

# **Ordinary Council Meeting**

8 April 2020

## **Minutes**

Note – That due to the current COVID-19 social distancing requirements, and in accordance with recently amended *Local Government (Administration) Regulations 1996*, that this Ordinary Meeting of Council was held electronically.



Agendas and Minutes are available on the City's website www.kwinana.wa.gov.au

## **TABLE OF CONTENTS**

| 1  | Opening and announcement of visitors4   |                |  |  |  |  |
|----|---|----------------|--|--|--|--|
| 2  | Acknowledgement of country  | . 4            |  |  |  |  |
| 3  | Dedication  | . 4            |  |  |  |  |
| 4  | Attendance, apologies, Leave(s) of absence (previously approved)  | . 5            |  |  |  |  |
| 5  | Public Question Time  | . 5            |  |  |  |  |
| 6  | Receiving of petitions, presentations and deputations:  | . 5            |  |  |  |  |
|    | 6.1 Petitions: 6.2 Presentations: 6.3 Deputations: 6.3.1 Mr Steve Sturgeon, on behalf of the Casuarina Wellard Progress Association regarding item 16.1, City of Kwinana Draft Submission on the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper – received electronically | <b>5 6</b>     |  |  |  |  |
| 7  | Confirmation of minutes   | . 6            |  |  |  |  |
|    | 7.1 Ordinary Meeting of Council held on 25 March 2020:  | 6              |  |  |  |  |
| 8  | Declarations of Interest (financial, proximity, impartiality – both real and perceived) by Members and City Officers  | . 7            |  |  |  |  |
| 9  | Requests for leave of absence   | . 7            |  |  |  |  |
| 10 | Items brought forward for the convenience of those in the public gallery  | . 7            |  |  |  |  |
| 11 | Any business left over from previous meeting  | . 7            |  |  |  |  |
| 12 | Recommendations of committees   | . 7            |  |  |  |  |
| 13 | Enbloc reports:   | . 7            |  |  |  |  |
| 14 | Reports - Community   | . 7            |  |  |  |  |
| 15 | Reports – Economic  | . 7            |  |  |  |  |
| 16 | Reports – Natural Environment   | . 8            |  |  |  |  |
|    | 16.1 City of Kwinana Draft Submission on the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper   | on             |  |  |  |  |
| 17 | Reports – Built Infrastructure  | 12             |  |  |  |  |
|    | 17.1 Amendment 2 to the Anketell South Local Structure Plan – Lots 1, 2 and Thomas Road, Anketell – Consideration of submissions and recommendation to the Western Australian Planning Commission   | on<br>2<br>_   |  |  |  |  |
| 18 | Reports – Civic Leadership  | 54             |  |  |  |  |
|    | 18.1 Budget Variations  | an<br>ent<br>8 |  |  |  |  |
| 19 | Chief Executive Officer, Officers and Committees 2019   | 5              |  |  |  |  |
|    |   |                |  |  |  |  |

| 20 | Notices of motions for consideration at the following meeting if given during the meeting |   |    |  |
|----|---|---|----|--|
| 21 | La  | ate and urgent Business   | 71 |  |
|    | 21.1  | Closure of beaches and reserves in the interest of public health - De of authority to Chief Executive Officer |    |  |
| 22 | Re  | eports of Elected Members   | 76 |  |
|    | 22.1  | Councillor Wendy Cooper   | 76 |  |
|    | 22.2  | Councillor Sandra Lee   |    |  |
|    | 22.3  | Councillor Matthew Rowse  |    |  |
|    | 22.4  | Councillor Sherilyn Wood  | 76 |  |
| 23 | Answers to questions which were taken on notice7  |   |    |  |
| 24 | Mayoral Announcements7  |   |    |  |
| 25 | 25 Confidential items   |   |    |  |
| 26 | Close of meeting  |   |    |  |

#### **Present:**

MAYOR CAROL ADAMS, OAM (electronically present) DEPUTY MAYOR PETER FEASEY (electronically present) CR W COOPER (electronically present) **CR M KEARNEY** (electronically present) CR S LEE (electronically present) (electronically present) CR M ROWSE CR D WOOD (electronically present) CR S WOOD (electronically present)

MR W JACK - Chief Executive Officer
MRS M COOKE - Director City Regulation
MRS M BELL - Director City Legal

MS A MCKENZIE - Council Administration Officer

Members of the Press 0 Members of the Public 0

## 1 Opening and announcement of visitors

Presiding Member declared the meeting open at 7:00pm and welcomed Councillors and City Officers in attendance.

## 2 Acknowledgement of country

#### Presiding Member read the Acknowledgement of county

"It gives me great pleasure to welcome you all here and before commencing the proceedings, I would like to acknowledge that we come together tonight on the traditional land of the Noongar people and we pay our respects to their Elders past and present."

## 3 Dedication

## Deputy Mayor Peter Feasey read the dedication

"May we, the Elected Members of the City of Kwinana, have the wisdom to consider all matters before us with due consideration, integrity and respect for the Council Chamber.

May the decisions made be in good faith and always in the best interest of the greater Kwinana community that we serve."

## **COUNCIL DECISION**

131

**MOVED CR C ADAMS** 

#### **SECONDED CR P FEASEY**

That Council suspend Standing Order 7.12 Recording of Proceedings and suspend any other Standing Order (or part of a Standing Order) that does not facilitate the meeting occurring by way of an eMeeting including but not limited to any Standing Order that requires an Elected Member to stand or sit as well as any Standing Order that require a member of the public to be present during the meeting in order to ask a question or give a presentation or deputation.

CARRIED 8/0

**Apologies** 

Nil

Leave(s) of Absence (previously approved):

Nil

## 5 Public Question Time

Nil

## 6 Receiving of petitions, presentations and deputations:

## 6.1 Petitions:

Nil

## 6.2 Presentations:

Nil

## 6.3 Deputations:

6.3.1 Mr Steve Sturgeon, on behalf of the Casuarina Wellard Progress Association regarding item 16.1, City of Kwinana Draft Submission on the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper – received electronically

My Name is Steve Sturgeon and I speak on behalf of The CWPA (Casuarina Wellard Progress Association Inc.).

Item 16.1 City of Kwinana Draft Submission on the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper.

We would like to fully endorse the officers' recommendation that Council adopt the City of Kwinana's response to the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper as detailed in Attachment A and Confidential Attachment B.

As you are fully aware both the CWPA and the City have had a long, frustrating and generally unproductive fight to save the two proposed Banksia Road sand mine project sites in Wellard / Oldbury. It is clear that without far reaching changes to the Federal and state acts dealing with native vegetation clearing permits, we will continue to experience similar problems trying to protect other valuable native vegetation sites within the City of Kwinana.

We commend the work being done by the City's officers and Councillors and thank you all for your ongoing support.

## 7 Confirmation of minutes

7.1 Ordinary Meeting of Council held on 25 March 2020:

COUNCIL DECISION

132

MOVED CR S LEE

**SECONDED CR W COOPER** 

That the Minutes of the Ordinary Meeting of Council held on 25 March 2020 be confirmed as a true and correct record of the meeting.

CARRIED 8/0

# 8 Declarations of Interest (financial, proximity, impartiality – both real and perceived) by Members and City Officers

Mayor Carol Adams declared an impartiality interest in item 17.2, Joint Development Assessment Panel Application for General Industry – Lithium Hydroxide Processing Plant – Lot 15 Mason Road, Kwinana Beach due to the applicant for the Lithium Hydroxide Processing Plant being a member of the Kwinana Industries Council, whom is her husband's employer. Further, the Mayor is a member of the Metro South Joint Development Assessment Panel who will decide the application when presented for consideration in due course.

Councillor Matthew Rowse declared an impartiality interest in item 17.2, Joint Development Assessment Panel Application for General Industry – Lithium Hydroxide Processing Plant – Lot 15 Mason Road, Kwinana Beach due to his involvement with the Joint Development Assessment Panel.

| 9 | Red | uests | for | leave | of | absence |
|---|-----|-------|-----|-------|----|---------|
|---|-----|-------|-----|-------|----|---------|

Nil

# 10 Items brought forward for the convenience of those in the public gallery

Nil

11 Any business left over from previous meeting

Nil

12 Recommendations of committees

Nil

13 Enbloc reports:

Nil

14 Reports - Community

Nil

15 Reports - Economic

Nil

## 16 Reports - Natural Environment

16.1 City of Kwinana Draft Submission on the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper

#### **DECLARATION OF INTEREST:**

There were no declarations of interest declared.

#### SUMMARY:

The Environmental Protection and Biodiversity Conservation Act, 1999 (EPBC Act) is Australia's central piece of environmental legislation and deals with Matters of National Environmental Significance (MNES). The EPBC Act is required to be independently reviewed every 10 years. The first review, the Hawke Review, was completed in 2009. Recommendations of the Hawke Review were never considered by Australian parliament. This review will be the second of the legislation and is a once in a decade opportunity to influence reform of the EPBC Act.

The Federal Government appointed an independent panel of experts to undertake the review of the EPBC Act. A Discussion Paper (the Paper) was released for public comment in November 2019 by the review panel, submissions are due in April 2020. The review panel's draft report is expected to be released within 12 months of the closing of submissions.

The City of Kwinana (the City) and other West Australian Local Governments have significant interaction with the EPBC Act, in particular, in matters of land use planning. City Officers have prepared a draft response to the Paper for Council's consideration, please see Attachment A.

#### OFFICER RECOMMENDATION:

That Council adopt the City of Kwinana response to the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper as detailed in Attachment A and Confidential Attachment B.

#### **DISCUSSION:**

#### City Responsibilities under the EPBC Act

The City has significant responsibilities in the application of environmental legislation in the context of land use planning and as a land manager and owner. As a rapidly urbanising peri-urban local government, the City is tasked with the challenge of balancing competing land-use pressures and the conservation of significant and valuable natural areas. The City is part of a small number of metropolitan Local Governments to have MNES protected under the EPBC Act within its jurisdiction. These include, but are not limited to, the iconic West Australian Threatened Ecological Communities (TEC) of Banksia and Tuart Woodlands as well as habitat that supports Endangered and Vulnerable fauna species such as the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) and Carnabys Cockatoo (*Calyptorhynchus latirostris*). Confidential Attachment B is a map showing the extent of flora and fauna protected under the EPBC Act.

16.1 CITY OF KWINANA DRAFT SUBMISSION ON THE INDEPENDENT REVIEW OF THE ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 DISCUSSION PAPER

## **Community Values**

The community of the City of Kwinana recognises and values its significant natural assets. This is demonstrated within the *City of Kwinana Strategic Community Plan's* (2019 – 2029) aspirational goal to be "surrounded by nature". The Strategic Community Plan 2019 -2029 acknowledges the importance that the local community places on the protection and conservation of its biodiversity.

The City faces increasing pressure in sustaining this aspirational goal. This is largely due to a combination of urban development and resource mining land-uses. To address these threats the *City of Kwinana Local Planning Policy No.1 Landscape Feature and Tree Retention, 2016* was developed to ensure that native vegetation is conserved in each new development area in alignment with its *Strategic Community Plan*. However, in the majority of circumstances, the City has little statutory power to address the rapid decline of MNES within its local area as the assessment and approval of impacts on its most valuable environmental assets is largely decided at the State and, in the case of the EPBC Act, Federal Government levels.

### **The Discussion Paper**

The Paper raises broad questions that essentially seek to answer:

- ➤ Is the EPBC Act delivering what was intended in an efficient and effective manner?
- ➤ How well is the EPBC Act being administered?
- Is the EPBC Act sufficient to address future challenges, and why?
- What are the priority areas for reform?
- What changes are needed to the EPBC Act, and why?

#### Conclusion

The Draft City of Kwinana submission on the Independent Review of the EBPC Act Discussion Paper acknowledges that many factors have led to the continued decline of our natural environment. However, also considers that significant flaws in the legislation and priorities given to different parts of the EPBC Act have had a major role to play in this decline. The Draft Submission also highlights the existence of a global biodiversity hotspot in south-west Western Australia, which is inclusive of the Swan Coastal Plain and the City of Kwinana and expresses the local communities' value of, and connectedness to, these diminishing natural areas. As such, the Draft Submission highlights areas for reform including:

- Strategic and bioregional assessment to address accumulative environmental impacts
- Greater transparency of the assessment and approvals process with a reduction in the duplication of assessments under separate State and Federal legislation
- Efficient and effective administration of regulation including regular state of the environment reporting with oversight of the implementation of the EPBC Act by an independent board or agency
- Improved assessment processes including analysis by State based staff with greater opportunities for Local Government and local communities to be a part of the decision making process on MNES

16.1 CITY OF KWINANA DRAFT SUBMISSION ON THE INDEPENDENT REVIEW OF THE ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 DISCUSSION PAPER

#### **LEGAL/POLICY IMPLICATIONS:**

The following legislation has the potential to be impacted by amendments to the EPBC Act, 1999:

Environmental Protection Act, 1986 Clearing of Native Vegetation Regulations, 2004 Biodiversity Conservation Act, 2016

## FINANCIAL/BUDGET IMPLICATIONS:

There are no financial or budget implications.

#### **ASSET MANAGEMENT IMPLICATIONS:**

There are no asset management implications as a result of this report.

#### **ENVIRONMENTAL IMPLICATIONS:**

As the Discussion Paper is part of an ongoing review of the EPBC Act there are no implications at this early stage.

## STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective detailed in the Strategic Community Plan.

| Plan                     | Outcome  | Objective   |
|--------------------------|--|---|
| Strategic Community Plan | Increase in % of community satisfied with conservation and | 1.3 Improve conservation of biodiversity and protection of                                    |
|                          | environmental management                                   | native vegetation whilst achieving high levels of environmental protection in new development |

## **COMMUNITY ENGAGEMENT:**

There are no community engagement implications as a result of this report.

#### **PUBLIC HEALTH IMPLICATIONS**

There are no implications on any determinants of health as a result of this report.

16.1 CITY OF KWINANA DRAFT SUBMISSION ON THE INDEPENDENT REVIEW OF THE ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 DISCUSSION PAPER

#### **RISK IMPLICATIONS:**

The risk implications in relation to this proposal are as follows:

| Risk Event                                   | Reduced rigor of environmental assessment by the Federal Government, resulting in a reduction of environmental protection and conservation |
|--|--|
| Risk Theme                                   | Inadequate environmental management  |
| Risk Effect/Impact                           | Environment  |
| Risk Assessment<br>Context                   | Operational  |
| Consequence                                  | Moderate   |
| Likelihood                                   | Possible   |
| Rating (before treatment)                    | Moderate   |
| Risk Treatment in place                      | Reduce - mitigate risk   |
| Response to risk treatment required/in place | Advocate for adequate environmental protection to Federal Government   |
| Rating (after treatment)                     | Moderate   |

## **COUNCIL DECISION**

133

## **MOVED CR W COOPER**

**SECONDED CR S WOOD** 

That Council adopt the City of Kwinana response to the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 Discussion Paper as detailed in Attachment A and Confidential Attachment B.

CARRIED 8/0





March 2020

**DRAFT SUBMISSION -INDEPENDENT REVIEW** OF THE **ENVIRONMENTAL PROTECTION AND BIODVIDERSITY CONSERVATION ACT (1999) - DISCUSSION PAPER CITY OF KWINANA SUBMISSION** 

#### **SUBMISSIONS CLOSE 17 APRIL 2020**

#### INTRODUCTION

The City of Kwinana (the City) welcomes the opportunity to respond to the Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) Discussion Paper (the Paper).

The City and other West Australian Local Governments have significant interaction with this legislation, in particular, in matters of land use planning. The City has prepared the following submission in response to the Paper.

This submission from the City covers some background information and then details issues and concerns in relation to the Paper for the Independent Review of the EPBC Act.

For clarification on any matters in this submission, please contact the City's Senior Environmental Planner, Christine Burtenshaw, on (08) 9439 0200 or by email: customer@kwinana.wa.gov.au

### **BACKGROUND**

The Local Government Act 1995 (LG Act) states that:

'In carrying out its functions a local government is to use its best endeavors to meet the needs of current and future generations through an integration of environmental protection, social advancement and economic prosperity (S 1.3(3))'.

In regarding the obligations inherent in fulfilling the intent of the aforementioned objective of the LG Act, the City has significant responsibilities in the application of environmental legislation in the context of land use planning and as a land manager and owner. As a rapidly urbanising peri-urban local government, the City is tasked with the challenge of balancing competing land-use pressures and the conservation of significant and valuable natural areas. The City is fortunate to have MNES protected under the EPBC Act within its jurisdiction. These include the iconic West Australian Threatened Ecological Communities (TEC) of Banksia and Tuart Woodlands as well as habitat that supports Endangered and Vulnerable fauna species such as the Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso) and Carnabys









Cockatoo (*Calyptorhynchus latirostris*). Attachment A shows the extent of MNES within the City of Kwinana.

The community of the City of Kwinana recognises and values its significant natural assets and as such has identified these within the *City of Kwinana Strategic Community Plan 2019 – 2029*. This is demonstrated by the community's aspirational goal to be (and remain) "surrounded by nature". The *Strategic Community Plan 2019 -2029* was developed following extensive community consultation and acknowledges the importance that the local community places on the protection and conservation of its biodiversity.

The City faces increasing pressure in sustaining its aspiration to be 'surrounded by nature'. This is largely due to a combination of urban development and resource mining land-uses. To address the former threat the City of Kwinana Local Planning Policy No.1 Landscape Feature and Tree Retention (2016) was developed to ensure that native vegetation is conserved in each new development area in alignment with its Strategic Community Plan. However, in the majority of circumstances, the City has little statutory power to address the rapid decline of MNES within its local area as the assessment and approval of impacts on its most valuable environmental assets is largely decided at the State and, in the case of the EPBC Act, Federal Government levels.

#### **COMMENT ON THE DISCUSSION PAPER**

## **Priorities for Reform – Strategic and Bioregional Assessment**

Current assessment and approval processes under the EPBC Act are widely viewed as confusing, inconsistent and lacking in transparency. A broadly expressed criticism focuses on the current practice of assessment that neglects to consider the accumulative impacts of actions on the environment but rather considers each assessment (and its impacts) individually. This demonstratively has resulted in the 'death by a thousand cuts' of the vast majority of vegetation complexes on the Swan Coastal Plain of Western Australia (WA) and engenders the perception of weakness of the EPBC to protect and conserve Australia's most significant biodiversity.

South west WA is one of 20 globally recognised biodiversity hotspots. The vast and unique flora and fauna of WA has the potential to stimulate significant and sustainable economic growth through eco-tourism and associated industries. However, continuing declines of MNES suggest that the Objects of the EPBC Act are not being met. The EPBC Act has not been instrumental in the protection or conservation of the States biodiversity. The City therefore strongly recommends that the EPBC Act is amended to mandate a strategic, bioregional assessment and approvals process that is considerate of accumulative impacts and includes regular quantitative evaluation and reporting on the state of the environment and the effectiveness of the EPBC Act.

#### **Assessment and Approvals**

The City also advocates for greater transparency of the assessment and approvals process, with all reports (proponent and government) made available to the public. This would assist in

D20/14483 Page **2** of **3** 

the promotion of consistent and rigorous decision making. Additionally, the duplication of assessments for proposals under separate State and Federal regulation should be addressed by the implementation of bilateral agreements between the WA State and Federal Governments.

Federal environmental assessments are generally desktop-based exercises with no onsite ground-truthing undertaken. The City considers that onsite assessment is fundamental to gaining a comprehensive understanding of a proposal and its potential impacts on the receiving environment. It is therefore recommended that the Federal Department of Environment and Energy increases its regional presence within WA to allow for a more thorough assessment of proposals that includes a field-based component.

Additionally, the current assessment process of notification to stakeholders is antiquated with the primary focus on the proponent. Greater emphasis on engaging impacted stakeholders, including earlier engagement and a more efficient notification process is required.

#### **Efficient and Effective Regulation Administration**

There is currently no instrument that provides independent oversight of the implementation of the EBPC Act. It is suggested that the EPBC Act includes a requirement for the provision of regular reporting on the state of the environment by an independent board or agency. This would enable an instrument of measurement of the effectiveness of the EPBC Act and its implementation.

#### CONCLUSION

The City of Kwinana, whilst welcoming the opportunity to comment on the Discussion Paper for the Independent Review of the EPBC Act and acknowledging that many factors have led to the continued decline of our natural environment, considers that significant flaws in the legislation and priorities given to different parts of the Act have had a major role to play. It is evident that considerable resources are allocated for the assessment and approval of actions, yet little reform and resourcing is afforded to the equally important areas of strategic planning and bioregional assessment.

Section 522A of the EPBC Act requires that the statutory review of the Act investigates the extent to which the Objectives of the Act have been achieved. Clearly the ongoing decline of biodiversity is evidence that the right balance has not been achieved in ecologically sustainable development. Additional long-term funding must be allocated for essential data collection and analysis to inform bioregional and strategic planning.

The City also considers that Local Government should be given the opportunity and support to play a more cooperative role with other levels of government in achieving the Objects of the EPBC Act, given that they have intimate knowledge of the communities' value and use of local natural areas and its biodiversity.

Maria Cooke Director City Regulation

D20/14483 Page 3 of 3

## 17 Reports – Built Infrastructure

17.1 Amendment 2 to the Anketell South Local Structure Plan – Lots 1, 2 and 3, Thomas Road, Anketell – Consideration of submissions and recommendation to the Western Australian Planning Commission

#### **DECLARATION OF INTEREST:**

There were no declarations of interest declared.

#### SUMMARY:

A proposed amendment (Amendment 2) to the Anketell South Local Structure Plan (ASLSP) for Lots 1, 2 and 3 Thomas Road, Anketell has been lodged with the City of Kwinana (City) in accordance with Schedule 2, Clause 16(3) of the *Planning and Development Regulations 2015* (PD Regulations). The area the subject of Amendment 2 is shown in Attachment A.

The proponent also submitted a Development Plan (Version A) (Attachment B) to demonstrate the intended development and to support a development application for Stage 1 that has been lodged with the City. The Stage 1 development application includes a service station with a convenience store, fast food outlet and a shop (Attachment C). Stage 2 is proposed to include a supermarket, three shops, a café and a childcare centre. The City is also in receipt of a subdivision application referral from the Western Australian Planning Commission (WAPC) that proposes to create 51 residential lots and three commercial lots within the area the subject of the ASLSP (Attachment D).

Amendment 2 (Version B) to the ASLSP proposes to reconfigure the shape and increase the size of the Neighbourhood Centre so that it can better accommodate the dimensions of a supermarket and associated tenancies, relocate the Local Community Centre (Version B), and provide a 'Main Street' (Version B).

Amendment 2 and the Development Plan have been advertised twice (Versions A and B) due to the extent of the modifications to the amendment and Development Plan following the first period of advertising. The modifications were made following discussions between City Officers and the proponent to improve the design and integration of the shopping centre and Local Community Centre. The modified design includes a pedestrian focused 'Main Street' as shown in Attachments E and F.

Version A of Amendment 2 and the Development Plan, were advertised from 5 November 2018 to 7 December 2018 (Attachments A and B respectively). Version B of Amendment 2 and the Development Plan, were re-advertised for community comment from 3 May 2019 to 24 May 2019 (Attachments E and F respectively).

The modifications included in Version B of Amendment 2 and the Development Plan are:

a) Relocation of the Local Community Centre (3,072m² site, including 60 car bays) to a position alongside the shopping centre, rather than on the opposite side of the north-south distributor road.

- b) Redesign of the Neighbourhood Centre to create a stronger integration between the retail uses, child care facility and the Local Community Centre. Retail shops are to front onto and provide an 'active' building edge to the 'Main Street' to ensure interest and vitality to the public realm.
- c) Provision of a 'Main Street' between the Local Community Centre and shopping centre to provide an active pedestrian friendly focus for the Neighbourhood Centre. The 'Main Street' is also intended to provide a traffic and parking function.
- d) Redesign of the ASLSP to provide a 10 metre wide service road (adjacent to Thomas Road and south of the drainage reserve) to link the proposed shopping centre with the eastern boundary of Lot 17 Thomas Road.
- e) Allowing for reciprocal parking and access within the Neighbourhood Centre (Local Community Centre and shopping centre).
- f) Provision of an R80 residential area at the intersection of Thomas Road and the proposed north-south distributor road.
- g) Provision of footpath through the service corridor located between the service station site and the shopping centre, to promote safe access for pedestrians and cyclists.
- h) Screening of the service yard situated on the south side of the shopping centre from roads and parking areas to the satisfaction of the City.

The submissions received by the City during the advertising of Versions A and B of Amendment 2 and Development Plans, and the City's comments on each submission are summarised in the Schedules of Submissions for Versions A and B (Attachments G and H respectively). The key points raised in the submissions were:

- a) The owners of Lot 17 Thomas Road (situated to the west of Amendment 2) are concerned about access/egress from their property to Thomas Road and to the north-south distributor road. They have requested that at least two means of access be provided between Lot 17 Thomas Road and the north-south distributor road, including the:
  - 'Main Street' between the shopping centre and Local Community Centre; and
  - a service road between the shopping centre and the service commercial area proposed on Lot 17 Thomas Road so that there is adequate access between these two areas.

A 'Main Street' between the Local Community Centre and shopping centre has been identified in Version B of Amendment 2 and the Development Plan.

b) The owner of the Cockburn Gateway Shopping Centre is concerned that the proposed commercial (retail/shop) floor space expansion (4,692m²) is inconsistent with the City's Local Commercial and Activity Centre Strategy (LCACS) which identifies the potential for 4,000m² of retail/shop floor space in this location.

The proposed commercial floor space for the Neighbourhood Centre includes a service station with a floor area of 240m². City Officers are of the view that the service station should be excluded from the overall commercial floor space for the Neighbourhood Centre and on this basis the Neighbourhood Centre is 452m² larger than the 4,000m² threshold identified in LCACS.

City Officers recommendations to prepare a Neighbourhood Centre Concept Plan (NCCP)

Following the advertising of versions A and B of the Development Plans, City Officers requested that an NCCP be prepared which clearly identifies design elements to improve the integration of the shopping centre, Local Community Centre and the service commercial area on Lot 17. The applicant has submitted an NCCP (Attachment I).

Whilst showing the design layout of Development Plan (Version B) and noting some key design elements, the NCCP does not, in the view of City Officers, sufficiently address the key objectives and design responses for the Neighbourhood Centre. City Officers recommend that the NCCP be further modified to include a number of design objectives and design responses prior to the City forwarding the ASLSP to the WAPC.

#### OFFICER RECOMMENDATION:

The Council takes the following action in respect to Amendment 2 (Version B) to the Anketell South Local Structure Plan (ASLSP):

 Requests that the applicant amend the Neighbourhood Centre Concept Plan (NCCP) to the satisfaction of the City of Kwinana, which is to be included in Part 1 of the Anketell South Local Structure Plan (ASLSP). The amendments should include (but are not limited) to the following:

Replacement of the dot points in the current NCCP to include a set of key design objectives and design responses for the following components:

- a) The 'Main Street' is to be an attractive and engaging public realm, facilitate a pedestrian-orientated environment whilst accommodating vehicles and associated parking space.
  - The design response requires attractive and active built form frontages, the requirement for retail/speciality shops on the southern side of the 'Main Street', on-street parking, and high quality tree planting and landscaping (including seating and shade).
- b) Built form and landscaping across the Neighbourhood Centre shall be attractive, respond to public spaces and safe.

The design response specifies the requirement for the landmark corners, articulated frontages for blank walls fronting the distributor road, high quality screening of service yards, and the incorporation of Crime Prevention through Environmental Design (CPTED) principles. Landscaping reinforces the public realm, provides shade, and visual relief against wall features and in car parks.

c) Create a neighbourhood hub, land use co-dependency and shared parking and pedestrian/cycling /traffic movements.

The design response addresses the location of the Community Purpose Site (3,072m²) and associated parking, requirements for shared parking, pedestrian/traffic movements over the private/public domain and promotes cohesive built form types.

The above should be reinforced by notations or shapes on the NCCP, the inclusion of visual illustrations or sketches which clearly show the intent behind the required design elements. This should include a sketch cross section of the 'Main Street'.

- Subject to Point 1 above, advises the Western Australian Planning Commission (WAPC) that it supports Amendment 2 (Version B) to the Anketell South Local Structure Plan (ASLSP) subject to:
  - a) Modification of Amendment 2 (Version B) to provide an additional 446m<sup>2</sup> of public open space (POS) to the proposed POS area situated to the east of the Neighbourhood Centre (adjacent the eastern boundary of the ASLSP).
  - b) Inclusion of the following in Part 1 of Amendment 2, to the City's satisfaction:
    - i. Future development is to be in accordance with the NCCP (as amended) as adopted by the City.
    - ii. Preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public.
    - iii. Preparation of a Traffic and Pedestrian Management Plan (TPMP) to the satisfaction of the City of Kwinana. The TPMP should include details concerning:
      - The provision a service road (10 metres wide) connecting the north-south distributor road (between the shopping centre and service station) to the eastern boundary of Lot 17;
      - The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;

- Service trucks are able to manoeuvre through the intersection without traversing any road infrastructure; and are able to manoeuvre in and out of the crossover, lane correct so as to not be blocked or block traffic travelling in the opposing direction and potentially block vehicles travelling on the main north-south distributor road;
- The provision of a 'Main Street' between the shopping centre and Local Community Centre;
- Reciprocal rights of access to facilitate co-ordinated and efficient vehicle movement and parking within the Neighbourhood Centre.
   It should also link to the eastern boundary of Lot 17 Thomas Road;
- That the shopping centre car park is designed to facilitate through traffic between the north-south distributor road and future residential development on Lot 17; and
- That sixty car bays for the Local Community Centre can be provided to the City of Kwinana's satisfaction within the Local Community Centre site.

The TPMP shall be prepared and adopted so as to inform subdivision design and/or any development approvals for the area of Amendment 2 (Version B).

- iv. Preparation of a Traffic Noise Assessment (TNA) assessing the impact of traffic noise from Thomas Road and/or future service station on residential areas including appropriate noise mitigation measures such as acoustic barriers and/or quiet house design requirements and an implementation plan to the satisfaction of the City of Kwinana. The TNA shall be prepared and adopted so as to inform subdivision design and/or any development approvals for the area of Amendment 2 (Version B).
- v. That a Local Water Management Strategy (LWMS) is to be prepared to the satisfaction of the Department of Water and Environmental Regulation and the City of Kwinana. The LWMS shall demonstrate that the drainage reserve adjacent to Thomas Road is of sufficient size and capacity to the satisfaction of the City of Kwinana.
  - The LWMS shall be prepared and adopted so as to inform subdivision design and/or any development approvals for the area of Amendment 2.
- vi. All development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.
  - No development (including fill, fencing, storage or parking) will be permitted within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator.

- vii. That the R80 coded residential site situated on the north-east corner of the Thomas Road and north-south distributor road be developed as grouped dwelling and/or multiple dwelling (minimum 2 storeys) in accordance with the R80 requirements set out in State Planning Policy 3.1 Residential Planning Codes or other land uses permitted in the 'Development' zone under Local Planning Scheme 2.
- c) Request that the WAPC impose the following conditions on future subdivision applications with the area the subject of Amendment 2 requiring:
  - The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;

The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;

- ii. Service trucks are able to manoeuvre through the intersection without traversing any road infrastructure; and are able to manoeuvre in and out of the crossover, lane correct so as to not be blocked or block traffic travelling in the opposing direction and potentially block vehicles travelling on the main north-south distributor road;
- iii. Preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public.
- iv. Provision of Section 70A Notifications on all proposed lots adjoining the existing Western Power registered easement advising prospective purchasers that they are in close proximity to power infrastructure which will be maintained, upgraded and expanded on a regular basis.

All development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.

No development (including fill, fencing, storage or parking) will be permitted within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator.

- v. Provision of Section 70A Notifications on all proposed lots that may be subject to excessive noise levels from Thomas Road and/or future service station (in accordance with a Traffic Noise Assessment that has been endorsed by the City of Kwinana) advising prospective purchases that the lot is situated in the vicinity of Thomas Road and/or future service station and is currently affected and/or may in the future be affected by transport noise.
- vi. Preparation of an Urban Water Management Plan for Lot 1, 2 and 3
  Thomas Road in consultation with the City of Kwinana and Department
  of Water and Environmental Regulation.
- vii. Preparation of a Local Development Plan (LDP) for the proposed Neighbourhood Centre as part of the subdivision approval for proposed Lots 52, 53 and 54. Amongst other things, the LDP should address the design elements detailed in NCCP (as amended) included in Part 1 of the ASLSP as well as the following points:
  - Architectural treatment and design of the built form interface to Thomas Road.
  - Details as to the acceptable building elevations to the street level tenancies facing the 'Main Street'. These should be predominantly glazed, with no more than 30% of the façade comprising solid walls. Tenancy windows facing the 'main street' are to be unobscured glass.
  - Details in respect to the verandahs or awnings to be constructed along the 'Main Street' and that these would extend the whole length of all buildings located along the 'Main Street' frontage to provide weather protection to the street space and building entrances.
  - Details as to the provision of a footpath and street lighting through the service corridor located between the service station site and the shopping centre, to promote safe access for pedestrians and cyclists.
  - Details about the high quality screening of the service yard situated on the south side of the shopping centre from roads and parking areas to the satisfaction of the City.
  - The application of the principles of Council's Local Planning Policy No 8: Designing out Crime and Local Planning Policy No 7: Uniform Fencing.
- viii. The preparation of Local Development Plan(s) for proposed laneway lots, grouped housing lots and lots with widths of less than 11m that address the following;
  - Type of fencing;
  - Location of garages and carports;
  - Surveillance;
  - Access;

- Setback variations;
- Solar orientation;
- Location of acoustic and/or screening walls;
- Landscaping;
- Crossover locations:
- Application of the principles of Council's Local Planning Policy No
   8: Designing out Crime and Local Planning Policy No
   7: Uniform Fencing:
- Demonstrate that the design addresses the requirements of State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning; and
- Quiet House Design for proposed lots that may be exposed to noise levels that exceed the acceptable levels prescribed in State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning and amenity impacts from the proposed service station.
- d) That the Local Community Centre site (3,072m²) be ceded to the City of Kwinana free of cost and without payment of compensation.
- e) That appropriate conditions are included on future development approvals or that the WAPC be requested to impose conditions on future subdivision applications requiring the preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public.
- f) That the 'Main Street' between the shopping centre and the Local Community Centre be constructed and ceded to the Crown free of cost without payment of compensation.
- g) The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;
- h) That a drainage reserve with a minimum area of approximately 1,500m<sup>2</sup> (adjacent to the service road and Thomas Road) be ceded to the Crown as shown in a Local Water Management Strategy that has been endorsed by the Department of Water and Environmental Regulation and the City of Kwinana.
- 3. Adopt the NCCP (as amended) for use as a guide to assessing future development and subdivision with the NCCP.
- 4. Endorse the Schedules of Submissions (Attachments G and H) pursuant to Schedule 2, Part 4, Clause 20(2), of the *Planning and Development Regulations* 2015.

5. Forward this Ordinary Council Meeting Report, Council's recommendations and the Schedules of Submissions to the WAPC pursuant to Schedule 2, Clause 20 of the *Planning and Development Regulations 2015*.

#### **BACKGROUND:**

The area the subject of the ASLSP is zoned 'Urban' under the *Metropolitan Region Scheme* (MRS) and 'Development' under *Local Planning Scheme No. 2* (LPS2).

Amendment 2 encompasses approximately 11.32ha of land situated immediately north of Thomas Road and approximately 750m east of the Kwinana Freeway (Attachment J).

Amendment 2 is situated north of the Casuarina North Local Structure Plan that was approved by Council on 14 November 2018 for Service Commercial and Commercial land uses.

### The original ASLSP and Amendment 1

The ASLSP was first adopted by the WAPC in May 2014. The adopted ASLSP provided a 'Main Street' through the Neighbourhood Centre (Attachment K).

Amendment 1 to the ASLSP (Attachment L) removed the 'Main Street' and provided an east-west road situated further north to enable a more consolidated Neighbourhood Centre. Amendment 1 was approved by Council in September 2014.

The original version of the ASLSP and Amendment 1 utilised the Western Power line easement for parking and access/egress purposes.

## **Description of Amendment 2 (Version B)**

The proponent has advised that the dimensions of the Neighbourhood Centre site in the current ASLSP (Attachment L) are not suitable for a number of tenants that have expressed an interest in locating in the Neighbourhood Centre.

The proponent has advised that the proposed tenancies include:

- Supermarket
- Specialty shops
- Shop
- Café/restaurant

- Childcare centre
- Drive through fast food (Stage 1)
- Café/Restaurant
- Petrol Filling Station (Stage 1)

The purpose of Amendment 2 (Version B) is to:

- a) reconfigure the shape and increase the size of the Neighbourhood Centre site (from 1.51ha to 2.367ha) so that it is better suited to the dimensions of a supermarket and associated tenancies;
- b) relocate the Local Community Centre to the north of the shopping centre; and

c) provide a 'Main Street' between the Local Community Centre and the shopping centre.

Following the first advertising period for Amendment 2 (Version A), City Officers met with the proponent a number of times to discuss modifications to Amendment 2 and the Development Plan (Version B). The modifications requested by City Officers and the changes included in the Development Plan (Version B) in response to the City's request are set out in Table 1 below. City Officer comments concerning additional recommendations in relation to each matter are also included in Table 1. For the purpose of this report, the original amendment and associated Development Plan are referred to as Version A. The updated amendment and Development Plan resubmitted by the applicant in response to the City's requests are referred to as Version B. The additional recommendations listed in the table below form the recommended modifications to Version B and are listed in the recommended Council resolution.

Versions A and B of Amendment 2 are consistent with the City's recently revised Community Infrastructure Plan 2011-2031 which identifies the need for a Local Community Centre in Casuarina- Anketell South (Development Contribution Area 10).

Table 1: Summary of the modifications to Version A (Amendment 2 and Development Plan) requested by the City and then included in Version B (Amendment 2 and Development Plan) and the Neighbourhood Centre Concept Plan

| Versi | equested modification to on A (Amendment 2 and lopment Plan)   | Modifications included in Version B (Amendment 2 and Development Plan) and the NCCP   |  |
|-------|--|---|--|
| Loca  | Community Centre   |   |  |
| 1.    | Locate the Local Community<br>Centre site alongside the<br>shopping centre. The Local<br>Community Centre shall<br>front onto a 'Main Street'. | The Development Plan (Version B) includes a 'Main Street' between the Local Community Centre and shopping centre. The Local Community Centre and retail uses front onto the 'Main Street' as requested by the City.               |  |
| 2.    | Sixty car bays be provided for the Local Community Centre  | Sixty car bays have been provided on the Local Community Centre site to the City's satisfaction as shown in the modified Development Plan (Version B).  |  |
|       |  | City Officers recommend that a provision be included in Part 1 of Amendment 2 to ensure that sixty car bays are shown on the Local Community Centre site to the City's satisfaction in the Development Plan (Version B) and NCCP. |  |

|       | T   |   |
|-------|---|---|
| 3.    | Allow for reciprocal parking between the shopping centre and Local Community Centre   | City Officers recommend that appropriate conditions are included in future subdivision and/or development approvals requiring the preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public. |
| Neigh | bourhood Centre   |   |
| 4.    | Retail uses to be situated<br>and front the 'Main Street'<br>facing towards the Local<br>Community Centre.  | The Development Plan (Version B) include a 'Main Street' between the Local Community Centre and shopping centre. The Local Community Centre and retail uses front onto the 'Main Street' as requested by the City.  |
| 5.    | The design of any blank walls facing the north-south distributor road should incorporate architectural design measures that provides articulation and incorporate significant landscaping along the blank wall. | The Development Plan (Version B) includes measures that provides articulation and incorporate significant landscaping along the blank wall facing the north-south distributor road.   |
| 6.    | Provide a footpath and lighting through the service corridor (between the service station and the shopping centre) to allow safe access for pedestrians and cyclists.   | The Development Plan (Version B) includes a footpath through the service corridor (between the service station and the shopping centre).  |
| 7.    | Screening the service area situated on the south side of the Neighbourhood Centre.  | The service area situated on the south side of the Neighbourhood Centre has been screened in Version B of the Development Plan and NCCP.  |
| 8.    | Provide reciprocal rights of way across the Neighbourhood Centre, (to facilitate coordinated vehicular movement).   | City Officers recommend that a provision be included in Part 1 of Amendment 2 that requires public easements to be provided in favour of the City for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre.   |

## 'Main Street' between Neighbourhood Centre and Local Community Centre

9. Provide a 'Main Street'
between the shopping centre
and Local Community
Centre.

A 'Main Street' between the shopping centre and Local Community Centre has been shown in the Development Plan (Version B) to the City's satisfaction.

City Officers recommend that the WAPC impose a subdivision condition requiring the 'Main Street' between the shopping centre and Local Community Centre to be constructed and ceded free of cost as a public road.

## Service road linking the Neighbourhood Centre with the Service Commercial area on Lot 17 Thomas Road

10. Provide a 10 metres wide service road (adjacent to Thomas Road and south of the drain reserve) to link the proposed shopping car park to Lot 17 Thomas Road.

City Officers recommend that Amendment 2 (Version B) be further modified to show a service road (10 metres wide) adjacent to Thomas Road from the proposed shopping centre car park (past the drain reserve) to the eastern boundary of Lot 17.

City Officers recommend that the WAPC impose future subdivision conditions requiring a service road to be constructed adjacent to Thomas Road (south of the drain reserve) from the north-south distributor road to the eastern boundary of Lot 17.

The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4:

Service trucks are able to manoeuvre through the intersection without traversing any road infrastructure; and are able to manoeuvre in and out of the crossover, lane correct so as to not be blocked or block traffic travelling in the opposing direction and potentially block vehicles travelling on the main north-south distributor road;

| R80 s | R80 site  |  |  |  |  |
|-------|---|--|--|--|--|
| 11.   | Redesign the R80 site shown in the Development Plan (Version A) to remove the smaller lots so that the R80 site can remain as a large lot appropriate for a group dwelling or multiple dwelling development.  | The smaller lots have been removed from Amendment 2 (Version B)  |  |  |  |
| Open  | Space   |  |  |  |  |
| 12.   | Modification of Amendment 2 (Version B) to provide an additional 446m² of POS to the proposed POS area situated to the east of the Neighbourhood Centre (adjacent the eastern boundary of the ASLSP).   | City Officers recommend that Amendment 2 be modified to provide an additional 446m <sup>2</sup> of POS to the proposed POS area situated to the east of the Neighbourhood Centre (adjacent the eastern boundary of the ASLSP).   |  |  |  |
| Drain | nage  |  |  |  |  |
| 13.   | That a drainage reserve with a minimum area of approximately 1,500m² (adjacent to the service road and Thomas Road) be ceded to the Crown as shown in a Local Water Management Strategy that has been endorsed by the Department of Water and Environmental Regulation and the City of Kwinana. | City Officers recommend that the WAPC impose future subdivision conditions the preparation of a Local Water Management Strategy (LWMS).  The LWMS shall be prepared and adopted so as to inform subdivision design and/or any development approvals for the area of Amendment 2. |  |  |  |

## Subdivision approvals within the ASLSP

The northern portion of the ASLSP (known as the Treeby Park subdivision) was approved by the WAPC in June 2014, to create 132 residential lots. Stage 1 (47 residential lots) was completed in 2018. City Officers understand that there are a number of subdivision conditions, for Stages 2 and 3 of Treeby Park, that have not been cleared by the WAPC concerning connection to reticulated sewer. Certificates of Title cannot be issued until the necessary infrastructure has been provided.

The western portion of the ASLSP (Lot 17 Thomas Road) was approved by the WAPC in August 2017 to create 86 residential lots (WAPC Ref 155574). Site works for this subdivision have not commenced.

## Subdivision and development applications within the area the subject of Amendment 2

The City has received a development application for Stage 1 which includes a 24 hour service station with a convenience store, fast food outlet, shop, service road, driveways and car parking. Stage 2 is proposed to include a supermarket, three shops, cafe, childcare centre, 'Main Street', driveways, car parking and landscaping.

The City is also in receipt of a subdivision application referral from the WAPC for the subdivision of Lots 2 and 3 Thomas Road into 51 residential lots and three commercial lots (Attachment D). The three commercial lots have been designed to accommodate the Neighbourhood Centre.

- a) Lot 52 will contain the proposed child care centre and associated driveways and car parking;
- b) Lot 53 will contain the supermarket, three retail tenancies, a café, associated driveways and car parking; and
- c) Lot 54 will contain the proposed Stage 1 development (service station, fast food outlet, shop, service road, associated driveways and car parking).

The proposed subdivision also includes a recreation reserve and drainage reserve which will be vested in the Crown and ceded free of cost at the subdivision stage. The Community Purpose Site is also to be created as a separate Public Purpose reserve.

## SUMMARY AND CITY OFFICERS RESPONSE TO ISSUES RAISED IN THE SUBMISSIONS

Five submissions were received during the advertising period for Version A of Amendment 2 (and Development Plan A) (5 November 2018 to 7 December 2018), including four submissions from State Government agencies/service providers and one submission from the owners of the property that abuts the western boundary of Amendment 2 (Lot 17 Thomas Road). The main issues raised in these submissions and the City responses are summarised in the Schedule of Submissions in Attachment G.

Six submissions were received during the advertising period for Version B of Amendment 2 (and Development Plan B) (3 May 2109 to 24 May 2019), including three submissions from State Government agencies/service providers, two submissions from landowners and one submission from the owner of the Cockburn Gateway Shopping Centre. The main issues raised in the submissions and the City's response to these issues are summarised in the Schedule of Submissions in Attachment H.

The main issues raised during both periods of advertising and the City's Officers response to these issues are summarised in Table 2 below:

Table 2: Summary of City Officers response to the main issues raised in the submissions

| Main | In a second Decision of the Control | 0  |
|------|---|--|
|      | Issues Raised In Submissions  | Summary of City Officers Comments            |
| 1.   | At least two means of access  | A 'Main Street' between the shopping         |
|      | should be provided between  | centre and Local Community Centre has        |
|      | Lot 17 Thomas Road and the  | been shown in Development Plan B and         |
|      | north-south distributor road,   | the NCCP to the City's satisfaction and a    |
|      | including the:  | service road (adjacent to Thomas Road)       |
|      | _   | has been provided from the north-south       |
|      | A 'Main Street' between   | distributor (between the shopping centre     |
|      | the Neighbourhood Centre  | and the service station) and the eastern     |
|      | and Local Community   | boundary of Lot 17.                          |
|      | Centre; and   | boundary or Lot 17.                          |
|      |   | It should be noted that the function of the  |
|      | service road between the  |  |
|      | shopping centre and   | 'Main Street' is not to provide the primary  |
|      | Service Commercial area   | route for traffic movement east-west         |
|      | are required so that there  | across the structure plan. An east-west      |
|      | is adequate access to Lot   | link road is provided just to the north of   |
|      | 17 Thomas Road.   | the Neighbourhood Centre and this road       |
| 1    |   | is intended to be the primary east-west      |
|      |   | link.  |
|      |   |  |
|      |   | City Officers recommend that a provision     |
|      |   | be included in Part 1 of Amendment 2         |
|      |   | requiring the 'Main Street' be identified in |
|      |   |  |
|      | The Department of Motor and   | a NCCP.                                      |
| 2.   | The Department of Water and   | Noted.                                       |
|      | Environmental Regulation  | N 0% 06%                                     |
|      | deemed the Local Water  | No City Officer recommendations              |
|      | Management Strategy for   | required.                                    |
|      | Lots 1, 2, 3 & 17 Thomas Rd,  |  |
|      | Anketell (Hyd2o, April 2019 –   |  |
|      | H18052Av4) satisfactory to  |  |
|      | support Amendment 2   |  |
|      | (Version B).  |  |
| 3.   | The Water Corporation has no  | Noted.                                       |
|      | objections to the   |  |
|      | modifications in Amendment  | No City Officer recommendations              |
|      | 2 (Version B).  | required.                                    |
|      | 2 (* 0131011 <b>b</b> ).  | 10441104.<br>                                |
| 4.   | The Department of Fire and  | Noted.                                       |
| 1.   | Emergency Services (DFES)   | 110104.                                      |
|      | advises that the Bushfire   | No City Officer recommendations              |
| 1    | Management Plan has   | · · · · · · · · · · · · · · · · · · ·        |
|      |   | required.                                    |
| 1    | adequately identified issues  |  |
|      | arising from the bushfire risk  |  |
| 1    | assessment and considered   |  |
|      | how compliance with the   |  |
|      | bushfire protection criteria  |  |
| 1    | can be achieved at  |  |
|      | subsequent planning stages.   |  |
|      | <u> </u>  |  |

5. The owner of Cockburn
Gateway Shopping Centre is
concerned that the proposed
commercial (retail/shop) floor
space expansion (4,692sqm)
is inconsistent with the City's
Local Commercial and
Activity Centre Strategy
(LCACS) which identifies the
potential for 4,000sqm of
retail/shop floor space in this
location.

The proposed commercial floor space for the Neighbourhood Centre includes a service station with a floor area of 240m². City Officers are of the view that the service station should be excluded from the overall commercial floor space for the Neighbourhood Centre (4,692m²–240m²=4,452m²) and on this basis the Neighbourhood Centre is only marginally larger (452m²) than the threshold (4,000m²) identified in LCACS.

Council has the capacity under its Local Planning Scheme No 2 to accept this marginal increase to the floor space of this Centre and in this respect, City Officers are recommending support. The Neighbourhood Centre has been planned in this location for a considerable period. It is not a new proposal that was unanticipated and the marginal increase in size does not materially affect its hierarchical function as a Neighbourhood Centre. Most important is that the Centre is successful in serving the needs of the local community and the additional floor space is considered to offer flexibility and assistance in performing this role.

## CITY OFFICERS ASSESSMENT OF VERSIONS A AND B OF AMENDMENT 2 AND THE NCCP

City Officers have assessed versions A and B of Amendment 2 and the Development Plan in relation to the following matters:

#### **Neighbourhood Centre**

Amendment 2 (Version B) proposes to reconfigure the shape and increase the size of the Neighbourhood Centre site so that it can better accommodate the dimensions of a supermarket and associated tenancies. The proponent submitted a Development Plan to demonstrate the intended development and to support associated subdivision and development applications that have also been submitted for the Neighbourhood Centre.

The City has received a development application for Stage 1 of the Neighbourhood Centre which includes a service station with a convenience store, fast food outlet and a shop. Subsequent stages will include a supermarket, three shops, café and a childcare centre. The City has also received a subdivision application referral from the WAPC to create 51 residential lots and three commercial lots within the area the subject of Amendment 2.

The location of the Neighbourhood Centre proposed in Amendment 2 is consistent with the Jandakot Structure Plan, Eastern Residential Intensification Concept, State Planning Policy 4.2 – Activity Centres for Perth and Peel and the Local Commercial and Activity Centres Strategy (LCACS). The Neighbourhood Centre site is generally consistent with the threshold commercial floor space (4,000m²) identified in the LCACS.

The proposed commercial floor space for the Neighbourhood Centre includes a service station with a floor area of 240m² as shown in Development Plan (Versions A and B). City Officers are of the view that the service station should be excluded from the overall commercial floor space for the Neighbourhood Centre (4,692m²–240m²=4,452m²) and on this basis the Neighbourhood Centre is 452m² larger than the threshold (4,000m²) identified in LCACS.

Council has the capacity under its Local Planning Scheme No 2 (LPS2) to accept this marginal increase to the floor space of this Centre and City Officers recommend that Amendment 2 be supported. The Neighbourhood Centre has been planned in this location for a considerable period. It is not a new proposal that was unanticipated and the marginal increase in floor space does not materially affect its hierarchical function as a Neighbourhood Centre. It is more important that the Neighbourhood Centre is successful in serving the needs of the local community and the additional floor space is considered to offer flexibility and assistance in performing this role.

Additional modifications to the NCCP recommended by City Officers

City Officers requested that the proponent prepare a NCCP so that it can be included in

Part 1 of Amendment 2 (Version B) of the ASLSP to provide statutory support for the

design intent proposed in Development Plan B. While the proponent has prepared a

NCCP which addresses a number of design elements (Attachment I), City Officers are of
the view that additional modifications are required to best address the intent of the City.

The modifications should include (but are not limited) to the following:

Replacement of the dot points in the current version of the NCCP to include a set of key design objectives and design responses for the following components:

- a) The 'Main Street' is to be an attractive and engaging public realm, facilitate a pedestrian-orientated environment whilst accommodating vehicles and associated parking space.
  - The design response requires attractive and active built form frontages, the requirement for retail/speciality shops on the southern side of the 'Main Street', on-street parking, and high quality tree planting and landscaping (including seating and shade).
- b) Built form and landscaping across the Neighbourhood Centre shall be attractive, respond to public spaces and safe.
  - The design response specifies the requirement for the landmark corners, articulated frontages for blank walls fronting the distributor road, high quality screening of service yards, and the incorporation of Crime Prevention through Environmental Design (CPTED) principles. Landscaping reinforces the public realm, provides shade, and visual relief against wall features and in car parks.

c) Create a neighbourhood hub, land use co-dependency and shared parking and pedestrian/cycling /traffic movements.

The design response addresses the location of the Community Purpose Site (3,072m²) and associated parking, requirements for shared parking, pedestrian/traffic movements over the private/public domain and promotes cohesive built form types.

The above should be reinforced by notations or shapes on the NCCP, the inclusion of visual illustrations or sketches which clearly show the intent behind the required design elements. This should include a sketch cross section of the 'Main Street'.

The inclusion of the modified NCCP in Part 1 of the ASLSP will provide the City with added confidence that the development of the Neighbourhood Centre and Local Community Centre will occur in a manner which is intended under the ASLSP. This is important as the staging of the construction of the Neighbourhood Centre may take a number of years and under differing land owners.

### **Local Community Centre**

The proposed Local Community Centre and shopping centre were located on opposite sides of the north-south integrator road in Version A of Amendment 2. City Officers were of the view that this did not facilitate safe and convenient pedestrian access between the two facilities. Furthermore, the entrance to the shopping centre is proposed to be situated on the western side facing towards the parking area. This orientation meant that the Local Community Centre (situated on the east side of the north-south integrator) would be separated from the shopping centre and could not be easily integrated as a cohesive Neighbourhood Centre.

City Officers requested the proponent to relocate the Local Community Centre to a position where it would function as an integral part of the Neighbourhood Centre and the proponent modified Version A of Amendment 2 and the Development Plan (Version A) as requested. The Local Community Centre is now situated alongside the shopping centre where access between the shopping centre and Local Community Centre will be safe and convenient for pedestrians via a pedestrian focussed 'Main Street'; and also enable reciprocal car parking between the two facilities.

As noted above, City Officers have recommended that the NCCP (as amended) be included in Part 1 of Amendment 2 to ensure that this urban design approach is implemented in the future.

## 'Main Street' situated between the shopping centre and Local Community Centre

The proponent modified Version A of the Amendment and the Development Plan to provide a 'Main Street' between the Local Community Centre and shopping centre as requested by City Officers. City Officers also required that the Development Plan include retail uses along the 'Main Street' fronting the Local Community Centre.

The 'Main Street' is intended to provide a safe pedestrian orientated space that creates a focus for the local community. An east-west road is shown to the immediate north of the Neighbourhood Centre and this road is designed to provide the bulk of east-west traffic movements rather than the 'Main Street'.

City Officers are recommending that NCCP (as amended) be included in Part 1 of Amendment 2 to ensure that the 'Main Street' is provided during the early stages of the planning and development process and that the Local Community Centre is integrated with the Neighbourhood Centre.

# North-south distributor road intersection (situated between the proposed service station and shopping centre)

Main Roads has advised (letter dated 30 August December 2019) that it does not support Amendment 2 due to the close proximity of the proposed north-south distributor intersection to Thomas Road (Figure 1). Main Roads further advise that queuing of vehicles will impede traffic flow on Thomas Road and give rise to public safety and traffic conflict issues.

Figure 1: North-south distributor road intersection (situated between the proposed service station and shopping centre)



The proponent has submitted traffic modelling and analysis undertaken for year 2031 (Transcore, 2020) (Attachment M) which indicates that the service road/north-south distributor intersection will operate satisfactorily and without any excessive queues and delays. The analysis indicates that there:

- d) won't be any queues extending back from the proposed Thomas Road roundabout intersection to the subject crossover.
- e) are no reported queues from the subject crossover back to the Thomas Road roundabout on the spine road.
- f) is no risk with any such queue as the traffic on the north-south distributor road northbound will turn left into the centre at the crossover. This left turn movement is free flowing without any blockages or bottlenecks.

As a result, the proponent is of the view that service road crossover will have no impact on the operations of Thomas Road and the proposed Thomas Road/north-south distributor road intersection.

In response to the concerns raised by Main Roads, City Officers (Engineering Department) advice that conditions will be imposed on the Stage 1 development application requiring the separation distance between the service road/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4.

Main Roads also raised concern that the swept paths presented by the proponent identify the vehicle mounting the median and demonstrate that the vehicle is unable to remain lane correct. As presented the development will negatively impact upon the traffic flow, operation of the intersection and damage public infrastructure. City Officers (Engineering Department) recommend that the Stage 1 Development Application be conditioned requiring modifications to be made to the crossover width, alignment and geometry to ensure service trucks are able to manoeuvre through the intersection without traversing any road infrastructure; and are able to manoeuvre in and out of the crossover, lane correct so as to not be blocked or block traffic travelling in the opposing direction and potentially block vehicles travelling on the main north-south distributor road.

# Service road between the north-south distributor road (between the service station and shopping centre) and the eastern boundary of Lot 17

City Officers requested the proponent to provide a 10 metre wide service road (adjacent to Thomas Road and south of the drainage reserve) between the north-south distributor road and the eastern boundary of Lot 17 (Figure 2). The purpose of the service road is to provide vehicle access from the service commercial area on Lot 17 to the north-south distributor road.

Figure 2: Service Road between the north-south distributor road (between the service station and shopping centre) and the eastern boundary of Lot 1



### Thomas Road and Service Station amenity impacts

Thomas Road is a key east-west road link and it will continue to generate considerable traffic noise. The service station and fast food use proposed in Stage 1 of the Neighbourhood Centre also have the potential to adversely impact on noise sensitive land uses.

The configuration of built form and land uses adjoining Thomas Road and the service station requires consideration in relation to noise management and compatibility.

The land uses proposed within the Neighbourhood Centre are not classified as noise sensitive premises in the *Environmental Protection (Noise) Regulations 1997* and are less likely to be affected by traffic noise emissions from Thomas Road. However, Amendment 2 (Version B) proposes an R80 residential site adjacent to Thomas Road. Amendment 2 (Version B) also proposes a row of R30 coded residential lots along Thomas Road (separated by an internal roadway to Thomas Road) and this remains unchanged from the ASLSP previously adopted by Council.

City Officers have considered the appropriateness of the R80 development adjacent to Thomas Road and the proposed service station. The siting of the R80 development opposite the Neighbourhood Centre is supported by City Officers because it is considered to be an appropriate residential density adjacent to the Neighbourhood Centre (within a walkable catchment/distance of the Neighbourhood Centre). It would also present as an appropriate entry building into the estate and frame up the Neighbourhood Centre, particularly if the built form was as a grouped or multiple dwelling with a height of two or more storeys. However, the design of the R80 development will need to include appropriate Quiet House Design measures to manage potential traffic noise from Thomas Road and potential amenity impacts from the proposed service station. For this reason, City Officers are recommending that a provision be included in Part 1 of the ASLSP which articulates this requirement.

City Officers have considered whether additional R80 or higher densities could be located along Thomas Road to act in a similar fashion for noise mitigation. However, City Officers have taken the view that apart from noise management itself, there is little to support the need for the higher density and height further away from the Neighbourhood Centre and that the R30 residential development (lots fronting onto a roadway abutting Thomas Road immediately east of the R80 site) is more suitable built form and subdivision design for this location.

R30 reflects the density previously supported by Council some years ago. It is noted that the adopted ASLSP (WAPC 22 May 2014) forecast that noise levels approximately 15 metres from Thomas Road will be in the vicinity of 67dBA at 'full development' and as such, noise attenuation measures would be required at the subdivision and development stages.

Possible measures to mitigate the effect of noise from Thomas Road include:

- a) Construction of noise attenuation barriers such as a noise wall;
- b) Building design such as locating outdoor living areas and indoor habitable rooms away from noise sources; and

c) Building construction techniques, such as upgraded glazing (in partnership with air conditioning) and ceiling insulation.

The impacts of noise generated from the service station and fast food uses should also be considered and noise mitigation measures introduced where necessary.

City Officers are recommending that the WAPC be requested to impose a condition on the current and future subdivision applications requiring:

- a) Preparation of a Traffic Noise Assessment (TNA) assessing the impact of noise from Thomas Road and/or the service station on residential development in the vicinity of Thomas Road including outlining noise mitigation measures such as acoustic walls and or quiet house design requirements.
- b) Provision of Section 70A Notifications on all proposed lots that may be subject to excessive noise levels from Thomas Road and/or the proposed service station/fast food land uses advising prospective purchasers that the lot is situated in the vicinity of Thomas Road and is currently affected and/or may in the future be affected by transport noise.

#### **Western Power easement**

The ASLSP is heavily constrained by an existing high voltage transmission line that traverses the western side of the proposed Neighbourhood Centre. The presence of the power easement has been a challenge for the design of the NCCP (including the Local Community Centre).

Western Power has advised that the structure plan, future subdivision and development processes must protect the transmission line corridor and associated assets from encroachment, mitigating public safety or network reliability risks and ensure that there is no impediment to routine and emergency land access to the network.

Western Power has not raised any fatal flaws in relation to Amendment 2 but has advised that approval will be required before any development in accordance with Amendment 2 or the Development Plan can occur within the power easement.

Western Power advised that, prior to subdivision, it will need to review, assess and provide prior written consent to any proposals listed below within the registered easement, in accordance with standard easement conditions:

- landscaping plans (including mature heights and location of species);
- ground level changes;
- permanent structures;
- drainage plans; and
- conservation controls.

Western Power advises that the proponent must submit detailed design plans for the land use and drainage proposed within the electricity infrastructure corridor to allow determination of its suitability in respect to public safety, routine and emergency land access and future network plans.

The studies should identify any mitigation required to be submitted to Western Power for review, record-keeping and to confirm the appropriateness of the proposed land use prior to subdivision.

Western Power requires the following additional provisions to be included on the ASLSP for consideration at the subdivision and development stages:

- a) Provision of Section 70A Notifications on all proposed lots adjoining the existing Western Power registered easement prior to subdivision clearance advising prospective purchasers that they are in close proximity to power infrastructure which will be maintained, upgraded and expanded on a regular basis;
- b) All development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict; and
- c) No development (including fill, fencing, storage or parking) will be permitted within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator.

City Officers recommend that a provision be included in Part 1 of the ASLSP, and the WAPC be requested to impose conditions on future subdivision applications to this effect.

#### **Bushfire Management**

State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP3.7) (WAPC, 2015) outlines how development and/or land uses should address bushfire risk in Western Australia and it applies to all land which has been designated as a Bushfire Prone Area. The area the subject of Amendment 2 is wholly situated within a designated Bushfire Prone Area.

A Bushfire Management Plan (BMP) has been prepared for Amendment 2 by an accredited assessor (Bushfire Prone Planning, March 2019) in accordance with Clause 6.5 of SPP3.7.

The pre-development Bushfire Attack Levels (BAL) assessment, included with the BMP, show that based on the existing vegetation, the area the subject of Amendment 2 contains land with Moderate to Extreme BALs.

A BAL rating of BAL-29 or lower is achievable for future lots in this proposal, dependent on vegetation management within the three subject lots and some areas outside the subject lots.

The structure plan design allows for access/egress to the north, south, east and west of the development, providing various choices of escape routes during a bushfire event.

The future development will have a reticulated water supply with hydrants installed at the required intervals and to the required specifications.

The Department of Fire and Emergency Services (DFES) has advised the City (letter dated 5 June 2019) that the BMP has adequately identified issues arising from the bushfire risk assessment and considered how compliance with the bushfire protection criteria can be achieved at subsequent planning stages.

#### **Designing Out Crime**

The City's Local Planning Policy No. 8 sets out design guidelines to be implemented during the design and assessment of structure plans, subdivision applications and development applications.

Version B of Amendment 2 and the Development Plan incorporate many of the "designing out crime principles" of Crime Prevention Through Environmental Design (CPTED).

The five (5) key principles, which inform CPTD, are:

- Surveillance:
- Access control;
- Territorial reinforcement;
- Target hardening (securing measures); and
- Management and maintenance.

The incorporation of a 'Main Street' with active land uses (specialty retail tenancies and a Local Community Centre) will ensure natural surveillance over a significant area of the public realm. Tenancies are also located to adjoin and activate the future road to the east and the associated vehicle parking areas which make the most effective utilisation of the Western Power easement corridor that dissects the Neighbourhood Centre. Although having the car parking area positioned in the one large central area should be avoided under the general principle of surveillance, the car park will be positioned between the commercial development and the future residential area and will be highly visible.

All of the commercial buildings including the supermarket with incorporated specialist tenancy shops will provide natural surveillance over the car park area. The inclusion of open space areas at the northern and southern ends of the vehicle parking area will enable further opportunity for passive surveillance. There is an opportunity for the eastern elevation of the supermarket to be further enhanced to minimise the area of blank façade facing the future adjoining residential area to the east and provide an interesting element that contributes to the overall amenity of the area.

City Officers consider that the layout of NCCP is legible and easy to navigate for vehicles, pedestrians and bicycles alike. The 'Main Street' will provide a clear and safe connection between the future residential development to the east and west. There are pedestrian and bicycle path linkages between uses within the Centre as well as linkages to POS areas and the future adjoining residential development.

City Officers are of the view that the layout of the Neighbourhood Centre shown in NCCP, with the 'Main Street' road, will enhance the sense of community ownership of the public realm and encourage a level of shared responsibility for the security of the shared places within the Centre. The management and maintenance principles of CPTD will be addressed at the detailed development approval stage for the Neighbourhood Centre.

#### LIVEABLE NEIGHBOURHOODS ASSESSMENT

The WAPC requires local structure plans to be prepared in accordance with objectives and requirements of Liveable Neighbourhoods (WAPC, 2009). Version B of Amendment 2 and the Development Plan (and the NCCP) have been assessed by City Officers against the following elements of Liveable Neighbourhoods:

#### **Lot Layout**

The residential densities proposed in Version B of Amendment 2 are generally consistent with the existing densities depicted on the adopted ASLSP. Some reallocation and reorganising of densities to accommodate the enlarged commercial space and reflect the amended POS location have occurred, generally reducing the total residential area within the ASLSP. To offset this reduction, the proponent has redesigned the street blocks and road alignment so that the available residential space is utilised more efficiently.

The site occupied by the Local Community Centre at the intersection of Thomas Road and the north–south distributor road as shown in Amendment 2 (Version A) is now designated as an R80 residential site in Amendment 2 (Version B). City Officers are of the view that the site adjacent to the shopping centre, near the Local Community Centre and in close proximity to the Kwinana Freeway is an appropriate location for a higher density residential development.

#### **Open Space and Local Community Centre**

Table 3 describes the allocation of POS proposed in Version B of Amendment 2.

**Table 3: Public Open Space provision** 

|                                      | POS required in<br>Liveable<br>Neighbourhoods | POS Provided in Version B of Amendment 2                        |
|--------------------------------------|---|---|
| 10% POS                              | 7,040m <sup>2</sup>                           | 6,594m <sup>2</sup>   |
| Max restricted POS permitted (20%)   | 1,408m <sup>2</sup>                           | 320m <sup>2</sup>   |
| Min unrestricted POS permitted (80%) | 5,632m <sup>2</sup>                           | 3,204m <sup>2</sup>   |
| Local Community                      |   | 3,070m <sup>2</sup>   |
| Centre                               |   | (total unrestricted   |
|                                      |   | 3,204m <sup>2</sup> +3,070m <sup>2</sup> =6,274m <sup>2</sup> ) |
| TOTAL                                | 7,040m <sup>2</sup>                           | 6,274m <sup>2</sup> +320m <sup>2</sup> =6,594m <sup>2</sup>     |
|                                      |   | (446m <sup>2</sup> POS shortfall)                               |

The 446m<sup>2</sup> shortfall of POS described in Table 3 has occurred due to the reduction in the size of the Local Community Centre site from 3507m<sup>2</sup> to 3070m<sup>2</sup>.

City Officers are of the view that the reduction in the size of the Local Community Centre site is justifiable on the basis that the relocated Local Community Centre site is no longer immediately adjacent to residential lots and is integrated with the Neighbourhood Centre. However, City Officers recommend that an additional 446m² of POS be provided within the area the subject of Amendment 2. This shortfall should be added to the proposed POS area situated to the east of the Neighbourhood Centre (adjacent the boundary of the ASLSP).

#### **Urban Water Management**

The following water management plans and strategies have been prepared for Version B of Amendment 2. These strategies include:

- Jandakot Drainage and Water Management Plan Peel Main Drain Catchment (Department of Water, 2009);
- Anketell South Urban Cell Local Water Management Strategy (LWMS) (Bioscience, 2014); and
- Addendum to the Anketell South Local Water Management Strategy (hyd2o, April 2019).

These water management plans provide a greater level of detail regarding water management at each successive stage of the planning process.

The City's Engineering Department and DWER have considered the LWMS and have advised that the Anketell - Local Water Management Strategy for Lots 1, 2, 3 and 17 Thomas Rd (Addendum) (Hyd2o, April 2019 – H18052Av4) is satisfactory.

#### **Utilities**

The Servicing Report (Ewing VDM, 2010) prepared to support the adopted ASLSP states that the subject area is able to be connected to water, sewer, electricity, gas and telecommunications services. It is normal practice for the WAPC to impose subdivision conditions requiring that these services be provided to an urban standard. (Note that Maria had previously requested this part below be deleted)

The Water Corporation and Western Power have not raised concerns with Version B of Amendment 2 to the ASLSP.

City Officers recommend that the NCCP (as amended) (Attachment I) be adopted by Council. The NCCP includes a number of modifications that were made to Versions A and B of the Development Plan to clearly illustrate the following design elements:

- a) A 'main street' (a shared active streetscape) between the shopping centre and Local Community Centre. Show a public service road (10 metres wide) (adjacent to Thomas Road and south of the drainage reserve) which connects the shopping centre car park to the crossover on Lot 17 to Thomas Road.
- b) The location of the Local Community Centre site (3,072m²) is to provide an active frontage to the 'main street' and include 60 car bays.

- c) The location of active retail shops forming part of the proposed shopping centre are to front and provide an 'active' building edge to the 'main street' to ensure interest and vitality to the public realm.
- d) The design of any blank walls facing the north-south integrator road should incorporate architectural design measures that provide articulation and incorporate significant landscaping along the blank wall.
- e) The corners between the north–south distributor road and the 'main street' are to be promoted as landmark corners so that built form accentuates the corners and promotes a sense of entry and arrival into the 'main street'.
- f) Provide a footpath and street lighting through the service corridor located between the service station site and the shopping centre, to promote safe access for pedestrians and cyclists.
- g) The provision of high quality screening of the service yard situated on the south side of the shopping centre from roads and parking areas to the satisfaction of the City.

#### Recommended subdivision and development application conditions

City Officers recommend that the following conditions be imposed on the appropriate subdivision and development applications to ensure that key design elements in the NCCP (as amended) are implemented:

- a) The separation distance between the intersection (between the service station and shopping centre) and the Thomas Road/north-south distributor road intersection is to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4.
- b) The width, alignment and geometry of the intersection must enable service trucks to manoeuvre:
  - through the intersection without traversing any road infrastructure,
  - in and out of the crossover, lane correct so as to not be blocked by traffic travelling in the opposing direction, in turn blocking access and potentially blocking vehicles travelling on the main north-south distributor road.
- c) Preparation of an Urban Water Management Plan for Lot 1, 2 and 3 Thomas Road in consultation with the City of Kwinana and Department of Water and Environmental Regulation.
- d) Preparation of a Local Development Plan for the proposed Neighbourhood Centre as part of the subdivision approval for proposed Lots 52, 53 and 54. The Local Development Plan is to include:
  - The design of any blank walls facing the north-south distributor road should incorporate architectural design measures that provide articulation and incorporate significant landscaping along the blank wall.
  - The corners between the north–south distributor road and the 'Main Street' are to be promoted as landmark corners so that built form accentuates the corners and promotes a sense of entry and arrival into the 'Main Street'.

- e) The preparation of Local Development Plan(s) for proposed laneway lots, grouped housing lots and lots with widths of less than 11m.
- f) The redesign of the R80 lot under ASLSP adjoining the Neighbourhood Centre to remove the smaller lots proposed for this R80 area so that it can remain as a large lot appropriate for a group dwelling or multiple dwelling development.
- g) The Local Community Centre site (3,072m²) being ceded to the City of Kwinana free of cost and without payment of compensation.
- h) The 'Main Street' between the shopping centre and the Local Community Centre being ceded to the Crown free of cost and without payment of compensation.
- i) A 10 metres wide service road (adjacent to Thomas Road and on the south side of the drain reserve) being created to the satisfaction of the City of Kwinana to connect the north-south distributor road to the eastern boundary of Lot 17.
- j) Preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public.
- k) That a drainage reserve with a minimum area of approximately 1,500m<sup>2</sup> (adjacent to the service road and Thomas Road) be ceded to the Crown as shown in a Local Water Management Strategy that has been endorsed by the Department of Water and Environmental Regulation and the City of Kwinana.
- The R80 coded residential site situated on the north-east corner of the Thomas Road and north-south distributor road being developed as grouped dwelling and/or multiple dwelling (minimum 2 storeys) in accordance with the R80 requirements set out in State Planning Policy 3.1 Residential Planning Codes.

#### **LEGAL/POLICY IMPLICATIONS:**

For the purpose of Councillors considering a financial or impartiality interest only, the proponent is Saraceni Properties, the owner of Lots 1, and 2 is Wayne Barber and the owner of Lot 3 Thomas Road is Lisa Pix.

#### Acts and Regulations

- Planning and Development Act 2005
- Planning and Development (Local Planning Schemes) Regulations 2015
- Environmental Protection Act 1986
- Environmental Protection (Noise) Regulations 1997
- Environmental Protection and Biodiversity Conservation Act 1999 (Cwlth)

#### Planning Schemes

- Metropolitan Region Scheme
- City of Kwinana Local Planning Scheme No. 2

#### State Government Policies

- South Metropolitan Peel Sub-regional Planning Framework (WAPC, 2018)
- Jandakot Drainage and Water Management Plan Peel Main Drain Catchment
- Liveable Neighbourhoods 2009
- State Planning Policy 3.0 Urban Growth and Settlement (WAPC)
- State Planning Policy 3.1 Residential Design Codes (WAPC)
- State Planning Policy 3.7 Planning in Bushfire Prone Areas (WAPC)
- State Planning Policy 4.2 Activity Centres for Perth and Peel (WAPC)
- State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning (WAPC)
- State Planning Policy 7.0 Design of the Built Environment (WAPC)

#### Local Planning Policies

- Community Infrastructure Plan 2011-2031
- Local Commercial and Activity Centres Strategy (LCACS)
- Local Planning Policy No. 1 Landscape Feature and Tree Retention
- Local Planning Policy No. 2 Streetscapes
- Local Planning Policy No. 7 Uniform Fencing
- Local Planning Policy No. 8 Designing out Crime

#### FINANCIAL / BUDGET IMPLICATIONS:

The cost of preparing the amendment to the ASLSP and advertising has been borne by the applicant.

#### **ASSET MANAGEMENT IMPLICATIONS:**

The City will be financially responsible for maintaining the Local Community Centre, POS, roads, verge trees and footpaths within the LSP area once the area has been developed.

#### **ENVIRONMENTAL IMPLICATIONS:**

MRS Amendment 1116/33 to rezone Anketell Cell 3 from 'Rural' to 'Urban Deferred' was assessed by the Environmental Protection Authority (EPA) on 13 March 2006 under the *Environmental Protection Act 1986* (WA) (EP Act 1986). The EPA advised that Amendment 1116/33 did not require formal assessment under the EP Act 1986 and provided advice and recommendations. In particular, the EPA advised that it had not assessed the following issues in its assessment of Amendment 1116/33:

- Drainage
- Wetlands
- Remnant vegetation
- Fauna

- Peel Harvey catchment
- Contamination
- Air emissions
- Noise and Vibration

The EPA's decision to not formally assess Amendment 1116/33 was on the basis that the environmental issues listed above can be resolved during subsequent stages of the planning process.

Amendment 2 to the ASLSP does not raise any new environmental issues that were not previously considered by the EPA, or the City, as part of the MRS Amendment or the assessment of the ASLSP.

#### STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective detailed in the Strategic Community Plan 2017-2027.

| Plan                                  | Outcome             | Objective  |
|---------------------------------------|---------------------|--|
| Strategic Community<br>Plan 2017-2027 | A well planned City | 4.4 Create diverse places and spaces where people can enjoy a variety of lifestyles with high levels of amenity. |

#### **COMMUNITY ENGAGEMENT:**

Amendment 2 to the ASLSP has been advertised twice due to modifications that were made to the amendment following the first period of advertising.

The City advertised Version A (including Version A of the Development Plan) of Amendment 2 from 5 November 2019 to 7 December 2019 in accordance with Schedule 2, Clause 18 of the PD Regulations. Version B of Amendment 2 (and Version B of the Development Plan) was subsequently modified to improve the layout and the pedestrian/vehicle connectivity between the proposed Commercial, Service Commercial and Local Community Centre sites and re-advertised from 3 May 2019 to 24 May 2019.

Each period of advertising was carried out in the following manner:

- Nearby landowners and State government agencies were notified of the proposal in writing and invited to comment;
- The proponent erected two signs on site;
- A notice was placed in the Weekend Courier once over the course of the advertising period; and
- Copies of the proposed amendment to the ASLSP and relevant documents were made available for inspection at the City's Administration Office and placed on the City's website.

The following State government agencies were notified of the proposal in writing and invited to comment during both periods of advertising:

- Main Roads WA
- Department of Fire and Emergency Services
- Department of Water and Environmental Regulation
- Western Power
- Water Corporation

The City received six submissions in relation to Version A of Amendment 2 and seven submissions in relation to Version B. The City's comments on the submissions are summarised in the Schedules of Submissions for each version of the amendment.

#### **PUBLIC HEALTH IMPLICATIONS:**

Noise impacts from traffic on Thomas Road requires careful management. It is important that future subdivision and development applications are accompanied by appropriate noise studies to demonstrate that the sensitive land uses will not be exposed to unacceptable noise levels. The City will only support land uses in locations where it can be confident there will not be long-term noise conflicts.

#### **RISK IMPLICATIONS:**

The risk implications in relation to this proposal are as follows:

| Risk Event               | The WAPC may not adopt the City's advice.             |
|--------------------------|---|
|                          |   |
| Risk Theme               | Failure to fulfil statutory regulations or compliance |
|                          | requirements.   |
| Risk Effect/Impact       | Compliance  |
| Risk Assessment          | Strategic   |
| Context                  |   |
| Consequence              | Moderate  |
| Likelihood               | Possible  |
| Rating (before           | Moderate  |
| treatment)               |   |
| Risk Treatment in place  | The 60 day period in which the City is required to    |
|                          | report to the WAPC, under Schedule 2 Clause 20        |
|                          | of the PD Regulations, expired on 22 July 2019        |
|                          | (60 days from close of advertising).                  |
|                          | The City has sought an extension of time under        |
|                          | clause 20(c) of the Planning and Development Act      |
|                          | until the 16 August 2019 to provide sufficient time   |
|                          | to report to Council.                                 |
|                          | la repent to Geometria                                |
|                          | The City will be reporting to the WAPC following      |
|                          | the Council meeting on the 25 March 2020August        |
|                          | 2019.   |
| Response to risk         | The City is to give due regard to the amended         |
| treatment required/in    | ASLSP when providing advice to the WAPC in            |
| place                    | relation to subdivision applications and making       |
|                          | decisions in relation to development applications.    |
|                          |   |
| Rating (after treatment) | Moderate  |

#### COUNCIL DECISION 134 MOVED CR S WOOD

#### SECONDED CR S LEE

The Council takes the following action in respect to Amendment 2 (Version B) to the Anketell South Local Structure Plan (ASLSP):

1. Requests that the applicant amend the Neighbourhood Centre Concept Plan (NCCP) to the satisfaction of the City of Kwinana, which is to be included in Part 1 of the Anketell South Local Structure Plan (ASLSP). The amendments should include (but are not limited) to the following:

Replacement of the dot points in the current NCCP to include a set of key design objectives and design responses for the following components:

a) The 'Main Street' is to be an attractive and engaging public realm, facilitate a pedestrian-orientated environment whilst accommodating vehicles and associated parking space.

The design response requires attractive and active built form frontages, the requirement for retail/speciality shops on the southern side of the 'Main Street', on-street parking, and high quality tree planting and landscaping (including seating and shade).

b) Built form and landscaping across the Neighbourhood Centre shall be attractive, respond to public spaces and safe.

The design response specifies the requirement for the landmark corners, articulated frontages for blank walls fronting the distributor road, high quality screening of service yards, and the incorporation of Crime Prevention through Environmental Design (CPTED) principles. Landscaping reinforces the public realm, provides shade, and visual relief against wall features and in car parks.

c) Create a neighbourhood hub, land use co-dependency and shared parking and pedestrian/cycling /traffic movements.

The design response addresses the location of the Community Purpose Site (3,072m²) and associated parking, requirements for shared parking, pedestrian/traffic movements over the private/public domain and promotes cohesive built form types.

The above should be reinforced by notations or shapes on the NCCP, the inclusion of visual illustrations or sketches which clearly show the intent behind the required design elements. This should include a sketch cross section of the 'Main Street'.

- 2. Subject to Point 1 above, advises the Western Australian Planning Commission (WAPC) that it supports Amendment 2 (Version B) to the Anketell South Local Structure Plan (ASLSP) subject to:
  - a) Modification of Amendment 2 (Version B) to provide an additional 446m<sup>2</sup> of public open space (POS) to the proposed POS area situated to the east of the Neighbourhood Centre (adjacent the eastern boundary of the ASLSP).
  - b) Inclusion of the following in Part 1 of Amendment 2, to the City's satisfaction:
    - i. Future development is to be in accordance with the NCCP (as amended) as adopted by the City.
    - ii. Preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public.
    - iii. Preparation of a Traffic and Pedestrian Management Plan (TPMP) to the satisfaction of the City of Kwinana. The TPMP should include details concerning:
      - The provision a service road (10 metres wide) connecting the north-south distributor road (between the shopping centre and service station) to the eastern boundary of Lot 17;
      - The separation distance between the service station/northsouth distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;
      - Service trucks are able to manoeuvre through the intersection without traversing any road infrastructure; and are able to manoeuvre in and out of the crossover, lane correct so as to not be blocked or block traffic travelling in the opposing direction and potentially block vehicles travelling on the main north-south distributor road;
      - The provision of a 'Main Street' between the shopping centre and Local Community Centre;
      - Reciprocal rights of access to facilitate co-ordinated and efficient vehicle movement and parking within the Neighbourhood Centre. It should also link to the eastern boundary of Lot 17 Thomas Road;
      - That the shopping centre car park is designed to facilitate through traffic between the north-south distributor road and future residential development on Lot 17; and
      - That sixty car bays for the Local Community Centre can be provided to the City of Kwinana's satisfaction within the Local Community Centre site.

The TPMP shall be prepared and adopted so as to inform subdivision design and/or any development approvals for the area of Amendment 2 (Version B).

- iv. Preparation of a Traffic Noise Assessment (TNA) assessing the impact of traffic noise from Thomas Road and/or future service station on residential areas including appropriate noise mitigation measures such as acoustic barriers and/or quiet house design requirements and an implementation plan to the satisfaction of the City of Kwinana. The TNA shall be prepared and adopted so as to inform subdivision design and/or any development approvals for the area of Amendment 2 (Version B).
- v. That a Local Water Management Strategy (LWMS) is to be prepared to the satisfaction of the Department of Water and Environmental Regulation and the City of Kwinana. The LWMS shall demonstrate that the drainage reserve adjacent to Thomas Road is of sufficient size and capacity to the satisfaction of the City of Kwinana.

The LWMS shall be prepared and adopted so as to inform subdivision design and/or any development approvals for the area of Amendment 2.

vi. All development shall be designed and constructed to protect
Western Power infrastructure and interests from potential land use
conflict.

No development (including fill, fencing, storage or parking) will be permitted within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator.

- vii. That the R80 coded residential site situated on the north-east corner of the Thomas Road and north-south distributor road be developed as grouped dwelling and/or multiple dwelling (minimum 2 storeys) in accordance with the R80 requirements set out in State Planning Policy 3.1 Residential Planning Codes or other land uses permitted in the 'Development' zone under Local Planning Scheme 2.
- c) Request that the WAPC impose the following conditions on future subdivision applications with the area the subject of Amendment 2 requiring:
  - i. The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;

The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;

- ii. Service trucks are able to manoeuvre through the intersection without traversing any road infrastructure; and are able to manoeuvre in and out of the crossover, lane correct so as to not be blocked or block traffic travelling in the opposing direction and potentially block vehicles travelling on the main north-south distributor road;
- iii. Preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public.
- iv. Provision of Section 70A Notifications on all proposed lots adjoining the existing Western Power registered easement advising prospective purchasers that they are in close proximity to power infrastructure which will be maintained, upgraded and expanded on a regular basis.

All development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.

No development (including fill, fencing, storage or parking) will be permitted within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator.

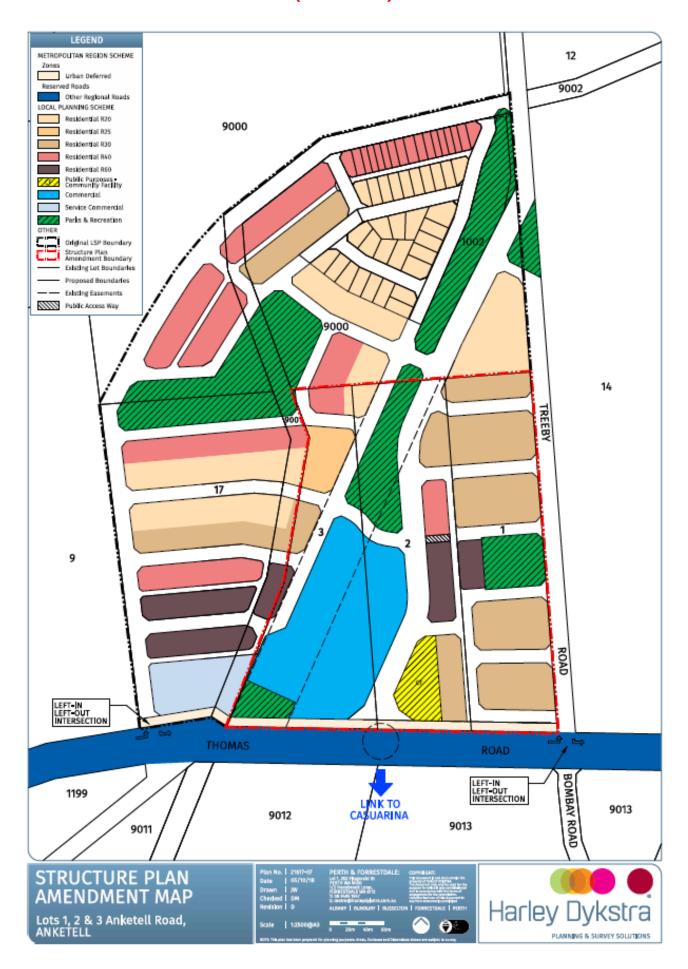
- v. Provision of Section 70A Notifications on all proposed lots that may be subject to excessive noise levels from Thomas Road and/or future service station (in accordance with a Traffic Noise Assessment that has been endorsed by the City of Kwinana) advising prospective purchases that the lot is situated in the vicinity of Thomas Road and/or future service station and is currently affected and/or may in the future be affected by transport noise.
- vi. Preparation of an Urban Water Management Plan for Lot 1, 2 and 3
  Thomas Road in consultation with the City of Kwinana and
  Department of Water and Environmental Regulation.

- vii. Preparation of a Local Development Plan (LDP) for the proposed Neighbourhood Centre as part of the subdivision approval for proposed Lots 52, 53 and 54. Amongst other things, the LDP should address the design elements detailed in NCCP (as amended) included in Part 1 of the ASLSP as well as the following points:
  - Architectural treatment and design of the built form interface to Thomas Road.
  - Details as to the acceptable building elevations to the street level tenancies facing the 'Main Street'. These should be predominantly glazed, with no more than 30% of the façade comprising solid walls. Tenancy windows facing the 'main street' are to be unobscured glass.
  - Details in respect to the verandahs or awnings to be constructed along the 'Main Street' and that these would extend the whole length of all buildings located along the 'Main Street' frontage to provide weather protection to the street space and building entrances.
  - Details as to the provision of a footpath and street lighting through the service corridor located between the service station site and the shopping centre, to promote safe access for pedestrians and cyclists.
  - Details about the high quality screening of the service yard situated on the south side of the shopping centre from roads and parking areas to the satisfaction of the City.
  - The application of the principles of Council's Local Planning Policy No 8: Designing out Crime and Local Planning Policy No 7: Uniform Fencing.
- viii. The preparation of Local Development Plan(s) for proposed laneway lots, grouped housing lots and lots with widths of less than 11m that address the following;
  - Type of fencing;
  - Location of garages and carports;
  - Surveillance;
  - Access:
  - Setback variations;
  - Solar orientation;
  - Location of acoustic and/or screening walls;
  - Landscaping;
  - Crossover locations;
  - Application of the principles of Council's Local Planning Policy No 8: Designing out Crime and Local Planning Policy No 7: Uniform Fencing;
  - Demonstrate that the design addresses the requirements of State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning; and

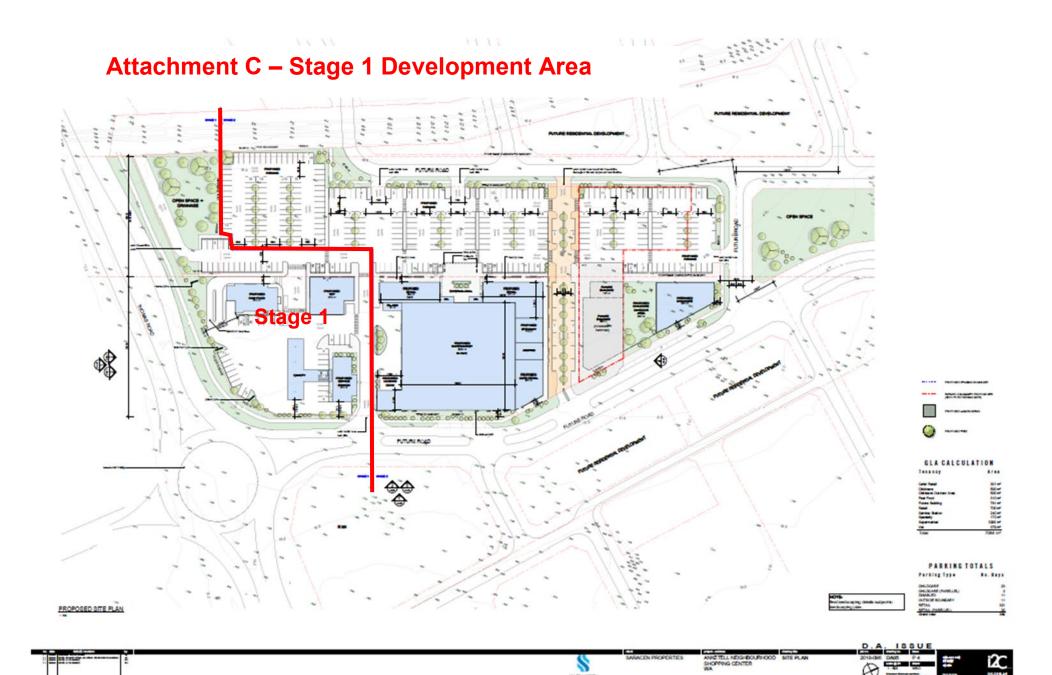
- Quiet House Design for proposed lots that may be exposed to noise levels that exceed the acceptable levels prescribed in State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning and amenity impacts from the proposed service station.
- d) That the Local Community Centre site (3,072m²) be ceded to the City of Kwinana free of cost and without payment of compensation.
- e) That appropriate conditions are included on future development approvals or that the WAPC be requested to impose conditions on future subdivision applications requiring the preparation of appropriate legal instruments for the purpose of securing access rights over the main access driveways within the Neighbourhood Centre (including the Local Community Centre) and ensuring that parking within the Neighbourhood Centre (including the Local Community Centre) remains available for use for all tenancies and the public.
- f) That the 'Main Street' between the shopping centre and the Local Community Centre be constructed and ceded to the Crown free of cost without payment of compensation.
- g) The separation distance between the service station/north-south distributor road intersection and Thomas Road to meet the minimum distance specified within AS2890.1-2004 (sections 3.23 and 3.24) and Austroads 2017 Guide to Road Design Part 4;
- h) That a drainage reserve with a minimum area of approximately 1,500m<sup>2</sup> (adjacent to the service road and Thomas Road) be ceded to the Crown as shown in a Local Water Management Strategy that has been endorsed by the Department of Water and Environmental Regulation and the City of Kwinana.
- 3. Adopt the NCCP (as amended) for use as a guide to assessing future development and subdivision with the NCCP.
- 4. Endorse the Schedules of Submissions (Attachments G and H) pursuant to Schedule 2, Part 4, Clause 20(2), of the *Planning and Development Regulations 2015*.
- 5. Forward this Ordinary Council Meeting Report, Council's recommendations and the Schedules of Submissions to the WAPC pursuant to Schedule 2, Clause 20 of the *Planning and Development Regulations 2015*.

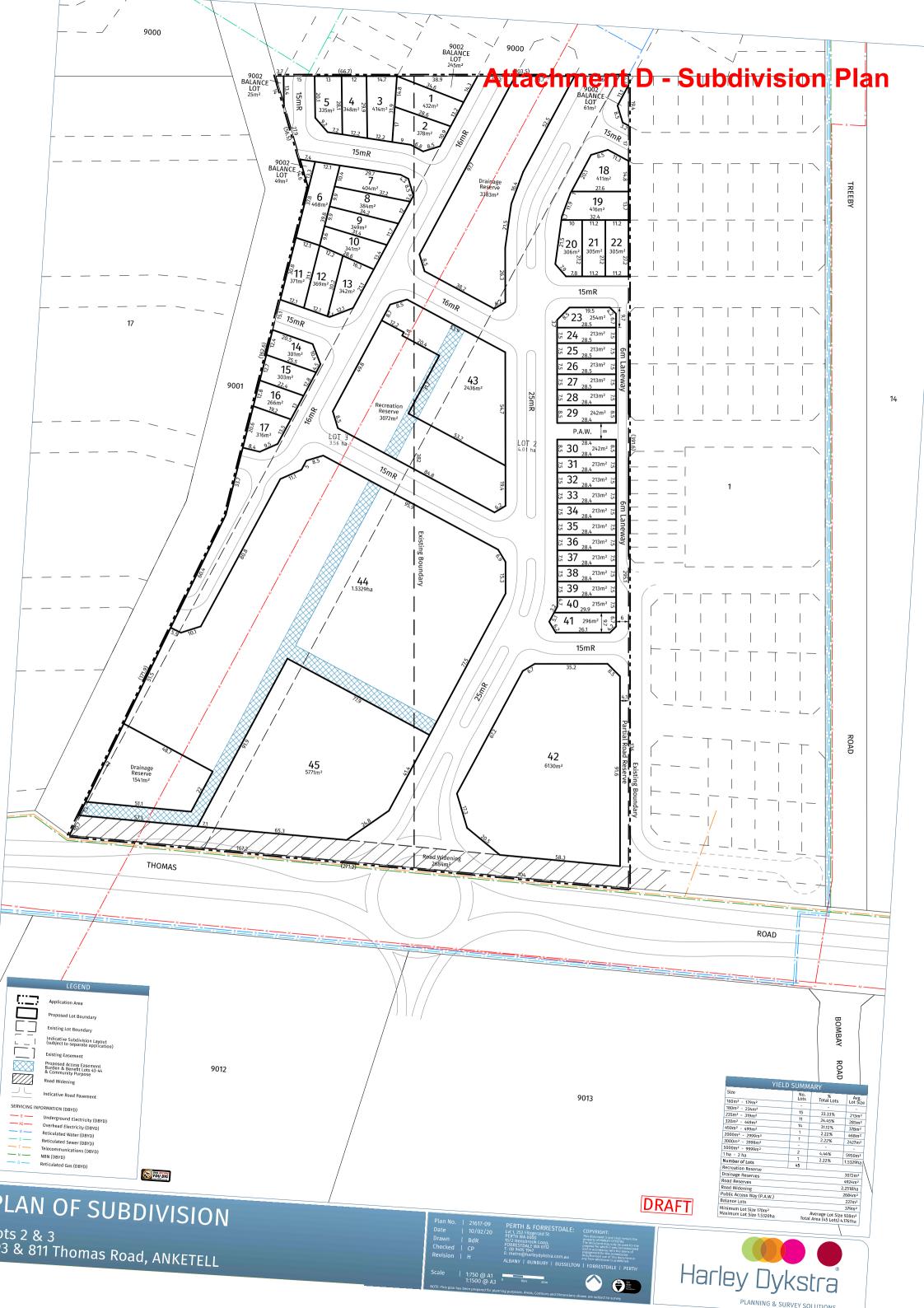
CARRIED

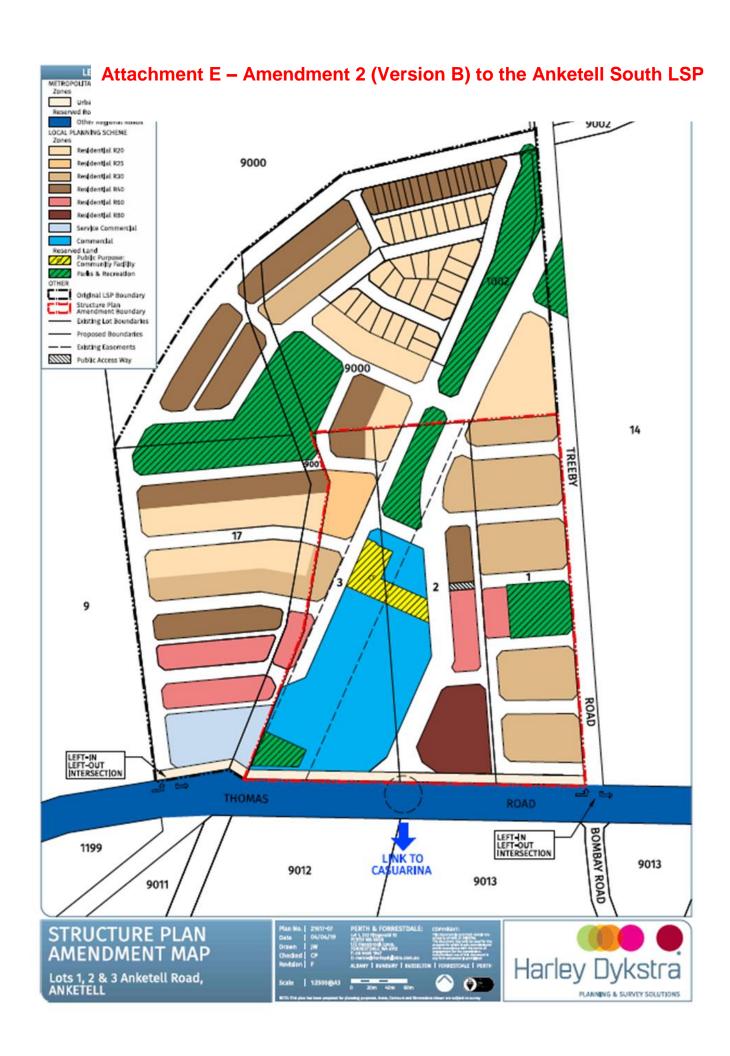
### Attachment A - Amendment 2 (Version A) to the Anketell South LSP



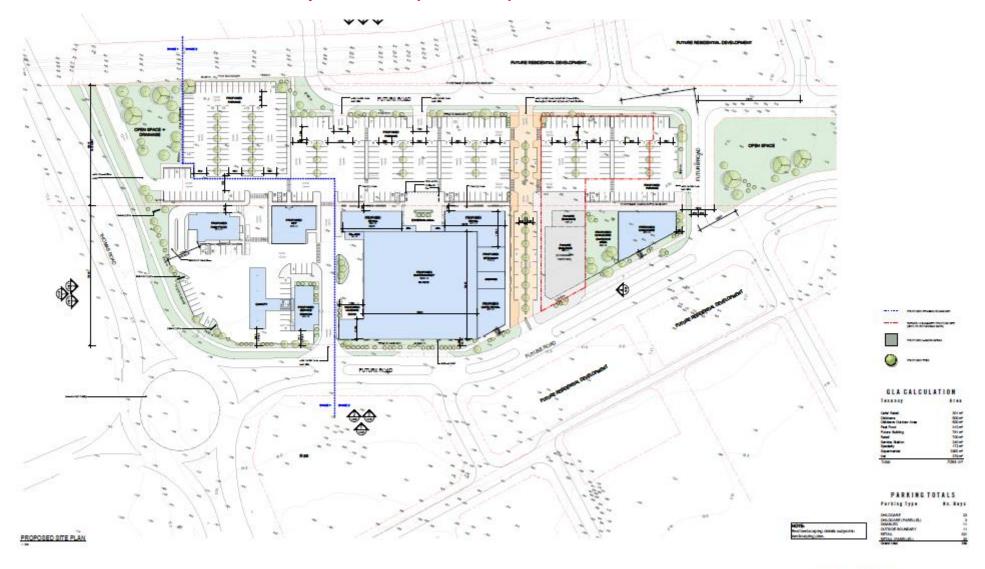








## **Attachment F - Development Plan (Version B)**











| SUBMITTERS AND PROPERTIES AFFECTED BY AMENDMENT               | NATURE AND SUMMARY OF SUBMISSIONS  | CITY OFFICERS COMMENTS   |
|---|--|--|
| 1. Vincenzo & Laura Nibali Lot 17 (779) Thomas Road, Anketell | a) Eliminates Continuity of Commercial Precinct The commercial precinct must be thought of as one continuous section of commercial area for the Structure Plan to function effectively. The proponent's design absolutely and unequivocally eliminates the functionality and accessibility of our Commercial Site. To our mind, this loss is not worth any purported benefit of an additional 7,400m² that the Proponent will gain from this reconfiguration. Arguably there is no overall gain to the City of Kwinana as our site which is 4,905m² approximately is rendered useless. The overall integrity of the Structure Plan is greatly diminished by these designs.  b) The Service Road connecting our Site to the Full Movement Intersection is eliminated The road labelled B in Annexure A was a service road linking our entire estate with the full movement intersection to be constructed in between Lots 2 and 3 Thomas Road.  The proposed change removes completely the primary function of this linking road as it is pushed all the way up to the northern portion of our site to the point where it is rendered useless. This will undoubtedly result in peak hour traffic delays, as any resident whom purchases any lot on our site southward from where road B is placed will have to double back on themselves to get to this linking road in order to turn right and head towards the Kwinana Freeway.  Instead, what is highly probable is that owners of any lots on our site will simply head up our Thomas Road Access (C) and turn right illegally to get to the Kwinana Freeway. | <ul> <li>The submitter's concerns are noted and City Officers requested that the original lodged version of Amendment 2 be modified to provide improved vehicle pedestrian/cycle access between the shopping centre and Service Commercial area on Lot 17 as shown in the Development Plan (version B).</li> <li>City Officers recommend that: <ul> <li>Amendment 2 be modified to show a 10 metres wide service road from Thomas Road (between the service station and the shopping centre) to the eastern boundary of Lot 17.</li> <li>The WAPC impose a subdivision condition requiring a service road to be constructed between the north—south distributor road (between the service station and shopping centre) through to the eastern boundary of Lot 17.</li> <li>A 'Main Street' between the Local Community Centre and shopping centre has been shown in the Development Plan (version B) to the City's satisfaction.</li> <li>The WAPC impose a subdivision condition requiring the Main Street between the shopping centre and the Local Community Centre to be constructed and ceded free of cost.</li> <li>A statement be included in the amendment requiring the preparation of an Urban Water Management Strategy in consultation with the City of Kwinana and Department of Water and Environmental Regulation.</li> </ul> </li> </ul> |

|    | <u> </u>   |  |  |   |
|----|--|--|--|---|
|    |  |  | Attachment 1 - Proposed amendment to the Ariketall South LSP    Inc.   I |   |
|    |  |  | c) Traffic travelling west along Anketell Road will not have direct access to the Commercial area on Lot 17  The amendment does not simplify or provide safer access to the commercial site on Lot 17 for vehicles coming from the east heading west.  The proponent needs to illustrate effectively how vehicles will be able to safely and in a timely way navigate from our Commercial site to the full movement intersection. The Neighbourhood Concept Plan completely cuts off access to Lot 17 by putting greenery all along the western boundary of the carpark under the power lines.   |   |
|    |  |  | d) Stormwater Treatment has been moved We at present do not have the resources to investigate whether the alteration that the Proponent has made to storm water treatment has been dealt with although we note in our submission that this has been conducted and should this amendment be approved and a detrimental impact is beheld to our land at the hands of the approval of the City we will again be seeking compensation.   |   |
| 2. | Department of Water and Environmental Regulation | Not supported until<br>DWER is satisfied with<br>the LWMS which<br>accompanies<br>Amendment 2 to the<br>ASLSP. | The DWER is deemed to be unsatisfactory to the DWER. The proposed structure plan should not be finalised prior to the endorsement of a satisfactory LWMS by the DWER in accordance with BUWM (WAPC, 2008).  Groundwater Levels The basin proposed in Catchment F will have an invert of 16.5 m AHD. Data presented in the Anketell South Urban Cell, LWMS (Bioscience, March 2014) for the nearest monitoring bore to Basin F, WAM 15, indicates a maximum groundwater level (MGL) of 17.24 m AHD. The swale proposed in Catchment B will have an invert of 17.5 m AHD. Data presented in the Anketell South Urban Cell, LWMS for the nearest monitoring bore to Swale B, WAM 10, indicates a MGL of 17.4 m AHD. Therefore, there is a concern regarding adequate separation distances of  | DWER's concerns are noted and City Officers recommend that Amendment 2 (as modified) be approved subject to a revised Local Water Management Strategy being prepared in consultation with and to the satisfaction of the Department of Water and Environmental Regulation.  City Officers also recommend that a statement be included in the amendment requiring the preparation of an Urban Water Management Strategy in consultation with the City of Kwinana and Department of Water and Environmental Regulation. |

|    | <u> </u>                                  |   |   |   |
|----|---|---|---|---|
|    |   |   | the proposed basin and swale to the MGL. In addition, DWER recommends the use and demonstration of MGL when designing stormwater infrastructure in areas of shallow groundwater.  |   |
|    |   |   | Section 3.1: Groundwater Levels The LWMS uses groundwater monitoring data from 2005 to 2008 and one monitoring event in 2017. Are there current monitoring values for Bores WAM15s & WAM10s? Nearby long-term DWER monitoring bore JE22c indicates a relative increase in the 2018 winter peak of around 0.5 metres. Also, as described above, please use MGL rather than AAMGL (annual average maximum groundwater level) when calculating distance from drainage basin inverts to groundwater and amend figures to reflect this.  |   |
|    |   |   | Section 4: Stormwater Management This section notes that the stormwater runoff modelling assumes a 0% stormwater runoff for lots less than 300m² for events greater than the 5 year ARI. DWER question whether this figure is correct and has it been used when calculating runoff volumes into local drainage infrastructure?  |   |
| 3. | Water Corporation                         | No objection  | The Water Corporation has no objections to the modification to accommodate the design layout of the proposed neighbourhood centre.  The LWMS for the Anketell South Structure Plan areas should be revised to take account of the increased impervious area and to provide any additional on-site storage for runoff events.  | City Officers recommend that a statement be included in the amendment requiring the preparation of an Urban Water Management Strategy in consultation with the City of Kwinana and Department of Water and Environmental Regulation.  |
| 4. | Department of Fire and Emergency Services | No objection subject to amendments to the Bush Management Plan. | If the proposal does not result in the intensification of development (or land use) then there may not be any practicable reason to require the application of SPP3.7. Given the amendment seeks to realign boundaries associated with the proposed neighbourhood centre which also facilitates a reduction in lot yield, DFES is unsure if application of SPP3.7 is necessary for the subject LSP amendment.  The BAL ratings delineated on the BAL Contour Map (Figure 3.2) do not correlate with the Vegetation Classification Map (Figure 3.1). It is unclear why no BAL ratings are derived from Vegetation Areas 2, 3 and 9. Given the accuracy of the BAL Contour Map cannot be validated, and that the BHL assessment demonstrates compliance to Policy Measure 6.3, it is recommended the BAL Contour Map be removed from this version of the BMP and be refined for subsequent planning stage(s), when assumptions can be confirmed and verified.  Should the City apply SPP3.7, then as outlined in the tables above, DFES is satisfied that the bushfire hazard level assessment has adequately identified the bushfire risk and considered how compliance with the | Following this advice the BMP was subsequently amended in accordance with these comments.  In response to the advertising of Amendment 2 (version B), DFES advised that the BMP has adequately identified issues arising from the bushfire risk assessment and considered how compliance with the bushfire protection criteria can be achieved at subsequent planning stages. |
|    |   |   | bushfire protection criteria can be achieved at subsequent planning stages.  However, modifications to the BMP will be required to ensure its accuracy. As these modifications will not affect the LSP amendment, DFES recommends the LSP amendment proceed and the proponent be advised that these modifications be undertaken prior to subsequent stages of the planning process (subdivision & development applications).  |   |

| 5. | Main Roads WA (Letter dated 5 December 2018) | No objection subject to agreement being reached between the City of Kwinana and Aigle Properties (CNLSP) concerning the design of the Thomas Road roundabout. | Main Roads advises that it supports this amendment 'in principle' which sets out to realign the central north-south spine road slightly eastwards in order to accommodate a larger commercial precinct within Lots 2 and 3.  This proposed realignment on the north side of Thomas Road will also impact on the connection at the southern side of the Thomas Road/Spine Road roundabout treatment.  As a consequence, the Local Structure Plan concept on the southern extent (Lots 9012, 9013 & 9014 -Aigle Royal Properties Pty Ltd) may require some adjustments to tie in to this realigned full movement connection.  As the planning report submitted is silent on this issue, Main Roads requires that the City of Kwinana and the applicant for this amendment facilitate further discussions and agreement with Aigle Royal Properties. This ensures that an orderly and co-ordinated approach and agreement is reached for this proposed realignment with all affected landowners.  Upon receipt of this agreement with Aigle Royal Properties, Main Roads will require a copy of this correspondence for our file records. In due course, please forward a copy of the Councils final determination on this | The WAPC approved the Casuarina North Local Structure Plan (CNLSP) on 11 June 2019 which identifies the approved location of the full movement intersection on Thomas Road.  The full movement intersection on Thomas Road shown in Amendment 2 is in the same location shown the approved CNLSP.  Subject Futuri Plannir  Lis 1011  Subject Futuri Plannir  C. 35/48  |
|----|--|---|---|--|
|    |  |   | course, please forward a copy of the Councils final determination on this proposed Amendment to the Anketell South Local Structure Plan to Main Roads   |  |
| 6. | Western Power                                | Neutral   | It is noted that the most recent proposed amendments continue to facilitate the proliferation of development and land use in the corridor resulting in potential network reliability and public safety risks that would require further assessment by Western Power prior to subdivision or development.  The structure plan, future subdivision and development processes must protect the transmission line corridor and associated assets from encroachment, mitigating public safety or network reliability risks and ensuring there is no impediment to routine and emergency land access to the network.  1. Prior to subdivision, Western Power will need to review, assess and provide prior written consent to any proposals below within the registered easement, in accordance with standard easement  | City Officers recommend that the WAPC be requested to impose a condition on future subdivision applications requiring  Provision of Section 70A Notifications on all proposed lots adjoining the existing Western Power registered easement prior to subdivision clearance advising prospective purchasers that they are in close proximity to power infrastructure which will be maintained, upgraded and expanded on a regular basis.  All development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.  No development (including fill, fencing, storage or parking) will be permitted |
|    |  |   | <ul> <li>conditions: <ul> <li>Landscaping plans (including mature heights and location of species);</li> <li>Ground level changes;</li> <li>Permanent structures;</li> <li>Drainage plans;</li> <li>Conservation controls.</li> </ul> </li> <li>2. In respect to condition 1, the proponent must submit detailed design plans for the land use and drainage proposed within the electricity</li> </ul>  | within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator.   |
|    |  |   | infrastructure corridor to allow determination of its suitability in respect to public safety, routine and emergency land access and future network plans. Regarding public safety assessment, the requirements of the detailed study are summarised below and a required to form part of the servicing strategy:   |  |

Lots 1, 2 and 3 Thomas Road, Anketell
Version A of Amendment 2 to the Anketell South Local Structure Plan
Advertising period 5 November 2018 – 7 December 2018

| • | Soil Resistivity Report outlining on-site measurement of the soil |  |
|---|---|--|
|   | resistivity, using the Wenner method.                             |  |
| • | An Earth Potential Rise study to determine touch, step and        |  |
|   | transfer potentials, including documentation of all calculations. |  |
|   | A Low Frequency Induction study to investigate the effects of     |  |

- A Low Frequency Induction study to investigate the effects of induced voltages from the power line for step, touch and transfer potentials, during both construction and operation of the site.
- An Electrostatic Induction study to investigate the potential of hazardous charging of metallic objects in the vicinity of the line, such as fences, gates and other services.
- An Electromagnetic Field Study to determine the impacts of Electric and Magnetic Fields as per ARPANSA guidelines.

The studies should identify any mitigation required and be submitted to Western Power for review, record-keeping and to confirm the appropriateness of the proposed land use prior to subdivision. Please be advised that Western Power can provide data to assist in the preparation of the report, which will attract a fee. Costs will be estimated and funds must be received prior to assessment commencing. Generally assessments will take between three to five weeks, from receipt of funds.

- 3. Western Power requires the following additional provisions to be included on the Structure Plan for consideration at the subdivision and development stages:
  - Provision of Section 70A Notifications on all proposed lots adjoining the existing Western Power registered easement prior to subdivision clearance advising prospective purchasers that they are in close proximity to power infrastructure which will be maintained, upgraded and expanded on a regular basis.
  - All development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.
  - No development (including fill, fencing, storage or parking) will be permitted within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator.

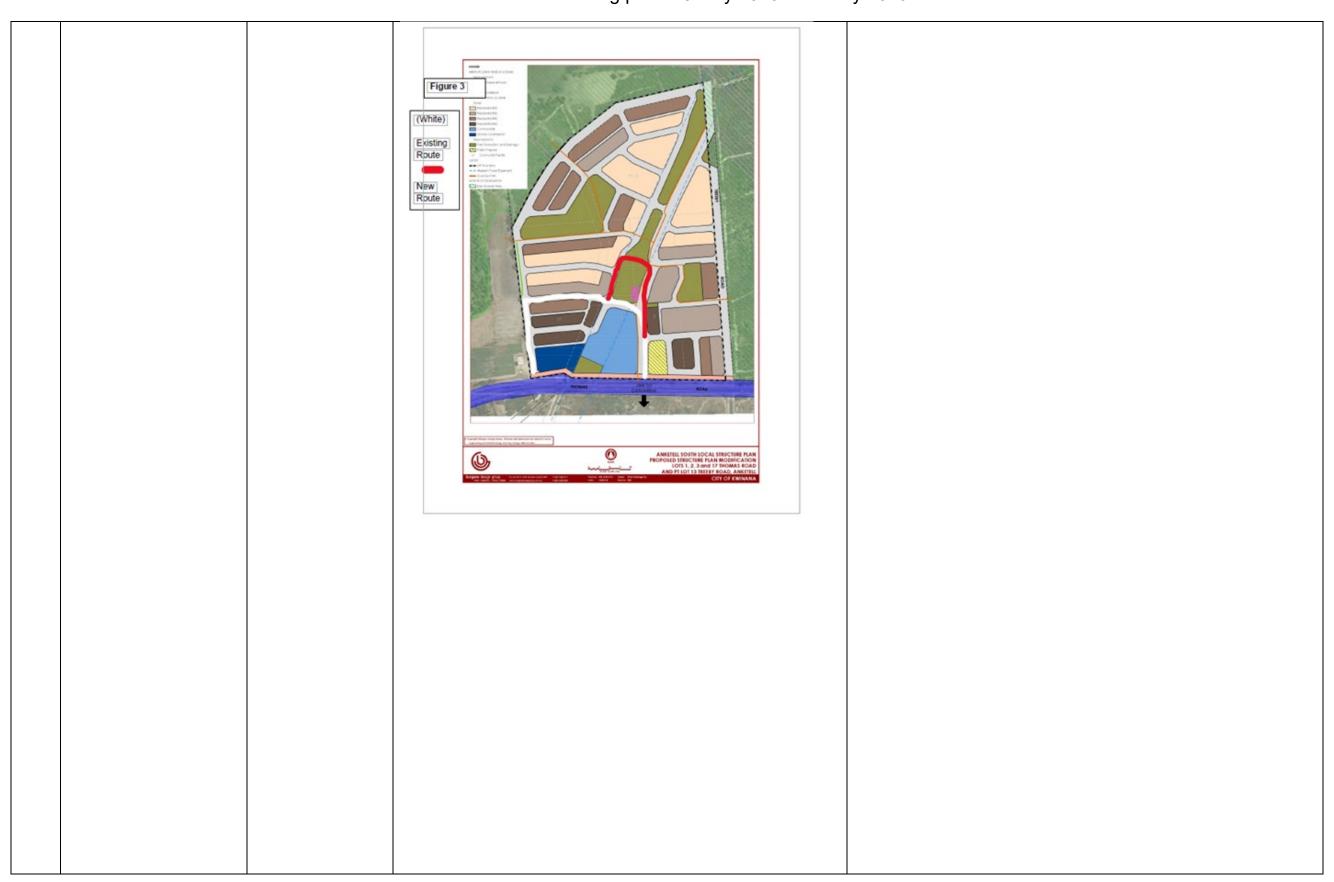
Note: The above advice should not be construed as Western Power's support or otherwise of the land use or development proposed in the existing electricity corridors and associated registered easements. Further detailed studies will be required to determine the suitability of subdivision and development within the easement corridors.

Lots 1, 2 and 3 Thomas Road, Anketell
Version B of Amendment 2 to the Anketell South Local Structure Plan
Advertising period 3 May 2019 – 24 May 2019

SUBMITTER AND PROPERTY AFFECTED BY AMENDMENT NATURE AND SUMMARY OF SUBMISSION

CITY OFFICERS COMMENT

| 1. | Vincenzo & Laura Nibali  Lot 17 (779) Thomas Road, Anketell | Support subject to the issues discussed | It is our contention that the Amendment must only be approved, if it ensures that any Development and/or Subdivision Application for the Property, will provide for at least two additional means of access from 779 Thomas Road through the Commercial Site to the 'Integrator B' Road.   | The submitter's concerns have been are noted and City Officers requested that the original lodged version of Amendment 2 be modified to provide improve vehicle pedestrian/cycle access between the Neighbourhood Centre and Service Commercial area on Lot 17 as shown in the Development Plan (version B).   |
|----|---|---|--|--|
|    |   |   | The contract of the contract o | City Officers recommend that Amendment 2 be modified to show a service road (10 metres wide) (adjacent to Thomas Road south of the drain reserve) from the Neighbourhood Centre car park to the access/egress point to Thomas Road situated on Lot 17.  City Officers recommend that the WAPC impose a subdivision condition requiring a service road to be constructed adjacent to Thomas Road from the Neighbourhood Centre car park (across the drain reserve) to the eastern |
|    |   |   | Road 2  Road 1  1999  List TO CAMARINA MINISTER SOUTS  SOU | boundary of Lot 17.  A 'Main Street' between the Local Community Centre and the shopping centre has been shown in the Development Plan (version B) to the City's satisfaction.  City Officers recommend that a provision be included in Part One of Amendment 2 requiring an LDP to be prepared with an east-west road as  |
|    |   |   | STRUCTURE MAN AMENDMENT MAP Harley Dykstra Road Submission LSP Amendment 2  7/9 Thomas Road Submission LSP Amendment 2  One approximating Road 1 on Figure 1 (above) and the other   | shown in Development Plan (version B).  City Officers recommend that the WAPC impose a subdivision condition requiring the 'Main Street' between the Neighbourhood Centre and Local Community Centre to be constructed and ceded free of cost.   |
|    |   |   | approximating Road 1 on Figure 1 (above) and the other approximately half way between Thomas Road and the northern boundary of the Proposed Commercial segment on the Property (Road 2 on Figure 1 above) more accurately described as the current location on the Existing LSP.  Vehicles cannot directly navigate from 779 Thomas Road to the Kwinana  |  |
|    |   |   | Freeway, nor can they turn directly in to 779 Thomas Road if they are coming from the east (it is left in left out). Our concern attenuated to this Amendment is therefore a direct consequence of this cumbersome logistical situation.  We cannot accept the change to the 'Neighbourhood Connector B' Road unless the City ensures the provision of other linking roads through the commercial development on the Property.   |  |
|    |   |   |  |  |
|    |   |   |  |  |



| 2 | Department of Water and Environmental Regulation | Not supported until<br>DWER is satisfied<br>with the LWMS which<br>accompanies<br>Amendment 2 to the<br>ASLSP. | The DWER reviewed the Lots 1, 2, 3 & 17 Thomas Rd, Anketell - Local Water Management Strategy Addendum (LWMS) (Hyd2o, April 2019 – H18052Av4) and it was deemed satisfactory to the DWER to support the amended Local Structure Plan for this area. Accordingly, the DWER has no objections to this proposed Local Structure Plan proceeding.  Please note: the LWMS accompanying the current LSP technical reports is an earlier version of the LWMS (H18052Av3).  | DWER's concerns are noted and City Officers recommend that Amendment 2 (version B) be approved subject to a revised Local Water Management Strategy being prepared in consultation with and to the satisfaction of the Department of Water and Environmental Regulation.  City Officers also recommend that a statement be included in Amendment 2 (version B) requiring the preparation of an Urban Water Management Strategy in consultation with the City of Kwinana and Department of Water and Environmental Regulation.   |
|---|--|--|---|---|
| 3 | Water Corporation                                | No objection   | The Water Corporation has no objections to the modification to accommodate the design layout of the proposed neighbourhood centre.  The proposed modifications to the layout and configuration of the proposed commercial area appear to be relatively minor in nature and are unlikely to affect the developer's ability to extend water and wastewater services to this portion of the land at the subdivision stage. It should be noted that the Crown reserve (Lot 9002) containing the water Corporation's Peel Drain sub-section P is depicted as cadastre on the revised LSP. The open drain traverses the structure plan area and will be incrementally replaced with a piped local drainage system. The northern half of the Water Corporation's drain has already disappeared and has been replaced with a local drainage system within the approved subdivision. The southern half of the drain will similarly be relinquished as part of further subdivision stages.  | City Officers recommend that Amendment 2 (version B) to the ASLSP be approved subject to a revised Local Water Management Strategy being prepared in consultation with and to the satisfaction of the Department of Water and Environmental Regulation.  City Officers also recommend that a statement be included in the amendment requiring the preparation of an Urban Water Management Strategy in consultation with the City of Kwinana and Department of Water and Environmental Regulation.  |
| 4 | Department of Fire and Emergency Services        | No objection   | DFES advises that the BMP has adequately identified issues arising from the bushfire risk assessment and considered how compliance with the bushfire protection criteria can be achieved at subsequent planning stages.   | Noted   |
| 5 | Western Power                                    | Neutral  | It is noted that the most recent proposed amendments continue to facilitate the proliferation of development and land use in the corridor resulting in potential network reliability and public safety risks that would require further assessment by Western Power prior to subdivision or development.  The structure plan, future subdivision and development processes must protect the transmission line corridor and associated assets from encroachment, mitigating public safety or network reliability risks and ensuring there is no impediment to routine and emergency land access to the network.  Prior to subdivision, Western Power will need to review, assess and provide prior written consent to any proposals below within the registered easement, in accordance with standard easement conditions:  • Landscaping plans (including mature heights and location of species);  • Ground level changes;  • Permanent structures;  • Drainage plans;  • Conservation controls.  In respect to condition 1, the proponent must submit detailed design plans for the land use and drainage proposed within the electricity | City Officers recommend that the WAPC be requested to impose a condition on future subdivision applications requiring  Provision of Section 70A Notifications on all proposed lots adjoining the existing Western Power registered easement prior to subdivision clearance advising prospective purchasers that they are in close proximity to power infrastructure which will be maintained, upgraded and expanded on a regular basis.  All development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.  No development (including fill, fencing, storage or parking) will be permitted within Western Power registered easements without the prior written approval of Western Power or the relevant power line operator. |

|   |                                     |           | infrastructure corridor to allow determination of its suitability in respect to public safety, routine and emergency land access and future network plans. Regarding public safety assessment, the requirements of the detailed study are summarised below and a required to form part of the servicing strategy:  • Soil Resistivity Report outlining on-site measurement of the soil resistivity.  • An Earth Potential Rise study to determine touch, step and transfer potentials, including documentation of all calculations.  • A Low Frequency Induction study to investigate the effects of induced voltages from the power line for step, touch and transfer potentials, during both construction and operation of the site.  • An Electrostatic Induction study to investigate the potential of hazardous charging of metallic objects in the vicinity of the line, such as fences, gates and other services.  • An Electromagnetic Field Study to determine the impacts of Electric and Magnetic Fields.  The studies should identify any mitigation required and be submitted to Western Power for review, record-keeping and to confirm the appropriateness of the proposed land use prior to subdivision. Please be advised that Western Power can provide data to assist in the preparation of the report, which will attract a fee. Costs will be estimated and funds must be received prior to assessment commencing. Generally assessments will take between three to five weeks, from receipt of funds.  Western Power requires the following additional provisions to be included on the Structure Plan for consideration at the subdivision and development stages:  • Provision of Section 70A Notifications on all proposed lots adjoining the existing Western Power registered easement prior to subdivision clearance advising prospective purchasers that they are in close proximity to power infrastructure which will be maintained, upgraded and expanded on a regular basis.  • All development shall be designed and constructed to protect Western Power infrastructure and interests from |  |
|---|-------------------------------------|-----------|---|--|
|   |                                     |           | without the prior written approval of Western Power or the relevant power line operator.  |  |
| 6 | Element<br>(on behalf Perron Group) | Objection | The proposed amendments to the neighbourhood centre are not consistent with the City's Local Commercial and Activity Centres Strategy (LCACS). As such, the uncapped and unjustified nature of the  | The location of the Neighbourhood Centre proposed in Amendment 2 (version B) is consistent with the Jandakot Structure Plan, Eastern Residential Intensification Concept, State Planning Policy 4.2 – Activity Centres for Perth |

Lots 1, 2 and 3 Thomas Road, Anketell Version B of Amendment 2 to the Anketell South Local Structure Plan Advertising period 3 May 2019 – 24 May 2019

additional shop/retail floorspace appears to contrary to the relevant planning framework and orderly and proper planning.

The proposed amendment not be adopted by Council in its current form for the reasons identified below:

The existing Anketell South Local Structure Plan includes a proposed neighbourhood centre of 3,900m² retail/commercial floorspace and 2,200m² 'Service Commercial' floorspace. We are concerned that the proposed Amendment no longer proposes a cap on the retail/commercial floorspace but states that the applicant intends to remain consistent with the 6,000m² retail cap provided for in State Planning Policy 4.2 – Activity Centres for Perth and Peel (SPP4.2).

We note that a Retail Sustainability Assessment (RSA) has not been prepared to support the additional shop/retail floorspace proposed.

As currently proposed, the amendment is not consistent with the City's strategic planning framework and an assessment of the potential economic and related effects of a significant retail expansion on the network of activity centres in the locality has not been undertaken. The City prepared the LCACS in 2014 to form a part of the Local Planning Strategy, specifically undertaking an assessment of the current activity centre policy environment, existing activity centres, retail trends and population projections. The LCACS includes a Retail Needs Assessment (RNA) and details how the development of activity centres within the City should occur.

The subject site is identified as the 'Thomas Road Neighbourhood Centre' under the City's LCACS and is formally classified as a 'Neighbourhood Centre'. The RNA provided in the LCACS sets out a series of site-specific shop/retail floorspace maxima which are not to be exceeded. The shop/retail floorspace maxima for the Thomas Road Neighbourhood Centre is 4,000m<sup>2</sup>.

We note that the LCACS states that, 'A convincing RSA will be required if the following maxima are to be exceeded (Shop/ Retail floorspace only) in a neighbourhood centre', referring to the 4,000m² maxima. The applicant's report mentions that there may be up to 6,000m² shop/retail floorspace proposed on the neighbourhood centre site. As the amount of proposed shop/retail floorspace significantly exceeds the permitted 4,000m² under the LCACS and without a supporting RSA demonstrating the sustainability of the retail hierarchy within the City, we are of the opinion that the proposed Amendment should not be supported in its current form.

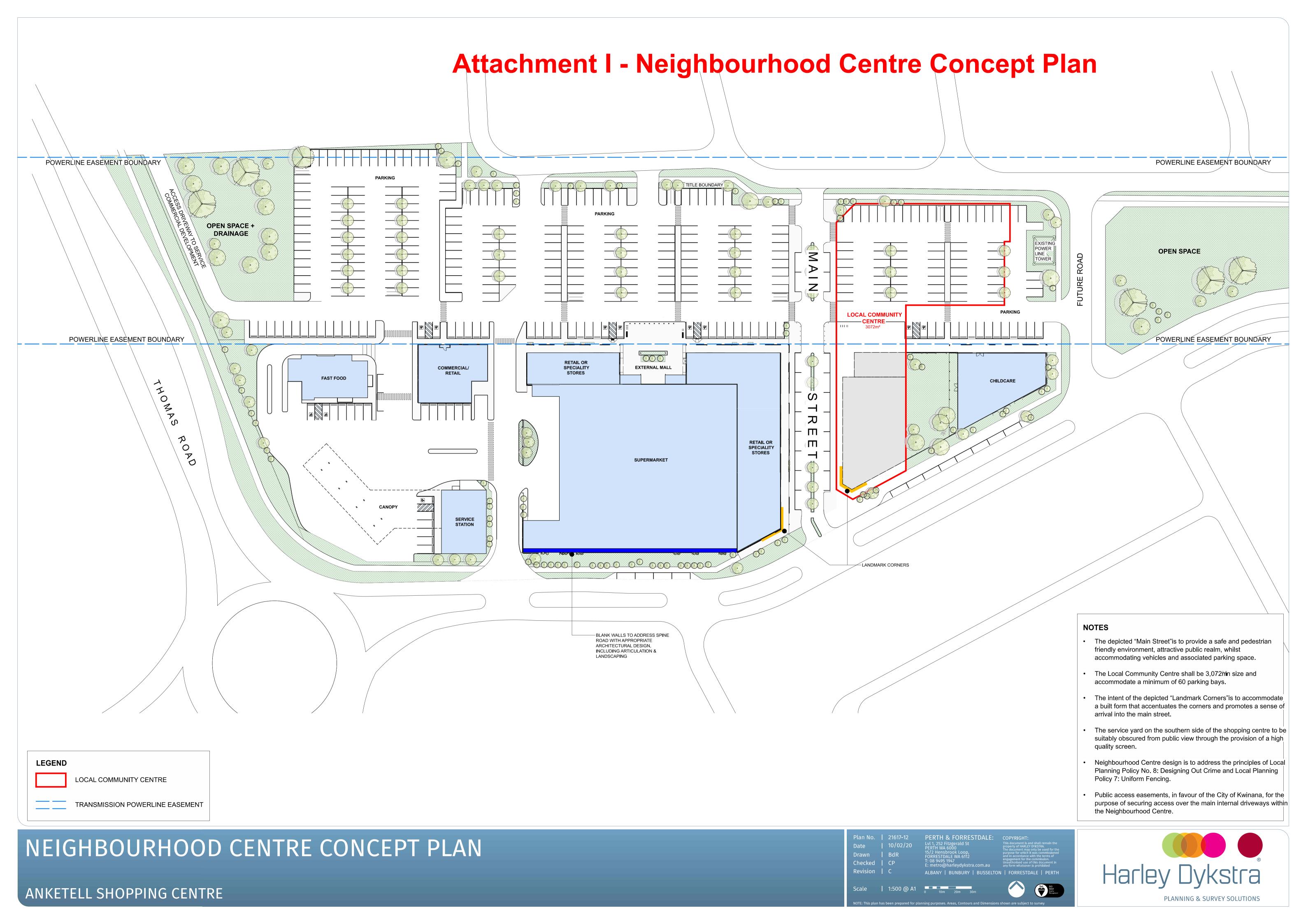
The applicant has included a 'Conceptual Neighbourhood Centre Plan' which shows at least 4,683m² shop/retail floorspace (excluding the service station, vet and child care uses). Again, this is vastly inconsistent with the provisions of the LCACS and completely unjustified in the Applicant's report.

On the basis of the above, it is requested that the proposed Amendment not be supported unless a retail floorspace cap of 4,000m<sup>2</sup> (in

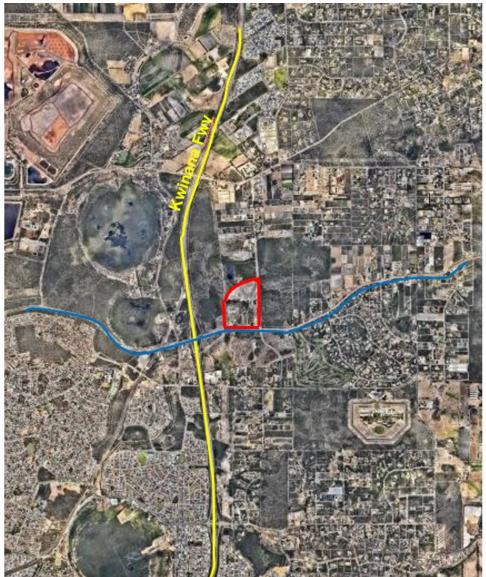
and Peel and Local Commercial and Activity Centres Strategy (LCACS). The neighbourhood centre site is generally consistent with the threshold commercial floor space (4000m2) identified in the LCACS.

It is noted in LCACS that the modelling on which the 4000m2 threshold was established is based on the demographics of the various localities and 'does not reflect other factors that may influence a particular centres performance such as large quantities of passing traffic'.

|   |  |         | accordance with the LCACS) is applied to the neighbourhood centre in the LSP.  In the event that a RSA is provided by the Applicant to justify shop/retail floorspace above 4,000m², we are of the opinion that the new figure must be included in the amended LSP as a retail floorspace cap to provide guidance in relation to the maximum shop/retail floorspace permitted.   |   |
|---|--|---------|--|---|
| 7 | Wayne Barber  Lots 2 & 3 Thomas Rd  Anketell | Support | We support the proposed amendment as it is clearly a superior plan to the original LSP in terms of accessibility, public use and future financial viability. It will provide a much better outcome for future residents and commercial tenants alike.  I also welcome and congratulate the council for their input into the revised layout & design, which I understand is the result of significant positive consultation between the proponent and the shire.  I would like to draw Council's attention to the future Thomas Rd upgradings and request that consideration be given to future road widening requirements.  My understanding is that all future road widening is to be taken from the northern side of Thomas Rd & no widening at all from the southern side. It would seem reasonable that the widening be shared equally on both | These comments are noted and City Officers will be raising this subject as part of discussions between the City and Main Roads on the Thomas Road alignment.  Main Roads is the determining authority on this matter. The rationale for the location of the road widening is dependent on such issues as the historic alignment, landform, safety and cost. |
|   |  |         | sides of the road.  Similarly the onus of paying for the roundabout which services land both north and south should be equitably distributed on each side.  If those matters could be addressed during planning of land development on the southern side of Thomas Rd - then it would represent a fair and reasonable outcome.   |   |



# **Attachment J – Locality Plan**

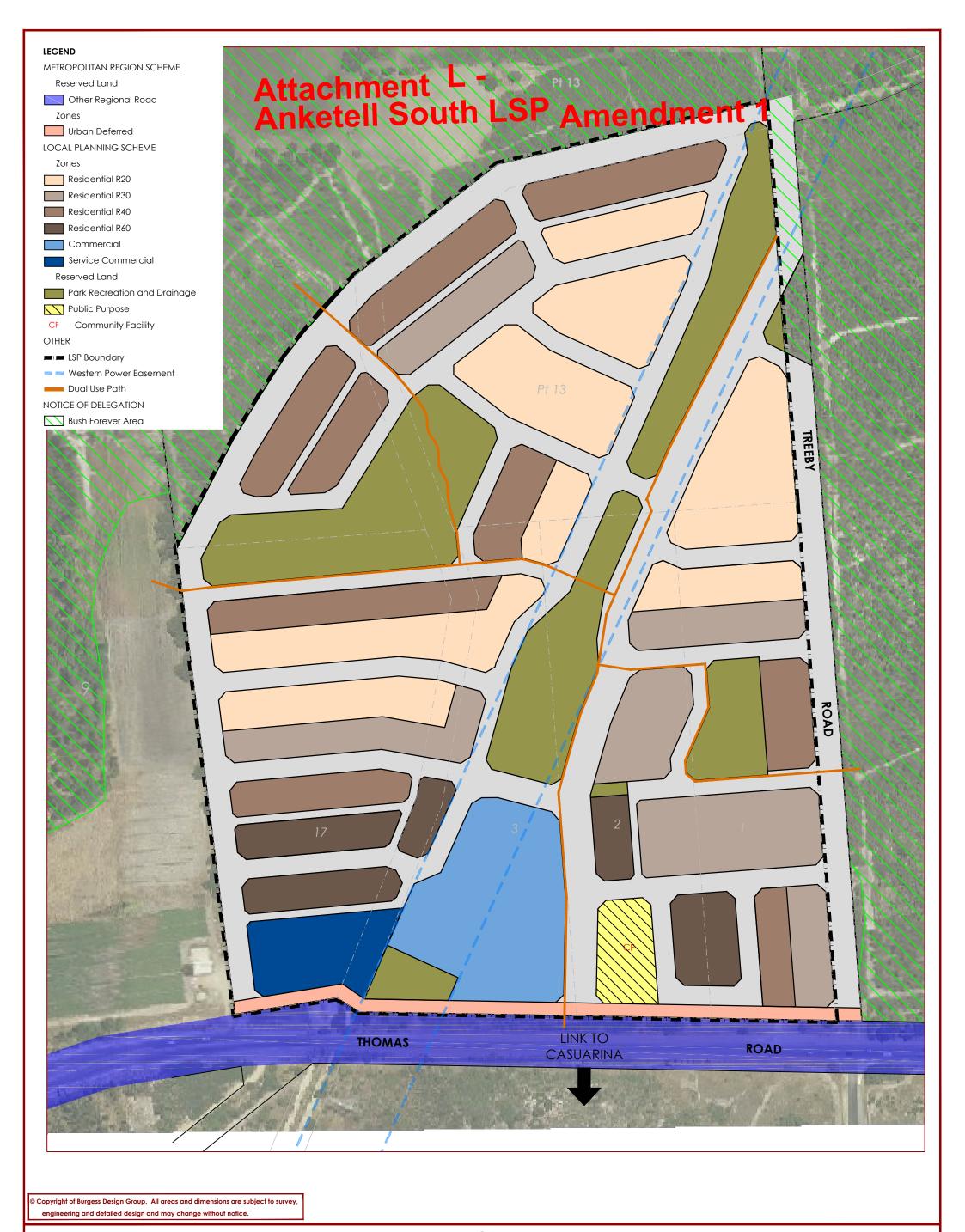


# **LOCATION**

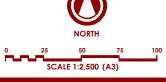
Thomas Road













61 York Streament Subiaco WA 6008
P.O.Box 42 Subiaco WA 6904
Phone: +61 (08) 9382 4199
Fax: +61 (08) 9382 4177

Email: admin@transcore.net.au

transport planning • traffic engineering • transport modelling
TRANSCORE PTY LTD ACN 094 951 318 ABN 19 094 951 318

Technical Note: No 1b Date: 10/02/2020

Project No: t18.174

**Project:** Proposed Amendment to Anketell South Structure Plan **Subject:** Neighbourhood Centre Crossover on N-S Spine Road

#### Introduction

As part of the approval process for the proposed amendment to Anketell South Structure Plan, The City of Kwinana has requested confirmation of the satisfactory operation of the N-S Spine Road southern crossover to the proposed neighbourhood centre on Lots 2 and 3 Thomas Road, Anketell.

The latest structure plan amendment map, latest subdivision plan and the latest neighbourhood centre plan are included in **Appendix A**. The crossover subject of this assessment is the closest crossover to the proposed Thomas Road roundabout.

Accordingly, this technical note documents the traffic modelling and analysis to demonstrate satisfactory operation of the subject crossover.

#### **Traffic Modelling and Analysis**

The Transport Impact Assessment (TIA) report prepared by Transcore for the neighbourhood centre dated April 2019 documents the traffic modelling and results of SIDRA network analysis for the proposed four-way roundabout intersection of Thomas Road and N-S Spine Road and the neighbourhood centre subject crossover.

The assessment year that was adopted for the analysis is 2031, with the assumption of full development of Anketell, Wandi and Casuarina LSP areas. This would be representative of the WAPC guidelines requirement for analysis of future scenario of 10 years after completion of the proposed development.

The following sections of this technical note documents relevant extracts from the April 2019 TIA. It is important to note that the traffic modelling and analysis undertaken was used as part of the process for the Thomas Road intersection treatment selection and therefore, has been accepted by relevant agencies.

#### **Traffic Generation and Distribution**

The transport modelling for this project utilised Transcore's subregional strategic transport model for year 2031 based on weekday traffic flows for this area using the EMME transport modelling software package. The model incorporates the latest land

use data for the neighbourhood centre, Wandi, Anketell and Casuarina LSPs in order to consider all the traffic volumes in the area.

The daily traffic generation rate used in the traffic model for residential land uses in the structure plan areas is 8 vehicle trips per day (vpd) per dwelling, which corresponds to peak hour trip generation rates recommended in the Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Development (2016).

The "Guide to Traffic Generating Developments, Roads and Traffic Authority (RTA) of New South Wales" was sourced to establish the traffic generation rates for the proposed retail component (supermarket and specialty stores) of the proposed neighbourhood centre. For the trip generation of the proposed service station and fast food outlets the Institute of Transportation Engineers, USA, Trip Generation Manual (10<sup>th</sup> Edition) was sourced and for the proposed childcare centre trip rates from previous Transcore reports were utilised.

Accordingly, it is estimated that the neighbourhood centre would generate a total of approximately 7,300 total trips per day (both inbound and outbound) with approximately 340, 630 and 690 trips (both inbound and outbound) during weekday morning, weekday afternoon and Saturday afternoon peak hour periods, respectively

Similar analysis was undertaken for the trip generation estimation of the proposed commercial area to the south of Thomas Road. The outcome of the traffic analysis indicates that the proposed commercial development to the south of Thomas road would generate approximately 19,600vpd with approximately 500, 1850 and 2,650trips (both inbound and outbound) during weekday morning, weekday afternoon and Saturday afternoon peak hour periods, respectively.

The distribution of the daily traffic in 2031 is determined by the transport model using the principles of gravity model and in proportion to the location of trip productions and attractors for work trips, education trips and other trips (shopping, social, recreational, etc.) among all the land uses in the traffic model. **Figure 1** illustrates the 2031 daily traffic projections on internal and external roads.

For the conversion of the daily traffic volume to peak hour volumes, it was assumed that the in/ out traffic split for residential component of the traffic would be 80%/20% during the weekday PM peak hour (and reverse for the weekday AM peak hour) and 50%/50% during the Saturday PM peak hour. The in/out traffic split for the commercial component of the traffic was assumed to be 50%/50% for both weekday and Saturday peak hours. The residential and commercial traffic were established separately through select zone analysis in the EMME model.

The total projected peak hour traffic volumes for year 2031 at the intersections and crossovers are presented **Figure 2**.



Figure 1: Projected daily traffic volumes - 2031

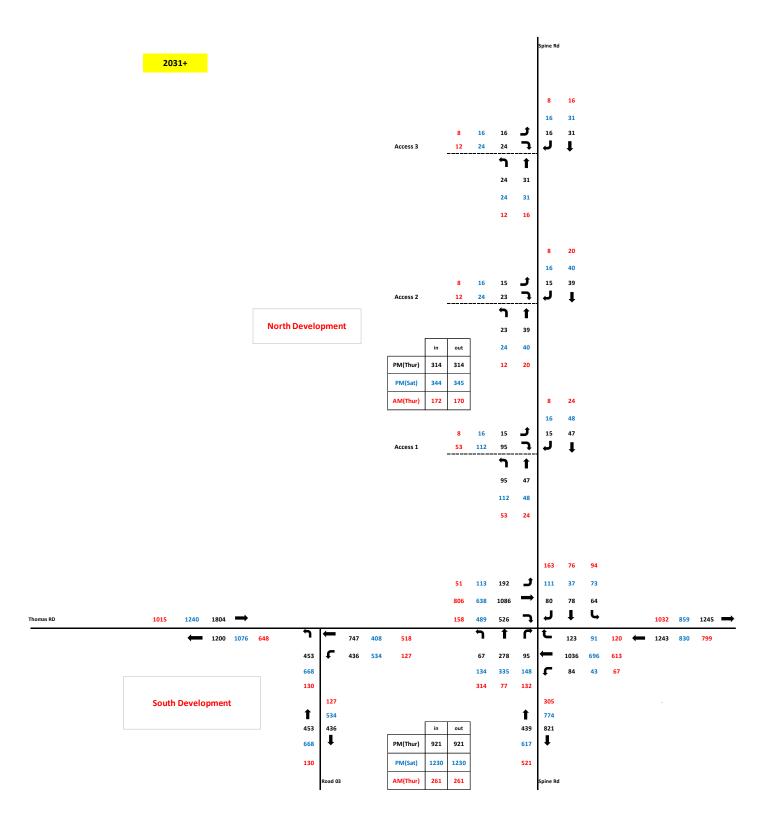


Figure 2: Total post development (2031) traffic – Weekday PM, PM Saturday and AM Weekday

#### **Intersection Analysis**

Capacity analysis was undertaken using the SIDRA computer software package. SIDRA is an intersection modelling tool commonly used by traffic engineers for all types of intersections. SIDRA outputs are presented in the form of Degree of Saturation, Level of Service, Average Delay and 95% Queue. These characteristics are defined as follows:

- Degree of Saturation is the ratio of the arrival traffic flow to the capacity
  of the approach during the same period. The Degree of Saturation ranges
  from close to zero for infrequent traffic flow up to one for saturated flow
  or capacity.
- Level of Service is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. In general, there are 6 levels of service, designated from A to F, with Level of Service A representing the best operating condition (i.e. free flow) and Level of Service F the worst (i.e. forced or breakdown flow).
- Average Delay is the average of all travel time delays for vehicles through the intersection.
- 95% Queue is the queue length below which 95% of all observed queue lengths fall.

**Figure 3** illustrates the proposed intersection layout modelled in SIDRA for year 2031.

The results of the SIDRA analysis are summarised in **Appendix B**. The SIDRA intersection models were coded with reference to the Main Roads WA Operation Modelling Guidelines Version No. 1.1. All relevant parameters such as heavy vehicle groups, PCU factors etc. were coded as per the Main Roads WA Guidelines.

A Network SIDRA model was prepared to assess the proposed neighbourhood centre crossover and Thomas road intersection as an integrated traffic network. A separation distance of about 50m was assumed between the proposed primary intersection on Thomas Road and the neighbourhood centre crossover on the spine road.

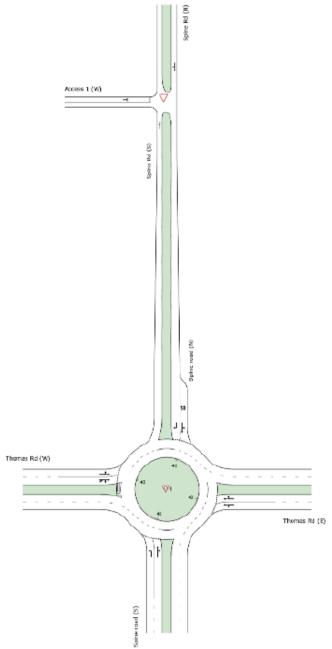


Figure 3: SIDRA Network Models (2031)

#### **Thomas Road roundabout intersection**

SIDRA analysis undertaken indicates that in 2031 (and beyond) with full development of the Anketell and Casuarina structure plans the proposed roundabout intersection on Thomas Road would operate satisfactorily and within capacity with overall level of service A or B for all scenarios.

#### Neighbourhood centre crossover

SIDRA analysis indicates that the subject crossover will operate satisfactorily in the 2031 (10-year post development scenario) during assessed peak hours. All movements operate with good level of service with minimal delays and queuing.

#### **Network Operation**

Relevant SIDRA network outputs were reviewed for assessed peak hours to assess the operation of the subject crossover on spine road and the roundabout intersection on Thomas Road as an integrated network. The critical periods for this analysis are the AM and PM peak hours as the critical issue is the queue back from the roundabout on Thomas Road. Review of the Saturday peak hour has shown no issues and therefore the focus of this analysis is the AM and PM peak hours.

As detailed in **Figures 4 & 5**, no queuing back from the Thomas Road intersection to the subject crossover is anticipated. Additionally, no queuing from the subject crossover back to the roundabout is anticipated.

The SIDRA analysis indicates that the proposed roundabout intersection of Thomas Road/ Spine Road will operate satisfactorily with overall level of service A or B (good operation). The maximum reported 95% queue on spine road (SB) is about 12m during the PM peak hour for year 2031 and therefore this queue back does not extend to the subject crossover on spine road which would be located about 50m to the north of the primary intersection on Thomas Road.

It should be noted that there is no reported queue from the subject crossover to the Thomas Road roundabout on the spine road. This reporting is also logical as the traffic on spine road northbound will turn left into the centre at the crossover. This left turn movement is free flowing without any blockages or bottlenecks.

The SIDRA Network Queue Storage Ratio diagrams, presented in **Figures 4 & 5**, confirm sufficient separation distance between the roundabout on Thomas Road and the subject crossover. The diagrams present the 95% queue as a ratio of available storage distance between the intersection and the crossover. It should be noted that the average queue distance on spine road (SB) is much less than the reported 12m queue that would happen occasionally during the PM peak hours.

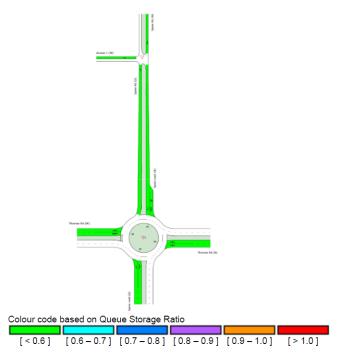


Figure 4: Weekday AM peak hour network analysis – queue storage ratio (2031)

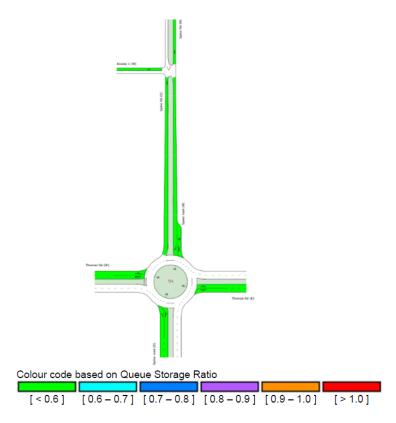


Figure 5: Weekday PM peak hour network analysis – queue storage ratio (2031)

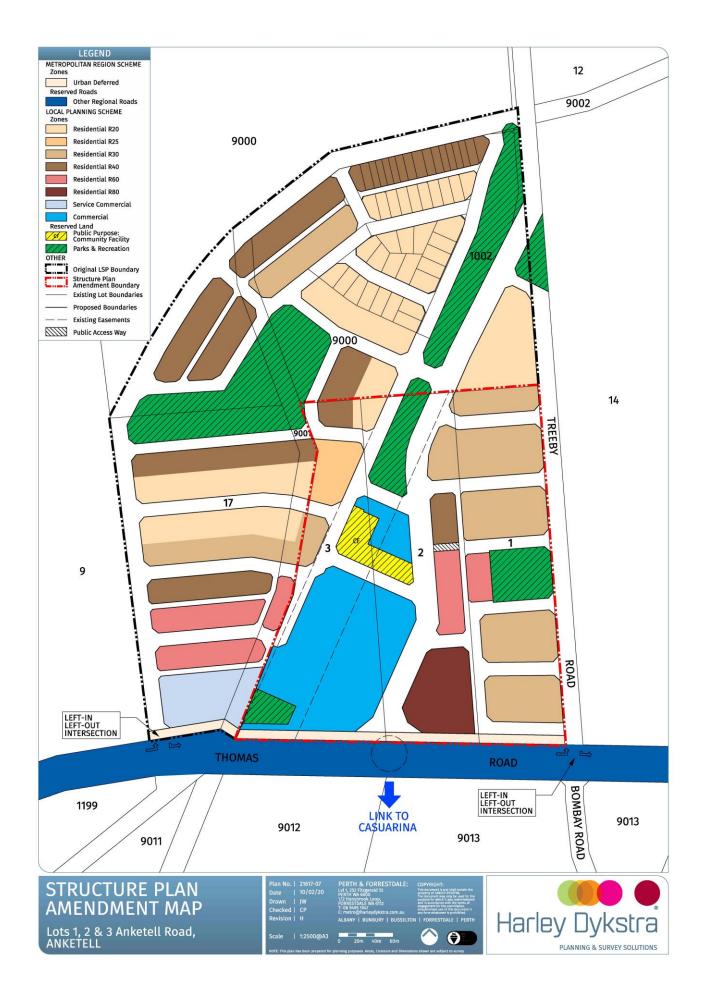
#### Conclusion

This technical note has been prepared to demonstrate and confirm satisfactory operation of the southern crossover on N-S spine road for the proposed neighbourhood centre. This confirmation was request by City of Kwinana as part of the proposed Anketell South LSP Amendment.

The result of the comprehensive traffic modelling and analysis undertaken for year 2031 indicates that the subject crossover will operate satisfactory and without any excessive queues and delays. Specifically, there won't be any queues extending back from the proposed Thomas Road roundabout intersection to the subject crossover. Further there are no reported queues from the subject crossover back to the Thomas Road roundabout on the spine road. There is no risk with any such queue as the traffic on spine road northbound will turn left into the centre at the crossover. This left turn movement is free flowing without any blockages or bottlenecks. As a result, the subject crossover has no impact on the operations of Thomas Road and the proposed Thomas Road/Spine Road intersection.

# **Appendix A**

## LATEST STRUCTURE PLAN AMENDMENT MAP LATEST SUBDIVISION PLAN AND LATEST NEIGHBOURHOOD CENTRE PLAN







# **Appendix B**

# **INTERSECTION ANALYSIS**

### **MOVEMENT SUMMARY**

♥ Site: 1 [Thomas-Spine Road - RB - Post 2031 - Weekday AM]

фф Network: N101 [Network -RB - Access Rd 1 - Post 2031 -

Thomas-Spine Road - RB - Post 2031 - PM Site Category: (None) Roundabout

| Mov   Turn   Demand Flows Arrival Flows   Deg.   Average   Level of Satin   Delay   Service   Service   Vehicles Distance     | Move   | ement    | Perform    | ance - | - Vehic | cles |       |         |         |         |      |        |       |          |            |
|---|--------|----------|------------|--------|---------|------|-------|---------|---------|---------|------|--------|-------|----------|------------|
| Total   HV   Total   HV   Veh/h   South: Spine road (S)   | Mov    |          |            |        |         |      |       | Average |         | 95% Bad | k of | Prop.  |       | Aver. A  | Averag     |
| Veh   Weh   Weh   Weh   Weh   South: Spine road (S)   | ID     |          | Total      | H\/    | Total   | H\/  | Satn  | Delay   | Service |         |      | Queued |       |          | e<br>Speed |
| 1 L2 314 14.1 314 14.1 0.305 4.1 LOS A 1.3 11.5 0.58 0.57 0.58 50.6 2 T1 77 2.2 0.53 3.5 LOS A 1.0 8.1 0.57 0.69 0.57 35.0 3 R2 132 14.1 132 14.1 0.253 10.1 LOS B 1.0 8.1 0.57 0.69 0.57 50.0 Approach 523 12.3 523 12.3 0.305 5.5 LOS A 1.3 11.5 0.58 0.62 0.58 49.2 East: Thomas Rd (E)  4 L2 67 14.1 67 14.1 0.344 5.5 LOS A 1.4 12.8 0.41 0.48 0.41 55.6 5 T1 613 14.1 613 14.1 0.344 5.5 LOS A 1.4 12.8 0.42 0.52 0.42 59.3 6 R2 120 2.2 120 2.2 0.344 12.1 LOS B 1.4 11.9 0.42 0.58 0.42 53.6 Approach 800 12.3 800 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 800 12.3 800 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 801 12.3 80 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 801 12.3 80 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 801 12.3 80 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 801 12.3 80 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 801 12.3 80 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 801 12.3 80 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 801 12.3 80 12.3 0.344 6.5 LOS A 0.7 5.1 0.59 0.47 0.59 55.6 8 T1 76 2.2 76 2.2 0.161 3.6 LOS A 0.7 5.1 0.59 0.47 0.59 55.6 8 T1 76 2.2 76 2.2 0.161 2.8 LOS A 0.7 5.1 0.59 0.47 0.59 48.2 9 R2 163 2.2 163 2.2 0.201 9.5 LOS A 0.8 6.0 0.60 0.60 0.62 0.60 52.0 Approach 333 2.2 333 2.2 0.201 6.3 LOS A 0.8 6.0 0.60 0.62 0.60 52.6 West: Thomas Rd (W)  10 L2 51 2.2 51 2.2 0.393 5.4 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 5.7 LOS B 2.3 20.1 0.52 0.61 0.52 56.1 12 U 50 12.6 50 12.6 0.393 15.7 LOS B 2.3 20.1 0.52 0.61 0.52 56.1 12 U 50 12.6 50 12.6 0.393 15.7 LOS B 2.3 20.1 0.52 0.61 0.52 59.5 Approach 1015 13.4 1015 13.4 0.393 7.0 LOS A 2.4 21.5 0.50 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 5.7 LOS B 2.3 20.1 0.52 0.61 0.52 59.5 Approach 1015 13.4 1015 13.4 0.393 7.0 LOS A 2.4 21.5 0.50 0.50 0.53 0.50 58.8 12 R2 108 R4 (S)  |        |          |            |        |         |      | v/c   | sec     |         |         |      |        | Ttate | Cycles c |            |
| 2 T1 77 2.2 77 2.2 0.253 3.5 LOS A 1.0 8.1 0.57 0.69 0.57 35.0 3 R2 132 14.1 132 14.1 0.253 10.1 LOS B 1.0 8.1 0.57 0.69 0.57 35.0 Approach 523 12.3 523 12.3 0.305 5.5 LOS A 1.3 11.5 0.58 0.62 0.58 49.2 East: Thomas Rd (E)  4 L2 67 14.1 67 14.1 0.344 5.5 LOS A 1.4 12.8 0.41 0.48 0.41 55.6 F. T1 613 14.1 613 14.1 0.344 5.5 LOS A 1.4 12.8 0.41 0.42 0.52 0.42 59.3 6 R2 120 2.2 120 2.2 0.344 12.1 LOS B 1.4 11.9 0.42 0.55 0.42 53.6 Approach 800 12.3 800 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 53.6 Approach 800 12.3 800 12.3 0.344 6.5 LOS A 1.4 12.8 0.42 0.53 0.42 55.5 North: Spine road (N)  7 L2 94 2.2 94 2.2 0.161 3.6 LOS A 0.7 5.1 0.59 0.47 0.59 55.6 8 T1 76 2.2 76 2.2 0.161 2.8 LOS A 0.7 5.1 0.59 0.47 0.59 48.2 9 R2 163 2.2 163 2.2 0.201 9.5 LOS A 0.8 6.0 0.60 0.78 0.60 52.0 Approach 333 2.2 333 2.2 0.201 6.3 LOS A 0.8 6.0 0.60 0.78 0.60 52.0 West: Thomas Rd (W)  West: Thomas Rd (W)  10 L2 51 2.2 51 2.2 0.393 5.4 LOS A 0.8 6.0 0.60 0.62 0.60 52.6 West: Thomas Rd (W)  11 T1 806 14.1 806 14.1 0.393 12.8 LOS B 2.3 20.1 0.52 0.61 0.52 56.1 12u U 50 12.6 50 12.6 0.393 15.7 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 15.7 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 15.7 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 15.7 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 15.7 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 15.7 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 15.7 LOS A 2.4 21.5 0.50 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 15.7 LOS A 2.4 21.5 0.50 0.50 0.53 0.50 58.8 12 R2 108 | South  | n: Spine | e road (S) |        |         |      |       |         |         |         |      |        |       |          |            |
| 3   R2   132   14.1   132   14.1   0.253   10.1   LOS B   1.0   8.1   0.57   0.69   0.57   50.0     Approach   523   12.3   523   12.3   0.305   5.5   LOS A   1.3   11.5   0.58   0.62   0.58   49.2     East: Thomas Rd (E)     4   L2   67   14.1   67   14.1   0.344   5.5   LOS A   1.4   12.8   0.41   0.48   0.41   55.6     5   T1   613   14.1   613   14.1   0.344   5.5   LOS A   1.4   12.8   0.42   0.52   0.42   59.3     6   R2   120   2.2   120   2.2   0.344   12.1   LOS B   1.4   11.9   0.42   0.58   0.42   53.6     Approach   800   12.3   800   12.3   0.344   6.5   LOS A   1.4   11.9   0.42   0.58   0.42   53.6     Approach   800   12.3   800   12.3   0.344   6.5   LOS A   1.4   11.9   0.42   0.53   0.42   58.5     North: Spine road (N)  | 1      | L2       | 314        | 14.1   | 314     | 14.1 | 0.305 | 4.1     | LOS A   | 1.3     | 11.5 | 0.58   | 0.57  | 0.58     | 50.6       |
| Approach 523 12.3 523 12.3 0.305 5.5 LOSA 1.3 11.5 0.58 0.62 0.58 49.2  East: Thomas Rd (E)  4 L2 67 14.1 67 14.1 0.344 5.5 LOSA 1.4 12.8 0.41 0.48 0.41 55.6 5 T1 613 14.1 613 14.1 0.344 5.5 LOSA 1.4 12.8 0.42 0.52 0.42 59.3 6 R2 120 2.2 120 2.2 0.344 12.1 LOSB 1.4 11.9 0.42 0.58 0.42 53.6 Approach 800 12.3 800 12.3 0.344 6.5 LOSA 1.4 12.8 0.42 0.53 0.42 58.5  North: Spine road (N)  7 L2 94 2.2 94 2.2 0.161 3.6 LOSA 0.7 5.1 0.59 0.47 0.59 55.6 8 T1 76 2.2 76 2.2 0.161 2.8 LOSA 0.7 5.1 0.59 0.47 0.59 55.6 8 T1 76 2.2 163 2.2 0.201 9.5 LOSA 0.8 6.0 0.60 0.78 0.60 52.0 Approach 333 2.2 333 2.2 0.201 6.3 LOSA 0.8 6.0 0.60 0.78 0.60 52.0 Approach 333 2.2 333 2.2 0.201 6.3 LOSA 0.8 6.0 0.60 0.62 0.60 52.6 West: Thomas Rd (W)  10 L2 51 2.2 51 2.2 0.393 5.4 LOSA 2.4 21.5 0.49 0.49 0.49 55.1 11 T1 806 14.1 806 14.1 0.393 5.7 LOSA 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 12.8 LOSB 2.3 20.1 0.52 0.61 0.52 56.1 12.0 U 50 12.6 50 12.6 0.393 15.7 LOSB 2.3 20.1 0.52 0.61 0.52 59.5 Approach 1015 13.4 1015 13.4 0.393 7.0 LOSA 2.4 21.5 0.51 0.54 0.51 58.5 All Vehicles 2671 11.5 2671 11.5 0.393 6.5 LOSA 2.4 21.5 0.51 0.54 0.51 58.5 All Vehicles 2671 11.5 2671 11.5 0.393 6.5 LOSA 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 2.4 2.0 2.4 2.0 0.042 0.0 LOSA 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 2.4 2.0 2.4 2.0 0.042 0.0 LOSA 0.0 0.0 0.0 0.0 0.37 0.00 19.9 2 T1 2.4 2.0 2.4 2.0 0.042 0.0 LOSA 0.0 0.0 0.0 0.0 0.37 0.00 25.3 North: Spine Rd (N)  8 T1 24 2.0 24 2.0 0.042 0.0 LOSA 0.0 0.0 0.0 0.0 0.37 0.00 25.3  |        |          |            | 2.2    |         | 2.2  | 0.253 | 3.5     | LOSA    | 1.0     | 8.1  | 0.57   | 0.69  | 0.57     |            |
| East: Thomas Rd (E)  4  | 3      | R2       |            | 14.1   |         | 14.1 | 0.253 | 10.1    | LOS B   | 1.0     | 8.1  | 0.57   | 0.69  | 0.57     | 50.0       |
| 4       L2       67       14.1       67       14.1       0.344       5.5       LOS A       1.4       12.8       0.41       0.48       0.41       55.6         5       T1       613       14.1       613       14.1       0.344       5.5       LOS A       1.4       12.8       0.42       0.52       0.42       59.3         6       R2       120       2.2       120       2.2       0.344       12.1       LOS B       1.4       11.9       0.42       0.58       0.42       53.6         Approach       800       12.3       800       12.3       0.344       6.5       LOS A       1.4       11.9       0.42       0.53       0.42       53.6         North: Spine road (N)       **O.04       0.2       94       2.2       0.161       3.6       LOS A       0.7       5.1       0.59       0.47       0.59       55.6         8       T1       76       2.2       76       2.2       0.161       2.8       LOS A       0.7       5.1       0.59       0.47       0.59       48.2         9       R2       163       2.2       0.201       9.5       LOS A       0.8  | Appro  | oach     | 523        | 12.3   | 523     | 12.3 | 0.305 | 5.5     | LOSA    | 1.3     | 11.5 | 0.58   | 0.62  | 0.58     | 49.2       |
| 5         T1         613         14.1         613         14.1         0.344         5.5         LOS A         1.4         12.8         0.42         0.52         0.42         59.3           6         R2         120         2.2         120         2.2         0.344         12.1         LOS B         1.4         11.9         0.42         0.58         0.42         53.6           Approach         800         12.3         800         12.3         0.344         6.5         LOS A         1.4         12.8         0.42         0.53         0.42         53.6           North: Spine road (N)         V           7         L2         94         2.2         0.161         3.6         LOS A         0.7         5.1         0.59         0.47         0.59         55.6           8         T1         76         2.2         76         2.2         0.161         2.8         LOS A         0.7         5.1         0.59         0.47         0.59         48.2           9         R2         163         2.2         0.201         6.3         LOS A         0.8         6.0         0.60         0.60         0.60         52.6  | East:  | Thoma    | as Rd (E)  |        |         |      |       |         |         |         |      |        |       |          |            |
| 6         R2         120         2.2         120         2.2         0.344         12.1         LOS B         1.4         11.9         0.42         0.58         0.42         53.6           Approach         800         12.3         800         12.3         0.344         6.5         LOS A         1.4         12.8         0.42         0.53         0.42         53.6           North: Spine road (N)         7         L2         94         2.2         0.161         3.6         LOS A         0.7         5.1         0.59         0.47         0.59         55.6           8         T1         76         2.2         76         2.2         0.161         2.8         LOS A         0.7         5.1         0.59         0.47         0.59         48.2           9         R2         163         2.2         103         2.2         0.201         9.5         LOS A         0.8         6.0         0.60         0.62         0.60         52.0           Approach         333         2.2         51         2.2         0.393         5.4         LOS A         2.4         21.5         0.49         0.49         0.49         55.1           10 </td <td>4</td> <td>L2</td> <td>67</td> <td>14.1</td> <td>67</td> <td>14.1</td> <td>0.344</td> <td>5.5</td> <td>LOSA</td> <td>1.4</td> <td>12.8</td> <td>0.41</td> <td>0.48</td> <td>0.41</td> <td>55.6</td>   | 4      | L2       | 67         | 14.1   | 67      | 14.1 | 0.344 | 5.5     | LOSA    | 1.4     | 12.8 | 0.41   | 0.48  | 0.41     | 55.6       |
| Approach 800 12.3 800 12.3 0.344 6.5 LOSA 1.4 12.8 0.42 0.53 0.42 58.5  North: Spine road (N)  7  | 5      | T1       | 613        | 14.1   | 613     | 14.1 | 0.344 | 5.5     | LOSA    | 1.4     | 12.8 | 0.42   | 0.52  | 0.42     | 59.3       |
| North: Spine road (N)  7  | 6      | R2       | 120        | 2.2    | 120     | 2.2  | 0.344 | 12.1    | LOS B   | 1.4     | 11.9 | 0.42   | 0.58  | 0.42     | 53.6       |
| 7 L2 94 2.2 94 2.2 0.161 3.6 LOSA 0.7 5.1 0.59 0.47 0.59 55.6 8 T1 76 2.2 76 2.2 0.161 2.8 LOSA 0.7 5.1 0.59 0.47 0.59 48.2 9 R2 163 2.2 163 2.2 0.201 9.5 LOSA 0.8 6.0 0.60 0.78 0.60 52.0 Approach 333 2.2 333 2.2 0.201 6.3 LOSA 0.8 6.0 0.60 0.60 0.78 0.60 52.0 West: Thomas Rd (W)  10 L2 51 2.2 51 2.2 0.393 5.4 LOSA 2.4 21.5 0.49 0.49 0.49 55.1 11 T1 806 14.1 806 14.1 0.393 5.7 LOSA 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 12.8 LOSB 2.3 20.1 0.52 0.61 0.52 56.1 12u U 50 12.6 50 12.6 0.393 15.7 LOSB 2.3 20.1 0.52 0.61 0.52 56.1 12u U 50 12.6 50 12.6 0.393 7.0 LOSA 2.4 21.5 0.50 0.50 0.54 0.51 58.5 Approach 1015 13.4 1015 13.4 0.393 7.0 LOSA 2.4 21.5 0.50 0.50 0.54 0.51 58.5 All Vehicles 2671 11.5 2671 11.5 0.393 6.5 LOSA 2.4 21.5 0.50 0.50 0.54 0.51 58.5 Approach 77 2.0 77 2.0 0.042 0.0 LOSA 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 0.0 LOSA 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 3.0 NA 0.0 0.0 0.0 0.00 0.37 0.00 25.3 North: Spine Rd (N)  8 T1 24 2.0 24 2.0 0.042 3.0 NA 0.0 0.0 0.3 0.09 0.14 0.09 43.1   | Appro  | oach     | 800        | 12.3   | 800     | 12.3 | 0.344 | 6.5     | LOSA    | 1.4     | 12.8 | 0.42   | 0.53  | 0.42     | 58.5       |
| 8 T1 76 2.2 76 2.2 0.161 2.8 LOS A 0.7 5.1 0.59 0.47 0.59 48.2 9 R2 163 2.2 163 2.2 0.201 9.5 LOS A 0.8 6.0 0.60 0.78 0.60 52.0 Approach 333 2.2 333 2.2 0.201 6.3 LOS A 0.8 6.0 0.60 0.62 0.60 52.6 West: Thomas Rd (W)  10 L2 51 2.2 51 2.2 51 2.2 0.393 5.4 LOS A 2.4 21.5 0.49 0.49 0.49 55.1 1 T1 806 14.1 806 14.1 0.393 5.7 LOS A 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 12.8 LOS B 2.3 20.1 0.52 0.61 0.52 56.1 12u U 50 12.6 50 12.6 0.393 15.7 LOS B 2.3 20.1 0.52 0.61 0.52 59.5 Approach 1015 13.4 1015 13.4 0.393 7.0 LOS A 2.4 21.5 0.50 0.51 0.54 0.51 58.5 All Vehicles 2671 11.5 2671 11.5 0.393 6.5 LOS A 2.4 21.5 0.50 0.50 0.56 0.50 56.4 South: Spine Rd (S)  1 L2 53 2.0 53 2.0 0.042 4.3 LOS A 2.4 21.5 0.50 0.50 0.56 0.50 56.4 South: Spine Rd (S)  1 L2 53 2.0 53 2.0 0.042 4.3 LOS A 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 0.0 LOS A 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 24 2.0 77 2.0 0.042 3.0 NA 0.0 0.0 0.0 0.00 0.37 0.00 25.3 North: Spine Rd (N)  8 T1 24 2.0 24 2.0 0.018 0.1 LOS A 0.0 0.0 0.0 0.0 0.37 0.00 25.3 North: Spine Rd (N)   | North  | : Spine  | road (N)   |        |         |      |       |         |         |         |      |        |       |          |            |
| 9 R2 163 2.2 163 2.2 0.201 9.5 LOSA 0.8 6.0 0.60 0.78 0.60 52.0 Approach 333 2.2 333 2.2 0.201 6.3 LOSA 0.8 6.0 0.60 0.60 0.62 0.60 52.6 West: Thomas Rd (W)  10 L2 51 2.2 51 2.2 0.393 5.4 LOSA 2.4 21.5 0.49 0.49 0.49 55.1 11 T1 806 14.1 806 14.1 0.393 5.7 LOSA 2.4 21.5 0.50 0.53 0.50 58.8 12 R2 108 14.1 108 14.1 0.393 12.8 LOSB 2.3 20.1 0.52 0.61 0.52 56.1 12u U 50 12.6 50 12.6 0.393 15.7 LOSB 2.3 20.1 0.52 0.61 0.52 59.5 Approach 1015 13.4 1015 13.4 0.393 7.0 LOSA 2.4 21.5 0.51 0.54 0.51 58.5 All Vehicles 2671 11.5 2671 11.5 0.393 6.5 LOSA 2.4 21.5 0.50 0.50 0.56 0.50 56.4 South: Spine Rd (S)  1 L2 53 2.0 53 2.0 0.042 4.3 LOSA 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 0.0 LOSA 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 3.0 NA 0.0 0.0 0.0 0.00 0.37 0.00 25.3 North: Spine Rd (N)  8 T1 24 2.0 24 2.0 0.018 0.1 LOSA 0.0 0.3 0.09 0.14 0.09 43.1  | 7      | L2       | 94         | 2.2    | 94      | 2.2  | 0.161 | 3.6     | LOSA    | 0.7     | 5.1  | 0.59   | 0.47  | 0.59     | 55.6       |
| Approach         333         2.2         333         2.2         0.201         6.3         LOS A         0.8         6.0         0.60         0.62         0.60         52.6           West: Thomas Rd (W)           10         L2         51         2.2         51         2.2         0.393         5.4         LOS A         2.4         21.5         0.49         0.49         0.49         55.1           11         T1         806         14.1         0.393         5.7         LOS A         2.4         21.5         0.50         0.53         0.50         58.8           12         R2         108         14.1         108         14.1         0.393         15.7         LOS B         2.3         20.1         0.52         0.61         0.52         56.1           12u         U         50         12.6         50         12.6         0.393         15.7         LOS B         2.3         20.1         0.52         0.61         0.52         59.5           Approach         1015         13.4         1015         13.4         0.393         6.5         LOS A         2.4         21.5         0.51         0.54         0.51         58.5   | 8      | T1       | 76         | 2.2    | 76      | 2.2  | 0.161 | 2.8     | LOSA    | 0.7     | 5.1  | 0.59   | 0.47  | 0.59     | 48.2       |
| West: Thomas Rd (W)  10   | 9      | R2       | 163        | 2.2    | 163     | 2.2  | 0.201 | 9.5     | LOSA    | 0.8     | 6.0  | 0.60   | 0.78  | 0.60     | 52.0       |
| 10         L2         51         2.2         51         2.2         0.393         5.4         LOS A         2.4         21.5         0.49         0.49         0.49         55.1           11         T1         806         14.1         806         14.1         0.393         5.7         LOS A         2.4         21.5         0.50         0.53         0.50         58.8           12         R2         108         14.1         108         14.1         0.393         12.8         LOS B         2.3         20.1         0.52         0.61         0.52         56.1           12u         U         50         12.6         50         12.6         0.393         15.7         LOS B         2.3         20.1         0.52         0.61         0.52         59.5           Approach         1015         13.4         1015         13.4         0.393         7.0         LOS A         2.4         21.5         0.51         0.54         0.51         58.5           All Vehicles         2671         11.5         2671         11.5         0.393         6.5         LOS A         2.4         21.5         0.50         0.56         0.50         56.4   | Appro  | oach     | 333        | 2.2    | 333     | 2.2  | 0.201 | 6.3     | LOSA    | 0.8     | 6.0  | 0.60   | 0.62  | 0.60     | 52.6       |
| 11       T1       806       14.1       806       14.1       0.393       5.7       LOS A       2.4       21.5       0.50       0.53       0.50       58.8         12       R2       108       14.1       108       14.1       0.393       12.8       LOS B       2.3       20.1       0.52       0.61       0.52       56.1         12u       U       50       12.6       50       12.6       0.393       15.7       LOS B       2.3       20.1       0.52       0.61       0.52       59.5         Approach       1015       13.4       1015       13.4       0.393       7.0       LOS A       2.4       21.5       0.51       0.54       0.51       58.5         All Vehicles       2671       11.5       2671       11.5       0.393       6.5       LOS A       2.4       21.5       0.50       0.56       0.50       56.4         South: Spine Rd (S)       1       L2       53       2.0       53       2.0       0.042       4.3       LOS A       0.0       0.0       0.00       0.37       0.00       19.9         2       T1       24       2.0       24       2.0       0.042  | West   | : Thom   | as Rd (W)  |        |         |      |       |         |         |         |      |        |       |          |            |
| 12       R2       108       14.1       108       14.1       0.393       12.8       LOS B       2.3       20.1       0.52       0.61       0.52       56.1         12u       U       50       12.6       50       12.6       0.393       15.7       LOS B       2.3       20.1       0.52       0.61       0.52       59.5         Approach       1015       13.4       1015       13.4       0.393       7.0       LOS A       2.4       21.5       0.51       0.54       0.51       58.5         All Vehicles       2671       11.5       2671       11.5       0.393       6.5       LOS A       2.4       21.5       0.50       0.56       0.50       56.4         South: Spine Rd (S)       1       L2       53       2.0       53       2.0       0.042       4.3       LOS A       0.0       0.0       0.00       0.37       0.00       19.9         2       T1       24       2.0       24       2.0       0.042       3.0       NA       0.0       0.0       0.00       0.37       0.00       25.3         North: Spine Rd (N)       8       T1       24       2.0       24       2.0   | 10     | L2       | 51         | 2.2    | 51      | 2.2  | 0.393 | 5.4     | LOSA    | 2.4     | 21.5 | 0.49   | 0.49  | 0.49     | 55.1       |
| 12u         U         50         12.6         50         12.6         0.393         15.7         LOS B         2.3         20.1         0.52         0.61         0.52         59.5           Approach         1015         13.4         1015         13.4         0.393         7.0         LOS A         2.4         21.5         0.51         0.54         0.51         58.5           All Vehicles         2671         11.5         2671         11.5         0.393         6.5         LOS A         2.4         21.5         0.50         0.56         0.50         56.4           South: Spine Rd (S)         1         L2         53         2.0         53         2.0         0.042         4.3         LOS A         0.0         0.0         0.00         0.37         0.00         19.9           2         T1         24         2.0         24         2.0         0.042         3.0         NA         0.0         0.0         0.00         0.37         0.00         41.2           Approach         77         2.0         77         2.0         0.042         3.0         NA         0.0         0.0         0.0         0.37         0.00         25.3   | 11     | T1       | 806        | 14.1   | 806     | 14.1 | 0.393 | 5.7     | LOSA    | 2.4     | 21.5 | 0.50   | 0.53  | 0.50     | 58.8       |
| Approach         1015         13.4         1015         13.4         0.393         7.0         LOS A         2.4         21.5         0.51         0.54         0.51         58.5           All Vehicles         2671         11.5         2671         11.5         0.393         6.5         LOS A         2.4         21.5         0.50         0.56         0.50         56.4           South: Spine Rd (S)         1         L2         53         2.0         53         2.0         0.042         4.3         LOS A         0.0         0.0         0.00         0.37         0.00         19.9           2         T1         24         2.0         24         2.0         0.042         0.0         LOS A         0.0         0.0         0.00         0.37         0.00         41.2           Approach         77         2.0         77         2.0         0.042         3.0         NA         0.0         0.0         0.0         0.37         0.00         25.3           North: Spine Rd (N)         8         T1         24         2.0         24         2.0         0.018         0.1         LOS A         0.0         0.3         0.09         0.14         0.09  | 12     | R2       | 108        | 14.1   | 108     | 14.1 | 0.393 | 12.8    | LOS B   | 2.3     | 20.1 | 0.52   | 0.61  | 0.52     | 56.1       |
| All Vehicles 2671 11.5 2671 11.5 0.393 6.5 LOS A 2.4 21.5 0.50 0.56 0.50 56.4 South: Spine Rd (S)  1 L2 53 2.0 53 2.0 0.042 4.3 LOS A 0.0 0.0 0.0 0.00 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 0.0 LOS A 0.0 0.0 0.0 0.00 0.37 0.00 41.2 Approach 77 2.0 77 2.0 0.042 3.0 NA 0.0 0.0 0.0 0.00 0.37 0.00 25.3 North: Spine Rd (N)  8 T1 24 2.0 24 2.0 0.018 0.1 LOS A 0.0 0.3 0.09 0.14 0.09 43.1  | 12u    | U        | 50         | 12.6   | 50      | 12.6 | 0.393 | 15.7    | LOS B   | 2.3     | 20.1 | 0.52   | 0.61  | 0.52     | 59.5       |
| South: Spine Rd (S)  1 L2 53 2.0 53 2.0 0.042 4.3 LOS A 0.0 0.0 0.0 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 0.0 LOS A 0.0 0.0 0.0 0.37 0.00 41.2 Approach 77 2.0 77 2.0 0.042 3.0 NA 0.0 0.0 0.0 0.00 0.37 0.00 25.3  North: Spine Rd (N) 8 T1 24 2.0 24 2.0 0.018 0.1 LOS A 0.0 0.3 0.09 0.14 0.09 43.1  | Appro  | oach     | 1015       | 13.4   | 1015    | 13.4 | 0.393 | 7.0     | LOSA    | 2.4     | 21.5 | 0.51   | 0.54  | 0.51     | 58.5       |
| South: Spine Rd (S)  1 L2 53 2.0 53 2.0 0.042 4.3 LOS A 0.0 0.0 0.0 0.37 0.00 19.9 2 T1 24 2.0 24 2.0 0.042 0.0 LOS A 0.0 0.0 0.0 0.37 0.00 41.2 Approach 77 2.0 77 2.0 0.042 3.0 NA 0.0 0.0 0.0 0.00 0.37 0.00 25.3  North: Spine Rd (N) 8 T1 24 2.0 24 2.0 0.018 0.1 LOS A 0.0 0.3 0.09 0.14 0.09 43.1  | All Ma | histor   | 2074       | 44 E   | 2074    | 11 E | 0.202 | c c     | 1004    | 2.4     | 24.5 | 0.50   | 0.50  | 0.50     | EC A       |
| 1       L2       53       2.0       53       2.0       0.042       4.3       LOS A       0.0       0.0       0.00       0.37       0.00       19.9         2       T1       24       2.0       24       2.0       0.042       0.0       LOS A       0.0       0.0       0.00       0.37       0.00       41.2         Approach       77       2.0       77       2.0       0.042       3.0       NA       0.0       0.0       0.00       0.37       0.00       25.3         North: Spine Rd (N)         8       T1       24       2.0       24       2.0       0.018       0.1       LOS A       0.0       0.3       0.09       0.14       0.09       43.1  |        |          |            | 11.5   | 2071    | 11.5 | 0.595 | 0.0     | LUSA    | 2.4     | 21.5 | 0.50   | 0.56  | 0.50     | 50.4       |
| 2     T1     24     2.0     24     2.0     0.042     0.0     LOS A     0.0     0.0     0.00     0.37     0.00     41.2       Approach     77     2.0     77     2.0     0.042     3.0     NA     0.0     0.0     0.00     0.37     0.00     25.3       North: Spine Rd (N)       8     T1     24     2.0     24     2.0     0.018     0.1     LOS A     0.0     0.3     0.09     0.14     0.09     43.1   |        | •        |            | 2.0    | 53      | 2.0  | 0.042 | 4.3     | LOSA    | 0.0     | 0.0  | 0.00   | 0.37  | 0.00     | 19.9       |
| Approach     77     2.0     77     2.0     0.042     3.0     NA     0.0     0.0     0.00     0.37     0.00     25.3       North: Spine Rd (N)       8     T1     24     2.0     24     2.0     0.018     0.1     LOS A     0.0     0.3     0.09     0.14     0.09     43.1  |        |          |            |        |         |      |       |         |         |         |      |        |       |          |            |
| 8 T1 24 2.0 24 2.0 0.018 0.1 LOSA 0.0 0.3 0.09 0.14 0.09 43.1   |        |          |            |        |         |      |       |         |         |         |      |        |       |          |            |
| 8 T1 24 2.0 24 2.0 0.018 0.1 LOSA 0.0 0.3 0.09 0.14 0.09 43.1   | North  | · Snine  | Rd (N)     |        |         |      |       |         |         |         |      |        |       |          |            |
|   |        |          | . ,        | 2.0    | 24      | 2.0  | 0.018 | 0.1     | LOSA    | 0.0     | 0.3  | 0.09   | 0.14  | 0.09     | 43.1       |
| 1.2 0 2.0 0 2.0 0.010   | _      |          |            |        |         |      |       |         |         |         |      |        |       |          |            |
| Approach 32 2.0 32 2.0 0.018 1.3 NA 0.0 0.3 0.09 0.14 0.09 40.5   | _      |          |            |        |         |      |       |         |         |         |      |        |       |          |            |
| West: Access 1 (W)  |        |          | e 1 (W/)   |        |         |      |       |         |         |         |      |        |       |          |            |
| 10 L2 8 2.0 8 2.0 0.033 0.1 LOSA 0.1 0.7 0.08 0.14 0.08 30.5  |        |          | , ,        | 2.0    | 8       | 2.0  | 0.033 | 0.1     | LOSA    | 0.1     | 0.7  | 0.08   | 0.14  | 0.08     | 30.5       |
| 12 R2 53 2.0 53 2.0 0.033 0.7 LOSA 0.1 0.7 0.08 0.14 0.08 18.6  |        |          |            |        |         |      |       |         |         |         |      |        |       |          |            |
| Approach 61 2.0 61 2.0 0.033 0.6 LOSA 0.1 0.7 0.08 0.14 0.08 21.2   |        |          |            |        |         |      |       |         |         |         |      |        |       |          |            |
| - Transis   | - ppro |          |            |        |         |      | 5.555 | 2.0     |         | · · ·   |      | 5.50   | 54    | 5.55     |            |
| All Vehicles 170 2.0 170 2.0 0.042 1.8 NA 0.1 0.7 0.05 0.24 0.05 26.3   | All Ve | hicles   | 170        | 2.0    | 170     | 2.0  | 0.042 | 1.8     | NA      | 0.1     | 0.7  | 0.05   | 0.24  | 0.05     | 26.3       |

### **MOVEMENT SUMMARY**

♥ Site: 1 [Thomas-Spine Road - RB - Post 2031 - Weekday PM]

Thomas-Spine Road - RB - Post 2031 - PM Site Category: (None) Roundabout

| Mov   | ement          | Perform          | ance  | - Vehi  | cles  |       |         |         |                    |       |        |              |                 |            |
|-------|----------------|------------------|-------|---------|-------|-------|---------|---------|--------------------|-------|--------|--------------|-----------------|------------|
|       | Turn           | Demand           | Flows | Arrival | Flows | Deg.  | Average |         | 95% Ba             |       |        | Effective    |                 | Averag     |
| ID    |                | Total            | HV    | Total   | HV    | Satn  | Delay   | Service | Queu<br>Vehicles D |       | Queued | Stop<br>Rate | No.<br>Cycles S | e<br>Speed |
| Cont  | h. Cain        | veh/h            | %     | veh/h   | %     | v/c   | sec     |         | veh                | m     |        |              | *               | km/h       |
| Souti | n: Spine<br>L2 | e road (S)<br>67 | 14.1  | 67      | 14.1  | 0.132 | 5.9     | LOSA    | 0.6                | 5.1   | 0.73   | 0.81         | 0.73            | 49.8       |
| 2     | T1             | 278              | 2.2   | 278     | 2.2   | 0.132 | 5.5     | LOSA    | 3.3                | 25.7  | 0.75   | 0.80         | 1.00            | 34.0       |
| 3     | R2             | 95               | 14.1  | 95      | 14.1  | 0.501 | 12.0    | LOS B   | 3.3                | 25.7  | 0.85   | 0.80         | 1.00            | 49.8       |
| Appr  |                | 440              | 6.6   | 440     | 6.6   | 0.501 | 7.0     | LOSA    | 3.3                | 25.7  | 0.84   | 0.80         | 0.96            | 42.5       |
|       |                | as Rd (E)        |       |         |       |       |         |         |                    |       |        |              |                 |            |
| 4     | L2             | 84               | 14.1  | 84      | 14.1  | 0.705 | 9.0     | LOSA    | 6.4                | 56.8  | 0.84   | 0.88         | 1.07            | 52.3       |
| 5     | T1             | 1036             |       | 1036    | 14.1  | 0.705 | 9.3     | LOSA    | 6.4                | 56.8  | 0.84   | 0.91         | 1.07            | 56.8       |
| 6     | R2             | 123              | 2.2   | 123     | 2.2   | 0.705 | 16.1    | LOS B   | 5.9                | 50.8  | 0.84   | 0.96         | 1.08            | 49.9       |
| Appr  | oach           | 1243             | 12.9  | 1243    | 12.9  | 0.705 | 9.9     | LOSA    | 6.4                | 56.8  | 0.84   | 0.91         | 1.07            | 56.1       |
| North | n: Spine       | e road (N)       |       |         |       |       |         |         |                    |       |        |              |                 |            |
| 7     | L2             | 64               | 2.2   | 64      | 2.2   | 0.251 | 6.7     | LOSA    | 1.5                | 11.2  | 0.89   | 0.84         | 0.89            | 52.7       |
| 8     | T1             | 78               | 2.2   | 78      | 2.2   | 0.251 | 6.0     | LOSA    | 1.5                | 11.2  | 0.89   | 0.84         | 0.89            | 43.8       |
| 9     | R2             | 80               | 2.2   | 80      | 2.2   | 0.187 | 12.4    | LOS B   | 0.9                | 6.8   | 0.82   | 0.92         | 0.82            | 49.5       |
| Appr  | oach           | 222              | 2.2   | 222     | 2.2   | 0.251 | 8.5     | LOSA    | 1.5                | 11.2  | 0.86   | 0.87         | 0.86            | 49.3       |
| West  | : Thom         | as Rd (W)        |       |         |       |       |         |         |                    |       |        |              |                 |            |
| 10    | L2             | 192              | 2.2   | 192     | 2.2   | 0.802 | 10.3    | LOS B   | 12.3               | 105.9 | 0.92   | 0.95         | 1.22            | 50.8       |
| 11    | T1             | 1086             |       | 1086    | 14.1  | 0.802 | 11.1    | LOS B   | 12.3               | 105.9 | 0.93   | 0.98         | 1.25            | 55.5       |
| 12    | R2             | 376              | 14.1  | 376     | 14.1  | 0.802 | 19.5    | LOS B   | 11.2               | 98.8  | 0.95   | 1.07         | 1.34            | 48.7       |
| 12u   | U              | 150              | 12.6  | 150     | 12.6  | 0.802 | 22.2    | LOSC    | 11.2               | 98.8  | 0.95   | 1.07         | 1.34            | 53.4       |
| Appr  | oach           | 1804             | 12.7  | 1804    | 12.7  | 0.802 | 13.7    | LOS B   | 12.3               | 105.9 | 0.93   | 1.00         | 1.27            | 53.7       |
|       | ehicles        | 3709<br>e Rd (S) | 11.4  | 3709    | 11.4  | 0.802 | 11.3    | LOS B   | 12.3               | 105.9 | 0.89   | 0.94         | 1.14            | 53.6       |
| 1     | L2             | 95               | 2.0   | 95      | 2.0   | 0.078 | 4.3     | LOSA    | 0.0                | 0.0   | 0.00   | 0.36         | 0.00            | 20.0       |
| 2     | T1             | 47               | 2.0   | 47      | 2.0   | 0.078 | 0.0     | LOSA    | 0.0                | 0.0   | 0.00   | 0.36         | 0.00            | 41.4       |
| Appr  | oach           | 142              | 2.0   | 142     | 2.0   | 0.078 | 2.9     | NA      | 0.0                | 0.0   | 0.00   | 0.36         | 0.00            | 25.8       |
| North | n: Spine       | e Rd (N)         |       |         |       |       |         |         |                    |       |        |              |                 |            |
| 8     | T1             | 47               | 2.0   | 47      | 2.0   | 0.035 | 0.2     | LOSA    | 0.1                | 0.7   | 0.13   | 0.13         | 0.13            | 42.6       |
| 9     | R2             | 15               | 2.0   | 15      | 2.0   | 0.035 | 5.0     | LOSA    | 0.1                | 0.7   | 0.13   | 0.13         | 0.13            | 35.7       |
| Appr  | oach           | 62               | 2.0   | 62      | 2.0   | 0.035 | 1.3     | NA      | 0.1                | 0.7   | 0.13   | 0.13         | 0.13            | 40.2       |
| West  | : Acces        | ss 1 (W)         |       |         |       |       |         |         |                    |       |        |              |                 |            |
| 10    | L2             | 15               | 2.0   |         | 2.0   | 0.061 | 0.1     | LOSA    | 0.2                | 1.3   | 0.12   | 0.16         | 0.12            | 30.3       |
| 12    | R2             | 95               | 2.0   | 95      | 2.0   | 0.061 | 0.8     | LOSA    | 0.2                | 1.3   | 0.12   | 0.16         | 0.12            | 18.4       |
| Appr  | oach           | 110              | 2.0   | 110     | 2.0   | 0.061 | 0.7     | LOSA    | 0.2                | 1.3   | 0.12   | 0.16         | 0.12            | 21.0       |
| All V | ehicles        | 314              | 2.0   | 314     | 2.0   | 0.078 | 1.8     | NA      | 0.2                | 1.3   | 0.07   | 0.25         | 0.07            | 26.6       |

#### **MOVEMENT SUMMARY**

Site: 1 [Thomas-Spine Road - RB - Post 2031 - Sat PM]

♦♦ Network: N101 [Network - RB - Access Rd 1 - Post 2031 -Sat PM]

Thomas-Spine Road - RB - Post 2031 - PM Site Category: (None) Roundabout

| Move                | ement    | Perform    | ance  | - Vehic | cles  |       |         |         |                    |      |        |              |                 |            |
|---------------------|----------|------------|-------|---------|-------|-------|---------|---------|--------------------|------|--------|--------------|-----------------|------------|
|                     | Turn     | Demand     | Flows | Arrival | Flows | Deg.  | Average |         | 95% Bad            |      | Prop.  | Effective    | Aver. A         |            |
| ID                  |          | Total      | HV    | Total   | HV    | Satn  | Delay   | Service | Queu<br>Vehicles D |      | Queued | Stop<br>Rate | No.<br>Cycles S | e<br>Speed |
|                     |          | veh/h      |       | veh/h   | %     | v/c   | sec     |         | veh                | m    |        |              | _,              | km/h       |
|                     |          | e road (S) |       |         |       |       |         |         |                    |      |        |              |                 |            |
| 1                   | L2       | 134        | 14.1  | 134     | 14.1  | 0.210 | 5.2     | LOSA    | 0.8                | 7.4  | 0.63   | 0.73         | 0.63            | 50.4       |
| 2                   | T1       | 335        | 2.2   | 335     | 2.2   | 0.492 | 4.1     | LOSA    | 2.9                | 23.1 | 0.73   | 0.66         | 0.83            | 36.0       |
| 3                   | R2       | 148        | 14.1  | 148     | 14.1  | 0.492 | 10.7    | LOS B   | 2.9                | 23.1 | 0.73   | 0.66         | 0.83            | 50.5       |
| Appro               | oach     | 617        | 7.6   | 617     | 7.6   | 0.492 | 5.9     | LOSA    | 2.9                | 23.1 | 0.70   | 0.68         | 0.79            | 45.1       |
| East:               |          | as Rd (E)  |       |         |       |       |         |         |                    |      |        |              |                 |            |
| 4                   | L2       | 43         | 14.1  | 43      | 14.1  | 0.447 | 6.8     | LOSA    | 2.7                | 24.1 | 0.67   | 0.60         | 0.70            | 53.4       |
| 5                   | T1       | 696        | 14.1  | 696     | 14.1  | 0.447 | 7.0     | LOSA    | 2.7                | 24.1 | 0.67   | 0.65         | 0.71            | 57.9       |
| 6                   | R2       | 91         | 2.2   | 91      | 2.2   | 0.447 | 13.7    | LOS B   | 2.6                | 22.0 | 0.67   | 0.71         | 0.72            | 51.7       |
| Appro               | oach     | 830        | 12.8  | 830     | 12.8  | 0.447 | 7.7     | LOSA    | 2.7                | 24.1 | 0.67   | 0.65         | 0.71            | 57.3       |
| North               | : Spine  | road (N)   |       |         |       |       |         |         |                    |      |        |              |                 |            |
| 7                   | L2       | 73         | 2.2   | 73      | 2.2   | 0.175 | 4.7     | LOSA    | 0.8                | 5.8  | 0.71   | 0.66         | 0.71            | 54.8       |
| 8                   | T1       | 37         | 2.2   | 37      | 2.2   | 0.175 | 4.0     | LOSA    | 0.8                | 5.8  | 0.71   | 0.66         | 0.71            | 47.1       |
| 9                   | R2       | 111        | 2.2   | 111     | 2.2   | 0.133 | 9.3     | LOSA    | 0.7                | 5.0  | 0.72   | 0.77         | 0.72            | 51.4       |
| Appro               | oach     | 221        | 2.2   | 221     | 2.2   | 0.175 | 6.9     | LOSA    | 0.8                | 5.8  | 0.71   | 0.71         | 0.71            | 52.1       |
| West:               | Thom     | as Rd (W)  |       |         |       |       |         |         |                    |      |        |              |                 |            |
| 10                  | L2       | 113        | 2.2   | 113     | 2.2   | 0.586 | 7.7     | LOSA    | 5.7                | 49.2 | 0.81   | 0.74         | 0.91            | 52.1       |
| 11                  | T1       | 638        | 14.1  | 638     | 14.1  | 0.586 | 8.0     | LOSA    | 5.7                | 49.2 | 0.81   | 0.75         | 0.91            | 57.3       |
| 12                  | R2       | 339        | 14.1  | 339     | 14.1  | 0.586 | 16.1    | LOS B   | 5.2                | 45.3 | 0.82   | 0.93         | 0.96            | 49.9       |
| 12u                 | U        | 150        | 12.6  | 150     | 12.6  | 0.586 | 18.9    | LOS B   | 5.2                | 45.3 | 0.82   | 0.93         | 0.96            | 54.5       |
| Appro               | oach     | 1240       | 12.8  | 1240    | 12.8  | 0.586 | 11.5    | LOS B   | 5.7                | 49.2 | 0.81   | 0.82         | 0.93            | 54.7       |
| All Ve              | hicles   | 2908       | 10.9  | 2908    | 10.9  | 0.586 | 8.9     | LOSA    | 5.7                | 49.2 | 0.74   | 0.73         | 0.82            | 54.0       |
| South               | n: Spine | e Rd (S)   |       |         |       |       |         |         |                    |      |        |              |                 |            |
| 1                   | L2       | 112        | 2.0   | 112     | 2.0   | 0.088 | 4.3     | LOSA    | 0.0                | 0.0  | 0.00   | 0.38         | 0.00            | 19.9       |
| 2                   | T1       | 48         | 2.0   | 48      | 2.0   | 0.088 | 0.0     | LOSA    | 0.0                | 0.0  | 0.00   | 0.38         | 0.00            | 41.1       |
| Appro               | oach     | 160        | 2.0   | 160     | 2.0   | 0.088 | 3.0     | NA      | 0.0                | 0.0  | 0.00   | 0.38         | 0.00            | 25.1       |
| North: Spine Rd (N) |          |            |       |         |       |       |         |         |                    |      |        |              |                 |            |
| 8                   | T1       | 48         | 2.0   | 48      | 2.0   | 0.036 | 0.2     | LOSA    | 0.1                | 0.8  | 0.14   | 0.14         | 0.14            | 42.2       |
| 9                   | R2       | 16         | 2.0   | 16      | 2.0   | 0.036 | 5.1     | LOSA    | 0.1                | 0.8  | 0.14   | 0.14         | 0.14            | 35.5       |
| Appro               | oach     | 64         | 2.0   | 64      | 2.0   | 0.036 | 1.4     | NA      | 0.1                | 0.8  | 0.14   | 0.14         | 0.14            | 39.8       |
| West                | : Acces  | s 1 (W)    |       |         |       |       |         |         |                    |      |        |              |                 |            |
| 10                  | L2       | 16         | 2.0   | 16      | 2.0   | 0.071 | 0.1     | LOSA    | 0.2                | 1.5  | 0.13   | 0.17         | 0.13            | 30.3       |
| 12                  | R2       | 112        | 2.0   | 112     | 2.0   | 0.071 | 0.8     | LOSA    | 0.2                | 1.5  | 0.13   | 0.17         | 0.13            | 18.3       |
| Appro               | oach     | 128        | 2.0   | 128     | 2.0   | 0.071 | 0.7     | LOSA    | 0.2                | 1.5  | 0.13   | 0.17         | 0.13            | 20.8       |
| All Ve              | ehicles  | 352        | 2.0   | 352     | 2.0   | 0.088 | 1.9     | NA      | 0.2                | 1.5  | 0.07   | 0.26         | 0.07            | 25.9       |



# **LOCAL STRUCTURE PLAN**

Lots 1, 2 and 3 Thomas Road, Anketell



**PLANNING & SURVEY SOLUTIONS** 



#### DOCUMENT CONTROL

| Control Version | Date     | Status | Distribution | Comment    |
|-----------------|----------|--------|--------------|------------|
| С               | 04/04/19 | Final  | LG           | Assessment |

Prepared for: Saracen Properties

Prepared by: CP Reviewed by: DM

Date: April 2019

Job No: 21617

Ref: RevC\_04.04.2019

**Harley Dykstra** 

PO Box 316

**KELMSCOTT WA 6991** 

Phone: (08) 9495-1947

Email: claytonp@harleydykstra.com.au

### **DISCLAIMER**

This document has been prepared by HARLEY DYKSTRA PTY LTD (the Consultant) on behalf of Saracen Properties (the Client). All contents of the document remain the property of the Consultant and the Client except where otherwise noted and is subject to Copyright. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.

This document has been exclusively drafted. No express or implied warranties are made by the Consultant regarding the research findings and data contained in this report. All of the information details included in this report are based upon the existent land area conditions and research provided and obtained at the time the Consultant conducted its analysis.

Please note that the information in this report may not be directly applicable towards another client. The Consultant warns against adapting this report's strategies/contents to another land area which has not been researched and analysed by the Consultant. Otherwise, the Consultant accepts no liability whatsoever for a third party's use of, or reliance upon, this specific document.

T: 08 9228 9291

ABN 77 503 764 248

## **ENDORSEMENT PAGE**

This Local Structure Plan Amendment is prepared under the provisions of the City of Kwinana Town Planning Scheme No.2

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

| 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<br>Planning and Development Act 2005 for that purpose, in the presence of: |
| Witness   |
| Date  |
| Date of Expiry  |

# TABLE OF AMENDMENT(S)

| Amendment<br>No. | Summary of Amendment | Amendment<br>Type | Date approved by<br>WAPC |
|------------------|----------------------|-------------------|--------------------------|
|                  |                      |                   |                          |
|                  |                      |                   |                          |

# **Executive Summary**

#### Local Structure Plan Amendment Lots 1, 2 and 3 Thomas Road, Anketell

This report represents an application for a minor amendment to the Anketell South Local Structure Plan with respect to Lots 1, 2 and 3 Thomas Road, Anketell ("the subject land"). The subject land has an approximate area of 11.32ha and is situated approximately 30.5km south of the Perth Central Business District, within 4.5km east of the Kwinana Town Centre and approximately 750m from the Thomas Road – Kwinana Freeway intersection.

The proposed Local Structure Plan Amendment is minor in nature and is intended to facilitate the development of the proposed neighbourhood centre, adjacent to Thomas Road, by providing a more appropriately dimensioned commercial site capable of accommodating a supermarket, associated tenancies and the relocated Community Purpose site within it. This has been achieved via the realignment of the central north - south spine road which has been designed having regard to the future roundabout on Thomas Road that is proposed by Main Roads WA. Subsequent minor amendments to the residential street blocks, densities and public open space areas are also proposed to accommodate the amended road alignments to deliver an improved development outcome.

The Local Structure Plan Amendment summary table below details the nature and key outcomes of the proposed amendment.

Table 1

| ITEM   | DATA                                | STRUCTURE PLAN REF (section no.) |
|--|-------------------------------------|----------------------------------|
| Total area covered by the<br>Structure Plan Amendment  | 11.3235ha                           | Section 1.2.1                    |
| Gross Subdivisible Area  | 7.0404ha                            | Section 3.3                      |
| Area of each land use proposed:  |                                     |                                  |
| Residential<br>Commercial  | 4.192ha<br>2.461ha                  | Section 3.4.1                    |
| Total estimated lot yield<br>(Includes green title and survey–<br>strata lots)                       | 122 lots                            | Section 1.1                      |
| Estimated number of dwellings  | 130 dwellings                       | Section 1.1, 3.4.1               |
| Estimated population   | 447 persons                         | Section 3.4.1                    |
| Estimated residential site density   | 15.19 dwellings per site<br>hectare | Section 3.4.1                    |
| Estimated area and percentage of Public Open Space given over to: - Local parks - Community Facility | 0.873ha (9.37%)                     | Section 3.3                      |



## **CONTENTS**

| APPEND | DICES LIST         |   | 4  |
|--------|--------------------|---|----|
| PART O | NE – Impleme       | entation  | 5  |
| 1.0    | Local Struct       | ure Plan Amendment Area   | 5  |
| 2.0    | Operation          |   | 5  |
| 3.0    | Staging            |   | 5  |
| 4.0    | Subdivision        | and Development Requirements  | 5  |
|        |                    | opment Plans  |    |
|        |                    | e Plan Amendment Map  |    |
|        |                    | tory Report   |    |
| 1.0    | •                  | BACKGROUND  |    |
| 1.1    |                    | n and Purpose   |    |
|        |                    | ·   |    |
| 1.2    |                    | ption   |    |
|        | 1.2.1<br>1.2.2     | Location  |    |
|        | 1.2.2              | Legal description and ownership   |    |
| 1.3    |                    | amework   |    |
| 1.3    | · ·                |   |    |
|        | 1.3.1<br>1.3.2     | Statutory Planning Framework  |    |
|        | 1.3.2              | Structure Plans   |    |
|        | 1.3.3.1            | Jandakot Structure Plan   |    |
|        | 1.3.3.2            | Anketell South Structure Plan   |    |
|        | 1.3.4              | State Planning Policies   |    |
|        | 1.3.4.1            | SPP3.7-Planning in Bushfire Prone Areas   |    |
|        | 1.3.4.2<br>1.3.4.3 | SPP4.2-Activity Centres for Perth and Peel<br>Draft SPP5.4-Road & Rail Transport Noise & Freight Considerations |    |
|        | 1.3.4.4            | SPP2.1-Peel Harvey Coastal Plain Catchment  |    |
|        | 1.3.4.5            | Other Relevant State Planning Policies  |    |
|        | 1.3.5              | Operation Policies  |    |
|        | 1.3.5.1            | Liveable Neighbourhoods   |    |
|        | 1.3.6              | Local Planning Policies   |    |
|        | 1.3.6.1            | Design Guidelines for Medium Density  | 16 |
| 1.4    | Pre-Lodgem         | nent Consultation   | 16 |
| 2.0    | SITE CONDI         | TIONS AND CONTRAINTS  | 17 |
| 2.1    | Bushfire Ha        | zard  | 17 |
| 2.2    | Noise Atten        | uation  | 17 |
| 2.3    | Western Po         | wer Easement Corridor   | 18 |
| 3.0    | LAND USE A         | ND SUBDIVISION REQUIREMENTS   | 19 |
| 3.1    | Land Use           |   | 19 |
| 3.2    | Commercial         | l   | 19 |
| 3.3    | Public Oper        | 1 Space (POS)   | 20 |
| 3.4    | Residential        |   | 21 |
|        | 3.4.1<br>3.4.2     | Land Use & Residential Density<br>Residential Lot Layout  |    |
| 3.5    | Movement I         | Networks  | 22 |
|        | 3.5.1              | Proposed Movement Network   | 22 |
|        | 3.5.2              | Traffic Generation  | 22 |
| 3.6    | Stormwater         | Management  | 23 |



| <b>VDDENIU</b> | NICES INDEX                         | 25 |
|----------------|-------------------------------------|----|
| 3.9            | Implementation                      | 24 |
| 3.8            | Developer Contribution Arrangements | 24 |
| 3.7            | Staging                             | 23 |



### **APPENDICES**

Appendix A - Certificates of Title

Appendix B - Bushfire Management Plan

Appendix C - Local Water Management Plan

Appendix D - Conceptual Neighbourhood Centre Plan

Appendix E - Conceptual Lot Yield Plan

Appendix F - Transport Impact Assessment



#### **PART ONE - IMPLEMENTATION**

#### 1.0 Local Structure Plan Amendment Area

This Local Structure Plan Amendment relates to the land within the inner edge of the line denoted as the "Local Structure Plan Amendment Boundary" on the Local Structure Plan Amendment Map (Plan 1). This area is currently defined as Lots 1, 2 and 3 Thomas Road, Anketell - being the land contained in the south eastern portion of the Anketell South Local Structure Plan area. No amendments are proposed to the developed areas of the LSP or within undeveloped portions of Lots 9000, 9001 and 17 (the remaining lots covered by the existing Local Structure Plan). The amended Local Structure Plan Map is included as Plan 1.

#### 2.0 Operation

The date the Local Structure Plan amendment comes into effect is the date that the amendment is approved by the WAPC.

#### 3.0 Staging

It is likely that intersection upgrades at the Thomas Road intersection with the proposed north-south spine road will be triggered by the development of the neighbourhood centre adjacent to Thomas Road. These upgrades would be required as a part of the upgrading of Thomas Road that is funded by the Development Contribution Plan for Development Control Area 4. It is likely that the ultimate intersection upgrade would represent a roundabout, but that interim development, such as that depicted in Stage 1 of the Concept Plan (attached at **Appendix D** of the Explanatory section of this report) might be serviced by an interim intersection upgrade of a different form. Residential development that could be serviced from the north, through subdivisional roads, would not trigger this infrastructure requirement.

It is envisaged that the City would seek to acquire the land required for the Community Purpose facility at the time either of Commercial Lots B or C are subdivided, as identified on the Indicative Lot Yield Plan attached at **Appendix E** of the explanatory section.

Other than the intersection upgrades noted above, there are no other infrastructure triggers that would influence the staging of future subdivision within the structure plan area.

#### 4.0 Subdivision and Development Requirements

| 4.1 | Land Uses & Permissibility | The land use designations for the Local Structure Plan Area are as indicated on the 'Local Structure Plan Amendment Map'. These will guide the future subdivision and development of the land for residential and commercial purposes. |
|-----|----------------------------|--|
|     |                            | Land use permissibility within the Local<br>Structure Plan Amendment area shall be<br>generally in accordance with the   |



| F   |                                       |   |
|-----|---------------------------------------|---|
|     |                                       | corresponding zone under the Town of Kwinana Town Planning Scheme No. 2.  |
| 4.2 | Residential Density                   | Residential densities applicable to the Local<br>Structure Plan Area shall be those residential<br>densities shown on the 'Local Structure Plan<br>Amendment Map'.  |
| 4.3 | Staging of<br>Subdivision/Development | Refer to Part 3.0 above.  |
| 4.4 | Noise Attenuation                     | The recommendations of the existing Local Structure Plan continue to apply to the proposed amendment. Specifically, this includes the detailing of any required noise attenuation measures at the subdivision or development implementation stage.  |
| 4.5 | Notifications on Title                | In respect of applications for subdivision of land, the City of Kwinana shall recommend to the Western Australian Planning Commission that a condition be imposed on the grant of subdivision approval for a notification to be placed on the Certificate(s) of Title(s) to advise of the following:  • Requirements of an approved Bushfire Management Plan (see Part Two – Section 2.1 Bushfire Management Plan); and  • Requirements of a Noise Assessment (see Part Two – Section 2.2 Noise Assessment).  |
| 4.6 | Neighbourhood Centre<br>Development   | Development within the commercial zone, as a part of the neighbourhood centre, shall comply with the following principles:  • An active, internal main street should be established within any neighbourhood centre that represents a shared pedestrian and vehicle space, with the commercial and community purpose uses addressing each other from opposite sides of the street.  • The design of any blank walls facing the north-south integrator road should incorporate architectural design measures that provide good articulation and should incorporate significant landscaping along the blank wall.  • Parking for the commercial and community facilities can occur in a reciprocal manner, but this arrangement must be appropriately demonstrated.  The application of these principles has been |
|     |                                       | illustrated within the concept development plan that is attached at <b>Appendix D</b> in the  |



|     |                  | explanatory section of this report.   |
|-----|------------------|---|
| 4.7 | Access Easements | Satisfactory arrangements for the provision of access and vehicle parking easements between the commercial zone and community purpose site shall be made at the time of subdivision implementation. |

#### 5.0 Local Development Plans

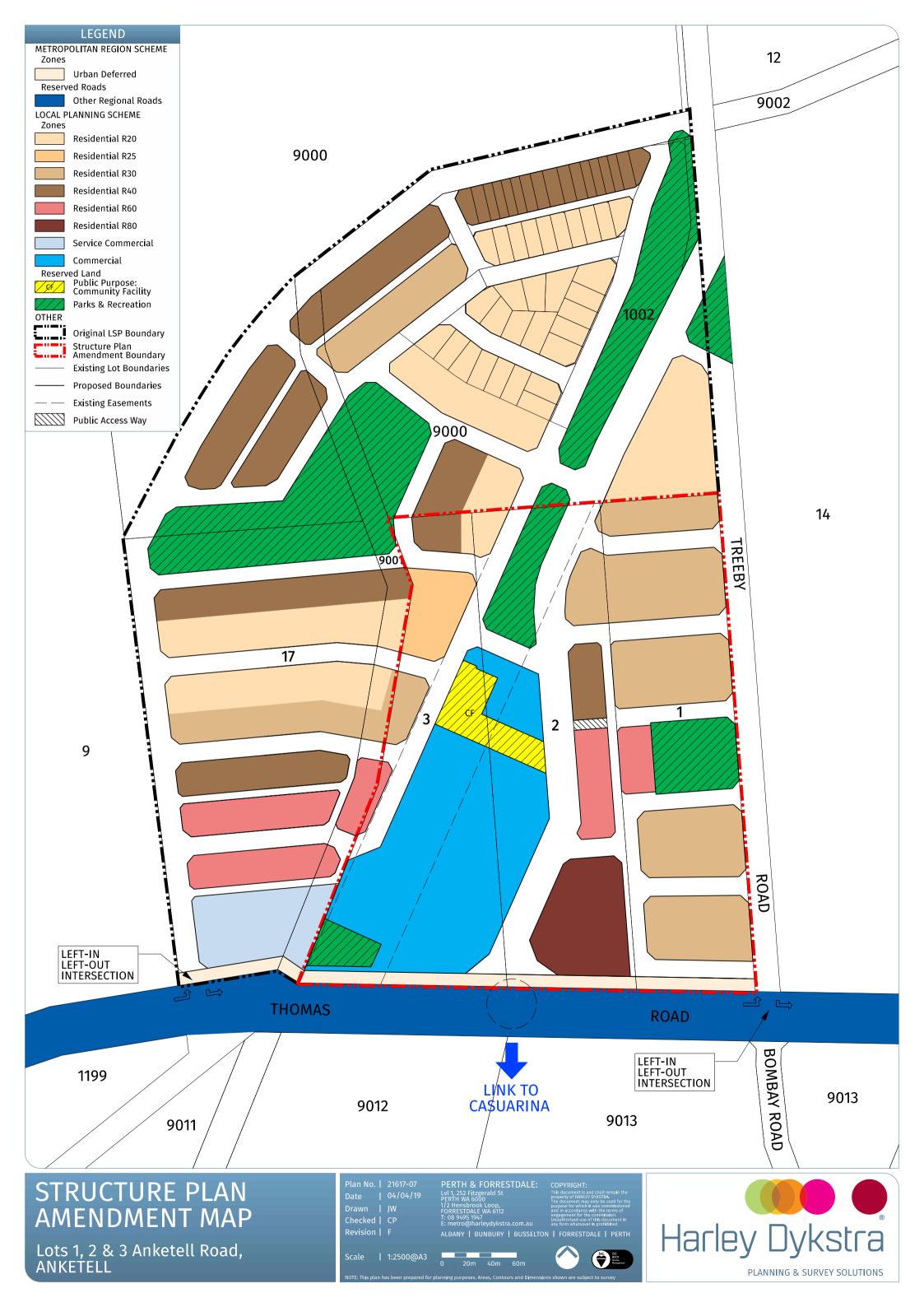
Local Development Plans (LDPs) are required to be prepared and implemented pursuant to the provisions of the Town of Kwinana Town Planning Scheme No. 2 and the *Planning and Development (Local Planning Schemes) Regulations 2015*, for affected lots that address the following, where relevant:

- Specific setback requirements;
- Vehicle access constraints;
- Private Open Space;
- Bin pad locations;
- · Garage or carport locations; and
- Quiet House Design requirements.

Lots that may require an LDP include those residential lots located adjacent to Thomas Road and all lots serviced by a laneway or with frontages of less than 10 metres.



# **PLAN 1** – STRUCTURE PLAN AMENDMENT MAP





## **PART TWO** - EXPLANATORY REPORT



#### 1.0 PLANNING BACKGROUND

#### 1.1 Introduction and Purpose

This submission has been prepared by Harley Dykstra on behalf of Saracen Properties in respect of Lots 1, 2 and 3 Thomas Road, Anketell ("the subject land").

The primary objective of this submission is to seek a minor amendment to the existing Anketell South Local Structure Plan (LSP) to facilitate the development of an appropriate neighbourhood centre adjacent to Thomas Road. This will be facilitated by providing more appropriately dimensioned commercial site capable of accommodating a supermarket and associated tenancies as well as a community purpose facility that will be relocated from its existing position on the approved LSP to a new location within the revised commercial precinct. This re-dimensioned site has been achieved via the realignment of the central north - south spine road, which has been designed having regard to the future roundabout on Thomas Road proposed by Main Roads WA. Subsequent minor modifications to internal road alignments, street block extents, orientation and residential densities over Lots 1, 2 and 3 Thomas Road are also proposed. The amendments will also ensure that, wherever possible, residential land uses occur in a manner that has greater regard to cadastral boundaries, thereby increasing the ability of the LSP to be implemented.

The intended land uses within the LSP Amendment area include:

- A total of three R20, six R25, fourteen R30, twelve R40 and fourteen R60 residential lots and 1 R80 grouped/multiple dwelling site over Lots 2 and 3 combined;
- A total of sixty-eight R30 and eight (plus a portion of balance land) R60 residential lots over Lot 1;
- 3 commercial lots within Lots 2 and 3;
- Two (2) areas of Public Open Space (POS) within the site (including a community purpose site) in addition to a power line easement that is to be used, in part, for drainage and recreational linkage purposes. The two Public Open Space portions within the site are located, separately, with one (community purpose site) being in the commercial portion of the site and the other being central and adjacent to the eastern boundary of Lot 1.

This proposal is accompanied by a Local Structure Plan Amendment Map (**Plan 1**) prepared in accordance with the *Planning and Development* (Local Planning Schemes) Regulations 2015, which is included at Part One of this Report.

The Explanatory Section of this LSP Amendment Report includes a description of the proposal, an evaluation of the relevant town planning, traffic, acoustic, bushfire management, water management and servicing considerations applicable to the land, and details the rationale supporting the proposed LSP Amendment.

The LSP Amendment has been formulated by Harley Dykstra in collaboration with specialist consultants, who have provided input in relation to matters as follows:

| Hyd2o                   | - | Local Water Management Strategy |
|-------------------------|---|---------------------------------|
| Transcore               | - | Traffic Impact Assessment       |
| Bushfire Prone Planning | - | Bushfire Management Plan        |



Copies of the relevant consultant reports are appended to this submission and key findings incorporated within the body of the report.

#### 1.2 Land Description

#### 1.2.1 Location

The subject land is located within the suburb of Anketell and is situated approximately 30.5km south of the Perth Central Business District and less than 750m west of the Kwinana Freeway. An Aerial Locality Plan is provided below

The subject land is 11.3235ha in area and has frontage to Thomas Road along its southern boundary and Treeby Road on its eastern boundary, the majority of which is unconstructed.



Figure 1 – Aerial Locality Plan (subject land outlined in blue)

#### 1.2.2 Area and Land Use

The subject land comprises three (3) vacant lots that are not currently developed other than to accommodate the existing high voltage power line (330kW) that traverses Lots 2 and 3.

Residential redevelopment of land to the north of the subject site has commenced within the Anketell South Local Structure Plan area. Land to the east is reserved for parks and recreation purposes, whilst land to the south has been identified for urban development and is subject to a separate structure plan. The Aerial Photograph at (**Figure 2**, overleaf) depicts the nature of existing land use.





Figure 2 – Aerial Photograph (subject land)

#### Legal Description and Ownership 1.2.3

**Table 1**, below, provides details in respect to the legal ownership of the subject land.

Lot No. House Plan / Volume Folio Registered **Lot Area** No. Diagram Proprietor(s) Trevor Keith Pix 819 83118 46 3.7619 ha 1 2034 Lisa Margaret Pix 2 811 83118 2123 858 Anketell South 4.0055 ha Investment Pty Ltd 3 793 83118 2034 48 **Anketell Commercial** 3.5561 ha Pty Ltd Total 11.3235 ha

Table 1 - Certificate of Title details

Copies of the Certificates of Title are included at **Appendix A**.

#### 1.3 Planning Framework

#### Statutory Planning Framework 1.3.1

#### Metropolitan Region Scheme

The subject site is primarily zoned "Urban" under the Metropolitan Region Scheme, however, it is also noted that a narrow strip along the southern boundary of the site is zoned "Urban Deferred". It is understood that this narrow portion of land is intended for the future road widening of Thomas Road.

Town of Kwinana Town Planning Scheme No. 2



The subject site is zoned "Development" under Town Planning Scheme No. 2 (TPS No. 2). Clause 6.17.2 of TPS No. 2 requires the preparation of a structure plan in order to enable subdivision or obtain development approval within the Development zone. This proposal is consistent with that requirement.

#### 1.3.2 Perth and Peel at 3.5 million

Perth and Peel at 3.5 million is a high-level spatial framework and strategic plan that provides a vision for the future growth of the Perth metropolitan region towards a population of 3.5 million residents.

As depicted within the South Metropolitan Peel and Perth Subregional Framework, the subject site has been identified as existing urban development in accordance with the zoning of the site under the Metropolitan Region Scheme and the existing Anketell South Local Structure Plan.

The proposed LSP Amendment also provides for a more efficient use of space by proposing a larger commercial site with improved amenity outcomes, thereby facilitating an increase in residential densities and diversity within the LSP area. This increase in residential density offsets the loss in residential land that is caused as a result of the larger commercial site.

#### 1.3.3 Structure Plans

#### 1.3.3.1 Jandakot Structure Plan

The proposed amendment continues to confirm the intentions of the Jandakot Structure Plan (JSP), a regional structure plan that was adopted in 2007. The JSP was intended to guide strategic planning and development on either side of Kwinana Freeway, within the City of Kwinana, and within the western rural areas of the Shire of Serpentine-Jarrahdale.

The JSP identified the subject site as medium-term urban, and also identifies the development of a commercial site (neighbourhood centre) in accordance with the provisions of Liveable Neighbourhoods.

The proposed amendment is considered to be in accordance with the intent and provisions of the JSP.

#### 1.3.3.2 Anketell South Local Structure Plan

The subject land is included within the existing Anketell South Local Structure Plan area, which was originally adopted by the Town of Kwinana on 13<sup>th</sup> July 2011 and endorsed by the WAPC on 22<sup>nd</sup> May 2014 and subsequently modified following that endorsement.

The Anketell South Local Structure Plan seeks to primarily facilitate residential development, a neighbourhood centre (adjacent to Thomas Road) and a community facility, whilst also incorporating areas of public open space and a community purpose site in addition to open space provided for drainage purposes within the easement associated with the high voltage power line infrastructure.

Development within the LSP area has already commenced within the northern half, primarily on Lot 13, whilst the remainder of the site has remained largely undeveloped aside from an existing rural supplies business on Lot 17.

It is also noted that a subdivision approval for subdivision within Lots 1, 2 and 3 was issued in February 2015; however, this was not implemented. The subdivision approval confirmed a number of the elements identified on the adopted LSP, including road



widths, POS location and size and lot layout and orientation. It also provided for a commercial space. It is noted that the approval is still valid; however, it appears unlikely to be implemented given this proposal to amend the Local Structure Plan.

#### 1.3.4 State Planning Policies

#### 1.3.4.1 SPP 3.7 - Planning in Bushfire Prone Areas

State Planning Policy 3.7 (SPP 3.7) seeks to guide the implementation of effective risk based land use planning and development to preserve life and reduce the impact of bushfire on property and infrastructure. SPP 3.7 applies to strategic planning proposals, including Structure Plans and Structure Plan Amendments over land designated as bushfire prone by the Map of Bushfire Prone Areas prepared by the Department of Fire and Emergency Services. An extract from the Map of Bushfire Prone Areas Mapping, as it relates to the subject land, is included at **Figure 3** below.

Given the subject land is designated as Bushfire Prone, SPP 3.7 is applicable to this Structure Plan Amendment proposal. A Bushfire Management Plan has been prepared in accordance with SPP 3.7 and is included at **Appendix B**. Further details are included at Section 2.1 of this Report.



Figure 3 – Bushfire Prone Areas Mapping (Subject land outlined in red)

#### 1.3.4.2 SPP 4.2 - Activity Centres for Perth and Peel

State Planning Policy 4.2 provides guidance on the development of commercial centres of varying scales with the Perth and Peel region. In accordance with the adopted Anketell South LSP, a neighbourhood centre has been identified on the proposed amendment to the LSP. It is noted that this site has been previously identified as a Neighbourhood Centre at various levels of strategic planning, including within the Jandakot Structure Plan and the Eastern Residential Intensification Concept.

It is noted that within SPP 4.2 a Neighbourhood Centre is defined as a commercial centre with a maximum of 6000m² net lettable area. On that basis, this proposed commercial



facility will be representative of a Neighbourhood Centre according to the hierarchy established under SPP 4.2.

It is anticipated that the neighbourhood centre will accommodate a number of commercial land uses including a supermarket, fuel station, fast food store, child care centre, café and other specialty stores.

1.3.4.3 Draft SPP 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning

Draft State Planning Policy 5.4 (SPP 5.4) includes the following relevant objectives:

- protect people from unreasonable levels of transport noise;
- protect major transport corridors from incompatible urban encroachment;
- ensure that noise impacts are addressed as early as possible in the planning process; and
- encourage best-practice noise mitigation design and construction standards for noise-sensitive land use and/or major road or railway proposals;

The subject site is affected by traffic noise from vehicles using Thomas Road, which is classified as an "Other Regional Road". The adopted Local Structure Plan document references the fact that noise attenuation measures can be implemented during development or subdivision application stage. These measures may include the need to place a notification on the title that would advise prospective purchasers of traffic noise and the requirement for quiet house design packages. It is envisaged that the approved approach will continue to be applicable to this amendment application given the residential development within close proximity to Thomas Road is consistent with the approved LSP.

#### 1.3.4.4 SPP 2.1 - Peel Harvey Coastal Plain Catchment

The subject site is located in the Peel Harvey Coastal Plain Catchment area and as such, a two year water monitoring program was previously undertaken in support of the adopted Local Structure Plan. The findings of this study were utilised in the preparation of a Local Water Management Strategy (LWMS). It is noted that the LWMS has been updated to reflect the proposed amendment ensuring that the objectives and policy measures of SPP 2.1 can continue to be satisfied. The amended LWMS is attached at **Appendix C**, as prepared by Hyd2o.

#### 1.3.4.5 Other Relevant State Planning Policies

Other State Planning Policies that are relevant to the Local Structure Plan area include the following:

- SPP 2.9 Water Resources:
- SPP 3.0 Urban Growth and Settlement;
- SPP 3.1 Residential Design Codes; and
- SPP 3.6 Development Contributions for Infrastructure.

All of these policies were suitably addressed in the application process for the adopted Anketell South LSP, and it is noted that the findings of that process remain relevant given these policies deal with the broad development intent of the site, which has not changed through the proposed amendment. This ensures that a detailed description of compliance is not required in this instance.

#### 1.3.4 Operational Policies

#### 1.3.4.1 Liveable Neighbourhoods



Liveable Neighbourhoods represents the adopted policy that forms the basis for the assessment of urban structure plans, such as that proposed. The original Local Structure Plan report confirms consistency with the policy and as such, the proposed amendment remains consistent with it.

#### 1.3.5 Local Planning Policies

#### 1.3.5.1 Design Guidelines for Medium Density

The *Design Guidelines* are intended to provide additional measures to the Residential Design Codes in order to ensure appropriate design outcomes for medium density residential development. Although these are primarily applicable to subdivision design, it is noted that detailed subdivision design will be heavily influenced by the design of the Local Structure Plan, as amended. Accordingly, the eventual lot yield and layout has been considered in the design of the LSP to ensure that compliance with this policy can be achieved.

#### 1.4 Pre-Lodgement Consultation

Extensive consultation has been undertaken with both City of Kwinana's Strategic and Statutory Planning sections prior to the preparation of this Local Structure Plan Amendment and also following its recent lodgement. This proposal reflects the outcomes of this consultation with the City of Kwinana, given it represents a revision to the originally submitted plan and it acknowledges the previous work by others in refining the scope and requirements of the Local Structure Plan Amendment.

In addition, Main Roads WA has been consulted in relation to the proposed location and design of the round-about that will be required at the intersection of Thomas Road and the north-south spine road servicing the Structure Plan area.



#### 2.0 SITE CONDITIONS AND CONSTRAINTS

#### 2.1 Bushfire Hazard

A Bushfire Management Plan has been prepared to address the requirements of SPP 3.7 - Planning in Bushfire Prone Areas and the associated Guidelines in support of this application to amend the LSP. The Bushfire Management Plan addresses proposed development on Lots 1, 2, and 3 Thomas Road. A copy of the Bushfire Management Plan is included at **Appendix B.** 

The Bushfire Management Plan concludes that the future development of the site will be able to occur in accordance with the requirements of the associated *Guidelines*. In particular, all dwellings will be able to have a determined rating of BAL-29 or less, multiple means of access and egress are available and a reticulated water supply will be able to be connected to any development.

It is anticipated that as a condition of subdivision approval, the WAPC may require a Notification, pursuant to Section 165 of the *Planning and Development Act 2005* to be placed on the certificate of title of the proposed lots with a Bushfire Attack Level (BAL) rating of 12.5 or above, which would be required to state:

'This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and may be subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land'

#### 2.2 Noise Attenuation

The proposed amendment to the Local Structure Plan continues to ensure that a land use noise buffer between Thomas Road and residential development occurs over the western two-thirds of the Thomas Road frontage. This is achieved by maintaining a service commercial and commercial space with significant frontage to Thomas Road. Residential land uses in the eastern third of the site continue to be setback from Thomas Road due to a proposed local road and possible internal driveways within the multiple/grouped dwelling R80 site.

Acoustic studies can be completed in support of subdivision applications, or development application in the instance of the R80 development site. These studies will likely need to investigate additional noise mitigation measures such as acoustic walls and/or the imposition of quiet house design requirements. Additionally, lots that are subject to an excessive noise level as a result of their proximity to Thomas Road may require the following Notification on their Certificate of Title:

"This lot is situated in the vicinity of the Thomas Road and is currently affected, and/or may in the future be affected by transport noise".

It is noted that a recent subdivision approval at the site, for subdivision consistent with the adopted LSP, was issued with a condition requiring a Transport Noise Assessment and another requiring the abovementioned 70A notification. It is envisaged that any future subdivision approvals would be similarly conditioned.



#### 2.3 Western Power Easement Corridor

The Western Power easement corridor that dissects the Local Structure Plan area restricts development opportunities. As a result, the proposed LSP continues to be designed around the constraints of this easement. Vehicle parking areas associated with the proposed commercial development, roadways, pedestrian linkages, and drainage basins are considered the most effective means of utilising the Western Power easement corridor.



#### 3.0 LAND USE AND DEVELOPMENT REQUIREMENTS

#### 3.1 Land Use

The primary design driver to the proposed amendment of the Local Structure Plan is related to the need to modify the area designated for commercial use so that it can accommodate a viable neighbourhood centre and a community purpose facility within it. As a result, the commercial site has been made wider and longer, which in turn results in the need for minor amendments to the residential areas and road alignments within the LSP to the east of the commercial area, primarily within Lots 1 and 2. Other minor amendments include the redesign of residential street blocks and road alignments to ensure the amended LSP and eventual development seamlessly integrates with existing development that has occurred in the northern part of the LSP area.

Further details relating to the relevant design opportunities and constraints are provided below.

#### 3.2 Commercial

The commercial space has be enlarged to enable the development of a commercial facility that can accommodate an anchor tenant and a number of other specialty stores and other commercial outlets. The developer has discussed the commercial site with a number of potential tenants whose requirements have driven the need to amend the size and configuration of the commercial space. These requirements, in addition to the constraints of the power line easement (that limits space available for buildings), have been the major driver behind the proposed amendment to the LSP.

Furthermore, since the lodgement of this LSP amendment, significant consultation with the City of Kwinana, relating to the design of the neighbourhood centre, has occurred. As a result, the latest iteration of the LSP depicts a centrally located Community Purpose Site. This layout amendment was completed to encourage a strong link between the commercial and community purpose elements of the LSP. The consultation occurred largely in the context of the proposed Neighbourhood Centre for the site and as a result there is a need to establish a number of design principles for the eventual development of the neighbourhood centre through the Local Structure Plan process.

These principles, which should be addressed as part of any Development Application for the commercial portion of the LSP, are as follows:

- An active, internal main street should be established within any neighbourhood centre that represents a shared pedestrian and vehicle space, with the commercial and community purpose uses addressing each other from opposite sides of the street.
- The design of any blank walls facing the north-south integrator road should incorporate architectural design measures that provide good articulation and should incorporate significant landscaping along the blank wall.
- Parking for the commercial and community facilities can occur in a reciprocal manner, but this
  arrangement must be appropriately demonstrated.

In accordance with the above principles a concept design for the neighbourhood centre has been prepared by i2c architects and is attached at **Appendix D**. The plan has informed the total land requirement for a viable neighbourhood centre.



#### 3.3 Public Open Space (POS)

The Structure Plan Amendment results in a number of changes to the Public Open Space (POS) arrangements identified in the adopted LSP. In particular, the "eastern parkland" (as identified in the original LSP report) has been made slightly smaller from a previously approved 4,248m² down to 3,864m², representing a reduction of only 384m². The reduction in the size of this POS site has been more than adequately offset by the reduction in the size of the drainage basin that is to occur within that POS area and through an overall reduction to the gross subdividable area, which reduces the need for POS space.

In order to demonstrate that the proposed LSP amendment includes an appropriate amount of Public Open Space, a review of the POS requirements for the original LSP is required. This is because there are no available detailed drainage calculations for the first amendment of the Anketell South LSP, which is now the existing LSP given these were not required in support of that amendment. It is assumed that updated drainage requirements were not provided in the case of the first amendment because the same drainage assumptions made in the original LSP were carried over to the first amendment. That has not been the case for this second amendment.

To demonstrate this, it is noted that the LWMS (prepared by Bioscience) provided with the originally adopted LSP indicates that 2,231m² basin within the POS area of 4,850m² would be required for 1-in-5-year stormwater event. The updated LWMS only requires a 660m² basin for 1-in-5-year and 1-in-1-year stormwater events. This reduction has been brought about through the completion of Urban Water Management Plan studies within other cells of the LSP area. These provided a more accurate calculation of drainage requirements for the rest of the LSP area. Therefore, through this reduction in basin area there is significantly more unrestricted POS provided by the proposed Local Structure Plan amendment. In the originally adopted LSP the "eastern parkland" (as it is known in that document) included 2,415m² of unrestricted open space, whilst the proposed amendments this same area of POS proposes 3,204m² of unrestricted open space.

On the basis of the above the following summary of POS changes is provided:

- The "eastern parkland" has increased by nearly 800m² from what was originally approved, as described above;
- The "Community Centre Parkland" (north of commercial site) has been removed, in part because the Local Government was not willing to consider it as creditable open space. This represents a loss of 830m² in unrestricted open space, but this is largely offset by the aforementioned gain; and
- The community purpose site has been made smaller, from 3,507m<sup>2</sup> to 3,070m<sup>2</sup> now that the Local Government land use and parking requirements for this space have become known through the applicants detailed consultation with them (refer to the Concept Plan attached in **Appendix D** that includes an indicative design for this site).

Therefore, on the basis of the above changes, the following table demonstrates that the proposed Local Structure Plan provides close to the 10% public open space requirement (9.37%) for Lots 1, 2 and 3 (the lots subject to the Structure Plan amendment).

| Public Open Space Schedule                |           |  |
|---|-----------|--|
| Total Land Area                           | 11.3235ha |  |
|   |           |  |
| Deductions                                |           |  |
| Commercial and Western Power Easement     | 3.8940    |  |
| Uncredited POS (Incl. 1 in 1 year basins) | 0.0270    |  |
| Thomas Road Widening                      | 0.3621    |  |
| Total:                                    | 4.2831    |  |



|                                     | Gross S | Subdivisible Area: | 7.0404               |
|-------------------------------------|---------|--------------------|----------------------|
| POS Requirement:                    |         | 0.704              |                      |
| Public Open Space Calculation       |         |                    |                      |
| To Comprise                         |         |                    |                      |
| Minimum 80% unrestricted Open Space |         |                    | 0.5632               |
| Maximum 20% restricted Open Space   |         |                    | 0.1408               |
| Public Open Space Provided          |         |                    |                      |
|                                     |         | Unrestricted       | Restricted           |
| POS area in Lot 1                   |         | 0.3204             | 0.0320               |
| POS area in Lot 2                   |         | 0                  | 0                    |
| Community Purpose Site              |         | 0.3070             | 0                    |
|                                     | Total   | 0.6274             | 0.0320               |
| Total Open Space Provided:          |         |                    | 0.6594 ha<br>(9.37%) |

#### TABLE 2 - POS SCHEDULE (ALL AREAS IN HECTARES)

The 446m<sup>2</sup> shortfall has occurred primarily through the reduction to the size of the Community Purpose site. If it were to remain 3,507m<sup>2</sup> in size there would have only been a 9m<sup>2</sup> shortfall. Nevertheless, the shortfall is justifiable on the basis that, although it has been reduced in size, the relocated Community Purpose site is:

- Better located within the LSP area because it is no longer immediately adjacent to residential lots and within the commercial portion of the site that provides benefits such as addition reciprocal car parking; and
- Because it is better integrated with the commercial precinct, significantly increasing its viability and providing a better amenity outcome given its location will improve the shared access street that is to occur in the neighbourhood centre (refer again to the Concept Plan in City of Armadale).

Therefore, the benefits of this relocation outweigh the minor (0.67%) shortfall in POS area. As such, it is clear that sufficient Public Open Space is provided for the broader Local Structure Plan area, including within Lots 1, 2 and 3.

#### 3.4 Residential

#### 3.4.1 Land Use and Residential Density

The residential densities proposed by the Local Structure Plan Amendment are generally consistent with the existing densities depicted on the adopted Local Structure Plan. Some reallocation and reorganising of densities to accommodate the enlarged commercial space and reflect the amended POS location have occurred, generally reducing the total residential area within the LSP. To offset this reduction a redesign of the street blocks and road alignment, plus a minor increase in residential density, has occurred to ensure that the available residential space is utilised more efficiently. This is demonstrated within **Table 2**, below, which summarises the total land area of commercial, various residential densities and POS areas within Lots 1, 2 and 3. Of particular interest, it is noted there is a total land increase in commercial and POS spaces of 0.995 hectares, yet the reduction in total residential space only totals 0.141 hectares. This has occurred through a more efficient design including a reduction in the central open space area within the power line easement and a reduction in the total road reserve area.



| Land Use   | Approved LSP | Proposed LSP |
|------------|--------------|--------------|
| Commercial | 1.510        | 2.461        |
| R20        | 1.001        | 0.140        |
| R25        | -            | 0.309        |
| R30        | 2.084        | 2.472        |
| R40        | 0.679        | 0.272        |
| R60        | 0.569        | 0.385        |
| R80        | -            | 0.614        |
| POS        | 0.829        | 0.873        |

Table 2: Land Use Area Comparison

The Structure Plan Amendment proposes the creation of standard street blocks where practical to accommodate a variety of lot sizes. Overall, 41,920m² of residential coded land is proposed. This appears capable of allowing for a total of 122 lots within Lots 1, 2 and 3, which includes one grouped / multiple dwelling site. Given it is difficult to determine how many dwellings this site will accommodate, the average lot size, prescribed in State Planning Policy 3.7 (R-Codes) can be used to estimate that 51 lots could be created on this lot. As such, the expected dwelling yield would be 172 dwellings, which equates to approximately 15.19 dwellings per site hectare. Based on 2011 ABS statistics and an expected dwelling yield of 172 dwellings, the estimated population within the Structure Plan Amendment area is 447 persons at 2.6 persons per dwelling.

An indicative Lot Yield Plan has been attached at Appendix E

#### 3.4.2 Residential Lot Layout

Street blocks and road layouts have been amended to provide for a more efficient use of space including rectangular lots that also respond to the current market demand in regards to lot depths and widths.

#### 3.5 Movement Networks

#### 3.5.1 Proposed Movement Network

The proposed public road network shall remain generally consistent with the adopted Structure Plan as detailed in preceding sections of this Report. Road reserves and laneways will be constructed generally in accordance with Liveable Neighbourhoods guidelines. The various road widths are considered consistent with those previously approved in both the Local Structure Plan and subsequent subdivision approvals. They are further considered and justified in the Transport Impact Assessment that has been prepared by Transcore, attached at **Appendix F**.

#### 3.5.2 Traffic Generation

The proposed subdivisional road network within the current Local Structure Plan area has been designed to service future subdivision and development at densities between R20 and R80 over the subject land.

The anticipated change to the total daily traffic volume associated with the Local Structure Plan Amendment is minimal. Therefore, it is concluded that the proposed road network has the capacity to accommodate the anticipated traffic generated by subdivision and development within the Structure Plan Amendment area with no adverse impact on traffic operations.



#### 3.6 Stormwater Management

A Local Water Management Strategy has been prepared to address the various catchment areas within the Local Structure Plan area and is attached at **Appendix C**. Whilst this application only suggests amendments within Lots 1, 2 and 3 the LWMS addresses drainage across the whole LSP area given that drainage catchments are not necessarily limited to lot boundaries and because drainage infrastructure, on the basis of detailed UWMP design, has already been installed to the north given the current subdivision implementation and construction that is or has occurred. The updated LWMS seeks to reflect much of what was previously proposed and/or constructed.

The resultant structure plan layout and densities has, therefore, been the subject of initial assessment in terms of drainage illustrating the site's capacity to manage future drainage demands. Given the lot yield/dwelling density and layout is generally consistent with the original LSP, there are no additional drainage implications anticipated as a result of this Structure Plan Amendment.

The LWMS suggests assumed basin configurations (as detailed in the strategy) and therefore concludes that there will need to be an additional 630m³ of drainage space within the structure plan amendment area, provided in addition to that proposed within the open space area within the power line easement. This area is in addition to those that are contained within lots outside of the amendment area. Only one drainage area will be required within the LSP amendment area. This will occur within the POS area proposed within Lot 1. It is envisaged that the top of water level area required to capture 1 in 5 year stormwater events will be 660m² in area, with the portion of that required for 1 in 1 year events to be 340m² in area.

In accordance with Liveable Neighbourhoods Element 4 (R26), Restricted Open Space areas are able to be used for greater than 1 in 1 year events. Furthermore, any storm events greater than 1 in 5 AEP can be accommodated in the site as well, however, these areas form a part of the unrestricted POS area in accordance with Liveable Neighbourhoods Element 4 (R25).

#### 3.7 Staging

It is likely that intersection upgrades at the Thomas Road intersection with the proposed north-south spine road will be triggered by the development of the neighbourhood centre adjacent to Thomas Road or any other residential development (dependant on the amount of lots proposed). These upgrades would be required as a part of the upgrading of Thomas Road that is funded by the Development Contribution Plan for Development Control Area 4, as detailed in the associated DCP Report. It is likely that the ultimate intersection upgrade would represent a roundabout, but that interim development, such as that depicted in Stage 1 of the Concept Plan (attached at **Appendix D** of the Explanatory section of this report) might be serviced by an interim intersection upgrade of a different form. Residential development that could be serviced from the north, through subdivisional roads, would not trigger this infrastructure requirement.

It is also envisaged that the City would seek to acquire the land required for the Community Purpose facility at the first stage of subdivision related to the Commercial Site.

Other than the above, there are no other infrastructure triggers that would influence the staging of future subdivision within the structure plan area.



#### 3.8 Developer Contribution Arrangements

Under the City of Kwinana Town Planning Scheme No. 2 the subject site falls within two development control areas. These are Development Contribution Areas No. 4 and No. 10, which require contributions for hard and soft infrastructure respectively. Of particular interest, is the infrastructure requirement for the upgrading of Thomas Road, given this is likely to be triggered by the development of the neighbourhood centre or by any development that is to seek full movement access to Thomas Road.

On the basis of these development contribution schemes, future subdivision and development applications will be approved with conditions requiring the landowner / developer to provide a cost contribution.

#### 3.9 Implementation

The proposed Structure Plan Amendment has been prepared in accordance with the requirements of the Planning and Development (Local Planning Schemes) Regulations 2015.

The Planning and Development (Local Planning Schemes) Regulations 2015 stipulates the manner by which the Structure Plan Amendment will be processed by the City of Kwinana and thereafter, the Western Australian Planning Commission to enable final approval.

Following adoption of the Local Structure Plan, subdivision applications, local development plans and development applications can be considered and approved where they comply with the Amended Structure Plan.



# **APPENDICES INDEX**

| Appendix | Nature of Document                     |
|----------|--|
| А        | Certificates of Title                  |
| В        | Bushfire Management Plan               |
| С        | Local Water Management Plan            |
| D        | Conceptual Neighbourhood Centre Design |
| E        | Conceptual Lot Yield Plan              |
| F        | Transport Impact Assessment            |

# **APPENDIX A**

Certificates of Title





**AUSTRALIA** 

REGISTER NUMBER
1/D83118

DUPLICATE DATE DUPLICATE ISSUED
EDITION
3 13/2/2007

#### RECORD OF CERTIFICATE OF TITLE

2034

FOLIO **46** 

UNDER THE TRANSFER OF LAND ACT 1893

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 1 ON DIAGRAM 83118

#### **REGISTERED PROPRIETOR:**

(FIRST SCHEDULE)

TREVOR KEITH PIX LISA MARGARET PIX BOTH OF POST OFFICE BOX 957, BUSSELTON AS JOINT TENANTS

(T K078917) REGISTERED 5/2/2007

#### LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:

(SECOND SCHEDULE)

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

\* 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: 2034-46 (1/D83118)

PREVIOUS TITLE: 1940-235

PROPERTY STREET ADDRESS: 819 THOMAS RD, ANKETELL.

LOCAL GOVERNMENT AUTHORITY: CITY OF KWINANA





AUSTRALIA

REGISTER NUMBER

2/D83118

DUPLICATE DATE DUPLICATE ISSUED
EDITION
4
29/7/2004

#### RECORD OF CERTIFICATE OF TITLE

2123

858

UNDER THE TRANSFER OF LAND ACT 1893

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 2 ON DIAGRAM 83118

#### **REGISTERED PROPRIETOR:**

(FIRST SCHEDULE)

ANKETELL SOUTH INVESTMENT PTY LTD OF SUITE 2, 298 MILL POINT ROAD, SOUTH PERTH (TP M468856 ) REGISTERED 20/11/2013

#### LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:

(SECOND SCHEDULE)

1. C054492 EASEMENT TO THE STATE ENERGY COMMISSION OF WESTERN AUSTRALIA. SEE SKETCH ON VOL 2123 FOL 858. REGISTERED 31/12/1980.

\*N517402 MORTGAGE TO WESTPAC BANKING CORPORATION REGISTERED 22/12/2016.

3. \*N856483 CAVEAT BY SARACEN DEVELOPMENTS PTY LTD LODGED 21/3/2018.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

\* 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: 2123-858 (2/D83118)

PREVIOUS TITLE: 2034-47

PROPERTY STREET ADDRESS: 811 THOMAS RD, ANKETELL.

LOCAL GOVERNMENT AUTHORITY: CITY OF KWINANA

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING

K220194





AUSTRALIA

REGISTER NUMBER

3/D83118

DUPLICATE DATE DUPLICATE ISSUED
EDITION

1 4/7/2001

#### RECORD OF CERTIFICATE OF TITLE

2034

FOLIO **48** 

UNDER THE TRANSFER OF LAND ACT 1893

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 3 ON DIAGRAM 83118

#### **REGISTERED PROPRIETOR:**

(FIRST SCHEDULE)

ANKETELL COMMERCIAL PTY LTD OF SUITE 2, 298 MILL POINT ROAD, SOUTH PERTH

(TP M468857) REGISTERED 20/11/2013

#### LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:

(SECOND SCHEDULE)

1. C054492 EASEMENT TO THE STATE ENERGY COMMISSION OF WESTERN AUSTRALIA. SEE SKETCH

ON VOL 2034 FOL 48. REGISTERED 31/12/1980.

2. \*N517403 MORTGAGE TO WESTPAC BANKING CORPORATION REGISTERED 22/12/2016.

3. \*N856484 CAVEAT BY SARACEN DEVELOPMENTS PTY LTD LODGED 21/3/2018.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

\* 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: 2034-48 (3/D83118)

PREVIOUS TITLE: 1940-235

PROPERTY STREET ADDRESS: 793 THOMAS RD, ANKETELL.

LOCAL GOVERNMENT AUTHORITY: CITY OF KWINANA

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING

K082778

# **APPENDIX B**

Bushfire Management Plan

# Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

| Site address:  |   |  |                       |    |
|--|---|--|-----------------------|----|
| Site visit: Yes No   |   |  |                       |    |
| Date of site visit (if applicable): D  | ay Month  |  | Year                  |    |
|  |   |  |                       |    |
| Report author or reviewer:   |   |  |                       |    |
| WA BPAD accreditation level (ple   | ase circle):  |  |                       |    |
| Not accredited Level 1 B   | AL assessor Level 2 practitioner  | Level 3 practit                        | tioner                |    |
| If accredited please provide the   | following.  |  |                       |    |
| BPAD accreditation number:   | Accreditation expiry: Month   |  | Year                  |    |
|  |   |  |                       |    |
| Bushfire management plan version   | n number:   |  |                       |    |
| Bushfire management plan date:   | Day Month   |  | Year                  |    |
| Client/business name:  |   |  |                       |    |
|  |   |  |                       |    |
|  |   |  | Yes                   | No |
| Has the BAL been calculated by   | a method other than method 1 as outlined i  | n AS3959                               |                       |    |
|  | seen used to calculate the RALV2  |  |                       |    |
| (tick no if AS3959 method 1 has b  | <u> </u>  | h. II.                                 |                       |    |
| (tick no if AS3959 method 1 has be<br>Have any of the bushfire protection<br>performance principle (tick no if   | on criteria elements been addressed throug<br>only acceptable solutions have been used  |  |                       |    |
| (tick no if AS3959 method 1 has b  | on criteria elements been addressed throug<br>only acceptable solutions have been used  |  |                       |    |
| (tick no if AS3959 method 1 has be<br>Have any of the bushfire protection<br>performance principle (tick no if   | on criteria elements been addressed throug<br>only acceptable solutions have been used<br>ents)?  |  | Yes                   | No |
| (tick no if AS3959 method 1 has be<br>Have any of the bushfire protection<br>performance principle (tick no if<br>bushfire protection criteria eleme   | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?   |  |                       | No |
| (tick no if AS3959 method 1 has be have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following Unavoidable development (in BAS Strategic planning proposal (inclusive).   | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?   |  |                       | No |
| (tick no if AS3959 method 1 has be have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following Unavoidable development (in BAStrategic planning proposal (including high risk land-use  | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?   |  |                       | No |
| (tick no if AS3959 method 1 has be have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following Unavoidable development (in BAS Strategic planning proposal (inclusive).   | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?   |  |                       | No |
| (tick no if AS3959 method 1 has be have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following Unavoidable development (in BAStrategic planning proposal (including high risk land-use  | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?   |  |                       | No |
| (tick no if AS3959 method 1 has be Have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following. Unavoidable development (in BAS strategic planning proposal (including high risk land-use.  Vulnerable land-use.  None of the above  Note: Only if one (or more) of the strategic planning proposal (including high risk land-use)  | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  LL-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should  | to address all of the                  | Yes                   |    |
| Have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements)  Is the proposal any of the following:  Unavoidable development (in BA)  Strategic planning proposal (including the proposal land-use)  Vulnerable land-use  None of the above  Note: Only if one (or more) of the or the WAPC) refer the pro-  | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  LL-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.   | the decision maker                     | Yes  (e.g. local gove |    |
| Have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements)  Is the proposal any of the following:  Unavoidable development (in BA)  Strategic planning proposal (including the proposal land-use)  Vulnerable land-use  None of the above  Note: Only if one (or more) of the or the WAPC) refer the pro-  | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  L-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.  above listed classifications (E.g. Considered                             | the decision maker                     | Yes  (e.g. local gove |    |
| Have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements)  Is the proposal any of the following:  Unavoidable development (in BA)  Strategic planning proposal (including the proposal land-use)  Vulnerable land-use  None of the above  Note: Only if one (or more) of the or the WAPC) refer the proposal land to the proposal land the proposal | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  L-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.  above listed classifications (E.g. Considered                             | the decision maker                     | Yes  (e.g. local gove |    |
| Have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements)  Is the proposal any of the following:  Unavoidable development (in BA)  Strategic planning proposal (including the proposal land-use)  Vulnerable land-use  None of the above  Note: Only if one (or more) of the or the WAPC) refer the proposal land to the proposal land the proposal | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  L-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.  above listed classifications (E.g. Considered                             | the decision maker                     | Yes  (e.g. local gove |    |
| Have any of the bushfire protection performance principle (tick no if bushfire protection criteria elements)  Is the proposal any of the following:  Unavoidable development (in BA)  Strategic planning proposal (including the proposal land-use)  Vulnerable land-use  None of the above  Note: Only if one (or more) of the or the WAPC) refer the proposal land to the proposal land the proposal | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  L-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.  above listed classifications (E.g. Considered                             | the decision maker                     | Yes  (e.g. local gove |    |
| Have any of the bushfire protectic performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following. Unavoidable development (in BA). Strategic planning proposal (including High risk land-use.  Vulnerable land-use.  Note: Only if one (or more) of the or the WAPC) refer the production. Why has it been given one of the development is for accommodate.   | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  L-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.  above listed classifications (E.g. Considered                             | the decision maker vulnerable land-use | (e.g. local gove      |    |
| Have any of the bushfire protectic performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following. Unavoidable development (in BA). Strategic planning proposal (including High risk land-use.  Vulnerable land-use.  Note: Only if one (or more) of the or the WAPC) refer the production. Why has it been given one of the development is for accommodate.   | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  AL-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.  above listed classifications (E.g. Considered ion of the elderly, etc.)? | the decision maker vulnerable land-use | (e.g. local gove      |    |
| Have any of the bushfire protectic performance principle (tick no if bushfire protection criteria elements). Is the proposal any of the following. Unavoidable development (in BA). Strategic planning proposal (including High risk land-use.  Vulnerable land-use.  Note: Only if one (or more) of the or the WAPC) refer the production. Why has it been given one of the development is for accommodate.   | on criteria elements been addressed througonly acceptable solutions have been used ents)?  g (see SPP 3.7 for definitions)?  AL-40 or BAL-FZ)  uding rezoning applications)  e above answers in the tables is yes should apposal to DFES for comment.  above listed classifications (E.g. Considered ion of the elderly, etc.)? | the decision maker vulnerable land-use | (e.g. local gove      |    |



# Bushfire Management Plan (Local Structure Plan Amendment)

Lots 1, 2 & 3 (Nos 819, 811 & 793) Thomas Road, Anketell

City of Kwinana

Job Number: 180598

Assessment Date: 29 August 2018

Report Date: 21 September 2018

# BPP Group Pty Ltd t/a Bushfire Prone Planning

ABN: 39 166 551 784

Level, 159-161 James Street Guildford WA 6055

PO Box 388 Guildford WA 6935

Ph: 08 6477 1144

Email: admin@bushfireprone.com.au



#### **Commercial in Confidence**

The information, including any intellectual property, contained in this document is confidential and proprietary to the Company. It may only be used by the person to whom it is provided for the stated purpose for which it is provided and must not be imparted to any third person without the prior written approval of the Company. The Company reserves all legal rights and remedies in respect of its confidential information.

#### Copyright ©2017 BPP Group Pty Ltd

All intellectual property rights, including copyright, in format and proprietary content contained in documents created by Bushfire Prone Planning, remain the property of BPP Group Pty Ltd. Any use made of such format or content without the prior written approval of Bushfire Prone Planning, will constitute an infringement on the rights of the Company which reserves all legal rights and remedies in respect of any such infringement.

#### Disclaimer

The measures contained in this Bushfire Management Plan are considered to be minimum standards and they do not guarantee that a building will not be damaged in a bushfire, persons injured, or fatalities occur either on the subject site or off the site while evacuating. This is substantially due to the unpredictable nature and behaviour of fire and extreme weather conditions. Additionally, the correct implementation of the required bushfire protection measures (and any associated response/evacuation plan if applicable) will depend, among other things, on the actions of the landowners or occupiers over which Bushfire Prone Planning has no control.

All surveys, forecasts, projections and recommendations made in this report associated with the project are made in good faith based on information available to Bushfire Prone Planning at the time.

All maps included herein are indicative in nature and are not to be used for accurate calculations.

Notwithstanding anything contained therein, Bushfire Prone Planning will not, except as the law may require, be liable for any loss or other consequences whether or not due to the negligence of their consultants, their servants or agents - arising out of the services provided by their consultants.



#### **Document Control**

| Version | Version Details               | Date Submitted |
|---------|-------------------------------|----------------|
| 1.0     | Primary Document              | 21-Sep-18      |
| 1.1     | Amended Structure Plan Layout | 25-Mar-19      |
|         |                               | -              |

| Author            | Accreditation            | Signature   |
|-------------------|--------------------------|-------------|
| Ian Macleod       | BPAD Level 2 - No. 39131 | Jan Macleod |
| Co-author         |                          |             |
|                   |                          |             |
| Reviewed/Approved |                          |             |
| Kathy Nastov      | BPAD Level 3 - No. 27794 | K. Master   |

#### **Document Content Compliance Statement**

This Bushfire Management Plan (the Plan) provides the required information to address State Planning Policy No. 3.7: Planning in Bushfire Prone Areas - December 2015 (SPP 3.7), the associated Guidelines for Planning in Bushfire Prone Areas - WAPC 2017 v1.3 (Guidelines), and any additional information as directed by the WA Planning Commission (WA Department of Planning, Lands and Heritage). It is fit for accompanying a planning application.

Structure Plan / Subdivision BMP Template v7.3



# Table of Contents

| D      | OCUMEI  | NT CONTROL  | 1  |
|--------|---------|---|----|
| Ε>     | (ECUTIV | E SUMMARY   | 4  |
| 1      | THE     | PROPOSAL AND PURPOSE OF THE PLAN  | 5  |
|        | 1.1     | Details   | 5  |
|        | 1.2     | EXISTING DOCUMENTATION RELEVANT TO THE CONSTRUCTION OF THIS PLAN            | 9  |
| 2      | ENV     | RONMENTAL CONSIDERATIONS  | 10 |
|        | 2.1     | NATIVE VEGETATION – MODIFICATION AND CLEARING                               | 10 |
|        | 2.2     | RE-VEGETATION / RETAINED VEGETATION / LANDSCAPE PLANS                       | 12 |
| 3      | POTI    | ENTIAL BUSHFIRE IMPACT ASSESSMENT   | 13 |
|        | 3.1     | Assessment Input  | 13 |
|        | 3.1.1   | Fire Danger Index (FDI) Applied   | 13 |
|        | 3.1.2   | Existing Vegetation Identification, Classification and Effective Slope      | 13 |
|        | 3.2     | Assessment Output   | 25 |
|        | 3.2.1   | Indicative BAL Results Presented as a BAL Contour Map                       | 26 |
|        | 3.2.2   | Bushfire Attack Levels (BAL) Derived from The Contour Map                   | 28 |
|        | 3.2.3   | Issues Derived from The Contour Map   | 29 |
| 4      | IDEN    | TIFICATION OF BUSHFIRE HAZARD ISSUES  | 30 |
| 5      | ASSE    | SSMENT AGAINST THE BUSHFIRE PROTECTION CRITERIA (BPC)                       | 32 |
|        | 5.1     | BUSHFIRE PROTECTION CRITERIA - ASSESSMENT SUMMARY                           | 32 |
|        | 5.2     | BUSHFIRE PROTECTION CRITERIA – ACCEPTABLE SOLUTIONS ASSESSMENT DETAIL       | 33 |
|        | 5.2.1   | Element 1: Location   | 33 |
|        | 5.2.2   | Element 2: Siting and Design of Development                                 | 34 |
|        | 5.2.3   | Element 3: Vehicular Access   | 35 |
|        | 5.2.4   | Element 4: Water  | 37 |
|        | 5.3     | ADDITIONAL INFORMATION FOR REQUIRED BUSHFIRE PROTECTION MEASURES            | 38 |
|        | 5.3.1   | Vegetation Management   | 38 |
|        | 5.3.2   | Future Stage Planning Application – Additional Information Required         | 40 |
| 6<br>M |         | ONSIBILITIES FOR IMPLEMENTATION AND MANAGEMENT OF THE BUSHFIRE PROTECTION S | 41 |
| ΑI     | PPENDIX | 1 - ONSITE VEGETATION MANAGEMENT TECHNICAL REQUIREMENTS                     | 45 |
| ΑI     | PPENDIX | 2 - VEHICULAR ACCESS TECHNICAL REQUIREMENTS                                 | 50 |
| ΑI     | PPENDIX | 3 - WATER TECHNICAL REQUIREMENTS  | 54 |



# List of Figures

| Figure 1.1: Proposed structure plan   | 6  |
|---|----|
| FIGURE 1.2: PROPOSED STRUCTURE PLAN SPATIAL CONTEXT MAP.                                  | 7  |
| FIGURE 1.3: SCREEN SHOT OF MAP OF BUSHFIRE PRONE AREAS FOR THE SUBJECT SITE AND SURROUNDS | 8  |
| FIGURE 3.1: VEGETATION CLASSIFICATION AND TOPOGRAPHY MAP.                                 | 24 |
| Figure 3.2: BAL Contour Map   | 27 |
| FIGURE 4.1: BUSHFIRE HAZARD LEVEL ASSESSMENT MAP  | 31 |



#### **Executive Summary**

This Bushfire Management Plan addresses the proposed amendments to the Anketell South Local Structure Plan. The proposed amendments are contained within Lots 1, 2 and 3 on Thomas Road. The amendments provide for a larger commercial precinct which is achieved by moving the main north-south road that connects to Thomas Road further to the east.

The subject land is generally cleared with remnant areas of scrub and several areas of scrub regrowth. The land is not considered environmentally sensitive and has a low to medium risk of acid-sulphate soils. Land to the east of the subject lots is classified as Bush Forever.

The Bushfire Hazard Level Assessment of the site demonstrates levels of moderate to extreme bushfire threat within and external to the subject land. However, this is considered manageable by compliance with the requirements of this Bushfire Management Plan.

A BAL rating of BAL-29 or lower is achievable for future lots in this proposal, dependent on vegetation management within the three subject lots and some areas outside the subject lots. These areas are specified in this Plan.

The structure plan design allows for access/egress to the north, south, east and west of the development, providing various choices of escape routes during a bushfire event.

The future development will have a reticulated water supply with hydrants installed at the required intervals and to the required specifications.

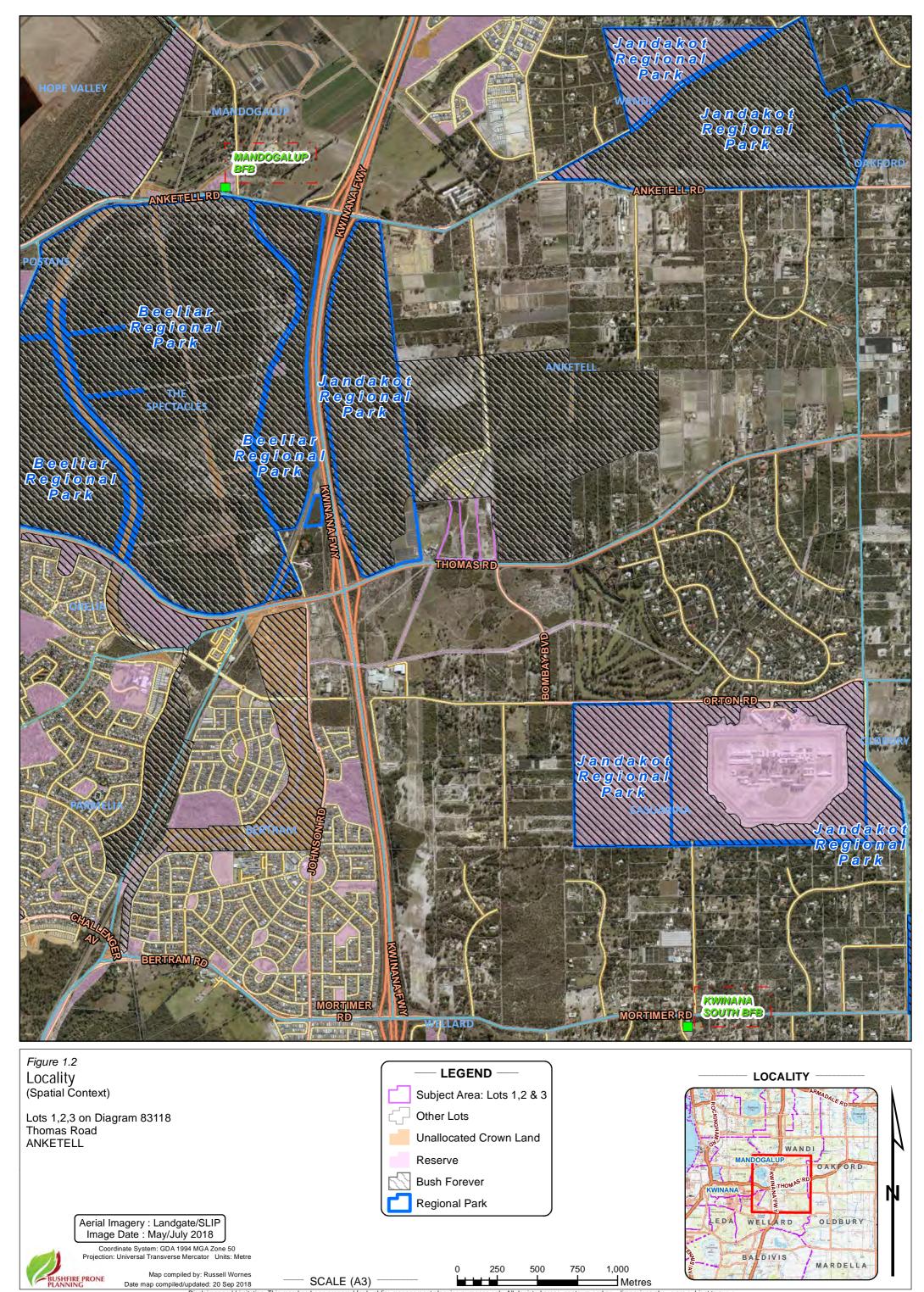


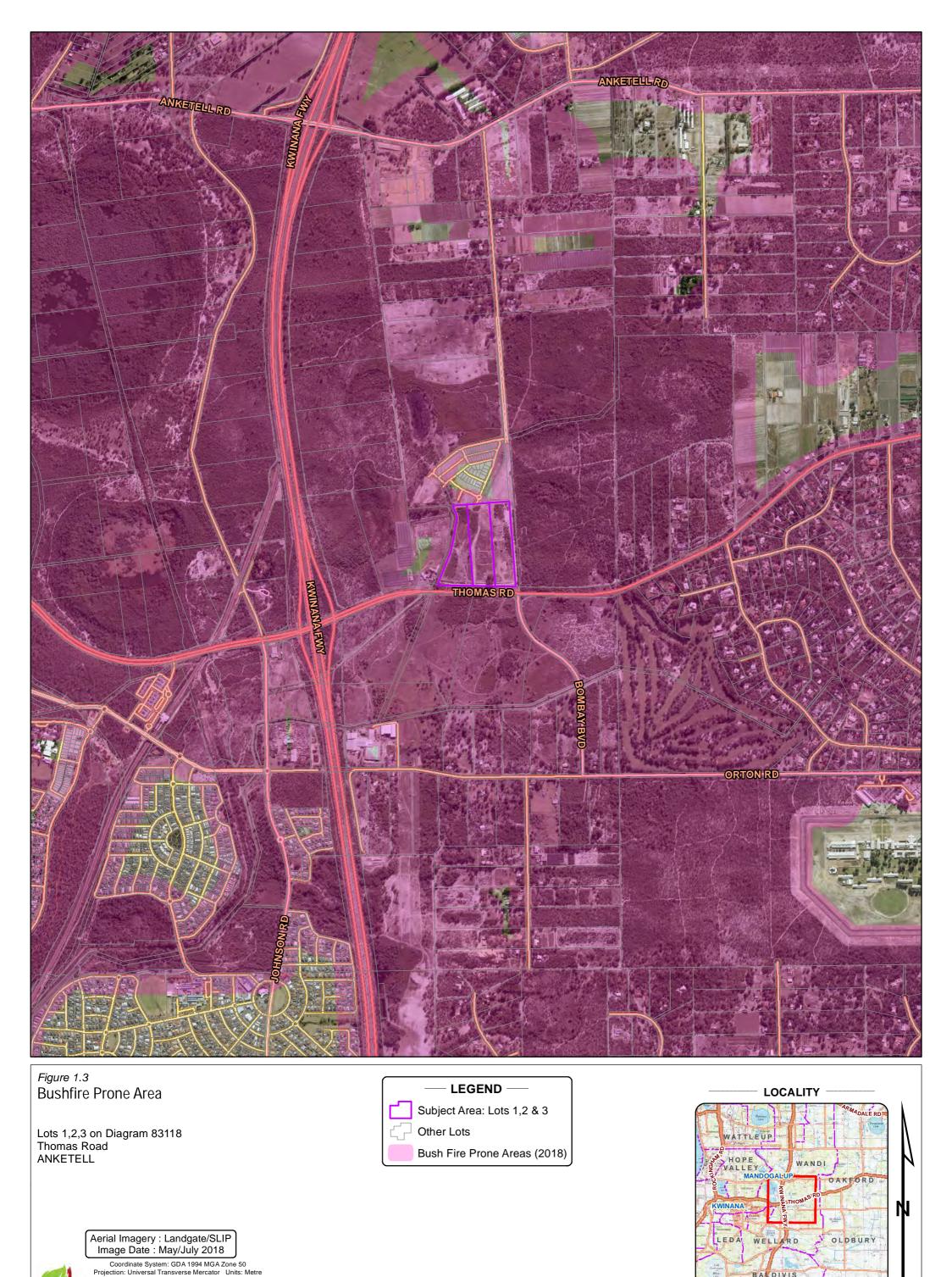
# 1 The Proposal and Purpose of the Plan

#### 1.1 Details

Proponent: Saracen Properties Site Address: Lots 1, 2 & 3 (Nos 819, 811 & 793) Thomas Road, Anketell **Local Government:** City of Kwinana Site Area: 11.3 hectares No. of Proposed Lots: To be advised Planning Stage: Strategic - local structure plan amendment Overview of the Proposal: The proposed amendment of the Local Structure Plan is to redesign internal road locations to accommodate a larger commercial area. **Bushfire Prone Planning** Commissioned to Produce Harley Dykstra the Plan by: Purpose of the Plan: To accompany an application to amend a local structure plan For Submission to: City of Kwinana







SCALE (A3)

Map compiled by: Russell Wornes

Date map compiled/updated: 20 Sep 2018

BUSHFIRE PRONE

BALDIVIS

1,000

∃Metres

MARDELLA



#### 1.2 Existing Documentation Relevant to the Construction of this Plan

This section acknowledges any known reports or plans that have been prepared for previous planning stages, that refer to the subject area and that may or will impact upon the assessment of bushfire risk and/or the implementation of bushfire protection measures and will be referenced in this Bushfire Management Plan.

| Relevant Documents              |                               |   |  |
|---------------------------------|-------------------------------|---|--|
| Existing Document               | Copy<br>Provided<br>by Client | Title   |  |
| Structure Plan                  | Yes                           | Anketell South Local Structure Plan (Map Only)  |  |
| Environmental Report            | No                            |   |  |
| Landscaping (Revegetation) Plan | No                            |   |  |
| Bushfire Risk Assessments       | Yes                           | Fire Management Plan for Lots 1, 2, 3 & 17 Thomas Road and Portion of Lot 13 Treeby Road Anketell – Anketell South Local Structure Plan |  |

Landscaping (revegetation) within the site requires consideration of the bushfire management plan requirements. This is to ensure that an increase in bushfire hazards do not occur, nor any alteration in bushfire attack levels determined for the site. Where an environmental report or landscaping (revegetation) plan is required as a condition of future subdivision, the bushfire management plan will require updating (amending) to address any bushfire impacts arising from these subsequent reports or plans.



#### 2 Environmental Considerations

#### 2.1 Native Vegetation – Modification and Clearing

**'Guidelines' s2.3:** "Many bushfire prone areas also have high biodiversity values. SPP 3.7 policy objective 5.4 recognises the need to consider bushfire risk management measures alongside environmental, biodiversity and conservation values."

Existing conservation areas that are potentially affected by the development proposal are required to be identified. This may result in vegetation removal/modification prohibition or limitations. These areas include National Parks, Nature Reserves, Wetlands and Bush Forever sites.

**Environmental Protection Act 1986:** "Clearing of native vegetation in Western Australia requires a clearing permit under Part V, Division 2 of the Act unless clearing is for an exempt purpose. Exemptions from requiring a clearing permit are contained in Schedule 6 of the Act or are prescribed in the Environmental Protection Regulations" ('Guidelines' s2.3).

The Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act): This Act administered by the Australian Government Department of Environment, provides a national scheme of environment and heritage protection and biodiversity conservation. Nationally threatened species and ecological communities are a specific matter of significance. Areas of vegetation can be classified as a Threatened Ecological Community (TEC) under the EPBC Act and consequently have removal restrictions imposed.

| Vegetation Modification and Clearing Assessment   |     |  |
|---|-----|--|
| Will on-site clearing of native vegetation be required?   | Yes |  |
| Does this have the potential to trigger environmental impact/referral requirements under State and Federal environmental legislation?   | No  |  |
| Identified environmental legislation applicable to the Proposal site - No.1:  | N/A |  |
| Identified environmental legislation applicable to the Proposal site - No.2:  | N/A |  |
| For the proposed development site, have any areas of native vegetation been identified as species that might result in the classification of the area as a Threatened Ecological Community (TEC)? | No  |  |
| Potential TEC species identified:   | N/A |  |

The subject land is generally classified as grassland with remnant areas of scrub and some areas of scrub regrowth. The land is not considered environmentally sensitive and has a low to medium risk of acid-sulphate soils. Neighbouring land to the east of the subject lots and land further north and west of the lots is classified as Bush Forever.

The bushfire assessment and management strategies contained in the BMP, assume that environmental approval will be achieved or clearing permit exemptions will apply.



#### **Development Design Options**

Establishing development in bushfire prone areas can adversely affect the retention of native vegetation through clearing associated with the creation Lots and/or Asset Protection Zones. Where loss of vegetation is not acceptable or causes conflict with landscape or environmental objectives, it will be necessary to consider available design options to minimise the removal of native vegetation.

| Minimising the Removal of Native Vegetation  |            |         |  |
|--|------------|---------|--|
| Design Option  | Identified | Adopted |  |
| Reduction of lot yield   | N/A        | N/A     |  |
| Cluster development  | N/A        | N/A     |  |
| Construct building to a standard corresponding to a higher BAL rating as per BCA (AS 3959-2009 and/or NASH Standard) | N/A        | N/A     |  |
| Modify the development location  | N/A        | N/A     |  |

Minimal native vegetation exists on the lots.

#### Impact on Adjoining Land

| Is this planning proposal able to implement the required bushfire measures within the boundaries of the land being developed so as not to impact on the bushfire and environmental management of neighbouring reserves, properties or conservation covenants? | Yes |
|---|-----|
|---|-----|

Future lots can achieve Asset Protection Zone (APZ) development and maintenance of vegetation in a low bushfire threat state. This will ensure that the bushfire risk will be reduced to the immediate surrounding properties due to the ongoing management of vegetation on each newly created lot. Compliance is regulated via the bushfire management plan for the site and the City of Kwinana annual Fire Breaks Notice.



#### 2.2 Re-vegetation / Retained Vegetation / Landscape Plans

Riparian zones, wetland/foreshore buffers, road verges and public open space may have plans to re-vegetate or retain vegetation as part of the Proposal.

Vegetation corridors may join offsite vegetation and provide a route for fire to enter a development area.

When applicable, any such area will be identified in this Bushfire Management Plan and their impact on the assessment and future management accounted for.

| Is re-vegetation of riparian zones and/or wetland or foreshore buffers and/or public open space a part of this Proposal?  | Yes |
|---|-----|
| Is the requirement for ongoing maintenance of existing vegetation in riparian zones and/or wetland or foreshore buffers and/or public open space a part of this Proposal? | Yes |

Where areas of Public Open Space are created, whether the areas have existing vegetation or are to be revegetated, these areas are to be managed and maintained to a low bushfire threat state.



#### 3 Potential Bushfire Impact Assessment

#### 3.1 Assessment Input

#### 3.1.1 Fire Danger Index (FDI) Applied

AS 3959-2009 specifies the fire danger index values to apply for different regions as per Table 2.1. The values used in the model calculations are for the Forest Fire Danger Index (FFDI) and for which equivalent representative values of the Grassland Fire Danger Index (GFDI) are applied as per Appendix B. The values can be refined if appropriately justified.

Table 3.1: Applied FDI Value

| FDI Value            |                                    |                                 |               |  |  |
|----------------------|------------------------------------|---------------------------------|---------------|--|--|
| Vegetation Area      | As per AS 3959 - 2009<br>Table 2.1 | As per DFES for the<br>Location | Value Applied |  |  |
| All Vegetation Areas | 80                                 | N/A                             | 80            |  |  |

#### 3.1.2 Existing Vegetation Identification, Classification and Effective Slope

Vegetation identification and classification has been conducted in accordance with AS 3959-2009 s2.2.3 and the Visual Guide for Bushfire Risk Assessment in WA (DoP February 2016).

When more than one vegetation type is present, each type is identified separately with the worst-case scenario being applied as the classification. The predominant vegetation is not necessarily the worst-case scenario.

The vegetation structure has been assessed as it will be in its mature state (rather than what might be observed on the day). Areas of modified vegetation are assessed as they will be in their natural unmodified state (unless maintained in a permanently low threat, minimal fuel condition, satisfying AS 3959-2009 s2.2.3.2-f and asset protection zone standards). Vegetation destroyed or damaged by a bushfire or other natural disaster has been assessed on its revegetated mature state.

**Effective Slope:** Is the ground slope under the classified vegetation and is determined for each area of classified vegetation. It is the measured or determined slope which will most significantly influence the bushfire behaviour in that vegetation as it approaches a building or site. Where there is a significant change in effective ground slope under an area of classified vegetation, that will cause a change in fire behaviour, separate vegetation areas will be identified, based on the change in effective slope, to enable the correct assessment.



Table 3.2: Vegetation identification and classification

| All Vegetation Within 150 metres of the Proposed Development |   |                                     |   |             |  |  |
|--|---|-------------------------------------|---|-------------|--|--|
| Vegetation<br>Area   | Identified Classification Types <sup>1</sup>      | Applied Classification <sup>2</sup> | Effective Slope Under Classified Vegetation |             |  |  |
|  | or Description if 'Excluded'                      |                                     | degrees                                     | description |  |  |
| 1  | Closed Scrub D-13<br>Open Scrub D-14              | Class D Scrub                       | 0   | Upslope     |  |  |
| 2  | Closed Scrub D-13<br>Open Scrub D-14              | Class D Scrub                       | 1   | Downslope   |  |  |
| 3  | Open Herbfield G-27<br>Sparse Open Herbfield G-28 | Class G Grassland                   | 1   | Downslope   |  |  |
| 4  | Woodland B-05                                     | Class B Woodland                    | 0   | Flat        |  |  |
| 5  | Sparse Open Herbfield                             | Class G Grassland                   | 0   | Flat        |  |  |
| 6  | Open Tussock G-23                                 | Class G Grassland                   | 0   | Flat        |  |  |
| 7  | Tussock Grassland G-22                            | Class G Grassland                   | 1   | Downslope   |  |  |
| 8  | Open Scrub D-14                                   | Class D Scrub                       | 1   | Downslope   |  |  |
| 9  | Woodland B-05                                     | Class B Woodland                    | 0   | Flat        |  |  |
| -  | Market garden, commercial area                    | Excluded AS3959-2009<br>2.2.3.2 (f) | N/A   | N/A         |  |  |
| -  | <u> </u>  | 2.2.3.2 (f)                         | N/A   |             |  |  |

Representative photos of each vegetation area, descriptions and classification justification, are presented on the following pages. The areas of classified vegetation are defined, and the photo locations identified on the topography and classified vegetation map, Figure 3.1.

Note<sup>1</sup>: As per AS 3959-2009 Table 2.3 and Figures 2.3 and 2.4 a-g

Note<sup>2</sup>: As per AS 3959-2009 Table 2.3.



**Vegetation Area 1** 

Classification Applied: Class D Scrub

**Classification Justification:** Large area of tall scrub and banksia woodland, occasional melaleuca, grass understorey. Banksia Woodland is classified as Scrub in compliance with the Visual Guide for Bushfire Assessment in Western Australia.





Photo ID: 1a Photo ID: 1b

**Vegetation Area 2** 

Classification Applied: Class D Scrub

Classification Justification: Scrub to 3 metres high, occasional banksia, sparse to no understorey





Photo ID: 2a Photo ID: 2b



**Vegetation Area 2** 

Classification Applied: Class D Scrub

**Classification Justification:** Areas of regrowth 1 to 2 metres high, grass and succulent understorey, mature scrub to 4 metres high





Photo ID: 2c

Photo ID: 2d

**Vegetation Area 2** 

Classification Applied: Class D Scrub

Classification Justification: Areas of scrub 3 to 4 metres high, sparse understorey





Photo ID: 2e

Photo ID: 2f



**Vegetation Area 2** 

Classification Applied: Class D Scrub

**Classification Justification:** Scrub regrowth along open drain to 2 metres high. Areas of regrowth 1 to 2 metres high, sparse grass and succulent understorey.





Photo ID: 2g Photo ID: 2h

**Vegetation Area 3** 

Classification Applied: Class G Grassland

Classification Justification: Sparse open grassland and succulents





Photo ID: 3a Photo ID: 3b



**Vegetation Area 3 Classification Applied:** Class G Grassland

Classification Justification: Grassland and succulents sparse in areas





Photo ID: 3c Photo ID: 3d

**Vegetation Area 3 Classification Applied:** Class G Grassland

Classification Justification: Grassland and succulents sparse in areas





Photo ID: 3e Photo ID: 3f



Vegetation Area 3 Classification Applied: Class G Grassland

Classification Justification: Grassland and succulents sparse in areas





Photo ID: 3g Photo ID: 3h

Vegetation Area 4 Classification Applied: Class B Woodland

Classification Justification: Narrow strip of eucalypts, some low scrub, grass understorey



Photo ID: 4a



**Vegetation Area 5** 

Classification Applied: Class G Grassland

**Classification Justification:** Recent development, sparse grassy regrowth, some areas assessed using precautionary principle





Photo ID: 5a Photo ID: 5b

**Vegetation Area 5** 

Classification Applied: Class G Grassland

**Classification Justification:** Recent development, sparse grassy regrowth, some areas assessed using precautionary principle.





Photo ID: 5c Photo ID: 5d



**Vegetation Area 6** 

Classification Applied: Class G Grassland

Classification Justification: Recent revegetation, open tussock grassland, some shrubs (<10%)



Photo ID: 6a

**Vegetation Area 7** 

Classification Applied: Class G Grassland

Classification Justification: Open grassland areas, tussock grassland, occasional grass trees or scrub





Photo ID: 7a

Photo ID: 7b



Vegetation Area 8 Classification Applied: Class D Scrub

Classification Justification: Scrub to 4 metres high, occasional eucalypt, grass understorey





Photo ID: 8a Photo ID: 8b

Vegetation Area 9

Classification Applied: Class B Woodland

Classification Justification: Small area of eucalypts, juvenile melaleuca, some low scrub, grass understorey



Photo ID: 9a



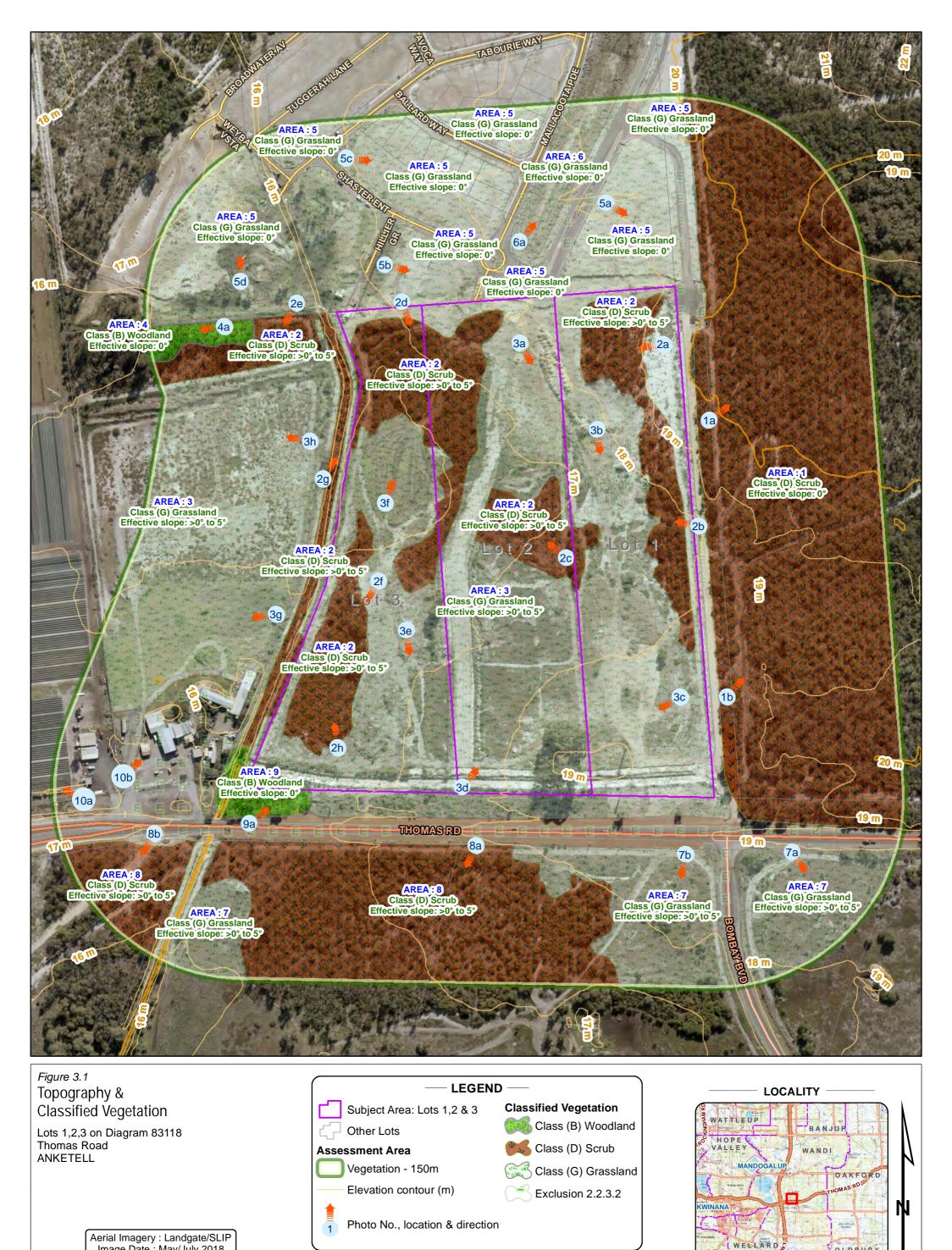
Vegetation Area Classification Applied: Excluded AS3959-2009 2.2.3.2 (f)

Classification Justification: Small market garden, commercial area





Photo ID: 10a Photo ID: 10b



OLDBURY

LEDA

Image Date: May/July 2018



#### 3.2 Assessment Output

#### Understanding the Bushfire Assessment Results - Application of Bushfire Attack Levels (BAL)

The BAL rating has a different application in the building environment compared to the planning environment and the BAL assessment can result in a determined BAL or an indicative BAL which have different implications.

#### **Building versus Planning Applications**

In the building environment, a determined BAL rating is required (for the proposed construction) at the building application stage. This is to inform approval considerations and establish the construction standards that are to apply if approved. An indicative BAL rating is not acceptable for a building application.

In the planning environment, assessing the ability of a proposed development site to achieve BAL-29 or less is the objective (as one of the bushfire protection criteria being assessed). The 'development site' is defined by the LPS Amendment Regulations 2015 as "that part of a lot on which a building that is the subject of development stands or is to be constructed".

Therefore, being able to show that a BAL rating of BAL-29 or lower is achievable for a proposed development site (i.e. the building footprint) is an acceptable outcome for that criteria, as established by the bushfire provisions, SPP 3.7 and the associated Guidelines. For planning purposes, this BAL rating could be either indicative or determined.

#### **Determined BAL Ratings**

A determined BAL rating is to apply to an existing or proposed construction site (building) and not to a lot or envelope. Its purpose is to state the potential radiant heat flux to which the building will be exposed.

A determined BAL cannot be given for a future building whose location, elevation design and footprint (on a given lot) are unknown. It is not until these variables have been fixed that a BAL can be determined (typically at the development application or building application stage).

The one exception is when a building of *any dimension* can be *positioned anywhere* on a proposed lot or within defined limits within the lot (i.e. building setbacks or building envelope) and always remain subject to the same BAL rating. For this to be the case, there needs to be no classified vegetation either onsite or offsite that if retained could impact upon the determined BAL rating.

#### **Indicative BAL Ratings**

When this Plan presents a single indicative BAL rating for a proposed construction site (building), this will be because the construction is still subject to a location within the lot being confirmed and/or a vegetation separation distance being achieved. That is, it will be conditional upon some factor being confirmed at a later stage.

For planning applications associated with proposed lots, the building location, elevation design and footprint have typically not been established. Therefore, indicative rather than determined BAL rating/s will be presented for each lot (with the exception as noted above under 'Determined BAL Ratings').

When this Plan <u>presents a single indicative BAL rating for a lot or building envelope</u> (i.e. an 'area' that is not a located building footprint) it will represent the highest BAL rating affecting that 'area'. The BAL rating of a future building on that 'area' will be dependent on its eventual location.

Otherwise, this Plan will present all BAL ratings for each lot and for each BAL rating, the vegetation separation distances from each area of classified vegetation that are to apply. These distances will be presented as either figures in a table or as a BAL contour map.

From this indicative BAL information, it can be assessed if acceptable BAL ratings (≤ BAL-29) can be achieved for future buildings.



# 3.2.1 Indicative BAL Results Presented as a BAL Contour Map

#### Interpretation of the Bushfire Attack Level (BAL) Contour Map

The contour map will present different coloured contour intervals constructed around the classified bushfire prone vegetation. These represent the different Bushfire Attack Levels that exist at varying distances away from the classified vegetation.

Each BAL represents a set range of radiant heat flux (as defined by AS 3959-2009) that can be generated by the bushfire in that vegetation at that location.

The width of each shaded contour (i.e. the distance interval) will vary and is determined by consideration of variables including vegetation type, fuel structure, ground slope, climatic conditions. They are unique to a site and can vary across a site. The width of each contour is a diagrammatic expression of the separation distances from the classified vegetation that apply for each BAL rating, for that site.

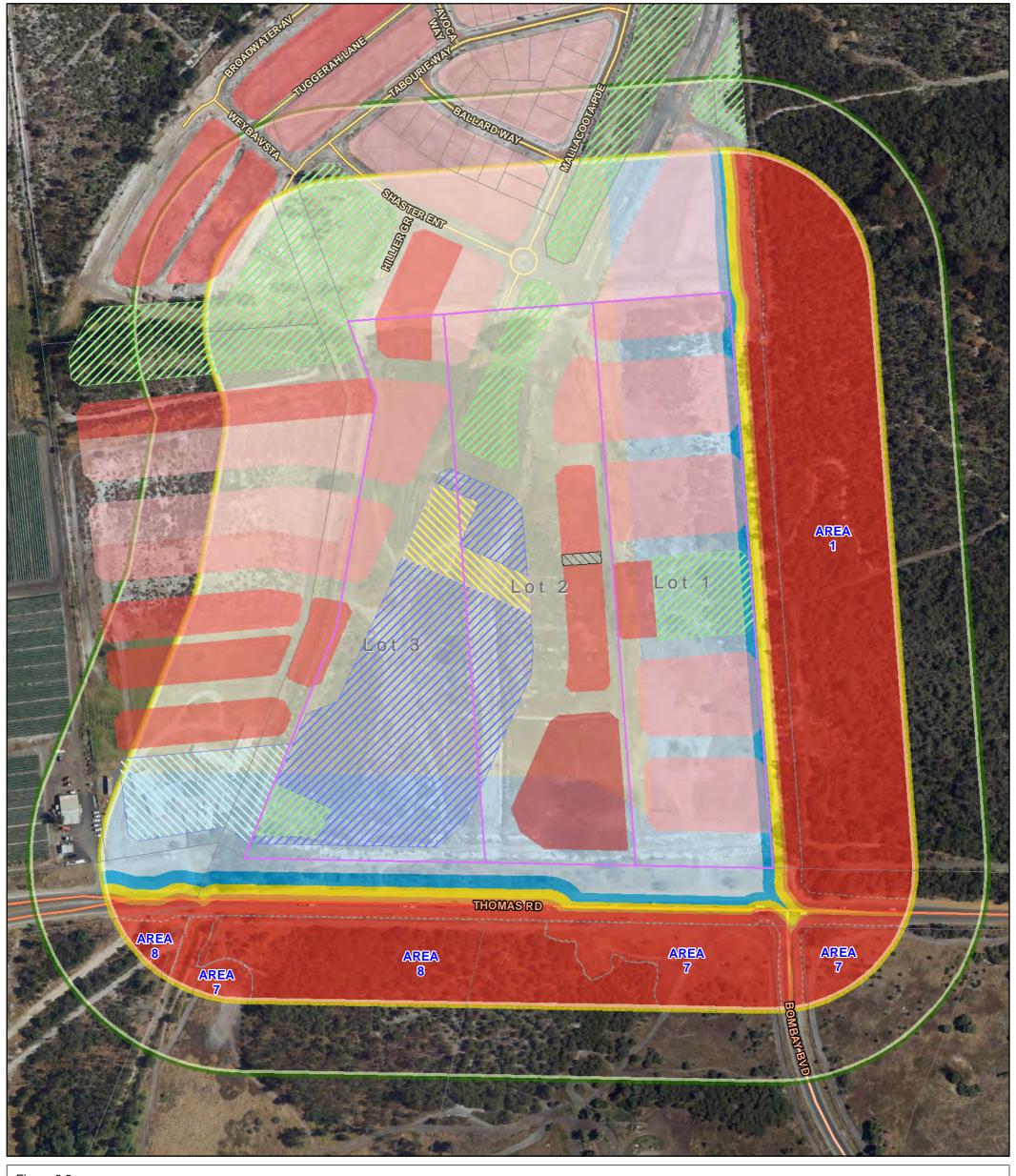
A building (or 'area') located within any given BAL contour will be subject to that BAL rating and potentially multiple BAL ratings of which the highest rating will be applied.

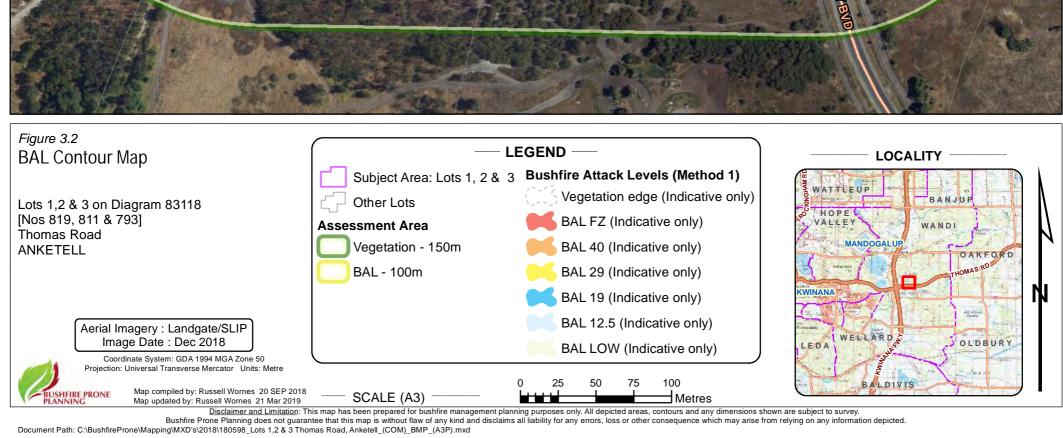
#### Separation Distances Calculated to Construct the BAL Contours

Table 3.3: Vegetation separation distances applied to construct the BAL contours.

|            | Calculated Vegetation Separation Distances |                    |                                |  |        |        |        |         |
|------------|--|--------------------|--------------------------------|--|--------|--------|--------|---------|
| Vegetation | Vegetation                                 | Effective<br>Slope | BAL<br>Assessment              | BAL Rating and Corresponding Separation Distance <sup>2</sup> (metres) |        |        |        |         |
| Veget      | Classification                             | Degrees            | Method<br>Applied <sup>1</sup> | BAL-FZ   | BAL-40 | BAL-29 | BAL-19 | BAL12.5 |
| 1          | Class D Scrub                              | 0                  | Method 1                       | <10  | 10-<13 | 13-19  | 19-<27 | 27-<100 |
| 2          | Class D Scrub                              | 1                  | Method 1                       | <11  | 11-<15 | 15-<22 | 22-<31 | 31-<100 |
| 3          | Class G<br>Grassland                       | 1                  | Method 1                       | <7   | 7-<9   | 9-<14  | 14-<20 | 20-<50  |
| 4          | Class B<br>Woodland                        | 0                  | Method 1                       | <10  | 10-<14 | 14-<20 | 20-<29 | 29-<100 |
| 5          | Class G<br>Grassland                       | 0                  | Method 1                       | <6   | 6-<8   | 8-<12  | 12-<17 | 17-<50  |
| 6          | Class G<br>Grassland                       | 0                  | Method 1                       | <6   | 6-<8   | 8-<12  | 12-<17 | 17-<50  |
| 7          | Class G<br>Grassland                       | 1                  | Method 1                       | <7   | 7-<9   | 9-<14  | 14-<20 | 20-<50  |
| 8          | Class D Scrub                              | 1                  | Method 1                       | <11  | 11-<15 | 15-<22 | 22-<31 | 31-<100 |
| 9          | Class B<br>Woodland                        | 0                  | Method 1                       | <10  | 10-<14 | 14-<20 | 20-<29 | 29-<100 |

<sup>&</sup>lt;sup>1</sup> Method 1 as per AS 3959-2009 Table 2.4.3. The input variables applied, other than the calculation model defaults, are presented in Section 3.1 of this Plan.







## 3.2.2 Bushfire Attack Levels (BAL) Derived from The Contour Map

# Deriving a BAL Rating for a Future Construction Site (Building) from the BAL Contour Map Data (Capacity to Issue a BAL Certificate)

**Key Assumptions:** The actual location of a building within a lot or envelope (an 'area') has not been determined at this stage of planning; and the BAL ratings represent the BAL of an 'area' not a building.

#### The BAL Rating is Assessed as Indicative

If the assessed BAL for the 'area' is stated as being 'indicative', it is because that 'area' is impacted by more than one BAL contour interval and/or classifiable vegetation remains on the lot, or on adjacent lots, that can influence a future building's BAL rating (and this vegetation may have been omitted from being contoured for planning purposes e.g. Grassland or when the assumption is made that all onsite vegetation can be removed and/or modified).

In this report the indicative BAL is presented as either the highest BAL impacting the site or as a range of achievable BAL's within the site – whichever is the most appropriate.

The BAL rating that will apply to any future building within that 'area' will be dependent on:

- 1. vegetation management onsite; and/or
- 2. vegetation remaining on adjacent lots; and/or
- 3. the actual location of the future building within that 'area'.

A BAL Certificate cannot be provided for future buildings, within a lot or envelope with an indicative BAL, until the building location and in some instances building design (elevation), have been established and any required and approved vegetation modification/removal has been confirmed. Once this has occurred a report confirming the building location and BAL rating will be required to submit with the BAL certificate.

The required confirmation of the BAL rating must be done by a bushfire practitioner with the same level of accreditation as has been required to compile this Bushfire Management Plan. This is dependent on the type of calculations utilised (e.g. if performance based solutions have been used in the Plan BPAD Level 3 accreditation is required)

#### The BAL Rating is Assessed as Determined

If the assessed BAL for the lot or envelope is stated as being 'determined' it is because that lot or envelope is impacted by a single BAL contour interval. This BAL has been determined by the existence (or non-existence) of classified vegetation outside the lot or envelope, and no classifiable vegetation currently exists on the lot or envelope (i.e. it has been cleared to a minimal fuel, low bushfire threat state). In the situation where the BAL Contour Map has been constructed around multiple lots, there also needs to no classifiable vegetation on an adjacent lot if this vegetation has not already been incorporated into the creation of the BAL Contour Map.

As a result, a determined BAL can be provided in this limited situation because:

- 1. No classified vegetation is required to be removed or modified to achieve the determined BAL, either within the lot/envelope or on adjacent lots (or if vegetation is excluded from classification, it is reasonable to assume it will be maintained in this state into the future); and
- 2. A future building can be located anywhere within the 'site' and be subject to the determined BAL rating; and
- 3. The degree of certainty is more than sufficient to allow for any small discrepancy that might occur in the mapping of the BAL contours.

For a determined BAL rating for a lot/envelope, A BAL Certificate (referring to this BMP) can be provided for a future building, if the BMP remains current.



## 3.2.3 Issues Derived from The Contour Map

The final lot layout for the proposed structure plan amendment is not known and therefore BAL ratings for future lots is not possible. However, the BAL Contour Map can be used as a planning tool for the design and location of future lots.

The BAL Contour Map assumes that all onsite vegetation will be managed to a low bushfire threat state, including vegetation within the proposed Public Open Spaces.

Future lots along the eastern boundary of the structure plan are affected by vegetation on the Treeby Road reserve and Lot 14 further to the east. Construction of Treeby Road and/or management of the road reserve will reduce the Bushfire Attack Level affecting the future lots within the development area to an acceptable BAL-29 rating or lower. For this Bushfire Management Plan it is assumed that the Treeby Road reserve will be managed to a low bushfire threat state.

Areas to the north and west of the subject lots are contained within the Anketell South Local Structure Plan and it is assumed that all of these areas including the future Public Open Space areas will be managed to a low bushfire threat state.

A future road widening for Thomas Road is located along the southern boundary of the subject lots. This area and portions of the existing Thomas Road reserve are assumed to be managed to a low bushfire threat state to achieve a BAL-29 or lower rating for abutting future lots.

Notwithstanding the assumptions made above, the effects of vegetation within and outside the subject lots is to be taken into consideration at subsequent planning stages.



# 4 Identification of Bushfire Hazard Issues

The Bushfire Hazard Level Assessment of the site demonstrates levels of moderate to extreme bushfire threat within and external to the subject land. However, this is considered manageable by compliance with the requirements of this Bushfire Management Plan.

Land to the east of Treeby Road is classified as Bush Forever and is assessed as an extreme bushfire hazard. This area, consisting of tall scrub and banksia woodland, is unlikely to be developed and will provide an ongoing bushfire threat to the proposed development. Treeby Road is planned to be constructed in the future and will join with Thomas Road. It is expected, that once constructed, the remnant vegetation within the road reserve will be cleared or managed to a low bushfire threat state, reducing the BAL rating along the eastern boundary of the proposed lots.

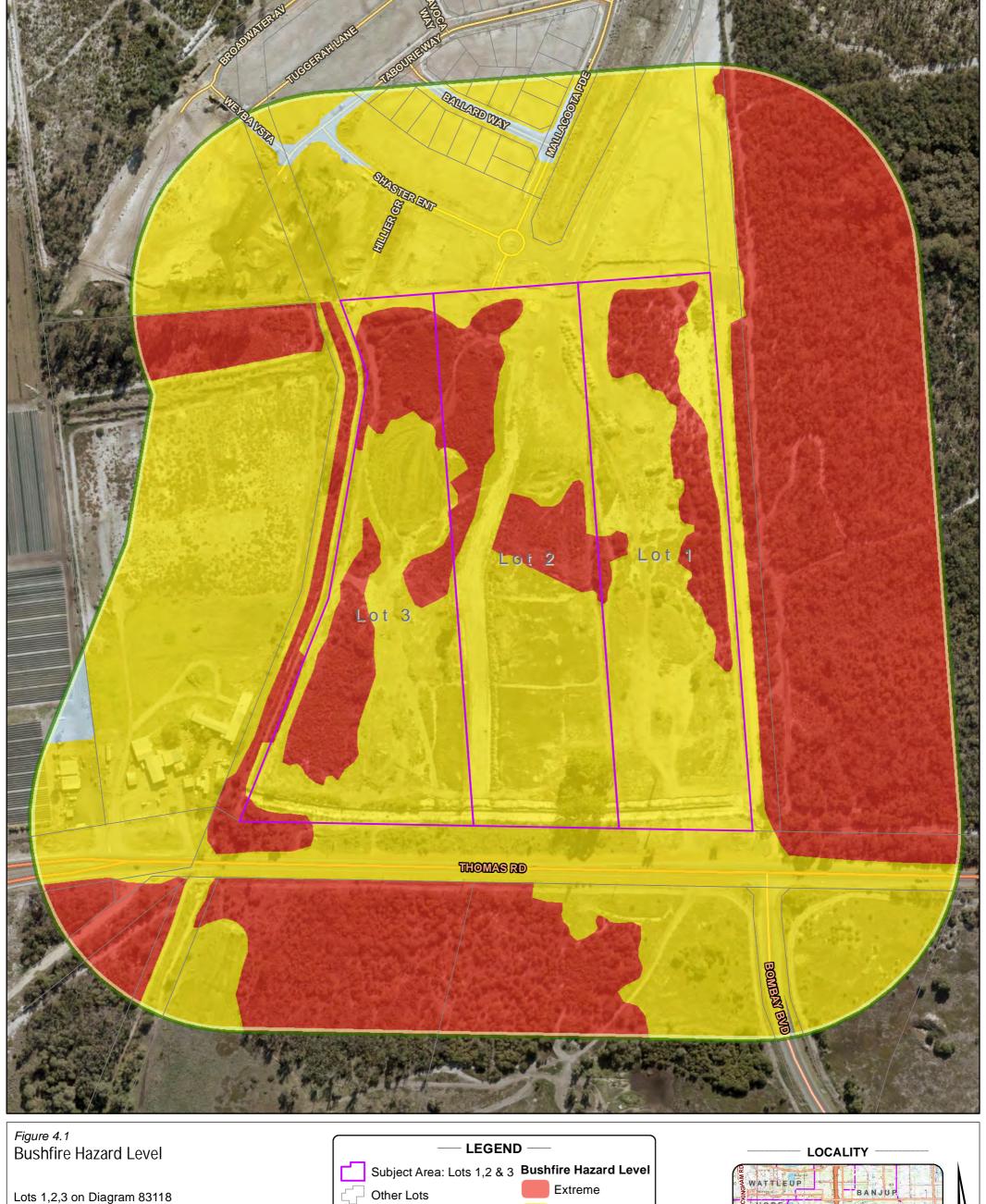
To the south of the subject lots are generally open areas of grassland. However, an area of scrub (assessed as an extreme bushfire hazard) exists on the southern side of Thomas Road and close to the subject land. Thomas Road is 40 metres wide in this area and will be widened a further 10 metres in the future providing a larger buffer from this bushfire threat.

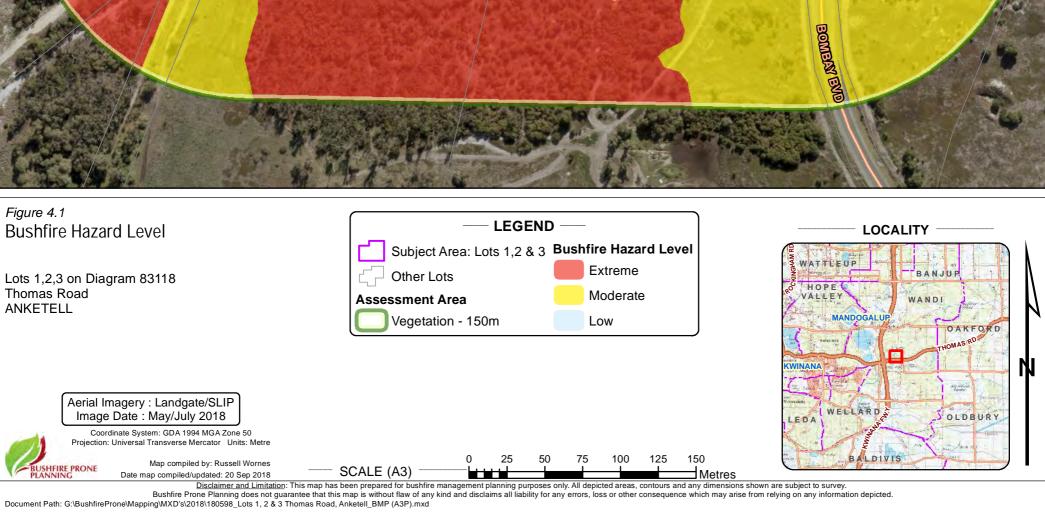
West of the subject lots are generally areas of grassland and a working market garden. The area is contained within the Anketell South Local Structure Plan and is expected to be developed in the future. Currently, due to the grassland vegetation on this lot and scrub in the existing open drain, there is a moderate to extreme bushfire hazard level from this direction.

Some development has occurred to the north of the subject lots. The proposed subdivision is incomplete and the balance lot abuts the 3 subject lots. However, it is expected that this area will continue to be developed and will result in a future low bushfire hazard level assessment.

The structure plan design allows for access/egress to the north, south, east and west of the development, providing various choices of escape routes during a bushfire event. Mandogalup Volunteer Bush Fire Brigade is located approximately 3.3 kilometres north of the subject site on the corner of Anketell Road and Mandogalup Road and can access the area via either, Anketell and Treeby Roads, or via Kwinana Freeway and Thomas Road.

The future development will have a reticulated water supply with hydrants installed at the required intervals and to the required specifications.







# 5 Assessment Against the Bushfire Protection Criteria (BPC)

# 5.1 Bushfire Protection Criteria - Assessment Summary

| Summarised Outcome of the Assessment Against the Bushfire Protection Criteria (BPC) |   |   |  |  |  |  |
|---|---|---|--|--|--|--|
|   | Basis for the Assessment of Achieving the Intent of the Element |   |  |  |  |  |
|   | Achieves comp<br>Element thro<br>Acceptable                     | ough meeting  | Achieves compliance with the<br>Element by application of a<br>Performance Based Solution  | Minor or<br>Unavoidable<br>Development                         |  |  |
| Element   | Meets all<br>relevant<br>acceptable<br>solutions                | One or more relevant Acceptable Solutions are not fully met. A variation of the solution is provided and justified. | One or more applicable Acceptable Solutions are not met. A solution is developed with the summary presented in this Plan in Section 5.5. The supporting document presenting Bushfire Prone Planning's detailed methodology is submitted separately to the decision makers. | The required supporting statements are presented in this Plan. |  |  |
| Location  | ✓   |   |  |  |  |  |
| Siting and Design of Development  | ✓   |   |  | N/A  |  |  |
| Vehicular Access  | ✓   |   |  | 19/75  |  |  |
| Water   | ✓   |   |  |  |  |  |

The subject Proposal has been assessed against:

- 1. The requirements established in Appendix 4 of the Guidelines for Planning in Bushfire Prone Areas, WAPC 2017 v1.3 (the 'Guidelines'). The detail, including technical construction requirements, are found at https://www.planning.wa.gov.au/8194.aspx. A summary of relevant information is provided in the appendices of this Plan; and
- 2. Any endorsed variations to the Guideline's acceptable solutions and associated technical requirements that have been established by the relevant local government. If known and applicable these have been stated in Section 5.2 of this Plan with the detail included as an appendix if required by the relevant local government.



## 5.2 Bushfire Protection Criteria – Acceptable Solutions Assessment Detail

#### 5.2.1 Element 1: Location

#### **Bushfire Protection Criteria Element 1: Location**

Assessment Statements and Bushfire Protection Measures to be Applied

**Intent:** To ensure that strategic planning proposals, subdivision and development applications are located in areas with the least possible risk of bushfire to facilitate the protection of people, property and infrastructure.

Acceptable Solution:

A1.1: Development Location Method of achieving Element compliance and/or the Intent of the Element:

The acceptable solution can be fully met in the future (at a later planning stage).

The proposed structure plan layout achieves compliance by:

- By ensuring building work on future lots can be located on an area that will be subject to potential radiant heat from a bushfire not exceeding 29 kW/m<sup>2</sup> (i.e. a BAL rating of BAL-29 or less will apply). This can be achieved by using positioning, design and appropriate vegetation removal/modification; and
- Managing the remaining bushfire risk to an acceptable level by the existence/implementation and ongoing maintenance of all required bushfire protection measures, as identified within this Plan. These measures include the requirements for vegetation management, vehicular access and firefighting water supply.

Due to the small size of some future lots any future building work may occupy the whole or most of the lot in some instances. This may need to be considered when planning lot layouts with respect to Bushfire Attack Levels (See BAL Contour Map).



#### 5.2.2 Element 2: Siting and Design of Development

#### **Bushfire Protection Criteria Element 2: Siting and Design of Development**

Assessment Statements and Bushfire Protection Measures to be Applied

**Intent:** To ensure that the siting and design of development (note: not building/construction design) minimises the level of bushfire impact.

Acceptable Solution:

A2.1: Asset Protection Zone Method of achieving Element compliance and/or the Intent of the Element:

The acceptable solution can be fully met in the future (at a later planning stage).

The proposed structure plan layout achieves compliance by:

- Ensuring building work on the future lots can have established around it an APZ of the required dimensions - to ensure that the potential radiant heat from a bushfire to impact future building/s, does not exceed 29 kW/m² (i.e. a BAL rating of BAL-29 or less will apply to determine building construction standards);
- The APZs can be partially established within each lot's boundaries. The balance of the APZ's required
  dimensions are being contributed by an area on adjoining land that will be either non-vegetated or
  assessed as being managed in a low-fuel state and which can most reasonably be expected to be
  managed this way in perpetuity.
- The landowner/s having the responsibility of continuing to manage the required APZ as low threat
  vegetation in a minimal fuel state, by maintaining the APZ to the required dimensions and standard,
  including compliance with the local government's annual firebreak notice.

Classified vegetation within the drainage reserve abutting the western boundary of Lot 3, within the abutting Treeby Road reserve, and along the abutting northern verge of Thomas Road is to be managed to a low bushfire threat state. All future lots are to be managed to a low bushfire threat state including the Public Open Space lots. This will ensure an acceptable BAL rating for lots within the boundaries of this proposal.

The required minimum APZ dimensions are set out in Section 5.3.1. The APZ technical requirements (Standards) are detailed in Appendix 1.



#### 5.2.3 Element 3: Vehicular Access

#### **Bushfire Protection Criteria Element 3: Vehicular Access**

Assessment Statements and Bushfire Protection Measures to be Applied

**Intent:** To ensure that the vehicular access serving a subdivision/development is available and safe during a bushfire event.

Acceptable Solution:

A3.1: Two access routes

Method of achieving Element compliance and/or the Intent of the Element:

The acceptable solution can be fully met in the future (at a later planning stage).

All roads within the proposed structure plan provide access and egress to two different destinations. As sealed public roads, they will be available to all residents and the public at all times and under all weather conditions.

It is noted that some roads provide access onto Treeby Road which is currently not constructed. Treeby Road will be constructed through to Thomas Road in the future and provide additional access/egress to the proposed development.

Acceptable Solution:

A3.2 Public Road Method of achieving Element compliance and/or the Intent of the Element:

The acceptable solution can be fully met in the future (at a later planning stage).

The construction technical requirements for future roads, established by the Guidelines and/or the local government, can and will be complied with. These requirements are set out in Appendix 2.



# Acceptable Solution: Bushfire Protection Criteria Element 3: Vehicular Access (continued) Assessment Statements and Bushfire Protection Measures to be Applied Method of achieving Element compliance and/or the Intent of the Element: N/A

There are no culs-de-sac planned for this development.

| Acceptable<br>Solution: | A3.4: Battle-axe | Method of achieving<br>Element compliance and/or<br>the Intent of the Element: | The acceptable solution can be fully met in the future (at a later planning stage). |
|-------------------------|------------------|--|---|
|-------------------------|------------------|--|---|

There are no battle-axe lots planned for this development.

| Acceptable<br>Solution: | A3.5: Private<br>Driveways | Method of achieving<br>Element compliance and/or<br>the Intent of the Element: | The acceptable solution can be fully met in the future (at a later planning stage). |
|-------------------------|----------------------------|--|---|
|-------------------------|----------------------------|--|---|

The construction technical requirements established by the Guidelines and/or the local government can and will be complied with. These requirements are set out in Appendix 2.

| Acceptable<br>Solution: |
|-------------------------|
|-------------------------|

There are no emergency access ways planned for this development.

| cceptable<br>Solution: |
|------------------------|
|------------------------|

There are no fire service access routes planned for this development.

| Acceptable<br>Solution: | A3.8<br>Firebreak Width | Method of achieving<br>Element compliance and/or<br>the Intent of the Element: | The acceptable solution can be fully met in the future (at a later planning stage). |
|-------------------------|-------------------------|--|---|
|-------------------------|-------------------------|--|---|

The proposed lots will comply with the requirements of the local government annual firebreak notice issued under s33 of the Bush Fires Act 1954.



#### 5.2.4 Element 4: Water

#### **Bushfire Protection Criteria Element 4: Water**

Assessment Statements and Bushfire Protection Measures to be Applied

**Intent:** To ensure water is available to the subdivision, development or land use to enable people, property and infrastructure to be defended from bushfire.

| Acceptable Solution: | A4.1<br>Reticulated Areas | compliance and/or the Intent of | The acceptable solution can be fully met in the future (at a later planning stage). |
|----------------------|---------------------------|---------------------------------|---|
|----------------------|---------------------------|---------------------------------|---|

A reticulated water supply is available to the subject site and hydrants will be installed in locations as required. (Required hydrant separation distances – 100m commercial, 200m residential, 400m).

Existing hydrants are currently located along the Treeby Road reserve, on the southern side of Thomas Road and within the partially complete subdivision to the north of the subject lots (See Figure 1.1).

The construction technical requirements established by the Guidelines and/or the local government can and will be complied with. These requirements are set out in Appendix 3.

| Acceptable<br>Solution: | A4.2<br>Non-Reticulated Areas                      | Method of achieving Element compliance and/or the Intent of the Element: | N/A |
|-------------------------|--|--|-----|
| Acceptable Solution:    | A4.3<br>Non-reticulated Areas<br>(Individual Lots) | Method of achieving Element compliance and/or the Intent of the Element: | N/A |



## 5.3 Additional Information for Required Bushfire Protection Measures

The purpose of this section of the Plan is:

- As necessary, to provide additional detail (to that provided in the tables of Section 5.3) regarding the implementation of the acceptable solutions for those persons who will have the responsibility to apply the stated requirements;
- As necessary, to detail specific onsite vegetation management requirements such as the APZ dimensions, management of Public Open Space or application of landscaping plans for onsite vegetation;
- To discuss how staged development will be handled, if applicable; and
- As relevant, for future planning stages, consider and discuss the requirements that may apply to future planning applications and the content of the associated BMP. In particular:
  - Any potential Vulnerable or High-Risk Land Uses.
  - o Any additional content that will be required in the future BMP.

#### 5.3.1 Vegetation Management

#### Asset Protection Zone (APZ) Dimensions that are to Apply

The required dimensions of the APZ will vary dependent upon the purpose for which the APZ has been defined. There are effectively three APZ dimensions that can apply:

- 1. An application for planning approval will be required to show that an APZ can be created which is of sufficient size to ensure the potential radiant heat impact of a fire does not exceed 29kW/m² (BAL-29); and
- 2. If the assessment has determined a BAL rating for an existing or future building is less than BAL-29, the APZ must be of sufficient size to ensure the potential radiant heat impact of a fire does not exceed the kW/m² corresponding to the lower assessed BAL rating; or
- 3. Complying with the relevant local government's annual firebreak notice may require an APZ of greater size than that defined by the two previous parameters.



The minimum dimensions (vegetation separation distances) that are to apply to the APZs for this Proposal are presented in the tables below.

| The 'Planning (WAPC) BAL-29' APZ  Minimum Required Dimensions for the Subject Site |   |                     |                                 |   |  |  |
|--|---|---------------------|---------------------------------|---|--|--|
| Requirement Set By Guidelines for Planning in Bushfire Prone Areas (W              |   |                     |                                 |   | C 2017 v1.3)                                   |  |
| Relevant Fire D  | Danger Index (AS3                                 | 959-2009 Table 2.1) |                                 |   | 80   |  |
| BAL Determina  | ation Method                                      | Method 1 (as pe     | er AS 3959-2009                 | s2.2.6 and Table                        | 2.4.3)   |  |
| Vegetation<br>Area   | Applied Vegetation Classification                 |                     | Effective<br>Slope<br>(degrees) | Maximum<br>Acceptable<br>'Planning' BAL | Required<br>Separation<br>Distance<br>(metres) |  |
| 1  | C   | lass D Scrub        | 0                               |   | 13   |  |
| 2  | Class D Scrub                                     |                     | 1                               |   | 15   |  |
| 3  | Cla   | ss G Grassland      | 1                               |   | 9  |  |
| 4  | Cla   | ss B Woodland       | 0                               |   | 14   |  |
| 5  | Cla   | ss G Grassland      | 0                               | DAL 20                                  | 8  |  |
| 6  | Cla   | ss G Grassland      | 0                               | BAL-29                                  | 8  |  |
| 7  | Class G Grassland                                 |                     | 1                               |   | 9  |  |
| 8  | Class D Scrub                                     |                     | 1                               |   | 15   |  |
| 9  | Class B Woodland Excluded AS3959-2009 2.2.3.2 (f) |                     | 0                               |   | 14   |  |
| -  |   |                     | N/A                             |   | N/A  |  |

This requirement has been established through the State bushfire provisions, SPP 3.7 and the associated Guidelines, as being a key compliance requirement for development proposals in WA.

| 'Local Government Firebreak Notice APZ' Required Minimum Dimensions for the Subject Site |  |  |  |  |
|--|--|--|--|--|
| Requirement Set By:  | City of Kwinana  |  |  |  |
| Minimum Dimensions:  | See City of Kwinana Fire Breaks Notice   |  |  |  |
| Other Conditions:  | If Asset Protection Zone technical requirements are defined in the Notice, the standards and dimensions may differ from the Guideline's APZ Standards, with the intent to better satisfy local conditions. When these are more stringent than those created by the Guidelines, or less stringent and endorsed by the WAPC and DFES, they must be complied with. Refer to Appendix 1. |  |  |  |

under the Bushfires Act 1954 s33.



#### Consideration/Implementation of Public Open Space Management

To minimise the bushfire threat for future lots, all areas of public open space are to be managed to a low bushfire threat state as per AS359-2009 s2.2.3.2 and the 'Guidelines for Planning in Bushfire Prone Areas' Appendix 4, Element 2.

#### Consideration/Implementation of Proposed Landscape Plans

Any future landscape plans must comply with the requirements of this Bushfire management Plan.

#### Consideration/Implementation of Staged Development

Where the proposed development is to be staged, all lots within each stage must achieve a BAL rating of BAL-29 or lower. This may require the management of vegetation outside that particular stage.

#### 5.3.2 Future Stage Planning Application – Additional Information Required

Once the final lot layout is known, each lot should be assessed against the bushfire protection criteria.

Where any potential Vulnerable or High Risk land uses are proposed it is required that these are assessed against State Planning Policy 3.7 and the Guidelines for Planning in Bushfire Prone Areas.



# 6 Responsibilities for Implementation and Management of the Bushfire Protection Measures

Table 6.1: BMP Implementation responsibilities prior to the issue of titles for the Developer (Landowner).

| DEVELOPER (LANDOWNER) - PRIOR TO ISSUE OF TITLES |  |  |  |  |
|--|--|--|--|--|
| No.  | Implementation Actions   |  |  |  |
|  | Planning approval may be conditioned with the requirement to make appropriate notifications (on the certificates of title and the deposited plan), of the existence of this Bushfire Management Plan.  |  |  |  |
| 1  | The WAPC may condition a subdivision application approval with a requirement for the landowner / proponent to place a notification onto the certificate(s) of title and a notice of the notification onto the diagram or plan of survey (deposited plan). This will be done pursuant to Section 165 of the Planning and Development Act 2005 ('Hazard etc. affecting land, notating titles as to:') and applies to lots with a determined BAL rating of BAL-12.5 or above. The notification will be required to state: |  |  |  |
|  | 'This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and may be subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land'.  |  |  |  |
| 2  | Construct the public roads and cul-de-sacs to the standards stated in the BMP.   |  |  |  |
| 3  | Construct the private driveways and battle axes to the standards stated in the BMP.  |  |  |  |
| 4  | Install the reticulated water supply (hydrants) to the standards stated in the BMP.  |  |  |  |



Table 6.2: BMP Implementation responsibilities prior to lot sale, occupancy or building for the Landowner (Developer).

| LANDOWNER (DEVELOPER) - PRIOR TO LOT SALE, OCCUPANCY OR BUILDING |   |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| No.  | Implementation Actions  |  |  |  |  |  |  |
| 1  | Prior to sale and post planning approval, the entity responsible for having the BMP prepared should ensure that anyone listed as having responsibility under the Plan has endorsed it and is provided with a copy for their information and informed that it contains their responsibilities. This includes the landowners/proponents (including future landowners where the Plan was prepared as part of a subdivision approval), local government and any other authorities or referral agencies ('Guidelines' s4.6.3). |  |  |  |  |  |  |
| 2  | Prior to sale of the future lots, each individual lot is to be compliant with the relevant local government's annual firebreak notice issued under s33 of the Bushfires Act 1954.   |  |  |  |  |  |  |
| 3  | Establish the Asset Protection Zones (APZ) on the lots to the dimensions and standard stated in the BMP. This is the responsibility of the developer.   |  |  |  |  |  |  |
| 4  | <ul> <li>Prior to any building work, inform the builder of the existence of this Bushfire Management Plan and the responsibilities it contains, regarding the required construction standards. This will be:</li> <li>The standard corresponding to the determined BAL rating, as per the bushfire provisions of the Building Code of Australia (BCA); and/or</li> <li>A higher standard as a result of the BMP establishing that construction is required at a standard corresponding to a higher BAL rating.</li> </ul> |  |  |  |  |  |  |



Table 6.3: Ongoing management responsibilities for the Landowner/Occupier.

| LANDOWNER/OCCUPIER - ONGOING |   |  |  |  |  |  |  |  |
|------------------------------|---|--|--|--|--|--|--|--|
| No.                          | Ongoing Management Actions  |  |  |  |  |  |  |  |
| 1                            | Maintain the Asset Protection Zone (APZ) to the dimensions and standard stated in the BMP.  |  |  |  |  |  |  |  |
| 2                            | Comply with the City of Kwinana Fire Breaks Notice issued under s33 of the Bush Fires Act 1954.   |  |  |  |  |  |  |  |
| 3                            | Maintain vehicular access routes within the lots to the required surface condition and clearances as stated in the BMP.   |  |  |  |  |  |  |  |
| 4                            | Ensure that any builders (of future structures on the lot) are aware of the existence of this Bushfire Management Plan and the responsibilities it contains regarding the application of construction standards corresponding to a determined BAL rating.   |  |  |  |  |  |  |  |
| 5                            | <ol> <li>Ensure all future buildings the landowner has responsibility for, are designed and constructed in full compliance with:         <ol> <li>the requirements of the WA Building Act 2011 and the bushfire provisions of the Building Code of Australia (BCA); and</li> <li>with any identified additional requirements established by this BMP or the relevant local government.</li> </ol> </li> </ol> |  |  |  |  |  |  |  |



Table 6.4: Ongoing management responsibilities for the Local Government.

| LOCAL GOVERNMENT - ONGOING |   |  |  |  |  |  |  |
|----------------------------|---|--|--|--|--|--|--|
| No.                        | Ongoing Management Actions  |  |  |  |  |  |  |
| 1                          | Monitor landowner compliance with the Bushfire Management Plan and the annual Fire Breaks Notice.   |  |  |  |  |  |  |
| 2                          | The public open space reserves to be managed to ensure the vegetation remains as low threa vegetation, in accordance with AS3959-2009.  |  |  |  |  |  |  |
| 3                          | Where control of an area of vegetated land is vested in the control of the local government and that area of land has influenced the assessed BAL rating/s of the subject site/s – and the BAL rating has been correctly assessed - there is an obligation to consider the impact of any changes to future vegetation management and/or revegetation plans with respect to that area. |  |  |  |  |  |  |



# Appendix 1 - Onsite Vegetation Management Technical Requirements

It is the responsibility of the landowner to maintain the established bushfire protection measures on their property. Not complying with these responsibilities can result in buildings being subject to a greater potential impact from bushfire than that determined by the assessed BAL rating presented in this Bushfire Management Plan.

For the management of vegetation within a lot (i.e. onsite) the following technical requirements exist:

- 1. The APZ: Installing and maintaining an asset protection zone (APZ) of the required dimensions to the standard established by the Guidelines for Planning in Bushfire Prone Areas (WA Planning Commission, as amended). When, due to the planning stage of the proposal to which this Bushfire Management Plan applies, defined APZ dimensions are known and are to be applied to existing or future buildings then these dimensions are stated in Section 5.4.1 of this Plan.
- 2. **The Firebreak/Fuel Load Notice:** Complying with the requirements established by the relevant local government's annual firebreak notice issued under s33 of the Bushfires Act 1954. Note: If an APZ requirement is included in the Notice, the standards and dimensions may differ from the Guideline's APZ Standard the larger dimension must be complied with.

#### 3. Changes to Vegetated/Non-Vegetated Areas:

- a. If applicable to this Plan, the minimum separation distance from any classified vegetation, that corresponds to the determined BAL for a proposed building, must be maintained as either a non-vegetated area or as low threat vegetation managed to a minimal fuel condition as per AS 3959-2009 s2.2.3.2 (e) and (f). Refer to Part 4 of this Appendix 1.
- b. Must not alter the composition of onsite areas of <u>classified</u> vegetation (as assessed and presented in Section 3.1.2) to the extent that would require their classification to be changed to a higher bushfire threat classification (as per AS 3959-2009); and
- c. Must not allow areas within a lot (i.e. onsite) that have been:
  - i. excluded from classification by being low threat vegetation or non-vegetated; and
  - ii. form part of the assessed separation distance that is determining a BAL rating -

...to become vegetated to the extent they no longer represent a low threat (refer to Part 4 of Appendix 1). Note: The vegetation classification exclusion specifications as established by AS 3959-2009 s2.2.3.2, are included at A1.4 below for reference.



# 1. Requirements Established by the Guidelines – the Asset Protection Zone (APZ) Standards

(Source: Guidelines for Planning in Bushfire Prone Areas - WAPC 2017 v1.3 Appendix 4, Element 2, Schedule 1 and Explanatory Note E2.1)

#### **Defining the Asset Protection Zone (APZ)**

**Description:** An APZ is an area surrounding a building that is managed to reduce the bushfire hazard to an acceptable level (by reducing fuel loads). The width of the required APZ varies with slope and vegetation. For planning applications, the minimum sized acceptable APZ is that which is of sufficient size to ensure the potential radiant heat impact of a fire does not exceed 29kW/m² (BAL-29). It will be site specific.

The APZ may include public roads, waterways, footpaths, buildings, rocky outcrops, golf courses, maintained parkland as well as cultivated gardens in an urban context, but does not include grassland or vegetation on a neighbouring rural lot, farmland, wetland reserves and unmanaged public reserves.

For subdivision planning, design elements and excluded/low threat vegetation adjacent to the lot can be utilised to achieve the required vegetation separation distances and therefore reduce the required dimensions of the APZ within the lot.

**Defendable Space:** The APZ includes a defendable space which is an area adjoining the asset within which firefighting operations can be undertaken to defend the structure. Vegetation within the defendable space should be kept at an absolute minimum and the area should be free from combustible items and obstructions. The width of the defendable space is dependent on the space which is available on the property, but as a minimum should be 3 metres.

**Establishment:** The APZ should be contained solely within the boundaries of the lot on which the building is situated, except in instances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity.

Note: Regardless of whether an Asset Protection Zone exists in accordance with the acceptable solutions and is appropriately maintained, fire fighters are not obliged to protect an asset if they think the separation distance between the dwelling and vegetation that can be involved in a bushfire, is unsafe.

#### Schedule 1: Standards for APZ

**Fences:** within the APZ are constructed from non-combustible materials (e.g. iron, brick, limestone, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.

**Objects:** within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.

**Fine Fuel Load:** combustible dead vegetation matter less than 6 mm in thickness reduced to and maintained at an average of two tonnes per hectare (example below).



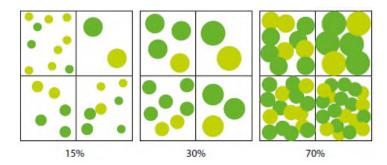
#### Example Fine Fuel Load of Two Tonnes per Hectare



(Image source: Shire of Augusta Margaret River's Firebreak and Fuel Reduction Hazard Notice)

**Trees (> 5 metres in height):** trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy. Diagram below represents tree canopy cover at maturity.

Tree canopy cover – ranging from 15 to 70 per cent at maturity



(Source: Guidelines for Planning in Bushfire Prone Areas 2017, Appendix 4)

**Shrubs (0.5 metres to 5 metres in height):** should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m2 in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.

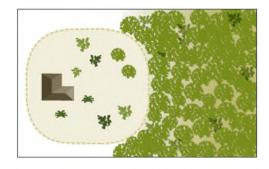
**Ground covers (<0.5 metres in height):** can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 mm in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.

**Grass:** should be managed to maintain a height of 100 mm or less.

The following example diagrams illustrate how the required dimensions of the APZ will be determined by the type and location of the vegetation.

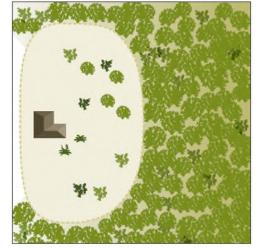


Hazard on one side



Hazard on three sides

APZ



#### 2. Requirements Established by the Local Government – the Firebreak Notice

These requirements are established by the relevant local government's Firebreak Notice created under s33 of the Bushfires Act 1954 and issued annually (potentially with revisions). The Notice may include additional components directed at managing fuel loads, accessibility and general property management with respect to limiting potential bushfire impact.

The relevant local government's current Firebreak Notice is available on their website, at their offices and is distributed as ratepayer's information. It must be complied with.

If Asset Protection Zone technical requirements are defined in the Notice, the standards and dimensions may differ from the Guideline's APZ Standards, with the intent to better satisfy local conditions. When these are more stringent than those created by the Guidelines, or less stringent and endorsed by the WAPC and DFES, they must be complied with.

When, due to the planning stage of the proposal to which this Bushfire Management Plan applies, defined APZ dimensions are known and are to be applied to existing or future buildings – then these dimensions are stated in Section 5.4.1 of this Plan.

#### 3. Requirements Recommended by DFES – Property Protection Checklists

Further guidance regarding ongoing/lasting property protection (from potential bushfire impact) is presented in the publication 'DFES – Fire Chat – Your Bushfire Protection Toolkit'. It is available from the Department of Fire and Emergency Services (DFES) website.



# 4. Requirements Established by AS 3959-2009 - Maintaining Areas within your Lot as 'Low Threat'

This information is provided for reference purposes. This knowledge will assist the landowner to comply with Management Requirement No. 3 set out in the Guidance Panel at the start of this Appendix. It identifies what is required for an area of land to be excluded from classification as a potential bushfire threat.

"Australian Standard - AS 3959-2009 Section 2.2.3.2: Exclusions - Low threat vegetation and non-vegetated areas:

The Bushfire Attack Level shall be classified BAL-LOW where the vegetation is one or a combination of the following:

- a) Vegetation of any type that is more than 100m from the site.
- b) Single areas of vegetation less than 1ha in area and not within 100m of other areas of vegetation being classified.
- c) Multiple area of vegetation less than 0.25ha in area and not within 20m of the site or each other.
- d) Strips of vegetation less than 20m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20m of the site or each other, or other areas of vegetation being classified.
- e) Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.
- f) Low threat vegetation, including grassland managed in a **minimal fuel condition** (i.e. insufficient fuel available to significantly increase the severity of a bushfire attack recognisable as short cropped grass to a nominal height of 100mm for example), maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks."



# Appendix 2 - Vehicular Access Technical Requirements

Each local government may have their own standard technical requirements for emergency vehicular access and they may vary from those stated in the Guidelines.

Contact the relevant local government for the requirements that are to apply in addition to the requirements set out as an acceptable solution in the Guidelines. If the relevant local government requires that these are included in the Bushfire Management Plan, they will be included in this appendix and referenced.

#### Requirements Established by the Guidelines – The Acceptable Solutions

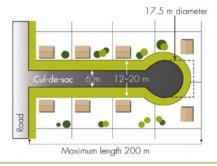
(Source: Guidelines for Planning in Bushfire Prone Areas WAPC 2017 v1.3, Appendix 4)

#### Vehicular Access Technical Requirements - Part 1

#### Acceptable Solution 3.3: Cul-de-sacs (including a dead-end road)

Their use in bushfire prone areas should be avoided. Where no alternative exists then the following requirements are to be achieved:

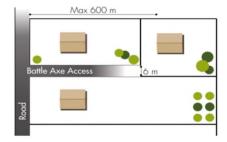
- Maximum length is 200m. If public emergency access is provided between cul-de-sac heads (as a right of way or public access easement in gross), the maximum length can be increased to 600m provided no more than 8 lots are serviced and the emergency access way is less than 600m in length;
- Turnaround area requirements, including a minimum 17.5m diameter head to allow type 3.4 fire
  appliances to turn around safely;
- The cul-de-sac connects to a public road that allows for travel in two directions; and
- Meet the additional design requirements set out in Part 2 of this appendix.



#### Acceptable Solution 3.4: Battle-axe

Their use in bushfire prone areas should be avoided. Where no alternative exists then the following requirements are to be achieved:

- Maximum length 600m and minimum width 6m; and
- Comply with minimum standards for private driveways.





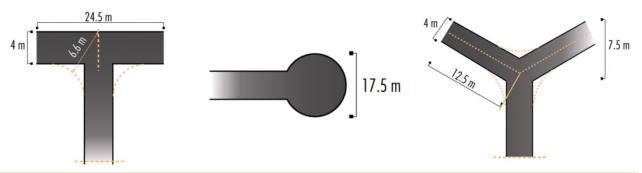
#### **Acceptable Solution 3.5: Private Driveways**

The following requirements are to be achieved:

• The design requirements set out in Part 2 of this appendix; and

Where the house site is more than 50 metres from a public road:

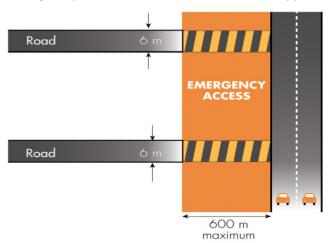
- Passing bays every 200 metres with a minimum length of 20 metres and a minimum width of two
  metres (ie combined width of the passing bay and constructed private driveway to be a minimum
  six metres);
- Turn-around areas every 500 metres and within 50 metres of a house, designed to accommodate type 3.4 fire appliances to turn around safely (ie kerb to kerb 17.5 metres);
- Any bridges or culverts are able to support a minimum weight capacity of 15 tonnes; and
- All weather surface (i.e. compacted gravel, limestone or sealed).



#### **Acceptable Solution 3.6: Emergency Access Way**

An access way that does not provide through access to a public road is to be avoided bushfire prone areas. Where no alternative exists, an emergency access way is to be provided as an alternative link to a public road during emergencies. The following requirements are to be achieved:

- No further than 600 metres from a public road;
- Must be signposted including where they ajoin public roads;
- Provided as a right of way or public access easement in gross;
- Where gates are used they must not be locked and they must be a minimum width of 3.6 metres with design and construction approved by local government (refer to the example in this appendix); and
- Meet the additional design requirements set out in Part 2 of this appendix.





#### Acceptable Solution 3.7: Fire Service Access Routes (Perimeter Roads)

Are to be established to provide access within and around the edge of subdivision and related development and to provide direct access to bushfire prone areas for firefighters and link between public road networks for firefighting purposes. Fire service access is used during bushfire suppression activities but can also be used for fire prevention work. The following requirements are to be achieved:

- No further than 600 metres from a public road (driveways may be used as part of the designated fire service access;
- Dead end roads not permitted;
- Allow for two-way traffic (i.e. two 3.4 fire appliances);
- Provide turn-around areas designed to accommodate 3.4 fire appliances and to enable them to turn around safely every 500m (i.e. kerb to kerb 17.5 metres);
- All weather surface (i.e. compacted gravel, limestone or sealed) and have erosion control measures in place;
- Must be adequately sign posted;
- Where gates are used they must be a minimum width of 3.6 metres with design and construction approved by local government (refer to the example in this appendix) and may be locked (use a common key system);
- Meet the additional design requirements set out in Part 2 of this appendix;
- Provided as right of ways or public access easements in gross; and
- Management and access arrangements to be documented and in place.

#### Acceptable Solution 3.8: Firebreak Width

Lots greater than 0.5 hectares must have an internal perimeter firebreak of a minimum width of three meters or to the level as prescribed in the local firebreak notice issued by the local government.

| Vehicular Access Technical Requirements - Part 2 |                        |             |                      |                          |                               |  |  |  |  |
|--|------------------------|-------------|----------------------|--------------------------|-------------------------------|--|--|--|--|
|  | Vehicular Access Types |             |                      |                          |                               |  |  |  |  |
| Technical Component                              | Public<br>Roads        | Cul-de-sacs | Private<br>Driveways | Emergency<br>Access Ways | Fire Service<br>Access Routes |  |  |  |  |
| Minimum trafficable surface (m)                  | 6*                     | 6           | 4                    | 6*                       | 6*                            |  |  |  |  |
| Horizontal clearance (m)                         | 6                      | 6           | 6                    | 6                        | 6                             |  |  |  |  |
| Vertical clearance (m)                           | 4.5                    | 4.5         | 4.5                  | 4.5                      | 4.5                           |  |  |  |  |
| Maximum grade <50 metres                         | 1 in 10                | 1 in 10     | 1 in 10              | 1 in 10                  | 1 in 10                       |  |  |  |  |
| Minimum weight capacity (t)                      | 15                     | 15          | 15                   | 15                       | 15                            |  |  |  |  |
| Maximum cross-fall                               | 1 in 33                | 1 in 33     | 1 in 33              | 1 in 33                  | 1 in 33                       |  |  |  |  |
| Curves minimum inner radius (m)                  | 8.5                    | 8.5         | 8.5                  | 8.5                      | 8.5                           |  |  |  |  |

<sup>\*</sup> A six metre trafficable surface does not necessarily mean paving width. It could, for example, include four metres of paving and one metre of constructed road shoulders. In special circumstances, where 8 lots or less are being serviced, a public road with a minimum trafficable surface of four metres for a maximum distance of ninety metres may be provided subject to the approval of both the local government and DFES.

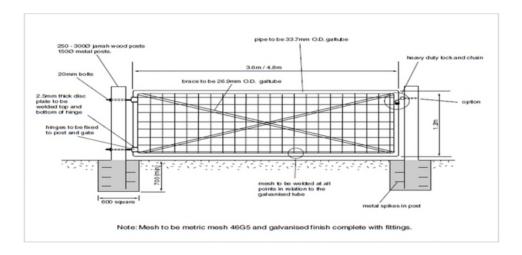


# Vehicular Access Technical Requirements – Gates and Signs Examples

### Gates

Design and construction to be approved by relevant local government.

- Minimum width 3.6m
- Emergency access way gates must not be locked.
- Fire service access route gates may be locked but only with a common key that is available to local fire service personnel.
- Bollards will be to the relevant local government specifications



## Signs

Design and construction to be approved by the relevant local government.

Minimum height above ground of 0.9m.

Lettering height to be 100mm.

To display the words (as appropriate) "Emergency Access Only" or "Fire Service Access – No Public Access". Size 600mm x 400mm.

Sign colour red, base (white) area is reflective background.

Rounded corners, radius 20mm.

White key-line 3mm wide, 3mm from outside edge.

Suggested mounting hole six 6mm diameter.



# Appendix 3 - Water Technical Requirements

# Requirements Established by the Guidelines - Acceptable Solution A4.1: Reticulated Areas

(Source: Guidelines for Planning in Bushfire Prone Areas WAPC 2017 v1.3, Appendix 4, Element 4)

The requirement is to supply a reticulated water supply and fire hydrants, in accordance with the technical requirements of the relevant water supply authority and DFES.

The Water Corporation's 'No 63 Water Reticulation Standard' is deemed to be the baseline criteria for developments and should be applied unless local water supply authority's conditions apply.

Key specifications in the most recent version/revision of the design standard include:

- **Residential Standard** hydrants are to be located so that the maximum distance between the hydrants shall be no more than 200 metres.
- **Commercial Standard** hydrants are to be located with a maximum of 100 metre spacing in Industrial and Commercial areas.
- Rural Residential Standard where minimum site areas per dwelling is 10,000 m<sup>2</sup> (1ha), hydrants are to be located with a maximum 400m spacing. If the area is further subdivided to land parcels less than 1ha, then the residential standard (200m) is to be applied.

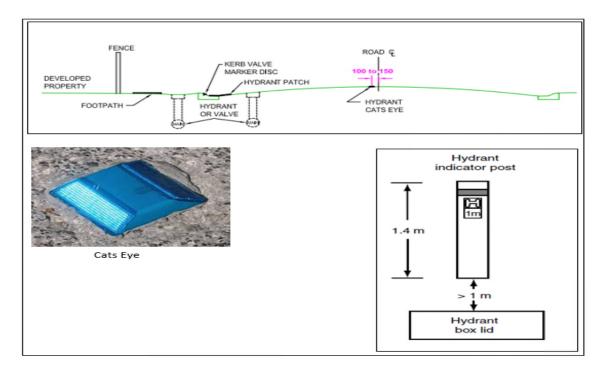


Figure A4.1: Hydrant Location and Identification Specifications

Contact the relevant water supply authority to confirm the technical requirements that are to be applied. They may differ from the minimum requirements of the 'baseline' Water Corporation's No. 63 Water Reticulation Standard.

# **APPENDIX C**

Local Water Management Plan



8 April 2019

Your Ref: Our Ref: H18052Av3

Department of Water and Environmental Regulation Kwinana Peel Regional Office PO Box 332 Mandurah WA 6210

ATTENTION: Brett Dunn

Dear Brett.

# RE: LOTS 1, 2, 3 & 17 THOMAS RD ANKETELL LOCAL WATER MANAGEMENT STRATEGY ADDENDUM

This Local Water Management Strategy (LWMS) addendum has been prepared by Hyd2o on behalf of Saracen Properties in support of the revised Lots 1, 2 & 3 Anketell Road, Anktell Local Structure Plan (LSP).

The addendum report has been initiated through amendments made to the LSP and has been prepared to review and refine the overall stormwater management strategy and stormwater modelling across the LSP area. This modelling will later be used to guide subdivision planning and the development of Urban Water Management Plans (UWMPs) within the site. A further update to the structure plan has been undertaken since the approval of the last addendum earlier in 2019.

This report is intended to be read in conjunction with the previously approved Anketell South Urban Cell LWMS for Lots 1, 2, 3 & 17 Thomas Road & Part of Lot 13 Treeby Road, Anketell (Bioscience, 2014). The modelling outcomes in this report supersede post development modelling outcomes detailed in the previous LWMS. The key principles and objectives of the approved LWMS remain current.

The LSP area (herein referred to as the site) is approximately 28.5 ha in size and located within the City of Kwinana. The site is comprised of Lots 1, 2, 3 and 17 Thomas Road and part of Lot 13 Treeby Road and is bound by Thomas Road to the south, Treeby Road to the east, a Bush Forever reserve to the north (and east of Treeby Road) and conservation category wetlands to the north and west (Figure 1).

The site is zoned 'Urban' under the Metropolitan Region Scheme (MRS), with a 10 m wide strip of 'Urban Deferred' along the northern edge of Thomas Road. The site is zoned 'Development' under the City of Kwinana Town Planning Scheme No 2 (TPS 2).

This document provides a total water cycle management approach to development and has been prepared consistent with the approved Anketell South Urban Cell LWMS (Bioscience, 2014) and Better Urban Water Management (Western Australian Planning Commission, 2008).



### 1. Modified Local Structure Plan

A copy of the revised LSP for the site is included as Figure 2. Proposed land use within the site is generally consistent with that shown in the LWMS (Bioscience, 2014), albeit with realignment of roads, lots and POS across the site. These changes have resulted in modification to post development drainage routes and local catchment boundaries.

### 2. Site Characteristics

The site is generally described as having the following predevelopment characteristics:

- Majority of the site is moderately vegetated with several vehicle access tracks. The
  portion of the site within Lot 13 Treeby Road has been developed for residential
  purposes complete with roads and drainage infrastructure (Figure 3).
- The topography of the site ranges from approximately 19 mAHD at the north eastern corner to 15 mAHD in the southwest corner of the site (Figure 3).
- A transmission line easement runs through the central portion of the site (Figure 3).
   Western Power approved the use of this area for drainage purposes as part of the LWMS (Bioscience, 2014).
- A geotechnical investigation was undertaken by Galt Geotechnics on the 26 and 27 July 2016, which included 31 test pits across the site. Generally, the site was characterised as being peaty sand in the top soil profile and Bassendean Sands occurring up to 2.5 m below ground surface. Soil profiles were generally consistent with those outlined in the Fremantle Sheets 2033 I and 2033 IV of the Environmental Geology Series where Gozzard (1983) describes Bassendean Sands overlying a clayey Guildford formation (Figure 4). Note that Guildford clays were only found at one test pit across the site (TP06) during the geotechnical investigation. A copy of the geotechnical report is included as Appendix A.
- Infiltration testing was conducted as part of the geotechnical investigation at six locations, P1 to P6 (Figure 4). Depths ranged from 0.66 m to 0.71 m below ground level. Permeability at the site ranged from 5.2 m/day to greater than 15 m/day. Galt Geotechnical (2016) considered the site suitable for the disposal of stormwater by infiltration and concluded that soak wells can be adopted at lot level. For design and modelling purposes, an infiltration rate of 5 m/day has been recommended.
- DBCA's Geomorphic Wetlands of the Swan Coastal Plan dataset indicates that the
  majority of the site is a multiple use wetland and adjacent areas to the west are
  shown to contain conservation category wetlands (Figure 5)
- A tributary of the Peel Main Drain (PMD), the Peel Sub P Main Drain (PSPMD) has been piped through Lot 13 Treeby Rd. It enters the site at the northern boundary where it continues as an open drain and exits, via culverts under Thomas Rd, at the southern boundary of the site (Figure 6).
- The culverts under Thomas Rd are the legal point of discharge (LPD) for the site. The Department of Water (2009) modelling provides an allowable discharge at this

H18052Av2 | 17 January 2019

2



location for both pre and post development scenarios. Discharge rates are shown in Table 1.

Table 1. LPD Post Development Allowable Discharge Rates (Department of Water, 2009)

| Legal Point of<br>Discharge              |             | elopment<br>e at LPD (m³/s) |             | elopment<br>e at LPD (m³/s) |
|--|-------------|-----------------------------|-------------|-----------------------------|
|  | 10 Year ARI | 100 Year ARI                | 10 Year ARI | 100 Year ARI                |
| Downstream of<br>Thomas Road<br>Culverts | 0.19        | 0.36                        | 0.26        | 0.40                        |

### 3. Groundwater

### 3.1 Groundwater Levels

The Perth Groundwater Atlas (Department of Environment, 2004) minimum (end of May) groundwater levels range from 13 m AHD in the west of the site to 15 m AHD in the east, approximately 3 m below existing natural surface.

Groundwater monitoring was undertaken at several bores onsite by JDA between 2005 and 2008 (JDA, 2008). Results were presented in the LWMS developed by Bioscience (2014). Bioscience described groundwater as flowing from east to west across the site, with average annual maximum groundwater levels (AAMGL) ranging from approximately 13.5 m AHD to 17.0 m AHD.

Further groundwater monitoring was undertaken by Hyd2o on 20 February and 19 September 2017 at the same JDA monitoring bores, as well as an additional monitoring bore located on site. Hyd2o recorded levels ranged from 14.04 m AHD to 16.51 m AHD across all bores monitored. Full details of both Hyd2o and JDA groundwater level monitoring results are provided in Appendix B.

Hyd2o revised AAMGL calculations for all site and nearby bores based on the most recent groundwater levels which are shown in Tables 2 and 3. AAMGL levels calculated by Hyd2o range from 15 m AHD to 18 m AHD across the site (shown in Figure 7). This equates to levels of approximately 0.6 m and 3.0 m below existing natural surface. These levels are generally in agreement with the Bioscience (2014) LWMS, and are considered a refinement of those levels.

DWER hydrographs for long term monitoring bore JE22C indicate that the water table in close vicinity to the site has been steadily declining since 2000 with annual max recorded values dropping 1.8 m from 18.6 m AHD in 2000, to 16.8 m AHD in 2014 however has shown increase in the 2018 winter peak of around 0.5 m (Appendix B).

DWER recommended the use and demonstration of MGL when designing stormwater infrastructure for this site due to the relatively shallow groundwater depths. Therefore MGL has been adopted for design purposes for this site.

MGL contours are shown in Figure 7 and recorded values are presented Tables 2 and 3.

H18052Av2 **| 17 January 2019** 3



Table 2: DWER Monitoring Bore JE22C AAMGL & MGL

| Bore  | Period of<br>Record | AAMGL<br>(mAHD) | 19/9/2017<br>Level<br>(mAHD) | AAMGL<br>Correction<br>Factor (m) | MGL<br>(mAHD) |
|-------|---------------------|-----------------|------------------------------|-----------------------------------|---------------|
| JE22C | 1994 – 2018         | 17.92           | 17.97                        | -0.05                             | 18.77         |

Table 3: Hyd2o Groundwater Level Monitoring Results

| Site Bore | Bore Reading<br>19/9/2017<br>(mAHD) | AAMGL<br>(mAHD) | Depth to AAMGL<br>(m) | MGL<br>(mAHD) |
|-----------|-------------------------------------|-----------------|-----------------------|---------------|
| WAM9      | 15.19                               | 15.14           | 2.94                  | 15.86         |
| WAM10     | 16.74                               | 16.69           | 2.13                  | 17.40         |
| WAM14     | 15.68                               | 15.63           | 2.48                  | 17.01         |
| WAM15     | 15.60                               | 15.55           | 2.13                  | 17.24         |
| WAM16     | 14.33                               | 14.28           | 1.93                  | 15.50         |
| RAM1      | 17.8                                | 17.75           | 3.05                  | 16.10         |
| RAM2      | 18.15                               | 18.10           | 0.58                  | 18.95         |
| RAM3      | 15.30                               | 15.25           | 0.74                  | 18.60         |

# 3.2 Groundwater Quality

Groundwater quality was sampled at JDA bores from 2005 – 2007 and was reported in the LWMS as the following:

- Groundwater can be considered fresh to marginally saline, with salinity generally below 800 mg/L total dissolved solids.
- The average total nitrogen concentration at all bores except WAM16 was between 1 mg/L and 10 mg/L, which is mostly higher than the ANZECC guideline value of 1.2 mg/L. Concentrations in WAM16 were recorded as high as 55 mg/L.
- Total phosphorus concentrations at all bores except WAM16 were generally less than 0.2 mg/L. Levels in WAM16 reached as high as 10 mg/L. The ANZECC guideline value for TP is 0.065 mg/L.
- TN and TP concentrations were highest at WAM16, due to the bore's close proximity to market gardens located to the west of the site.

H18052Av2 | 17 January 2019 4



### 4. Stormwater Management

Stormwater management is proposed to be undertaken consistent with DWER water sensitive design practices. The system will consist of a series of lot soakwells, piped road drainage system, and ephemeral bioretention swales within POS for water quality treatment and detention prior to discharge to the receiving environment.

Runoff from the first 15mm on the lot will be retained and infiltrated within soakwells. The first 15mm runoff from within the road reserve will be managed for quality and quantity via the swales located within POS areas.

Consistent with the stormwater management strategy outlined in the LWMS (Bioscience, 2014) flow from upstream catchments draining to the PSPMD will be piped through the site. Hyd2o modelling results indicate a 600 mm diameter pipe will be suitable for conveying allowable flows, up to and including the 100 year ARI event.

Based on the revised structure plan, updated post-development drainage catchments are shown in Figure 8.

Stormwater modelling for the site was performed using XP-STORM. The design rainfall storms modelled were based on methodology in Australian Rainfall and Runoff (ARR) (Ball et al, 2016) and determined using the Bureau of Meteorological Computerised Design IFD rainfall System (CDIRS). The rainfall temporal pattern is assumed to be spatially uniform across the catchment. Storm durations modelled ranged from 1 hour to 72 hours.

Stormwater modelling for Catchment F POS basin was performed using the PONDS groundwater infiltration model to determine flood storage requirements and provide an assessment of areas required for distributed stormwater infiltration.

Stormwater modelling parameters used to design the stormwater storages are as follows:

- All lot drainage to be managed by soakwells for the first 15 mm of stormwater (equivalent to the 1 year 1 hour event). For events greater than the 1 in 5 AEP, modelling assumes 20% runoff for residential lots >300m<sup>2</sup> and 40% runoff for lots <300m<sup>2</sup>.
- Road runoff for the first 15mm of stormwater will be retained and infiltrated within 1 year biofiltration areas located within POS drainage basin/swales. A runoff coefficient of 80% is assumed from road and road reserve areas.
- A runoff coefficient of 25% is assumed for POS for the 1 in 5 and 1 in 100 AFP events.
- Runoff coefficients of 40 % and 25 % were assumed for commercial/service commercial and community purpose land uses, respectively.
- A hydraulic conductivity of 5 m/day has been applied for modelling purposes based on recommendations in Galt Geotechnical (2016).
- A minimum of 0.5 m separation between AAMGL and the invert of stormwater storage areas has been applied.
- The allowable discharge rate at the Thomas Rd culverts (the site's legal point of discharge) for the 1 in 100 AEP is 0.4 m/s<sup>3</sup> as outlined in Department of Water (2009) (refer to Table 1 of this report).

H18052Av2 | 17 January 2019

5



Part of an external catchment from the east (Catchment 6 on Figure 5) will contribute
to Catchment F POS basin. It has been assumed for modelling purposes that an
equivalent impervious area (EIA) of 0.55 ha is likely to generate overland flow into the
site for events greater than the 1 in 5 AEP.

The locations of storage areas and their contributing post development catchments are shown in Figure 8, with modelling results summarised in Table 5.

The total storage volume and area across the site are estimated as approximately 2670m<sup>3</sup> and 0.67 ha for the 1 in 5 AEP event, and 6675 m<sup>3</sup> and 1.3 ha, for the 1 in 100 AEP event. This equates to 2.5 % and 5 % of the total contributing catchment areas for 1 in 5 and 1 in 100 AEP events, respectively.

Note that storage shapes shown in Figure 8 are indicative only for determination of area requirements and representation of the storage area required. Drainage within Western Power easements is approved by Western Power provided the basins meet design requirements of being more than 30 m from towers and have a minimum 1:6 slopes (Bioscience, 2014).

The final flood attenuation area configuration (side slopes and shape), locations and elevations will be documented in future UWMPs and will be dependent on final earthworks, drainage, landscaping and road design levels for the development. Minor refinements to catchment areas in this report are considered likely to occur as detailed design proceeds and stormwater modelling will be updated accordingly during the UWMP process.

H18052Av2 | 17 January 2019



Table 4: Stormwater Management

| Land Use                    | Α              | В              | С            | D      | E             | F      |
|-----------------------------|----------------|----------------|--------------|--------|---------------|--------|
| Commercial                  |                |                |              |        | 2.46          |        |
| Community Purposes          |                |                |              |        | 0.32          |        |
| PAW                         |                |                |              | 0.02   |               |        |
| POS                         | 1.08           | 0.166          | 0.58         |        |               | 0.40   |
|                             | 1.00           | 0.82           | 0.50         | 0.37   | 0.13          | 0.40   |
| Open Space/Drainage         | 4.60           |                | 0.62         |        | +             | 4.4.4  |
| Lots <300m2 (R40, R60,R80)  | 1.69           | 0.11           | 0.63         | 3.12   | 1.17          | 1.14   |
| Lots >300m2 (R20, R30, R40) | 2.04           | 0.81           |              | 0.60   | 0.55          | 0.60   |
| Road                        | 3.04           | 1.47           | 0.50         | 2.33   | 1.28          | 0.80   |
| Service Commercial          |                |                |              |        | 0.60          |        |
| External Catchment          |                |                |              |        |               | 0.55   |
| Total Area                  | 7.84           | 3.38           | 1.72         | 6.44   | 6.51          | 2.94   |
| Equivalent Impervious Area  |                |                |              |        |               |        |
| 1yr EIA (ha)                | 2.43           | 1.18           | 0.40         | 1.86   | 1.03          | 0.64   |
| 5 & 100yr EIA               | 3.78           | 1.63           | 0.80         | 3.33   | 2.94          | 1.32   |
| Storage Design Parameters   |                |                |              |        |               |        |
| Drainage Type               | Basin          | Swale          | Basin        | Swale  | Basin         | Basin  |
| MGL (mAHD)                  | 16.3           | 17.5           | 16.5         | 16.7   | 16.2          | 17     |
| Storage Invert              | 16.3           | 17.5           | 16.5         | 17     | 16.5          | 17.3   |
| Outlet Pipe Size (mm)       | 150            | 150            | 150          | 150    | 150           | n/a    |
| First 15 mm Event           |                |                |              |        |               |        |
| Side Slopes                 | 1 in 0         | 1 in 0         | 1 in8        | 1 in 8 | 1 in 8        | 1 in 8 |
| Base Area (m2)              | 340            | 280            | 25           | 360    | 400           | 270    |
| Flood Rise (m)              | 0.3            | 0.3            | 0.36         | 0.26   | 0.11          | 0.12   |
| TWL (mAHD)                  | 16.6           | 17.8           | 16.86        | 17.26  | 17.11         | 17.42  |
| TWL Area (m2)               | 340            | 280            | 120          | 600    | 473           | 340    |
| Volume (m3)                 | 100            | 90             | 40           | 125    | 48            | 40     |
| 1 in 5 AEP Event            |                |                |              |        |               |        |
| Side Slopes                 | 1 in 8         | 1 in 8         | 1 in 8       | 1 in 8 | 1 in 8        | 1 in 8 |
| Base Area (m2)              | 1600           | 1140           | 25           | 360    | 400           | 270    |
| Flood Rise (m)              | 0.5            | 0.3            | 0.71         | 0.73   | 0.66          | 0.58   |
| TWL (mAHD)                  | 16.8           | 17.8           | 17.21        | 17.73  | 17.66         | 17.88  |
| TWL Area (m2)               | 2300           | 1490           | 270          | 1115   | 933           | 660    |
| Volume (m3)                 | 970            | 400            | 90           | 521    | 430           | 260    |
| Critical Duration (hr)      | 6              | 6              | 0            | 12     | 6             | 6      |
| 1 in 100 AEP Event          | 1 in 0         | 1 in 0         | 1 in 0       | 1 in 8 | 1 in 0        | 1 in 8 |
| Side Slopes Base Area (m2)  | 1 in 8<br>5600 | 1 in 8<br>2275 | 1 in 8<br>25 | 360    | 1 in 8<br>400 | 270    |
| Flood Rise (m)              | 0.7            | 0.5            | 1.0          | 1.20   | 1.2           | 1.01   |
| TWL (mAHD)                  | 17             | 18             | 17.5         | 18.20  | 17.70         | 18.31  |
| TWL Area (m2)               | 6090           | 2600           | 440          | 1746   | 1535          | 1065   |
| Volume (m3)                 | 2140           | 880            | 190          | 1745   | 1090          | 630    |
| Critical Duration (hr)      | 6              | 6              | 3            | 24     | 24            | 6      |

H18052Av2 | 17 January 2019



### 5. Conclusions/Recommendations

This addendum provides revised stormwater modelling for the site to address proposed changes to the LSP since the approval of the Local Water Management Strategy (Bioscience, 2014).

The updated stormwater management strategy and modelling takes into consideration the soil profiles and infiltration testing results documented in Galt Geotechnics (2016). In addition, updated groundwater levels have been calculated across the site based on bore readings taken by Hyd2o in 2017.

It is recommended that modelling contained in this addendum be used as the basis for further subdivision development within the site and the development of future UWMPs.

Aside from the revised AAMGLs, stormwater strategy and modelling detailed in this report, all principles and objectives of the approved LWMS (Bioscience, 2014) remain valid for implementation.

### 6. References

Australian and New Zealand Environment and Conservation Council (ANZECC) (2000). National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality, October 2000.

Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors) (2016). Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia.

Bioscience (2014). Anketell South Urban Cell Local Water Management Strategy Lots 1, 2, 3 & 17 Thomas Road & Part Lot 13 Treeby Road Anketell, March 2014.

City of Kwinana (1992) Town Planning Scheme No. 2. Government of Western Australia.

Department of Environment (2004) Perth Groundwater Atlas Second Edition.

Department of Water (2007). Stormwater Management Manual for Western Australia.

Department of Water (2009). Jandakot Drainage and Water Management Plan Peel Main Drain Catchment.

Galt Geotechnics (2016). Geotechnical and Preliminary Acid Sulfate Soil Study Proposed Residential Development Lots 1 to 3 & part of Lot 13 Thomas Rd, Anketell, September 2016.

Gozzard, J. R. (1983). Fremantle Part Sheet 2033 I and 2033 IV, Environmental Geology Series. Geological Survey of Western Australia, Department of Minerals and Energy, Perth.

JDA (2008). Lots 13 and 100 Treeby Road: Pre-development Hydrological Monitoring, May 2005 – June 2007.

Western Australian Planning Commission (2008). Better Urban Water Management. Government of Australia, October 2008.

H18052Av2 | 17 January 2019 8



Western Australian Planning Commission (2009). Perth Metropolitan Regional Scheme. Government of Western Australia.

Should you have any queries regarding this report, please do not hesitate to contact Suzanne Smart or Sasha Martens of this office.

Yours sincerely,

Suzanne Smart

Senior Environmental Hydrologist

Sugare freed

### **Attachments**

Figure1: Location Plan

Figure 2: Revised Local Structure Plan

Figure 3: Site Conditions Plan

Figure 4: Geotechnical Plan

Figure 5: Wetland Plan

Figure 6: Surface Water Plan

Figure 7: Groundwater Plan

Figure 8: Stormwater Plan

Appendix A: Geotechnical Report (Galt Geotechnics, 2016)

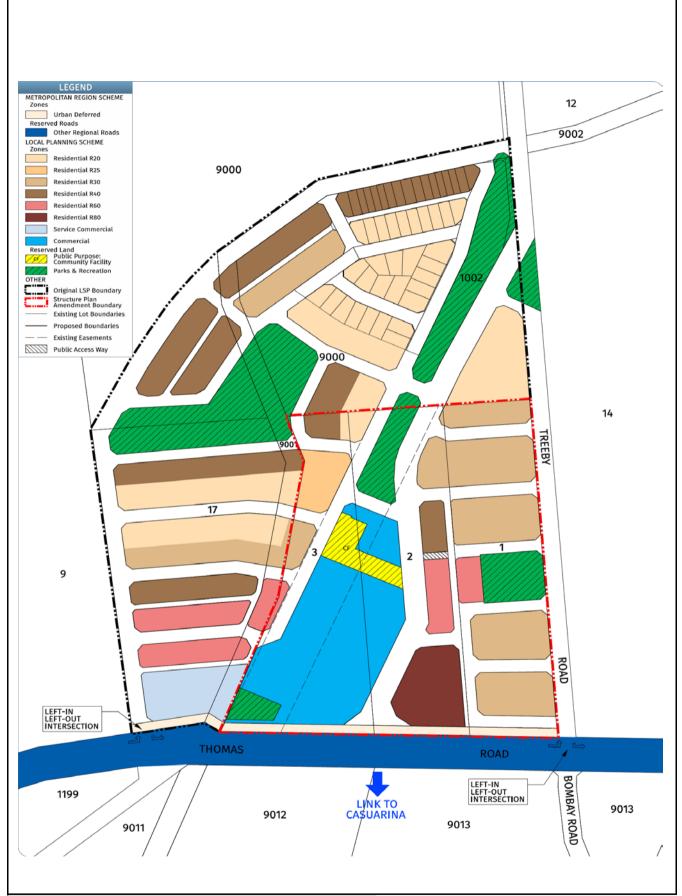
Appendix B: Site Monitoring Data & DWER Bore JE22C Hydrograph

Appendix C: Infiltration Areas Conceptual Cross Sections

This document is published in accordance with and subject to an agreement between Hyd2o and the Client for whom it has been prepared, and is restricted to those issues that have been raised by the Client in its engagement of Hyd2o. It has been prepared using the skill and care ordinarily exercised by hydrologists in the preparation of such documents.

Hyd2o recognise site conditions change and contain varying degrees of non-uniformity that cannot be fully defined by field investigation. Measurements and values obtained from sampling and testing in this document are indicative within a limited timeframe, and unless otherwise specified, should not be accepted as conditions on site beyond that timeframe.

Any person or organisation that relies on or uses the document for purposes or reasons other than those agreed by Hyd2o and the Client does so entirely at their own risk. Hyd2o denies all liability in tort, contract or otherwise for any loss, damage or injury of any kind whatsoever (whether in negligence or otherwise) that may be suffered as a consequence of relying on this document for any purpose other than that agreed with the Client.



Source: Harley Dykstra (2019)

Lots 1, 2, 3 and 17 Thomas Rd, Anketell
Revised Local Structure Plan
Figure 2



Site PSPMD Easement
Topography (mAHD) PSPMD Piped

---- Western Power Easement PSPMD Open Drain

Lots 1,2,3, and 17 Thomas Rd, Anketell LWMS Addendum
Site Conditions Plan
Figure 3

Source: Galt Geotechnics (2016)

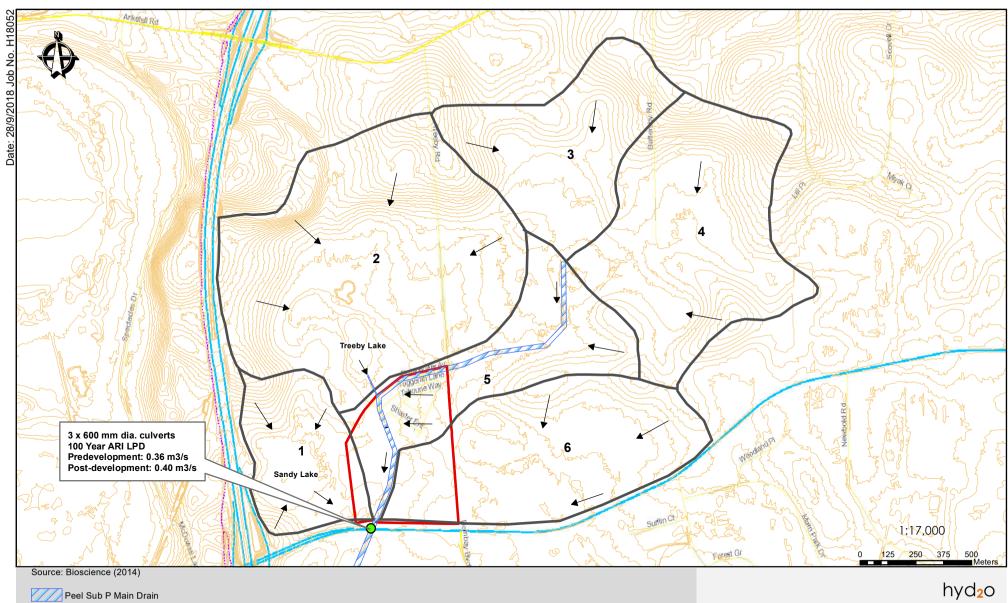
Lots 1,2,3 and 17 Thomas Rd, Anketell

Geotechnical Plan

Figure 4

# Conservation Multiple Use Resource Enhancement

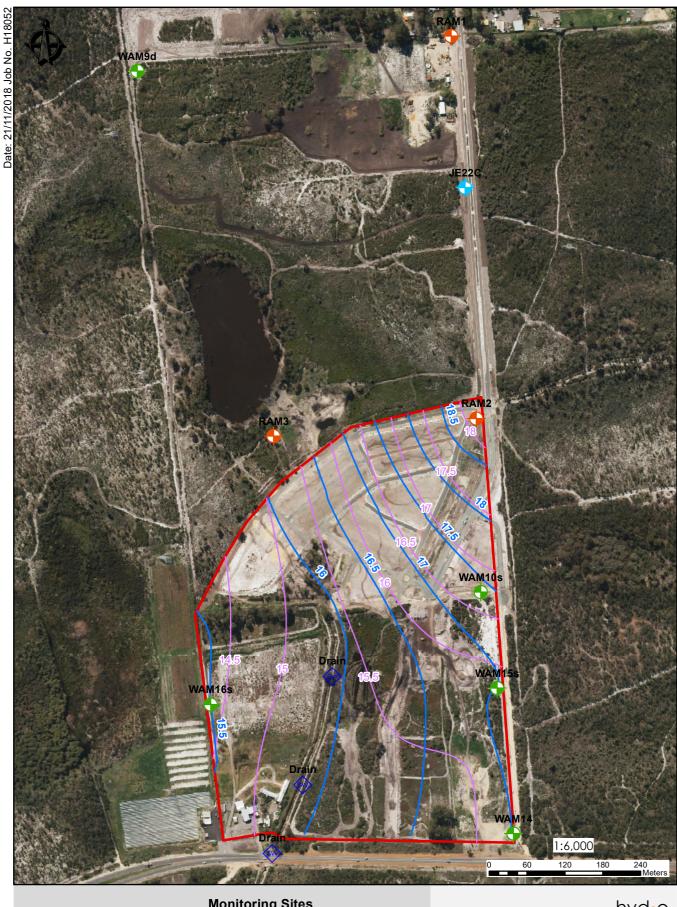
hyd<sub>2</sub>O Lots 1,2,3, and 17 Thomas Rd, Anketell LWMS Addendum Wetland Plan Figure 5



Pre-Development Catchments

Lot 1,2,3 & 17 Thomas Rd Anketell LWMS Addendum
Surface Water Plan

Figure 6





# **Monitoring Sites**



JDA

**PSPMD** 

Unknown

hyd20 Lots 1,2,3, and 17 Thomas Rd, Anketell LWMS Addendum **Groundwater Plan** Figure 7

APPENDIX A
Geotechnical Investigation
(Galt Geotechnics, 2016)

APPENDIX B Site Monitoring Data & DoW Bore JE22C Hydrograph



# H18052 Thomas Rd Anketell Hyd2o Groundwater Monitoring Summary

|        |                        |          |         |               | ŀ                              | Hyd2o Measurement              | :s                              |
|--------|------------------------|----------|---------|---------------|--------------------------------|--------------------------------|---------------------------------|
| Bore   | Easting                | Northing | Owner   | TOC<br>(mAHD) | 14/9/2016<br>Reading<br>(mAHD) | 20/2/2017<br>Reading<br>(mAHD) | 19/09/2017<br>Reading<br>(mAHD) |
| WAM10d | 392546                 | 6433942  | JDA     | 19.32         |                                | 16.50                          | 16.74                           |
| WAM10s | 392545                 | 6433942  | JDA     | 19.37         | 16.74                          | 16.51                          | 16.77                           |
| WAM14  | M14 392597 6433559 JDA |          | 18.61   |               | 15.21                          | 15.68                          |                                 |
| WAM15d | 392570                 | 6433791  | JDA     | 18.18         |                                | 14.99                          | 15.60                           |
| WAM15s | 392571                 | 6433790  | JDA     | 18.19         | 15.59                          | 15.54                          | 15.85                           |
| WAM16d | 392117                 | 6433763  | JDA     | 16.71         |                                | 14.04                          | 14.33                           |
| WAM16s | 392117                 | 6433764  | JDA     | 16.66         |                                | 14.16                          | 14.42                           |
| JE22C  | 392520                 | 6434584  | DoW     | 20.33         | 17.53                          | 17.23                          | 17.97                           |
| WAM9d  | 392001                 | 6434769  | JDA     | 18.58         | 15.02                          | _                              | 15.19                           |
| RAM3   | 392217                 | 6434190  | Unknown | 16.492        | 15.222                         |                                | 15.30                           |
| RAM2   | 392538                 | 6434218  | Unknown | 18.684        | 16.904                         |                                | 18.15                           |
| RAM1   | 392498                 | 6434825  | Unknown | 21.3          | 17.68                          |                                | 17.8                            |

### JDA Lot 13 & 100 Treeby Road (April 2008)

| Bore ID  |           | Water Level (m AHD) |           |          |           |           |           |           |           |          |          |          |       |       |            |  |
|----------|-----------|---------------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|-------|-------|------------|--|
| Bore ID  | 30-May-05 | 5-Jul-05            | 27-Jul-05 | 9-Sep-05 | 26-Sep-05 | 21-Oct-05 | 23-Nov-05 | 10-Jan-06 | 31-Jan-06 | 3-Mar-06 | 4-Apr-06 | 4-May-06 | Min.  | Max.  | Difference |  |
| WAM9(s)  | 14.43     | 14.96               | 15.12     | 15.4     | 15.46     | 15.51     | 15.34     | 15.01     | 14.85     | 14.62    | 14.44    | 14.3     | 14.3  | 15.51 | 1.21       |  |
| WAM9(d)  | 14.76     | 15.33               | 15.47     | 15.75    | 15.8      | 15.86     | 15.66     | 15.36     | 15.19     | 14.97    | 14.78    | 14.65    | 14.65 | 15.86 | 1.21       |  |
| WAM10(s) | 16.58     | 17.06               | 17.17     | 17.35    | 17.35     | 17.4      | 17.24     | 16.94     | 16.81     | 16.57    | 16.33    | 16.26    | 16.26 | 17.4  | 1.14       |  |
| WAM10(d) | 16.56     | 17.05               | 17.16     | 17.34    | 17.37     | 17.4      | 17.23     | 16.94     | 16.79     | 16.58    | 16.39    | 16.26    | 16.26 | 17.4  | 1.14       |  |
| SP1-2B   | -         | -                   | -         | 1        | -         | 11.9      | 11.8      | 11.66     | 11.6      | 11.48    | 11.39    | 11.37    | 11.37 | 11.9  | 0.53       |  |
| JE22C    | -         | 17.84               | 17.98     | 18.18    | 18.24     | 18.2      | 18.03     | 17.65     | 17.4      | 17.11    | 16.95    | 16.81    | 16.81 | 18.24 | 1.43       |  |

| Bore ID  |           | Water Level (m AHD) |          |           |           |           |           |           |           |           |           |           |       |       |            |  |
|----------|-----------|---------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------|------------|--|
| Borein   | 29-May-06 | 28-Jun-06           | 2-Aug-06 | 30-Aug-06 | 24-Oct-06 | 27-Nov-06 | 19-Dec-06 | 23-Jan-07 | 20-Feb-07 | 22-Mar-07 | 23-Apr-07 | 28-Jun-07 | Min.  | Max.  | Difference |  |
| WAM9(s)  | 14.27     | 14.15               | 14.35    | 14.54     | 14.46     | 14.37     | 14.32     | 14.13     | 14.06     | 13.98     | 13.9      | 14.04     | 13.9  | 14.54 | 0.64       |  |
| WAM9(d)  | 14.59     | 14.53               | 14.69    | 14.86     | 14.88     | 14.72     | 14.62     | 14.53     | 14.41     | 14.33     | 14.27     | 14.39     | 14.27 | 14.88 | 0.61       |  |
| WAM10(s) | 16        | 16.17               | 16.47    | 16.65     | 16.42     | 16.3      | 16.21     | 16.13     | 16.07     | 16.01     | 15.97     | 16.26     | 15.97 | 16.65 | 0.68       |  |
| WAM10(d) | 16.23     | 16.21               | 16.4     | 16.62     | 16.46     | 16.29     | 16.22     | 16.15     | 16.07     | 16.01     | 15.97     | 16.26     | 15.97 | 16.62 | 0.65       |  |
| SP1-2B   | 11.36     | 11.32               | 11.5     | 11.52     | 11.44     | 11.32     | 11.26     | 11.28     | 11.06     | 11        | 10.98     | 11.07     | 10.98 | 11.52 | 0.54       |  |
| JE22C    | 16.8      | 16.77               | -        | 17.37     | 17.27     | 16.86     | 16.83     | 16.56     | 16.61     | 16.53     | 16.68     | 16.7      | 16.53 | 17.37 | 0.84       |  |

### JDA Wandi/Anketell South (April 2008)

| David ID |           |           |           |           |           |          | Wate     | r Level (m A | HD)       |           |          |           |       |       |            |
|----------|-----------|-----------|-----------|-----------|-----------|----------|----------|--------------|-----------|-----------|----------|-----------|-------|-------|------------|
| Bore ID  | 27-Sep-05 | 21-Oct-05 | 23-Nov-06 | 10-Jan-06 | 31-Jan-06 | 3-Mar-06 | 4-Apr-06 | 4-May-06     | 29-May-06 | 28-Jun-06 | 2-Aug-06 | 30-Aug-06 | Min.  | Max.  | Difference |
| WAM5(s)  | 20.07     | 20.08     | 19.99     | 19.85     | 19.82     | 19.65    | 19.54    | 19.53        | 19.47     | 19.46     | 19.62    | 19.58     | 19.46 | 20.08 | 0.62       |
| WAM5(d)  | 20.06     | 20.08     | 20.01     | 19.83     | 19.77     | 19.64    | 19.55    | 19.51        | 19.45     | 19.46     | 19.59    | 19.57     | 19.45 | 20.08 | 0.63       |
| WAM6(s)  | 20.97     | 21        | 20.98     | 20.87     | 20.69     | 20.59    | 20.46    | 20.36        | 20.5      | 20.67     | 20.32    | 20.4      | 20.32 | 21    | 0.68       |
| WAM6(d)  | 21.08     | 21.15     | 21.12     | 20.97     | 20.88     | 20.72    | 20.6     | 20.52        | 20.27     | 20.37     | 20.45    | 20.45     | 20.27 | 21.15 | 0.88       |
| WAM7(s)  | 19.52     | 19.62     | 19.54     | 19.09     | 18.89     | 18.66    | 18.63    | 18.51        | 18.4      | 18.09     | 18.23    | 18.12     | 18.09 | 19.62 | 1.53       |
| WAM7(d)  | 18.97     | 19.04     | 18.64     | 18.07     | 18.82     | 17.49    | 17.35    | 17.55        | 17.7      | 17.82     | 18.01    | 18.01     | 17.35 | 19.04 | 1.69       |
| WAM8(s)  | 20.15     | 20.15     | 19.96     | 19.6      | 19.44     | 19.23    | 19.13    | 19.05        | 18.99     | 19.11     | 19.2     | 19.35     | 18.99 | 20.15 | 1.16       |
| WAM8(d)  | 20.06     | 20.05     | 19.87     | 19.53     | 19.4      | 19.21    | 19.09    | 19           | 18.97     | 18.93     | 19.2     | 19.26     | 18.93 | 20.06 | 1.13       |
| SP1-2B   | -         | 11.9      | 11.8      | 11.66     | 11.6      | 11.48    | 11.39    | 11.37        | 11.36     | -         | 11.5     | 11.52     | 11.36 | 11.9  | 0.54       |
| JE22C    | -         | 18.2      | 18.03     | 17.65     | 17.4      | 17.11    | 16.95    | 16.81        | 16.8      | -         | 17.04    | 17.37     | 16.8  | 18.2  | 1.4        |
| JM42     | 22.09     | 22.22     | 22.17     | 22.01     | 21.95     | 21.82    | 21.67    | 21.62        | 21.58     | 21.48     | -        | 21.07     | 21.07 | 22.22 | 1.15       |

| David ID |          |           |           |           |           |           | Wate      | r Level (m A | HD)       |           |           |           |       |       |            |
|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|-----------|-------|-------|------------|
| Bore ID  | 6-Oct-06 | 24-Oct-06 | 27-Nov-06 | 19-Dec-06 | 23-Jan-07 | 20-Feb-07 | 23-Mar-07 | 23-Apr-07    | 22-May-07 | 28-Jun-07 | 26-Jul-07 | 30-Aug-07 | Min.  | Max.  | Difference |
| WAM5(s)  | 19.55    | 19.52     | 19.42     | 19.28     | 19.18     | 19.09     | 19.02     | 18.98        | 19.04     | 19.07     | 19.17     | 19.38     | 18.98 | 19.55 | 0.57       |
| WAM5(d)  | 19.52    | 19.52     | 19.42     | 19.31     | 19.18     | 19.09     | 19.03     | 18.99        | 19.02     | 19.08     | 19.18     | 19.4      | 18.99 | 19.52 | 0.53       |
| WAM6(s)  | 20.34    | 20.32     | 20.31     | 20.1      | 19.97     | 19.87     | 19.79     | 19.76        | 19.74     | 19.74     | 19.87     | 20.16     | 19.74 | 20.34 | 0.6        |
| WAM6(d)  | 20.47    | 20.37     | 20.15     | 20.23     | 20.07     | 20        | 19.9      | 19.82        | 19.84     | 19.85     | 19.96     | 20.22     | 19.82 | 20.47 | 0.65       |
| WAM7(s)  | 17.98    | 17.84     | 17.55     | Dry       | Dry       | Dry       | Dry       | Dry          | Dry       | Dry       | Dry       | 18.35     | 17.55 | 18.35 | 0.8        |
| WAM7(d)  | 17.7     | 17.7      | 17.36     | 17.16     | 16.94     | 16.79     | 16.64     | 16.81        | 17.04     | 17.27     | 17.48     | 17.73     | 16.64 | 17.73 | 1.09       |
| WAM8(s)  | 19.5     | 19.19     | 19.08     | 18.92     | 18.84     | 18.72     | 18.68     | 18.55        | 18.58     | 18.79     | -         | 19.31     | 18.55 | 19.5  | 0.95       |
| WAM8(d)  | 19.3     | 19.11     | 19        | 18.89     | 18.85     | 18.74     | 18.69     | 18.61        | 18.59     | 18.73     | -         | 19.25     | 18.59 | 19.3  | 0.71       |
| SP1-2B   | -        | 11.44     | 11.32     | 11.26     | 11.3      | 11.06     | -         | 10.98        | -         | -         | 11.26     | -         | 10.98 | 11.44 | 0.46       |
| JE22C    | 17.24    | 16.27     | 16.86     | 16.83     | 16.56     | 16.61     | -         | 16.68        | 16.47     | 16.7      | 17        | 17.57     | 16.27 | 17.57 | 1.3        |
| JM42     | 21.02    | -         | -         | -         | -         | -         | -         | -            | -         | -         | -         | -         | -     | -     | -          |

JDA Lots 1, 2, 3 & 17 Thomas Road

| Dove ID  |          | Water Level (m AHD) |           |           |           |           |           |          |           |           |           |           |       |       |            |  |
|----------|----------|---------------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-------|-------|------------|--|
| Bore ID  | 4-Apr-07 | 23-May-07           | 28-Jun-07 | 26-Jul-07 | 30-Aug-07 | 18-Sep-07 | 11-Oct-07 | 7-Nov-07 | 18-Dec-07 | 15-Jan-08 | 12-Feb-08 | 11-Mar-08 | Min.  | Max.  | Difference |  |
| WAM14    | 15.43    | 15.33               | 15.58     | 15.87     | 16.34     | 16.43     | 16.5      | 16.34    | 16.13     | 15.92     | 16.02     | 15.79     | 15.33 | 16.5  | 1.17       |  |
| WAM15(s) | 15.74    | 15.66               | 15.96     | 16.25     | 16.74     | 16.7      | 16.86     | 16.67    | 16.43     | 16        | 16.3      | 16.04     | 15.66 | 16.86 | 1.2        |  |
| WAM15(d) | 15.24    | 15.22               | 15.44     | 15.75     | 16.25     | 16.34     | 16.43     | 16.24    | 16.02     | 15.75     | 15.81     | 15.61     | 15.22 | 16.43 | 1.21       |  |
| WAM16(s) | 13.82    | 13.9                | 14.08     | 14.39     | 14.97     | 15.09     | 15.12     | 15.02    | 14.99     | 14.73     | 14.88     | 14.62     | 13.82 | 15.12 | 1.3        |  |
| WAM16(d) | 13.64    | 13.7                | 13.93     | 14.28     | 14.8      | 14.91     | 14.94     | 14.84    | 14.74     | 14.48     | 14.67     | 14.41     | 13.64 | 14.94 | 1.3        |  |
| SP1-2B   | 10.97    | 10.99               | 11.07     | 11.26     | 11.39     | 11.46     | 11.46     | 11.38    | 11.26     | 11.15     | 11.19     | 11.09     | 10.97 | 11.46 | 0.49       |  |
| JE22C    | 1        | 16.47               | 16.7      | 17        | 17.57     | 17.85     | 17.92     | 20.33    | 17.76     | 20.33     | 17.36     | 16.74     | 16.47 | 20.33 | 3.86       |  |

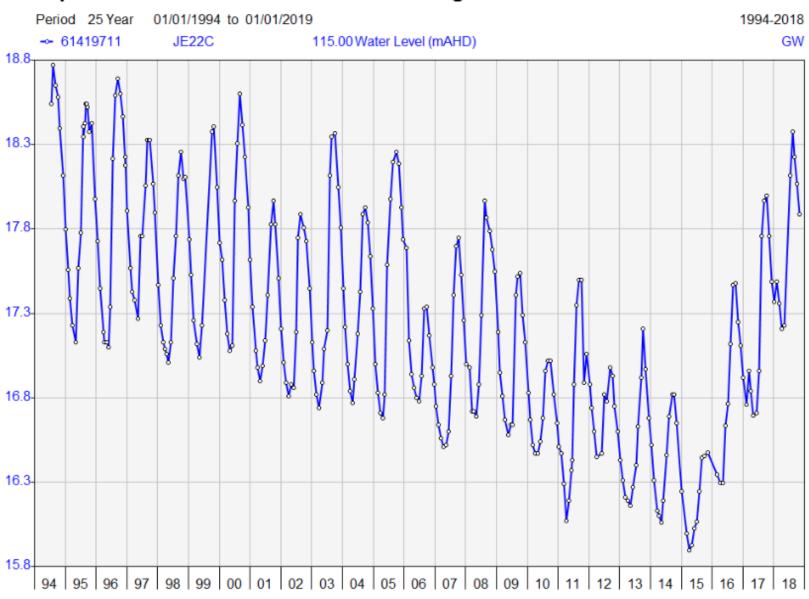
| Bore ID  |          |           |           |           |           |           | Wate      | r Level (m A | HD)       |           |  |       |       |            |
|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|-----------|-----------|--|-------|-------|------------|
| Bore ib  | 9-Apr-08 | 16-May-08 | 10-Jun-08 | 11-Jul-08 | 11-Aug-08 | 11-Sep-08 | 23-Oct-08 | 17-Nov-08    | 16-Dec-08 | 13-Jan-09 |  | Min.  | Max.  | Difference |
| WAM14    | 15.85    | 15.74     | 15.99     | 16.41     | 17.01     | 16.81     | 16.73     | 16.66        | 16.56     | 16.39     |  | 15.74 | 17.01 | 1.27       |
| WAM15(s) | 16.08    | 15.97     | 16.24     | 16.69     | 17.24     | 17.08     | 16.99     | 16.91        | 16.82     | 16.82     |  | 15.97 | 17.24 | 1.27       |
| WAM15(d) | 15.7     | 15.65     | 15.87     | 16.29     | 16.88     | 16.71     | 16.58     | 16.5         | 16.4      | 16.69     |  | 15.65 | 16.88 | 1.23       |
| WAM16(s) | 14.66    | 14.56     | 14.84     | 15.17     | 15.5      | 15.32     | 15.21     | 15.14        | 15.05     | 14.9      |  | 14.56 | 15.5  | 0.94       |
| WAM16(d) | 14.42    | 14.42     | 14.72     | 15.01     | 15.3      | 15.19     | 15.11     | 15.01        | 14.94     | 14.8      |  | 14.42 | 15.3  | 0.88       |
| SP1-2B   | 11.13    | 11.12     | 11.08     | 11.4      | 11.69     | 11.58     | 11.58     | 11.56        | 11.53     | 11.43     |  | 11.08 | 11.69 | 0.61       |
| JE22C    | -        | -         | 16.87     | 17.2      | 18.02     | 17.82     | 17.7      | 17.7         | 17.49     | 17.2      |  | 16.87 | 18.02 | 1.15       |

#### Anketell North DWMS

| Done ID  |           |          |           |           |           |           | Wate      | r Level (m A | HD)      |          |           |           |       |       |            |
|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|--------------|----------|----------|-----------|-----------|-------|-------|------------|
| Bore ID  | 27-Jul-05 | 9-Sep-05 | 27-Sep-05 | 21-Oct-05 | 23-Nov-05 | 10-Jan-06 | 31-Jan-06 | 3-Mar-06     | 4-Apr-06 | 4-May-06 | 29-May-06 | 28-Jun-06 | Min.  | Max.  | Difference |
| WAM11    | 13.42     | 13.63    | 13.72     | 13.86     | 13.86     | 13.76     | 13.71     | 13.65        | 13.57    | 13.49    | 13.46     | 13.3      | 13.3  | 13.86 | 0.56       |
| WAM12(s) | 14.15     | 14.18    | 14.04     | 13.76     | 13.31     | 13.47     | 13.46     | 13.12        | 13.17    | 13.34    | 13.01     | 12.98     | 12.98 | 14.18 | 1.2        |
| WAM12(d) | 14.12     | 14.15    | 14.08     | 13.91     | 13.55     | 13.49     | 13.47     | 13.01        | 13.12    | 13.26    | 13.14     | 13.12     | 13.01 | 14.15 | 1.14       |
| WAM13(s) | 14.15     | 14.2     | 14.03     | 14.03     | 13.75     | 13.74     | 13.73     | 13.43        | 13.5     | 13.64    | 13.44     | 13.45     | 13.43 | 14.2  | 0.77       |
| WAM13(d) | 14.08     | 14.13    | 14.08     | 13.91     | 13.68     | 13.64     | 13.62     | 13.31        | 13.36    | 13.47    | 13.33     | 13.33     | 13.31 | 14.13 | 0.82       |
| SP1-2B   | -         | -        | -         | 11.9      | 11.8      | 11.66     | 11.6      | 11.48        | 11.39    | 11.37    | 11.36     | 11.32     | 11.32 | 11.9  | 0.58       |
| JE22C    | 17.98     | 18.18    | 18.24     | 18.2      | 18.03     | 17.65     | 17.4      | 17.11        | 16.95    | 16.81    | 16.8      | 16.77     | 16.77 | 18.24 | 1.47       |

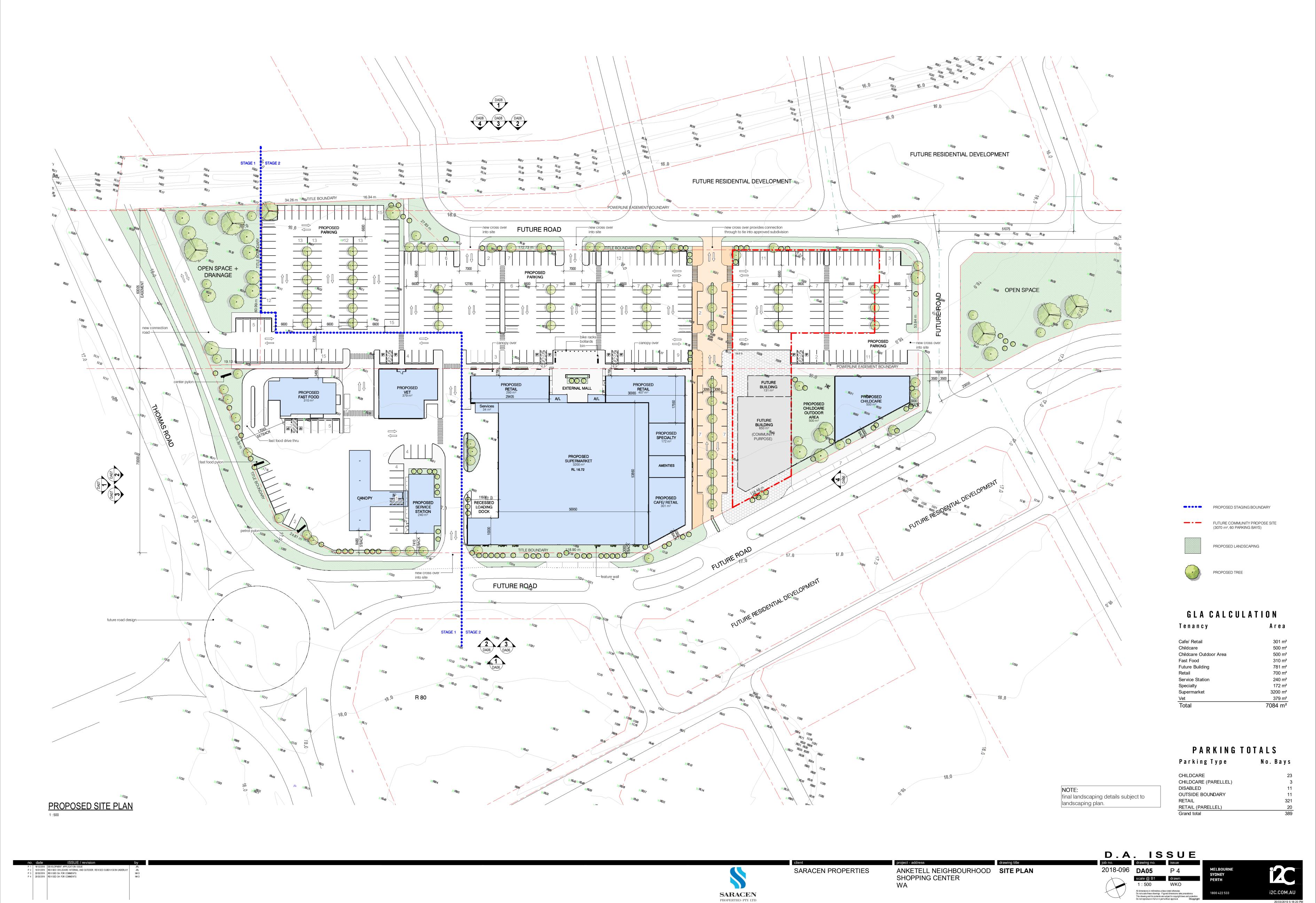
| Bore ID  | Water Level (m AHD) |           |           |           |           |           |           |           |           |           |           |           |       |       |            |
|----------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------|------------|
|          | 2-Aug-06            | 30-Aug-06 | 24-Oct-06 | 27-Nov-06 | 19-Dec-06 | 23-Jan-07 | 20-Feb-07 | 23-Mar-07 | 23-Apr-07 | 22-May-07 | 28-Jun-07 | 26-Jul-07 | Min.  | Max.  | Difference |
| WAM11    | 13.3                | 13.22     | 13.27     | 13.23     | 13.17     | 13.08     | 13.02     | 12.93     | 12.85     | 12.82     | 12.68     | 12.68     | 12.68 | 13.3  | 0.62       |
| WAM12(s) | 13.47               | 13.67     | 13.06     | 12.85     | 12.89     | 12.45     | 12.26     | 12.1      | 12.22     | 12.7      | 13.17     | 13.61     | 12.1  | 13.67 | 1.57       |
| WAM12(d) | 13.5                | 13.7      | 13.23     | 12.82     | 12.89     | 12.5      | 12.33     | 12.23     | 12.39     | 12.62     | 13.08     | 13.52     | 12.23 | 13.7  | 1.47       |
| WAM13(s) | 13.93               | 13.92     | 13.42     | 13.08     | 13.06     | 12.85     | 12.74     | 12.66     | 12.7      | 12.86     | 13.12     | 13.67     | 12.66 | 13.93 | 1.27       |
| WAM13(d) | 13.75               | 13.76     | 13.31     | 13        | 12.89     | 12.77     | 12.66     | 12.57     | 12.61     | 12.76     | 13.05     | 13.5      | 12.57 | 13.76 | 1.19       |
| SP1-2B   | 11.5                | 11.52     | 11.44     | 11.32     | 11.26     | 11.3      | 11.06     | 11        | 10.98     | 10.99     | 11.07     | 11.26     | 10.98 | 11.52 | 0.54       |
| JE22C    | 17.04               | 17.34     | 16.27     | 16.86     | 16.83     | 16.56     | 16.61     | 16.53     | 16.68     | 16.47     | 16.7      | 17        | 16.27 | 17.34 | 1.07       |

HYPLOT V134 Output 07/11/2018



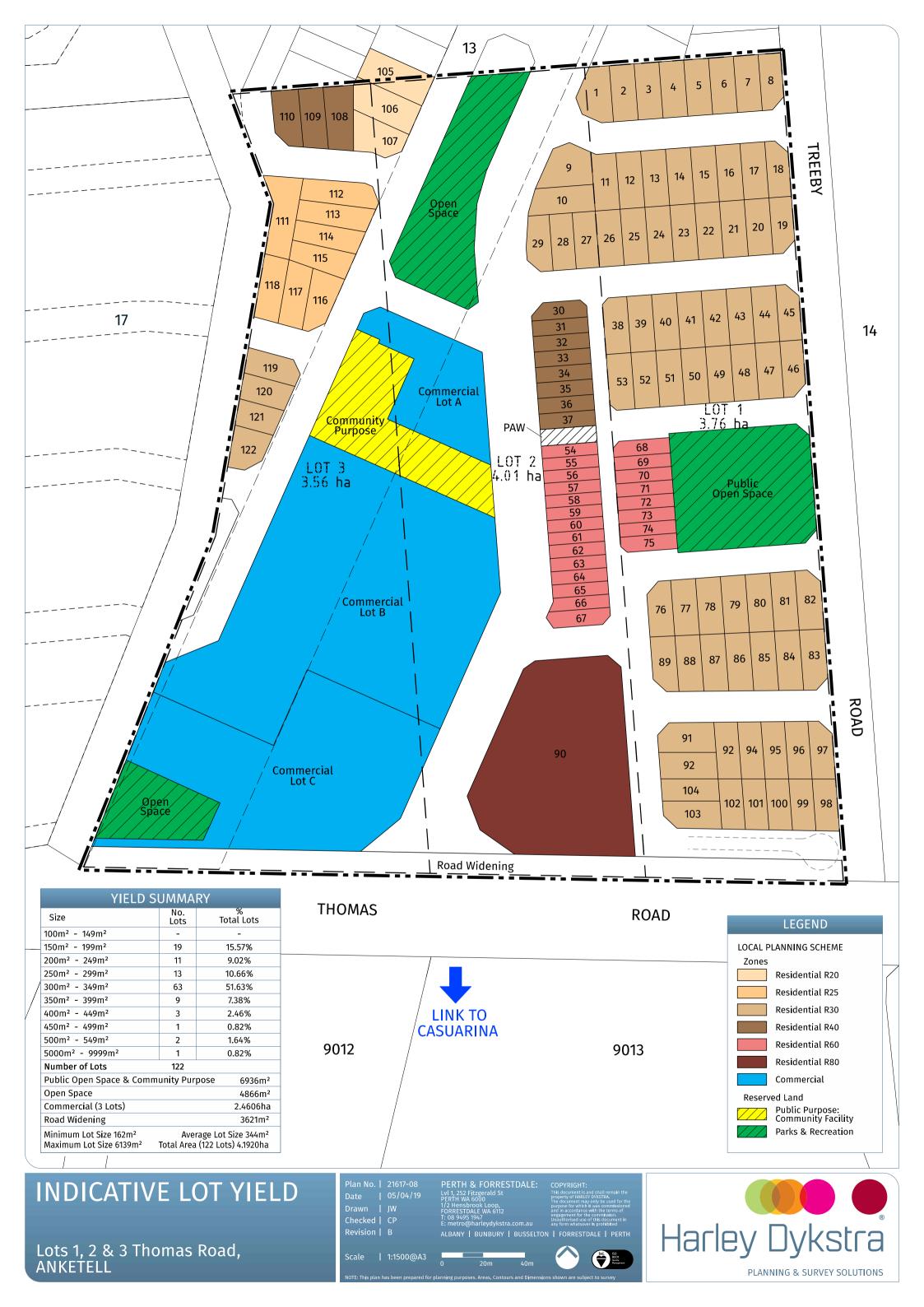
# **APPENDIX D**

Conceptual Neighbourhood Centre Plan



# **APPENDIX E**

Indicative Lot Yield Plan



# **APPENDIX F**

Transport Impact Assessment



# Lots 1, 2 & 3 Anketell Road Revised Traffic Impact Assessment Anketell South LSP Amendment

PREPARED FOR: Saracen Developments

March 2018

# **Document history and status**

| Author    | Revision | Approved by | Date approved | Revision type |
|-----------|----------|-------------|---------------|---------------|
| M Rasouli | r01      | B Bordbar   | 08/10/2018    | Draft         |
| M Rasouli | r01a     | B Bordbar   | 15/10/2018    | Draft         |
| M Rasouli | r01b     | B Bordbar   | 16/10/2018    | Final         |
| M Rasouli | r01c     | M Rasouli   | 29/03/2019    | Revised Final |
|           |          |             |               |               |
|           |          |             |               |               |

File name: t18.174 mr01c

**Author:** Mohammad Rasouli

Project manager: Mohammad Rasouli

Client: Saracen Developments

Project: Lots 1, 2 & 3 Anketell Road, Anketell South LSP

Amendment

**Document revision:** r01c

**Project number:** t18.174

Copyright in all drawings, reports, specifications, calculations and other documents provided by the Consultant in connection with the Project shall remain the property of the Consultant.

The Client alone shall have a license to use the documents referred to above for the purpose of completing the Project, but the Client shall not use, or make copies of, such documents in connection with any work not included in the Project, unless written approval is obtained from the Consultant or otherwise agreed through a separate contract.

# **TABLE OF CONTENTS**

| 1.0 | INTRODUCTION AND BACKGROUND             | 1  |
|-----|---|----|
| 2.0 | PROPOSED AMENDED LOCAL STRUCTURE PLAN   | 3  |
| 3.0 | EXISTING SITUATION                      | 5  |
| 3.1 | Existing Land Use                       | 5  |
| 3.2 | Existing Road Network                   | 5  |
| 3.3 | Public Transport                        | 6  |
| 3.4 | PEDESTRIAN AND CYCLIST FACILITIES       | 7  |
| 3.5 | CHANGES TO THE SURROUNDING ROAD NETWORK | 8  |
| 3.6 | Public Transport Network Planning       | 8  |
| 4.0 | PROPOSED TRANSPORT NETWORK              | 9  |
| 4.1 | Road Hierarchy                          | 9  |
| 4.2 | Public Transport                        | 11 |
| 4.3 | PEDESTRIAN AND CYCLIST FACILITIES       | 11 |
| 4.4 | Integration with Surrounding Area       | 12 |
| 5.0 | ANALYSIS OF THE TRANSPORT NETWORK       | 13 |
| 5.1 | Assessment Period                       | 13 |
| 5.2 | TRAFFIC GENERATION AND DISTRIBUTION     | 13 |
| 5.3 | TRAFFIC FLOW FORECASTS                  | 13 |
| 5.4 | ROADS AND INTERSECTIONS                 | 15 |
| 5.5 | INTERSECTION ANALYSIS                   | 16 |
| 5.6 | Access to Frontage Properties           | 18 |
| 5.7 | PEDESTRIAN / CYCLE NETWORKS             | 18 |
| 5.8 | Access to Public Transport              | 18 |
| 6.0 | CONCLUSIONS                             | 19 |
|     |   |    |

APPENDIX A: WAPC CURRENT APPROVED ANKETELL NORTH LSP

**APPENDIX B: DEVELOPMENT PLANS** 

APPENDIX C: INTERSECTION ANALYSIS

# **REPORT FIGURES**

| Figure 1: Location of the Subject Site2   |
|---|
| Figure 2: Proposed Amended Local Structure Plan3                                  |
| Figure 3: Existing traffic counts on Thomas Road (Source: Main Roads WA)5         |
| Figure 4: Existing Bus Routes6  |
| Figure 5: Bike Map  |
| Figure 6: Proposed Road Hierarchy9  |
| Figure 7: Proposed Cross Section for the Main North-South Spine Road              |
| Figure 8: Proposed Pedestrian and Cyclist Road Network11                          |
| Figure 9: Projected Daily Traffic Volumes14                                       |
| Figure 10: Projected traffic volumes (vpd) at the Commercial Centre Crossovers 15 |
| Figure 11: Intersection Treatments  |
| Figure 12: 95% queue distance   |
|   |
| REPORT TABLES   |
|   |
| Table 1: The proposed land uses within the approved WAPC and amended LSP areas    |

# 1.0 Introduction and Background

Transcore prepared a Transport Impact Assessment (TIA) report (t10.006.mr.r0b) in October 2013 on behalf of various landowners for the proposed Anketell South Local Structure Plan (LSP). The LSP was approved by WAPC in May 2014. A copy of the approved LSP is provided in **Appendix A** of this report.

Transcore prepared an updated TIA for the proposed amended LSP in October 2018. The amendments included a shift, eastward, for the central north-south spine road that connects to Thomas Road in order to accommodate a slightly larger commercial precinct. This shift, in turn, caused some necessary adjustments of lot sizes and shapes to the east of this proposed road.

It is our understanding that following Harley Dykstra's recent discussions with the City of Kwinana regarding the design of the proposed commercial precinct at Lots 1, 2 & 3 Thomas Road in Anketell, the proposed amended LSP has subsequently been modified. These modifications include the relocation of the proposed Community Facility to the northern part of the commercial precinct and some changes to the proposed density (coding) of the residential areas surrounding the proposed commercial precinct.

This revised TIA report aims to provide an update on the traffic modelling and analysis to reflect the proposed amendments and update the report figures to reflect the latest amended LSP area.

For the purpose of this report Transcore's strategic EMME transport model for the area is utilised again. The model incorporates the latest land use data for the subject site, Wandi and Anketell LSPs in order to consider all the traffic volumes in the area.

The proposed Anketell South LSP area is located south of the Anketell Road, north of Thomas Road and east of Kwinana Freeway, as shown in **Figure 1.** 

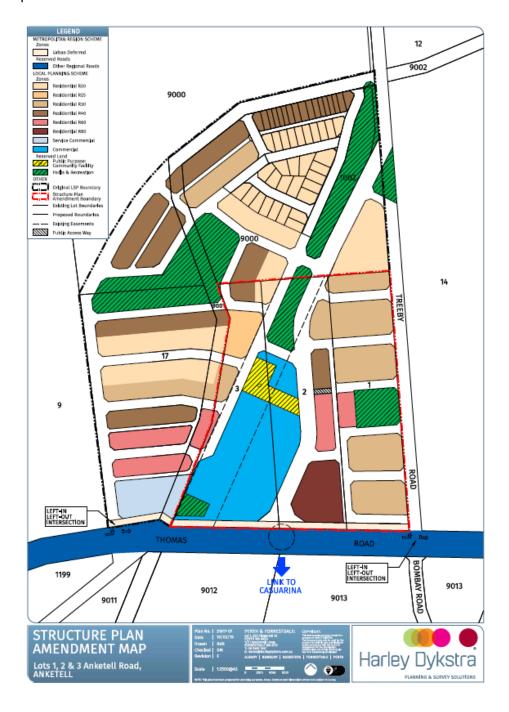
t18.174 mr01c Page 1



**Figure 1: Location of the Subject Site** 

# 2.0 Proposed Amended Local Structure Plan

The proposed amended LSP is shown in **Figure 2.** The proposed amendment proposes a shift, eastward, for the central north-south road that connects to Thomas Road in order to accommodate a slightly larger commercial precinct within Lots 2 and 3 and relocation of the proposed Community Facility to the northern part of the commercial precinct. This shift, in turn, will cause a necessary adjusting of lot sizes and shapes within Lot 1as well.



**Figure 2: Proposed Amended Local Structure Plan** 

**Table 1** summarises the proposed land uses for the LSP amended area for both the original approved and the amended LSP. According to this table the proposed commercial area will increase by about  $8,250~\text{m}^2$ . The total residential dwellings will increase by about 42~lots.

Table 1: The proposed land uses within the approved WAPC and amended LSP areas for Anketell South

| Land Use              | Approved WAPC LSP | Amended LSP |  |  |
|-----------------------|-------------------|-------------|--|--|
| Residential dwellings | 140 Lots          | 182 Lots    |  |  |
| Commercial area       | 1.59 ha           | 2.4149 ha   |  |  |

# 3.0 Existing Situation

## 3.1 Existing Land Use

The site currently is mainly vacant. Adjacent land uses to the north, east and south are also vacant lands. The Kwinana Freeway forms the western boundary of the Anketell South LSP area.

## 3.2 Existing Road Network

**Thomas Road** is classified as a District Distributor A Road in the Main Roads WA Functional Road Hierarchy document and is constructed as a single carriageway road with 90kmh posted speed limit. The existing traffic counts on Thomas Road in the vicinity of the LSP area sourced from Main Roads WA indicated that Thomas Road carried about 15,600vpd in 2014/2015. Figure 3 illustrates the existing traffic flow (for both directions) along Thomas Road during a typical day.

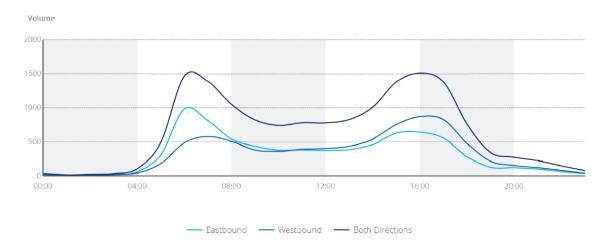
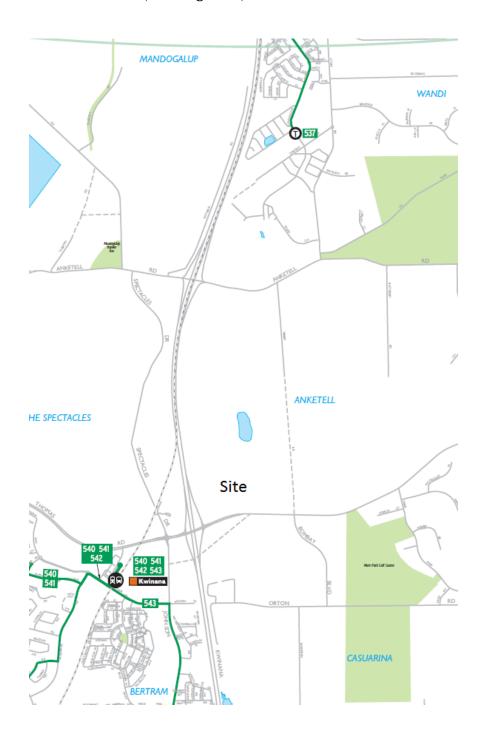


Figure 3: Existing traffic counts on Thomas Road (Source: Main Roads WA)

**Kwinana Freeway** is classified as a Primary Distributor and is reserved as a Primary Regional Road in the MRS. It is currently constructed as four-lanes divided carriageway in this area and has a posted speed limit of 100km/h. The closest freeway interchange is at Thomas Road, just to the west of the Anketell South LSP area. The most recent available Main Roads WA traffic count for the Freeway in this area was approximately 83,000vpd (average weekday traffic, south of Rowley Road) in 2017/2018.

# 3.3 Public Transport

Currently, there are no bus routes servicing the subject site. The closest public transport facility is the Kwinana Train Station which is located approximately 1.5km to the west of the LSP area (refer **Figure 4**).



**Figure 4: Existing Bus Routes** 

# 3.4 Pedestrian and Cyclist Facilities

Currently, there is a 2.5m Principal Shared Path (PSP) on the western side of Kwinana Freeway. The Department of Transport's Perth Bike Map series (see **Figure 5**) also shows the existing PSP along Kwinana Freeway in the vicinity of the LSP area.

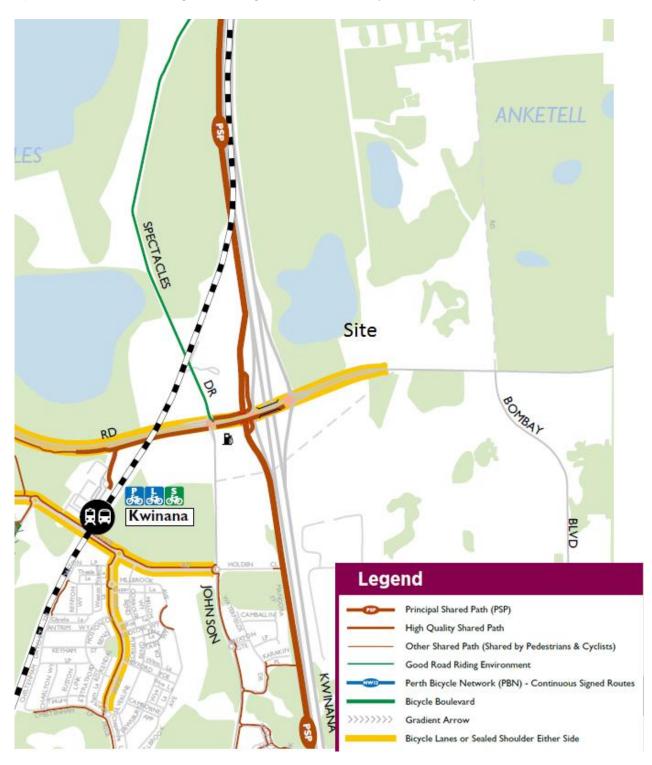


Figure 5: Bike Map

## 3.5 Changes to the Surrounding Road Network

According to the information obtained from Main Roads WA, ultimately Thomas Road is planned to be constructed to four lanes divided standard fronting the LSP area. The planned intersection arrangements along Thomas Road to the east of the Kwinana Freeway for the ultimate situation currently include a dual lane roundabout intersection at Thomas Road/ N-S spine road and a pair of left in/ left out intersections both sided of the proposed roundabout.

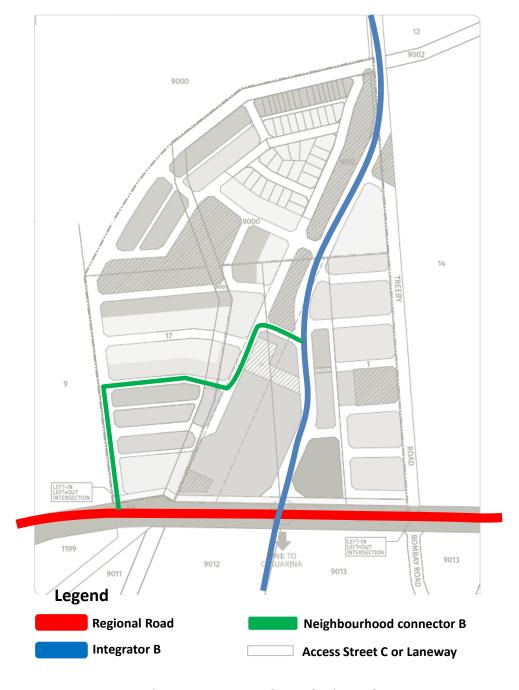
## 3.6 Public Transport Network Planning

According to the information obtained from Public Transport Authority (PTA), it is anticipated that Bus route 527 would run along the continuation of Honeywood Avenue and would serve Wandi and Anketell LSP areas including the amended LSP area and provide connectivity to Aubin Grove and Kwinana stations.

# 4.0 Proposed Transport Network

# 4.1 Road Hierarchy

The proposed hierarchy of roads within the Anketell South LSP area was established through transport modelling undertaken for the amended LSP area and is illustrated in Figure 6. The proposed road hierarchy was based on traffic projections and the road classification in Liveable Neighbourhoods document (2009).



**Figure 6: Proposed Road Hierarchy** 

Modelling and analysis undertaken for the amended LSP area indicates that the proposed amendments would not change the projected traffic volumes of the original LSP road network in any significant way and the original road hierarchy shown in the current WAPC approved LSP (refer Appendix A) is still valid for the majority of the amended LSP road network including the main north-south spine road.

#### **Integrator Roads**

The main spine road through the LSP area is classified as Integrator B road, with a cross section of 25.2m as illustrated in **Figure 7**. This cross section is constructed along the exiting sections of Honeywood Avenue (further north through Wandi LSP) and would be extended through all the new developments within Wandi and Anketell localities.

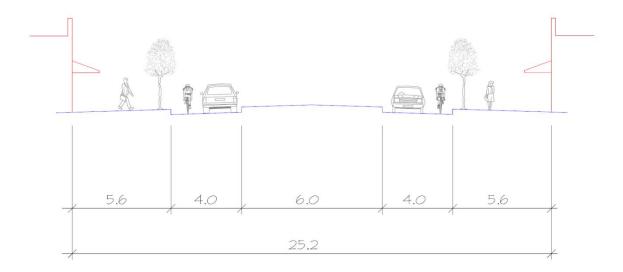


Figure 7: Proposed Cross Section for the Main North-South Spine Road

#### **Neighbourhood Connectors**

The roads abutting the proposed commercial development and connecting to the proposed left in/ left out intersection on Thomas Road (to the west) are expected to carry between 1,000vpd to 3,000vpd and therefore are classified as Neighbourhood Connector B road. According to the condition on the recent March 2018 subdivision approval the western north south spine road which connects to the proposed left in/ left out intersection on Thomas Road should be constructed as 16.0m road reserve.

#### **Access Streets**

The remainder of the local road network is classified as Access Street C (with 15.0m road reserve and 13.0m road reserve widths where services are only required on one side of the road consistent with the City of Kwinana's requirements) or laneways. It must be noted that the projected traffic volumes are expected to be less than 1,000vpd for the majority of the roads within the LSP area and therefore

Access Street D roads with typical road reserve of 14.2m would accommodate the projected traffic volumes, however due to the City of Kwinana requirements 15.0m wide road reserves have been considered for these roads.

## 4.2 Public Transport

According to the information obtained from Public Transport Authority (PTA), it is anticipated that Anketell LSP area to the east of Kwinana Freeway would be served by bus routes 527 when the demand arises.

The existing bus route 527 is most likely to traverse southbound on continuation of Honeywood Avenue towards Anketell LSP area in future and serve the amended LSP area.

## 4.3 Pedestrian and Cyclist Facilities

**Figure 8** outlines the proposed pedestrian and cyclist network for the amended Anketell South LSP area. In accordance with the Liveable Neighbourhoods document, shared paths are proposed on one side of the main north-south spine road with a footpath on the other side.

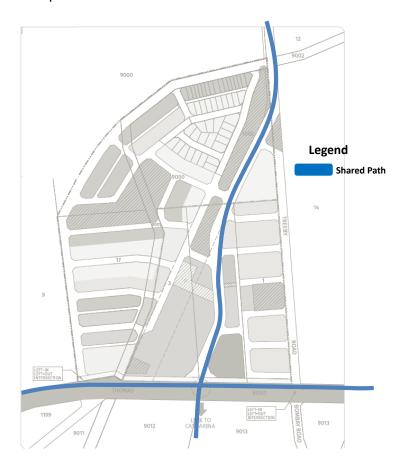


Figure 8: Proposed Pedestrian and Cyclist Road Network

# 4.4 Integration with Surrounding Area

The proposed land uses for the amended LSP area are predominantly residential and commercial which are in line with the original land uses adopted in this area including the original LSP.

# **5.0** Analysis of the Transport Network

#### 5.1 Assessment Period

The assessment year that has been adopted for this analysis is 2031, with the assumption of full development of Anketell, Wandi and north cell of Casuarina LSP areas.

## 5.2 Traffic generation and distribution

Transcore has developed a subregional strategic transport model for year 2031 based on weekday traffic flows for this area using the EMME transport modelling software package.

The daily traffic generation rate used for this transport assessment is 8 vehicle trips per day (vpd) per dwelling, which corresponds to peak hour trip generation rates recommended in the Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Development (2016). Therefore, the anticipated additional 42 residential dwellings due to the proposed amendments would increase the traffic generation of the residential component of the LSP by 336vpd or about 34vph.

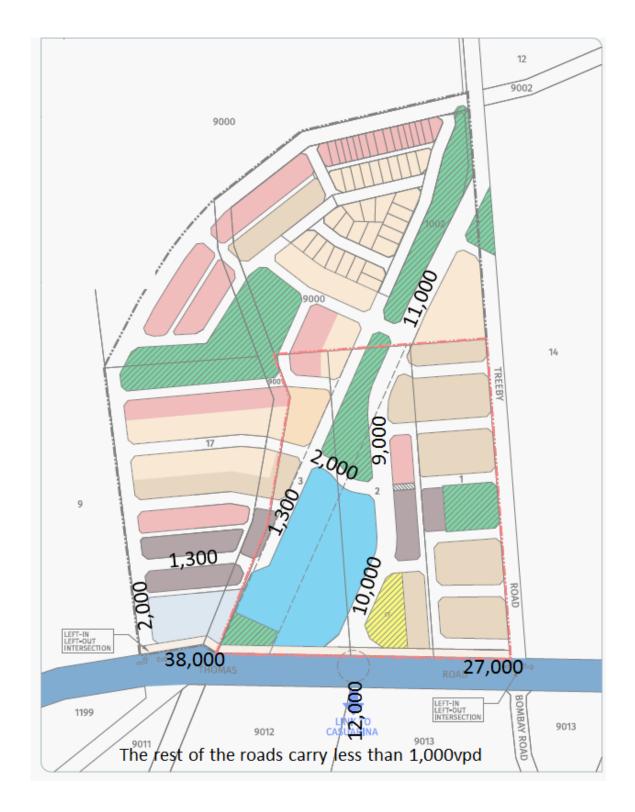
According to the information provided to Transcore the total area of the commercial site would increase by approximately 8,250m<sup>2</sup> which would translate to about 4,125m<sup>2</sup> additional GFA assuming that about 50% of the total additional area would be constructed. The additional 4,125m<sup>2</sup> GFA of commercial area would generate about 3,220vpd assuming average trip rate of about 78vpd per 100sqm GFA.

Accordingly the total traffic increase due to the proposed amendments would be approximately 3,556vpd (3,220 + 336 = 3,556).

The distribution of the LSP traffic is determined by the transport model in proportion to the location of trip productions and attractors for work trips, education trips and other trips (shopping, social, recreational, etc.) among all the land uses in the traffic model.

#### 5.3 Traffic Flow Forecasts

**Figure 9** illustrates the total projected traffic volumes for the amended LSP area. This figure includes the background traffic. The additional 3,556vpd would be distributed to the surrounding road network including the main north-south spine road; however this additional traffic is not expected to change the road hierarchy and anticipated cross section of the main north-south spine road.



**Figure 9: Projected Daily Traffic Volumes** 

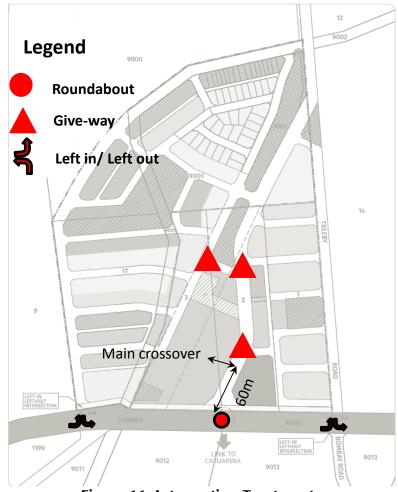
**Figure 10** shows the projected traffic volumes (vpd) at the Commercial Centre Crossovers.



Figure 10: Projected traffic volumes (vpd) at the Commercial Centre Crossovers

#### 5.4 Roads and Intersections

The proposed road network to accommodate the amended LSP traffic volumes has been detailed in section 4 of this report, including the details of the proposed road hierarchy in section 4.1. **Figure 11** details the proposed intersection controls for key intersections within the amended LSP area. This figure also shows the proposed main commercial development crossover which is expected to operate as full movement priority controlled T-intersection. The proposed main commercial development crossover on north-south spine road would be located about 60m to the north of the proposed roundabout intersection on Thomas Road.



**Figure 11: Intersection Treatments** 

## 5.5 Intersection Analysis

Capacity analysis is undertaken using the SIDRA Network computer software package for the proposed roundabout intersection on Thomas Road and the main development crossover on the spine road. SIDRA is an intersection modelling tool commonly used by traffic engineers for all types of intersections. SIDRA outputs are presented in the form of Degree of Saturation, Level of Service, Average Delay and 95% Queue. These characteristics are defined as follows:

- Degree of Saturation is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The Degree of Saturation ranges from close to zero for infrequent traffic flow up to one for saturated flow or capacity.
- Level of Service is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. In general, there are 6 levels of service, designated from A to F, with Level of Service A representing the best operating condition (i.e. free flow) and Level of Service F the worst (i.e. forced or breakdown flow).
- Average Delay is the average of all travel time delays for vehicles through the intersection.

• 95% Queue is the queue length below which 95% of all observed queue lengths fall.

The results of the SIDRA analysis are summarised in **Appendix B**. The proposed roundabout intersection layout in SIDRA is also shown in Figure B1.

The SIDRA analysis indicates that the proposed roundabout intersection of Thomas Road/ Spine Road will operate satisfactorily with overall level of service C (good operation). The reported 95% queue on spine road (SB) is about 55m and therefore this queue back does not extend to the commercial centre crossover on spine road. The SIDRA Network Queue Storage Ratio diagram, presented in Figure 12, confirms sufficient separation distance between the roundabout intersection on Thomas Road and the proposed main commercial centre crossover. The diagram presents the 95% queue as a ratio of available storage distance between the intersection and the crossover. It should be noted that the average queue distance on spine road (SB) is approximately 22m. Therefore the reported 55m queue would happen occasionally during the PM peak hours.

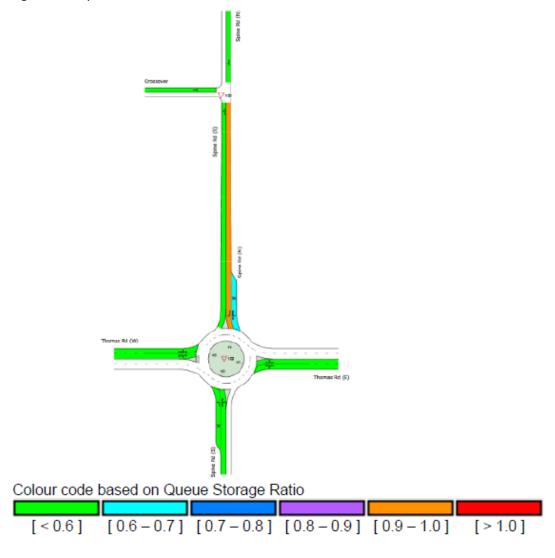


Figure 12: 95% queue distance

## 5.6 Access to Frontage Properties

The WAPC Liveable Neighbourhoods policy requires that "Developments along integrator B and neighbourhood connector streets with ultimate vehicle volumes over 5000 vehicles per day should be designed either so vehicles entering the street can do so travelling forward, or are provided with alternative forms of vehicle access. Wider lots with paired driveways and protected reversing areas in the parking lane may be used on streets with up to 7000 vehicles per day."

There are no direct residential property access on the amended LSP road network with projected traffic volumes of over 5,000vpd.

## 5.7 Pedestrian / Cycle Networks

The proposed network of shared paths for pedestrians and cyclists is described in section 4.3 of this transport assessment. This network of paths will provide an excellent level of accessibility and permeability for pedestrians and cyclists within the amended LSP area, and provide connections to existing and proposed PSPs along the Freeway and neighbouring precincts.

## 5.8 Access to Public Transport

At this stage of the planning process the details of the bus routes and the location of bus stops are not known. However, in these circumstances the WAPC *Transport Assessment Guidelines for Developments* (2006) suggest that it is desirable for at least 90 per cent of dwellings to be within 400m straight line distance of a bus route. The potential future bus route proposed along the main north-south spine road (continuation of Honeywood Avenue) would service the majority of the residential and commercial lots within the amended LSP area.

# 6.0 Conclusions

The subject of this TIA is the proposed amended Anketell South Local Structure Plan. The amendments include a shift, eastward, for the central north-south road that connects to Thomas Road in order to accommodate a larger commercial precinct and relocate the proposed Community Facility within the northern part of the proposed commercial precinct. This shift, in turn, will cause necessary adjustments to the lot sizes and shapes to the east of the central north-south road.

Transport modelling and analysis undertaken for the amended LSP area indicates that the proposed amendments would not significantly change the projected traffic volumes of the original LSP road network and the original road hierarchy shown in the current WAPC approved LSP area (refer Appendix A) is still valid for the majority of the roads within the amended LSP area.

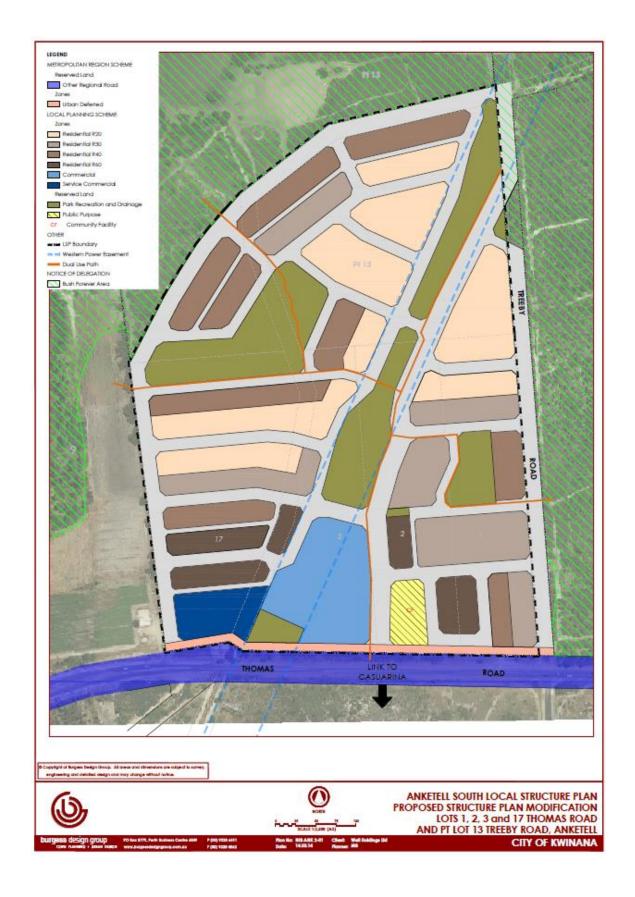
The SIDRA analysis indicates that the proposed roundabout intersection on Thomas Road will operate satisfactorily with overall level of service C (good operation).

The proposed main commercial centre crossover on the spine road will operate at level of service A with minimal delays and queuing. During typical operations, no queues would extend back from the roundabout intersection on Thomas Road to the crossover which would be located about 60m to the north of the proposed roundabout intersection on Thomas Road.

The road network of the amended LSP area has been planned based on WAPC Liveable Neighbourhoods guidelines to accommodate the future traffic flows that will be generated within this area.

# **Appendix A**

WAPC CURRENT APPROVED ANKETELL SOUTH LSP



# **Appendix B**

# **INTERSECTION ANALYSIS**

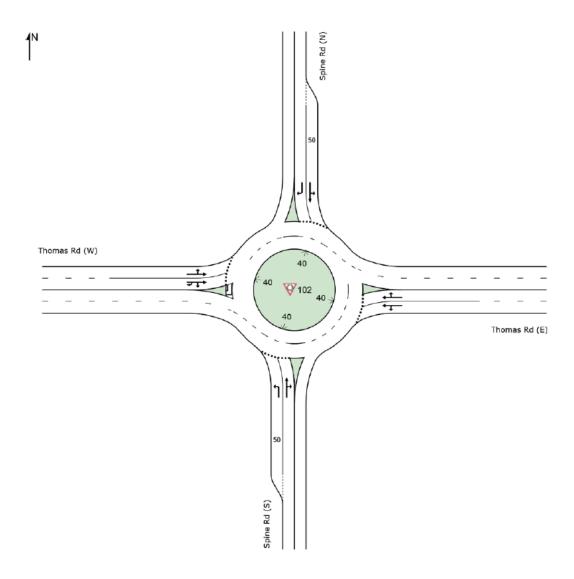


Figure B1: Proposed Thomas Road roundabout intersection

Table B1: SIDRA results - Proposed Thomas Road roundabout intersection (2031 typical peak hour)

| Mov       | emen     | t Perform      | ance | - Vehi         | cles    |              |                  |                     |                |       |                 |                   |          |               |
|-----------|----------|----------------|------|----------------|---------|--------------|------------------|---------------------|----------------|-------|-----------------|-------------------|----------|---------------|
| Mov<br>ID | Turn     |                |      |                |         | Deg.<br>Satn | Average<br>Delay | Level of<br>Service | 95% Ba<br>Quei | ıe    | Prop.<br>Queued | Effective<br>Stop | Aver. A  | e             |
|           |          | Total<br>veh/h |      | Total<br>veh/h | HV<br>% | v/c          |                  |                     | Vehicles D     |       |                 | Rate              | Cycles S | Speed<br>km/h |
| South     | n: Spin  | e Rd (S)       | 70   | ven/n          | 70      | V/C          | sec              |                     | ven            | m     |                 |                   |          | Km/n          |
| 1         | L2       | 130            | 2.0  | 130            | 2.0     | 0.315        | 9.6              | LOS A               | 1.7            | 12.1  | 0.87            | 0.93              | 0.90     | 52.1          |
| 2         | T1       | 326            | 2.0  | 326            | 2.0     | 0.679        | 13.4             | LOS B               | 5.7            | 40.4  | 0.98            | 1.13              | 1.38     | 42.0          |
| 3         | R2       | 64             | 2.0  | 64             | 2.0     | 0.679        | 20.0             | LOSC                | 5.7            | 40.4  | 0.98            | 1.13              | 1.38     | 51.4          |
| Appro     |          | 520            | 2.0  | 520            | 2.0     | 0.679        | 13.3             | LOS B               | 5.7            | 40.4  | 0.95            | 1.08              | 1.26     | 46.6          |
|           |          | as Rd (E)      |      |                |         |              |                  |                     |                |       |                 |                   |          |               |
| 4         | L2       | 60             | 2.0  | 60             | 2.0     | 0.966        | 33.4             | LOSC                | 23.0           | 176.3 | 1.00            | 1.84              | 3.22     | 39.4          |
| 5         | T1       | 1300           | 12.0 | 1300           | 12.0    | 0.966        | 35.7             | LOS D               | 23.0           | 176.3 | 1.00            | 1.82              | 3.23     | 39.5          |
| 6         | R2       | 1300           | 2.0  | 1300           | 2.0     | 0.966        | 44.6             | LOS D               | 19.3           | 148.5 | 1.00            | 1.82              | 3.24     | 27.8          |
| Appro     |          | 1373           |      | 1373           | 11.5    | 0.966        | 35.7             | LOS D               | 23.0           | 176.3 | 1.00            | 1.82              | 3.24     | 39.4          |
| Appro     | Jacii    | 1373           | 11.5 | 13/3           | 11.5    | 0.900        | 35.7             | LO3 D               | 23.0           | 170.5 | 1.00            | 1.02              | 3.23     | 39.4          |
| North     | ı: Spine | e Rd (N)       |      |                |         |              |                  |                     |                |       |                 |                   |          |               |
| 7         | L2       | 11             | 2.0  | 11             | 2.0     | 0.583        | 12.2             | LOS B               | 4.3            | 30.6  | 0.98            | 1.07              | 1.21     | 45.4          |
| 8         | T1       | 273            | 2.0  | 273            | 2.0     | 0.583        | 12.2             | LOS B               | 4.3            | 30.6  | 0.98            | 1.07              | 1.21     | 47.9          |
| 9         | R2       | 275            | 2.0  | 275            | 2.0     | 0.888        | 40.8             | LOS D               | 7.7            | 55.0  | 0.98            | 1.30              | 1.97     | 30.8          |
| Appro     | oach     | 559            | 2.0  | 559            | 2.0     | 0.888        | 26.2             | LOS C               | 7.7            | 55.0  | 0.98            | 1.18              | 1.59     | 37.4          |
| West      | : Thom   | nas Rd (W)     |      |                |         |              |                  |                     |                |       |                 |                   |          |               |
| 10        | L2       | 125            | 2.0  | 125            | 2.0     | 0.827        | 9.7              | LOS A               | 15.2           | 116.0 | 1.00            | 0.95              | 1.29     | 46.2          |
| 11        | T1       | 1250           | 12.0 | 1250           | 12.0    | 0.827        | 10.2             | LOS B               | 15.2           | 116.0 | 1.00            | 0.97              | 1.32     | 52.7          |
| 12        | R2       | 430            | 2.0  | 430            | 2.0     | 0.827        | 18.4             | LOS B               | 14.6           | 106.8 | 1.00            | 1.04              | 1.39     | 50.2          |
| 12u       | U        | 110            | 2.0  | 110            | 2.0     | 0.827        | 20.9             | LOS C               | 14.6           | 106.8 | 1.00            | 1.04              | 1.39     | 51.7          |
| Appro     | oach     | 1915           | 8.5  | 1915           | 8.5     | 0.827        | 12.6             | LOS B               | 15.2           | 116.0 | 1.00            | 0.99              | 1.34     | 51.8          |
| All Ve    | ehicles  | 4367           | 7.8  | 4367           | 7.8     | 0.966        | 21.7             | LOS C               | 23.0           | 176.3 | 0.99            | 1.29              | 1.95     | 44.9          |

Figure B2: SIDRA results - Proposed commercial crossover on spine road (2031 typical peak hour)

| Move      | ement   | Perform        | ance · | - Vehi         | cles    |              |                  |                     |                   |              |                 |                   |                |               |
|-----------|---------|----------------|--------|----------------|---------|--------------|------------------|---------------------|-------------------|--------------|-----------------|-------------------|----------------|---------------|
| Mov<br>ID | Turn    | Demand         |        |                |         | Deg.<br>Satn | Average<br>Delay | Level of<br>Service | 95% Ba<br>Queu    | ie           | Prop.<br>Queued | Effective<br>Stop | Aver. /<br>No. | Averag<br>e   |
|           |         | Total<br>veh/h |        | Total<br>veh/h | HV<br>% | v/c          | sec              |                     | Vehicles D<br>veh | istance<br>m |                 | Rate              | Cycles S       | Speed<br>km/h |
| South     | : Spine | e Rd (S)       |        |                |         |              |                  |                     |                   |              |                 |                   |                |               |
| 1         | L2      | 105            | 2.0    | 105            | 2.0     | 0.255        | 4.2              | LOS A               | 0.0               | 0.0          | 0.00            | 0.13              | 0.00           | 55.5          |
| 2         | T1      | 381            | 2.0    | 381            | 2.0     | 0.255        | 0.0              | LOS A               | 0.0               | 0.0          | 0.00            | 0.13              | 0.00           | 58.4          |
| Appro     | ach     | 486            | 2.0    | 486            | 2.0     | 0.255        | 0.9              | NA                  | 0.0               | 0.0          | 0.00            | 0.13              | 0.00           | 57.8          |
| North     | : Spine | Rd (N)         |        |                |         |              |                  |                     |                   |              |                 |                   |                |               |
| 8         | T1      | 438            | 2.0    | 438            | 2.0     | 0.293        | 0.6              | LOS A               | 0.7               | 5.2          | 0.18            | 0.08              | 0.19           | 57.3          |
| 9         | R2      | 57             | 2.0    | 57             | 2.0     | 0.293        | 8.2              | LOS A               | 0.7               | 5.2          | 0.18            | 0.08              | 0.19           | 56.3          |
| Appro     | ach     | 495            | 2.0    | 495            | 2.0     | 0.293        | 1.4              | NA                  | 0.7               | 5.2          | 0.18            | 0.08              | 0.19           | 57.1          |
| West:     | Cross   | over           |        |                |         |              |                  |                     |                   |              |                 |                   |                |               |
| 10        | L2      | 57             | 2.0    | 57             | 2.0     | 0.178        | 7.1              | LOS A               | 0.5               | 3.8          | 0.41            | 0.74              | 0.41           | 52.4          |
| 12        | R2      | 151            | 2.0    | 151            | 2.0     | 0.178        | 6.9              | LOS A               | 0.5               | 3.8          | 0.41            | 0.74              | 0.41           | 48.8          |
| Appro     | ach     | 207            | 2.0    | 207            | 2.0     | 0.178        | 7.0              | LOS A               | 0.5               | 3.8          | 0.41            | 0.74              | 0.41           | 50.3          |
| All Ve    | hicles  | 1188           | 2.0    | 1188           | 2.0     | 0.293        | 2.2              | NA                  | 0.7               | 5.2          | 0.15            | 0.21              | 0.15           | 55.9          |

# 17.2 Joint Development Assessment Panel Application for General Industry – Lithium Hydroxide Processing Plant – Lot 15 Mason Road, Kwinana Beach

#### **DECLARATION OF INTEREST:**

Mayor Carol Adams declared an impartiality interest due to the applicant for the Lithium Hydroxide Processing Plant being a member of the Kwinana Industries Council, whom is her husband's employer. Further, the Mayor is a member of the Metro South Joint Development Assessment Panel who will decide the application when presented for consideration in due course.

Councillor Matthew Rowse declared an impartiality interest due to his involvement with the Joint Development Assessment Panel.

#### SUMMARY:

The City has received an application for a Lithium Hydroxide Processing Plant (LHPP) at Lot 15 Mason Road, Kwinana Beach (subject site). The application proposes to construct and operate a LHPP on the northern portion of the subject site (Refer to Attachment 1 and 2 of the Responsible Authority Report (RAR)). The application has been assessed against relevant planning legislation and is considered to meet the requirements of the City's Local Planning Scheme No. 2 (LPS2).

As the estimated development cost of this application is in excess of \$10 million (the estimated cost of development is \$600 million), the City of Kwinana (the City) does not have delegation to determine the application. The application is therefore required to be referred to the Metro South West Joint Development Assessment Panel (JDAP) for determination. The application is scheduled to be considered by the JDAP at a meeting in April 2020. City Officers have prepared the attached Responsible Authority Report (RAR) in accordance with the *Planning and Development (Development Assessment Panels)* Regulations 2011 and it is attached for Council's consideration and adoption.

On 30 March 2020, City Officers provided an overview of the potential impact of the application on the local road infrastructure to the Elected Members. The presentation outlined the current traffic volume on surrounding roads by vehicle type and the potential impact of the development on current infrastructure. City Officers outlined the need to include conditions within the development approval to ensure that the impact to the road network is confirmed and responsibility attributed accordingly.

#### **OFFICER RECOMMENDATION:**

That Council resolve to support the development application for a Lithium Hydroxide Processing Plant at Lot 15 Mason Road, Kwinana Beach as per the recommendation outlined in the Responsible Authority Report to the Metro South West Joint Development Assessment Panel.

#### **DISCUSSION:**

The LHPP is part of an integrated project consisting of a mine, concentrator and the proposed processing plant to produce battery quality lithium hydroxide. The associated mine and concentrator are located in Mt Holland, approximately 500 kilometres east of Perth. The project, once operational, will have a nominal capacity of approximately 129 tonnes per day of battery quality lithium hydroxide monohydrate, which will be sold into the global battery market.

In addition to the highly complex infrastructure proposed for the actual processing plant, the following key non-process components are proposed as part of the development:

- Administration Building;
- Laboratory;
- Switch room
- Warehouse;
- Workshop:
- Access-ways and Car parks; and
- Landscaping

An assessment has been undertaken against the requirements of LPS2 and relevant Local Planning Policies. The proposal complies with all relevant requirements set out in LPS2. Furthermore, the proposal has been considered against the following Local Planning Policies:

- Local Planning Policy 5 Development Contribution Towards Public Art
- Local Planning Policy 8 Designing Out Crime
- Local Planning Policy 11 Site Requirements and Standards for Development within Industrial Zones.

The development is considered to meet the objectives of each of the above policies. A number of conditions are recommended to further ensure the provisions of the policies are sufficiently addressed. A detailed assessment of the application against LPS2 and the above policies is provided on pages 11 through 16 of the attached RAR.

The proposed development is expected to deliver significant economic benefits to Kwinana and support complementary industries within the Kwinana Industrial Area. With a substantial estimated construction cost of \$600 million, the applicant estimates that approximately 600 direct jobs may be created during construction and construction of the processing plant and the associated supply chain. Once the site is operational, the refinery will employ over 118 workers, split over two shifts.

As part of the process, the application was also referred to various external agencies and government departments. The responses that have been received by the City are further discussed in the RAR.

Considering the estimated development cost of the proposed development exceeds \$10 million, the application is required to be referred to the JDAP for determination. The application is scheduled to be considered by the JDAP at a meeting in April 2020. The City is required to submit the RAR to the DAP Secretariat on 27 March 2020.

The application has been referred to Council as City Officers do not have delegation to prepare the RAR under the Development Assessment Panel Regulations. Council should note that if it wishes to modify or make an alternative recommendation to that contained within the RAR, this should be in the form of a separate recommendation which will be included as an alternative recommendation within the RAR.

#### **LEGAL/POLICY IMPLICATIONS:**

For the purpose of Councillors considering a financial or impartiality interest only, the proponent is Urbis Pty Ltd and Covalent Lithium and the land owner is Development WA.

#### Legislation

- Planning and Development Act 2005
- Planning and Development (Local Planning Schemes) Regulations 2015
- Planning and Development (Development Assessment Panels) Regulations 2015
- Environmental Protection Act 1986 and relevant Regulations
- Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992
- Health (Miscellaneous Provisions) Act 1911 and Regulations

#### State Government Planning Policies

• State Planning Policy 4.1 – State Industrial Buffer Policy

#### **Local Planning Scheme**

City of Kwinana, Local Planning Scheme No. 2

#### Local Planning Policies

- Local Planning Policy 5 Development Contribution Towards Public Art
- Local Planning Policy 8 Designing Out Crime
- Local Planning Policy 11 Site Requirements and Standards for Development within Industrial Zones.

#### FINANCIAL/BUDGET IMPLICATIONS:

There are no financial or budget implications as a result of this application.

#### **ASSET MANAGEMENT IMPLICATIONS:**

There are no asset management implications as a result of this application.

#### **ENVIRONMENTAL IMPLICATIONS:**

The proposed facility is required to obtain a Works Approval, Licence and Clearing Permit from the Department of Water and Environmental Regulation (DWER) prior to the commencement of operations, which will address environmental issues. The majority of existing vegetation on the site is proposed to be retained. Where clearing of vegetation is proposed, a clearing permit is required to be applied for and approved by DWER.

#### STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective detailed in the Strategic Community Plan.

| Plan                     | Outcome                  | Objective                 |
|--------------------------|--------------------------|---------------------------|
| Strategic Community Plan | A thriving local economy | 2.5 Stimulate economic    |
|                          |                          | development and encourage |
|                          |                          | diversification.          |

#### **COMMUNITY ENGAGEMENT:**

The proposed land use is a permitted use under Table 1 – Zoning and Use Classes of Local Planning Scheme No.2, meaning advertising of the application is not required. However, due to the scale of the project, the application was advertised to all adjoining property owners and occupiers for a period of 21 days. One submission in support of the application was received.

#### **PUBLIC HEALTH IMPLICATIONS**

The development will require a Dangerous Good Licence to be obtained from the Department of Mines, Industry Regulation and Safety, which will address public health and risk matters.

#### **RISK IMPLICATIONS:**

The risk implications in relation to this proposal are as follows:

| Risk Event                | Appeal of the JDAP's decision or conditions of approval imposed.   |
|---------------------------|--|
| Risk Theme                | Failure to fulfil statutory regulations or compliance requirements Providing inaccurate advice/ information. |
| Risk Effect/Impact        | Reputation<br>Compliance   |
| Risk Assessment Context   | Strategic  |
| Consequence               | Minor  |
| Likelihood                | Possible   |
| Rating (before treatment) | Medium   |

| Risk Treatment in place                      | Reduce - mitigate risk  |
|--|---|
| Response to risk treatment required/in place | Work instructions in place and checklists used when assessing the application. The recommendation on the application is justified on the basis of compliance with the Local Planning Scheme, and the discretion afforded to the JDAP to vary these documents. Liaising with the applicant throughout the application process. |
| Rating (after treatment)                     | Low   |

# COUNCIL DECISION

135

**MOVED CR M ROWSE** 

#### **SECONDED CR M KEARNEY**

#### **That Council:**

- Defer the matter to a future Ordinary Council Meeting to enable the applicant to undertake further assessments to address the traffic and access requirements of the application and inform the conditions of any recommendation for approval.
- 2. Advise the Metro South West Joint Development Application Assessment Panel of the applicant's request.

CARRIED 8/0

NOTE – That the Officer Recommendation has been amended at the applicant's request.



## Form 1 - Responsible Authority Report

(Regulation 12)

| Property Location:         | Lot 15 Mason Road Kwinana Beach  |
|----------------------------|--|
| Development Description:   | Lithium Hydroxide Processing Plant   |
| DAP Name:                  | Metro South-West   |
| Applicant:                 | Urbis Pty Ltd and Covalent Lithium   |
| Owner:                     | Development WA   |
| Value of Development:      | \$600 Million  |
| LG Reference:              | DA9534   |
| Responsible Authority:     | City of Kwinana  |
| Authorising Officer:       | Jared Veenendaal – Planning Officer  |
| DAP File No:               | DAP/20/01738   |
| Report Due Date:           | 27 March 2020  |
| Application Received Date: | 10 January 2020  |
| Application Process Days:  | 90 Days  |
| Attachment(s):             | 1: Aerial Photograph/Location Plan 2: Site Plan – North 3: Site Plan – South 4: Site Elevations – North East 5: Site Elevations – North West 6: Site Sections 7: Administration Area – Landscaping Plan 8: Administration Area – Floor Plans 9: Administration Building – Floor Plans 10: Administration Building - Elevation Plans 11: Laboratory + Warehouse Elevations Plans (Administration Area) 12: Traffic Movements Plan 13: Stormwater Drainage Plan 14: Copy of DWER Responses 15: Copy of DFES Response 16: Council Minutes |

#### Officer Recommendation:

That the Metro South West Joint Development Assessment Panel resolves to:

1. **Approve** DAP Application reference DAP/20/01738 and accompanying plans:

Drawing No: Figure 1.1 – General Arrangement – Development Application Drawing No: Figure 1.2 – General Arrangement – Development Application

Drawing No: Figure 1.3 – Isometric View – North East Drawing No: Figure 1.4 – Isometric View – North West

Drawing No: Figure 1.5 - Sections

Drawing No: COV-002-AR-DWG-0001 – Administration Area Site Plan Drawing No: COV-002-AR-DWG-0002 – Administration Area Floor Plans Drawing No: COV-002-AR-DWG-0007 – Administration Area Elevations

Drawing No: Figure 1.7 – Traffic Movements – Layout

Drawing No: Figure 1.6 – Stormwater Drainage

in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and Clause 6.1 of the City of Kwinana Local Planning Scheme No.2, subject to the following conditions and advice:

#### **Conditions**

- 1. This decision constitutes planning approval only and is valid for a period of two (2) years from the date of approval. If the subject development is not substantially commenced within the two (2) year period, the approval shall lapse and be of no further effect.
- 2. The proponent shall meet the requirements of Local Planning Policy 5 Development Contribution Towards Public Art through one of the following options:
  - a. Prior to the lodgement of a building permit, submit a Public Art Report in accordance with LPP No. 5 to the City of Kwinana that details the public art to be developed as a component of the development. Prior to the occupation of the development, the approved artwork shall be installed on site to the satisfaction of the City of Kwinana; or
  - b. Prior to the commencement of works, the proponent shall provide a financial contribution of \$500,000 to the City of Kwinana in lieu of installing art work on site to the satisfaction of the City of Kwinana.
  - 3. The provision of vehicle parking bays as defined on the approved development plans in accordance with AS2890, to be clearly marked on the ground and constructed of bitumen, brick or concrete and drained prior to occupation to the satisfaction of the City of Kwinana.
  - 4. A detailed Landscaping Plan for the entire development area which outlines the proposed species and densities of plants to be used at the time of planting in addition to showing existing vegetation for retention on site, is required to be submitted to the City of Kwinana for approval prior to commencement of works on site. The landscaping plan shall be implemented to the satisfaction of the City prior to the occupation of the development.
  - 5. Existing and proposed landscaping areas shall be installed prior to the occupation of the proposed development and maintained thereafter to the satisfaction of the City of Kwinana.
  - 6. A schedule of colours, materials, textures and finishes for the proposed Administration Building shall be submitted for approval prior to the submission of a building permit to the satisfaction of the City of Kwinana.
  - 7. The proposed parking area adjacent to the Administration Building which is to be used by the public is to be adequately lit in accordance with the requirements of Local Planning Policy 8: Designing out Crime. Details are to be submitted at Building Permit stage.
  - 8. Ancillary structures, equipment and utilities near or adjacent to public access (including the proposed HV switchyard) shall be screened from public view at ground level to the satisfaction of the City of Kwinana.
  - 9. The development shall at all times comply with the requirements and recommendations of the Bushfire Management Plan prepared by Strategen-

- JBS&G and dated 3 March 2020, reference number: 56663/125,395 (Rev 2) to the satisfaction of the City of Kwinana.
- 10. A stormwater management plan is to be designed and constructed consistent with the Stormwater Management Manual for Western Australia (DoW, 2004-2007) and Water quality protection note 52: Stormwater management at industrial sites (DoW, 2010).
- 11. Vehicle crossovers shall be constructed and designed to the specifications and satisfaction of the City of Kwinana.
- 12. All trafficable areas are to be sealed and drained as per the City of Kwinana 'Trafficable Areas' Specifications to the satisfaction of the City of Kwinana.
- 13. All non-trafficable and lay-down areas within the subject lot being sealed and drained to comply with the City of Kwinana non-trafficable and lay-down area specifications.
- 14. The Traffic and Access Report (prepared by Uloth and Associates dated 5 December 2019) is to be amended to include the following:
  - a. The required incidental vehicle movements related to site operations and maintenance are to be addressed in the report and volumes added.
  - b. A swept path analysis and an alignment and geometry analysis for large vehicles travelling between Lot 15 Mason Road and the Aurizon Kwinana rail siding yard (adjacent to Mounsey Road).

Where the report identifies deficiencies, these are to be addressed in accordance with the relevant design standards and guidelines, to the satisfaction of the City of Kwinana. Construction of any required road upgrades shall be completed to the satisfaction of the City of Kwinana, prior to occupancy of the development.

15. Prior to commencement of construction works, pavement investigation is to be undertaken for the route between Lot 15 Mason Road and the Aurizon rail siding yard and a report detailing recommendations of any remedial works is to be submitted to and approved by the City of Kwinana. The report shall take into account the proposal to have 27.5m trucks transporting materials and waste between the sites. Any recommended works shall be designed and constructed to the satisfaction of the City of Kwinana and prior to the occupancy of the site.

The investigations, and any subsequent works shall cover the proposed route along Mason Road, Mandurah Road, Butcher Street, Yeates Road and Mounsey Road and associated intersections.

16. Mason Road is to be widened to the west at the intersection with Donaldson Road. The widening shall include an auxiliary lane that permits north bound traffic to continue through the intersection unhindered on the left hand side of vehicles that are stopped at the intersection making a right hand turn into Donaldson Road. Detailed design drawings shall be submitted to the City for approval prior to commencement of construction works and the widening is to

- be completed prior to occupancy of the development to the satisfaction of the City of Kwinana.
- 17. The proponent is to bund all loading/unloading or batching areas. Such areas are to be of impermeable surfaces, with all drainage being captured and treated on-site.
- 18. The proponent shall implement dust control measures for the duration of construction works and submit a Dust Management Plan for the ongoing operation of the site to the satisfaction of the City of Kwinana.
- 19. The proponent to make application to the City of Kwinana or Western Australia Department of Health for the installation of waste treatment systems, with nutrient retention capabilities for the servicing of sanitary ablutions.
- 20. The proponent to make application to the City of Kwinana for approval of a construction noise plan for out of hours work in accordance with the *Environmental Protection Noise Regulations*.
- 21. The development shall be connected to an adequate potable water supply in accordance with the standards required by the National Health and Medical Research Council Australian Drinking Water Guidelines (2004).
- 22. The proponent is to construct and operate the development in accordance with the recommendations of Section 8.2 of the GHD Covalent Lithium Pty Ltd Covalent Lithium Refinery Approvals Noise Impact Assessment (dated December 2019).

#### **Advice Notes**

- The proponent is advised that all future development must be submitted to the City of Kwinana prior to the commencement of works or alteration of land use.
- ii. In relation to vehicle crossovers, all crossovers are required to be angled at 90 degrees to the road way. The existing left turn entry slip lane for the proposed northern crossover is to be removed and the verge reinstated.
- iii. In relation to the required amendments to the Traffic and Access Report (prepared by Uloth and Associates, dated 5 December 2019), a swept path analysis and alignment and geometry analysis is to be undertaken for 19.0 metre Semi-Trailers and 27.5 metre B-Doubles between Lot 15 Mason Road to the Aurizon Kwinana rail siding yard (adjacent to Mounsey Road), assessing Butcher Street, Yeates Road and Mounsey Road. Designs are to be submitted to the City of Kwinana for approval, prior to commencement of construction works.
- iv. In relation to the widening of the intersection at Mason Road and Donaldson Road, road widening is required to the west side of Mason Road to permit north bound vehicles to pass on the left side of stationary vehicles on Mason Road, waiting to turn right into Donaldson Road. The widening shall be designed in accordance with relevant design standards and guidelines for the 70km/hr posted speed limit for Mason Road, to the satisfaction of the City. The design should be submitted to the City for approval prior to

- commencement of works on site. For further information the proponent is advised to contact the City of Kwinana Engineering Department.
- In relation to the application and installation of waste treatment systems, onsite effluent disposal systems shall be nutrient retentive to comply with the Health Act 1911 and Cockburn Sound Management Council requirements. Use of conventional septic systems is not permitted.
- vi. The proponent is advised that this approval is not a building permit, which constitutes a separate legislative requirement. Prior to any building work commencing on site, a building permit or building permit exemption must be obtained from the City of Kwinana. Significant penalties apply under the *Building Act 2011* for any failure to comply with this requirement.
- vii. The proponent is advised that a submission consisting of all the relevant information of the proposed structure and associated process areas should be forwarded to the Fire and Emergency Services Commissioner as per the requirements of WA Building Regulations 2012, 18b, Certificate of design compliance preliminary action (s.19(6)). DFES will be able to provide further advice once detailed designs are provided at the building permit stage.
- viii. The proponent should ensure that the proposed development complies with all other relevant legislation, including, but not limited to the:
  - a. Environmental Protection Act 1986,
  - b. Health Act and Regulations,
  - c. Environmental Protection (Noise) Regulations 1997,
  - d. Environmental Protection (Unauthorised Discharges) Regulations 2004
  - e. Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992.
  - f. Dangerous Goods Safety Act 2004 and Regulations,
  - g. Contaminated Sites Act 2003
  - h. National Construction Code.
- ix. The proponent is advised that any future signage for the development shall be submitted to the City of Kwinana prior to the commencement of works and comply with the City of Kwinana's Local Planning Policy No. 9: Advertising Signage.
- x. The proponent shall register with the City, water cooling and air handling systems that produce water droplets. Documentation of system efficacy is be provided to the City of Kwinana when requested.
- xi. Discharges of waste water via the Sepia Depression Ocean Outlet are subject to Ministerial Statement 665 under Part IV of the Environmental Protection Act.
- xii. The proponent is advised of the requirements under the Environmental Protection Act 1986 to obtain a clearing permit for the clearing of native vegetation from the Department of Water and Environmental Regulation. The Department advises that no exemption applies to the proposed development and a clearing permit is required. A copy of the advice from the Department is to be forwarded to the City for its records.

- xiii. The proponent is advised of the requirements under the Environmental Protection Act 1986 to obtain a Works Approval from the Department of Water and Environment Regulation prior to constructing a prescribed premises, and makes it an offence to cause an emission or discharge unless a licence or registration is held for the premises.
- xiv. The site is subject to a site management plan, entitled 'Former Petrochemical Industries Construction and Operational Environmental Management Plan' (Golder, January 2012). This management plan is to be implemented. If further impacts are identified exceeding applicable site use criteria, then these should be reported to the Department of Water and Environment Regulation.
- xv. The proponent is advised of the requirements under the Dangerous Goods Safety Act 2004 and Regulations to obtain a Dangerous Goods Storage Licence from the Department of Mines, Industry Regulation and Safety.

#### Details: outline of development application

| Insert Zoning MRS:         | Industrial/Railways                          |
|----------------------------|--|
| TPS:                       | General Industry                             |
| Insert Use Class:          | General Industry                             |
| Insert Strategy Policy:    | City of Kwinana Local Planning Policy No.11: |
|                            | Site Requirements and Standards for          |
|                            | Development within Industrial Zones          |
| Insert Development Scheme: | City of Kwinana Local Planning Scheme No.2   |
| Insert Lot Size:           | 76 hectares (approx. 19.5 hectares           |
|                            | development area)                            |
| Insert Existing Land Use:  | Vacant                                       |

#### Proposal:

Covalent Lithium proposes to construct and operate a Lithium Hydroxide Processing Plant (LHPP) on the northern portion of Lot 15 Mason Road, Kwinana Beach, known hereafter as the subject site (refer to Attachments 1-3).

The LHPP is part of an integrated project consisting of a mine, concentrator and the proposed processing plant to produce battery quality lithium hydroxide. The associated mine and concentrator are located in Mount Holland, approximately 500 kilometres east of Perth. The project, once operational, will have a nominal capacity of approximately 129 tonnes per day of battery quality lithium hydroxide monohydrate, which will be sold into the global battery market. The development cost of the proposed LHPP is estimated to be \$600 million.

The LHPP will also generate a number of by-products and secondary outputs that are beneficial for other industrial operations. Examples include by-products that can be used in road base or cement production. The proponent has indicated it is committed to avoiding disposal of any material to landfill and is actively seeking potential beneficial reuse options for these outputs. The proponent remains firmly committed to pursuing logical synergies within the Kwinana Industrial Area (KIA) and notes that the KIA is a highly conducive location to realise these opportunities. This was a major factor in selecting the KIA to locate the LHPP.

#### Land Use

The actual processing component of the LHPP takes up a majority of the development area. In addition to the processing area, the proposal comprises the following key non-process components that are accessible to the public;

- Administration Building;
- Laboratory;
- Switch room
- Warehouse:
- Workshop;
- Access-ways and Car parks; and
- Landscaping

Considering the above, it was considered the proposed use of the site be classified as a 'General Industry' use as defined under the City of Kwinana Local Planning Scheme No.2 (LPS2). Further discussion regarding the prescribed land use is outlined later in this report.

#### Zoning

The subject site is predominately zoned 'General Industry' under LPS2. The subject site is zoned 'Industrial' and 'Railways Reserve' under the Metropolitan Region Scheme (MRS). The portion zoned 'Railways Reserve' under the MRS traverses the northern section of the subject site, extending east to west. This portion zoned 'Railways Reservation' under the MRS is not zoned under LPS2. Considering the proposed development encroaches into this railways reserve (and it is not zoned under LPS2) the application is also required to be considered by the Western Australian Planning Commission (WAPC) under the MRS. A Responsible Authority Report will therefore also be prepared by the WAPC on this application. Further information and an image showing the zoning is outlined later in this report.

#### Background:

#### Site Context

The lot is approximately 76 hectares in area with approximately 19.5 hectares to be utilised for the proposed development. The lot is situated in the Kwinana Industrial Area, with direct access from Mason Road. Mason Road borders the north and eastern boundaries of the lot. A railway line, owned by the Fremantle Port Authority (FPA), is also located to the east and north of the subject site, adjacent to the Mason Road reserve. A number of existing and established land uses also surround the lot, a significant land use being the BP refinery directly to the west. The site is approximately 700 metres east of the Cockburn sound.

The City of Kwinana and Metro South-West JDAP approved a proposal in 2016 for a LHPP located to the north-east of the subject site at Lot 12 Mason Road, operated by Tiangi Lithium Australia Pty Ltd (DAP16/01068).

#### Site History

The subject site is currently vacant. A large hardstand area exists on the northern half of the subject site where the proposed LHPP is located. Although this hardstand area is currently unused, it was previously approved for open air storage of various industrial equipment and materials in 2011. The site has been vacant since June 2019. The southern portion of the lot has historically been (and is currently) sparsely vegetated and will remain largely untouched as part of the proposed development. It

is envisioned the north eastern quadrant of the hardstand area is to remain largely vacant at this stage and will be utilised by Covalent Lithium in future for the expansion of operations, should this be required.

#### Legislation and Policy:

#### **Legislation**

The proposed LHPP is subject to a range of licences and regulations applicable for industry in Western Australia. A summary of the key legislation, regulations or local laws relevant to the application is listed below:

- Contaminated Sites Act 2003
- Dangerous Goods Safety Act 2004 and Regulations
- Environmental Protection Act 1986 and relevant Regulations
- Health Act 1911
- Planning and Development Act 2005
- Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992

#### State Government Planning Policies

- State Planning Policy 4.1 State Industrial Buffer Policy
- State Environmental (Cockburn Sound) Policy 2005
- Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999.

#### Local Planning Scheme

City of Kwinana, Local Planning Scheme No. 2

#### **Local Planning Policies**

- Local Planning Policy 5 Development Contribution Towards Public Art
- Local Planning Policy 8 Designing Out Crime
- Local Planning Policy 11 Site Requirements and Standards for Development within Industrial Zones.

#### Consultation:

#### **Public Consultation**

The proposal represents a "P" (permitted) use under Table 1 – Zoning and Use Classes of LPS2, and therefore is not required to be advertised. However, due to the scale of the project, the application was advertised to all adjoining property owners and occupiers for a period of 21 days. One response was received in support of the proposal, with no objections being outlined.

#### Consultation with other Agencies or Consultants

The following government departments and service agencies were consulted with a response being provided:

- Department of Mines, Industry Regulation and Safety (DMIRS)
- Department of Water and Environmental Regulation (DWER)
- Department of Fire and Emergency Services (DFES)
- Main Roads Western Australia (MRWA)

- Westport
- Fremantle Port Authority (FPA)
- Dampier Bunbury Pipeline operator (DBP)

The City has summarised the comments raised in agency responses below.

### **DMIRS**

The application was referred to DMIRS for comment considering the proposal will require a Dangerous Goods Storage License. DMIRS confirmed the proponent is required to submit a Dangerous Goods Storage License, separate to this development application. It was noted that further information relating to the Dangerous Goods Storage License will be required to be submitted to DMIRS at that time. As a result, an advice note is recommended to notify the proponent of requirement for submission of a Dangerous Goods Storage License to DMIRS.

# **DWER**

The application was referred to DWER in relation to site contamination, existing vegetation, air quality, a Works Approval and Licencing under the *Environmental Protection Act 1986*. A copy of the advice can be seen in Attachment 14.

The DWER Industry Regulation Branch provided comment as summarised below:

- Noise: a Technical Noise report was provided by the proponent. DWER concurs this report satisfactorily demonstrates noise emissions comply with the applicable Noise Regulations.
- Native Vegetation: a clearing permit is required for the clearing of any native vegetation on the site.
- Works Approval: A works approval under Part V Division 3 of the Environmental Protection Act is required from DWER prior to operation.
- Stormwater Management: Stormwater management is to be designed and constructed consistent with the Stormwater Management Manual for Western Australia.

The City recommends each of the above requirements/recommendations be included as conditions and/or advice notes on the development approval.

The DWER Contaminated Sites Branch also provided comment stating no contamination has been identified in the northern portion of the lot where the development is proposed. However, buried asbestos-containing material and hydrocarbon impacted soil has been observed in the southern portion of the subject site, which may be accessed for fire breaks and services. DWER have advised an existing management plan in this regard was endorsed in 2012 and is entitled *Former Petrochemical Industries - Construction and Operational Environmental Management Plan*. DWER have requested that the applicant be advised of this requirement, but have not asked for any conditions of approval in relation to site contamination. An advice note is therefore recommended, drawing the applicant's attention to the plan.

# <u>Department of Fire and Emergen</u>cy Services (DFES)

A significant portion of the subject site is within a bushfire prone area as prescribed by DFES. The proponent has submitted a Bushfire Management Plan (BMP) as required under the *Planning and Development Regulations 2015* which was referred

to DFES for review. To ensure the BMP accurately identifies bushfire risk and necessary mitigation measures for a high-risk land use, DFES requested a number of amendments be made to the BMP (refer to Attachment 15). In response to DFES' comments, the proponent provided an amended BMP showing an emergency exit point to the eastern side of the subject site and an additional action has been incorporated for management of the existing vegetation along the north and eastern boundaries. DFES advised it will be able to provide further advice to the proponent once detailed designs are provided at the building permit stage, particularly in relation to storage of hazardous materials and adequacy of water supply. A condition is also recommended for the development to comply with the requirements and recommendations of the BMP.

# Main Roads Western Australia (MRWA)

A response was received from MRWA stating they have no comment to make regarding this application. Further comment in relation to traffic and vehicle movement is discussed later in this report.

### Western Power

The application was referred to Western Power considering the need for various power supply works and connections as part of the proposal. No concerns were noted by Western Power.

### Westport

Considering the significance of the KIA and its future in relation to Westport, the application was referred to the Westport Taskforce for comment. A response was received stating the site was originally considered by Westport for an empty container park, however, the proposed LHPP represents a higher and better use for the site.

### Fremantle Port Authority (FPA)

A response was received from FPA stating the application has been assessed and FPA have no comments. Separate to the application, FPA went on to state safety issues have been raised concerning the intersection at Mason Road and Donaldson Road. This matter is further discussed later in this report under the heading: *Traffic Considerations*.

### Dampier to Bunbury Natural Gas Pipeline (DBNGP)

Considering the Dampier to Bunbury Natural Gas Pipeline runs through the KIA, the application is proposing to connect (via a number of adjacent sites) to the pipeline. The gas will be used in the operation of the processing plant. Therefore, the application was referred to DBNGP (WA) who confirmed no objection to the proposed development.

# **Planning Assessment:**

# Metropolitan Region Scheme (MRS)

The subject site is zoned Industrial and Railways Reserve under the MRS. See the image below for further detail. The portion allocated as 'Railways Reservation' traverses the northern portion of the site, extending east to west.

An amendment to the MRS is currently being progressed by the WAPC to amend the portion zoned 'Railways Reservation' to be consistent with the remainder of the site, zoned 'Industrial'. In July 2019, the City provided preliminary comment to the WAPC in relation to the MRS amendment. The City outlined its support for the amendment

citing the existing MRS zoning and how it does not correspond with the actual location of the railway line. The railway line has instead been constructed some time ago to the north of the subject land. The MRS amendment will ensure the zoning is an accurate representation of the physical infrastructure and land use in-situ.



City of Kwinana Local Planning Scheme No.2 (LPS2)

#### Land Use

The proposal represents a 'General Industry' use in the context of LPS2 which is defined under Appendix 4 (Interpretations) as: "...any industry other than a hazardous, light, noxious, rural, extractive or service industry". LPS2 defines 'Industry' as 'the carrying out of any process for and incidental to: ... (b) The winning, processing or treatment of minerals...'

'Hazardous Industry' is defined under LPS2 as '...an industry which by reason of the processes involved or the method of manufacture, or the nature of the materials used or produced requires isolation from other buildings.'

In the context of land use under LPS2, this development has been considered as a 'General Industry' in lieu of 'Hazardous Industry'. The development has been considered as a 'General Industry' use on the basis of the information and detail provided as part of the application. The proponent advised that the types and volume of materials stored at the site are not likely to result in the development being classified as a major hazard facility in accordance with the Dangerous Goods legislation. Furthermore, the proponent submitted a noise report that demonstrates compliance with relevant legislation. The proponent also advised that airborne

emissions are to be appropriately managed and maintained in accordance with relevant standards as specified in *Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999.* 

For the reasons discussed above, the development has been considered as a 'General Industry' use in the context of LPS2.

# **Development Standards**

The following table lists the relevant development standards under LPS2 which apply to this application.

| Local Planning Scheme<br>No.2 Clause | Requirements  | Planning Comment   |
|--------------------------------------|---|--|
| 6.8.4 – Plot Ratio and Site Coverage | 0.8 Plot Ratio<br>65% Site Cover  | Complies.  |
|                                      |   | The plot ratio and site coverage of the lot is well within LPS2 requirements. The approximate site cover is 3.1% of Lot 15 Mason Road.   |
| 6.8.5 – Minimum<br>Setbacks from     | Front – 15 metres<br>Side – 6 metres  | Complies.  |
| Boundaries                           | Rear – 9 metres   | Proposed Front setback (eastern boundary): 108 metres Proposed Side setback (northern boundary): 11 metres Proposed Rear setback (western boundary): 20 metres   |
| 6.8.6 – Appearance of Buildings      | Buildings and ancillary structures located, constructed and finished so as to not cause detriment to the locality | Complies.  The proposed development is considered appropriate for the industrial zone and consistent with existing development in the surrounding area. The proposed development should not detrimentally affect the amenity of the locality.  A condition is recommended for the HV switchyard and substation at the very entrance to the subject site to be screened |
|                                      |   | to further reduce visual impacts when entering the site. Although not indicated on plans, the applicant has stated ancillary structures and equipment and utilities (including the HV switchyard) near or adjacent to public access shall be screened from public view at ground level.  |

|                                    |  | Soft screening will be the preferred solution in such screening applications, as well as in the vicinity of high traffic access around the site entry from Mason Road.   |
|------------------------------------|--|--|
| 6.8.7 – Landscaping Areas          | 5% of site area to be landscaped and maintained  | Complies  Landscaping to be retained onsite far exceeds the minimum 5%. Additional landscaping is proposed around the Administration Building.  A landscape plan showing the species of plants in the car parking area and around the administration building has been provided (refer to Attachment 7).  A condition is recommended for a landscaping plan over the entire site showing proposed landscaping and the retention and maintenance of existing  |
| 6.8.8 – Car Parking and Crossovers | Car Parking Spaces to be provided in accordance with Table III of LPS2:  Office – 1 bay for every 50m² gross floor area. | regetation on the site.  Complies  The development requires the provision of 60 bays in accordance with the requirements of Table III of LPS2. The proponent has indicated that a total of 59 employees will be on site per shift. Therefore the applicant has provided excess parking bays (124 in total) to account for a 'shift overlap' period and other visitors.  Conditions have been recommended requiring trafficable areas to be sealed and drained in accordance with the City of Kwinana's specifications. |
| 6.8.9 – Loading and<br>Unloading   | Loading / Unloading<br>areas to be<br>maintained in good<br>order  | Complies.  The proposed loading / unloading areas of the development are proposed to be provided in an appropriate   |

|                         |                              | location and manner.  |
|-------------------------|------------------------------|---|
| 6.8.10 – Waste Water    | Waste water to be            | Complies.   |
| and Effluent Disposal   | managed                      | Compiles.   |
| and Emdent Disposar     |                              | Sewerage and grey water                                     |
|                         |                              | Sewerage and grey water                                     |
|                         | preserve the environment and | generated on site is proposed                               |
|                         |                              | and required to be disposed of                              |
|                         | groundwater                  | through a waste treatment                                   |
|                         |                              | system with nutrient retention                              |
|                         |                              | capabilities. The plans indicate a system (referred to as a |
|                         |                              | `   |
|                         |                              | · , ,   |
|                         |                              | located adjacent to the administration building. Treated    |
|                         |                              | wastewater will be stored in                                |
|                         |                              |   |
|                         |                              | tanks, and pending approval from Water Corporation,         |
|                         |                              | discharged to the Sepia                                     |
|                         |                              | Depression Ocean Outlet                                     |
|                         |                              | Landline (SDOOL). DWER has                                  |
|                         |                              | advised discharges of waste                                 |
|                         |                              | water via the Sepia Depression                              |
|                         |                              | Ocean Outlet are subject to                                 |
|                         |                              | Ministerial Statement 665 under                             |
|                         |                              | Part IV of the EP Act. An advice                            |
|                         |                              | note is accordingly   |
|                         |                              | recommended.  |
|                         |                              |   |
|                         |                              | The site currently has two drain                            |
|                         |                              | systems that are capable of                                 |
|                         |                              | managing all stormwater                                     |
|                         |                              | collected on site.  |
| 6.8.11 – Recycled Water | Not Applicable.              | Not Applicable.   |
|                         |                              | The development does not                                    |
|                         |                              | generate industrial process                                 |
|                         |                              | water. The comments above                                   |
|                         |                              | regarding the SDOOL should be                               |
|                         |                              | taken into account.   |
| 6.8.12 - Fencing        | A security fence             | Complies  |
|                         | proposed on a front          | •   |
|                         | lot boundary shall           | The security fence on the front                             |
|                         | be setback 1.5               | lot boundary is visually                                    |
|                         | metres from the              | permeable with a significant strip                          |
|                         | front lot boundary           | of vegetation (approximately 60                             |
|                         | and landscaping              | metres in width) between the                                |
|                         | shall be established         | fence and the proposed                                      |
|                         | and maintained               | development area.   |
|                         | between these lines          |   |
|                         | to the satisfaction of       |   |
| 0.0.40                  | Council.                     |   |
| 6.8.13 – Materials Used | a) The facade on             | Complies  |
|                         | the principal                | The application manager "                                   |
|                         | frontage shall be            | The application proposes the                                |

constructed of brick, stone, masonry or such other such material approved by Council.

b) Notwithstanding this, Council may approve the installation of strategic landscaping on the principal frontage in lieu of facade treatment.

main administration building to be located approximately 280 metres from the street boundary. The administration building is proposed to be concrete construction (painted). A feature verandah is also proposed building. around the The administration building incorporates two different wall finishes to achieve greater aesthetic amenity.

As the proposed administration building is located 280 metres from the boundary, with a significant landscaping strip between, the City considers the development meets this provision of LPS2. However, a condition is recommended to provide further design details prior to the submission of a building permit for the administration building to ensure it presents well aesthetically to confirm it does not detract from the amenity of the locality. This will ensure the administration building is clearly delineated as a building that is publicly accessible.

# Local Planning Policy 5: Development Contribution towards Public Art

| Item         | Requirement               | Proposal                | Compliance          |
|--------------|---------------------------|-------------------------|---------------------|
| Public Art   | Public Art proposals will | This proponent has      | The City welcomes   |
| Report       | be accompanied by a       | not submitted a         | the intention to    |
|              | Public Art Report, as set | Public Art Report.      | involve an arts     |
|              | out in Appendix 1 of this | The proponent has       | curator. The        |
|              | Policy and will be        | stated a professional   | recommended         |
|              | required to be approved   | arts curator will be    | condition of        |
|              | prior to the lodgement of | employed to select all  | approval (as        |
|              | a building permit         | pieces and determine    | mentioned above)    |
|              | application for the       | the final               | incorporates the    |
|              | associated                | layout/presentation of  | requirement for a   |
|              | development.              | these pieces.           | Public Art Report   |
|              |                           |                         | in accordance with  |
|              |                           |                         | the policy.         |
| Public Art   | The proponent will meet   | The proponent has       | Further details     |
| contribution | their public art          | indicated its intention | regarding the       |
|              | contribution in one or    | to provide public art   | provision of public |
|              | more of the following     | on the site as part of  | art will be         |

ways by: the proposed a) establishing public art development than contributing a "on-site" as а component of their cash sum development; \$500.000 as option 'b'. However, b) Providing cash-in-lieu of 1% of development the proponent has cost (or a maximum of outlined its intention \$500,000. to purchase a wide selection of quality large scale art exhibits from Kwinana Industries

negotiated with the City of Kwinana prior to occupation of the development as part of the submittal of а public art report. condition of approval requiring adherence with the policy is therefore recommended.

rather

of

per

high

the

display

Youth Art Awards and

these arts throughout

prominently

its facility.

# Local Planning Policy 8: Designing Out Crime

The application has also been assessed against the provisions of Local Planning Policy 8: Designing out Crime. This Policy sets out design guidelines to reduce the likelihood of crime and anti-social behaviour in the City of Kwinana. The proposed development generally complies with all relevant requirements of this Policy. However, it is noted the Policy requires car parking areas to be adequately lit and security lighting to be provided. This is required for areas that are accessible to the public, specifically around the administration building. Current plans do not provide this level of detail and therefore a condition is recommended to this effect.

# Local Planning Policy 11: Site requirements and standards for development within **Industrial Zones**

The proposed development is considered to meet the objectives and requirements of LPP 11 as follows:

- The administration building is located forward of the actual processing plant and adjacent to parking areas that are proposed to be landscaped.
- The applicant has indicated that prior to the submission of a building permit, detailed design plans for the administration building will be provided to enhance the visual appeal of the development. A condition is recommended to this effect.
- The proposal is sufficiently set back from all boundaries with significant landscaping being retained along both street frontages (north and east boundaries).

### **Traffic Considerations**

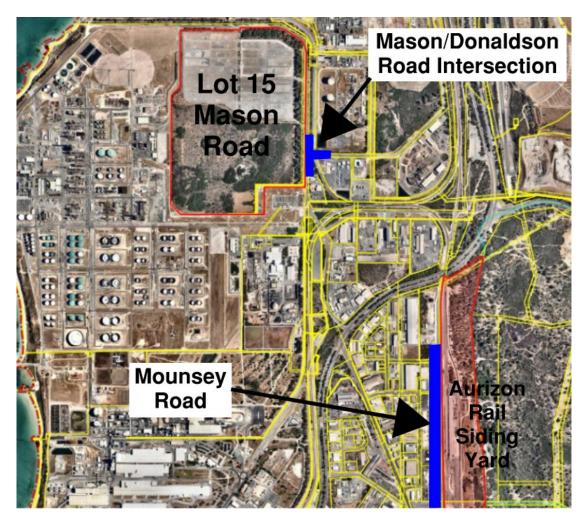
As part of the application, the proponent submitted a Traffic and Access Report. This report noted the proposed development generates a total of 236 staff vehicle trips per day that will use the southern crossover entrance into the site. Furthermore, a total of 124 truck trips in and out of the site is proposed per day. The City's Engineering Department has requested the Traffic and Access Report be updated to account for incidental vehicle movements which relate to the operations of the facility such as

plant maintenance, servicing and electricians. A condition is therefore recommended to amend the Traffic and Access Report to incorporate the above.

The Traffic and Access Report further outlines that materials will be trucked in and out of the site, to and from the existing Aurizon Rail siding yard adjacent to Mounsey Road (refer to the image below showing the location of the siding yard). The local roads between the subject site and the Aurizon Rail siding yard are not designed to accommodate the large vehicles as proposed by the applicant. In assessing the suitability of the road network for the development, the following advice is provided:

- No assessment of the route between the development site and the rail yard has been provided by the applicant, rather the focus is on the crossovers in and out of the site and the overall traffic numbers expected to be generated.
- 27.5m permit vehicles are proposed to undertake the bulk of the deliveries of materials, and removal of waste, between the site and the rail yard.
- The local road network is not currently capable of servicing vehicles of this size, regardless of the number truck movements in and out of the site. The road network is not designed to accommodate trucks of this size, and frequent use by these vehicles may result in failure of the road pavement
- Investigations are required to determine what potential upgrades may be required to the pavement of the roads and intersections along the transport route. A condition of approval has been recommended to address this.

Furthermore, the development proposes a significant increase in the number of vehicles travelling on Mason Road. In order to provide an improved level of service to the subject site, it is considered necessary to upgrade the intersection at Mason Road and Donaldson Road (refer to the image below showing the location of the intersection). Northbound vehicles on Mason Road that intend to make a right hand turn into Donaldson Road are occasionally stopped for extended periods of time due to the railway crossing located only 27 metres from the intersection, across Donaldson Road. In this situation, such vehicles will prevent north bound traffic continuing along Mason Road and accessing the subject site. A condition is recommended to widen Mason Road at the intersection with Donaldson Road to the satisfaction of the City of Kwinana to improve the level of service to the subject site and enhance safety.



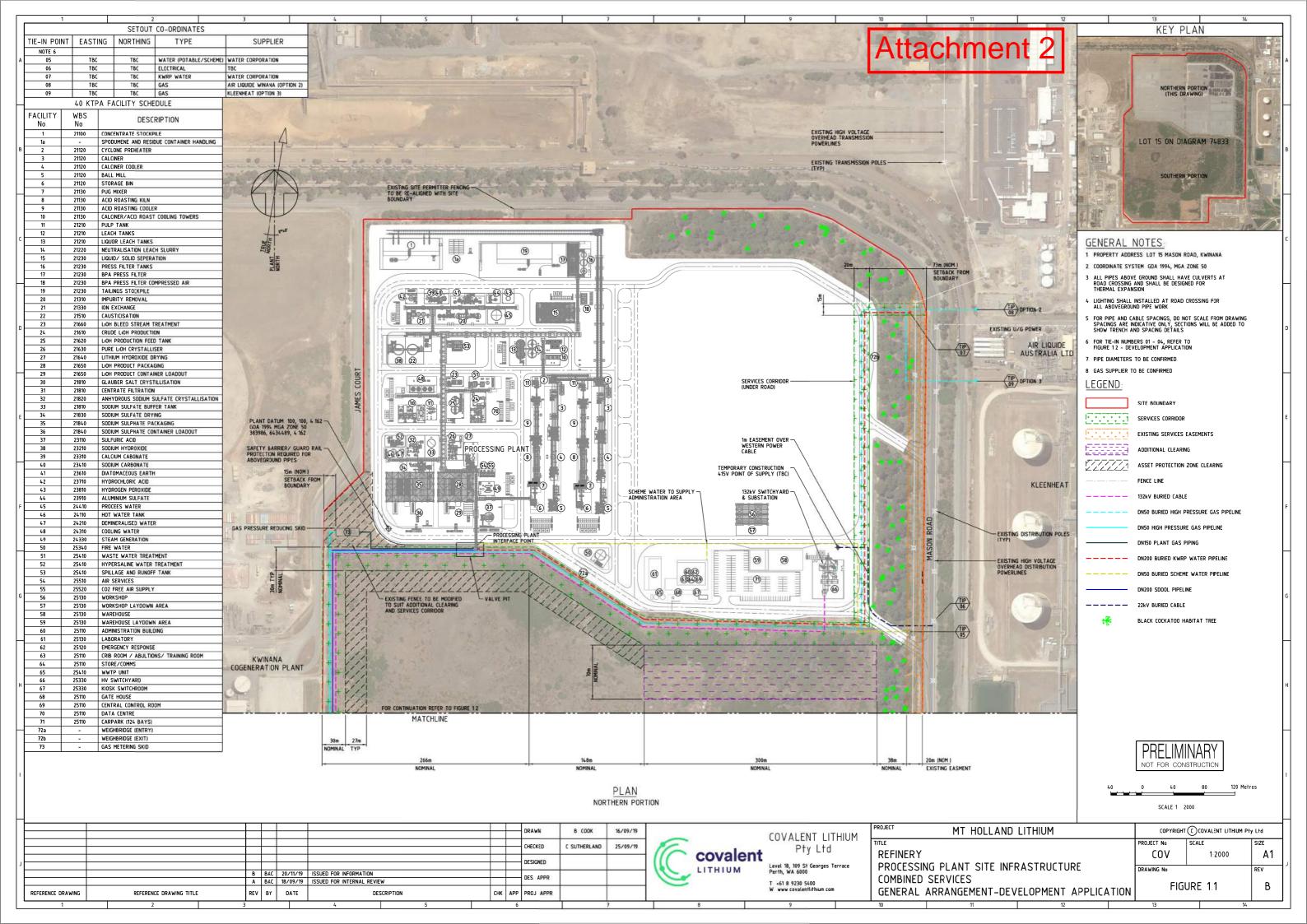
### **Council Recommendation:**

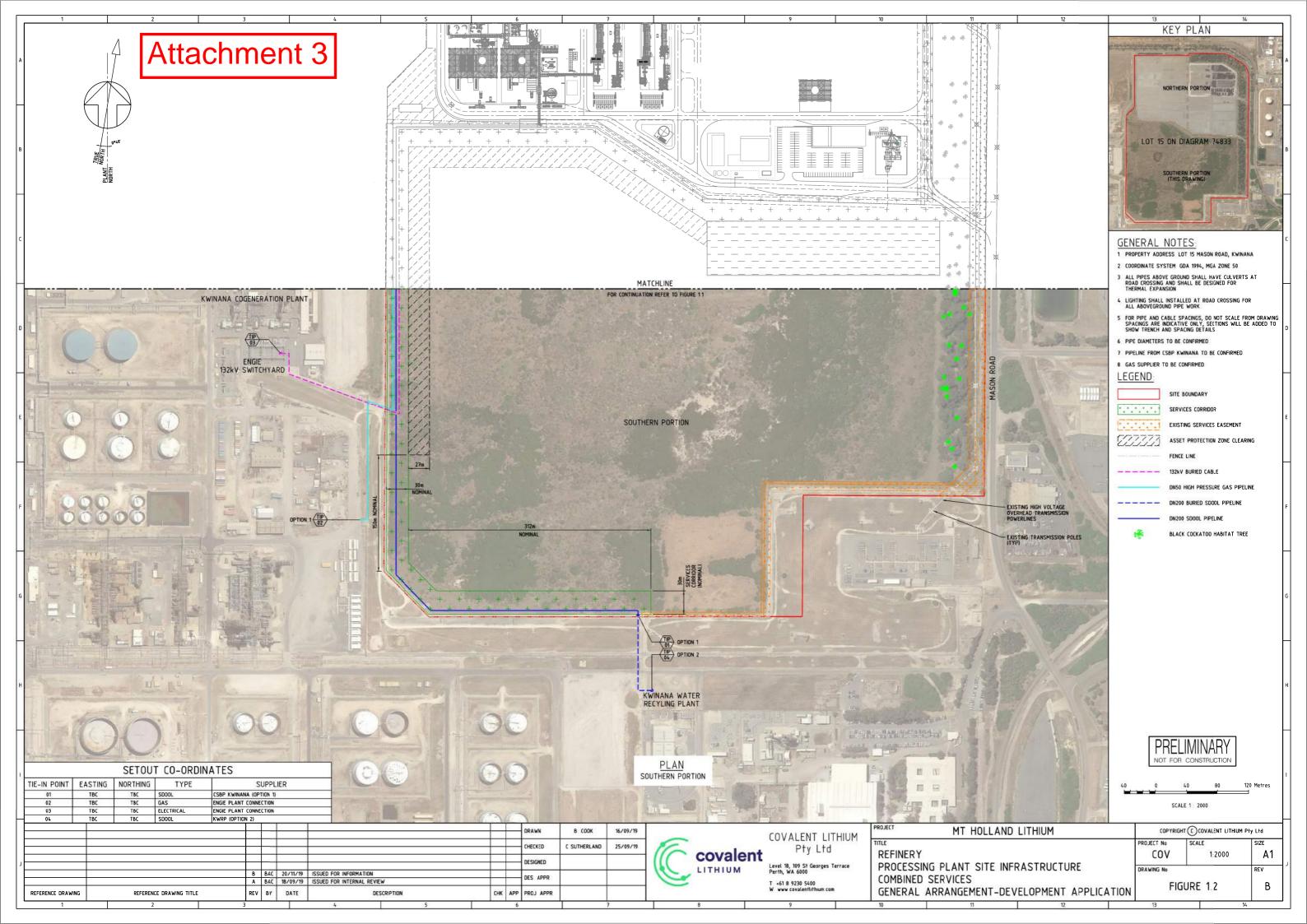
That the application is approved subject to the recommended conditions and advice notes as per this report.

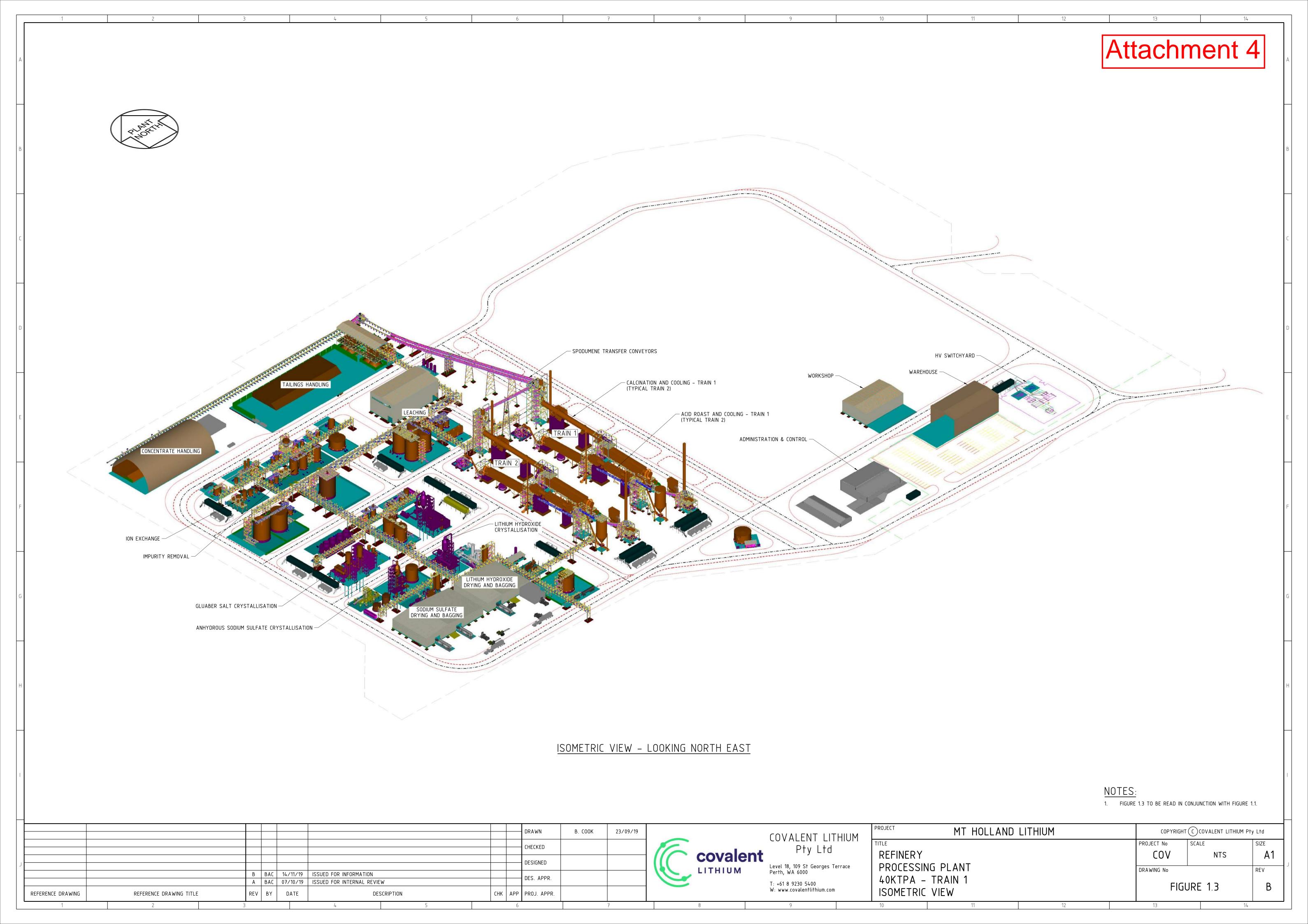
# **Conclusion:**

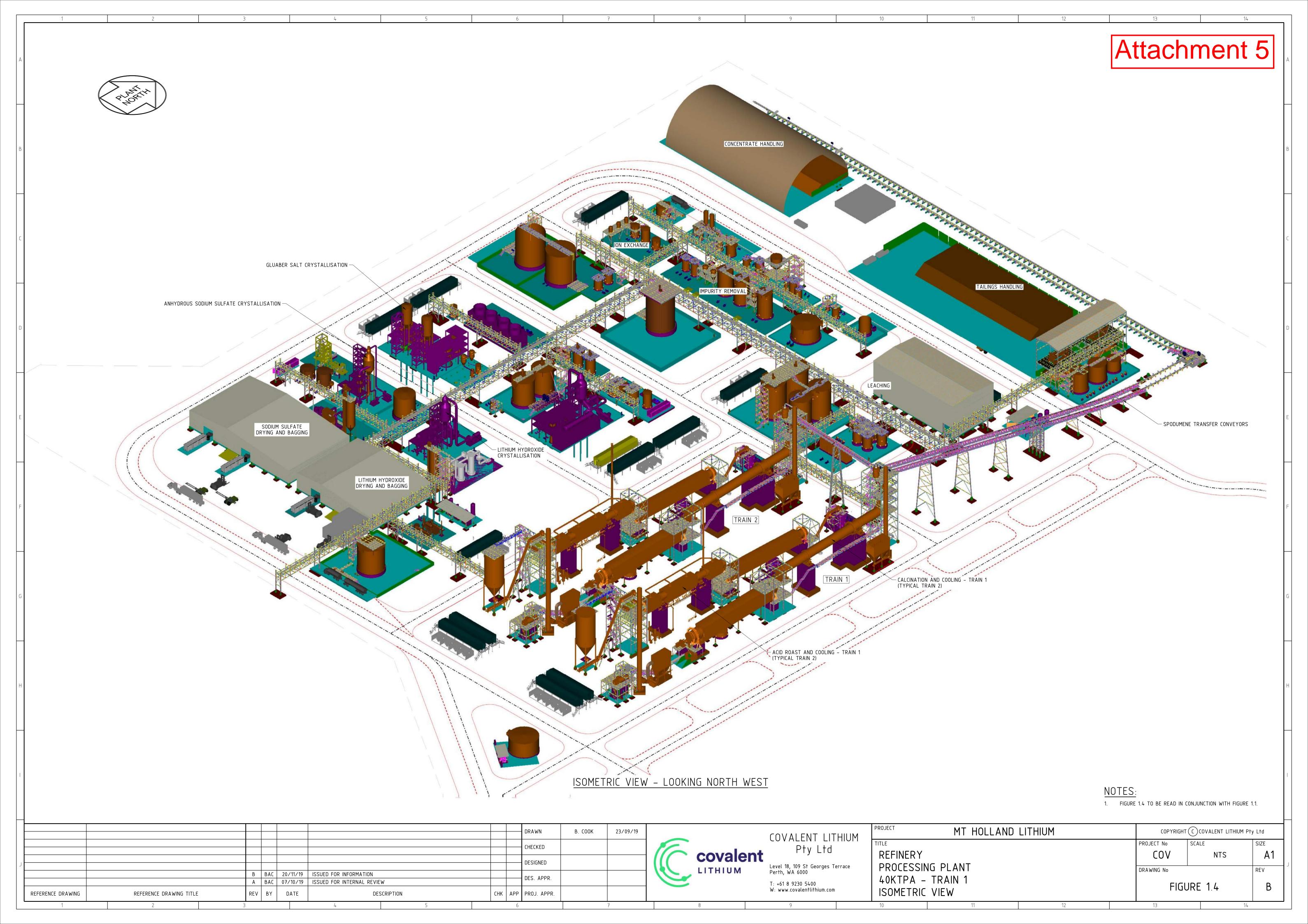
Upon assessment of the development against the objectives and requirements of Local Planning Scheme No.2 and relevant policy, it is considered that the application can be approved subject to conditions. The development complies with relevant planning provisions and represents effective use of currently underutilised industrial land within the Kwinana industrial area. The subject site is one of few larger vacant industrial lots in the heart of the Kwinana industrial area and the LHPP is considered a suitable land use for such a significant site.

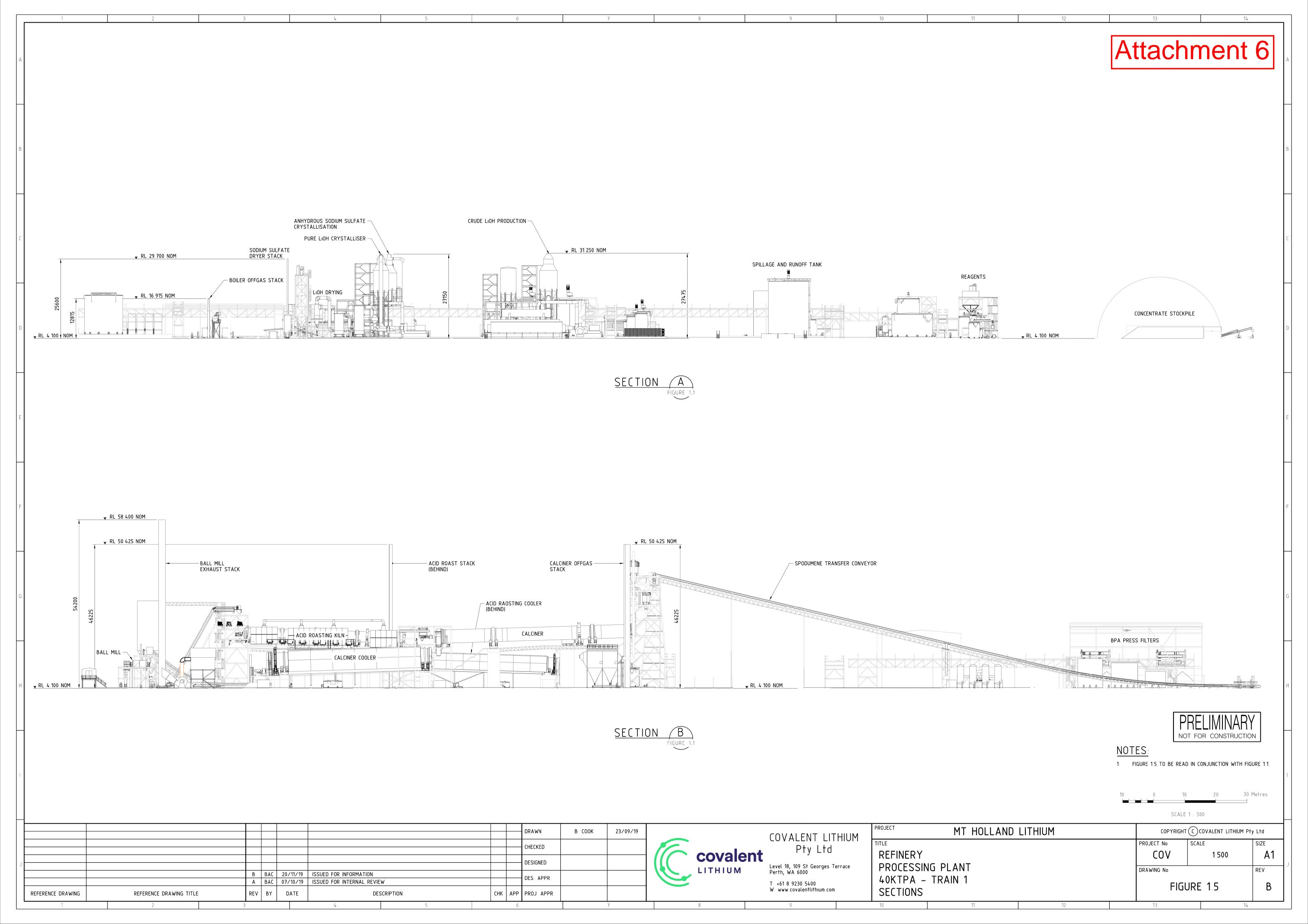


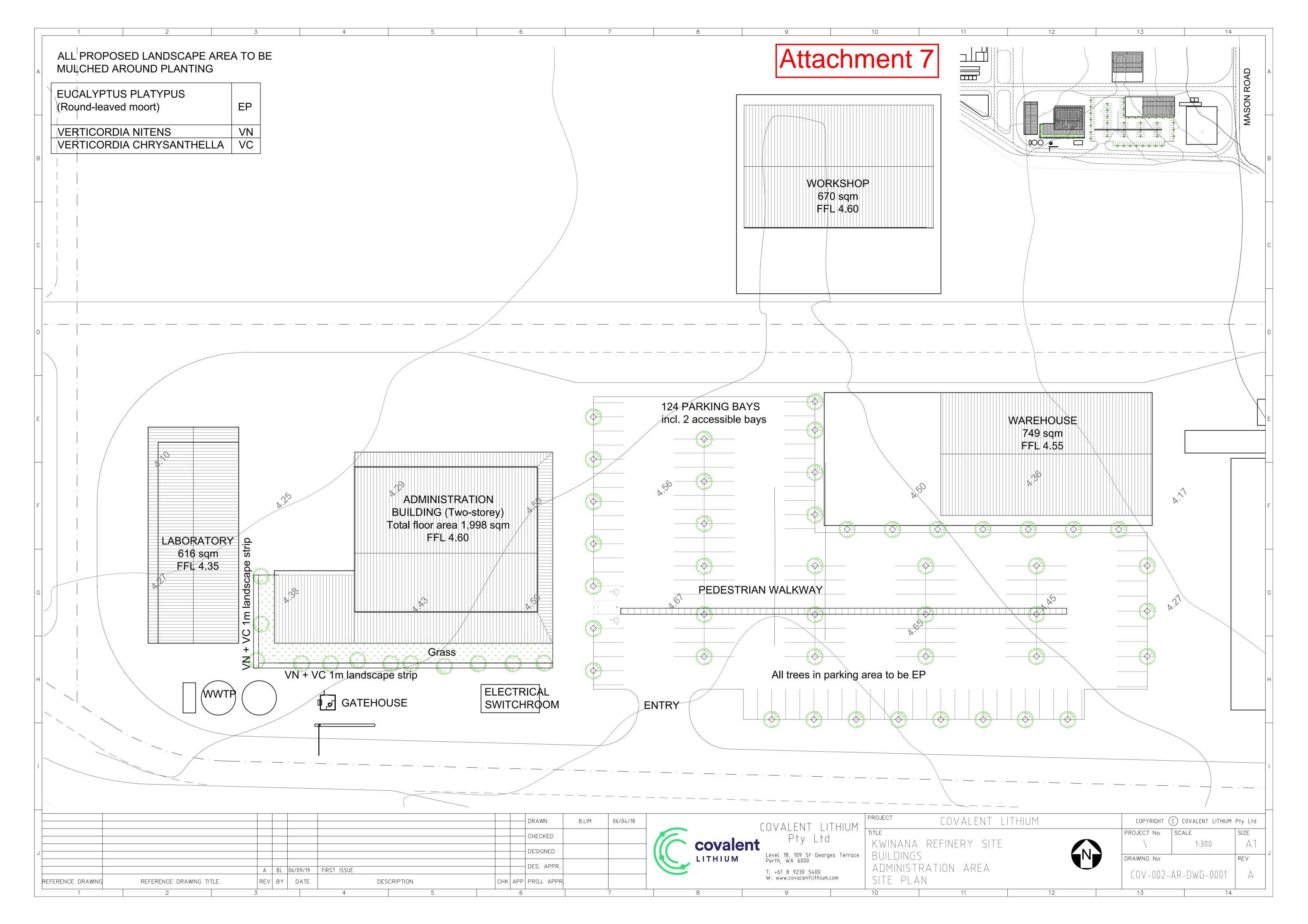


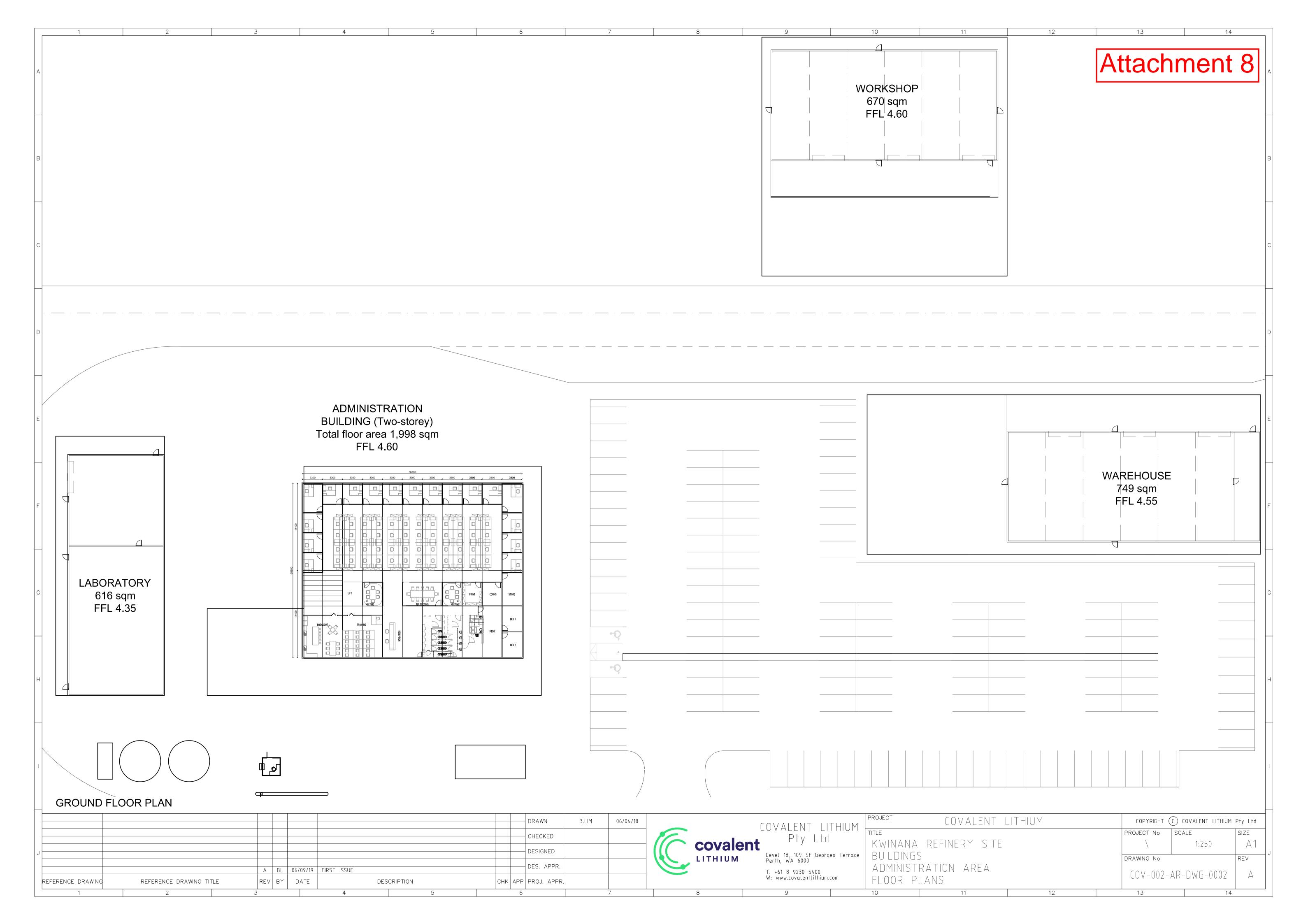


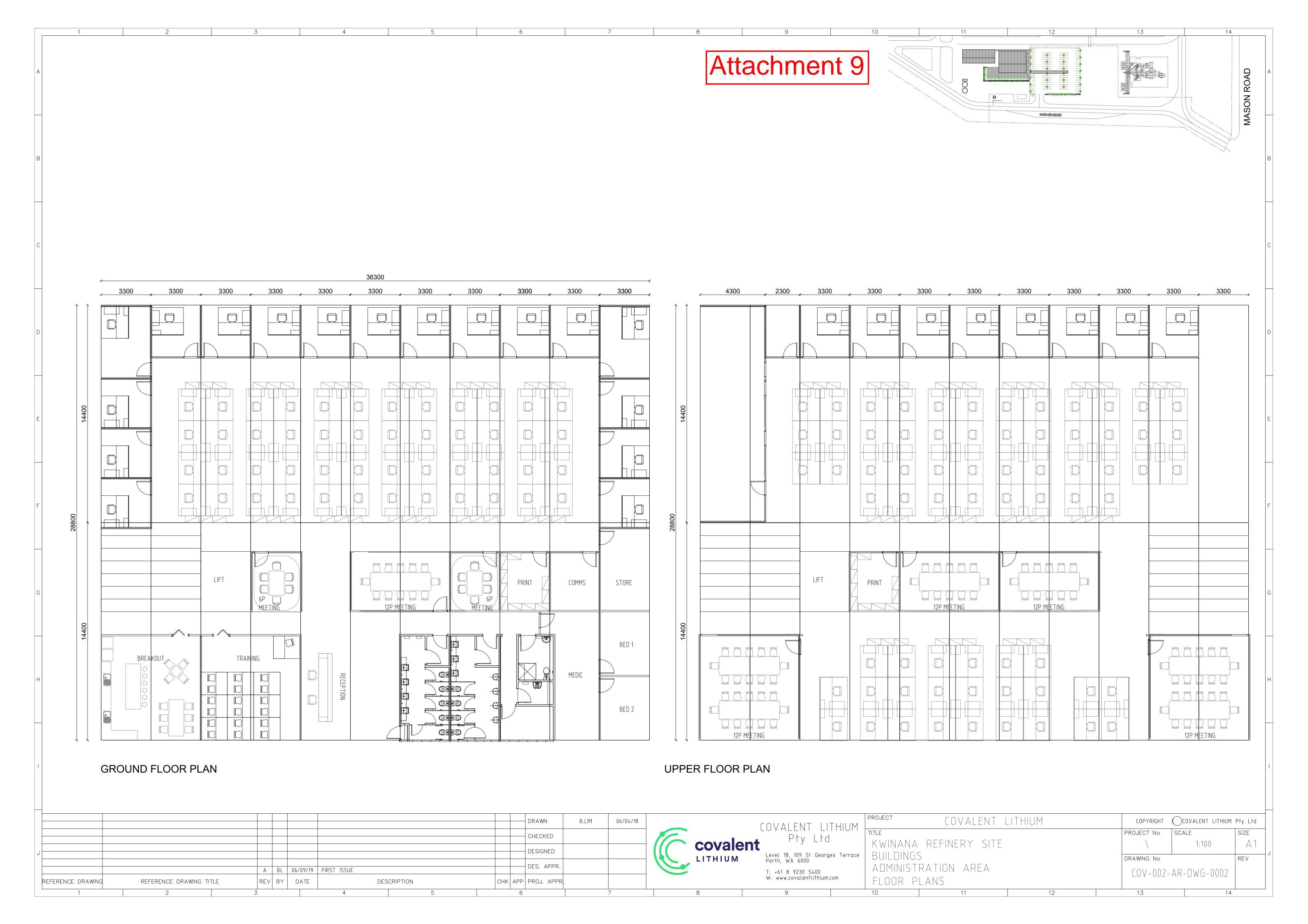


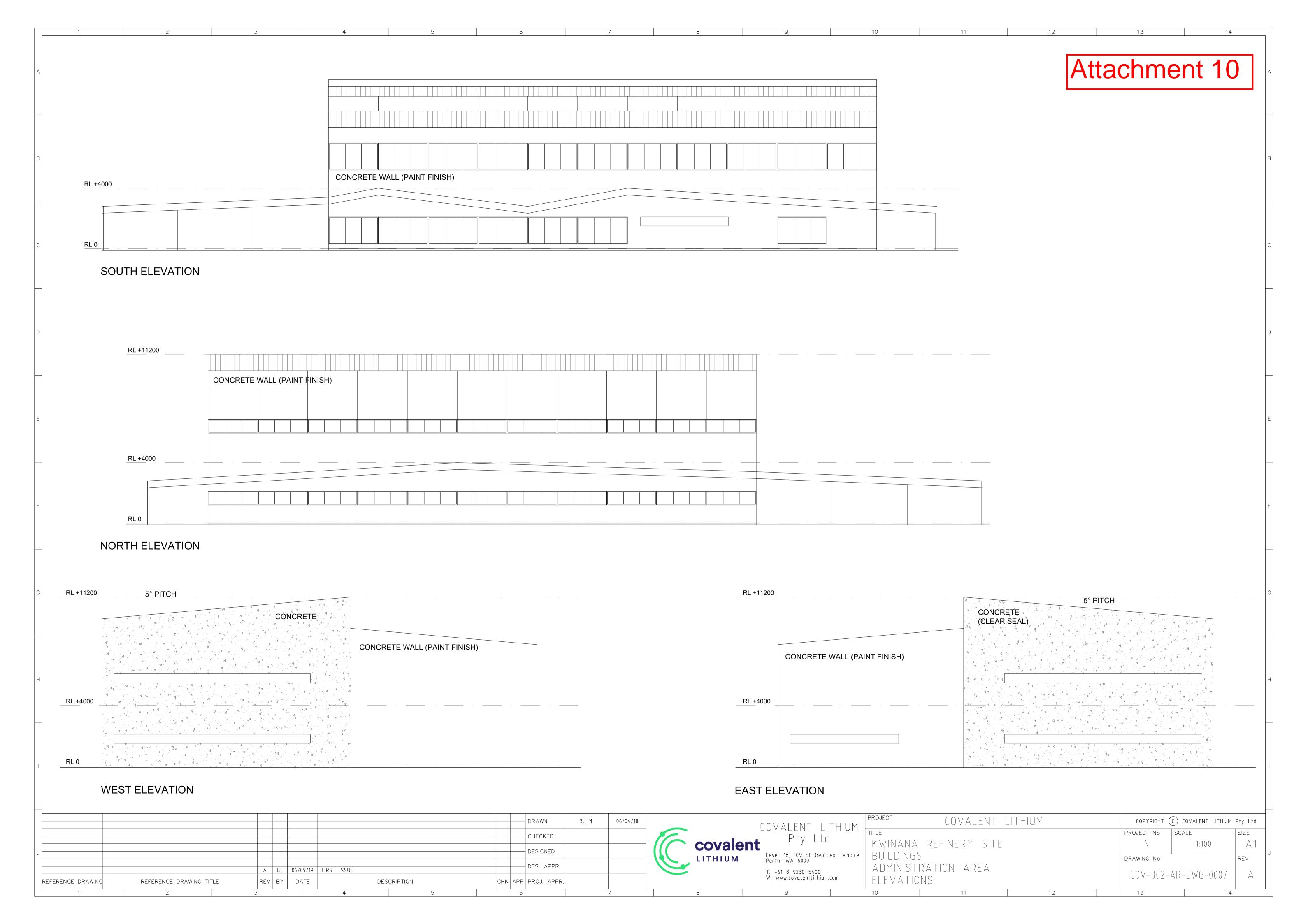


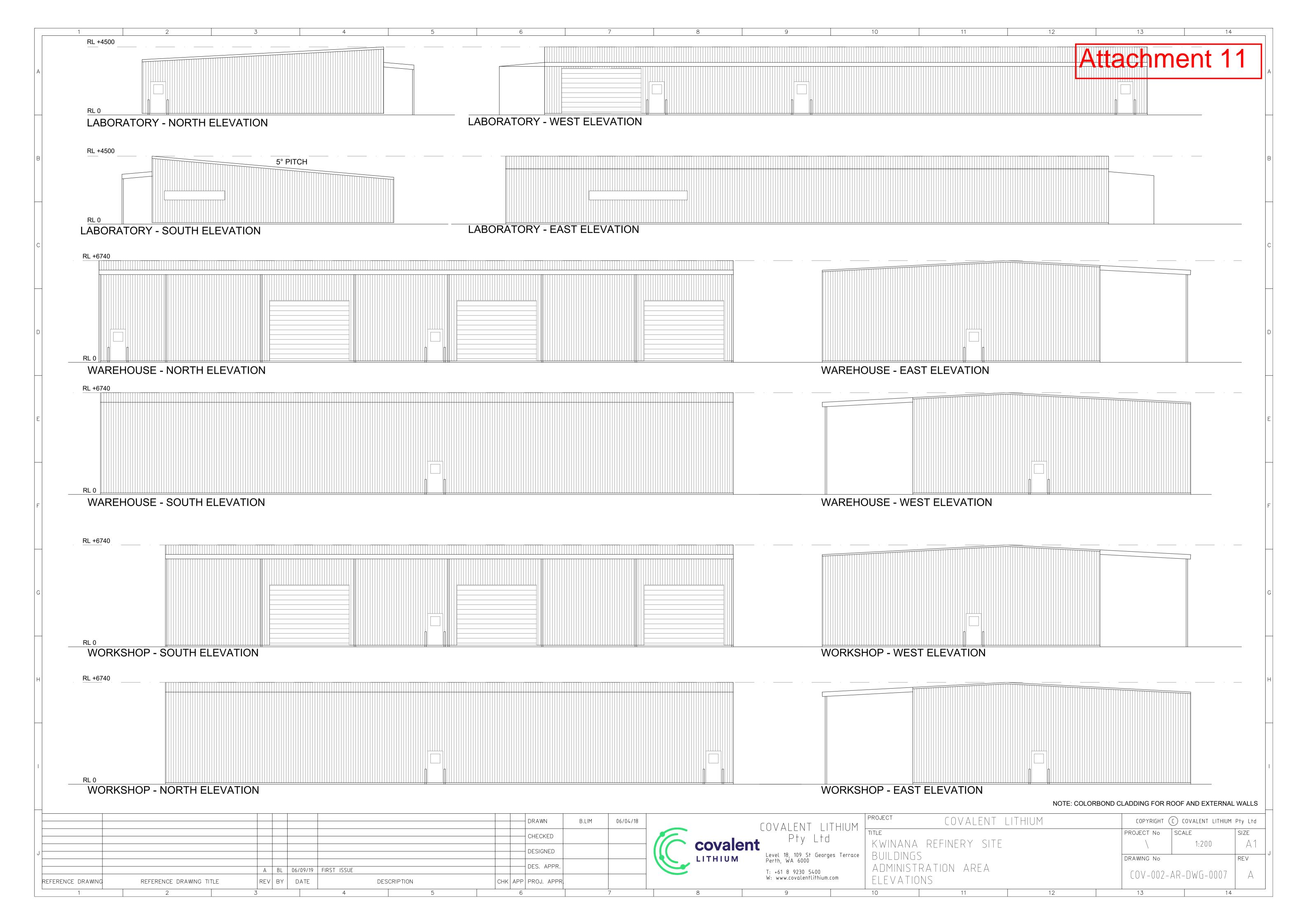


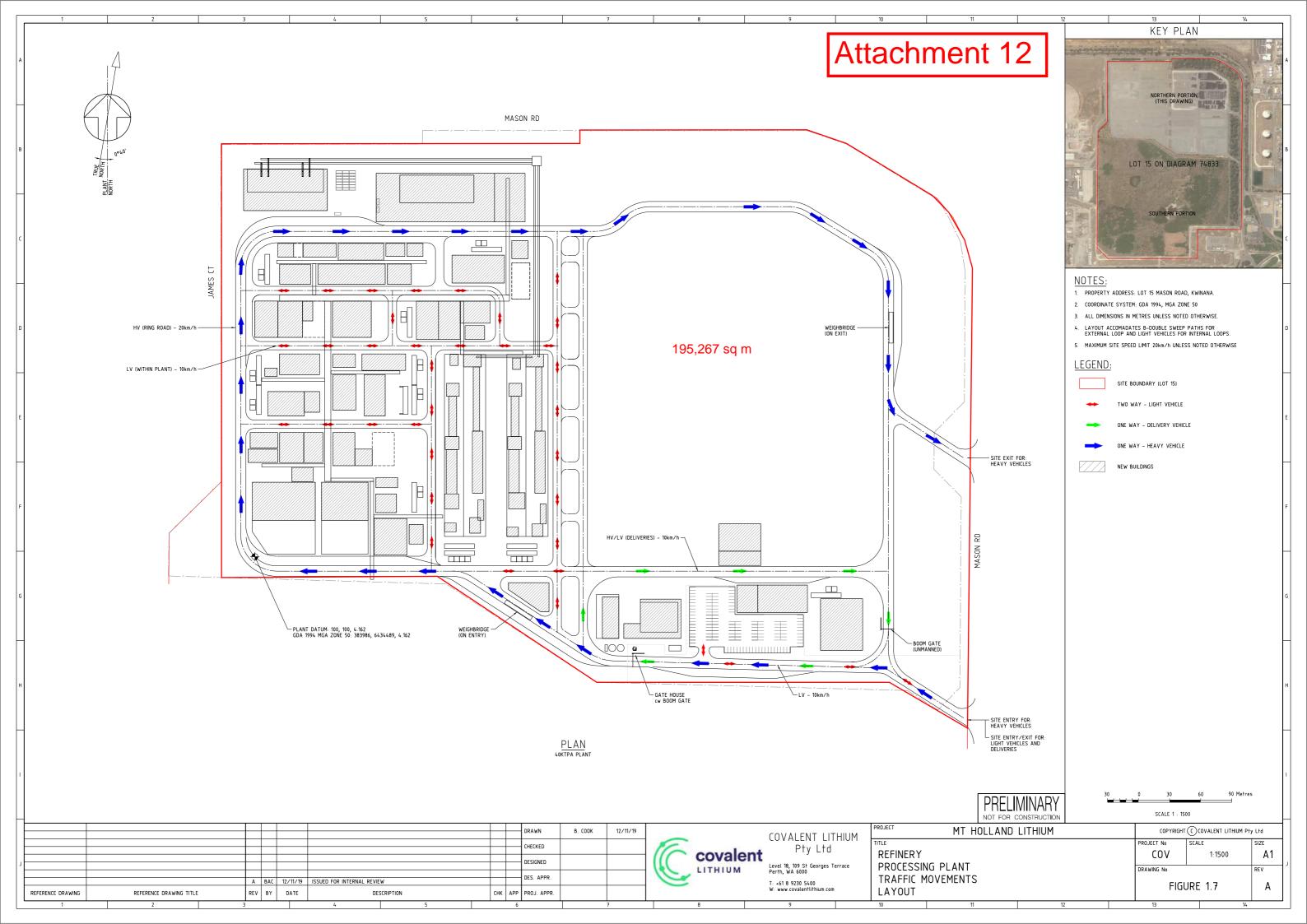


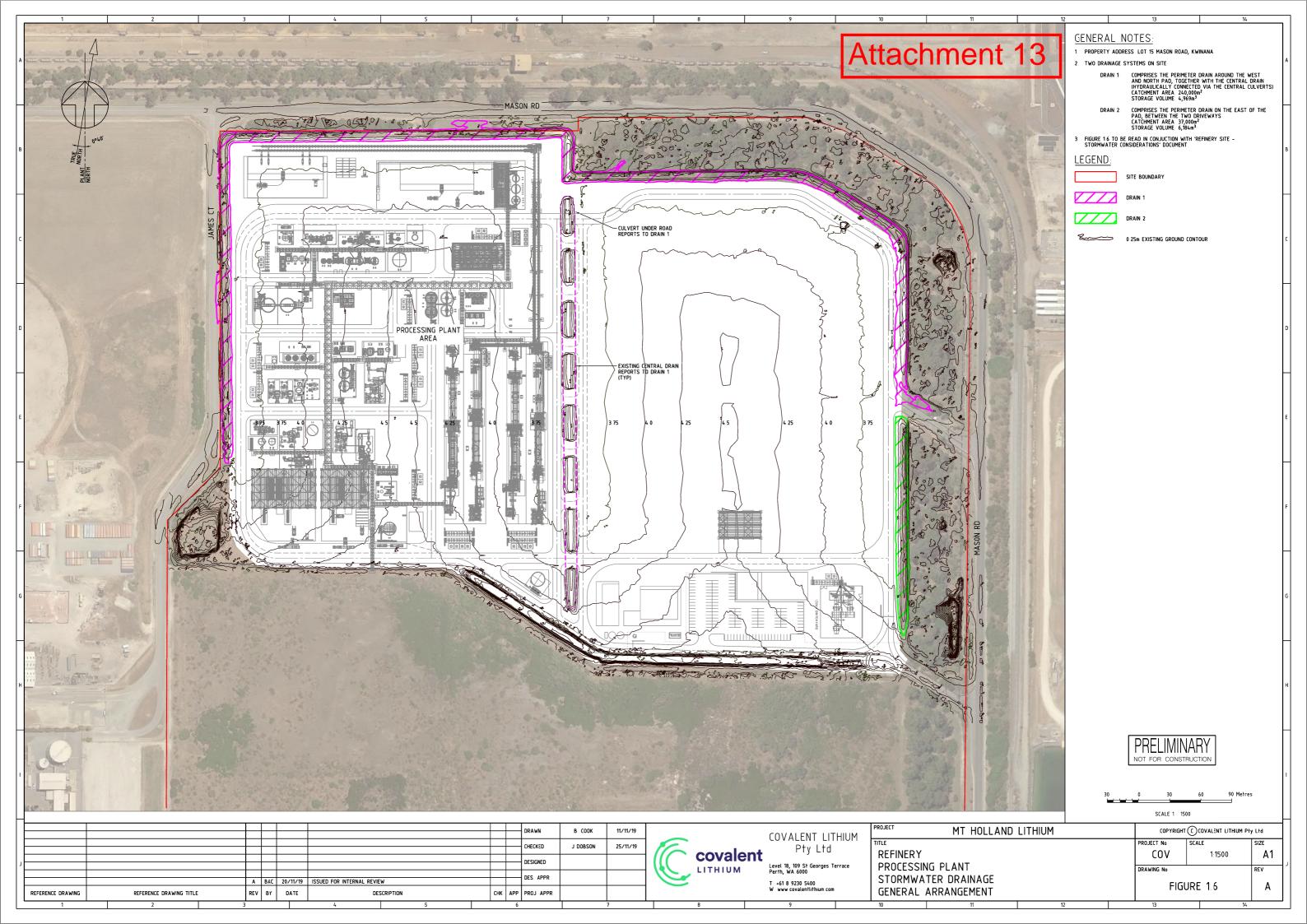














Your ref: DA9534

Our ref: DWERDT243967, PA031797 Enquiries: Jane Sturgess, Ph 9550 4228

City of Kwinana PO Box 21 Kwinana WA 6966

Attention: Jared Veenendaal

Dear Jared

# PROPOSED DEVELOPMENT APPLICATION - LITHIUM HYDROXIDE PROCESSING PLANT - LOT 15 MASON ROAD, KWINANA BEACH

Thank you for providing the proposed lithium hydroxide processing plant for the Department of Water and Environmental Regulation (DWER) to consider.

The Department has identified that the proposal has the potential for impact on environment and water values. While the Department does not object to the proposal key issues and recommendations are provided below, and these matters should be addressed where required.

### Issue 1

Native vegetation regulation

### **Recommendation:**

Under section 51C of the *Environmental Protection Act 1986* (EP Act), clearing of native vegetation is an offence unless undertaken under the authority of a clearing permit, or the clearing is subject to an exemption. Exemptions for clearing that are a requirement of written law, or authorised under certain statutory processes, are contained in Schedule 6 of the EP Act. Exemptions for low impact routine land management practices outside of environmentally sensitive areas (ESAs) are contained in the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (the Clearing Regulations).

Based on the information provided, no exemption applies to the proposed clearing and a clearing permit is required.

The Department has not received a clearing permit application relating to this proposal. Application forms are available from <a href="https://www.der.wa.gov.au/our-work/clearing-permits/46-clearing-permit-application-forms">https://www.der.wa.gov.au/our-work/clearing-permits/46-clearing-permit-application-forms</a>.

Additional information on how to apply for a clearing permit is available here: https://www.der.wa.gov.au/images/documents/your-environment/nativevegetation/Fact\_sheets/Fact\_Sheet\_-\_how\_to\_apply.pdf

#### Issue 2

Acoustic report

### **Recommendation:**

Please refer to attachment 1 for the Technical (Review) Report - Advice on Noise Impact Assessment for the Proposal Covalent Lithium Refinery located at Lot 15 Mason Road, Kwinana Beach.

The Department considers the proponents report satisfactorily demonstrates that noise emissions from the proposed project would be able to comply with the Environmental Protection (Noise) Regulations 1997 (Noise Regulations).

#### Issue 3

Industry regulation

#### Recommendation:

The EP Act requires a works approval to be obtained from the Department prior to constructing a prescribed premises, and makes it an offence to cause an emission or discharge unless a licence or registration is held for the premises.

The provided development application request was reviewed in relation to works approval and licence requirements under Part V Division 3 of the EP Act.

Based on the information provided, the proposed operations are likely to cause the premises to become a prescribed premises as per Schedule 1 of the Environmental Protection Regulations 1987 for the following categories. These categories were selfidentified by Covalent Lithium in their planning approval application.

Chemical manufacturing: premises (other than premises within 100 tonnes or more category 32) on which chemical products are manufactured by per year; a chemical process.

or

Chemical manufacturing: premises on which chemical products are manufactured by a chemical process.

Not more than 100 tonnes per year

44 Metal smelting or refining: premises on which metal ore, metal 1,000 tonnes or ore concentrate or metal waste is smelted, fused, roasted, refined or processed.

more per year

73 Bulk storage of chemicals etc: premises on which acids, alkalis 1,000 m<sup>3</sup> in or chemicals that:

aggregate.

- a) Contain at least one carbon to carbon bond; and
- b) Are liquid at STP (standard temperature and pressure), are stored

The Department is yet to receive any applications under Part V of the EP Act in respect of this proposal. A works approval is likely to be required for the construction phase and a licence required for the operational phase.

The applicant may also be advised that the following Regulations apply to this proposal; *Environmental Protection (Unauthorised Discharges) Regulations 2004* and *Environmental Protection (Kwinana)(Atmospheric Wastes) Regulations 1992.* 

Discharges of waste water via the Sepia Depression Ocean Outlet are subject to *Ministerial Statement 665* under Part IV of the EP Act.

### Issue 4

Contaminated sites

### Recommendation:

Please refer to correspondence dated 31 January 2020 previously issued to the City of Kwinana by the Departments Contaminated Sites Branch (attachment 2).

# Issue 5

Stormwater management

### **Recommendation:**

A stormwater management plan is to be designed and constructed consistent with the Stormwater Management Manual for Western Australia (DoW, 2004-2007) and Water quality protection note 52: Stormwater management at industrial sites (DoW, 2010).

Should you require any further information on the comments please contact Jane Sturgess on 9550 4228.

Yours sincerely

Brett Dunn

Program Manager - Planning Advice

Kwinana Peel Region

03 / 02 / 2020

Your ref: DA9534

Our ref: DMO 410, 2012/5619 Enquiries: Justin Ritchie

Ph: 6364 7183

Email: Justin.Ritchie@dwer.wa.gov.au

Mr Jared Veenendaal Planning Officer City of Kwinana PO Box 21 KWINANA WA 6966

By email customer@kwinana.wa.gov.au and

Jared. Veenendaal@kwinana.wa.gov.au

Dear Mr Veenendaal

# DEVELOPMENT APPLICATION DA9534 LOT 15 MASON ROAD KWINANA BEACH

I refer to your letter dated 14 January 2020 to the Department of Water and Environmental Regulation (the department) regarding an application to the City of Kwinana for the proposed construction of a lithium hydroxide processing plant (the development) on the above-mentioned lot.

As per the requirements under section 58(6)(b) of the *Contaminated Sites Act 2003* (CS Act), advice is required as to the suitability of the land for the proposed development. Lot 15 is currently zoned "general industry" under the City of Kwinana's Town Planning Scheme.

Land at Lot 15 on Diagram 74883 (the site), as shown on certificate of title 1827/500, was classified under section 13 of the CS Act as *remediated for restricted use* on 10 January 2017.

The classification was based on several soil and groundwater investigations which identified hydrocarbons in soil and groundwater in the southern portion of the site. Soil and groundwater investigations undertaken in 2012 and 2019 for the northern portion of the site (Attachment 1 and 2) did not identify any contaminants in soil or groundwater above assessment levels for commercial/industrial use.

Based on the information provided to the department, the proposed development will occupy the northern portion of the site (Attachment 3). As no contamination has been identified in the northern portion of the site, the department does not recommend that a contaminated sites related condition is placed on the development approval.

However, buried asbestos-containing material and hydrocarbon impacted soil has been observed in the southern portion of this site, which may be accessed for fire breaks and a small portion may be used as a laydown area. Therefore the department recommends the following advice note is applied to the development approval:

Telephone: 1300 762 982 Facsimile: 08 6364 7001

### **Advice**

The site is subject to a site management plan, entitled 'Former Petrochemical Industries - Construction and Operational Environmental Management Plan' (Golder, January 2012). This management plan is to be implemented. If further impacts are identified exceeding applicable site use criteria, then these should be reported in accordance with s.11 of the Act.

If you have any further queries, please contact Contaminated Sites Officer, Justin Ritchie, on 6364 7183.

Yours sincerely

Paul Newell

A/SENIOR MANAGER
CONTAMINATED SITES
Delegated Officer under section 91
of the Contaminated Sites Act 2003

31 January 2020

Attachment 1: 2019 Soil sampling locations

Attachment 2: 2019 Groundwater sampling locations

Attachment 3: Proposed location of the lithium hydroxide processing plant







Our Ref: D12932 Your Ref: DA9534

Jared Veenendaal City of Kwinana customer@kwinana.wa.gov.au

Dear Mr Veenendaal

# RE: HIGH-RISK LAND USE - LOT 15 MASON ROAD, KWINANA BEACH - LITHIUM HYDROXIDE REFINERY - DEVELOPMENT APPLICATION (JDAP)

I refer to your email dated 14 January 2020 regarding the submission of a Bushfire Management Plan (BMP) (Version 1), prepared by Strategen JBS&G and dated 18 December 2019, for the above development application. The BMP is accompanied by a report from the applicant titled "Lithium Hydroxide Refinery – Development Application" dated 6 January 2020 for the above development application (DA).

It should be noted that this advice relates only to *State Planning Policy 3.7 Planning in Bushfire Prone Areas* (SPP 3.7) and the *Guidelines for Planning in Bushfire Prone Areas* (Guidelines). It is the responsibility of the proponent to ensure that the proposal complies with all other relevant planning policies and building regulations where necessary. This advice does not exempt the applicant/proponent from obtaining necessary approvals that may apply to the proposal including planning, building, health or any other approvals required by a relevant authority under other written laws.

# **Assessment**

### 1. Policy Measure 6.6 High-risk land uses

| Issue                 | Assessment  | Action                            |
|-----------------------|---|-----------------------------------|
| High-risk<br>land use |   | Modification required to the BMP. |
|                       |   | Further information               |
|                       | Entry and exit points are proposed along the eastern side of the lot for the high-risk land use. To meet the intent of Element 3 of the Guidelines, DFES recommends an additional access point connecting to James Court for safe access and egress. If there is a fire in the Kleenheat facility opposite the Mason Road verge vegetation, there will be no way to enter or evacuate the site to Mason Road. | required.                         |
|                       | Further details are required regarding the maximum capacity of hazardous materials being stored onsite at any one time.   |                                   |
|                       | There is insufficient information available to determine whether the water supply is sufficient for the high-risk land use.   |                                   |

# Recommendation - supported subject to modifications

The development application and the BMP have adequately identified issues arising from the bushfire risk assessment and considered how compliance with the bushfire protection criteria can be achieved. However, modifications to the BMP are necessary to ensure it accurately identifies the bushfire risk and necessary mitigation measures for a high-risk land use. The required modifications and further information required are listed in the table above.

Following a planning approval, a submission consisting of all the relevant information of the proposed structure and associated process areas should be forwarded to the Fire and Emergency Services Commissioner as per the requirements of WA Building Regulations 2012, 18b, Certificate of design compliance – preliminary action (s.19(6)). DFES will be able to provide further advice once detailed designs are provided at the building permit stage.

As this planning decision is to be made by a Joint Development Assessment Panel please forward notification of the decision to DFES for our records.

If you require further information, please contact Richard Trinh – Senior Land Use Planning Officer on telephone number 6551 4031.

Yours sincerely

Ron de Blank

**DIRECTOR LAND USE PLANNING** 

24 February 2020

# 18 Reports - Civic Leadership

# 18.1 Budget Variations

### **DECLARATION OF INTEREST:**

There were no declarations of interest declared.

### **SUMMARY:**

To amend the 2019/2020 budget to reflect various adjustments to the General Ledger with nil effect to the budgeted surplus position as detailed below.

### **OFFICER RECOMMENDATION:**

That Council approves the required budget variations to the Current Budget for 2019/2020 as follows.

| ITEM<br># | DESCRIPTION   | CURRENT<br>BUDGET | INCREASE/<br>DECREASE | REVISED<br>BUDGET |
|-----------|---|-------------------|-----------------------|-------------------|
| 1         | Capital Expense - Plant and<br>Equipment - Sound Level Meter            | (12,000)          | (8,641)               | (20,641)          |
|           | Operating Expense - Public Health –<br>Legal Expenses                   | (11,250)          | 8,641                 | (2,609)           |
| 2         | Operating Expense – Depot Operating<br>Overheads – Expendable Equipment | (58,507)          | (4,950)               | (63,457)          |
|           | Capital Expense -Plant and<br>Equipment – New 4.5T Trailer              | (25,000)          | 4,950                 | (20,050)          |

NOTE: AN ABSOLUTE MAJORITY OF COUNCIL IS REQUIRED

#### **DISCUSSION:**

| ITEM<br># | DESCRIPTION   | CURRENT<br>BUDGET | INCREASE/<br>DECREASE | REVISED<br>BUDGET |
|-----------|---|-------------------|-----------------------|-------------------|
| 1         | Capital Expense – Plant and Equipment - Sound Level Meter | (12,000)          | (8,641)               | (20,641)          |
|           | Operating Expense - Public Health –<br>Legal Expenses     | (11,250)          | 8,641                 | (2,609)           |

The original quote received for the replacement of a sound level meter for the Environmental Health team was not issued with the conformity certificates required by the *Environmental Protection (Noise) Regulations 1997*. This certification is required if the City is to undertake legal enforcement for noise complaints. A quote have been received for a sound level meter complete with conformity certificates.

The proposal is to adjust the budget to increase the sound level meter budget by \$8,641 to cover the full cost of this purchase of the approved sound level meter using savings in the Health legal expenses budget as they are not anticipating any prosecutions during the remainder of the financial year.

#### 18.1 BUDGET VARIATIONS

| 2 | Operating Expense – Depot Operating<br>Overheads – Expendable Equipment | (58,507) | (4,950) | (63,457) |
|---|---|----------|---------|----------|
|   | Capital Expense -Plant and<br>Equipment – New 4.5T Trailer              | (25,000) | 4,950   | (20,050) |

As part of Budget Review, funds were set aside for the replacement of a Razorback industrial mower. It has been determined that the existing trailer to transport the mower is not suitable and it will require a trailer with the appropriate TARE weight. A 2.0T purpose built trailer suitable to transport the mower will cost \$4,950.

To fund the new trailer, it is proposed that the budget is reduced for the heavy duty 4.5T trailer currently budgeted at \$25,000. The original quoted price has been renegotiated with the supplier and resulted in savings of \$5,660. It is proposed that \$4,950 of these savings are used to purchase a replacement trailer for the Razorback industrial mower. Both trailers would be funded by the Plant and Equipment Replacement Reserve.

### **LEGAL/POLICY IMPLICATIONS:**

The *Local Government Act 1995* Part 6 Division 4 s 6.8 (1) requires the local government not to incur expenditure from its municipal fund for an additional purpose except where the expenditure-

(b) is authorised in advance by resolution\*

"additional purpose" means a purpose for which no expenditure estimate is included in the local government's annual budget.

# FINANCIAL/BUDGET IMPLICATIONS:

The financial implications are detailed in this report.

### **ASSET MANAGEMENT IMPLICATIONS:**

The allocation of funds towards the upgrading and purchase of City assets will be included in the City's Asset Management Strategy.

### **ENVIRONMENTAL IMPLICATIONS:**

No environmental implications have been identified as a result of this report or recommendation.

<sup>\*</sup>requires an absolute majority of Council.

### 18.1 BUDGET VARIATIONS

# STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective detailed in the Corporate Business Plan.

| Plan                    | Outcome              | Objective  |
|-------------------------|----------------------|--|
| Corporate Business Plan | Business Performance | 5.4 Ensure the financial sustainability of the City of |
|                         |                      | Kwinana into the future                                |

# **COMMUNITY ENGAGEMENT:**

There are no community engagement implications as a result of this report.

# **PUBLIC HEALTH IMPLICATIONS**

There are no public health implications as a result of this report.

# **RISK IMPLICATIONS:**

The risk implications in relation to this proposal are as follows:

| Risk Event                                   | The City does not manage its finances adequately and allows budget expenditure to exceed allocation and the City then finds itself unable to fund its services that have been approved through the budget process |
|--|---|
| Risk Theme                                   | Failure to fulfil statutory regulations or compliance Providing inaccurate advice/information   |
| Risk Effect/Impact                           | Financial Reputation Compliance   |
| Risk Assessment Context                      | Operational   |
| Consequence                                  | Minor   |
| Likelihood                                   | Rare  |
| Rating (before treatment)                    | Low   |
| Risk Treatment in place                      | Reduce (mitigate risk)  |
| Response to risk treatment required/in place | Submit budget variation requests to Council as they arise, identifying financial implications and ensuring there is nil effect on the budget adopted  |
| Rating (after treatment)                     | Low   |

# 18.1 BUDGET VARIATIONS

# **COUNCIL DECISION**

136

MOVED CR M KEARNEY

# **SECONDED CR P FEASEY**

That Council approves the required budget variations to the Current Budget for 2019/2020 as follows.

| ITEM<br># | DESCRIPTION   | CURRENT<br>BUDGET | INCREASE/<br>DECREASE | REVISED<br>BUDGET |
|-----------|---|-------------------|-----------------------|-------------------|
| 1         | Capital Expense - Plant and<br>Equipment - Sound Level Meter            | (12,000)          | (8,641)               | (20,641)          |
|           | Operating Expense - Public Health –<br>Legal Expenses                   | (11,250)          | 8,641                 | (2,609)           |
| 2         | Operating Expense – Depot Operating<br>Overheads – Expendable Equipment | (58,507)          | (4,950)               | (63,457)          |
|           | Capital Expense -Plant and<br>Equipment – New 4.5T Trailer              | (25,000)          | 4,950                 | (20,050)          |

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL 8/0

18.2 Disposition by way of Lease, Part of 2 (Lot 107) Robbos Way Kwinana, an Office in the Darius Wells Library and Resource Centre, Lease Agreement between the City of Kwinana and the Australian Red Cross

### **DECLARATION OF INTEREST:**

There were no declarations of interest declared.

### **SUMMARY:**

The City of Kwinana (the City) is the owner of the Darius Wells Library and Resource Centre (Darius Wells) situated at 2 Robbos Way, Kwinana. This report concerns an office with an area of 24.7m2 on the first floor, being part of Lot 107 on Deposited Plan 70670, comprised in Certificate of Title Volume 2786 Folio 114 (the Premises).

Council resolved at Ordinary Council Meetings on 24 July 2019 and 23 October 2019, to authorise the Mayor and Chief Executive Officer (CEO) to execute Leases for the offices within Darius Wells with the following Non-Government Agencies, on behalf of the City:

- Citizens Advice Bureau of Western Australia Inc.;
- Relationships Australia Western Australia Inc.;
- Ngala Community Services;
- Bridging the Gap Inc.;
- Kwinana Early Years Services Inc.;
- The Smith Family; and
- Communicare Inc.

This report seeks Council to resolve that the CEO is authorised on behalf of the City to give disposition by way of lease, to negotiate and finalise the lease of the Premises to the Australian Red Cross (the Red Cross).

The layout of the offices that the Red Cross (and other Darius Wells tenants) currently occupy, and will continue to occupy, are at Attachment A.

The Red Cross is a not-for-profit organisation, the objects of which are charitable, cultural, educational or of a similar nature. As such, the disposition of the Premises does not have to be advertised in accordance with section 3.58 of the *Local Government Act 1995* (the Act), as the lease to the Red Cross is an exempt disposition under section 30 (2)(b)(i) of the *Local Government (Functions and General) Regulations 1996.* 

The Premises is currently leased to non-government agencies who were selected through an Expression of Interest process that was conducted by the City in 2012. The City has worked closely with these organisations to ensure the best possible quality and most effective fitout to enable the Non-Government Agencies to provide a high level of service.

The Premise comprises of eight lettable office areas, meetings rooms, staff and kitchen facilities. The development of Darius Wells was made possible through joint funding from the City of Kwinana, Lotterywest and Federal Government grant funding. The grant funding from Lotterywest was conditional upon Darius Wells providing low-rental office space for non-government agencies and community groups. The City undertook an appropriate fitout of each space to meet the individual requirements of the Non-Government Agencies.

18.2 DISPOSITION BY WAY OF LEASE, PART OF 2 (LOT 107) ROBBOS WAY KWINANA, AN OFFICE IN THE DARIUS WELLS LIBRARY AND RESOURCE CENTRE, LEASE AGREEMENT BETWEEN THE CITY OF KWINANA AND THE AUSTRALIAN RED CROSS

### OFFICER RECOMMENDATION:

### That Council:

- 1. Authorise the valuation undertaken on 18 April 2019 (as identified at Attachment B), carried out more than 6 months before the proposed disposition, to be a true indication of the value at the time of the proposed disposition; and
- 2. Authorise the Chief Executive Officer and Mayor to execute an individual lease agreement (as identified in Attachment C), and make modifications where the intent of the agreement does not change, in relation to an office on the first floor, 2 Robbos Way, Kwinana being part of Lot 107 on Deposited Plan 70670, comprised in Certificate of Title Volume 2786 Folio 114 to the Australian Red Cross.

NOTE - AN ABSOLUTE MAJORITY OF COUNCIL IS REQUIRED

### **DISCUSSION:**

The following sets out the current tenancy of the offices:

| Tenant/Non-<br>Government Agency | Area (m²) | Lease<br>Commencement<br>Date |                     | Lease Area<br>Attachment<br>A |
|----------------------------------|-----------|-------------------------------|---------------------|-------------------------------|
| Australian Red Cross             | 24.7      | 14 November<br>2013           | 13 November<br>2019 | 1                             |

On 6 June 2019, the Red Cross were reminded that the abovementioned lease was due to expire and that the City required confirmation of their intentions to enter into a new lease. We received correspondence that the Red Cross were considering the new lease, however were not in a position to confirm their intention to enter into the lease due in internal issues within the organisation at that time. However, on 24 January 2020 the Red Cross confirmed that they wished to continue their tenancy and enter into a new lease with the City, subject to Council approval. The Red Cross are operating on a month to month holding over tenancy term, until the new lease is executed.

Section 3.58(4)(c) of the Act requires the market value of a disposition is to be ascertained by a valuation carried out not more than 6 months before the proposed disposition. However, section 3.58(4)(c)(ii) of the Act allows the City to declare by resolution that it believes a valuation carried out more than six months before the proposed disposition, is a true indication of the value at the time of the proposed disposition. McGees Property conducted a valuation of the Premises on 18 April 2019, a copy of the Valuation Report is contained at Confidential Attachment B. Accordingly, the Valuation was carried out more than 6 months before any proposed disposition, assuming Council resolve to dispose of the Premises at its next Ordinary Council Meeting. Whilst the Valuation is dated more than 6 months before the proposed disposition, City Officer's believe that a subsequent valuation would not be materially different from the Valuation obtained on 18 April 2019. City Officers have confirmed with McGees Property that they are confident that if they were to conduct a valuation now, the market rental valuation would remain the same. Accordingly, City Officers recommend that Council resolve that it believes the Valuation carried out on 18 April 2019 contains a true indication of the current value of the Premises.

The Red Cross has reviewed and agreed to the terms of the new lease (at Attachment C).

#### **Proposed Rent – Discounted Market Rent**

The City's Leasing of Community Facilities Policy (the Policy) provides for the circumstances in which an organisation is entitled to a discounted market rent. The proposed rent as set out below, has been determined by applying a 35% discount to the valuation amount, as set out in the Policy. The assessment of eligibility to the discount of the market rental valuation was determined by the Director of City Engagement in consultation with senior officers of the City Legal team by evaluating the services provided by the Red Cross in Kwinana against the criteria outlined within the Policy.

The following outlines the current rent charged, the rent to be charged for the new lease and a summary description of the Red Cross' service to the community.

#### The Red Cross

The Red Cross is a not-for-profit organisation who provides support and advice to the public. They assist with disasters, humanitarian issues, international programs, social inclusion, building stronger communities, protecting people in times of war and conflict and improve the wellbeing of those experiencing extreme vulnerability. They occupy a space of  $24.7m^2$  and currently pay the City \$3,402 rent per annum plus outgoings, subject to annual Consumer Price Index (CPI) reviews. The annual market rent is \$5,900. If a 35% discount is applied in accordance with the Policy, the annual rent payable would be \$3,835 (constituting a \$2,065 discount). This is an increase of \$433 from the amount currently payable. The rent will be reviewed on each rent review date, based on CPI review. The outgoings are estimated to be \$167 per annum. The proposed term of the lease agreement is for 3 years with the option to extend for a further 3 years, at which time a market value rent review may occur.

#### **LEGAL/POLICY IMPLICATIONS:**

#### Section 3.58 (3) and (4) of the Local Government Act 1995 states:

- (3) A local government can dispose of property other than under subsection (2) if, before agreeing to dispose of the property
  - (a) it gives local public notice of the proposed disposition
    - (i) describing the property concerned; and
    - (ii) giving details of the proposed disposition; and
    - (iii) inviting submissions to be made to the local government before a date to be specified in the notice, being a date not less than 2 weeks after the notice is first given; and
  - (b) it considers any submissions made to it before the date specified in the notice and, if its decision is made by the council or a committee, the decision and the reasons for it are recorded in the minutes of the meeting at which the decision was made.

- (4) The details of a proposed disposition that are required by subsection (3)(a)(ii) include
  - (a) the names of all other parties concerned; and
  - (b) the consideration to be received by the local government for the disposition; and
  - (c) the market value of the disposition
    - (i) as ascertained by a valuation carried out not more than 6 months before the proposed disposition; or
    - (ii) as declared by a resolution of the local government on the basis of a valuation carried out more than 6 months before the proposed disposition that the local government believes to be a true indication of the value at the time of the proposed disposition.

## Section 30 of the Local Government (Functions and General) Regulations 1996 states:

- (1) A disposition that is described in this regulation as an exempt disposition is excluded from the application of section 3.58 of the Act.
- (2) A disposition of land is an exempt disposition if
  - (a) the land is disposed of to an owner of adjoining land (in this paragraph called the transferee) and
    - (i) its market value is less than \$5 000; and
    - (ii) the local government does not consider that ownership of the land would be of significant benefit to anyone other than the transferee; or
  - (b) the land is disposed of to a body, whether incorporated or not
    - (i) the objects of which are of a charitable, benevolent, religious, cultural, educational, recreational, sporting or other like nature; and (ii) the members of which are not entitled or permitted to receive any pecuniary profit from the body's transactions; or
  - (c) the land is disposed of to
    - (i) the Crown in right of the State or the Commonwealth; or
    - (ii) a department, agency, or instrumentality of the Crown in right of the State or the Commonwealth; or
    - (iii) another local government or a regional local government; or
  - (d) it is the leasing of land to an employee of the local government for use as the employee's residence; or
  - (e) it is the leasing of land for a period of less than 2 years during all or any of which time the lease does not give the lessee the exclusive use of the land; or
  - (f) it is the leasing of land to a person registered under the Health Practitioner Regulation National Law (Western Australia) in the medical profession to be used for carrying on his or her medical practice; or
  - (g) it is the leasing of residential property to a person.
- (2a) A disposition of property is an exempt disposition if the property is disposed of within 6 months after it has been
  - (a) put out to the highest bidder at public auction, in accordance with section 3.58(2)(a) of the Act, but either no bid is made or any bid made does not reach a reserve price fixed by the local government; or

- (b) the subject of a public tender process called by the local government, in accordance with section 3.58(2)(b) of the Act, but either no tender is received or any tender received is unacceptable; or
- (c) the subject of Statewide public notice under section 3.59(4) of the Act, and if the business plan referred to in that notice described the property concerned and gave details of the proposed disposition including
  - (i) the names of all other parties concerned; and
  - (ii) the consideration to be received by the local government for the disposition; and
  - (iii) the market value of the disposition as ascertained by a valuation carried out not more than 12 months before the proposed disposition.
- (2b) Details (see section 3.58(4) of the Act) of a disposition of property under subregulation (2a) must be made available for public inspection for at least 12 months from the initial auction or tender, as the case requires.
- (3) A disposition of property other than land is an exempt disposition if
  - (a) its market value is less than \$20 000; or
  - (b) the entire consideration received by the local government for the disposition is used to purchase other property, and where the total consideration for the other property is not more, or worth more, than \$75,000.

#### FINANCIAL/BUDGET IMPLICATIONS:

This lease will provide an annual income of \$46,020 plus GST. The total income before the discount would be \$70,800 plus GST.

#### **ASSET MANAGEMENT IMPLICATIONS:**

The implications for this report are the ongoing management and administration required by all of the City's leases of property.

#### **ENVIRONMENTAL IMPLICATIONS:**

No environmental implications have been identified as a result of this report or recommendation.

#### STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective as detailed in the Corporate Business Plan.

| Plan                    | Outcome              | Objective                            |  |
|-------------------------|----------------------|--------------------------------------|--|
| Corporate Business Plan | Business performance | 5.6 Maximise the value of the City's |  |
|                         |                      | property assets                      |  |

#### **COMMUNITY ENGAGEMENT:**

As a result of leasing the Premises to the Red Cross there will be various and continued positive community engagement implications.

#### **PUBLIC HEALTH IMPLICATIONS**

The recommendations of this report (e.g. the leasing of the City facility to the Red Cross has the potential to assist with improved health behaviours and socio-economic factors including education, family and social support.

#### **RISK IMPLICATIONS:**

The risk implications in relation to this proposal are as follows:

| Risk Event                 | That Council does not support disposition by way of lease of the office space in Lot 107 on Deposited Plan 70670 to the Red Cross. If Council resolve not to support disposition by way of lease, as per Section 3.58 of the <i>Local Government Act 1995</i> , the disposition cannot proceed. |
|----------------------------|---|
| Risk Theme                 | Ineffective management of facilities/venues/events and failure to fulfil statutory regulation requirements  |
| Risk Effect/Impact         | Financial   |
| Risk Assessment Context    | Operational   |
| Consequence                | Minor   |
| Likelihood                 | Unlikely  |
| Rating (before treatment)  | Low   |
| Risk Treatment in place    | Avoid   |
| Response to risk treatment | This report is to authorise the Chief Executive Officer   |
| required/in place          | on behalf of the City of Kwinana to give disposition  |
|                            | by way of lease, an office within Part Lot 107 on   |
|                            | Deposited Plan 70670 to the Red Cross   |
| Rating (after treatment)   | Low   |

## COUNCIL DECISION 137

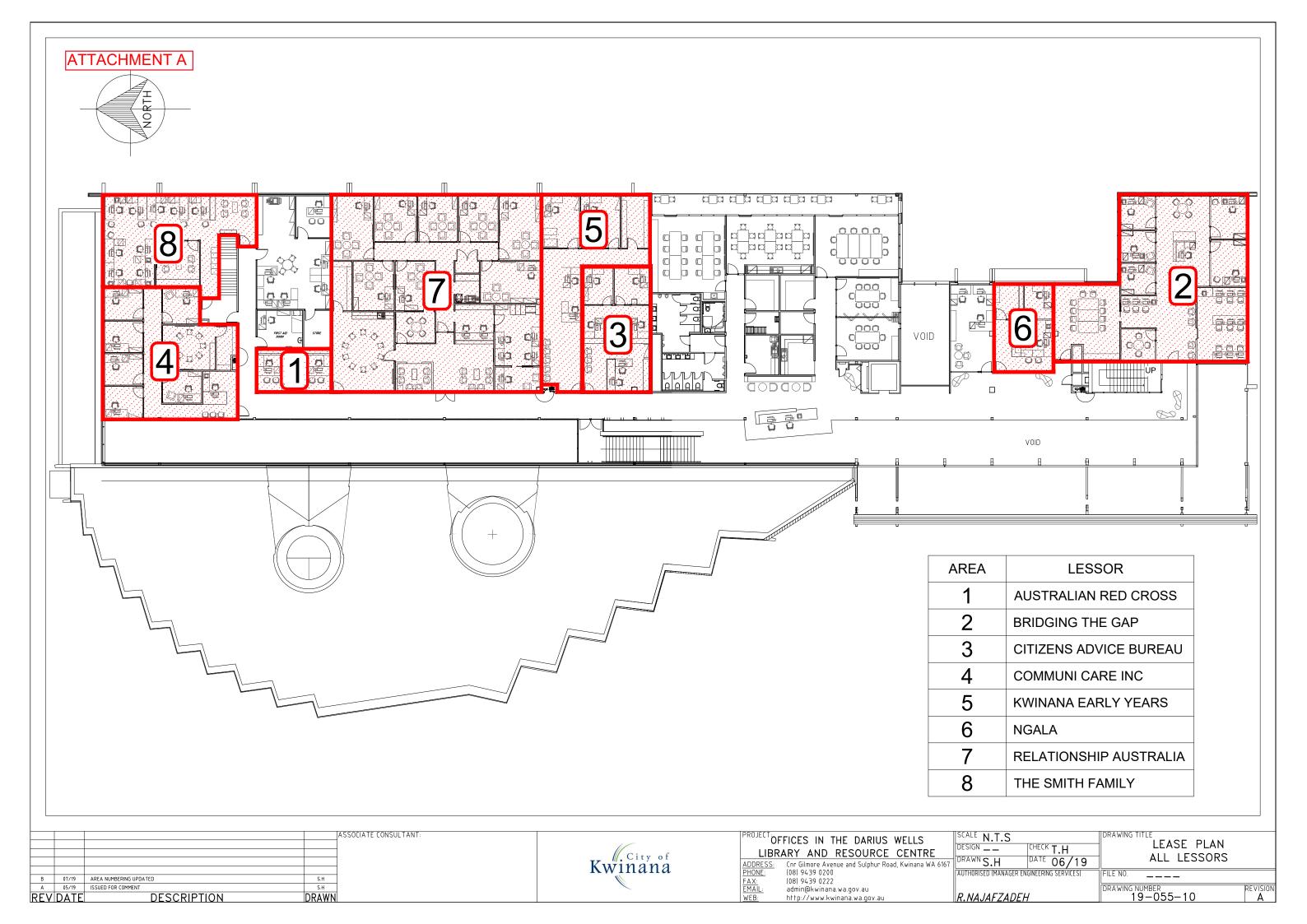
**MOVED CR W COOPER** 

SECONDED CR S LEE

#### **That Council:**

- 1. Authorise the valuation undertaken on 18 April 2019 (as identified at Attachment B), carried out more than 6 months before the proposed disposition, to be a true indication of the value at the time of the proposed disposition; and
- 2. Authorise the Chief Executive Officer and Mayor to execute an individual lease agreement (as identified in Attachment C), and make modifications where the intent of the agreement does not change, in relation to an office on the first floor, 2 Robbos Way, Kwinana being part of Lot 107 on Deposited Plan 70670, comprised in Certificate of Title Volume 2786 Folio 114 to the Australian Red Cross.

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL 8/0



## Lease

# Offices in the Darius Wells Library & Resource Centre Part Lot 107 on Deposited Plan 70670

City of Kwinana (ABN 13 890 27 321)

Australian Red Cross Society (ABN 50 169 561 394)

## **Table of Contents**

| Details  |  | 6                                      |
|--|--|--|
| Agre   | ed terms   | 7                                      |
| 1.   | Definitions  | 7                                      |
| 2.   | Interpretation   | 9                                      |
| 3.   | Grant of lease   | 10                                     |
| 4.   | Quiet enjoyment  | 10                                     |
| <b>5</b> . 5.1 5.2 5.3 5.4 5.5                             | Rent and other payments Rent Outgoings Interest Costs Accrual of amounts payable   | 10<br>10<br>11<br>11<br>11<br>12       |
| 6.<br>6.1<br>6.2<br>6.3<br>6.4<br>6.5<br>6.6               | Rent Review Rent to be Reviewed Methods of Review CPI Review Market Rent Review Rent will not decrease Lessor's right to review  | 12<br>12<br>12<br>12<br>12<br>13<br>13 |
| 7.   | Outgoings and Services   | 13                                     |
| 8.<br>8.1<br>8.2<br>8.3<br>8.4<br>8.5<br>8.6<br>8.7<br>8.8 | Insurance Insurance required Building Insurance to be effected by Lessor Details and receipts Payment of excess on insurance Not to invalidate Report Settlement of claim Lessor as attorney | 14<br>15<br>15<br>15<br>16<br>16<br>16 |
| 9.1<br>9.2<br>9.3<br>9.4<br>9.5                            | Indemnity Lessee responsibilities Indemnity Obligations Continuing No indemnity for Lessor's negligence Release  | 16<br>16<br>16<br>17<br>17             |
| <b>10.</b> 10.1 10.2                                       | Limit of Lessor's liability  No liability for loss on Premises Limit on liability for breach of Lessor's covenants   | <b>18</b><br>18<br>18                  |
| 11.<br>11.1<br>11.2<br>11.3<br>11.4<br>11.5<br>11.6        | Maintenance, repair and cleaning Generally Cleaning Repair Responsibility for Securing the Premises Lessor's Fixtures and Fittings Pest control  | 18<br>19<br>19<br>19<br>19<br>19       |

| 11.7  | Painting  | 19   |
|---|---|--|
| 12.   | Use   | 20   |
| 12.1<br>12.2<br>12.3<br>12.4<br>12.5<br>12.6<br>12.7<br>12.8<br>12.9<br>12.10<br>12.11<br>12.12<br>12.13<br>12.14 | Restrictions on use Generally No offensive or illegal acts No nuisance No dangerous substances No harm or stress No signs No smoking Consumption of alcohol Sale of Alcohol Removal of rubbish No pollution No warranty Lessee to Observe Copyright Premises Subject to Restriction | 20<br>20<br>20<br>20<br>20<br>20<br>20<br>21<br>21<br>21<br>21<br>21<br>21<br>21 |
| 12.16   | Indemnity for Costs   | 21   |
| 13.1<br>13.2<br>13.3<br>13.4  | Alterations Restriction Consent Cost of Works Conditions  | <b>21</b><br>21<br>22<br>22<br>22  |
| <b>14.</b><br>14.1<br>14.2  | Lessor's right of entry Entry on Reasonable Notice Costs of Rectifying Breach   | 23<br>23<br>23   |
| <b>15.</b><br>15.1<br>15.2  | Statutory obligations and notices Comply with Statutes Indemnity if Lessee Fails to Comply  | <b>23</b><br>23<br>24  |
| 16.   | Report to Lessor  | 24   |
| 17.1<br>17.2<br>17.3<br>17.4<br>17.5<br>17.6  | Default  Events of Default  Forfeiture  Lessor may remedy breach  Acceptance of Amount Payable By Lessor  Essential Terms  Breach of Essential Terms  | 24<br>24<br>25<br>25<br>25<br>25<br>25   |
| <b>18.</b><br>18.1<br>18.2  | Damage or destruction of Premises Abatement of Rent Total Damage or Destruction   | <b>26</b><br>26<br>26  |
| 19.   | Option to renew   | 26   |
| 20.   | Holding over  | 27   |
| 21.   | Restore premises  | 27   |
| <b>22.</b><br>22.1<br>22.2  | Yield up the premises  Peacefully surrender Clause 22.1 to survive termination  | <b>27</b><br>27<br>27  |
| <b>23.</b> 23.1 23.2  | Removal of property from Premises  Remove property prior to termination Lessor can remove property on re-entry  | <b>27</b><br>27<br>28  |

| 24.          | Assignment, Subletting and Charging   | 28       |
|--------------|---|----------|
| 24.1<br>24.2 | No assignment or sub-letting without consent Lessor's Consent to Assignment and Sub-letting | 28<br>28 |
| 24.3<br>24.4 | Consents of Assignee Supplementary Property Law Act 1969                                    | 28<br>28 |
| 24.5         | Costs for assignment and sub-letting  | 29       |
| 24.6         | No mortgage or charge   | 29       |
| 25.          | Disputes  | 29       |
| 25.1<br>25.2 | Referral of Dispute: Phase 1 Referral of Dispute: Phase 2                                   | 29<br>29 |
| 25.3         | Appointment of Arbitrator: Phase 3  | 29       |
| 25.4         | Payment of Amounts Payable to Date of Award   | 29       |
| 26.          | Prior notice of proposal to change rules  | 30       |
| 27.          | Provision of information  | 30       |
| 28.          | Caveat  | 30       |
| 28.1         | No absolute caveat  | 30       |
| 28.2<br>28.3 | CEO & Lessor as attorney Ratification   | 30<br>30 |
| 28.4         | Indemnity   | 30       |
| 29.          | Goods and Services Tax  | 31       |
| 29.1         | Definitions   | 31       |
| 29.2         | Lessee to pay GST   | 31       |
| 29.3<br>29.4 | Consideration in Kind No Contribution from Lessor   | 31<br>31 |
| 29.5         | Statement of GST paid is Conclusive   | 31       |
| 29.6         | Tax Invoices  | 32       |
| 29.7         | Reciprocity   | 32       |
| 30.          | No Fetter   | 32       |
| 31.          | Additional Terms Covenants and Conditions   | 32       |
| 32.          | Commercial Tenancy Act  | 32       |
| 33.          | Acts by agents  | 32       |
| 34.          | Governing law   | 32       |
| 35.          | Statutory powers  | 32       |
| 36.          | Notice  | 33       |
| 36.1         | Form of delivery  | 33       |
| 36.2<br>36.3 | Service of notice Signing of notice   | 33<br>33 |
| 37.          | Severance   | 33       |
| 38.          | Variation   | 34       |
| 39.          | Moratorium  | 34       |
| 40.          | Further assurance   | 34       |
| 41.          | Payment of money  | 34       |
| 42.          | Waiver  | 34       |
| 42.1         | No general waiver   | 34       |
| 42.2         | Partial exercise of right power or privilege  | 34       |

| Schedule                        | 35 |
|---------------------------------|----|
| Signing page                    | 39 |
| Annexure 1 – Sketch of Premises | 40 |

## **Details**

## **Parties**

### City of Kwinana

of PO Box 21, Kwinana, Western Australia 6966 (**Lessor**)

#### **Australian Red Cross Society**

of 110 Goderich Street, East Perth, Western Australia 6004 (**Lessee**)

## Background

- A The Lessor is registered as the proprietor of the Land.
- B The Lessor has agreed to lease and the Lessee has agreed to take a lease of the Premises upon the terms and conditions contained in this Deed.

## Agreed terms

#### 1. Definitions

In this Lease, unless otherwise required by the context or subject matter:

Alterations means any of the acts referred to in clause 13.2;

**Amounts Payable** means the Rent and any other money payable by the Lessee under this Lease;

#### Authorised Person means:

- (a) an agent, employee, licensee or invitee of the Lessor; and
- (b) any person visiting the Premises with the express or implied consent of any person mentioned in paragraph (a);

**Authority** includes any governmental or public authority of any kind;

**Building** means the building in which the Premises are situated and includes any modifications, extensions or alterations to the Building and the Lessor's Property;

**CEO** means the Chief Executive Officer for the time being of the Lessor or any person appointed, authorised or delegated by the Chief Executive Officer to perform any of her or his functions;

**Commencement Date** means the date of commencement of the Term specified in **Item** 4 of the Schedule:

**Common Areas** means those parts of the Land and Building that are set aside or designated for the use of the occupiers of the Building or members of the public generally in common with each other and the Lessor;

**CPI** means the Consumer Price Index (All Groups) Perth number published from time to time by the Australian Bureau of Statistics;

**Encumbrance** means a mortgage, charge, lien, pledge, easement, restrictive covenant, writ, warrant or caveat and the claim stated in the caveat;

Further Term means each further term specified in Item 3 of the Schedule;

**Good Repair** means good and substantial Lease-able repair and in clean, good working order and condition;

**GST** has the meaning that it bears in the *A New Tax System (Goods and Services Tax) Act 1999 (Cth)* and any legislation substituted for, replacing or amending that Act;

**Interest Rate** means the rate at the time the payment falls due being 2% greater than the Lessor's general overdraft rate on borrowings from its bankers on amounts not exceeding \$100,000.00;

Land means the land described at Item 1(a) of the Schedule;

Lease means this deed as supplemented, amended or varied from time to time;

#### Lessee's Agents includes:

- (a) the sublessees, employees, agents, contractors, invitees and licensees of the Lessee; and
- (b) any person on the Premises by the authority of a person specified in paragraph (a);

**Lessee's Covenants** means the covenants, agreements and obligations set out or implied in this Lease or imposed by law to be performed and observed by any person other than the Lessor:

**Lessee's Employees** means each of the Lessee's employees, contractors and agents and those persons over whom the Lessee exercises control at the Premises and includes the employees and sub-contractors of the Lessee's agents and contractors;

#### **Lessor** includes:

- (a) in the case of a person, that person's executors, administrators and assigns; and
- (b) in any other case, the Lessor's successors and assigns;

**Lessor's Property** means the plant, equipment, fixtures, fittings and any other Lessor's property in the Premises;

**Lessor's Covenants** means the covenants, agreements and obligations set out or implied in this Lease, or imposed by law to be observed and performed by the Lessor;

Normal Hours mean the hours between 7am and 9pm;

**Notice** means each notice, demand, consent or authority given or made to any person under this Lease;

Outgoings has the meaning set out in clause 5.2 in this Lease;

Outgoings Contribution means the contribution set out in Item 7 of the Schedule; Party means the Lessor or the Lessee according to the context;

**Permitted Purpose** means use of the Leased Premises as specified in **Item 8** of the Schedule;

**Premises** means the premises described at **Item 1(b)** of the Schedule;

#### Rates and Taxes means:

- (a) Local Government rates and charges including, all local government rates, levies, charges and service fees and rubbish service rates, charges, levies and fees;
- (b) land tax (including metropolitan region improvement tax) on a single holding basis;
- (c) water, drainage and sewerage rates, including meter rents, charges for the disposal of storm water and excess water charges,
- (d) levied, charged, assessed or imposed together with any related stamp or transaction duties, and any interest, penalties, fines and expenses in connection with them but excluding any income tax, capital gains tax and GST;

**Rent** means the rent specified in **Item 5** of the Schedule;

**Rent Review Date** means the date that rent and outgoings are reviewed and specified at **Item 6** of the Schedule to this Lease;

Schedule means the Schedule to this Lease;

**Services** means all gas, electricity, telephone, water, sewerage, fire prevention, ventilation, air conditioning, hydraulic, elevator and security services and all other services or systems provided in the Building or available for the Lessee's use whether provided by the Lessor or any Authority;

**Term** means the term of years specified in **Item 2** of the Schedule and any Further Term;

**Termination** means expiry by effluxion of time or sooner determination of the Term or any period of holding over.

### 2. Interpretation

In this Lease, unless expressed to the contrary:

- (a) words importing:
  - (i) the singular includes the plural and vice versa; and
  - (ii) a gender or genders include each other gender;
- (b) if a word or phrase is assigned a particular meaning, other grammatical forms of that word or phrase have a corresponding meaning:
- (c) a reference to:
  - (i) a natural person includes a body corporate or local government;
  - (ii) a body corporate or local government includes a natural person;
  - (iii) a professional body includes a successor to or substitute for that body;
  - (iv) a Party includes its legal personal representatives, successors and assigns and if a Party comprises two or more persons, the legal personal representatives, successors and assigns of each of those persons;
  - (v) a statute, includes an ordinance, code, regulation, award, town planning scheme, regulation, local law, by-law, requisition, order or other statutory instruments made under any of them and a reference to any of them, whether or not by name, includes any amendments to, re-enactments of or replacements of any of them from time to time in force;
  - (vi) a right includes a benefit, remedy, discretion, authority or power;
  - (vii) an obligation includes a warranty or representation and a reference to a failure to observe or perform an obligation includes a breach of warranty or representation;
  - (viii) this Lease or provisions of this Lease or any other deed, agreement, instrument or contract includes a reference to:
  - (ix) both express and implied provisions; and

- (x) that other deed, agreement, instrument or contract as varied, supplemented, replaced or amended:
- (xi) writing includes any mode of representing or reproducing words in tangible and permanently visible form and includes facsimile transmissions;
- (xii) any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them; and
- (xiii) a subparagraph, paragraph, subclause, clause, Item, Schedule or Annexure is a reference to, respectively, a subparagraph, paragraph, subclause, clause, Item, Schedule or Annexure of this Lease;
- (d) the covenants and obligations on the part of the Lessee not to do or omit to do any act or thing include:
  - (i) covenants not to permit that act or thing to be done or omitted to be done by a Lessee's Agent; and
  - (ii) a covenant to take all reasonable steps to ensure that that act or thing is not done or omitted to be done;
- (e) the meaning of general words or phrases is not limited by specific examples introduced by 'including', 'for example' or similar expressions; and
- (f) if a Party comprises two or more persons, the covenants and agreements on their part bind them and must be observed and performed by them jointly and each of them severally, and may be enforced against any one or more of them.

#### 3. Grant of lease

The Lessor leases to the Lessee the Premises for the Term subject to:

- (a) all Encumbrances;
- (b) the payment of the Amounts Payable; and
- (c) the performance and observance of the Lessee's Covenants.

## 4. Quiet enjoyment

Except as provided in the Lease, for so long as the Lessor is registered as the proprietor in fee simple in the Land, and subject to the performance and observance of the Lessee's Covenants the Lessee may quietly hold and enjoy the Premises during the Term without any interruption or disturbance from the Lessor or persons lawfully claiming through or under the Lessor.

## 5. Rent and other payments

The Lessee covenants with the Lessor:

#### 5.1 Rent

To pay to the Lessor the Rent in the manner set out at **Item 5** of the Schedule on and from the Commencement Date clear of any deductions.

#### 5.2 Outgoings

- (1) To pay to the Lessor or to such person as the Lessor may from time to time direct punctually all the following outgoings or charges, assessed or incurred in respect of the Premises:
  - (a) local government rates, specified area rates, taxes, service and other charges and including charges for rubbish and garbage removal;
  - (b) water, drainage and sewerage rates, charges for disposal of stormwater, meter rent and excess water charges;
  - (c) telephone, electricity, gas and other power and light charges including but not limited to meter rents and the cost of installation of any meter, wiring, internet connections or telephone connection;
  - (d) land tax and metropolitan regional improvement tax on a single ownership basis;
  - (e) premiums, excess and other costs arising from the insurance obtained by the Lessor pursuant to **clause 8.2**. For the avoidance of doubt, the parties agree:
    - that if such premium or cost does not include a separate assessment or identification of the Premises or the Land, the Lessee must pay a proportionate part of such premium or cost determined by the Lessor acting reasonably; and
    - (ii) such insurance will include insurance for the full replacement value of buildings; and
    - (iii) any other consumption charge or cost, statutory impost or other obligation incurred or payable by reason of the Lessee's use and occupation of the Premises.
- (2) If the Premises are not separately charged or assessed the Lessee will pay to the Lessor a proportionate part of any charges or assessments referred to in **clause 5.2(1)** being the proportion that the Premises bears to the total area of the land or premises included in the charge or assessment.

#### 5.3 Interest

Without affecting the rights, power and remedies of the Lessor under this Lease, to pay to the Lessor interest on demand on any Amounts Payable which are unpaid for 7 days computed from the due date for payment until payment is made and any interest payable under this paragraph will be charged at the Interest Rate.

#### 5.4 Costs

- (1) To pay to the Lessor on demand:
  - (a) all duty, fines and penalties payable under the *Duties Act 2008* and other statutory duties or taxes payable on or in connection with this Lease;
  - (b) all registration fees in connection with this Lease; and
  - (c) all legal costs of and incidental to the instructions for the preparation, execution and stamping of this Lease and all copies.

- (2) To pay to the Lessor all costs, legal fees, disbursements and payments incurred by or for which the Lessor is liable in connection with or incidental to:
  - (a) the Amounts Payable or obtaining or attempting to obtain payment of the Amounts Payable under this Lease;
  - (b) any breach of covenant by the Lessee or the Lessee's Agents;
  - (c) the preparation and service of a notice under Section 81 of the *Property Law Act* 1969 requiring the Lessee to remedy a breach even though forfeiture for the breach may be avoided in a manner other than by relief granted by a Court;
  - (d) any work done at the Lessee's request; and
  - (e) any action or proceedings arising out of or incidental to any matters referred to in this **clause 5.4** or any matter arising out of this Lease.

#### 5.5 Accrual of amounts payable

Amounts Payable accrue on a daily basis.

#### Rent Review

#### 6.1 Rent to be Reviewed

The Rent will be reviewed on and from each Rent Review Date to determine the Rent to be paid by the Lessee until the next Rent Review Date.

#### 6.2 Methods of Review

The review will be either based on CPI or a Market Review. The basis for each rent review is as identified for each Rent Review Date in **Item 6** of the Schedule.

#### 6.3 CPI Review

A rent review based on CPI will increase the amount of Rent payable during the immediately preceding period by the percentage of any increase in CPI having regard to the quarterly CPI published immediately prior to the later of the Commencement Date or the last Rent Review Date as the case may be and the quarterly CPI published immediately prior to the relevant Rent Review Date. If there is a decrease in CPI having regard to the relevant CPI publications the Rent payable from the relevant Rent Review Date will be the same as the Rent payable during the immediately preceding period. Should the CPI be discontinued or suspended at any time or its method of computation substantially altered, the parties shall endeavour to agree upon the substitution of the CPI with an equivalent index, or failing agreement by the parties, the substitution shall be made by a Valuer appointed in accordance with clause 6.4.

#### 6.4 Market Rent Review

- (1) A rent review based on market rent will establish the current market rent for the Premises (which will not be less than the Rent payable in the period immediately preceding the Rent Review Date) by agreement between the parties and failing agreement, will be determined in accordance with the following provisions.
- (2) If agreement as to the substitution of the CPI with an equivalent index for the Premises is not reached at least one (1) month prior to the relevant Rent Review Date then the current market rent for the Premises will be determined at the expense of the Lessee by a valuer (**Valuer**) licensed under the *Land Valuers Licensing Act 1978*, to be appointed, at the

request of either party, by the President for the time being of the Australian Property Institute (Western Australian Division) (or if such body no longer exists, such other body which is then substantially performing the functions performed at the Commencement Date by that Institute).

- (3) The Valuer will act as an expert and not as an arbitrator and his or her decision will be final and binding on the parties. The parties will be entitled to make submissions to the Valuer.
- (4) In this **clause 6**, "current market rent" means the rent obtainable for the Premises in a free and open market if the Premises was unoccupied and offered for rental for the use for which the Premises is permitted pursuant to this Lease and on the same terms and conditions contained in this Lease, BUT will not include:
  - (a) any improvements made or effected to the Premises by the Lessee; and
  - (b) any rent free periods, discounts or other rental concessions.

#### 6.5 Rent will not decrease

Notwithstanding the provisions in this clause, the Rent payable from any Rent Review based on CPI Review will not be less than the Rent payable in the period immediately preceding such Rent Review Date.

#### 6.6 Lessor's right to review

The Lessor may institute a rent review notwithstanding the Rent Review Date has passed and the Lessor did not institute a rent review on or prior to that Rent Review Date, and in which case the Rent agreed or determined shall date back to and be payable from the Rent Review Date for which such review is made.

## 7. Outgoings and Services

#### 7.1 Outgoings

- (a) The Lessee must pay to the Lessor the Outgoings Contribution with the first payment due on the Commencement Date.
- (b) With effect from each Rent Review Date, the Outgoings Contribution shall be reviewed in accordance with the following formula:

#### $ROC = OC \times EC / OC$

Where:

"ROC" = the annual Outgoings Contribution as reviewed;

"OC" = the annual Outgoings Contribution payable immediately before the relevant Outgoings Review Date; and

"**EC**" = the estimated cost of the Outgoings for the year commencing on the relevant Outgoings Review Date.

(c) The Lessor may not earlier than three (3) months before an Outgoings Review Date give the Lessee a notice setting out the amount of the reviewed Outgoings Contribution which shall be payable from the Outgoings Review Date ("Outgoings Review Notice"), except that the failure of the Lessor to give such a notice before

the Outgoings Review Date does not preclude the Lessor from giving such a notice in respect of that Outgoings Review Date at any later time.

#### 7.2 Rates and Taxes

- (a) The Lessee must pay to the Lessor, when due, all Rates and Taxes assessed or imposed by any Relevant Authority or other service provider in respect of the Leased Premises.
- (b) Except in the case of manifest error, a statement issued by the Lessor under clause 8.2(b) will be prima facie evidence of the matters stated in that statement.
- (c) If the year or other period in respect of which any particular Rates and Taxes is payable does not coincide with the Lease year, the amount the Lessee is to pay in the first year and last year of the Lease will be adjusted proportionally.

#### 7.3 Services separately assessed

The Lessee must pay to the Lessor or, if demand is made by a service provider, or other Relevant Authority, to that Relevant Authority, all amounts separately charged or assessed in respect of the Leased Premises or the Lessee for or in connection with Services to or for the benefit of the Leased Premises or the Lessee, and the cost of installation of any meter, wiring or other device necessitated by the use of the Services.

#### 7.4 Bulk supplies of Services

- (a) If the Lessor supplies any Services to the Leased Premises the Lessee must on demand pay to the Lessor the amount which the Lessee would have been charged by the original service provider, or other Relevant Authority if the Services had been supplied to the Lessee directly together with an administrative charge of no more than twenty per cent (20%) of the amount charged by the original service provider, or other Relevant Authority.
- (b) The Lessee must observe and comply with any conditions of supply of Services by the Lessor, or where no conditions of supply are imposed by the Lessor, observe and comply with the conditions of supply of Services imposed by the Relevant Authority.
- (c) If any Service is not provided by the Lessor, the Lessee is responsible to make the Lessee's own arrangements at the Lessee's own cost for the supply of the Service to the Leased Premises.

#### 8. Insurance

#### 8.1 Insurance required

The Lessee must effect and maintain with insurers approved by the Lessor (noting the Lessor's and the Lessee's respective rights and interest in the Premises) for the time being:

adequate public liability insurance for a sum not less than the sum set out at Item
 of the Schedule in respect of any one claim or such greater amount as the Lessor may from time to time reasonably require;

- (b) insurance against all risks as the Lessor may require, of all plate glass windows, doors and display show cases forming part of or within the Premises for a sum which is not less than its full insurable value;
- (c) insurance to cover the Lessee's fixtures, fittings, equipment and stock against loss or damage by fire, fusion, smoke, lightning, flood, storm, tempest, earthquake, sprinkler leakage, water damage and other usual risks against which a Lessee can and does ordinarily insure in their full replacement value, and loss from theft or burglary;
- (d) employers' indemnity insurance including workers' compensation insurance in respect of all employees of the Lessee employed in, about or on the Premises; and
- (e) any other policy of insurance which the Lessor may reasonably require or specify from time to time.

#### 8.2 Building Insurance to be effected by Lessor

The Lessor shall effect and keep effected insurance to the full insurable value on a replacement or reinstatement value basis of the Premises against damage arising from fire, tempest, storm, earthquake, explosion, aircraft, or other aerial device including items dropped from any device, riot, commotion, flood, lightning, act of God, fusion, smoke, rainwater, leakage, impact by vehicle, machinery breakdown and malicious acts or omissions and other standard insurable risks and the Lessee will reimburse the Lessor for any premiums, excess or other costs arising therefrom.

#### 8.3 Details and receipts

In respect of the insurances required by **clause 8.1** the Lessee must:

- on the Lessor's request, upon renewal of any insurance policy immediately forward to the Lessor copies of Certificates of Currency and details of the insurances as held by the Lessee;
- (b) on the Lessor's request, promptly pay all premiums and produce to the Lessor each policy or certificate of currency and each receipt for premiums or certificate of currency issued by the insurers; and
- (c) notify the Lessor immediately:
  - (i) when an event occurs which gives rise or might give rise to a claim under or which could prejudice a policy of insurance; or
  - (ii) when a policy of insurance is cancelled.

#### 8.4 Payment of excess on insurance

The Lessee AGREES with the Lessor that it shall be responsible to pay any excess payable in connection with the insurances referred to in **clause 8.1** and **clause 8.2**.

#### 8.5 Not to invalidate

The Lessee must not do or omit to do any act or thing or bring or keep anything on the Premises which might:

render any insurance effected under **clause 8.1** and **clause 8.2** on the Premises, or any adjoining premises, void or voidable; or

(b) cause the rate of a premium to be increased for the Premises or any adjoining premises (except insofar as an approved development may lead to an increased premium).

#### 8.6 Report

Each Party must report to the other promptly in writing and in an emergency verbally:

- (a) any damage to the Premises of which they are or might be aware; and
- (b) any circumstances of which they are aware and which are likely to be a danger or cause any damage or danger to the Premises or to any person in or on the Premises.

#### 8.7 Settlement of claim

The Lessor may, but the Lessee may not without prior written consent of the Lessor, settle or compromise any claims under any policy of insurance required by **clause 8.1** and **clause 8.2**.

#### 8.8 Lessor as attorney

The Lessee irrevocably appoints the Lessor as the Lessee's attorney during the Term:

- (a) in respect to all matters and questions which may arise in relation to any insurances required by **clause 8.1** and **clause 8.2**;
- (b) with full power to demand, sue for and recover and receive from any insurance company or society or person liable to pay the insurance money as are payable for the risks covered by the insurances required by **clause 8.1** and **clause 8.2**:
- (c) to give good and effectual receipts and discharges for the insurance; and
- (d) to settle, adjust, arbitrate and compromise all claims and demands and generally to exercise all powers of absolute owner.

## 9. Indemnity

#### 9.1 Lessee responsibilities

- (1) The Lessee is subject to the same responsibilities relating to persons and property to which the Lessee would be subject if during the Term the Lessee were the owner and occupier of the freehold of the Premises.
- (2) The Lessee is responsible and liable for all acts or omissions of the Lessee's Agents on the Premises and for any breach by them of any covenants or terms in this Lease required to be performed or complied with by the Lessee.

#### 9.2 Indemnity

- (1) The Lessee indemnifies, and shall keep indemnified, the Lessor from and against all actions, claims, costs, proceedings, suits and demands whatsoever which may at any time be incurred or suffered by the Lessor, or brought, maintained or made against the Lessor, in respect of:
  - (a) any loss whatsoever (including loss of use);
  - (b) injury or damage of, or to, any kind of property or thing; and

(c) the death of, or injury suffered by, any person,

caused by, contributed to, or arising out of, or in connection with, whether directly or indirectly:

- (d) the use or occupation of the Premises by the Lessee or the Lessee's Agents;
- (e) any work carried out by or on behalf of the Lessee on the Premises;
- (f) the Lessee's activities, operations or business on, or other use of any kind of, the Premises:
- (g) the presence of any Contamination, Pollution or Environmental Harm in on or under the Premises or adjoining land caused or contributed to by the act, neglect or omission of the Lessee or the Lessee's Agents;
- (h) any default by the Lessee in the due and punctual performance, observance and compliance with any of the Lessee's covenants or obligations under this Lease; or
- (i) an act or omission of the Lessee.

#### 9.3 Obligations Continuing

The obligations of the Lessee under this clause:

- (a) are unaffected by the obligation of the Lessee to take out insurance, and the obligations of the Lessee to indemnify are paramount, however if insurance money is received by the Lessor for any of the obligations set out in this clause then the Lessee's obligations under clause 9.2 will be reduced by the extent of such payment;
- (b) continue after the expiration or earlier determination of this Lease in respect of any act, deed, matter or thing occurring or arising as a result of an event which occurs before the expiration or earlier determination of this Lease.

#### 9.4 No indemnity for Lessor's negligence

The parties agree that nothing in this clause shall require the Lessee to indemnify the Lessor, its officers, servants, or agents against any loss, damage, expense, action or claim arising out of a negligent or wrongful act or omission of the Lessor, or its servants, agents, contractors or invitees.

#### 9.5 Release

- (1) The Lessee:
  - (a) agrees to occupy and use the Premises at the risk of the Lessee; and
  - (b) releases to the full extent permitted by law, the Lessor from:
    - (i) any liability which may arise in respect of any accident or damage to property, the death of any person, injury to any person, or illness suffered by any person, occurring on the Premises or arising from the Lessee's use or occupation of the Premises by;
    - (ii) loss of or damage to the Premises or personal property of the Lessee; and

(iii) all claims, actions, loss, damage, liability, costs and expenses arising from or connected with (directly or indirectly) the presence of any Contamination, Pollution or Environmental Harm in, on or under the Premises or surrounding area.

except to the extent that such loss or damage arises out of a negligent or wrongful act or omission of the Lessor, or its servants, agents, contractors or invitees.

(2) The release by the Lessee continues after the expiration or earlier determination of this Lease in respect of any act, deed, matter or thing occurring or arising as a result of an event which occurs before the expiration or earlier determination of this Lease.

## 10. Limit of Lessor's liability

#### 10.1 No liability for loss on Premises

The Lessor will not be liable for loss, damage or injury to any person or property in or about the Premises however occurring.

#### 10.2 Limit on liability for breach of Lessor's covenants

- (1) The Lessor is only liable for breaches of the Lessor's Covenants set out in this Lease which occur while the Lessor is vested with care, control and management of the Land.
- (2) The Lessor will not be liable for any failure to perform and observe any of the Lessor's Covenants due to any cause beyond the Lessor's control.

### Maintenance, repair and cleaning

#### 11.1 Generally

- (1) The Lessee agrees during the Term and for so long as the Lessee remains in possession or occupation of the Premises to maintain, replace, repair, clean and keep the Premises (which for the avoidance of doubt includes the Lessor's fixtures and fittings and any accessories) in good repair having regard to the age of the Premises at the Commencement Date provided that this subclause shall not impose on the Lessee any obligation:
  - (a) to carry out maintenance, repairs or replacement that are necessary as a result of reasonable fair wear and tear; or
  - (b) to undertake any structural maintenance, replacement or repair,

except when such maintenance, repair or replacement is necessary because of any act or omission of or on the part of the Lessee or the Lessee's Agents (including its use of the Premises).

- (2) In discharging the obligations imposed on the Lessee under this subclause, the Lessee shall where maintaining, replacing, repairing or cleaning:
  - (a) any electrical fittings and fixtures;
  - (b) any plumbing;
  - (c) any air-conditioning fittings and fixtures; and
  - (d) any gas fittings and fixtures,

in or on the Premises use only licensed trades persons, or such trades persons as may be approved by the Lessor and notified to the Lessee, which approval shall not be unreasonably withheld.

- (3) The Lessee must take such reasonable action as is necessary to:
  - (a) prevent, if it has occurred as a result of the Lessee's use of the Premises; and
  - (b) rectify or otherwise ameliorate,

the effects of erosion, drift or movement of sand, soil, dust or water on or from the Premises.

#### 11.2 Cleaning

The Lessee must at all times keep the Premises clean, tidy, unobstructed and free from dirt and rubbish.

#### 11.3 Repair

Unless such damage is the Lessor's responsibility pursuant to the terms of the Lease, the Lessee must promptly repair at its own expense to the satisfaction of the Lessor, any damage to the Premises, regardless of how the damage is caused and replace any of the Lessor's fixtures and fittings which are or which become damaged.

#### 11.4 Responsibility for Securing the Premises

The Lessee must ensure the Premises, including Lessor's and Lessee's fixtures and fittings, are appropriately secured at all times.

#### 11.5 Lessor's Fixtures and Fittings

The Lessee covenants and agrees that the Lessor's Fixtures and Fittings will remain the property of the Lessor and must not be removed from the Premises at any time.

#### 11.6 Pest control

The Lessee must keep the Premises free of any pests and vermin and the cost of extermination will be borne by the Lessee.

#### 11.7 Painting

- (1) The Lessee must on or before each repainting date as stated in **Item 10** of the Schedule paint with at least 2 coats of paint those parts of the Premises usually painted internally, unless otherwise agreed by the Lessor in writing.
- (2) All painting carried out on the Premises must be carried out by a registered painting contractor and the registered painting contractor or other person engaged by the Lessee to paint the Premises must:
  - (a) do so in a proper manner using good quality materials;
  - (b) have the colour and quality of the materials approved in writing by the Lessor before the work commences;
  - (c) comply will all reasonable directions given or requests made by the Lessor; and
  - (d) be finished in a proper and workmanlike manner.

#### 12. Use

#### 12.1 Restrictions on use

#### 12.2 Generally

The Lessee must not and must not suffer or permit a person to:

- (a) use the Premises or any part of it for any purpose other than the Permitted Purpose; or
- (b) use the Premises for any purpose which is not permitted under any local or town planning scheme, local laws, acts, statutes or any law relating to health.

#### 12.3 No offensive or illegal acts

The Lessee must not and must not suffer or permit a person to do or carry out on the Premises any harmful, offensive or illegal act, matter or thing.

#### 12.4 No nuisance

The Lessee must not and must not suffer or permit a person to do or carry out on the Premises any thing which causes a nuisance, damage or disturbance to the Lessor or to owners or occupiers of adjoining properties.

#### 12.5 No dangerous substances

The Lessee must not and must not suffer or permit a person to store any dangerous compound or substance on or in the Premises, otherwise than in accordance with the following provisions:

- (a) any such storage must comply with all relevant statutory provisions;
- (b) all applications for the approval or renewal of any licence necessary for such storage must be first referred to the Lessor;
- (c) the Lessor may within its absolute discretion refuse to allow the storage of any particular dangerous compound or substance on the Premises; and
- (d) upon the request of the Lessor, the Lessee will provide a list of all dangerous compounds or substances stored on the Premises.

#### 12.6 No harm or stress

The Lessee must not and must not suffer or permit a person to do any act or thing which might result in excessive stress or harm to any part of the Premises.

#### 12.7 No signs

The Lessee must not and must not suffer or permit a person to display from or affix any signs, notices or advertisements on the Premises without the prior written consent of the Lessor.

#### 12.8 No smoking

The Lessee must not suffer or permit a person to smoke inside any building or other enclosed area on the Premises.

#### 12.9 Consumption of alcohol

The Lessee must not suffer or permit a person to use or allow the Premises to be used for the consumption of alcohol without first obtaining the written consent of the Lessor.

#### 12.10 Sale of Alcohol

The Lessee will not sell or supply liquor from the Premises or allow liquor to be sold or supplied from the Premises without the prior written consent of the Lessor and then only in accordance with the provisions of the *Liquor Control Act 1988*, *Health (Food and Pet Meat) Repeal Regulations 2009*, *Liquor Licensing Regulations 1989* and any other relevant written laws that may be in force from time to time.

#### 12.11 Removal of rubbish

The Lessee must keep the Premises free from dirt and rubbish and to store and keep all trade waste and garbage in proper receptacles.

#### 12.12 No pollution

The Lessee must do all things necessary to prevent pollution or contamination of the Premises by garbage, refuse, waste matter, oil and other pollutants.

#### 12.13 No warranty

The Lessor gives no warranty:

- (a) as to the use to which the Premises may be put; or
- (b) that the Lessor will issue any consents, approvals, authorities, permits or licences required by the Lessee under any statute for its use of the Premises.

#### 12.14 Lessee to Observe Copyright

In the event that the Lessee or any person sub-leasing, hiring, or in temporary occupation of the Premises provides, contracts for, or arranges for the performance, exhibition or display of any music or work of art the copyright of which is not vested in the Lessee or that person, the Lessee shall ensure that all obligations in regard to payment of copyright or licensing fees with the owner or licensor of the copyright are met before any such performance, exhibition or display is held.

#### 12.15 Premises Subject to Restriction

The Lessee accepts the Premises for the Term subject to any existing prohibition or restriction on the use of the Premises.

#### 12.16 Indemnity for Costs

The Lessee indemnifies the Lessor against any claims or demands for all costs, on a solicitor client basis, reasonably incurred by the Lessor by reason of any claim in relation to any matters set out in this **clause 12**.

#### 13. Alterations

#### 13.1 Restriction

(1) The Lessee must not without prior written consent:

- (a) from the Lessor;
  - (i) from any other person from whom consent is required under this Lease; or
  - (ii) as required under statute in force from time to time, including but not limited to the planning approval of the Lessee under a local planning scheme of the Lessee:
- (b) make or allow to be made any alteration, addition or improvements to or demolish any part of the Premises; or
- (c) subject to the performance of the Lessee's obligations in **clause 11**, remove any flora or fauna, alter or cut down any flora, or sell, remove or otherwise dispose of any flora, sand, gravel, timber or other materials from the Premises.

#### 13.2 Consent

- (1) If the Lessor and any other person whose consent is required under this Lease or at law consents to any matter referred to in **clause 13.1** the Lessor may:
  - (a) consent subject to conditions; and
    - (i) require that work be carried out in accordance with plans and specifications approved by the Lessor or any other person giving consent; and
    - (ii) require that any alteration be carried out to the satisfaction of the Lessor under the supervision of an engineer or other consultant; and
  - (b) if the Lessor consents to any matter referred to in **clause 13.1**:
    - (i) the Lessor gives no warranty that the Lessor will issue any consents, approvals, authorities, permits or policies under any statute for such matters; and
    - (ii) the Lessee must apply for and obtain all such consent approvals, authorities, permits or policies as are required at law before undertaking any alterations, additions, improvements or demolitions.

#### 13.3 Cost of Works

All works undertaken under this **clause 13** will be carried out at the Lessee's expense.

#### 13.4 Conditions

If any of the consents given by the Lessor or other persons whose consent is required under this Lease or at law require other works to be done by the Lessee as a condition of giving consent, then the Lessee must at the option of the Lessor either:

- (a) carry out those other works at the Lessee's expense; or
- (b) permit the Lessor to carry out those other works at the Lessee's expense,

in accordance with the Lessor's requirements.

## 14. Lessor's right of entry

#### 14.1 Entry on Reasonable Notice

The Lessee must permit entry by the Lessor or any Authorised Person onto the Premises without notice in the case of an emergency, and otherwise upon reasonable notice:

- (a) (i) at all reasonable times;
  - (ii) with or without workmen and others; and
  - (iii) with or without plant, equipment, machinery and materials;
- (b) for each of the following purposes:
  - (i) to inspect the state of repair of the Premises and to ensure compliance with the terms of this Lease;
  - (ii) to carry out any survey or works which the Lessor considers necessary, however the Lessor will not be liable to the Lessee for any compensation for such survey or works provided they are carried out in a manner which causes as little inconvenience as is reasonably possible to the Lessee;
  - (iii) to comply with the Lessor's Covenants or to comply with any notice or order of any authority in respect of the Premises for which the Lessor is liable; and
  - (iv) to do all matters or things to rectify any breach by the Lessee of any term of this Lease but the Lessor is under no obligation to rectify any breach and any rectification under this clause is without prejudice to the Lessor's other rights, remedies or powers under this Lease.

#### 14.2 Costs of Rectifying Breach

All costs and expenses incurred by the Lessor as a result of any breach referred to at clause 14.1(b)(iv) together with any interest payable on such sums will be a debt due to the Lessor and payable to the Lessor by the Lessee on demand.

## 15. Statutory obligations and notices

#### 15.1 Comply with Statutes

The Lessee must:

- (a) comply promptly with all statutes and local laws from time to time in force relating to the Premises;
- (b) apply for, obtain and maintain in force all consents, approvals, authorities, licences and permits required under any statute for the use of the Premises specified at clause 12:
- (c) ensure that all obligations in regard to payment for copyright or licensing fees are paid to the appropriate person for all performances, exhibitions or displays held on the Premises; and
- (d) comply promptly with all orders, notices, requisitions or directions of any competent authority relating to the Premises or to the business the Lessee carries on at the Premises.

#### 15.2 Indemnity if Lessee Fails to Comply

The Lessee indemnifies the Lessor against:

- (a) failing to perform, discharge or execute any of the items referred to in **clause 15.1**; and
- (b) any claims, demands, costs or other payments of or incidental to any of the items referred to in **clause 15.1**.

### 16. Report to Lessor

The Lessee must immediately report to the Lessor:

- (a) any act of vandalism or any incident which occurs on or near the Premises which involves or is likely to involve a breach of the peace or become the subject of a report or complaint to the police and of which the Lessee is aware or should be aware;
- (b) any occurrence or circumstances in or near the Premises of which it becomes aware, which might reasonably be expected to cause, in or on the Premises, pollution of the environment; and
- (c) all notices, orders and summonses received by the Lessee and which affect the Premises and immediately deliver them to the Lessor.

#### 17. Default

#### 17.1 Events of Default

A default occurs if:

- (a) any Amounts Payable remain unpaid for 14 days after a Notice has been given to the Lessee that an amount is outstanding;
- (b) the Lessee is in breach of any of the Lessee's Covenants for 28 days after a Notice has been given to the Lessee to rectify the breach or to pay compensation in money;
- (c) the business conducted at the Premises is wound up whether voluntarily or otherwise;
- (d) the Lessee passes a special resolution under the *Associations Incorporation Act* 2015 altering its rules of association in a way that makes its objects or purposes inconsistent with the use permitted by this Lease;
- (e) a mortgagee takes possession of the property of the Lessee under this Lease;
- (f) any execution or similar process is made against the Premises on the Lessee's property;
- (g) the Premises are vacated, or otherwise not used, in the Lessor's reasonable opinion, for the Permitted Purpose for six month period; or
- (h) a person other than the Lessee or a permitted sublessee or assignee is in occupation or possession of the Premises or in receipt of a rent and profits.

#### 17.2 Forfeiture

On the occurrence of any of the events of default specified in **clause 17.1** the Lessor may:

- (a) without notice or demand at any time enter the Premises and on re-entry the Term will immediately determine;
- (b) by notice to the Lessee determine this Lease and from the date of giving such notice this Lease will be absolutely determined; and
- (c) by notice to the Lessee elect to convert the unexpired portion of the Term into a tenancy from month to month when this Lease will be determined as from the giving of the notice and until the tenancy is determined the Lessee will hold the Premises from the Lessor as a Lessee from month to month under **clause 20**,

but without affecting the right of action or other remedy which the Lessor has in respect of any other breach by the Lessee of the Lessee's Covenants or releasing the Lessee from liability in respect of the Lessee's Covenants.

#### 17.3 Lessor may remedy breach

If the Lessee:

- (a) fails or neglects to pay the Amounts Payable by the Lessee under this Lease; or
- (b) does or fails to do anything which constitutes a breach of the Lessee's Covenants,

then, after the Lessor has given to the Lessee notice of the breach and the Lessee has failed to rectify the breach within a reasonable time, the Lessor may without affecting any right, remedy or power arising from that default pay the money due or do or cease the doing of the breach as if it were the Lessee and the Lessee must pay to the Lessor on demand the Lessor's cost and expenses of remedying each breach or default.

#### 17.4 Acceptance of Amount Payable By Lessor

Demand for or acceptance of the Amounts Payable by the Lessor after an event of default has occurred will not affect the exercise by the Lessor of the rights and powers conferred on the Lessor by the terms of the Lease or at law and will not operate as an election by the Lessor to exercise or not to exercise any right or power.

#### 17.5 Essential Terms

Each of the Lessee's Covenants in clauses 5 (Rent and Other Payments), 6 (Insurance), 9 (Indemnity), 11 (Maintenance, Repair and Cleaning), 12 (Use), 24 (Assignment, Subletting and Charging) and 29 (Goods and Services Tax), is an essential term of this Lease but this clause 17.5 does not mean or imply that there are no other essential terms in this Lease.

#### 17.6 Breach of Essential Terms

If the Lessee breaches an essential term of this Lease then, in addition to any other remedy or entitlement of the Lessor:

- (a) the Lessee must compensate the Lessor for the loss or damage suffered by reason of the breach of that essential term;
- (b) the Lessor will be entitled to recover damages against the Lessee in respect of the breach of an essential term; and

- (c) the Lessee covenants with the Lessor that if the Term is determined:
  - (i) for breach of an essential term or the acceptance by the Lessor of a repudiation of this Lease by the Lessee; or
  - (ii) following the failure by the Lessee to comply with any notice given to the Lessee to remedy any default,

the Lessee must pay to the Lessor on demand the total of the Amounts Payable under this Lease which would have been payable by the Lessee for the unexpired balance of the Term as if the Term had expired by effluxion of time together with the losses incurred or reasonably expected to be incurred by the Lessor as a result of the early determination including but not limited to the costs of re-letting or attempting to re-let the Premises;

- (d) the Lessee agrees that the covenant set out in **clause 17.6(c)** will survive termination or any deemed surrender at law of the estate granted by this Lease;
- (e) the Lessee may deduct from the amounts referred to at **clause 17.6(c)** the Rent and other money which the Lessor reasonably expects to obtain by re-letting the Premises between the date of Termination and the date on which the Term would have expired by effluxion of time; and
- (f) the Lessor must take reasonable steps to mitigate its losses and endeavour to relet the Premises at a reasonable rent and on reasonable terms but the Lessor is not required to offer or accept rent or terms which are the same or similar to the rent or terms contained or implied in this Lease.

## 18. Damage or destruction of Premises

#### 18.1 Abatement of Rent

If the Premises are at any time during the Term, without neglect or default of the Lessee, destroyed or damaged by fire or other risk covered by insurance so as to render the same unfit for the occupation and use of the Lessee, then the Rent or a proportionate part thereof (according to the nature and extent of the damage) shall abate until the Premises have been rebuilt or made fit for the occupation and use of the Lessee, and in case of any dispute arising under this provision the same will be referred to arbitration under the provisions of the *Commercial Arbitration Act 2012* and the full Rent must be paid without any deduction or abatement until the date of the arbitrator's award whereupon the Lessor will refund to the Lessee any Rent which according to the aware appears to have been overpaid.

#### **18.2 Total Damage or Destruction**

If the premises are at any time during the Term destroyed or damaged to an extent as to be wholly unfit for the occupation and use of the Lessee either party may be notice in writing to the other of them given within sixty (60) days after the event elect to cancel and terminate this lease. The term will terminate upon such notice being given and the Lessee must vacate the premises and surrender the same to the Lessor, but such termination will be without prejudice however to the liability of the Lessee under this Lease up to the date of termination.

## 19. Option to renew

If the Lessee at least one month, but not earlier than 12 months, prior to the date for commencement of the Further Term gives the Lessor a Notice to grant the Further Term and:

- (a) all consents and approvals required by the terms of this Lease or at law have been obtained; and
- (b) there is no subsisting default by the Lessee at the date of service of the Notice in:
  - (i) the payment of Amounts Payable; or
  - (ii) the performance or observance of the Lessee's Covenants,

the Lessor shall grant to the Lessee a lease for the Further Term at the Rent and on terms and conditions similar to this Lease other than this **clause 19** in respect of any Further Term previously taken or the subject of the present exercise and on such other terms and conditions as the Lessor may consider appropriate.

## 20. Holding over

If the Lessee remains in possession of the Premises after the expiry of the Term with the consent of the Lessor, the Lessee will be a monthly Lessee of the Lessor at a rent equivalent to one hundred and twenty percent of the Rent for the period immediately preceding expiry of the Term and otherwise on the same terms and conditions of this Lease provided that all consents required under this Lease or at law have been obtained to the Lessee being in possession of the Premises as a monthly Lessee.

## 21. Restore premises

Prior to Termination, the Lessee at the Lessee's expense must restore the Premises to a condition consistent with the observance and performance by the Lessee of the Lessee's Covenants under this Lease fair wear and tear excepted.

## 22. Yield up the premises

#### 22.1 Peacefully surrender

On Termination the Lessee must:

- (a) peacefully surrender and yield up to the Lessor the Premises in a condition consistent with the observance and performance of the Lessee's Covenants under this Lease;
- (b) surrender to the Lessor all keys and security access devices and combination for locks providing an access to or within the Premises held by the Lessee whether or not provided by the Lessor.

#### 22.2 Clause 22.1 to survive termination

The Lessee's obligation under clause 22.1 will survive termination.

## 23. Removal of property from Premises

#### 23.1 Remove property prior to termination

Prior to Termination, unless otherwise mutually agreed between the parties, the Lessee must remove from the Premises all property of the Lessee which is not a fixture other than air-conditioning plant and fire equipment, security alarms and security systems and other fixtures and fittings which in the opinion of the Lessor form an integral part of the Premises

and promptly make good, to the satisfaction of the Lessor, any damage caused by the removal.

#### 23.2 Lessor can remove property on re-entry

On re-entry the Lessor will have the right to remove from the Premises any property of the Lessee and the Lessee indemnifies the Lessor against all damage caused by the removal of and the cost of storing that property.

### 24. Assignment, Subletting and Charging

#### 24.1 No assignment or sub-letting without consent

The Lessee must not assign the leasehold estate in the Premises nor Sub-let, part with possession, or dispose of the Premises or any part of the Premises without the prior written consent of the Lessor and any other persons whose consent is required under the terms of this Lease or at law.

#### 24.2 Lessor's Consent to Assignment and Sub-letting

Provided all parties whose consent is required, under this Lease or at law, to an assignment or Sub-letting, give their consent and any assignment or sublease is for a purpose consistent with the use of the Premises permitted by this Lease then the Lessor may not unreasonably withhold its consent to the assignment or Sub-letting of the leasehold estate created by this Lease if:

- (a) the proposed assignee or sublessee is a respectable and responsible person of good financial standing capable of continuing the permitted use for non-profit making community purposes;
- (b) all Amounts Payable due and payable have been paid and there is no existing unremedied breach, whether notified to the Lessee or not, of any of the Lessee's Covenants:
- (c) the Lessee procures the execution by:
  - (i) the proposed assignee of a deed of assignment; or
  - (ii) the proposed sublessee of a deed of sublease,

to which the Lessor is a party and which deed is prepared and completed by the Lessor's solicitors; and

(d) the assignment contains a covenant by the assignee or sublessee with the Lessor to pay all Amounts Payable and to perform and observe all the Lessee's Covenants.

#### 24.3 Consents of Assignee Supplementary

The covenants and agreements on the part of any assignee will be supplementary to the Lessee's Covenants and will not release the assigning lessee from the Lessee's Covenants.

#### 24.4 Property Law Act 1969

Sections 80 and 82 of the *Property Law Act 1969* are excluded.

#### 24.5 Costs for assignment and sub-letting

If the Lessee wishes to assign or sub-let the leasehold estate created by this Lease the Lessee must pay all reasonable professional and other costs, charges and expenses, incurred by the Lessor or other person whose consent is required under this Lease, of and incidental to:

- (a) the enquiries made by or on behalf of the Lessor as to the respectability, responsibility and financial standing of each proposed assignee or sublessee;
- (b) any consents required under this Lease or at law; and
- (c) all other matters relating to the proposed assignment or sub-letting,

whether or not the assignment or Sub-letting proceeds.

#### 24.6 No mortgage or charge

The Lessee must not mortgage nor charge the Premises.

### 25. Disputes

#### 25.1 Referral of Dispute: Phase 1

Except as otherwise provided any dispute arising out of this Lease is to be referred in the first instance in writing to the Lessor's Representative as nominated in writing by the Lessor from time to time (**the Lessor's Representative**) who shall convene a meeting within 10 days of receipt of such notice from the Lessee or such other period of time as is agreed to by the parties between the Lessor's Representative and an officer of the Lessee for the purpose of resolving the dispute (**the Original Meeting**).

#### 25.2 Referral of Dispute: Phase 2

In the event the dispute is not resolved in accordance with **clause 25.1** of this Lease then the dispute shall be referred in writing to the CEO of the Lessor who shall convene a meeting within 10 days of the Original Meeting or such other date as is agreed to by the parties between the CEO and the Lessee for the purpose of resolving the dispute.

#### 25.3 Appointment of Arbitrator: Phase 3

In the event the dispute is not resolved in accordance with **clause 25.2** of this Lease then the dispute shall be determined by a single arbitrator under the provisions of the *Commercial Arbitration Act 2012* (as amended from time to time) and the Lessee may each be represented by a legal practitioner.

#### 25.4 Payment of Amounts Payable to Date of Award

The Lessee must pay the Amounts Payable without deduction to the date of the award of the Arbitrator or the date of an agreement between the Parties whichever event is the earlier, and if any money paid by the Lessee is not required to be paid within the terms of the award of the Arbitrator or by agreement between the Lessor and the Lessee then the Lessor will refund to the Lessee the monies paid

## 26. Prior notice of proposal to change rules

If applicable, the Lessee agrees that it will not change its rules of association under the *Associations Incorporations Act 2015* without notifying the Lessor of its intention to make such a change prior to consideration of the required special resolution.

#### 27. Provision of information

The Lessee agrees to provide to the Lessor:

- (a) a copy of the Lessee's audited annual statement of accounts for each year;
- (b) advice of any changes in its office holders during the Term; and
- (c) any information reasonably required by the Lessor.

#### 28. Caveat

#### 28.1 No absolute caveat

The Lessee nor any person on behalf of the Lessee will, without the prior written consent of the Lessor, lodge any absolute caveat at Landgate against the Certificate of Title for the Land, to protect the interests of the Lessee under this Lease.

#### 28.2 CEO & Lessor as attorney

In consideration of the Lessor having granted this Lease to the Lessee, the Lessee irrevocably appoints the Lessor and the CEO of the Lessor jointly and severally:

- (a) for the Term of this Lease;
- (b) for any holding over under this Lease; and
- (c) for a period of 6 months after Termination,

to be the agent and attorney of the Lessee in its name and on its behalf to sign and lodge at Landgate:

- (d) a withdrawal of any absolute caveat lodged by or on behalf of the Lessee;
- (e) a withdrawal of any caveat lodged by or on behalf of the Lessee and not withdrawn on Termination; and
- (f) a surrender of the estate granted by this Lease,

and the costs of withdrawing any caveat or surrendering this Lease (including the Lessor's solicitor's costs and registration fees) will be borne by the Lessee.

#### 28.3 Ratification

The Lessee undertakes to ratify all the acts performed by or caused to be performed by the Lessor, its agent or attorney under this clause.

#### 28.4 Indemnity

The Lessee indemnifies the Lessor against:

- (a) any loss arising directly from any act done under this clause. and
- (b) all costs and expenses incurred in connection with the performance of any act by the attorney on behalf of the Lessee under this clause.

## 29. Goods and Services Tax

#### 29.1 Definitions

The following definitions apply for the purpose of this clause:

- (a) **Act** means the Commonwealth's *A New Tax System (Goods and Services Tax) Act* 1999 and associated Acts and subsidiary legislation;
- (b) **Consideration** means the Amounts Payable or any other money payable to the Lessor under this Lease, but does not include the amount of the GST which may apply to the Amounts Payable or other money payable under the Act;
- (c) **GST** means a tax under the Act levied on a Supply including but not limited to the Amounts Payable or other money payable to the Lessor for goods or services or property or any other thing under this Lease; and
- (d) **Supply** means a good or service or any other thing supplied by the Lessor under this Lease and includes but is not limited to a grant of a right to possession of the Premises.

## 29.2 Lessee to pay GST

- (1) The Consideration will be increased by the amount of the GST, if any, which the Lessor is required under the Act to pay on any Supply made under this Lease.
- (2) The Lessee must pay any increase referred to at **clause 29.2(1)** whether it is the Lessee or any other person who takes the benefit of any Supply.
- (3) The Lessee must pay the amount of the GST to the Lessor at the same time and in the same manner as the Lessee is required to pay the Consideration under this Lease.

### 29.3 Consideration in Kind

If consideration in kind is accepted by the Lessor for any Supply made under this Lease, the GST amount payable to the Lessor under **clause 29.2(2)** in respect of the consideration in kind will be calculated by using the prevailing market value of the consideration in kind as determined by the Lessor.

#### 29.4 No Contribution from Lessor

If the Lessee is required under this Lease to make any payment of money or give other consideration to a third party for outgoings, goods, services and benefits of any kind, the Lessee is not entitled to any contribution from the Lessor for any GST payable by it to any person.

#### 29.5 Statement of GST paid is Conclusive

A written statement given to the Lessee by the Lessor of the amount of the GST that the Lessor pays or is liable to pay or account for is conclusive as between the Parties except in the case of an obvious error.

#### 29.6 Tax Invoices

For each payment by the Lessee under this clause the Lessor agrees to promptly deliver to the Lessee, as required under the Act, tax invoices and adjustment notes in a form which complies with the Act, so as to enable the Lessee to claim input tax credits or decreasing adjustments for Supplies.

#### 29.7 Reciprocity

If the Lessee furnishes any Supplies to the Lessor under this Lease, then the requirements set out in this clause with respect to the Lessee will apply to the Lessor with the necessary changes.

## 30. No Fetter

Notwithstanding any other provision of this Lease, the Parties acknowledge that the Lessor is a local government established by the *Local Government Act 1995*, and in that capacity, the Lessor may be obliged to determine applications for consents, approvals, authorities, licences and permits having regard to any Written Law governing such applications including matters required to be taken into consideration and formal processes to be undertaken, and the Lessor shall not be taken to be in default under this Lease by performing its statutory obligations or exercising its statutory discretions, nor shall any provision of this Lease fetter the Lessor in performing its statutory obligations or exercising any discretion.

## 31. Additional Terms Covenants and Conditions

Each of the terms, covenants and conditions (if any) specified in **Item 12** of the Schedule are part of this Lease and are binding on the Lessor and the Lessee as if incorporated into the body of this Lease.

# 32. Commercial Tenancy Act

If at any time and for so long as the *Commercial Tenancy (Retail Shops) Agreements Act* 1985 applies to this Lease and a provision of that Act conflicts with a provision of this Lease, then each conflicting provision of this Lease is deemed to be amended to the extent necessary to comply with that Act.

# 33. Acts by agents

All acts and things which the Lessor is required to do under this Lease may be done by the Lessor, the CEO, an officer or the agent, solicitor, contractor or employee of the Lessor.

## 34. Governing law

This Lease is governed by and is to be interpreted in accordance with the laws of Western Australia and, where applicable, the laws of the Commonwealth of Australia.

# 35. Statutory powers

The powers conferred on the Lessor by or under any statutes for the time being in force are, except to the extent that they are inconsistent with the terms and provisions expressed in this Lease, in addition to the powers conferred on the Lessor in this Lease.

## 36. Notice

## 36.1 Form of delivery

A notice, consent, approval or other communication (each a Notice) under this Lease must be in writing and may be given or made:

- (a) by delivery to the Party personally;
- (b) by addressing it to the Party and leaving it at or posting it by registered post to the address of the Party appearing in this Lease or any other address nominated by a Party by Notice to the other; or
- (c) by electronic mail to the Party's email address as appearing in this Lease or any other address nominated by a Party by Notice to the other.

#### 36.2 Service of notice

A Notice to a Party is deemed to be given or made:

- (a) if by personal delivery, when delivered;
- (b) if by leaving the Notice at an address specified in **Item 11** at the time of leaving the Notice, provided the Notice is left during normal business hours;
- (c) if by post to an address specified in **Item 11**, on the second business day following the date of posting of the Notice; and
- (d) if sent by electronic mail and the send does not received a message from its internet service provider or the recipient's mail server indicating that is has not be successfully transmitted, on the day of sending if a Business Day, otherwise on the next Business Day.

## 36.3 Signing of notice

A Notice to a Party may be signed:

- (a) if given by an individual, by the person giving the Notice;
- (b) if given by a corporation, by a director, secretary or manager of that corporation;
- (c) if given by a local government, by the CEO;
- (d) if given by an association incorporated under the *Associations Incorporation Act* 2015, by any person authorised to do so by the board or committee of management of the association; or
- (e) by a solicitor or other agent of the individual, corporation, local government or association giving the Notice.

## 37. Severance

If any part of this Lease is or becomes void or unenforceable, that part is or will be severed from this Lease to the intent that all parts that are not or do not become void or unenforceable remain in full force and effect and are unaffected by that severance.

## 38. Variation

This Lease may be varied only by deed executed by the parties subject to such consents as are required by this Lease or at law.

## 39. Moratorium

The provisions of a statute which would but for this clause extend or postpone the date of payment of money, reduce the rate of interest or abrogate, nullify, postpone or otherwise affect the terms of this Lease do not, to the fullest extent permitted by law, apply to limit the terms of this Lease.

## 40. Further assurance

The Parties must execute and do all acts and things necessary or desirable to implement and give full effect to the terms of this Lease.

# 41. Payment of money

Any Amounts Payable to the Lessor under this Lease must be paid to the Lessor at the address of the Lessor referred to in the Lease or as otherwise directed by the Lessor by Notice from time to time.

## 42. Waiver

## 42.1 No general waiver

Failure to exercise or delay in exercising any right, power or privilege in this Lease by a Party does not operate as a waiver of that right, power or privilege.

## 42.2 Partial exercise of right power or privilege

A single or partial exercise of any right, power or privilege does not preclude any other or further exercise of that right, power or privilege or the exercise of any other right, power or privilege.

# Schedule

## Item 1 Land and Premises

#### (a) Land

Lot 107 on Deposited Plan 70670 being the whole of the land comprised in Certificate of Title Volume 2786 Folio 114.

#### (b) Premises

The part of the Land and Building comprising Office 3, being approximately 24.7 square metres which for identification purposes is depicted in **Annexure 1** (Exclusive Areas) including all buildings, structures, alterations, additions and improvements on that part of the Land, or erected on that part of the Land during the Term.

## Item 2 Term

3 years commencing on [insert date] 2020 and expiring on [insert date] 2023.

## Item 3 Further Term

3 years commencing on [insert date] 2023 and expiring on [insert date] 2026.

## Item 4 Commencement Date

30 days from Council Resolution – subject to change.

## Item 5 Rent

\$3,835 per annum plus GST payable in advance by equal monthly instalments of \$319.58.

## Item 6 Rent Review

Manner in which Rent is to be reviewed:

| Rent Review Date   | Manner of Review |
|--------------------|------------------|
| [insert date] 2021 | CPI Rent Review  |
| [insert date] 2022 | CPI Rent Review  |

#### If the Lease is extended for the Further Term

| ii tilo Edado lo oktoriada idi tilo i artilor i dilili |                    |  |
|--|--------------------|--|
| Rent Review Date                                       | Manner of Review   |  |
| [insert date] 2023                                     | Market Rent Review |  |
| [insert date] 2024                                     | CPI Rent Review    |  |
| [insert date] 2025                                     | CPI Rent Review    |  |

## Item 7 Outgoings Contributions

From the Commencement Date until the 1<sup>st</sup> Outgoings Review Date, the Outgoings Contribution are \$167.91 per annum plus GST payable in advance by equal monthly instalments of \$13.99 with the first payment due on the Commencement Date.

## Item 8 Permitted purpose

Office purposes and uses reasonably ancillary thereto.

## Item 9 Public liability insurance

Twenty million dollars (\$20,000,000.00).

## Item 10 Repainting Dates

On or before the end of the Term, unless otherwise advised by the Lessor in writing.

## Item 11 Notice Details

#### Lessor

The City of Kwinana (ABN 13 890 277 321)
Address: PO Box 21 Kwinana WA 6966
Email: city.legal@kwinana.wa.gov.au

#### Lessee

## **Australian Red Cross Society**

Address: 110 Goderich Street, East Perth, WA 6004

Email: invoices@redcross.org.au

## Item 12 Additional terms and covenants

## 12.1 Liquor licence

The Lessee agrees that if a licence or permit is granted under the Liquor Control Act 1988 for the Premises it must:

- (a) comply with any requirements attaching to the licence or permit at its cost and where any alteration is required to the Premises **clause 13** shall apply;
- (b) comply with the requirements of the Harm Minimisation Policy (as amended from time to time) of the Department of Racing, Gaming & Liquor, which will require, without limitation the following:
  - (i) the development and implementation of a House Management Policy and Code of Conduct (as defined by the Harm Minimisation Policy) for the Premises, and such policies must be displayed in a prominent position on the Premises at all times; and
  - (ii) the development and implementation of a Management Plan (as defined by the Harm Minimisation Policy) for the Premises.

- (c) provide a copy of the licence or permit (as well as a copy of any document referred to in the licence or permit, including without limitation a copy of the House Management Policy, Code of Conduct and Management Plan (as defined by the Harm Minimisation Policy) to the Lessor as soon as practicable after the date of grant; and
- (d) indemnify and keep indemnified the Lessor from and against any breach of the *Liquor Control Act 1988, Liquor Control Regulations 1989* or the licence or permit or any conditions imposed thereupon for which it may be liable as the owner of the Premises.

## 12.2 Minimise nuisance to neighbours

- (a) The Lessee must take all reasonable action to minimise and prevent disruption, nuisance and disturbance to surrounding residential premises, particularly during and following social events held at the Premises.
- (b) The Lessee must comply with all reasonable conditions and directions that may be imposed by the Lessor from time to time in relation to the minimisation and prevention of disruption, nuisance and disturbance to surrounding residential premises.

## 12.3 Right to terminate upon notice

Notwithstanding any other provision of this Lease, the Parties AGREE that either party may terminate this Lease for any reason upon six months written notice to the other party. If this Lease is terminated in accordance with this clause, **clause 21** and **22** will apply.

#### 12.4 Use of Premises in Emergency

Notwithstanding any other provision in this Lease, in the event of a circumstance that calls for immediate emergency response, including flooding or a bushfire event, the Lessor may require the use of the whole or part of the Premises for that purpose and the Lessee agrees to surrender use of the whole or part of the Premises for that purpose. If such an emergency occurs and the Lessor enters into possession of the whole or part of the Premises, the Lessor agrees to suspend payment of the Rent and Outgoings charges (or part thereof dependent on whether the Lessor requires use of the whole or only a part of the Premises) for the duration of the emergency.

#### 12.5 Lessor's Fixtures

- (a) 2 x task chair;
- (b) 4 x visitor chair;
- (c) 2 x pedestals;
- (d) 2 x work stations;
- (e) 2 x HP Elite 8300 Small Form Factor PC;
- (f) 1 x Kyocera FS 2100DN;
- (g) 1 x Kyocera FS C2626MFP

Including any new fixtures or fittings that are provided at the cost of the Lessor upon request of the Lessee for the duration of the Lease.

#### 12.6 After-hours access to the Leased Premises

- (a) Should the Lessee access the Leased Premises outside the Normal Hours, the Lessee shall be responsible for the security of the Building for the time any Authorised Person is inside the Building.
- (b) The Lessee must not permit any third party to have access to the keys, access cards or other security devices for the Leased Premises or the Building.
- (c) The Lessee shall pay to the Lessor on demand on a full indemnity basis any amounts payable by the Lessor arising from the Lessee's improper use of the keys, access cards or other security devices for the Leased Premises or the Building.

### 12.7 Damage to Lessor's Fixtures

- (a) The Lessee acknowledges and agrees that the Lessor's Fixtures do not include any software. All software must be supplied by the Lessee at the Lessee's cost.
- (b) The Lessee agrees to (at the Lessee's cost):
  - (i) maintain the Lessor's Fixtures in a good condition and where necessary, repair or replace any of the Lessor's Fixtures to the satisfaction of the Lessor, except in respect of fair wear and tear;
  - (ii) return to the Lessor any of the Lessor's Fixtures which have been damaged and cannot be repaired; and
  - (iii) provide the Lessor with written notice of any Lessor's Fixtures which are replaced by the Lessee at the Lessee's cost; and
  - (iv) leave all Lessor's Fixtures which have not been replaced in the Leased Premises at the expiration of the Term (or the Further Term as the case may be).
- (c) For the avoidance of doubt, any Lessor's Fixture which has been replaced by the Lessee at the Lessee's cost will vest in the Lessor unless the Lessor or Lessee provides otherwise in writing to the Lessor.

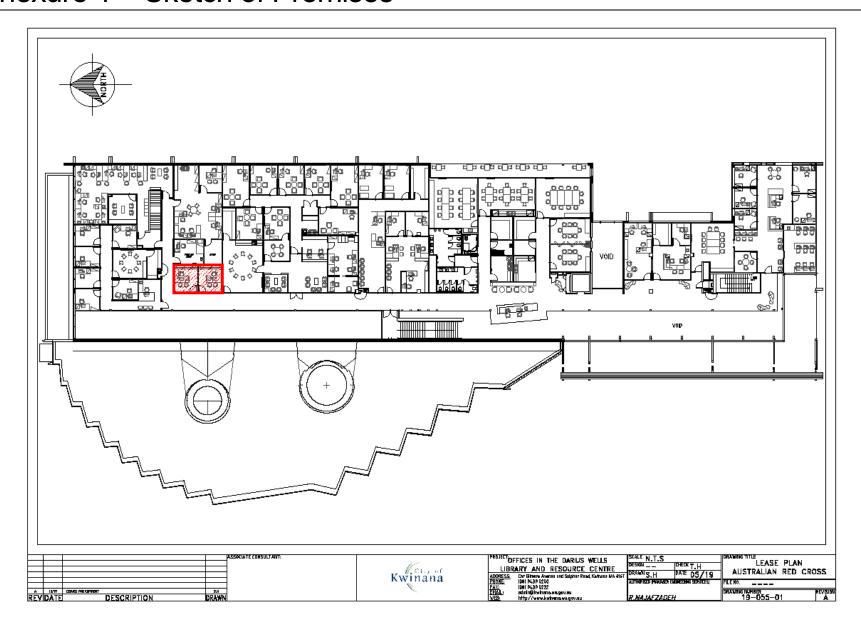
#### 12.8 Termination

- (a) Notwithstanding any other clause in this Lease, the parties agree that the Lessor may (in its absolute discretion) permit the Lessee to terminate the Lease upon the Lessee giving the Lessor ninety (90) days prior written notice.
- (b) The Lessor will not unreasonably withhold consent if the Lessee satisfies the Lessor that:
  - (i) the funding the Lessee receives from a Relevant Authority has ceased; and
  - (ii) it is no longer financially viable for the Lessee to continue operating from the Leased Premises.

# Signing page

**EXECUTED** 2020 THE COMMON SEAL of CITY OF KWINANA is affixed in the presence of: (Print Full Name) Mayor Chief Executive Officer (Print Full Name) THE COMMON SEAL of AUSTRALIAN RED CROSS SOCIETY was hereunto affixed pursuant to the constitution of the Lessee in the presence of each of the undersigned each of whom hereby declares by the execution of this document that he or she holds the office in the Lessee indicated under his or her name-Office Holder Sign Office Holder Sign Name: Name: Address: Address: Office Held: Office Held:

# Annexure 1 – Sketch of Premises



# 18.3 Amendment to Register of Delegated Authority – Local Government Officer to Chief Executive Officer, Officers and Committees 2019

#### **DECLARATION OF INTEREST:**

There were no declarations of interest declared.

#### **SUMMARY:**

At its 25 September 2019 meeting, Council resolved to delegate the Chief Executive Officer (CEO), Officers and Committees power to exercise certain functions under the *Local Government Act 1995* and other relevant legislation.

As part of the on-going review of delegated powers to ensure appointments are appropriately captured and meet the operational needs of the City, it is recommended that the *Register of Delegated Authority – Local Government to Chief Executive Officer, Officers and Committees 2019* be amended to grant the Coordinator Environmental Health & Waste Services delegated functions under sections 1.12 – Authorise Community Funding (1.12), 4.1 *Public Health Act 2016* and the *Health (Miscellaneous Provisions) Act 1911* – Power or duty of the local government (enforcement agency) under any provision of these Acts (4.1) and 4.5 – *Food Act 2008* – Functions of enforcement agency (4.5).

#### OFFICER RECOMMENDATION:

That Council resolve as follows:

1. Approve the amendment to Council delegations 1.12, 4.1 and 4.5 at Attachment A to include Coordinator Environmental Health & Waste Services.

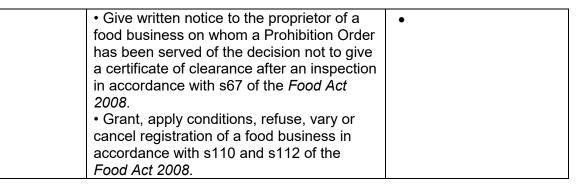
NOTE - AN ABSOLUTE MAJORITY OF COUNCIL IS REQUIRED

#### **DISCUSSION:**

Sections 5.42 and 5.44 of the *Local Government Act 1995*, as well as other relevant legislation, grant Council the ability to delegate certain local government functions to the CEO, Officers or Committees to exercise. Such delegation are recorded in the *Register of Delegated Authority – Local Government to Chief Executive Officer, Officers and Committees 2019* may be with or without conditions.

The Manager Environmental Health position is currently delegated the following functions by Council:

| Delegation<br>Reference | Power or duty delegation   | Delegates/Subdelegates  |
|-------------------------|--|---|
| 1.12                    | To approve an application for funding under the Community Funding Policy.  | <ul> <li>Allocations Panel</li> <li>Chief Executive Officer</li> <li>Manager Environmental Health</li> <li>Selection Panel</li> </ul> |
| 4.1                     | All powers exercisable by the Local Government under the <i>Public Health Act 2016</i> , the <i>Health (Miscellaneous Provisions) Act 1911</i> and Regulations made there under; and the City's Health Local Laws.   | Manager     Environmental Health  |
| 4.5                     | <ul> <li>Chief Executive Officer:</li> <li>Institute proceedings for an offence under the Food Act 2008 in accordance with s125 of the Food Act 2008.</li> <li>Manager Environmental Health:</li> <li>Serve a Prohibition Order on the proprietor of a food business in accordance with s65 of the Food Act 2008.</li> <li>Give a Certificate of Clearance, where inspection demonstrates compliance with a Prohibition Order and any Improvement Notices in accordance with s66 of the Food Act 2008.</li> <li>Give written notice to the proprietor of a food business on whom a Prohibition Order has been served of the decision not to give a Certificate of Clearance after an inspection in accordance with s67 of the Food Act 2008.</li> <li>Grant, apply conditions, refuse, vary or cancel registration of a food business in accordance with s110 and s112 of the Food Act 2008.</li> <li>Coordinator Environmental Health (Health and Food Safety):</li> <li>Give a Certificate of Clearance, where inspection demonstrates compliance with a Prohibition Order and any Improvement Notices in accordance with s66 of the Food Act 2008.</li> </ul> | Chief Executive Officer Coordinator Environmental Health (Health and Food Safety) Manager Environmental Health  Environmental Health  |
|                         |  | <u>.</u>  |



At the Ordinary Council Meeting held 11 March 2020, Council resolved to amend delegations 1.12, 4.1 and 4.5 in order to grant the Coordinator Environmental Health (Health and Food Safety) the same powers as the Manager Environmental Health. This was on the basis that the Acting Manager Environmental Health did not possess the appropriate qualifications under section 122(1) of the *Food Act 2008* and section 25(1) *Public Health Act 2019* to allow them to exercise the delegations granted by Council to that role.

The Acting Manager Environmental Health was seconded to the role from City Operations based on their demonstrated strengths in leadership, contract management, change management, as well as work system improvements across City Operations. It is therefore intended that their focus is to be on the overall management of the team and to provide technical expertise and support to officers, particularly taking a lead role with respect to waste contract negotiations, new contract procurement and budget preparation.

In order to meet the operational needs of the City, it is now recommended that delegations 1.12, 4.1 and 4.5 be amended such that the role of Coordinator Environmental Health & Waste Services be delegated all powers of the Manager Environmental Health role on a temporary basis pending the permanent appointment of that position. They have sufficient qualifications to perform such delegations and will assist the City in providing these essential functions.

#### **LEGAL/POLICY IMPLICATIONS:**

The Food Act 2008 provides as follows:

## 122. Appointment of authorised officers

- (1) An enforcement agency may appoint a person to be an authorised officer for the purposes of this Act if the enforcement agency, having regard to any guidelines issued by the CEO under subsection (2), considers the person has appropriate qualifications and experience to perform the functions of an authorised officer.
- (2) The CEO may issue guidelines that describe the qualifications and experience that are appropriate for a person to be appointed as an authorised officer.

The Public Health Act 2016 provides as follows:

## 25. Certain authorised officers required to have qualifications and experience

- (1) An enforcement agency must not designate a person or class of persons under section 24(1) unless the enforcement agency
  - (a) considers that the person or, as the case requires, the persons in that class have appropriate qualifications and experience to perform the particular functions that the person or class of persons are to perform as authorised officers; and
  - (b) has regard to any guidelines issued under section 29.

#### FINANCIAL/BUDGET IMPLICATIONS:

There are no direct financial implications related to this report.

#### **ASSET MANAGEMENT IMPLICATIONS:**

There are no direct asset management implications related to this report.

#### **ENVIRONMENTAL IMPLICATIONS:**

There are no direct environmental implications related to this report.

#### **COMMUNITY ENGAGEMENT:**

There are no community engagement implications as a result of this report.

### STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following objectives and strategies detailed in the Corporate Business Plan:

| Plan                    | Outcome              | Objective                   |
|-------------------------|----------------------|-----------------------------|
| Corporate Business Plan | Business Performance | 5.8 Apply best practice     |
| 2017 - 2022             |                      | principles and processes to |
|                         |                      | maximise efficiencies and   |
|                         |                      | quality.                    |

#### **COMMUNITY ENGAGEMENT:**

There are no community engagement implications as a result of this report.

### **RISK IMPLICATIONS:**

The risk implications in relation to this proposal are as follows:

| Risk Event                                   | Officers and committees are appointed or provided with inappropriate or unnecessary delegated authority.                                   |
|--|--|
| Risk Theme                                   | Failure to fulfil statutory or compliance requirements.  |
| Risk Effect/Impact                           | Compliance   |
| Risk Assessment Context                      | Operational  |
| Consequence                                  | Moderate   |
| Likelihood                                   | Unlikely   |
| Rating (before treatment)                    | Moderate   |
| Risk Treatment in place                      | Avoid - remove cause of risk   |
| Response to risk treatment required/in place | Ensure officers and committees are appointed or delegated functions which are appropriate and in accordance with the relevant legislation. |
| Rating (after treatment)                     | Low  |

## COUNCIL DECISION 138 MOVED CR S WOOD

**SECONDED CR M ROWSE** 

#### That Council resolve as follows:

1. Approve the amendment to Council delegations 1.12, 4.1 and 4.5 at Attachment A to include Coordinator Environmental Health & Waste Services.

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL 8/0

| 1.12 Authorisation of community funding |   |  |
|---|---|--|
| Function to be performed:               | To approve an application for funding under the Community Funding Policy.   |  |
| Legislative power or duty delegated:    | Local Government Act 1995 – Part 6, Division 4<br>s6.7 Municipal Fund   |  |
| Legislative Power to Delegate:          | Local Government Act 1995<br>s5.42 Delegation of some powers to the CEO   |  |
| Date Delegation made or reviewed:       | 16 December 2015 Council resolution #084 10 February 2016 D16/1283 14 June 2017 Council Resolution #513 13 June 2018 Council Resolution #196 17 June 2019 Council Resolution #422 11 March 2020 Council Resolution #110 |  |
| Delegation to:                          | Chief Executive Officer Selection Panel Allocations Panel Manager of Environmental Health Coordinator Environmental Health (Health and Food Safety) Coordinator Environmental Health & Waste Services                   |  |
| Conditions and Exceptions:              | Coordinator Environmental Health (Health and Food Safety)   |  |

| Statutory Power to sub-delegate: | Local Government Act 1995 s5.44 CEO may delegate some powers and duties to other employees. |
|----------------------------------|---|
| Reporting<br>Requirements:       | Any exercise of this delegation is to be recorded in the Delegated Authority Register.      |

| Power or du                          | th Act 2016 and the Health (Miscellaneous Provisions) Act 1911 –<br>uty of the local government (enforcement agency) under any<br>f these Acts   |  |
|--------------------------------------|--|--|
| Function to be performed:            | To authorise the Manager Environmental Health to exercise and discharge all or any of the powers and functions of the local government (enforcement agency).   |  |
| Legislative power or duty delegated: | All powers exercisable by the Local Government under the Public Health Act 2016, the Health (Miscellaneous Provisions) Act 1911 and Regulations made there under; and the City's Health Local Laws.  |  |
| Legislative Power to Delegate:       | Public Health Act 2016 s21(1)(c) Enforcement agency may delegate  Health (Miscellaneous Provisions) Act 1911 s26 Powers of Local Government  |  |
| Date Delegation made or reviewed:    | 14 June 2017 Council Resolution #513 13 June 2018 Council Resolution #196 11 March 2020 Council Resolution #110  |  |
| Delegation to:                       | Manager Environmental Health Coordinator Environmental Health (Health and Food Safety) Coordinator Environmental Health & Waste Services   |  |
| Conditions and Exceptions:           | Public Health Act 2016     s20. Conditions on performance of functions by enforcement agencies     (a) The Chief Health Officer, after consultation with another enforcement agency, may, in writing, impose conditions or restrictions on the performance of functions under this Act by the enforcement agency.  (b) The performance by an enforcement agency of functions under this Act is subject to any conditions or restrictions imposed under subsection (1). |  |
|                                      | 2. Not to expend funds for the carrying out of works in default of a notice served under this Act without separate budget approval by Council.   |  |

| Statutory Power to sub-delegate: | This Authority is not to be sub-delegated  |
|----------------------------------|--|
| Reporting<br>Requirements:       | Any exercise of this delegation is to be recorded in the Delegated Authority Register. |

| 4.5 Food Act 2                       | 008 – Functions of enforcement agency  |  |
|--------------------------------------|--|--|
| Function to be performed:            | <ol> <li>Serve a Prohibition Order on the proprietor of a food business in accordance with s65 of the Food Act 2008.</li> <li>Give a Certificate of Clearance, where inspection demonstrates compliance with a Prohibition Order and any Improvement Notices in accordance with s66 of the Food Act 2008.</li> <li>Give written notice to the proprietor of a food business on whom a Prohibition Order has been served of the decision not to give a certificate of clearance after an inspection in accordance with s67 of the Food Act 2008.</li> <li>Grant, apply conditions, refuse, vary or cancel registration of a food business in accordance with s110 and s112 of the Food Act 2008.</li> <li>Institute proceedings for an offence under the Food Act 2008 in accordance with s125 of the Food Act 2008.</li> </ol> |  |
| Legislative power or duty delegated: | Food Act 2008  s65(1) Prohibition orders s66 Certificate of clearance to be given in certain circumstances s67(4) Request for re-inspection s110 Registration of food businesses s112 Variation of conditions or cancellation of registration of food businesses s125 Institution of proceedings   |  |
| Legislative Power to Delegate:       | Food Act 2008<br>s118(2)(b) Local Government (Enforcement Agency)  |  |
| Date Delegation made or reviewed:    | 9 March 2016 Council Resolution #129 14 June 2017 Council Resolution #513 13 June 2018 Council Resolution #196 11 March 2020 Council Resolution #110   |  |
| Delegation to:                       | <ul> <li>Chief Executive Officer         <ul> <li>Institute proceedings for an offence under the Food Act 2008 in accordance with s125 of the Food Act 2008.</li> </ul> </li> <li>Manager Environmental Health         <ul> <li>Coordinator Environmental Health (Health and Food Safety)</li> <li>Coordinator Environmental Health &amp; Waste Services</li> <li>Serve a Prohibition Order on the proprietor of a food business in accordance with s65 of the Food Act 2008.</li> <li>Give a Certificate of Clearance, where inspection demonstrates compliance with a Prohibition Order and any</li> </ul> </li> </ul>   |  |

|                                  | <ul> <li>Improvement Notices in accordance with s66 of the Food Act 2008.</li> <li>Give written notice to the proprietor of a food business on whom a Prohibition Order has been served of the decision not to give a Certificate of Clearance after an inspection in accordance with s67 of the Food Act 2008.</li> <li>Grant, apply conditions, refuse, vary or cancel registration of a food business in accordance with s110 and s112 of the Food Act 2008.</li> <li>Coordinator Environmental Health (Health and Food Safety)</li> </ul>  |  |
|----------------------------------|--|--|
|                                  | <ul> <li>Give a Certificate of Clearance, where inspection demonstrates compliance with a Prohibition Order and any Improvement Notices in accordance with s66 of the Food Act 2008.</li> <li>Give written notice to the proprietor of a food business on whom a Prohibition Order has been served of the decision not to give a certificate of clearance after an inspection in</li> </ul>  |  |
|                                  | <ul> <li>accordance with s67 of the Food Act 2008.</li> <li>Grant, apply conditions, refuse, vary or cancel registration of a food business in accordance with s110 and s112 of the Food Act 2008.</li> </ul>  |  |
| Conditions and Exceptions:       | In accordance with the requirements of the sections under which the function is to be performed.   |  |
|                                  | 2. Any proceedings of an offence must be reported in accordance with s121(2) of the Food Act 2008.   |  |
| Statutory Power to sub-delegate: | Food Act 2008<br>s118(4) Sub-delegation only permissible if expressly provided<br>in Regulations.  |  |
| Reporting<br>Requirements:       | <ol> <li>s121 Reports by and about enforcement agencies         <ul> <li>(1) An enforcement agency (other than the CEO) must report to the CEO, at the intervals that the CEO requires, on the performance of functions under this Act by persons employed or engaged by the agency.</li> </ul> </li> <li>(2) In addition to any report required under subsection (1), an enforcement agency must forward to the CEO details of any proceedings for an offence under this Act taken by an officer of the agency within one month after the proceedings have been finally dealt with.</li> <li>2. Any exercise of this delegation is to be recorded in the Delegated Authority Register.</li> </ol> |  |
|                                  | Delegated Authority Register.  |  |

19 Notices of motions of which previous notice has been given

Nil

20 Notices of motions for consideration at the following meeting if given during the meeting

Nil

## 21 Late and urgent Business

### **COUNCIL DECISION**

139

**MOVED CR W COOPER** 

SECONDED CR S LEE

That Council deal with the one item of urgent business as presented in the Addendum to the Agenda.

CARRIED 8/0

21.1 Closure of beaches and reserves in the interest of public health - Delegation of authority to Chief Executive Officer

#### **DECLARATION OF INTEREST:**

There were no declarations of interest declared.

#### SUMMARY:

City of Kwinana ('the City') officers currently do not possess power to enforce social gathering restrictions imposed by State Government in response to the COVID-19 outbreak. Although the *Local Government Property Local Law* permits specified activities to be prohibited on local government property, it does not address the closure of beaches and reserves in the district for the purpose of protecting the safety of the public.

It is recommended that the *Register of Delegated Authority – Local Government to Chief Executive Officer, Officers and Committees 2019* be amended to grant the Chief Executive Officer ('CEO') power to temporarily close beaches and reserves within the district for the purposes of enforcing a Declaration of State of Emergency, Declaration of Public Health Emergency, or to otherwise protect the safety of the public.

#### OFFICER RECOMMENDATION:

That Council resolve as follows:

1. That the City approve delegation 6.11 at Attachment A for the purpose of authorising the CEO to temporarily close beaches and reserves in the district, wholly or partially, in the interest of maintaining public safety.

NOTE - AN ABSOLUTE MAJORITY OF COUNCIL IS REQUIRED

#### DISCUSSION:

The *Local Government Property Local Law* provides limited ability to close access to public spaces to members of the public. Clause 2.8 provides as follows:

## 2.8 Activities which may be prohibited on specified local government property

- (1) A determination may provide that a person is prohibited from pursuing all or any of the following activities on specified local government property
  - (a) smoking on premises;
  - (b) bring, ride or drive an animal;
  - (c) riding a bicycle, a skateboard, rollerblades, a sandboard or a similar device;
  - (d) taking, riding or driving a vehicle on the property or a particular class of vehicle;
  - (e) riding or driving a vehicle of a particular class or any vehicle above a specified speed;
  - (f) use, launch or fly motorised model aeroplanes, gliders or rockets that are propelled by mechanical hydraulic, combustion or pyrotechnic means:
  - (g) use, launch or sail a motorised boat, including electronic and remote controlled model boats;
  - (h) taking or using a boat, or a particular class of boat;
  - (i) the playing or practice of
    - i. golf, archery, pistol shooting or rifle shooting; or
    - ii. a similar activity, specified in the determination, involving the use of a projectile which, in the opinion of the local government may cause injury or damage to a person or property;
  - (j) the playing or practice of any ball game which may cause detriment to the property or any fauna on the property; and
  - (k) the traversing of sand dunes or land which in the opinion of the local government has environmental value warranting such protection, either absolutely or except by paths provided for that purpose.

The local law does not provide the ability of officers or the CEO to authorise the closure of public spaces that it has management responsibility for, nor does it permit action to address public health risks such as the COVID-19 pandemic. Currently the City is only permitted under the property local law to direct people to leave areas which are local government property in circumstances whereby they are reasonably suspected of breaching a law:

#### 9.2 Persons may be directed to leave local government property

An authorised person may direct a person to leave local government property where she or he reasonably suspects that the person has contravened a provision of any written law.

The State Government has declared a Public Health State of Emergency in respect of the COVID-19 pandemic, effective 16 March 2020. That declaration remains in effect. From 1 April 2020, Stage 3 restrictions limit indoor and outdoor gatherings to two persons only.

Sections 5.42 and 5.44 of the *Local Government Act 1995*, as well as other relevant legislation, grant Council the ability to delegate certain local government functions to the CEO, Officers or Committees to exercise. Such delegation are recorded in the *Register of Delegated Authority – Local Government to Chief Executive Officer, Officers and Committees 2019* may be with or without conditions.

In order for the City to effectively respond to the public health risk posed by COVID-19, as well as public health risks which the City may face in the future and in circumstances where it is considered a last resort because the use of polite engagement and all other methods have not been adhered to, it is now recommended that the CEO be delegated power to temporarily close beaches and reserves within the district for the purposes of enforcing a Declaration of State of Emergency, Declaration of Public Health Emergency, or to otherwise protect the safety of the public.

In the event the CEO was to consider the exercise of the power to effect temporary closure, consultation would be undertaken with Police and neighbouring local governments to ensure that the decision was supported and could be implemented without adversely affecting the neighbouring local government. Any proposed closure would also include providing Public Notice on the City's website and through signage.

#### **LEGAL/POLICY IMPLICATIONS:**

The Act provides as follows:

#### 3.18. Performing executive functions

(1) A local government is to administer its local laws and may do all other things that are necessary or convenient to be done for, or in connection with, performing its functions under this Act.

#### 5.41. Functions of CEO

The CEO's functions are to —

- (a) advise the council in relation to the functions of a local government under this Act and other written laws; and
- (b) ensure that advice and information is available to the council so that informed decisions can be made; and
- (c) cause council decisions to be implemented; and
- (d) manage the day to day operations of the local government; and
- (e) liaise with the mayor or president on the local government's affairs and the performance of the local government's functions; and
- (f) speak on behalf of the local government if the mayor or president agrees; and
- (g) be responsible for the employment, management supervision, direction and dismissal of other employees (subject to section 5.37(2) in relation to senior employees); and
- (h) ensure that records and documents of the local government are properly kept for the purposes of this Act and any other written law; and
- (i) perform any other function specified or delegated by the local government or imposed under this Act or any other written law as a function to be performed by the CEO.

#### FINANCIAL/BUDGET IMPLICATIONS:

There are no direct financial implications related to this report.

#### **ASSET MANAGEMENT IMPLICATIONS:**

There are no direct asset management implications related to this report.

#### **ENVIRONMENTAL IMPLICATIONS:**

There are no direct environmental implications related to this report.

#### STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following objectives and strategies detailed in the Corporate Business Plan:

| Plan                    | Outcome              | Objective                   |
|-------------------------|----------------------|-----------------------------|
| Corporate Business Plan | Business Performance | 5.8 Apply best practice     |
| 2017 - 2022             |                      | principles and processes to |
|                         |                      | maximise efficiencies and   |
|                         |                      | quality.                    |

#### **COMMUNITY ENGAGEMENT:**

There City will be required to provide public notice by way of its website as well as social media in the event delegation 6.11 is exercised, for the purpose of informing the community and minimising potential negative sentiment.

#### **PUBLIC HEALTH IMPLICATIONS:**

The creation of delegation 6.11 is intended to allow the City a greater ability to respond to potential public health risks such as COVID-19. In the event Council resolves not to adopt the recommendation of this report, the City will be limited in its ability to respond to social distancing restrictions implemented by State Government.

#### **RISK IMPLICATIONS:**

The risk implications in relation to this proposal are as follows:

| Risk Event              | Officers and committees are appointed or provided with inappropriate or unnecessary delegated authority. |
|-------------------------|--|
| Risk Theme              | Failure to fulfil statutory or compliance requirements.  |
| Risk Effect/Impact      | Compliance   |
| Risk Assessment Context | Operational  |

| Consequence                                  | Moderate   |
|--|--|
| Likelihood                                   | Unlikely   |
| Rating (before treatment)                    | Moderate   |
| Risk Treatment in place                      | Avoid - remove cause of risk   |
| Response to risk treatment required/in place | Ensure officers and committees are appointed or delegated functions which are appropriate and in accordance with the relevant legislation. |
| Rating (after treatment)                     | Low  |

## **COUNCIL DECISION**

140

**MOVED CR S LEE** 

#### **SECONDED CR W COOPER**

That Council resolve as follows:

1. That the City approve delegation 6.11 at Attachment A for the purpose of authorising the CEO to temporarily close beaches and reserves in the district, wholly or partially, in the interest of maintaining public safety.

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL

5/3



| 6.11 Closure of beaches and reserves in the interest of public safety |  |  |
|---|--|--|
| Function to be performed:   | Approve the temporary closure of beaches and reserves in the district, wholly or partially, in the interest of maintaining public safety.                                      |  |
| Legislative power or duty delegated:                                  | Local Government Act 1995<br>s3.18 Performing executive functions  |  |
| Legislative Power to Delegate:  | Local Government Act 1995<br>s5.42 Delegation of some powers to the CEO  |  |
| Date Delegation made or reviewed:                                     |  |  |
| Delegation to:  | Chief Executive Officer  |  |
| Conditions and Exceptions:  | Must be for the purposes of enforcing a Western Australian Declaration of State of Emergency, Public Health Emergency, or for the purpose of maintaining safety of the public. |  |
| Statutory Power to sub-delegate:                                      | This Authority is not to be sub-delegated.   |  |
| Reporting<br>Requirements:  | Any exercise of this delegation is to be recorded in the Delegated Authority Register.   |  |

## 22 Reports of Elected Members

## 22.1 Councillor Wendy Cooper

Councillor Wendy Cooper offered the City's new Chief Executive Officer, Wayne Jack a warm welcome to the City.

#### 22.2 Councillor Sandra Lee

Councillor Sandra Lee passed on her thanks to Acting Chief Executive Officer Graeme Mackenzie for keeping the Chief Executive Officer seat warm and the ship steady. Councillor Lee welcomed the City's new Chief executive Officer, Wayne Jack and advised that she looks forward to working with him.

#### 22.3 Councillor Matthew Rowse

Councillor Matthew Rowse reported that he had attended the Local Recovery Coordination Group meeting via electronic means.

Councillor Rowse advised that he had attended the Joint Development Assessment Panel (JDAP) meeting via electronic means, where the Application for the Bulk Liquid Storage Facility on Lot 108 Kwinana Beach Road, Kwinana Beach was approved.

## 22.4 Councillor Sherilyn Wood

Councillor Sherilyn Wood passed on her thanks to Acting Chief Executive Officer Graeme Mackenzie for all of his help and support. Councillor Sherilyn Wood welcomed the City's new Chief executive Officer, Wayne Jack.

## 23 Answers to questions which were taken on notice

Nil

# 24 Mayoral Announcements

Mayor Carol Adams formally welcomed the City's new Chief Executive Officer (CEO), Wayne Jack, who commenced at the City of Kwinana three days ago and has really 'hit the ground running'. The Mayor stated on behalf of the Elected Members they sincerely hope he enjoys his time at the helm of this very dynamic organisation.

The Mayor formally acknowledged and thanked outgoing Acting CEO, Graeme McKenzie, for his support, guidance and efforts in his time whilst Council were waiting to appoint their new CEO and for the new CEO to arrive and take over the reins.

The Mayor advised that since the City's last Ordinary Council Meeting (OCM), she has participated in two WA Local Government Association (WALGA) hosted webinars, where the Minister for Local Government and other invited special guest briefed the sector and responded to numerous questions relating to the impact on our community by virtue of the Pandemic.

#### 24 MAYORAL ANNOUNCEMENTS

The Mayor further advised that the webinar was open to all West Australian Mayors, Presidents and CEO's and were held on 27 March 2020 and 3 April 2020. The Mayor added that the City has been active in the webinars by providing question to the Minister and the special guests on each occasion.

The Mayor mentioned that she had attended the WALGA Special State Council Meeting held on the 27 March 2020, which was held in response to the COVID-19 Pandemic. The State Council passed a number of recommendations including an action to Local Governments with the capacity to do so to consider not increasing residential rates for the 2020/21 Financial year. The Mayor stated that she is aware that several councils have already publicly announced a rate freeze and added that the City will be doing everything it can to assist our community during this difficult time and that City Officers are working hard on providing Elected Members with financial modelling and a report to council working on a zero rate increase. The Mayor advised that it is anticipated that the report will be presented to Council at the next OCM, for consideration.

The Mayor said that the Minister for Local Government acknowledges that Local Government is not 'once size fits all', and each has varying capacities. For Kwinana, it is appropriate that our City Officers diligently prepare a report with all the information needed so that the Elected Members know what the full impacts of a nil rate rise will mean going forward, as well as presenting ways that the City as an organisation might be able to best address the anticipated financial shortfall.

The Mayor reported that she had attended the daily update meetings with the CEO and Manager of Marketing and Communication.

The Mayor advised that she had participated in the filming of weekly Council updates to the community.

The Mayor mentioned that she had participated in a WALGA video update from a State Councillor and then provided an overview of what the City of Kwinana has been doing to assist our community during as part of the Pandemic response.

The Mayor reported that she initiated and chaired the inaugural meeting of the Kwinana Local Recovery Coordination Group Meeting, which was held on the 2 April 2020.

The Mayor advised that she had chaired the inaugural meeting of the Kwinana Local Economic Recovery Subcommittee, which was held on 8 April 2020.

The Mayor mentioned that she had attended with Councillor Rowse, their first Metro South Joint Development Assessment Panel Meeting on 7 April 2020.

The Mayor reported that she had participated in a Brand Community Cabinet teleconference with the Member for Brand, Madeleine King, Mayor Barry Sammel, CEO Wayne Jack, Tony Solin, Rockingham Kwinana Chamber of Commerce (RKCC), Reece Whitby MLA Baldivis and electoral officers representing Roger Cook MLA and Paul Papalia MLA. The Mayor explained that the initiative will see meetings held every week as a way for the Federal Member to see how she can assist from a Federal Member perspective.

The Mayor further reported that one of the matters they had asked assistance on, is for Local Governments to be included as part of the JobKeeper initiative.

#### 24 MAYORAL ANNOUNCEMENTS

The Mayor stated that as this is the last Ordinary Council Meeting before the traditional Easter break, she wished everyone a healthy, safe break.

## 25 Confidential items

Nil

# 26 Close of meeting

The Mayor declared the meeting closed at 7:28pm.

Chairperson: 22 April 2020