



LOCAL STRUCTURE PLAN

LOT 81 (FORMERLY LOT 2 FANSTONE AVENUE) BEELIAR
COCK2016/0782



ROWEGROUP



DOCUMENT CONTROL

Printed 21 May 2018 7222_17dec01R_al

Version	File Name	Prepared by	Approved by	Date
1	7222_16jun01R_al (final for advertising)	Aaron Lohman	Greg Rowe	21/01/2016
2	7222_17dec01R_al (clean)	Aaron Lohman	Greg Rowe	28/03/2018
3	7222_17dec01R_al (final 030518)	Aaron Lohman	Greg Rowe	03/05/2018

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ENDORSEMENT PAGE

This structure plan is prepared under the provisions of the City of Cockburn Local Planning Scheme No.3

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

..... 11 June 2018 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:



..... Witness

..... 11 June 2018 Date

..... 11 June 2028 Date of Expiry





TABLE OF AMENDMENTS

Amendment No.	Summary of the Amendment	Amendment Type	Date Approved by WAPC

TABLE OF DENSITY PLANS

Density Plan No.	Area of density plan application	Date Endorsed by WAPC

EXECUTIVE SUMMARY

The Structure Plan applies to an area of 9.6622 ha currently contained within the 'Development' Zone under the City of Cockburn's Town Planning Scheme No.3 (the 'Scheme').

The Structure Plan area is located approximately 5 km west of Cockburn Central and 20 km south west of the Perth CBD.

The purpose of this Structure Plan is to facilitate the development of the subject site for residential purposes. The Structure Plan is therefore prepared to satisfy the requirement of the Scheme to facilitate subdivision and development of the subject site.

The subject site adjoins the approved Structure Plan for Cell 9 Yangebup and Cell 10 Beeliar along its northern, eastern and western boundaries. Development in accordance with the Structure Plan for Cell 9 Yangebup and Cell 10 Beeliar has generally been completed with the exception of the lands to the south east of the subject site.

The Structure Plan will facilitate the sustainable re-use of a former quarry site for residential development within a developed urban structure.

The preparation of the Structure Plan has been undertaken in liaison with the City of Cockburn (City).

Structure Plan Summary Table

Item	Data	Section number referenced in report
Total area covered by the structure plan	9.6622 hectares	1.2
Area of each land use proposed:		3.1
Residential	6.422 ha	
Estimated lot yield	171	3.3
Estimated number of dwellings	171	3.3
Estimated residential site density	26 dwellings per site hectare	3.3
Estimated population	378 persons	3.3
Estimated area and number Neighbourhood parks	1.34 ha 5 parks	3.2
Estimated number and area of natural area and biodiversity assets	1.29 ha 4 parks	2.1 and 3.2



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TECHNICAL APPENDICES

Appendix Number	Document Title	Nature of Document	Referral/Approval Agency	Summary of Document Modifications
1.	Herring Storer Acoustics Noise Assessment	Acoustic Screening Assessment	Department of Water and Environmental Regulation	
2.	360 Environmental Assessment and Management Strategy	Environmental Assessment and Management Strategy	Department of Water and Environmental Regulation Department of Biodiversity, Conservation and Attractions	
	360 Environmental Level 2 Flora and Vegetation Assessment	Level 2 Flora and Vegetation Assessment	Department of Water and Environmental Regulation Department of Biodiversity, Conservation and Attractions	
	360 Environmental Black Cockatoo Habitat Assessment	Black Cockatoo Habitat Assessment	Department of Water and Environmental Regulation Department of Biodiversity, Conservation and Attractions	



	360 Environmental Preliminary Site Investigation and Sampling and Analysis Program	PSI and SAP	Department of Water and Environmental Regulation	
3.	Golder and Associates Geotechnical Investigation Residential Subdivision	Geotechnical Report	N/A	
4.	Smith Consulting Bush Fire Management Plan	Bush Fire Management Plan	Department of Fire and Emergency Services	
5.	Emerge Associates Landscape and Tree Protection Strategy	Landscape and Tree Protection Strategy	City of Cockburn	
6.	Shawmac Transport Impact Assessment – V5	Traffic Impact Assessment	City of Cockburn	
7.	Hyd20 Local Water Management Strategy	Local Water Management Strategy	Department of Water and Environmental Regulation	
8.	Peritas Engineering Servicing Report	Engineering Servicing Report	Western Power and Water Corporation	
9.	Paperbark Technologies	Tree Survey Reports September 2017 and November 2017	City of Cockburn	
10.	Paperbark Technologies	Aboriculturalist Advice	City of Cockburn	





Part One

IMPLEMENTATION



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1. Structure Plan Area

This Structure Plan shall apply to part of Lot 81 McLaren Avenue (formerly Lot 2 Fanstone Avenue), Beeliar being the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan Map (Plan 1).

2. Operation

In accordance with Schedule 2, Part 4 of the *Planning and Development (Local Planning Schemes) Regulations 2015*, this Structure Plan shall come into operation when it is approved by the Western Australian Planning Commission (WAPC) pursuant to Schedule 2, Part 4, Clause 22 of the Regulations.

3. Staging

Development of the site will commence upon issue of subdivision approval. Specific staging and timing for the development is unknown at this stage.

4. Subdivision and Development Requirements

4.1 Land use and zones

The Structure Plan Map (Plan 1) outlines land use, zones and reserves applicable within the Structure Plan area. Land use permissibility within the Structure Plan area shall be in accordance with the corresponding zone or reserve under Town Planning Scheme No. 3.

4.2 Environmental and Heritage Features

The trees identified on the structure plan map are to be retained. Model subdivision condition EN 1 is to be included as a condition of subdivision as follows –

Prior to the commencement of subdivisional works a tree protection management plan for the trees identified within the Structure Plan Map is to be prepared and approved to ensure the protection and management of the sites environmental assets with satisfactory arrangements being made for the implementation of the approved plan (Local Government).

4.3 Hazards and Separation Areas

This Structure Plan is supported by a Bush Fire Management Plan (BFMP) including a Bushfire Hazard Level (BAL) Assessment. Any land falling within 100 metres of a bushfire hazard identified in the Bushfire Hazard Level Assessment (BAL) is designated as a Bushfire Prone area for the purpose of the Building Code of Australia.

Subdivision and development shall be in accordance with the requirements of the BFMP.

4.4 Interface with adjoining land

Development of the site will have due regard to existing surrounding development, service infrastructure and road connections.

4.5 Public Open Space

The provision of a minimum of 10 per cent public open space (POS) being provided in accordance with the WAPC's Liveable Neighbourhoods. POS is to be provided generally in accordance with Plan 1 (and Table 1), with an updated POS schedule is to be provided at the time of subdivision for determination by the WAPC, upon the advice of the City of Cockburn.

Table 1: Strategic Public Open Space Provision

POS Site	Size (Ha)
POS 1	06427
POS 2	0.1385
POS 3	0.3362
POS 4	0.1793
POS 5	0.0480

4.6 Residential Density Targets

In accordance with Liveable Neighbourhoods and Directions 2031 targets, subdivision of the site is to achieve the following:

- a) A minimum average of 22 dwellings per residential site hectare across the Structure Plan area; and
- b) A minimum average of 15 dwellings per gross urban hectare across the Structure Plan area.

Plan 1 defines the residential densities that apply to specific areas within the Structure Plan.

5. Local Development Plans

Local Development Plans may be prepared in accordance with *Planning and Development (Local Planning Schemes) Regulations (2015)* for any lots within a subdivision area, prior to the creation of said lots. A Local Development Plan is required for any lot that:

- a) Immediately adjoins public open space;
- b) Abuts a rear laneway;
- c) Has an area of 260m² or less;
- d) Requires special conditions to be set; or where otherwise deemed appropriate to the satisfaction of the City of Cockburn.

6. Other Requirements


Developer Contribution Arrangements

The Structure Plan area is included within Development Contribution Areas 5 and 13 under the Scheme. Contribution costs are to be paid in accordance with the requirements of the Scheme.

7. Additional Information

The following additional information is required at the subdivision and subdivision clearance stage.

Additional Information	Approval Stage	Consultation Required
Landscape Management Plan	Subdivision clearance	City of Cockburn



Additional Information	Approval Stage	Consultation Required
Urban Water Management Plan	Subdivision clearance	City of Cockburn
Site contamination and remediation	Subdivision clearance	Department of Water and Environmental Regulation
Fauna Survey and Relocation Management Plan	Subdivision clearance	City of Cockburn





Part Two

EXPLANATORY SECTION



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Planning Background

1.1 Introduction and Purpose

This Structure Plan has been prepared by Rowe Group who act on behalf of Cockburn Cement Limited (CCL), being the former owners of Lot 2 Fanstone Avenue, Beeliar (the 'subject site') (now known as Lot 81 McLaren Avenue, Beeliar), as a precursor to subdivision. CCL previously quarried the subject site for sand and limestone resources. Kiln ash has also been deposited on the subject site.

The objective of the Structure Plan is to facilitate infill residential development on the former quarry site given its 'Urban' zoning under the Metropolitan Region Scheme (MRS).

The purpose of the Structure Plan is to refine the provisions under the district framework and ensure a comprehensive approach to planning and development is undertaken, with input from landowners, government agencies and other key stakeholders.

The Structure Plan is a statutory planning document that will guide future land use and development within the Structure Plan area, and provide a framework for more detailed planning at the subdivision stage.

1.2 Land Description

1.2.1 Location

The subject site is located in the City of Cockburn (City) approximately 20 kilometres south west of the Perth Central Area. The subject site is located within the suburb of Beeliar (refer to Local and Regional Location Plans Figures '1' and '2').

The subject site is bordered to the north by McLaren Avenue, to the east by Delphinium Way, to the south by Cockburn Cement's quarry operations and to the west by L'Aquila Circle.

1.2.2 Area and Land Use

The Structure Plan area is 9.6622 ha excluding the southern connector road and drainage area.

The Structure Plan is only proposed over the northern section of Lot 81 McLaren Avenue, Beeliar which is zoned 'Urban' under the MRS. The remaining part of Lot 81 is zoned 'Rural' under the MRS and is subject to the Area B of the *Environmental Protection (Atmospheric Waters Kwinana) Policy 1992*.

The southern connector road and the drainage basin form part of Lot 81, but are located outside of the Structure Plan area.

The area subject to the Structure Plan consists of a revegetated quarry and is not currently used for any specific purpose.

1.2.3 Legal Description and Ownership

The subject site is described as:

- ▲ Lot 81 on Deposited Plan 413024

The Certificate of Title contains three encumbrances including a caveat, an easement (Western Power), a memorial relating to the *Contaminated Site Act 2003* and various mortgages.

A copy of the Certificate of Title is provided in Figure '3'.

1.3 Planning Framework

1.3.1 Zoning and Reservations

1.3.1.1 Metropolitan Region Scheme

The subject site is zoned 'Urban' and 'Rural' under the MRS. Surrounding land to the north, east and west of the subject site is also zoned 'Urban'. Refer to Figure '4' MRS zoning.

1.3.1.2 Town Planning Scheme No.3

The subject site is zoned Development and Special Use under the Scheme and is included within Development Area 4 (DA4). A reserve for Lakes and Drainage is contained within the south west corner of the subject site (refer to Figure '5').

The objective of the Development Zone under the Scheme is:

To provide for future residential, industrial or commercial development in accordance with a comprehensive Structure Plan prepared under the Scheme.

The 'Special Use' assigned to the subject site in accordance with Schedule '4' of the Scheme is as follows:

Cement Works and Conservation Area, includes land and buildings used for the manufacture of cement lime and associated products for use in the construction industry and includes excavation and earthworks associated with manufacture of cement together with the surrounding areas of buffer land retained and conserved to separate the works from adjoining uses, and operates in accordance with the "Cement Works (Cockburn Cement Limited) Agreement Act" 1971 (as amended) and to the Agreement as annexed to that Act.

Inclusion of the subject site in DA4 facilitates the preparation and adoption of the Structure Plan to guide the subdivision and development. Clauses 5.2.2.1 and 5.2.2.2 of the Scheme require that development of land within a Development Area is to comply with Table 9 and subdivision and development within a Development Area is to be generally in accordance with a Structure Plan that applies to the land. A Structure Plan is required to be prepared in accordance with Part 4 of Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

1.3.2 Regional and Sub-Regional Structure Plan


The subject site is surrounded to the north, east and west by the Structure Plans for Cell 9 Yangebup and Cell 10 Beeliar.

The proposed Structure Plan will complement the existing development and provide additional vehicular and pedestrian connections between the already established residential developments adjoining the Structure Plan area.

1.3.3 Planning strategies

1.3.3.1 Directions 2031 and the Outer Metropolitan Perth and Peel Sub-Regional Strategy

Directions 2031 is a high level spatial and strategic planning framework that establishes a vision for future growth of the Perth Metropolitan and Peel region. It provides a detailed framework guiding the planning and delivery of housing, infrastructure and services required to accommodate a range of growth scenarios.



Directions 2031 seeks a 50% increase to the current average residential density of 10 dwellings per gross urban zoned hectare, setting the target of 15 dwellings per gross urban zoned hectare for land in new development areas. Based on a total land area of 9.6622 ha, the subject site is required to achieve a minimum total of 145 dwellings. Consistency with this objective is discussed in Section 3.1 (below).

Under the Outer Metropolitan Perth and Peel Sub-Regional Strategy (OMPPRS) the subject site is identified as being 'urban zoned undeveloped' (BEE 1). Under a connected City scenario, a dwelling yield of 860 is proposed for the BEE 1 area. The Structure Plan will contribute to the proposed dwelling yield of 860 dwellings.

1.3.3.2 South Metropolitan Peel Sub-Regional Planning Framework

The South Metropolitan Peel Sub-Regional Planning Framework (Planning Framework) was finalised in March 2018.

The Planning Framework identifies the northern part of subject site for urban purposes consistent with its current zoning under the MRS. The subdivision and development of the subject site for residential purposes is consistent with the Planning Framework as it provides for a consolidation of an existing urban area which has ready access to existing services and facilities.

The Planning Framework provides for a gross residential density of 15 dwellings per hectare. This requirement is achieved.

1.3.3.3 Liveable Neighbourhoods

Liveable Neighbourhoods (LN) is a Western Australian Planning Commission (WAPC) operational policy for the design and assessment of structure plans and subdivision for new urban areas, it seeks to create more vibrant, self sufficient and interactive communities that provide a wide range of residential, employment, recreational and business opportunities within a reasonable catchment.

The aims of LN can be summarised as follows:

- ▲ To promote an environment for safe, efficient and pleasant walking, cycling and driving.
- ▲ To facilitate mixed use urban development which provide a wider range of living, employment and leisure opportunities.
- ▲ To provide for a flexible neighbourhood structure capable of adapting over time as a community changes.
- ▲ To provide for a variety of lot sizes for housing choice and diversity.
- ▲ To provide a comprehensive approach to the design of open space and water management.

The Structure Plan has been prepared in accordance with LN.

A key element of sustainable urban design contained within LN is the establishment of desired urban densities within new developments. As detailed in Section 3.3, this Structure Plan achieves the residential density targets set under LN.

As identified within LN, achieving better residential design outcomes requires a mechanism to enable lot design to be linked to a future building without the building plan being submitted at subdivision. Local Development Plans (LDPs) will be required for lots with a residential density code of R40 in order to ensure design coordination between buildings and the streetscape. In particular, where Grouped/Multiple Dwelling sites about POS, LDPs will need to be completed and approved to address

the interface between these areas. Section 3.2 addresses the POS contribution of the Structure Plan area.

In respect to water management, as identified within the Local Water Management Strategy (LWMS), the Structure Plan provides emphasis on the on-site collection, treatment and use of stormwater flows. The LWMS provides methods of stormwater collection, detention and use within roadways and individual lots. The LWMS is described in more detail in Section 3.3.

1.3.4 Planning Policies

1.3.4.1 State Planning Policy 2.8: Bushland Policy for the Perth Metropolitan Region

State Planning Policy 2.8: Bushland Policy for the Perth Metropolitan Region (SPP2.8) applies to land identified as Bush Forever sites and areas of bushland outside of Bush Forever sites within the Perth Metropolitan Region.

The subject site is not identified as a Bush Forever area but contains some remnant vegetation along the northern, eastern and western boundaries. The vegetation condition within the Structure Plan area ranges from 'completely degraded' to 'good'. The majority of the subject site (former quarry floor) has been rehabilitated.

Tuart trees along the northern, eastern and western site boundaries are proposed to be retained given the potential for these trees to provide Black Cockatoo habitat. The remaining vegetation, mostly consisting of rehabilitated quarry area, will be cleared to facilitate development.

1.3.4.2 State Planning Policy 4.1 State Industrial Buffer

State Planning Policy 4.1 State Industrial Buffer (SPP4.1) aims to provide a state wide approach to defining and securing buffer areas around industry, infrastructure and special use areas. In addition, SPP4.1 aims to protect industry, infrastructure and special use areas for the encroachment of incompatible land uses.

As detailed earlier, Cockburn Cement operates a limestone and sand quarry to the south of the Structure Plan area and there are former market gardens to the east of the Structure Plan area.

The Environmental Protection Authority's (EPA) Environmental Protection Guidance Statement No.3: Separation Distances Between Industrial and Sensitive Land Uses (Guidance Statement No.3) prescribes generic separation distances between industrial and sensitive land uses.

In respect to the quarry to the south of the subject site, Guidance Statement No.3 requires a separation distance of 300 to 500 metres for a sand and limestone extraction. A separation distance of approximately 580 metres is achieved between the Structure Plan area and the quarry.

In respect to the former market gardens to the east of the subject site, a review of recent aerial photography indicates that the market gardens have been removed to accommodate residential development. Therefore, no buffer will be required from this area.

The southern boundary of the Structure Plan area also coincides with the northern boundary of Area B of the *Environmental Protection (Atmospheric Wastes Kwinana) Policy 1992*. The extent of Area B of the *Environmental Protection (Atmospheric Wastes Kwinana) Policy 1992* coincides with the boundary between the 'Urban' and 'Rural' zoning of Lot 81 under the MRS.

As the Structure Plan area is outside of Area B of the *Environmental Protection (Atmospheric Wastes Kwinana) Policy 1992* it is considered that the Structure Plan area is suitable for residential development. Adjoining land to the east and west of the subject site has already been approved for

residential development abutting the boundary of Area B of the *Environmental Protection (Atmospheric Wastes Kwinana) Policy 1992*.

1.3.4.3 State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning

The aim of State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP5.4) is to protect people from unreasonable levels of transport noise, to protect major transport corridors and freight operations from incompatible urban development and to facilitate the operation of an efficient freight network.

The subject site is within approximately 190 metres of a freight railway line to the west of the subject site. Between the subject site and freight railway line is a recently developed residential area. This residential development is within 26 metres of the freight railway line.

In accordance with SPP5.4, given the separation distance between the freight railway line and subject site of 190 metres it was not considered that a 'screening assessment' was required in respect to the potential affect (noise and vibration) from the railway line on the subject site. However, at the recommendation of the City a screening assessment was undertaken by Herring Storer Acoustics (HSA). A copy of HSA report is provided in Appendix '1'.

HSA concluded that noise modelling showed that noise received within the development from passing freight trains would comply with the 'target' noise limits during both the day and night period as outlined in SPP5.4. Given this, it is considered that the proposed development complies with SPP5.4.

1.3.5 Local Planning Policies

The following Local Planning Policies (LPP) were considered in the preparation of this Structure Plan:

- ▲ SPD1 Bushland Conservation Policy.
- ▲ APD4 Public Open Space.
- ▲ APD20 Incorporating Natural Areas in Public Open Space and/or Drainage Areas.

1.3.5.1 SPD 1 Bushland Conservation Policy

The SPD1 Bushland Conservation Policy seeks to conserve the quality, extent and uniqueness of the natural environment and ensure that development is undertaken in a way that balances the natural and human environment.

The vegetation condition within the Structure Plan area ranges from 'completely degraded' to 'good'. The majority of the subject site (former quarry floor) has been rehabilitated. The vegetation contained within the Structure Plan area is not considered to be significant, and worthy of retention.

A Black Cockatoo Habitat Assessment was also undertaken for the Structure Plan area. The Black Cockatoo Habitat Assessment indicated there are Tuart trees that are potential habitat areas. Some of these trees are proposed to be retained in POS areas.

1.3.5.2 APD4 Public Open Space

The purpose of the policy is to specify land features which will not be accepted by the City as part of the POS requirement. The City will not accept land that is considered to be 'contaminated' or 'possibly contaminated'. It is noted that the subject site may be contaminated, however remediation will be undertaken as required.

1.3.5.3 APD20 Incorporating Natural Areas in Public Open Space and/or Drainage Areas

APD20 Incorporating Natural Areas in Public Open Space and/or Drainage Areas provides guidance for the retention of natural areas in POS or drainage areas.

As detailed earlier, Tuart trees (potential Black Cockatoo habitat) are to be retained in POS areas. These Tuart trees have been located via survey and will be identified for retention during site works consistent with the requirements of the policy.

Site Conditions and Constraints

2.1 Biodiversity and Natural Area Assets

2.1.1 Flora

360 Environmental undertook a Level 2 Flora and Fauna Vegetation Assessment and prepared an Environmental Assessment and Management Plan (EAMS) for the Structure Plan area (Refer to Appendix 2). The assessment concluded that:

- ▲ A total of 63 taxa (including species, subspecies, varieties and forms) from 51 genera and 27 families were recorded.
- ▲ No Threatened species pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and/or gazetted as Declared Rare Flora (DRF) pursuant to the *Wildlife Conservation Act 1950* (WC Act) were recorded.
- ▲ One Priority 4 species, *Calothamnus rupestris* as listed by the Department of Parks and Wildlife (DPaW) were recorded.
- ▲ No vegetation associations described for the subject site were considered analogous to any known Threatened Ecological Communities or Priority Ecological Communities.
- ▲ Vegetation condition ranged from completely degraded to good with a large portion of the subject site consisting of rehabilitation in a degraded condition.

In respect to the two vegetation associations contained within the Structure Plan area (EgAc and EgAcMhSg) the understorey of both associations has few native species and is dominated by weedy grasses and herbs.

The rehabilitated area is considered to be 'degraded' in condition as it contains a mixture of endemic and non-endemic shrubs and small trees with no understorey species.

Vegetation within the Structure Plan area is not considered to be regionally significant.


360 Environmental concludes that:

Due to the small size of remnant native vegetation being cleared and the predominantly degraded nature of the vegetation associated with the fingers of the site and rehabilitated area, impacts to vegetation and flora are unlikely to be significant.

2.1.2 Tree Retention

As part of the preparation of the Structure Plan, trees (primarily Tuart trees) fringing the boundaries of the subject site have been identified for retention. These trees have been identified for retention as part of a referral of the proposal under the EPBC Act, and for landscape amenity value.

Two tree surveys were undertaken by Paperbark Technologies to identify trees for possible retention. The first survey was undertaken in September 2017 (commissioned by the City and the second in November 2017 (commissioned by the former landowner). A further supplementary report was also commissioned to assist in confirming trees able to be retained where POS adjoins residential areas. A copy of the survey reports are contained within Appendix 9. Liaison with the City has further been undertaken to identify trees for retention having regard to a preliminary site works plan.



The reports identify that a maximum of thirty seven trees should be able to be retained on the subject site. Two of these trees will be subject to X-Ray to establish structural stability whilst a third tree will need to be reviewed in respect to suitability for retention adjoining the road reserve in the south west corner of the subject site. These trees are indicated for possible retention on the Structure Plan.

The Landscape and Tree Protection Strategy (refer to Appendix 5) prepared for the subject site references the trees identified for protection, and protection measures required. Advice for protection for trees to be retained has been provided by Paperbark Technologies (refer to Appendix 10).

Further review of the trees will be undertaken at the subdivision implementation stage when detailed engineering design is further progressed.

2.1.3 Fauna

According to the 360 Environmental EAMS:

Two broad fauna habitat types occur onsite, Eucalyptus woodland and Acacia shrublands. The Acacia shrubland has moderate habitat value and is unlikely to support fauna taxa of conservation significance. The Eucalyptus woodland has moderate habitat value with the potential habitat support the conservation significant Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoo.

In terms of habitat areas it is proposed to retain, where possible, Tuart trees which are potential Black Cockatoo habitat areas (refer to Appendix '2'). The remainder of the Structure Plan area will be cleared to facilitate subdivision and development.

Figure '6' illustrates the location of Tuart trees which are potential Black Cockatoo Habitat.

2.2 Landform and Soils

2.2.1 Topography

The topography of the Structure Plan area represents its former quarry use. The site falls from the northern, eastern and western boundaries to the former quarry floor. The quarry floor grades towards the south west.

2.2.2 Soil Types


Golder Associates undertook a geotechnical investigation of the Structure Plan area (refer to Appendix '3').

The geotechnical investigation concluded that the subsurface conditions at the subject site can be generalised as comprising of uncontrolled fill overlying in-situ limestone. The 'uncontrolled fill' represents the former use of the subject site for the storage of kiln ash from CCL operations.

The generalised stratigraphy of the Structure Plan area was described by Golder Associates as follows:

Topsoil: SAND/Gravelly SAND (SP) grey/brown, fine to coarse grained sand, locally with fine to coarse gravels, variable organics (grasses, roots and rootlets), fine to coarse limestone gravel, locally with limestone cobbles, extending from the ground surface to depths of between about 0.15 m and 0.3 m; overlying

Uncontrolled Fill: Sand/Gravelly SAND/Cobbles (SP): grey/white/brown/orange brown, fine to coarse grained, with occasional limestone gravel, cobbles and boulders, locally with deleterious materials (wood, plastics, metal, and other refuse, etc), varying density. The depth of uncontrolled fill typically ranged between about 0.5 m and 2.3 m (not encountered at every location); overlying



SAND/Gravelly SAND (SP): orange brown/white, fine to medium grained, medium dense/very dense. Locally containing limestone gravels and cobbles; extending to depths varying between about 0.6 m and 2.6 m (not encountered at every location); overlying

LIMESTONE: grey/white, massive, moderately to very well cemented, low to high strength, encountered at depths varying between 0.1 and 2.1 m and typically causes shallowed refusal of the backhoe where encountered (not encountered at every location).

To facilitate subdivision and development extensive earthworks will be required. Proposed lots will step down from the McLaren Avenue to the southern extent of the subject site via a series of retaining walls. Retaining walls on a north south alignment will further be required to address east west cross fall across the subject site.

Stepping of lots on the corner of McLaren Avenue and Birchley Road is required to address significant difference in level between the subject site and adjoining road network.

Final engineering design will be determined at the subdivision clearance stage.

Figure '7' shows the location of the proposed retaining walls.

2.2.3 Acid Sulphate Soils

Online mapping indicates that the subject site has a 'low to no risk of ASS and PASS' at depths of greater than 3.0 metres. Given this, it is considered that ASS is not a constraint to the development of the Structure Plan area.

2.3 Groundwater and Surface Water

The former Department of Water's (DoW) Perth Groundwater Atlas indicates that the depth to groundwater is approximately 2.0 to 3.0 metres AHD. Based on site elevations the depth to groundwater ranges from 25.0 metres to 43.0 metres below ground level.

2.4 Bushfire Hazard

Smith Consulting has undertaken a Bush Fire Hazard Assessment (refer to Appendix '4')

The southern road reserve has a width of 21.0 metres. This width is proposed to provide additional separation between the bushland to the south of the subject site and residential development. The road reserve will be managed in such a manner as to have minimal fuel loading. Lots along the southern subdivisional road achieve BAL29.

In respect to POS areas where trees are proposed to be retained, the understorey will be parkland cleared to allow for active recreational uses and to reduce fuel loadings.


2.5 Heritage

No European or Aboriginal heritage sites affect the Structure Plan area.

2.6 Context and Other Land Use Constraints and Opportunities

2.6.1 Site Contamination

Due to the subject site's former use as a quarry and uncontrolled filling, the Certificate of Title contains a memorial classifying the site as 'potentially contaminated – investigation required'.



Given the subject site is potentially contaminated, 360 Environmental prepared a Preliminary Site Investigation (PSI) and Sampling and Analysis Program (SAP). 360 Environmental concluded as part of the PSI that:

- ▲ *A review of the site geotechnical report (Golder Associates, 2013) indicates that small amounts of anthropogenic fill are present within the site stratigraphy, with an uneven spatial distribution across the site. Due to the unknown origins of this anthropogenic fill, and without suitable laboratory assessment the contamination potential of this material is unknown.*
- ▲ *Some illegal dumping of car parts was identified on the site's surface.*
- ▲ *Potentially-impacted groundwater from market gardening activities adjacent to the east of the site could have affected the site's groundwater quality. However contamination in the groundwater does not pose a risk to future residents of the site as groundwater is approximately 25-48 mbgl at the site.*

A SAP was produced further to the PSI and outlines the steps involved in order to conduct a soil and groundwater sampling program (refer to Appendix '2'). The PSI and SAP were reviewed by a Department of Water and Environmental Regulation (DWER) accredited Contaminated Site Auditor. The Auditor's comments on the PSI and SAP have been accommodated in the version of the PSI and SAP attached to this report.

Given the passage of time since the lodgement of the Structure Plan a Voluntary Auditor's Report (VAR) has been prepared and is awaiting finalisation. The conclusion of the VAR is that the subject site should be classified "not contaminated – unrestricted use".

03

Land Use and Subdivision Requirements

3.1 Land Use

The Structure Plan proposes residential development at varying densities and POS. A copy of the Structure Plan is provided a Figure '8'.

3.2 Public Open Space

Under the provisions of Liveable Neighbourhoods, a range of site responsive parkland is required to address the needs of residents.

Five areas of POS are provided within the Structure Plan area. One area is located along the eastern boundary of the subject site which will adjoin future residential development to the east. A second POS area is located along the western boundary of the subject site which will interface directly with L'Aquila Circle. Two POS areas are located along the McLaren Avenue frontage at the entry to the subject site with a landscaped POS link in the south western section of the landholding (refer to Figure '9').

The POS areas will be parkland cleared to retain the existing trees and remove the degraded understorey. Table 3 Public Open Space Schedule below illustrates the location and the size of POS areas.

Local Structure Plan – Public Open Space Schedule		
Site Area (Structure Plan Boundary)		9.6622ha
Deductions		
Primary School	Nil	
Dedicated Drainage	Nil	
Total	Nil	
Gross Subdivisible Area		9.6622 ha
POS @ 10%		0.96622 ha
Public Open Space Contribution		
May comprise:		
- Minimum 80% unrestricted public open space	0.772976 ha	
- Minimum 20% restricted public open space	0.193244 ha	
Total Required POS		0.96622 ha
Public Open Space Provision	Unrestricted POS Sites	Restricted POS
POS 1	0.6427 ha	
POS 2	0.1385 ha	
POS 3	0.3362	
POS 4	0.1793 ha	

POS 5	0.0480 ha	
Total Public Open Space Provided		
	1.344 ha (13.9%)	0 ha

In respect to the table above, the drainage area south of southern most subdivision road has been excluded from the POS calculations as it is outside the Structure Plan area.

As discussed earlier POS areas will be parkland cleared. Tuart trees within these areas will remain, providing for Black Cockatoo habitat and a pleasing outlook from adjoining residential areas. POS areas will be 'overlooked' by adjoining residential development. This will provide for passive surveillance which will assist in discouraging anti-social activities.

All POS areas proposed are classified as 'neighbourhood parks' for the purposes of LN and have street frontages to either side of the parks. The exception to this is the POS link in the south western section of the subject site.

All lots within the Structure Plan area are within 400 metres walk from POS areas which accords with the requirements of LN.

All POS areas are proposed to be vested in the City as part of future subdivision. The POS areas will be developed to the minimum standard specified in LN and maintained for a period of two summers. A landscaping plan will be required to be prepared and approved as a condition of subdivision approval.

Preliminary landscaping concepts for the POS and drainage areas have been prepared and are contained within Appendix '5'.

The landscape concepts set landscape design for the Structure Plan area as well as the methodology for the retention of trees identified on the Structure Plan. The landscape concepts identify appropriate earthworks methodology and designation of tree protection areas. This is assist to in ensuring retention of vegetation at the subdivision stage.

3.3 Residential

The Structure Plan provides for residential development at two different residential density codes being R25 and R40. Density codes have been proposed for the site and have been used in the preparation of subdivision layouts and density calculations.

The R25 code applies to the majority of the subject site.

Three sites are assigned a residential density of R40. These sites overlook POS areas and are proposed to encourage a diversity of building form and housing type. LDPs will be required for these areas in accordance with Clause 46 of Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* to address the interface with the POS and adjoining lower scale residential development.

A gross site dwelling density of 17.70 is achieved over the Structure Plan area. Note that the southern road and drainage area are not included within the Structure Plan area.

A residential population of approximately 378 persons is expected to be accommodated.

3.4 Movement Networks

3.4.1 Road Network

A grid road layout is provided which connects into the existing road network at McLaren Avenue and L'Aquila Circle. A new local access road connecting L'Aquila Circle ultimately to Tindal Avenue is further proposed.

The southern connector road has a proposed reserve width of 21.0 metres. This is proposed to create additional separation between future dwellings and the adjoining bushland area to reduce bush fire risk.

All roads are classified as local access roads recognising the low volumes of traffic likely to be generated from the Structure Plan area.

Shawmac have prepared a Traffic Impact Assessment (TIA) for the Structure Plan area which is contained within Appendix '6'.

3.4.2 Trip Generation and Distribution

Based on the proposed land uses, it has been estimated that the Structure Plan area would generate 1,895 vehicle movements per day with approximately 155 vehicle movements during both the AM and PM weekday peak periods.

It is considered that 55% of the traffic will travel north and west via McLaren Avenue, Birchley Drive and Beeliar Drive, 40% will travel north and east via McLaren Avenue, Tindal Avenue and Beeliar Drive and 5% of the traffic will travel to the south and east via the southern subdivisional road.

The additional traffic generated by the Structure Plan and the proposed permeable layout with external linkages to the existing road network will allow for an efficient distribution of traffic with the additional traffic accommodated comfortably within the practical road network capacities of the existing road network.

3.4.3 Intersection Analysis

A capacity analysis was considered unnecessary due to the low turning volumes expected to occur at the internal and nearby intersections.


All intersections will be basic priority-controlled with signage and line marking installed due to the relatively low traffic volumes. Whilst it is recognised that traffic volumes are relatively low, in order to maximise safety and minimise conflict, local area traffic management measures should be implemented. Final details related to line marking, intersection controls and local area traffic management measures will be addressed during the detailed subdivision design process. Indicative treatments however are identified within the TIA.

Indicative road cross-sections for the proposed local roads showing carriageway, median and verge widths and accommodation of service infrastructure and street trees are provided in Appendix '6'.

3.4.4 Public Transport

No public transport services currently service the subject site. Transperth Bus Routes 522, 531, 532 and 533 which operate to and from Cockburn Central Bus and Railway Station operate along Beeliar Drive and are within 400 metres walking distance of the Structure Plan area.

The existing Transperth Bus Services operate every 15 to 20 minutes during weekday peak periods. These services provide connection to the broader public transport network. From the Cockburn



Central Railway Station a direct rail service is provided into the Perth CBD which is a 10 to 15 minute connection during peak periods.

3.4.5 Pedestrian and Cycle Network

3.4.5.1 External Connections

L'Aquila Circle and Birchley Road provide footpaths and a 'local bike friendly route' connection to a 'high quality shared path' along Beeliar Drive. The Beeliar Drive 'high quality shared path' then provides connection to the regional bike network.

3.4.5.2 Internal Connections

Internally, footpaths will be provided along one side of each access road to a width of 1.5 metres. Given the low traffic volumes anticipated internally it is considered that the local access roads are suitable for on street cycling.

3.5 Water Management

Hyd20 have prepared a Local Water Management Strategy (LWMS) for the Structure Plan area (refer to Appendix '7'). As depth to groundwater ranges from 23mbgl to 40mbgl ground water monitoring was not required.

All stormwater is proposed to be directed to a stormwater basin in the south western corner of the subject site. The stormwater basin design is indicative at this juncture, and a final design will be prepared at the subdivision implementation stage in consultation with the City. The stormwater drainage area is constrained to the land identified reserved Lakes and Drainage under the Scheme. The form of the basin, including required earthworks, has been designed in such a manner so as to be contained within the Lakes and Drainage reserve.

3.6 Education Facilities

No education facilities are proposed within the Structure Plan area.

3.7 Activity Centres and Employment

No activities centres are proposed within the Structure Plan area.

3.8 Infrastructure Coordination, Servicing and Staging

Peritas Group has prepared an infrastructure servicing report for the Structure Plan Area (refer to Appendix '8'). Peritas confirm that there are no major servicing constraints for the Structure Plan Area and that the site is capable of being serviced with all essential infrastructure.

3.8.1 Power

Underground power will be provided to the Structure Plan area. The system will connect to the existing overhead/underground network on adjoining roads.

Padmount sites will be required at various locations within the Structure Plan area. Street lighting will be provided throughout the development to provide effective illumination for pedestrians and vehicles.

In respect to the 132 kV power lines along the McLaren Avenue frontage, an easement benefiting Western Power, ranging in width from 7.42 metres to 7.89 metres, is shown on the Deposited Plan for the landholding. All dwellings will be required to be constructed outside of the easement area.

3.8.2 Water

All internal water reticulation will be designed and constructed to the standards and requirements of the Water Corporation. Advice from the Water Corporation indicates there is an existing 250mm water main along McLaren Avenue and L'Aquila Circle. It is anticipated that this system will be extended to service the Structure Plan area.

Internally, a ring main feeder system will distribute water along higher order roads. From the ring, main water will be reticulated through the remaining road reserves to service the future lots.

3.8.3 Sewer

Preliminary advice from the Water Corporation indicates that there is sewer available in the immediate vicinity and construction planning is underway for residential development to the north and west.

Sewer services will then be extended from the surrounding network to service the subject site.

3.8.4 Telecommunication

Telstra network services are available within the immediate locality. All lots can be serviced via the extension of this infrastructure.

3.8.5 Gas

ATCO gas has advised that reticulated gas services are available in the immediate locality. It is anticipated that this network will have sufficient capacity to service the Structure Plan area with reticulated gas services via the extension of existing mains.

3.9 Developer Contribution Arrangements

The Structure Plan area is included within DCA5 and DCA13 under the Scheme. DCA5 applies to the area known as Yangebup East.

DCA5 requires that all landowners shall make a proportional contribution of 40.88% of the total cost of constructing Beeliar Drive between Stock Road and Spearwood Avenue, that all landowners within DCA5 south of Beeliar Drive shall make a proportional contribution of 30.65% of the cost of Spearwood Avenue between Beeliar Drive and Fancote Avenue, and that all landowners north of Beeliar Drive shall make a proportional contribution to 100% of the cost of closing Yangebup Road at the Railway Line.

Contributions shall be made towards the following items for Beeliar Drive:

- ▲ Land requirements for the Other Regional Road Reservation between Watson Road and Stock Road.
- ▲ Land requirements for an average 45.0 metre wide road reserve between Watson Road and Stock Road and where necessary to accommodate channelisation at intersections and drainage.
- ▲ Full earthworks.
- ▲ Construction of a four lane median divided kerbed road.
- ▲ Dual use path (both sides).
- ▲ Pedestrian Crossings (where appropriate at the discretion of the Local Government).
- ▲ Lighting.

- ▲ Landscaping.
- ▲ Traffic signals and roundabouts at major intersections.
- ▲ Drainage.
- ▲ Costs to administer cost sharing arrangements including preliminary engineering design and costings, valuations, annual reviews and audits and administrative costs.
- ▲ Servicing infrastructure relocation where necessary.
- ▲ Costs for the repayment of any loans raised by the local government for the purchase of any land for the road reserve or any of the abovementioned works.

Contributions shall be made towards the following items for Spearwood Avenue:

- ▲ Land requirements for a 25.0 metre wide road reserve.
- ▲ Full earthworks.
- ▲ Construction of a two lane kerbed road with channelisation at intersections.
- ▲ Dual use path (one side only).
- ▲ Traffic Management devices.
- ▲ Drainage.
- ▲ Servicing infrastructure relocation where necessary.
- ▲ Costs to administer cost sharing arrangements including preliminary engineering design and costings and valuations.


DCA13 relates to the following infrastructure and administrative items to be funded:

Regional

- ▲ Coogee Surf Club.
- ▲ Wetland Education Centre/Native Ark.
- ▲ Cockburn Central Recreation and Aquatic Centre.
- ▲ Cockburn Central Community Facilities.
- ▲ Visko Park Bowling and Recreation Club.
- ▲ Coogee Golf Complex (excluding the pro shop and restaurant components).
- ▲ Bibra Lake Management Plan Proposals.
- ▲ Atwell Oval.
- ▲ Cockburn Coast Foreshore Reserve (excluding coastal protection measures).
- ▲ Cockburn Coast Beach Parking.

Sub Regional—East

- ▲ Cockburn Central Library and Community Facilities.
- ▲ Cockburn Central Playing Fields.

- 
- ▲ Anning Park Tennis.
 - ▲ Cockburn Central Heritage Park.
 - ▲ Bicycle Network—East.

Sub Regional—West

- ▲ North Coogee Foreshore Management Plan Proposals (excluding rebuilding of the groyne).
- ▲ Phoenix Seniors and Lifelong Learning Centre.
- ▲ Beale Park Sports Facilities.
- ▲ Western Suburbs Skate Park.
- ▲ Bicycle Network—West.
- ▲ Dixon Reserve/Wally Hagen Facility Development (excluding the café component).

Local

- ▲ Lakelands Reserve.
- ▲ Southwell Community Centre.
- ▲ Hammond Park Recreation Facility.
- ▲ Frankland Reserve Recreation and Community Facility.
- ▲ Munster Recreation Facility.
- ▲ Banjup Playing Field.
- ▲ Banjup Community Centre.
- ▲ Cockburn Coast Sport Oval and Clubroom (including land cost).

Administrative costs including

- ▲ Costs to prepare and administer the Contribution Plan during the period of operation (including legal expenses, valuation fees, cost of design and cost estimates, proportion of staff salaries, computer software or hardware required for the purpose of administering the plan).
- ▲ Cost to prepare and review estimates including the costs for appropriately qualified independent persons.
- ▲ Costs to prepare and update the Community Infrastructure Cost Contribution Schedule.
- ▲ Costs including fees and interest of any loans raised by the local government to undertake any of the works associated with DCA13.

Development contributions will be imposed at the subdivision stage.

3.10 Other requirements

LDPs will be required for lots with a residential density code of R40 to address the interface with the adjoining POS.



FIGURES



ROWEGROUP



LEGEND

■ Subject Site

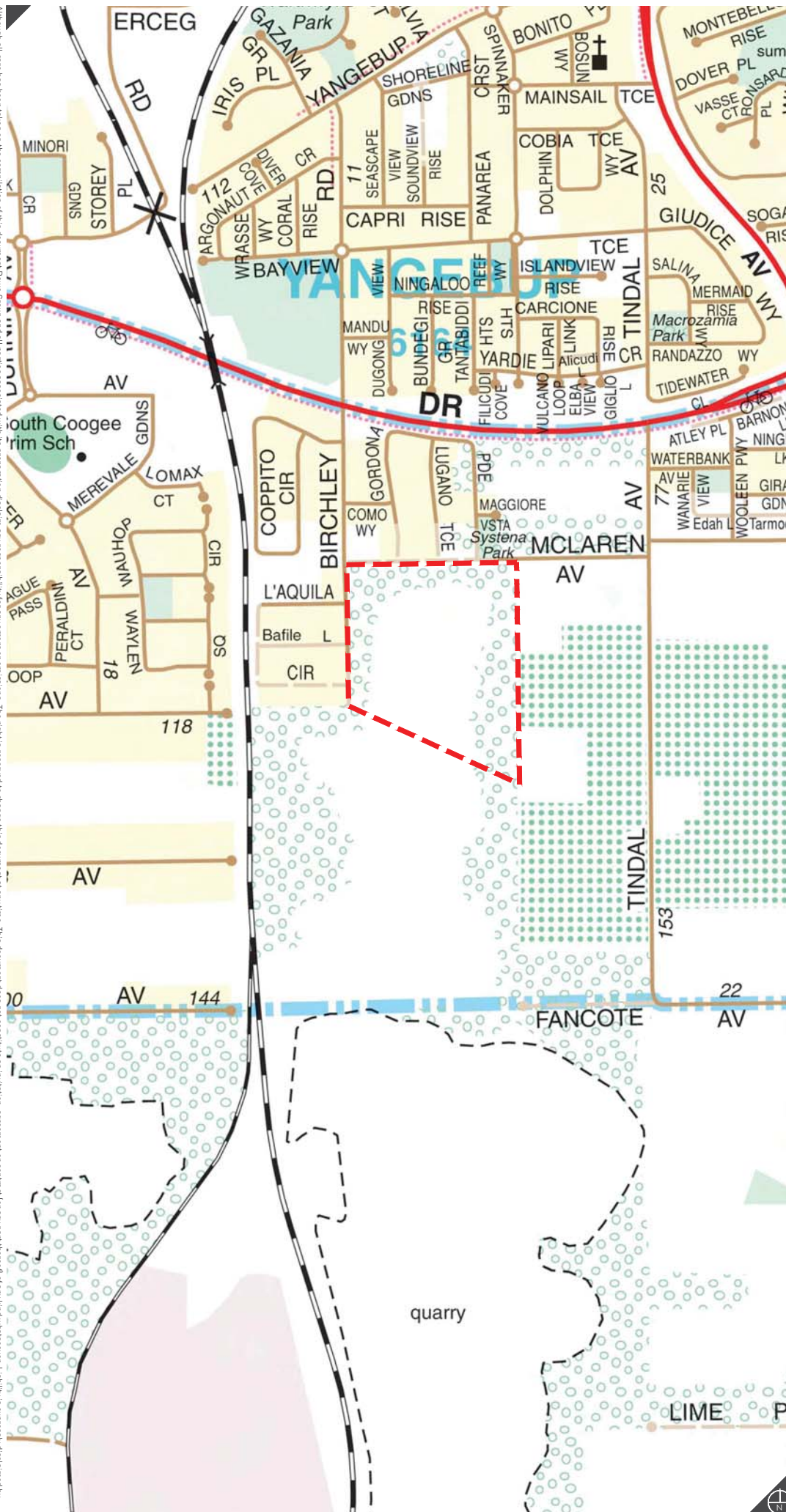
REVISIONS

Rev	Date	Drawn
A	2015.02.27	K. Trenberth
B	2018.03.22	A. Glaskin



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p: 08 9221 1991

Date Drawn: 2018.03.22
Job Ref: 7222
Scale: 1:10,000 @ A4
Client: Cockburn Cement Limited
Designer: A. Lohman
Drawn: A. Glaskin
Projection: MGA50 GDA94
Plan ID: 7222-FIG-17-B
Map supplied by Streetsmart

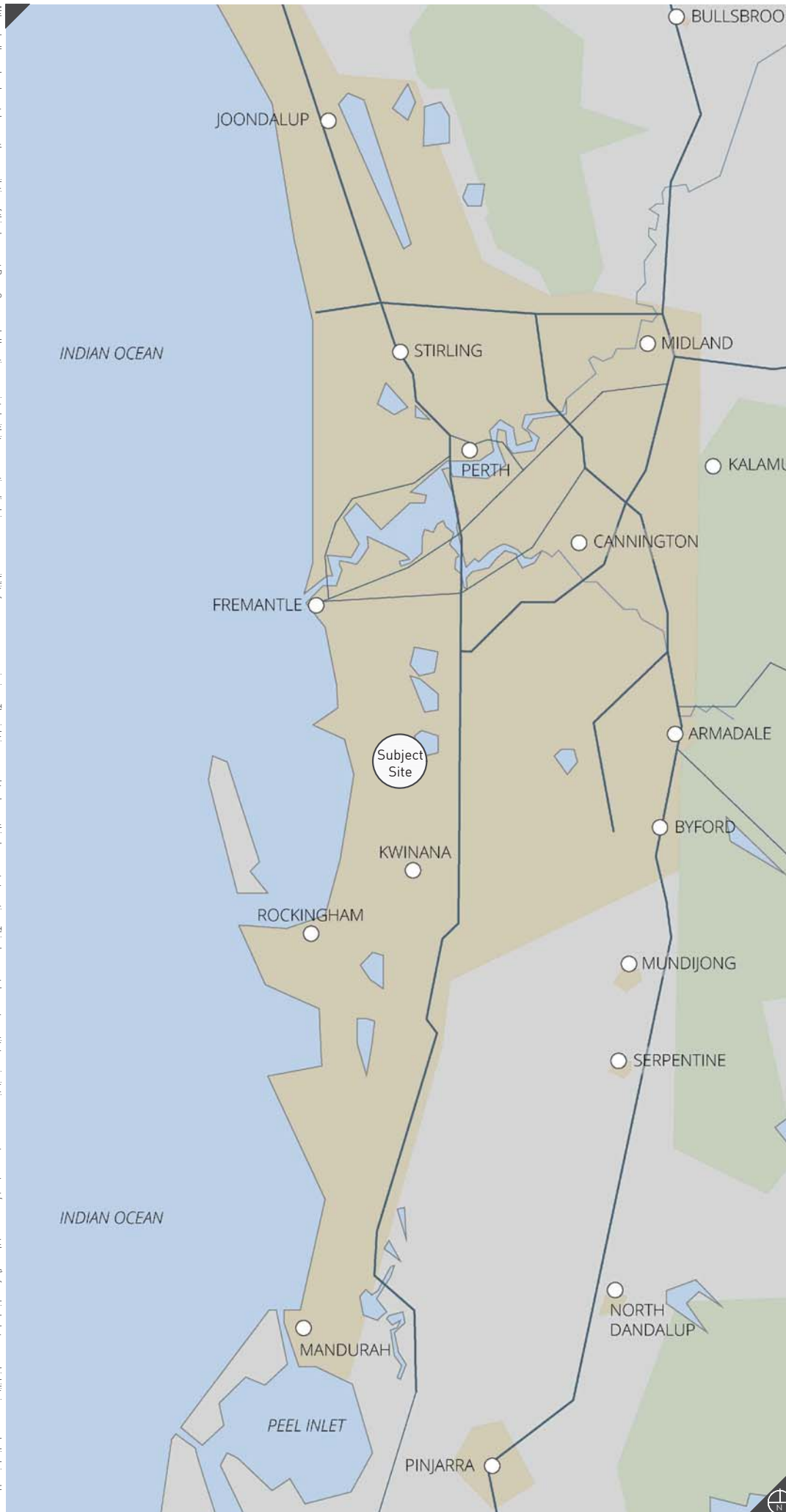


Local Location

Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue)

Beeliar

Figure 1



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Designer: A. Lohman
Drawn: A. Glaskin
Projection: MGA50 GDA94
Plan ID: 7222-FIG-16-B

Regional Location

Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue)
Beeliar

Figure 2



LEGEND

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

0 75 Metres

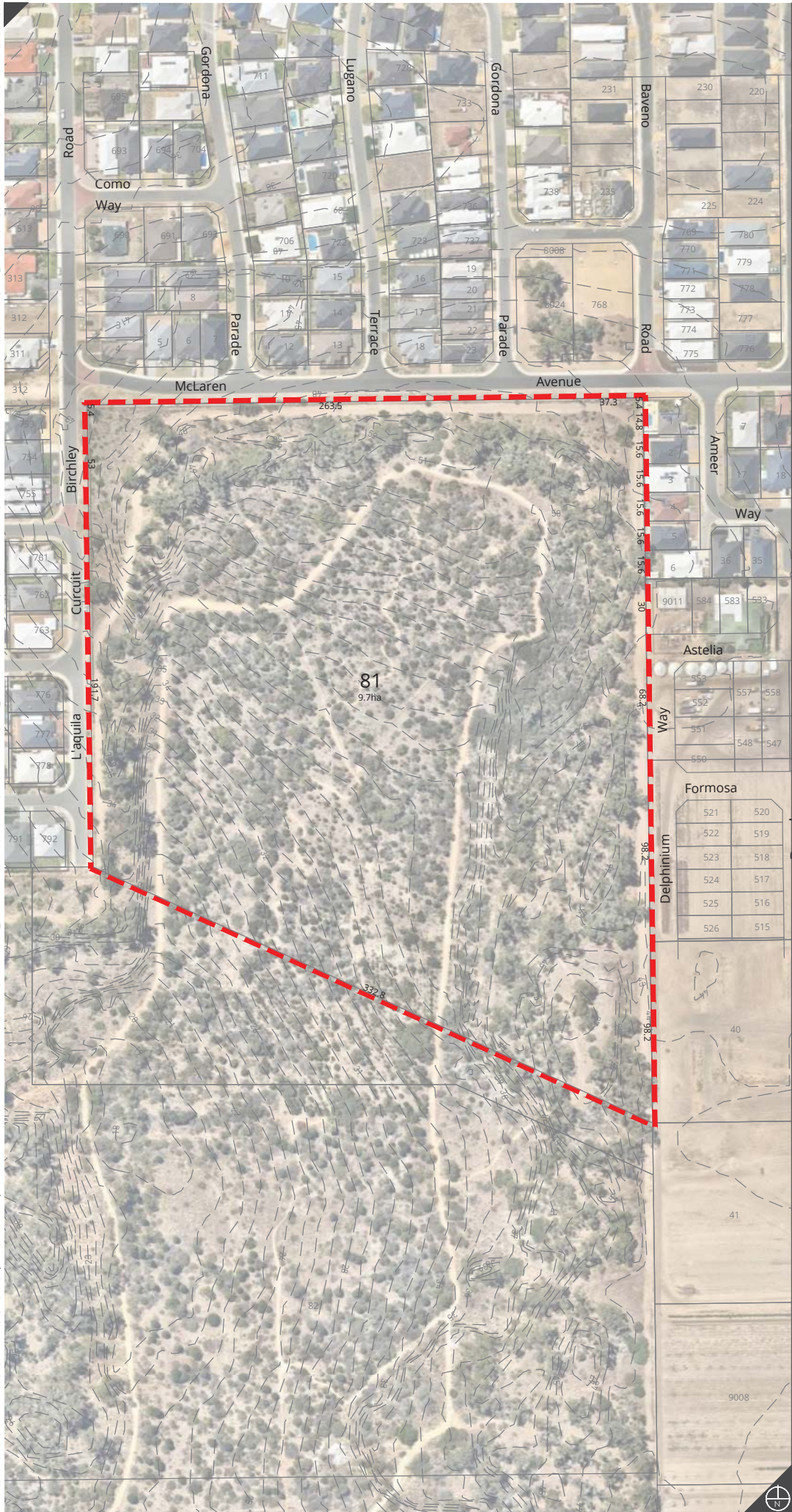
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Scale: 1:3000 @ A4
Client: Cockburn Cement Limited
Designer: A. Lohman
Drawn: A. Glaskin
Projection: MGA50 GDA94
Plan ID: 7222-FIG-18-B
Aerial photography captured and supplied by Nearmap



Site Plan

Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue)
Beeliar
Figure 3

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WESTERN



AUSTRALIA

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

REGISTER NUMBER 81/DP413024	
DUPLICATE EDITION 1	DATE DUPLICATE ISSUED 18/12/2017

VOLUME
2939FOLIO
351

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 81 ON DEPOSITED PLAN 413024

REGISTERED PROPRIETOR:
 (FIRST SCHEDULE)

BEELIAR MANAGEMENT PTY LTD OF 394 STIRLING HIGHWAY CLAREMONT WA 6010
 (T N795999) REGISTERED 22/12/2017

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
 (SECOND SCHEDULE)

1. THE LAND THE SUBJECT OF THIS CERTIFICATE OF TITLE EXCLUDES ALL PORTIONS OF THE LOT DESCRIBED ABOVE EXCEPT THAT PORTION SHOWN IN THE SKETCH OF THE SUPERSEDED PAPER VERSION OF THIS TITLE. VOL 1722 FOL 866.
2. *K529174 MEMORIAL. CONTAMINATED SITES ACT 2003 REGISTERED 7/3/2008.
3. N781395 EASEMENT TO ELECTRICITY NETWORKS CORPORATION FOR TRANSMISSION WORKS PURPOSES.SEE DEPOSITED PLAN 413024. REGISTERED 14/12/2017.
4. *N796000 MORTGAGE TO BRENLANE PTY LTD, NOELLE BEVERLEY AYLMOORE, DESTHARM PTY LTD, JENNIFER MARIE BEAN, PETER SCRIVENER BENNETT, JAY BENNETT, SHIRLEY BLOCH, ETHEL BROWN, BLYTH NOMINEES PTY LTD, JENALLEN PTY LTD, JOHN LEONARD CADDY, JOAN RAE CADDY, DENISE CALVER, ANDREW DAVID HARDY, DAVID JOHN CAMPBELL, DIANE MARILYN CAMPBELL, EUGENE ALBERT CARNAZOLA, ROBERT CHARLES CARR, LYN CHRISP PTY LTD, ANDREW STEWART COLES, ALEXANDRA CONSTANCE MANOOK, TOLEEN NOMINEES PTY LTD, CAROL ANNE ROYSTON, TW2 PTY LTD, TVT SUPER FUND PTY LTD, GEORGE DRONOW, JUNE PATRICIA DRONOW, BRIAN ALAN EBERT, JOY LYNETTE EBERT, JOSEF ECSERI, JOHANNA ECSERI, ISTVAN PETER LUTTER, KRISZTINA TOROK, RED HORSE PTY LTD, FREEGARD NOMINEES PTY LTD, WILLIAM JOHN GENAT, KATHRYN SHAIN, GIGLIA SUPER PTY LTD, RUTH GLICK, KENNETH CHARLES GROVES, EDITH SELVESTER HARRISON, EXTON NOMINEES PTY LTD, JOSHURICH PTY. LTD., GEOFFREY BENJAMIN PILPEL, HEIDI REBECCA PILPEL, DAVID HIRSH PILPEL, JESSIE LOUISE PILPEL, ANNA ROSE PILPEL, LINDA KIKIROS, ROSS ALFRED KEIRLE, DOURO PTY LTD, THORNWOOD NOMINEES PTY LTD, ROSLYN PATRICIA LUCE, ALLAN ROBERT MACPHERSON, ROSALIND CLARE MACPHERSON, JOSPEH DAMIAN MCDERMOTT, SUSAN MARGARET MCDERMOTT, EDITCETERA (WA) PTY LTD, ROSS A. MCDONALD PTY. LTD., ROGER GREGORY PETTMAN, PATRICIA MAE PETTMAN, KEITH ROYCROFT PHIPPS, MARGARET DAWN PHIPPS, BRYAN JOHN SPENCER REID, MONICA PAULINE REID, LOIS JANET REIFFER, LINDSAY CHARLES

END OF PAGE 1 - CONTINUED OVER

RECORD OF CERTIFICATE OF TITLE

REGISTER NUMBER: 81/DP413024

VOLUME/FOLIO: 2939-351

PAGE 2

RICHARDSON, NU-THOM NOMINEES PTY LTD, LOLA LALE SCHLEICHER, PANGA PTY LTD,
DIANE CATHERINE BURNS, PATRICK EDWARD TEMPLER, RUSSEL PHILIP THOMAS,
PENELOPE OLIVE THOMAS, NAOUMIS CHRISTOS VELLIOS, VASILIKI VELLIOS, PAULINE
FAY WEBB REGISTERED 22/12/2017.

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* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land
and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP413024
PREVIOUS TITLE: 1722-866
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AUTHORITY: CITY OF COCKBURN

NOTE 1: N544821 SECTION 138D TLA APPLIES TO CAVEAT B601064
NOTE 2: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING
N796000



LEGEND

Subject Site

ZONES

- Urban
- Rural

0 75 Metres

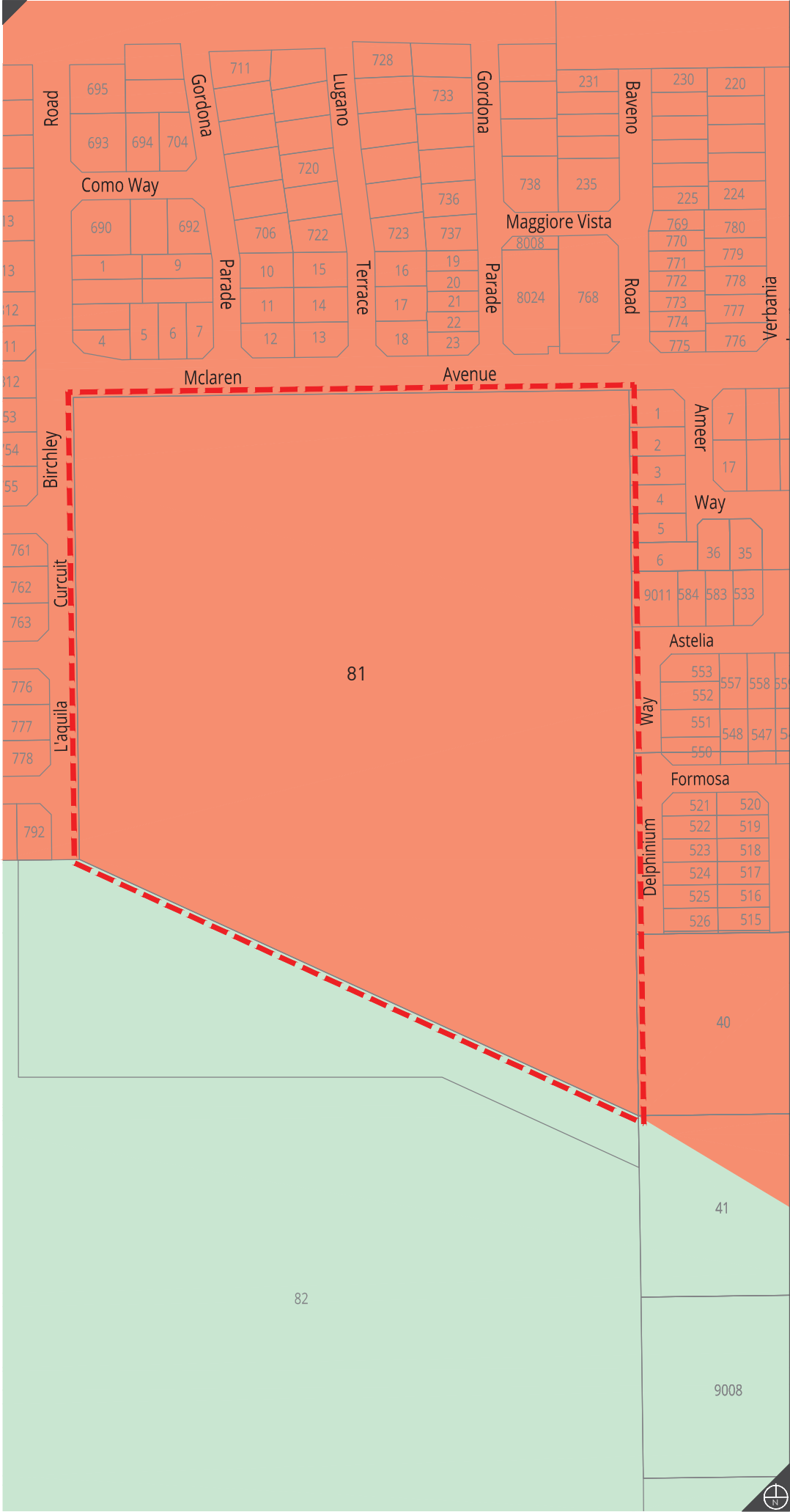
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B	2018.03.22	A. Glaskin



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Client: Cockburn Cement Limited
Designer: A. Lohman
Drawn: A. Glaskin
Projection: MGA50 GDA94
Plan ID: 7222-FIG-19-B
Zoning supplied by Western Australian Planning Commission



MRS Zoning

N:\TOWN PLANNING\7000-7999\7222\DRAWING\A-CAD\7222_FIG19B_20180329_LOT 81 BEELIAR (MRS).DWG
Adam Glaskin 22 March 2018

Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue)
Beeliar
Figure 4



LEGEND

- Subject Site
- ZONES**
 - Development
 - Special Use
- OTHER**
 - Development Contribution Area
 - Development Area - DA4
 - Lakes and Drainage

0 75 Metres

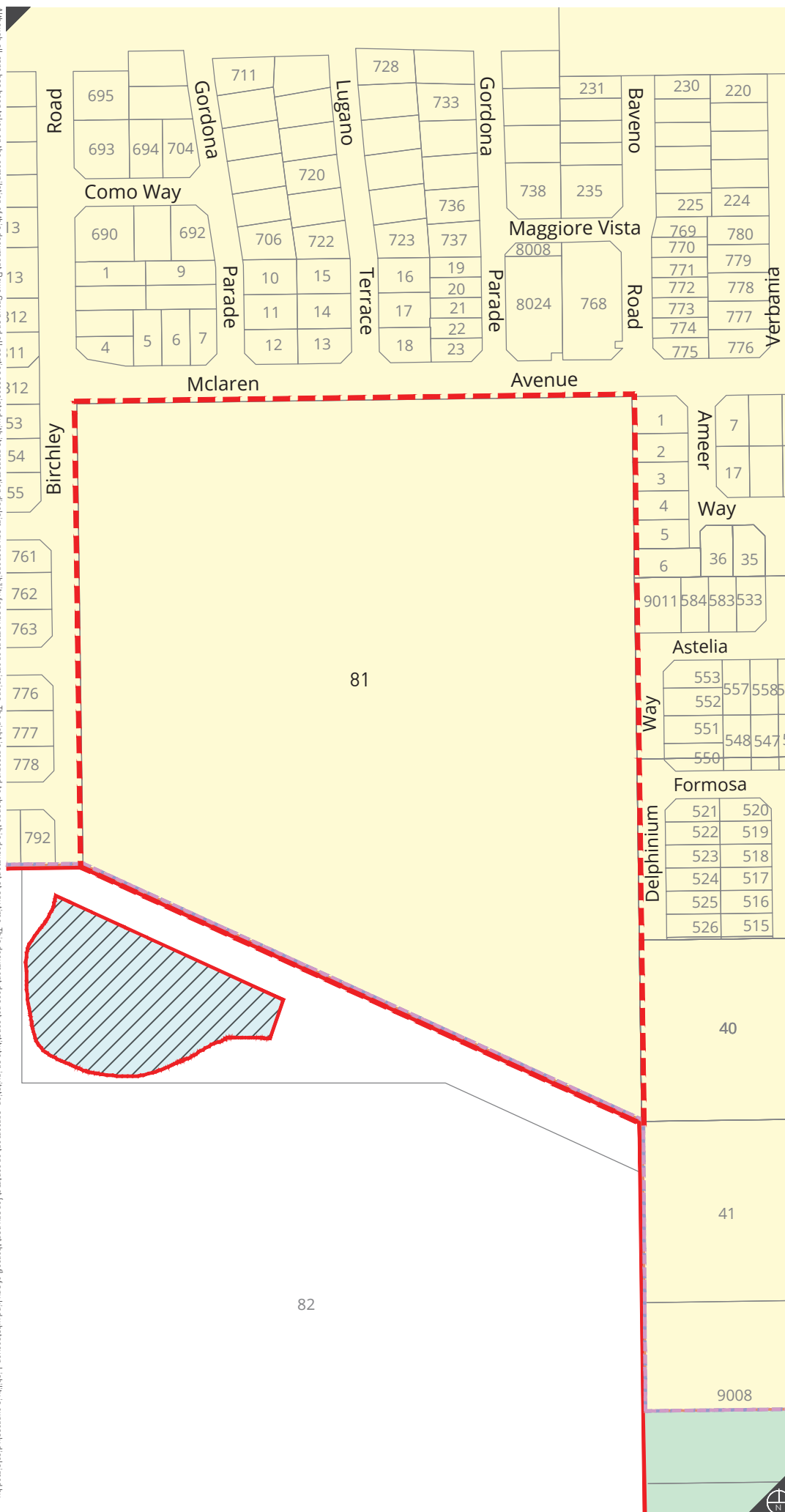
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Rev	Date	Drawn
A	2015.03.03	M. Sullivan
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C	2018.03.22	A. Glaskin



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Projection: MGA50 GDA94
Plan ID: 7222-FIG-20-C
Zoning supplied by Western Australian Planning Commission



TPS No.3 Zoning

Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue)

Beeliar

Figure 5



LEGEND

Structure Plan Area

Tuart Trees

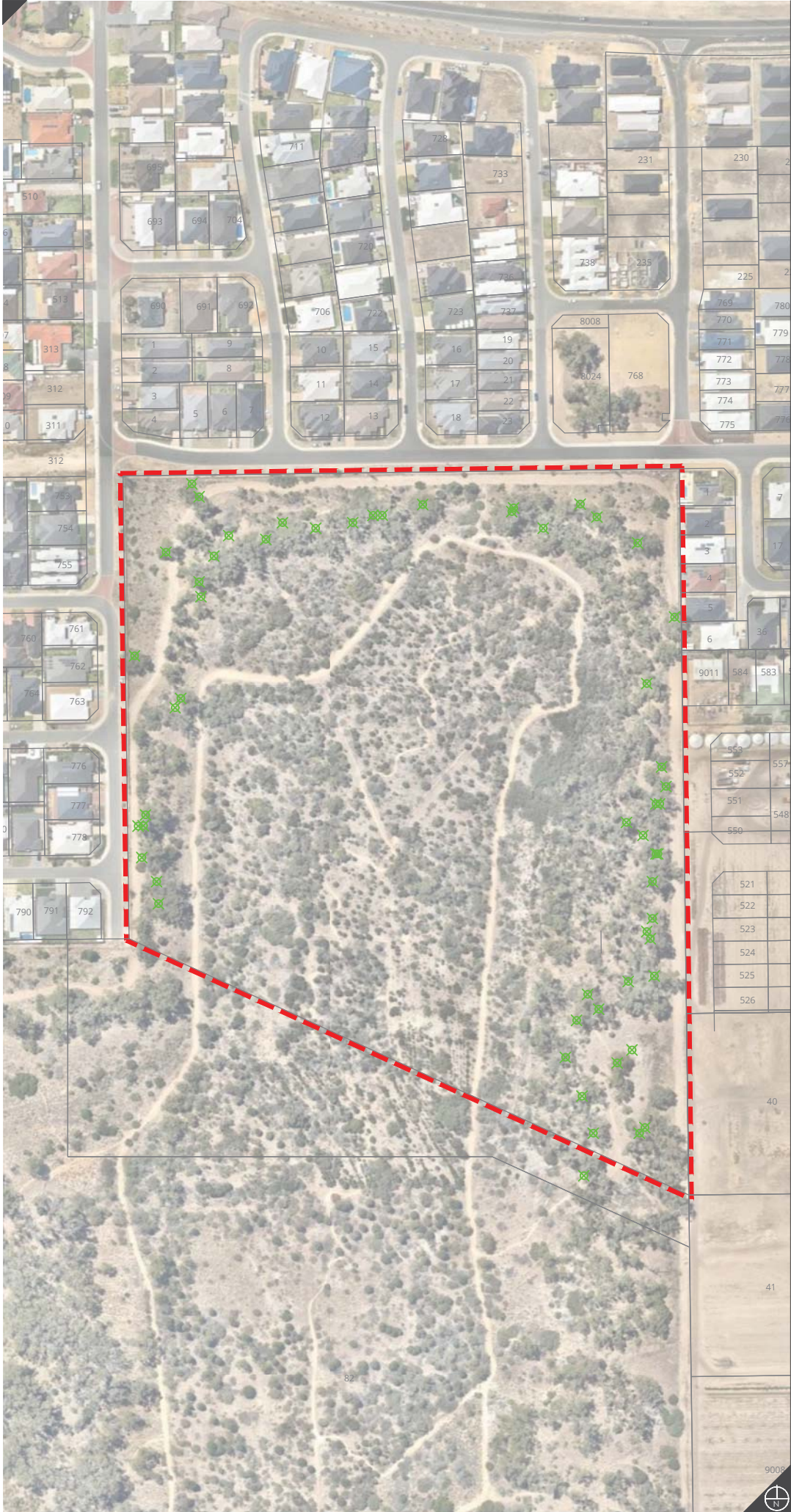
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Designer: A. Lohman
Drawn: M. Sullivan
Projection: NA
Plan ID: 7222-FIG-22-B
Aerial captured and supplied by Nearmap
Tree Locations supplied by 360 Environmental



Biodiversity Areas

Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue)
Beeliar
Figure 6

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LEGEND

- 43 — Finished Surface Contours
- 43 -- Existing Surface Contours
- Retaining Wall
- Tree Protection Zone

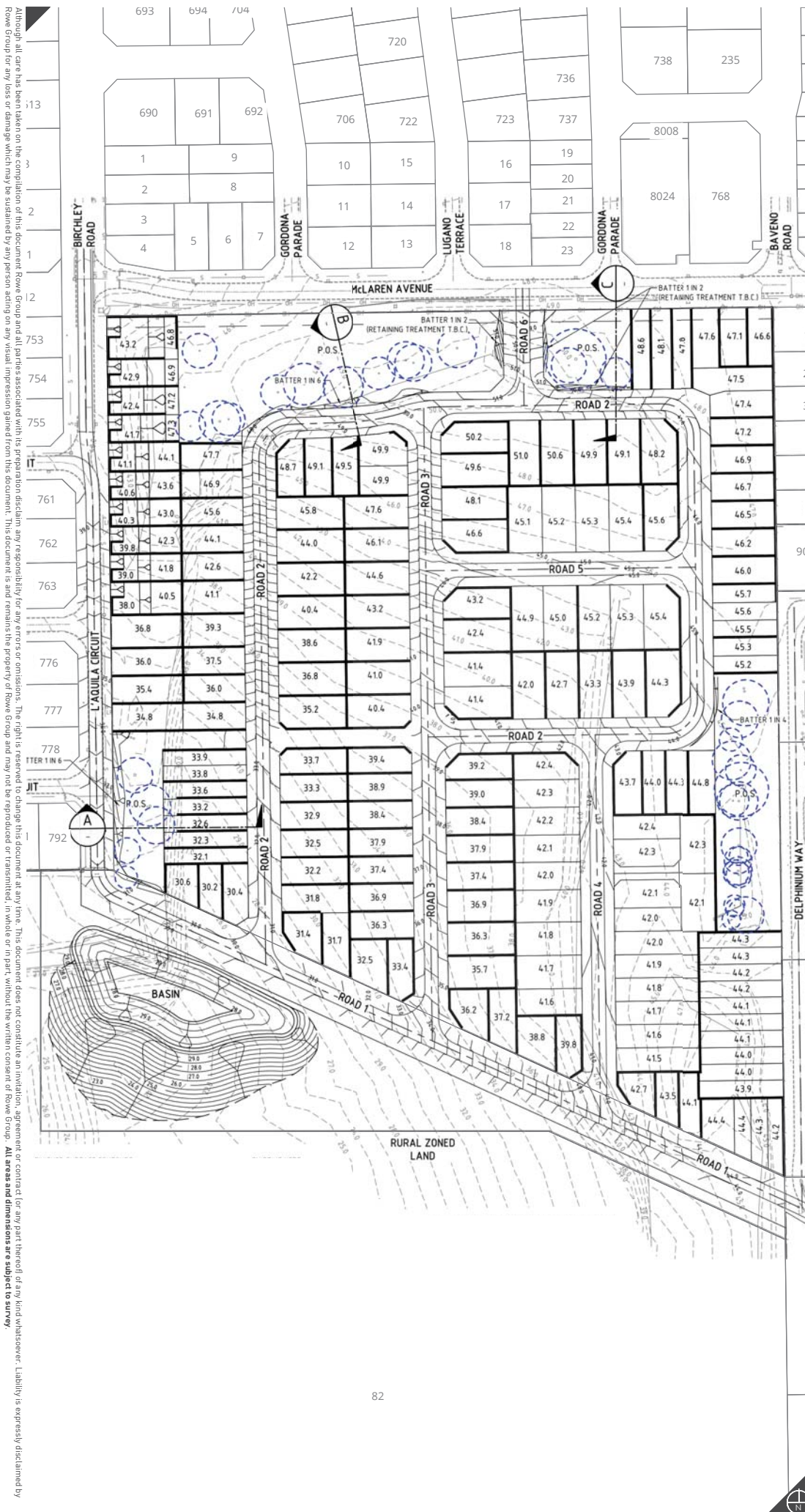
REVISIONS

Rev	Date	Drawn
A	2015.05.27	M. Sullivan
B	2018.03.28	A. Glaskin



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

Date Drawn: 2015-05-27
Job Ref: 7222
Scale: NTS @ A4
Client: Cockburn Cement Limited
Designer: A. Lohman
Drawn: M. Sullivan
Projection: N/A
Plan ID: 7222-FIG-28-B
Data supplied by Peritas Group



Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue) Preliminary Earthworks and Retaining Walls

N:\TOWN PLANNING\7000-7999\7222\DRAWING\A-CAD\7222_FIG28B_20180329_BEELIAR [EARTHWORKS].DWG
Adam Glaskin 28 March 2018



- LEGEND**
- RESIDENTIAL**
- Residential (R25)
 - Residential (R40)
- PARKS, RECREATION & CONSERVATION**
- Public Open Space
 - N Neighbourhood
- TRANSPORT**
- Pathway - Shared
 - Pathway - Pedestrian Only
- OTHER**
- Structure Plan Boundary
 - Trees to be retained
 - Trees for possible retention

0 50 100 Metres

REVISIONS

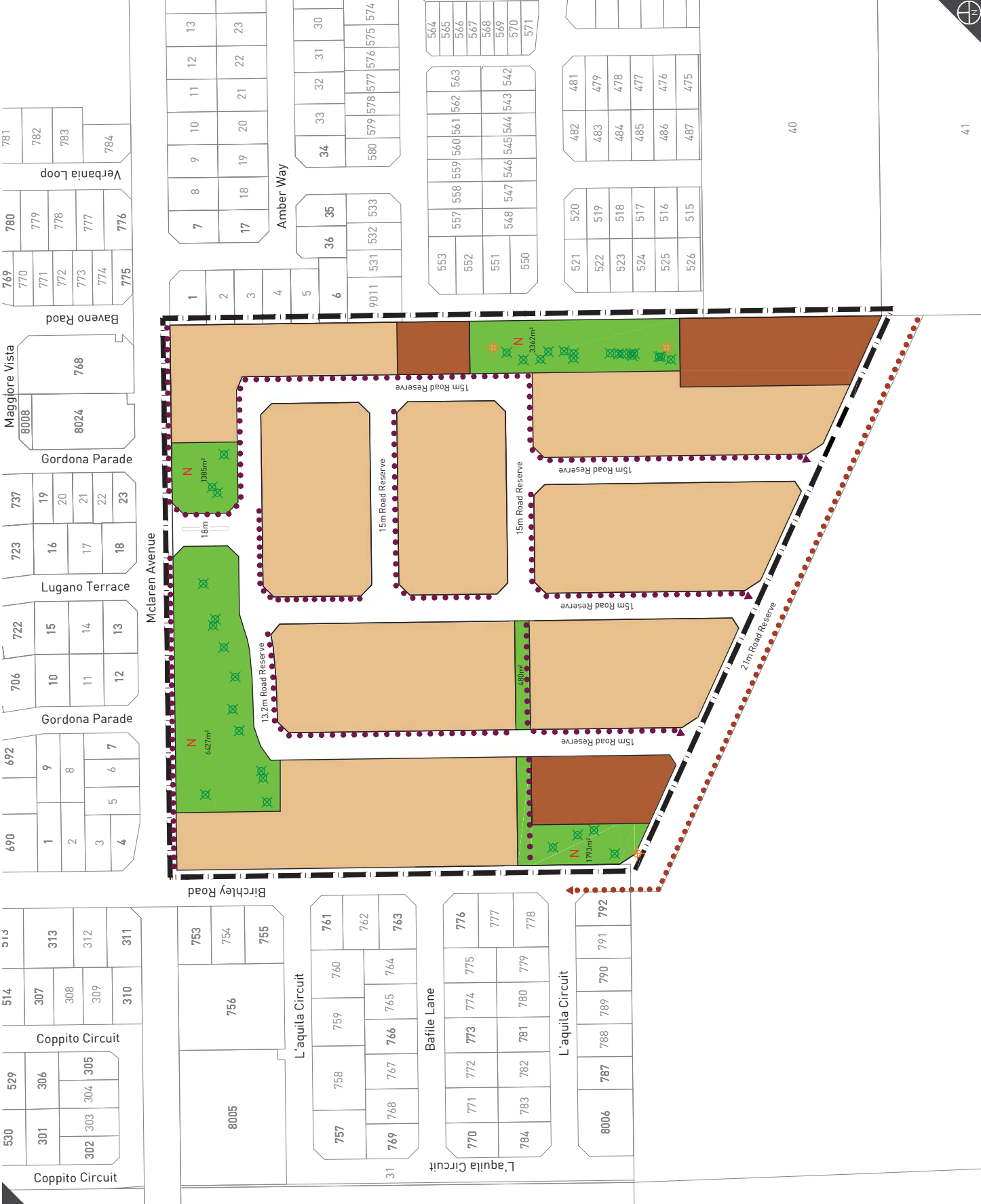
Rev	Date	Drawn
Q	2018.01.24	W. Clements
R	2018.02.26	W. Clements
S	2018.03.12	W. Clements
T	2018.03.14	W. Clements



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Date Drawn:	2015-06-22
Job Ref:	7222
Scale:	1:2000 @ A3
Client:	H. Beck
Designer:	D. Evans
Drawn:	W. Clements
Projection:	MGAS50 GDA94
Plan ID:	7222-LSP-08-T

Cadastral data supplied by Water Corporation of WA



Lot 81 Mclaren Avenue (formerly Lot 2 Fanstone Avenue)
Becliar
Figure 8

Local Structure Plan

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All areas and dimensions are subject to survey.



LEGEND

- Subject Site
- 7 Existing Lot Numbers
- Existing Boundaries
- Proposed Boundaries
- Public Open Space
- N Neighbourhood

0 75 Metres

REVISIONS

Rev	Date	Drawn
A	2015.03.03	M. Sullivan
B	2016.05.13	M. Sullivan
C	2018.01.15	W. Clements
D	2018.03.22	A. Glaskin



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Date Drawn: 2018.03.22
Job Ref: 7222
Scale: 1:3000 @ A4
Client: Cockburn Cement
Designer: A. Lohman
Drawn: A. Glaskin
Projection: MGA50 GDA94
Plan ID: 7222-FIG-21-D



Public Open Space Plan

Lot 81 McLaren Avenue (Formerly Lot 2 Fanstone Avenue) Beeliar

Figure 9

N:\TOWN PLANNING\7000-7999\7222\DRAWING\A-CAD\7222_FIG21D_20180329_BEELIAR (POS PLAN).DWG
Adam Glaskin 22 March 2018