

# LAKE MUNMORAH

## STRUCTURE PLAN REPORT

PREPARED FOR

**DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL**

21 FEB 2020

# INTRODUCTION

## INTERIM DARKINJUNG DEVELOPMENT DELIVERY PLAN

In 2019, the State Environmental Planning Policy (Aboriginal Lands) 2019 (AL SEPP) was gazetted to enhance the NSW Planning System's ability to facilitate social and economic outcomes for the Aboriginal Community. The AL SEPP requires that a development delivery plan be prepared for land to which the SEPP applies. To fast track the first stage of the Darkinjung delivery pipeline, the NSW Department of Planning, Industry and Environment (DoPIE) (formerly the Department of Planning and Environment) prepared the Interim Darkinjung Development Delivery Plan (IDDDP) in February 2019. This IDDDP applies to four key sites being:

- Lake Munmorah
- Wallarah
- Somersby; and
- Kariong

### WORK PROGRAM

The IDDDP identifies the matters to be resolved to allow the finalisation of the Planning Proposal (PP 2015 Wyong 002 01) (Lake Munmorah Planning Proposal) for low density residential subdivision and environmentally sensitive lands at 405-415 Pacific Highway, Lake Munmorah.

The IDDDP includes a work program which includes the following actions specific to Lake Munmorah site:

### ACTION 1: EXHIBIT THE LAKE MUNMORAH PLANNING PROPOSAL

**Responsibility: Central Coast Council assisted by the Department of Planning and Environment**

This will require resolution of the following issues:

- Finalisation of the biodiversity impact assessment report
- Traffic network requirements clarified and agreed to with RMS and Central Coast Council
- Aboriginal Cultural Heritage investigations completed and addressed.
- Updated planning proposal with consideration of agency and internal council comments and amendment to the proposed rezoning boundary.

### CURRENT STATUS

The Lake Munmorah Planning Proposal received Gateway Determination in February 2015 and is with Council for implementation. The Gateway Determination identified the requirement for additional information in relation to a range of matters prior to the Planning Proposal being placed on public exhibition.

### PURPOSE OF THIS REPORT

This report summarises the investigations undertaken to inform the preparation of the Lake Munmorah Structure Plan

### KEY INSIGHTS

- The structure planning for the Lake Munmorah site needs to address concerns on Biodiversity Conservation, Aboriginal Cultural Heritage and Traffic Movement and Circulation within and around the site.

For ease of navigation, this report has been structured in three sections as follow:

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# SECTION 1

# STRATEGIC PLANNING CONTEXT

## INTRODUCTION

The planning proposal for the Darkinjung Land Lake Munmorah site is informed by the strategic visioning and planning strategies developed by DPIE and Central Coast Council as outline by the following diagram.

NSW Department of Planning,  
Industry and Environment (DPIE)



The following pages outlines the context analysis of the following strategic planning documents:

- Central Coast Regional Plan 2036 (CCRP 2036)
- North Wyong Shire Structure Plan 2012 (NWSSP 2012)
- Draft Greater Lake Munmorah Structure Plan 2019 (DGLMSP 2019)
- Wyong Local Environmental Plan 2013 (WLEP 2013)

Figure 1 Planning Proposal Process

# CENTRAL COAST REGIONAL PLAN 2036

The CCRP 2036 establishes the strategic planning framework to deliver a prosperous and sustainable future for the Central Coast's current and future residents. It sets out a vision, goals, directions, and actions for the Central Coast Region.

The overarching goals of the Regional Plan are to plan for:

- Goal 1: A prosperous Central Coast with more jobs close to home
- Goal 2: Protect the natural environment and manage the use of agricultural and resource lands
- Goal 3: Well-connected communities and attractive lifestyles
- Goal 4: A variety of housing choice to suit needs and lifestyles

The following key directions provided by the CCRP are relevant to the Lake Munmorah Site:

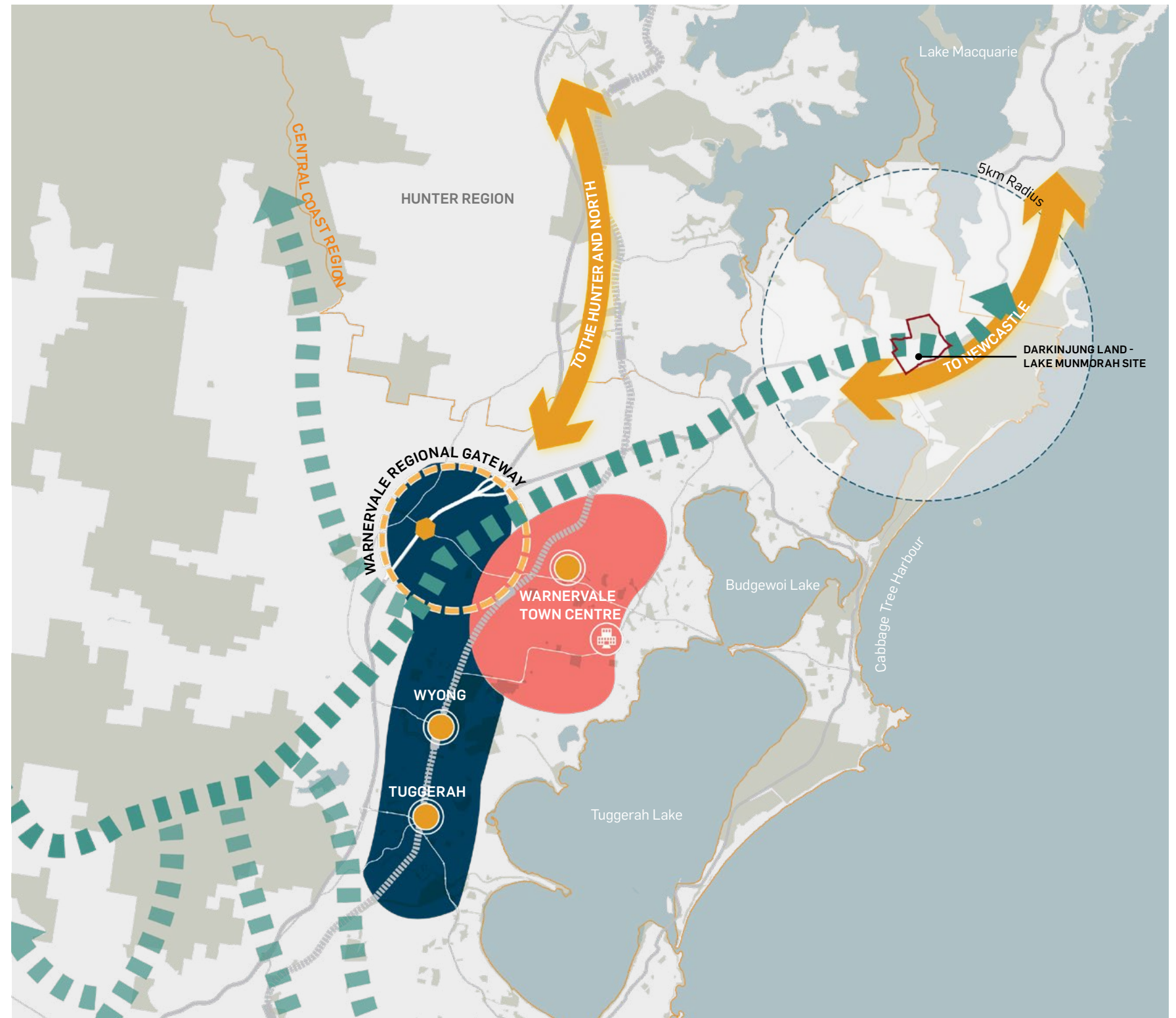
- Direction 6 – Strengthen the economic self-determination of Aboriginal communities
- Direction 8 – Recognise the cultural landscape of the Central Coast
- Direction 9 – Protect and enhance productive agricultural land
- Direction 12 – Protect and manage environmental values
- Direction 17 – Align land use and infrastructure planning
- Direction 19 – Accelerate housing supply and improve housing choice
- Direction 20 – Grow housing choice in and around local centres
- Direction 21 – Providing housing choice to meet community needs

## KEY DIRECTIONS

- The site has road frontage to Pacific Highway which is the inter regional connection between Warnervale and Newcastle
- A biodiversity corridor passes through the site.

### LEGEND

- |   |  |   |   |
|---|--|---|---|
|  | DLALC Land - Lake<br>Munmorah          |  | Regional Gateway                        |
|  | Inter-regional Road and<br>Interchange |  | Rail Network                            |
|  | Strategic Centres                      |  | Biodiversity Corridor                   |
|  | Gosford & Wyong<br>Hospitals           |  | Inter-regional Connection               |
|   |  |  | Warnervale Wadalba Land<br>Release Area |
|   |  |  | Regional Growth Corridor                |



**Figure 2** Central Coast Regional Plan 2036



# NORTH WYONG SHIRE STRUCTURE PLAN 2012














The North Wyong Structure Plan (NWSP) presents the outcome of the Central Coast Regional Plan which identified the areas planned for residential development and employment development.

The NWSSP has identified multiple precincts throughout the north eastern areas of Wyong LGA to identify land for regional greenfield housing and to protect significant environmental assets and landscape values

## KEY DIRECTIONS

- The green corridor and habitat networks within the North Wyong Shire Structure Plan passes through the northern part of the site.
- The Structure Plan indicates that there is a need for additional residential and employment uses within the region to meet future demand. The Central Coast Council has subsequently prepared a Draft Greater Lake Munmorah Structure Plan to identify the locations for development to meet this demand.
- The planning for the Lake Munmorah site will need to leverage the opportunities to contribute towards the proposed green corridor and habitat networks, as well as the opportunity to offset vegetation losses through biodiversity credit.

## LEGEND

	DLALC Land - Lake Munmorah Site		External Conservation Link
	Town Centres		Potential New Roads
	Major Centres		Zoned Employment Areas
	Potential New Centres		Proposed Employment Area
	Rail Network		Strategically Located, Constrained Sites
	Biodiversity Corridor		Proposed Residential Area
			Green Corridor and Habitat Network

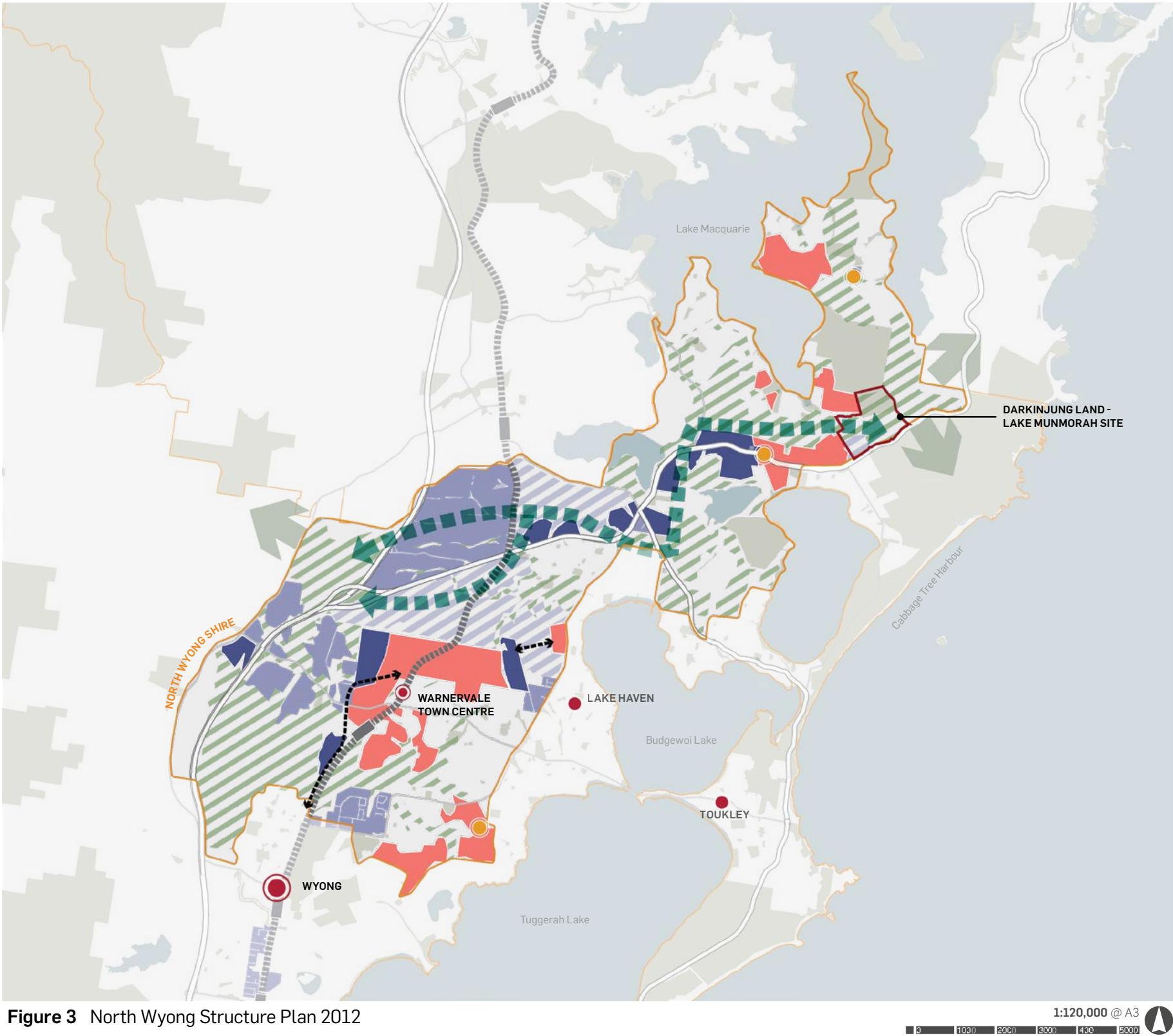


Figure 3 North Wyong Structure Plan 2012



# DRAFT GREATER LAKE MUNMORAH STRUCTURE PLAN 2019

The Draft Greater Lake Munmorah Structure Plan (Draft Structure Plan) sets out to facilitate sustainable growth in the Greater Lake Munmorah Area (GLMA) over the next 30 years.

The Draft Structure Plan intends to build upon the directions set up in the North Wyong Shire Structure Plan (NWSSP). To accommodate the objective for sustainable growth, DGLMSP further divides the GLMA area into 10 precincts.

This structure plan identifies the need to accommodate the following items over the next 30 years.

- a potential additional 2,744 additional residential dwellings,
- 6,256 additional residents and
- 825 additional jobs

The structure plan intends to facilitate future local planning proposals and land zoning amendments that are consistent with the provided mapping.

The northern portion of DLALC owned land is identified as being a biodiversity corridor. The southwestern portion of the site is identified as low density residential development.

## KEY DIRECTIONS

- A main road is proposed running east-west through the site connecting Chain Valley Bay Road and Carters Road.
- A new signalised intersection is proposed at the Pacific Highway and Chain Valley Bay Road intersection.
- Low density residential zones have been proposed to the southern part of Stage 1 site.
- A large portion of the overall site has been identified as environmental land biodiversity corridor consisting of:
  - The northern part land between Chain Valley Bay Road and Carters Road, and
  - All area between Chain Valley Bay Road and Kanangra Road.
- Two recreation land - play spaces has been proposed at the central part west of Chain Valley Bay Road.
- Proposed low density residential uses have been identified in the southern portion of land between Carters Road and Chain Valley Bay Road

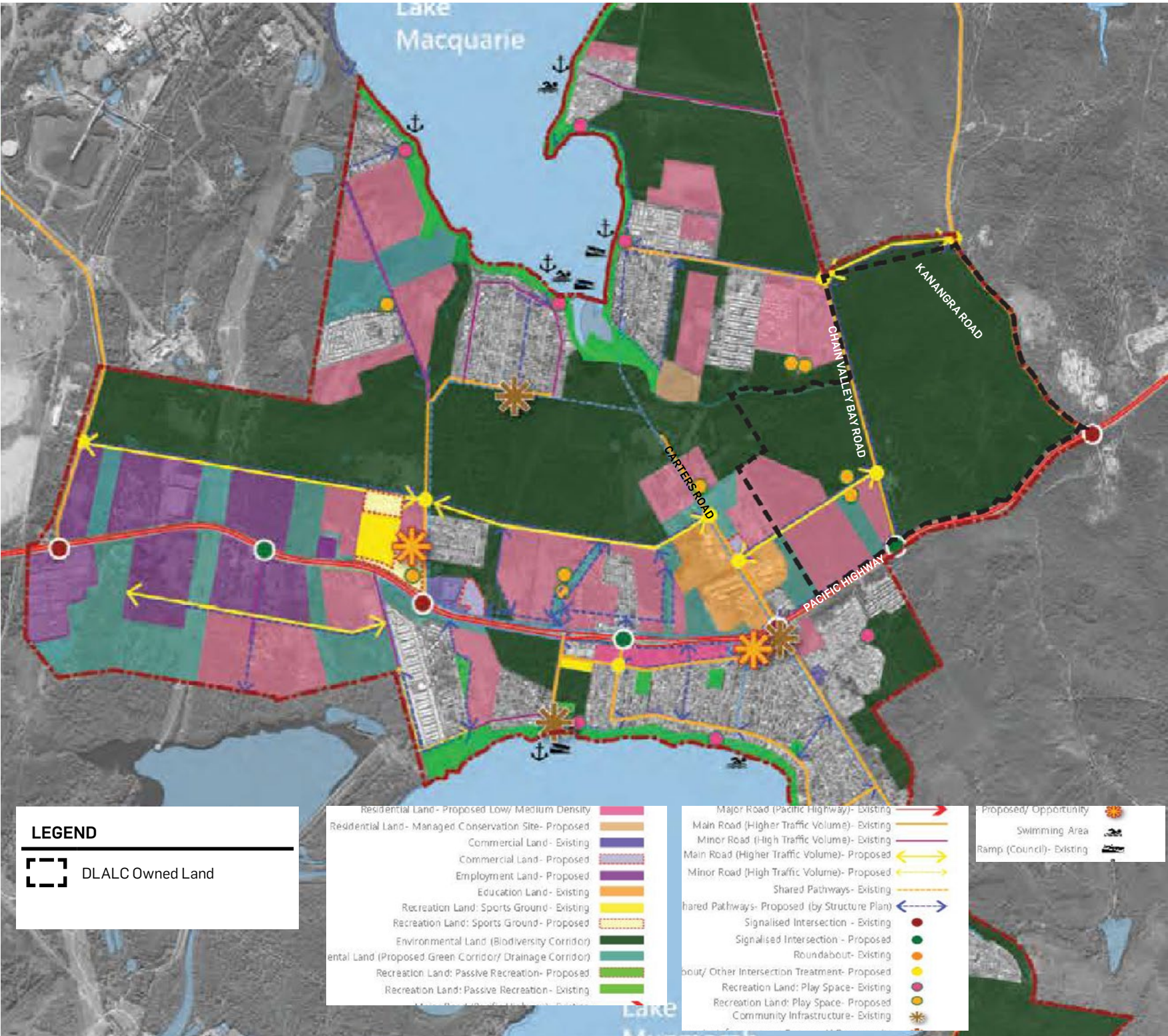


Figure 4 Draft Greater Lake Munmorah Structure Plan 2019



# WYONG LOCAL ENVIRONMENTAL PLAN 2013 (WLEP 2013)

## Land Zoning

The 170.9ha DLALC Owned Land - Lake Munmorah Site is located at 405-415 Pacific Highway, Lake Munmorah.

The site is covered by the following zonings:

- Predominantly E3 Environmental Conservation
- Patches of E2 Environmental Conservation in the centre and west portion of the site; and

The site is surrounded by the following zonings:

- E1 National Parks and Nature Reserves t the north of the site and south of Pacific Highway;
- E3 Environmental Management and patches of E2 Environmental Conservation of to the east and northwest of the site;
- RE2 Private Recreation to the south west of the site;
- RU6 Transition and SP2 Infrastructure (School) to the west side of the site; and
- RE1 Public Recreation to the east of the site.

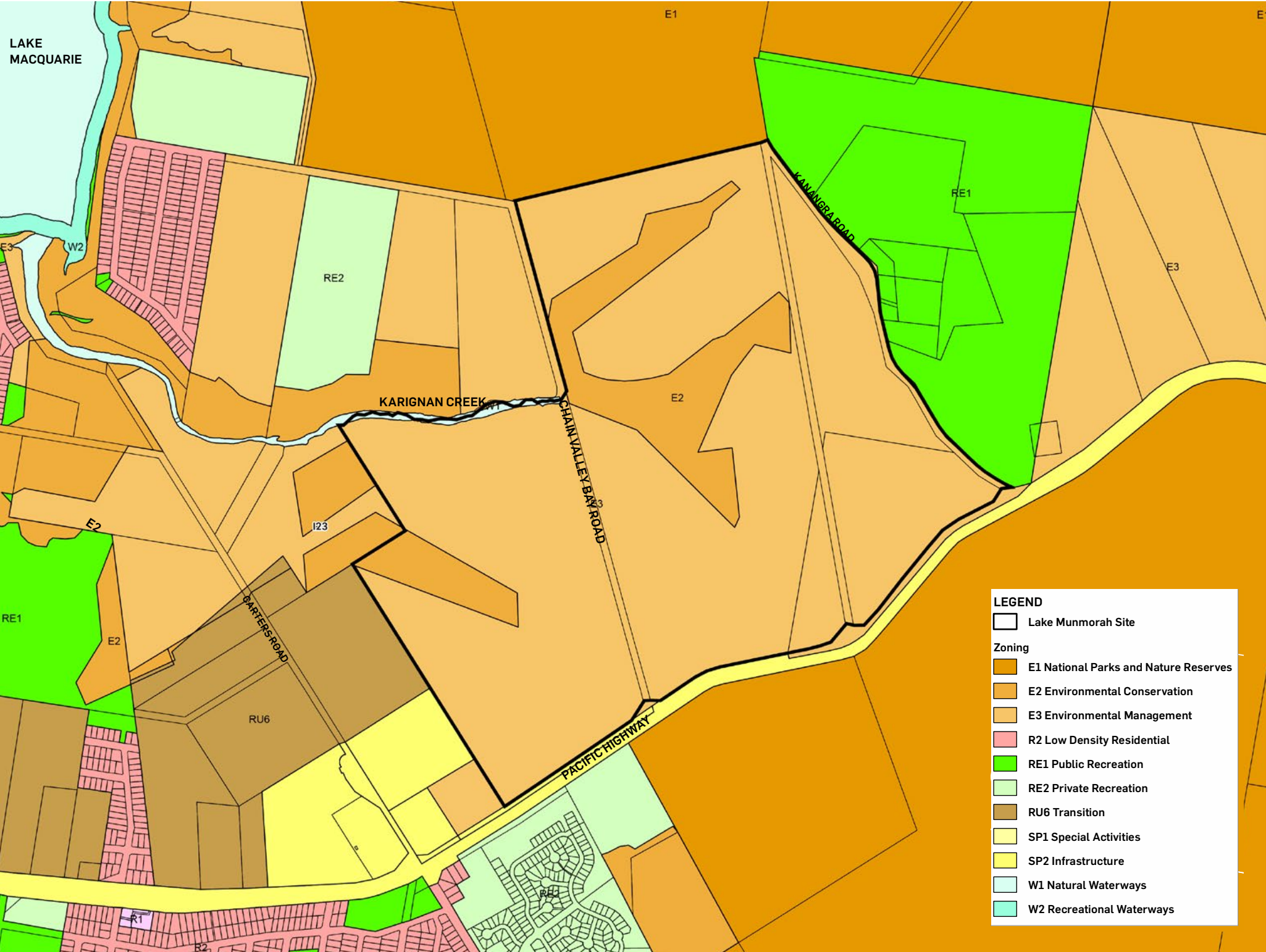


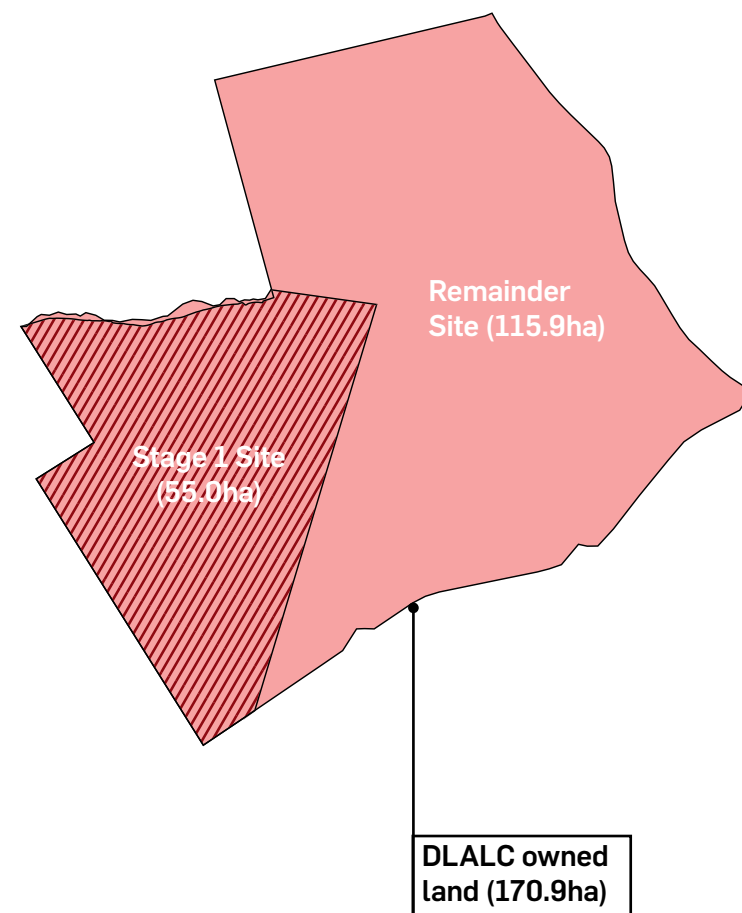
Figure 5 Existing Zoning

## SECTION 2

# SITE ANALYSIS

### OVERVIEW

Council has advised the site area extent supported for rezoning within the DLALC owned land identified as Stage 1 Site illustrated below.



The analysis of the site was undertaken to identify the opportunities and constraints for Stage 1 site. This considered:



#### ENVIRONMENTAL CONSTRAINTS

1. Riparian Corridor;
2. 1% AEP Flood Extent;
3. Biodiversity;
4. Regional Biodiversity Corridor;
5. SEPP Coastal Management; and
6. Topography and Slope.



#### DEVELOPMENT CONSTRAINTS

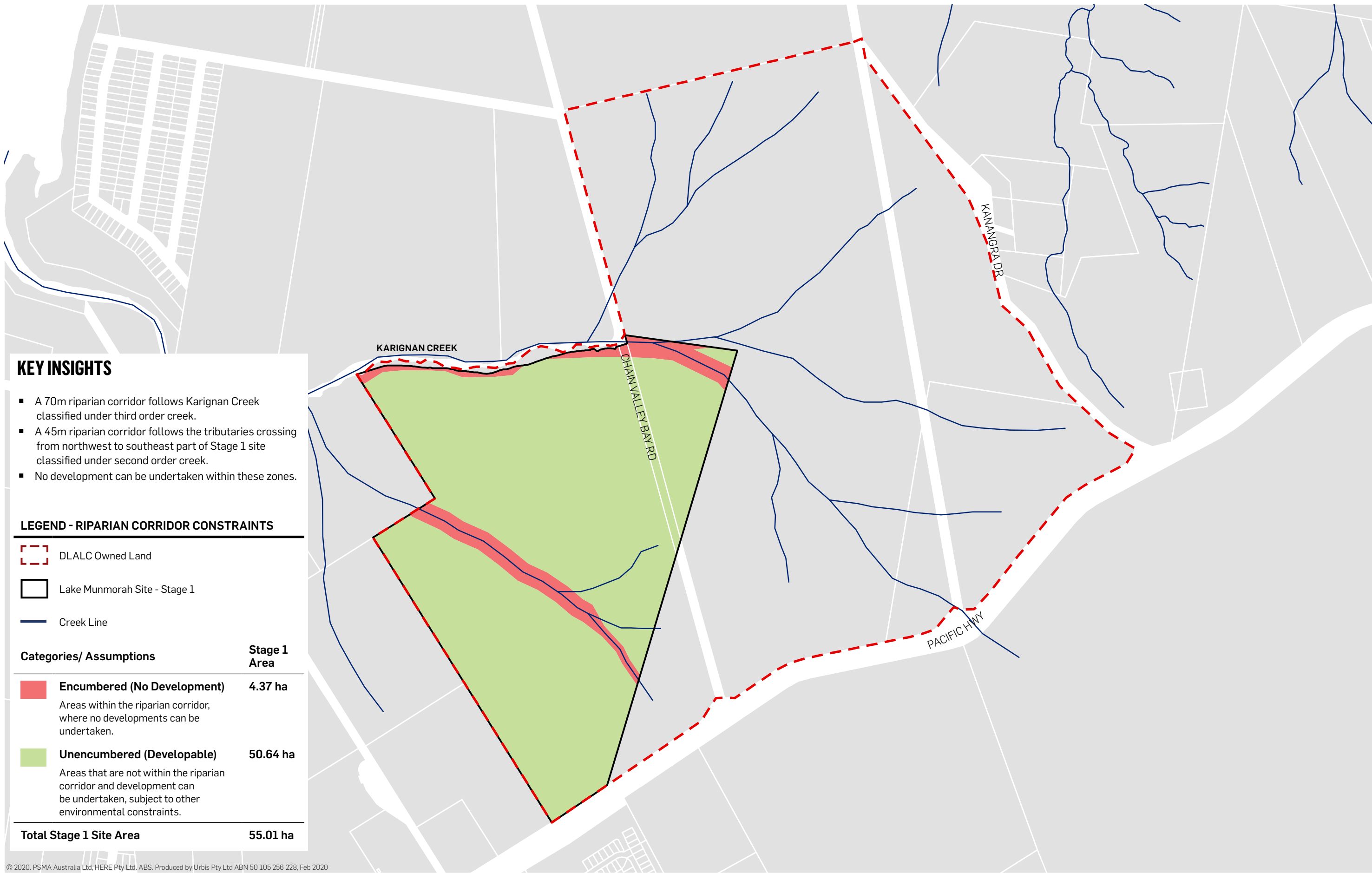
7. Land Zoning and Greater Lake Munmorah Structure Plan overlay
8. Aboriginal Heritage

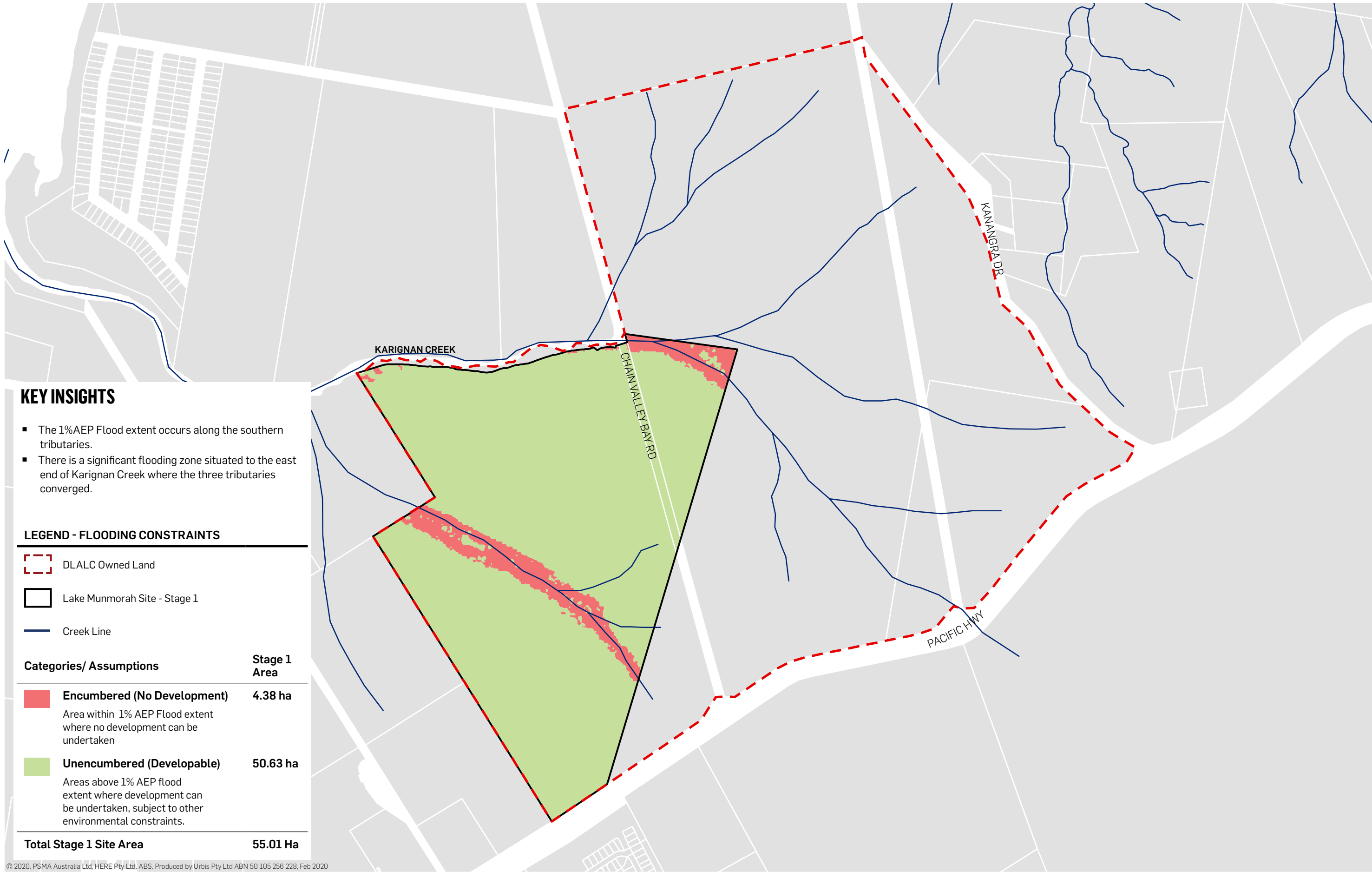
The Aboriginal Heritage assessment is currently being undertaken and not included in this analysis. The updated opportunities and constraints mapping is subject to the assessment completion by April 2020.

For each of the constraints listed above, the site area has been classified under three categories, being:

- **Encumbered (No Development):** Areas affected by constraints where no development can be undertaken
- **Encumbered (Mitigation Required):** Areas affected by constraints that can be mitigated, where future development is possible subject to further investigation and implementation of mitigation strategies.
- **Unencumbered (Developable):** Areas not affected by any constraints, where future development can be undertaken.







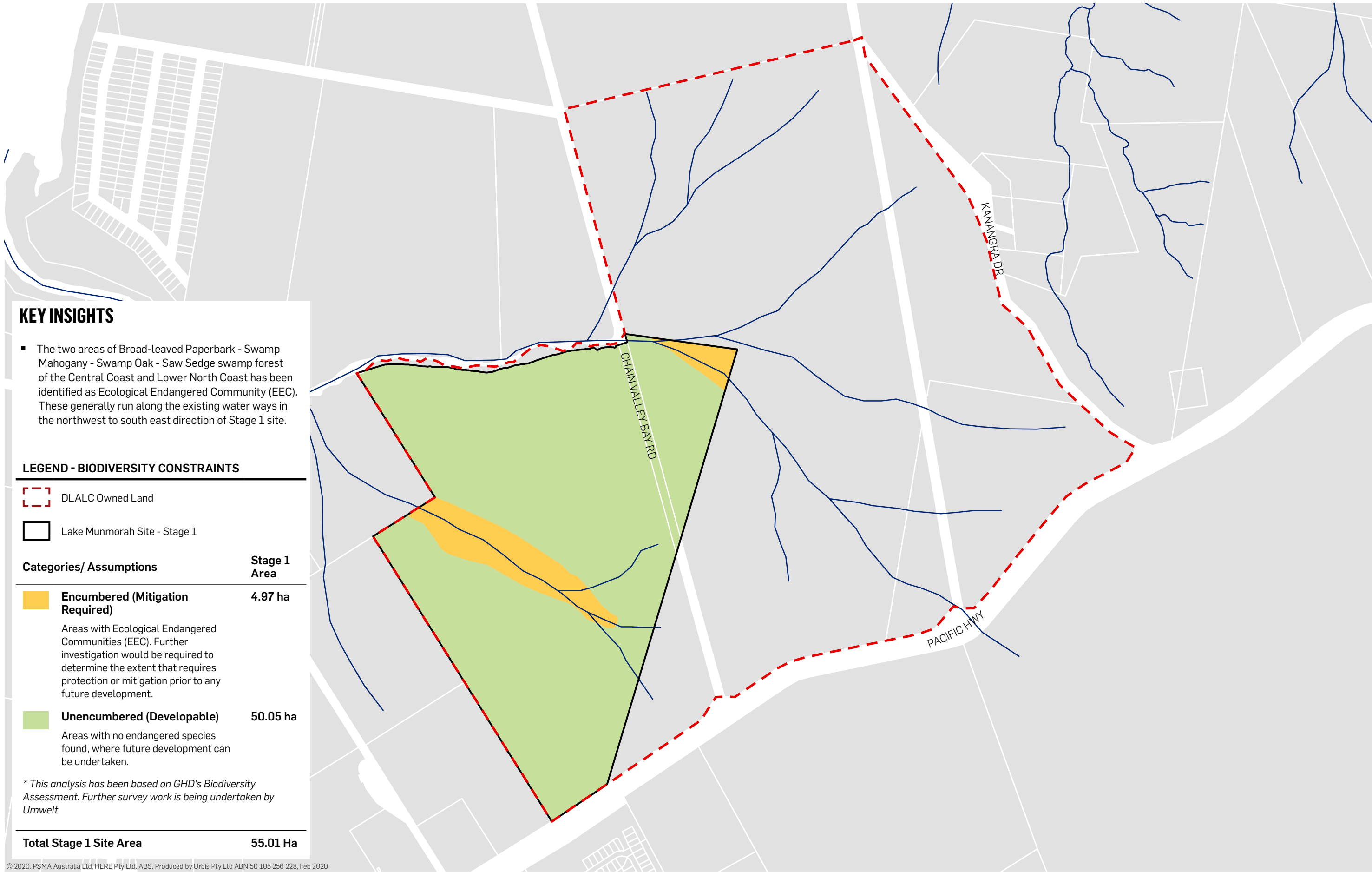
**DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL - LAKE MUNMORAH PLANNING PROPOSAL**  
**ENVIRONMENTAL CONSTRAINTS MAPPING - 1%AEC FLOOD EXTENT**



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# DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL - LAKE MUNMORAH PLANNING PROPOSAL

## ENVIRONMENTAL CONSTRAINTS MAPPING - BIODIVERSITY

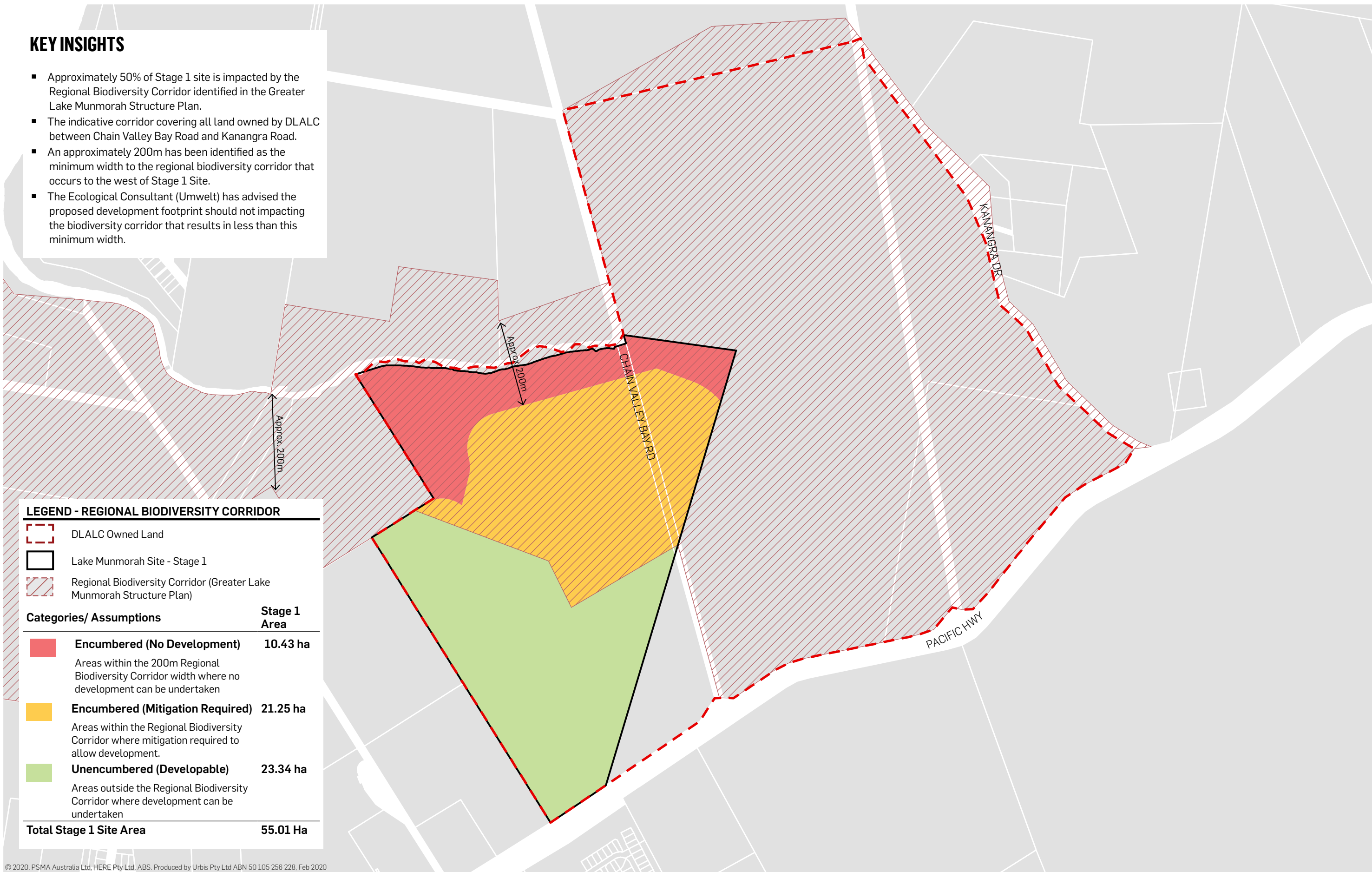


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KEY INSIGHTS

- Approximately 50% of Stage 1 site is impacted by the Regional Biodiversity Corridor identified in the Greater Lake Munmorah Structure Plan.
- The indicative corridor covering all land owned by DLALC between Chain Valley Bay Road and Kanangra Road.
- An approximately 200m has been identified as the minimum width to the regional biodiversity corridor that occurs to the west of Stage 1 Site.
- The Ecological Consultant (Umwelt) has advised the proposed development footprint should not impacting the biodiversity corridor that results in less than this minimum width.



LEGEND - REGIONAL BIODIVERSITY CORRIDOR

- DLALC Owned Land
- Lake Munmorah Site - Stage 1
- Regional Biodiversity Corridor (Greater Lake Munmorah Structure Plan)

Categories/ Assumptions		Stage 1 Area
	<b>Encumbered (No Development)</b> Areas within the 200m Regional Biodiversity Corridor width where no development can be undertaken	10.43 ha
	<b>Encumbered (Mitigation Required)</b> Areas within the Regional Biodiversity Corridor where mitigation required to allow development.	21.25 ha
	<b>Unencumbered (Developable)</b> Areas outside the Regional Biodiversity Corridor where development can be undertaken	23.34 ha
<b>Total Stage 1 Site Area</b>		<b>55.01 Ha</b>

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KEY INSIGHTS

- The northern and northeast portion of Stage 1 site area are within SEPP Coastal Management - Environmental Area where mitigation required prior to any development to determine the extent that requires protection.

LEGEND - SEPP COASTAL MANAGEMENT

- DLALC Owned Land
- Lake Munmorah Site - Stage 1
- SEPP Coastal Management - Environmental Area

Categories/ Assumptions	Stage 1 Area
<b>Encumbered (Mitigation Required)</b> Areas within Coastal Management - Environmental Area. Further investigation would be required to determine the extent that requires protection or mitigation prior to any future development.	9.31 ha
<b>Unencumbered (Developable)</b> Areas with no endangered species found, where future development can be undertaken.	45.70 ha
<b>Total Stage 1 Site Area</b>	<b>55.01 Ha</b>

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DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL - LAKE MUNMORAH PLANNING PROPOSAL

ENVIRONMENTAL CONSTRAINTS MAPPING



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## KEY INSIGHTS

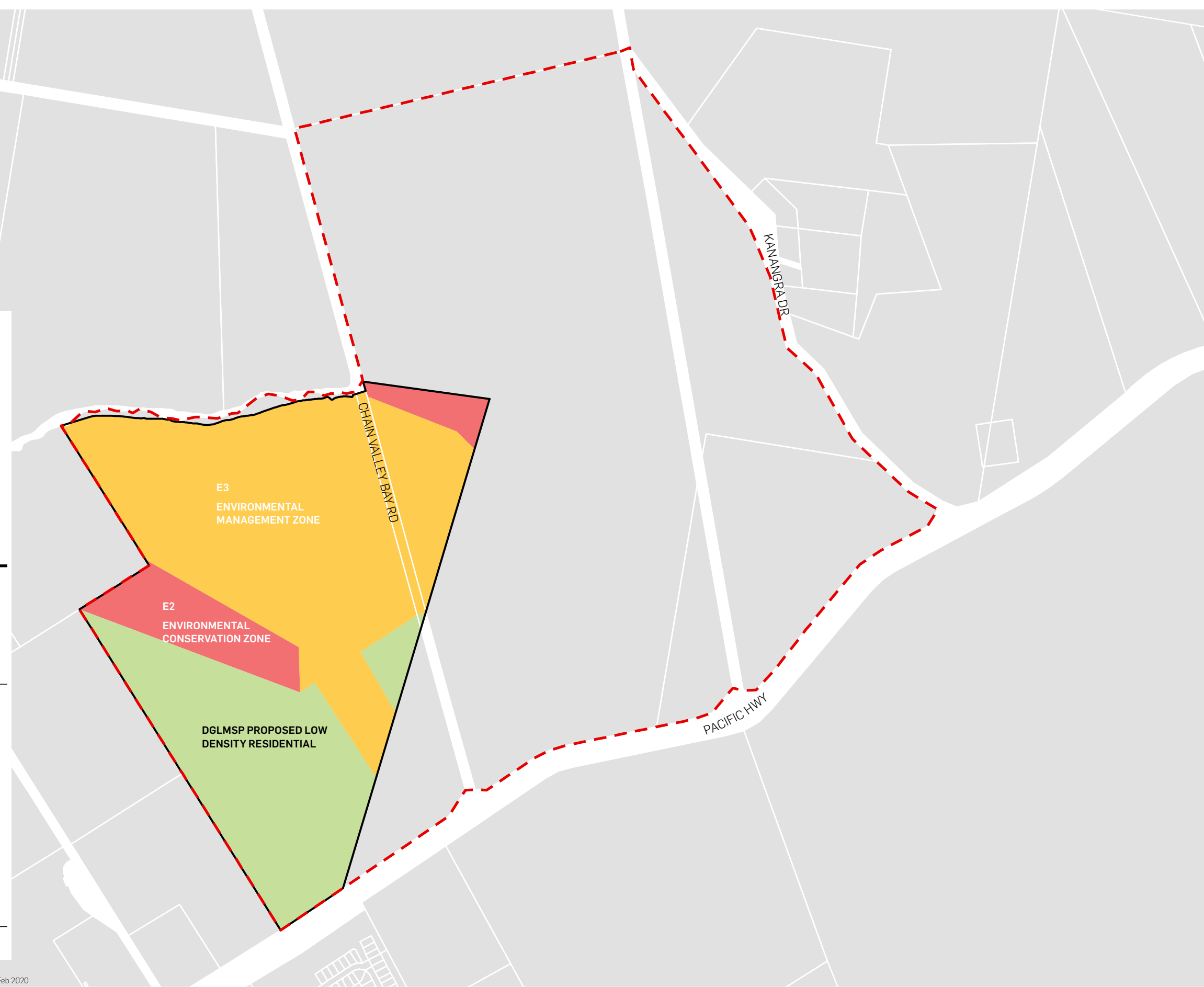
- Stage 1 site is predominantly zoned E3 Environmental Management where low density residential is not permissible. However, the Greater Lake Munmorah Structure Plan identifies the northwest to southeast portion of Stage 1 site as proposed low density residential development .
- The E2 Zone is situated generally along the riparian corridor and areas with biodiversity constraints ground truthed through technical investigations.

## LEGEND - LAND ZONING AND DGLMSP OVERLAY

 DLALC Owned Land

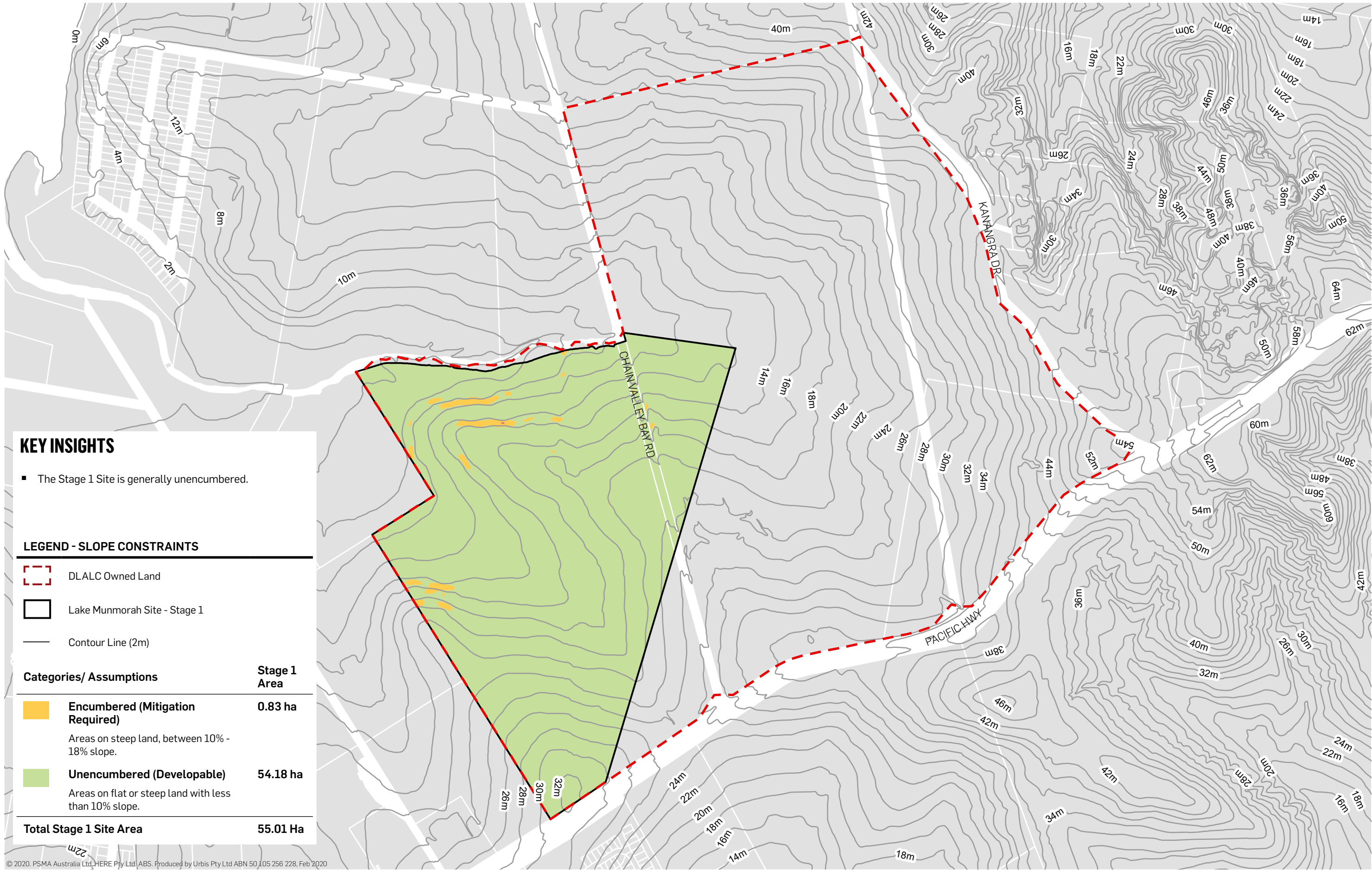
 Lake Munmorah Site - Stage 1

Existing Zoning	Stage 1 Area
 <b>Encumbered (No Development)</b>	<b>6.07 ha</b>
Areas within E2 Environmental Conservation zone where no development can be undertaken	
 <b>Encumbered (Mitigation Required)</b>	<b>31.18 ha</b>
Areas within the DGLMSP proposed open space and Regional Biodiversity Corridor covering the E3 Environmental Management zone where mitigation required to allow development.	
 <b>Unencumbered (Developable)</b>	<b>17.76 ha</b>
Areas within the DGLMSP proposed low density residential where development can be undertaken	
<b>Total Stage 1 Site Area</b>	<b>228.4 Ha</b>



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# DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL - LAKE MUNMORAH PLANNING PROPOSAL

## ENVIRONMENTAL CONSTRAINTS MAPPING - TOPOGRAPHY AND SLOPE



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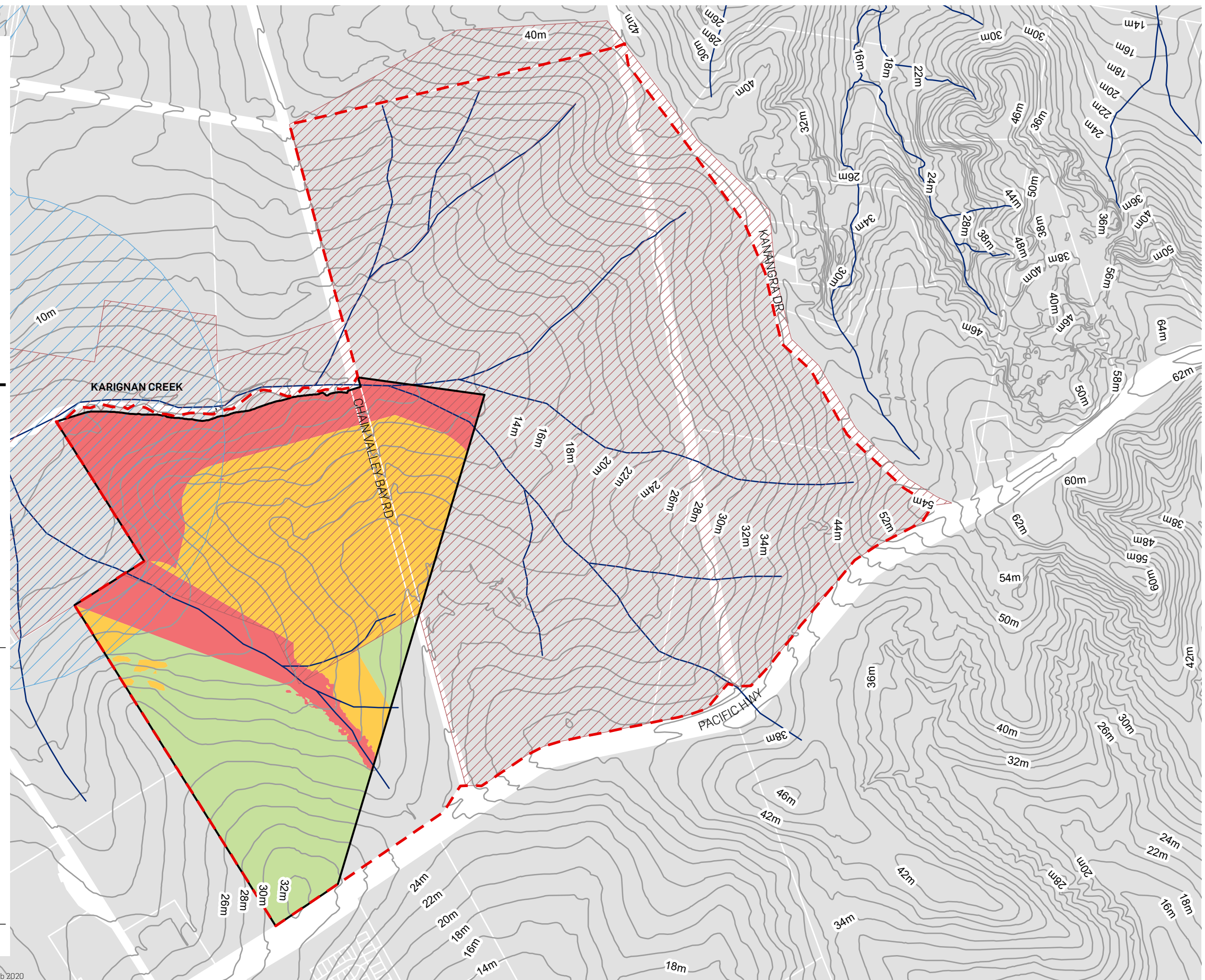
# CONSOLIDATED OPPORTUNITIES AND CONSTRAINTS MAPPING SUMMARY

- The encumbered land where no development can be undertaken in Stage 1 mainly occurs along Karignan Creek and its southern tributaries crossing the south east portion of Stage 1 site. This is due to 1%AEP flood extent, riparian corridor and 200m minimum regional biodiversity corridor width constraints.
- Approximately 50% of central part of Stage 1 site is within the regional biodiversity corridor. Further mitigation is required to allow development whilst ensuring the biodiversity and ecological value of the corridor is maintained.
- There are no significant constraints identified to the west and southeast portion of Stage 1 site.

## LEGEND - CONSOLIDATED CONSTRAINTS MAP

- DLALC Owned Land
- Lake Munmorah Site - Stage 1
- Creek Line
- Contour Line (2m)
- Regional Biodiversity Corridor (Greater Lake Munmorah Structure Plan)
- SEPP Coastal Management - Environmental Area

Categories/ Assumptions	Stage 1 Area
<b>Encumbered (No Development)</b> Areas that are encumbered by various Environmental Constraints, where No Development can be undertaken.	16.02 ha
<b>Encumbered (Mitigation Required)</b> The net area that encumbered by various Environmental Constraints, where mitigation would be required prior to any future development.	22.39 ha
<b>Unencumbered (Developable)</b> The remaining area of land that is Unencumbered by any environmental constraints, where development can more likely occur.	16.60 ha
<b>Total Stage 1 Site Area</b>	<b>55.01 Ha</b>



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## SECTION 3

# INDICATIVE STRUCTURE PLAN

The following pages present an indicative structure plan and proposed zoning for the subject site, as informed by the technical investigation. This includes:

- Urban Design Principles;
- Indicative Structure Plan;
- Proposed Land Zoning; and
- Draft Greater Lake Munmorah Structure Plan - Biodiversity Corridor Overlay

## URBAN DESIGN PRINCIPLES

The structure plan has been guided by three main urban design principles:



### NATURAL SETTING AND GREEN AMENITIES

- Leverage the location of the site along the regional biodiversity corridor and riparian corridors that exist within the site as part of the open space network linking the surrounding residential communities.
- Maintain the biodiversity corridor to the north of Stage 1 site by providing the similar minimum width of an approx. 200m that occurs to the west of the site .
- Provides a centralised active recreational open space that is accessible from the surrounding communities.



### ACCESSIBILITY AND INTERCONNECTIVITY

- Provide road connection between Chain Valley Bay Road and Carters Road, including the schools located at the west of the site.
- Provide active transport connection between St. Brendan's Lake Munmorah school and the residential communities through green linkages that includes pedestrian, cycleway and potential shuttle bus service.



### LEGIBLE RESIDENTIAL COMMUNITIES

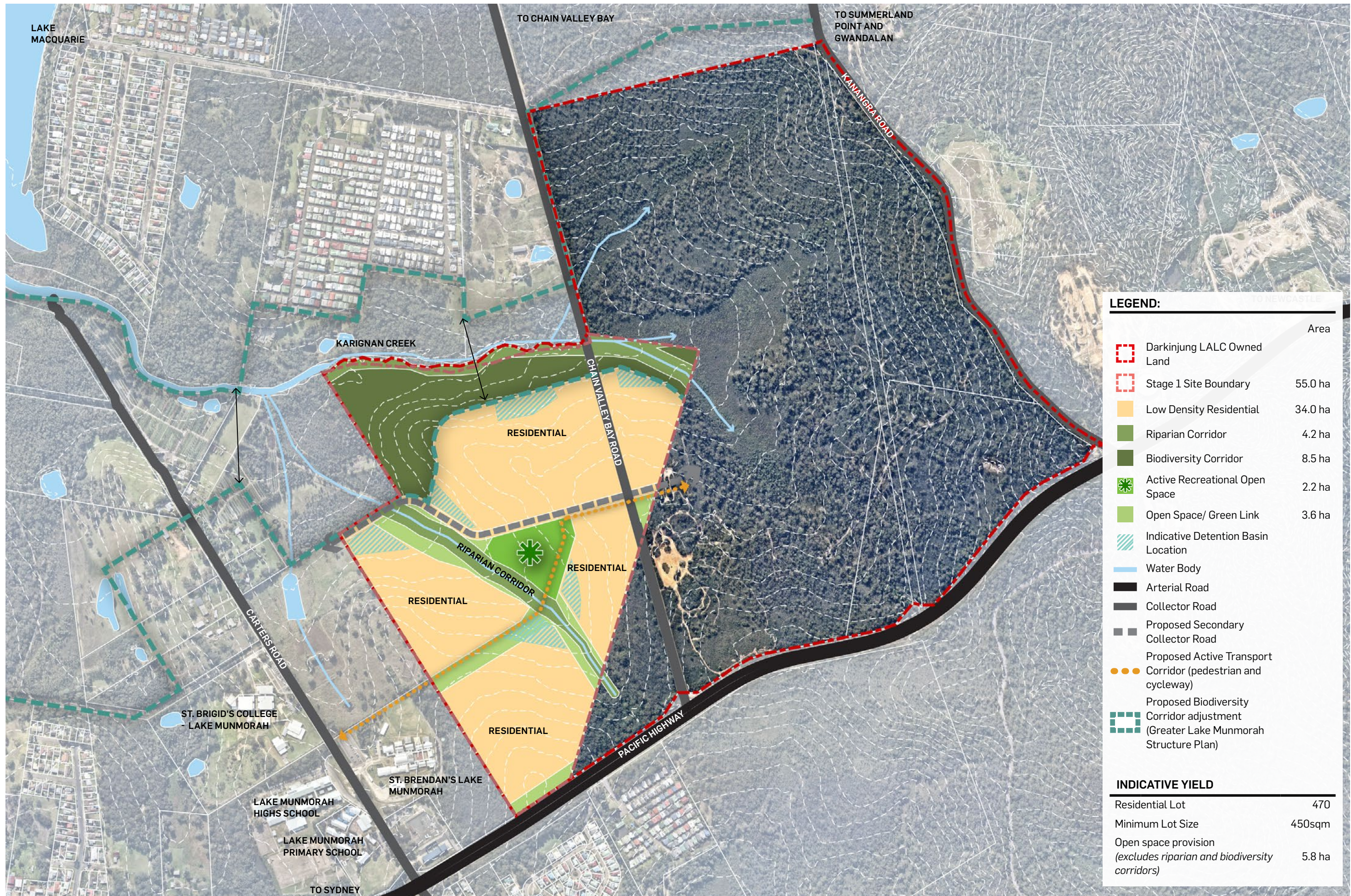
- Provide four distinctive residential neighbourhoods.

## DEVELOPMENT ASSUMPTIONS

The structure plan has been developed based on the following assumptions:

- Minimum lot size of 450 sqm
- 70% residential development efficiency.
- Minimum open space ratio of 1.8ha/ 200 dwellings







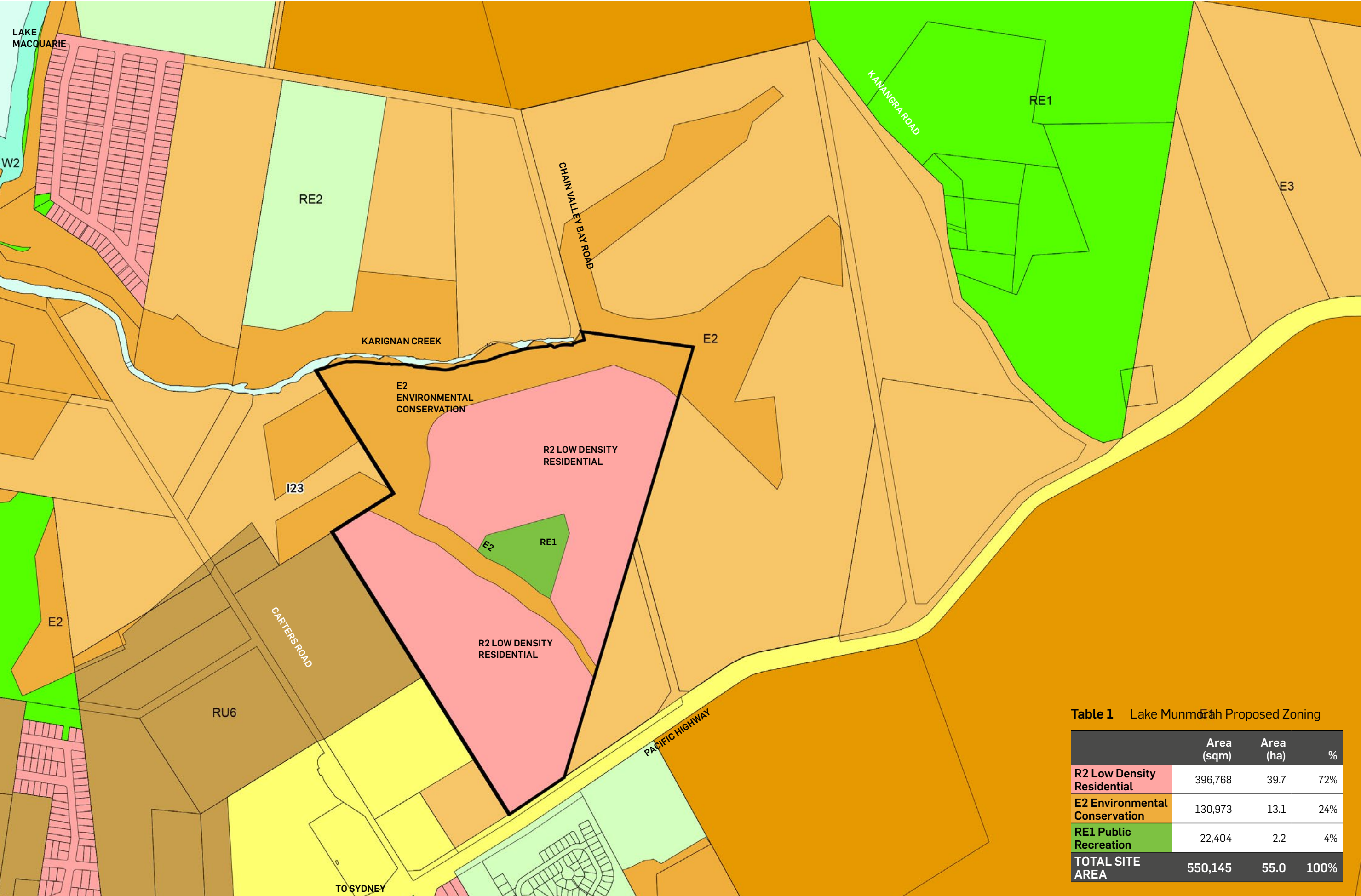


Table 1 Lake Munmorah Proposed Zoning

	Area (sqm)	Area (ha)	%
R2 Low Density Residential	396,768	39.7	72%
E2 Environmental Conservation	130,973	13.1	24%
RE1 Public Recreation	22,404	2.2	4%
TOTAL SITE AREA	550,145	55.0	100%





