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Our Reference: P3849.001L

Your Reference: MP 06\_0316 MOD 8

28 September 2018

Leda Manorstead Pty Ltd  
PO Box 1914  
Surfers Paradise QLD 4217

Attention: **Reg Van Rij**

Sent via email: [rvanrij@ledaholdings.com.au](mailto:rvanrij@ledaholdings.com.au)

Dear Reg

**RE : COBAKI DEVELOPMENT CONCEPT PLAN MODIFICATION (MOD 8)  
SEARs RESPONSE – TRANSPORT PLANNING & ACCESSIBILITY ITEMS**

Bitzios Consulting has been engaged by Leda Manorstead Pty Ltd to prepare an initial response to the Secretary's Environmental Assessment Requirements (SEARs) request for further information issued by the Department of Planning and Environment (DPE) (dated 21<sup>st</sup> December 2017) in relation to the proposed concept plan modification (MOD 8).

A copy of the MOD 8 Concept Plan and relevant supporting material is provided in **Attachment 1**, while the Plan of Development (POD) is provided in **Attachment 2**.

This letter aims to address Item 8 (Transport and Accessibility) of the SEARs request for the proposed modification (MOD 8), with consideration to the suit of previous assessments and analysis undertaken for traffic and transport (*refer: P2105.001R Cobaki MOD2 SCU TIA*). Specifically, Item 8 states:

*Include a revised traffic and transport assessment, which includes:*

- *modelling of the traffic impacts associated with the proposed modifications to the Concept Plan, including an estimate of the total daily and peak hour vehicle trips generated by the proposal;*
- *an assessment of the current and future performance of key intersections providing access to the site under the approved and proposed scenarios, any additional upgrades required as a consequence of the proposal and any proposed changes to the timing of upgrades;*
- *an assessment of any proposed changes to the approved road network and associated infrastructure;*
- *an assessment of the car parking requirements for the modified proposal;*
- *detailed plans of the proposed layout of the internal road network and on-site parking in accordance with the relevant Australian Standards;*
- *measures to promote travel choices that support the achievement of NSW State Government targets (in a location-specific, sustainable travel plan) and sustainable travel initiatives, including the provision of secure, convenient and accessible end-of-trip facilities for pedestrians and cyclists;*
- *an assessment of any proposed changes to the Access Network and Potential Bus Route Plan approved under the Concept Plan; and*
- *an assessment of the adequacy of public transport services to meet the likely future demand of the proposed development.*

The following sections provide a summary of the proposed modifications (MOD 8) and their relevance to the overarching transport planning aspects of the concept plan.

## 1.0 INTRODUCTION

The proposed modification to the Cobaki concept plan (MOD 8) includes changes to the quantity and composition of dwellings across the 17 precincts. It is understood that MOD 8 aims to:

- increase building heights in and around the town centre and other precincts within the site;
- reduce the town centre area whilst maintaining the 12,000m<sup>2</sup> GFA limit on commercial land uses; and
- adjust the residential density whilst maintaining the approved yield of 5,500 dwellings.

As identified above, the modification shall not exceed 5,500 dwellings remaining in accordance with the existing approval. The specific changes to uses within the area are discussed further below.

## 2.0 PROPOSED MODIFICATION SUMMARY

### 2.1. Residential Uses

The reconfiguration of dwellings within the development is summarised comparatively in Table 2.1 below.

**Table 2.1: Change in Development Yield – Residential**

Precinct #	Previous Approval (MOD 4)		Proposed Modification (MOD 8)		Net Difference	
	Dwellings >450m <sup>2</sup>	Dwellings <450m <sup>2</sup>	Dwellings >450m <sup>2</sup>	Dwellings <450m <sup>2</sup>	Dwellings >450m <sup>2</sup>	Dwellings <450m <sup>2</sup>
Precinct 1	82	106	137	73	+55	-33
Precinct 2	137	394	175	175	+38	-219
Precinct 3	0	247	20	180	+20	-67
Precinct 4	0	60	0	130	0	+70
Precinct 5	0	472	0	1150	0	+678
Precinct 6	203	192	120	280	-83	+88
Precinct 7	201	185	180	120	-21	-65
Precinct 8	134	105	138	112	+4	+7
Precinct 9	165	260	116	174	-49	-86
Precinct 10	163	208	210	90	+47	-118
Precinct 11	97	124	110	90	+13	-34
Precinct 12	128	466	100	300	-28	-166
Precinct 13	233	248	200	0	-33	-248
Precinct 14	59	75	32	128	-27	+53
Precinct 15	61	263	0	500	-61	+237
Precinct 16	107	114	160	0	+53	-114
Precinct 17	0	211	15	285	+15	+74
<b>Sub-Total</b>	<b>1,770</b>	<b>3,730</b>	<b>1,713</b>	<b>3,787</b>	<b>-57</b>	<b>+57</b>
<b>TOTAL</b>	<b>5,500</b>		<b>5,500</b>		<b>-</b>	

As shown above, the proposed modification results in no net change in the number of residential dwellings. Rather, it results in a change to the density mix overall (i.e. reduces the number of detached dwellings and increases the number of zero-lot houses / attached dwellings).

This therefore aligns with the existing approval over the site for 5,500 dwellings. This also translates to a reduced traffic generation, which is detailed / discussed in Section 3.0 overleaf.

## 2.2. Commercial

The previously approved development application proposed a limit of 12,000m<sup>2</sup> GFA of commercial land uses. This limit is not proposed to change under the modification (MOD 8) to the development approval.

The commercial land uses in the northern portion of the approved town centre (north of the connector road) are proposed to be removed and replaced with residential dwellings. This results in an increase to the number of dwellings within the town centre's walkable catchment which is considered an improved outcome for accessibility, whilst remaining consistent with the approved 5,500 dwellings.

## 3.0 TRIP GENERATION

As discussed above, the proposed modification results in a yield change from 57 detached dwellings to 57 attached dwellings, which has a subsequent change in traffic generation characteristics.

To maintain a conservative assessment, it was assumed that the 57 attached dwellings are to be considered as "larger" medium density product in terms of trip generation rates. The adopted trip generation rates have been sourced from the *RMS Guide to Traffic Generating Developments* (2002).

*Note, the limit on commercial land uses is not proposed to change (albeit with a reduction and town centre area), hence a change in traffic generation characteristics for commercial uses is not included.*

The resultant change in traffic generation for the proposed development is shown in Table 3.1.

**Table 3.1: Change in Residential Trip Generation Characteristics**

Scenario	Land Use Type	Qty	Trip Rate (trips / dwelling)		Vehicle Trips	
			Peak	Daily	Peak (veh/h)	Daily (veh/day)
Previous Approval	Detached Dwellings	57	0.85	9.0	49	513
MOD 8	Medium Density	57	0.65	6.5	37	371
Net Change					-12	-142

As shown, the proposed change to the development is anticipated to yield an overall reduction in traffic generation as follows:

- a reduction in 12 peak hour trips; and
- a reduction in 142 daily trips.

## 4.0 TRAFFIC IMPACT REVIEW

A review of the traffic impacts associated with MOD 8 has been considered below in the context of the SEARs request Item 8: Transport & Accessibility.

- *modelling of the traffic impacts associated with the proposed modifications to the Concept Plan, including an estimate of the total daily and peak hour vehicle trips generated by the proposal;*

The total daily and peak hour vehicle trips generated by the proposal results in a reduction of 12 peak hour trips and 142 daily trips overall.

Given the reduction in the number of trips, MOD 8 is anticipated to yield a net benefit to the road network (compared with the existing approval). It is acknowledged that the SEARs has requested modelling of the impacts of the proposed modification, however, given that MOD 8 results in a net reduction in peak and daily traffic, detailed modelling of traffic impacts – beyond that which has previously been completed – is not considered warranted.

Furthermore, from a traffic modelling perspective, such proposed changes are unlikely to have any significant impact on the road network overall, as the road network and intersection planning has sufficient capacity to accommodate these minor internal modifications.

- *an assessment of the current and future performance of key intersections providing access to the site under the approved and proposed scenarios, any additional upgrades required as a consequence of the proposal and any proposed changes to the timing of upgrades;*

As detailed above, the proposed modification results in a net reduction in overall traffic generation. Therefore, the performance of key intersections is not expected to change significantly, and any previous proposed upgrades and their respective timing is not expected to change.

- *an assessment of any proposed changes to the approved road network and associated infrastructure;*

There are no proposed changes to the approved road network, nor are any changes required based on the proposed modification considering the net reduction in daily traffic generation of 142 veh/day. Specifically, the road network will include:

- Cobaki Parkway: *Modified Arterial or Distributor Road* (40m reserve width);
- Sandy Road will: *Neighbourhood Connector Road* (22.4m reserve width,  $\geq 7,000$  veh/day);
- Low Volume Roads: *Neighbourhood Connector Road* (18.5m reserve width, 3,000-5,000 veh/day).

The road network and associated infrastructure will remain in accordance with Tweed Shire Council (Council) standards / requirements and remain suitable to cater for the forecast traffic demand.

- *an assessment of the car parking requirements for the modified proposal;*

Considering the nature of the modification, detailed car parking requirements are not expected to change significantly, shall be as per the previously accepted development applications and shall be further assessed with any formal development application submission to Council.

- *detailed plans of the proposed layout of the internal road network and on-site parking in accordance with the relevant Australian Standards;*

The proposed modification (MOD 8) includes a modification to the Concept Plan and POD for certain precincts. Any detailed plans are to be submitted with any formal development application submission to Council.

- *measures to promote travel choices that support the achievement of NSW State Government targets (in a location-specific, sustainable travel plan) and sustainable travel initiatives, including the provision of secure, convenient and accessible end-of-trip facilities for pedestrians and cyclists;*

Active transport, a sustainable travel plan and public transport infrastructure requirements are not intended to change with MOD 8 and shall be as per the previously accepted development applications and refined through development and construction.

- *an assessment of any proposed changes to the Access Network and Potential Bus Route Plan approved under the Concept Plan; and*

There is no expected change to the Access Network Plan and Potential Bus Route associated with the proposed Concept Plan modification. As shown in **Attachment 1**, the Access Network Plan and Potential Bus Route achieves the Council requirement of 90% of allotments being within 400m straight line distance of a potential bus route, with approximately 93% of allotments within this catchment.

- *an assessment of the adequacy of public transport services to meet the likely future demand of the proposed development.*

As discussed above, the overall yield is not expected to change maintaining 5,500 dwellings as per the previous approval. Hence the public transport services are expected to be consistent with the previous approval, and adequate to meet the likely future demand of the site.



I trust that the above information is sufficient to respond to the SEARs in relation to transport planning items.

Yours faithfully



**Luke Darragh**

*Manager – Gold Coast & Northern NSW*

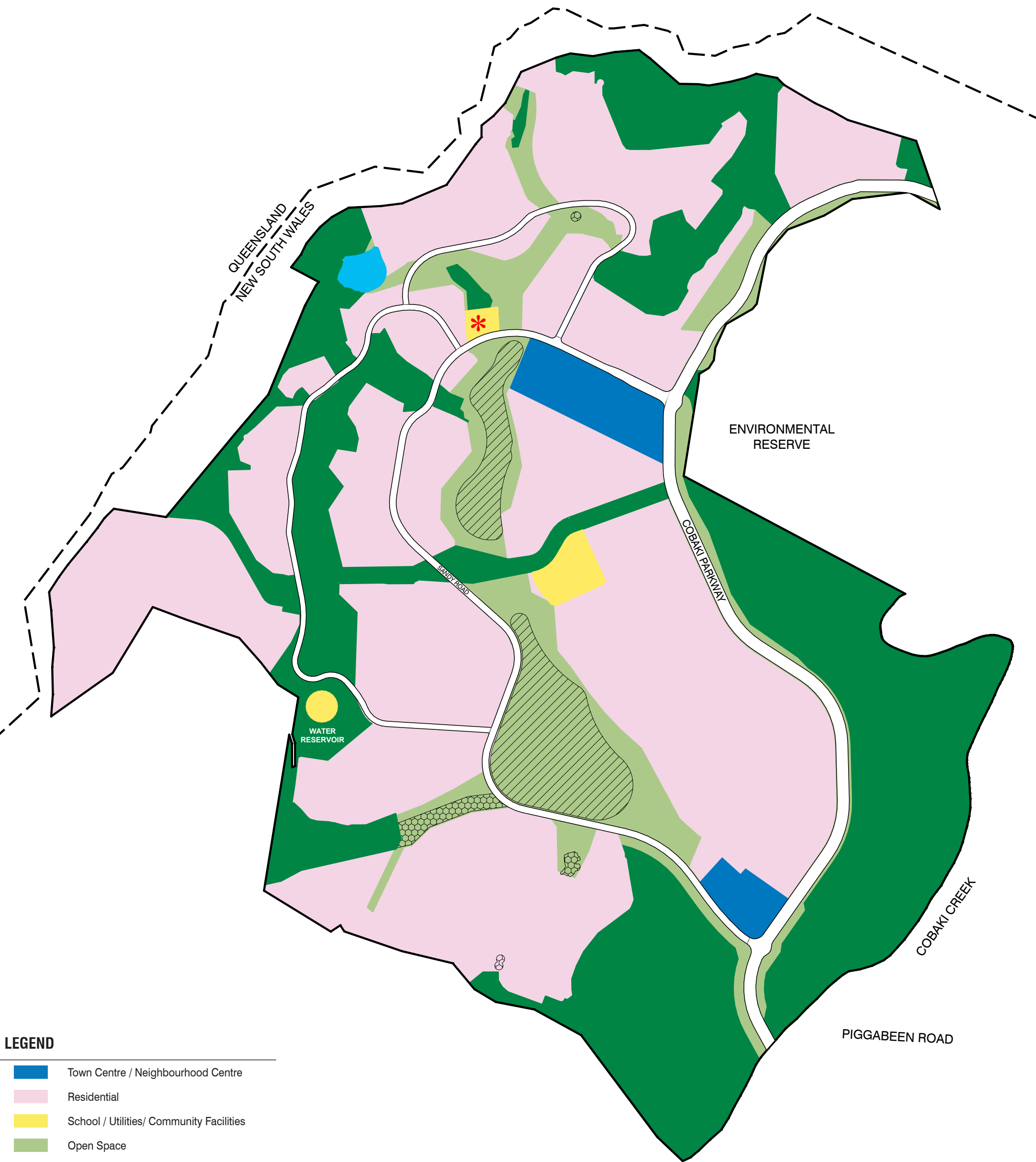
*Principal Traffic Engineer / Transport Planner*

**BITZIOS CONSULTING**

## ATTACHMENT 1

### *CONCEPT PLAN – PROPOSED MODIFICATION (MOD 8)*

# CONCEPT PLAN



LEGEND

Town Centre / Neighbourhood Centre

Residential

School / Utilities/ Community Facilities

Open Space

Environmental Protection Area

Dam

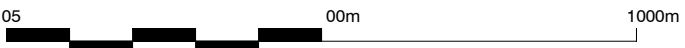
Structured Open Space

Covenant Protected Area

\*

Proposed Community Facilities

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PROJECT  
COBAKI LAKES, NSW

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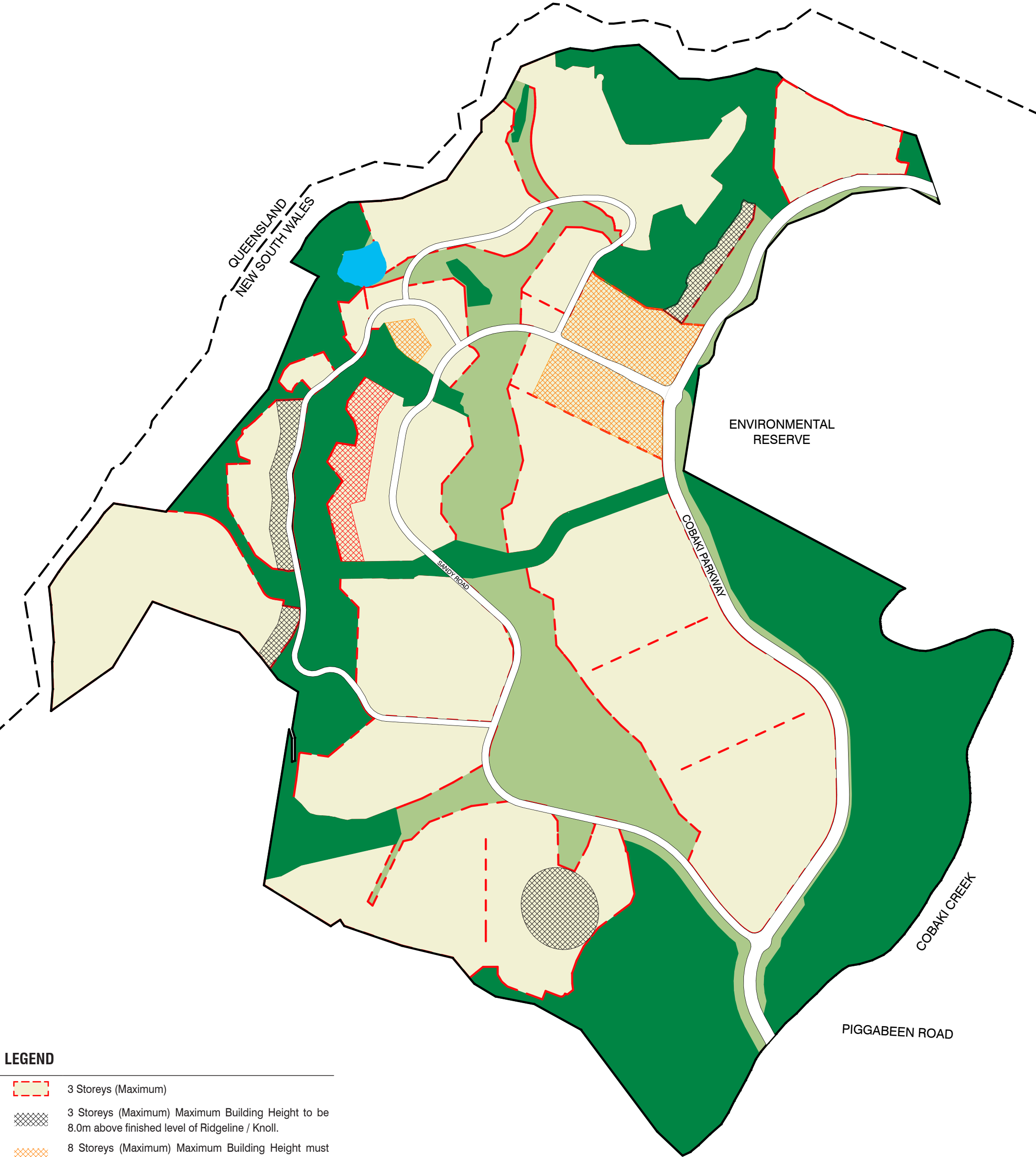
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# DEVELOPMENT MATRIX

	Concept Plan Domain	Development Uses		Total Area		Urban Design Principles
				Leda Owned Land	Proposed Road Closures	
	Town Centre/ Neighbourhood Centre	Business premises Carpark Child care centre Community facility Education establishment Emergency services facility Entertainment facility Environmental facility Food and drink premises Funeral chapel Health services facility Home business Hotel or motel accommodation Information and education facility Medical centre	Office premises Place of worship Pub Recreation area Recreation facility (indoor) Residential care facility Residential types in Development Code Registered Club Restaurant Retail premises Roads Seniors housing Service station Shop Telecommunication facility	14.07 ha	0.00 ha	Urban form controlled by Plan of Development in Precinct approval Building height controlled by Development Code Mixed uses are encouraged Provide legible off-street parking Create town square focus Sporting facilities may be shared between schools and community Buildings facing main streets are encouraged to have active frontages Pedestrian friendly streetscape with awnings Create interesting buildings with articulated facades Screen or conceal passive facades and service areas Soften visual impact of carpark with landscaping Incorporate urban art and public streetscaping Must demonstrate sensitive interface with surrounding development Ground floor facing main roads must be non residential use Landscape concept to maintain visibility of retail uses Incorporate passive surveillance and public safety principles
	Residential	Carpark Child care centre Community facility Environmental facility Exhibition village Home based child care Home business Neighbourhood shop Recreation area	Recreation facility (indoor) Recreation facility (outdoor) Residential care facility Residential types in Development Code Roads Seniors housing	298.50 ha	4.88 ha	Urban form controlled by Plan of Development in Precinct approval and the Development Code Create diversity of housing choice Designs must optimise residential amenity, privacy and solar access Strong streetscape character with articulated setbacks Incorporate on-site private recreation areas Garage doors must not dominate streetscape Incorporate passive surveillance and public safety principles Incorporate public open space within walkable radius of each dwelling
	Community Facilities/ Education/ Utilities	Carpark Child care centre Community facility Education establishment Environmental facility Information and education facility Kiosk Place of worship	Recreation area Recreation facility (indoor) Recreation facility (outdoor) Roads Telecommunication facility Water storage facility	4.91 ha	0.00 ha	Locate school buildings with integrated parking and shared facilities Provide adequate safe setdown areas Sporting facilities may be shared between schools and community Must demonstrate sensitive interface with surrounding development Enhance community education on surrounding environment
	Public Open Space	Carpark Community facility Environmental facility Food and drink premises Kiosk Recreation area	Recreation facility (indoor) Recreation facility (outdoor) Roads Sewage reticulation system	88.64 ha	1.55 ha	Include range of active and passive uses Incorporate community facilities appropriate to residents needs such as ovals, amenities and carparking Sporting facilities may be shared between schools and community Incorporate stormwater path and treatment
	Environmental Protection Area	Environmental facilities Roads Water storage facility		187.14 ha	5.77 ha	Incorporate low-impact community trails for public and service access Provide linkages in accordance with the Pedestrian and Cycle Network Plan
Total Area				593.26 ha	12.20 ha	

Note: Areas are subject to final design and survey

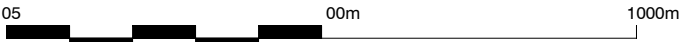
# HEIGHT CONTROLS



## LEGEND

- 3 Storeys (Maximum)
- 3 Storeys (Maximum) Maximum Building Height to be 8.0m above finished level of Ridgeline / Knoll.
- 8 Storeys (Maximum) Maximum Building Height must not exceed height of adjoining ridgeline / Knoll.
- 10 Storeys (Maximum) Maximum Building Height must not exceed height of adjoining ridgeline / Knoll.
- Open Space
- Environmental Protection Area
- Dam

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HEIGHT CONTROLS

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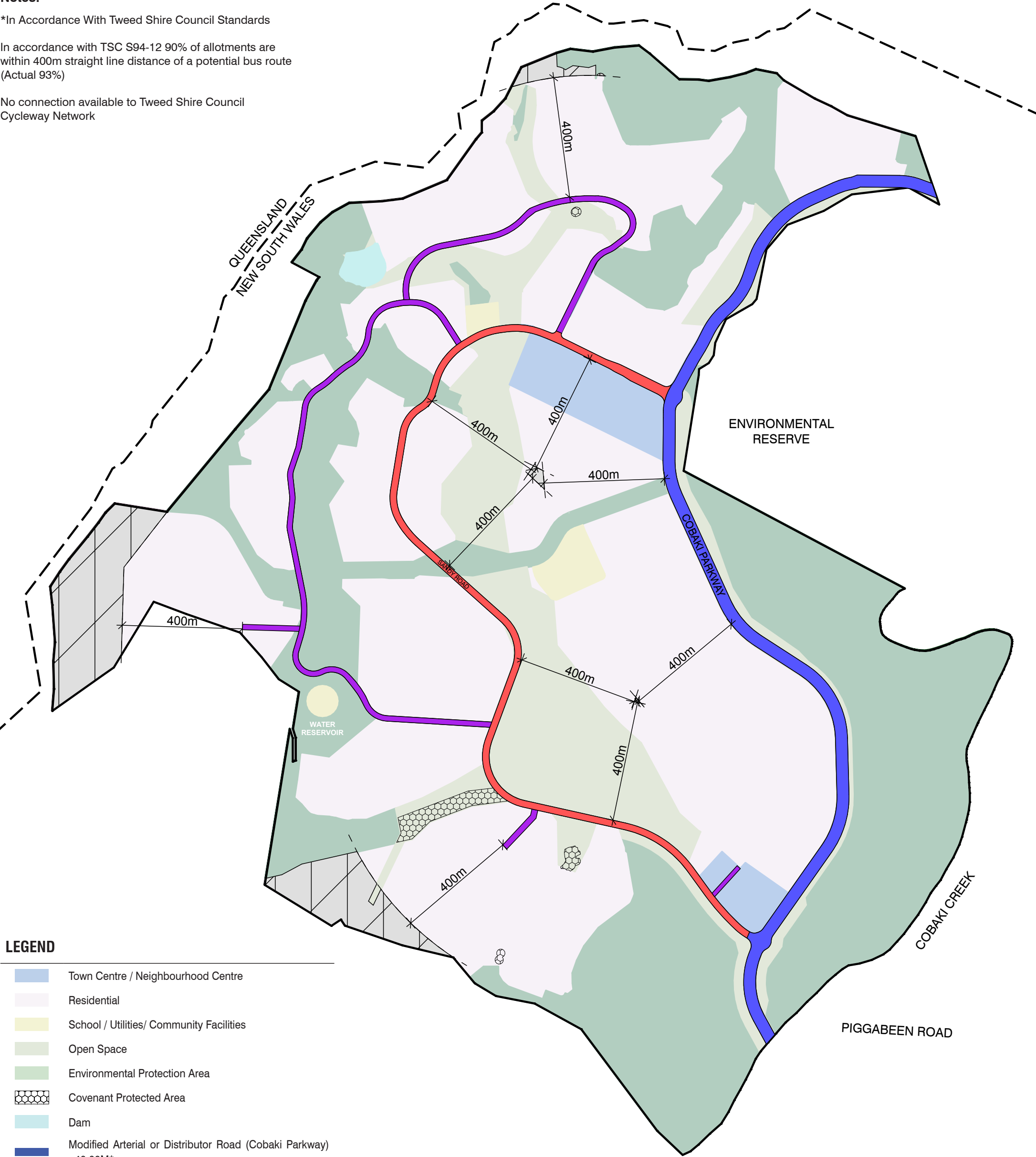
# ACCESS NETWORK PLAN & POTENTIAL BUS ROUTE

Notes:

\*In Accordance With Tweed Shire Council Standards

In accordance with TSC S94-12 90% of allotments are within 400m straight line distance of a potential bus route (Actual 93%)

No connection available to Tweed Shire Council Cycleway Network



LEGEND

- Town Centre / Neighbourhood Centre
- Residential
- School / Utilities/ Community Facilities
- Open Space
- Environmental Protection Area
- Covenant Protected Area
- Dam
- Modified Arterial or Distributor Road (Cobaki Parkway) - 40.00M\*
- Normal Neighbourhood Connector Road (Sandy Road) - 22.40M\* (VPD ≥ 7000)
- Low Volume Neighbourhood Connector Road - 18.50M\* (3000 - 5000 VPD)
- Areas outside of 400M walkable distance to bus route corridor (7.3% of allotments)

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ACCESS NETWORK PLAN & POTENTIAL BUS ROUTES

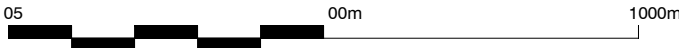
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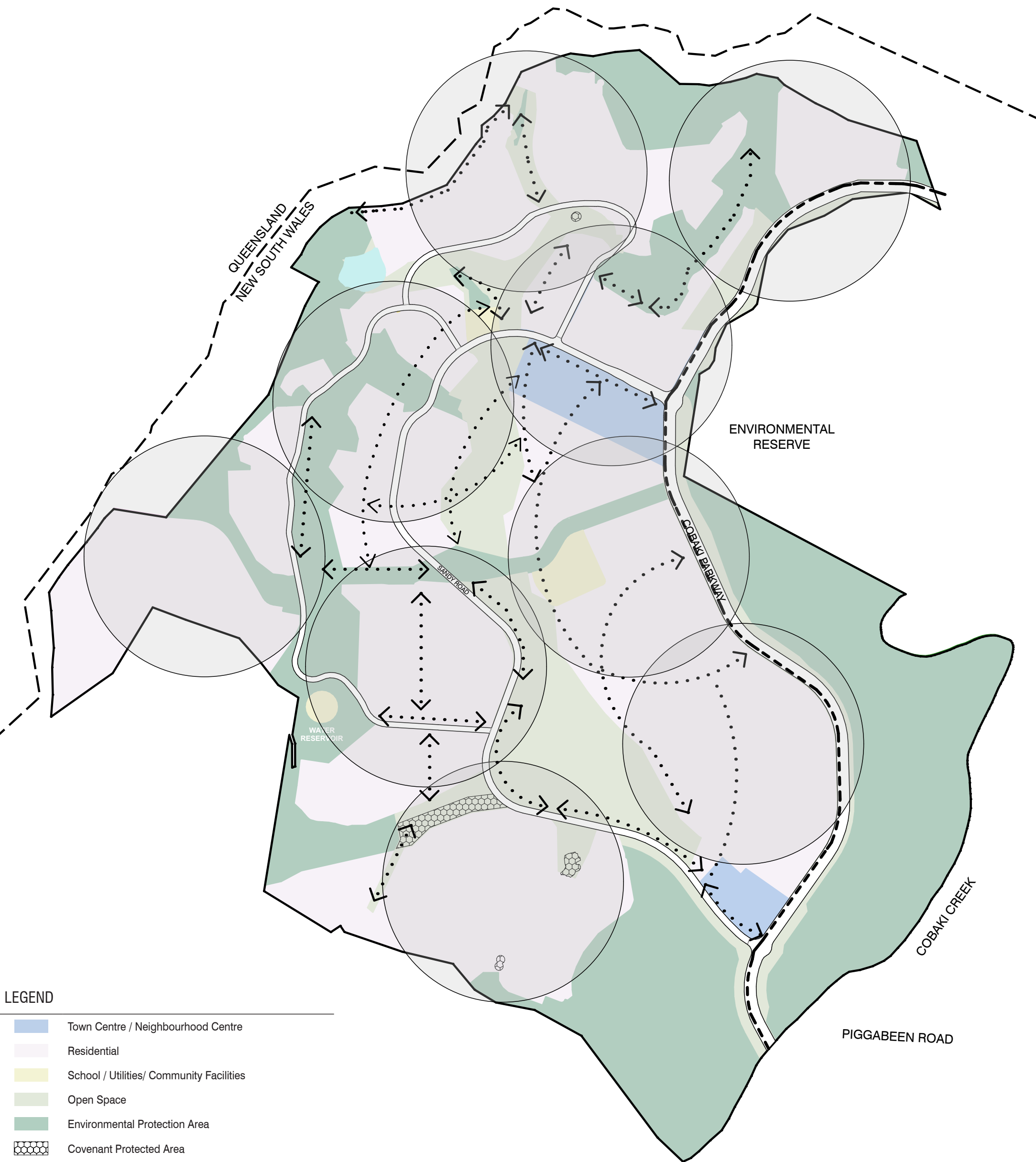
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# OPEN SPACE NETWORK PLAN



## LEGEND

- Town Centre / Neighbourhood Centre
- Residential
- School / Utilities/ Community Facilities
- Open Space
- Environmental Protection Area
- Covenant Protected Area
- Dam
- 400M walkable radius to town centre / local parks
- Indicative location of 2.0M / 2.5M shared pedestrian and cycle path
- 1.2M on-road cycle pathway

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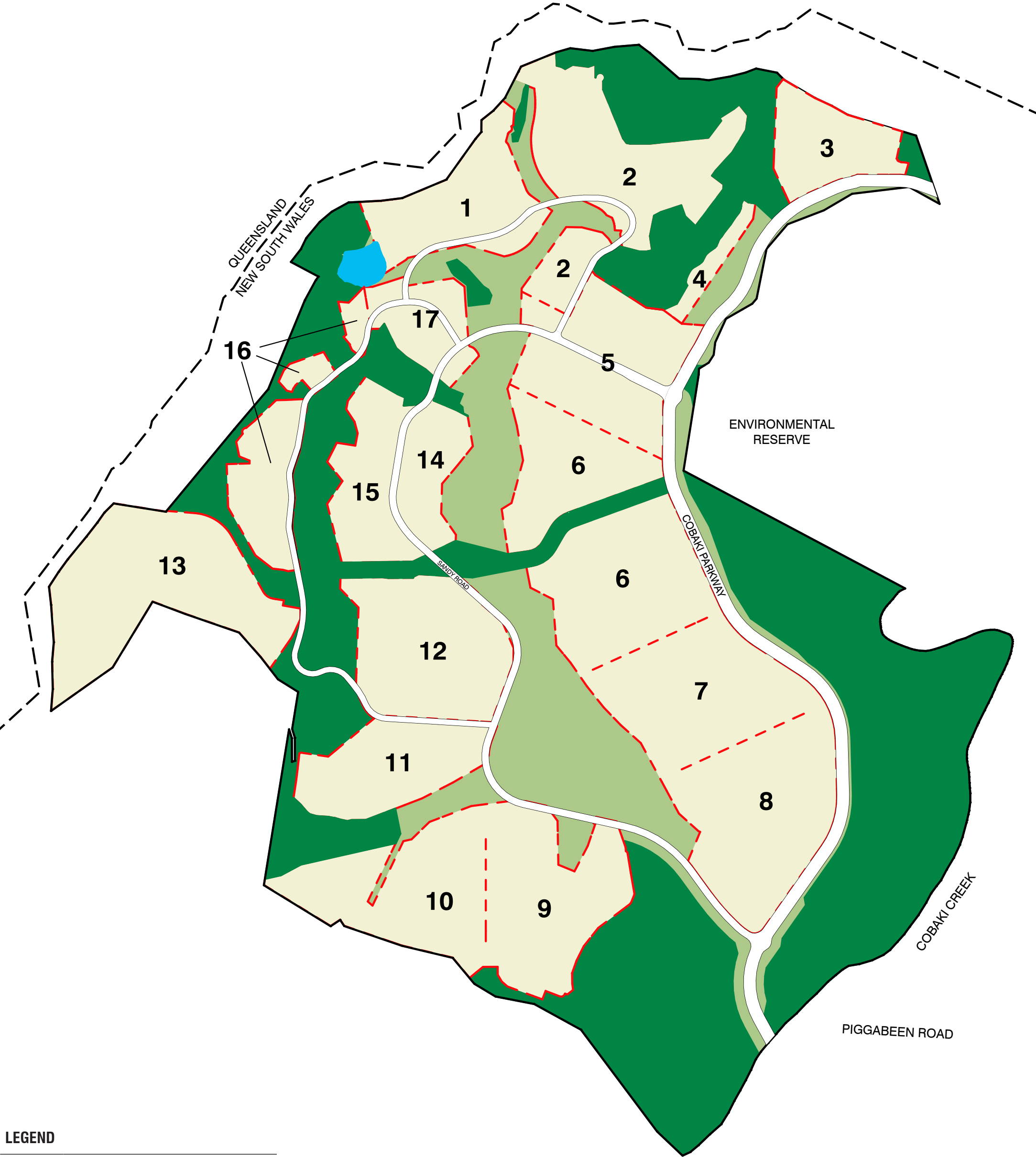
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# PRECINCT LOCATION PLAN



LEGEND

- 123 Precincts
- Development Precincts
- Open Space
- Environmental Protection Area
- Dam

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PRECINCT LOCATION PLAN

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## ATTACHMENT 2

### *PLAN OF DEVELOPMENT*

## The Proposal




### Precinct 5 - Plan of Development

Precinct 5 will be developed and designed as a major retail destination within the region. The core will be supported by a central Main Street to encourage a mix of land uses including retail, commercial, residential, entertainment and community uses.

The built form of Precinct 5 will achieve a vibrant urban Town Centre. An urban outcome will be delivered through the scale of development with the potential for slab building development that defines the streets. Building height reflects the primacy of the Town Centre and transition down towards the east and west. Development provides an active frontage to the Main Street, and Squares.

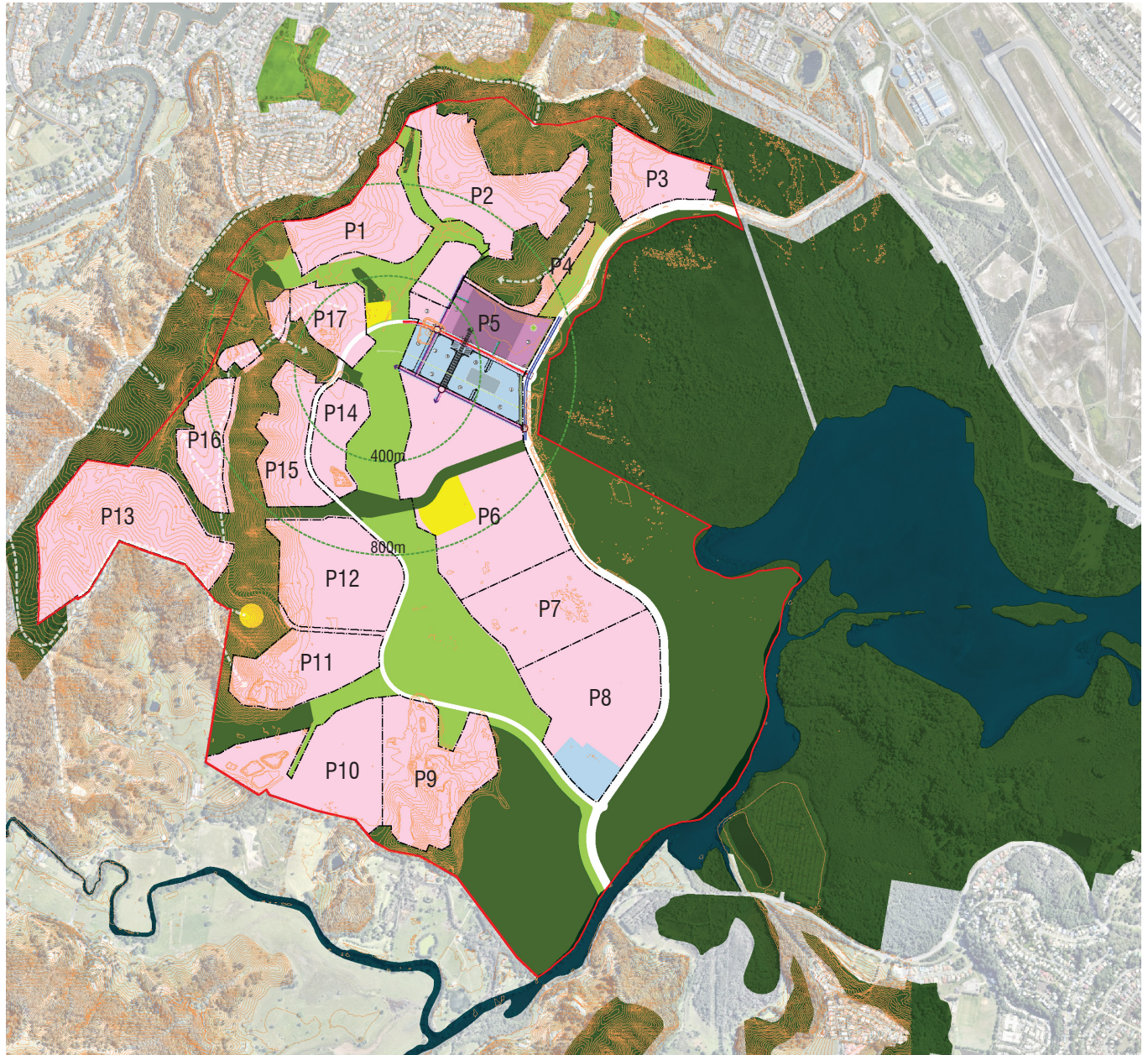
Vehicle access to the retail core is gained from the surrounding street network. Rear access is encouraged for development fronting the Main Street as well as carparking which will be screened from external streets via landscaping and built form.

#### LEGEND

-  Site Boundary
-  Precinct Boundary
-  Contours (2.0m Intervals)






#### LAND USES

-  Retail/Commercial
-  School/Utilities/Community Facilities
-  Low Density Residential
-  Medium Density Residential
-  Medium-High Density Residential
-  Open Space
-  Environmental Protection Area












## LEGEND

-  Precinct Boundary
-  Town Square
-  Landscape Buffer
-  Indicative Carparking Area
-  Local Park (Indicative Location)




## LAND USES

-  Retail/Commercial
-  Low Density Residential
-  Medium Density Residential
-  Medium-High Density Residential

## BUILDING HEIGHTS

-  Up to 8 Storeys (28.0m)
-  Up to 5 Storeys (17.5m)
-  Up to 3 Storeys (13.6m)




## INTERFACES

-  Primary Building Frontage
-  Secondary Building Frontage
-  Key Corner Site




## ROAD NETWORK HIERARCHY

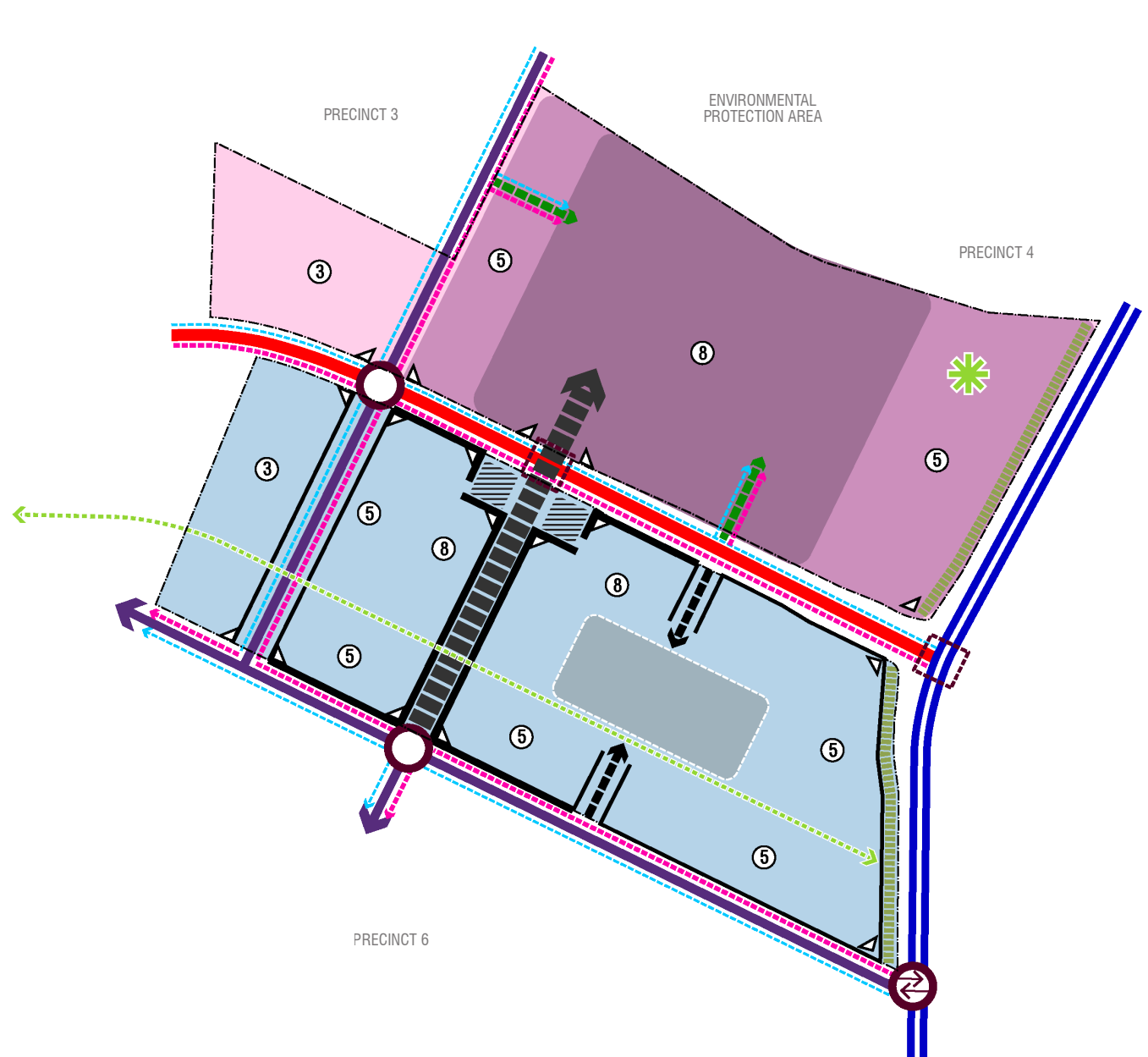
-  Main Street
-  Distributor Road (Cobaki Parkway) - 40.0m
-  Neighbourhood Connector Road (Sandy Lane) - 22.4m
-  Low Volume Neighbourhood Connector Road - 18.5m
-  Access Street - 17.0m
-  Indicative Access Point

## INTERSECTIONS

-  Roundabout
-  Signalised Intersection
-  Left In - Left Out Access

## STREET SCAPE

-  2.5m Wide Off-Road Shared Path
-  1.5m Wide Off-Road Pedestrian Path
-  Green Link Intent



## Precinct 15 & 17 - Plan of Development

Precinct 15 and 17 is to provide a diverse mix of housing such as semi detached housing, terrace housing and medium density residential flat buildings. The Precincts comprises medium density residential dwellings on the western edges of the precinct and

The precincts will present an 'iconic' built form outcome which will be achieved by a built form that is set within the environment and of a slim form which will aim to address the coast.

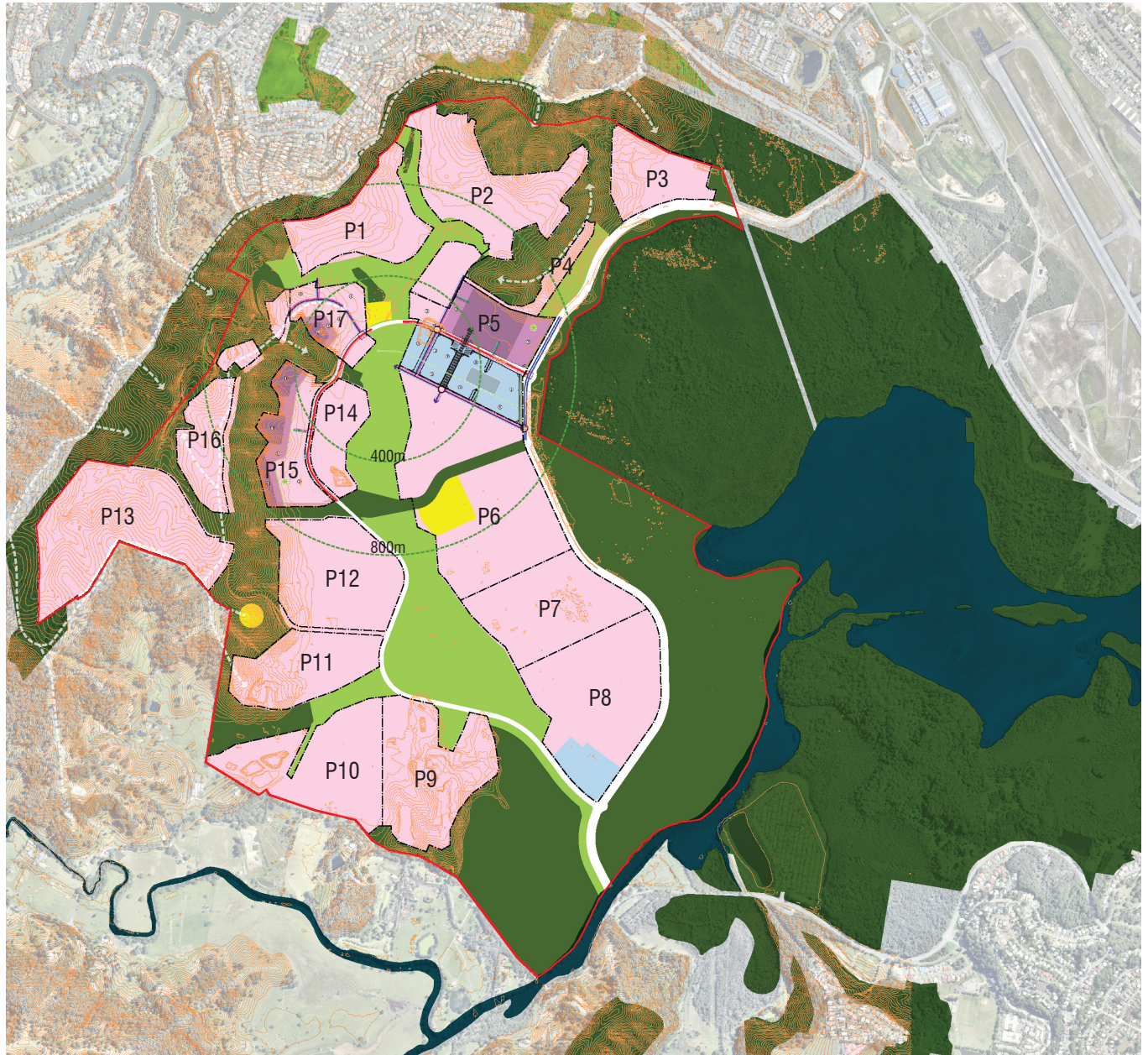
The public realm within Precinct 15 and 17 will be designed to facilitate movement of pedestrians in a comfortable environment with a focus on creating strong links to the District Park and Retail Core.

### LEGEND

- Site Boundary
- Precinct Boundary
- ~ Contours (2.0m Intervals)

### LAND USES

- Retail/Commercial
- School/Utilities/Community Facilities
- Low Density Residential
- Medium Density Residential
- Medium-High Density Residential
- Open Space
- Environmental Protection Area





## LEGEND



Precinct Boundary



Local Park (Indicative Location)



APZ (20.0m)

## LAND USES



Low Density Residential



Medium Density Residential



Medium-High Density Residential

## BUILDING HEIGHTS



Up to 10 Storeys (35.0m)



Up to 5 Storeys (18.0m)



Up to 3 Storeys (13.6m)

## ROAD NETWORK HIERARCHY



Neighbourhood Connector Road (Sandy Lane) - 22.4m



Low Volume Neighbourhood Connector Road - 18.5m



Access Street - 17.0m

## INTERSECTIONS



Signalised Intersection

## STREET SCAPE



2.5m Wide Off-Road Shared Path



1.5m Wide Off-Road Pedestrian Path



Green Link Intent

