Cultural Heritage Assessment prepared by RPS (**Appendix O**) concluded that there are no known or potential historic or archaeological sites associated with the historical use of the site as either the prison labour camp or the Aero Club located within the proposed development footprint. As a result, the rezoning of the site is not considered to have any impacts upon European heritage within the Site. Any unexpected finds discovered during the development phase would be managed within the existing legislative framework under the EP&A Act and the *Heritage Act 1977* as part of the development approvals and construction process.

7.12 Geotechnical and Contamination

7.12.1 Geotechnical Conditions

The Geotechnical Investigation report prepared by Douglas Partners (**Appendix G**) indicates that the NTURA Site is underlain by sands of varying densities to depths of at least 15-18 metres. Surface sands are generally loosely bound, and would require compaction prior to development of buildings, roads and infrastructure. The report finds that compaction of the existing soils to the required levels can be achieved with standard construction equipment and methodologies (e.g. a 10 tonne static weight roller), and as such it is considered that the proposed rezoning would not give rise to any significant site planning issues that cannot be appropriately managed during detailed subdivision and construction planning.

7.12.2 Contamination

Worley Parsons has prepared a Soil Contamination Investigation (**Appendix F**) which considers the potential for contamination within the site based on a desktop analysis of existing studies and historical information, a visual inspection and borehole testing and laboratory analysis.

Based on the findings of the Soil Contamination Assessment, it is evident that:

- Widespread contamination within the Site is not in evidence. Elevated concentrations of iron across the site are likely to be related to naturally occurring elevations associated with the heavy mineral sands resource within the site.
- Except for one elevated nickel concentration to the north of the golf course, all inorganic contaminants were below thresholds for human and ecological health.

- Localised petroleum hydrocarbon contamination was encountered in relation to fill material imported for the golf course access road. Apart from this instance, levels of chemical contamination were below thresholds for human and ecological health.
- Regional mapping indicates that there is a low risk that Potential Acid Sulphate Soils (PASS) may be present within the Site although soil analysis indicates that PASS may occur in localised areas.
- Potential localised contamination may occur as a result of and in the vicinity of illegally dumped waste within the Site.

The findings of the Soil Contamination Investigation indicate that widespread contamination is not likely to be an issue for the rezoning of the NTURA Site or future development. It is expected that where localised contamination does occur, this can be managed through standard remediation techniques. In light of the above, it is considered that the results of this assessment are sufficient to allow the consent authority to form the view that the NTURA Site is or can be made suitable for the proposed mixed use residential and recreational uses, subject to more detailed investigations as part of future detailed planning and development in accordance with the requirements of SEPP 55.

In addition, the detailed acid sulphate soils investigation prepared by SMEC provided at **Appendix W** confirms that presence of acid sulphate soils is low and as such, they are not a major constraint to development proceeding in accordance with the rezoning or Master Plan. Notwithstanding this, SMEC has recommended that a high-level acid sulfate soil management plan (ASSMP) be developed for the NTURA Site, particularly to protect the environmentally sensitive receiving water bodies within and adjacent to the Site. This ASSMP would need to be prepared prior to future development proceeding and is not required to support this Study.

7.13 Acoustic Amenity

A Road Noise Assessment for The Lakes Way has been prepared by Muller Acoustic Consulting and is provided at **Appendix R**. The report is based on noise logging undertaken along the western boundary of the Site adjacent to The Lakes Way. The Lakes Way is a 100km/h road to the north of Chapmans Rd with Annual Average Daily Traffic (AADT) of approximately 12,000 movements. Whilst the Department of Planning, Industry and Environment's 'Development Near Rail Corridors and Busy Roads Interim Guideline' does not apply to roads with an AADT of less than 40,000 vehicle movements, the methodologies and noise targets are considered good practice and have been adopted. Under this policy, an internal noise criteria for bedrooms of 35dB(A) during the night and 40dB(A) within any room during the day would apply.

Based on noise logging conducted along the boundary of the NTURA with The Lakes Way, road noise contours have been generated which identified constraints on residential amenity as a result of existing road. These noise contours have informed the development footprint as part of the master planning process to ensure that all lots can be developed with standard construction methods to allow residential dwellings to comply with the relevant noise criteria in a 'windows-open' scenario.

Figure 30 below illustrates the daytime noise contour for the final development scenario. Allowing for a 10dB(A) reduction from standard construction in a windows-open scenario, all dwellings within the proposed development footprint for the Site would comply with the noise criteria under the 'Development Near Rail Corridors and Busy Roads Interim Guideline' during the daytime period. Noise impacts from The Lakes Way at night are much less extensive due to lower traffic volumes during this time, and the Road Noise Assessment demonstrates that all residential dwellings would also comply with the night-time noise criteria in a windows-open scenario.

In light of the above, it is considered that the proposed development footprint would not give rise to any adverse amenity impacts on future residents of North Tuncurry and ensure that all dwellings can be built without need for the incorporation of specific noise mitigation measures in building design.



Figure 30 2023 Scenario Predicted Road Daytime Leq(15-hour) Noise Contour (no mitigation)

Source: Muller Acoustic Consulting

7.14 Bushfire Risk Assessment

A Bushfire Threat Assessment has been prepared by RPS (**Appendix S**) which provides an assessment of the required protection measures for residential, business and industrial land uses within the NTURA Site in accordance with the 2018 Planning for Bush Fire Protection Guidelines.

Figure 31 illustrates the boundaries of the development footprint and location of asset protection zones (APZs) based on the vegetation types within the immediate vicinity. These include:

- a 24m APZ is required between vegetation to the north and to the northern industrial precinct; and
- a 15m APZ is required between to the north-east, north-west, east, south and west.

These APZs will largely be accommodated within the perimeter roads and fire trails but may also be included within non-developed portions of residential lots along the foreshore. The future development applications to create the larger lots will be required to demonstrate that any required APZ can be accommodated. It is appropriate for the APZs to be demonstrated at DA stage to ensure the assessment is contemporaneous with RFS requirements and the environmental attributes at the time of the assessment are appropriately considered. The report also makes a number of standard recommendations for future subdivision and development of buildings, including the construction of buildings and roads in the immediate vicinity of vegetated areas in accordance with the BCA, compliance with the relevant Australian Standards and the preparation of an evacuation management plan.

In light of the above, it is considered that the proposed rezoning would not give rise to any significant risks or impacts that cannot be appropriately managed during the detailed planning and delivery of the proposed development.

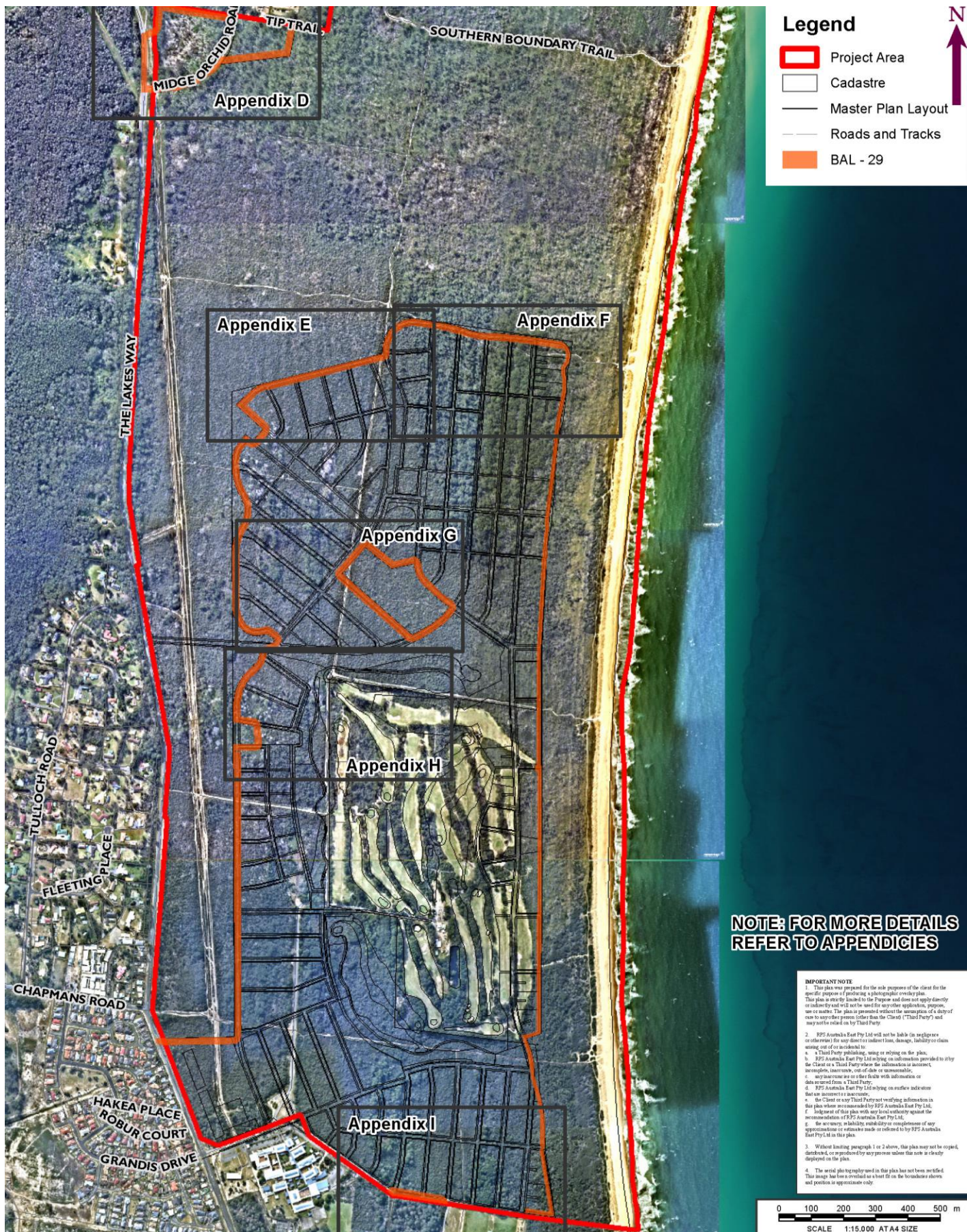


Figure 31 Recommended Asset Protection Zone locations and Bushfire Attack Level (BAL)
Source: RPS

7.15 Social and Economic Assessment

The Social Planning Report prepared by Elton Consulting (**Appendix T**) includes a profile of the community and an analysis of existing demographic trends within the area. Based on an assessment of the existing population and the profile of people moving within and to the area, the future population of North Tuncurry is likely to be comprised of:

- Affluent retirees and pre-retirees seeking quality coastal homes on well-sized lots
- Middle income retirees and pre-retirees seeking freestanding homes on standard lots
- Downsizing retirees seeking diverse housing typologies
- Local families who are 'trading up', and seeking well-priced standard lot housing
- Other people moving from within the LGA, including first home buyers seeking affordable small lot homes and medium density products
- Investors, second home and holiday home buyers.

Based on the proposed mix of lot sizes and dwelling types, it is estimated that the 2,123 residential dwellings proposed within North Tuncurry will yield a future population for the area of approximately 4,550 people.

These findings have formed the basis for the assessment for the planning of social infrastructure, community facilities and retail space for the proposed development.

7.15.1 Community Facilities, Social Infrastructure and Open Space

The Social Planning Report (**Appendix T**) identifies existing community facilities, social infrastructure and recreational facilities within the Forster-Tuncurry area and makes an assessment of the needs of the future North Tuncurry population. Based on the projected population and demographic there will be sufficient demand to support some new neighbourhood community facilities and services, including:

- spaces for informal social interaction and networking;
- a multi-purpose community facility with meeting and activity rooms;
- mobile surf-life saving facilities and storage spaces;
- childcare centre(s);
- medical services, such as a medical centre;
- convenience shopping, business services and employment; and
- local parks, walking and cycling trails and beach connections.

Community Facilities

It is anticipated that a multi-purpose community centre would be incorporated within the B2 Local Centre Zone, and the inclusion of an Indigenous Cultural Centre either as part of this facility or as a separate facility would also be investigated. These facilities would be sized to meet projected demand for the North Tuncurry population and development would be likely limited to 1-2 ha in disturbed areas.

Rather than establishing a new surf club, based on discussions with MidCoast Council it is proposed to incorporate facilities (such as equipment storage) that would allow the operation of surf club activities at Nine Mile Beach adjacent to North Tuncurry by an existing surf club.

Arrangements for capital funding, construction and ongoing maintenance of these facilities would form part of the VPA negotiations and are outlined in high level terms in the Statement of Intent provided at **Appendix AA**. Landcom has developed a staging plan that proposes construction of the community centre in the latter stages of development. Section 6.2 of the Social Planning Report acknowledges that in the interim there will be a need for a temporary venue for community activities and to provide a base for community development initiatives. Landcom proposes to provide a Sales and Information Office which would be established in the early stages of the project as part of a display village which could potentially provide space that can be utilised as a temporary community centre until the permanent centre is built; this is formalised in the Statement of Intent prepared for the VPA. The siting of the Sales and Information Office and its use as a temporary community centre is yet to be confirmed however as

outlined earlier in this Study the proposed R2 Low Density Residential Zone, R3 Medium Density Residential Zone and B2 Local Centre Zone all permit community facilities.

Childcare centres and medical centres would be permissible with consent within the proposed business and residential zones, and Landcom would engage with potential tenants and service providers during the release of these areas.

Open Space and Recreation

The Master Plan and Draft DCP provide for nine new local parks ranging from 2,000m² to 2.1 ha in size.. This provision has been designed to meet the recreational open space needs of the future community and will accommodate a range of passive and informal active recreational uses.

MidCoast Council has advised Landcom that land for active open space need not be set aside within North Tuncurry as Council would prefer a contribution towards upgrading the existing North Tuncurry Sports Complex. Preparation of a masterplan for the complex could also form works in kind for part of that contribution. Based on the projected population and demographic, it is anticipated that North Tuncurry would give rise to approximately 3.4 to 3.6 ha of active open space.

The reconfiguration of the 18-hole Tuncurry Golf Course will include the development of a new clubhouse interfacing with the B2 Local Centre Zone. This facility will provide opportunities for social connections between the residents of North Tuncurry and the existing Tuncurry community as well as providing an additional venue for social and recreational activities.

Education

The expected dwelling yield for the Site is slightly below the threshold that would trigger the need for a new primary school. The Department of Education has advised that Tuncurry Primary School and the Junior and Senior Campuses of the Tuncurry Secondary College are expected to have sufficient capacity to accommodate enrolment growth resulting from North Tuncurry. Future forecasts suggest the proportion of school age children will decrease between now and 2036, with the peak already surpassed. There is potential to investigate the inclusion of a private school within the Site, which would be permissible within the proposed residential and business zones. Residents of North Tuncurry would have good access to the North Coast TAFE Great Lakes Campus which adjoins the site to the south.

However, the Department projects demand for teaching spaces within these schools will decline to 2036 (from 16 to 12 teaching spaces at Tuncurry Primary School, and from 27 to 23 teaching spaces in each of the Great Lakes College Campuses). Additionally, both sites have room for expansion either through additional demountables or redevelopment of existing buildings.

The Catholic Education Office have also confirmed enrolments at schools within this diocese have been stable over time and there is no indication that there is demand for an additional Catholic school. While there is no local Catholic high school, a majority (55-60%) of Catholic students from the Forster region go on to attend St Clare's Catholic high school in Taree.

7.15.2 Seniors Housing and Aged Care

An Aged Care and Retirement Housing Study has been prepared by Elton Consulting (**Appendix U**) to assess the underlying demand for a retirement village or residential aged care, new demand from North Tuncurry and gauge industry interest in developing and operating these facilities.

The Study clearly demonstrates that there is sufficient medium-long term supply available in the region and NTURA is not required to provide a site for either aged care or retirement purposes. At present the retirement and aged care needs of the local community are generally well met by existing facilities within the Forster-Tuncurry area, and the 'Pacific Cape' residential aged care and village within Forster (partially completed/ under construction) is expected to cater for future growth in the short-medium term, including from North Tuncurry. Combined with an industry shift towards greater community care, there is unlikely to be demand for the development of aged care and retirement facilities within North Tuncurry unless these facilities were developed as a 'destination' attracting residents from outside the Forster Tuncurry area.

The Study does however acknowledge that seniors are likely to comprise a significant proportion of the market for mainstream housing, and consequently recommends planning for the NTURA site should seek to maximise its utility and attractiveness to older people, with a view to delivering a seniors-friendly development. This includes providing a safe and attractive public domain, easy walkability, access to good recreation facilities, and 'mainstream' housing options that suit older people (preferably including some homes that offer adaptable/ universal design standards).

Housing should be designed to allow older people to age in place, including a proportion of homes to adaptable/universal design standards. The NTURA Master Planning specifically responds to these recommendations through the following initiatives:

- housing diversity and the provision of a variety of lot sizes to accommodate the changing housing needs of the community
- commitment in the DCP to ensure future housing is adaptable or adopts universal design standards
- a connected neighbourhood with levels and comfortable walking routes to open space, the local centre and other places of interest, and
- the proposed R2 Low Density zone within which seniors housing is a permissible land use and accordingly safeguards for a purpose-built retirement housing, residential aged care facility, and/or a seniors' health precinct to be provided at some future date, if the need and demand is found to be strong enough.

In addition, Elton advises that a retirement village or residential aged care facility could be a longer-term demand that could be accommodated within the Site. If accommodated within the NTURA, a site of at least 10 ha and preferably 15-18 ha would be required. This site area could be accommodated within a number of areas within the Site, and preferably within the vicinity of the B2 Local Centre Zone, should the demand arise in the future.

7.15.3 Retail Economic Impact Assessment

A Market and Economic Assessment Report has been prepared by SGS Economics (SGS) (**Appendix V**) which assesses the demand for retail and employment lands within the Site and potential impacts on existing centres and employment lands.

Retail

Consultation and analysis identified low demand and high vacancy rates for retail and commercial properties within Forster Tuncurry which reflects poor existing regional market conditions. Based on the needs of a future population of approximately 4,500 residents, and on existing retail provision within the region SGS expect that there will be new demand for approximately 9,000m² of additional retail floorspace. Demand for the majority of this floorspace should be accommodated within town and regional retail centres, with SGS recommending that retail provision in the B2 Local Centre Zone within the site should be sized between 2,154 and 2,834m² in order to ensure that retail trade is not captured away from existing centres. This is consistent with the Master Plan for the B2 Local Centre Zone proposed by Roberts Day. Demand for retail floorspace generated by new residents is likely to result in the creation of approximately 76 additional jobs within the Site. On this basis it is expected that the proposed rezoning and development of the site would result in positive impacts within the regional economy by generating additional demand for new and existing retail floorspace within existing centres in Forster Tuncurry whilst meeting the local convenience retail needs of future residents within the centre.

Employment Land

The proposed rezoning includes 6.6 ha of land for industrial uses within the north-west corner of the Site separate from the residential area and adjacent to the Tuncurry Waste Management Centre, as well as 6.7 ha of land for business development within the south-west corner in the vicinity of Northern parkway. The development of this land represents a long term prospect, with rezoned employment land supply within the Site predicted to meet demand for 1.2 ha of freight and logistics land within the NTURA delivery lifespan (supporting approximately 50 jobs) and cater for emerging demand in other industries within this period and in the longer term.

From an economic development perspective, the two employment precincts are considered by SGS to be suitable for a range of business uses including:

- businesses and/or facilities which complement the existing educational facilities on Northern Parkway;

- uses that require easy access to major road corridors and/or high passing customer trade;
- heavy industrial uses that requires separation from residential areas;
- uses that require large land areas for storage or manoeuvrability, such as auto wreckers or warehousing;
- uses that have synergies with the existing educational uses on Northern Parkway; and
- uses that have a symbiotic relationship with the existing Materials Recovery Facility, such as particular construction industries.

7.16 Natural Resources

The area of coastline between Newcastle and South East Queensland hosted a significant mineral sand mining industry in the 1960s and 1970s based on valuable heavy mineral sand accumulations. During this period the area was the world's major source of rutile and zircon, contributing to the manufacturing of a range of products in ceramics, plastics and paints. In the Forster Tuncurry region, sand mining occurred on and to the north of the Tuncurry Waste Management Centre during the 1960s. Greater environmental protection and regulation, as well as a shift toward more commercial deposits in Western Australia, in the 1980s and 1990s saw a significant decline in the industry. The last active commercial sand mining operations on the NSW coast at Stockton closed around 2003. The Site has previously been the subject of resource exploration for valuable mineral sands under an exploration license issued by the NSW Department of Primary Industries.

A Heavy Minerals Investigation Report was prepared by Peter Stitt & Associates (**Appendix H**) in order to determine whether there is a viable mineral resource within the Site that would be potentially sterilised by the proposed rezoning. Two strandlines of mineral sands are located within western portion of the Site adjacent to and under The Lakes Way, predominately corresponding with the electricity transmission lines, and it is inferred that there is a resource of approximately 10,700 tonnes of heavy minerals within the Site, with an estimated resource value of between \$14m and \$23m. This is considered to be a relatively insignificant resource in terms of both the national and international resource base.

The establishment of a commercially viable mining operation on the Site is heavily constrained by:

- high capital cost for detailed exploration, environmental approvals and mine establishment on the Site;
- absence of existing commercial operations and sand mining infrastructure within the region;
- proximity to residential areas, schools and recreation areas; and
- presence of the critically endangered Tuncurry Midge Orchid in direct proximity to the most commercial resources within the Site.

Based on the assessment, it is evident that the resource is too small, too constrained and too low-grade to be viable as a stand-alone project, and previous commercial exploration of the surrounding area has not supported the possibility of establishing a more widespread commercial sand mining operation. Financial modelling based on both present and optimistic future assessments of the resource value indicate that sand mining within the Site would not be profitable. In light of the above it is considered that the rezoning of the land for predominately residential purposes would not have any adverse impact upon the capacity to utilise the Site's natural resource.

7.17 Land Use Conflicts

The rezoning proposal proposes land use zones informed by the technical studies and urban capability assessment at **Section 3.4.13**. The DCP Amendment includes design criteria to ensure that appropriate setbacks and buffers are provided between future forms of development.

Larger lot sizes in the north of the development footprint will facilitate a transition zone between residential development and future conservation lands.

Land use conflicts will continue to be assessed through future development applications as the nature and scale of future proposals is determined.

8.0 Conclusion

Landcom is proposing to deliver a mixed-use development within the NTURA Site that meets the State Government's objectives to increase housing supply, provide community benefits and create jobs. The NTURA will assist in revitalising what is currently an under-utilised area of the MidCoast LGA that has been identified as a key site capable of delivering housing.

The NTURA is consistent with and will assist in the delivery of key outcomes set out in the NSW Premier's priorities and the Hunter Regional Plan 2036 by contributing to the supply to market of appropriately located land to sustainably accommodate the projected housing and employment needs of the region's population over the next 25 years.

NTURA proposes to accommodate 2,123 residential dwellings, a significant component of the new dwelling requirements for the MidCoast LGAs proposed in the HRP 2036. A variety of housing types is proposed to be delivered. The range of densities will enable a range of dwelling types, allow for social and demographic diversity and provide a proportion of dwellings at affordable price points. The NTURA includes a land use framework that can deliver moderate income housing and seniors housing.

The NTURA will be a self-contained development in proximity to Forster-Tuncurry township and will provide job opportunities for some 126 workers. The proposed NTURA centre is proposed to accommodate up to 2,500m² of retail, business and office floor space. In addition, the NTURA provides for a new business precinct adjoining the intersection of Northern Parkway and The Lakes Way and a separated industrial precinct in the north to support future employment growth within the Forster Tuncurry urban locality.

The proposal establishes 327 ha of on-site land for ecological conservation securing long term agreed conservation outcomes with the State and Commonwealth Governments, as well as additional off-site offsets to achieve regional conservation objectives. In addition, the establishment of the conservation lands provides for the protection and sympathetic management of open space containing the Tuncurry Midge Orchid, a listed critically endangered species. A fundamental objective of the proposal is to obtain a Biodiversity Certification Order and secure appropriate biodiversity conservation outcomes in accordance with the legislative requirements, and establish on-site management arrangements for biodiversity, and particularly for Tuncurry Midge Orchid.

The NTURA retains and protects a number of identified indigenous heritage items within the NTURA Site, and provides for a framework to conserve and as well as interpret the Site's Indigenous and European heritage values.

Planning for identified community facilities and services for the whole of the site has also been undertaken, and Landcom has committed to the preparation of a VPA. This Study demonstrates that adequate provision for community infrastructure, including land in appropriate locations, is planned for in line with the proposed development staging. The Statement of Intent supporting this Study provides the preliminary framework for the future aims, purposes and intended outcome of the VPA.

On balance, the suitability and capacity of the NTURA Site for the proposed range and intensity of uses taking into account the site's regional context and environmental, economic and social opportunities and constraints has been addressed at the strategic level. The master plan underpinning this Study, Draft DCP, urban design report and suite of technical environmental studies and investigations have addressed the urban capability of the NTURA Site and provided appropriate strategic justification for rezoning to proceed.