



LAKE ROAD PRECINCT B LOCAL STRUCTURE PLAN

LOT 4 AND 6 BAY COURT, LOTS 5 AND 10 LAKE ROAD AND LOT 9 MCNEIL ROAD,
CHAMPION LAKES

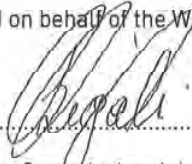


RECORD OF ENDORSEMENT

CERTIFIED THAT THIS STRUCTURE PLAN WAS ADOPTED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

10 July 2015 Date

Signed for and on behalf of the Western Australian Planning Commission


an officer of the Commission duly authorised by the Commission pursuant to section 16 of the Planning and Development Act 2005 for that purpose, in the presence of:

M. Wierlan Witness
27 October 2015 Date

Expires: 27 OCTOBER 2035

And by

RESOLUTION OF THE COUNCIL OF THE CITY OF ARMADALE (RESOLUTION 419/10/14), DATED 27/10/2014

FINAL APPROVAL GRANTED BY THE CITY OF ARMADALE (Delegation S.731)


Executive Manager Planning Services
CITY OF ARMADALE

Date: 15/10/2015

This Structure Plan is prepared under the provisions of the City of Armadale
Town Planning Scheme No. 4





DOCUMENT CONTROL

Printed 05 October 2015 7879_15oct01R_rd

Version	File Name	Prepared by	Approved by	Date
1	7879_15mar01R_rd	Reyne Dial	Kim Kyle	07/05/2015
2	7879_15jul01R_rd	Reyne Dial	Kim Kyle	29/07/2015
3	7879_15oct01R_rd	Reyne Dial	Kim Kyle	05/10/2015

This report has been authorised by;



Kim Kyle Manager Design



Reyne Dial Planner



Jamie Baxter Quality Control

CONTACT PERTH OFFICE

p 9221 1991 **e** info@rowegroup.com.au **w** rowegroup.com.au **a** 3/369 Newcastle Street, Northbridge 6003

Although all care has been taken on the compilation of this document Greg Rowe Pty Ltd and all parties associated with its preparation disclaim any responsibility for any errors or omissions. The right is reserved to change this document at any time. This document does not constitute an invitation, agreement or contract (or any part thereof) of any kind whatsoever. Liability is expressly disclaimed by Greg Rowe Pty Ltd for any loss or damage which may be sustained by any person acting on this document.

© 2015 Greg Rowe Pty Ltd All Rights Reserved. Copyright in the whole and every part of this document belongs to Greg Rowe Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of Greg Rowe Pty Ltd.



This structure plan is prepared under the provisions of the City of Armadale
Town Planning Scheme No. 4

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY
RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION
ON:

27 OCTOBER 2015

In accordance with Schedule 2, Part 4, Clause 28 (2) and refer to Part 1, 2. (b)
of the *Planning and Development (Local Planning Schemes) Regulations*
2015.

Date of Expiry: **27 OCTOBER 2035**



TABLE OF MODIFICATIONS TO STRUCTURE PLAN

Modification No.	Description of Modification	Date Endorsed by Council	Date Endorsed by WAPC



EXECUTIVE SUMMARY

This Local Structure Plan (LSP) addresses Lots 4 and 6 Bay Court, Lots 5 and 10 Lake Road and Lot 9 McNeil Road, Champion Lakes. The LSP area comprises 12.5 hectares of urban zoned land, and is defined as 'Precinct B' under the Lake Road Champion Lakes Structure Plan.

The site is located approximately 4 kilometres north-west of the Armadale City Centre and approximately 4.3 kilometres south-west of the Kelmscott Town Centre.

The LSP seeks to facilitate the subdivision and development of the land for a range of residential land uses in a manner that interacts appropriately with both the developing urban environment in this locality and the adjoining Wungong River. Specifically, the land uses within the Precinct B LSP include:

- ▲ Residential lots ranging in density from R25 to R40;
- ▲ A Lifestyle Village comprising Aged and Dependant Person Dwellings at a density of R40 within the northern portion of the Precinct; and
- ▲ Public Open Space (POS) which integrates with the Wungong River Foreshore and creates pedestrian opportunities for residents east of Lake Road to access the foreshore.

The preparation of the LSP has been undertaken in liaison with the City of Armadale and other relevant Government authorities.


Structure Plan Summary Table

Item	Data	Section number referenced in Part 2 report
Total area covered by the Structure Plan	12.5 hectares	1.2.2
Area of each land use proposed:		4.1
Residential	6.9 hectares	
Industrial	0 hectares	
Commercial	0 hectares	
Estimated lot yield	61 lots	4.3
Estimated number of dwellings	242 dwellings	4.3
Estimated residential site density	35.0 dwellings per site hectare 19.4 dwellings per gross hectare	4.3
Estimated population	629 people	4.3
Number of high schools	0 high schools	4.6
Number of primary schools	0 primary schools	4.6
Estimated commercial floor space (for activity centres if appropriate)	n/a	4.7
Estimated area and % of public open space:		4.2
Regional open space	0 hectares, 0%	
District open space	0 hectares, 0%	
Estimated area and number neighbourhood parks	1.1 hectares, 2 parks	4.2
local parks	0.2 hectares, 1 parks	
Estimated number and area of natural area and biodiversity assets	Nil	N/A




CONTENTS

Record of Endorsement	i
Table of Modifications to Structure Plan	ii
Executive Summary	iii
1. Local Structure Plan Area	2
2. Local Structure Plan Content	2
3. Interpretations and Relationship with the Scheme	2
4. Operation	2
5. Land Use and Subdivision	3
6. Development	5
01 Planning Background.....	9
1.1 Introduction and Purpose	9
1.2 Land Description	9
1.2.1 Location.....	9
1.2.2 Area and Land Use	9
1.2.3 Legal Description and Ownership	9
02 Planning Framework.....	10
2.1 Zoning and Reservations.....	10
2.1.1 Metropolitan Region Scheme	10
2.1.2 City of Armadale Town Planning Scheme No. 4	10
2.2 Planning Strategies.....	11
2.2.1 Directions 2031 and Beyond.....	11
2.2.2 Outer Metropolitan Perth and Peel Sub-Regional Strategy	11
2.2.3 City of Armadale Local Planning Strategy.....	12
2.3 Policies	12
2.3.1 Liveable Neighbourhoods.....	12
2.3.2 State Planning Policy 3 – Urban Growth and Development.....	12
2.3.3 Wungong River Management Plan.....	13
2.3.4 City of Armadale Seniors Plan	14
2.3.5 Swan River Trust Development Control Area.....	14



2.4	Other Approvals and Decisions.....	14
03	Site Conditions and Constraints	15
3.1	Biodiversity and Natural Area Assets.....	15
3.1.1	Flora and Vegetation.....	15
3.1.2	Wetlands	15
3.1.3	Fauna.....	16
3.2	Landform and Soils	16
3.2.1	Acid Sulphate Soils	16
3.2.2	Contamination.....	16
3.3	Groundwater and Surface Water	17
3.3.1	Groundwater	17
3.3.2	Surface Water	17
3.4	Bushfire Hazard	17
3.4.1	Hazard Assessment.....	17
3.4.2	Management Requirements.....	18
3.5	Heritage	18
3.5.1	Indigenous Heritage	18
3.5.2	Non-Indigenous Heritage	19
3.6	Context and Other Land Use Constraints.....	19
04	Land Use and Subdivision Requirements	20
4.1	Land Use.....	20
4.2	Public Open Space.....	20
4.2.1	Wungong River Reserve	21
4.2.2	Lifestyle Village.....	21
4.3	Residential.....	21
4.4	Movement Networks	22
4.4.1	Existing Road Network	22
4.4.2	Proposed Road Network	23
4.4.3	Public Transport	23
4.4.4	Pedestrian and Cycle Networks	24
4.4.5	Surrounding Land Use Interface and Streetscape	24





4.5	Water Management.....	25
4.5.1	Local Drainage.....	25
4.5.2	Existing Man-Made Lake.....	25
4.6	Education Facilities	26
4.7	Commercial and Employment	26
4.8	Infrastructure Coordination, Servicing and Staging	26
4.8.1	Water Supply.....	26
4.8.2	Sewer	26
4.8.3	Natural Gas	27
4.8.4	Electricity	27
4.8.5	Telecommunications	27
4.9	Implementation	27
4.9.1	Staging of Subdivision and Development.....	27
4.9.2	Developer Contribution Arrangements	27





FIGURES

1. Regional Location
2. Local Location
3. Aerial, Contours and Cadastral (Site Plan)
4. Metropolitan Region Scheme Zoning
5. City of Armadale Town Planning Scheme No. 4 Zoning
6. Wetland Location
7. Public Open Space Plan
8. Public Open Space Schedule
9. Indicative Lot Layout
10. Indicative Movement Network
11. Indicative Cross-sections

TECHNICAL APPENDICES

Appendix Number	Document Title	Nature of Document	Referral/Approval Agency	Summary of Document Modifications
1.	Certificates of Title	Supporting document only	-	
2.	Wetland Management Plan	Approval Required	DPaW / City of Armadale	
3.	Flora and Vegetation Survey	Supporting document only	DPaW	
4.	Vegetation Condition Assessment	Supporting document only	DPaW	
5.	Wetland Reclassification Report	Supporting document only	DPaW	
6.	DEC Correspondence	Supporting document only	DPaW	
7.	Local Water Management Strategy	Approval Required	Department of Water	
8.	Fire Management Plan	Approval Required	Department of Fire and Emergency Services / City of Armadale	
9.	Landscape Master Plan	Supporting document only	City of Armadale	
10.	Transport Report	Supporting document only	City of Armadale	
11.	Engineering Report	Supporting document only	City of Armadale	
12.	Preliminary Environmental, Hydrology and Engineering Assessment	Supporting document only	City of Armadale	



Part One

STATUTORY SECTION



ROWEGROUP



1. Local Structure Plan Area

This Local Structure Plan shall apply to Lots 4 and 6 Bay Court, Lots 5 and 10 Lake Road and Lot 9 McNeil Road, Champion Lakes, being the land contained within the inner edge of the line denoting the LSP boundary on the Structure Plan map (Plan 1).

2. Local Structure Plan Content

This Structure Plan comprises:

a) Part One - Statutory section

This section contains the Structure Plan map and statutory planning provisions and requirements.

b) Part Two – Non-statutory (explanatory) section

This section is to be used as a reference guide to interpret and justify the implementation of Part One.

c) Part Three – Technical Appendices

This section contains report and supporting plans and maps.

3. Interpretations and Relationship with the Scheme

Unless otherwise specified in this part, the words and expressions used in this Structure Plan shall have the respective meanings given to them in the City of Armadale Town Planning Scheme No. 4 (the Scheme) including any amendments gazetted thereto.

The Local Structure Plan map (Plan 1) outlines land use, zones and reserves applicable within the Structure Plan area. The zones and reserves designated under this Local Structure Plan apply to the land within it as if the zones and reserves were incorporated into the Scheme.

Pursuant to Clause 6A.7 of the Scheme:

- a) The provisions, standards and requirements specified under Part One of this Structure Plan shall have the same force and effect as if it were a provision, standard or requirement of the Scheme. In the event of there being any variations or conflict between the provisions, standards or requirements of the Scheme and the provisions, standards or requirements of this Structure Plan, then the provisions, standards or requirements of the Scheme shall prevail;
- b) Any other provision, standard or requirement of Part One of the Structure Plan that is not otherwise contained in the Scheme, shall apply to the Structure Plan area as though it is incorporated into the Scheme, and shall be binding and enforceable to the same extent as if part of the Scheme; and
- c) Part Two of this Local Structure Plan and all appendices are to be used as a reference only to clarify and guide interpretation and implementation of Part One.

4. Operation

In accordance with Clause 6A.3 of the Scheme, this Structure Plan shall come into operation when it is adopted by the City under Clause 6A.3.15.



5. Land Use and Subdivision

The Structure Plan Map (Plan 1) outlines land use, zones and reserves applicable within the Structure Plan area. The zones and reserves designated under this Structure Plan apply to the land within it as if the zones and reserves were incorporated into the Scheme.

5.1 Land Use Permissibility

Land use permissibility within the Structure Plan area shall be in accordance with the corresponding zone or reserve under the Scheme.

5.2 Residential

5.2.1 Dwelling Target

a) Objective

To provide for a minimum of 187 dwellings within the Structure Plan area.

b) Subdivisions are to achieve the following:

- i) A minimum average of 22 dwellings per site hectare across the LSP area.
- ii) A minimum average of 15 dwellings per gross urban hectare across the LSP area.

5.2.2 Density

a) Plan 1 defines the residential density codes that apply to the LSP.


b) Subdivision applications must be accompanied by information illustrating the manner in which the proposed subdivision meets (as a minimum) the density targets applicable as outlined in Clause 5.2.1.

5.2.3 Development of Lots 4 and 6 Bay Court and Lot 5 Lake Road for residential dwellings shall address the following criterion to the satisfaction of the City and WAPC:

a) Prior to the approval of subdivision, survey strata subdivision and/or development on Lots 4 and 6 Bay Court and Lot 5 Lake Road, to a density of R25 a structure plan modification is required to guide subdivision, survey strata subdivision or development and is to consider:

- i) Management and protection of the Conservation Category Wetland and its buffer;
- ii) Road alignments;
- iii) Public Open Space interface;
- iv) Drainage; and
- v) Other matters as required by the City.

b) Notwithstanding the existing density code of Lots 4 and 6 Bay Court and Lot 5 Lake Road and Clause 5.2.3 a) above, the City may permit aged persons dwellings (as defined by the Residential Design Codes) to be constructed to a density of R40 subject to a Local Development Plan being prepared by the subdivider or developer and approved by the City prior to the approval of any



subdivision, survey strata subdivision and/or development. The Local Development Plan shall include the following:

- i) Communal Open Space provision that complies with the requirements of the Residential Design Codes and the City's Local Planning Policies;
 - ii) Community and recreation facilities to the satisfaction of the City;
 - iii) Development no greater than three (3) storeys in height;
 - iv) Management of the Conservation Category Wetland and buffer in accordance with an approved Wetland Management Plan; and
 - v) Other LDP details as listed in Clause 6.1.2.
- c) The Conservation Category Wetland is to be ceded to the crown free of cost as part of a public open space reserve where the site is developed at a density of R25 or less.

5.3 Public Open Space

- a) The provision of a minimum of 10 per cent public open space being provided in accordance with the WAPC's Liveable Neighbourhoods for the LSP area. Public open space is to be provided in accordance with Plan 1, with an updated public open space schedule to be provided at the time of subdivision for determination by the WAPC, upon the advice of the City of Armadale.
- b) Public open space shall be implemented in accordance with an approved Landscape and Streetscape Plan and Foreshore Management and Improvement Plan prior to subdivision and development occurring on site in accordance with the requirements of Development Area 45 (Clauses 45.4 and 45.6) of Schedule 12 of the Scheme.

5.4 Plans, Strategies and Reports


Prior to subdivision, survey strata subdivision, or development, the following plans, strategies and reports are to be prepared by suitably qualified persons, to the City's satisfaction:

- a) Urban Water Management Plan;
- b) Landscape and Streetscape Plan;
- c) Wetland Management Plan for the Conservation Category Wetland and its buffer;
- d) Foreshore Management and Improvement Plan;
- e) Fire Management Plan; and
- f) Geotechnical Report.

The plans, strategies and reports are to be implemented to the City's satisfaction.

5.5 Bushfire Management

- a) Regardless of whether this land has been designated as bushfire prone, any buildings to be erected pursuant to this structure plan shall comply with the requirement of Australian Standard 3959 under the Building Code of Australia.

- 
- b) Any dwellings/buildings envelopes are to be located to ensure a maximum BAL-29 rating is applicable to the subject dwelling.
 - c) Any dwellings are to be located to ensure a minimum 20m Building Protection Zone can be achieved from dwellings at the interface with vegetation threats as required by the Western Australian Planning Commission's Planning for Bush Fire Protection Guidelines (2010, as amended). The Building Protection Zone may include setbacks, footpaths, road reserves and areas maintained in a minimal fuel state or compliant with AS3959 Section 2.2.3.2 (f).
 - d) A Section 70A Notification shall be lodged on the Certificate of Title of each lot notifying owners/prospective purchasers that the use and development of the land is to be in accordance with the approved Fire Management Plan.

6. Development

6.1 Local Development Plans

- 6.1.1 Local Development Plans (LDPs) are to be prepared in accordance with Clause 6A.5 of the Scheme. A LDP is required for the following lots:
 - a) lots zoned R40; and
 - b) for Lots 4 and 6 Bay Court and Lot 5 Lake Road where Aged and Dependent Persons dwellings are proposed.
- 6.1.2 Prior to subdivision, survey strata subdivision and/or development, LDPs shall be prepared by the subdivider or developer and approved by the City for the R40 lots indicated on the Structure Plan. The LDPs shall include details on the following to the City's satisfaction:
 - a) the location of private open space to allow for the passive surveillance of public open space;
 - b) the location of major openings in buildings to allow for the passive surveillance of public open space;
 - c) the orientation of buildings;
 - d) the provision of visually permeable fencing abutting public open space and roads;
 - e) the provision of safe and efficient vehicular access and parking;
 - f) the protection of trees and vegetation considered worthy of retention by the City; and
 - g) any other details considered necessary by the City.

6.2 Conservation Category Wetland

- a) Subdivision and development of those lots affected by the Conservation Category Wetland UFI 14967 is to be in accordance with an approved Wetland Management Plan.
- b) Prior to subdivision, survey strata subdivision or development, notifications are to be placed on the Certificate of Title for any lot affected by the Conservation Category



Wetland and its associated buffer, advising landowners that the use and development of the land shall be in accordance with the approved Wetland Management Plan.

- c) Prior to subdivision, survey strata subdivision or development, a Conservation Covenant or similar, pursuant to Section 129BA of the Transfer of Land Act 1893 (as amended) is to be placed on the Certificates of Title for the proposed lots which contain the Conservation Category Wetland and its associated buffer, advising of the existence of a restriction on the use of the land to protect areas identified for conservation. Notice of this restriction is to be included on the Deposited Plan. The Conservation Covenant is to state as follows:

“The Conservation Category Wetland and the associated vegetation shall be protected, fenced and preserved in accordance with the approved Wetland Management Plan”.

6.3 Vehicular Access

No direct vehicle access/egress to/from Lake Road shall be permitted from the structure plan area.

6.4 Fencing

Visually permeable uniform masonry fencing with infill panels shall be provided by the subdivider or developer prior to subdivision and/or development where indicated on the structure plan.

6.5 Flood Fringe

Prior to subdivision, survey strata subdivision and/or development, the subdivider or developer shall ensure the finished lot level of residential land within the flood fringe is at least 0.50 metre above the adjacent 100 year flood level to the City’s satisfaction.

6.6 Other Requirements

In accordance with the provisions of Development Area 45 (Clause 45.7) of Schedule 12 of the Scheme, the purchasers of all lots shall be advised by the subdivider or developer of the provisions of the Scheme, Structure Plan and Local Development Plans applying to the site as part of future sale contracts to the satisfaction of the City.



- RESIDENTIAL**
- Residential - R25
 - Residential - R40
- PARKS, RECREATION & CONSERVATION**
- Public Open Space
 - Conservation
- WATER**
- Flood Fringe
 - Floodway
 - Wetland
- TRANSPORT**
- Access Street - Local Road
- OTHER**
- Structure Plan Boundary
 - Subject To Further Planning (Refer Clause 5.2)
 - Visually Permeable Uniform Masonry Fencing with Infill Panels

0 75 Metres

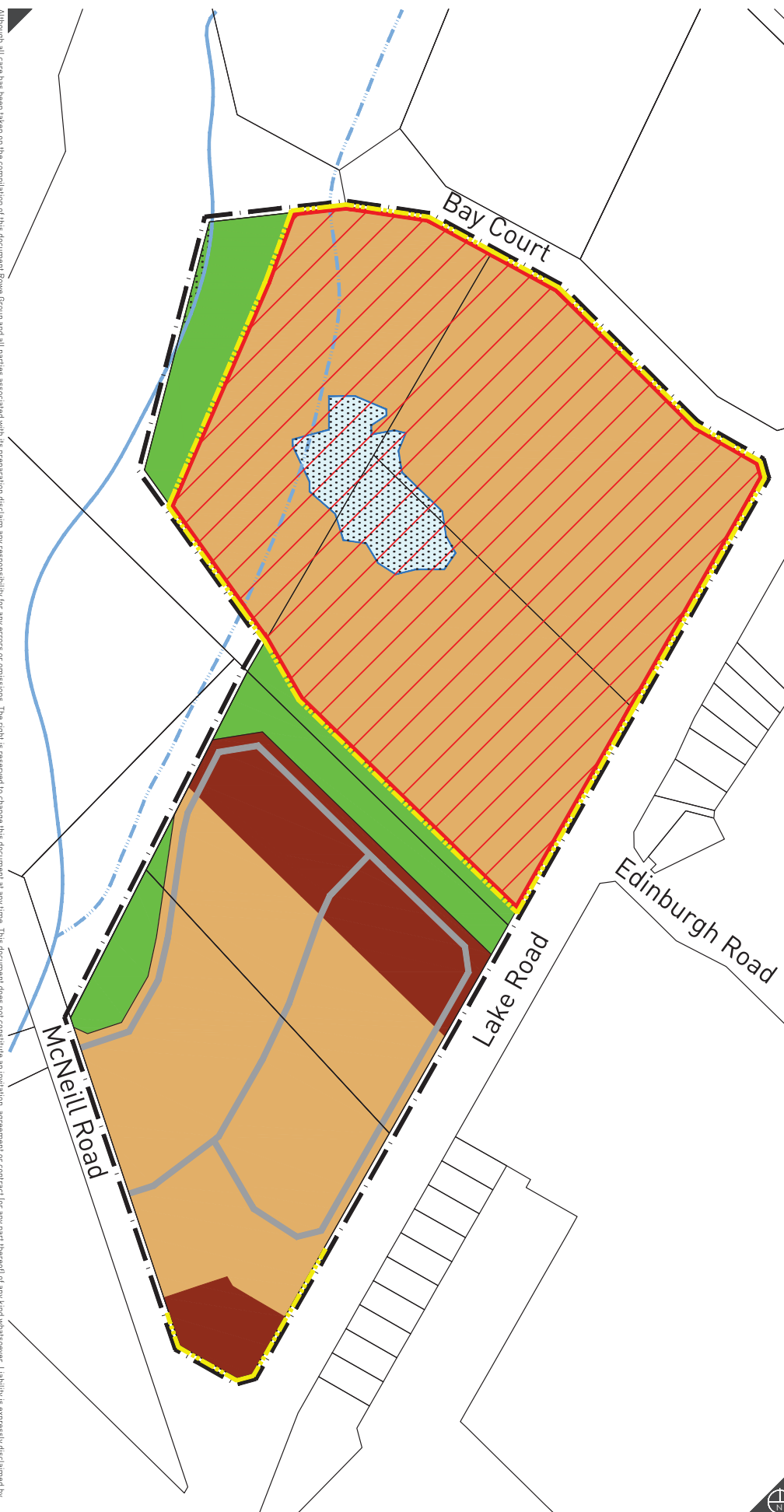
REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan
B	2015.04.28	M. Sullivan
C	2015.05.07	W. Clements
D	2015.07.22	W. Clements



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-LSP-01-D
Cadastral supplied by Water Corporation of WA



Local Structure Plan

Lake Road, Champion Lakes Plan 1



Part Two

EXPLANATORY SECTION



ROWEGROUP

Planning Background

1.1 Introduction and Purpose

This Local Structure Plan (LSP) has been prepared on behalf of KCM Nominees and Mr Keith Henville, as a precursor to the subdivision and development of land zoned 'Urban Development' under the provisions of the City of Armadale Town Planning Scheme No. 4 (TPS 4).

This LSP will guide future land use and development within Precinct B and provide a framework for more detailed planning at subdivision. The purpose of Part 2 of the LSP is to provide an explanation for the Statutory Part 1 provisions.

1.2 Land Description

1.2.1 Location

The LSP area is located within the municipality of the City of Armadale. The site is situated approximately 23 km south-east of the Perth Central Area and 4 km north-west of the Armadale City Centre.

The subject site is generally bound by Lake Road to the east, Bay Court to the north, McNeill Road to the south, and the Wungong River to the west.

Refer to Figure 1 – Regional Location and Figure 2 – Locality Plan.

1.2.2 Area and Land Use

The LSP area comprises approximately 12.5 hectares of land, and is generally accessed by Bay Court, Lake Road and McNeill Road.

The LSP comprises rural properties ranging in size from 2.3 hectares to 2.6 hectares, which are currently being used for rural living purposes and low intensity equestrian uses. A number of existing dwellings (and associated outbuildings and infrastructure) are located within the LSP area. These are intended to be demolished and removed as part of the development of the site, with the exception of the existing man-made lake situated on Lot 4 Bay Court. It is anticipated the lake will be modified and used as a drainage basin as a result of the redevelopment of the site for use as a Lifestyle Village.

Refer to Figure 3 – Aerial, Contours and Cadastral (Site Plan)

1.2.3 Legal Description and Ownership

The LSP comprises five (5) land parcels, being:

Lot Number	Address	Plan/ Diagram No.	Vol./Folio	Land Ownership
4	15 Bay Court	P13486	1626-643	K B & P J Henville
5	424 Lake Road	P13486	1626-644	KCM Nominees Pty Ltd
6	27 Bay Court	P13486	1626-645	L J Butler & K E Henville
9	22 McNeill Road	P12325	1497-756	S M & R L McMurray
10	436 Lake Road	P12325	1497-757	KCM Nominees Pty Ltd

Table 1: Lot Details

Refer to Appendix 1 – Certificates of Title.

2.1 Zoning and Reservations

2.1.1 Metropolitan Region Scheme

The subject site is zoned 'Urban' under the Metropolitan Region Scheme (MRS). The subject site was zoned 'Urban' following gazettal of MRS Amendment No. 1140/57 in 2008.

Lake Road, abutting the eastern portion of the site, is reserved as an 'Other Regional Road' under the MRS. It is noted no widening of the Lake Road reserve was required as part of MRS Amendment No. 1140/57.

The Wungong River and foreshore, abutting the north-western portion of the site, is reserved as 'Parks and Recreation' under the MRS.

Refer to Figure 4 – Metropolitan Region Scheme Map.

2.1.2 City of Armadale Town Planning Scheme No. 4

The subject site is zoned 'Urban Development' under the City of Armadale TPS 4. The subject site was rezoned from the 'Rural Living 2' zone to the 'Urban Development' zone as part of Town Planning Scheme Amendment No. 62, which was approved by the Minister for Planning on 18 November 2013.

In accordance with the provisions of the Development zone under the Scheme, a LSP is required as a precursor to subdivision and development. This LSP has therefore been prepared in accordance with provisions of Clause 6A of the Scheme.

The TPS 4 mapping depicts two Special Control Areas (SCAs) affecting the site:

- ▲ SCA – Wetland Protection Policy Conservation Category Wetlands; and
- ▲ SCA – Flood Prone Areas – Flood Fringes.

The Wetland Protection Policy Conservation Category Wetlands highlight those wetlands of environmental significance, opportunities for the enhancement or rehabilitation of wetland functions, and to provide for the basis for the avoidance and/or minimisation of degradation associated with any development in the vicinity of these areas. The LSP has responded to this by providing for the requirement for the preparation and adoption of a Wetland Management Plan over the Conservation Category Wetland located within Lots 4, 5 and 6. The Wetland Management Plan has been included as Appendix 2 to this report.

The purpose of the Flood Prone Area is to highlight the potential for flooding within those designated areas and provide a basis for the mitigation and minimisation of flood damage. In accordance with the provisions of the Scheme, the finished lot level of those lots identified within the Flood Fringe area will be a minimum of 0.5 metres above the adjacent 100 year flood level to the satisfaction of the City of Armadale at Development Application stage.

Refer to Figure 5 – City of Armadale Town Planning Scheme No. 4 Zoning.



2.2 Planning Strategies

2.2.1 Directions 2031 and Beyond

Directions 2031 and Beyond provides a broad strategic framework defining the overall visions for the Perth and Peel Regions for the next 20 years. It sets out the planning framework for the delivery of housing, infrastructure and services to accommodate future projected population growth within both regions.

Key elements of the overall visions identified by Directions 2031 include:

- ▲ Making more efficient use of available land use infrastructure; and
- ▲ Prioritising use of land that has already been zoned under the MRS.

The subject land is located within the 'South-East Metropolitan Sub-Region' under Directions 2031. Directions 2031 recognise Tonkin Highway as the primary road servicing the sub-region and Ranford Road as a regionally significant road, both of which are situated within close proximity to the Structure Plan area. The South-East subregion is identified as being likely to undergo significant pressure to accommodate population growth.

Demand for residential dwellings within the City of Armadale is anticipated, which will invariably bring about pressure for demographic change with the retired and aging population likely to seek alternative housing choices as younger working families take up conventional single residential housing stock. The provision of suitable housing options for the aging population as proposed under the LSP is therefore consistent with the intent of Directions 2031.

2.2.2 Outer Metropolitan Perth and Peel Sub-Regional Strategy

With the release of the finalised Directions 2031 and Beyond, the Western Australian Planning Commission (WAPC) also released the draft Outer Metropolitan Perth and Peel Sub-Regional Strategy 2010 for public comment. The Sub-Regional Strategy is based upon the planning framework established by Directions 2031.

The subject land is included within the south-east sub-region, with Armadale identified as the Strategic Metropolitan Centre for the sub-region. The subject site is identified within the Strategy as 'Urban zoned undeveloped land'. Consistent with Directions 2031, the Strategy anticipates a significant proportion of the demand for new housing over the next 20 years will be met by the development of existing urban zoned land.

It is noted the sub-region has a particularly high proportion (91%) of single dwellings, relative to other housing types, indicating a lack of diversity of housing choice, particularly to cater for the ageing population.

The proposed Precinct B LSP will facilitate the delivery of outcomes envisaged by the Strategy for the south-east sub-region and hence is consistent with the intent of this document.

The Lake Road Precinct has not been subject to detailed structure planning at a district level, and falls outside the Southern River/Forrestdale/Brookdale/Wungong District Structure Plan, which was adopted by the Western Australian Planning Commission in 2001. The absence of this level of Structure Planning will not compromise the orderly and proper planning of this Precinct.

2.2.3 City of Armadale Local Planning Strategy

The City of Armadale Local Planning Strategy was prepared to support Town Planning Scheme No. 4, and is intended to set out the long term planning direction for the City. Specific to the LSP area, Part 4.1.6.3 of the Local Planning Strategy acknowledges the strategic location of land between Lake Road and Southern River (Wungong River) as a potential opportunity for the land to accommodate a range of alternative and more intensive uses.

The site has since been rezoned under both the MRS and TPS 4, and is suitably zoned to accommodate residential development.

The Local Planning Strategy sets out accompanying strategies and actions to facilitate high quality residential and urban development within the City's municipal boundaries. Of these, one of the key actions notes the opportunity to provide for a wide range of housing types in the various residential zones. The LSP has responded to this by providing for a variety of housing types, being both standard single residential lots and aged and dependant person's dwellings within Lots 4, 5 and 6.

2.3 Policies

2.3.1 Liveable Neighbourhoods

Liveable Neighbourhoods (LN) represents the WAPC's primary policy to guide the design and assessment of structure plans and subdivision for new urban areas. The underlying objective is to create quality neighbourhoods with site responsive design, identity, supportive of local communities that reduce dependency on private vehicles, and are more energy and land efficient. As such, LN focuses on an urban structure based on walkable mixed-use neighbourhoods with interconnected street patterns. It functions by drawing together key policy aspects into a single 'integrated planning and assessment policy' to provide for a performance based approach to planning assessment.

It does so according to a range of considerations including:


- ▲ Community;
- ▲ Movement;
- ▲ Lot Layout;
- ▲ Urban Water Management;
- ▲ Public Open Space; and
- ▲ Schools.

Liveable Neighbourhoods identifies a series of Objectives and Requirements for Local Structure Plans that, when met, demonstrate compliance with the overall outcomes sought by LN. These objectives and requirements relate to items such as road layout, relationships between housing and open space and schools, school location/distribution, POS layout and location, and housing densities.

The LSP has been prepared to satisfy the various objectives and requirements of LN to ensure that more detailed proposals at subdivision are also capable of satisfying the relevant criteria.

2.3.2 State Planning Policy 3 – Urban Growth and Development

State Planning Policy 3 (SPP 3) sets out the principles and considerations which apply to planning for urban growth and settlement in Western Australia. The Policy seeks to ensure well planned and



coherent management of urban growth, having regard to a range of social, economic and environmental objectives.

The key objectives of the Policy are:

- *To promote a sustainable and well planned pattern of settlement across the State, with sufficient and suitable land to provide for a wide variety of housing, employment, recreation facilities and open space.*
- *To build on existing communities with established local and regional economies, concentrate investment in the improvement of services and infrastructure, and enhance the quality of life in those communities.*
- *To manage the growth and development of urban areas in response to the social and economic needs of the community and in recognition of relevant climatic, environmental, heritage and community values and constraints.*
- *To promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community.*
- *To co-ordinate new development with the efficient, economic and timely provision of infrastructure and services.*

The LSP area can be serviced with all essential infrastructure through the extension of existing infrastructure available on adjacent land.

Further, the subject land is located within approximately 4 km of the Armadale City Centre and approximately 4.3km of the Kelmscott Town Centre, and is well serviced by existing regional and local road networks and employment centres. The land is within close proximity to a range of existing community infrastructure and services.


The LSP is therefore considered consistent with the intent and objectives of SPP 3.

2.3.3 Wungong River Management Plan

The Wungong River Management Plan identifies a number of strategic directions relating to the foreshore management of the Wungong River between Champion Drive and Armadale Road.

The actions identified in the Management Plan are general in nature and relate to the whole Management Plan area (ie. all new 'Urban Development' areas), as opposed to specified areas. The proposed Structure Plan is consistent with the Wungong River Management Plan as follows:

- ▲ The LSP is supported by an approved Local Water Management Strategy in accordance with the provisions of the Western Australian Planning Commission's 'Better Urban Water Management 2008' policy framework;
- ▲ The LSP facilitates the provision of a short term multi-use trail system between McNeill Road and Bay Court consistent with Figure 10 of the Wungong River Management Plan. The LSP reflects the indicative location of the multi-use trail proposed by the Management Plan;
- ▲ The LSP facilitates improvements to riparian vegetation, weed control and fire management measures at subsequent planning stages (ie. via conditions of development and subdivision approval); and

- 
- ▲ The LSP provides for ceding of land as Public Open Space adjacent to existing MRS reserves, and cash-in-lieu contribution to enhance existing reserves.

The proposed LSP is consistent with the intent and provisions of the Wungong River Management Plan and appropriately responds to the actions identified within the Policy. Further, provision has been included within Part 1 of the LSP to require the preparation of a Foreshore Management Plan as a precursor to subdivision or development occurring on site to ensure the protection and management of the foreshore reserve.

2.3.4 City of Armadale Seniors Plan

The City of Armadale adopted a Seniors Plan in recognition of the fact that seniors are a significant and growing section of the local community, which requires special consideration. In this regard, the City recognises its role, amongst other tasks, in providing infrastructure and facilitating development which supports the overall wellbeing of seniors. The Seniors Plan identifies the following key issues for seniors in the local community relevant to planning:

- ▲ Opportunity for seniors to remain in the community;
- ▲ Provision of available, affordable housing and accommodation for seniors; and
- ▲ Promoting safety and security for seniors.

The potential for Lots 4, 5 and 6 to be considered for a Lifestyle Village as part of the LSP responds to the key issues identified by the policy. Currently there are insufficient facilities of this type in both the local area and more broadly within the metropolitan area which cater for the special needs of the aging population.

2.3.5 Swan River Trust Development Control Area

The section of the Southern River almost immediately downstream of the subject site is within the management area of the Swan River Trust classified as Section 24 of the Development Control Area. The recent MRS rezoning proposal (WAPC Ref: 1140/57) was referred to the Swan River Trust for comment. It is noted that the Swan River Trust did not have any objection to the rezoning of the MRS, provided a Local Water Management Strategy (LWMS) be prepared and approved for the site. The LWMS prepared for the LSP area was subsequently approved by the Department of Water on 24 March 2015.

2.4 Other Approvals and Decisions

At the time of writing, we are unaware of any other approvals or decisions that might impact the consideration of the LSP.

Site Conditions and Constraints

3.1 Biodiversity and Natural Area Assets

The following provides a summary of the environmental site conditions and constraints. For further information, the Flora and Vegetation Survey and Vegetation Condition Assessment reports are provided at Appendix 3 and 4.

3.1.1 Flora and Vegetation

A Flora and Vegetation Survey was conducted in October 2010 by Endemic. The survey identifies a small area of vegetation within the study area in 'excellent' condition. This vegetation correlates with the area of wetland identified as being worthy of conservation as part of an earlier Wetland Reclassification Report conducted over Lots 4, 5 and 6. The Wetland Reclassification Report is included at Appendix 5.

Both the Flora and Vegetation Survey and the Wetland Reclassification Report confirm the majority of the vegetation on site has been cleared and is in a 'degraded' condition as a result of its previous rural use.

A search of the Department of Environment and Conservation Threatened Flora and Fauna databases revealed that two 'Threatened and Priority Flora' may possibly occur within, or adjacent to the project area. Two small populations of Priority Three Flora *Dillwynia dillwynioides* were located during the site survey. Retention of the flora will be further reviewed at detailed design stage.

A further Vegetation Condition Assessment was undertaken in November 2011 at the request of the City of Armadale to include Lots 5 and 10 Lake Road and Lot 9 McNeill Road.

The assessment concludes that although a number of mature trees were recorded on site, particularly on the boundary of Lot 5 and 10, the majority of these were introduced species. However, there is potential for mature trees to be retained for landscape purposes within areas of public open space.


Trees within the public open space area on the boundary of Lot 5 and 10 will be retained. While it was noted that none of these trees had significant ecological or habitat value, they do provide streetscape and amenity value. Notwithstanding, tree retention opportunities will be further reviewed at the detailed design stage.

Whilst the requirement for raised fill levels for flood protection would make it unlikely that these trees would be retained under future land use, there is the potential for some mature trees to be retained for landscape purposes within POS areas. It was noted none of the trees had significant ecological or habitat value. Notwithstanding, tree retention opportunities will be further reviewed at the detailed design stage.

3.1.2 Wetlands

The Department of Parks and Wildlife Geomorphic Database Wetlands of the Swan Coastal Plain depicts the following wetlands within the LSP area:

- ▲ UFI 14967 - Conservation Category Wetland, located centrally within Lots 4, 5 and 6.
- ▲ UFI 15846 - Multiple Use Wetland, extending across the north-western corner of Lot 4 and the north-eastern corner of Lot 6.

- 
- ▲ UFI 14967 - Multiple Use Wetland, extending across the majority of Lot 4 and the eastern portion of Lot 6.
 - ▲ UFI 15797 - Multiple Use Wetland, generally located the majority of Lot 6 not occupied by wetland UFI 14967, the majority of Lot 5 and entirely over Lots 9 and 10.

A Wetland Reclassification Report, supported by a Flora and Vegetation Survey was submitted to the then, Department of Environment and Conservation (DEC) in July 2011. The reports concluded the Conservation Category Wetland (CCW) was significantly degraded and no longer met the requirements of the classification in place at the time. The report concluded that only a small portion of the CCW was considered to be worthy of conservation and the remaining wetland was recommended to be reclassified to Multiple Use Palusplain which has been reflected on the LSP.

Correspondence and accompanying wetland mapping received from the DEC in September 2011 is included at Appendix 6, which confirms the recommendation of the report prepared by Endemic. The wetland mapping has since been revised accordingly.

A Wetland Management Plan has been prepared in accordance with the provisions of Part 1 of the LSP for CCW UFI 14967.

Refer to Figure 6 - Wetlands.

3.1.3 Fauna

A desktop fauna review was undertaken using Department of Parks and Wildlife Threatened Species and Communities database which revealed no threatened species were identified as occurring within 2km of the subject site. Due to the fragmented and degraded nature of the vegetation present on site, it is considered unlikely that any significant fauna species would be present on site.

3.2 Landform and Soils

The site is generally flat, sloping gently in a westerly direction towards the Wungong River and associated reserve which form the north-western boundary to Precinct B. The elevation of the land across the site varies between approximately 27.0m AHD to 20.6m AHD.

The geotechnical investigation undertaken in December 2004 confirmed the site generally consists of Bassendean Sands (quartz sands) at depths varying between 0.8m and 1.5m, overlying sandy clay and clayey sands of the Guildford formation. Generally these soil profiles are considered to be suitable for urban development.


3.2.1 Acid Sulphate Soils

The Department of Environmental Regulation (DER) Acid Sulphate Soil Risk Mapping identifies the entire site as having moderate to low risk of acid sulphate soils occurring within 3m of the natural soil surface.

Field tests did not indicate the presence of acid sulphate soils or potential acid sulphate soils occurring within 3m of the natural surface.

3.2.2 Contamination

A search of the Department of Environmental Regulation's (DER) Contaminated Sites Database does not indicate the presence of contamination within the land.



Further, anecdotal reports from the landowners, previous geotechnical investigations and groundwater monitoring have not indicated any evidence of site contamination that would warrant any additional investigation at this stage.

3.3 Groundwater and Surface Water

3.3.1 Groundwater

Groundwater monitoring was conducted by JDA Consulting Hydrologists over two winters during 2008 and 2009. Details of the monitoring undertaken and results are provided in the Local Water Management Strategy at Appendix 7.

Bores established within and peripheral to the study area identified an average clearance from the surface to groundwater during winter of 0.53m.

The Wungong River Flood Study shows that a portion of Lot 6 occurs within the Wungong River flood fringe, with the 100 year ARI level estimated to be 22.85m AHD.

The Department of Water's Flood Plain Management Strategy recommends the following in relation the lots affecting by the flood fringe:

- *Proposed development (building, filling, etc.) that is located outside the floodway is considered acceptable with respect to major flooding. However, a minimum habitable floor level of 0.5m above the 100 year ARI flood levels is recommended to ensure adequate flood protection.*
- *Proposed development (building, filling, etc.) that is located within the floodway and is considered obstructive to major flows is not acceptable as it would increase flood level upstream. No new buildings are acceptable in the floodway.*

The Department of Water also advises that whilst Lots 4 and 5 Lake Road are outside of the flood fringe, habitable floor levels should still be a minimum of 0.5m above the 100 year ARI flood level.

3.3.2 Surface Water

No surface water exists within the site, with the exception of a manmade lake within Lot 4 that is filled via a groundwater bore in the summer months.

The site however, abuts a significant water body being the Wungong River. Groundwater flow is in a north-west direction towards the Wungong River.

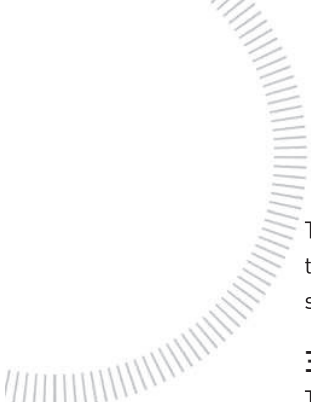
3.4 Bushfire Hazard

A Fire Management Plan has been prepared for the LSP in accordance with the WAPC's Planning for Bushfire Protection Guidelines 2010. The Fire Management Plan has considered the requirements of draft State Planning Policy 3.7: Planning for Bushfire Risk and Management. The Fire Management Plan is provided within Appendix 8, however the following provides an overview of the fire management assessment undertaken and applicable provisions to development of the site.

3.4.1 Hazard Assessment

The Fire Management Plan (FMP) identifies the post development status of the site as being a Low Bushfire Hazard rating. The proposed wetland area to be retained as part of the development of the site is identified as an area of moderate bushfire hazard associated due to its existing vegetation.

The development and urbanisation of the LSP area as per the proposed layout will result in a reduced threat of bushfire.



The FMP identifies the resulting potential bush fire issues stemming from the central wetland area and the associated revegetation of the wetland and from existing vegetation to the north-west corner of the site which sits outside of the LSP area.

3.4.2 Management Requirements

The FMP proposes a variety of measures to manage the fire hazard, including:

- ▲ A minimum 20 metre Building Protection Zones separating future development from fire hazard;
- ▲ Dwelling construction to a standard to align with the designated bush fire attack level (BAL) within the Building Protection Zone;
- ▲ Regardless of whether the land has been designated as bushfire prone, any building to be erected pursuant to this structure plan shall comply with the requirements of the Australian Standard 3959 under the Building Code of Australia;
- ▲ A notification on title to inform prospective purchasers that the use and development of the land is to be in accordance with a Fire Management Plan; and
- ▲ Compliance with and annual Fire Control Notice issued by the City of Armadale under the Act.

The Fire Management Plan will be required to be implemented as a condition of subdivision approval.

3.5 Heritage

3.5.1 Indigenous Heritage

There are no known registered aboriginal sites within the LSP area.

A search of the Department of Aboriginal Affairs Aboriginal Heritage Inquiry System identified a site of mythological significance which abuts the site being:

- ▲ ID: S02601 “The Wungong River”, abutting the north-western portion of the LSP area.

The Department of Aboriginal Affairs (DAA) was consulted early in the progress to determine if further detailed investigations were required at Structure Planning stage, including the preparation of an Aboriginal Heritage Survey Report.

Based on the guidelines provided by DAA, ‘The Cultural Heritage Due Diligence Guidelines’, it is considered the development and subdivision of the land within the Structure Plan area will not directly result in disturbance to the identified mythological site and hence further investigations are not required at this stage.

Further detailed investigations are considered to only be required at the time works are required within the Wungong River Foreshore reserve, such as the installation of pathways and emergency vehicle access, clearing for fire-breaks, weed control and construction of public infrastructure that may result in ground disturbance.

Accordingly, it would only be necessary to seek consent for development under Section 18 of the Aboriginal Heritage Act 1972 at such point in time as development occurs within the foreshore reserve.

3.5.2 Non-Indigenous Heritage

No places were identified on the Heritage Council of Western Australia Heritage Places Database or the City of Armadale Municipal Heritage List for the LSP area.

3.6 Context and Other Land Use Constraints

The site is located approximately 2.1km from the local shopping centre on Champion Drive, with the Armadale City Centre being located approximately 5.4km south-east of the LSP area. The Kelmscott District Centre is also located approximately 4.3km north-east from the subject site. These centres provide important nodes for commercial transaction, regional level community facilities, and provide significant employment opportunities. At a local level, a local shop site is identified within 200m of the subject site, which would cater for the day to day needs of the future residents and is located within walking distance of the site.

The existing Kelmscott Industrial Area is located approximately 1.5km to the east of the site. The Forrestdale Business Park will also provide a range of commercial, mixed business, industrial enterprise and general industrial uses in close proximity to the south-west of the subject site. The Business Park will satisfy the industrial needs and requirements of future residents as well as provide important employment nodes.

With respect to health services, the Armadale Kelmscott District Memorial Hospital is located approximately 6.3km east of the subject site, and the Champion Drive Medical Centre located approximately 4.2km south-east of the subject site.

In terms of recreation opportunities, active recreation opportunities are available at the Bob Blackburn Reserve and John Dunn Memorial Park, both of which are located within close proximity to the site. Passive recreation opportunities are provided within walking distance of the site along the Wungong River foreshore reserve.

It should also be noted the Champion Lakes Precinct to the north-east of the site is progressively being developed for a mix of urban uses, including 25ha of residential development, a 15ha commercial precinct and a 55ha lake. This precinct will become a major recreational park within the South-East metropolitan region, and will include an extensive dual use path system, areas for public open space and conservation areas.

The land is also well catered for by schools, with Willandra, Grovelands and Challis Community Primary Schools all within close proximity. Senior education is similarly available with nearby secondary schools including Cecil Andrews, Kelmscott and Armadale Senior High Schools, Southern River College and Armadale Senior High School.

The above factors combine to illustrate the land is afforded with acceptable levels of amenity, and is well located in terms of employment, education, recreation and health facilities.

Land Use and Subdivision Requirements

4.1 Land Use

The LSP sets out land use, residential densities, public open space, public and private transport provision, environmental considerations and servicing requirements.

The LSP is proposed to comprise residential development with density ranges between R25 and R40. The LSP also comprises a range of local and neighbourhood public open space areas in accordance with Liveable Neighbourhoods requirements.

The following describes the design response proposed under the LSP and addresses the relevant elements of Liveable Neighbourhoods.

Please also refer to the LSP Plan 1, provided at the end of Part One.

4.2 Public Open Space

Under the provisions of Liveable Neighbourhoods a range of site responsive urban parkland is required, which appropriately addresses the district, neighbourhood and local needs of residents, comprising a mixture of unrestricted and restricted open space.


The LSP therefore provides a framework for the hierarchy and location of public open space areas across the site, considering the requirements for drainage and vegetation retention as identified on Plan 1. Detailed subdivision/development design will provide further refinement to the LSP public open space framework, defining the configuration, uses and treatment within each public open space area.

The LSP provides for approximately 1.3 hectares of public open space (POS) by way of 2 neighbourhood parks and 1 local park. This comprises approximately 1.193 hectares of unrestricted (9.5% of gross subdivisible area) and approximately 0.065 hectares of restricted open space (0.5% of gross subdivisible area).

The POS has been designed to integrate with the existing Wungong River foreshore reserve and provides a linear POS corridor from Lake Road to the Wungong River. The design and layout of the open space provides for a high level of amenity for future residents of both the Lifestyle Village and residential subdivision to the south of the site. In addition, the urban development of the land will facilitate significant environmental improvement and management of the immediately adjoining Wungong River and surrounding environment, whilst also enhancing public access, use and enjoyment of the river foreshore for the broader community.

The location of POS has been on the basis of the following design considerations:

- ▲ Integration with the adjoining Wungong River Parks and Recreation reserve to maximise available areas for a range of passive and active recreation activities, as well as achieving improved efficiencies in terms of maintenance and management;
- ▲ Providing direct pedestrian linkages between areas of open space on the east side of Lake Road to the Wungong River and associated open space reserves;
- ▲ Increasing passive interaction opportunities with other residents as a means to address social isolation and improve well being;

- 
- ▲ Ensure compatibility with local water management requirements and accommodate drainage integrated with landscaping to improve the useability and amenity of open space for residents;
 - ▲ Incorporate natural features, including identified wetlands and existing drainage infrastructure where possible;
 - ▲ Maximise opportunities for passive surveillance over areas of open space to discourage opportunities for anti-social behaviour.

Public open space has been provided such that all lots are generally located within 150 – 300m of a local park and within 400m of a neighbourhood park.

A Landscape Master Plan has been prepared for the LSP area, depicting the anticipated use and intent of each of the public open space areas. Refer to Appendix 9.

Please also refer Figure 7 - Public Open Space Plan and Figure 8 - Public Open Space Schedule.

4.2.1 Wungong River Reserve

POS Area B adjoins the existing Wungong River Parks and Recreation reserve. A small portion of POS Area B will be ceded to the crown free of cost as it forms part of the foreshore reserve.

Provision has been included within Part 1 of the LSP requiring a Foreshore Management Plan to be prepared and implemented as a precursor to subdivision and development.

4.2.2 Lifestyle Village

Areas of private open space for residents of the Retirement Village will be located in convenient and accessible locations, which will be subject to further review at detailed design stage. Areas of private open space will generally comprise landscaped gardens, which will also partly function as rain gardens for drainage purposes, and facilities around the ornamental 'man-made' lake, subject to approval of an Urban Water Management Plan.


Sensitive treatments to the wetland area located centrally to the site will also be provided as per the Wetland Concept Plan included within the Wetland Management Plan.

4.3 Residential

Residential Densities have been established for the LSP area in accordance with the requirements of LN to achieve dwelling densities of 15 dwellings per gross urban hectare and 22 dwellings per site hectare.

The LSP provides for base residential density code of R25, with some areas of R40 being provided in the southern portion of the site. The LSP provides for the potential for Lots 4 and 6 Bay Court and Lot 5 Lake Road to be developed at a density of R40 where the site is to be developed for Aged or Dependant Persons Dwellings. It is noted however, should standard 'freehold' residential subdivision be pursued over Lots 4 and 6 Bay Court and Lot 5 Lake Road, a density code of R25 shall apply. Provision has been built into Part 1 of the LSP to this effect.

A potential grouped housing site with a density code of R40 has been identified at the corner of Lake Road and McNeill Road, on the basis of the awkward shape of the lot and the vehicle access restrictions that apply from Lake Road. Local Development Plans (LDPs) will be required for all R40 sites with potential for grouped housing, and those R40 lots with an interface to the POS corridor. The



LDPs are required to ensure a suitable interface is provided between the POS and the residential development.

An Indicative Lot Layout Plan has been prepared for the site, identifying a yield of approximately 72 dwellings over the southern portion of the site and approximately 170 dwellings within the proposed Lifestyle Village. Based on a total indicative yield of 242 lots, the site achieves a density of approximately 35 dwellings per site hectare and 19 dwellings per gross hectare.

The LSP therefore exceeds the minimum average residential density of 22 dwellings per site hectare and 15 dwelling per gross hectare as stipulated under Liveable Neighbourhoods for new urban areas.

Refer Figure 10 - Indicative Lot Layout Plan.

4.4 Movement Networks

The following provides a summary of the proposed movement network. For further information it is recommended the reader consult the Transport Assessment included at Appendix 10

Refer to Figure 9 - Movement Network.

4.4.1 Existing Road Network

4.4.1.1 Lake Road

Lake Road is classified as a District Distributor A road under the Main Roads Functional Road Hierarchy, and is constructed as a dual divided carriageway, which connects Armadale Road in the south-west with Albany Highway in the north-east. Lake Road comprises a 21.0m wide carriageway with a 6.0m central median.

The latest traffic volume data supplied by Transcore which was carried out in March 2015 indicates Lake Road presently accommodates approximately 7,200 vehicles per day.

Given the relatively insignificant increase in traffic expected to be generated by the proposed Structure Plan, no upgrading of Lake Road is anticipated, however should any upgrades be required as identified through the subdivision, survey strata subdivision or development process, these upgrades will be required to be undertaken by the landowner/applicant.

4.4.1.2 McNeill Road

McNeill Road functions as a Rural Local Access road, and is constructed as a single undivided road, which connects Lake Road in the north-east with Ranford Road in the south-west. McNeill Road is constructed as a 7.0m carriageway with soft shoulders, and includes a 1.0m gravelled verge on either side.

4.4.1.3 Bay Court

Bay Court functions as a Rural Local Access road, and is constructed as a single undivided road, which has an east-west alignment connecting Lake Road in the east and terminating in a cul-de-sac at its western end. Bay Court is constructed as a 6.0m carriageway.

It is noted that no additional road intersections are proposed to service the LSP, with the only access points being via McNeill Road and Bay Court.

4.4.2 Proposed Road Network

The proposed road network is largely defined by the existing network of roads which bound the site, being Lake Road, Bay Court and McNeill Road. No access shall be permitted from Lake Road, which will be enforced through the provisions of LDPs.

Internal access roads around the residential lots in the southern portion of the LSP area will connect to McNeill Road at two locations, with some lots having direct frontage onto McNeill Road.

On this basis, the proposed road network is made up of 'Access Street – Local Road' with the internal road layout over Lots 4 and 6 Bay Court and Lot 5 Lake Road to be determined as part of a structure plan modification, or at Development Application stage where Aged or Dependent Persons Dwellings are proposed as part of a Lifestyle Village concept.

4.4.2.1 Access Streets

The access streets are proposed to primarily consist of Access Street C roads, designed to a 15.4 metre cross-section. Where services are only required to one side of the road, such as adjacent to public open space or the Lake Road reserve, a reduced Access Street C cross-section of 14.2 metres is proposed.

Traffic volumes along the access roads are typically estimated to be in the order of 1,000 to 3,000 vehicle movements per day.

McNeill Road provides the main access point to the southern portion of the LSP area which also connects Lake Road to Ranford Road. As such, an increase in traffic volumes is anticipated along this road in the order of 1,000 – 2,000 vehicles per day. Similarly, this is expected to occur to a lesser extent on Bay Court where the proposed access points to the Lifestyle Village are to be located.

It is expected that both McNeill Road and Bay Court will require upgrading to an urban Access Road standard. Any upgrades required to McNeill Road and Bay Court shall be undertaken by the landowner/applicant to the satisfaction of the City of Armadale, including future intersection treatments if required.

4.4.2.2 Lifestyle Village

The proposed Lifestyle Village will be serviced by an internal driveway system which will be detailed at Development Application Stage. Notwithstanding, the indicative access locations to the Lifestyle Village have been shown on Figure 9 - Movement Network, which will be reaffirmed in the subsequent LDP lodged for the site.

4.4.3 Public Transport

The Perth-Armadale railway line is located approximately 2.5km east of the subject site. Sherwood station is located at the eastern end of Champion Drive. Bus routes linking the subject land to the rail system will ensure that future residents have convenient access to an efficient public transportation network.

Transperth Bus Route 245 runs along Westfield Road, which can be directly accessed from the Precinct B LSP area via Edinburgh Road. The bus route provides access from the site to the Armadale City Centre and the Kelmscott Town Centre as well as the rail stations associated with the respective centre sites.

4.4.4 Pedestrian and Cycle Networks

In accordance with Liveable Neighbourhoods requirements, footpaths will be provided on at least one side of every street.

The pedestrian footpath network for the proposed Lifestyle Village will be detailed at Development Application stage. It is expected however, that pedestrian paths would also be provided for public access to the Wungong River foreshore adjoining the site.

Further details of pedestrian linkages around the Wungong River reserve will be provided upon preparation of a Foreshore Management Plan which, in accordance with the provisions of Part 1, will be required as a condition of subdivision or development approval.

The Access Streets within the LSP area have low daily traffic volumes and are therefore suitable for on-road cycling. Although, it is recognised that informal on-street parking will create some interference for on-road cycling, however this will typically occur on very low traffic volume roads where the opportunity for conflict is considered to be low.

4.4.5 Surrounding Land Use Interface and Streetscape

The Structure Plan has been designed to ensure the existing streetscapes are enhanced with lots provided to address Lake Road where possible, via the inclusion of a service road arrangement with perimeter roads being provided adjacent to surrounding POS.

The proposed Lifestyle Village site required special consideration in order to balance streetscape objectives with the need to provide the perception of security and safety to residents.


Treatments to the interface between the Lifestyle Village site and public spaces, including POS and roads, shall include:

- ▲ Retention of existing trees where possible, and additional landscaping within the road reserves and POS;
- ▲ Uniform fencing to be visually permeable above 1.2 metres to ground level, as viewed from public open space and street reserves, to ensure passive surveillance and a greater level of amenity;
- ▲ Gradual level changes between POS/roads and residential land; and
- ▲ Retaining walls to be minimised.

The cross-sections included at Figure 11 conceptually illustrate the manner by which development of the site can be properly integrated with adjoining public land uses, including public open space and road reserves.

Whilst the finished levels of the site will be determined at detailed design stage following geotechnical investigations and drainage design, a minimum of 1.2m fill across the site is assumed having regard to the recommendations of LWMS. Whilst the cross-sections are for illustrative purposes only, they nonetheless demonstrate the transition areas adjoining the site can be properly managed so as to avoid abrupt level changes and hence adverse visual impacts.

It is noted where the existing level of Lake Road adjoins the proposed Lifestyle Village site, it is approximately 500 – 600mm higher than the adjoining land proposed for residential development. Hence, the addition of 1.0m of fill would only result in a change of approximately 500mm above the existing level of Lake Road.



A maximum grade of 1:6 has been shown on the Landscape Sections provided within the Landscape Master Plan at Appendix 9 between the Lifestyle Village and the standard residential subdivision to the south. The proposed grade is suitable for planting and native vegetation however it not suitable for the planting of grass as this is difficult for the City to maintain at the proposed grade. On this basis, grass should not be planted within areas where a maximum grade of 1:6 is proposed.

It is noted the batters of drainage swales described in the LWMS supporting the LSP also adopt a grade of 1:6, which will be planted with native vegetation to enhance nutrient stripping of stormwater. These landscaping treatments will also integrate the drainage areas within adjacent POS from a visual amenity perspective.

Similarly, a maximum grade to the City's specifications will be incorporated within road reserves and single residential front setback areas to enable a gradual level change up to the dwellings. The final design including grades and finished levels will be determined at detailed design stage, in consultation with the City of Armadale.

4.5 Water Management

A Local Water Management Strategy (LWMS) has been prepared in support of this LSP, and is provided at Appendix 7.

The LWMS addresses the LSP area, and provides a refinement of flood modelling, the surface water management strategy and the groundwater management strategy to a local scale. The LWMS has been prepared in accordance with the water sensitive urban design practices as described in the Stormwater Management Manual of WA.

4.5.1 Local Drainage

The local stormwater drainage system has been designed using a major/minor approach. The minor drainage system is defined as the system of underground pipes, swales, kerbs, gutters, etc designed to carry runoff generated by low frequency ARI storms, less than 5 year ARI.

The major drainage system is defined as the arrangement of roads, drainage reserves, attenuation/infiltration areas and open space planned to provide safe passage of stormwater runoff from extreme events which exceed the capacity of the minor system.


Stormwater runoff generated by the impervious areas of the road reserve will be collected in gully or side entry pits and then flow into a local piped and swale drainage system. Attenuation of flow can then be achieved through provision of detention storage areas in swales and drainage areas.

Due to the proximity of the Study Area to Wungong River and the small size of the drainage catchments, post development flows can be discharged directly into the Wungong River without attenuation of flows to pre-development rates.

In accordance with the processes defined under *Better Urban Water Management*, an Urban Water Management Plan (UWMP) will be required to be prepared and implemented at the time of subdivision or development. The UWMP will refine and implement the proposed drainage network/system, as defined under the LWMS.

4.5.2 Existing Man-Made Lake

The LWMS details the existing man-made lake within Lot 4 as forming part of the stormwater management strategy of the site. It should be noted however, that the details provided regarding the man-made lake acting as a basin are indicative only and will be subject to further detailed design at the



Subdivision / Detailed Area Plan / Development Application stage. Detailed basin design information will be presented in a supporting UWMP. Should the site be developed for use as a Lifestyle Village for Aged and Dependent Persons dwellings, the existing or modified lake being retained for drainage purposes will need to be privately managed and will not be an asset or the responsibility of the City of Armadale.

4.6 Education Facilities

The site is within close proximity to a number of local schools including, Willandra, Grovelands and Challis Community Primary Schools. Senior education is similarly available with nearby secondary schools including Cecil Andrews, Kelmscott and Armadale Senior High Schools and Southern River College and Armadale Senior High School.

On the basis of a maximum population of 594 people, of which approximately 432 people comprise the Lifestyle Village, and given the densities proposed, the existing education facilities are considered to adequately cater for any need created from residential development at the subject site.

4.7 Commercial and Employment

No new commercial areas or centres are proposed by the LSP. Previous contextual discussion at Section 3.6 confirms that a full range of commercial and employment opportunities exist in proximity to the site, with particular regard to the Champion Drive and Westfield local shopping centres which incorporate a wide variety of shopping, commercial and employment opportunities. The proximity of the site to the Armadale City Centre and Forrestdale Business Park is also noted.

4.8 Infrastructure Coordination, Servicing and Staging

The Engineering Services Report prepared by VDM Consulting confirms there are no significant constraints to servicing the Structure Plan area with all required urban utilities.

The following provides a summary of the infrastructure and servicing for the LSP area, however for further information it is recommended the reader consult the Engineering Services Report provided as Appendix 11.

4.8.1 Water Supply

The subject site is situated within the Water Corporation's licensed area as a water provider. Water Corporation has advised that the development may connect to the existing water reticulation in Lake Road. The Champion Lakes area will require the extension of a DN300 water distribution main to the site via Poad Street and Lake Road. The Water Corporation has advised they will assess this on an 'as needed' basis and will install as required.

4.8.2 Sewer

Lots within the LSP area are not currently connected to reticulated sewer. The development requires the extension of a DN300 sewer from the wastewater pump station on McNeil Road, via the foreshore reserve. The extension of the sewer may be staged as follows, subject to the ultimate sewer extension drawing being approved by the Water Corporation:

- ▲ Stage 1 – Sewer property connection to the existing sewer in Lake Road.
- ▲ Stage 2 – Extend the DN300 sewer to the south-western boundary of the site, plus extend a reticulated sewer to the site.
- ▲ Stage 3 – Extend the DN300 sewer to the north-eastern boundary of the site.



4.8.3 Natural Gas

Gas reticulation mains exist in sections of Lake Road on the eastern side of the road reserve, opposite the subject site. These mains would need to be extended from Edinburgh Road, beneath Lake Road to provide gas services to the development. Westnet has advised that sufficient capacity should be available for a typical residential subdivision.

Westnet has also advised a capital contribution from the developer is required to accommodate any extension of gas mains along Lakes Road if the connection point into the development is not directly aligned with Edinburgh Road.

4.8.4 Electricity

Existing overhead power infrastructure is located within the Bay Court and McNeill Road reserves. Western Power is likely to require the developer to remove and replace aerials on the development side of the road with an underground power system.

At this stage it is unclear whether there is sufficient additional capacity to supply the proposed development. Any required upgrade works to existing Western Power infrastructure would be determined at detailed design stage.

There is existing street lighting along Lake Road, which was installed as part of the upgrade works to the road reserve.

4.8.5 Telecommunications

Telecommunications infrastructure is available to service the site, however this is likely to require upgrading and extension via the telecommunications networks servicing nearby subdivisions. The existing network across Lake Road can be easily extended to service the proposed development.

4.9 Implementation

4.9.1 Staging of Subdivision and Development

The syndicate of landowners of Lots 4, 5 and 6 intend to progress development of the site for use as a Lifestyle Village immediately following approval of the Local Structure Plan. The LSP design and accompanying LWMS allow for a Development Application over Lots 4, 5 and 6 to be progressed independently of the remainder of the LSP area.

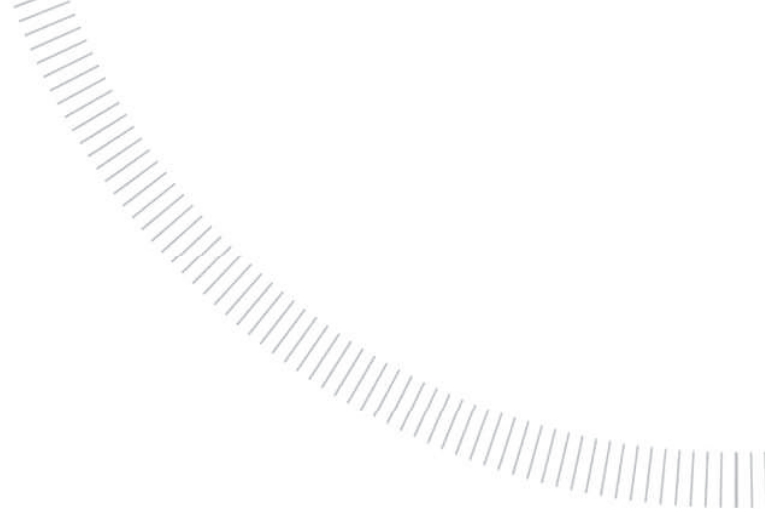
4.9.2 Developer Contribution Arrangements

Provision exists under Part 6B of TPS 4 for cost contribution schemes to be established to ensure the equitable sharing of costs between owners towards infrastructure required as a result of subdivision and development within with a Development Contribution Area (DCA).

Given the small scale of the LSP area, it is not anticipated that Precinct B will be included within a DCA.



FIGURES



ROWEGROUP

Although all care has been taken on the compilation of this document Rowe Group and all parties associated with its preparation disclaim any responsibility for any errors or omissions. The right is reserved to change this document at any time. This document does not constitute an invitation, agreement or contract for any part thereof of any kind whatsoever. Liability is expressly disclaimed by Rowe Group for any loss or damage which may be sustained by any person acting on any visual impression gained from this document. This document is and remains the property of Rowe Group and may not be reproduced or transmitted, in whole or in part, without the written consent of Rowe Group. All areas and dimensions are subject to survey.



Planning Design Delivery



REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan



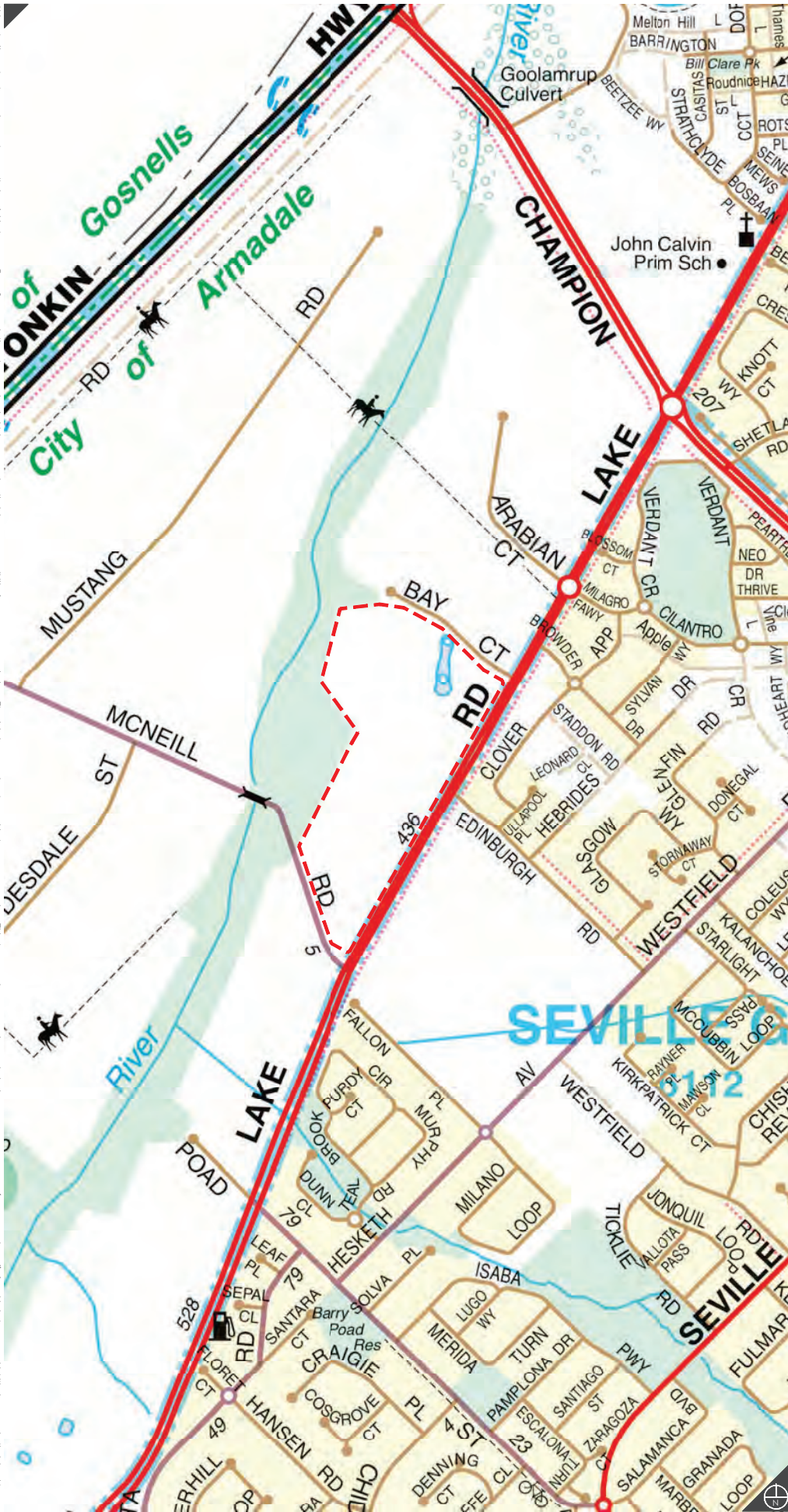
w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: NTS @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: N/A
Plan ID: 7879-FIG-11-A
Cadastre supplied by WA Planning Commission

Regional Location

Lake Road, Champion Lakes
Figure 1

Although all care has been taken on the compilation of this document, Rowe Group and all parties associated with its preparation disclaim any responsibility for any errors or omissions. The right is reserved to change this document at any time. This document does not constitute an invitation, agreement or contract for any part thereof. All areas and dimensions are subject to survey.



Planning Design Delivery



LEGEND
--- Subject Site

0 250 Metres

REVISIONS		
Rev	Date	Drawn
A	2015.04.01	M. Sullivan



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:10,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-12-A
Map supplied by Streetsmart

Local Location

Lake Road, Champion Lakes
Figure 2



LEGEND

- Subject Site
- Contours
- Existing Lot Numbers
- Existing Boundaries

0 75 Metres

REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-13-A
Cadastral supplied by Water Corporation of WA
Aerial Photography supplied by Nearmap



Site Plan

Lake Road, Champion Lakes
Figure 3



LEGEND

--- Subject Site

RESERVED LANDS

■ Parks And Recreation

■ Other Regional Roads

ZONES

■ Urban

■ Rural



0 75 Metres

REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-14-A
Zoning supplied by WA Planning Commission

Metropolitan Region Scheme

Lake Road, Champion Lakes Figure 4



Legend

Metropolitan Region

Scheme Reserves

Parks And Recreation

Other Regional Roads

Zones

Rural Living

Urban Development

Residential

Other

SCA-Wetland Protection Policy CCW

SCA-Flood Prone Areas-Floodways

SCA Development Areas

R Codes

No Zone

Subject Site

0 75 Metres

REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-15-A
Zoning supplied by WA Planning Commission



Town Planning Scheme No.4

Lake Road, Champion Lakes Figure 5

\\GRA-PER-DC1\DATA\TOWN PLANNING\7000-7999\7879\DRAWING\A-CAD\7879_FIG15A_20150401 CHAMPION LAKES (TPS) DWG
Matt Sullivan 2 April 2015

Although all care has been taken on the compilation of this document Rowe Group and all parties associated with its preparation disclaim any responsibility for any errors or omissions. The right is reserved to change this document at any time. This document does not constitute an invitation, agreement or contract for any part thereof of any kind whatsoever. Liability is expressly disclaimed by Rowe Group for any loss or damage which may be sustained by any person acting on any visual impression gained from this document. This document is and remains the property of Rowe Group and may not be reproduced or transmitted, in whole or in part, without the written consent of Rowe Group. **All areas and dimensions are subject to survey.**



LEGEND

- Subject Site
- 7 Existing Lot Numbers
- Existing Boundaries
- Conservation
- Multiple Use
- Resource Enhancement
- Not Assessed



0 75 Metres

REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-16-A
Cadastral supplied by Water Corporation of WA

Wetland Location

Lake Road, Champion Lakes
Figure 6



- LEGEND**
- Subject Site
 - 7 Existing Lot Numbers
 - Existing Boundaries
 - Public Open Space
 - Residential
 - Conservation Category Wetland (Under Private Ownership / Management)
 - Public Open Space - Restricted
 - Walkable Catchment
 - Floodway
 - Extend of Flood Fringe
 - Pedestrian Foreshore Link (Indicative Alignment)

Note: All areas area subject to survey.

0 75 Metres

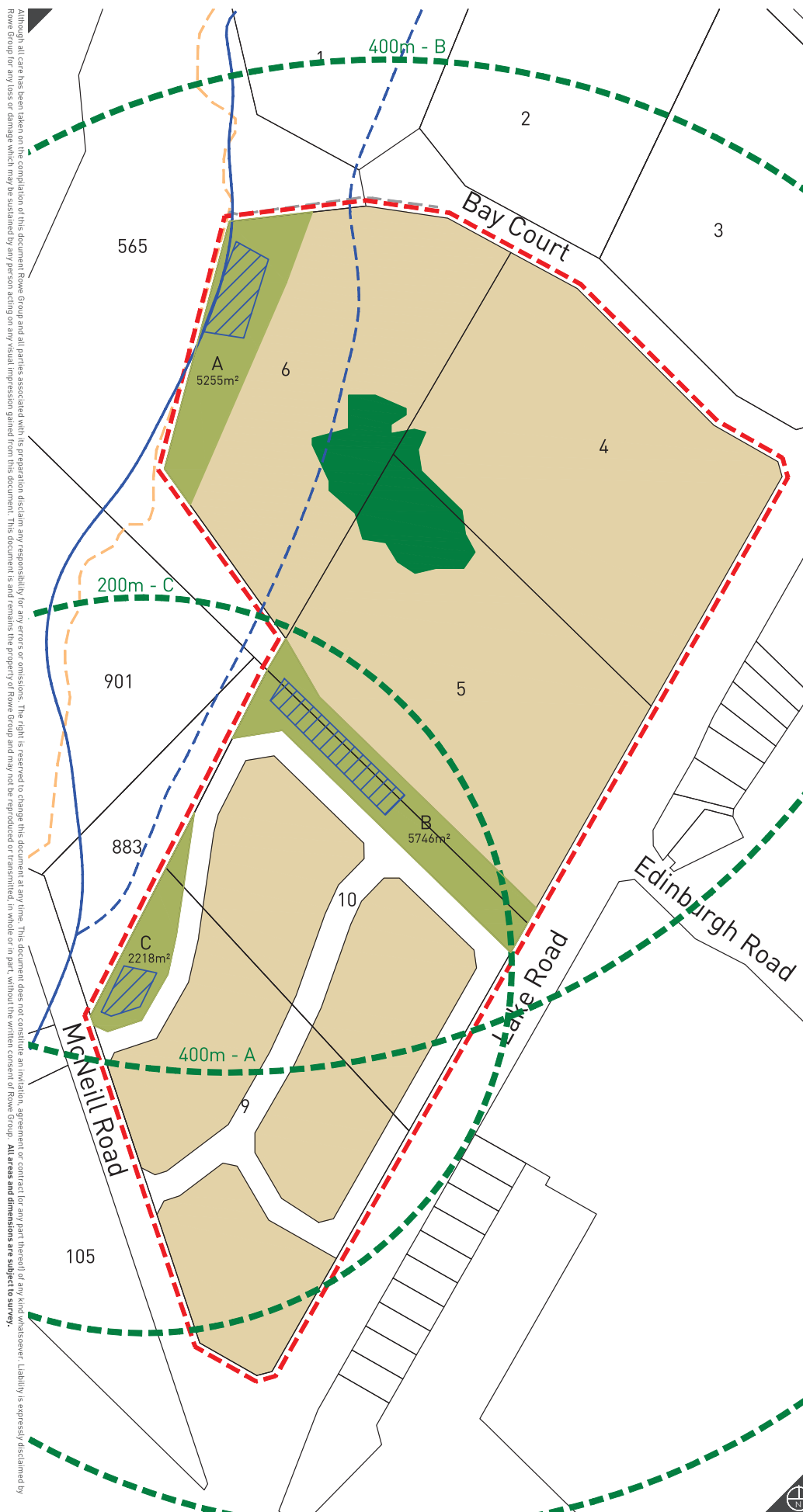
REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan
B	2015.07.22	W. Clements



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-17-B
Cadastral supplied by Water Corporation of WA



Public Open Space Plan

Lake Road, Champion Lakes
Figure 7



Lake Road, Precinct B Champion Lakes Local Structure Plan - Public Open Space Schedule									
31.03.2015									
Site Area (Local Structure Plan boundary)									
Less									
CCW Core				0.44					
Net Site Area								12.06	
Deductions									
Drainage (1:1yr) * See below				0.0643					
Total								0.1	
Gross Subdivisible Area									
POS (at 0%)								12.0	
1.2									
Public Open Space Contribution									
May comprise:									
Min 30% unrestricted POS						1.0			
Min 20% restricted use POS						0.2			
Total Required POS									
POS Reference Number (area within urban zone/LSP boundary only)		1:1yr Drainage (m ²)		Unrestricted Urban POS sites (m ²)		1:5yr Restricted POS (m ²)			
Aa		2218		93		2025		100	
Ab		5746		486		4880		380	
B		5255		64		5021		170	
Total		13219		643		11926		650	
		1.3		0.065		1.193		0.065	
Percentage of gross subdivisible area		10.5%		0.5%		9.5%		0.5%	

Although all care has been taken on the compilation of this document Rowe Group and all parties associated with its preparation disclaim any responsibility for any errors or omissions. The right is reserved to change this document at any time. This document does not constitute an invitation, agreement or contract for any part thereof of any kind whatsoever. Liability is expressly disclaimed by Rowe Group for any loss or damage which may be sustained by any person acting on any visual impression gained from this document. This document is and remains the property of Rowe Group and may not be reproduced or transmitted, in whole or in part, without the written consent of Rowe Group. All areas and dimensions are subject to survey.

REVISIONS

Rev	Date	Drawn
A	2015.04.14	M. Sullivan
B	2015.07.24	W. Clements



W: www.rowegroup.com.au
E: info@rowegroup.com.au
P: 08 9221 1991

Date Drawn: 2015.04.14
Job Ref: 7879
Scale: NTS @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: N/A

Plan ID: 7879-FIG-21-B

Lake Road, Champion Lakes
Figure 8

POS Schedule



LEGEND

- Subject Site
- Existing Lot Numbers
- Existing Boundaries
- Proposed Boundaries
- Proposed Lake Boundary
- Wetland
- Wetland Buffer

0 75 Metres

REVISIONS

Rev	Date	Drawn
A	2015.04.02	M. Sullivan
B	2015.05.07	M. Sullivan
C	2015.07.22	W. Clements
D	2015.07.24	W. Clements



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-02
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-19-D
Cadastral supplied by Water Corporation of WA

Although all care has been taken on the compilation of this document Rowe Group and all parties associated with its preparation disclaim any responsibility for any errors or omissions. The right is reserved to change this document at any time. This document does not constitute an invitation, agreement or contract (or any part thereof) of any kind whatsoever. Liability is expressly disclaimed by Rowe Group for any loss or damage which may be sustained by any person acting on any visual impression gained from this document. This document is and remains the property of Rowe Group and may not be reproduced or transmitted, in whole or in part, without the written consent of Rowe Group. **All areas and dimensions are subject to survey.**



Indicative Lot Layout

Lake Road, Champion Lakes
Figure 9



LEGEND

- Subject Site
- 7 Existing Lot Numbers
- Existing Boundaries
- Access Street C
- Access Street D
- ➔ Vehicle Access
- ▨ Private Access Arrangement

0 75 Metres

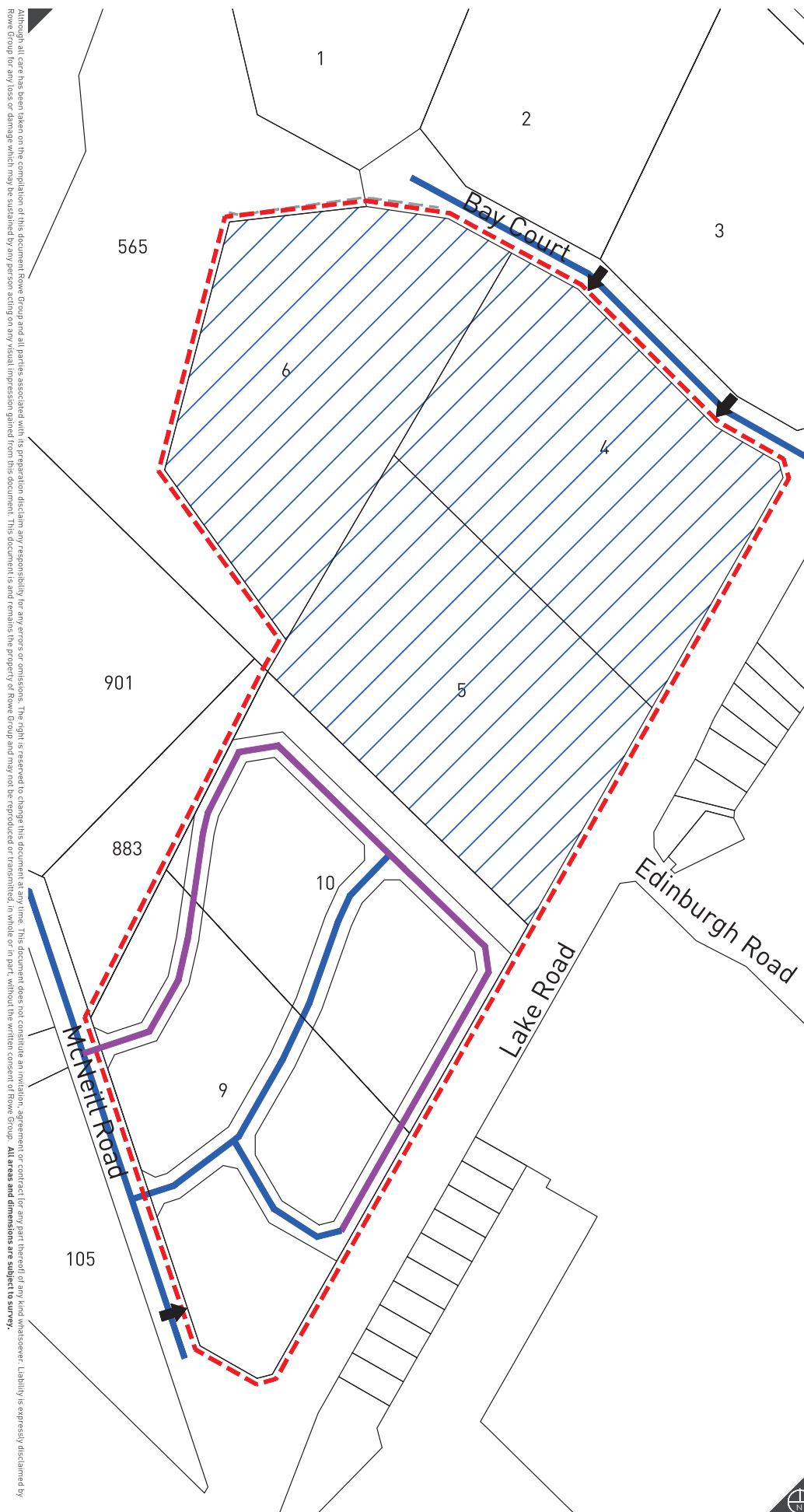
REVISIONS

Rev	Date	Drawn
A	2015.04.01	M. Sullivan



w: www.rowegroup.com.au
e: info@rowegroup.com.au
p: 08 9221 1991

Date Drawn: 2015-04-01
Job Ref: 7879
Scale: 1:3,000 @ A4
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan
Projection: MGA50 GDA94
Plan ID: 7879-FIG-18-A
Cadastral supplied by Water Corporation of WA



Indicative Movement Network

Lake Road, Champion Lakes
Figure 10



- LEGEND**
- Subject Site
 - Existing Lot Numbers
 - Existing Boundaries
 - Section Markers
 - Retaining Wall

10 5 15 Metres

REVISIONS

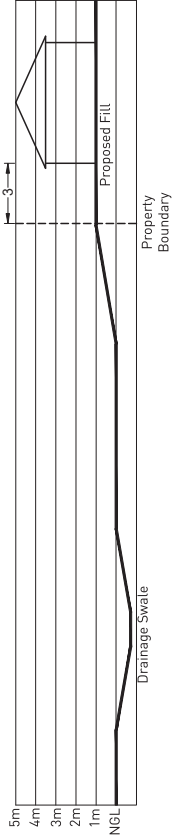
Rev	Date	Drawn
A	2015.04.07	M. Sullivan
B	2015.07.23	M. Sullivan



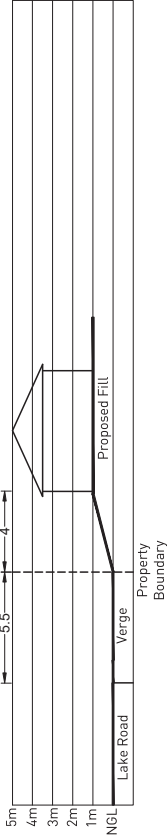
W: www.rowegroup.com.au
E: info@rowegroup.com.au
P: 08 9221 1991

Date Drawn: 2015-04-07
Job Ref: 7879
Scale: 1:250 @ A3
Client: KCM Nominees & K. Henville
Designer: R. Dial
Drawn: M. Sullivan

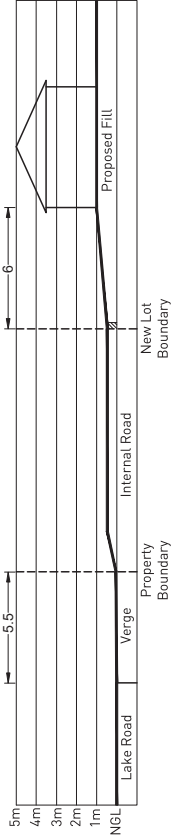
Projection: MGA50 GDA94
Plan ID: 7879-FIG-20-B
Cadastral supplied by Water Corporation of WA



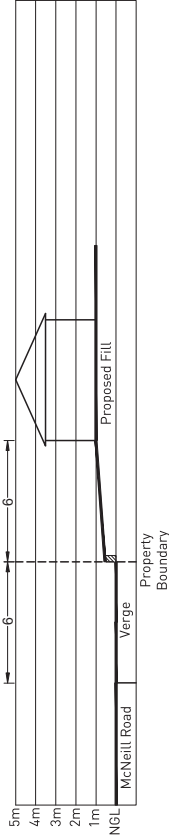
1. Wungah River / Lifestyle Village Interface



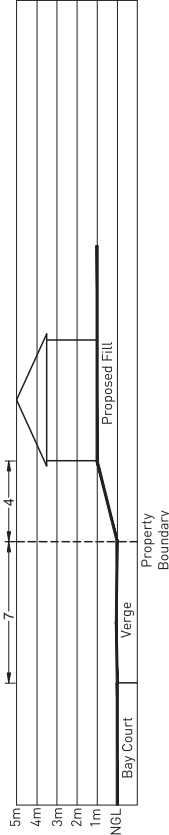
2. Lake Road / Lifestyle Village Interface



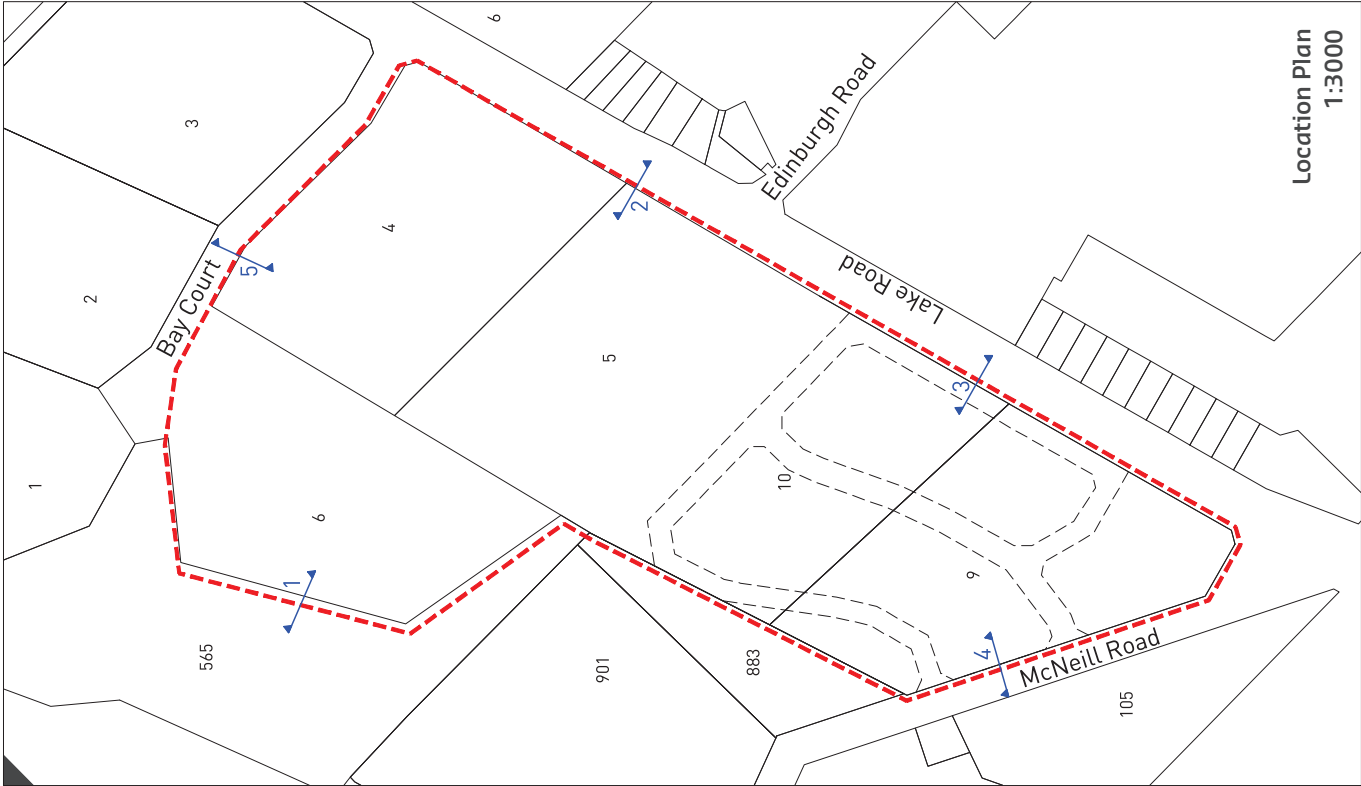
3. Lake Road / Single Residential Interface



4. McNeill Road / Single Residential Interface



5. Bay Court / Lifestyle Village Interface



Location Plan
1:3000

Indicative Cross-Sections