

# Ordinary Council Meeting

12 December 2018

## Minutes



Members of the public who attend Council meetings should not act immediately on anything they hear at the meetings, without first seeking clarification of Council's position. Persons are advised to wait for written advice from the Council prior to taking action on any matter that they may have before Council.

Agendas and Minutes are available on the City's website [www.kwinana.wa.gov.au](http://www.kwinana.wa.gov.au)

## Vision Statement

***Kwinana 2030  
Rich in spirit, alive with opportunities,  
surrounded by nature - it's all here!***

## Mission

**Strengthen community spirit, lead exciting growth, respect the environment  
- create great places to live.**



## We will do this by -

- providing strong leadership in the community;
- promoting an innovative and integrated approach;
- being accountable and transparent in our actions;
- being efficient and effective with our resources;
- using industry leading methods and technology wherever possible;
- making informed decisions, after considering all available information; and
- providing the best possible customer service.

## Values

### We will demonstrate and be defined by our core values, which are:

- Lead from where you stand - Leadership is within us all.
- Act with compassion - Show that you care.
- Make it fun - Seize the opportunity to have fun.
- Stand Strong, stand true - Have the courage to do what is right.
- Trust and be trusted - Value the message, value the messenger.
- Why not yes? - Ideas can grow with a yes.

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## Present:

MAYOR CAROL ADAMS  
DEPUTY MAYOR P FEASEY  
CR S LEE  
CR M ROWSE  
CR D WOOD

MS J ABBISS	-	Chief Executive Officer
MRS M COOKE	-	Director City Regulation
MS C MIHOVILOVICH	-	Director City Strategy
MRS B POWELL	-	Director City Living
MR R NAJAFZADEH	-	Acting Director City Infrastructure
MS M BELL	-	Director City Legal
MS K HAYWARD	-	Manager Finance
MR T HOSSEN	-	Lawyer
MS A MCKENZIE	-	Council Administration Officer

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## 1 Declaration of Opening:

***Presiding Member declared the meeting open at 7:00pm and welcomed Councillors, City Officers and gallery in attendance and read the Welcome.***

“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”

## 2 Prayer:

***Councillor Sandra Lee read the Prayer***

“OH LORD WE PRAY FOR GUIDANCE IN OUR MEETING. PLEASE GRANT US WISDOM AND TOLERANCE IN DEBATE THAT WE MAY WORK TO THE BEST INTERESTS OF OUR PEOPLE AND TO THY WILL. AMEN”

## 3 Apologies/Leave(s) of Absence (previously approved)

### Apologies

Councillor Merv Kearney

### Leave(s) of Absence (previously approved):

Councillor Wendy Cooper from 3 December 2018 to 19 December 2018 inclusive.  
Councillor Sheila Mills on 12 December 2018.

#### 4 Public Question Time:

Nil

#### 5 Applications for Leave of Absence:

##### COUNCIL DECISION

359

MOVED CR M ROWSE

SECONDED CR D WOOD

That Councillor Sandra Lee be granted a leave of absence from 8 February 2019 to 22 February 2019 inclusive.

CARRIED  
5/0

#### 6 Declarations of Interest by Members and City Officers:

Deputy Mayor Peter Feasey declared an impartiality interest in item 15.3, Adoption of Local Development Plan – Stage 42 Wellard Village, Wellard as his supervisor is the Minister for Housing and the Department of Communities – Housing Division is a joint venture with Satterley.

Councillor Matthew Rowse declared an impartiality interest in item 15.3, Adoption of Local Development Plan – Stage 42 Wellard Village, Wellard due to his interest in the Village at Wellard Residents Association and their association with Peet Ltd.

Mayor Carol Adams declared an impartiality interest in item 15.5, Adoption of Local Planning Policy No.11: Site Requirements and Standards for Development within the Industrial Zones due to her husband providing a submission to the item on behalf of Kwinana Industries Council (KIC).

#### 7 Community Submissions:

##### 7.1 **Ms Julie-Anne Fitzgerald on behalf of Taylor Burrell Barnett regarding item 12.1, Adoption of the City of Kwinana Community Infrastructure Plan 2011 – 2031 (Revised 2018)**

###### **Introduction**

Good evening Mayor, Councillors. Thank you for the opportunity to address you as part of this Council meeting. My name is Julie-Anne Fitzgerald, I am an Associate at Taylor Burrell Barnett.

We are the town planners for The Village at Wellard - a Peet Limited and Department of Communities joint venture development.

On behalf of the Wellard Village Joint Venture Partners, we are seeking Council to defer adoption of the Revised 2018 Community Infrastructure Plan.

## 7 COMMUNITY SUBMISSIONS

### **Background**

As representatives of key stakeholders in the City, we have been consistently and constantly engaged with the City in the preparation of its Community Infrastructure Plans since the Community Infrastructure Plan was first prepared in 2009. The Community Infrastructure Plans are closely aligned to the Community Development Contribution Amendments which in turn have significant cost implications for our client.

We therefore engaged with the City in relation to the 2009 Community Infrastructure Plan which informed Development Contribution Amendment 115 and we engaged with the City again in relation to the 2015 Community Infrastructure Plan which informed Development Contribution Amendment 145.

In both instances we have had numerous meetings and discussions with City officers and we have lodged extensive submissions in relation to both Development Contribution Amendment 115 and 145 and the corresponding Community Infrastructure Plans.

### **Community Infrastructure Plan 2018**

As part of our more recent engagement with the City in relation to the 2015 Community Infrastructure Plan and Development Contribution Amendment 145 we raised a number of queries regarding the Community Infrastructure Plan through our submission which we lodged with the City in November 2015.

Based on our brief review of the Revised Community Infrastructure Plan, given the limited time this has been publicly available, and the Officer Report, the answers to these questions are still unclear. As the Revised Community Infrastructure Plan will inform Development Contribution Amendment 145 and there are significant cost implications for our client associated with Development Contribution Amendment 145, we believe it is reasonable to ensure that the information contained in the Community Infrastructure Plan is both accurate and justified.

In the past there has been time to review both the 2009 Community Infrastructure Plan and 2015 Community Infrastructure Plan in conjunction with Development Contribution Amendments 115 and 145. Unfortunately time has not been provided for a review of the 2018 Community Infrastructure Plan.

We would therefore appreciate the opportunity to review the Revised Community Infrastructure Plan in more detail and discuss and seek further advice regarding the Revised Plan from the City's technical officers. We also understand that a key staff member from the City who we would wish to liaise with is currently on leave and not due to return until the end of January 2019.

### **Conclusion**

The Officer Recommendation is to adopt the Revised Community Infrastructure Plan; however, the Revised Community Infrastructure Plan will inform Development Contribution Amendment 145 which has significant cost implications for our client. On this basis we believe it is reasonable that there is an opportunity to review the Revised Community Infrastructure Plan. We therefore ask that Council defer adoption of the Revised Community Infrastructure Plan.

Thank you again for your time.

## **8 Minutes to be Confirmed:**

### **8.1 Ordinary Meeting of Council held on 5 December 2018:**

#### **COUNCIL DECISION**

**360**

**MOVED CR S LEE**

**SECONDED CR P FEASEY**

**That the Minutes of the Ordinary Meeting of Council held on 5 December 2018 be confirmed as a true and correct record of the meeting.**

**CARRIED  
5/0**

## **9 Referred Standing / Occasional / Management /Committee Meeting Reports:**

Nil

## **10 Petitions:**

Nil

## **11 Notices of Motion:**

Nil



## 12 Reports - Community

### 12.1 Adoption of the City of Kwinana Community Infrastructure Plan 2011 – 2031 (Revised 2018)

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

There were no declarations of interest declared.

#### **SUMMARY:**

The Community Infrastructure Plan (CIP) was first prepared by the then Town of Kwinana in 2009, with the CIP supported by an amendment to the City's Town Planning Scheme No.2 (Amendment No 115) which introduced developer contributions for certain community infrastructure, with the period of 2011 to 2031 applying to the CIP. The scheme amendment was gazetted in 2012 and has been in operation since, with the City progressively developing community facilities in accordance with the CIP.

In 2015 the CIP was reviewed and on 24 June 2015, Council resolved to adopt a revised Community Infrastructure Plan (Revised 2015) and to initiate Amendment 145 to Local Planning Scheme No. 2 (LPS2). The 2015 CIP was a revision of the Community Infrastructure Plan prepared in 2009 in order to address a number of changes in the planning context, and changes in dwelling projections. Amendment 145 was prepared to align the community infrastructure Development Contribution Plans (DCPs) within the context of the revised 2015 CIP.

Both proposals were advertised between 16 October 2015 and 30 November 2015. A total of 28 written submissions were received and a number of issues were raised by landowners and their representatives, government agencies and service providers, and industry representative groups.

In early 2017, City Officers determined that the 2015 CIP should undergo an additional review to reflect 2016 Census data and to ensure, once updated demographic data had been analysed in the context of community need, that the subsequent recommended community infrastructure provision was appropriate. The reviewed Community Infrastructure Plan (Revised 2018) process has now been completed.

It is recommended that Council adopt the Community Infrastructure Plan (Revised 2018), as detailed in Attachment A, to guide the delivery of the City's future community infrastructure requirements, to inform the City's forward financial and asset management planning processes and so that consideration and adoption of Amendment 145 can proceed in due course.

It is not considered necessary to advertise the revised 2018 CIP, given that public comment has been received and incorporated into the revision process.

#### **OFFICER RECOMMENDATION:**

That Council adopt the Community Infrastructure Plan (Revised 2018), as detailed in Attachment A, to guide the delivery of the City's future community infrastructure requirements, and to inform the City's forward financial and asset management planning.

12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

**DISCUSSION:**

The City of Kwinana is experiencing rapid population growth that is set to continue for at least the next twenty years, with the most recent population forecasts indicating that in 2031 the City's population is forecast to reach 75,270. Based on the ABS 2017 Estimated Residential Population of 41,866, this represents an increase of 33,404, or a 56% increase in population.

Most of these new residents will come to live in the newly created urban areas either side of the Perth - Mandurah rail line and Kwinana Freeway. To a much lesser extent, some of this growth will be attributed to infill development. By growth percentage, the City of Kwinana remains the fastest growing local government area in Perth's south-west metropolitan area and with a 2015/16 growth rate of 4.5%, it is the second fastest growing area in Western Australia.

An essential role of local government is to provide community facilities for its residents and Attachment A, the Community Infrastructure Plan (Revised 2018) sets out the City's priorities to provide such community infrastructure until 2031. While much of the community infrastructure in this Plan will be funded partially or wholly through development contributions, this Plan also includes a number of community facilities that the City will provide with its own resources, or via grants.

This additional infrastructure has been incorporated to give the City the capacity to consider and plan all community infrastructure items required to meet the needs of the projected 2031 population, regardless of how they are to be funded.

The Community Infrastructure Plan (CIP) was first prepared by the then Town of Kwinana in 2009, with the CIP supported by an amendment to the City's Town Planning Scheme (Amendment No 115) which introduced developer contributions for certain community infrastructure (sometimes referred to as 'soft infrastructure'), with the period 2011 to 2031 applying to the CIP. This scheme amendment was gazetted in 2012 and has been in operation since, with the City progressively developing community facilities in accordance with the CIP.

The methodology used to develop the 2009 CIP and to determine community infrastructure requirements was endorsed by the Western Australian Planning Commission (WAPC) which considered it against its State Planning Policy 3.6 Development Contributions for Infrastructure (SPP No.3.6).

The methodology included:

- Analysis of the land use planning framework;
- Development of community infrastructure planning principles and catchments;
- Analysis of the community profile;
- Population growth projections;
- Community needs assessment;
- Development of a community infrastructure hierarchy and planning standards; and
- Supply and demand analysis.

## 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

In 2015 and 2018, the CIP was reviewed as there have been planning decisions made by the WAPC and other factors which have affected the extent and distribution of the population across the City. Since the adoption of the 2009 CIP, there have also been changing trends in the design and the way community facilities are provided, with both of these factors leading to changes in the number of community facilities and the land and building size area required.

To ensure a consistent methodology and a high level of independent advice, the City has used a specialist community planning consultancy to prepare the original 2009 CIP and to undertake the subsequent 2015 and 2018 reviews of the CIP. The outcomes of both reviews and recommended amendments to the CIP are summarised below.

### **Review of 2009 CIP: 2015 and 2018**

The 2015 review of the 2009 CIP resulted in a number of changes to infrastructure requirements, largely as a result of changes to the expected dwelling yields brought about by planning decisions made by the WAPC affecting the likely size and distribution of population across the City, and to a lesser extent, changes to the Community Infrastructure Planning Standards.

On 24 June 2015, Council resolved to adopt the revised Community Infrastructure Plan (2015 CIP) and to initiate Amendment 145 to Local Planning Scheme No. 2 (LPS2). Amendment 145 was prepared to align the community infrastructure Development Contribution Plans (DCPs) within the context of the revised 2015 CIP.

Both 2015 CIP and Amendment 145 were advertised for public comment between October 2015 and November 2015. A total of 28 written submissions were received. Issues relating to the CIP and the associated Capital Expenditure Plan (CEP) included:

- Timing of infrastructure delivery;
- District C Sporting Ground (Medina Oval redevelopment);
- Wellard East Local Community Centre;
- Inclusion of additional community infrastructure items in the DCPs;
- Local Sporting Pavilion – Wandí;
- Renaming of Community Sports Facility Buildings A and B to Facility Building and Facility Building and Kiosk;
- Combining of facilities into consolidated buildings;
- On-going review of population projections and growth rates;
- Modifications to the Capital Expenditure Plan; and
- Redistribution of funds collected to modified items or refund of deleted items.

Early in 2017 City Officers determined that the 2015 CIP should undergo an additional review to reflect 2016 Census data and to ensure, once updated demographic data had been analysed in the context of community need, that the subsequent recommended community infrastructure provision was appropriate. The reviewed Community Infrastructure Plan (2018 CIP) process has now been completed, taking into consideration:

- Changes to the Community Infrastructure Hierarchy;
- Changes to the Community Infrastructure Planning Standards;
- Changes to timing of infrastructure provision;

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

- Changes to the community profile of the City;
- Changes to infrastructure requirements flowing from changes to expected dwelling yields;
- Introduction of District D;
- Introduction of Non Developer Contribution items; and
- Changes as a result of feedback received during the 2015 advertising period.

The changes to the 2009 CIP are summarised below.

#### **Changes to Community Infrastructure Hierarchy**

The 2009 CIP classified parks as 'semi developed' and 'developed' based on the City of Kwinana parks hierarchy at the time, which was amended to Neighbourhood and Local in the 2015 CIP, with neighbourhood parks being the smaller of the two.

While the 2015 CIP hierarchy for parks involved 'neighbourhood' and 'local' parks, with local parks being the larger of the two, the 2018 review resulted in a change to the parks hierarchy to reflect neighbourhood parks as the larger of the two, in line with the City of Kwinana's revised parks classifications. This has resulted in parks previously named in the 2015 CIP as Neighbourhood Parks being renamed as Local Parks, and Local Parks being renamed as Neighbourhood Parks.

#### **Changes to the Community Infrastructure Planning Standards**

The review of the 2009 CIP and the revised 2015 CIP involved a review of the Community Infrastructure Planning Standards, given that the design and size of community facilities and the land area required varies over time with changing trends in provision.

The changes in the Planning Standards are outlined below and the revised Community Infrastructure Planning Standards are included as an Appendix to the 2018 CIP.

- In 2015 the site area required for Local Community Centres was amended from 0.3 hectares to 0.5 hectares to reflect the trend toward multipurpose 'community centre hubs' which require a larger building and associated facilities, and hence a larger site area.
- Similarly the site area required for Local Sporting Grounds (with Pavilion) was amended from 4.0 hectares to 7.2 hectares in 2015, based on a template concept plan prepared by the City of Kwinana aimed at 'future proofing' local sports grounds to cater for a number of changing sports over time. The increase in site area also reflected the need for clubroom facilities to increase in size to cater for the demand for additional spaces, such as a first aid room, umpire changerooms, office space, changeroom facilities to cater for both male and female teams, and more adequate parking provisions. The increase in the site area required also reflected the growing demand for sporting grounds to more adequately cater for informal physical activity, with pathways for walking, running and cycling, outdoor gym exercise opportunities, active playspaces, as well as informal sporting opportunities and passive recreation.

12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

- While the 2009 CIP planning standards made provision for Local Sports Grounds (without Pavilion) at 3.0 hectares, this classification was amended in the 2015 CIP to either a Local Sports Ground (with Facility A Building) consisting of toilets and shade, or a Local Sports Ground (with Facility B Building) consisting of toilets, small kiosk/kitchenette, storage and shade. The amendment in this classification occurred as a result of the increasing use of sports grounds for informal physical activity and growing demand from sports clubs and casual users for some form of facility building on sporting grounds, particularly public toilets. The size of the required site was also increased to 4.6 hectares because of this.

The 2018 review of the Community Infrastructure Planning Standards has resulted in a further refinement of the classifications for Local Sports Grounds, with the 2018 CIP classifying them as Local Sports Ground (with Clubroom [more contemporary term than Pavilion]), or Local Sports Ground (with Small Facility Building). This has occurred as a result of the detailed planning and consultation work undertaken in 2017 for the Facility A Building for Bertram Oval indicating that the scope of a Facility A Building did not adequately meet the needs of the sporting clubs using the oval. The larger 'Facility B Building' was subsequently provided for Bertram Oval, and it is considered that the larger of the two facilities best meets community need for this type of facility.

- The increase in the site area required for Local Sports Grounds proposed in the 2015 CIP resulted in some feedback from developers indicating that, from their perspective, the area required is excessive. As a result of this, the required site area for sporting grounds and active open space allocated in the 2015 CIP has been reviewed again for the 2018 CIP and has been set at 4.2 hectares as the basic site area required for the active sporting component (not taking into account the additional site area associated with a Facility Building or Clubroom). The 2018 review has been based on the guidelines for active open space (playing fields) derived from the 2013 study undertaken by Curtin University's Centre for Sport and Recreation and Department of Urban and Regional Planning on the planning and provision of Active Open Space (Playing Fields) in Perth and the Peel region. These guidelines indicate that 6.5m<sup>2</sup> of active open space (playing surface only) per resident is required, to be at least doubled to allow for supporting infrastructure.

Based on these guidelines and on the requirement of either 7.2 hectares for a Local Sports Ground (with Clubroom) or 4.6 hectares for a Local Sports Ground (with Small Facility Building) per 5,000 residents, there would be an undersupply of 9.8 hectares in sports fields in District B, or an under supply of 6.8 hectares if the provision of the 3.0 hectare site set aside for the District Hard Courts was taken into account. Using the same guidelines, District A was assessed as having an oversupply of 3.1 hectares, taking this apparent oversupply into consideration, a deficit would still remain. Hence, this would indicate that the requirement for either a 7.2 hectare site for a Local Sports Ground (with Clubroom) or a 4.6 hectare site for a Local Sports Ground (with Small Facility Building) per 5,000 residents should not be regarded as excessive.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

- The other change to the Community Infrastructure Planning Standards in the 2015 CIP, and is included in the 2018 CIP, relates to the District Library to serve District A and B, which was based on the then planning standards utilised by the State Library Service of 1:25 books per person and 34m<sup>2</sup> per 1,000 people. This resulted in the proposed library, in 2009, requiring a built area of 1,790m<sup>2</sup>. However, this planning standard has since been revised by the State Library Service to reflect the major changes that have occurred in the role and design of public libraries, and now results in a built area of 2,388m<sup>2</sup> being required for this District Library.
- The 2018 review of the Community Infrastructure Planning Standards also involved the development of Planning and Design Guidelines for each community infrastructure item. The aim of introducing these guidelines is to ensure appropriate land and site areas are allocated by developers within local structure plans, and to guide the more detailed site and building/facility requirements to ensure consistency with the hierarchy for community infrastructure provision across the City.

#### **Timing of Infrastructure Items**

Amendment 115 and the 2009 CIP made provision for infrastructure requirements to be provided when the respective DCA or District reached 50% of the anticipated 2031 population, on the basis that the early provision of community infrastructure provides many benefits in terms of developing a strong sense of community, and addressing the early needs of residents, given new land release areas are typically some distance from existing community infrastructure and often lack public transport.

However, the 2015 review of the 2009 CIP found that this timeframe was not being achieved, largely because of insufficient funds in developer contribution accounts at the time of 50% of development, requiring the City to pre-fund half of the CIP items through borrowings, which proved beyond the financial capacity of the City.

Hence, the 2015 CIP revised the trigger point for provision from 50% of the predicted 2031 population, to 75% to enable the City to collect a greater proportion of the funds from developers, and to reduce borrowing costs and liabilities. While this would result in facilities being delivered to the community at a later stage of development, this change was considered necessary given the City's desire to deliver the community infrastructure facilities in a realistic and fiscally responsible and sustainable manner.

The change has been effective to some extent, however, an unqualified trigger point of this nature is still problematic given that, for example, all local level infrastructure items in a DCA would be required in the same year, as would all district level infrastructure items. While the 75% trigger point allows the City to collect a greater proportion of funds from developers, the staff resources required to simultaneously plan, construct and achieve the operation of a large number of facilities at the same time could prove to be beyond the City's staff resources.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

To address this, the 2018 review has involved the development of a more complex set of criteria to determine the timing for planning and providing community infrastructure items. The criteria takes into account a number of factors beyond a population point, such as the proximity and capacity of any existing facilities. This has resulted in a revised timing schedule for the planning and provision of infrastructure, and which is now more evenly distributed across the years. This schedule is also integrated with the City's Long Term Financial Plan.

#### **Community Profile**

While the 2009 CIP was based on the 2006 ABS Census and the 2015 CIP on the 2011 ABS Census, with 2016 ABS Census results becoming available in 2017, the 2018 CIP community profile has been updated based on the 2016 ABS Census results. The data and analysis has also been considerably expanded to include the 2006, 2011 and 2016 ABS Censuses, as well as suburb level data to give a more in-depth understanding of the City of Kwinana's community profile and how the population has changed over a ten year period. In addition, the 2018 review has identified the implications for community infrastructure provision for each demographic characteristic.

Besides the most significant change from the 2006 and 2016 Census being an increase in the City of Kwinana's population from 23,207 to 38,906, there has been a major shift in the proportion of residents living in the older and newer suburbs. For example, in 2006 the population in the older suburbs accounted for 71% of the City's population, reducing to 48% in 2016, with the proportion of residents in the newer suburbs increasing from 29% in 2006 to 52% in 2016. The other significant changes from 2006 to 2016 are highlighted below.

- The number of people in the younger age groups has increased considerably, effectively reflecting the younger age profile of the newer suburbs, with the more established suburbs generally having an older age profile.
- There has been a significant decrease in the proportion of people of English and Australian ancestry and a considerable increase in the proportion of people of Filipino, Indian and Chinese ancestry, particularly in the new suburbs.
- The unemployment rate across the City of Kwinana has increased considerably from 5.8% in 2006 to 10.8% in 2016, particularly since 2011, and is well above the unemployment rate of 7.8% for Western Australia (total). The only suburbs in the City of Kwinana with a lower unemployment rate than Western Australia (total) are Wandi, Mandogalup, Anketell, and Casuarina.
- The level of educational attainment has increased considerably with the proportion of residents with a Bachelor or Higher Degree increasing from 5.0% in 2006 to 14.3% in 2016, with the newer suburbs generally having higher levels of education. However, almost all Kwinana suburbs have lower levels of educational attainment compared to Western Australia (total).
- The proportion of 'Technicians and Trades Workers', 'Labourers' and 'Machinery Operators and Drivers' has decreased but still remains much higher than Western Australia (total). While the number of 'Professionals' and 'Managers' has increased, compared to Western Australia (total) the proportion of residents in these occupations remains much lower than for Western Australia (total).

## 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

- The proportion of households with higher incomes has increased by 5.5% since 2006, while the proportion of households with lower incomes has decreased by 6.2%. However, in comparison with Western Australia (total), the City of Kwinana still has a much higher proportion of lower income households, particularly in the older suburbs.

### **Review of Dwelling Yields**

A review of dwelling yields based on ID Forecast data and consultation with developers, was undertaken as part of the 2015 and 2018 review of the CIP. The review considered the proposed future timing of new land releases and any changes in planning decisions made by the WAPC. This resulted in revised population projections for each DCA for both the 2015 CIP and the 2018 CIP, with associated changes in community infrastructure requirements.

#### ***District A***

##### ***DCA 8 Mandogalup***

The 2009 CIP made provision for two Local Community Centres in DCA 8 Mandogalup, with an ultimate population of 13,331 expected in this area (and using a planning ratio of one Local Community Centre per 5,000 people). With a revised population projection of 3,780, the 2015 CIP reduced this provision from two to one Local Community Centre for this area. While the 2018 review has resulted in the population of DCA 8 Mandogalup being revised upward to 5,265, this upward revision is not sufficient to warrant any additional community infrastructure in this DCA.

With the 2018 review of the 2015 CIP resulting in an amendment to the 2015 CIP Community Infrastructure Planning Standards with respect to the classification of Local Sporting Grounds, the Local Sporting Ground for DCA 8 has been reclassified to a Local Sports Grounds (with Small Facility Building) in the 2018 CIP.

With a then anticipated 2031 population of 20,723 in District A and a planning ratio of one District Sports Ground per 25,000 people, the 2009 CIP made provision for one District Sports Ground to be located in DCA 8 Mandogalup to serve District A. However, with the 2031 population of District A revised down to 12,129, this requirement was removed in the 2015 CIP and remains deleted for the 2018 CIP.

##### ***DCA 9 Wandii/Anketell North***

The 2009 CIP made provision for one Local Community Centre for DCA 9 Wandii/Anketell with a then anticipated 2031 population of 7,392. This was amended in the 2015 CIP to a Local Community Centre (Large Scale) given the expected 2031 population increase in DCA 9 to 8,349. With the 2018 revised population projections indicating a minor increase in DCA 9 of 178 people, there is no change to this requirement in the 2018 CIP.



## 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

The 2009 CIP also made provision for two Local Sports Grounds, one with a pavilion and one without a pavilion. With the 2015 review of the CIP reclassifying Local Sports Ground (without a Pavilion) to either a Local Sports Ground (with a Facility A Building) or a Local Sports Ground (with Facility B Building), the one required Local Sports Ground (without a Pavilion) in the south of DCA 9 was reclassified to a Local Sports Ground (with Facility A Building). For the 2018 CIP the terminology for the facilities has been changed to 'Clubroom' and 'Small Facility Building', respectively.

The 2015 CIP also identified the requirement for one additional Local Sports Ground to be provided at the proposed High School site in the centre of DCA 9. This was required as a result of the removal of the District Sports Ground originally shown in the 2009 CIP to serve District B and is discussed further under DCA 10 Casuarina/Anketell South. In the 2018 CIP this facility is identified as a Local Sports Ground (with Small Facility Building).

The District Community Centre to serve District A and to be located in DCA 9 as shown in the 2009 CIP was removed in the 2015 CIP as a result of the 2031 population of District A being revised down from 20,723 to 12,129 in 2015. While this population makes a sizable contribution to the demand for a district level community centre, with the Local Community Centre (Large Scale) to be provided with the District Library in the District Town Centre, these two facilities will form a district level community hub.

The 2015 CIP also made provision for a District Youth Centre to be located in DCA 9 to serve District A with a then population projection of 12,129 and while the 2018 review revised the population forecast for District A upward to 13,792, the provision of one District Youth Centre remains sufficient.

The 2015 CIP also made provision for a District Library and District Recreation Centre to be located in DCA 9 to serve both District A and B. While the combined population projection for District A and B has been revised up from 36,588 in the 2015 CIP to 39,501, there is no change to this requirement in the 2018 CIP.

### **District B**

#### *DCA 10 Casuarina/Anketell South*

The 2009 CIP made provision for one Local Sports Ground (without a Pavilion) in DCA 10 and in line with the 2015 reclassification of Local Sporting Grounds, this sporting ground was reclassified to a Local Sporting Ground (with Facility B Building) in the 2015 CIP. While the 2018 review resulted in the population projections for DCA 10 being revised up from 6,534 to 7,530, this does not change this requirement, other than reclassification to a Local Sports Ground (with Small Facility Building).

The 2015 CIP similarly made provision for one Local Community Centre and the requirement for this facility has not changed as a result of the upward revision of the population.

In DCA 10 the 2009 CIP also made provision for a District Sports Ground to serve the population of District B, with a then 2031 population projection of 22,783, which was revised up to 24,459 in 2015.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

During the review of the 2015 CIP, concept plans were prepared to refine the site area required for this District Sports Ground, to include sports fields and netball, basketball and tennis courts and it was determined that a total site area of 18 hectares was required, 15 hectares for district level sports grounds and 3 hectares for district level hard courts. With the removal of District Sports Ground in District A, due to the significant reduction in the projected 2031 population, it was proposed that the District Sporting Ground in District B would serve both District B and A, with a combined 2031 population of 36,588.

While efforts were made during the 2015 review to identify and secure this 18 hectare site within existing/future Local Structure Plans via the 10% Public Open Space provisions, this was not achievable. Alternative options of purchasing this site on the open market were also investigated and deemed financially prohibitive given the estimated purchase cost of \$11 million. Options to separate the land and cost components of the district level sports fields and the district level hard courts were also investigated and while achieving the 15 hectare sports field component remained unachievable, securing the 3 hectare site for the District Hard Courts was possible and hence included in the 2015 CIP.

With the loss of the district level sports fields, the 2015 CIP proposed to address this by increasing the provision of Local Sports Grounds via joint provision and use arrangements on school sites with the Department of Education. The additional Local Sports Ground in DCA 9 Wandil/Anketell, referred to previously, is a result of this. Building on this strategy for the 2018 CIP, one additional Local Sports Ground (with Facility Building) is planned to be provided at the proposed Primary School site in DCA 10. The need for this additional Local Sports Ground is demonstrated by the undersupply of sporting grounds for District B identified in the 2018 review (refer to in 'Changes to Infrastructure Planning Standards' above).

The 2015 CIP requirement for a District Recreation Centre and District Hard Courts to be located in DCA 10 to serve both District A and B remains unchanged, as does the need for the District Community Centre and District Youth Centre to be located in DCA 10 to serve District B.

#### *DCA 11 Wellard East*

For DCA 11 Wellard East the 2009 CIP required a Local Sports Ground (with Pavilion) and one Local Community Centre, both with a planning ratio of one per 5,000 people and a then estimated 2031 population of 4,110. However, due to land constraint issues, the 2015 review of the CIP revised the estimated 2031 population down to 3,381. Further, the site identified for the Local Sports Ground also had contamination issues and was not of an adequate size. Considering these factors, the 2015 CIP removed the requirement for the Local Sports Ground. With the reduced population and the close proximity of the District Community Centre for District B, to be provided in DCA 10 Casuarina/Anketell South, the 2009 requirement for a Local Community Centre in DCA 11 Wellard East was also removed from the 2015 CIP.

With only a marginal increase in the 2031 population projections for DCA 11 from 3,318 in the 2015 CIP to 3,372 in 2018 and with the land constraint issues persisting, there is no change in infrastructure requirements for DCA 11 in the 2018 CIP.

## 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

### *DCA 12 Wellard West*

In the 2009 CIP the estimated 2031 population of DCA 12 Wellard West was 3,080 and while this falls under the planning ratio of 1:5,000 for a Local Sports Ground and Local Community Centre, a Local Sports Ground (with Pavilion) was identified, given the pavilion building would have some capacity to cater for activities normally associated with a Local Community Centre.

With the 2015 review of the 2009 CIP and the rezoning of Rural land to Urban/Urban Deferred, a significant increase of dwelling yields occurred and hence the 2031 population for DCA 12 Wellard West was revised upward to 8,043, an increase of 4,963. With a revised population of 8,043 this would require the provision of both a Local Community Centre and Local Sports Ground. However, the 2015 review found that there was no suitable land or site within the Wellard West local structure plan for both facilities and hence the 2015 CIP determined that the next best option was a combined clubroom and community centre at the Local Sporting Ground, to be provided adjacent to the Wellard Primary School site.

With only a small increase in the 2018 revised population projections of 311 people, no further community infrastructure items are required in the 2018 CIP for this DCA.

### *DCA 13 Bertram*

The 2009 CIP required a Local Sports Ground (without a Pavilion) and a Local Community Centre in DCA 13, with a then 2031 population of 8,036, revised down to 6,564 in the 2015 CIP review. In line with the 2015 reclassification of Local Sports Grounds (without a Pavilion) to either a Facility A or B building, this Local Sports Ground was reclassified to a Local Sports Ground (With Facility A Building) in the 2015 CIP.

With the Local Community Centre and Local Sports Ground component already provided, and taking into account the revised 2018 population projections, there is no change to these requirements, other than reclassifying the Local Sporting Ground to a Local Sporting Ground (with Small Facility Building).

## **District C**

### *DCA 14 Wellard Leda*

The 2009 CIP required two Local Community Centres and two Local Sports Grounds, one with a pavilion and the other without a pavilion based on the then 2031 population of 13,521 and the planning ratio of one per 5,000 people for both Local Sports Grounds and Local Community Centres.

While at the time of the 2009 CIP, the 2031 population forecast for DCA 14 Wellard Leda was 13,521, this was revised down to 11,436 in the 2015 CIP 2015. However, the requirement for the provision of two Local Sports Grounds remained, with the Local Sports Ground (with Pavilion) built by the time of the 2015 review of the CIP. At that time it was apparent that the pavilion/clubroom was of an inadequate size to cater for existing and future sporting uses and clubs and hence, the 2015 CIP included an upgrade to the existing clubroom facilities to address this.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

With the review of the 2015 CIP reclassifying Local Sports Grounds, the second required Local Sports Ground was reclassified to a Local Sports Ground (with a Facility A Building), now a Local Sports Ground (with Small Facility Building) in the 2018 CIP.

The 2009 CIP required two Local Community Centres in DCA 14 Wellard Leda for the then 2031 population estimate of 13,521. By the time of the 2015 review one of these Local Community Centres (John Wellard Community Centre) had been built. Given this centre considerably exceeded the built area requirements for a Local Community Centre, the 2015 CIP removed the requirement for the second Local Community Centre on the basis that with the size and facilities available at the John Wellard Community Centre. This centre should be adequate to meet the needs of the 2018 revised 2031 population of 12,558 for DCA 14.

While the 2018 population projections for 2031 have been revised upward from 11,436 to 12,558, this is not sufficient to warrant any additional community infrastructure in this DCA.

#### *DCA 15 Medina/Orelia/Parmelia/Calista*

The 2015 CIP resulted in a review of existing sporting grounds within DCA 15 Medina/Orelia/Parmelia/Calista, which included the district level sporting facilities that are required to meet the needs of the population of District C, as well as the subregional sporting facilities that are required to meet the needs of the whole LGA, all of which are located in DCA 15.

The 2009 CIP identified Orelia Oval as the District Sporting Ground for District C, with a planning ratio of one District Sport Ground per 25,000 and a then 2031 population projection of 36,249. However, further work undertaken as part of the 2015 review found that with more detailed planning and upgrades to Orelia Oval, this sports ground had the capacity to function as district level sports fields, but could not accommodate the other district level sporting facilities, such as hard courts and the associated facilities.

With hard courts provided at various locations within District C and reaching the end of their economic life in the next 10 to 20 years, the 2015 CIP proposed that the required district level hard court facilities be provided via a redeveloped multipurpose shared facility at Medina Oval.

With the Thomas Oval site being the designated Sub-Regional Sporting Ground to meet the regional sporting needs of the total population of the City of Kwinana, the 2015 CIP further highlighted that while Thomas Oval had the capacity to function as a Sub-Regional Sporting Ground, major improvements and upgrades to the existing clubrooms, buildings and facilities were required, including upgraded and new lighting across the site.

With the 2031 population projections for DCA 15 revised up from 20,564 in the 2015 CIP to 22,442 in the 2018 review, this upward revision is not sufficient to require any further community infrastructure in this DCA.

All district level community infrastructure items for District C are located in DCA 15 and while the 2015 CIP population projections for District C have been revised upward from 32,000 to 35,000, this does not justify any further district level infrastructure either.

## 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

### **Introduction of District D**

The 2015 review of the 2009 CIP resulted in the introduction of a new district, District D for the primarily rural areas east of the Kwinana Freeway, with the purpose of including this District in future reviews of the CIP when the future projected population, and hence community infrastructure requirements can be determined. Given this, District D is not currently part of the Developer Contribution Plans and as such, no items of community infrastructure were proposed in the 2015 CIP, nor are any proposed in the 2018 CIP.

### **Non Developer Contribution Items**

To provide a total picture of community infrastructure requirements, the 2015 review of the 2009 CIP resulted in the inclusion of the following infrastructure items.

- Animal Shelter
- Works Depot – Upgrade (Timing and costs are still to be confirmed by Council. The project is still at concept stage.)
- Arts and Cultural Centre - Upgrade
- Civic Administration Centre – Upgrade.

These items have been retained in the 2018 CIP.

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

#### **Acts and Regulations**

*Planning and Development Act 2005*

*Planning and Development (Local Planning Schemes) Regulations 2015*

#### **Strategies**

State Planning Strategy

Directions 2031 and Beyond

#### **Schemes**

Metropolitan Region Scheme

City of Kwinana Town Planning Scheme No.2

#### **Policies**

State Planning Policy 3.6 Development Contributions for Infrastructure

### **FINANCIAL/BUDGET IMPLICATIONS:**

Included in the Community Infrastructure Plan as an Appendix is a Capital Expenditure Schedule to guide the implementation of the 2018 CIP. The Schedule outlines planning, design and construction costs for the provision of the infrastructure and it aligns with the City's Revised Long Term Financial Plan which is listed in this Agenda at 16.1 for consideration and adoption by Council.

**12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)**

Indicative designs, based on the Community Infrastructure Planning Standards, have been developed for each of the proposed classes of community infrastructure. These have been costed by an independent Quantity Surveyor and these costings are the basis of the Capital Expenditure Schedule.

The Capital Expenditure Schedule indicates total expenditure required for infrastructure items over the period 2020 – 2031 as being \$82,629,000. It is estimated that Developer Contributions Plans associated with proposed Amendment 145 to LPS2 will deliver 88% of the funds required during this period, with the City contributing the remainder from its own resources. The cost apportionment schedule for Amendment 145 will provide a more accurate breakdown of the funding once it has been developed.

The Revised Long Term Financial Plan also accounts for all staffing and operating costs for the proposed infrastructure.

**ASSET MANAGEMENT IMPLICATIONS:**

As the 2018 CIP proposes the construction of significant levels of new building assets along with some building upgrades, to 2031, it is critical that a whole of life cost approach to developing cost-effective management strategies for the infrastructure is adopted.

The 2018 CIP will guide the development of the City's Asset Management Plans.

**ENVIRONMENTAL IMPLICATIONS:**

In designing and constructing the community infrastructure outlined in the 2018 CIP, consideration must be given to the City of Kwinana's Green Building New and Renovated Buildings Policy, particularly with respect to efficient environmental design, the use of renewable energy, and minimisation of the use of energy, water and other resources.

**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	Great Public Places	4.1 Residents are provided with a range of multifunctional community places and accessible recreation facilities

**COMMUNITY ENGAGEMENT:**

Public advertising of the 2015 CIP and Amendment 145 to LPS2 occurred between 16 October 2015 and 30 November 2015 (45 days), although the City accepted submissions until 24 December 2015.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

Advertising consisted of the following:

- Public notice published in the local newspaper, Weekend Courier, on 16 October 2015 and 23 October 2015;
- Public notice displayed on the City's website;
- Publication of a dedicated 'Development Contributions' webpage with relevant information. The website attracted 358 independent visits during the advertising period – an average of 12 visits per business day;
- Letters to service providers, government agencies and authorities;
- Letters to community groups;
- Letters to landowners and occupiers affected by the Amendment;
- Promotion of the 2015 CIP on the City's Facebook site.

A total of 28 written submissions were received from a mix of Landowners or their representatives, government agencies or service providers, and industry representative groups. The matters raised included

- Timing of infrastructure delivery;
- District C Sporting Ground (Medina Oval extension / upgrade);
- Wellard East Local Community Centre;
- Inclusion of additional community infrastructure items in the DCPs;
- Local Sporting Pavilion – Wandí;
- Modifications to the Capital Expenditure Plan;
- Renaming of Community Sports Facility Buildings A and B to Facility Building and Facility Building and Kiosk;
- Redistribution of funds collected to modified items or refund of deleted items;
- Combining of facilities into consolidated building; and
- On-going review of population projections and growth rates.

Consideration has been given to the feedback directly relevant to the review of the CIP, as follows:

#### **Timing of Infrastructure Delivery**

Four submissions expressed concern about the proposed change to the trigger point whereby the City would deliver the community infrastructure – from 50% of the projected catchment population to 75%. The comments received included:

- Concern that residents who contribute to the infrastructure won't receive any benefit.
- Council has an obligation to provide the infrastructure in a reasonable period of time to benefit those residents who pay for it.
- A mechanism should be introduced to allow Council to bring certain items forward.
- It is inequitable that the community may not benefit from community infrastructure until potentially 100% of the population is achieved.
- SPP3.6 is based on providing funds for the early provision of infrastructure.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

**Response:** The proposed 2015 CIP change in the delivery timeframe from 50% of the projected population being reached to 75% was due primarily to a number of infrastructure items being ‘triggered’ within a relatively short period of time and the impact that this would place on the City’s borrowing capacity and ability to deliver the infrastructure. The delivery of community infrastructure needs to be planned in consideration of the City’s other long term financial objectives and whilst it is certainly desirable to deliver the infrastructure earlier rather than later, such expenditure needs a responsible and considered approach.

As a result of the feedback received, further consideration of this matter has occurred during the 2018 review process and the unqualified trigger point has been amended to include a more complex set of criteria including:

- The planning and design of local, district and sub-regional level community facilities will generally commence two years prior to the estimated population catchment reaching 5,000, 20,000 – 40,000 and 75,000 people, respectively.
- The proximity and capacity of any existing Local, District and Sub-Regional community facilities within and outside the relevant DCA will be considered.
- Opportunities for maximising the co-location and joint provision of community facilities will be sought and assessed.
- The City of Kwinana’s organisational capacity to plan, manage and operate existing and new community facilities will be considered.

Additionally, the provision of each community facility is further identified within the Capital Expenditure Schedule and City’s Long Term Financial Plan (LTFP).

#### **District C Sporting Ground (Medina Oval Redevelopment)**

Two submitters objected to the inclusion of the District C Sporting Ground: Medina Oval Redevelopment on the basis of:

- The need and nexus for the infrastructure has not been demonstrated;
- Replacement works are inconsistent with the principles of State Planning Policy 3.6: Development Contributions for Infrastructure (SPP3.6);
- Other funding opportunities should be explored; and
- The need for the infrastructure was not identified in the 2009 CIP.

**Response:** This infrastructure item is considered necessary to service the existing and future needs of the City’s residents and is to be retained in the revised 2018 CIP. As such the City would fund the proportion of the redevelopment attributed to the needs of the existing population, with Development Contributions funding the proportion that is attributed to increased population resulting from, primarily, infill development.

#### **Wellard East Local Community Centre**

Two submitters requested that the Local Community Centre for DCA11 be removed from the DCP. The following comments were made:

- The projected population for DCA11 does not meet the threshold requirement for a local community centre (projected population of 3,318 / threshold requirement 5,000).



12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

- Both submitters suggested that the proposed District Community Centre to be located in District B (DCA10) near Mortimer Road could serve the function of local community centre for DCA11's population.
- Removal of the local community centre was 'flagged' in the initiation report for Amendment 100A in December 2014 where the reduced population projection was one of the reasons to remove the local sporting ground from the standard infrastructure DCP (DCP2). A comment in the report implied the reduced population projection for DCA11 also reduced the need for a local community centre.
- There was a suggestion that there are many opportunities for linear pathways through DCA11 for dual use paths to link to the District Community Centre.

**Response:** The projected population for Wellard East (DCA11) is 3,318 which is less than the 5,000 person threshold for a local community centre. This is due to the reduction in developable Urban land in Wellard East due to the odour buffer associated with the livestock holding facility on Telephone Lane in the City of Rockingham, to the south.

The City agrees with the points raised by the submitters that the infrastructure item is no longer needed for the projected population. It is also noted that the District Community Centre for District B (which includes DCA11) is planned to be located near Mortimer Road in Casuarina and thus within relatively close proximity to the residents of DCA11.

The reviewed 2018 CIP reflects the feedback received and does not identify a local community centre within DCA11.

**Inclusion of additional community infrastructure items in the DCPs**

Three submissions objected to the inclusion of additional community infrastructure items that were not identified in the 2009 CIP, notably:

- Sub Regional Sporting Ground (Thomas Oval / Kelly Park Extension / Upgrade);
- District C Sporting Ground (Medina Oval Extension / Upgrade);
- Local Sporting Ground with Pavilion Extension – Wellard / Leda; and
- Local Sporting Ground with Community Sports Facility Building A – Wellard / Leda.

Comments made by the submitters were:

- Population projections to 2031 have reduced;
- Items were not identified in the 2009 CIP; and
- Current demand on a facility does not justify an extension or upgrade.

**Response:** SPP3.6 and the DCP provisions of TPS2 allow for, and in fact require, a review of the DCP. The review of the provision of community infrastructure undertaken during 2015 identified the need for additional infrastructure that was not previously identified or not considered necessary. The demand generated by the existing population and projected population has necessitated a need for additional infrastructure at the Thomas Oval/Kelly Park Sub-regional facility, with the costs being apportioned accordingly.

## 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

Clause 5.1 of SPP3.6 states *'Development contributions can be sought for ... the total replacement of infrastructure once it has reached the end of its economic life.'* It was on this basis that infrastructure items needing replacement were included in the proposed DCPs. However the City would be responsible for the replacement costs proportionate to the existing population, with developers responsible for costs proportionate to the projected population.

The projected population for the Sub-regional facility is approximately 75,000 persons by 2031 in the 2018 CIP. This is the 75,000 person provision threshold. Furthermore the projected population for Wellard / Leda has been revised again since advertising of the amendment and the reduction in projected population to 2031 is not significant.

Despite what was stated in the 2009 CIP, the revised 2015 CIP and 2018 CIP has identified and justified the need for this proposed infrastructure.

### **Local Sporting Ground with Pavilion – Wandí**

Five submissions objected to the inclusion of this infrastructure item, whilst two submissions raised no objection to the item. The objecting comments received included:

- Duplication and excessive provision of recreation facilities for DCA9 – 3 local sporting grounds are to be provided within DCA9 (1 in Anketell North and 2 in Wandí) for a projected population of 8,349;
- Wandí Playing Fields are equivalent to a district level facility and suggests that DCA8 landowners should also contribute;
- Inequitable costs across the DCAs – DCA9 has considerably higher costs for local sporting facilities than those DCAs within District B.

**Response:** The Wandí Playing Fields have been approved by the WAPC through the structure planning process for the Wandí cell and are to be used also by the Wandí Primary School that opened in early 2018. As the land for the Wandí Playing Fields sits outside of the Urban zoned area, it was not provided as part of the public open space for Wandí and therefore is to be acquired through the development contribution plan for standard infrastructure (Amendment 100A – DCA5). This facility will be the primary local sporting ground for the Wandí area and therefore is justified in being provided with a Clubroom.

The community infrastructure proposed for the two other local sporting grounds within DCA9 (one co-located with the future High School and one on a stand-alone local sporting ground in Anketell North) are considered basic amenity requirements for community use. In the context of the 2018 CIP, the Wandí Playing Fields are identified as a 'Local Sporting Ground with Clubroom' and both the future Wandí High School and Anketell North sites identified as 'Local Sporting Ground with Facility Building'.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

The Wandi Playing Fields is a local sporting ground, not a district sporting ground. Whilst the land area for the facility is larger than other local sporting grounds, this is due to the site's topography and natural features more so than the facility being of district scale.

DCA8 Mandogalup is provided with a local sporting ground as part of the public open space required for the local structure planning. Developers within DCA8 will contribute to a sporting amenity building to be located at this local sporting ground.

The overall per dwelling contribution for DCA9 is comparable to other DCAs.

#### **Renaming of Community Sports Facility Buildings A and B and Pavilion to Facility Building and Clubroom**

Whilst not explicitly raised in the written submissions, a number of verbal discussions with landowners and their representatives commented that the naming of the Community Sports Facility Buildings A and B, and Pavilion was confusing and lengthy. The City agrees with these comments and the 2018 CIP has been amended accordingly.

#### **Combining of facilities into consolidated building**

Four submissions raised the opportunity for combined facility buildings to be designed and built where multiple community infrastructure facilities are proposed, specifically:

- (Future) Wandi District Centre – Branch Library (serves Districts A and B), District Youth Centre and Local Community Centre (large scale); and
- (Future) Casuarina Neighbourhood Centre – District Community Centre and District Youth Centre.

The submissions noted the potential for a reduced land area requirement and the opportunity to provide a community focal point for the centres.

**Response:** The City agrees that there is merit in co-locating the facilities into a single community purpose building, with design features such as separate entrances and areas where necessary, as community needs and contemporary practice indicate at the time of facility design. DCPs 2-7 are required to contribute towards the land acquisition for a combined facility in the Wandi District Centre, for example. However co-location may not be achievable in all cases.

#### **On-going review of population projections and growth rates**

A number of submitters commented on the methodology for population projections and requested further detail about population and growth rates. The 2015 CIP was prepared to address significant changes in the population projections notably in Mandogalup, Wellard East and Wellard West, as well as to address emerging issues in the provision of community infrastructure in the established urban areas due to new growth. As noted previously in this report, in early 2017, City Officers determined that the 2015 CIP should undergo an additional review to reflect 2016 Census data and to ensure, once updated demographic data had been analysed in the context of community need, that the subsequent recommended community infrastructure provision was appropriate. This review included revised population projections and growth rates.

### 12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031 (REVISED 2018)

The City will continue to review and monitor the projected population and growth rates for the purpose of the CIP. On-going review and monitoring of projected population and growth rates will ensure that sufficient and equitable development contributions are collected for the implementation of the 2018 CIP.

Given the above public comment received when advertising the 2015 CIP, which has for the most part been incorporated into the 2018 CIP, it is not considered necessary to undertake further community engagement activities before adoption of the 2018 revised CIP.

#### **PUBLIC HEALTH IMPLICATIONS**

Provision of the infrastructure in the 2018 revised Community Infrastructure Plan has the potential to cause a significant improvement to neighbourhood amenity and increase participation, sense of belonging and social connection/cohesion, particularly in new and emerging communities.

Community infrastructure provision is an essential element in achieving socially sustainable communities and it plays an important role in bringing people together, developing social capital, maintaining quality of life and in developing the skills, networks and relationships essential to strong communities. Investing in community infrastructure is essential for the health, wellbeing and economic prosperity of communities.

#### **RISK IMPLICATIONS:**

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

Risk Event	Community infrastructure not adequately planned for
Risk Theme	Business and community disruption
Risk Effect/Impact	Service Delivery Reputation
Risk Assessment Context	Strategic
Consequence	Major
Likelihood	Almost certain
Rating (before treatment)	Extreme
Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Revision of Community Infrastructure Plan and associated development contribution plans ensures the funding and delivery of infrastructure appropriate for the needs of the City's future residents.
Rating (after treatment)	Low

12.1 ADOPTION OF THE CITY OF KWINANA COMMUNITY INFRASTRUCTURE PLAN 2011 – 2031  
(REVISED 2018)

**COUNCIL DECISION**

**361**

**MOVED CR C ADAMS**

**SECONDED CR M ROWSE**

**That Council adopt the Community Infrastructure Plan (Revised 2018), as detailed in Attachment A, to guide the delivery of the City's future community infrastructure requirements, and to inform the City's forward financial and asset management planning.**

**CARRIED**

**5/0**

***Draft Final***

***Community Infrastructure Plan***

***2011 - 2031***



***'Hip to be in the Square' Event - Darius Wells Library and Resource Centre***

***Revised November 2018***

***Revised June 2015***

***First Version October 2009***

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## **APPENDICES**

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Appendix 3	Community Needs Assessment Overview

# **1. Executive Summary**

The City of Kwinana is experiencing rapid population growth that is set to continue for at least the next twenty years, with the most recent population forecasts indicating that in 2031 the City's population is forecast to reach 75,270. Based on the ABS 2017 Estimated Residential Population of 41,866, this represents an increase of 33,404, or a 56% increase in population.

Most of these new residents will come to live in the newly created urban areas either side of the Perth - Mandurah rail line and Kwinana Freeway. To a much lesser extent, some of this growth will be attributed to infill development. By growth percentage, the City of Kwinana remains the fastest growing local government area in Perth's south-west metropolitan area and with a 2015 -16 growth rate of 4.5%, it is the second fastest growing area in Western Australia.

An essential role of local government is to provide community facilities for its residents and this Community Infrastructure Plan (CIP) sets out the City's priorities to provide such community infrastructure until 2031. While much of the community infrastructure in this Plan will be funded partially or wholly through development contributions, this Plan also includes a number of community facilities that the City will provide with its own funding, or via grants.

This has been done to give the City the capacity to consider and plan all community infrastructure items required to meet the needs of the projected 2031 population, regardless of how they are to be funded.

The Community Infrastructure Plan (CIP) was first prepared by the then Town of Kwinana in 2009 with the CIP supported by an amendment to the City's Town Planning Scheme (Amendment No 115) which introduced developer contributions for certain community infrastructure (sometimes referred to as 'soft infrastructure'), with the period of 2011 to 2031 applying to the CIP. This scheme amendment was gazetted in 2012 and has been in operation since, with the City progressively developing community facilities in accordance with the CIP.

The methodology used to develop the CIP 2009 and to determine community infrastructure requirements was endorsed by the Western Australian Planning Commission (WAPC) which considered it against its State Planning Policy 3.6 Development Contributions for Infrastructure (SPP No.3.6).

In 2015 and 2018, the CIP was reviewed as there have been planning decisions made by the WAPC and other factors which affected the extent and distribution of the population across the City. Since the adoption of the CIP 2009, there have also been changing trends in the design and the way community facilities are provided, with both of these factors leading to changes in the number of community facilities and the land and building size area required.

To ensure a consistent methodology and a high level of independent advice, the City has used Community Perspectives, a specialist community planning consultancy to prepare the original CIP 2009 and to undertake the subsequent 2015 and 2018 reviews and preparation of the CIP 2015 and this CIP 2018, with the outcomes and amendments summarised below.

## **CIP 2009 Review - 2015**

The 2015 review of the CIP 2009 resulted in a number of changes to infrastructure requirements, largely as a result of changes to the expected dwelling yields brought about by planning decisions made by the WAPC affecting the likely size and distribution of population across the City, and to a lesser extent, changes to the Community Infrastructure Planning Standards. These factors and CIP 2015 changes to the CIP 2009 are summarised below.

### **Changes to the Community Infrastructure Planning Standards**

The CIP 2015 involved a review of the 2009 Community Infrastructure Planning Standards, given that the design and size of community facilities and the land area required varies over time with changing trends in provision. The changes are outlined below:

- The site area required for Local Community Centres was amended from 0.3 hectares to 0.5 hectares to reflect the trend toward multipurpose 'community centre hubs' which require a larger building and associated facilities and hence a larger site area.
- The site area required for Local Sporting Grounds (with Pavilion) was amended from 4.0 hectares to 7.2 hectares based on a template concept plan prepared by the City of Kwinana aimed at 'future proofing' local sports grounds to cater for a number of changing sports over time. The increase in site area also reflected the need for clubroom facilities to increase in size to cater for the demand for additional spaces, such as a first aid room, umpire changerooms, office space, changeroom facilities to cater for both male and female teams, and more adequate parking provisions. The increase in the site area required also reflected the growing demand for sporting grounds to more adequately cater for informal physical activity, with pathways for walking, running and cycling, outdoor gym exercise, active playspaces, as well as informal sporting opportunities and passive recreation.
- While the 2009 CIP planning standards made provision for Local Sports Grounds (without Pavilion) at 3.0 hectares, this classification was amended in the CIP 2015 to either a Local Sports Ground (with Facility A Building) consisting of toilets and shade, or a Local Sports Ground (with Facility B Building) consisting of toilets, small kiosk/kitchenette, storage and shade. This occurred as a result of the increasing use of sports grounds for informal physical activity and growing demand from sports clubs and casual users for some form of facility building on sporting grounds, particularly public toilets. The size of the site was increased to 4.6 hectares because of this.
- The 2009 CIP classified parks as 'semi developed' and 'developed' based on the City of Kwinana parks hierarchy at the time, which was amended to Neighbourhood and Local in the CIP 2015, with neighbourhood parks being the smaller of the two.

### **Timing of Infrastructure Items**

Amendment 115 and the CIP 2009 made provision for infrastructure requirements to be provided when the respective DCA or District reached 50% of the anticipated 2031 population on the basis that the early provision of community infrastructure provides many benefits in terms of developing a strong sense of community, and addressing the early needs of residents, given new land release areas are typically some distance from existing community infrastructure and often lack public transport.

However, the 2015 review of the CIP 2009 found that this timeframe was not being achieved, largely because of insufficient funds in developer contribution accounts at the time of 50% of development, requiring the City to pre-fund half of the CIP items through borrowings, which proved to be beyond the financial capacity of the City.

Hence, the CIP 2015 revised the trigger point for provision from 50% of the predicted 2031 population, to 75% to enable the City to collect a greater proportion of the funds from developers and to reduce borrowing costs and liabilities. While this resulted in facilities being delivered to the community at a later stage of development, this change was considered necessary given the City's desire to deliver the community infrastructure facilities in a realistic and fiscally responsible and sustainable manner.

### Introduction of District D

The 2015 review of the CIP 2009 resulted in the introduction of a new district, District D for the primarily rural areas east of the Kwinana Freeway, with the purpose of including this District in future reviews of the CIP when the future projected population, and hence community infrastructure requirements, can be determined. Given this, District D is not currently part of the Developer Contribution Plans and as such, no items of community infrastructure were proposed in the CIP 2015.

### Non Developer Contribution Items

To provide a total picture of community infrastructure requirements, the 2015 review of the CIP 2009 resulted in the inclusion of the following infrastructure items.

Animal Shelter

Works Depot – Upgrade (Timing and costs are still to be confirmed by Council. The project is still at concept stage.)

Arts and Cultural Centre - Upgrade

Civic Administration Centre - Upgrade.

### Review of Dwelling Yields

Based on forecast id. data and after consultation with developers, a review of dwelling yields was undertaken as part of the CIP 2015 review. The review considered the proposed future timing of new land releases and any changes in planning decisions made by the WAPC. This resulted in revised population projections for each DCA for the CIP 2015, shown in the following tables for District A, B and C, together with the changes in community infrastructure requirements resulting from the 2015 review.

#### District A

District A	CIP 2009		CIP 2015		Change	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA8 Mandogalup	13,331	4,761	3,780	1,400	-9,551	-3,361
DCA9 Wandii/Anketell North	7,392	2,640	8,349	3,093	957	453
<b>Total</b>	<b>20,723</b>	<b>7,401</b>	<b>12,129</b>	<b>4,493</b>	<b>-8,594</b>	<b>-2,908</b>

## **DCA 8 Mandogalup**

- The 2009 CIP made provision for two Local Community Centres in DCA 8 Mandogalup, with an ultimate population of 13,331 expected in this area and using a planning ratio of one Local Community Centre per 5,000 people. With a revised population projection of 3,780, the CIP 2015 reduced this provision from two to one Local Community Centre for this area.
- With a then anticipated 2031 population of 20,723 in District A and a planning ratio of one District Sports Ground per 25,000 people, the 2009 CIP made provision for one District Sports Ground to be located in DCA 8 Mandogalup to serve District A. However, with the 2031 population of District A revised down to 12,129, this requirement was removed in the CIP 2015.

## **DCA 9 Wandii/Anketell North**

- The 2009 CIP made provision for one Local Community Centre for DCA 9 Wandii/Anketell with a then anticipated 2031 population of 7,392. This was amended in the CIP 2015 to a Local Community Centre (Large Scale) given the expected 2031 population increase in DCA 9 to 8,349.
- The CIP 2009 also made provision for two Local Sports Grounds, one with a pavilion and one without a pavilion. With the 2015 review of the CIP reclassifying Local Sports Ground (without a Pavilion) to either a Local Sports Ground (with a Facility A Building) or a Local Sports Ground (with Facility B Building), the one required Local Sports Ground (without a Pavilion) in the south of DCA 9 was reclassified to a Local Sports Ground (with Facility A Building).
- The CIP 2015 also identified the requirement for one additional Local Sports Ground to be provided at the proposed High School site in the centre of DCA 9. This was required as a result of the removal of the District Sports Ground originally shown in the 2009 CIP to serve District B and is discussed further on the next page under 'DCA 10 Casuarina/Anketell South'.
- The District Community Centre to serve District A and to be located in DCA 9 as shown in the CIP 2009 was removed in the CIP 2015 as a result of the 2031 population of District A being revised down from 20,723 to 12,129 in 2015. While this population makes a sizable contribution to the demand for a district level community centre, with the Local Community Centre (Large Scale) to be provided with the District Library in the District Town Centre, this will form a district level community hub.

## District B

District B	CIP 2009		CIP 2015		Change	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA10 Casuarina/Anketell South	7,557	2,699	6,534	2,420	-1,023	-279
DCA11 Wellard East	4,110	1,468	3,318	1,229	-792	-239
DCA12 Wellard West	3,080	1,100	8,043	2,979	4,963	1,879
DCA 13 Bertram	8,036	2,870	6,564	2,431	-1,472	-439
<b>Total</b>	<b>22,783</b>	<b>8,137</b>	<b>24,459</b>	<b>9,059</b>	<b>1,676</b>	<b>922</b>

### DCA 10 Casuarina/Anketell South

- The CIP 2009 made provision for one Local Sports Ground (without a Pavilion) in DCA 10 and in line with the 2015 reclassification of Local Sporting Grounds, this sporting ground was reclassified to a Local Sporting Ground (with Facility B Building) in the CIP 2015.
- In DCA 10 the CIP 2009 also made provision for a District Sports Ground to serve the population of District B, with a then 2031 population projection of 22,783, which was revised up to 24,459 in 2015.
- During the review of the CIP 2015, concept plans were prepared to refine the site area required for this District Sports Ground, to include sports fields and netball, basketball and tennis courts and it was determined that a total site area of 18 hectares was required, 15 hectares for district level sports grounds and 3 hectares for district level hard courts. With the removal of District Sports Ground in District A, due to the significant reduction in the projected 2031 population, it was proposed that the District Sporting Ground in District B would serve both District B and A, with a combined 2031 population of 36,588.
- While efforts were made during the 2015 review to identify and secure this 18 hectare site within existing/future Local Structure Plans via the 10% Public Open Space provisions, this was not achievable. Alternative options of purchasing this site on the open market were also investigated and deemed financially prohibitive given the estimated purchase cost of \$11 million. Options to separate the land and cost components of the district level sports fields and the district level hard courts were also investigated and while achieving the 15 hectare sports field component remained unachievable, securing the 3 hectare site for the District Hard Courts was possible and hence included in the CIP 2015.
- With the loss of the district level sports fields, the CIP 2015 proposed to address this by increasing the provision of Local Sports Grounds via joint provision and use arrangements on school sites with the Department of Education. The additional Local Sports Ground in DCA 9 Wandii/Anketell referred to previously is a result of this.

### DCA 11 Wellard East

- The 2009 CIP required a Local Sports Ground (with Pavilion) and one Local Community Centre, both with a planning ratio of one per 5,000 people and a then estimated 2031 population of 4,110. However, due to land constraint issues, the 2015 review of the CIP revised the estimated 2031 population down to 3,381. Further, the site identified for the Local Sports Ground also had contamination issues and was not of an adequate size. Considering these factors, the CIP 2015 removed the requirement for the Local Sports Ground. With the reduced population and the close proximity of the District Community Centre for District B, to be provided in DCA 10 Casuarina/Anketell South, the 2009 requirement for a Local Community Centre in DCA 11 Wellard East was also removed from the CIP 2015.

### DCA 12 Wellard West

- In the 2009 CIP the estimated 2031 population of DCA 12 Wellard West was 3,080 and while this falls under the planning ratio of 1:5,000 for a Local Sports Ground and Local Community Centre, a Local Sports Ground (with Pavilion) was identified, given the pavilion building would have some capacity to cater for activities normally associated with a Local Community Centre.
- With the 2015 review of the CIP 2009 and the rezoning of Rural land to Urban/Urban Deferred, a significant increase of dwelling yields occurred and hence the 2031 population for DCA 12 Wellard West was revised upward to 8,043, an increase of 4,963. With a revised population of 8,043 this would require the provision of both a Local Community Centre and Local Sports Ground. However, the 2015 review found that there was no suitable land or site within the Wellard West Local Structure Plan for both facilities and hence the CIP 2015 determined that the next best option was a combine clubroom and community centre at the Local Sporting Ground to be provided adjacent to the Wellard Primary School site.

### DCA 13 Bertram

- The 2009 CIP required a Local Sports Ground (without a Pavilion) and a Local Community Centre in DCA 13 with a then 2031 population of 8,036, revised down to 6,564 in the 2015 CIP review. While both of these community facilities have since been built, in line with the 2015 review and reclassification of Local Sports Grounds (without a Pavilion) to either a Facility A or B building, this Local Sports Ground was reclassified to a Local Sports Ground (With Facility A Building) in the CIP 2015.

### District C

District C	CIP 2009		CIP 2015		Change	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA14 Wellard Leda	13,521	4,829	11,436	4,183	-2,085	-646
DCA15 Medina/Orelia/Parmelia/Calista	22,728	8,117	20,564	8,640	-2,164	523
<b>Total</b>	<b>36,249</b>	<b>12,946</b>	<b>32,000</b>	<b>12,823</b>	<b>-4,249</b>	<b>-123</b>

### DCA 14 Wellard Leda

- The 2009 CIP required two Local Community Centres and two Local Sports Grounds, one with a pavilion and the other without a pavilion based on the then 2031 population of 13,521 and the planning ratio of one per 5,000 people for both Local Sports Grounds and Local Community Centres.

- While at the time of the CIP 2009, the 2031 population forecast for DCA 14 Wellard Leda was 13,521, this was revised down to 11,436 in the CIP 2015 and the requirement for two Local Sports Grounds remained with the Local Sports Ground (with Pavilion) built by the time of the 2015 review of the CIP. However, it was apparent that the pavilion/clubroom was of an inadequate size to cater for existing sporting uses and clubs and hence, the CIP 2015 included an upgrade to the existing clubroom facilities to address this.
- With the review of the 2015 CIP reclassifying Local Sports Grounds, the second required Local Sports Ground was reclassified to a Local Sports Ground (with a Facility A Building).
- While the CIP 2009 required two Local Community Centres in DCA 14 Wellard Leda for the then 2031 population estimate of 13,521, by the time of the 2015 review one of these Local Community Centres (John Wellard Community Centre) had been built. Given this centre considerably exceeded the built area requirements for a Local Community Centre, the CIP 2015 removed the requirement for the second Local Community Centre on the basis that with the size and facilities available at the John Wellard Community Centre, this centre should be adequate to meet the needs of the 2015 revised 2031 population of 11,436 for DCA 14.

#### **DCA 15 Medina/Orelia/Parmelia/Calista**

- The 2015 CIP resulted in a review of existing sporting grounds within DCA 15 Medina/Orelia/Parmelia/Calista, which included the district level sporting facilities that are required to meet the needs of the population of District C, as well as the subregional sporting facilities that are required to meet the needs of the whole LGA, all of which are located in DCA 15.
- The CIP 2009 identified Orelia Oval as the District Sporting Ground for District C with a planning ratio of one District Sport Ground per 25,000 and a then 2031 population projection of 36,249. However, further work undertaken as part of the 2015 review found that with more detailed planning and upgrades to Orelia Oval, this sports ground had the capacity to function as district level sports fields, but could not accommodate the other district level sporting facilities, such as hard courts and the associated facilities.
- With hard courts provided at various locations within District C and reaching the end of their economic life in the next 10 to 20 years, the CIP 2015 proposed that the required district level hard court facilities be provided via a redeveloped multipurpose shared facility at Medina Oval.
- With the Thomas Oval site being the designated Sub-Regional Sporting Ground to meet the regional sporting needs of the total population of the City of Kwinana, the CIP 2015 further highlighted that while Thomas Oval had the capacity to function as a Sub-Regional Sporting Ground, major improvements and upgrades to the existing clubrooms, buildings and facilities were required, including upgraded and new lighting across the site.



## **CIP 2015 Review - 2018**

The review of the CIP 2015 was undertaken in 2018 and also involved a review of all existing Local Structure Plans, with a summary of the outcomes and amendments to the CIP 2015 provided below and reflected in the CIP 2018.

### **Community Infrastructure Hierarchy**

While the 2015 CIP hierarchy for parks involved 'neighbourhood' and 'local' parks, with local parks being the larger of the two, the 2018 review resulted in a change to the parks hierarchy to reflect neighbourhood parks as the larger of the two, in line with the City of Kwinana's revised parks classifications. This has resulted in parks previously named in the CIP 2015 as Neighbourhood Parks being renamed as Local Parks, and Local Parks being renamed as Neighbourhood Parks.

### **Community Infrastructure Planning Standards**

The 2018 review of the Community Infrastructure Planning Standards resulted in a simplification of the three classifications for Local Sports Grounds contained in the CIP 2015, being a Local Sports Ground (with Pavilion), a Local Sports Ground (with Facility A Building) and a Local Sports Ground (with Facility B Building). This occurred as a result of the detailed planning and consultation work undertaken in 2017 for the Facility A Building for Bertram Oval indicating that the scope of a Facility A Building did not adequately meet the needs of the sporting clubs using the oval. The larger 'Facility B Building' was subsequently provided for the Bertram Oval.

With this considered to also be a likely outcome for future Facility A Buildings, both Local Sports Grounds with Facility A and B Buildings have been reclassified to a Local Sports Ground (with Small Facility Building) in the CIP 2018, components of the building to include a kiosk/kitchenette, storage rooms, small meeting room, change space, public toilets and shaded veranda space. For Local Sports Grounds (with a Pavilion), the term pavilion has changed to 'clubroom' to reflect the now more commonly used term.

The 2018 review of the Community Infrastructure Planning Standards also involved the development of Planning and Design Guidelines for each community infrastructure item. The aim of introducing these guidelines is to ensure appropriate land and site areas are allocated by developers within local structure plans, and to guide the more detailed site and building/facility requirements to ensure consistency with the hierarchy for community infrastructure provision across the City. The revised Community Infrastructure Planning Standards are provided. (Appendix 1)

With the increase in the site area required for Local Sports Ground in the CIP 2015, there has since been some feedback from developers indicating that the area required is excessive. As a result of this, the required site area for sporting grounds and active open space allocated in the CIP 2015 has been reviewed for the CIP 2018.

This review has been based on the guidelines for active open space (playing fields) from the 2013 study undertaken by the Curtin University's Centre for Sport and Recreation and Department of Urban and Regional Planning on the planning and provision of Active Open Space (Playing Fields) in Perth and the Peel region. These guidelines indicate that 6.5m<sup>2</sup> of active open space (playing surface only) per resident is required, to be at least doubled to allow for supporting infrastructure.

Based on these guidelines and on the requirement of either 7.2 hectares for a Local Sports Ground (with Clubroom) or 4.6 hectares for a Local Sports Ground (with Small Facility Building) per 5,000 residents, there would be an undersupply of 9.8 hectares in sports fields in District B, or an under supply of 6.8 hectares if the provision of the 3.0 hectare site for the District Hard Courts was taken into account. Using the same guidelines, District A was assessed as having an oversupply of 3.1 hectares, taking this apparent oversupply into consideration, a deficit would still remain. Hence, this would indicate that the requirement for either a 7.2 hectare site for a Local Sports Ground (with Clubroom) or a 4.6 hectare site for a Local Sports Ground (with Small Facility Building) per 5,000 residents should not be regarded as excessive. This review of active open space is further detailed in Section 7.3.

The other change to the Community Infrastructure Planning Standards in the CIP 2015 relates to the District Library to serve District A and B which was based on the then planning standards utilised by the State Library Service of 1:25 books per person and 34m<sup>2</sup> per 1,000 people and resulted in the proposed library requiring a built area of 1,790m<sup>2</sup>. However, this planning standard has since been revised by the State Library Service to reflect the major changes that have occurred in the role and design of public libraries which now results in a built area of 2,388m<sup>2</sup> being required for this District Library.

### **Timing of infrastructure items**

The CIP 2015 revised the trigger point for provision from 50% of the estimated 2031 population, to 75% to enable the City to collect a greater proportion of the funds from developers for community infrastructure items, and to reduce loan requirements. This change has been effective to some extent, however, an unqualified trigger point of this nature is still problematic given that, for example, all local level infrastructure items in a DCA would be required in the same year, as would all district level infrastructure items. While the 75% trigger point allows the City to collect a greater proportion of funds from developers, the staff resources required to simultaneously plan, construct and achieve the operation of a large number of facilities at the same time could also prove to be beyond the City's staff resources.

To address this, the 2018 review has involved the development of a more complex set of criteria to determine the timing for planning and providing community infrastructure items. The criteria takes into account a number of factors beyond a population point, such as the proximity and capacity of any existing facilities. This has resulted in revised timing for the planning and provision of infrastructure, which is now more evenly distributed across the years and is also integrated with the City's Long Term Financial Plan.

### **Community Profile**

While the CIP 2009 was based on the 2006 ABS Census and the CIP 2015 on the 2011 ABS Census, with 2016 ABS Census results becoming available in 2017, the CIP 2018 community profile has been updated based on the 2016 ABS Census results. The data and analysis has also been considerably expanded to include the 2006, 2011 and 2016 ABS Censuses, as well as suburb level data to give a more in-depth understanding of the City of Kwinana's community profile and how the population has changed over a ten year period. In addition, the 2018 review has identified the implications for community infrastructure provision for each demographic characteristic.

Besides the most significant change from the 2006 and 2016 Census being an increase in the City of Kwinana's population from 23,207 to 38,906, there has been a major shift in the proportion of residents living in the older and newer suburbs. For example, in 2006 the population in the older suburbs accounted for 71% of the City's population, reducing to 48% in 2016, with the proportion of residents in the newer suburbs increasing from 29% in 2006 to 52% in 2016. The other significant changes from 2006 to 2016 are highlighted below.

- The number of people in the younger age groups has increased considerably, effectively reflecting the younger age profile of the newer suburbs, with the more established suburbs generally having an older age profile.
- There has been a significant decrease in the proportion of people of English and Australian ancestry and a considerable increase in the proportion of people of Filipino, Indian and Chinese ancestry, particularly in the new suburbs.
- The unemployment rate across the City of Kwinana has increased considerably from 5.8% in 2006 to 10.8% in 2016, particularly since 2011, and is well above the unemployment rate of 7.8% for Western Australia (total). The only suburbs with a lower unemployment rate than Western Australia (total) are Wandi, Mandogalup, Anketell, and Casuarina.
- The level of educational attainment has increased considerably with the proportion of residents with a Bachelor or Higher Degree increasing from 5.0% in 2006 to 14.3% in 2016, with the newer suburbs generally having higher levels of education. However, almost all suburbs have lower levels of educational attainment compared to Western Australia (total).
- The proportion of 'Technicians and Trades Workers', 'Labourers' and 'Machinery Operators and Drivers' has decreased but still remains much higher than Western Australia (total). While the number of 'Professionals' and 'Managers' has increased, compared to Western Australia (total) the proportion of residents in these occupations remains much lower than for Western Australia (total).
- The proportion of households with higher incomes has increased by 5.5% since 2006, while the proportion of households with low incomes has decreased by 6.2%. However, in comparison with Western Australia (total), the City of Kwinana still has a much higher proportion of lower income households, particularly in the older suburbs.

### **Review of Dwelling Yields**

Using forecast id. data and after consultation with developers, a review of dwelling yields was undertaken in late 2016 by the City of Kwinana. The review considered the proposed future timing of new land releases and changes in planning decisions made by the WAPC. This resulted in revised population projections for each DCA for the CIP 2018, shown in the following tables for District A, B and C, together with the changes in community infrastructure requirements resulting from the 2018 review.

### **District A**

District A	CIP 2015		CIP 2018		Change	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA8 Mandogalup	3,780	1,400	5,265	1,950	1,485	550
DCA9 Wandii/Anketell North	8,349	3,093	8,527	3,158	178	65
<b>Total</b>	<b>12,129</b>	<b>4,493</b>	<b>13,792</b>	<b>5,108</b>	<b>1,663</b>	<b>615</b>

### DCA 8 Mandogalup

- The CIP 2015 made provision for one Local Community Centre and one Local Sporting Ground and while the revised dwelling yields undertaken as part of the 2018 review have resulted in the population of DCA 8 Mandogalup being revised upward from 3,780 to 5,265, this is not sufficient to warrant any additional community infrastructure.
- With the 2018 review of the CIP 2015 resulting in an amendment to the CIP 2015 Community Infrastructure Planning Standards with respect to the classification of Local Sporting Grounds, the Local Sporting Ground for DCA 8 has been reclassified accordingly to a Local Sports Grounds (with Small Facility Building) in the CIP 2018.

### DCA 9 Wandii/Anketell North

- The CIP 2015 made provision for one Local Community Centre (Large Scale), one Local Sporting Ground (with Pavilion), one Local Sporting Ground (with Facility Building A) and one Local Sporting Ground (with Facility Building B). Given the 2018 revised population projections indicate a minor increase in DCA 9 of 178 people, there are no changes to these requirements in the CIP 2018, other than the reclassification of both the Local Sporting Grounds with a Facility Building A and B to Local Sporting Grounds (with Small Facility Building) and the one Local Sporting Ground (with Pavilion) to a Local Sporting Ground (with Clubroom).
- The CIP 2015 also made provision for a District Youth Centre to be located in DCA 9 to serve District A with a then population projection of 12,129 and while the 2018 review revised the population forecast for District A upward to 13,792, the provision of one District Youth Centre remains sufficient.
- The CIP 2015 also made provision for a District Library and District Recreation Centre to be located in DCA 9 to serve both District A and B. While the combined population projection for District A and B has been revised up from 36,588 in the CIP 2015 to 39,501, there is no change to this requirement in the CIP 2018.

### District B

District B	CIP 2015		CIP 2018		Change	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA10 Casuarina/Anketell South	6,534	2,420	7,530	2,420	996	0
DCA11 Wellard East	3,318	1,229	3,372	1,249	54	20
DCA12 Wellard West	8,043	2,979	8,354	3,094	311	115
DCA 13 Bertram	6,564	2,431	6,453	2,390	-111	-41
<b>Total</b>	<b>24,459</b>	<b>9,059</b>	<b>25,709</b>	<b>9,153</b>	<b>1,250</b>	<b>94</b>

### DCA 10 Casuarina/Anketell South

- The CIP 2015 made provision for one Local Community Centre and one Local Sporting Ground (with Facility B Building) and while the 2018 review resulted in the population projections for DCA 10 being revised up from 6,534 to 7,530, this does not change these requirements, other than the reclassification of the Local Sporting Ground (with Facility B Building) to a Local Sports Ground (with Small Facility Building).
- However, with the removal of the District Sporting Ground in the CIP 2015 which was located in DCA 10 to serve both District B and A and the strategy contained in the CIP 2015 to seek to address this gap by increasing the provision of Local Sporting Grounds via joint provision and use arrangements at schools with the Department of Education, one additional Local Sports Ground (with Clubroom) is planned in the CIP 2018 to be provided at the proposed High School site in DCA 10. The need for this additional Local Sports Ground is further demonstrated by the undersupply of sporting grounds for District B identified in the 2018 review.
- The CIP 2015 requirement for a District Recreation Centre and District Hard Courts to be located in DCA 10 to serve both District A and B remains unchanged, as does the need for the District Community Centre and District Youth Centre to be located in DCA 10 to serve District B.

### DCA 11 Wellard East

- With only a marginal increase in the 2031 population projections for DCA 11 from 3,318 in CIP 2015 to 3,372 in 2018 and with the land constraint issues persisting, there is no change in infrastructure requirements for DCA 11 in CIP 2018.

### DCA 12 Wellard West

- The CIP 2015 made provision for a Local Sports Ground with a combined clubroom/community centre and with only a small increase in the 2018 revised population projections of 311 people, no further community infrastructure items are required in the CIP 2018.

### DCA 13 Bertram

- The CIP 2015 required one Local Community Centre and one Local Sporting Ground (with Facility A Building) in DCA 13 with a then 2031 population estimate of 6,564, revised down to 6,543 in the 2018 review. With the Local Community Centre and Local Sports Ground component already provided, and taking into account the revised 2018 population projections, there is no change to these requirements, other than reclassifying the Local Sporting Ground to a Local Sporting Ground (with Small Facility Building).

### District C

District C	CIP 2015		CIP 2018		Change	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA14 Wellard Leda	11,436	4,183	12,558	4,651	1,122	468
DCA15 Medina/Orelia/Parmelia/Calista	20,564	8,640	22,442	9,351	1,878	711
<b>Total</b>	<b>32,000</b>	<b>12,823</b>	<b>35,000</b>	<b>14,002</b>	<b>3,000</b>	<b>1,179</b>

#### **DCA 14 Wellard Leda**

- The CIP 2015 made provision for one Local Community Centre (Large Scale), one Local Sports Ground (with Pavilion) which have already been built and one Local Sports Ground (with Facility A Building ). While the 2018 population projections for 2031 have been revised upward from 11,436 to 12,558, this is not sufficient to warrant any additional community infrastructure in this DCA.
- In line with the reclassification of facility buildings on Local Sporting Grounds, the Local Sporting Ground (with Facility A Building) has been amended in the CIP 2018 to a Local Sports Ground (with Small Facility Building).

#### **DCA 15 Medina/Orelia/Parmelia/Calista**

- With the 2031 population projections for DCA 15 revised up from 20,564 in the CIP 2015 to 22,442 in 2018 review, this is not sufficient to require any further community infrastructure in this DCA.
- All district level community infrastructure items for District C are located in DCA 15 and while the CIP 2015 population projections for District C have been revised upward from 32,000 to 35,000, this does not justify any further district level infrastructure.

## 2. Introduction

The City of Kwinana is located in the outer southern suburbs of the Perth Metropolitan Region, approximately 30 kilometres south of the Perth CBD. It is bounded by the City of Cockburn in the north, Shire of Serpentine Jarrahdale in the east, the City of Rockingham in the south, and the Indian Ocean in the west. The City of Kwinana is situated in a major growth corridor in the south west metropolitan area and encompasses a total land area of nearly 120 square kilometres, with substantial industrial, rural and rural-residential areas, and some commercial areas.

The City of Kwinana is experiencing rapid population growth that is set to continue for at least the next twenty years, with the most recent population forecasts indicating that in 2031 the City's population is forecast to reach 75,270. Based on the ABS 2017 Estimated Residential Population of 41,866, this represents an increase of 33,404, or a 56% increase in population.

Most of these new residents will come to live in the newly created urban areas either side of the Perth - Mandurah rail line and Kwinana Freeway. To a much lesser extent, some of this growth will be attributed to infill development. By growth percentage, the City of Kwinana remains the fastest growing local government area in Perth's south-west metropolitan area and with a 2015 - 16 growth rate of 4.5%, it is the second fastest growing area in Western Australia.

With such considerable population growth and change to be experienced in the future, there will be a significant need for community facilities, services and programs and this Community Infrastructure Plan has been developed to address the community infrastructure needs of the current and future population to 2031.



Community infrastructure provision is an essential element in achieving socially sustainable communities and it plays an important role in bringing people together, developing social capital, maintaining quality of life and in developing the skills, networks and relationships essential to strong communities. Investing in community infrastructure is essential for the health, wellbeing and economic prosperity of communities.

### Enjoying the Darius Wells Library

This Community Infrastructure Plan provides the City of Kwinana with a strategic framework for providing community infrastructure for the period 2011 to 2031 and focuses on community facilities typically provided by Local Government. While the CIP does not include community infrastructure provided by other levels of government, the non-government or private sectors, the City of Kwinana will continue its key advocacy role in securing the necessary community infrastructure, services and programs provided by others to meet the needs of the community.

The Community Infrastructure Plan has also been prepared to meet the requirements of the WAPC's, State Planning Policy 3.6 'Development Contributions for Infrastructure' and establishes a framework upon which the policy can be applied and implemented.

While a standalone Plan in its own right, the Community Infrastructure Plan should be considered a critical part of the City's Development Contribution Plans contained in Town Planning Scheme No. 2. Amendment No. 115, gazetted in July 2012, and which introduced developer contributions for community infrastructure into the City's scheme. The Development Contribution Plans were largely based on the 2009 CIP.

This 2018 review of the CIP and the changes proposed are intended to be introduced into the scheme via Town Planning Scheme Amendment 145. This amendment deals with community 'soft' infrastructure. Amendment 100A to LPS2, which was gazetted on 3 October 2017 covers Development Contribution Areas 2 - 7, and primarily includes civil 'hard' infrastructure such as roads and drainage. It also addresses the co-ordination of and land acquisition for some playing fields necessary to deliver the community infrastructure. The Scheme Amendment texts of both gazetted Amendment 100A and proposed Amendment 145, the facilities applicable to each Development Contribution Area (DCA), and the Capital Expenditure Plan/Long Term Financial Plan should then be considered in conjunction with this Plan.

The City has sought to adhere to the principles underpinning development contributions in SPP 3.6 to ensure the need and nexus is demonstrated and there is transparency, equity, certainty, efficiency, consistency and accountability. The right of review is provided as part of the scheme amendment process and via the scheme provisions for development contributions (which largely follow the model scheme text).

The only variation to SPP 3.6 relates to the period during which community infrastructure is identified and is able to be contributed towards by development. The policy suggests that a community infrastructure plan should be limited to a 10 year timeframe and that development should contribute to that infrastructure within the 10 year horizon, from commencement of development. This reflects the need for certainty to the community and industry that community facilities will be provided from moneys contributed and a link established with 10 year financial plans established by Local Governments. The City adopted the position that in it's case a longer timeframe of 20 years should apply (2011 – 2031) and the WAPC provided its support for this variation as part of its support for the former Scheme Amendment 115. The reasons are:

- The existing City Centre, surrounding residential suburbs and the extent of urban development for new growth areas under the Jandakot Structure Plan provides for finite boundaries for urban development. There are no larger district areas yet to be planned for and developed.
- For these areas (existing and future residential), there has been substantial detailed planning undertaken for the full 'build out' of the City. As such, the City can identify the full scope of facilities at sub-regional, district and local levels with a high degree of certainty.
- Rather than one central growth front, the City has fragmented urban fronts with spots of growth in different localities. This results in growth rates across DCA's taking time to reach sufficient points to trigger facility construction (even for local facilities) but does not negate the need for such facilities for the communities.



- The City has taken a conservative view to the timing of the provision of infrastructure and can demonstrate via its financial planning that it can meet the costs of the provision of this infrastructure across the 20 year period.

It is considered that there is certainty to the community that the infrastructure identified can be developed in the location and timeframe set. This approach has been supported by the WAPC as part of its adoption of Town Planning Scheme No 2 Amendment 115.

The CIP is also a key part of the fourth pillar of the Kwinana 2030 Vision: *It's all here – Infrastructure* and community infrastructure planning and provision has and will continue to be directed by this vision and the Strategic Community Plan 2017-2027.



John Wellard Community Centre

### **3. Methodology**

As a 20 year strategic document, the City of Kwinana employed an extensive process to develop the CIP 2009. This involved engaging community planning and population forecasting consultants, architects and quantity surveyors and a multi-disciplinary team of staff from across the organisation.

To ensure a consistent methodology and a high level of independent advice, the City has used Community Perspectives, a specialist community planning consultancy in the preparation of the CIP 2009 and to undertake the subsequent 2015 and 2018 reviews and preparation of the CIP 2015, and this CIP 2018.

#### **3.1 Stage 1 - Planning Framework Review**

This stage involved a review of the land use planning framework for the City of Kwinana, with this underpinning the development of the CIP. The land use planning framework sets the basis for decision making about residential development and community infrastructure needs and provides the spatial context to consider provision and addressing of community needs.

#### **3.2 Stage 2 - Community Infrastructure Planning Catchments and Principles**

Community infrastructure planning catchments have been devised based on the above review of the land use planning framework and an analysis of settlement patterns, growth fronts, spatial catchments and the existing and future population forecasts. Three distinct 'District' catchment areas have been established within the City of Kwinana, with eight smaller urban cells referred to as Development Contribution Areas (DCAs) being identified. A fourth District was established in the CIP 2015 to reflect the remaining rural areas zoned urban deferred, east of the Kwinana Freeway.

This stage also involved the development of a set of guiding principles for developing and implementing the CIP. These principles specifically relate to the WAPC SPP 3.6 policy requirements and the City has complied with these principals in the development of the CIP 2009 and subsequent revisions of this Plan.

#### **3.3 Stage 3 - Community Profile**

A comprehensive demographic analysis of the City of Kwinana's population has been undertaken for each version of the CIP to provide a good understanding of the characteristics of the population, given this has a major influence on the current and future requirements for community infrastructure.

The Community Profile for CIP 2009 was based on the ABS Census 2006 and the most current population forecasts at that time, with the CIP 2015 Community Profile based on the next ABS Census undertaken in 2011 and revised population forecasts prepared at that time.

While the Community Profile for this CIP 2018 has been based on the ABS Census 2016 and the most recent revised population forecasts, the profile has been considerably expanded to include data and analysis from across the ABS Census 2006, 2011 and 2016 and has also included suburb level data and analysis to give a much more in-depth understanding of the City of Kwinana's population and how it has changed over a ten year period. In addition, the 2018 review has identified the implications for community infrastructure provision across each demographic characteristic.

### **3.4 Stage 4 - Community Needs Assessment**

The City of Kwinana has undertaken a range of community need assessment studies and plans which have involved extensive community and stakeholder engagement over the period of the development of the CIP 2009, CIP 2015 and CIP 2018. This has informed the Supply and Demand Analysis and the identified priorities and timing for infrastructure provision.

### **3.5 Stage 5 - Community Infrastructure Hierarchy and Planning Standards**

The Community Infrastructure Hierarchy was developed taking into account the general geographical and spatial characteristics of the City of Kwinana, as well as the distribution of the current and future population. The Community Infrastructure Hierarchy provides a framework for the provision of community facilities and guides what facilities are provided at a local, district and sub-regional level.

Community Infrastructure Planning Standards were also developed for the CIP 2009 and have since been revised in the CIP 2015 and the CIP 2018, largely based on the changing trends in the provision and design of community facilities.

### **3.6 Stage 6 - Supply and Demand Analysis**

A Supply and Demand Analysis was first undertaken for the CIP 2009 and has been revised for the CIP 2015 and CIP 2018, based on the key findings and outcomes from the revised Community Profile, Community Needs Assessment, Community Infrastructure Hierarchy and Planning Standards for each version of the Plan

In the preparation of the CIP 2018, the Supply and Demand Analysis has been considerably expanded to include more detailed analysis at the DCA level and across each District.

### **3.7 Stage 7 - Community Infrastructure Plan Development**

The Supply and Demand Analysis undertaken in 2009, 2015 and 2018 has informed each version of the CIP which sets out the priorities and timeline for community infrastructure provision. This has allowed the development of a Capital Expenditure Schedule and a Development Contribution Plan for each DCA, as required by the WAPC SPP3.6, and has been reflected in the City of Kwinana's Long Term Financial Plan.

## **4. Strategic Planning Framework**

The land use planning framework which exists for the City of Kwinana has underpinned the development of the Community Infrastructure Plan because it sets the basis for decision making about community needs and provides the spatial context to consider provision and addressing of community needs.

This is relevant for the application of WAPC SPP 3.6 Development Contributions for Infrastructure in that there is a clear spatial nexus between community need and land use planning for the local government.

The detailed land use planning undertaken by the City provides a holistic picture of the future urban fabric of the City and allows the City to understand its community needs at a sub-regional, district and local level. This is not always the case in other local governments where large parcels or districts of land which may be identified on regional land use planning documents have not reached a point where detailed district planning has occurred. As such, there is uncertainty about community needs in those geographic areas and a total holistic consideration of community needs and requirements is difficult to determine.

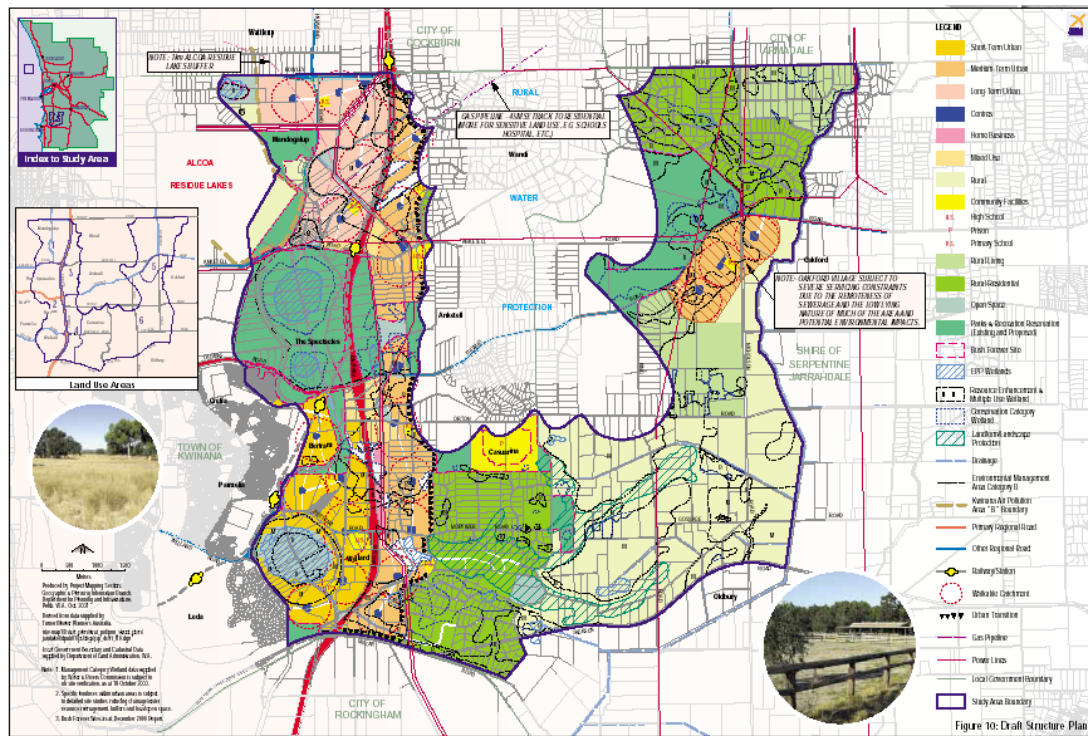
The City of Kwinana is fortunate in this regard because it has detailed planning in place and a clear understanding of its community needs to 'build out'. Hence, the City is able to state its community infrastructure needs with confidence and to determine where these facilities are to be located, and how much they will cost to provide.

As will be discussed, the hierarchy in the levels of the facilities is readily determined and the City can be broken down into sub-regional, district and local levels for the provision of the community facilities. Some facilities are small and only meet the needs of an immediate population within a nearby spatial catchment whilst other facilities service the whole City (sub-region). These local levels serve as the basis for Development Contribution Areas wherein landowners within these areas will be asked to contribute to infrastructure provision.

### **4.1 Jandakot Structure Plan (JSP)**

This regional planning document, prepared by the WAPC demonstrated that urban development proposals for land east of the Kwinana Freeway in the localities of Wellard, Casuarina, Anketell and Wandi and west of the Kwinana Freeway in Wellard and Mandogalup could be accommodated in a manner consistent with the City's overall planning objectives.

Figure 1 Jandakot Structure Plan (JSP)

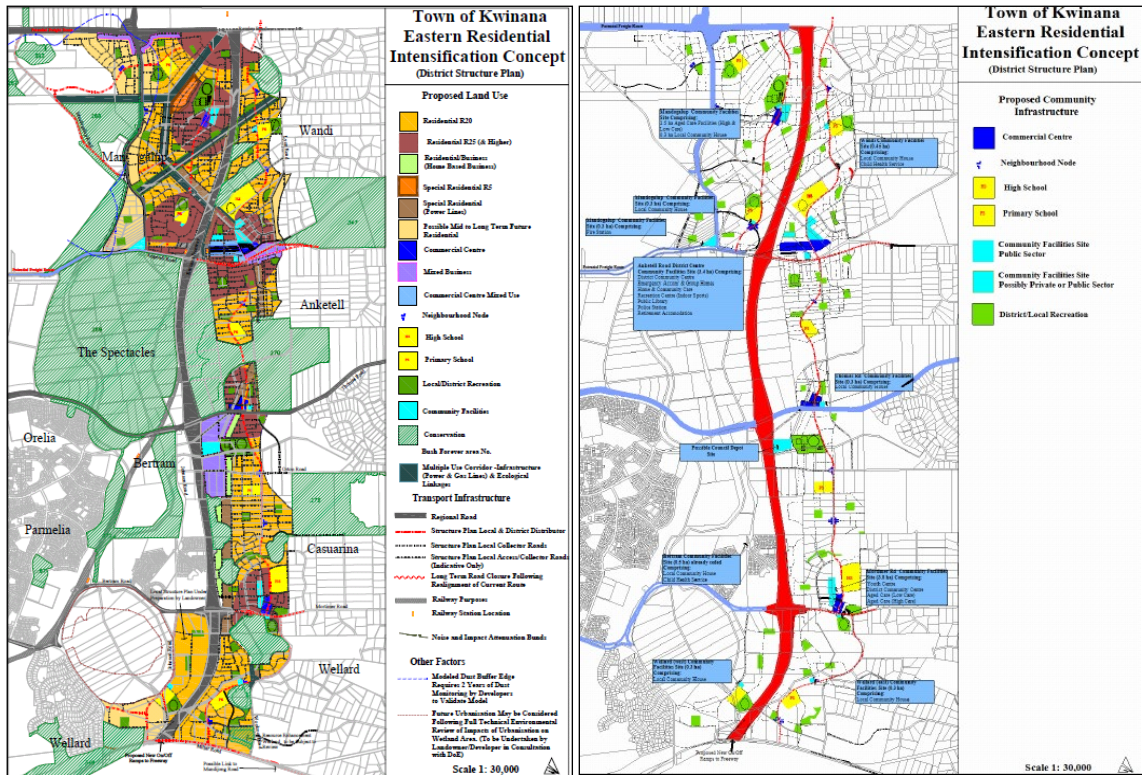


The JSP sets the framework within which future local structure planning, local Town Planning Scheme Amendments and subdivision could be undertaken. The planning took account of the existing residential areas of the City and newly approved structure planning for the Orelia, Parmelia, Bertram, Leda and Wellard areas, and identified some key land uses as part of the future urban development of the new urban cells along the Kwinana Freeway and railway line. These included the extent of urban cells, major transport nodes (including railway stations) major local and district centres, schools and conservation areas.

#### 4.2 Draft Eastern Residential Intensification Concept (ERIC)

The draft ERIC district structure planning built on the work undertaken by the WAPC for the Jandakot Structure Plan by examining land uses in more detail for the urban growth areas of the Mandogalup, Wandi, Anketell, Casuarina and Wellard areas. Undertaken by the City, it aimed to define land use for the new growth areas of the City in much greater clarity and detail. Whilst it is now being superseded in some areas with land specific local structure planning, this strategic document remains a valuable guide to integrated planning for the Kwinana region. In developing ERIC, a Community Infrastructure Study was undertaken to identify the types of community facilities likely to be needed, location criteria and approximate land requirements for each of the facilities. The study not only included local government community facilities, but also State Government and private sector facilities, thereby encompassing the wide range of community infrastructure likely to be required by the some 40,000 people anticipated to live in the ERIC structure plan area.

Figure 2 Draft ERIC District Structure Plan and Community Infrastructure Map



While the need for community facilities is largely influenced by the demographic and socio-economic characteristics of an area, where a community is yet to be established the use of appropriate planning standards is essential to determine ‘indicative’ requirements to ensure the necessary land area is set aside for community purposes in the early planning stages, and in the right locations in relation to other land uses. The distribution of community facilities was anticipated by the draft ERIC plan. The CIP refined the work undertaken as part of the ERIC planning exercise and considers community facility needs more holistically for the whole City.

### 4.3 Draft Local Planning Strategy

The City is also preparing a draft Local Planning Strategy (LPS) as part of the review of its City Planning Scheme. The draft LPS addresses land use planning across the local government area in both the short and long terms. As well as consideration of the City’s industrial, rural and commercial areas, the draft LPS incorporates the existing City Centre with surrounding residential suburbs identified in the district planning undertaken for the ERIC area. It integrates the planning of the existing suburbs such as Bertram, Parmelia and Orelia and the new urban growth corridor along the freeway and rail line.

The draft LPS is being prepared using a series of studies, such as an Integrated Land Use and Transport Study. It is in the City Centre that a number of key sub-regional and district facilities have been provided in response to future demands and needs including the Darius Wells Library and Resource Centre, the Zone Youth Space and the Recquatic, a recreation and aquatic facility.

The City Centre is the key activity node for the City of Kwinana and extensions to the Market Place Shopping Centre, streetscape improvements and other approved office/commercial developments will further enhance this site as the pre-eminent node for shopping and community interaction in the City.

Importantly, the draft LPS currently being prepared defines the long term parameters of urban land use across the City. It will define the 'build out' of the City based on the sub-regional planning framework of the WAPC, approved local structure plans and Council adopted local planning policies, including those for new urban areas of the City, such as Casuarina. This is relevant, as there is certainty in the planning process that the infrastructure the City is proposing to provide, will be needed.

#### **4.4 Local Structure Planning**

In recent years, a number of Local Structure Plans have been approved by the WAPC, largely in the new Urban areas along the Freeway. These include Mandogalup, Wandi, Anketell, Wellard and in the Kwinana City Centre and Parmelia. Additional local structure planning is occurring in Casuarina.

At the local structure planning stage, the identification and negotiation of appropriate sites for community facilities required for future community need is undertaken. At this stage of the planning process, it is critical that a community needs analysis has been prepared and provisional locations for community facilities identified, otherwise the potential to consider community facilities in the planning process is largely lost.

#### **4.5 Emerging Urban Areas**

As strategic planning work at the State Government level is being undertaken to identify certain areas of land with the potential to be rezoned Urban in the future, the implications with respect to future community need and subsequent future community infrastructure provision must also be noted. In this regard, City Officers are cognisant of particular areas, such as Mandogalup, which have been identified as having the potential for future Urban growth.

Within the scope of this Community Infrastructure Plan however, such areas have not been included in the community needs assessment, and will not be included until such time as potential rezoning occurs and there is more certainty in this regard.

#### **4.6 Development Contribution Areas**

This Community Infrastructure Plan applies to a number of defined Development Contribution Areas (DCAs) within the City, as follows:

- DCA8 – Mandogalup
- DCA9 – Wandi/Anketell North
- DCA10 – Casuarina/Anketell South
- DCA11 – Wellard East
- DCA12 – Wellard West
- DCA13 – Bertram
- DCA14 – Wellard-Leda
- DCA15 – Townsite (Medina, Calista, Orelia, Parmelia, Town Centre)

The DCA boundaries have been based on both current and future population catchments and geographic proximity. These eight DCAs also fall into one of three Districts for the purposes of identifying community need and subsequent community infrastructure provision – Districts A, B and C. While most DCAs contain one or more local community infrastructure items that are contributed to by that DCA, there are a number of District items that are contributed to by several DCAs. The various DCAs and corresponding Districts are further elaborated on in Section 9 of this Community Infrastructure Plan.



## **5. Community Profile**

An on-going understanding of the profile of the City of Kwinana is essential to planning and providing community infrastructure because the makeup of any place, including its history, culture and population, has a major impact on determining the types of community facilities and services that will be required.

The City of Kwinana engaged *id Consulting*®, a company of demographers, housing analysts and forecasters to prepare the data for the community profile based on the ABS Census counts for 2006, 2011 and 2016, as well as population forecasts to the year 2036, which were updated in December 2017.

Community Perspectives has analysed this data to determine how the population has changed from 2006 to 2016, and the implications for the current and future provision of community infrastructure over the next 20 years.

### **5.1 History**

The City of Kwinana was established in the early 1950's by the Western Australian State Government as part of its strategy to develop the then newly proclaimed south of Perth heavy industrial precinct. This decision was a landmark undertaking for the State and signalled its emergence as a manufacturing force.

With State Government assistance in the form of an attractive incentive package, the first major firm attracted to the area was the BP Refinery. Subsequently other large enterprises, such as the BHP Iron and Steel blast furnace, which at its peak employed some 1,200 workers, located to what has become known as the State's premier industrial area, Kwinana.

Construction of the heavy industry manufacturing plants required far more skilled labour than was available at the time and so, to overcome this problem, the State Government embarked on a migrant attraction programme. The mostly British tradesmen and their families recruited as part of this initiative were settled in Kwinana, and to a lesser extent Rockingham.

As part of this process, Medina, the first suburb to be created in the now City of Kwinana, was opened up as a State housing area. Predominantly the families that moved there were newly arrived skilled migrants of Anglo Celtic descent, being senior staff employed by the companies that established in the area.

In contrast to the construction and commissioning phases, much of the labour needed to operate the plants was semi-skilled or unskilled, and as a result a large number of employment opportunities created were taken up by migrants, including those from central Europe. This boom in industrial development saw the population of Kwinana double between 1966 and 1971. Unfortunately, the combination of an economic downturn in the 1970s, and a shift towards increased mechanisation and automation, saw employment numbers fall drastically, especially following the closure of the BHP blast furnace.

By the late 1970's, most, if not all senior company staff had relocated to other Perth suburbs along with those people who had the capacity and will to leave Kwinana. As a consequence of this exodus, vacant homes in Kwinana were offered by the State Housing Authority to people across Perth facing difficult circumstances. The City of Kwinana's profile as a place to live was further impacted by a State Government decision to build a prison in the suburb of Casuarina some three kilometres east of the residential area.

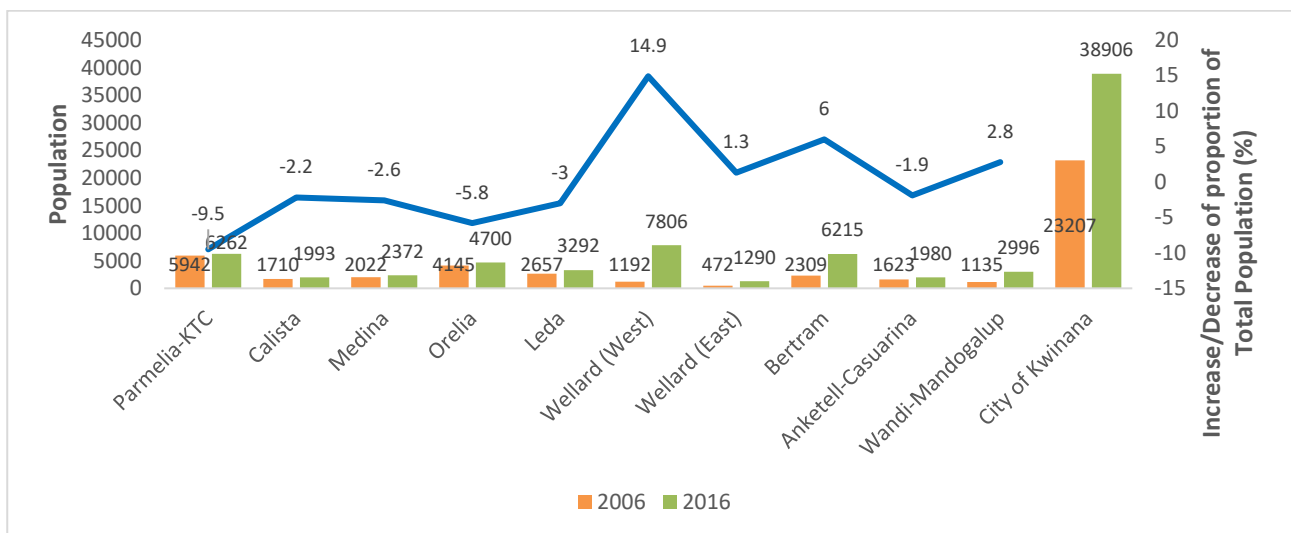
Ultimately, through circumstance and as a consequence of government policy of the day, a high proportion of socially and economically disenfranchised people came to live in Kwinana, resulting in the City becoming one of the most disadvantaged communities in the metropolitan area.

However, while new land release areas and housing development, particularly in Wellard (West), Bertram and Wandi have diluted the level of disadvantage somewhat over the last ten years, the City of Kwinana, as a whole, remains a relatively disadvantaged area in comparison with Perth, Western Australia and Australia.

## 5.2 Population

According to the most recent ABS Census 2016, the City's population was 38,906 in 2016, an increase of 15,699 new residents since the 2006 Census. This represents an average of almost 1,600 new residents each year and a significant growth in population of 40%, or an average annual growth rate of 4.0% over the last ten years. By 2017, the Estimated Resident Population (ERP) had increased to 41,866.

**Figure 3 City of Kwinana - Population - Suburbs 2006 – 2016**



ABS Census 2006, 2011, 2016  
Source: id Consulting

While the population has increased across all suburbs in the last ten year, Wellard (West) accounts for most of this growth with 6,614 new residents and has gone from making up 5.1% of the City's population in 2006 to 20.1% in 2016. Bertram has attracted the second highest growth with 3,906 new residents, followed by Wandi – Mandogalup with 1,984 new residents. The population in the newer suburbs of Kwinana has gone from making up 29% of the City's population in 2006, to 52% in 2016.

By comparison, the older suburbs of Parmelia, Calista, Medina, Orelia and Leda made up 71% of the City of Kwinana’s population in 2006 and with the growth of the population in the newer suburbs now accounts for 48% of the City’s population.

With the release of the 2016 ABS Census, it is apparent that there are significant demographic differences between the older and newer suburbs and therefore this 2018 review of the Community Infrastructure Plan now includes suburb level analysis.

With approximately 1,300 hectares of urban land to be released within the ERIC planning area, it is anticipated that with the steady continuous release of residential land, the population will continue to grow at a rate of approximately 4% per annum over the next 20 years.

### 5.3 Age Structure

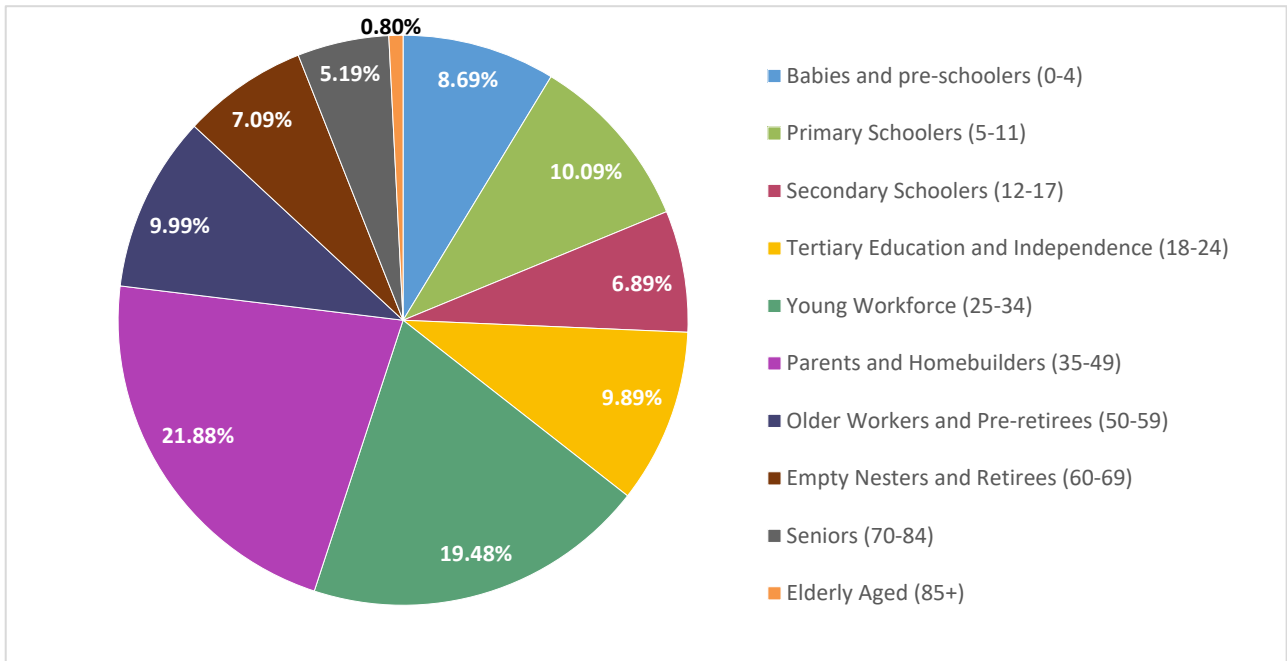
To provide an insight into the age profile of the City of Kwinana’s population, data for ‘service age groups’ which divides the population into age categories that reflect typical life-stages is provided in Figure 4 below. The data gives an indication of the level of demand for facilities and services targeting people at different life stages, and changes in demand as the population age structure changes.



**A high proportion of children and teenagers for Kwinana into the future.**

Figure 4 indicates that ‘parents and homebuilders’ account for the largest service age grouping, with 22% of the City’s population in this life stage.

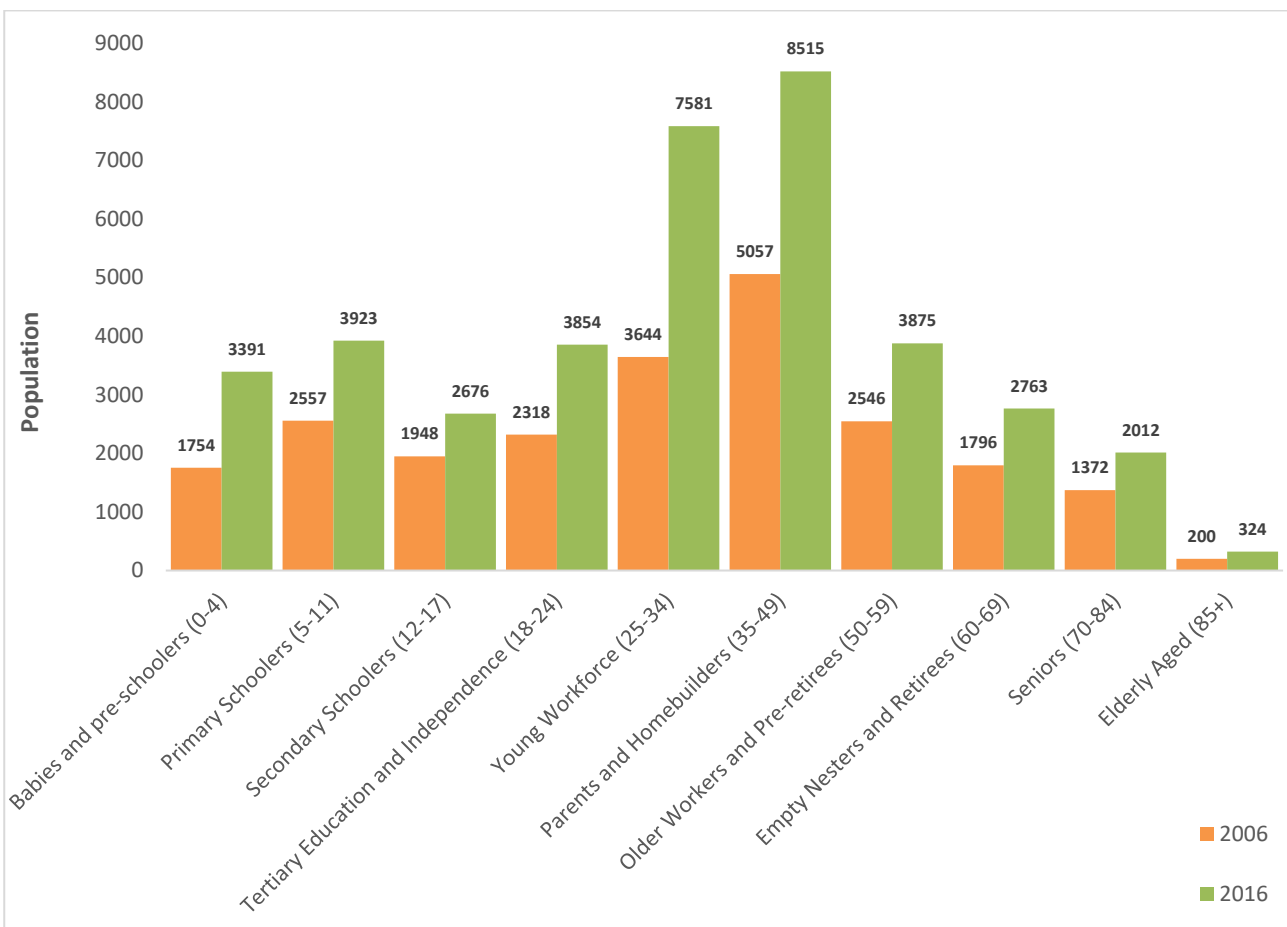
**Figure 4 City of Kwinana - Age Structure 2016**



ABS Census 2016  
Source: id Consulting

Figure 5 indicates the change in the age structure in the City of Kwinana from 2006 to 2016, with the greatest increase being in the 'young workforce' and 'parents and homebuilders' life stages.

**Figure 5 City of Kwinana – Service Age Groups 2006 - 2016**



ABS Census 2006, 2011, 2016  
Source: id Consulting

## Implications

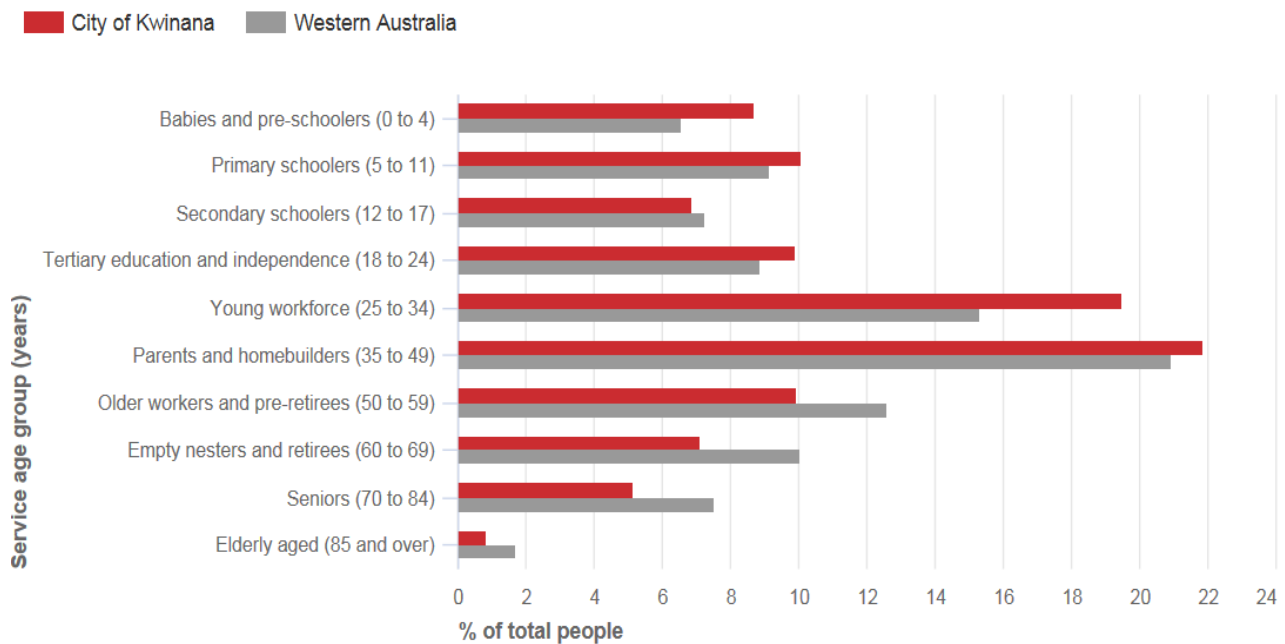
- **Babies and pre-schoolers (0-4)**
  - This age group results in a demand for child health centres, playgroup and other activities and programs normally associated with community centres, public libraries and recreation and aquatic facilities and also highlights the importance of parks catering for the development needs of this age group.
  - Although now typically provided by the private and non-government sector, rather than local government, this age group creates a demand for child care centres and early education services, particularly in new land release areas where this age segment is high.
- **Primary schoolers (5-11)**
  - This age group has a high participation rate in organised sport, impacting on the demand for sporting facilities and clubs, including recreation and aquatic centres, as well as community centres providing dance sports, gymnastics and other organised sporting opportunities.
  - Non-structured and informal opportunities for play, physical activity and recreation must also be provided for this age group and this typically involves parks, community centres, recreation and aquatic centres and arts and cultural centres.
  - This age group also has a high demand for out of school care services that can be provided at primary school sites, or in local government community and recreation centres.
  - The demand for the provision of primary schools for this age group is clearly high and while not provided by local government, LGAs have an important role in ensuring adequate site areas are allocated for primary schools.
- **Secondary schoolers (12-17 years)**
  - This age group has a high participation rate in organised sport and this impacts on the demand for sporting facilities, including recreation and aquatic centres, as well as community centres providing organised sporting and recreational opportunities.
  - Non-structured and informal opportunities for play, physical activity and recreation must also be provided for this age group and this typically involves parks, community centres, recreation and aquatic centres, libraries and arts and cultural centres. Youth centres also have an important role to play in providing these opportunities, as well as services and programs that support this age group.
  - The demand for the provision of high schools for this age group is clearly high and while not provided by local government, LGAs have an important role in ensuring adequate site areas are allocated for high schools.

- **Tertiary education and independence (18-24 years)**
  - This age group also has a reasonably high participation rate in organised sport, but participation in organised sport starts to decline in the 18 to 24 age group.
  - However, it is this age group that drives the demand for niche and extreme physical activities and informal sporting opportunities that do not require a lot of time or considerable commitment. Parks, sporting grounds and recreation centres are important in providing these opportunities.
  - Education and training opportunities are also critical to this age group and are important with respect to reducing the typically high unemployment rate in this age group.
- **Young Workforce (25-34 years)**
  - Participation in organised sports continues to decline in this age group, which also drives the demand for niche and extreme physical activities and informal sporting opportunities that do not require a lot of time or considerable commitment. Parks, sporting grounds and recreation centres are important in providing these opportunities.
- **Parents and homebuilders (35-49 years)**
  - Participation in organised sport, recreation and physical activity continues to decline more sharply in this age group, in favour of more informal recreational and physical activity opportunities that provide crèche/child care facilities and cater for the whole family.
  - Services and programs that are provided by the government and non-government sectors that support relationship development and the growth and development of children and families are of high importance to this age group, with many of these services and programs typically provided in community centres.
- **Older Workers and pre-retirees (50-59 years)**
  - Participation in physical activity and recreation has been increasing in this age group and will continue to do so.
  - There will also be a greater demand for health, wellbeing and leisure opportunities for this age group and libraries, community centres and recreation and aquatic centres commonly provide these.
- **Empty nesters and retirees (60-69 years)**
  - Participation in physical activity and recreation in this age group is increasing, however due to declining physical capacity toward the end of this age cohort, community facilities need to respond to this.
  - There will also be a greater demand for health, wellbeing and leisure opportunities for this age group and libraries, community centres and recreation and aquatic centres commonly provide these.

- **Seniors (70-84 years) and Elderly aged (85+ years)**
  - An age friendly city is of high importance to this age group and there will be an increasing demand on community and public infrastructure to more adequately cater for Seniors, as well as the more elderly and frail population.
  - There will also be an increasing demand for appropriate housing options, home support services and residential care facilities and while local government typically does not provide retirement housing and residential care, LGA housing strategies and planning policies need to respond to this.

In comparison with WA’s population, as the following figure shows, the City of Kwinana has a much higher proportion of 25 to 34 year olds (Young workforce), 0 to 4 year olds (Babies and pre-schoolers), 35 to 49 year olds (Parents and homebuilders) and 18 to 24 year olds (Tertiary education and independence). The City of Kwinana also has a much lower proportion of older age groups (50 years+) at 23%, compared to WA with 32%.

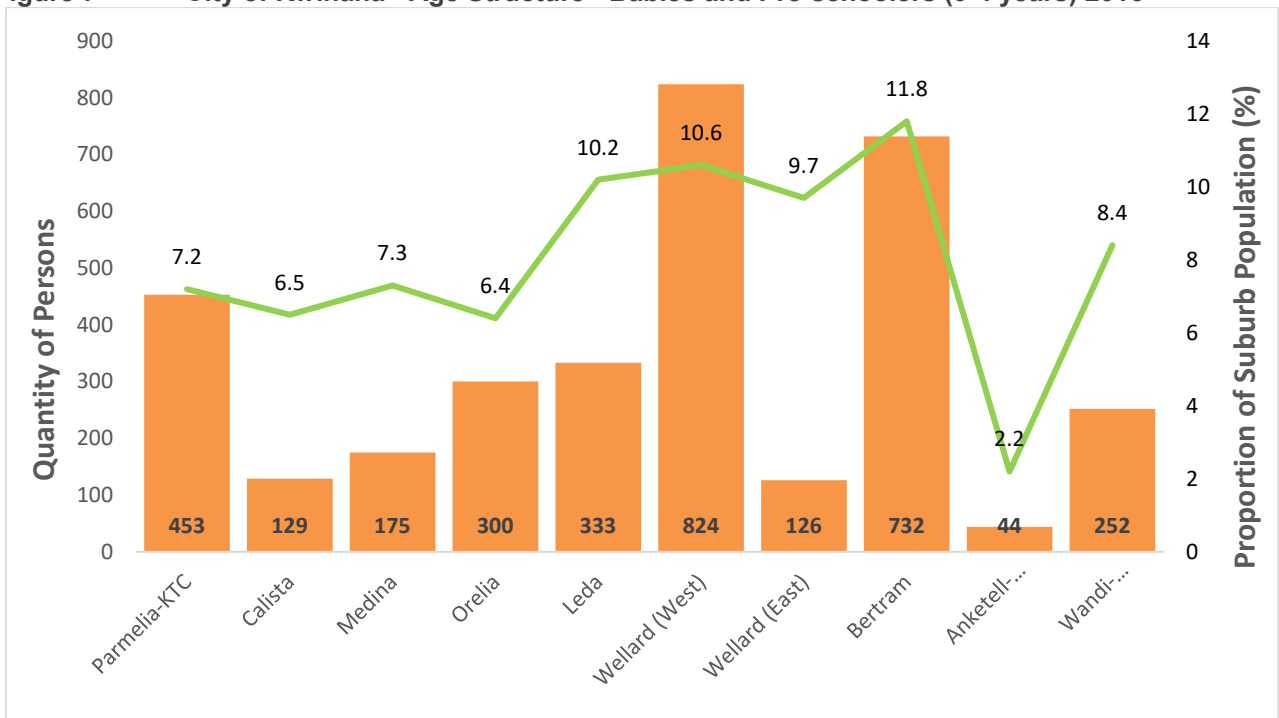
**Figure 6 City of Kwinana - Service Age Groups in Comparison with WA 2016**



ABS Census 2016  
Source: id Consulting

When considering the service age groups at the suburb level, it is evident that there are significant differences in the age profile across the City of Kwinana and this has implications for the nature and level of the community infrastructure and community services required.

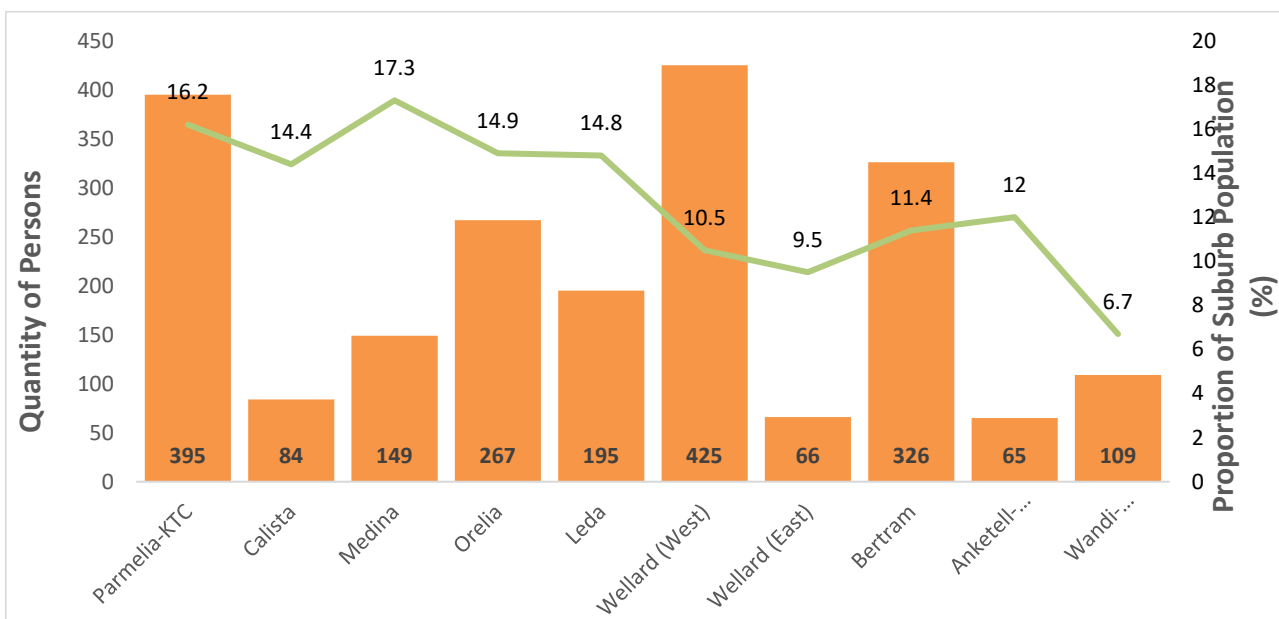
**Figure 7 City of Kwinana - Age Structure - Babies and Pre-schoolers (0-4 years) 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (824) of babies and pre-schoolers, making up 10.6% of this suburbs population.
- The suburbs that have the lowest number babies and preschools are Anketell – Casuarina and Wellard (East).
- All suburbs with the exception of Anketell – Casuarina have a higher proportion of babies and pre-schoolers compared to WA (6.5%).

**Figure 8 City of Kwinana - Age Structure - Primary Schoolers (5-11 years) 2016**

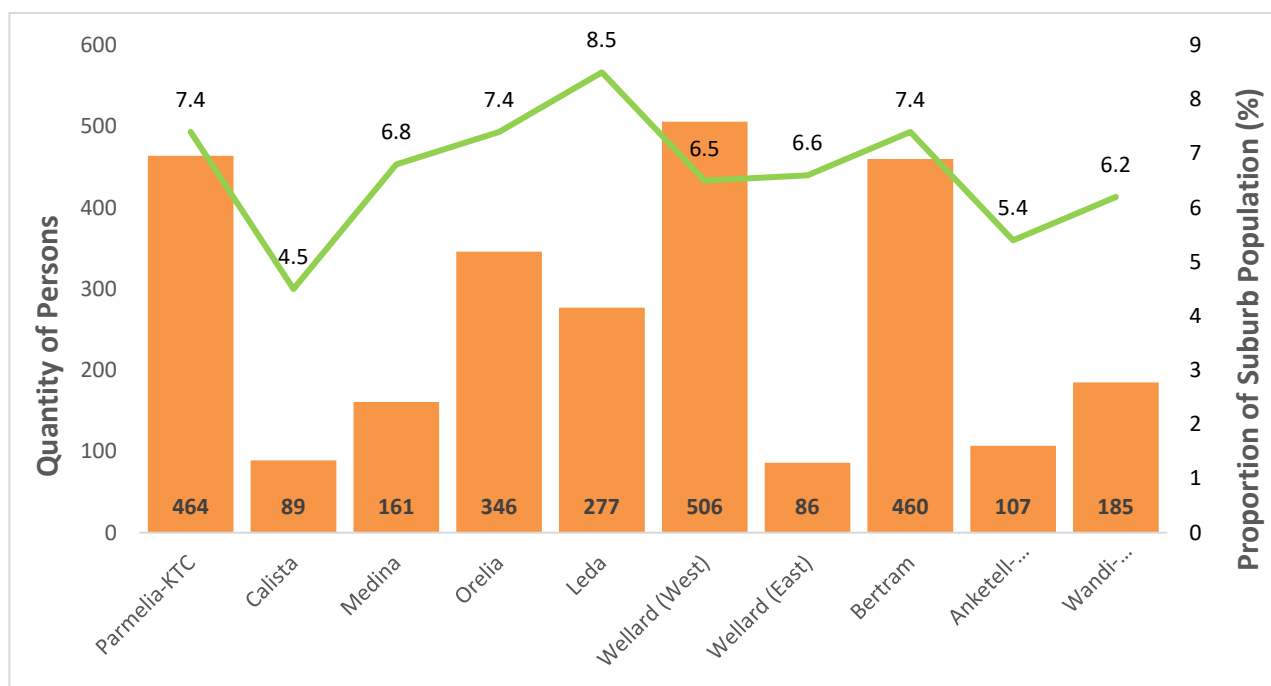


ABS Census 2016  
Source: id Consulting



- Bertram has the highest number (898) of primary schoolers, making up 14.4% of this suburbs population.
- The suburbs that have the lowest number of primary schoolers are Anketell – Casuarina and Wellard (East).
- All suburbs with the exception of Wandī – Mandogalup, Wellard (East), Medina, Calista and Anketell – Casuarina have a higher proportion of primary schoolers than WA (9.1%).

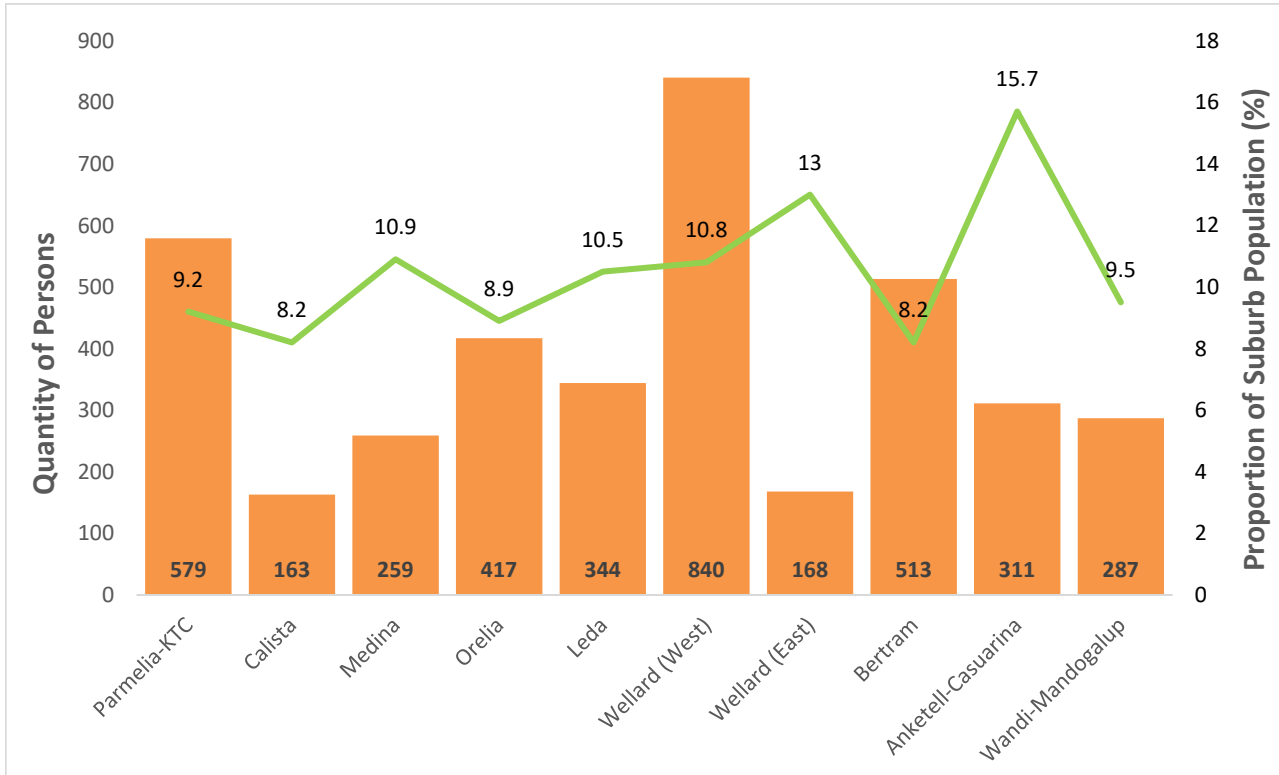
**Figure 9 City of Kwinana - Age Structure - Secondary Schoolers (12-17 years) 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (506) of secondary schoolers, making up 6.5% of this suburbs population.
- The suburbs that have the lowest number of secondary schoolers are Wellard (East) and Calista.
- The suburbs that have a higher proportion of secondary schoolers than WA (7.2%) are Leda, Parmelia – Kwinana Town Centre, Orelia and Bertram.

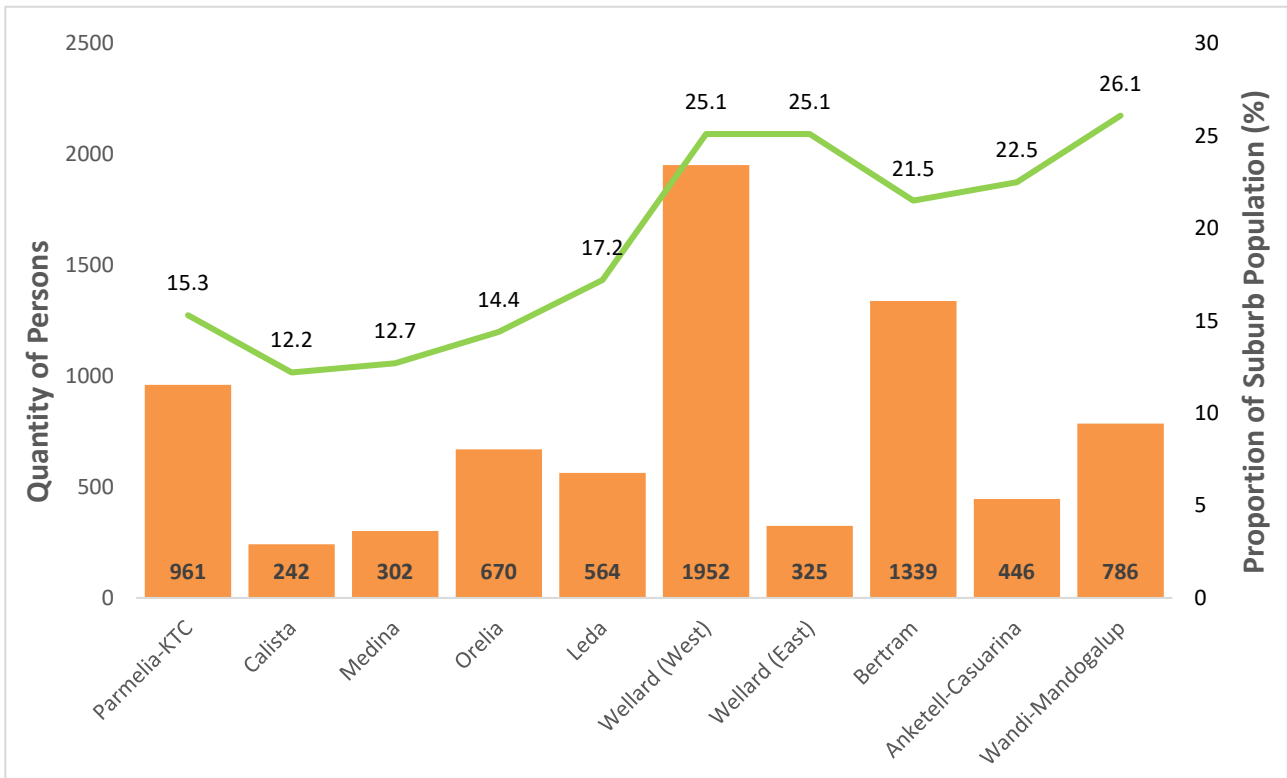
**Figure 10 City of Kwinana - Age Structure - Tertiary Education and Independence (18-24 years) 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (840) in the tertiary education and independence age group, making up 10.8% of this suburbs population.
- The suburbs that have the lowest number in the tertiary education and independence age group are Calista and Wellard (East).
- All suburbs with the exception of Calista and Bertram have a higher proportion in the tertiary education and independence age group compared to WA (8.9%).

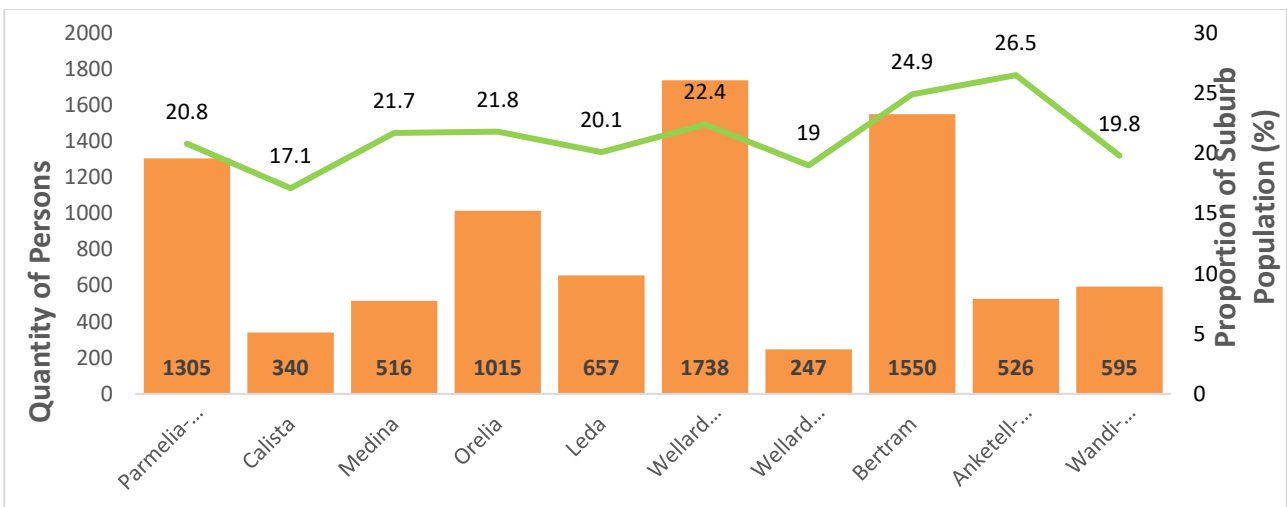
**Figure 11 City of Kwinana - Age Structure - Young Workforce (25-34 years) 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (1,952) in the young workforce age group, making up 25.1% of this suburbs population.
- The suburbs that have the lowest number in the young workforce age group are Calista and Medina.
- All suburbs with the exception of Orelia, Medina and Calista have a higher proportion in the young workforce age group compared to WA (15.3%).

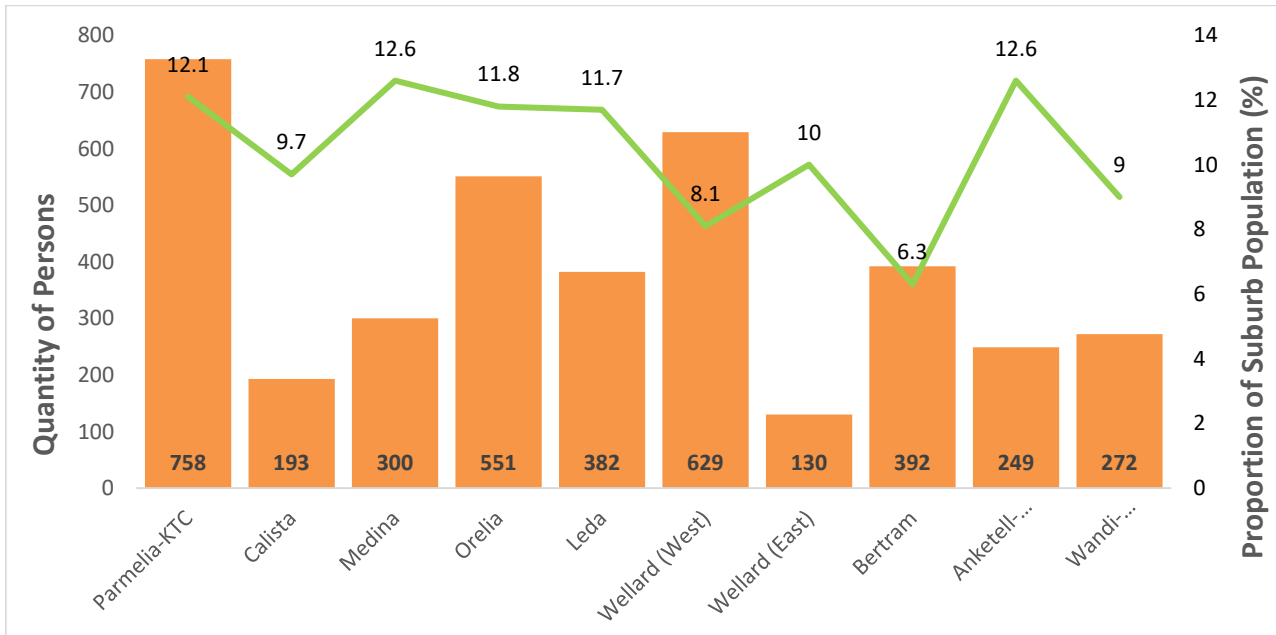
**Figure 12 City of Kwinana - Age Structure - Parents and Home Builders (35-49 years) 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (1,738) of parents and home builders, making up 22.4% of this suburbs population.
- The suburbs that have the lowest number of parents and home builders are Wellard (East) and Calista.
- All suburbs with the exception of Wandī – Mandogalup, Wellard (West) and Calista have a higher proportion of parents and home builders compared to WA (20.9%).

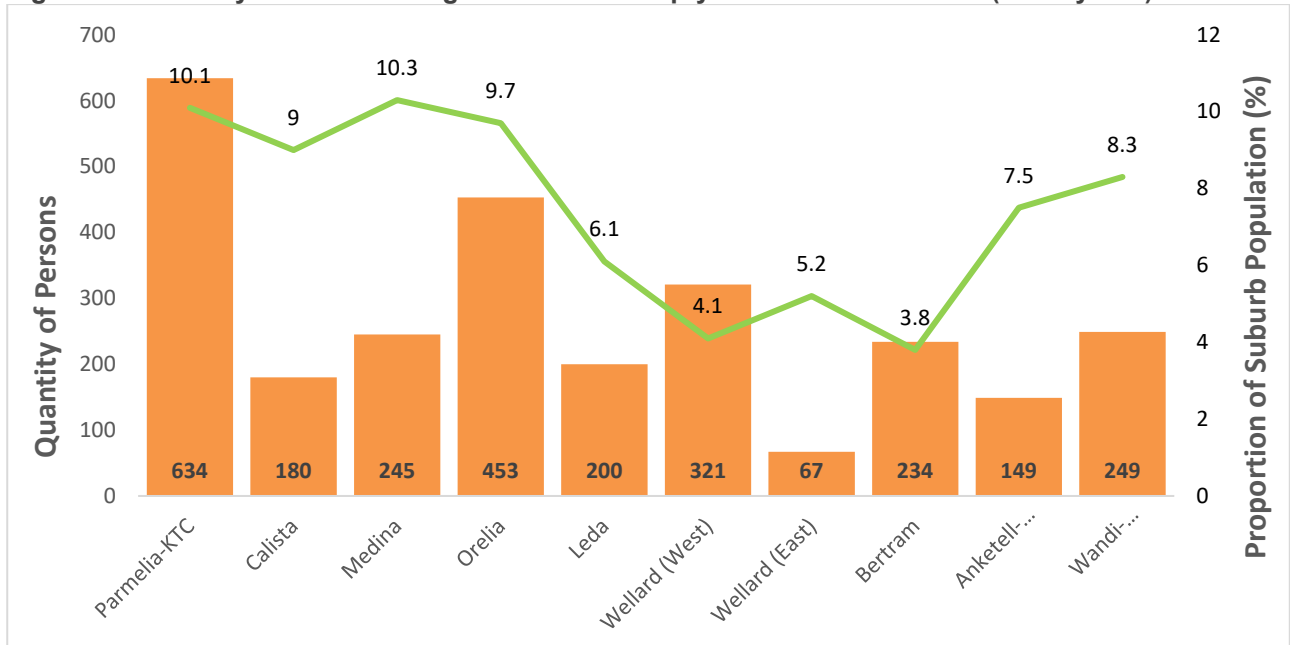
**Figure 13 City of Kwinana - Age Structure - Older Workers and Pre-retirees (50-59 years) 2016**



ABS Census 2016  
Source: id Consulting

- Parmelia – Kwinana Town Centre has the highest number (758) of older workers and pre-retirees, making up 12.1% of this suburbs population.
- The suburbs that have the lowest number of older workers and pre-retirees are Wellard (East) and Calista.
- All suburbs with the exception of Medina, Anketell – Casuarina and Parmelia – Kwinana have a lower proportion of older workers and pre-retirees compared to WA (20.9%).

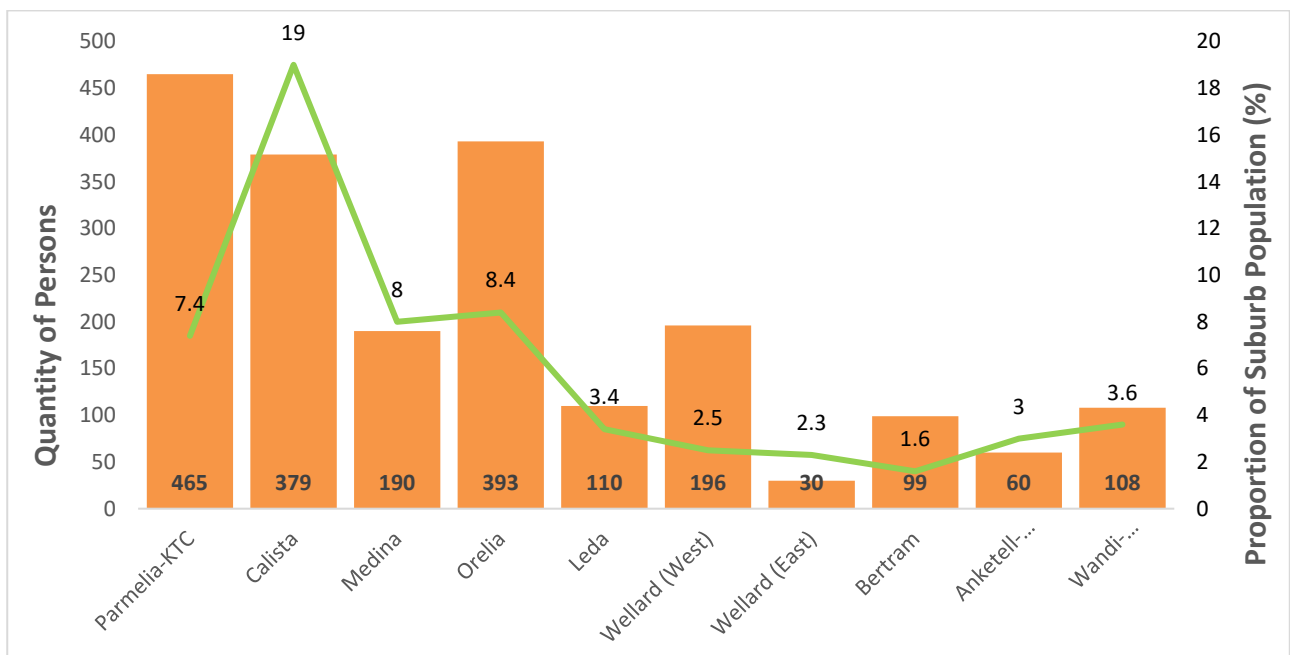
**Figure 14 City of Kwinana - Age Structure – Empty Nesters and Retirees (60-69 years) 2016**



ABS Census 2016  
Source: id Consulting

- Parmelia – Kwinana Town Centre has the highest number (634) of empty nesters and retirees, making up 10.1% of this suburbs population.
- The suburbs that have the lowest number of empty nesters and retirees are Wellard (East) and Anketell – Casuarina.
- All suburbs with the exception of Medina and Parmelia – Kwinana Town Centre have a lower proportion of empty nesters and retirees compared to WA (10.1%).

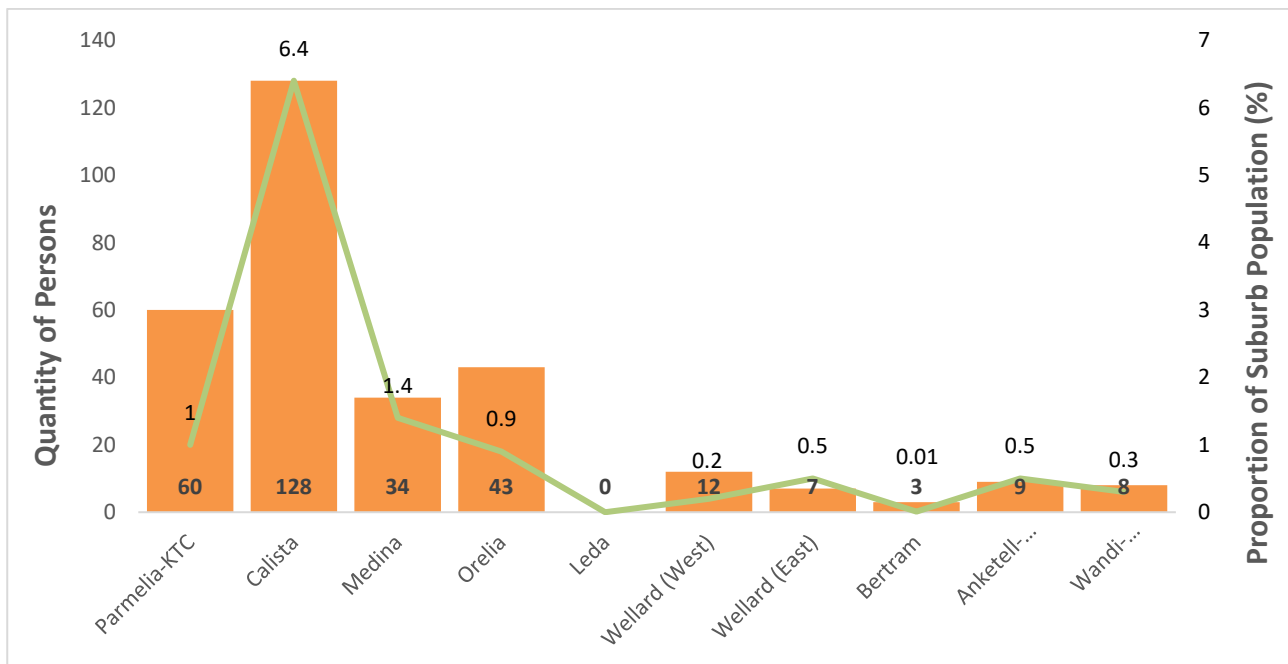
**Figure 15 City of Kwinana - Age Structure – Seniors (70-84 years) 2016**



ABS Census 2016  
Source: id Consulting

- Parmelia – Kwinana Town Centre has the highest number (464) of seniors, making up 7.4% of this suburbs population.
- The suburbs that have the lowest number of seniors are Wellard (East) and Anketell – Casuarina.
- In comparison with WA with 7.6% of the population in this age group, 19.0% of Calista population are aged 70-84 years old, followed by Orelia with 8.4% and Medina with 8.0%. All other suburbs have a lower proportion of Seniors than WA.

**Figure 16 City of Kwinana - Age Structure – Elderly Aged (85+ years) – 2016**



ABS Census 2016  
Source: id Consulting

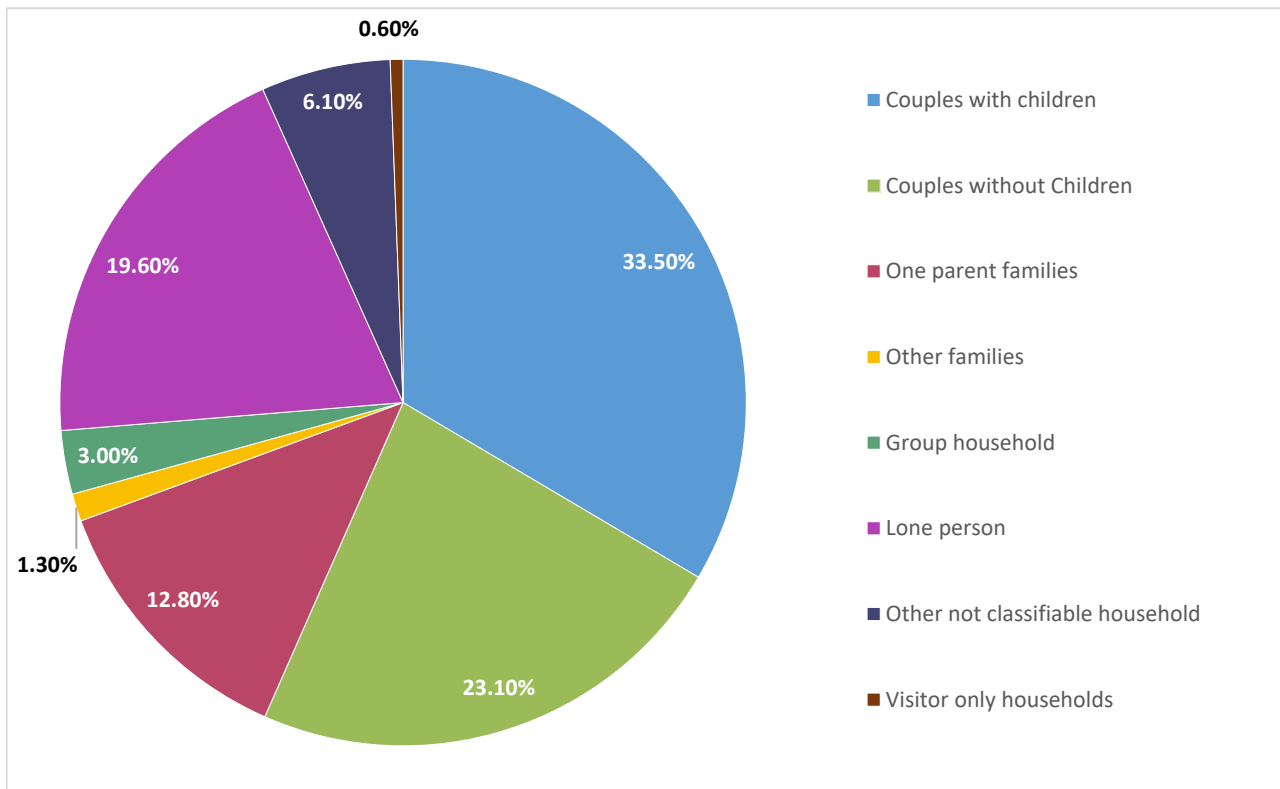
- Calista has the highest number (128) of elderly aged, making up 6.4% of this suburbs population.
- The suburbs that have the lowest number of elderly aged are Leda, Bertram, Wellard (East), Wandl – Mandogalup and Anketell – Casuarina.
- In comparison with WA with 1.7% of the population is elderly aged, Calista also has a much higher proportion of people in this age group (6.4%), while all other suburbs have a lower proportion of elderly aged compared to WA.

## 5.4 Households and Families

The City of Kwinana's household and family structure is one of the most important demographic indicators. It reveals the area's residential role and function, era of settlement and provides key insights into the level of demand for services and facilities, as most are related to age and household types.

In 2016, the City of Kwinana's dominant household type was couples with children, accounting for 33.5% of all households, followed by couples without children at 23.1%, lone person households at 19.6% and then one parent families at 12.8%.

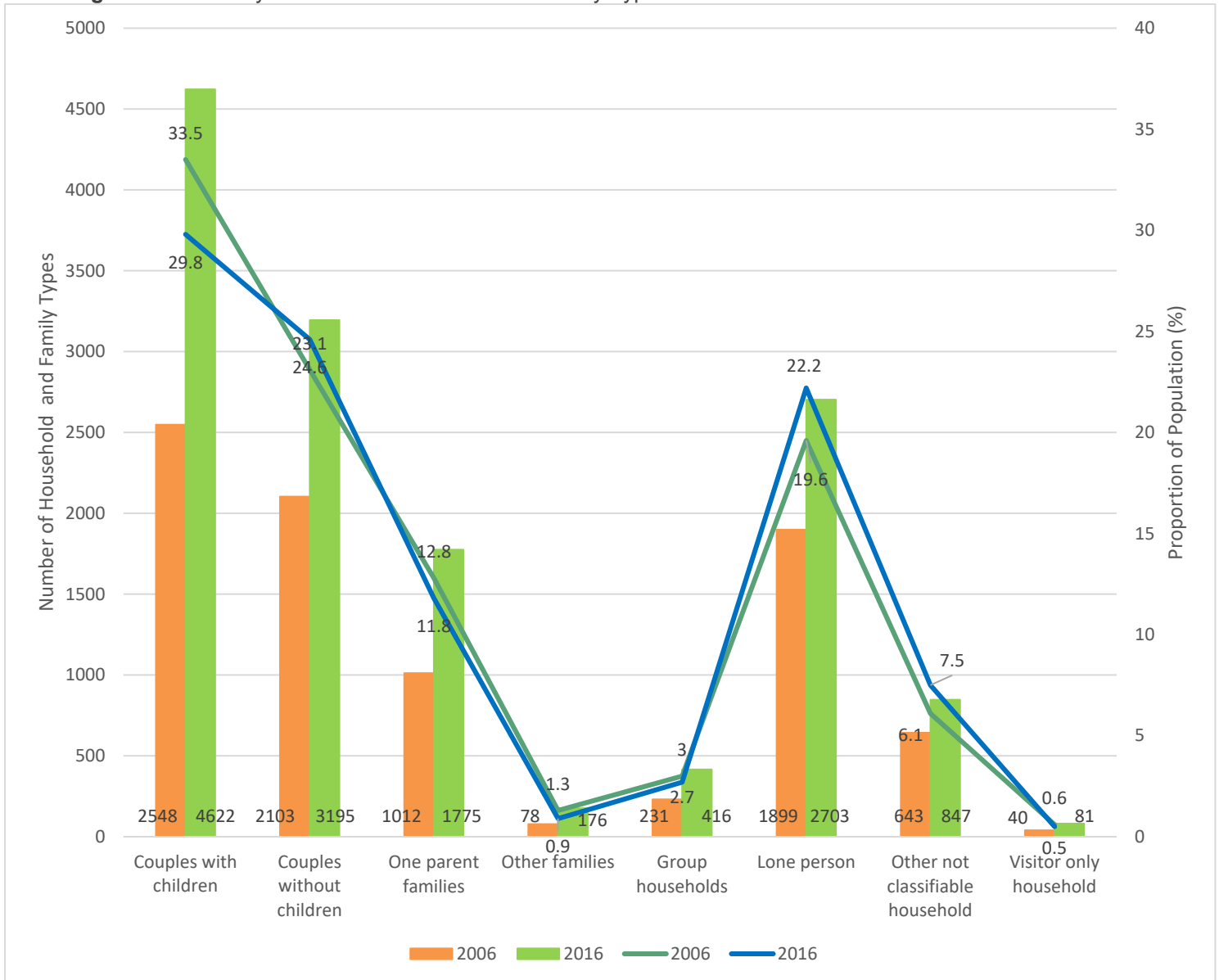
**Figure 17 City of Kwinana Households and Families – 2016**



ABS Census 2016  
Source: id Consulting

From 2006 to 2016, the largest changes in family/household types in the City of Kwinana were couples with children, increasing by 2,074 households and couples without children, increasing by 1,092 households. Interestingly though, while the numbers in each grouping increased, the actual composition of households did not shift.

**Figure 18** City of Kwinana Household and Family Type 2006 – 2016



ABS Census 2006, 2011, 2016  
Source: id Consulting

**Implications**

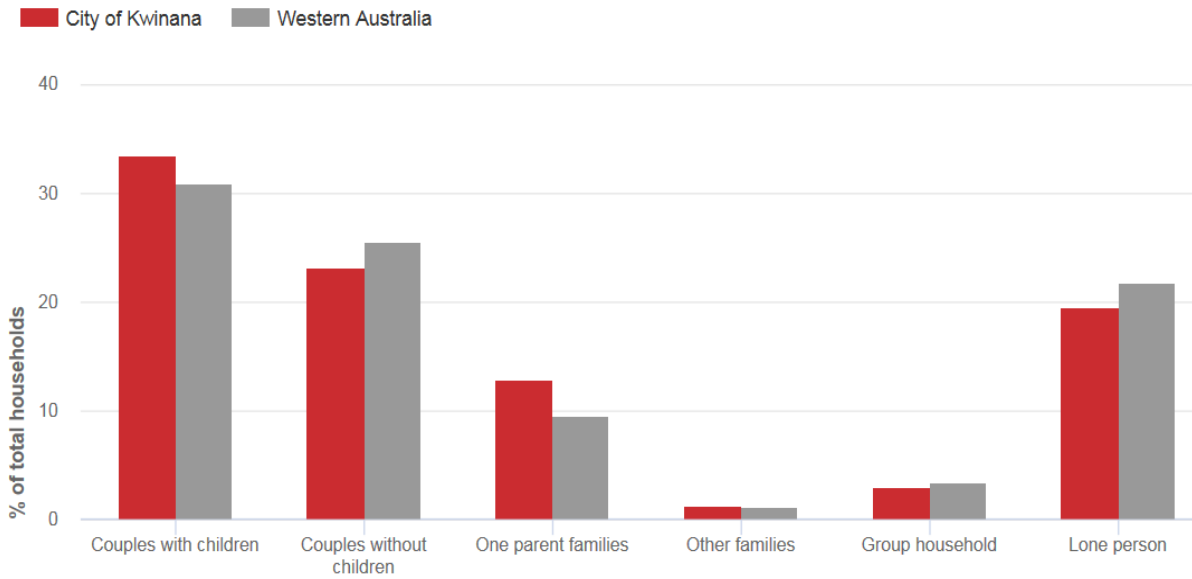
With couples with children the dominant household type in the City of Kwinana, facilities and services that support the needs of families will be of increasing importance, particularly for one parent families where income levels are typically lower, which highlights the need for low cost and free community facilities, services and opportunities.

With one in five households lone person households, social isolation can be high in this group which also highlights the importance of community facilities, services and programs which provide the opportunity to interact and connect with others.

In comparison with WA’s population, as the following figure indicates, the City of Kwinana has a higher proportion of couples with children and one parent families, and a lower proportion of couples without children and lone person households.



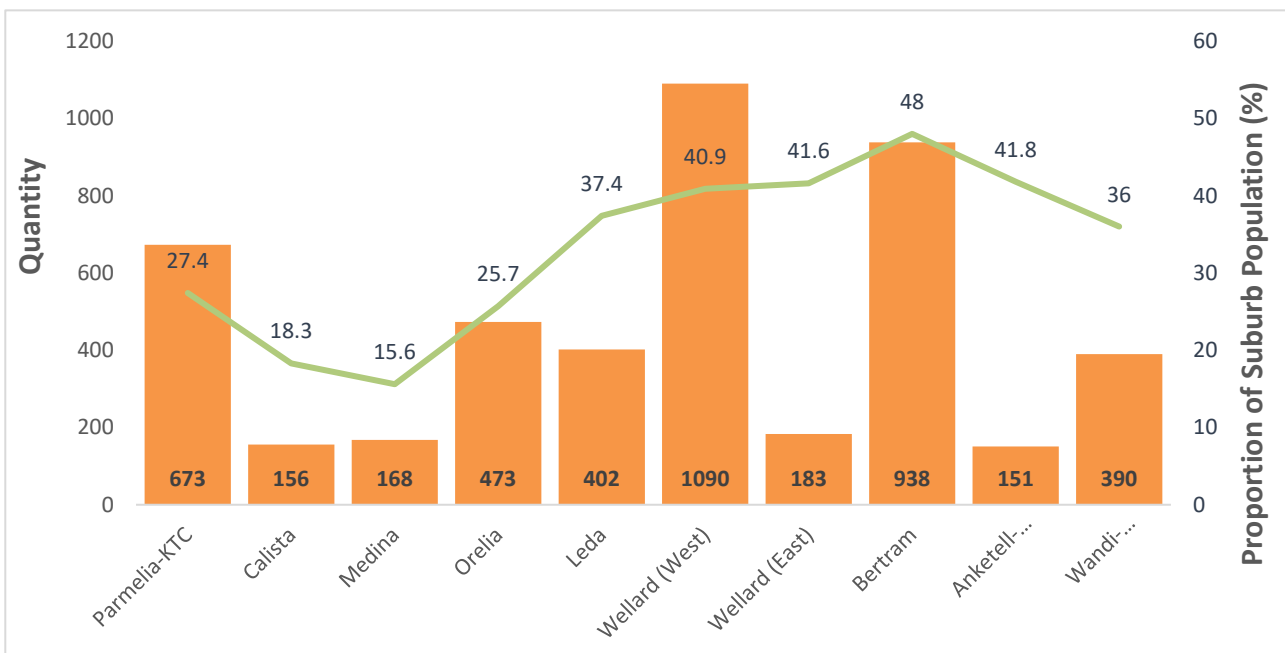
**Figure19 City of Kwinana Household and Family Type in Comparison with WA 2016**



ABS Census 2016  
Source: id Consulting

When considering the household and family type at the suburb level, the differences are highlighted below.

**Figure 20 City of Kwinana - Couples with Children - Suburb 2016**

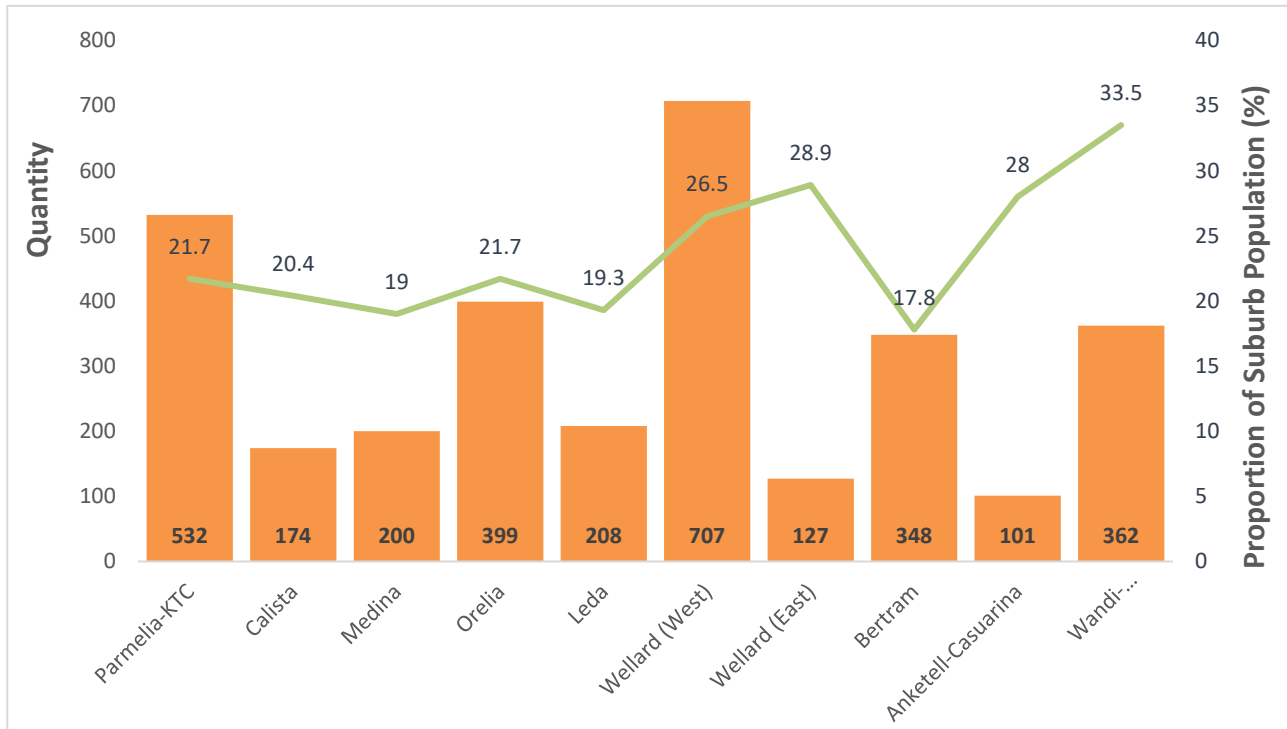


ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (1,090) of couples with children, making up 40.9% of this suburbs population.
- The suburbs that have the lowest number of couples with children are Anketell – Casuarina and Calista.

- In comparison with WA where 30.9% of households are couples with children, Bertram, Anketell – Casuarina, Wellard (East), Wellard (West), Leda and Wandi – Mandogalup have a considerably higher proportion of couples with children, with Medina, Calista and Orelia having a much lower proportion of couples with children than WA.

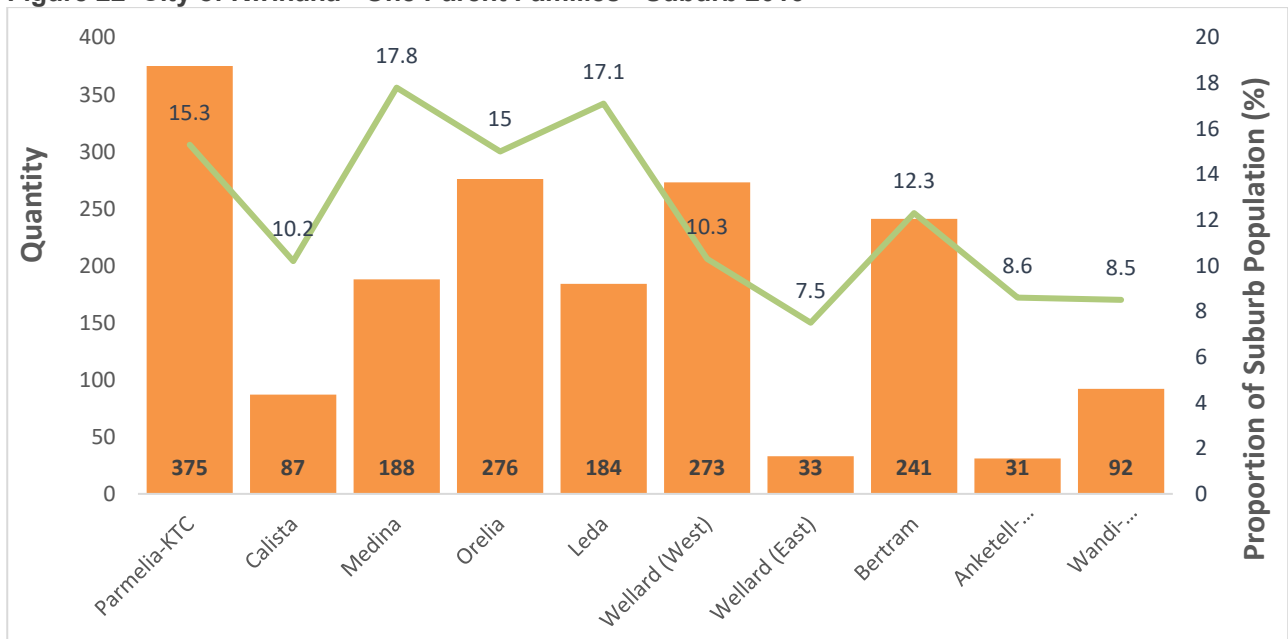
**Figure 21 City of Kwinana - Couples without Children - Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (707) of couples without children, making up 26.5% of this suburbs population.
- The suburbs that have the lowest number of couples without children are Anketell – Casuarina and Wellard (East).
- In comparison with WA where 25.6% of households are couples without children, Wandi – Mandogalup, Wellard (East), Anketell – Casuarina and Wellard (West) have a higher proportion of couples without children than WA, with Bertram, Medina, Leda, Calista, Orelia and Pamela – Kwinana Town Centre having a lower proportion of couples without children than WA

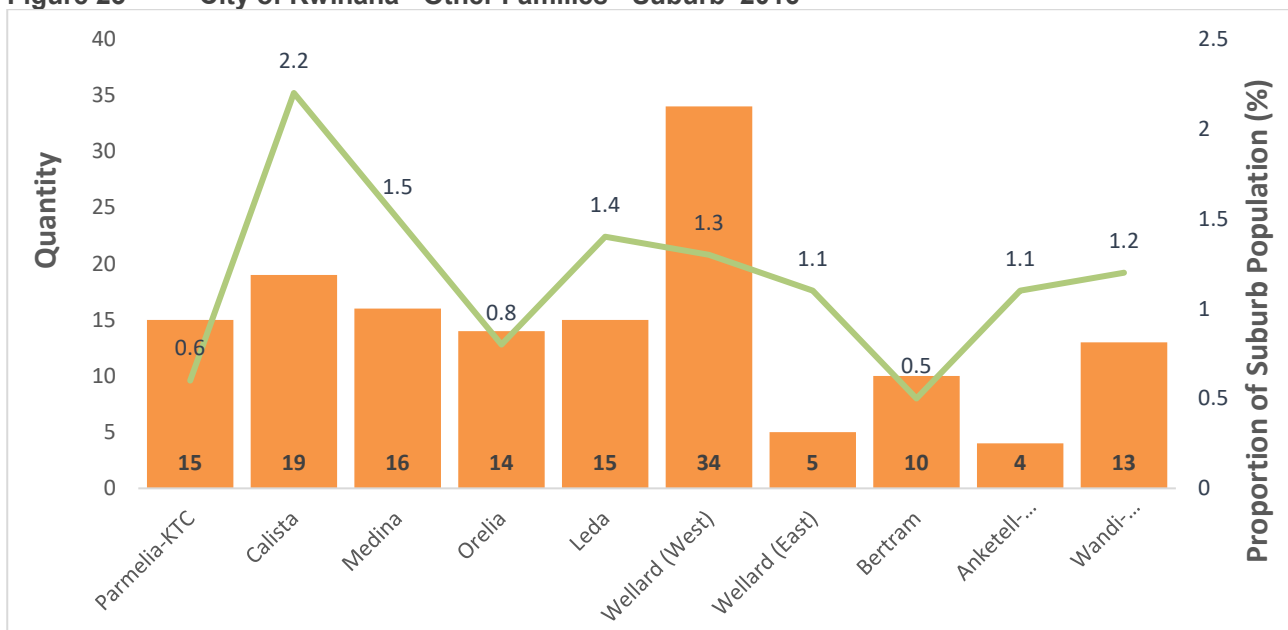
**Figure 22 City of Kwinana - One Parent Families - Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Parmelia – Kwinana Town Centre has the highest number (375) of one parent families, making up 15.3% of this suburbs population.
- The suburbs that have the lowest number of one parent families are Anketell – Casuarina and Wellard (East).
- Compared to WA where 9.6% of households are one parent families, nearly all suburbs in the City of Kwinana have a higher proportion of one parent families than WA, with the exception of Wellard (East), Wandl – Mandogalup and Anketell – Casuarina.

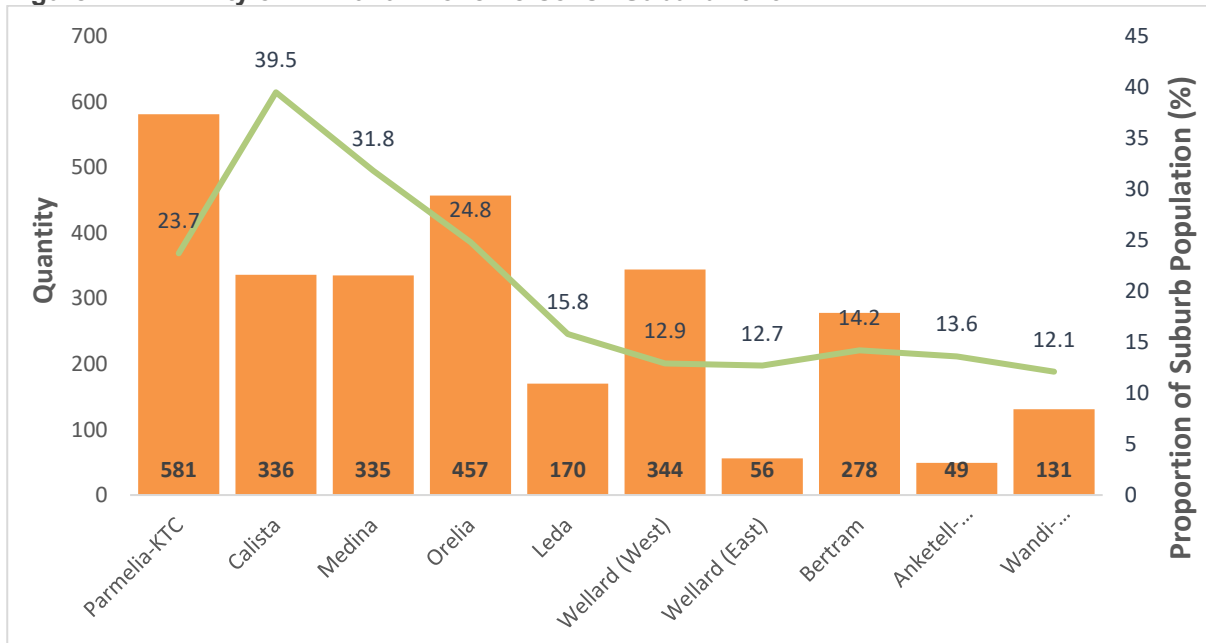
**Figure 23 City of Kwinana - Other Families - Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (34) of 'other' families, making up 1.3% of this suburbs population.
- The proportion of 'other' families in Kwinana's suburbs is similar to WA.

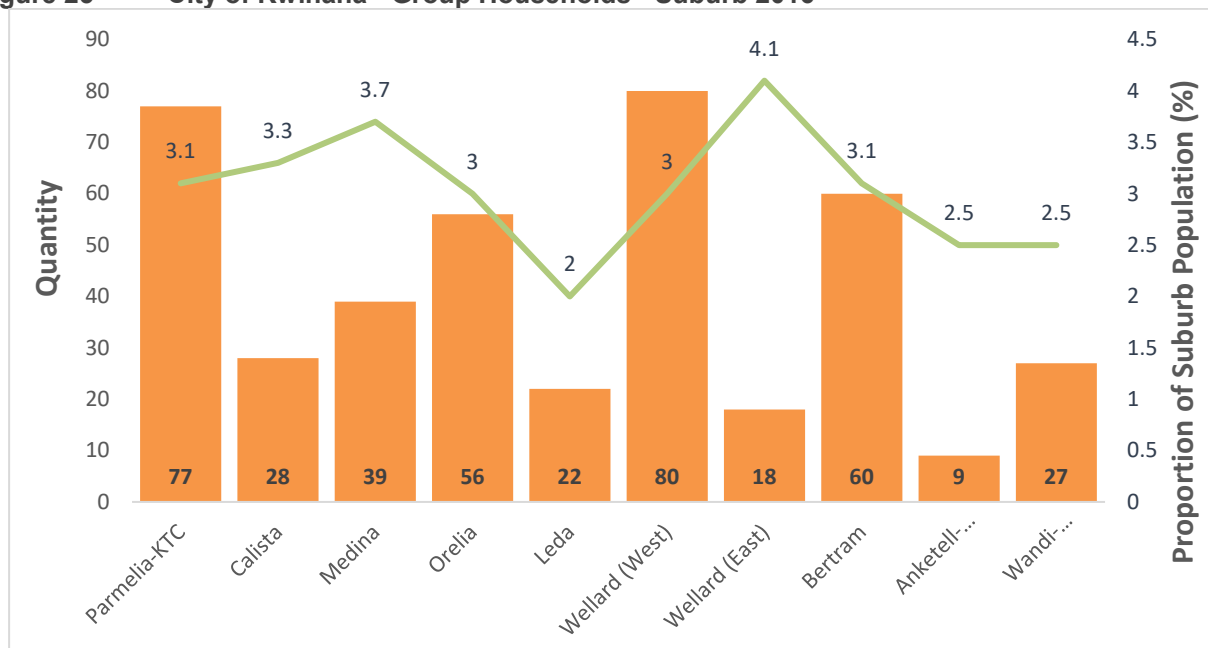
**Figure 24 City of Kwinana - Lone Persons - Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Parmelia – Kwinana Town Centre has the highest number (581) of lone person households, making up 23.7% of this suburbs population.
- The suburbs that have the lowest number of lone person households are Anketell – Casuarina and Wellard (East).
- Compared to WA with 21.8% lone person households, Calista, Medina, Orelia and Parmelia have a higher proportion of lone person households than WA, with Wandl – Mandogalup, Wellard (East), Wellard (West), Anketell – Casuarina, Bertram and Leda having a lower proportion of lone person households than WA.

**Figure 25 City of Kwinana - Group Households - Suburb 2016**



ABS Census 2016  
Source: id Consulting

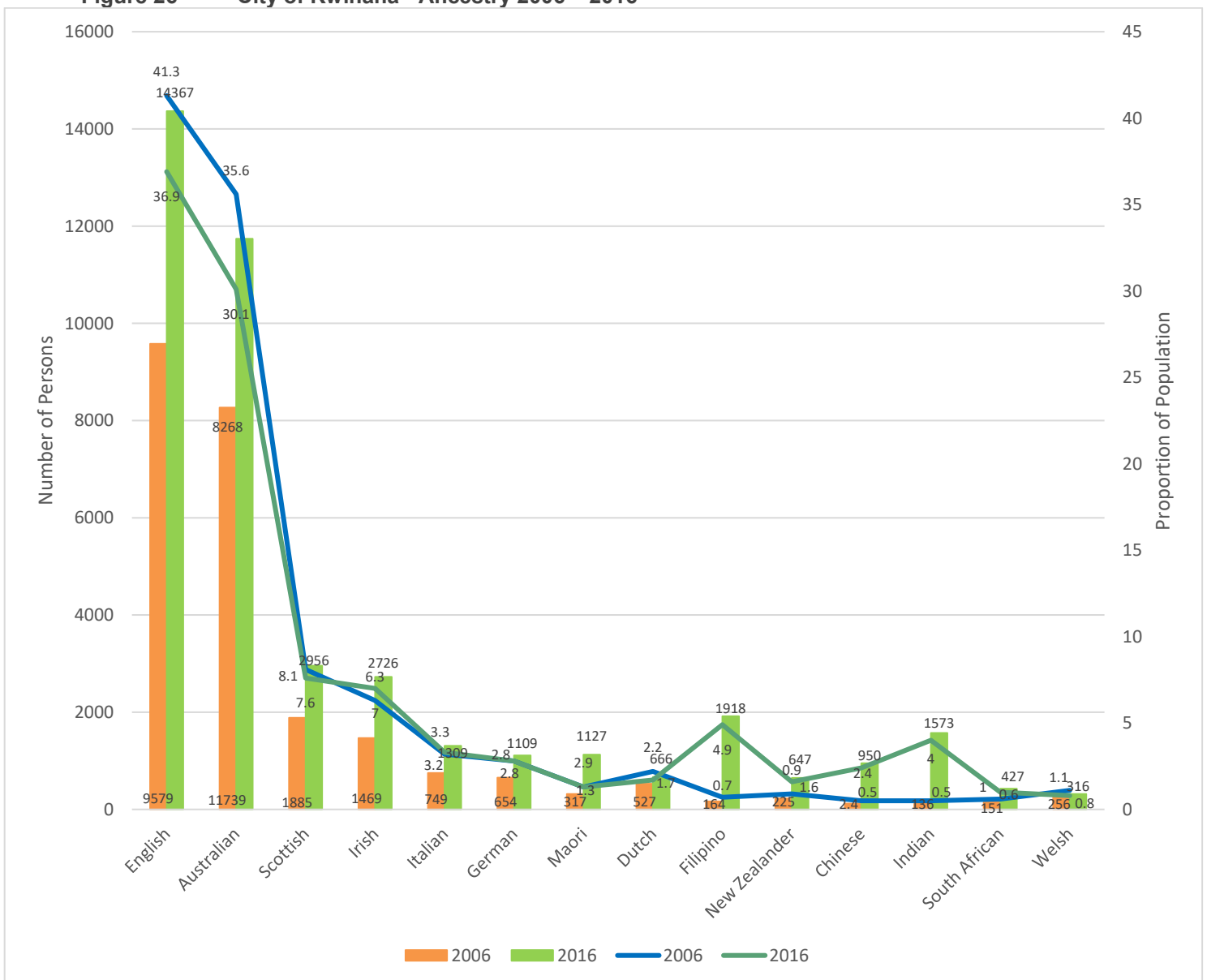
- Wellard (West) has the highest number (80) of group households, making up 3.0% of this suburbs population.
- The proportion of group households in Kwinana’s suburbs is similar to WA.

### 5.5 Cultural Diversity 2006 - 2016

Different cultural groups typically have a variety of different needs and priorities and how and what services and facilities are provided can vary in different cultures. This should be taken into account in planning and providing facilities to ensure they are inclusive of the needs of the different cultural groups in the population.

The figure below defines the cultural association and ethnic background of an individual going back three generations.

**Figure 26 City of Kwinana - Ancestry 2006 – 2016**



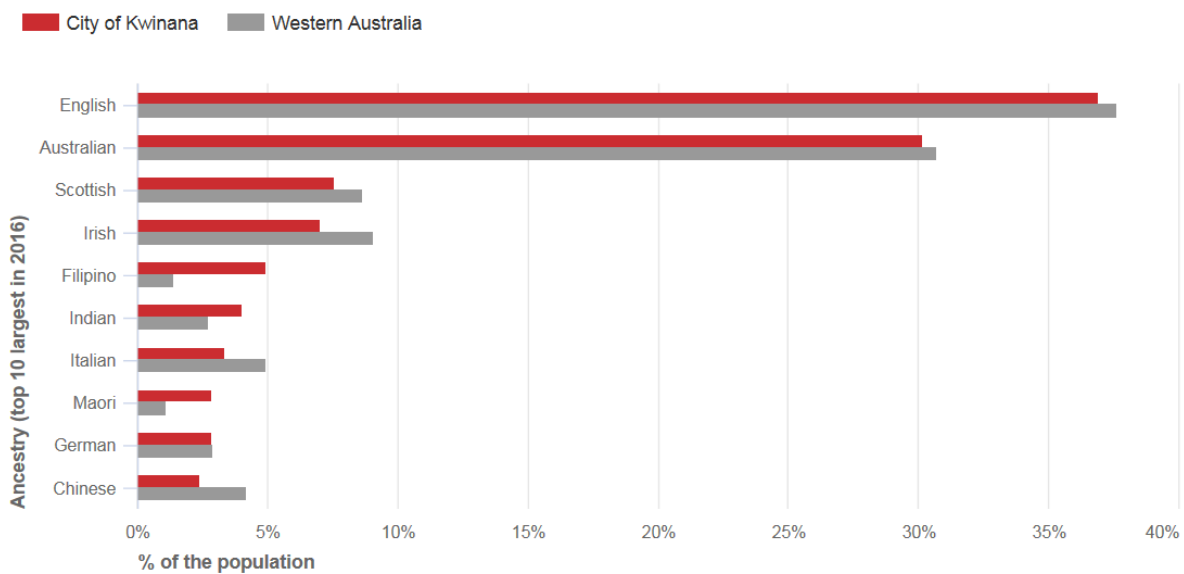
ABS Census 2006, 2011, 2016  
Source: id Consulting

This indicates that there has been a significant change in the ancestry profile of the City of Kwinana’s population in the last ten years with the proportion of English and Australian people declining by 10% and the number of Filipinos, Indian, Chinese and Maoris increasing by 4.2%, 3.5%, 1.9% and 1.6% respectively. Effectively, the culturally diversity of the City of Kwinana population has increased considerably, particularly since 2011.

### Implications

- The use of community facilities, activities and programs tends to be higher amongst the English and Australian ancestry groups and lower for non-English speaking groups. This highlights the importance of ensuring community facilities and programs are inclusive of all cultural groups. This is of particular importance given new migrants often lack social and extended family networks.
- The major differences between the top 10 ancestries of the population in the City of Kwinana compared with WA are highlighted in the following figure.

**Figure 27 City of Kwinana Ancestry in Comparison with WA 2016**



ABS Census 2016  
Source: id Consulting

When considering ancestry at the suburb level, it is evident that there are significant differences in the cultural makeup of the population across the City of Kwinana and this has implications for community infrastructure provision.

**Table 1a City of Kwinana - Ancestry - Suburbs 2016**

Ancestry	English		Australian		Scottish		Irish		Filipino		Indian		Italian	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
City of Kwinana	14,367	36.9	11,739	30.2	2,956	7.6	2,726	7.0	1,918	4.9	1,573	4.0	1,309	3.4
Parmelia - Kwinana Town Centre	2,573	41.0	2,080	33.2	490	7.8	492	7.8	247	3.9	85	1.4	185	3.0
Calista	922	46.3	679	34.1	202	10.2	182	9.1	60	3.0	15	0.8	42	2.1
Medina	1,023	42.9	837	35.1	192	8.1	152	6.4	75	3.1	28	1.2	69	2.9
Oreila	1,927	41.3	1,542	33.1	425	9.1	392	8.4	162	3.5	72	1.5	69	2.9
Leda	1,329	40.6	1,195	36.5	280	8.6	216	6.6	118	3.6	54	1.7	128	3.9
Wellard (West)	2,514	32.4	1,833	23.6	480	6.2	501	6.4	632	8.1	665	8.6	222	2.9
Wellard (East)	252	46.8	255	47.3	46	8.5	41	7.6	74	5.7	92	7.1	61	4.7
Bertram	2,043	32.8	1,885	30.3	461	7.4	408	6.6	486	7.8	359	5.8	187	3.0
Anketell - Casuarina	479	24.2	450	22.7	90	4.5	66	3.3	6	0.3	0	0.0	66	3.3
Wandi - Mandogalup	1,116	37.1	872	29.0	221	7.3	227	7.5	69	2.3	161	5.4	182	6.1

ABS Census 2016  
Source: id Consulting

**Table 1b City of Kwinana - Ancestry - Suburbs 2016**

Ancestry	Maori		German		Chinese		Dutch		New Zealander		South African		Welsh	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
City of Kwinana	1,127	2.9	1,109	2.8	950	2.4	666	1.7	647	1.7	666	1.7	316	0.8
Parmelia - Kwinana Town Centre	197	3.1	208	3.3	85	1.4	80	1.3	62	1.0	32	0.5	47	0.7
Calista	56	2.8	53	2.7	11	0.6	31	1.6	22	1.1	14	0.7	47	0.7
Medina	65	2.7	97	4.1	13	0.5	53	2.2	37	1.6	7	0.3	23	1.0
Oreila	107	2.3	146	3.1	59	1.3	49	1.1	76	1.6	28	0.6	35	0.8
Leda	155	4.7	124	3.8	15	0.5	43	1.3	65	2.0	47	1.4	23	0.7
Wellard (West)	228	2.9	175	2.3	339	4.4	132	1.7	145	1.9	129	1.7	64	0.8
Wellard (East)	11	0.8	54	4.2	22	1.7	29	2.2	28	2.2	20	1.5	11	0.8
Bertram	214	3.4	134	2.2	271	4.4	108	1.7	123	2.0	88	1.4	88	1.4
Anketell - Casuarina	5	0.3	479	24.2	13	0.7	51	2.6	20	1.0	7	0.4	8	0.4
Wandi - Mandogalup	53	1.8	84	2.8	109	3.6	84	2.8	53	1.8	64	2.1	30	1.0

ABS Census 2016  
Source: id Consulting

While the proportion of English and Australian born people has declined to 67.1% in the City of Kwinana, this is not the case in all suburbs with Wellard (East) continuing to have a very high number (94.1%) of English and Australian born, as well as Calista with 80.5%, Medina with 78.1%, Leda with 77.2% Oreila, with 74.4% and Parmelia – Kwinana Town Centre with 74.2%.

Anketell – Casuarina has the lowest proportion (46.8%) of residents of English and Australian ancestry, largely due to a significant increase in residents of German ancestry, from 23 (1.4%) in 2006 to 479 (24.1%) in 2016, with almost one in four residents now of German ancestry. In comparison, the proportion of people of German ancestry in City of Kwinana is substantially lower at 2.8%.

The proportion of people in Wellard (West) of English and Australian ancestry is also considerably lower (56%), compared to City of Kwinana (67.1%) and has declined significantly from 81.7% in 2006. Of all the suburbs in the City, Wellard (West) has the most culturally diverse population and accommodates the largest influx of Indian, Filipino, Irish, Chinese, Maori, New Zealander and South African migrants and new settlers.

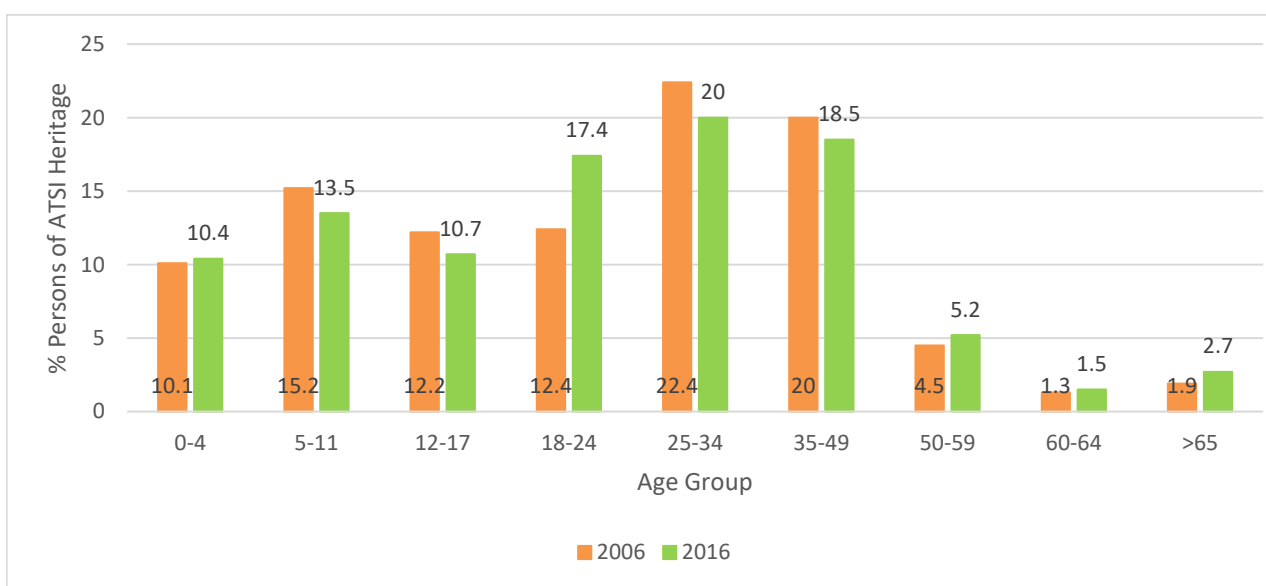
This is followed by Bertram where the English and Australian ancestry has declined from 80.1% in 2006, to 63.2% in 2016, with Bertram now accounting for the second largest influx of Filipinos, Scottish, Irish, Indian, Chinese, Maori, Italian, New Zealander, Dutch and South African migrants and new settlers.

Wandi – Mandogalup has experienced the next biggest decline in the proportion of residents of English and Australian ancestry, from 79.6% in 2006 to 66.1% in 2016 and this is largely due to an increase of people of Indian, Chinese and Irish ancestry.

## 5.6 Aboriginal and Torres Strait Islander Heritage

The ABS Census 2016 indicates that there are 1,397 Aboriginal and Torres Strait Islander persons living in the City of Kwinana, which represents 3.6% of the City’s population. From 2006 to 2016 the number of Aboriginal and Torres Strait Islander persons has increased by 456. However, Aboriginal and Torres Strait Islanders, as a proportion of the City’s population, has declined from 4.1% in 2006 to 3.6% in 2016.

**Figure 28 City of Kwinana - Aboriginal and Torres Strait Islanders 2006 – 2016**



ABS Census 2006, 2011, 2016  
Source: id Consulting



From 2006, the largest increase in the Aboriginal and Torres Strait Islander population has been in the 18 to 24 year old age group, with an increase of 126 people, followed by an increase of 71 in the 35 to 49 age group and then an increase of 68 people in the 25 to 34 year age group.

While 25.7% of the City of Kwinana's population are children aged 0 to 17 years, in contrast 34.6% of the Aboriginal and Torres Strait Islander population are in this age group, indicating the Aboriginal and Torres Strait Islander population is characterised by a large number of children.

At the same time, the proportion of the Aboriginal and Torres Strait Islander population aged 60+ years is substantially lower at 4.2%, compared to the City of Kwinana at 13.1%. This indicates that the life expectancy of the Aboriginal and Torres Strait Islander population is considerably lower compared to the general population of City of Kwinana and across WA.

### Implications

- The use of community facilities, activities and programs is lower amongst the Aboriginal people.
- Cost, access to transport and how community, sport and recreation facilities and programs operate in terms of being inclusive of Aboriginal people are important considerations in addressing this.

## 5.7 Employment

Employment statistics are an important indicator of the socio-economic status of the area and the levels of full or part-time employment, unemployment and labour force participation indicate the strength of the local economy and social characteristics of the population.



Shopping (and jobs) at the Kwinana Market Place

**Figure 29 City of Kwinana - Employment Status 2006 to 2016**



ABS Census 2006, 2011, 2016  
Source: id Consulting

In 2016, of the people living in the City of Kwinana who are employed, 57.4% are working full time and 29.9% are working part time. While full time employment has declined by 4.3% in the last ten years, this reflects the ‘casualisation’ of employment and the increasing level of unemployment during this time.

The unemployment rate has increased from 5.8% in 2006 to 6.7% in 2011 and to 10.8% in 2016. This represents a significant increase in the level of unemployment in the City of Kwinana over the last ten years, particularly since 2011, with the unemployment rate almost doubling since 2006.

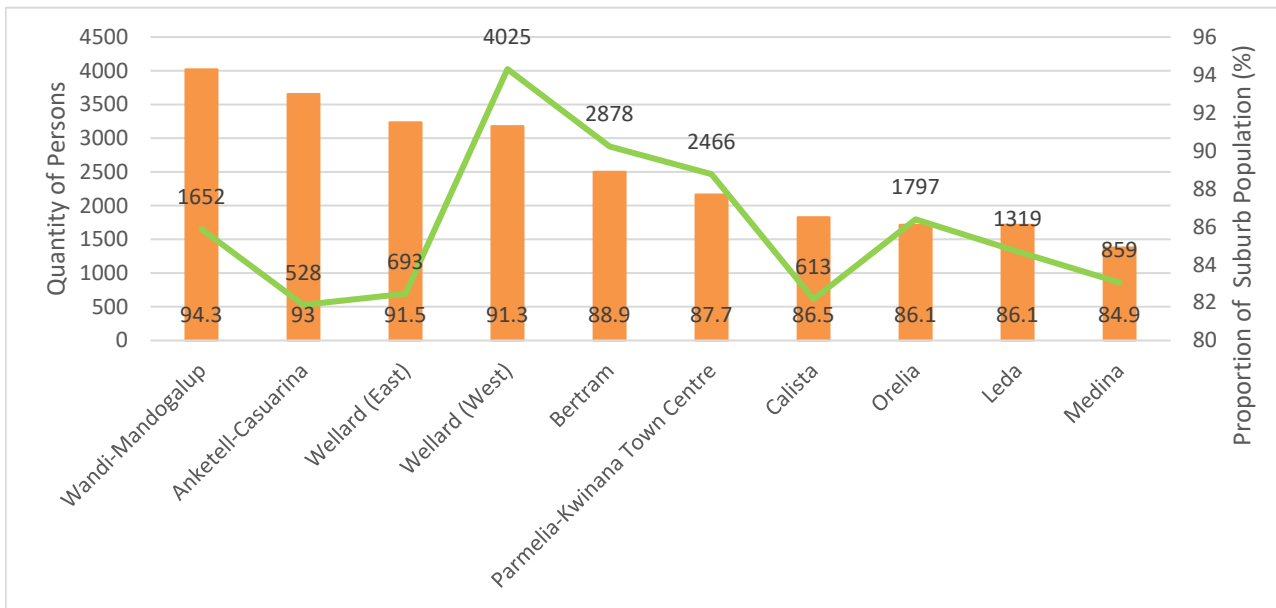
In addition, the unemployment rate for the 2018 June quarter, which is derived from the ABS labour force survey and Centrelink data and is compiled by the Department of Employment, indicates that the unemployment rate in the City of Kwinana has increased further, from 10.8% in 2016, to 12.1% in 2018. While the unemployment rate for the City of Kwinana has always been typically higher than for WA, the gap has further increased in the last ten years with the 2018 unemployment rate for the City of Kwinana almost double that for WA at 6.4%,

### Implications

- Linked to income levels, people who are unemployed have a lower capacity to pay to participate in sports, in particular, and this highlights the need for free or low cost opportunities and the importance of access to library services and other services and programs, usually provided at community centres.
- With changing work patterns beyond ‘nine to five’, community facilities and services need to be available across a wider spectrum of time.

When considering employment levels and the nature of employment at the suburb level, it is evident that there are significant differences across the City of Kwinana.

**Figure 30 City of Kwinana Employment Status: Employed - Suburb 2016**

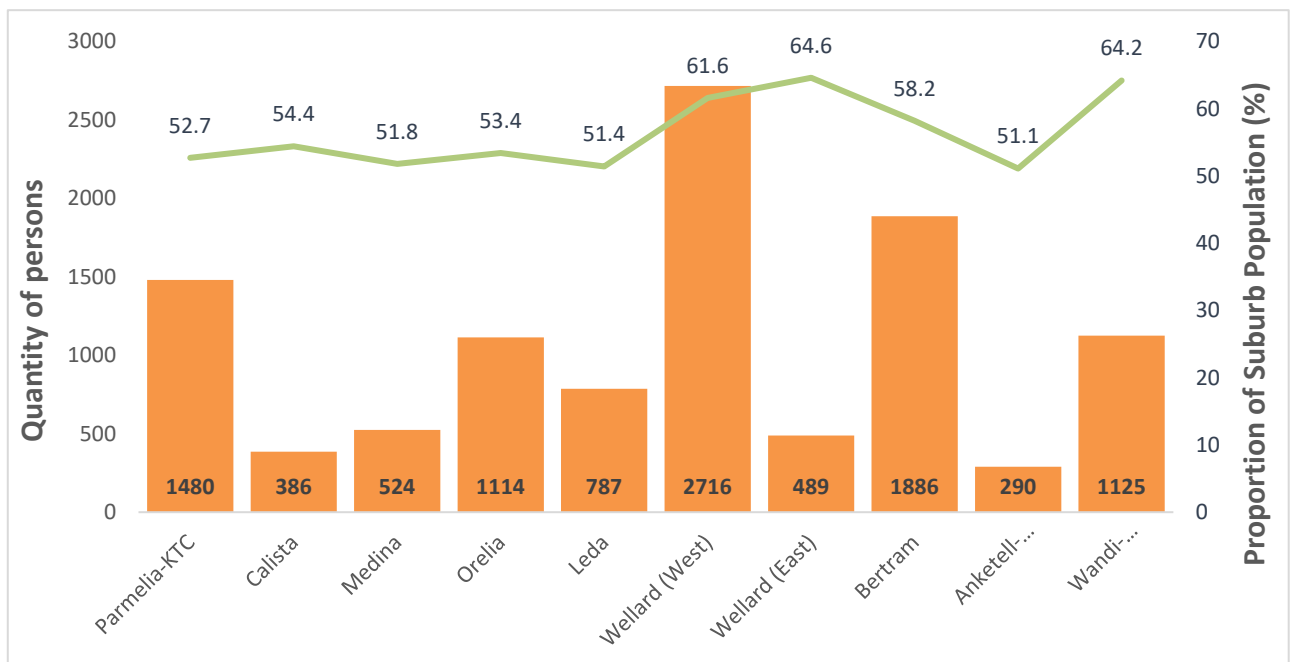


ABS Census 2016  
Source: id Consulting

While the proportion of people who are employed in the City of Kwinana is 89.2% (92.2% for WA), the suburbs with the highest proportion of employed persons are Wandl – Mandogalup with 94.3% and Anketell – Casuarina with 93.0%.

The suburbs with the lowest proportion of employed persons are Leda with 86.1% and Medina with 84.9%.

**Figure 31 City of Kwinana – Employment Status - Employed Full-time - Suburb - 2016**

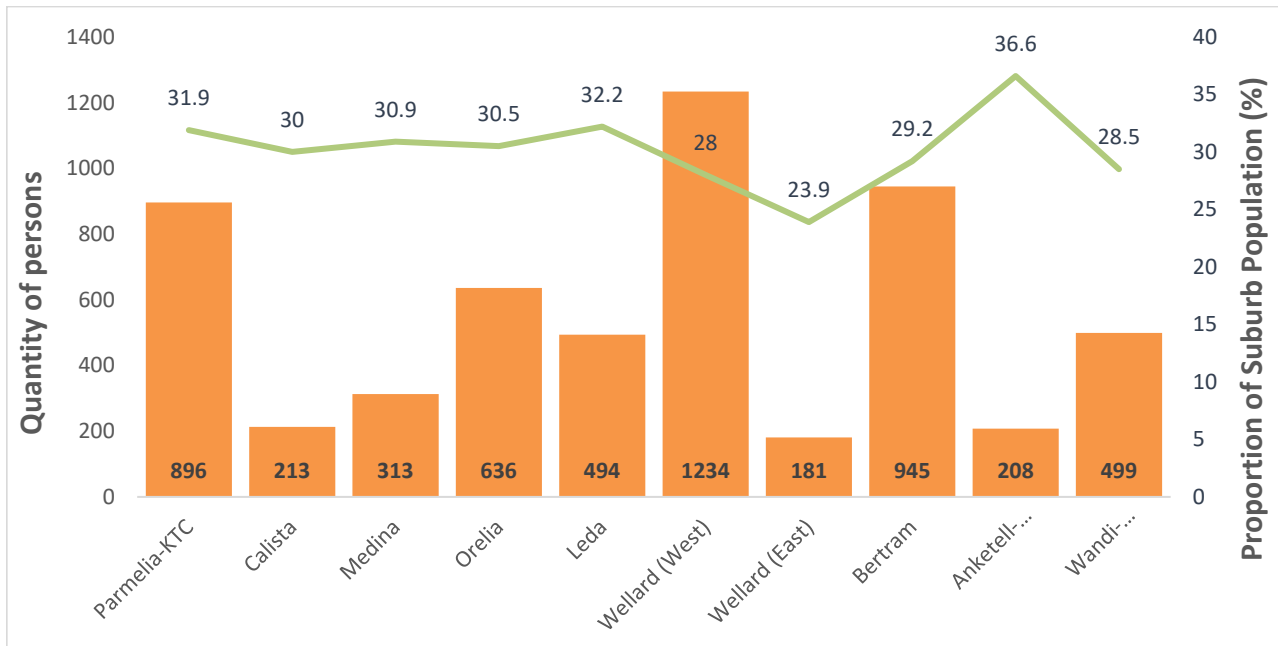


ABS Census 2016  
Source: id Consulting

While the proportion of people who are employed full-time in the City of Kwinana is 57.4% (57.0% for WA), the suburbs with the highest proportion of people employed full-time are Wellard (East) at 64.6%, Wandi – Mandogalup at 64.2%, and Wellard (West) at 61.6%.

The suburbs with the lowest proportion of people employed full time are Medina at 51.8%, Leda at 51.4%, and Anketell – Casuarina at 51.1%.

**Figure 32 City of Kwinana - Employment Status: Part time - Suburb 2016**

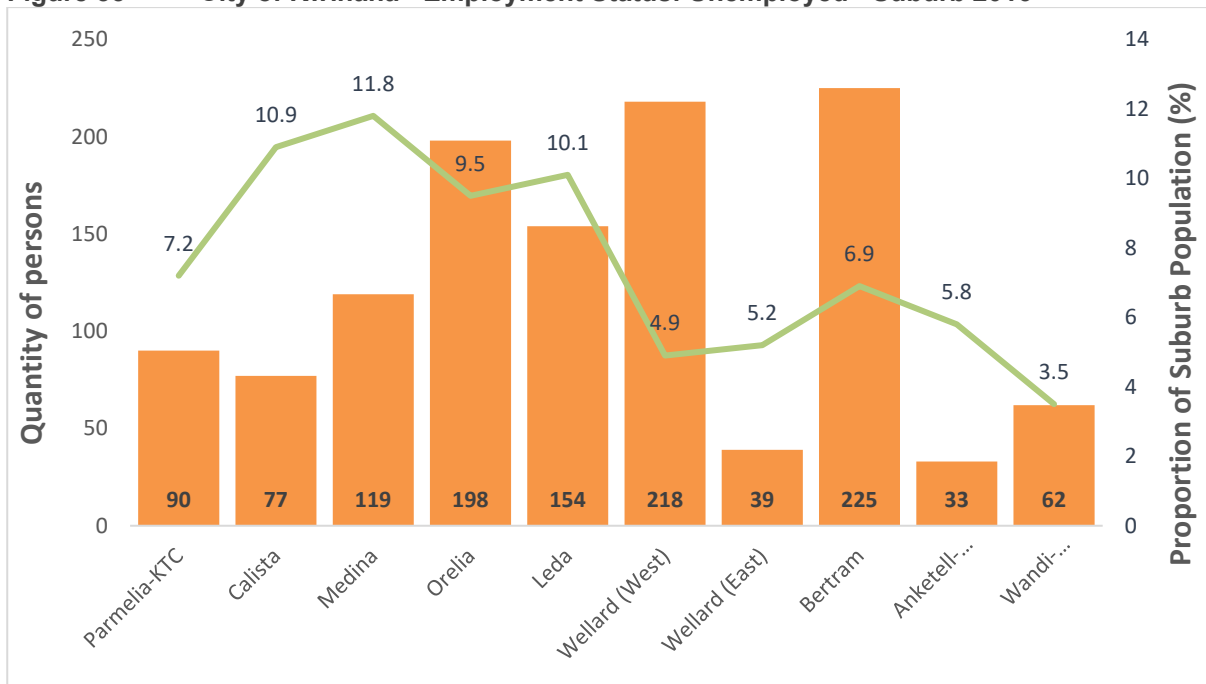


ABS Census 2016  
Source: id Consulting

While the proportion of people who are employed part-time in the City of Kwinana is 29.9% (33.6% for WA), the suburbs with the highest proportion of people employed part-time are Anketell – Casuarina at 36.6%, Leda at 32.2%, and Parmelia – Kwinana Town Centre at 31.9%.

The suburbs with the lowest proportion of people employed part-time are Wandi – Mandogalup at 28.5%, Wellard (West) at 28.0%, and Wellard (East) at 23.9%.

**Figure 33 City of Kwinana - Employment Status: Unemployed - Suburb 2016**



ABS Census 2016  
Source: id Consulting

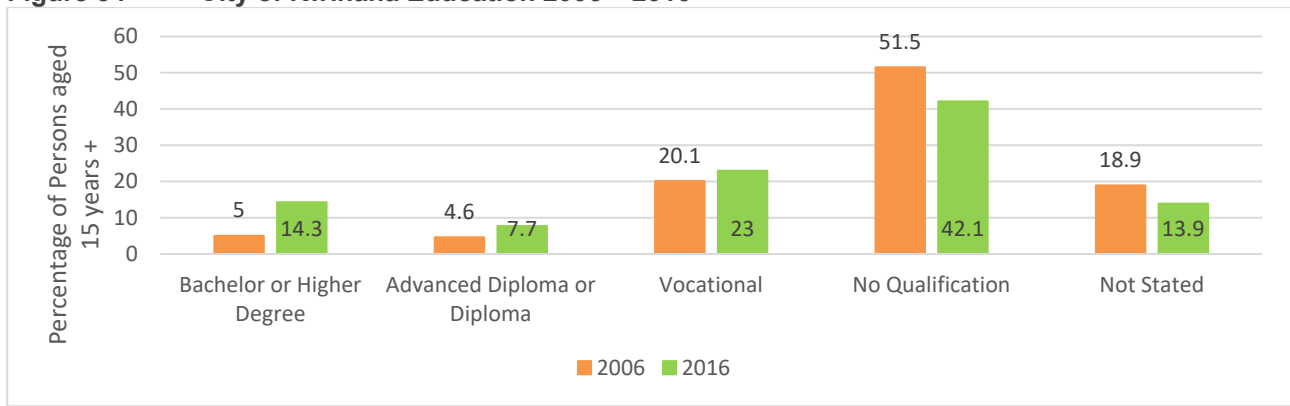
While the proportion of people who are unemployed in the City of Kwinana is 10.8% (7.8% for WA), the suburbs with the highest proportion of people who are unemployed are Medina at 15.1%, and Orelia, Leda and Calista at over 13%.

Effectively, all suburbs in the City of Kwinana have a higher unemployment rate than WA, except for Wandl – Mandogalup and Anketell – Casuarina which make up a relatively small proportion of the City of Kwinana’s population (12.8%), indicating that unemployment across the City of Kwinana has increased considerably since 2006, particularly since 2011, even in what would be considered the more affluent suburbs of the City.

## 5.8 Education

Educational Qualifications relate to education outside of primary and secondary school and are one of the most important indicators of socio-economic status. With other data sources, such as Employment Status, and Income and Occupation, the City of Kwinana's Educational Qualifications help to evaluate the economic opportunities and socio-economic status of the area, and identify skill gaps in the labour market.

**Figure 34 City of Kwinana Education 2006 – 2016**



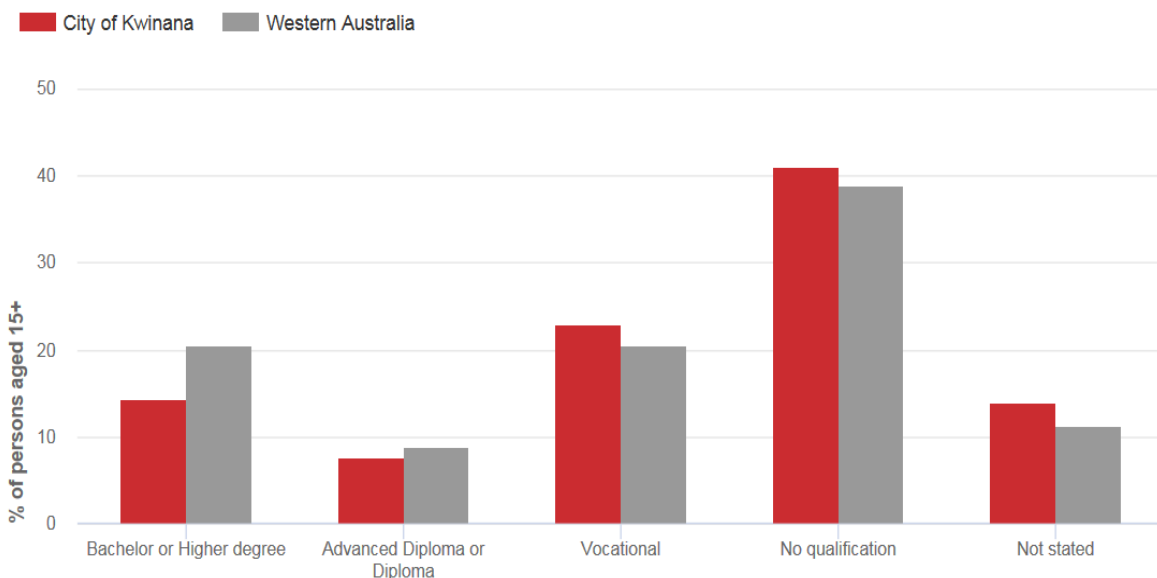
ABS Census 2006, 2011, 2016  
Source: id Consulting

Based on the 2016 ABS Census, the dominant education level in the City of Kwinana is no qualification (41.2%), followed by vocational qualification (23.0%), bachelor or higher degrees (14.3%) and advanced diploma or diploma (7.7%).

However, since 2006 there has been a 10.3% reduction in the number of people with no qualifications and an increase of 9.3% with bachelor or higher degrees, followed by an increase of 3.1% with advanced diplomas or diplomas, and an increase of 2.9% with vocational qualifications.

In comparison with WA as the following figure indicates, the City of Kwinana has a much lower proportion of people with bachelor or higher degrees and advanced diplomas or diplomas, and a higher proportion of people with vocational qualifications and no qualifications.

**Figure 35 City of Kwinana Education Levels Compared with WA 2016**



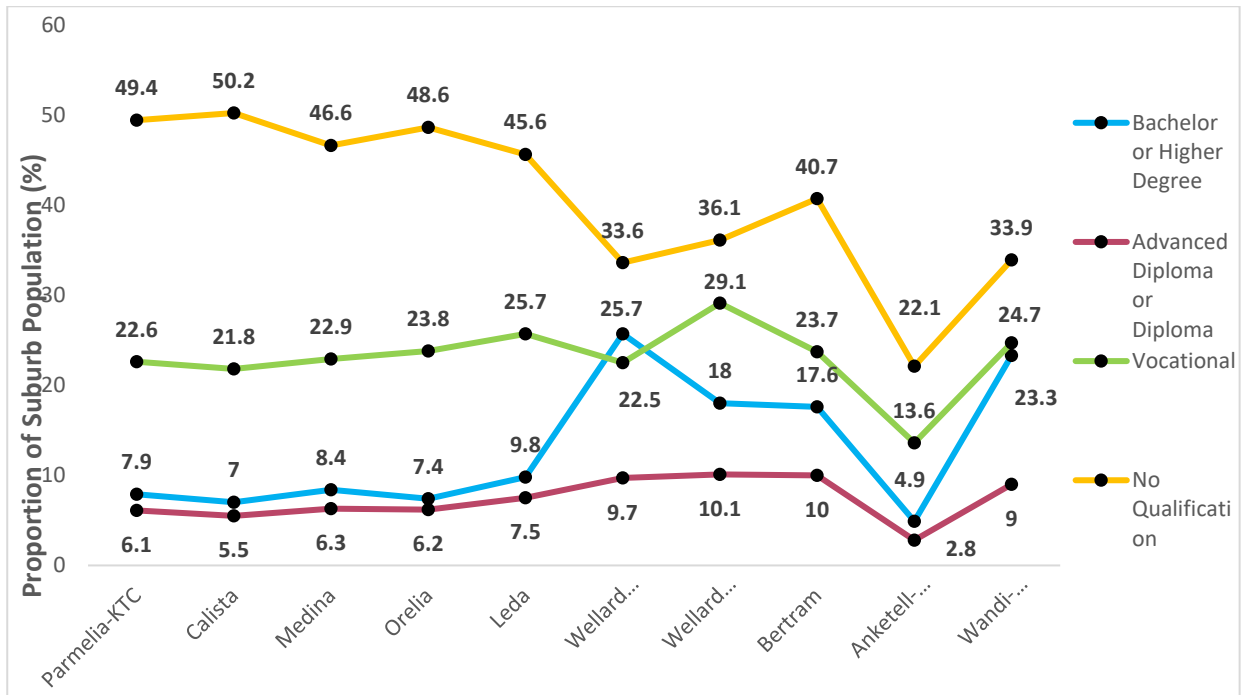
ABS Census 2016  
Source: id Consulting

## Implications

- With higher proportions of people with no qualifications, the importance of training and educational facilities and programs are highlighted.

When considering education at the suburb level, there are major differences in qualification levels across the City of Kwinana.

**Figure 36 City of Kwinana - Education Levels - Suburb 2016**



ABS Census 2016  
Source: id Consulting

### Bachelor or Higher Degrees

While the proportion of bachelor or higher degrees in the City of Kwinana is 14.3%, the suburbs with the highest proportion of Bachelor or Higher Degrees are Wellard (West) with 25.7% and Wandl – Mandalup with 23.3%.

The suburbs with the lowest proportion of Bachelor or higher degrees are Calista with 7% and Anketell-Casuarina with 4.9%.

### Advanced Diploma or Diploma

While the proportion of advanced diploma or diplomas in the City of Kwinana is 7.7%, the suburbs with the highest proportion advanced diploma or diplomas are Wellard East with 10.1% and Bertram with 10%.

The suburbs with the lowest proportion of advanced diploma or diplomas are Calista with 5.5% and Anketell – Casuarina with 2.8%.

### Vocational

While the proportion of vocational qualifications in the City of Kwinana is 23.0%, the suburbs with the highest proportion of vocational qualifications are Wellard East with 29.1% and Leda with 25.7%.

The suburbs with the lowest proportion of vocational qualifications are Calista with 21.8% and Anketell – Casuarina with 13.6%.

### No Qualification

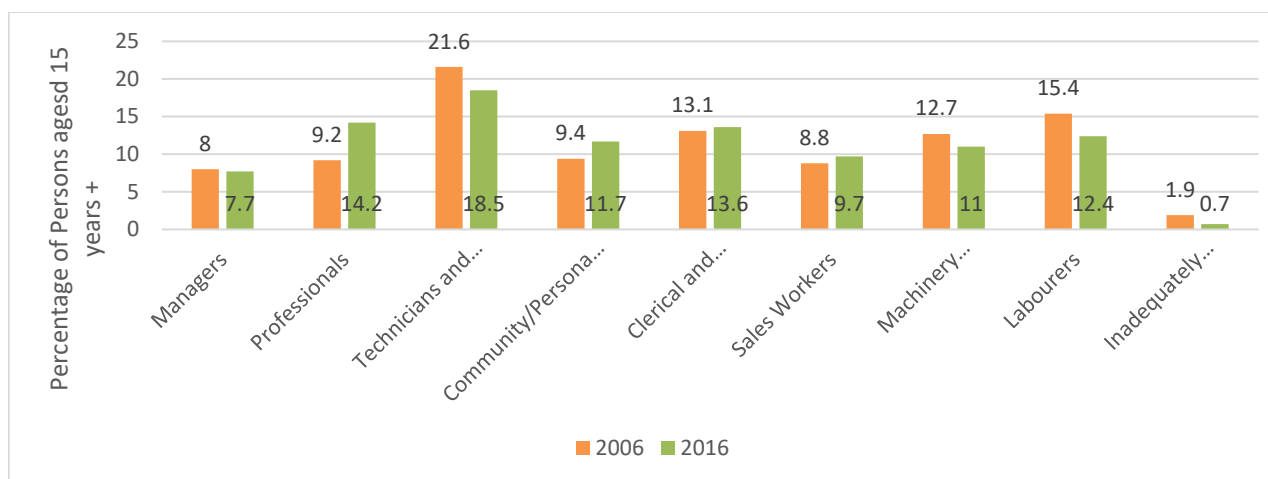
While the proportion of people with no qualifications in the City of Kwinana is 41.2%, the suburbs with the highest proportion of no qualifications are Calista with 50.2% and Parmelia – Kwinana Town Centre with 49.4%.

The suburb with the lowest proportion of no qualifications are Wellard West with 33.6% and Anketell – Casuarina with 22.1%.

## 5.9 Occupation

The City of Kwinana's occupation statistics quantify the occupations in which the residents work (which may be within the LGA or elsewhere). This will be influenced by the economic base and employment opportunities available in the area, education levels, and the working and social aspirations of the population.

**Figure 37 City of Kwinana - Occupation 2006 – 2016**



ABS Census 2016  
Source: id Consulting

Based on the 2016 ABS Census, the dominate occupations in the City of Kwinana are Technicians and Trade Workers making up 18.5% of the working population, followed by Professionals at 14.2%, Clerical and Administrative Workers at 13.6%, Labourers at 12.4%, Community/Personal Service Workers at 11.7% and Machinery Operators and Drivers at 11.0%.

Between 2006 and 2016, the most significant change in the occupations held by residents of the City of Kwinana is an increase in proportion of Professionals (6.3%), followed by Community/Personal Service Workers (2.3%) and a decrease in Technicians and Trades Workers' (-3.1%) followed by Labourers (-3.0%) and Machinery Operators and Drivers (-1.7%).

In comparison with WA, as the following figure indicates, the City of Kwinana has a much lower proportion of Professionals and Managers and a higher proportion of Machinery Operators and Drivers, Labourers and Technicians and Trade Workers.



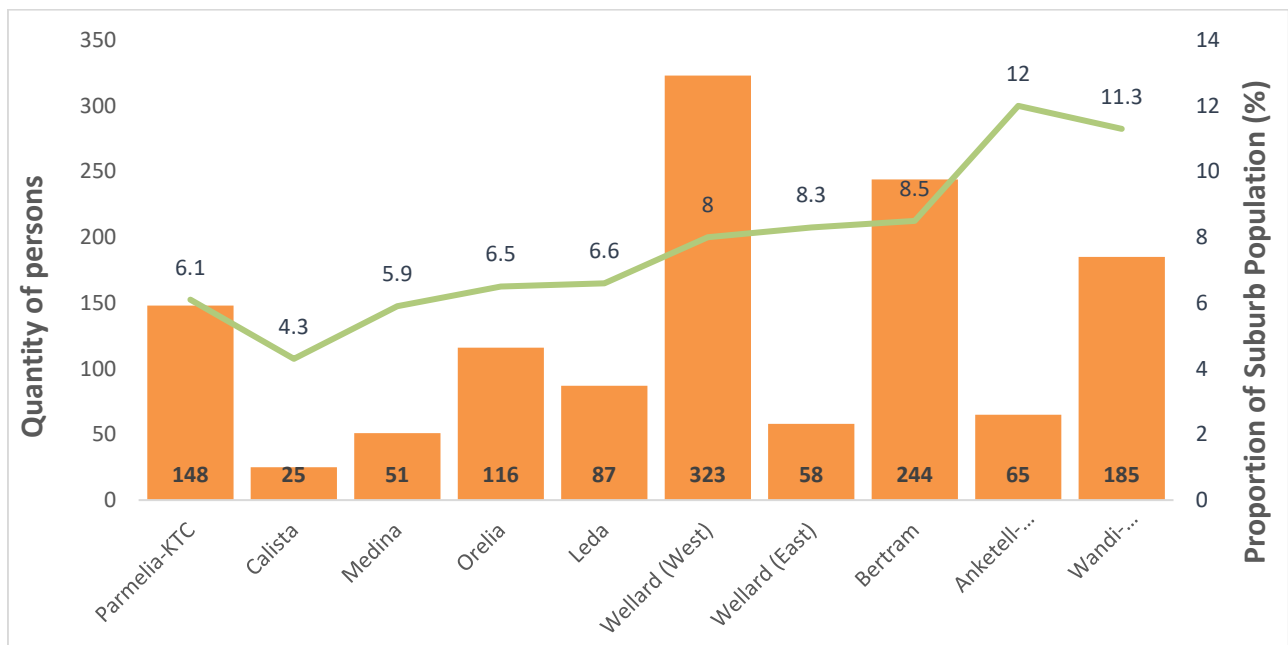
**Figure 38 City of Kwinana - Occupation Compared with WA 2016**



ABS Census 2016  
Source: id Consulting

When considering occupations at the suburb level, there are major differences in the profile of occupations.

**Figure 39 City of Kwinana - Occupation: Managers - Suburb 2016**

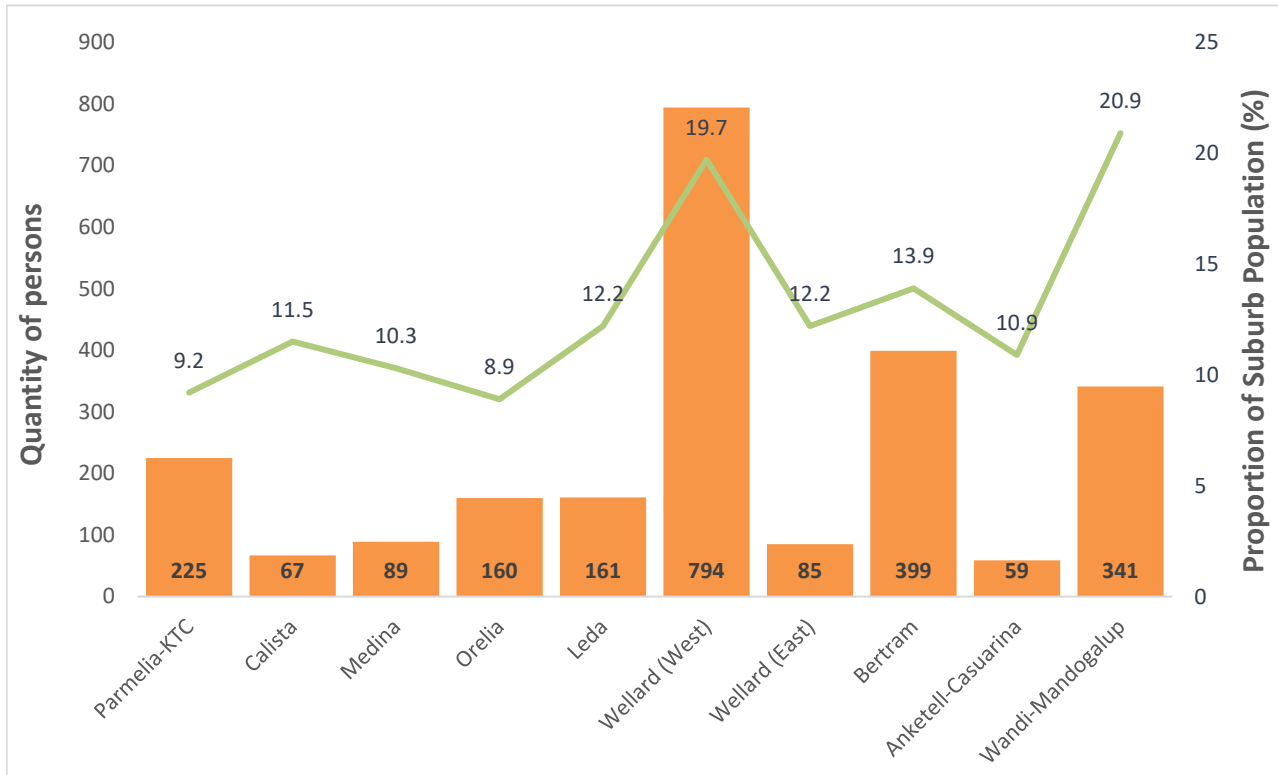


ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (323) of Managers, making up 8.8% of occupations in this suburb.
- Bertram has the second highest number (244) of Managers, making up 8.0% of occupations in this suburb.

- While the proportion of managers in the City of Kwinana is 7.7%, the suburbs with the highest proportion of Managers are Anketell – Casuarina with 12.6% and Wandl – Mandogalup with 11.3%.
- Medina and Calista have the lowest proportion of manager, at under 6% each.

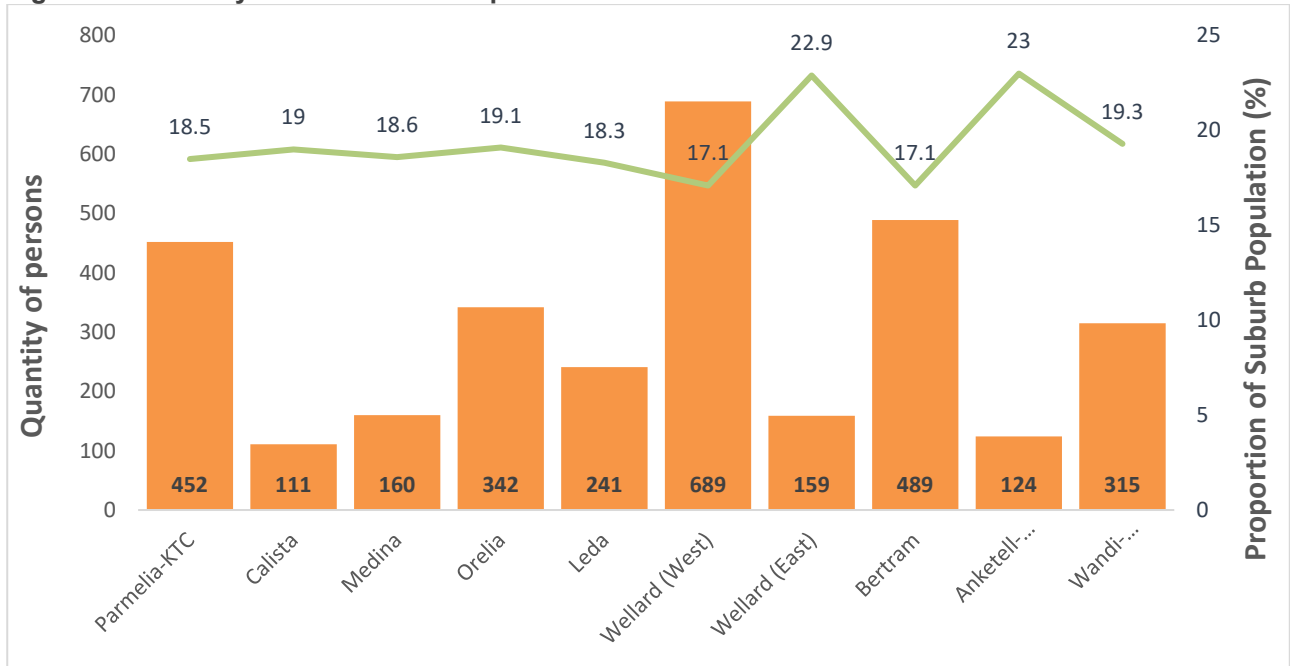
**Figure 40 City of Kwinana - Occupation: Professionals - Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (794) of Professionals making up 8.8% of occupations in this suburb.
- Bertram has the second highest number (399) of Professionals, making up 13.9% of occupations in this suburb.
- While the proportion of Professionals in the City of Kwinana is 14.2%, the suburbs with the highest proportion of Professionals are Wandl – Mandogalup with 20.9% and Wellard (West) with 19.7%.
- The suburbs with the lowest proportion of Professionals are Parmelia – Kwinana Town Centre with 9.2% and Orelia with 8.9%.

**Figure 41 City of Kwinana - Occupation - Technicians and Trade Workers - Suburb 2016**

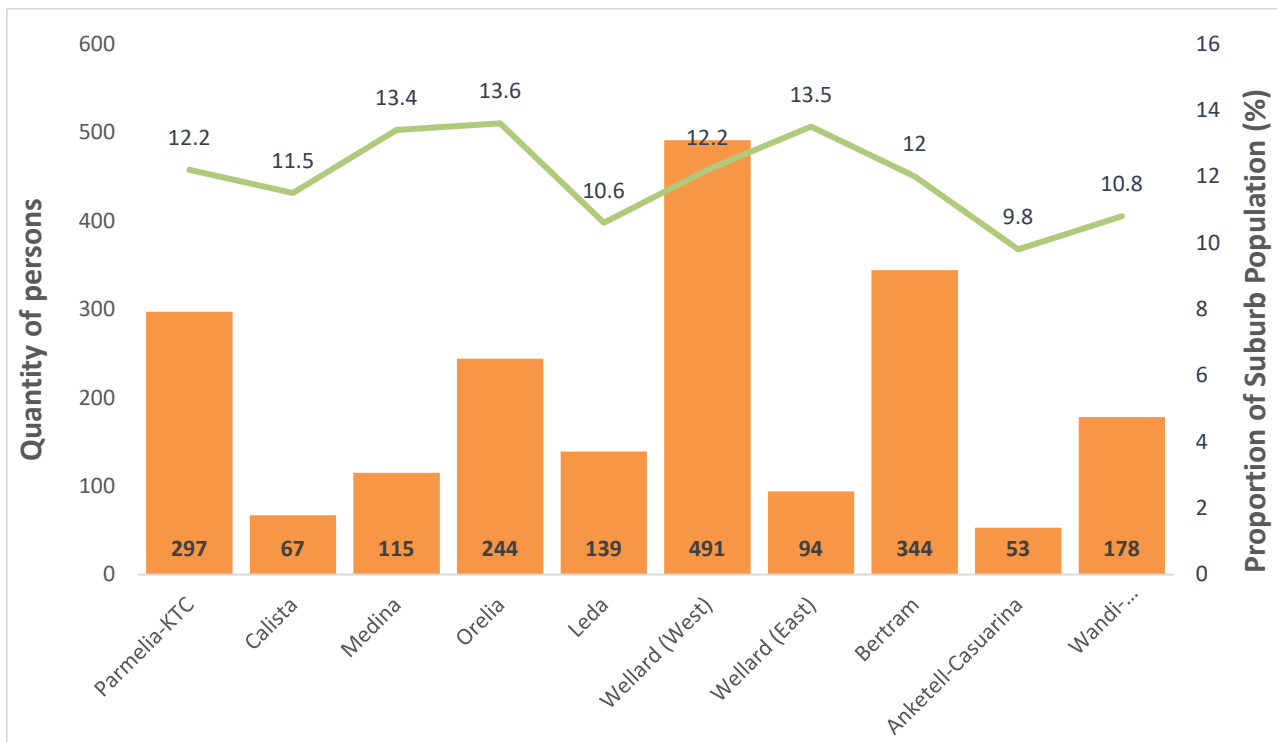


ABS Census 2016  
Source: id Consulting

While the proportion of Technicians and Trade Workers in the City of Kwinana is 18.5%, the suburbs with the highest proportion of Technicians and Trade Workers are Anketell – Casuarina with 23.0% and Wellard (East) with 22.9%.

The suburbs with the lowest proportion of Technicians and Trade Workers are Wellard (West) and Bertram, both with 17.1%.

**Figure 42 City of Kwinana - Occupation - Community/personal Service Workers - Suburb 2016**

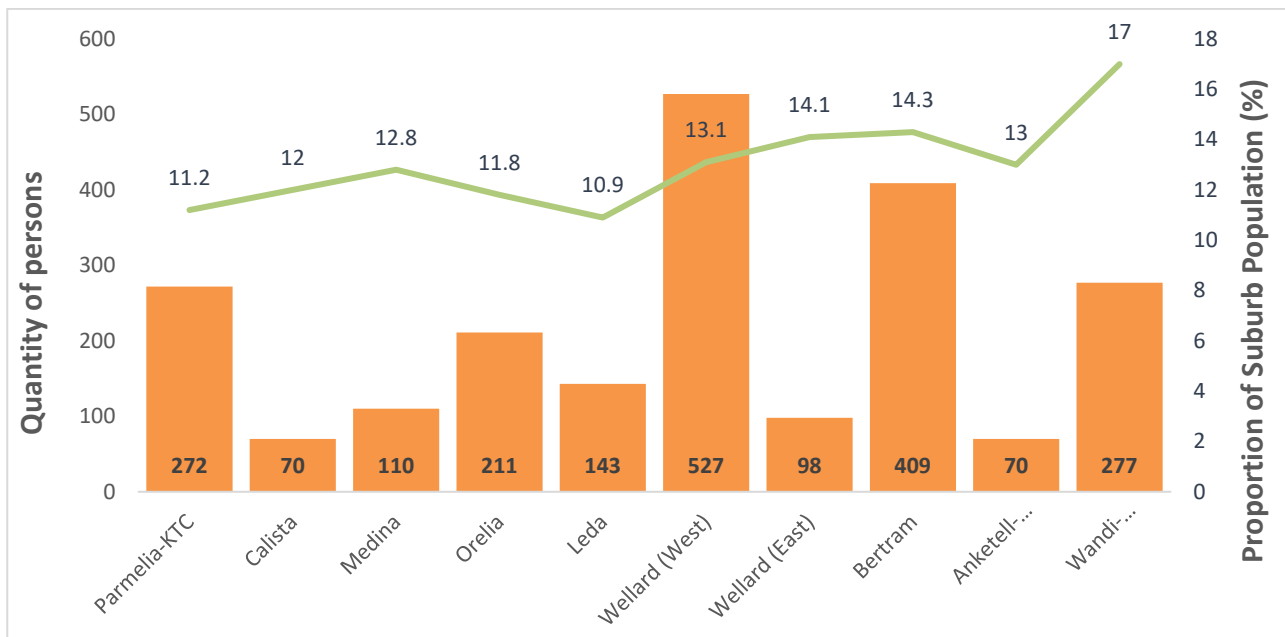


ABS Census 2016  
Source: id Consulting

While the proportion of Community/Personal Service Workers in the City of Kwinana is 11.7%, the suburbs with the highest proportion of Community/Personal Service Workers are Orelia, Wellard (East) and Medina, all with over 13%.

The suburbs with the lowest proportion of Community/personal Service Workers are Wandl – Mandogalup, Leda and Anketell – Casuarina with under 11%.

**Figure 43 City of Kwinana - Occupation: Clerical and Administrative Workers - Suburb 2016**

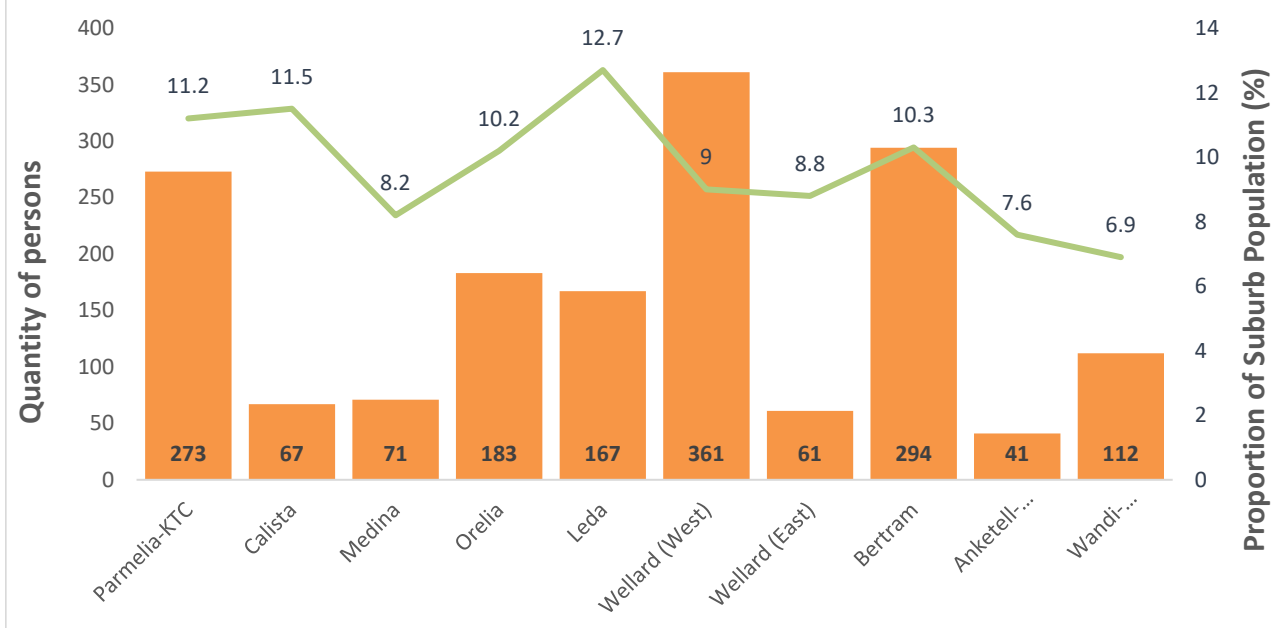


ABS Census 2016  
Source: id Consulting

While the proportion of Clerical and Administrative workers in the City of Kwinana is 13.7%, the suburbs with the highest proportion of Clerical and Administrative workers are Wandl – Mandogalup with 17.0%, Bertram with 14.3% and Wellard (East) with 14.1%.

The suburbs with the lowest proportion are Orelia with 11.8%, Parmelia – Kwinana Town Centre with 11.2%, and Leda with 10.9%.

**Figure 44 City of Kwinana - Occupation - Sales Workers - Suburb 2016**

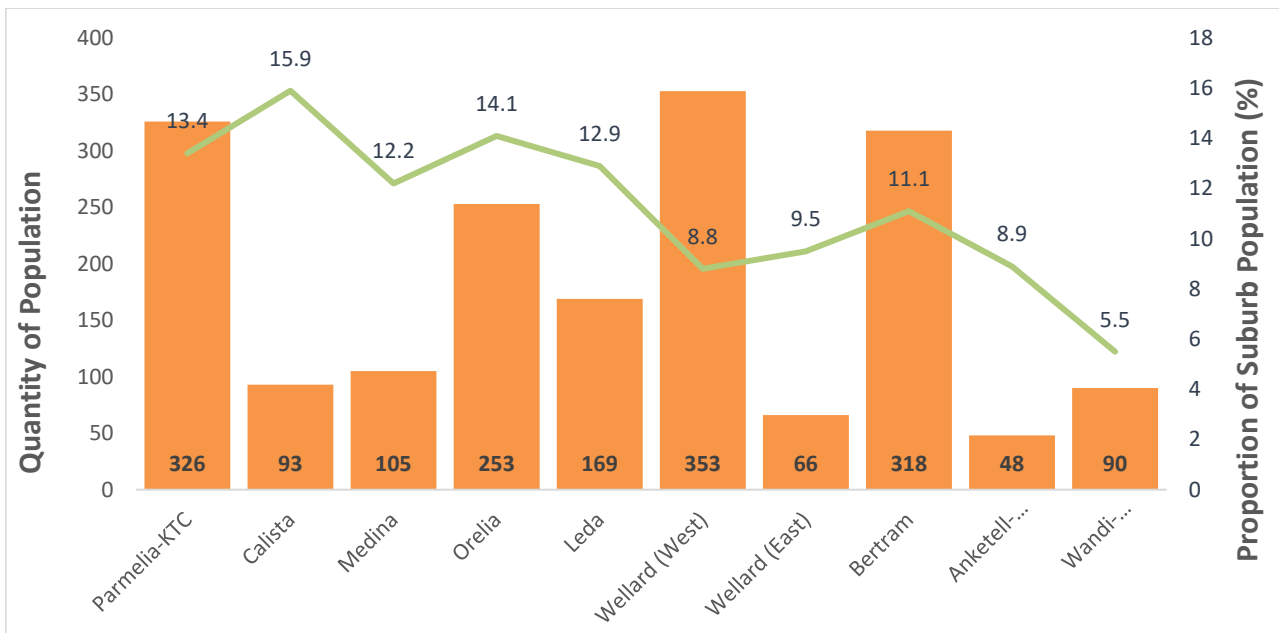


ABS Census 2016  
Source: id Consulting

While the proportion of Sales Workers in the City of Kwinana is 13.7%, the suburbs with the highest proportion of sales workers are Leda with 12.7%, Calista with 11.5% and Parmelia – Kwinana Town Centre with 11.2%.

The suburbs with the lowest proportion are Anketell – Casuarina with 7.6% and Wandl – Mandogalup with 6.9%.

**Figure 45 City of Kwinana – Occupation - Operators and Drivers - Suburb 2016**

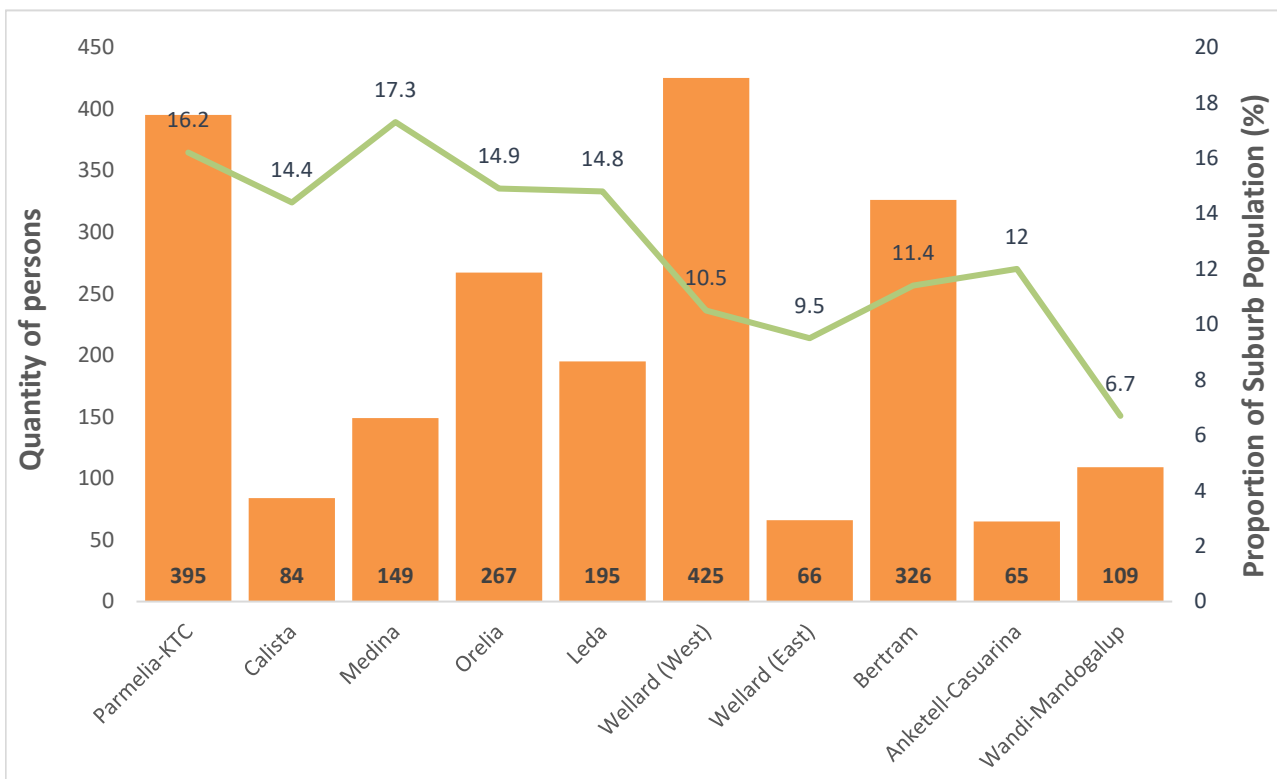


ABS Census 2016  
Source: id Consulting

While the proportion of machinery operators and drivers in the City of Kwinana is 13.7%, the suburbs with the highest proportion of machinery operators and drivers are Calista with 15.9% and Orelia with 14.1%.

The suburbs with the lowest proportion are Anketell – Casuarina, Wellard (West) and Wandi – Mandogalup, all with under 9%.

**Figure 46 City of Kwinana Occupation: Labourers - Suburb 2016**



ABS Census 2016  
Source: id Consulting

While the proportion of labourers in the City of Kwinana is 13.7%, the suburbs with the highest proportion of labourers are Medina with 17.3% and Parmelia – Kwinana Town Centre with 16.2%.

The suburbs with the lowest proportion are Wellard (East) and Wandi – Mandogalup, both with under 10%.

### 5.10 Income

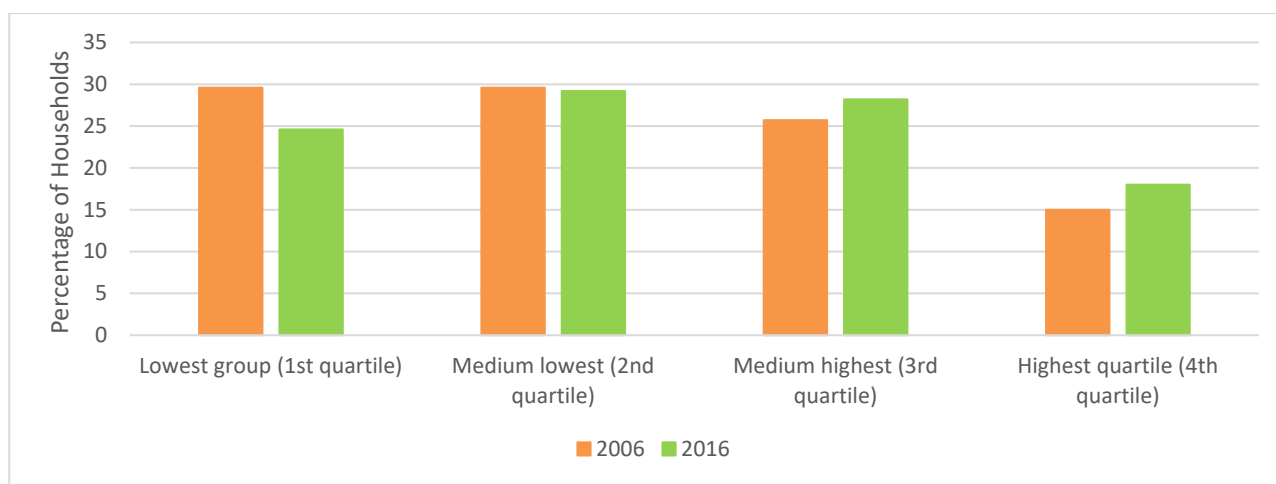
Given household income levels are less comparable over longer timeframes due to the influences of economic change, such as wage level fluctuations and inflation, the income quartile method is an objective way of comparing income levels over time. The household income ranges that apply to the 2016, 2011 and 2006 Census are highlighted below.

**Table 2 Household Income Ranges 2006 – 2016**

Household Income Ranges - Weekly	2016	2011	2006
Lowest group	\$0 - \$790	\$0 - \$693	\$0 - \$565
Medium lowest	\$791 - \$1,582	\$694 - \$1,405	\$566 - \$1,062
Medium highest	\$1,583 - \$2,614	\$1,406 - \$2,507	\$1,063 - \$1,774
Highest group	\$2,615 +	\$2,508 +	\$1,775 +

ABS Census 2006, 2011, 2016  
Source: id Consulting

**Figure 47 City of Kwinana - Household Income Ranges 2006 – 2016**



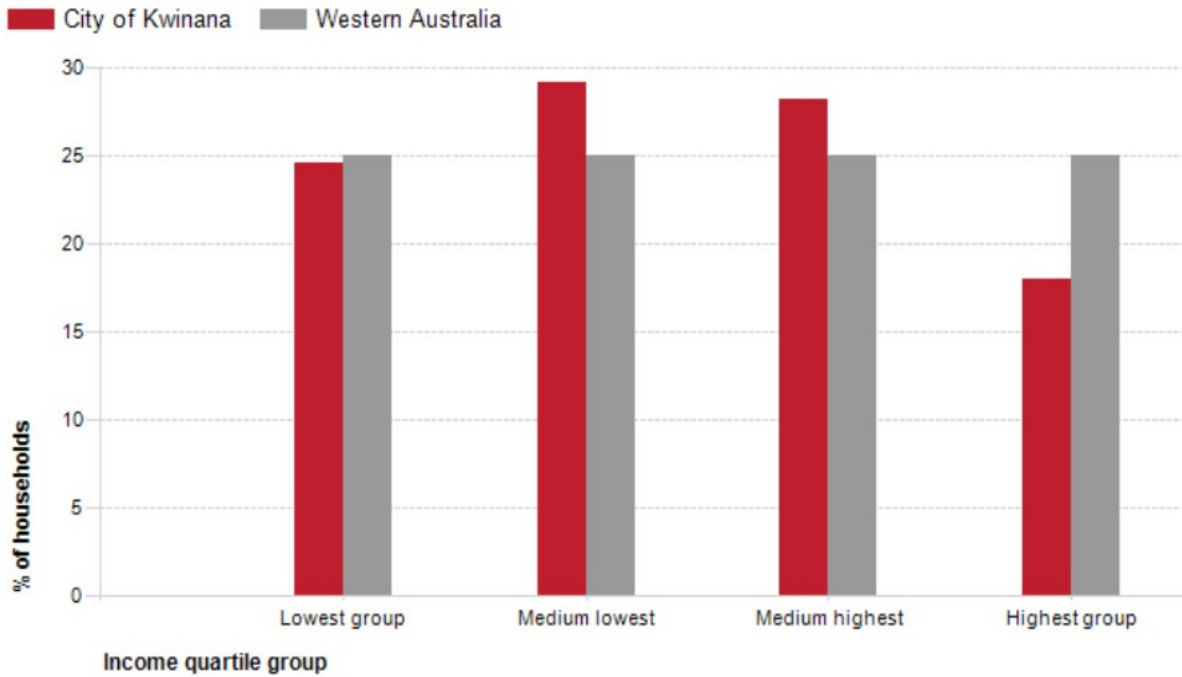
ABS Census 2006, 2011, 2016  
Source: id Consulting

In 2016, the number of households in the medium highest and highest group in the City of Kwinana was 46.2%, compared to 40.7% in 2006, indicating that there has been an increase in higher income households of 5.5% in the last ten years

At the same time, the number of households in the lowest income and medium lowest group has declined from almost 60% in 2006 to 53.8% in 2016. However, in comparison with WA, the City of Kwinana still has a much higher proportion of lower income households.

In comparison with WA, as the following figure indicates, the City of Kwinana has a much lower proportion of high income households compared to WA.

**Figure 48 City of Kwinana - Household Income Compared with WA 2016**



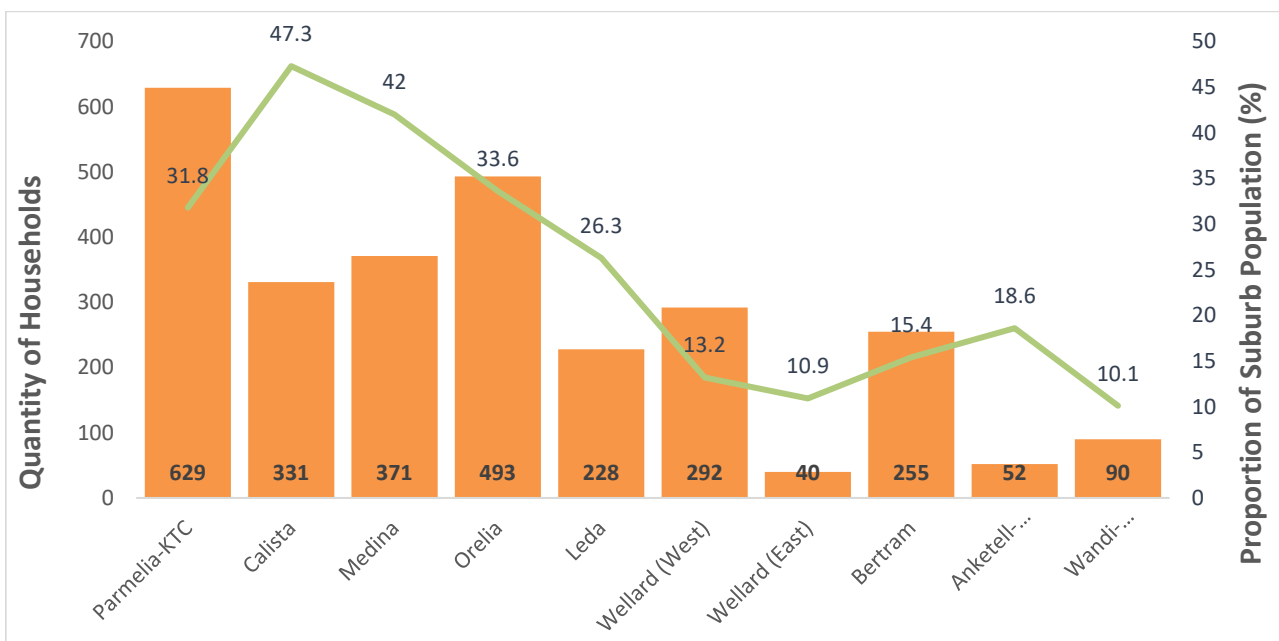
ABS Census 2016  
Source: id Consulting

**Implications**

- People with in areas with higher incomes generally have a greater opportunity to participate in sport, recreational and cultural opportunities than people in areas with lower incomes, highlighting the importance of low cost and free opportunities in those areas.

Household income varies considerably across the suburbs that make up the City of Kwinana, as the following data and analysis reveals.

**Figure 49 City of Kwinana - Household Income Quartiles: Lowest – Suburb 2016**

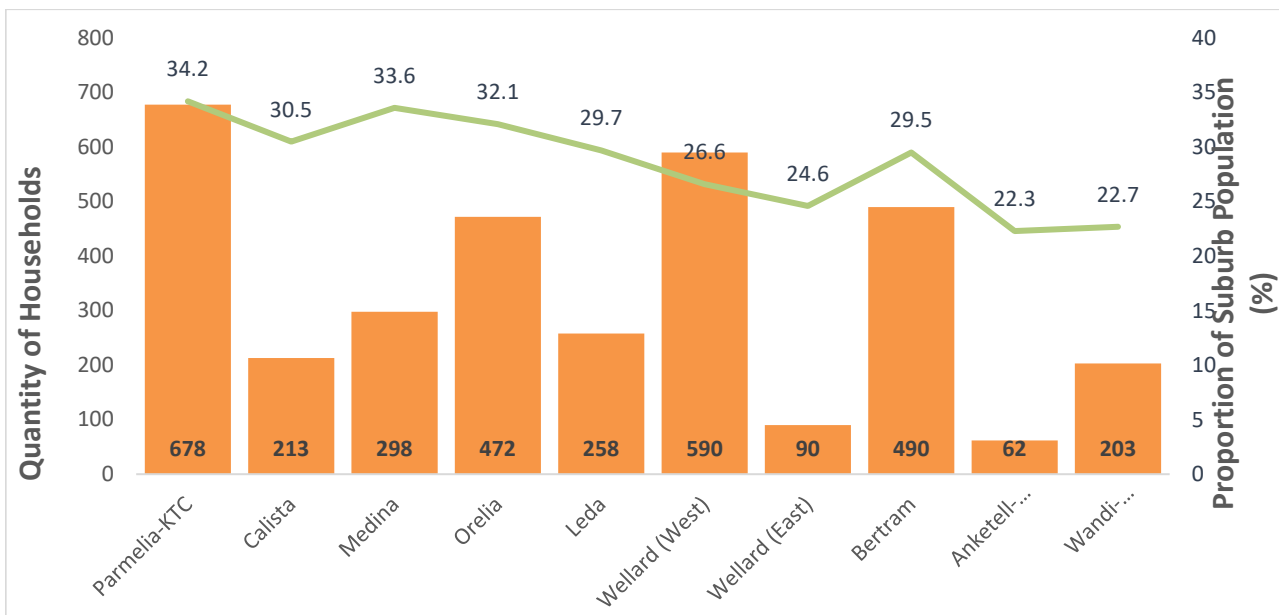


ABS Census 2016  
Source: id Consulting



- Parmelia – Kwinana Town Centre has the highest number (629) of households in the Lowest Income Quartile, making up 31.8% of households in this suburb.
- Orelia has the second highest number (493) of households in the Lowest Income Quartile, making up 33.6% of households in this suburb.
- While the proportion of households in Lowest Income Quartile in the City of Kwinana is 24.6%, the suburbs with the highest proportion of households in Lowest Income Quartile are Calista with 47.3%, Medina with 42.0% and Orelia with 33.6%.
- The suburbs with the lowest proportion of households in the Lowest Income Quartile are Wandī – Mandogalup with 10.1% and Wellard (East) with 10.9%.

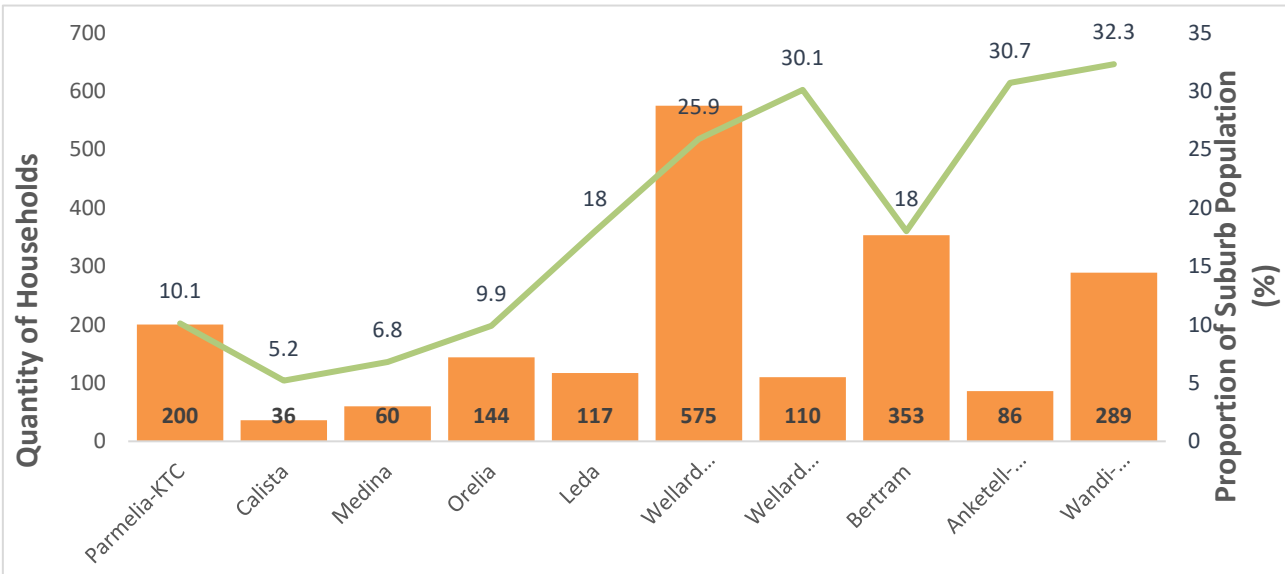
**Figure 50 City of Kwinana - Household Income Quartiles: Medium Lowest – Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Parmelia – Kwinana Town Centre has the highest number (678) of households in the Medium Lowest Income Quartile, making up 34.2% of households in this suburb.
- Wellard (West) has the second highest number (590) of households in the Medium Lowest Income Quartile, making up 26.6% of households in this suburb.
- While the proportion of households in Medium Lowest Income Quartile in the City of Kwinana is 29.2%, the suburbs with the highest proportion of households in Medium Lowest Income Quartile are Parmelia – Kwinana Town Centre with 34.2% and Medina with 33.6%.
- The suburbs with the lowest proportion of households in Medium Lowest Income Quartile are Anketell – Casuarina with 22.3% and Wandī – Mandogalup with 22.7%.

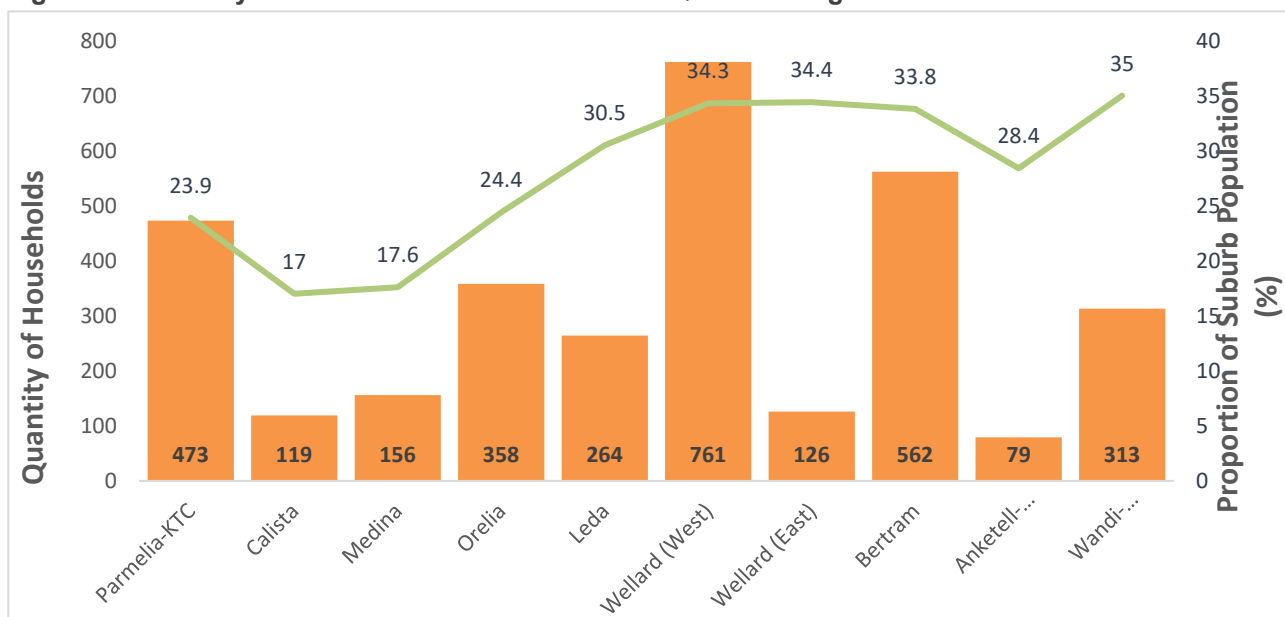
**Figure 51 City of Kwinana - Household Income Quartiles: Medium Highest – Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (761) of households in the Medium Highest Income Quartile, making up 34.3% of households in this suburb.
- Bertram has the second highest number (562) of households in the Medium Highest Income Quartile, making up 33.8% of households in this suburb.
- While the proportion of households in Medium Highest Income Quartile in the City of Kwinana is 28.2%, the suburbs with the highest proportion of households in Medium Highest Income Quartile are Wandl – Mandogalup with 35.0%, Wellard (East) with 34.4% and Wellard (West) with 34.3%.
- The suburbs with the lowest proportion of households in Medium Highest Income Quartile are Medina with 17.6% and Calista with 17.0%.

**Figure 52 City of Kwinana - Household Income Quartiles: Highest – Suburb 2016**



ABS Census 2016  
Source: id Consulting

- Wellard (West) has the highest number (575) of households in the Highest Income Quartile, making up 25.9% of households in this suburb.
- Bertram has the second highest number (353) of households in the Highest Income Quartile, making up 18.0% of households in this suburb.
- While the proportion of households in Highest Income Quartile in the City of Kwinana is 18.0%, the suburbs with the highest proportion of households in Highest Income Quartile are Wandi – Mandogalup with 32.3%, Anketell – Casuarina with 30.7% and Wellard (East) with 30.1%.
- The suburbs with the lowest proportion of households in Highest Income Quartile are Medina 6.8% and Calista 5.2%.

### **5.11 Socio – Economic Disadvantage**

The SEIFA Index of Disadvantage measures the relative level of socio-economic disadvantage based on a range of Census characteristics. The index is derived from attributes that reflect disadvantage such as low income, low educational attainment, high unemployment, and jobs in relatively unskilled occupations. A higher score on the index means a lower level of disadvantage. A lower score on the index means a higher level of disadvantage.

The City of Kwinana’s SEIFA Index of Disadvantage score is 972, making it the most disadvantaged LGA in the metropolitan area, with a higher level of disadvantage than WA and Australia.

At a suburb level, Medina has the highest level of disadvantage followed by Calista, Orelia, Parmelia and Leda, all falling below the average for the City of Kwinana. The only suburbs with a lower level of disadvantage than Perth and WA are Anketell – Casuarina, Wellard (West and East) and Wandi – Mandogalup. Although Bertram has a lower level of disadvantage than the City of Kwinana as a whole, the level of disadvantage in Bertram is higher than for Perth and WA.

While the SEIFA scores are not comparable across Census years because the components of the indices change, the ranking of suburbs can be used and this indicates that the level of disadvantage has improved in Parmelia – Town Centre, and declined in Bertram.

**Table 3 City of Kwinana - Socio – Economic Disadvantage - Suburbs 2016**

Relative Socio-Economic Disadvantage	2016
Medina	851
Calista	879
Orelia	901
Parmelia - Kwinana Town Centre	917
Leda	933
<b>City of Kwinana</b>	<b>972</b>
<b>Australia</b>	<b>1,002</b>
Bertram	1,005
<b>Western Australia</b>	<b>1,015</b>
<b>Greater Perth</b>	<b>1,026</b>
Anketell - Casuarina	1,029
Wellard (West)	1,044
Wellard (East)	1,058
Wandi - Mandogalup	1,087

ABS Census 2016

Source: id Consulting

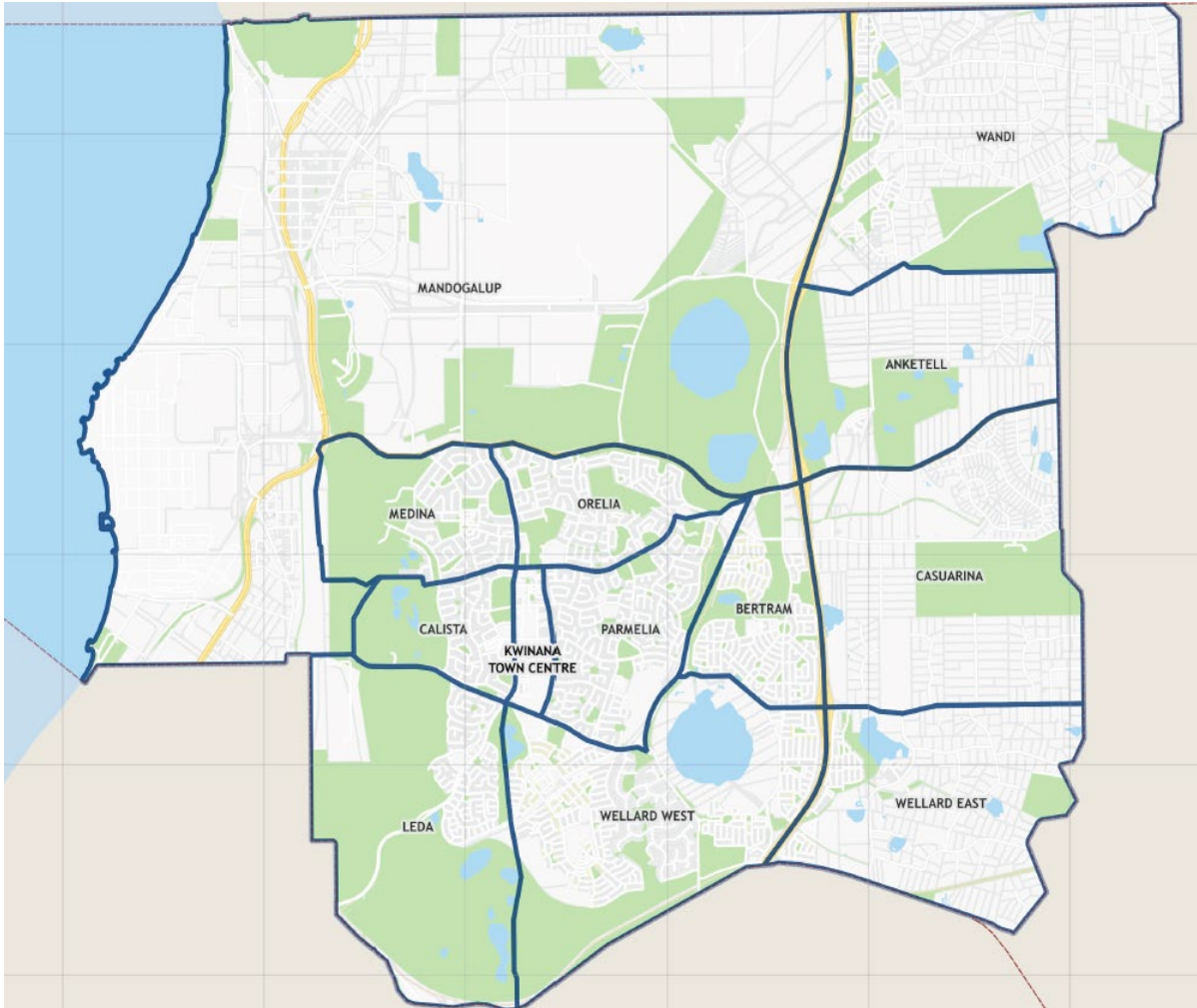
- The level of socio-economic disadvantage has a major impact on the level of participation in sporting and recreational facilities and community and cultural programs.
- While areas of lower socio-economic disadvantage are likely to have a higher need for community facilities and services, usage and participation rates are lower in these areas and higher in more affluent areas. This highlights the importance of low cost and free opportunities.
- Areas of high socio-economic disadvantage also have a higher reliance on government and non-government services, which are often provided in community facilities. This highlights the importance of community facilities in these areas, particularly those that are free, such as parks.
- Areas of high socio-economic disadvantage also have lower levels of car ownership, highlighting the importance of public transport and easily accessible community facilities.

### 5.12 Population Growth

The City of Kwinana’s population projections, discussed below, are produced by *id consulting*®, and are based on the whole area of the City of Kwinana. However, it should be noted that the population projections prepared for the CIP are based on the Development Contribution Areas to comply with the State Planning Policy 3.6 Developer Contributions for Infrastructure and as such do not include the areas within the City of Kwinana that are not zoned for urban development. Therefore, there is some discrepancy between the population projections shown below, and the CIP population projections shown in Section 9, although this is relatively small.

While the timing of development has been estimated, residential development depends on many factors such as interest rates, availability of finance, availability of land, and government spending. Both small and large changes in economic conditions, such as the Global Financial Crisis, can affect the pace of development and therefore population growth. Hence, the population projections will be reviewed on a regular basis.

**Figure 56** City of Kwinana - Area Population Projections Map



**Table 4 City of Kwinana - Population Projections – Small Areas 2016 – 2036**

Small Areas	2016		2021		2026		2031		2036		Change	
	persons	dwellings	persons	dwellings	persons	dwellings	persons	dwellings	persons	dwellings	persons	dwellings
Kwinana Town Centre	255	155	1,515	490	2,929	972	3,463	1,167	3,530	1,216	3,275	1,061
Parmelia	6,166	2,586	6,877	2,859	7,862	3,235	8,022	3,284	8,106	3,312	1,940	726
Calista	2,042	956	2,199	1,002	2,267	1,025	2,307	1,045	2,327	1,062	285	106
Medina	2,431	1,219	2,508	1,248	2,587	1,271	2,654	1,290	2,716	1,308	285	89
Oreila	4,817	2,077	5,036	2,164	5,626	2,397	6,175	2,608	6,640	2,805	1,823	728
Leda	3,373	1,192	3,332	1,197	3,287	1,202	3,403	1,250	3,416	1,263	43	71
Wellard (West)	8,094	3,025	13,207	4,876	16,594	6,157	17,660	6,596	17,602	6,637	9,508	3,612
Wellard (East)	1,400	497	3,019	1,040	4,364	1,490	5,002	1,720	4,978	1,739	3,578	1,242
Bertram	6,475	2,177	6,483	2,245	6,748	2,405	6,720	2,452	6,620	2,452	145	275
Anketell	261	93	1,101	313	2,263	623	5,786	1,558	6,219	1,712	5,958	1,619
Casuarina	1,826	277	1,455	277	1,519	317	4,877	1,297	9,117	2,545	7,291	2,268
Wandi	3,004	1,155	4,854	1,735	5,676	2,012	6,461	2,307	6,796	2,459	3,792	1,304
Mandogalup	161	71	161	75	1,181	418	2,740	956	7,091	2,479	6,930	2,408
<b>City of Kwinana</b>	<b>40,305</b>	<b>15,480</b>	<b>51,747</b>	<b>19,521</b>	<b>62,903</b>	<b>23,524</b>	<b>75,270</b>	<b>27,530</b>	<b>85,158</b>	<b>30,989</b>	<b>44,853</b>	<b>15,509</b>

Source: id Consulting – Forecasts

Based on *id consulting*®'s most recent population forecasts prepared in December 2017, there is expected to be an increase of 44,853 new residents and 15,509 new dwellings from 2016 to 2036. This represents an average annual increase of 2,242 new residents, or almost 800 dwellings each year and a doubling of the population and dwellings over the next 20 years.

This will be mainly as a result of significant new residential development in areas along the railway to Mandurah, including Wellard, Casuarina, Anketell, Mandogalup and Wandi. This residential development is expected to attract large numbers of young families with children.

The areas that will increase in population and dwellings the most over the next 20 years are Wellard (West) with 9,508 new residents and 3,612 new dwellings, followed by Casuarina with 7,291 new residents and 2,568 new dwellings, then Mandogalup with 6,903 new residents and 2,408 new dwellings and Anketell with 5,958 additional residents and 1,619 new dwellings.

Wandi will have the next biggest increase with 3,792 new residents and 1,304 new dwellings, followed by the Kwinana Town Centre with 3,275 new residents and 1,061 new dwellings.

The areas that will grow the least over the next 20 years are Leda, followed by Bertram, Calista, and Medina.

### 5.12.1 Population Growth 2016 to 2021

Between 2016 and 2021, the population of the City of Kwinana is expected to increase by 11,442 people, or an average of 2,288 per year, which would equate to 808 dwellings per year for this period.

The areas that are going to grow the most from 2016 to 2021 are Wellard (West), followed by Wandi, Wellard (East), Kwinana Town Centre and Anketell. This reflects the development fronts and the urban infill that will occur from 2016 to 2021.

**Table 5 City of Kwinana - Population Projection – Small Areas 2016 – 2021**

Small Areas	2016 - 2021	
	persons	dwellings
Wellard (West)	5,113	1,851
Wandi	1,850	580
Wellard (East)	1,619	543
Kwinana Town Centre	1,260	335
Anketell	840	220
Parmelia	711	273
Orelia	219	87
Calista	157	46
Medina	77	29
Bertram	8	68
Mandogalup	0	4
Leda	-41	5
Casuarina	-371	0
<b>City of Kwinana</b>	<b>11,442</b>	<b>4,041</b>

Source: id Consulting – Forecasts

### 5.12.2 Population Growth 2021 to 2026

From 2021 to 2026 the population of the City of Kwinana is expected to increase by 11,156, with 4,003 new dwellings, or an average of 2,231 people and 800 dwellings per year.

The areas that are going to grow the most from 2021 to 2026 are Wellard (West), followed by Kwinana Town Centre, Wellard (East), Anketell and Mandogalup. This reflects the development fronts and the urban infill that will occur from 2021 to 2026.

**Table 6 City of Kwinana Population Projections – Small Areas 2021 – 2026**

Small Areas	2021 - 2026	
	persons	dwellings
Wellard (West)	3,387	1,281
Kwinana Town Centre	1,414	482
Wellard (East)	1,345	450
Anketell	1,162	310
Mandogalup	1,020	343
Parmelia	985	376
Wandi	822	277
Oreila	590	233
Bertram	265	160
Medina	79	23
Calista	68	23
Casuarina	64	40
Leda	-45	5
<b>City of Kwinana</b>	<b>11,156</b>	<b>4,003</b>

Source: id Consulting – Forecasts

### 5.12.3 Population Growth 2026 to 2031

Between 2026 and 2031 the population of the City of Kwinana is expected to increase by 12,367 people with 4,006 new dwellings, or an average of 2,473 people and 801 dwellings per year.

The areas that are going to grow the most from 2026 to 2031 are Casuarina, followed by Anketell, Mandogalup, Wellard (West), Wandi, Wellard (East), Orelia and the Kwinana Town Centre. This reflects the development fronts and the urban infill that will occur from 2026 to 2031.

**Table 7 City of Kwinana - Population Projections – Small Areas 2026 – 2031**

Small Areas	2026 - 2031	
	persons	dwellings
Casuarina	3,358	980
Anketell	3,523	935
Mandogalup	1,559	538
Wellard (West)	1,066	439
Wandi	785	295
Wellard (East)	638	230
Orelia	549	211
Kwinana Town Centre	534	195
Parmelia	160	49
Leda	116	48
Medina	67	19
Calista	40	20
Bertram	-28	47
<b>City of Kwinana</b>	<b>12,367</b>	<b>4,006</b>

Source: id Consulting – Forecasts



#### 5.12.4 Population Growth 2031 to 2036

From 2031 to 2036 the population of the City of Kwinana is expected to increase by 9,888 people with 3,459 new dwellings, or an average of 1,978 people and 692 dwellings per year. The areas that are going to grow the most from 2031 to 2036 are Mandogalup, followed by Casuarina.

**Table 8 Population Projections – Small Areas 2031 – 2036**

Small Areas	2031 - 2036	
	persons	dwellings
Mandogalup	4,351	1,523
Casuarina	4,240	1,248
Orelia	465	197
Anketell	433	154
Wandi	335	152
Parmelia	84	28
Kwinana Town Centre	67	49
Medina	62	18
Calista	20	17
Leda	13	13
Wellard (East)	-24	19
Wellard (West)	-58	41
Bertram	-100	0
<b>City of Kwinana</b>	<b>9,888</b>	<b>3,459</b>

Source: id Consulting - Forecasts

## **6. Community Needs Assessment**

The City of Kwinana has a long established and experienced role in community needs assessment and the planning of community facilities, services and programs. It first completed a comprehensive Community Needs Assessment in 1994.

Since that time, the City of Kwinana has maintained an ongoing commitment to understanding community needs and priorities, having now completed a wide range of studies involving extensive community needs assessment and stakeholder and public engagement. These key studies form part of the community needs assessment for the Community Infrastructure Plan and included:

- Strategic Community Infrastructure Study (2004);
- Community Infrastructure Study - Jandakot Structure Plan (2004);
- Kwinana Youth Facility Feasibility Study (2008);
- Community Resource and Knowledge Centre Feasibility Study (2009);
- Parks and Playground Strategy (2008);
- Parks for People: Public Open Space Upgrade Strategy (2013); and
- Community Wellbeing Scorecard (2016)

This proactive role in community planning ensures that the City of Kwinana has an accurate picture of community needs and a good understanding of the capacity of existing facilities and services to meet current and future demand, as the population grows and changes over time.

### **6.1 Key Findings and Outcomes**

The key findings and identified needs and gaps to emerge from each of the above studies are summarised in the Community Needs Assessment Overview (Appendix 2) and has informed the Supply and Demand Analysis and the development of this Community Infrastructure Plan 2011 - 2031.

### **6.2 Strategic Infrastructure Projects**

A number of key strategic projects which are of high priority are outlined below and incorporated in the Community Infrastructure Plan.

#### **6.2.1 *Darius Wells Library and Community Resource Centre***

The development of a sub-regional community facility incorporating a library, community centre and office accommodation for community service providers and organisations, was identified as a priority community need. This facility is required to meet the needs of the existing population, as well as the significant demand that will be generated from new residential development. The building has been constructed and is operational.



**Darius Wells Library and Resource Centre (Community and Knowledge Centre)**

### **6.2.2 Sub-Regional Sporting Ground - Thomas Oval/Kelly Park**

The establishment of a sub-regional sporting ground with capacity to cater for large sporting clubs and a higher standard of competition was identified as a priority community need. The existing population has reached a point where a considerable demand for this standard of facility has been generated and this demand will continue to increase with the additional population generated from new residential development.

The redevelopment of facilities at the Thomas Oval/Kelly Park precinct to establish a sub-regional sporting facility was identified as the most cost effective and land efficient option. A multi-purpose shared clubroom has been constructed and ground redevelopment has occurred, including upgrading the hard court area, however, additional work is still required to create a fully functional sub-regional sports facility. This work includes installation of whole of ground lighting infrastructure, construction of a set of change rooms on the eastern side of the ground and renovation of the original pavilion.

### **6.2.3 Wells Park/Kwinana Beach**

Although the City of Kwinana is wholly bounded by the Indian Ocean to the west, the majority of this foreshore land is fronted by the heavy industries within Kwinana Beach and Naval Base. Kwinana Beach and Wells Park has perpetually been the primary waterfront recreation area for Kwinana residents. The poor condition and lack of facilities in this precinct, historically, have been identified as a priority upgrade to accommodate community need.

Facilities to support the recreational use of the beach and Cockburn Sound are required to meet the needs of both the existing population and the additional demand generated from new residential development. The redevelopment of Wells Park has been identified as the most effective and cost efficient option to cater for the existing and future demand. Stage 1 of this redevelopment has been completed, with the playground area and ablution facilities having been updated within the last five years.

#### **6.2.4 District Youth Centre (The Zone)**

A large-scale district level youth centre incorporating a range of services, programs and spaces for youth activities and recreation was identified as a priority community need and was completed in 2012. This district centre was constructed to serve the broader City area until future planned district youth facilities are provided for in Wandi and Casuarina.

#### **6.2.5 District Sporting Grounds (Orelia Oval and Medina Oval extension/upgrade)**

A district sports ground with facilities on Orelia Oval was identified as a priority community need to meet the demands of the existing population. The most effective and cost efficient option identified was the development of a district level sporting pavilion on Orelia Oval. This facility will meet the demand generated from the existing and new residential population within District C. This new facility has been completed.

Other district level facilities are located throughout District C and at some time in the future, when they have reached the end of their economic life, consideration should be given to re-locating these facilities to Medina Oval. The construction of a multipurpose facility to accommodate sporting groups and community groups currently located on the site, and relocation of the tennis club from Calista Oval to the Medina Oval location should be considered in 10 to 15 years time to create a multipurpose district level recreation/community complex.

#### **6.2.6 Multipurpose Sub-Regional Park - Calista**

The lack of any significant parkland to provide for the higher order and diverse passive recreation and leisure opportunities required for the size of the current and future population was identified as a major gap in parks provision and a priority community need. The redevelopment of the Calista Oval site to a sub-regional park has been identified as the most effective and cost efficient way of achieving a high order parkland facility to meet the needs and demands generated from the current and future population. This facility has now been constructed.

#### **6.2.7 Rural Community Facilities – Wandi Community Centre**

Although populations are much smaller in rural areas, the need for community facilities to undertake local sport and recreational activities is important. Currently the City has two rural community centres; Casuarina Hall Reserve / Community Centre (Mortimer Road and Barker Road, Casuarina), and Wandi Hall Reserve / Community Centre (De Haer Rd, Wandi).

The rural areas east of the freeway are very established and quite different in population mix and culture from the urban communities west of the freeway. The people who live there enjoy larger lots suited to a rural and/or equestrian lifestyle and the facilities that have developed in these communities reflect those lifestyle choices. Wandi is a case in point where equestrian, recreation, sporting, hobby and community meeting spaces are co-located.

This facility attracts members from much wider than the Wandie area, making this an activity hub for not only the rural residents of Casuarina, Wellard and Wandie but the increasing eastern urban populations as well. A replacement woodworking workshop and additional recreation building were added to this facility in the last five years.

#### **6.2.8 Koorliny Arts Centre**

The Koorliny Arts Centre is a Sub-Regional Arts and Cultural Centre incorporating a proscenium arch theatre which can double as a cinema, a black-box theatre, a dance studio, a number of multi-purpose studios, a large amphitheatre and courtyard space.

While this facility has been well maintained, there is a need for a program of refurbishment and upgrading to be undertaken to ensure facilities are of a contemporary standard, particularly given the centre was built over 25 years ago. This has been identified as a priority.

#### **6.2.9 Animal Shelter**

The development of a new animal shelter was identified as a priority community need due to the poor condition and standard of the existing animal shelter. This facility is considered inadequate in terms of meeting the demand from the existing population and current standards. With additional new residential development, the level of demand on the animal shelter will increase. This has yet to be developed.

#### **6.2.10 Works Depot**

With the rapidly expanding population, the need for an upgraded Works Depot has been identified. The existing facility is considered to be adequate to meet the demand from the existing population, however with additional demand generated by new residential development, a contemporary facility will be required.

#### **6.2.11 Civic Administration Centre**

The current civic administration building is adequate to meet the requirements of the current population. An upgrade to the office accommodation to better utilise the floor area and potentially decentralise the operations into other buildings that the City owns will be a requirement to meet the demands generated by the anticipated residential growth, and ultimately a new or expanded civic administration centre will be required unless technology and work practices change, enabling the current footprint to remain as it is.

#### **6.2.12 Redevelopment of Retirement Villages**

The City currently operates two retirement villages. One is a lease for life facility that was constructed in the late 1990's early 2000's. The other is a rental complex which is a joint venture with the Department of Housing, constructed in the 1970's. With housing needs changing as current generations age, these units will require redevelopment in the future.

## 7. Community Planning Framework

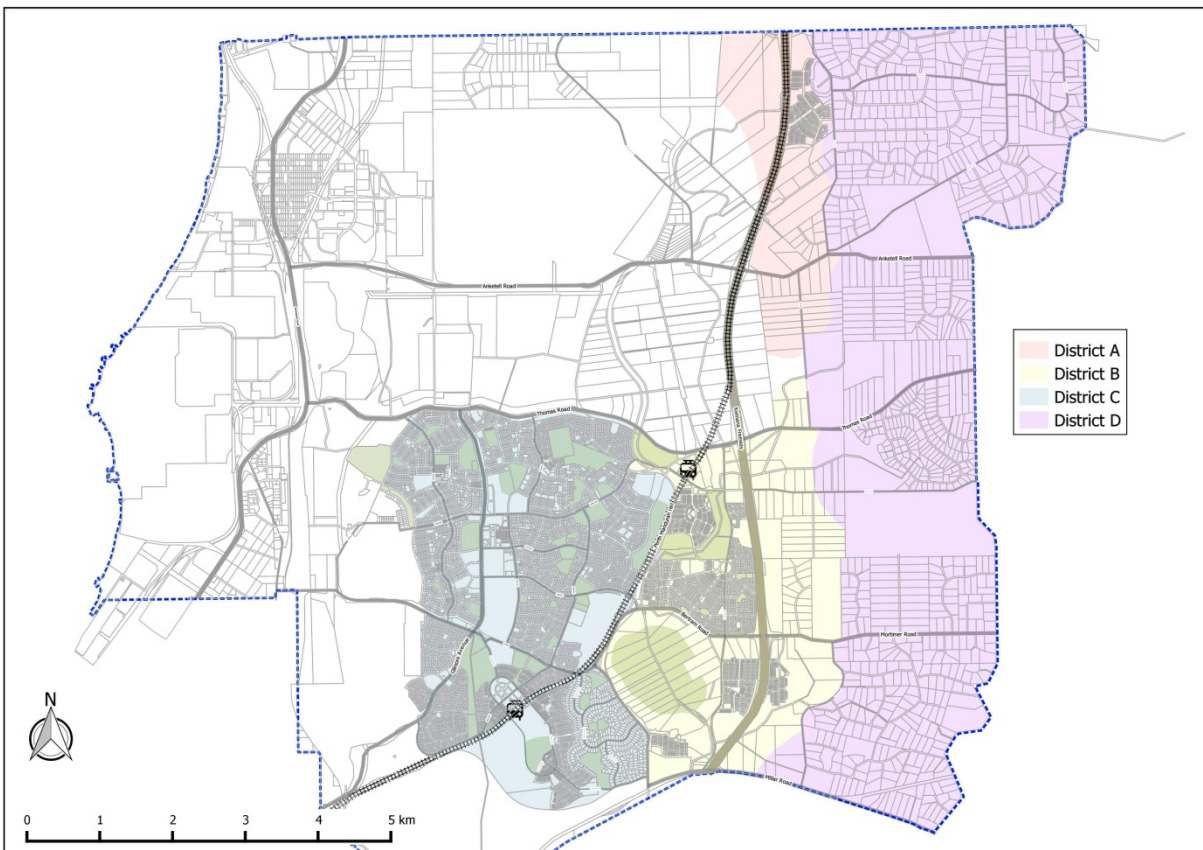
The preparation of the CIP is predicated upon an extensive Community Planning Framework incorporating planning catchments, a hierarchy for infrastructure provision, infrastructure planning standards and guiding principles, outlined below.

### 7.1 Planning Catchments

In developing a geographic framework for the Community Infrastructure Plan, growth fronts and population projections have been reviewed and mapped. Based on spatial catchments, relationships to existing commercial and community facilities and physical boundaries, the Community Infrastructure Plan is based on a four 'district' structure, as the following map indicates.

The location of surrounding district and regional centres and the existing and planned community facilities in the surrounding LGAs of the City of Cockburn, City of Rockingham and Shire of Serpentine Jarrahdale, have also been taken into consideration.

**Figure 57** District Map



Within each District, individual urban cells have then been formed based on a range of factors, including anticipated development fronts and timelines, road networks, physical barriers and Liveable Neighbourhoods guidelines. These urban cells are also referred to as DCA's – Development Contribution Areas.

**Table 9      Development Contribution Areas**

District A	
DCA 8	Mandogalup
DCA 9	Wandi/Anketell North
District B	
DCA 10	Casuarina/Anketell South
DCA 11	Wellard East
DCA 12	Wellard West
DCA 13	Bertram
District C	
DCA 14	Wellard Leda
DCA 15	Medina/Orelia/Parmelia/Calista
District D	
Rural	Wandi/Anketell/Casuarina/Wellard

## 7.2      Community Infrastructure Hierarchy

Community infrastructure operates within a hierarchy of provision with the function, scale, design and management of infrastructure determined by the catchment and size of the population the facility or service is required to serve. A 'structure' to community infrastructure provision is an important tool for not only planning infrastructure, but also for achieving good connectivity between community facilities and services and other urban features, such as the transport system, town centre and commercial precincts.

Having a clear hierarchy for providing community infrastructure also facilitates the potential for the appropriate co-location of facilities and the creation of community and civic hubs. A community infrastructure hierarchy is also an essential tool in maintaining an equitable, accessible and efficient distribution of community facilities across the City.

While the hierarchy for parks in the 2015 CIP was consistent with the hierarchy typically associated with community infrastructure provision, and in particular the Parks and Leisure Australia WA Guidelines for Community Infrastructure which define local parks as larger than neighbourhood parks, the hierarchy for the provision of parks has changed from the 2015 CIP to the 2018 CIP to be more consistent with Liveable Neighbourhoods Guidelines, which define neighbourhood parks as larger than local parks.

This has mainly occurred to avoid confusion amongst developers/planners who use Liveable Neighbourhoods in the planning of parks and has resulted in neighbourhood parks being reclassified as local parks and local parks being reclassified as neighbourhood parks, with neighbourhood parks being reflected as the larger of the two, as outline below.

## **Local Parks**

A Local Park provides a recreation space to accommodate the needs of the immediate surrounding local area, with a planning ratio of 1:1,200 and an indicative catchment of 400 metres or a 5 minute walk from most dwellings. Local Parks generally have a site area in the order of 0.5 hectare. They provide a basic level of infrastructure such as a swing set and bench seating.

## **Neighbourhood Parks**

A Neighbourhood Park provides a recreation space to accommodate the higher order needs of the wider surrounding local area with a planning ratio of 1:1,500 and an indicative catchment of 800 metres, or a 10 minute walk from most dwellings in the catchment. Neighbourhood Parks have a site area in the order of 1.0 hectare. They provide a higher level of infrastructure such as a play space and equipment to cater for children of all ages.

The hierarchy for parks in Liveable Neighbourhoods guidelines is not readily transferrable to other community infrastructure items, given the 'neighbourhood' classification does not apply to any other community infrastructure items in the CIP, and the 'local' classification in the CIP involves a much larger catchment than that associated with a local park, as described above. Hence, the following Community Infrastructure Hierarchy applies to all other community facilities.

### **7.2.1 Local Level**

With the exception of local parks, local level community infrastructure involves a population in the order of 5,000 to 8,000 people and an indicative catchment of two kilometres. Local level community infrastructure includes the following items identified in this plan:

- Local Community Centres
- Local Sporting Grounds

### **7.2.2 District Level**

District level community infrastructure involves a population in the order of 25,000 to 35,000 people and an indicative catchment of six kilometres, with the exception of District Youth Centres where an indicative catchment of three kilometres applies. The following community infrastructure items are included:

- District Community Centres
- District Youth Centres
- District Libraries
- District Recreation Centres
- District Sporting Grounds
- District Hard Courts

### **7.2.3 Sub-Regional Level**

Sub-Regional level community infrastructure involves a population in the order of 75,000 to 100,000 people and an indicative catchment of 12 kilometres. It can also be defined by the City of Kwinana's municipal boundary which covers an area of 120km<sup>2</sup> and is likely to involve an ultimate population of 100,000+, should the current rural areas be rezoned to urban development. Community infrastructure items at this level include the following, with potential for a Sub-Regional Health and Wellness Centre also having been raised.

- Sub-Regional Community Centres
- Sub-Regional Libraries
- Sub-Regional Sporting Grounds



- Sub-Regional Parks
- Sub-Regional Recreation and Aquatic Centres
- Sub-Regional Arts and Cultural Centres.

The purpose and function of all local, district and sub-regional community infrastructure is detailed in the Community Infrastructure Planning Standards (Appendix 1).

### **7.3 Community Infrastructure Planning Standards**

The City of Kwinana developed an extensive schedule of Community Infrastructure Planning Standards in 2004 in conjunction with the study into the community infrastructure requirements of the Eastern Residential Intensification Concept (District Structure Plan). The schedule encompassed all government facilities and services, including hospitals, tertiary institutions, schools, police and emergency services, as well as facilities and services provided by the private and non-government sector.

In developing the local government component of these standards, a 'baseline' standard was established by equating the current level of provision of various facilities in the City of Kwinana to a population ratio. A comparative analysis of planning standards utilised by other outer metropolitan growth LGAs in Australia was also undertaken, including the City of Swan, City of Armadale, City of Wanneroo, Shire of Melton (VIC), City of Wyndham (VIC) and City of Penrith (NSW). This work informed the development of the CIP 2009 Community Infrastructure Planning Standards.

In the review of the CIP 2009, undertaken in 2015, the original Community Infrastructure Planning Standards were reviewed, including consideration being given to the planning standards used in the surrounding LGAs. This indicated that there was generally a lower standard and level of provision in the City of Rockingham and the City of Cockburn, compared to the City of Kwinana. However, the City of Cockburn has since revised their Community Infrastructure Plan and the standards used by Cockburn are now more in line with the City of Kwinana standards.

However, while standards for planning community facilities have been used by LGAs for a number of years and may imply there is a uniform approach amongst LGAs, this is not actually the case and planning standards do vary depending on the hierarchy for provision used, existing facility provision, the level of provision the LGA commits to and also the unique physical, social and cultural features of the area, including the current and future distribution of the population.

Therefore, detailed and conclusive comparisons between LGAs are difficult to undertake. However, the 2015 review found that City of Kwinana's Community Infrastructure Planning Standards were still sound and were generally consistent with the Guidelines for provision of Community Infrastructure, prepared by Parks and Leisure WA in 2012.

While the 2015 review resulted in a number of changes to the 2009 standards, these were largely minor in nature and generally reflected the changing trends in the provision, design and size of community facilities and the land area required, with no change to the planning ratios. The amendments to the CIP 2009 planning standards resulting from the 2015 review of the CIP are outlined below.

- The site area required for Local Community Centres was amended from 0.3 hectares to 0.5 hectares to reflect the trend toward multipurpose 'community centre hubs' which require a larger building and outdoor space, hence site area required was increased.
- The site area required for Local Sporting Grounds (with Pavilion) was amended from 4.0 hectares to 7.2 hectares based on a template concept plan prepared by the City of Kwinana aimed at 'future proofing' local sports grounds to cater for a number of sports over time, rather than the typical one sport in winter and one sport in summer. The increase in site area also reflected the need for clubroom facilities to increase in size to cater for the recent demand for additional spaces, such as a first aid room, umpire changerooms, office space, changeroom facilities to cater for both male and female teams, and more adequate parking provisions. The increase in the site area required also reflected the growing demand for sports grounds to more adequately cater for informal physical activity with pathways for walking, running and cycling, outdoor gym exercise, active play spaces, as well as informal sporting opportunities and passive recreation.
- While the 2009 CIP planning standards made provision for Local Sports Grounds (without Pavilion) at 3.0 hectares, this classification was amended in the CIP 2015 to either a Local Sports Ground (with Facility A Building) consisting of toilets and shade, or a Local Sports Ground (with Facility B Building) consisting of toilets, small kiosk/kitchenette, storage and shade. This occurred as a result of the increasing use of sports grounds for informal physical activity and growing demand from sports clubs and casual users for some form of facility building on sports grounds, particularly public toilets. The size of the site was increase to 4.6 hectares because of this and to more adequately cater for informal physical activity opportunities and car parking.
- The 2009 CIP classified parks as 'semi developed' and 'developed' based on the City of Kwinana parks hierarchy at the time, which was amended to Neighbourhood and Local in the CIP 2015, with neighbourhood parks being the smaller of the two.

The review of the CIP 2015, undertaken in 2018 also involved a review of the 2015 Community Infrastructure Planning Standards and again the changes made are relatively minor in nature and generally reflect the changing trends in the provision, design and size of community facilities and the land area required, with no change to the planning ratios. The amendments to the planning standards in the CIP 2015, now reflected in the CIP 2018 are outlined below.

- The 2018 review of the Community Infrastructure Planning Standards resulted in a simplification of the three classifications for Local Sports Grounds contained in the CIP 2015, being a Local Sports Ground (with Pavilion), a Local Sports Ground (with Facility A Building) and a Local Sports Ground (with Facility B Building). This occurred as a result of the detailed planning and consultation undertaken in 2017 for the Facility A Building for Bertram Oval. The scope of a Facility Building A i.e. provision of toilets and shaded veranda alone, as per the planning standards, was too limited in terms of adequately meeting the needs of the sporting clubs using the oval. This resulted in the larger 'Facility B Building' being provided for on Bertram Oval.

- With the same outcome likely to occur in the future with respect to Facility A Buildings, both Local Sports Grounds with Facility A and Facility B Buildings have been reclassified to a Local Sports Ground (with Small Facility Building) in the CIP 2018, with the components largely reflecting the Facility B Building, to include a kiosk/kitchenette, storage rooms, small meeting room, change space, public toilets and shaded veranda space. For Local Sports Grounds (with a Pavilion), the term pavilion has changed to 'clubroom' to reflect the now more commonly used term.
- The 2018 review of the Community Infrastructure Planning Standards also involved the development of Planning and Design Guidelines for each community infrastructure item. The aim of introducing these guidelines is to ensure appropriate land and site areas are allocated by developers within local structure plans and to guide the more detailed site and building/facility requirements and design and to ensure consistency with the hierarchy for community infrastructure provision across the City.
- With the increase in the site area required for Local Sports Ground in the CIP 2015, there has since been some feedback from developers indicating that these standards are excessive. As a result of this, the required site area for sports grounds and the extent of active open space allocated in the CIP 2015 has been reviewed for the CIP 2018.
- This review has been based on the guidelines for active open space (playing fields) from the 2013 study undertaken by the Curtin University's Centre for Sport and Recreation and Department of Urban and Regional Planning on the planning and provision of Active Open Space (Playing Fields) in Perth and the Peel region. These guidelines indicate that 6.5m<sup>2</sup> of active open space (playing surface only) per resident is required, to be at least doubled to allow for supporting infrastructure. Base on this guideline the following table has been prepared.

**Table 10 POS Public Open Space (Active) Review**

District A	2031	Hectares Required *	CIP 2015 Hectares Required	Over Supply/ Deficit - Hectares	Hectares Provided & Planned	Over Supply/ Deficit - Hectares
	Population					
DCA8 Mandogalup	5,265	6.8	4.6	-2.2	3.5	-3.3
DCA9 Wandl/Anketell North	8,527	11.1	16.4	5.3	16.7	5.6
<b>Total</b>	<b>13,792</b>	<b>17.9</b>	<b>21</b>	<b>3.1</b>	<b>20.2</b>	<b>2.3</b>
District B	2031	Hectares Required *	CIP 2015 Hectares Required	Over Supply/ Deficit - Hectares	Hectares Provided & Planned	Over Supply/ Deficit - Hectares
	Population					
DCA10 Casuarina/Anketell South	7,530	9.8	14.8	5.0	14.8	5.0
DCA11 Wellard East	3,372	4.4	0	-4.4	0	-4.4
DCA 12 Wellard West	8,354	10.9	7.2	-3.7	4.0	-6.9
DCA13 Bertram	6,453	8.4	4.6	-3.8	3.0	-5.4
<b>Total</b>	<b>25,709</b>	<b>33.4</b>	<b>26.6</b>	<b>-6.8</b>	<b>21.8</b>	<b>-11.6</b>
District C	2031	Hectares Required *	CIP 2015 Hectares Required	Over Supply/ Deficit - Hectares	Hectares Provided & Planned	Over Supply/ Deficit - Hectares
	Population					
DCA14 Wellard Leda	12,558	16.3	11.8	-4.5	8.9	-7.5
DCA15 Medina/Orelia/Parmelia/Calista	22,442	29.2	42.7	13.5	42.7	13.5
<b>Total</b>	<b>35,000</b>	<b>45.5</b>	<b>54.47</b>	<b>9.0</b>	<b>51.54</b>	<b>6.0</b>
<b>Total District A, B and C</b>	<b>74,501</b>	<b>96.9</b>	<b>102.1</b>	<b>5.2</b>	<b>93.5</b>	<b>-3.3</b>

\* Derived from Curtin POS Study guideline of 6.5m2 per person active POS (sports field only) to be at least doubled to provide supporting infrastructure

- Based on these guidelines and the requirement of either 7.2 hectares for a Local Sports Ground (with Clubroom) or 4.6 hectares for a Local Sporting Ground (with Small Facility Building) per 5,000 residents, there would be a undersupply of 6.8 hectares in sports fields, if the provision of the 3.0 hectare site for the District Hard Courts was taken into account. Using the same guidelines, District A was assessed as having an oversupply of 3.1 hectares, taking this apparent oversupply into consideration, a deficit would still remain. Hence, this would indicate that the requirement for either a 7.2 hectare site for a Local Sports Ground (with Clubroom) or a 4.6 hectare site for a Local Sports Ground (with Small Facility Building) per 5,000 residents should not be regarded as excessive.
- Further, while the above deficit for District B and A is based on the standard of either 7.2 hectares for a Local Sports Ground (with Clubroom) or 4.6 hectares for a Local Sporting Ground (with Small Facility Building), this has not been possible to achieve in some recently provided and future planned local sporting grounds in existing local structure plans, largely due to land constraint issues. When taking this into account the actual deficit in District B is 11.6 hectares, which further highlights the CIP 2015 standards are appropriate, and the increase in the site area required in the CIP 2015 was justifiable.

The revised Community Infrastructure Planning Standards for the CIP 2018 are provided at Appendix 1.

## **7.4 Principles**

Principles were formulated to guide the development of the CIP and these have also been utilised to guide the implementation of the Plan. These principles set out the underlying philosophy that should be followed in the planning, design and provision of community infrastructure.

### **Equity and Access**

All members of the community, regardless of income, gender, background, age, cultural background or disability, should have fair and equal access to community infrastructure.

### **Need and Demand**

The provision of community infrastructure should be based on sound evidence of need and established priorities, with resources being allocated in accordance with these priorities.

### **Maximising the Use of Existing Infrastructure**

The capacity and use of existing community infrastructure should be maximised in addressing the needs of the current and future population.

### **Consultation and Engagement**

The community and all relevant stakeholders should be consulted and engaged in community infrastructure planning and provision.

### **Co-location and Resource Sharing**

Community infrastructure should be located to optimise land efficiencies, sharing of resources and the creation of active community 'hubs'.

### **Integration and Sustainability**

Community infrastructure should be integrated with land use and transport planning and should be designed and provided in an environmentally sustainable manner.

### **Timeliness and Flexibility**

Community infrastructure should be planned and provided in a timely manner to ensure facilities are available when needed and that facilities can adapt to meet changing community needs over time.

## **7.5 Timeframe for Community Infrastructure Provision**

Amendment 115 and the CIP 2009 made provision for infrastructure requirements to be provided when the respective DCA or District reached 50% of the anticipated 2031 population on the basis that the early provision of community infrastructure provides many benefits in terms of a developing a strong sense of community and meeting the needs of residents, given new land release areas are typically some distance from existing community infrastructure and can initially lack access to public transport.

However, the 2015 review of the CIP found that this timeframe was not being achieved, largely because of insufficient funds in developer contribution accounts at 50% of development, requiring the City to pre-fund half of the CIP items through borrowings, which proved to be beyond the financial capacity of the City.

Hence, the CIP 2015 revised the trigger point for provision from 50% of the predicted 2031 population, to 75% to enable the City to collect a greater proportion of the funds from developers and to reduce borrowing costs and liabilities. While this resulted in facilities being delivered to the community at a later stage of development, this change was considered necessary given the City's desire to deliver the community infrastructure facilities in a realistic and fiscally responsible and sustainable manner

However, this has still proved to be problematic given that, for example, all local infrastructure items in a DCA would be required in the same year, as would all district level infrastructure in a District. While the 75% trigger point allows the City to collect a greater proportion of funds from developers, the staff resources required to plan, construct and achieve the operation of a large number of facilities simultaneously would prove to be beyond the City's staff resources.

To address this, the 2018 review has involved the development of a set of criteria to determine the timing for planning and providing community infrastructure items, as outlined below. The criteria take into account a number of factors beyond a population point, such as the proximity and capacity of any existing facilities. This has resulted in the revised timing for the planning and provision of infrastructure, which is now more evenly distributed across the years and also integrated with the City's Long Term Financial Plan.

### **Local Community Infrastructure**

Local level community infrastructure includes Local Community Centres and Local Sports Grounds, with a ratio of 1:5,000 people. The following criteria have been applied to determine the timing of provision.

- The planning and design of Local level community facilities will generally occur two years prior to the population catchment reaching 5,000 people, with provision occurring when the population has reached 5,000.
- The proximity and capacity of any existing local community facilities within and outside the relevant DCA will be considered.
- Opportunities for maximising the co-location and joint provision of local community facilities will be sought and assessed.
- The location and timing of new District and Sub-regional level community facilities will be considered.
- The City of Kwinana's organisational capacity to plan, manage and operate existing and new community facilities will be considered.

### **District Community Infrastructure**

District level community infrastructure includes one District Community Centre, two District Youth Centres, one District Library, one District Recreation Centre and District Hard Courts, varying from a ratio 1:25,000 to 1:35,000 people. The following criteria have been applied to determine the timing of the planning and provision of District level community facilities.

- The planning and design of the District Youth Centres and District Community Centre serving one District will generally occur two years prior to the population reaching 20,000, with provision occurring when the population is in the order of 20,000.
- The planning and design of District level community infrastructure serving both Districts A and B will generally occur two years prior to the combined population reaching 30,000 to 35,000, with provision occurring when the population reaches this figure.
- The location and proposed timing of new District, Local and Sub-Regional level community facilities will be considered.
- Opportunities for maximising the co-location and joint provision of District community facilities will be sought and assessed.
- The City of Kwinana's organisational capacity to plan, manage and operate existing and new community facilities will be considered.

### **Sub-Regional Community Infrastructure**

While all Sub-Regional Community Infrastructure items were built either some time ago or recently, there are a number of older facilities that require upgrading or replacement. Sub-Regional level community infrastructure generally involves a ratio of 1:75,000 and the following criteria have been applied.

- The planning and design of new Sub-Regional community facilities will generally occur two years prior to the population reaching 50,000 to 60,000, with provision occurring when the population reaches this figure.
- The proximity and capacity of existing District level community facilities will be considered.
- The planning and construction of upgrades to existing regional infrastructure to a Sub-Regional standard will be based on the existing condition and capacity of facilities.
- The City of Kwinana's organisational capacity to plan, manage and operate existing and new community facilities will be considered.

## **8. Supply and Demand Analysis**

The findings and implications from the Community Profile (Section 5), the Community Needs Assessment (Section 6) and the Community Planning Framework (Section 7) have informed the following Supply and Demand Analysis.

While it should be noted that the Community Profile identifies population growth figures, these are for the entire area of the City of Kwinana. However, the population forecasts referred to below are for District A, B and C and for the individual DCAs in each of these Districts, which do not reflect the entire City of Kwinana area, notably excluding the mainly rural areas east of District A and B.

This area is referred to as District D and is zoned 'urban deferred' and as such cannot be considered for developer contributions in the CIP, until such time as the zoning changes to allow urban development. When this occurs it will be possible to produce population forecasts for this area and hence determine community infrastructure requirements, which will be included in future versions of the CIP.

### **8.1 Local and Neighbourhood Community Infrastructure**

#### **8.1.1 Local Parks**

A Local Park provides a recreation space to accommodate the needs of the immediate surrounding local area with an indicative catchment of 400 metres and a 5 minute walk from most dwellings, without having to cross busy roads or other geographic or physical barriers. Local Parks provide a basic level of infrastructure such as a swing set and bench seating, and require a site area of 0.5 hectares.

While a planning ratio of 1:1,200 people applies, when taking into account physical and geographic barriers and achieving a Local Park within a walkable 400 metre catchment of most dwellings, it is likely that in some areas a lower ratio will be required to achieve this.

Without mapping all current Local Parks in existing areas with a 400 metre catchment, it is difficult to determine with any certainty where there is an oversupply and where there is an undersupply. In any event, where there is an undersupply it would be difficult to achieve any additional Local Parks in existing areas, given these areas are largely built out. Where Local Parks are marked with an asterisk, these parks have been identified for upgrading in the current Parks for People Strategy, and further parks for upgrading will be identified in the 2019 – 2024 version of the strategy which is current being prepared.

However, in areas yet to be developed a Local Park within a walkable 400 catchment of most dwellings must be achieved and the onus should be on the developer to achieve this, and demonstrate it by mapping proposed Local Parks with a 400 metre catchment.

Further, from the following analysis, and with a total of 103 Local Parks, it appears that the City of Kwinana has exceeded the minimum requirements in terms of Local Parks. However, this is unlikely to be the case when taking into account physical barriers and the required walkable 400 metre catchment for Local Parks, particularly in newly developed or developing areas of the City where



developers generally provide the minimum POS requirement, with parks often encumbered by drainage requirements, bush conservation needs and subdivision design/site gradient.

As a result of these factors outlined above, the following analysis of current supply and future demand should be considered as being indicative only.

## **Current Supply and Future Demand**

### **District A**

There are currently 6 Local Parks in District A and with a 2018 population estimate of 5,452 and a ratio of 1:1,200 people, this would suggest that 5 Local Parks are currently required. While this suggests there is an oversupply of 1 Local Park, this may not be the case when taking into account the requirement for a Local Park to be provided within a walkable catchment of 400 metres of most dwellings.

#### Mandogalup

- Mandogalup Fire Station Reserve

#### Wandi

- Canunda Approach Reserve
- Darling Park
- Davenport Park
- Daybreak Park
- Woko Park

With a 2031 population forecast of 13,792 this would indicate that that a total of 12 Local Parks are required and with the current provision of 6 Local Parks, this suggests that 6 additional local parks are required. However, additional Local Parks to this number may be required to achieve a Local Park within the required walkable 400 metre catchment of most dwellings, and the final number will only be evident at the local structure design stage.

### **District B**

There are currently 18 Local Parks in District B and with a 2018 population estimate of 14,075 and a ratio of 1:1,200 people, this would suggest that 12 Local Parks are currently required. While this indicates there is an oversupply of 6 Local Parks, this may not be the case when taking into account the requirement for a Local Park to be provided within a walkable catchment of 400 metres of most dwellings.

#### Bertram

- Ascot Park
- Belgravia Dampland
- Berry Park\*
- Chipperton Park
- Daintree Park\*
- Darton Loop Reserve
- Everglades Park
- Greenham Way POS

- Kendal Bend Reserve
- Ludlow Park
- Millbrook Park
- Parkfield Park
- Prince Regent Park
- Sanctuary Reserve
- Squires Reserve

#### Wellard (West)

- Moonstone Park

#### Wellard (East)

- Babbage Park
- Daybreak Park

With a 2031 population forecast of 25,709 this would indicate that a total of 21 Local Parks will be required and with a current provision of 18 Local Parks, this suggests that a further 3 Local Parks are required. However, additional Local Parks to this may be required to achieve a Local Park within the required walkable 400 metre catchment of most dwellings, and the final number will only be evident at the local structure design stage.

### **District C**

There are currently 69 Local Parks in District C and with a 2018 population estimate of 26,123 and a ratio of 1:1,200 people, this would suggest that 22 Local Parks are currently required. While this indicates there is an oversupply of 47 Local Parks, this may not be the case when taking into account the requirement for a Local Park to be provided within a walkable catchment of 400 metres of most dwellings.

#### Leda

- English Park
- Rogan Park
- Riley Park\*

#### Calista

- Gawler Park
- Gale Court POS (Nature)
- Harrison Park\*
- Isaac Court POS

#### Kwinana Town Centre

- Town Park\*
- Council Green
- Orelia
- Borthwick Park
- Burke Place POS
- Dent POS
- Dowling Park

- Hennessy Park
- Jeffers Court Reserve
- Littlemore Park
- Maycock Park
- Menli Park
- Nathaniel Way
- Reilly Reserve
- Richard Park
- Rutherford Park

#### Parmelia

- Barney Park\*
- Blackboy Rise POS
- Bournan Park\*
- Brandon Park\*
- Corrigin Heights POS
- Darkins POS
- Gamblin Way POS
- Hefron POS
- Hunt Park
- Ince Park
- Kirkland Park\*
- Madfield Way POS
- Maple Vista POS
- McKanna Gardens POS
- Morrit Park
- Newstead Park
- Oakfield Park\*
- Sicklemore (Tramway) Reserve
- Sutherland Reserve
- Sutherland South Reserve
- Warner Park
- Warner Road Sump Reserve
- Welbourne POS

#### Medina

- Bryan Mainwaring Reserve
- Budden Way park
- Chalk Hill POS
- Clark Place POS
- Herald Place Reserve
- Helymore Place POS
- Kellam Park
- Medina Laneway Reserve
- Oakley Hollow POS
- Partridge POS
- Ridley Green

- Ridley South POS
- Seabrook Way POS

#### Wellard

- Banksia Reserve
- Combs Reserve POS
- Cooper Street POS
- Crofter POS
- Holystone Reserve
- Millar Road Reserve
- Ryhill Park POS
- Silverweave Reserve
- Southgate Park
- Weaver POS
- Wellard Road POS

With a 2031 population forecast of 35,000 this would indicate that a total of 30 Local Parks will be required and with a current provision of 69 Local Parks this suggests that no further Local Parks will be required. However, additional Local Parks may be required in some areas to achieve a Local Park within the required walkable 400 metre catchment of most dwellings, and the final number will only be evident at the local structure design stage for those areas yet to be developed.

#### **8.1.2 Neighbourhood Parks**

Neighbourhood Parks provide the opportunity for recreation, relaxation and are a focal point for community interaction for all age groups. They should include a well-designed play space with equipment and natural play opportunities, including both active and passive opportunities to assist children and young people (0 -12years+) develop their physical, cognitive and social skills.

An indicative catchment of 800 metres or a 10 minute walk from most dwellings applies, together with a planning ratio of 1:2,500 and a site area of 1.0 hectare. While a planning ratio of 1:2,500 people applies, when taking into account physical and geographic barriers and achieving a Neighbourhood Park within a walkable 800 metre catchment of most dwellings, it is likely in some areas that a lower ratio will be required to achieve this.

Without mapping all current Neighbourhood Parks in existing areas with an 800 metre catchment, it is difficult to determine with any certainty where there is an oversupply and where there is an undersupply. In any event, where there is an undersupply it would be difficult to achieve any additional Neighbourhood Parks in existing areas, given these areas are largely built out.

Where Neighbourhood Parks are marked with an asterisk, these parks have been identified for upgrading in the current Parks for People Strategy and further parks will be identified in the 2019 – 2024 version of the strategy, which is current being prepared.

However, in areas yet to be developed a Neighbourhood Park within a walkable 800 catchment of most dwellings must be achieved and the onus should be on the developer to achieve this. This should be demonstrated by mapping proposed Neighbourhood Parks with a 800 metre catchment.

Further, from the following analysis and with a total of 37 Neighbourhood Parks, it appears that the City of Kwinana has exceeded the minimum requirements in terms of Neighbourhood Parks. However, this is unlikely to be the case when taking into account physical barriers and the required walkable 800 metre catchment for Neighbourhood Parks, particularly in newly developed or developing areas of the City where developers generally provide the minimum POS requirement, with parks often encumbered by drainage requirements, bush conservation needs and subdivision design/site gradient.

As a result of these factors outlined above, the following analysis of current supply and future demand should be considered as indicative only.



Ridley Park Medina

## Current Supply and Future Demand

### District A

There are currently 6 Neighbourhood Parks in District A and with a 2018 population estimate of 5,452 and a ratio of 1:2,500 people, this would suggest that 2 Neighbourhood Parks are currently required. While this suggests there is an oversupply of 4 Neighbourhood Park, this unlikely to be the case when taking into account the requirement for a Neighbourhood Park to be provided within a walkable catchment of 800 metres of most dwellings.

### Wandi

- Honeywood Park
- Labatt Gardens POS
- Litchfield Gecko Park
- Litchfield Luna Park
- Mornington Park
- Willandra Park

With a 2031 population forecast of 13,792, this would indicate that a total of 6 Neighbourhood Parks are required and with a current supply of 6 Neighbourhood Parks this suggests that no further Neighbourhood Parks are required. However, additional Neighbourhood Parks may be required to achieve a Neighbourhood Park within the required walkable 800 metre catchment of most dwellings, and the final number will only be evident at the local structure design stage.

### **District B**

There are currently 8 Neighbourhood Parks in District B and with a 2018 population estimate of 14,075 and a ratio of 1:2,500 people, this would suggest that 6 Neighbourhood Parks are currently required. While this suggests there is an oversupply of 2 Neighbourhood Park, this unlikely to be the case when taking into account the requirement for a Neighbourhood Park to be provided within a walkable catchment of 800 metres of most dwellings.

#### **Bertram**

- Centennial Park
- Cleopatra Park
- Moombaki Park
- Price Parkway

#### **Wellard (West)**

- Gemstone Park
- Epidote Vista Road Park

#### **Wellard (East)**

- Sunshine Park
- Indigo Bend Park

With a 2031 population forecast of 25,709, this would indicate that a total of 11 Neighbourhood Parks are required and with a current supply of 8 Neighbourhood Parks, this suggests that 3 additional Neighbourhood Parks will be required. However, additional Neighbourhood Parks may be required to achieve a Neighbourhood Park within the required walkable 800 metre catchment of most dwellings, and the final number will only be evident at the local structure design stage.

### **District C**

There are currently 23 Neighbourhood Parks in District C and with a 2018 population estimate of 26,940 and a ratio of 1:2,500 people, this would suggest that 11 Neighbourhood Parks are currently required. While this suggests there is an oversupply of 12 Neighbourhood Park, this unlikely to be the case when taking into account the requirement for a Neighbourhood Park to be provided within a walkable catchment of 800 metres of most dwellings.

#### **Leda**

- Djilba Park
- Feilman Park
- Whyatt Green (Gabor Park)\*

#### **Calista**

- Rhodes Park

#### Orelia

- Sandringham Park
- Varris Way Park\*

#### Parmelia

- Peace Park
- Skottowe Park

#### Medina

- Apex Rotary Park
- Harry McGuigan Park\*
- Hewison Park

#### Naval Base

- Challenger Beach – with public toilet

#### Wellard

- Abingdon Park
- Boyne Park
- Brentford Park
- Coleford Park
- Gemstone Park
- Henley Reserve
- Maldon Park
- Pimlico Gardens
- Rushbrook Park
- Sunrise Park
- Wellard Park

With a 2031 population forecast of 35,000, this would indicate that 11 Neighbourhood Parks are required and with a current provision of 23 Neighbourhood Parks this suggests that no further Neighbourhood Parks are required. However, additional Neighbourhood Parks in some areas may be required to achieve a Neighbourhood Park within the required walkable 800 metre catchment of most dwellings, and the final number will only be evident at the local structure design stage.

### **8.1.3 Local Sporting Grounds**

There are two classifications of Local Sporting Grounds in the CIP 2018. These are described below and either a Local Sporting Ground (with Clubroom Building) or a Local Sporting Ground (with Small Facility Building) is required per 5,000 people.

#### **A Local Sporting Ground (with Clubroom Building)**

A Local Sporting Ground (with a Clubroom Building) includes a multipurpose sporting field that has the capacity to cater for a range of changing sporting codes over time, typically larger clubs and senior sporting clubs.

A Local Sporting Ground (with a Clubroom Building) must also have the capacity to cater for informal physical activity and passive recreation opportunities while the ground is being used for organised sports. The purpose and function of the Clubroom is to support junior and senior organised sports, passive recreation and informal physical activity and the following building components are required:

- Changerooms/showers (2)
- Large multipurpose/function space, bar and meeting room
- Commercial level kitchen with kiosk
- Umpires changeroom
- First aid room
- General storage space and sports equipment storage
- Internal toilets and public toilets
- Veranda/spectator shaded space.

### **Local Sports Ground (with Small Facility Building)**

A Local Sporting Ground (with Small Facility Building) includes a multipurpose sports field that has the capacity to cater for a range of changing sporting codes over time, typically smaller clubs, junior sports and senior sports training grounds.

A Local Sporting Ground (with Small Facility Building) must also have the capacity to cater for informal physical activity and passive recreation opportunities while the ground is being used for organised sport. The purpose and function of the Small Facility Building is to support organised sports, passive recreation and informal physical activity and the following building components are required:

- Change area (2)
- Kiosk/kitchenette
- Storage space
- Small meeting space
- Public toilets
- Veranda/spectator shaded area.

### **Planning Ratio**

1:5,000

### **Land area required**

7.2 hectares – Local Sporting Ground (with Clubroom)

4.6 hectares – Local Sporting Ground (with Facility Building)

### **Building area required**

650m<sup>2</sup> – Local Sporting Ground (with Clubroom)

180m<sup>2</sup> – Local Sporting Ground (with Facility Building)

### **Current Supply**

#### **District A**

Honeywood Sporting Ground (with Clubroom – to be built in 2019/20 – 2020//21)

District B

Bertram Oval (with Small Facility Building)



## **District C**

Wellard Oval (with Clubroom)

Medina Oval (with changerooms and public toilets)

Rhodes Park (with kiosk and public toilets)

Chisham Oval (with public toilets)

## **Current Need and Future Demand**

### **District A**

#### **DCA 8 Mandogalup**

There are currently no Local Sporting Grounds in DCA 8 Mandogalup and based on the 2018 population estimate of 473, and a planning ratio of 1:5,000, there is no current need for a Local Sporting Ground in this DCA.

With a 2031 population forecast of 5,265 and a planning ratio of 1:5,000, there will be a need for one Local Sporting Ground (with Small Facility Building)

#### **DCA 9 Wandii/Anketell North**

There is currently one Local Sporting Ground located in DCA 9 Wandii/Anketell (Honeywood Sporting Ground), with the clubroom to be provided in 2020/21. With a 2018 population estimate of 4,439 and a planning ratio of 1:5,000, this is considered adequate to meet current need.

With a 2031 population estimate of 8,527 in DCA 9 Wandii/Anketell North and a planning ratio of 1:5,000, this would indicate that two Local Sporting Grounds are required. However, while the initial CIP 2015 included a District Sports Ground to serve both District A and B, to be located in District B (DCA 10 Casuarina/Anketell South), it became apparent in finalising the CIP 2015 that it was not possible to secure the large site area required and hence this District Sports Ground was removed from the final CIP 2015.

To compensate for the loss of this District Sporting Ground, a strategy was adopted in the CIP 2015 to seek to address this by achieving additional Local Sporting Grounds via joint provision and use with the Education Department. Hence, in addition to the second local Sports Ground to be provided (with Small Facility Building), the CIP 2015 also included a third Local Sporting Ground (with Small Facility Building) in DCA 9, to be provided at the planned High School Site in this DCA.

### **District B**

#### **DCA 10 Casuarina/Anketell South**

There are currently no Local Sporting Grounds in DCA 10 Casuarina/Anketell South and based on the 2018 population estimate of 869 and a planning ratio of 1:5,000, there is no current need for a Local Sports Ground in this DCA.

With a 2031 population forecast of 7,530 in this DCA and a planning ratio of 1:5,000, one Local Sports Ground (With Small Facility Building) is required, with this to be provided via joint use and provision with the proposed Primary School site in this DCA.

However, while the initial CIP 2015 included a District Sporting Ground to serve both District A and B, to be located in DCA 10 Casuarina/Anketell South, it became apparent in finalising the CIP 2015 that it was not possible to secure the large site area required and hence this District Sports Ground was removed from the final CIP 2015.

To compensate for the loss of this District Sporting Ground, a strategy was adopted in the CIP 2015 to seek to address this by acquiring additional Local Sporting Grounds via joint provision and use with the Education Department. This strategy has been further progressed in the CIP 2018 and the opportunity to achieve an additional Local Sporting Ground (with Clubroom) in DCA 10, to be provided at the proposed High School Site in the centre of DCA 10, has been included in the CIP 2018.

### **DCA 11 Wellard East**

There are currently no Local Sporting Grounds in DCA 11 Wellard East and based on the 2018 population estimate of 2,966 and a planning ratio of 1:5,000 there is no current need for a Local Sporting Ground in this DCA.

With a 2031 population forecast of 3,372 in DCA 11 and a planning ratio of 1:5000, this comes close to requiring one Local Sporting Ground, which was allocated in the CIP 2009. However, with a reduction in the population forecast since the CIP 2009 and land constraint issues identified in the CIP 2015, this was removed. This remains unchanged in the CIP 2018.

### **DCA 12 Wellard West**

There is currently one Local Sporting Ground located in DCA 12 Wellard West (McWhirter Oval) with the clubroom component to be provided in 2021/22 and co-located with a Local Community Centre. With a 2018 population estimate of 5,033 in DCA 12 and a planning ratio of 1:5,000, this will be adequate to meet current need.

With a 2031 population forecast of 8,354 and a planning ratio of 1:5,000, there is no need to provide any further Local Sporting Grounds in this DCA.

### **DCA 13 Bertram**

There is currently one Local Sporting Ground located in DCA 13 Bertram, with a small facility building provided in 2018/19. With a 2018 population estimate of 5,189 in DCA 13 and a planning ratio of 1:5,000, this is adequate to meet current need.

With a 2031 population forecast of 6,453 in DCA 13 Bertram and a planning ratio of 1:5,000, there is no need to provide any further Local Sporting Grounds.

## **District C**

### **DCA 14 Wellard/Leda**

There is currently one Local Sporting Ground (with Clubroom) located in DCA 14 Wellard/Leda and with a 2018 population estimate of 9,226 in DCA 14 and a planning ratio of 1:5,000, this would indicate that a second Local Sporting Ground is required to meet current demand. However, with the relatively close proximity of district and sub-regional level sporting grounds in District C, this is not required. But the existing clubroom is not of a sufficient size to meet current need and an extension to this building is to occur in 2018/19.

With a 2031 population forecast of 12,558 in DCA 14 Wellard/Leda and a planning ratio of 1:5,000, one additional Local Sporting Ground (with Small Facility Building) will be required.

#### **DCA 15 Medina/Orelia/Parmelia/Calista**

There are currently three Local Sporting Grounds in DCA 15 Medina/Orelia/Parmelia/Calista, Medina Oval with changerooms and public toilets, Rhodes Park with a kiosk and public toilets, and Chisham Oval with toilets. With a 2018 population estimate of 17,714 in DCA 15 and a planning ratio of 1:5,000, this is considered to be adequate to meet current demand, given the existence of the District and Sub-Regional level sporting grounds in this DCA.

With a 2031 population estimate of 22,272 in DCA 15 Medina/Orelia/Parmelia/Calista and a planning ratio of 1:5,000, this would indicate that one additional Local Sporting Ground is required. However, again, with the existence of the District and Sub-Regional level sporting grounds in this DCA, no additional Local Sporting Grounds are required.

#### **8.1.4 Local Community Centres**

A Local Community Centre consists of a multipurpose community hub that provides social, recreational, cultural and learning activities, programs and services focused on developing the capacity of individuals, families and the collective needs of the immediate local area.

A Local Community Centre caters for all age groups and provides the opportunity to bring the local community together, build relationships, local identity and community spirit.

A Local Community Centre's (Large Scale) purpose and function is the same as above, but it is larger in size to cater for a larger population, nearing 10,000.

#### **Planning Ratio**

1:5,000

1:8,000

#### **Land area required**

0.5 hectares – Local Community Centre

0.7 hectares – Local Community Centre – Large Scale

#### **Building area required**

650m<sup>2</sup> – Local Community Centre

800m<sup>2</sup> - Local Community Centre – Large Scale

#### **Current Supply**

District A

- Nil

District B

- Bertram Community Centre
- District C

- Frank Konecny Family Centre
- Medina Hall – with public toilets
- John Wellard Community Centre

#### District D

- Wandi Community Centre
- Casuarina Wellard Community Centre

### **Current Need and Future Demand**

#### **District A**

##### **DCA 8 Mandogalup**

There are currently no Local Community Centres in DCA 8 Mandogalup and based on the 2018 population estimate of 473 and a planning ratio of 1:5,000, there is no current need for a Local Community Centre in this DCA.

With a 2031 population forecast of 5,265 and a planning ratio of 1:5,000, there will be a need for one Local Community Centre.

##### **DCA 9 Wandi – Anketell North**

There are currently no Local Community Centres in DCA 9 Wandi/Anketell and based on the 2018 population estimate of 4,439 and a planning ratio of 1:5,000, there is no current need for a Local Community Centre in this DCA, but one will be required in the near future, as identified below.

With a 2031 population forecast of 8,527 in DCA 9 Wandi/Anketell North one Local Community Centre (Large Scale) will be required.

#### **District B**

##### **DCA 10 Casuarina/Anketell South**

There are currently no Local Community Centres in DCA 10 Anketell South and based on the 2018 population estimate of 869 and a planning ratio of 1:5,000 there is no current need for a Local Community Centre in this DCA.

With a 2031 population forecast of 7,530 and a planning ratio of 1:5,000, one Local Community Centre will be required.

##### **DCA 11 Wellard East**

There are currently no Local Community Centres in DCA 11 Wellard East and based on the 2018 population estimate of 2,966 and a planning ratio of 1:5,000 there is no current need for a Local Community Centre in this DCA.

With a 2031 population forecast of 3,372 in DCA 11 and a planning ratio of 1:5000, this comes close to requiring one Local Community Centre, which was allocated in the CIP 2009. However, with a reduction in the population forecast since the CIP 2009 and land constraint issues identified in the CIP 2015, this was removed. This remains unchanged in the CIP 2018.

### **DCA 12 Wellard West**

There are currently no Local Community Centres in DCA 12 Wellard West and based on the 2018 population estimate of 5,033 and a planning ratio of 1:5,000, there is currently a need for a Local Community Centre in this DCA. A Local Community Centre is to be provided in 2021/22, co-located with the Local Sporting Ground.

With a 2031 population forecast of 8,354 and a planning ratio of 1:5,000, there is no need to provide any further Local Community Centres in this DCA.

### **DCA 13 Bertram**

There is currently one Local Community Centre located in DCA 13 Bertram and with a 2018 population estimate of 5,189 in DCA 13 and a planning ratio of 1:5,000, this is adequate to meet current need.

With a 2031 population forecast of 6,453 in DCA 13 Bertram and a planning ratio of 1:5,000, there is no need to provide any further Local Community Centres.



[William Bertram Community Centre](#)

## **District C**

### **DCA 14 Wellard/Leda**

There is currently one Local Community Centre located in DCA 14 Wellard/Leda and with a 2018 population estimate of 9,226 in DCA 14 and a planning ratio of 1:5,000, this could indicate a second Local Community Centre is required to meet current demand. However, given the existing John Wellard Community Centre exceeds the built area requirements for a Local Community Centre by almost double, this is considered adequate to meet current needs.

With a 2031 population forecast of 12,558 in DCA 14, the existing John Wellard Community Centre will be adequate to meet the needs of the future population.

## **DCA 15 Medina/Orelia/Parmelia/Calista**

There are currently three Local Community Centres in DCA 15 Medina/Orelia/Parmelia/Calista and with a 2018 population estimate of 17,714 and a planning ratio of 1:5,000, this is adequate to meet current demand.

With a 2031 population forecast of 22,272 in DCA 15 Medina/Orelia/Parmelia/Calista and a planning ratio of 1:5,000, this could indicate that an additional Local Community Centre is required, however with the Sub-Regional Darius Wells Library and Community Resource Centre located in DCA 15, no further Local Community Centres will be required.

## **District Community Infrastructure**

### **8.2.1 District Sporting Ground**

A District Sporting Ground and Clubroom includes multipurpose sports fields that have the capacity to cater for different sports simultaneously. District Sporting Grounds typically cater for large clubs and higher order competition levels where a number of sports pitches are required, and they serve the needs of a number of local and neighbourhood areas.

A District Sporting Ground must also have the capacity to cater for passive recreation opportunities and informal opportunities for physical activity and fitness while the ground is being used for organised sports.

While a District Sporting Ground should ideally be co-located with District Hard Courts, because the land in District A and B is constrained, there are inherent difficulties in assembling sufficient land to accommodate both. Hence, District Sporting Grounds and District Hard Courts have been separated and follow a similar dispersed model as in District C.

### **Planning Ratio**

1:25,000 people

### **Land area required**

15 hectares

### **Building area required**

1,000m<sup>2</sup>

### **Current Supply**

District A

- Nil

District B

- Nil

District C

- Orelia Oval - with Clubroom
- Kwinana Tennis Club – Calista
- Kwinana Bowling Club – Medina
- Derbal Field BMX Club – Medina

## **Current Need and Future Demand**

### **District A**

There are currently no District Sporting Grounds in District A and based on the 2018 population estimate of 4,593 and a planning ratio of 1:25,000, there is no current need for a District Sporting Ground.

With a 2031 population forecast of 13,792 and a planning ratio of 1:25,000, this will not justify the need for a District Sporting Ground in District A. However, this population makes a significant contribution toward the demand for district level sporting fields and while the initial CIP 2015 proposed that this demand be met by a District Sports Ground in District B, to serve both District A and B, the required site area was not able to be acquired, due to land constraint issues in District B.

### **District B**

There are currently no District Sporting Grounds in District B and based on the 2018 population estimate of 11,637 and a planning ratio of 1:25,000, there is no current need for a District Sporting Ground.

With a 2031 population forecast of 25,709 and a planning ratio of 1:25,000, there is justification for a District Sporting Ground in District B, which was shown in the initial CIP 2015 and removed in the final CIP 2015 as the required site area was not able to be acquired, due to land constraint issues in District B.

The strategy to address, in part, the loss of district level sporting fields is to increase the provision of Local Sporting Grounds via joint provision and use arrangements with the Department of Education. To that end, one additional Local Sports Ground (with Clubroom) was shown in the CIP 2015 in DCA 9 Wandii/Anketell North and in this CIP 2018 a further Local Sports Ground (with Small Facility Building) is planned to be provided at the proposed Primary School site in DCA 10 Casuarina/Anketell South.

However, with no further opportunities to increase the number of Local Sports Grounds identified in the CIP 2018, as the review of active open space indicates, there will be a gap of 11.6 hectares in sporting grounds in District B. Further, without district level sporting fields to serve the combined District A and B 2031 population of 39,501, and the provision of local level sporting fields only, the formation of larger clubs requiring a number of sporting pitches typically associated with District Sporting Grounds, will be limited.

The alternative for larger clubs with several hundred members is to train and play across a number of Local Sporting Grounds. This option is often not financially viable or sustainable as this requires additional resources such as coaches and equipment, including volunteers and can also be inconvenient if parents have to transport children of different age groups to a number of locations.

While no further opportunities to address the provision of a District Sporting Ground to serve District A and B can be identified in the CIP 2018, this should be considered in District D, if this area is earmarked for urban development.

## **District C**

There is currently one District Sporting Ground in District C and with a 2018 population estimate of 25,940 and a planning ratio of 1:25,000, Orelia Oval is sufficient to meet the needs of this population. With a 2031 population forecast of 35,000 no further District Sporting Grounds are required.

### **8.2.2 District Hard Courts**

District Hard Courts and Clubroom provide 10 netball/basketball courts and 10 tennis courts to cater for tennis, netball and basketball at a competitive and social level for juniors and seniors. They must also cater for public access and use.

#### **Planning Ratio**

1:25,000 people

#### **Land area required**

3 hectares

#### **Building area required**

650m<sup>2</sup>

#### **Current Supply**

District A

- Nil

District B

- Nil

District C

- 5 Netball Courts – Thomas Oval
- 8 Tennis Courts – Corner of Walgreen and Gilmore Avenue
- 2 Multipurpose Courts – Kwinana Recquatic
- 3 Lawn Bowl Rinks – Medina Oval

#### **Current Need and Future Demand**

##### **District A**

There are currently no District Hard Courts in District A and based on the 2018 population estimate of 4,593 and a planning ratio of 1:25,000, there is no current need for a District Hard Courts facility.

With a 2031 population forecast of 13,792 and a planning ratio of 1:25,000, this will not justify the need for District Hard Courts in District A. However, this population makes a significant contribution toward the demand for District Hard Courts and this demand will be addressed by the provision of District Hard Courts to be located in District B (DCA 10 Casuarina/Anketell South), to serve both District A and B with a combined 2031 population forecast of 39,501.

##### **District B**

There are currently no District Hard Courts in District B and based on the 2018 population estimate of 14,075 and a planning ratio of 1:25,000, there is no current need for District Hard Courts.



With a 2031 population forecast of 25,709 and a planning ratio of 1:25,000, this will justify the need for District Hard Courts in District B and this demand will be addressed by the provision of District Hard Courts to be located in District B (DCA 10 Casuarina/Anketell South), to serve both District B and A with a combined 2031 population forecast of 39,501.

### **District C**

There are currently a number of hard courts in different locations within District C and with a 2018 population estimate of 26,940 and a planning ratio of 1:25,000, it would appear a District Hard Court facility is required. However, with the provision of the existing hard courts in Calista this facility is not considered a current priority, particularly given the 8 tennis courts at the Kwinana Tennis Club, Calista were upgraded in 2017.

With a 2031 population forecast of 35,000 and considering there are a number of benefits in collocating hard courts (such as the provision of a shared clubroom, rather than separate clubrooms and facilities for netball, basketball and tennis courts throughout District C), at some time in the future, when the existing hard courts have reached the end of their economic life, consideration should be given to re-locating these to the Medina Oval site. This would involve the construction of a multipurpose facility to accommodate sporting groups and community groups currently located on this site, and the relocation of the tennis club from Calista Oval to the Medina Oval location, with a timeframe of 10 to 15 years applying to this.

### **8.2.3 District Community Centre**

A District Community Centre consists of a multipurpose community hub that provides for the higher order social, recreational, cultural and learning activities, programs and services generated from a number of surrounding local areas.

A District Community Centre also provides the base for the delivery of district level community services such as child health centres. Office accommodation for community/government organisations can also be included, and space for the provision of outreach services and programs.

#### **Planning Ratio**

1:25,000 people

#### **Land area required**

1.0 hectare

#### **Building area required**

1,200m<sup>2</sup>

#### **Current Supply**

District A

- Nil

District B

- Nil

District C

- Nil

## **Current Need and Future Demand**

### **District A**

There is currently no District Community Centre in District A and based on the 2018 population estimate of 4,593 and a planning ratio of 1:25,000, there is no current need for a District Community Centre.

With a 2031 population forecast of 13,792 and a planning ratio of 1:25,000, this will not justify the need for a District Community Centre in District A. However, this population makes a significant contribution toward the demand for a District Community Centre and this demand will be addressed by the provision of the Local Community Centre (Large Scale) in DCA 9 Wandii/Anketell North, given this is intended to be co-located with the District Library and will therefore form a district community hub.

### **District B**

With a 2018 population estimate of 14,075 and a planning ratio of 1:25,000, there is no current need for a District Community Centre in District B.

With a 2031 population forecast of 25,709 and a planning ratio of 1:25,000, this will justify the need for District Community Centre in District B and this will be provided in DCA 10 Casuarina/Anketell.

### **District C**

There is currently no District Community Centre in District C and while based on the 2018 population estimate of 26,940, this would indicate that a District Community Centre is required, with the provision of the Sub-Regional Library and Community Resource Centre located in District C, this is not required.

With a 2031 population forecast of 35,000 and given the above, there will remain no requirement for a District Community Centre in District C.

#### **8.2.4 District Youth Centre**

A District Youth Centre provides a multipurpose community hub that caters for children and young people by providing facilities, programs and services that support their social, educational, recreational and developmental needs and wellbeing.

A District Youth Centre caters for both indoor and outdoor activities and provides a base for youth services.

Youth workers can also provide outreach programs and activities for young people at Local Community Centres.

### **Planning Ratio**

1:25,000 people

## Land area required

1.0 hectares

## Building area required

1,830m<sup>2</sup>

## Current Supply and Future Demand

District A

- Nil

District B

- Nil

District C

- The Zone Youth Centre



'Zone' District Youth Centre – District C

## District A

There is currently no District Youth Centre in District A and based on the 2018 population estimate of 4,593 and a planning ratio of 1:25,000, there is no current need for a District Youth Centre.

With a 2031 population forecast of 13,792, this is below the population threshold of 25,000 that would normally generate the need for a Youth Centre. However, there is a requirement to provide a Youth Centre in District A. This reflects the fact that typically, there is a high population of young people in new residential areas and that young people have particular access difficulties, relying on walking, public transport and parents to get to community facilities and activities. A Youth Centre is also considered essential given the relative isolation of District A.

## **District B**

There is currently no District Youth Centre in District B and based on the 2018 population estimate of 14,075 and a planning ratio of 1:25,000, there is no current need for a District Youth Centre.

With a 2031 population forecast of 25,709 and a planning ratio of 1:25,000, this will justify the need for a Youth Centre in District B.

## **District C**

With a 2018 population estimate of 26,940, this generates the need for a District Youth Centre, which has been completed and is located in the City Centre in DCA 15 Medina/Orelia/Parmelia/Calista/Town Centre.

### **8.2.5 District Branch Library**

District Branch Libraries provide a centre for learning, knowledge and access to information and ideas with a wide range of reference, fiction, non-fiction, children, young adult, large print, special genre and specialist collections. They also provide public access to information and communication technology resources.

District Branch Libraries can also provide outreach services and programs in other community facilities and to the wider community, such as 'book on wheels'.

District Branch Libraries are an essential component of the public library system and structure within large LGAs and are supported by the central functions performed by a regional level library, which in the case of the City of Kwinana is the Library in the Darius Wells Library and Resource Centre.

### **Planning Ratio**

1:35,000 people

### **Land area required**

1.0 hectares (based on two storey building)

### **Building area required**

2,400m<sup>2</sup>



**Darius Wells Library**

## **Current Supply and Future Demand**

### **District A**

With a 2031 population estimate of 13,792, this is below the planning ratio of 1:35,000 for a District Branch Library. However, while the 2031 population forecast for District B at 25,709 is also below the population threshold of 35,000 for a District Branch Library, the combined population of District A and District B at 39,501 does generate the need for a District Branch Library and this will be located in District A, DCA 9 Wandí/Anketell North. The intent is that this library will be situated at the Wandí District Centre as shown on Figure 60. The District Branch Library may be co-located with the Local Community Centre (Large Scale).

### **District B**

See above

### **District C**

Given the Darius Wells Library, as the central regional library is located in District C, there is no current or future need for a District Branch Library in District C.

### **8.2.6 District Recreation Centre**

A District Recreation Centre provides a multipurpose indoor space for a wide variety of competitive and social sports including basketball, netball, volleyball, badminton, indoor soccer, hockey and bowls.

A District Recreation Centre also caters for a range of fitness, health and recreational activities and can also provide space for community and cultural events. It can also provide outreach services and programs at other community facilities.

**Planning Ratio**

1:35,000 people

**Land area required**

1.6 hectares

**Building area required**

5,000m<sup>2</sup>

**Current Supply and Future Demand****District A**

With a 2031 population estimate of 13,792, this is below planning ratio of 1:35,000 for a District Recreation Centre. However, while the 2031 population forecast for District B at 25,709 is also below the population threshold of 35,000 for a District Recreation Centre, the combined population of District A and District B at 39,501 does generate the need for a District Recreation Centre to serve both districts. This will be located in District A, DCA 9 Wandii/Anketell North and the intent is that this Centre will be situated near the Wandii District Centre as shown on Figure 60.

**District B**

See above

**District C**

With a 2031 population of 35,000, the population of District C requires the provision of Recreation Centre. However, this is addressed by the current provision of the Recquatic Centre which includes a Recreation Centre.

**8.3 Sub-Regional Community Infrastructure**

Sub-Regional community infrastructure includes sub-regional level parks, sporting grounds, libraries, community centres, recreation and aquatic facilities and art and cultural centres and caters for the sub-regional level needs of all Districts.

**8.3.1 Sub-Regional Park – Kwinana Adventure Park**

A Sub-Regional Park is a multifaceted, large scale park with major attractions that provide unique opportunities for play, adventure, physical activity, passive recreation, enjoyment and relaxation for all age groups and abilities.

A Sub-Regional Park has the capacity in scale and features to serve all Districts and also provides a venue for major community and cultural events.

**Planning Ratio**

1:75,000+

**Land area required**

5.0 hectares.

### **Current Supply and Future Demand**

There is currently one Sub-Regional Park, the Kwinana Adventure Park, which is located in the City Centre. With a 2031 population forecast for all Districts of 74,501 and a planning ratio of 1:75,000+, this is adequate to meet the current and future needs of the City of Kwinana.

#### **8.3.2 Sub-Regional Foreshore Park – Wells Park Kwinana Beach Foreshore**

A Sub-Regional Foreshore Park provides the infrastructure for supporting the use of the beach, swimming and other water activities, such as canoeing and fishing. It also provides the opportunity for play, adventure, physical activity, passive recreation, enjoyment and relaxation for all age groups and abilities.

A Sub-Regional Foreshore Park has the capacity in scale and features to serve all Districts and also provides a venue for major community and cultural events.

#### **Planning Ratio**

1:75,000+

#### **Land area required**

5.0 hectares.

### **Current Supply and Future Demand**

There is currently one designated Sub-Regional Foreshore Park, Wells Park Kwinana Beach Foreshore, however this needs to be considerably developed to achieve a sub-regional level facility. With a 2031 population forecast of 74,501 for all Districts and a planning ratio of 1:75,000+, this is considered adequate to meet the current and future needs of the City of Kwinana, once upgraded.

#### **8.3.3 Sub-Regional Sporting Ground - Thomas Oval/Kelly Park**

A Sub-Regional Sports Ground is a large scale sporting ground with a number of precincts that cater for a wide range of sports and accommodates a high standard of sport for the respective codes played in the LGA catchment. It accommodates 'A' grade teams/clubs, league and pennant level sport.

A Sub-Regional Sports Ground must also have the capacity to cater for passive recreation opportunities and informal opportunities for physical activity and fitness while the ground is being used for organised sports. It can also serve as a venue for large community, cultural or entertainment and exhibition events.

#### **Planning Ratio**

1:75,000+

#### **Land area required**

5.0 hectares.

### **Current Supply and Future Demand**

There is currently one Sub-Regional Sporting Ground, Thomas Oval/Kelly Park which is located in DCA 15 Medina/Orelia/Parmelia/Calista, however this needs to be upgraded to achieve a sub-regional level facility.

While a new clubroom was recently constructed and the existing hard court area has been upgraded, the original clubroom will require extension and modernisation. Changerooms and public toilets need to be constructed and whole of ground lighting needs to be installed to facilitate greater access to training opportunities and match play under lights.

With a 2031 population forecast of 74,501 and a planning ratio of 1:75,000+, this is adequate to meet the current and future needs of the City of Kwinana, once upgraded.

#### **8.3.4 Darius Wells Library and Community Resource Centre**

The Darius Wells Library and Community Resource Centre is a sub-regional level facility with an integrated range of components that form a Community Hub accommodating a wide range of services and programs.



This centre encompasses a Sub-Regional Library and a Sub-Regional Community Centre and caters for the broad range of universal services required across all population groups. It may also accommodate targeted or specialist services and programs.

The Darius Wells Library and Community Resource Centre also accommodates regional level community organisations and visiting government services and programs. It can be expected to provide outreach services or programs to District Community Centres.

#### **Darius Wells Library and Resource Centre**

##### **Planning Ratio**

1:75,000+

##### **Land area required**

Not applicable (existing)

##### **Current Supply and Future Demand**

The Darius Wells Library and Resource Centre was recently completed and is located in the Kwinana City Centre. With a 2031 population forecast of 74,501 for all Districts and a planning ratio of 1:75,000+, this is adequate to meet the current and future needs of the City of Kwinana.

#### **8.3.5 Sub-Regional Recreation and Aquatic Centre**

A Sub-Regional Recreation and Aquatic Centre is a multipurpose, high standard recreation, sporting and leisure facility that serves the population across all Districts. It caters for all ages and abilities.



A Sub-Regional Recreation and Aquatic Centre typically includes a 25m heated pool, leisure pool, hydrotherapy pool, spa, indoor courts, fully equipped gym, activity rooms, crèche, meeting and office space, kitchen, function room and café.

A Sub-Regional Recreation and Aquatic Centre caters for a diverse range of programs and activities such as swimming, water aerobics, hydrotherapy, indoor sports, exercise and fitness and may also provide specialist programs, such as pre-natal fitness.

**Planning Ratio**

1:75,000+

**Land area required**

Not applicable (existing)

**Current Supply and Future Demand**

The Sub-Regional Recreation and Aquatic Centre was built some years ago and has recently been upgraded to reflect a regional level facility. It is known as the Kwinana Recquatic.

With an expected 2031 population of 74,501, no further Sub-Regional Recreation and Aquatic Centres will be required. Specialised gymnasium and swim centres have now emerged within the City to cater for more specific needs in this area, however even if the population was greater, it would be difficult to justify the City providing another facility of this nature.

**8.3.6 Sub-Regional Arts and Cultural Centre**

A Sub-Regional Arts Centre is a multipurpose community facility catering for the creative, visual and performing arts interests and skill development needs that arise from a Sub-Regional population. It may include theatre, drama, dance, visual arts and music.

A Sub-Regional Arts Centre typically includes a theatre with 200 - 400 seating capacity, smaller studio theatre, dance and rehearsal spaces, activity rooms, meeting rooms, function room, kitchen and bar area and outdoor performance areas.

A Sub-Regional Arts Centre caters for live theatre and performances, major concerts and events and also provides a diverse range of arts and cultural activities and programs across all age groups and abilities.

**Planning Ratio**

1: 100,000

**Land area required**

Not applicable (existing)

**Current Supply and Future Demand**

With an expected 2031 population of 74,501 no further Sub-Regional Arts and Cultural Centre will be required. However, a major refurbishment of the existing centre will be required in the next five years.

## 9. Community Infrastructure Plan 2031

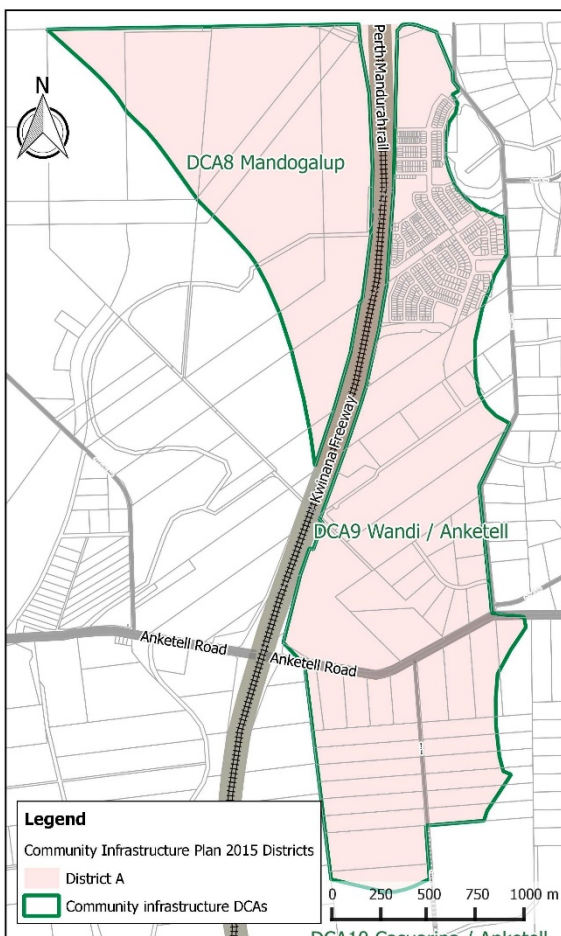
The following Community Infrastructure Plan provides a summary of the community infrastructure requirements emerging from the above Supply and Demand Analysis across each District and should be considered with Figure 60 which provides spatial instruction as to the proposed locations of the facilities (where possible). In some instances, the final location of facilities will not be determined until the local structure planning and subdivision stage. For others, the locations shown on Figure 60 are indicative and require further detailed consideration.

### 9.1 District A

District A is located in the northern area of the City of Kwinana, on both the east and west side of the Kwinana Freeway. The area is largely semi-rural at present and includes those areas of Mandogalup, Wandi and Anketell that are within the Urban Growth Boundary. District A is made up of two Development Contribution Areas:

- DCA 8 Mandogalup
- DCA 9 Wandi/Anketell North

Figure 58 District A



#### 9.1.1 Population

District A has an estimated 2018 population of 5,452 and is currently projected to grow to 13,792 people by 2031 and will make up approximately 19% of the City of Kwinana's population at this time.

Most of the existing population in District A is located in DCA 9 Wandii/Anketell North, which will continue to grow in the future. While the DCA 8 Mandogalup existing population is small, this will also grow in the future.

The Jandakot District Structure Plan and Eastern Residential Intensification Concept plan envisaged a future population within Mandogalup of up to 6,000 people. DCA 8 Mandogalup will accommodate a 2031 population of 5,265 based on the existing MRS Urban zoned land.

City Officers are cognisant of particular areas, such as Mandogalup, that have been identified as having the potential for future Urban growth. In early 2018, the City received a request from the Western Australian Planning Commission (WAPC) to provide comments on a proposal under the Metropolitan Region Scheme (MRS) to lift urban deferment from 59 hectares (ha) of land within the Mandogalup area. Further in the context of Mandogalup, in early 2018 the State Government and WAPC released two key strategic documents that set out a future planning framework – an Improvement Plan and a Sub-Regional Planning Framework. The Improvement Plan, once prepared, will have the effect of taking planning control from the City and placing it under the control of the WAPC. The WAPC’s intent for the Improvement Plan area is to consider up-coding from rural to industrial land. The Sub-Regional Planning Framework has identified a significant part of Mandogalup as Industrial Investigation with areas outside of this being suitable for Urban land uses

Within the scope of this Community Infrastructure Plan however, such areas have not been included in the community needs assessment and will not be included until such time as potential rezoning occurs, specifically in the context of future residential land, and there is more certainty in this regard.

**Table 11 District A - Population Projections**

District A	2011		New		Ultimate	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA8 Mandogalup*	0	0	5,265	1,950	5,265	1,950
DCA9 Wandii/Anketell North	68	25	8,459	3,133	8,527	3,158
<b>Total</b>	<b>68</b>	<b>25</b>	<b>13,724</b>	<b>5,083</b>	<b>13,792</b>	<b>5,108</b>

2012- 2021	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
DCA8 Mandogalup*	0	0	0	0	0	473	1,013	1,553	2,093	2,633
DCA9 Wandii/Anketell North	579	1,459	1,885	3,092	3,559	4,120	4,439	5,027	5,616	6,566
<b>Total</b>	<b>579</b>	<b>1,459</b>	<b>1,885</b>	<b>3,092</b>	<b>3,559</b>	<b>4,593</b>	<b>5,452</b>	<b>6,580</b>	<b>7,709</b>	<b>9,199</b>

2022 – 2031	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
DCA8 Mandogalup*	3,173	3,618	4,064	4,506	4,747	4,919	5,092	5,265	5,265	5,265
DCA9 Wandii/Anketell North	7,252	7,571	7,889	8,208	8,527	8,527	8,527	8,527	8,527	8,527
<b>Total</b>	<b>10,425</b>	<b>11,189</b>	<b>11,953</b>	<b>12,714</b>	<b>13,274</b>	<b>13,446</b>	<b>13,619</b>	<b>13,792</b>	<b>13,792</b>	<b>13,792</b>

Based on revised lot yields 2016

\* Potential of additional population arising from the lifting of urban deferment

While District A has a 2031 population of 13,792, which is lower than the District population catchment of 25,000 to 35,000 defined in the Community Infrastructure Hierarchy, there is a strong rationale for recognising this area as a District, particularly given the additional population arising from the lifting of urban deferment.

Further, District A borders with the City of Cockburn and the growth suburbs of Aubin Grove and Hammond Park, each with a 2031 population forecast of 8,995 and 9,052 respectively. A sizable part of this population will be closer to the District Centre proposed in District A, than Cockburn Central in the City of Cockburn. The City of Kwinana is already servicing these areas, with demand for community facilities coming from both Aubin Grove and Hammond Park.

The following tables provide a summary based on the Supply and Demand Analysis and outline the existing and proposed Local, District and Sub-Regional community infrastructure required to meet the needs of District A. This is followed by Table 12, which identifies these requirements and provides a timeline for provision.

### 9.1.2 Local and Neighbourhood Community Infrastructure

Local and Neighbourhood	Built Community Infrastructure	Proposed Community Infrastructure
Local Parks	6	To be determined at LSP design stage
Neighbourhood Parks	6	To be determined at LSP design stage
Local Community Centres	Nil	1 Local Community Centre in DCA 8 Mandogalup
Local Community Centres (Large Scale)	Nil	1 Local Community Centre (Large Scale) in DCA 9 Wandii/Anketell North
Local Sports Grounds (With Clubroom)	1 Local Sporting Ground in DCA 9 Wandii/Anketell North (Honeywood)	Clubroom component to be built - Local Sporting Ground in DCA 9 Wandii/Anketell North (Honeywood)
Local Sports Grounds (With Small Facility Building)	Nil	1 Local Sporting Ground (With Small Facility Building) in DCA 8 Mandogalup and 2 in DCA 9 Wandii/Anketell North, with one of these to be provided via joint use with the proposed High School

### 9.1.3 District Community Infrastructure

District	Built Community Infrastructure	Proposed Community Infrastructure
District Community Centre	Nil	Nil
District Youth Centre	Nil	District Youth Centre in DCA 9 Wandii/Anketell North to serve District A
District Sporting Ground	Nil	Nil
District Hard Courts	Nil	District Hard Courts in DCA 10 Casuarina/Anketell South to serve District A and B
District Library	Nil	District Library in DCA 9 Wandii/Anketell North to serve District A and B
District Recreation Centre	Nil	District Recreation Centre in DCA 10 Casuarina/Anketell South to serve District A and B

### 9.1.4 Sub-Regional Community Infrastructure

Sub-Regional	Built Community Infrastructure	Proposed Community Infrastructure
Sub-Regional Destination Park	Kwinana Adventure Park	Nil
Sub-Regional Beach Foreshore Park	Wells Park Kwinana Beach Foreshore	Upgrade required
Sub-Regional Sporting Ground	Thomas Oval Sports Ground	Upgrade required
Su-Regional Library and Community Centre	Darius Wells Library and Community Resource Centre	Nil
Su-Regional Recreation and Aquatic Centre	Recquatic	Nil
Arts and Cultural Centre	Koorliny Arts centre	Upgrade required
Works Depot	Kwinana Works Depot	Upgrade required
Animal Shelter	Kwinana Animal Shelter	New
Civic Administration Building	Kwinana Civic Administration Centre	Upgrade required

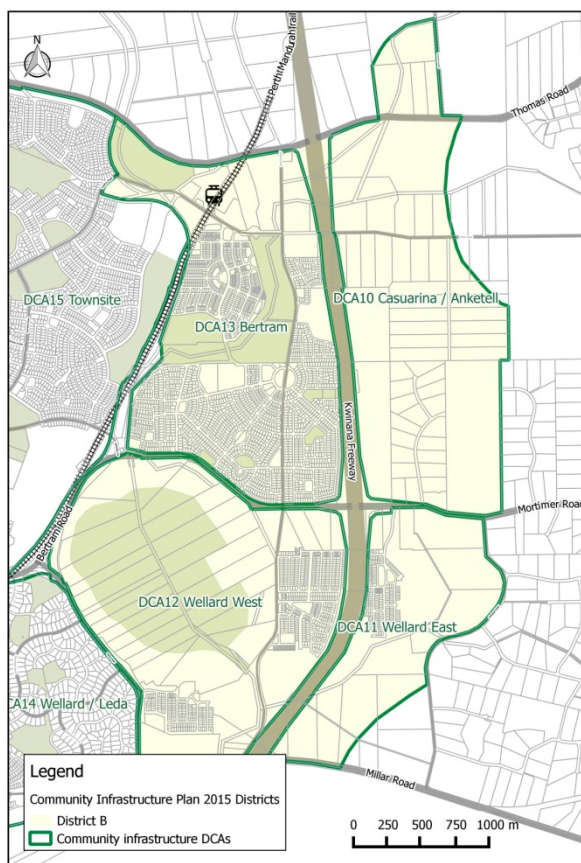


## 9.2 District B

District B is located in the south east area of the City of Kwinana, on both the east and west side of the Kwinana Freeway. The area is partly semi-rural at present and includes Wellard West and those areas of Casuarina/Anketell and Wellard East that are within the Urban Growth Boundary, and Bertram, which is almost at full development. District B is made up of four Development Contribution Areas:

- DCA 10 Casuarina/Anketell South
- DCA 11 Wellard East
- DCA 12 Wellard West
- DCA 13 Bertram

**Figure 59 District B**



### 9.2.1 Population

District B estimated 2018 population is 14,075. This is set to grow to 25,709 people by 2031 and will make up approximately 35% of the City of Kwinana's population by this time. DCA 13 Bertram and DCA 12 Wellard West equally accommodate the majority of the existing population in District B. While the population in DCA 12 Wellard West will continue to grow, DCA 13 Bertram is nearly at full development.

By 2031, DCA 12 Wellard West is expected to have the greatest population within the district of 8,354, followed by DCA 10 Casuarina/Anketell South with 7,530 and DCA 13 Bertram with 6,453. DCA 11 Wellard East will have the smallest population at 3,372, with the south eastern portion of this DCA currently restricted from residential development due to the land being within an amenity buffer surrounding a livestock holding facility on Telephone Lane within the City of Rockingham. The effective quarantining of this land has reduced the projected population for DCA11 Wellard East from earlier projections of 3,964 to 3,372.

**Table 13 District B - Population Projections**

District B	2011		New		Ultimate	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA10 Casuarina/Anketell South	0	0	7,530	2,420	7,530	2,420
DCA11 Wellard East	0	0	3,372	1,249	3,372	1,249
DCA12 Wellard West	232	86	8,122	3,008	8,354	3,094
DCA 13 Bertram	4,401	1,630	2,052	760	6,453	2,390
<b>Total</b>	<b>4,633</b>	<b>1,716</b>	<b>21,076</b>	<b>7,437</b>	<b>25,709</b>	<b>9,153</b>

2012 - 2021	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
DCA10 Casuarina/Anketell South	0	0	0	0	0	127	869	1,550	2,271	2,865
DCA11 Wellard East	0	59	500	1,501	1,955	2,430	2,986	3,224	3,372	3,372
DCA12 Wellard West	1,022	1,384	1,661	2,970	3,507	4,066	5,033	6,064	6,774	7,266
DCA 13 Bertram	4,533	4,533	4,560	4,828	4,842	5,014	5,187	5,498	5,646	5,795
<b>Total</b>	<b>5,555</b>	<b>5,977</b>	<b>6,721</b>	<b>9,299</b>	<b>10,304</b>	<b>11,637</b>	<b>14,075</b>	<b>16,336</b>	<b>18,063</b>	<b>19,298</b>
2022 - 2031	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
DCA10 Casuarina/Anketell South	3,332	3,799	4,266	4,733	5,200	5,667	6,134	6,602	7,069	7,530
DCA11 Wellard East	3,372	3,372	3,372	3,372	3,372	3,372	3,372	3,372	3,372	3,372
DCA12 Wellard West	7,436	7,436	7,436	7,582	7,727	7,873	8,035	8,195	8,354	8,354
DCA 13 Bertram	5,943	6,092	6,240	6,399	6,413	6,426	6,440	6,453	6,453	6,453
<b>Total</b>	<b>20,083</b>	<b>20,699</b>	<b>21,314</b>	<b>22,086</b>	<b>22,712</b>	<b>23,338</b>	<b>23,981</b>	<b>24,622</b>	<b>25,248</b>	<b>25,709</b>

Based on revised lot yields 2016

The following tables provide a summary based on the Supply and Demand Analysis and outline the existing and proposed Local, District and Sub-Regional community infrastructure required to meet the needs of District B. This is followed by Table 14 which identifies these requirements and provides a timeline for provision.



### 9.2.2 Local and Neighbourhood Community Infrastructure

Local and Neighbourhood	Built Community Infrastructure	Proposed Community Infrastructure
Local Parks	18	To be determined at LSP design stage
Neighbourhood Parks	8	To be determined at LSP design stage
Local Community Centres	1 Local Community Centre in DCA 13 Bertram	1 Local Community Centre in DCA 10 Casuarina – Anketell South 1 Local Community Centre in DCA 12 Wellard West to be co-located with the Clubroom associated with Local Sports Ground in DCA 12 Wellard West Local Sports Ground (McWhirter Oval)
Local Community Centres (Large Scale)	Nil	Nil
Local Sports Grounds (With Clubroom)	1 Local Sporting Ground in DCA 12 Wellard West (McWhirter Oval)	Clubroom component to be built with co-located Local Community Centre as above.  1 Local Sporting Ground (With Clubroom) in DCA 10 Casuarina/Anketell South, to be co-located with proposed High School site
Local Sports Grounds (With Small Facility Building)	Nil	1 Local Sporting Ground (With Small Facility Building) in DCA 10 Casuarina/Anketell South to be co-located with proposed Primary School site

### 9.2.3 District Community Infrastructure

District	Built Community Infrastructure	Proposed Community Infrastructure
District Community Centre	Nil	District Community Centre in DCA 10 Casuarina/Anketell South to serve District B
District Youth Centre	Nil	District Youth Centre in DCA 10 Casuarina/Anketell South to serve District B
District Sporting Ground	Nil	Nil
District Hard Courts	Nil	District Hard Courts in DCA 10 Casuarina/Anketell South to serve District A and B
District Library	Nil	District Library in DCA 9 Wandii/Anketell North to serve District A and B

District Recreation Centre	Nil	District Recreation Centre in DCA 10 Casuarina/Anketell South to serve District A and B
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#### 9.2.4 Sub-Regional Community Infrastructure

Sub-Regional	Built Community Infrastructure	Proposed Community Infrastructure
Sub-Regional Destination Park	Kwinana Adventure Park	Nil
Sub-Regional Beach Foreshore Park	Wells Park Kwinana Beach Foreshore	Upgrade required
Sub-Regional Sporting Ground	Thomas Oval Sports Ground	Upgrade required
Su-Regional Library and Community Centre	Darius Wells Library and Community Resource Centre	Nil
Su-Regional Recreation and Aquatic Centre	Recquatic	Nil
Arts and Cultural Centre	Koorliny Arts centre	Upgrade required
Works Depot	Kwinana Works Depot	Upgrade required
Animal Shelter	Kwinana Animal Shelter	New
Civic Administration Building	Kwinana Civic Administration Centre	Upgrade required

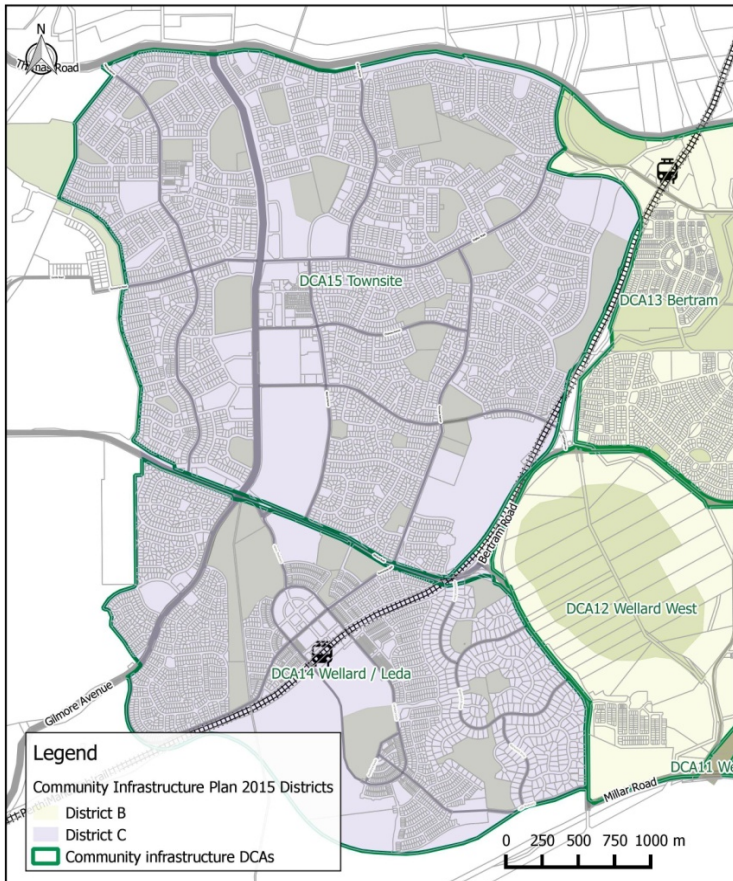


### 9.3 District C

District C encompasses the City Centre and the established urban areas of Kwinana, namely, Leda, Medina, Orelia, Parmelia and Calista and also the new residential development of Wellard. District C is made up of two Development Contribution Areas:

- DCA 14 Wellard Leda
- DCA 15 Medina/Orelia/Parmelia/Calista/Town Centre

**Figure 59 District C**



#### 9.3.1 Population

District C estimated 2018 population is 17,714. This is set to grow to 35,000 people by 2031 and will make up approximately 47% of the City of Kwinana’s population at this time. The population growth of District C will occur as a result of both urban infill and new residential development.

The majority of the existing population in District C is in DCA 15 Medina/Orelia/Parmelia/Calista and this will remain the case, increasing to 22,442 by 2031, largely as a result of urban infill.

The population of DCA 14 Wellard Leda will continue to grow to an estimated 12,558 by 2031, mainly as a result of new urban development.

**Table 15 District C - Population Projections**

District C	2011		New		Ultimate	
	Population	Dwellings	Population	Dwellings	Population	Dwellings
DCA14 Wellard Leda	5,982	2,188	6,576	2,463	12,558	4,651
DCA15 Medina/Orelia/Parmelia/Calista	15,483	6,500	6,959	2,851	22,442	9,351
<b>Total</b>	<b>21,465</b>	<b>8,688</b>	<b>13,535</b>	<b>5,314</b>	<b>35,000</b>	<b>14,002</b>

2012 - 2021	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
DCA14 Wellard Leda	6,231	6,920	7,882	8,216	8,427	8,826	9,226	9,262	10,025	10,425
DCA15 Medina/Orelia/Parmelia/Calista	15,507	15,743	15,917	16,531	16,675	17,297	17,714	18,086	18,578	19,166
<b>Total</b>	<b>21,738</b>	<b>22,663</b>	<b>23,799</b>	<b>24,747</b>	<b>25,102</b>	<b>26,123</b>	<b>26,940</b>	<b>27,348</b>	<b>28,603</b>	<b>29,591</b>

2022 - 2031	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
DCA14 Wellard Leda	10,824	11,224	11,624	12,002	12,380	12,558	12,558	12,558	12,558	12,558
DCA15 Medina/Orelia/Parmelia/Calista	19,663	20,095	20,527	20,878	21,187	21,480	21,744	22,008	22,272	22,442
<b>Total</b>	<b>30,487</b>	<b>31,319</b>	<b>32,151</b>	<b>32,880</b>	<b>33,567</b>	<b>34,038</b>	<b>34,302</b>	<b>34,566</b>	<b>34,830</b>	<b>35,000</b>

Based on revised lot yields 2016

The following tables provide a summary based on the Supply and Demand Analysis and outline the existing and proposed Local, District and Sub-Regional community infrastructure required to meet the needs of District C. This is followed by Table 16, which identifies these requirements and provides a timeline for provision.

### 9.3.2 Local and Neighbourhood Community Infrastructure

Local and Neighbourhood	Built Community Infrastructure	Proposed Community Infrastructure
Local Parks	69	To be determined at LSP design stage
Neighbourhood Parks	23	To be determined at LSP design stage
Local Community Centres	2 Local Community Centres in DCA 15 Medina/Orelia/Parmelia/Calista (Frank Konecny Family Centre and Medina Hall)	Nil
Local Community Centres (Large Scale)	1 Local Community Centre (Large Scale) in DCA 14 Wellard Leda (John Wellard Community Centre)	Nil
Local Sports Grounds (With Clubroom)	1 Local Sporting Ground (With Clubroom) in DCA 14 Wellard Leda (Wellard Oval)	Nil
Local Sports Grounds (With Small Facility Building)	Rhodes Park - with kiosk, public toilets Chisham Oval - with public toilets Medina Oval - with public toilets, changerooms	1 Local Sporting Ground (with Small Facility Building) in DCA 14 Wellard/Leda

### 9.3.3 District Community Infrastructure

District	Built Community Infrastructure	Proposed Community Infrastructure
District Community Centre	Nil	Nil
District Youth Centre	The Zone Youth Centre	Nil
District Sporting Ground	Orelia Oval	Medina Oval upgrade, possible relocation/co-location of existing hard courts in District C
District Hard Courts	At various locations in District C	See above

### 9.3.4 Sub-Regional Community Infrastructure

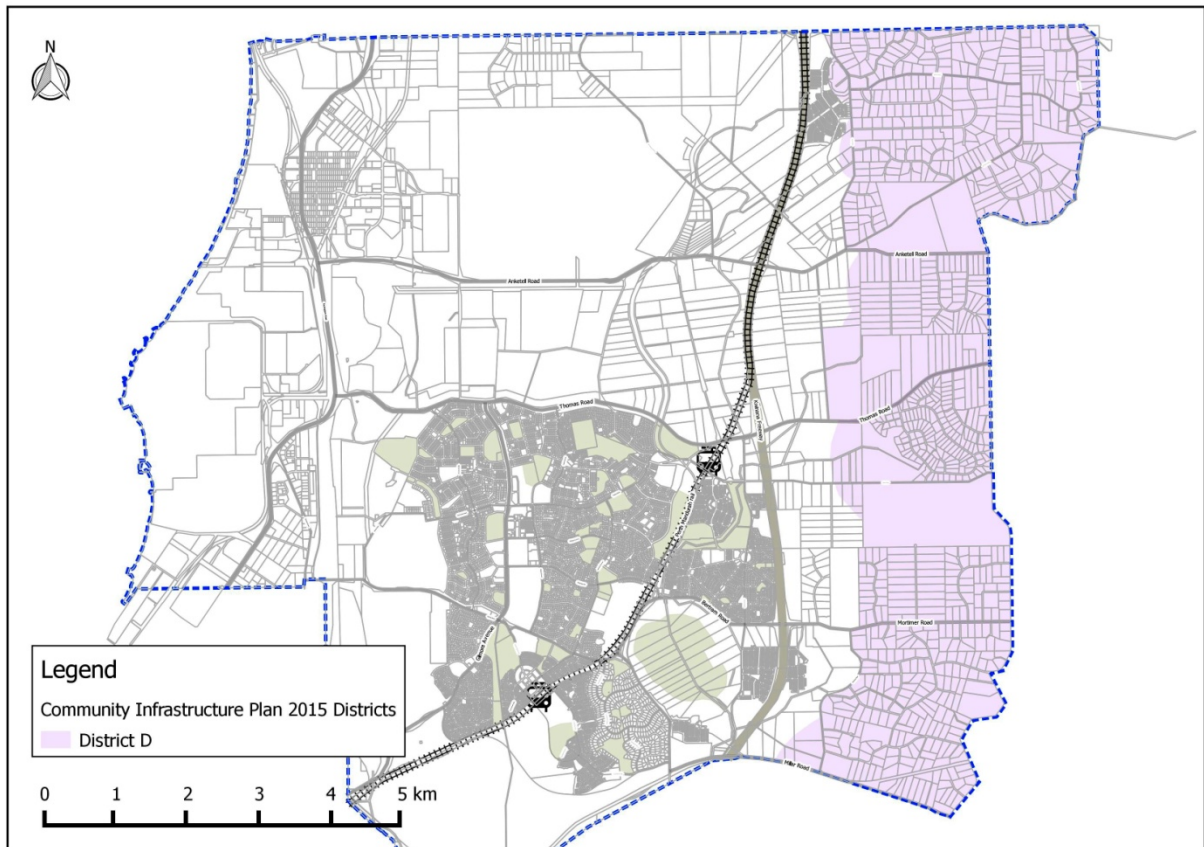
Sub-Regional	Built Community Infrastructure	Proposed Community Infrastructure
Sub-Regional Destination Park	Kwinana Adventure Park	Nil
Sub-Regional Beach Foreshore Park	Wells Park Kwinana Beach Foreshore	Upgrade required
Sub-Regional Sporting Ground	Thomas Oval Sports Ground	Upgrade required
Su-Regional Library and Community Centre	Darius Wells Library and Community Resource Centre	Nil
Su-Regional Recreation and Aquatic Centre	Recquatic	Nil
Arts and Cultural Centre	Koorliny Arts Centre	Upgrade required
Works Depot	Kwinana Works Depot	Upgrade required
Animal Shelter	Kwinana Animal Shelter	New
Civic Administration Building	Kwinana Civic Administration Centre	Upgrade required



## 9.4 District D

The 2015 review of the CIP resulted in the introduction of District D for the primarily rural areas east of the Kwinana Freeway with the purpose of including this District in future reviews of the CIP, when this area is rezoned for urban development. When this occurs, the future projected population of District D and the community infrastructure requirements will be determined and included in the CIP. Given this, District D is not currently part of the Developer Contribution Plans and as such, no items of community infrastructure are proposed in the CIP 2018.

Figure 59 District D





### 9.4.1 Local and Neighbourhood Community Infrastructure

Local and Neighbourhood	Built Community Infrastructure	Proposed Community Infrastructure
Local Parks		Nil
Neighbourhood Parks		Nil
Local Community Centres	Casuarina Wellard Community Centre – community hall	Nil
Local Community Centres (Large Scale)	Wandi Community Centre – community hall, community clubrooms, woodworking facilities, sports hall, community rooms.	Nil
Local Sports Grounds (With Clubroom)	Magenup Equestrian Centre	Nil
CentreLocal Sports Grounds (With Small Facility Building)	Wandi Oval – part of Wandi Community Centre Complex, including hardcourts	Nil

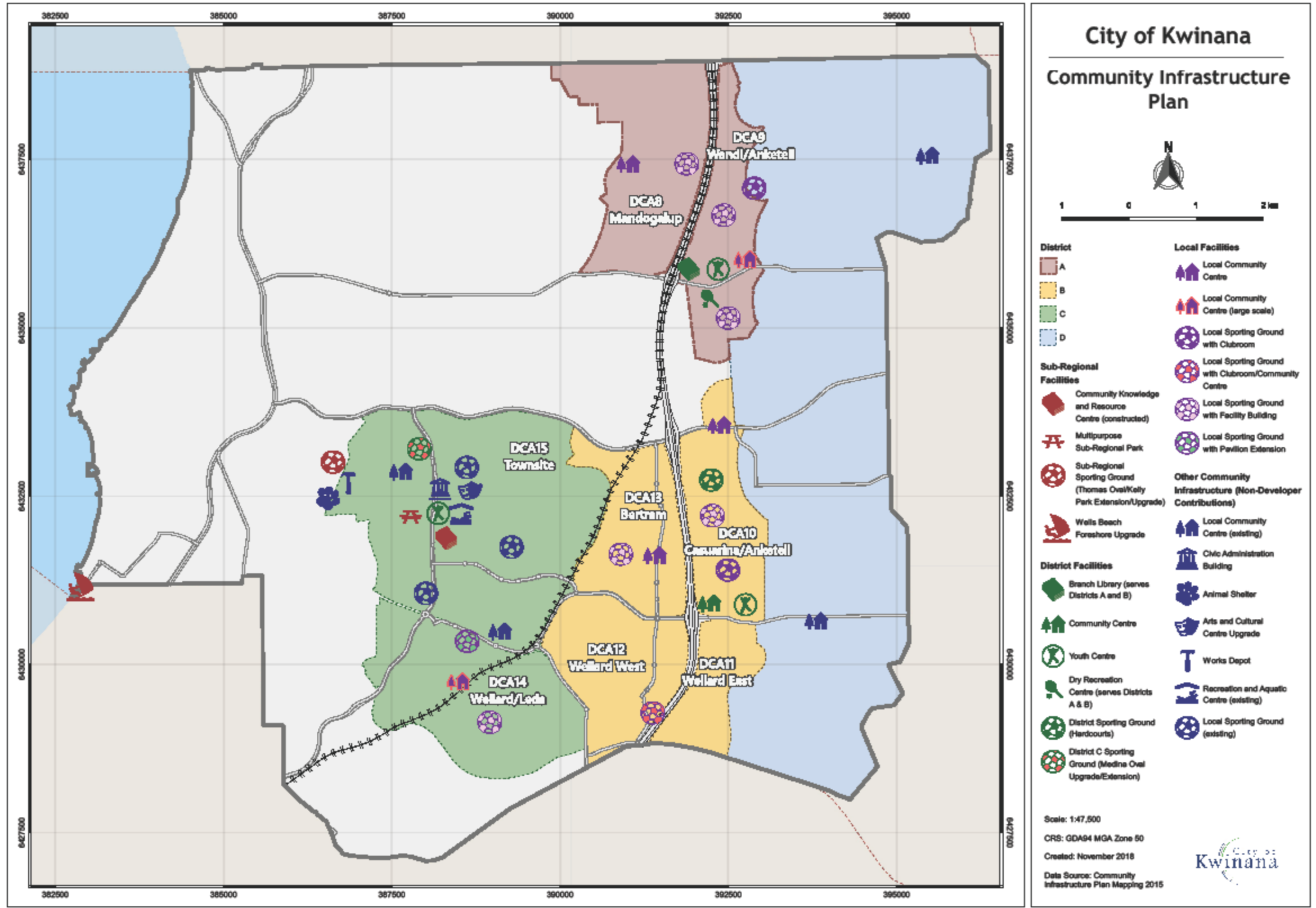
### 9.4.2 District Community Infrastructure

District	Built Community Infrastructure	Proposed Community Infrastructure
District Community Centre	Nil	Nil
District Youth Centre	Nil	Nil
Nil	Nil	Nil
District Hard Courts	Nil	Nil

### 9.4.3 Sub-Regional Community Infrastructure

Sub-Regional	Built Community Infrastructure	Proposed Community Infrastructure
Sub-Regional Destination Park	Kwinana Adventure Park	Nil
Sub-Regional Beach Foreshore Park	Wells Park Kwinana Beach Foreshore	Upgrade required
Sub-Regional Sporting Ground	Thomas Oval Sports Ground	Upgrade required
Su-Regional Library and Community Centre	Darius Wells Library and Community Resource Centre	Nil
Su-Regional Recreation and Aquatic Centre	Recquatic	Nil
Arts and Cultural Centre	Koorliny Arts Centre	Upgrade required
Works Depot	Kwinana Works Depot	Upgrade required
Animal Shelter	Kwinana Animal Shelter	New
Civic Administration Building	Kwinana Civic Administration Centre	Upgrade required

Figure 60 Community Infrastructure Plan





# **Community Infrastructure Plan**

## **Appendix 1**

### **Community Infrastructure Planning Standards**

## Community Infrastructure Planning Standards

PARKS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>Local Park</b></p>	<p>Local Parks provide the opportunity for recreation, relaxation and social interaction for the immediate surrounding local area and assist in preserving local biodiversity and in retaining/creating the open space network.</p>	<ul style="list-style-type: none"> <li>• Within 400 metre walkable catchment/5 minute walk of most dwellings.</li> <li>• Minimum of 75% of park perimeter to have street frontage.</li> <li>• Minimum depth of 20 metres with minimum flat turfed area of 1,000m<sup>2</sup> to facilitate ‘kick and play’.</li> <li>• Basic level of play equipment such as swing set, slide, and monkey bars, with playspaces catering for all age groups provided on Neighbourhood Parks.</li> <li>• Shaded bench seating.</li> <li>• Natural shaded areas by retaining existing trees/planting new trees.</li> <li>• Quiet space with shade and bench seating.</li> <li>• Security lighting where park forms pedestrian access way.</li> <li>• Pathways onto park and linking components.</li> <li>• Passive surveillance across the site.</li> <li>• Connected to footpath/cycle network.</li> </ul>	<p>1:1,200</p>	<p>0.5 ha</p>
<p><b>Neighbourhood Park</b></p>	<p>Neighbourhood Parks provide a well designed play space with equipment and natural play opportunities that provide both active and passive opportunities to assist children and young people develop their physical, cognitive and social skills.</p> <p>Neighbourhood Parks provide the opportunity for recreation, relaxation and a focal point for community interaction for all age groups and may provide for off-leash dog exercise and socialisation.</p> <p>Neighbourhood Parks provide the opportunity for residents to connect with nature and assist in preserving local biodiversity and in retaining/creating the open space network.</p>	<ul style="list-style-type: none"> <li>• Within a 800 metre walkable catchment/10 minute walk of most dwellings</li> <li>• Minimum of 75% of park perimeter to have street frontage.</li> <li>• Minimum depth of 50 metres with minimum flat turfed area of 2,000m<sup>2</sup> to facilitate ‘kick and play’ and fitness classes.</li> <li>• Shaded playspace capable of catering for::               <ul style="list-style-type: none"> <li>- 0-3 yr olds</li> <li>- 3-5 yr olds</li> <li>- 5-7 yr olds</li> <li>- 8-12 yr olds</li> <li>- 12+ year olds</li> </ul> </li> <li>• Shaded bench seating with view to playspace.</li> <li>• Natural shaded areas by retaining existing trees/planting new trees.</li> <li>• Artificial shade provided over playspace until new trees grow.</li> <li>• Quiet space with natural shade and bench seating.</li> <li>• Picnic table/seating, BBQ, drinking fountain.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Car bays (5-10)</li> <li>• Pathways onto park and linking components.</li> <li>• Passive surveillance across the site.</li> <li>• Connected to footpath/cycle network.</li> </ul>	<p>1:2500</p>	<p>1.0ha</p>

PARKS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>Sub-Regional Park</b></p>	<p>A Sub-Regional Park is a multifaceted, large scale park with major attractions that provide unique opportunities for play, adventure, physical activity, passive recreation, enjoyment and relaxation for all age groups and abilities.</p> <p>A Sub-Regional Park has the capacity in scale and features to serve all Districts and also provides a venue for major community and cultural events.</p>	<ul style="list-style-type: none"> <li>• Within a 12km radius of most dwellings.</li> <li>• Contains a number of major elements such as an adventure playground and skatepark, with a collection of smaller elements throughout the park, including high energy active and passive play spaces, including water, sensory, nature elements and spaces for quiet relaxation and reflection.</li> <li>• Shaded seating with view to all playspaces and park aspects.</li> <li>• Shaded courtyard space with kitchenette, BBQs and seating for parties and gatherings.</li> <li>• Flat turfed area of minimum 1.0 hectare to facilitate 'kick and play', casual sports and fitness classes.</li> <li>• Toilets and changerooms/showers.</li> <li>• Natural shaded areas by retaining existing trees/planting new trees.</li> <li>• Artificial shade provided where required.</li> <li>• Quiet spaces with shade and seating.</li> <li>• Picnic tables/seating/shade shelters, BBQs, drinking fountains.</li> <li>• Walking/running/cycle pathway around the perimeter of the site and may include fitness/gym equipment/stations.</li> <li>• Spaces and support infrastructure for major events.</li> <li>• Car bays (150)</li> <li>• Pathways onto park and linking components.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Connected to footpath/cycle and public transport network.</li> </ul>	<p>1:75,000+</p>	<p>5.0 ha</p>

PARKS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<b>Sub-Regional Foreshore Park</b>	<p>A Sub-Regional Foreshore Park provides the infrastructure for supporting the use of the beach, swimming and other water activities, such as canoeing and fishing.</p> <p>A Sub-Regional Foreshore Park provides the opportunity for play, adventure, physical activity, passive recreation, enjoyment and relaxation for all age groups and abilities.</p> <p>A Sub-Regional Foreshore Park has the capacity in scale and features to serve all Districts and also provides a venue for major community and cultural events.</p>	<ul style="list-style-type: none"> <li>• Accessible and safe beach area.</li> <li>• Contains a number of major elements such as a playspace/playground, high energy active spaces and passive spaces for quiet relaxation and reflection.</li> <li>• Shaded seating with view to all park aspects and the beach/ocean.</li> <li>• Shaded courtyard space and BBQs.</li> <li>• Flat turfed area of minimum 1.0 hectare to facilitate 'kick and play', casual sports and fitness classes.</li> <li>• Toilets and changerooms/showers.</li> <li>• Natural shaded areas by retaining existing trees/planting new trees.</li> <li>• Artificial shade provided where required.</li> <li>• Quiet spaces with shade and seating.</li> <li>• Picnic tables/seating/shade shelters, BBQs, drinking fountains.</li> <li>• Walking/running/cycle pathway around the perimeter of the site and may include fitness/gym equipment/stations.</li> <li>• Spaces and support infrastructure for major events.</li> <li>• Car bays (150).</li> <li>• Pathways onto park and linking components.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Connected to footpath/cycle and public transport network.</li> </ul>	1:75,000+	5..0 ha

SPORTING GROUNDS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>Local Sporting Ground with Small Facility Building</b></p>	<p>A Local Sports Ground with a Small Facility Building provides a multipurpose sports field that has the capacity to cater for a range of changing sporting codes over time, typically smaller clubs, junior sports and senior sports training grounds.</p> <p>A Local Sports Ground must also have the capacity to cater for passive recreation opportunities and informal opportunities for physical activity and fitness, while the ground is being used for organised sports.</p> <p>The purpose and function of the Small Facility Building is to support organised sports, passive recreation and informal physical activity.</p>	<ul style="list-style-type: none"> <li>• Within 2km catchment from most dwellings.</li> <li>• Minimum sports field component of 4.2 hectares (200m x 210m).</li> <li>• Training level lighting to sports field.</li> <li>• Minimum of 75% perimeter to have street frontage.</li> <li>• Small facility building required in the order of 180m<sup>2</sup> to include: <ul style="list-style-type: none"> <li>- Change area (2)</li> <li>- Kiosk/kitchenette</li> <li>- Storage space</li> <li>- Small meeting space</li> <li>- Public toilets</li> <li>- Veranda/spectator shaded area.</li> </ul> </li> <li>• Walking/running/cycle pathways around the perimeter of the site.</li> <li>• Picnic table/seating/shade shelter, BBQ, drinking fountain, fitness/gym stations.</li> <li>• Playspace to be included.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Car bays (30)</li> <li>• Pathways onto sports ground and linking components.</li> <li>• Connected to footpath/cycle and public transport network.</li> </ul>	1:5,000	4.6ha

SPORTING GROUNDS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>Local Sporting Ground with Clubroom Building</b></p>	<p>A Local Sports Ground with a Clubroom Building provides a multipurpose sports field that has the capacity to cater for a range of changing sporting codes over time, typically larger clubs and senior sporting clubs</p> <p>A Local Sports Ground must also have the capacity to cater for passive recreation opportunities and informal opportunities for physical activity and fitness, while the ground is being used for organised sports.</p> <p>The purpose and function of the Clubroom is to support junior and senior organised sports, passive recreation and informal physical activity.</p>	<ul style="list-style-type: none"> <li>• Within 2km catchment from most dwellings.</li> <li>• Population 7,500+ must include sports ground with clubroom building.</li> <li>• Minimum site dimension of 275m x 265m.</li> <li>• Minimum sports field component of 4.2 hectares (200m x 210m).</li> <li>• Training level lighting to sports field.</li> <li>• Minimum of 75% perimeter to have street frontage.</li> <li>• Clubroom building required in the order of 650m<sup>2</sup>.to include: <ul style="list-style-type: none"> <li>- Changerooms/showers (2)</li> <li>- Large multipurpose/function space, bar and meeting room</li> <li>- Commercial level kitchen with kiosk</li> <li>- Umpires changeroom</li> <li>- First aid room</li> <li>- General storage space and sports equipment storage</li> <li>- Internal toilets and public toilets</li> <li>- Veranda/spectator shaded space.</li> </ul> </li> <li>• Walking/running/cycle pathways around the perimeter of the site.</li> <li>• Picnic table/seating/shade shelter, BBQ, drinking fountain, fitness/gym stations.</li> <li>• Playspace to be included.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Car bays (60), capacity for overflow parking on the site</li> <li>• Pathways onto sports ground and linking components.</li> <li>• Connected to footpath/cycle and public transport network.</li> </ul>	1:5,000	7.2ha



SPORTING GROUNDS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>District Sporting Ground with Clubroom</b></p>	<p>A District Sports Ground and Clubroom provides multipurpose sports fields that have the capacity to cater for different sports simultaneously and typically cater for large clubs and higher competition levels where a number of sports pitches are required</p> <p>A District Sports Ground must also have the capacity to cater for passive recreation opportunities and informal opportunities for physical activity and fitness, while the ground is being used for organised sports.</p> <p>The purpose and function of the Clubroom is to support a number of sporting codes and uses at the same time, as well as passive recreation and informal physical activity.</p>	<ul style="list-style-type: none"> <li>• Within a 6km catchment of most dwellings.</li> <li>• Minimum of 75% perimeter to have street frontage.</li> <li>• Minimum sports field component of 4.2 hectares (200m x 210m) x 2</li> <li>• Training level lighting to sports field.</li> <li>• Clubroom building required in the order of 1,000m<sup>2</sup>.to include: <ul style="list-style-type: none"> <li>- Changerooms/showers (4)</li> <li>- Large multipurpose/function space,</li> <li>- Meeting rooms and office spaces</li> <li>- Commercial level kitchen with kiosk</li> <li>- Umpires changeroom</li> <li>- First aid room</li> <li>- General storage space and sports equipment storage</li> <li>- Internal toilets and public toilets</li> <li>- Veranda/spectator shaded space.</li> </ul> </li> <li>• Walking/running/cycle pathways around the perimeter of the site.</li> <li>• Picnic table/seating/shade shelters, BBQs, drinking fountain, fitness/gym stations.</li> <li>• Playspaces to be included.</li> <li>• Natural shaded areas by retaining existing trees/planting new trees.</li> <li>• Artificial shade provided over playspace until new trees grow.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Car bays (120), capacity for overflow parking on the site.</li> <li>• Pathways onto sports ground and linking components.</li> <li>• Connected to footpath/cycle and public transport network.</li> </ul>	1:25,000	15.0 ha

SPORTING GROUNDS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>District Hard Courts and Clubroom</b></p>	<p>District Hard Courts and Clubroom provides a range of hardcourts to cater for tennis, netball and basketball at a competitive and social level for juniors and seniors and serves the needs of a number of local/neighbourhood areas.</p> <p>District Hard Courts must cater for public access and use.</p> <p>The purpose and function of the Clubroom is to support junior and senior organised sports, passive recreation and informal physical activity.</p>	<ul style="list-style-type: none"> <li>• Within a 6km catchment of most dwellings.</li> <li>• Minimum of 75% perimeter to have street frontage.</li> <li>• 10 netball/basketball courts.</li> <li>• 10 tennis courts.</li> <li>• Clubroom building required in the order of 650 m<sup>2</sup>, to include: <ul style="list-style-type: none"> <li>- Changerooms/showers (4)</li> <li>- Large multipurpose/function space, bar and meeting room</li> <li>- Commercial level kitchen with kiosk</li> <li>- Umpires changeroom</li> <li>- First aid room</li> <li>- General storage space and sports equipment storage</li> <li>- Internal toilets and public toilets</li> <li>- Veranda/spectator shaded space</li> </ul> </li> <li>• Walking/running/cycle pathways around the perimeter of the site.</li> <li>• Picnic table/seating/shade shelter, BBQ, drinking fountain</li> <li>• Playspace to be included.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Car bays (120), capacity for overflow parking on the site.</li> <li>• Pathways onto site and linking components.</li> <li>• Connected by footpath/cycle and public transport network.</li> </ul>	1:25,000	3.0 ha

SPORTING GROUNDS	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>Sub-Regional Sporting Ground</b></p>	<p>A Sub-Regional Sports Ground is a large scale sporting ground with a number of precincts that cater for a wide range of sports and accommodates a high standard of sport for the respective codes played in the LGA catchment and accommodates 'A' grade teams/clubs, league and pennant level sport.</p> <p>A Sub-Regional Sports Ground must also have the capacity to cater for informal physical activity and passive recreation opportunities, while the ground is being used for organised sports.</p> <p>The purpose and function of the Clubroom(s) is to support a number of sporting codes and uses at the same time, as well as passive recreation and informal physical activity.</p> <p>Sub-Regional Sporting Grounds can also serve as a venue for large community, cultural or entertainment and exhibition events.</p>	<ul style="list-style-type: none"> <li>• Within a 12km catchment of most dwellings.</li> <li>• Minimum of 75% perimeter to have street frontage.</li> <li>• Minimum sports field component of 4.2 hectares (200m x 210m) x 4</li> <li>• Training level lighting to sports fields, at a minimum.</li> <li>• Main Clubroom building required in the order of 1,000m2.to include: <ul style="list-style-type: none"> <li>- Changerooms/showers (4)</li> <li>- Large multipurpose/function space, bar</li> <li>- Meeting rooms and office spaces</li> <li>- Commercial level kitchen with kiosk</li> <li>- Gym room</li> <li>- Umpires changeroom</li> <li>- First aid room</li> <li>- General storage space and sports equipment storage</li> <li>- Internal toilets and public toilets</li> </ul> </li> <li>• Two minor combined clubrooms and change rooms.</li> <li>• Veranda/spectator shaded spaces.</li> <li>• Walking/running/cycle pathways around the perimeter of the site.</li> <li>• Picnic table/seating/shade shelter, BBQs, drinking fountain, fitness/gym stations.</li> <li>• Playspaces to be included.</li> <li>• 350 – 400 car bays</li> <li>• May include tennis, netball or lawn bowls.</li> <li>• Passive surveillance and lighting across the site.</li> <li>• Connected by footpath/cycle and public transport network.</li> </ul>	1:75,000+	22.0ha

RECREATION AND AQUATIC CENTRES	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>District Recreation Centre</b></p>	<p>A District Recreation Centre provide a multipurpose indoor space for a wide variety of competitive and social sports including basketball, netball, volleyball, badminton, indoor soccer, hockey and bowls.</p> <p>A District Recreation Centre also caters for a range of fitness, health and recreational activities and can also provide space for community and cultural events.</p> <p>A Recreation Centre can also provide outreach services and programs at other community facilities.</p>	<ul style="list-style-type: none"> <li>• Within a 6km catchment of most dwellings.</li> <li>• Minimum building size of 5,000m<sup>2</sup> to include: <ul style="list-style-type: none"> <li>- 4 multi marked indoor courts</li> <li>- Fully Equipped Gymnasium</li> <li>- Group Fitness and Training Room</li> <li>- Changerooms</li> <li>- Function/meeting rooms</li> <li>- Crèche</li> <li>- Café, lounge area</li> <li>- Office accommodation</li> </ul> </li> <li>• 160 car bays</li> <li>• Connected by footpath/cycle and public transport network.</li> </ul>	1:25,000	1.6ha
<p><b>Sub-Regional Recreation and Aquatic Centre - Recquatic</b></p>	<p>A Sub-Regional Recreation and Aquatic Centre is a multipurpose recreation, sporting and leisure facility. It provides a multipurpose active and passive recreation and aquatic facility.</p> <p>The Recreation Centre component provides a multipurpose indoor space for a wide variety of competitive and social sports including basketball, netball, indoor soccer and volleyball..</p>	<ul style="list-style-type: none"> <li>• Already constructed.</li> </ul>	1:75,000+	

COMMUNITY CENTRES AND SPACES	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<p><b>Local Community Centre</b></p>	<p>A Local Community Centre provides a multipurpose community hub that provides social, recreational, cultural and learning activities, programs and services focused on developing the capacity of individuals, families and collective needs of the immediate local/neighbourhood area.</p> <p>A Local Community Centre caters for all age groups and provides the opportunity to bring the local community together, build relationships, local identity and community spirit.</p>	<ul style="list-style-type: none"> <li>• Within 2km catchment from most dwellings.</li> <li>• Minimum site area of 0.5 hectares</li> <li>• Building size required of 650m<sup>2</sup> to include: <ul style="list-style-type: none"> <li>- Main hall/function area (min 100 persons)</li> <li>- Activity rooms (wet and dry)</li> <li>- Meeting rooms, office space</li> <li>- Crèche</li> <li>- Commercial level kitchen</li> <li>- Storage spaces</li> </ul> </li> <li>• Courtyard</li> <li>• Connected playspace.</li> <li>• Minimum of 60 car bays.</li> <li>• Passive surveillance across the site.</li> <li>• Connected by footpath/cycle and public transport network.</li> </ul>	1:5,000	0.5 ha
<p><b>Local Community Centre – Large Scale</b></p>	<p>A Local Community Centre – Large Scale provides a multipurpose community hub that provides social, recreational, cultural and learning activities, programs and services focused on developing the capacity of individuals, families and collective needs of the immediate local/neighbourhood area.</p> <p>A Local Community Centre – Large Scale caters for all age groups and provides the opportunity to bring the local community together, build relationships, local identity and community spirit.</p> <p>A Local Community Centre – Large Scale is provided where the population well exceeds 5,000, but is under 10,000.</p>	<ul style="list-style-type: none"> <li>• Within 3km catchment from most dwellings.</li> <li>• Minimum site area of 0.7 hectares</li> <li>• Building size required of 800m<sup>2</sup> to included: <ul style="list-style-type: none"> <li>- Main hall/function area (min 150 persons)</li> <li>- Activity rooms (wet and dry)</li> <li>- Meeting rooms, office space</li> <li>- Crèche</li> <li>- Commercial level kitchen</li> <li>- Storage spaces</li> </ul> </li> <li>• Courtyard</li> <li>• Connected playspace.</li> <li>• Minimum of 80 car bays.</li> <li>• Passive surveillance across the site.</li> <li>• Connected by footpath/cycle and public transport network</li> </ul>	1: 8,000	0.7 ha

COMMUNITY CENTRES AND SPACES	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<b>District Community Centre</b>	<p>A District Community Centre provides a multipurpose community hub that provides for the higher order social, recreational, cultural and learning activities, programs and services generated from a number of surrounding local areas.</p> <p>A District Community Centre also provides the base for the delivery of district level community services such as child health centres and office space for community/government organisations.</p> <p>A District Community Centre can also provide outreach services and programs at other community facilities.</p>	<ul style="list-style-type: none"> <li>• Within 6km catchment of most dwellings.</li> <li>• Minimum site area of 1.0 hectare.</li> <li>• Building size required of 1,200m<sup>2</sup> to include: <ul style="list-style-type: none"> <li>- Main hall/function area (min 250 persons)</li> <li>- Stage, change/dressing rooms</li> <li>- Activity rooms (wet and dry)</li> <li>- Meeting rooms</li> <li>- Office spaces for services</li> <li>- Training rooms</li> <li>- Crèche</li> <li>- Café and lounge area</li> <li>- Commercial level kitchen</li> <li>- Storage spaces</li> <li>- Child Health Centre</li> <li>- Courtyard and BBQ area</li> </ul> </li> <li>• Connected playspace.</li> <li>• Minimum of 150 car bays.</li> <li>• Passive surveillance across the site.</li> <li>• Connected by footpath/cycle and public transport network</li> </ul>	1: 25,000	1.0ha
<b>District Youth Centre</b>	<p>A District Youth Centre provides a multipurpose community hub that caters for children and young people by providing facilities, programs and services that support their social, educational, recreational and developmental needs and wellbeing.</p> <p>A District Youth Centre caters for both indoor and outdoor activities and provides a base for youth services and youth workers.</p> <p>A District Youth Centre can also provide outreach services and programs for young people at other community facilities.</p>	<ul style="list-style-type: none"> <li>• Within 3km catchment of most dwellings.</li> <li>• Minimum site area of 1.0 hectare.</li> <li>• Building size required of 1,830m<sup>2</sup> to include: <ul style="list-style-type: none"> <li>- Major hall/indoor multipurpose court and seating</li> <li>- Activity rooms (wet and dry)</li> <li>- Multimedia room</li> <li>- Meetings rooms</li> <li>- Kitchen</li> <li>- Lounge area/café</li> <li>- Office space for youth workers and youth service agencies.</li> </ul> </li> <li>• Outdoor spaces such as skate ramps, sporting equipment, court games, climbing wall, courtyard, BBQ area and active and passive green spaces.</li> <li>• Minimum of 90 car bays.</li> <li>• Passive surveillance across the site.</li> <li>• Connected by footpath/cycle and public transport network.</li> </ul>	1: 25,000	1.0ha

COMMUNITY CENTRES AND SPACES	PURPOSE AND FUNCTION	PLANNING AND DESIGN GUIDELINES	RATIO	SITE AREA
<b>District Branch Library</b>	<p>A District Branch Library provides a centre for learning, knowledge and access to information and ideas with a wide range of reference, fiction, non-fiction, children, young adult, large print, special genre and specialist collections and also provides public access to information and communication technology resources.</p> <p>District Branch Libraries can also provide outreach services and programs in other community facilities and to the wider community, such as 'books on wheels'.</p>	<ul style="list-style-type: none"> <li>• Within 6km catchment of most dwellings.</li> <li>• Minimum site area of 1.0 hectares</li> <li>• Building size required of 2,400m<sup>2</sup> to include collections space, children's space, young adults area, exhibition and display area, technology area, study areas/small groups rooms, activity/meeting rooms, staff areas, public toilets.</li> <li>• Minimum 120 car bays</li> <li>• Close proximity/co-located with other community facilities.</li> <li>• Connected by footpath/cycle and public transport network.</li> </ul>	1: 35,000	1.0ha
<b>Sub-Regional Library and Community Centre</b>	<p>A Sub-Regional Library and Community Centre is a major community facility with an integrated range of components that forms a Community Hub, accommodating a wide range of services and programs.</p> <p>A Sub-Regional Library and Community Centre encompasses a regional library, community centre which includes meeting rooms, training/seminar rooms, large function space, kitchen, specialist activity areas and office space for community service organisations and government agencies.</p> <p>A Sub-Regional Library and Community Centre caters for the broad range of universal services and may also accommodate targeted or specialist services and programs and provide outreach services or programs to District Community Centres.</p>	<ul style="list-style-type: none"> <li>• Already constructed</li> </ul>	1:75,000+	
<b>Sub-Regional Arts and Cultural Centre</b>	<p>A Sub-Regional Arts and Cultural Centre is a multipurpose large scale community facility with the capacity to cater for all forms of the performing arts and serve the needs of all Districts within the LGA.</p> <p>A performing arts and cultural centre also provides rehearsal and teaching space and can accommodate a wide range of arts, cultural activities and community events</p>	<ul style="list-style-type: none"> <li>• Already constructed</li> </ul>	1:75,000+	



# **Community Infrastructure Plan**

## **Appendix 2**

### **Community Infrastructure Capital Expenditure Schedule**



## Community Infrastructure Plan Appendix 2 : Capital Expenditure Schedule

District	DCA	Infrastructure Item	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
A	8 Mandogalup	Local Community Centre						174,000	1,706,000	1,766,000					3,646,000
A	8 Mandogalup	Local Sporting Ground with Facility Building						46,000	457,000	473,000					976,000
A	9 Wandi-Anketell	Local Sporting Ground with Clubroom	1,010,000	1,030,000											2,040,000
A	9 Wandi-Anketell North	Local Community Centre – Large Scale			170,000	1,660,000	1,710,000								3,540,000
A	9 Wandi-Anketell North	Local Sporting Ground with Facility Building						43,000	457,000	473,000					973,000
A	9 Anketell North	Local Sporting Ground with Facility Building					45,000	441,000	457,000						943,000
A	9 Anketell North	District Youth Centre						342,000	3,363,000	3,481,000					7,186,000
B	10 Casuarina-Anketell South	Local Community Centre			159,000	1,546,000	1,593,000								3,298,000
B	10 Casuarina-Anketell South	Local Sporting Ground with Facility Building						46,000	457,000	473,000					976,000
B	10 Casuarina-Anketell South	Local Sporting Ground with Clubroom									135,000	1,334,000	1,370,000		2,839,000
B	12 Wellard West	Local Sporting Ground Clubroom/Community Centre		2,787,000	2,857,000										5,644,000
B	10 Casuarina-Anketell South	District Community Centre										318,000	3,129,000	3,238,000	6,685,000
B	10 Casuarina-Anketell South	District Youth Centre										392,000	3,859,000	3,994,000	8,245,000
A & B	10 Casuarina-Anketell South	Dry Recreation Centre						694,000	6,825,000	7,064,000					14,583,000
A & B	9 Anketell North	Branch Library			314,000	3,061,000	3,153,000								6,528,000
A & B	10 Casuarina-Anketell South	District Hard Courts									438,000	4,309,000	4,459,000		9,206,000
C	14 Wellard - Leda	Local Sporting Ground with Facility Building					45,000	441,000	457,000						943,000
C	15 Medina/Parmelia/Calista/Kwinana TC	District Sporting Ground – Medina Oval Extension/Upgrade												634,000	634,000
C	15 Medina/Parmelia/Calista/Kwinana TC	Sub-Regional Sporting Facility – Thomas Oval Extension/Upgrade			80,000	779,000	803,000								1,662,000
Other	Sub-Regional	Wells Park Kwinana Beach Foreshore Upgrade - TBA													
Other	Sub-Regional	Arts and Cultural Centre Upgrade	90,000	984,000	1,008,000										2,082,000
Other	Sub-Regional	Animal Shelter - TBA													
Other		Works Depot - TBA													
Other		Civic Administration Building – TBA													
		<b>Total</b>	<b>1,100,000</b>	<b>4,801,000</b>	<b>4,588,000</b>	<b>7,046,000</b>	<b>7,349,000</b>	<b>2,227,000</b>	<b>14,179,000</b>	<b>13,730,000</b>	<b>573,000</b>	<b>6,353,000</b>	<b>12,817,000</b>	<b>7,866,000</b>	<b>82,629,000</b>



# **Community Infrastructure Plan**

## **Appendix 3**

### **Community Needs Assessment Overview**



## **1 Introduction**

As highlighted in Section 7, the City of Kwinana has undertaken a wide range of community research and planning studies and strategies which address the current and future need for community facilities, amenities and services. This underpins the Community Infrastructure Plan and a summary of key studies, strategies and outcomes follows.

## **2 Strategic Community Infrastructure Study**

A detailed Strategic Community Infrastructure Study was undertaken to identify the needs and priorities for community services and facilities in the then Town of Kwinana in 2004 and a summary of key findings are outlined below.

### **Demographic Findings**

Growth in population particularly in new housing estates will increase the demand for new community services, programs and facilities and will also increase the demand on existing services, many of which are already stretched.

Kwinana is largely made up of young families with a high number of children and young people. This highlights the need to provide family friendly communities with parks, recreation opportunities, child care, community centres and family support programs. With the high number of lone parent families in Kwinana, programs are required to address the increased levels of disadvantage and social isolation confronting these families.

Education levels are low in Kwinana, at the same time economic and industrial restructuring has resulted in the requirement for higher education and training levels in many industries. There is the need to increase access to education and training opportunities to uplift the skill and knowledge base of Kwinana and also a need to improve local employment opportunities and local economic development.

The high unemployment rate and low incomes in Kwinana suggest that poverty is likely to be an ongoing issue, together with the associated issues of poorer health and education levels, social isolation and decline in quality of life. Material and financial aid and life skills programs are essential, together with a greater focus on community health and education programs.

### **Community Facility Audit**

The assessment of community facilities undertaken concluded that much of the City of Kwinana's existing community facilities are ageing and in a poor state of repair. Most of the infrastructure was put into place in the early stages of development of the town and no longer meets community need or expectations. The demand for the provision of contemporary infrastructure is rapidly growing in older areas.

While community and cultural facilities built more recently, such as the Kwinana Community Arts Centre and Frank Konecny Community Centre were found to be in better condition, both were showing signs of 'wear and tear' and are dated. The substantial upgrade required to existing facilities, with the increasing demand for new facilities was identified as a significant challenge the City of Kwinana will need to address.

### **Community Needs and Priorities**

The strategic Community Infrastructure Study identified the following community services and facility priorities for the City of Kwinana.

#### Community and Cultural Facilities

- Youth Activity Centre
- New Library
- Lotteries House
- Community arts village
- Artists incubator/studio space
- Gallery space
- Music and video studio

#### Children, Young People and Families

- Child care
- Respite care
- Early intervention family support
- Youth crisis accommodation

#### Community and Cultural Development

- Increase local events, passive and cultural events
- Develop community spirit and capacity
- Volunteer development
- Early planning and provision in new housing estates
- Basic life skills development
- Art school

#### Seniors

- Public and community transport
- Capacity of seniors to be independent
- Recreation and leisure opportunities
- Traffic and public infrastructure – footpaths, bus shelters, seating, lighting

#### Community and Public Health

- Improved infant health service
- Expand community health programs - Men's health and drugs/ alcohol
- Health education

### Mental Health Services

- Shortage of community support services
- Under resourced and huge waiting lists
- Lack of emergency after hours services
- Drug and alcohol counselling service

### Material and Financial Support

- Material aid shortages - food parcels, financial aid, furniture/household goods
- Community food kitchens
- Poverty programs

### Public Infrastructure

- Landscaping parks
- Improving footpaths and lighting
- Enhancing public spaces

### Transport and Access

- Poor footpaths and cycleways
- Poor public transport services
- Inadequate inter suburb and regional linkages
- Community transport - seniors, young people, families, people with disabilities
- Lack of access to regional services and government services

### Essential Services

- Improve ambulance service
- Expand police service
- Returning and retaining government offices in Kwinana

Consultation with both service and facility providers identified a lack of office space, meeting, seminar and workshop facilities and counselling rooms and developing some type 'Lotteries House' facility was identified as high priority by the Community Infrastructure Study.

With the size of the library, 334 square metres short in meeting the current needs of the community, the Community Infrastructure Study identified the development of a new library within the town centre as a high priority.

The Community Infrastructure Study also identified the need to consider a 'regional level' community centre within the future redevelopment of the town centre, as well as incorporating the new library into this development.

While a redevelopment of the Kwinana Community Arts Centre (now Koorliny Arts Centre) was not considered a priority it was noted that the need to expand this facility would occur with the anticipated growth of the population.

### 3 Community Infrastructure Study - Jandakot Structure Plan

The City of Kwinana, over a number of years, prepared its Draft District Structure Plan (Eastern Residential Intensification Concept 'ERIC'), which provides a further refinement to achieving urbanisation within the City of Kwinana, east and west of the Kwinana Freeway. ERIC has been derived from the Jandakot Structure Plan, which as a broader District Structure Plan provides a framework for future land use and development either side of the Kwinana Freeway.

In developing this Structure Plan, a Community Infrastructure Study was undertaken in 2004 to identify the types of community facilities likely to be needed, location criteria and approximate land requirement for each of the facilities. The study not only included local government community facilities, but also State government and private sector facilities, thereby encompassing the wide range of community infrastructure likely to be required by the 45,000 people anticipated to live in the structure plan area.

While the need for community facilities is largely influenced by the demographic and socio-economic characteristics of an area, where a community is yet to be established the use of planning standards is essential to determine 'indicative' requirements to ensure the necessary land area is set aside for community purposes, in the right locations in relation to other land uses, in the early planning stages.

The Community Infrastructure Study involved the development of a comprehensive set of Community Planning Standards with wide consultation with government agencies and the private sector. By profiling the likely age structure and applying these Community Planning Standards, indicative requirements for the following community facilities were identified.

- Schools and tertiary education
- Child care centres
- Youth centres
- Community centres
- Libraries
- Emergency and supported accommodation
- Hospitals
- Community health centres
- Child health centres
- Residential aged care
- Home and community care
- Parks
- Sports grounds
- Recreation and aquatic centres
- Cultural facilities and venues
- Police stations
- Ambulance stations

## 4 Kwinana Youth Facility Feasibility Study

This 2008 study involved a detailed assessment of the feasibility and need for a youth facility in the City of Kwinana and was conducted with extensive community consultation. Over 180 young people and children, as well as many relevant government and non-government agencies were involved.

The Kwinana Youth Facility Feasibility Study also involved a review of previous reports, a demographic analysis and an audit of the current services, programs and facilities available for young people. An overview of the resulting needs assessment is provided below.

- Service provision for young people in the City of Kwinana area is fragmented and inadequate, with young people having to face numerous challenges in order to access appropriate services.
- Many of the urgently required youth agencies such as drug and alcohol counselling and support, mental health care and supported accommodation services are based in Rockingham or Fremantle and are therefore not meeting the needs of young people in the City of Kwinana. This also proves difficult when trying to establish clear case plans and facilitate communication between agencies.
- The 'Kwinana Youth Needs Search Conference' (held in 1985) was the first to identify and document a number of significant issues for young people and the lack of facilities for unstructured, non-sporting recreational opportunities for young people. While improvements to services and facilities have occurred since this time, the size of the youth population has increased considerably and as the demographic analysis revealed, the population of young people is set to grow significantly, as new residential development occurs.
- The gaps in services and facilities for young people and the lack of recreational opportunities have also been demonstrated in a number of reports.
  - Report on Young People's Needs/Services in the Kwinana Region
  - Youth Services Planning Workshop and Budget Report
  - Kwinana Recreation and Leisure Centre CSRFF Feasibility Study
  - It's About Time and It's About Space: A Youth Centre for the Town of Kwinana
  - Town of Kwinana Youth Activity Centre: Development of Project Specifications.



- In the Kwinana Recreation and Leisure Centre Feasibility Study community members expressed strong support for a youth centre in the City of Kwinana. This study involved the distribution of questionnaires to randomly selected households consisting of questions relevant to community needs. Respondents to the questionnaire rated a youth centre as the "...second most needed social or recreation facility for Kwinana." The study also suggested that "...office space and a purpose built youth facility (with external entry) be a major consideration in any proposed redevelopment plan of the recreation centre."
- The 'Kwinana at the Crossroads Conference' held in 2006 also identified the lack of facilities and resources for children and young people and a lack of office space for services as an important issue, and the fact that child and mental health services are only available in Rockingham and Fremantle was a particular concern. The provision of a youth space, the promotion of a more positive image of young people and the need to increase service coordination and integration were key recommendations of the conference.
- Service statistics clearly demonstrate two prominent issues, firstly disengagement with formal education, employment, or training and secondly, the need for increased positive social interaction. Approximately 80% of young people referred regularly requested recreational and social activities, as well as appropriate mentoring and role modelling.
- These issues are consistently being observed by professionals within the education system, with a large number of children and young people considered to be educationally 'at risk' due to behavioural, social, emotional or family factors. Department of Education and Training unpublished data on suspension and exclusion from school for behaviour difficulties, critical incidents, such as school related violence and the retention levels into post-compulsory schooling all indicate the City of Kwinana is a high need area for improving services, programs and facilities for children and young people.
- To work effectively with young people, it is becoming increasingly evident that young people best connect with services at a space that is safe, secure and youth friendly.
- Often when young people are 'socialising' with peers, they do not feel comfortable disclosing to youth workers. It is therefore more appropriate to provide a forum for social, recreational and informal interaction between support services and young people in order to facilitate change. This is where the need for a youth facility that incorporates intensive case management and early intervention with informal mentoring and support opportunities.

- The principle of intervening earlier rather than later in the lives of young people is the key to engaging with them to prevent them from ‘slipping through the cracks’, increasing the likelihood of them becoming functional members of society.
- The need and desire for a specific youth facility with co-located services has been long awaited in Kwinana. Numerous reports stated above discuss very similar themes such as growing populations and lower socio-economic issues, the fragmented state of current service provision to young people in Kwinana and the pro-longed desire/need for a youth space in the community.

With a well-established need, feasibility and business case, the City of Kwinana has proceeded with the development of a regional level Youth Centre, located adjacent to the Recquatic and this has now been completed. The Youth Centre provides a purpose built centre incorporating multi-purpose activity/meeting rooms, recreation/leisure spaces and education/training facilities. It is a key focal point for young people to access a range of support services and activities, individual/group counselling, local information, and education/training opportunities.

Having services under one roof is particularly important for young people who are dealing with multiple issues involving multiple agencies. Equally vital is the increased communication amongst service providers, resulting in greater levels of collaboration and dialogue between the various services, thus facilitating new ways of working together and service delivery that maximizes benefits to young people. The key benefits of the Youth Centre are summarised below:

- Increased communication, liaison and planning between youth service providers.
- Increased opportunity for young people to access support in a coordinated manner.
- Improved learning outcomes for young people and associated improved outcomes accessing training and employment opportunities.
- Improved relationships and co-operation between service providers and young people.
- A safe and culturally appropriate space for young people to engage with peers and service providers.
- Additional office space to attract sessional youth workers into Kwinana.
- A space that young people can go to knowing that they will be safe, and engage in recreation, leisure and informal social activities.

- A place where young people feel a sense of ownership and where the community can see the positive aspects of youth culture.
- A place to build social capital and community networks.

## **5 Community Resource and Knowledge Centre Feasibility Study**

This study involved a detailed assessment of the need for a new public library, regional community centre and office space for community service organisations. Extensive community consultation occurred throughout the study which involved over 500 local residents, including children, young people, families, seniors and Indigenous residents.

All relevant government and non-government agency were also actively involved in identifying the need and components required. The study also involved a literature review, demographic analysis, community facility audit and an overview of the resulting needs assessment is provided below.

### **Public Library and Information**

The study highlighted that the Kwinana Library is one of the most well used libraries in Western Australia, with almost half of the population of Kwinana having library membership. However, the study also concluded that the floor area and facilities within the library were well below acceptable standards.

The major physical limitations identified with the current library related to space, layout and stock. With regard to space the study found that the library did not meet the minimum guidelines for library space, falling short by 248 square metres to service the population at that time.

### **Resource and Community Centre**

The study also concluded that Kwinana is one of the most disadvantaged communities in Western Australia and this was confirmed by the 2007 Catholic and Jesuit Social Services Report Dropping off the Edge - the distribution of disadvantage in Australia.

The study identified that if the entrenched social disadvantage being experienced by many Kwinana residents is going to change, then a wide range of community support services need to be provided locally. In order to do this, appropriate infrastructure needs to be provided from which a range of direct service and capacity building activities can operate.

For their part, religious and charitable not-for-profit agencies have long recognised the compelling need for real support for sections of the Kwinana community. However, there has also long been a shortage of premises to accommodate these agencies and their operations.

In addition, there is an acute shortage of community facilities and spaces and with education and employment levels significantly lower than State averages, training facilities are also an identified need in the area.

This highlights the importance of the community facilities, services and programs a Community Resource and Knowledge Centre can provide, incorporating a 'one stop' shop for services, activities and resources.

At the 'Kwinana at the Crossroads' conference hosted by the City of Kwinana in 2006, community members were asked to review the level and standard of community service provision in five key areas, identify gaps and make recommendations for improvements and the following gaps were some of those identified.

- Lack of facilities and resources for 8-12 year olds and young people
- Need for more information about services and programs
- Lack of communication between schools and services
- Child and mental health services only available in Rockingham and Fremantle
- Inappropriate and shortage of office space
- No community centre facilities or programming
- Ageing community infrastructure
- Lack of transport and no local services

The provision of a community resource and community centre, and library and information centre was also recommended by government and non-government service providers in the 2006/2007 'Community Action Plan' report developed by the City of Kwinana.

The 'Community Action Plan' identified similar gaps in service provision in the City of Kwinana, such as drug and alcohol, outreach and crisis services, child and adolescent mental health services and office space for health provision and agencies. A key recommendation of this report was for the provision of adequate and appropriate space and facilities for agencies, centrally located, accessible and co-located.

The Community Resource and Knowledge Centre Feasibility Study confirmed this and provided solid evidence to support the many anecdotal reports of a real shortage of suitable community purpose accommodation in the City of Kwinana. Thirteen organisations expressed an interest in being accommodated in the building, indicating an initial demand for 1,200 square metres of leasable space, excluding common areas.

Having established a clear need, feasibility and business case, the City of Kwinana progressed this project and the Community Resource and Knowledge Centre has now been built. The centre will serve the current and future population and it is envisaged that the Town Square and Community Resource and Knowledge Centre will work in harmony with each other.

Key benefits of the facility will include:

- Increased communication, liaison and planning between service providers.
- Increased opportunity for residents to access support in a coordinated manner.
- Improved learning outcomes for young people and the general community and associated improved outcomes accessing training and employment opportunities.
- A place that people can go to knowing that they will be safe, and engage in a wide variety of recreation, leisure and informal social activities.
- A place where people can engage in life long learning opportunities and expand their horizons.
- A place to build social capital, community capacity and community networks, and develop a sense of community.

## **6 Parks for People: Public Open Space Upgrade Strategy**

The Public Open Space Upgrade Strategy was prepared in 2013 and is the next step in formalising a Local Parks and Playground Strategy, based upon the recommendations from the Kwinana Parks Project Final Report, July 2008 and the Draft Parks and Playground Strategy 2009-2012. The Public Open Space Upgrade Strategy is a strategic approach to the upgrade of existing parks and aims to:

- Draw on current research to develop an informed strategy on the design and standard of public open space.
- Align with the standards set by the City of Kwinana Public Open Space & Streetscape Development Guidelines 2013, which are currently being reviewed.
- Establish the current standard of existing parks and changes required to bring them to the set standard.

The strategy draws on new research and establishes a new classification for public open space, a design approach, guidelines for provision and amenities and a process for determining the priorities for public open space improvements. The following key findings from the research and needs assessment process are outlined below.

## **Importance of Play**

Parks and open space play an integral role in the development of children. Through play children learn important social skills, rules and etiquette, coordination and motor skills, problem solving and decision making. Providing play spaces that are inclusive and varied stimulate the imagination, encourage creativity and exploration and enhance children's learning outcomes.

Research supports this and demonstrates the importance of play environments, with almost 25% of Australian children overweight or obese. One particular study has shown that children between the ages of 3-13 years are spending an astounding 27% of their time watching television, compared to only 1% outdoors.

However, play is not just for children and it is just as important for teenagers and adults. Parks and public open spaces provide the perfect opportunity for social interaction, physical activity, social inclusion and community engagement. They are essential for a healthy and connected community.

In order to provide exciting play opportunities for children and adults, parks and open space need to provide opportunities for inclusion across all abilities and age levels, be inviting and safe environments and encourage interaction with nature, animals and pets.

## **Nature and Play**

Further to this, more and more studies are showing the importance green spaces are having with respect to mental health benefits, as well as the importance of interaction with nature in the development of children. Research is indicating that playing in a natural environment:

- Stimulates the immune system resulting in being sick less often
- Increases physical activity levels and lowers likelihood of being overweight
- Improves language and collaboration skills
- Reduces Attention Deficit Disorder
- Reduces bullying behaviour.

While 14% of children are diagnosed with a mental health disorder and 11% with ADHD, research is demonstrating that contact with nature can have huge mental health benefits and that contact with nature decreases stress, decreases anger and improves attention. It has also been shown that adults who went walking in a natural environment had lower blood pressure than those who went walking in an urban setting. Not only does nature have a positive effect on mental health but studies have also shown that playing in a natural setting, versus urban landscapes, improves children's development of motor skills, coordination, balance and social skills.

With increasing urbanisation, parks will increasingly become some children's only chance to come into contact with nature and it is therefore important that 'nature focused' parks exist throughout the parks and public open space system. This means that traditional lines between structured playgrounds and the surrounding natural environment need to be blurred. Children should be encouraged to get dirty, play with sticks and sand and parents need to let them.

### **Inclusion and Access to Public Open Space**

Play spaces should provide a diverse range of interactive, creative and physical challenges and encourage play across all age brackets, integrated play between age groups, people with disabilities and people from various cultures.

Parks should be linked to the neighbourhood via perimeter pathways that link all internal facilities and must comply with the Disability Access and Inclusion Plan, as well as legislation, by providing access to the play space and interaction with some elements within the play space. Although not all areas will necessarily be accessible by all levels of abilities, this will allow children of all ages and abilities to interact within the same space and feel included in play.

Open grassed areas or "kick about space" provide the opportunity for activities to develop spontaneously. They are important areas that must be considered which allow for meeting, socialising and informal ball games. Informal play areas also provide important opportunities for imaginative and creative play. These areas should include natural areas containing creative elements for play and stimulating activities. These elements could include water, sand, rocks, pebbles, grass, bark, logs, mounds, shrubs and trees.

### **Pets in Parks**

Pet friendly parks should be accessible to all residents to encourage positive interactions with their pets and community, social interaction and active recreation. Pet friendly parks include designated dog exercise areas but are not limited to these spaces. They should include the following features:

- Dog litter bags and bins
- Pathways
- Signage encouraging responsible pet ownership.
- Dog agility equipment
- Water fountains for both pets and owners.

With 16 approved dog exercise parks across Kwinana, to improve accessibility and encourage a responsible pet ownership community it is recommended that there is at least one dog exercise area in each suburb.

The Public Open Space Upgrade Strategy has informed the standards and hierarchy developed for the Community Infrastructure Plan and the framework for providing passive and active public open space.

## **7 Parks and Playground Strategy**

In 2008, a Parks and Playground Strategy was prepared based on a comprehensive review of public open space, parks and the facilities and equipment available. The review involved consultation with user groups, community groups and a survey to gauge resident's perceptions about the current standard of parks and facilities and priorities for improvements.

Key principles for public open space planning were also identified and a five year action plan was prepared which identified the priorities for improvements and development of parks and public open space. An overview of the needs and issues identified by the strategy are outlined below.

- Local Parks are one of the most basic provisions of social open space that the City of Kwinana can make and are the simple, but important connectors of many communities. In some places, they are the only open space available to local residents without access to cars.
- Local Parks provide the most common leisure opportunities for local residents. Leisure may be in play or informal games, exercise, social interaction, or quiet reflection. Local Parks often support a range of age groups so leisure opportunities should be available for a variety of ages that is appropriate to the community profile of the local area. Where this cannot be provided on one local park, an adjacent park should provide appropriate alternative opportunities.
- Local parks are a major contributor to play and creative opportunities for local children. Play is not limited to the equipment provided but will also be encouraged by the provision of grassed surfaces, interesting landform and natural elements and the retention of trees in the park.
- Amenity should be available through tree planting and seats. In some parks shade will be provided by trees and, in some, by shelters.
- As the age profile of the local area changes this range of leisure opportunities provided by local parks may also change to serve the local residents.



- The conservation of special areas raises the issue of the competition between conservation and sport and recreation in public open space. On one side there is an increasing concern for the environment from individuals or groups seeking to protect and conserve natural areas. On the other side there is an increasing number seeking to utilise or develop natural areas for a range of activities.
- Whilst the City seeks to establish a balance between conservation and use, it is acknowledged that in some instances these different objectives cannot be reconciled, for example trail bike riding in sensitive bushland areas. This issue highlights the need for appropriate classification and management of spaces.
- There are also competing uses among recreational and sporting activities that can be difficult to resolve. For example, a number of different sports codes or clubs wanting to use a reserve simultaneously, which can result in overuse, impacts on ground condition and amenity or exclusion of some groups. There may also be competing uses relating to different functions of a space that may conflict with each other, such as quiet reflection, dog exercise and organised sport.
- This issue must be addressed on a number of levels, firstly through ensuring the adequate provision of public open space — both in total area and in different types of opportunities to meet a range of diverse community needs. Secondly, this issue can be addressed through the design of open spaces, through a planned approach to public open space zones and location and siting of facilities. Given that uses can change over time as a result of emerging community needs, trends, issues and demographics, the need to design spaces for flexibility and variety of use is important (multi-use spaces), although there also needs to be due consideration and understanding of the key needs of a range of users. For example, the dimensions of playing fields for different sports are relatively fixed to meet training and match play requirements.
- Public Open Space also serves different catchments of the population. An increase in the catchments may correlate to an increase in environmental significance, in the size of the site or the quality of the development on the site. Overuse and damage often occurs when a site with a local level of size or development standard attracts a district or regional catchment.

## 8 Community Wellbeing Study

In 2016, the City of Kwinana undertook a Community Wellbeing Study to better understand and meet community and wellbeing needs. This involved survey invitations to 2,000 randomly selected households and 2,000 randomly selected residents. The results that are relevant to the provision of community infrastructure and the services, programs and opportunities provided by community facilities are provided below.

### Quality of Life

- 60% of respondents described their quality of life as 'thriving', meaning that wellbeing is strong, consistent and progressing.
- 37% of respondents described their quality of life as 'struggling', meaning that wellbeing is moderate or inconsistent.
- 4% described their wellbeing as 'suffering", meaning that wellbeing is at high risk.

### Community spirit

- 57% of respondents agreed that there is a strong sense of community spirit in their local area.
- 23% of respondents disagreed that there is a strong sense of community spirit in their local area.

### Sense of belonging

- 51% of respondents agreed that they have a sense of belong in their local community.
- 21% of respondents disagreed that they have a sense of belonging in their local community.

### Participate in educational activities

- While 50% of respondents participated in educational activities, 50% did not.

### Sufficient training to get a job

- 66% of respondents indicated that they have sufficient education or training to get a job.
- 34% of respondents indicated that they did not have sufficient education or training to get a job.

### Level of burden caring for family members with a disability, long term illness or pain

- While 72% of respondents are not caring for a family member with a disability, long-term illness or pain, 28% of respondents are.
- Of those respondents caring for a family member with a disability, long term

illness or pain, 25% described this as a fairly big burden and 29% described this as a big or very big burden.

### **General health**

- 45% of respondents described their general health as excellent or very good and 36% described their general health as good.
- 20% of respondents described their general health as fair or poor.

### **Physical activity**

- 40% of respondents are active or very active, with 39% moderately active.
- 21% of respondents are not very active or not at all active.

### **Access to public transport**

- 40% of respondents describe their access to public transport as good or excellent, with 39% indicating it is okay.
- 27% of respondents describe their access to public transport as poor or terrible.

### **Safety and security**

- 22% of respondents describe safety and security as good or excellent, with 32% indicating it is okay.
- 45% of respondents describe safety and security as poor or terrible.

## 12.2 Adoption of the City of Kwinana Reconciliation Action Plan

### DECLARATION OF INTEREST:

There were no declarations of interest declared.

### SUMMARY:

This report seeks Council adoption of the City of Kwinana Reconciliation Action Plan (RAP) (Attachment A: Boola Maara Baldja Koorliny – Many Hands Firmly United Going Forward).

The RAP is a 12 month action plan based on the National Reflect Reconciliation Action Plan template, as set out by Reconciliation Australia. It aims to guide the City on its reconciliation journey, with actions aligned to Reconciliation Australia's three pillars of:

- Relationships,
- Respect, and
- Opportunities.

### OFFICER RECOMMENDATION:

That Council adopt the City of Kwinana Reconciliation Action Plan (RAP): Boola Maara Baldja Koorliny – Many Hands Firmly United Going Forward, as detailed in Attachment A.

### DISCUSSION:

The City of Kwinana sits within the lands of the Noongar people who are the Traditional Custodians of Kwinana and surrounding areas. The City has a strong, active Aboriginal community, comprising 3.6% of the population (ABS Census 2016). Within the Perth metropolitan region, the City of Kwinana has the highest proportion of residents that identify as Aboriginal and/or Torres Strait Islander (ATSI) people.

A key action under the Rich In Spirit: A Unique Identity objective of the Strategic Community Plan 2017 – 2027 is the development of a RAP, together with Kwinana's ATSI communities.

Reconciliation Australia's RAP Framework has been adopted to progress the development of the Kwinana RAP. It provides organisations with a structured approach to advance reconciliation.

The RAP process is built on three pillars:

- Building and encouraging relationships between ATSI peoples, communities and organisations and the broader Australian community.
- Fostering and embedding mutual respect; and
- Developing opportunities within organisations or services to improve outcomes for ATSI peoples.

## 12.2 ADOPTION OF THE CITY OF KWINANNA RECONCILIATION ACTION PLAN

There are four types of RAP that an organisation can develop: Reflect, Innovate, Stretch, Elevate. Each type of RAP is designed to suit an organisation at different stages of their reconciliation journey. In terms of Kwinana's journey a Stage 1 Reflect – Scoping Reconciliation RAP is the most appropriate, given that this will be Kwinana's inaugural RAP.

A Reflect RAP clearly sets out the steps the City should take to prepare the organisation for reconciliation initiatives in successive RAPs. Committing to a Reflect RAP allows the City to spend time scoping and developing its relationship with ATSI stakeholders, deciding on the vision for reconciliation and exploring Council's sphere of influence, before committing to specific actions or initiatives. This process assists to produce future RAPs that are meaningful, mutually beneficial and sustainable.

Work on development of the RAP commenced early in 2017 when two community engagement sessions were held, attended by approximately 50 people from the ATSI communities. Since then development of the RAP has progressed through consultation with the community on issues that are important to ATSI people and the broader community.

Community input was sought using a variety of consultative mechanisms, including the formation of a Conciliation Advisory Group, with members assisting with the process of gathering information and providing feedback on the following City of Kwinana Conciliation Statement of Intent and the draft RAP.

The Statement of Intent was adopted by Council during National Reconciliation Week held in May 2018.

*“The City of Kwinana is committed to the journey of Conciliation and respects Aboriginal people's connection to country as the Traditional Custodians of the land. The City of Kwinana's vision is to work together with the Kwinana community to build positive relationships between Aboriginal and non-Aboriginal communities. Throughout this journey the City aims to promote and assist with the development of pathways and opportunities for Aboriginal and Torres Strait Islander communities that are meaningful, mutually beneficial and sustainable”.*

The RAP is a strategic document that will support the City of Kwinana's Strategic Community Plan and Corporate Business Plan. It includes practical actions that will drive the City's contribution to reconciliation both internally and externally in the community. The actions are outlined in the RAP at Attachment A and are under Reconciliation Australia's three pillars of:  
Relationships,  
Respect, and  
Opportunities.

Rather than call the City's RAP a Reconciliation Action Plan, the Conciliation Advisory Group has recommended the RAP be named using words in the Noongar language: **“Boola Maara Baldja Koorliny”** which means “Many hands firmly united going forward”.

Following the 12 month implementation period of this Reflect RAP, the City will look to develop its next RAP at the Innovate level, which is the second level of a Reconciliation Action Plan.

## 12.2 ADOPTION OF THE CITY OF KWINANA RECONCILIATION ACTION PLAN

**LEGAL/POLICY IMPLICATIONS:**

The City of Kwinana Reconciliation Action Plan will support the City's Strategic Community Plan and Corporate Business Plan and it will drive the City's contribution to reconciliation both internally and externally.

**FINANCIAL/BUDGET IMPLICATIONS:**

The Reconciliation Action Plan's actions relate primarily to relationship building, awareness raising, identification of opportunities and celebration and recognition of culture. A budget allocation exists in the Community Engagement directorate to implement the RAP, any additional financial resources required to implement the RAP would be considered as part of the annual budget allocation and adoption process.

**ASSET MANAGEMENT IMPLICATIONS:**

There are no asset management implications associated with this report or recommendation.

**ENVIRONMENTAL IMPLICATIONS:**

There are no environmental implications associated with this report or recommendation.

**STRATEGIC/SOCIAL IMPLICATIONS:**

This proposal will support the achievement of the following outcomes and objectives detailed in the Strategic Community Plan and Corporate Business Plan.

Plan	Outcome	Objective
Strategic Community Plan	A unique identity	1.1 Develop and strengthen community identity to create a sense of belonging
Corporate Business Plan	A unique identity	1.1.21 Seek endorsement and then implement a Conciliation Action Plan

**COMMUNITY ENGAGEMENT:**

1. Community Engagement has taken place in the following forms:
  - a. **Aboriginal Community Planning Meetings:** In April 2017 the City held a series of meetings to seek community aspirations for reconciliation. Facilitated by Codeswitch Consultancy, these meetings were attended by a variety of stakeholders and community members. Codeswitch produced a report summarising participant recommendations in relation to the three pillars of reconciliation – relationships, respect and opportunities.

## 12.2 ADOPTION OF THE CITY OF KWINANA RECONCILIATION ACTION PLAN

- b. **Community BBQ** In March 2018: A Community BBQ was held to advise the Aboriginal community of the process of developing the Reconciliation Advisory Group and the Reconciliation Action Plan.
  - c. **Reconciliation Advisory Group:** In May 2018 the City's Reconciliation Advisory Group was formed (later to be renamed Conciliation Advisory Group). Six meetings have been held to date facilitated by Inspire Change Consulting Group.
  - d. **Feedback on the draft RAP plan:** During September 2018 Aboriginal community members and service providers were invited to give their feedback on the draft RAP – the City aimed to give all the opportunity to have their say:
    - Two community meetings held, 10 people engaged
    - Online survey received 18 responses
    - Feedback provided via email.
2. The following community engagement is proposed to take place:
- a. **Monthly engagement:** Hold small, casual activation events to build relationships between the City and the Aboriginal community – providing an open forum for meaningful conversations, engagement and significant outcomes.

**PUBLIC HEALTH IMPLICATIONS**

The health implications in relation to the endorsement of the Reconciliation Action Plan has the potential to:

- improve the following determinants of health –
  - Health Behaviours – Participation.
  - Socio-economic Factors – Education; Employment; Income; Family and Social Support; Community Safety.

**RISK IMPLICATIONS:**

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

Risk Event	Misalignment of service provision and community expectations of the Aboriginal community.
Risk Theme	Inadequate engagement practices.
Risk Effect/Impact	Service Delivery People/Health Reputation
Risk Assessment Context	Strategic
Consequence	Moderate
Likelihood	Likely
Rating (before treatment)	Moderate
Risk Treatment in place	Reduce - mitigate risk

## 12.2 ADOPTION OF THE CITY OF KWINANA RECONCILIATION ACTION PLAN

Response to risk treatment required/in place	Implement, monitor, evaluate and review the Reconciliation Action Plan informed by community engagement and expert stakeholders
Rating (after treatment)	Low

**COUNCIL DECISION****362****MOVED CR M ROWSE****SECONDED CR S LEE**

**That Council adopt the City of Kwinana Reconciliation Action Plan (RAP): Boola Maara Baldja Koorliny – Many Hands Firmly United Going Forward, as detailed in Attachment A.**

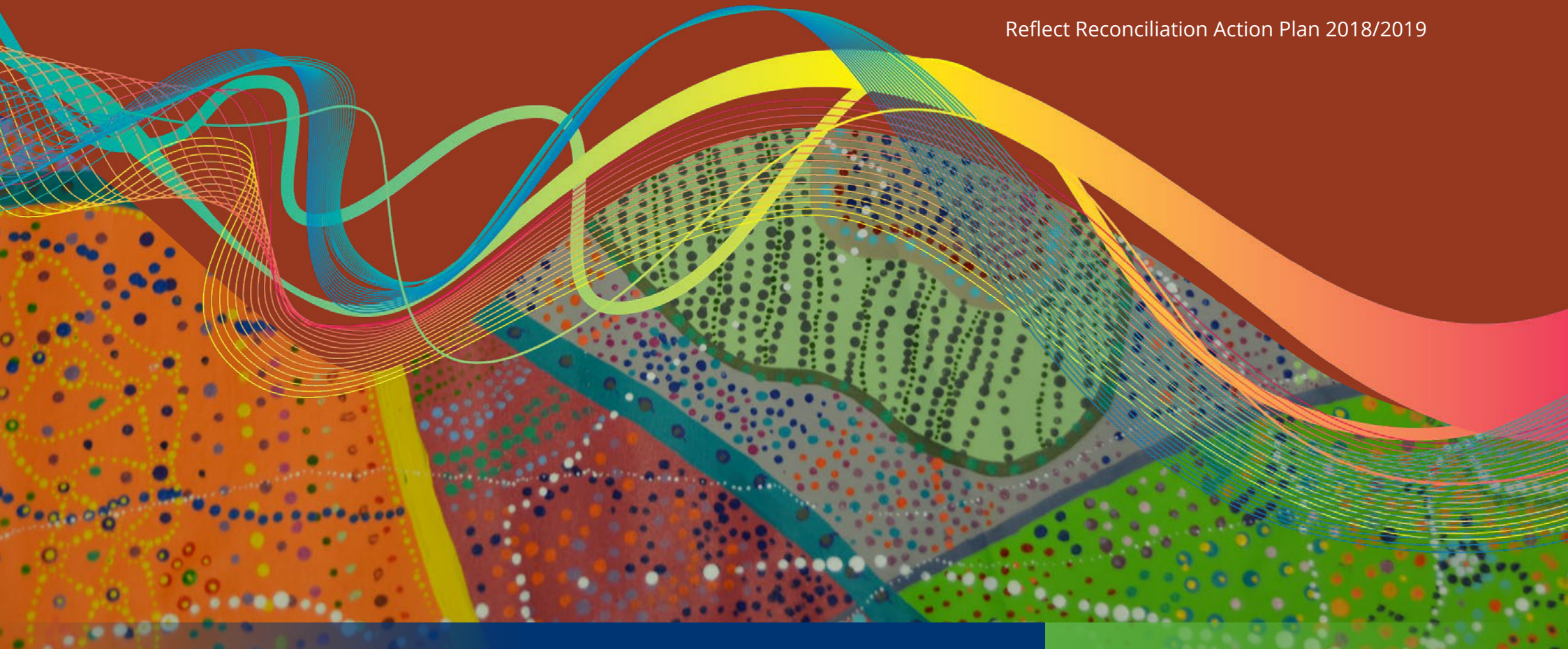
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# Boola Maara Baldja Koorliny

*'Many Hands Firmly United Going Forward'*

Reflect Reconciliation Action Plan 2018/2019





**The City of Kwinana is committed to the journey of conciliation and respects Aboriginal people's connection to Country as the Traditional Custodians of the land. The City of Kwinana's vision is to work together with the Kwinana community to build positive relationships between Aboriginal and non-Aboriginal communities. Throughout this journey the City aims to promote and assist with the development of pathways and opportunities for Aboriginal and Torres Strait Islander communities that are meaningful, mutually beneficial and sustainable.**

*City of Kwinana official Conciliation Statement of Intent, which was announced during National Reconciliation Week in May 2018.*

**The City of Kwinana acknowledges the Nyoongar (Noongar) people as the Traditional Custodians of the land and pay our respects to their Elders past and present.**

Cover artwork was created by the Kwinana community during NAIDOC Week 2015: We All Stand in Sacred Ground, facilitated by artist Deborah Bonar.

*Left:* Harry McGuigan Park in Medina.

# Mayor's Message

**I am delighted to present the City of Kwinana's Reconciliation Action Plan which is adapted from Reconciliation Australia's Reflect template - the first level of a Reconciliation Action Plan under their national framework.**

This plan is aimed at developing a future vision for conciliation between the City of Kwinana and our community, as partners.

Our City has developed strong relationships with Elders and Aboriginal and Torres Strait Islander community members who live and work in and around Kwinana and I have been personally involved in listening to their feedback on our draft plan towards conciliation.

In April 2017, the City held a series of 'Aboriginal Community Planning Meetings' to understand community aspirations for conciliation. Out of these sessions three pillars were identified - relationships, respect and opportunities. This information has informed the development of Boola Maara Baldja Koorliny.

The Aboriginal community has also expressed a need for increased awareness of Aboriginal and Torres Strait Islander histories and cultures among the wider community, and aspires to develop a strong sense of pride in young Aboriginal and Torres Strait Islander youth and children.

The City of Kwinana has taken many steps in recent years towards acknowledging the City's Aboriginal people and culture, including building community partnerships, honouring Aboriginal history through public artworks, and through symbolic protocols such as continually flying the Aboriginal Flag.

The City's Reconciliation Advisory Group decided from the outset to be known as a 'Conciliation' Advisory Group rather than 'Reconciliation Advisory Group'. This was in recognition of our desire to move forward, hand in hand with our Aboriginal and Torres Strait Islander community, connecting us all with a wealth of history, tradition and culture which enriches our society.

So, rather than call this a Reconciliation Action Plan, our Conciliation Advisory Group has decided to use words in the Nyoongar (Noongar) language and named the plan 'Boola Maaraa Baldja Koorliny' which means 'many hands firmly united going forward'.

I am looking forward to continuing to work with our community partners along the path to conciliation.

**Cr Carol Adams,  
Mayor of Kwinana, 2018**



## Message from Reconciliation Australia

Reconciliation Australia is delighted to welcome the City of Kwinana to the Reconciliation Action Plan (RAP) program and to formally endorse the City's inaugural Reflect RAP.

As a member of the RAP community, the City of Kwinana joins over 1,000 dedicated corporate, government, and not-for-profit organisations that have formally committed to reconciliation through the RAP program since its inception in 2006. RAP organisations across Australia are turning good intentions into positive actions, helping to build higher trust, lower prejudice, and increase pride in Aboriginal and Torres Strait Islander cultures.

Reconciliation is no one single issue or agenda. Based on international research and benchmarking, Reconciliation Australia defines and measures reconciliation through five critical dimensions: race relations; equality and equity, institutional integrity; unity; and historical acceptance. All sections of the community—governments, civil society, the private sector, and Aboriginal and Torres Strait Islander communities—have a role to play to progress these dimensions.

The RAP program provides a framework for organisations to advance reconciliation within their spheres of influence. This Reflect RAP provides the City of Kwinana with a roadmap to begin its reconciliation journey. Through implementing a Reflect RAP, the City of Kwinana will lay the foundations for future RAPs and reconciliation initiatives.

We wish the City of Kwinana well as it takes these first critical steps in its reconciliation journey. We encourage the organisation to embrace this journey with open hearts and minds, to grow from the challenges, and to build on the successes. As the Council for Aboriginal Reconciliation reminded the nation in its final report:

“Reconciliation is hard work—it's a long, winding and corrugated road, not a broad, paved highway. Determination and effort at all levels of government and in all sections of the community will be essential to make reconciliation a reality.”

On behalf of Reconciliation Australia, I commend the City of Kwinana on its first RAP, and look forward to following its ongoing reconciliation journey.

**Karen Mundine**

**Chief Executive Officer  
Reconciliation Australia**

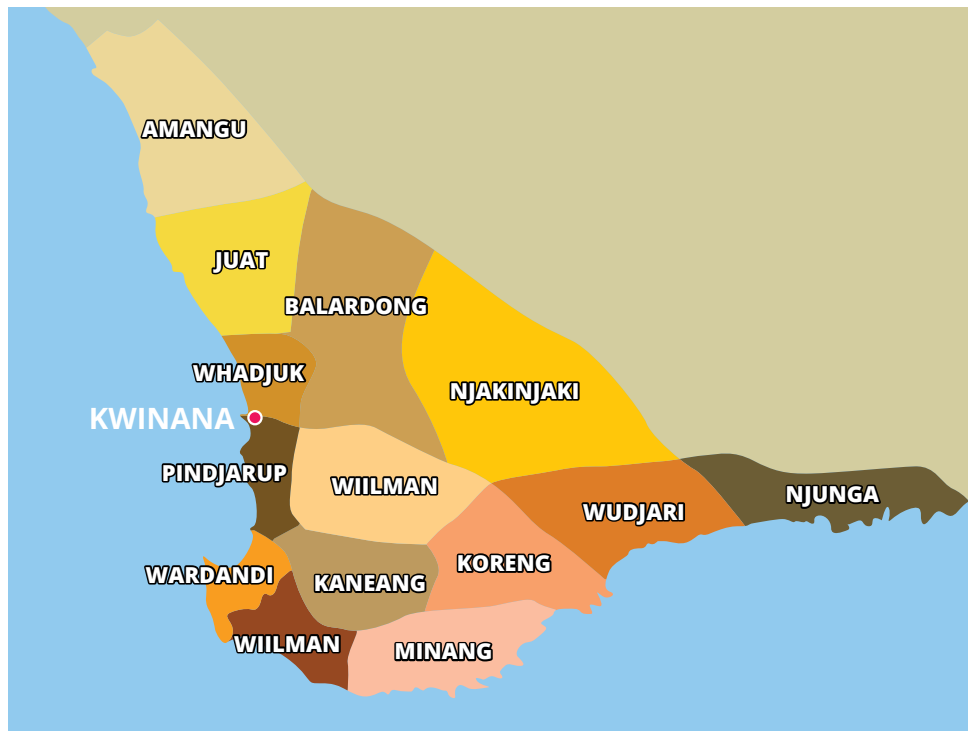


# Introduction

The City of Kwinana (the City) sits within the lands of the Nyoongar (Noongar) people who are the Traditional Custodians of Kwinana and surrounding areas. The City has strong, active Aboriginal communities, which represent 3.6% of the population (ABS Census 2016). Within the Perth Metropolitan Region, Kwinana has the highest proportion of residents that identify as Aboriginal and Torres Strait Islander people.

Nyoongar (Noongar) Country is the land in the south-west corner of Western Australia. There are 14 clan groups of people from Nyoongar (Noongar) descent within Aboriginal Australia.

## Aboriginal Groups of the South West of Western Australia



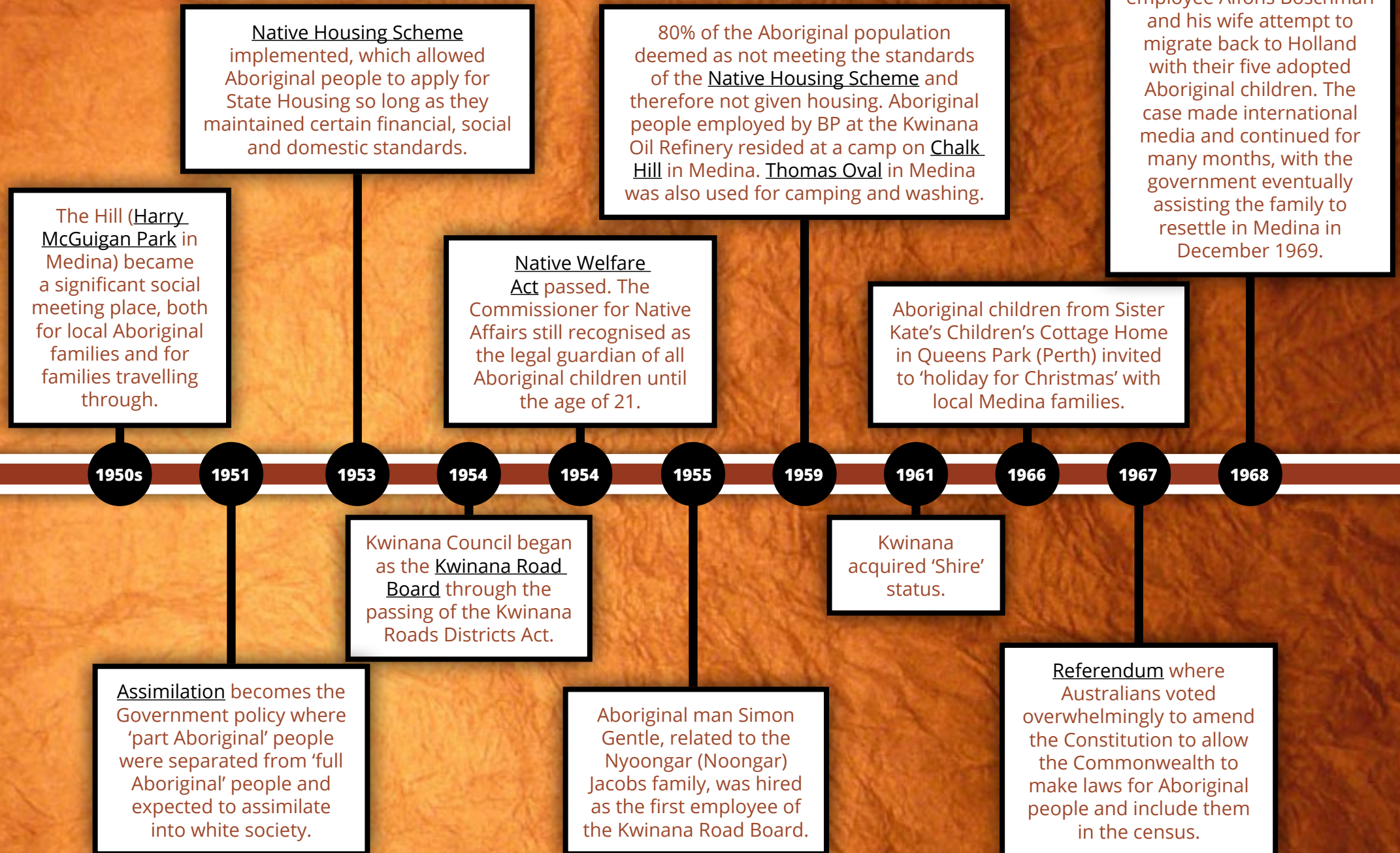
The City's Conciliation Advisory Group was formed in May 2018. The Group advised the City to use the term 'conciliation' as it is more descriptive of the process and journey the City is embarking upon.

This Plan is adapted from Reconciliation Australia's Reflect template, which is the first level of a Reconciliation Action Plan under their national framework. The City acknowledges that this is the beginning of a journey.

Rather than call this a Reconciliation Action Plan, the Conciliation Advisory Group recommended words in the Nyoongar (Noongar) language be used and named the Plan: 'Boola Maara Baldja Koorliny' which means '*Many hands firmly united going forward*'.

The Reconciliation Action Plan (RAP) program run by Reconciliation Australia provides a framework for organisations to support the national reconciliation movement. The framework has three pillars: relationships, respect and opportunities. Each of the four levels of a RAP (Reflect, Innovate, Stretch and Elevate) outline the minimum elements required for an organisation to reach each level.

## Brief history since creation of the Kwinana Local Government Area



This timeline aims to provide a basic overview of local, state and national events of historical significance relating to Aboriginal people, from the 1950s onwards. The City acknowledges that this timeline is limited and several key events may have been missed. If you would like your local history recorded please contact the [Kwinana Public Library](#). Information for this timeline has been sourced from the City's Local History Collection and from a Noongar Timeline published by [Ruminating.org](#)

The Shire of Kwinana declared the Town of Kwinana.

Native Title discussions occur regarding Kwinana Freeway extension through Wellard and naming the bridge. The bridge is named Walley Bridge after a local Aboriginal family.

The Town of Kwinana declared the City of Kwinana.

Medina Aboriginal Cultural Group given premises on Leasham Way Medina from the Aboriginal Lands Trust.

Kwinana population reaches 20,000 people.

Medina Revitalisation Project complete including revitalisation of The Hill (Harry McGuigan Park in Medina).

1972

1973

1975

1977

1992

2001

2001

2010

2012

2016

2017

Medina Aboriginal Cultural Group officially formed.

Commonwealth Racial Discrimination Act passed, making it illegal to discriminate against anyone on the grounds of race, colour, descent, nationality or ethnic origin.

High Court's Mabo decision reversed the notion that Australia was 'terra nullius' or 'desert and unoccupied' when Europeans arrived. This effectively re-introduced Aboriginal sovereignty in Australia.

Moorditj Koort Aboriginal Health and Wellness Centre opens in Medina.

City of Kwinana recognises the need to develop a Reconciliation Action Plan. Kwinana population reaches almost 40,000 people.

## OUR BUSINESS

The City is a rapidly growing residential area, with substantial industrial, rural and rural-residential areas and some commercial areas. Kwinana encompasses a total land area of nearly 120 square kilometres and it is the second fastest growing local government area in Western Australia, with the population predicted to double in the next 20 years.

In the 2016 ABS Census, 3.6% of the City's population identified as Aboriginal and Torres Strait Islander, totalling 1,961 people. This is almost double the proportion of Aboriginal and Torres Strait Islander people in the Greater Perth area. The City's workforce numbers are in the vicinity of 260 permanent staff, exclusive of casual staff. Of this number, approximately 3.5% of employees are recorded as being of either Aboriginal or Torres Strait Islander descent.

The City's vision for the future is *"Rich in spirit, alive with opportunities, surrounded by nature - It's all here."* The vision statement succinctly represents the community's aspirations for the future and is derived directly from community visioning priorities. The Reflect Reconciliation Action Plan (Boola Maara Baldja Koorliny) aligns directly with this vision.

## OUR RECONCILIATION ACTION PLAN (BOOLA MAARA BALDJA KOORLINY)

The City has developed strong relationships with Elders and Aboriginal and Torres Strait Islander community members who live and work in and around Kwinana.

Members of the Aboriginal community in Kwinana have expressed a need for increased awareness of Aboriginal and Torres Strait Islander histories and cultures in Kwinana.

### The key community aspirations for reconciliation from Aboriginal Community Planning Meetings held in 2017 were:

- The need for the City to develop strategies involving the Aboriginal and Torres Strait Islander community in order to build stronger relationships and rapport with the community; and
- The need to have more Aboriginal and Torres Strait Islander peoples working internally at the City of Kwinana and externally within Kwinana.

The City recognises that this RAP (Boola Maara Baldja Koorliny) will enable the organisation to spend time developing these relationships while together deciding on the future vision for reconciliation between the organisation and the community.

This mural was developed as a community art project during NAIDOC Week 2018 and is on display at the Kwinana Marketplace. The mural was funded by The Smith Family Communities for Children Project and the project artists were Jarred Franey and Ashley and Kellie Collard.





# Action Plan

Actions are listed under three headings of Relationships, Respect and Opportunities in order of priority.

<b>Relationships</b>			
Action	Deliverable	When	Responsibility
1. Support, resource and maintain a Conciliation Advisory Group	1.1 Support the Conciliation Advisory Group in the implementation of the City's RAP (Boola Maara Baldja Koorliny), comprised of Councillors, Aboriginal and Torres Strait Islander community members, representatives of relevant community stakeholder groups and staff from across the organisation.	Dec 2018	Mayor (lead) and Councillors  Director City Engagement
	1.2 Ensure the Conciliation Advisory Group monitors the development and implementation of the RAP (Boola Maara Baldja Koorliny).	Dec 2018	CDO Diversity
2. Build internal and external relationships	2.1 Develop a list of Aboriginal and Torres Strait Islander peoples, communities and organisations within the Kwinana local area or sphere of influence who the City can connect and work with on our reconciliation journey.	Dec 2018	CDO Diversity
	2.2 Develop a list of RAP (Boola Maara Baldja Koorliny) organisations and other like-minded organisations that we can connect and work with on our reconciliation journey.	Dec 2018	CDO Diversity
	2.3 Develop a mechanism for sharing information with the wider Aboriginal and Torres Strait Islander community in Kwinana – such as a newsletter, through social media or webpage.	Dec 2018	CDO Diversity
3. Promote events which foster conciliation	3.1 Hold an event to celebrate the adoption of the RAP (Boola Maara Baldja Koorliny).	Feb 2019	CDO Diversity
	3.2 Develop a calendar of events, including but not limited to, NAIDOC and National Reconciliation Week. Promote this calendar internally and externally.	Feb 2019	CDO Diversity
	3.3 Hold a Council afternoon tea hosted by the Mayor inviting Aboriginal community members to engage with Councillors and staff.	Sept 2019	Mayor CDO Diversity

4.	Raise awareness of the RAP (internally and externally)	4.1	Develop and implement a plan to raise awareness amongst all Councillors and staff across the organisation about our RAP (Boola Maara Baldja Koorliny) commitments.	Dec 2018	CDO Diversity
		4.2	Publish and promote our RAP (Boola Maara Baldja Koorliny) to the wider community and welcome feedback on the RAP (Boola Maara Baldja Koorliny) actions.	Dec 2018	CDO Diversity
5.	Participate in and celebrate National Reconciliation Week (NRW)	5.1	Encourage City staff to attend a NRW event.	May 2019	City Leadership Team
		5.2	Circulate Reconciliation Australia's NRW resources and reconciliation materials to City staff.	May 2019	Marketing and Comms Officer
		5.3	Ensure the Conciliation Advisory Group participates in an external event to recognise and celebrate NRW.	May 2019	Conciliation Advisory Group

## Respect

Action	Deliverable	When	Responsibility		
6.	Raise internal understanding of Aboriginal and Torres Strait Islander cultural protocols	6.1	Establish Welcome to Country and Acknowledgement of Country protocols, work with the internal Marketing Team to have them included in all civic and community events and speeches.	Dec 2018	CDO Diversity
		6.2	Develop an expanded Acknowledgement of Country for Citizenship Ceremonies which will provide attendees with a greater understanding of the history of the Acknowledgement and its importance to Aboriginal people	Dec 2018	CDO Diversity
7.	Investigate Aboriginal and Torres Strait Islander cultural learning and development	7.1	Deliver cultural awareness training to all Councillors and staff within the City of Kwinana. Aim for an immersion program including elements delivered by Traditional Custodians.	Feb 2019	HR Manager
		7.2	Investigate the potential for cultural awareness training to be delivered to local small businesses and community groups.	July 2019	CDO Diversity
8.	Display of flags	8.1	Investigate the display of the Australian flag, Aboriginal flag and Torres Strait Islander flag at the Council Administration Building and relevant civic and community events.	Dec 2018	Customer Service Officer CDO Events

9. Participate in and celebrate National Aboriginal and Islanders Day Observance Committee (NAIDOC) Week	9.1	Raise awareness and share information amongst City staff on the meaning of NAIDOC Week including information about the local Aboriginal and Torres Strait Islander peoples and communities.	June 2019	CDO Diversity
	9.2	Introduce City staff to NAIDOC Week by promoting community events in our local area.	July 2019	Marketing and Comms Officer
	9.3	Encourage members of the Conciliation Advisory Group to participate in an external NAIDOC Week event.	July 2019	Conciliation Advisory Group

### Opportunity

Action	Deliverable	When	Responsibility	
10. Investigate Aboriginal and Torres Strait Islander employment opportunities within the City's workforce.	10.1	Develop Aboriginal and Torres Strait Islander employment strategy targets.	Jan 2019	HR Manager
	10.2	Identify current Aboriginal and Torres Strait Islander staff to inform future employment and development opportunities.	Jan 2019	HR Development Coordinator
11. Investigate Aboriginal and Torres Strait Islander supplier diversity	11.1	Develop an understanding of the mutual benefits of procurement from Aboriginal and Torres Strait Islander owned businesses.	Feb 2019	Manager Contracts
	11.2	Develop a business case for procurement from Aboriginal and Torres Strait Islander owned businesses.	June 2019	Manager Contracts
12. Early childhood and youth services to promote reconciliation	12.1	Continue to convene the Youth Diversion Network meetings to develop strategies in partnership with early childhood and youth services, and other relevant agencies to support families.	Dec 2018	Manager Youth Development

Governance and Tracking Progress			
Action	Deliverable	When	Responsibility
13. Build support for the RAP	13.1 Define resource needs for the RAP (Boola Maara Baldja Koorliny) development and implementation.	Dec 2018	Manager Community Engagement
	13.2 Define systems and capability needs to track, measure and report on RAP activities.	Dec 2018	Manager Community Engagement
14. Review and refresh the RAP	14.1 Liaise with Reconciliation Australia to develop a new Innovate RAP (Boola Maara Baldja Koorliny) based on learnings, challenges and achievements.	Sept 2019	CDO Diversity Conciliation Advisory Group
	14.2 Submit this new draft RAP Innovate (Boola Maara Baldja Koorliny) to Reconciliation Australia for review.	Oct 2019	CDO Diversity
	14.3 Submit this new draft Innovate RAP (Boola Maara Baldja Koorliny) to Reconciliation Australia for formal endorsement.	Nov 2019	CDO Diversity
15. Report on the progress of our RAP internally and externally	15.1 Conciliation Advisory Group to report activities and outcomes in a written report to Council to be distributed internally to City of Kwinana staff.	Sept 2019	Conciliation Advisory Group Marketing and Comms Officer
	15.2 Conciliation Advisory Group to share activities and outcomes of the RAP (Boola Maara Baldja Koorliny) with the community.	Sept 2019	Conciliation Advisory Group
	15.3 Complete the annual RAP Impact Measurement Questionnaire and submit to Reconciliation Australia.	Sept 2019	Director City Engagement



## Glossary of Terms

### ABORIGINAL FLAG

The Aboriginal Flag was designed by Harold Thomas, an Aboriginal artist, in 1971. The Aboriginal flag has the symbolic meaning of:



**BLACK** represents the Aboriginal people of Australia;

**YELLOW CIRCLE** represents the sun, the giver of life and protector; and

**RED** represents the red earth, the red ochre used in ceremonies and Aboriginal peoples' spiritual relation to the land.

### ACKNOWLEDGEMENT OF COUNTRY

An Acknowledgment of Country is a way that non-Aboriginal people can show respect for Nyoongar (Noongar) heritage and the ongoing relationship of Traditional Custodians with the land. An example of a suitable Acknowledgement of Country to be used in the Kwinana area is "I/we wish to acknowledge the Traditional Custodians of the land we are meeting on today, the Nyoongar (Noongar) people, and pay my/our respects to their Elders past and present".

### ELDERS

Elders are our keepers of knowledge in family and community. They are usually Elder people but some families may agree to a younger person taking on this cultural responsibility.

Young artist Shakaylee Wallam with sculptures as part of the Edge Skatepark Community Art Project

## **NYOONGAR (NOONGAR)**

Nyoongar (Noongar) language word is a generic and accepted term which is used to broadly identify Aboriginal people who come from the South West region of Western Australia. It is estimated that there are approximately 30,000 Nyoongar (Noongar) people living in the south west making this group the largest Aboriginal or Torres Strait Islander peoples in Australia. Nyoongar (Noongar) language is a spoken language, not a written language; as such, there are many ways to spell the word, depending on the dialect of the clan group. Sometimes spelt Noongah, Nyungar, Nyoongah, Nyugha or Nyungah.

## **TRADITIONAL CUSTODIANS**

Aboriginal representatives of the traditional language group that inhabited the area prior to European settlement are recognised as Traditional Custodians by local Aboriginal communities.

## **TORRES STRAIT ISLANDER FLAG**



The Torres Strait Islander flag represents the Torres Strait Islander people, who are the Indigenous people of the Torres Strait Islands north of Queensland. The flag was designed by the late Bernard Namok as a symbol of unity and identity for Torres Strait Islanders. The green panels at the top and bottom of the flag symbolise the land, while the blue panel in the centre represents the waters of the Torres Strait. The thin black stripes between the green and blue panels signify the Torres Strait Islanders themselves. The white five-pointed star at the centre of the flag represents the five major island groups, and the white dhari (dancer's headdress) around it also symbolises the Torres Strait Islands people. White symbolises peace, while the star is a symbol for navigation.

## **WELCOME TO COUNTRY**

A Welcome to Country ceremony gives Traditional Custodians, the Nyoongar (Noongar) peoples, the opportunity to formally welcome people to their land. This ceremony should be undertaken by Elders acknowledged as such by their family and community.

Information in this glossary has been taken from the South West Aboriginal Land & Sea Council's document on Noongar Protocols 'Living Culture – Living Land'.



**ADMINISTRATION**

Cnr Gilmore Ave and Sulphur Rd,  
Kwinana WA 6167  
PO Box 21, Kwinana WA 6966

Telephone 08 9439 0200

[customer@kwinana.wa.gov.au](mailto:customer@kwinana.wa.gov.au)

[www.kwinana.wa.gov.au](http://www.kwinana.wa.gov.au)





### **13 Reports - Economic**

Nil

## 14 Reports - Natural Environment

### 14.1 Draft Environment Education Strategy 2019-2024

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

There were no declarations of interest declared.

#### **SUMMARY:**

City officers have prepared an Environmental Education Strategy 2019-2024 (the Strategy), which was identified as an objective under the Strategic Community Plan Aspiration 3 of "Surrounded by Nature". The Strategy as provided in Attachment A details the existing programs that have been delivered to the City over the last ten years, and considers the results of a community survey which outlines the programs in which the community are interested. It sets objectives based on the existing programs, the community feedback and principles of environmental education. These objectives form the basis for the implementation plan.

#### **OFFICER RECOMMENDATION:**

That Council adopt the Draft Environmental Education Strategy 2019-2024, as at Attachment A.

#### **DISCUSSION:**

In 2017, the City of Kwinana (the City) adopted the Strategic Community Plan based on a comprehensive community visioning process. The development of an Environmental Education Strategy (the Strategy) was identified as an objective under the Strategic Community Plan Aspiration 3 of "Surrounded by Nature". Prior to the development of the Strategy, programs had been developed based on perceived need within the community, and utilised to complement existing operational programs. For instance, the Community Planting Program was developed in conjunction with the Bushcare program to encourage the community to be involved in looking after their local reserves, to improve the amenity of these areas and to contribute positively toward biodiversity conservation.

The development of the Strategy was an opportunity to gauge from the community whether the City is continuing to meet residents' needs in providing this vision, given the big shift in demographics within the City over the last ten years. It was also an opportunity to include environmental educational principles and a methodology to the overall framework.

In preparing the Strategy, a survey of the community was undertaken to gauge how much the community value the existing environmental education program and what type of activities and programs the community would like to be involved in.

The major findings from the Community Feedback Survey included:

- 72.6% of respondents had previously participated in one of the 15 activities offered as part of the existing program.
- The most likely initiatives that they participated in were; Community Planting (61.11%), Seedling Subsidy Scheme – Living Green (46.3%), Clean Up Australia Day (40.74%), and the Annual Wildflower Walk (27.78%).

#### 14.1 DRAFT ENVIRONMENT EDUCATION STRATEGY 2019-2024

- The activities that were thought most likely to change behaviour included; Community Planting Events (53.19%), Seedling Subsidy Scheme (42.55%), Clean up Australia Day (29.79%), and Adopt a Verge Gardening (23.40%).
- Of the suggested new activities, the likelihood of participation by respondents were as follows; bushwalks with interpretative signs (30% very likely), solar panel advice (22.03% very likely), community gardens (20.69% very likely), nature play activities (20.37% very likely).

The key objectives that are the basis of the strategy and the implementation plan are as follows:

- Raise awareness about the environment and particularly in those growing demographic groups in Kwinana;
- Build skills in the community with new and existing residents and groups, so they can ultimately facilitate their own actions, and
- Look for new opportunities to incorporate all target audiences, and to collaborate with multiple stakeholders.

The Strategy's actions are described for each of these objectives and are outlined in the implementation plan. As the community feedback indicated, the City is largely providing the experiences and activities that the community expects in the area of environmental education. These existing activities have been listed in the plan as "Existing". There are also a number of "New" actions based on the community's suggestions that are outlined in the Implementation Plan.

For example, *No. 8 Investigating options for interpretative signage in key bushwalk areas, No. 22 Investigate options to incorporate Nature Play into existing frameworks, and*

*No.23 Work with Community Services to establish a suitable model and guidelines for the development of community gardens in the City.*

This report seeks adoption of the Environment Education Strategy including all actions within its implementation plan.

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

There are no legal/policy implications in relation to this report.

#### **FINANCIAL/BUDGET IMPLICATIONS:**

The existing activities outlined in the draft Strategy are funded through the current Council Budget. Most of the new initiatives that have been suggested are reviews, or investigations which would not require budget funds, but officer time. External funding could be sought for projects relating to interpretative signage. Where costs are to be confirmed (TBC) more investigation is required.

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

There are no asset management implications in relation to this report.

**14.1 DRAFT ENVIRONMENT EDUCATION STRATEGY 2019-2024****ENVIRONMENTAL IMPLICATIONS:**

Engaging the community to actively participate in their environment will have positive environmental implications. This Strategy activates citizens to engage in positive environmental behaviours to improve their health and wellbeing and that of the surrounding environment, through their sustainable actions.

**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 beautiful natural environment	3.3 Educate and promote improved environmental land management

**COMMUNITY ENGAGEMENT:**

The Strategy is regarded as having the project impact of "Lower Impact; All of Kwinana". As such we have undertaken a number of web-posts indicating that the survey has been available to complete online, and provided a direct opportunity for the community to participate at a stall in a high-traffic location at the Kwinana Marketplace. A total of 75 responses were received from individuals.

Community perception indicators as part of the Corporate Business Plan will form the basis as a measure of success for future reference.

**PUBLIC HEALTH IMPLICATIONS**

The recommendation/proposal has the potential to help improve the health and wellbeing of individuals who participate in environment related programs, particularly children and youth with Nature Play activities, School Planting Programs, and similarly the general public with Community Planting Programs and other community engagement activities.

**RISK IMPLICATIONS:**

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

Risk Event	Misalignment of environmental education provision and community expectation
Risk Theme	Ineffective management of events
Risk Effect/Impact	Service Delivery
Risk Assessment Context	Strategic
Consequence	Moderate
Likelihood	Likely
Rating (before treatment)	Moderate

## 14.1 DRAFT ENVIRONMENT EDUCATION STRATEGY 2019-2024

Risk Treatment in place	Reduce – mitigate risk
Response to risk treatment required/in place	Implement, monitor, evaluate and review the Environmental Education Strategy informed by current academic and practitioner literature.
Rating (after treatment)	Low

**COUNCIL DECISION**

363

**MOVED CR S LEE****SECONDED CR P FEASEY**

**That Council adopt the Draft Environmental Education Strategy 2019-2024, as at Attachment A.**

**CARRIED  
5/0**

City of Kwinana

# Draft Environmental Education Strategy (2019-2024)

November 2018



# 1. Introduction and Background

## 1.1 International and National Context

Environmental Education programs across the globe can attribute their development to key moments in history. The first *United Nations Conference on the Human Environment* in Stockholm, Sweden in 1972 produced a declaration of 26 principles, including Principle 19 that specifically called for the “education in environmental matters, for the younger generation as well as adults” (UNEP 1972). This was endorsed further at the world’s first *Intergovernmental Conference on Environmental Education* held in Tbilisi, Georgia 1977, through the development of *The Tbilisi Declaration*, which outlined environmental education goals as follows:

- a) to foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas;
- b) to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment; and
- c) to create new patterns of behaviour of individuals, groups and society as a whole towards the environment (UNESCO 1978, p.26).

Forty years on, these fundamental goals are still the underlying principles of all environmental education, and will form the basis of principles for this environmental education strategy. Further to this, the placement of local government closer to the people allows this sphere of government to have a key role in educating, raising awareness, and enabling change through the empowerment of the community.

## 1.2 Local Context

The City of Kwinana (the City) is geographically located 25 km south of the Perth City Centre, it covers an area of 12,068 hectares and contains a diversity of land use types including heavy industrial, urban residential, special rural, rural, and commercial. It also contains a variety of landforms including dune systems from Kwinana Beach, wetlands including such features as “The Spectacles” and extends out into the Bassendean Dune system east of the Kwinana Freeway containing the Threatened Ecological Community of Banksia Woodland of the Swan Coastal Plain. This diversity in landuse and form, provides for a variety of opportunities to engage with the community on environmental education from

special rural residents who can require further assistance with managing their properties in an environmentally sustainable manner, to commercial businesses who may like to become more energy or water efficient.

Over the last 10-15 years the City has grown rapidly from a population of 23,986 in 2006 to an estimated residential population of 41,866 in 2017 (ABS, 2018). The biggest increase in the last 10 years when looking at age structure has occurred in the under five or preschool age group, and the young workforce group of 24-35 year olds. This has particular implications when delivering services, and the types of environmental educational activities to allow for the greatest impact. For example, as the preschool cohort move into school, there would be more opportunities to participate in school holiday based environmental programs. Participation from the 24-35 year old age group in activities may be limited by their reduced availability as a result of full time employment, and child-care commitments. By structuring activities during out of work hours or making the environmental education opportunities child-care friendly, the City will be able to ensure a greater proportion of the population participate.

Other demographic shifts that may be important to note when targeting programs to participants is the increase in the overseas born population. In particular, the largest increase in birthplace countries between 2011 and 2016 were the Philippines, India, New Zealand and South Africa (ABS, 2016). For example resources may need to be provided in different languages in line with the City's Multicultural Action Plan. Furthermore, the City of Kwinana is in the fortunate position of having a greater than Perth average proportion of the population of Aboriginal people. The incorporation of indigenous culture and language is fundamental and should play an important role in the development of educational materials and programs.

### 1.3 Policy Context

During 2016, the City of Kwinana undertook to carry out a community visioning process which culminated in the development of the Strategic Community Plan 2017-2027 (City of Kwinana, 2017). As part of the Strategic Community Plan, there was one key aspiration endorsed by the community which encapsulated all of the areas to be addressed by the Environmental Education Strategy, which was **Aspiration 3 – Surrounded by Nature**. Its



development has been highlighted in the Corporate Business Plan as Objective 3.2 and Key Action 3.2.1 as follows:

*Objective 3.2 Educate and promote improved environmental land management*

*Key Action 3.2.1 Create an Environmental Education Strategy*

The purpose of this Strategy is to collate all current programs undertaken by the City of Kwinana that fall under Aspiration 3 of the Strategic Plan. These programs have direct links to the following strategies, plans and policies:

- Natural Areas Management Plan – 6 August 2014
- Climate Change Mitigation and Adaptation Plan – 12 September 2018
- Sustainable Water Management Plan – 12 September 2018
- Climate Change Policy – 23 January 2013

As the Environment Department currently engages regularly with the community at many events, workshops, and in the development of volunteer groups, the City has indirect links with aspects of the following Strategies, Plans and Policies:

- Youth Strategy – 14 December 2016
- Multicultural Action Plan - 14 December 2016
- Reconciliation Action Plan - In Development
- Events Strategy - 11 November 2016
- Community Engagement Policy - 23 March 2016
- Access and Equity Policy – 8 July 2015

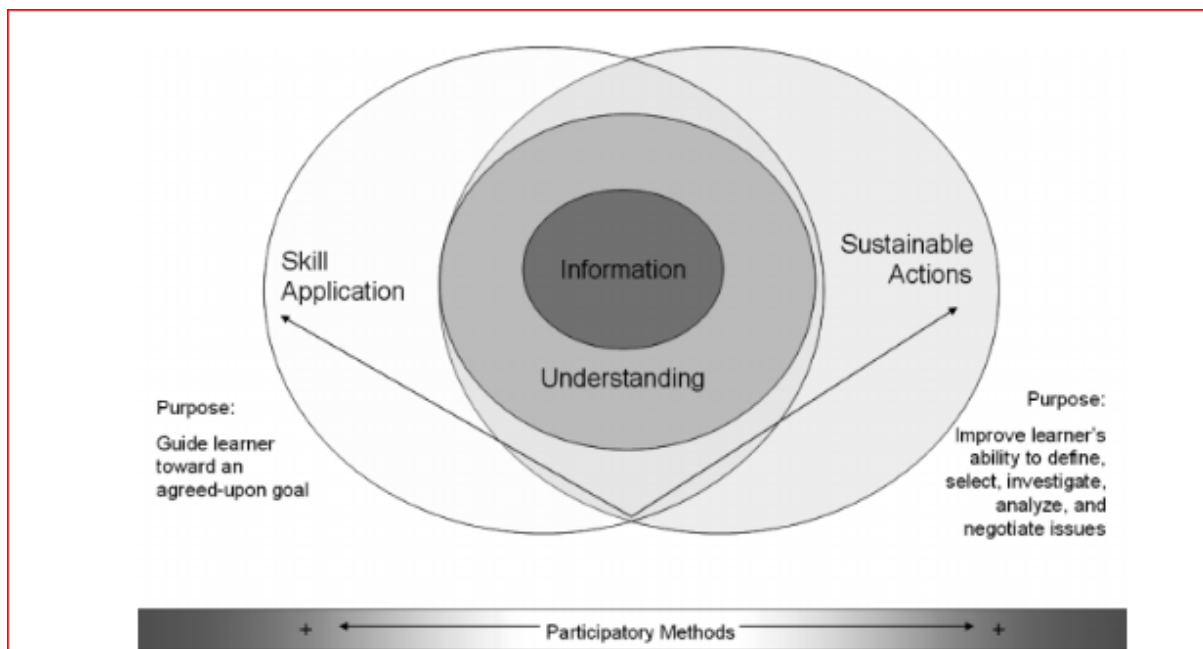
This Strategy has had regard to these relevant strategies, plans and policies in determining program relevance, effectiveness and co-ordination. This Strategy also incorporates feedback from the community on the projects and events the community currently participate in, what types of programs they would like to participate in, and other ways to engage with the community. This process has identified gaps within our current Environmental Education program which can be actioned as part of the Implementation Plan.

## 1.4 Why an Environmental Education Strategy?

“**Surrounded by Nature**” was a key Aspiration that was developed and acknowledged by the local community in the City of Kwinana Strategic Community Plan. It reinforces how important the local natural environment is for both the health and wellbeing of human beings, but also for all species that live within the natural ecosystem. The negative impacts that human activities have on the environment have been clearly outlined in a variety of documents including the City’s Natural Areas Management Plan, Sustainable Water Management Plan and Climate Change Adaptation and Mitigation Plan. As the population of the City grows these impacts will increase. Education will play a very important role in strengthening the communities’ ability to maintain a sustainable environment, and improve it into the future. Environmental education is more than just communicating information about the environment and the ways in which it is currently threatened by human activity. It helps individuals and communities to improve their understanding, skills and motivation to work together, to develop solutions and advocate for a healthy environment and society.

## 2.Environmental Education Methodology

Environmental Education in Australia is currently supported through the Education for Sustainability or EfS Framework. In Western Australia, this takes the shape of the Sustainable Schools initiative linked to the West Australian Education Department (Department of Education, 2016). The initiative provides tools and resources for teachers to incorporate the curriculum priority of sustainability into every learning area, within a school environment. As a local government, a framework is needed that can utilise these principles, but is adaptable to a broad base of learners in both formal and informal settings. In addition, it must be acknowledged that many participants will be at different stages in the Environmental Education Continuum, and that it can cater for different levels of involvement. A Framework for Environmental Education Strategies has been proposed by Monroe et al. (2007) which allows for a very broad target audience, with a variety of engagement opportunities. This Framework will be the basis for categorising the City's current educational programs, and is outlined in Figure 1.



**Figure 1 A framework for environmental education strategies**

(Monroe, Andrews & Biedenweg, 2007, p.211)

**Conveying Information:** is the basic level, which is the requirement for most understanding. This can occur in both informal and formal settings and is one directional in most cases. There are many examples of this in the local government setting and include the production of information brochures, website/internet information, signage, posters, public announcements, newspaper articles and exhibitions.

**Building Understanding:** allows for the two-way exchange of information and ideas, to clarify the understanding of information. This could include both informal and formal strategies such as guided nature walks, workshops that allow discussion, experiments, surveys, active learning, field study, and case studies to name a few. For a workshop to build understanding it requires “summative evaluation to better understand how the learners perceive information” (Monroe et al., 2007, p.211). If a workshop only disseminates information and does not provide an opportunity for evaluation or feedback, it would be regarded as “Conveying Information” only.

**Improve Skills:** in this category of environmental education, the participant practices a skill, and this is a very hands-on approach to learning. It may also include learning strategies that provide incentives to encourage skills and behavior change. This could include activities that involve citizen science, volunteer services such as Community Tree Planting and Community Gardens. The process of setting a pledge and mentoring participants to complete a pledge in programs such as “Living Smart” would be a way of encouraging skills and behavior change. This “Improvement of skills” category still requires a two way dialogue between the educator and the learner.

**Enable Sustainable Actions:** At this level of environmental education the learner is leading the development of their own goals and projects. The educator is facilitating and supporting the community group or learner in achieving their desired goal. An example of this would be a Friends of group or community member who is setting their own goals, and undertaking to achieve their particular projects with facilitation from the City only. Whilst sustainable actions is the desired goal for a sustainable community, it requires supports to be able to continue on a long term basis

At any given time within the local community, there may be a great deal of overlap between these categories of environmental education, and a number may be required to be utilised in

some programs at the same time. A variety of approaches will assist in creating a robust Environmental Education program that can cater for a variety of learners at different stages in their development.

This educational framework will ensure that a diverse range of educational options will be available to the community as part of this Strategy. Prior to the investment in a program, questions will be required to ensure that the program is fit for purpose, and whether it meets the proposed objectives of the Strategy, which are outlined in Section 5. The objectives are based on the elements of the educational framework.

## **2.1 Limitations**

For any Education Strategy to be effective in the long term, its framework needs to be incorporated across all departments and embedded in all practices conducted by the local government. Within the existing framework, the Strategy will encapsulate biodiversity conservation, climate change mitigation and adaptation, water use efficiency and energy efficiency as key areas of environmental education. Future reviews may provide an opportunity to improve collaborative relationships across other areas of the organisation to create a holistic approach.

### 3. Current Initiatives

Currently, the City of Kwinana deliver a variety of Environmental Education programs through a variety of different strategies. Utilising the above Framework, they can be included in the broad categories of conveying information, building understanding, improving skills and enabling sustainable actions. The City currently creates information such as brochures, signs, news articles and exhibitions, undertakes workshops and presentations, encourages the community to improve skills by volunteering and by attending skills building workshops, and supports local community groups to create and sustain their own projects. As described above in Figure 1, all of these areas are required for effective environmental education, and everyone will be at different stages of this process at any one time.

The key is to provide a mix of opportunities for the community to participate in, but to ultimately build the skills to enable the community to lead with their sustainable actions. Attached (Appendix A) is a table that outlines all the activities that the City of Kwinana currently undertake as part of its current Environmental Education program by the City's Environment Department. These programs are run locally, both directly by the City of Kwinana through the Environment Department, and also by utilising community partners such as Living Smart Facilitators, external guides (eg. Guides from the Wildflower Society of Western Australia) and the Switch Your Thinking program. These programs, workshops and guided tours are delivered through existing City of Kwinana venues such community centres, halls, pavilions, conservation reserves.

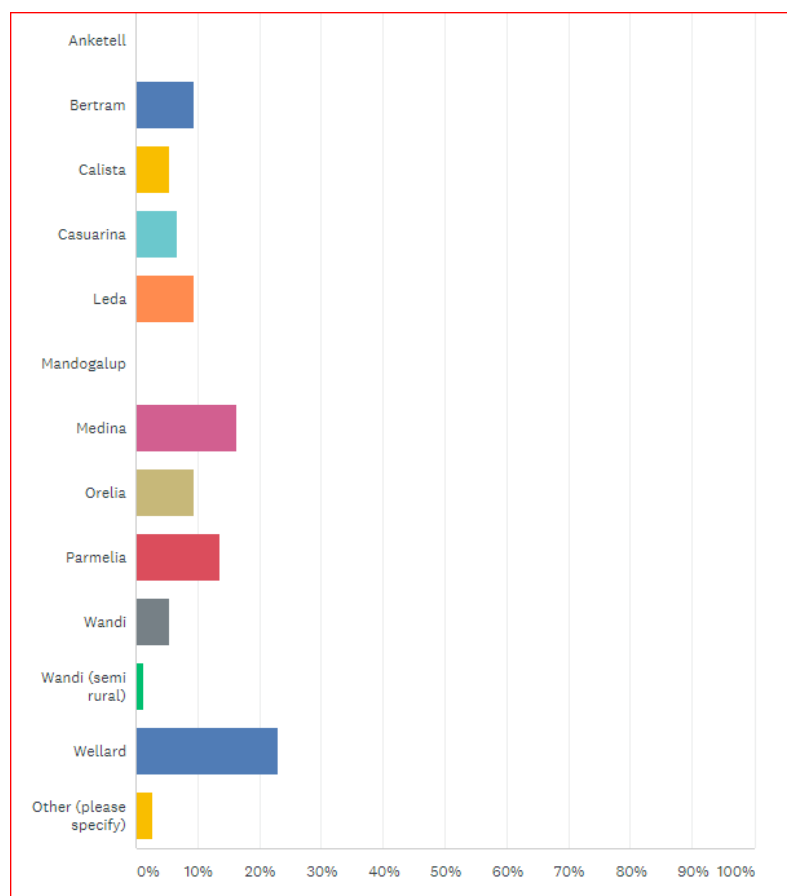
The Environment Department links in with ongoing City events such as the Childrens Festival to provide hands on environmental experiences, to promote activities, inform the public about all things "Environment" at a local level. The City also provides opportunities for staff to experience nature and be involved in sustainable actions (eg. Staff Wildflower Walks and Sustainability Photovoltaic workshops).

As well as formal activities undertaken by the Environment Department, there are a number of informal ways in which the City engages in environmental education. In particular, by providing positive natural experiences through passive recreation, eg. walking in the bush or riding bikes. This could occur in the form of signage or interpretation, and by providing support and advice to active Friends Groups.

## 4. Community Feedback Summary and Synthesis of Objectives

A Community Survey was created and sent out through Facebook, and email networks to gauge how much the community value the existing environmental education program, and what types of activities and programs the community would like to be involved in. A copy of the survey is attached in Appendix B. The City received 75 individual responses.

A summary of the community feedback is provided as follows: Most of the respondents reside within the urban areas of Kwinana, there were no responses from residents in Anketell or Mandogalup, and only one from any of the semi-rural residential area of Wandi. The highest number of responses came from Wellard at 22.97% of responses, followed by Medina at 16.22%.



**Figure 2 Percentage of Respondents by Suburb in Kwinana**

Over 72.6% of respondents had participated in an environmental activity conducted by the City of Kwinana. The most likely reasons for respondents to not participate included the lack of time, family and work commitments, and only recently moved into the area. Other reasons included that they did not know about them, did not have transport, and some had no reason for not participating.

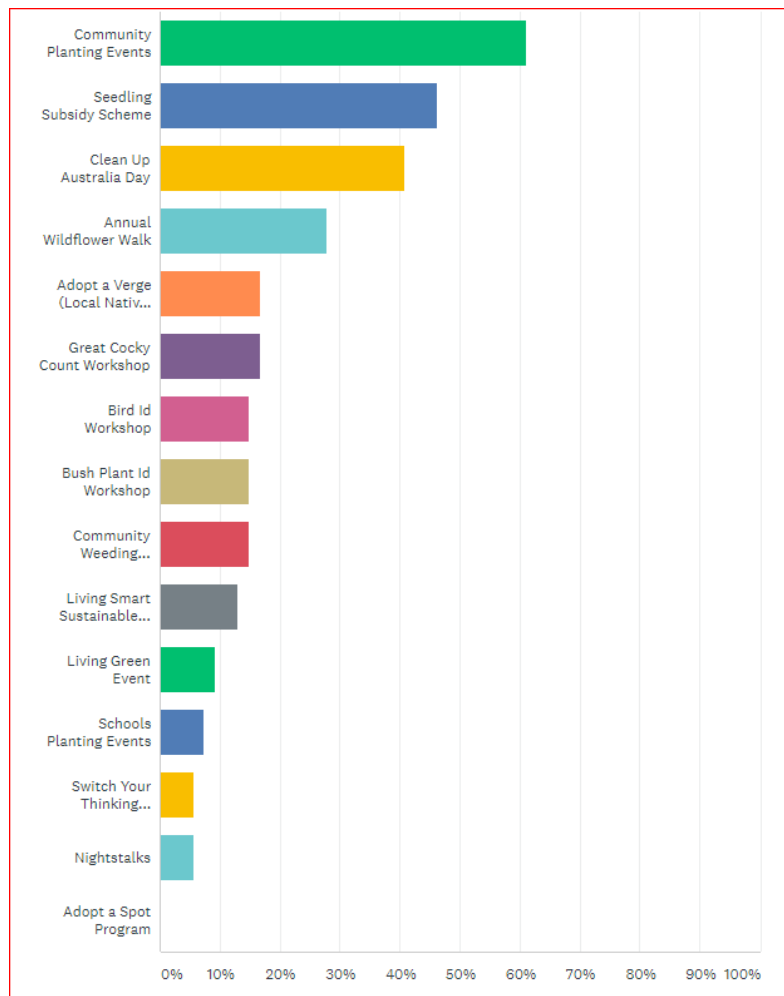
## **4.1 Current Initiatives the Community are likely to participate**

Of all the fifteen activities provided by the City, respondents participated mostly in Community Planting Events (61.11%), followed by the Seedling Subsidy Scheme (46.3%), Clean Up Australia Day (40.74%) and the Annual Wildflower Walk (27.78%). The events that had the least participation by respondents included Switch your Thinking activities\* (5.56%), Nightstalks\* (5.56%) and Adopt a Spot Program\*(0). A number of respondents (20) did not answer this question.

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\* Switch Your Thinking is a local government initiative that inspires sustainable action in Perth. It facilitates community events, delivers iconic projects and negotiates discounts for residents on sustainable products. Nightstalks are locally run guided wildlife spotting activities run during spring/autumn at night in various conservation reserves, organised by the City. Adopt a Spot is a program run through Keep Australia Beautiful WA. It is an anti-litter program that engages volunteers (individuals, community groups, business groups) to undertake coordinated litter clean-ups of designated sites in their communities.





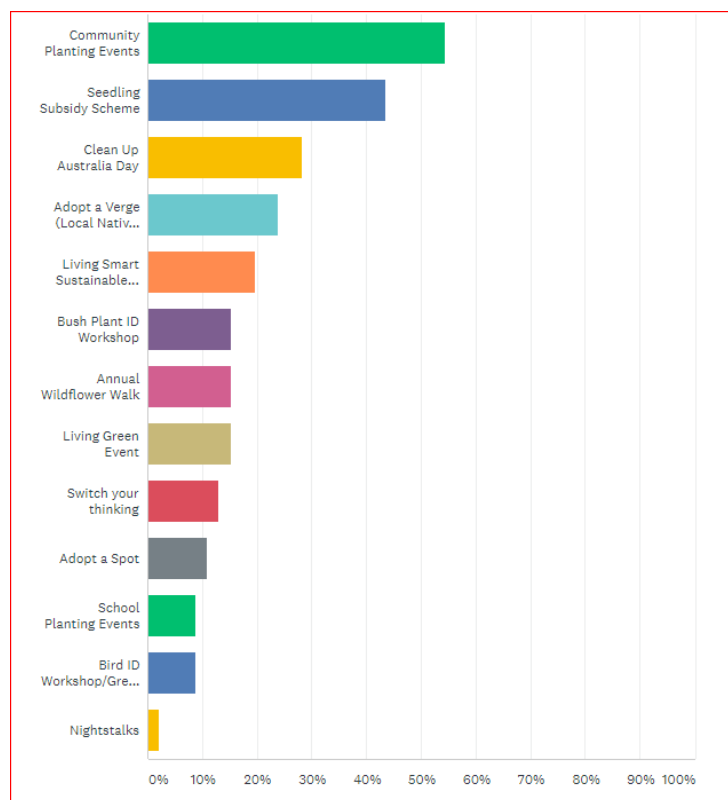
**Figure 3 Activities which respondents have participated in**

Respondents were asked how likely they would be to participate in the 15 activities that the City currently offers. The highest weighted average of likelihood at 4.25 was for the Seedling Subsidy Scheme, followed by Community Planting events at 4.05, the Annual Wildflower Walk at 3.89, and Verge Gardening Workshop at 3.84. Those activities less likely to be participated in by respondents included Switch Your Thinking at 3.4 and School Planting Events at 3.06.

## 4.2 Current activities likely to change behaviour:

In addition to getting a snapshot of current levels of participation, the City was also seeking to determine which activities provided the community with an opportunity to take these skills on board and make changes in their own lives, as part of the next stage in Environmental

Education of Building Understanding and Improving Skills. Community Planting Events had the highest response at 53.19% followed by Seedling Subsidy Scheme at 42.55%, Clean Up Australia Day at 29.79%, and Adopt a Verge (Local Native Verge Gardening) at 23.40%. In particular, the Community Planting and Seedling Subsidy Scheme activities have been in operation for the last 5-10 years and so have built an interest in participation from the community. It is likely that over time the community will make connections with other activities that have only recently been running eg. “Switch your Thinking”. There is also opportunity to adapt these activities according to the community needs and wants.



**Figure 4 Activities which have prompted respondents to make changes in their lives**

### 4.3 Other activities requested by the community

The community were also asked if they wanted to see any other activities included in the City’s Environmental Education Strategy that were not already being undertaken. The City provided some suggestions, but also allowed individuals to contribute their own ideas for consideration. Of the suggestions that the City made, the respondents listed the following as the most likely programs they would participate in:

- bushwalks with interpretative signage (30% very likely),
- solar panel advice (22.03% very likely),
- community gardens (20.69% very likely)
- nature play activities (20.37% very likely)

The least likely activities to participate in were Nature Based School Holiday activities (18.87% very unlikely) and Nature Play Activities (11.1% very unlikely). This clearly indicates more of a demographic bias, as some people with children are obviously very interested in nature play activities and those without children are not. Other suggestions put forward by the community in order of interest included; productive gardening advice (including permaculture gardening and establishing a community garden at Noongar Hill behind Pace Road shops), preserving trees and bush forever sites, native garden design and plant selection advice, installing interpretative signage in reserves (eg. Wildflower), youth and kids hands on activities, and native wildlife information and rescue. Other individual comments included; saving water, sustainable pet ownership, preventing trail bikes from getting into reserves, littering awareness and water based activities.

Finally, when asked if respondents had any other comments or ideas, there were 19 comments provided. This included the following; undertake school visits, motivate people to attend activities, planting gardens with fire prevention in mind, weeding activities, promote more planting of Tuarts, how to plant a waterwise verge garden, composting and worm farms, native tree planting in parks and street verges, and bird id walks.

Based on the feedback obtained from the community survey, the City is largely providing the experiences and activities expected by its community in the area of Environmental Education. Given the likelihood of participation in nature play activities outlined above, and the recent demographic changes in the City, there is a need to provide opportunities for the many more young families that are moving into the area, and to provide support for these time poor families to engage in our existing programs and activities. There will always be opportunities to improve services and provide new activities, based on interest and need, and this will be achieved by undertaking regular evaluation of our existing programs.

## 5. Key Objectives of the Environmental Education Strategy

In order to synthesise the educational framework of the Strategy with the initiatives that the City already conduct, and the feedback of the community; a few key objectives have been established as follows:

- 1. Raise Awareness** about the environment and particularly in those growing demographic groups in Kwinana (including celebrate success eg. awards);
- 2. Build Skills in the Community** with new and existing residents and groups, so they can ultimately facilitate their own actions.
- 3. Look for New Opportunities** to incorporate all target audiences, and to collaborate with multiple stakeholders.

## 6. Implementation Plan

Below is a list of actions that will be undertaken as part of the Environmental Education Strategy. These actions have been listed to respond to current levels of interest expressed by the community, and in line with City strategies, programs and initiatives for each objective. These actions may change over time according to public interest, specialist interest projects that are considered priorities (eg. seasonal issues such as swooping magpies, increases in feral animal numbers) and opportunities to link in with funding. Each Action is identified as new or existing to identify actions that are already being conducted as part of the existing Environmental Education Program. It is assumed that the budget totals will be made up of associated costs including operational costs (eg. Costs of buying plants for plantings, gloves, maintenance, watering) catering, advertising, hire of venues, as well as interpretative services provided externally. The budget for advertising is outlined in more detail as part of Appendix C.

No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
<b>Objective 1 Raise Awareness</b>					
1	<i>*Existing*</i> Organise Annual Wildflower Walk – promoting awareness of biodiversity in Kwinana, providing positive natural experiences. Utilising a collaborative approach with art and culture.	Natural Environment/Community Engagement	Annually	\$1500  City	40-50 participants.
2	<i>*Existing*</i> Organise Living Green Event – Providing advice to residents on ways to “Live Green” reducing	Natural Environment/Sustain	Annually	\$2000	80-200 participants, and Evaluation through

No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
	waste, native plant advice, solar power, and incorporation of Seedling Subsidy Scheme.	ability/ Environment Health		City	survey with a 70% satisfaction rate by participants
3	<i>*Existing*</i> Continue to provide information based workshops for Kwinana Residents (Adopt a Verge)	Natural Environment/Sustainability	Annually	\$200  City	20-40 participants, and Evaluation through survey with a 70% satisfaction rate by participants and Number of Native Verges installed
4	<i>*Existing*</i> Continue to participate in Switch your Thinking Program, 5 workshops including Young Re-inventor Competition.	Sustainability	Yearly (5)	\$5000  City	Evaluation by Provider - Switch Your Thinking

No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
5	<i>*Existing*</i> Conduct Nightstalks – promote awareness of biodiversity in Kwinana to provide positive experiences in the natural environment.	Natural Environment	Yearly (2)	\$900  City	70% of expected participation.
6	<i>*Existing*</i> Continue to participate in and promote the environment in cross departmental projects and events eg. Childrens Festival,	Natural Environment/Sustainability/ Community Engagement	As required	\$1000  City	Feedback through evaluation of relevant event.
7	<i>*New*</i> Review information provided about the Environment on City’s electronic platforms and update. Update existing information brochures. Establish a yearly events calendar/program.	Environment/Marketing-Communications	Ongoing	\$500  City	Number of hits/downloads online.
8	<i>*New*</i> Provide Solar Panel, Energy Efficiency and Water Efficiency Advice to residents at Callistemon Court and Banksia Park Retirement residents	Sustainability	2020	TBA	Participation, CO2 abated, cost saving,

No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
9	<b>*New*</b> Investigate options for interpretative signage in key bushwalk areas	Natural Environment/Other	2019-2020	TBA	NA
<b>Objective 2 Build Skills in the Community</b>					
10	<b>*Existing*</b> Continue to host Planting Events in local areas, based on community interest and revegetation priorities. This including National Tree Planting Day.	Natural Environment	Seasonal (May-August) 6 Events	\$15,000  City	Number of Seedlings Planted, and Evaluation through survey with a 70% satisfaction rate by participants
11	<b>Existing*</b> Continue to organise Seedling Subsidy Scheme as part of the Living Green Event	Natural Environment	Annually	\$4000  City	Seedlings sold
12	<b>*Existing*</b> Continue to facilitate Clean Up Australia Day in the City of Kwinana, to promote awareness about littering.	Natural Environment/ Sustainability	Annually	\$500  City	Increased number of participants



No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
13	<b>*Existing*</b> Continue providing skills based workshops for Kwinana Residents: (Plant ID, Bush Birds, Great Cocky Count, Seed Collection)	Natural Environment	Yearly (3-4)	\$2000  City	Evaluation through survey with a 70% satisfaction rate by participants
14	<b>Existing*</b> Continue to deliver the Living Smart Sustainable Living Course	Sustainability	Annually	\$7000  City	Evaluation through survey with a 70% satisfaction rate by participants
15	<b>Existing*</b> Continue to provide opportunities for Schools to be involved in Planting Events in their local areas. This includes National Tree Schools Planting Day.	Natural Environment	Yearly (4-6)	\$7500  City	Number of schools and students participating
16	<b>Existing*</b> Continue Switch Your Thinking Program – Rewards for Residents and Businesses and Switched on Schools and Businesses	Sustainability	Ongoing	(This is same as item4)  \$5000	Evaluation by provider - Switched on Thinking

No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
				City	
17	<b>*New*</b> Trial a Skills based Training Workshop for existing Friends/Community groups with focus on looking after larger landholdings.	Natural Environment	2020	TBA	Evaluation through survey with a 70% satisfaction rate by participants
	<b>Objective 3 Look for New Opportunities</b>				
18	<b>Existing*</b> Continue providing support to existing community volunteer groups, scout groups, youth groups, schools and those emerging to undertake a variety of activities, particularly Regeneration activities “Community Weeding”	Natural Environment/ Sustainability/Community	Adhoc Seasonally	Bushcare Materials	Number of new groups established
19	<b>*New*</b> Investigate ways for Friends group/Community groups to share information, resources and skills to support each other.	Natural Environment/Sustainability/Community	2021	TBA	N/A

No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
20	<b>*New*</b> .Continue to investigate ways to forge links with schools through the curriculum as an addition to the schools planting program.	Natural Environment	2021	TBA	Number of schools involved
21	<b>*Existing*</b> Utilise the Environment cross functional team to implement environmental education and sustainability principles across the whole organisation	Natural Environment/Sustainability	Ongoing	NIL	N/An
22	<b>New*</b> Investigate options to incorporate Nature Play into existing frameworks – New Beginnings, Creche, Vacation Care, Library and Community Centre Programs or to establish a new bush based program.	Natural Environment/ Community Centres/Family Day Care/	2022	TBA	N/A

No.	Description of Action	Responsibility	Timeframe	Budget and source  (Base year 2018/2019)	Measure of success (Outcome)
23	<b>*New*</b> Work with Community Services to establish a suitable model and guidelines for the development of community gardens in the City.	Natural Environment/Sustainability/Community Engagement	2022	NIL	Approved Guidelines

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## Appendix A Current Environmental Educational Activities (Formal and Informal) undertaken by the Environment Department

Area of Responsibility	Description of Formal Activities	Frequency of Event Annually	Numbers	Target Audience	Goals	Category of the Environmental Education Framework
Natural Environment	Great Cocky Count Workshop	1	20	All residents	Improving participation in Australia's biggest Citizen Science Project. New roost sites discovered.	Improving Skills
Natural Environment	Bush Bird ID Workshop	1	20	All residents	Promoting awareness of biodiversity in local conservation reserves.	Improving Skills
Natural Environment	Community Planting Days	6	20-50 (each)	All residents	Promoting awareness of the importance of our natural environment, providing positive natural experiences, and providing skills in revegetation.	Improving Skills
Natural Environment	Clean Up Australia Day	1	20	All residents	Promoting awareness of littering issues in conservation reserves, and encouraging community involvement in clean ups.	Building Understanding, Improving Skills
Natural Environment	Schools Planting Program	5	25-30 (per class)	Primary and Secondary Schools	Targeting youth to promote awareness about our natural environment. Providing skills in revegetation in local reserves, and positive natural experiences	Improving Skills
Natural Environment (Community Services – Art/Recreation)	Annual Wildflower Walk- Walk on the Wildside	1	70	All residents	Promoting awareness of biodiversity in Kwinana. Providing positive natural experiences. Utilising a collaborative approach with art to reach a wider audience.	Building Understanding

Natural Environment	Nightstalks- Walk on the Wildside	2	30	All residents (typically families with children 5 years or older)	Promoting awareness about the importance and presence of native wildlife in Kwinana. Providing opportunities for positive natural experiences.	Building Understanding
Natural Environment/ Sustainability	Living Green Event	1	200	All residents	Providing advice to residents on ways to “Live Green”, specifically, info about reducing waste, solar panel installation information, reducing power bills,	Conveying Information, Building Understanding,
Natural Environment/Community Services/Other	Participating in Cross Departmental projects and Events eg. Childrens Festival, Staff Wildflower Walks	2	200	Families, Staff	Promoting awareness of the natural environment in Kwinana, and the services that the Environment Department provide.	Convey Information, Build Understanding
Natural Environment	Plant ID Workshop	2	20	Community Volunteers	Improving skills in local volunteers to assist in their own weed control works, and native plant knowledge.	Improving Skills
Sustainability*	Switch Your Thinking Once off workshops	4	20-30	All residents	Promoting awareness through a variety of workshops – verge gardening, reducing waste, energy and water efficiency	Convey Information, Building Understanding
Sustainability	Switch Your Thinking Young Re-inventor Competition	1	100-200	Children & Youth 7-18	Encouraging young people to think creatively about re-using materials and reducing waste	Convey Information, Building Understanding,
Sustainability	Switch Your Thinking Rewards for Residents and Businesses	Ongoing	To be tracked	Businesses and home owners/renters	Encouraging people to reduce their energy and water use as well as reduce waste.	Convey Information, Building Understanding, Improving Skills

Sustainability	Switched on Schools and Switched on Businesses	Ongoing	100-200	School and Business Community	Encouraging businesses and schools to reduce their environmental impact.	Building Understanding, Enabling Sustainable Action
Sustainability	7 week Living Smart Sustainable Living Course	1	20	All residents	Promoting sustainable behavior change, and building community.	Convey Information, Building Understanding, Improving Skills, Enabling Sustainable Action
Sustainability	Adopt a Verge Verge gardening advice, free mulch, facebook posts, verge tips document	1	100-200	Home owners/residents	Encouraging residents to plant local native verge gardens.	Convey Information, Building Understanding,
Natural Environment/ Sustainability	Living Green Seedling Subsidy Scheme	2	100	Home owners/residents	Providing subsidised local native plants for private gardens.	Convey Information, Building Understanding
Natural Environment	Provide Support to “Friends Groups”, Progress Associations, and Landcare groups	Ongoing	Various	Empowered Local Residents	Providing skills and knowledge to existing motivated groups to ultimately be able to facilitate their ideas.	Improving Skills, and Enabling Sustainable Action
<b>Area of Responsibility</b>	<b>Description of Informal Activities</b>	<b>Frequency of Event</b>	<b>Numbers</b>	<b>Target Audience</b>	<b>Goals</b>	<b>Category of the Environmental Education Framework</b>
Natural Environment/ Community Services/ Recreation	Managing good access for Passive Recreation	Ongoing	Various	Local Residents	Providing positive natural experiences for the community.	Convey Information ( if interpretation is readily available)
Natural Environment	Providing information materials, in the form of –	Continuous, Ad hoc	Various	All Residents	Providing environmental knowledge to all residents.	Convey Information



	Brochures, Signage, Website					
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**\*Sustainability for this purpose includes the areas of Water Efficiency, Energy Efficiency and Climate Change Mitigation and Adaptation.**

**Currently, the City of Kwinana provides a variety of Environmental engagement opportunities, through a series of events and programs. We are creating a new Environmental Education Strategy and want to find out what you like, what you would like to see more of, and different ways that we can help your ideas come to life. Our key focus areas are Conservation of Biodiversity, Water Efficiency, Energy Efficiency and Adapting to Climate Change. Please feel free to promote this survey to other residents within the City of Kwinana.**

1. Which of the following suburbs of Kwinana do you live in?

- Anketell
- Bertram
- Calista
- Casuarina
- Leda
- Mandogalup
- Medina
- Orelia
- Parmelia
- Wandi
- Wandi (semi rural)
- Wellard
- Other (please specify)

2. Have you ever participated in an Environmental Activity at the City of Kwinana?

- Yes
- No
- Don't Know

3. If you have not participated in any Environmental activities, has there been a reason for this?

4. Which of the following activities have you participated in?

- Community Planting Events
- Schools Planting Events
- Clean Up Australia Day
- Bird Id Workshop
- Bush Plant Id Workshop
- Adopt a Verge (Local Native Verge Gardening)
- Living Smart Sustainable Living Courses
- Switch Your Thinking Activities
- Annual Wildflower Walk
- Nightstalks
- Great Cocky Count Workshop
- Community Weeding Activities
- Living Green Event
- Seedling Subsidy Scheme
- Adopt a Spot Program

Other (please specify)

5. Can you rate how likely you are to participate in the following activities?

	Very Unlikely	Unlikely	Neither Likely or Unlikely	Likely	Very Likely	N/A
Community Planting Events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schools Planting Events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean Up Australia Day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bird Id Workshop/Great Cocky Count Workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bush Plant ID Workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Living Smart Sustainable Living Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Switch your Thinking Activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Annual Wildflower Walk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nightstalks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verge Gardening Workshop (Local Native Verge Gardening)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Living Green Event	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seedling Subsidy Scheme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adopt a Spot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

6. Which of these activities have prompted you to make personal changes in your life, eg. get involved in a local friends group, undertake more sustainable practices at home?

- Community Planting Events
- School Planting Events
- Clean Up Australia Day
- Bird ID Workshop/Great Cocky Count Workshop
- Bush Plant ID Workshop
- Living Smart Sustainable Living Course
- Switch your thinking
- Annual Wildflower Walk
- Nightstalks
- Adopt a Verge (Local Native Verge Gardening)
- Living Green Event
- Seedling Subsidy Scheme
- Adopt a Spot

7. If the following educational opportunities were provided/supported by the Council, how likely are you to participate or be involved?

	Very Unlikely	Unlikely	Neither Likely or Unlikely	Likely	Very Likely	N/A
Nature Play Activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nature Based School Holiday Activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Gardens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adopt a Reserve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bushwalks with interpretative signage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Home Energy/Water Audits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solar Panel Advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

8. What other Environmental Education activities would you like to see the City of Kwinana undertake?

9. If you wanted information on Environmental Activities in Kwinana which of the following would you utilise?

- Phone the Council
- Read the Local Paper
- Check the Kwinana "What's On" Website
- Check the Kwinana Facebook Page
- Talk to friends
- Read the Spirit of Kwinana Newsletter
- Check "Our Services" on the Kwinana Website

Other (please specify)

10. Do you have any other comments or ideas on what activities/projects should be included in our Environmental Education Strategy?



# Appendix C – Environmental Marketing Plan

<b>Department</b>	Environment
<b>Financial Year</b>	18/19
<b>Department contact(s)</b>	Ash Harding
<b>Marketing contact</b>	Alyce Grover
<b>Relevant budget codes</b>	\$3,000 Suggest adding extra \$150 to budget

## 1. Planned Activities and Events

All marketing activities undertaken should relate back to the specific activities identified through each area's business plan, as well as to the community aspirations identified in the City's Strategic Community Plan: Rich in spirit, Alive with opportunities, Surrounded by nature and it's all here. These will help determine content opportunities for inclusion in this marketing plan.

Event series – Biodiversity month, Living Green

<b>Event or activity</b> <i>To be provided by the specific teams.</i>	<b>Date</b> <i>Expected date(s) of event/program</i>	<b>Marketing Budget</b> <i>Team to confirm budget available for each activity/event</i>	<b>Promotional Strategy</b> <i>Marketing and communications approach to be taken to promote event/activity based on budget (high level).</i>	<b>Responsible Officer</b>
National Tree Day Planting	29 July 2018 (Completed)	Nil	<ul style="list-style-type: none"> <li>Social Media, Facebook Event, 4 Facebook posts and</li> <li>Corporate Digital Platforms (What's On)</li> </ul>	Angela Jakob
Verge Garden Workshop	18 August 2018 (Completed)	Nil	<ul style="list-style-type: none"> <li>Social Media, Facebook Event, 4 Facebook posts</li> <li>Corporate Digital Platforms</li> </ul>	Sarah McCabe
Plant/ Weed ID Workshop	8 September 2018		<ul style="list-style-type: none"> <li>Social Media</li> </ul>	Angela Jakob

(Month of Biodiversity)	(in progress)		<ul style="list-style-type: none"> <li>Corporate Digital Platforms</li> </ul>	
Wildflower Walk  (Month of Biodiversity)	16 September 2018	\$600-700 W00012999.01 35.60	<p>Marketing Plan required</p> <ul style="list-style-type: none"> <li>Print (paid) Advertisement</li> <li>Flyer for Walk and Exhibition</li> <li>Social Media, Facebook Event, 4 Facebook posts and</li> <li>Corporate Digital Platforms – What’s On, Screen at Library and Admin Screen</li> <li>Corporate Publications</li> </ul>	Angela Jakob
Nightstalk (Month of Biodiversity)	23 September 2018	(\$20)	<ul style="list-style-type: none"> <li>Social Media, Facebook Event, 4 Facebook Posts</li> <li>Corporate Digital Platforms, What’s On, 2 Screens</li> </ul>	Angela Jakob
Reinventor Workshop	25 September 2018	(\$20)	<ul style="list-style-type: none"> <li>Social Media, Facebook Event, 4 Facebook Posts</li> <li>Corporate Digital Platforms, What’s On, 2 Screens</li> </ul>	Sarah McCabe
Nightstalk (Month of Biodiversity)	6 October 2018	(\$20)	<ul style="list-style-type: none"> <li>Social Media Facebook Event, 4 Facebook Posts</li> <li>Corporate Digital Platforms, What’s On, 2 Screens</li> </ul>	Angela Jakob
Fox Trapping	October/ November 2018	Nil	<ul style="list-style-type: none"> <li>Social Media</li> </ul>	Angela Jakob

Switch your thinking workshop	2 November 2018	\$125	<ul style="list-style-type: none"> <li>• Social Media Facebook Event, 4 Facebook Posts, Flyer</li> <li>• Corporate Digital Platforms</li> </ul>	Sarah McCabe
Waterwise Council	Announced February 2019 Presentation May 2019	(\$20)	<ul style="list-style-type: none"> <li>• Social Media</li> <li>• Media Release</li> </ul>	Sarah McCabe
Switch your thinking workshop	2 February 2019	\$125	<ul style="list-style-type: none"> <li>• Social Media Facebook Event, 4 Facebook Posts, Flyer</li> <li>• Corporate Digital Platforms, What's On, 2 Screens</li> </ul>	Sarah McCabe
Bush Bird Workshop	May 2019	\$400 WO 12999.135.60	<ul style="list-style-type: none"> <li>• Social Media Facebook Event, 4 Facebook Posts, Flyer</li> <li>• Corporate Digital Platforms, What's On, 2 Screens</li> </ul>	Angela Jakob
Great Cocky Count	10 March 2019	\$400 WO 12999.135.60	<ul style="list-style-type: none"> <li>• Print (paid) Advertisement</li> <li>• Social Media</li> <li>• Corporate Digital Platforms</li> <li>• Corporate Publications</li> </ul>	Angela Jakob
Weed Spraying	April 2019	Nil	<ul style="list-style-type: none"> <li>• Print (paid) Advertisement</li> </ul>	Environment Team
Living Green		\$1000 WO 13006.138	<ul style="list-style-type: none"> <li>• Print (paid) Advertisement</li> <li>• Media Release</li> <li>• Facebook Cover Photo for 2 months (May/June)</li> <li>• Lamp post Wraps awaiting Feedback</li> </ul>	Angela Jakob Sarah McCabe

			<ul style="list-style-type: none"> <li>• Introductory post about the Living Green suite of events.</li> </ul> <p>We would like the Seedling Subsidy, the Living Green Event, Living Smart and Community Plantings advertised individually as well as part of the whole.</p>	
Living Green – Event	4 May 2019		<ul style="list-style-type: none"> <li>• Social Media, Facebook Event, 4 Facebook Posts, Flyer - Printed</li> <li>• Corporate Digital Platforms What's On, 2 Screens</li> <li>• Corporate Publications (Spirit)</li> </ul>	Angela Jakob
Living Green – Seedling Subsidy Scheme	4 May 2019		<ul style="list-style-type: none"> <li>• Social Media Facebook Event, 4 Facebook Posts,</li> <li>• Corporate Digital Platforms What's On, 2 Screens</li> <li>• Corporate Publications (Spirit)</li> </ul>	Environment Team
Living Green - Living Smart Course	11 May 2019 to 21 June 2019???	\$250	<ul style="list-style-type: none"> <li>• Social Media, Facebook Event, 4 Facebook Posts, Flyer</li> <li>• Media Release</li> <li>• Corporate Digital Platforms What's On, 2 Screens</li> <li>• Corporate Publications</li> </ul>	Sarah McCabe
Living Green – Community Plantings	Late May to end of July and includes		<ul style="list-style-type: none"> <li>• Print (paid) Advertisement</li> </ul>	Angela Jakob

	National Tree Day (6 Sunday Events)		<ul style="list-style-type: none"> <li>• Social Media, Facebook Events, Facebook posts before each planting</li> <li>• Corporate Digital Platforms What's On, 2 Screens</li> <li>• Corporate Publications</li> </ul>	
Corporate event Challenge Planting and Schools Planting Program	June 2019	(\$20)	<ul style="list-style-type: none"> <li>• Social Media</li> </ul>	Angela Jakob

## 14.2 Boomerang Road Clearing Permit Amendment CPS 4935/2

### DECLARATION OF INTEREST:

There were no declarations of interest declared.

### SUMMARY:

Officers of the City of Kwinana (the City) became aware of an advertised amendment to a Clearing Permit (CPS 4935/2) for Extractive Industry (sand mining) on Boomerang Road, Oldbury (Shire of Serpentine Jarrahdale).

The amendment is being advertised, as a condition of the previously approved Clearing Permit has not been fulfilled within the specified timeframe. The applicant is being required by the Department of Water, Environment and Regulation to apply for an amendment to the Clearing Permit. The amendment is being publically advertised and comments on the requested amendment are being sought by 17 December 2018.

The amendment concerns condition 11 of the approved clearing permit which states:-

"Prior to 8 July 2017, the Permit Holder shall:

- (a) Give a conservation covenant under section 30B of the *Soil and Land Conservation Act 1945* setting aside the *covenant area* for the protection and management of vegetation in perpetuity; and
- (b) Provide the CEO a copy of the executed conservation covenant.

The City sourced the titles for these properties and can confirm that covenants have not been placed on the titles.

The applicant is seeking to amend condition 11 of the existing Clearing Permit to read "Prior to clearing commencing".

City Officers have reviewed the reasons provided by the applicant in support of the amendment request and are of the view that the rationale is not sufficient to support the change requested. City Officers present the submission as outlined in Attachment A for consideration, recommending that the amendment not be supported and for the Clearing Permit to be subsequently revoked.

### OFFICER RECOMMENDATION:

That Council endorse the City's submission prepared in response to the advertised amendment to CPS 4935/1 (Attachment A).

### DISCUSSION:

#### Clearing Permit CPS 4935/1.

Clearing permit CPS4935/1 was applied for by Rocla Quarry Products in March 2012 and granted to Hanson Construction Materials on 7 July 2016.

Condition 11 was included in the conditions attached to the Clearing Permit approval (please see Attachment B).

#### 14.2 BOOMERANG ROAD CLEARING PERMIT AMENDMENT CPS 4935/2

The purpose of the Conservation Covenant is to attempt to mitigate the significant environmental impacts that will result from implementation of the proposal. The Clearing Permit Decision Report details that removal of 11.6 hectares of native vegetation will result in the loss of, or impacts to:

- Foraging habitat and potential nesting habitat for Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Baudin's Black Cockatoo (*Calyptorhynchus baudinii*) and the Forest Red-Tailed Black Cockatoo (*Calyptorhynchus banksia naso*);
- High biological diversity and a regionally significant ecological linkage; and
- Native vegetation considered to be a significant remnant of vegetation in an area that has been extensively cleared.

For the reasons outlined above, the City has not supported clearing of Banksia Woodland TEC at several other locations including the adjacent Banksia Road proposed Mine Site.

Whilst in two separate Local Government areas, collectively, the two sites form a considerable and integral ecological linkage that connects significant vegetation with fauna habitats for two species of federally listed Black Cockatoos. Clearing of the Boomerang Road site vegetation will interrupt the east west linkage. The City has identified that vegetation within both sites is critical to maintain the ecological viability of this regionally significant corridor.

The applicant has stated that the permit should be amended for the following reasons:

- *The current wording of the approval is clearly unworkable. The corresponding EPBC Act (Environmental Protection and Biodiversity Conservation Act 1999) approval requires the same conservation covenant prior to undertaking clearing:*
- *Delays in obtaining other statutory approvals/clearance of approval conditions as a precondition to commencement of vegetation clearing, meant that securing an irrevocable covenant prior to 8 July 2017 was impracticable;*
- *The applicant had commenced the process for securing the conservation covenant;*
- *The amended condition will be tied to the actual need for a covenant (meaning that the proposed amendment will better address the environmental need for the condition); and*
- *The applicant has not cleared any native vegetation, and will not clear until the conservation covenant has been secured. As such, there is no environmental impact arising from delaying the securing of the conservation covenant until prior commencement of clearing.*

The City has reviewed the stated reasoning to justify the amendment request and provides the following comments:

##### Point 1

- The (Federal) EPBC Act requirements are not linked to conditional requirements imposed at a State level.
- The applicant was aware that conservation covenants were conditional to two approvals (EPBC and Clearing Permit) yet failed to undertake appropriate steps to implement the condition.
- The process to register a covenant, if all occupiers are in agreement, is not complicated.

14.2 BOOMERANG ROAD CLEARING PERMIT AMENDMENT CPS 4935/2

Point 2

- The details of the 'other statutory approvals/clearance of approval conditions' are not detailed in this reasoning although the other conditions on the Clearing Permit are unlikely to have placed any restriction on the achievement of condition 11.
- The applicant would have been aware of delays and their implications and should have made application to amend condition 11 prior the stated timeframe expiring.

Point 3

- The applicant has not evidenced the claim in the application that the process for securing a covenant had commenced. This point also somewhat contradicts the applicant's previous point.

Point 4

- The need for the covenant has already been identified and timing specified. Application of the covenant is required and no valid rationale has been provided for the failure to achieve this to date.

Point 5

- While this may be the case and clearing has yet to commence, the applicant had sufficient time to amend the condition before the condition timeframe expired. Should the amendment be successful, the community will not have any certainty of when this change to their local amenity will occur.

A suitable timeframe was provided in the existing permit although the applicant has failed to undertake conditional requirements. The application should be refused based on the failing of the applicant to register the conservation covenants before expiration of the conditions' timeframe and the lack of justification for the amendment. On this basis City Officers recommend that the application to amend the Clearing Permit condition not be supported and that the permit be revoked accordingly.

**LEGAL/POLICY IMPLICATIONS:**

There are no legal or policy implications as a result of this report.

The City is taking the opportunity to comment on the application to amend the Clearing Permit, as the site is located on the City's municipal boundary and forms part of an ecological corridor of regional significance ( adjacent to the Banksia Road Rifle Range).

**FINANCIAL/BUDGET IMPLICATIONS:**

There are no financial or budget implications as a result of this report.



## 14.2 BOOMERANG ROAD CLEARING PERMIT AMENDMENT CPS 4935/2

### **ASSET MANAGEMENT IMPLICATIONS:**

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

If mining of either Boomerang Road or Banksia Road commences, depreciation of the road assets will occur.

### **ENVIRONMENTAL IMPLICATIONS:**

The implications include:

- Potential revocation of Clearing Permit CPS 4935/1;

The collective impact from both the Boomerang Road and Banksia Road sites is:

- Removal of 27 hectares of Banksia Woodland TEC;
- Removal of 27 hectares of high quality and regionally unique foraging habitat for at least two species of Black Cockatoos;
- Removal of a geological feature (sand dune) that is responsible for the maintenance of two TECs (Organic Mound Springs of the Swan Coastal Plain);
- Removal of habitat for several priority listed species of flora and fauna.

### **STRATEGIC/SOCIAL IMPLICATIONS:**

The proposal to clear native vegetation for sand extraction in the application area, or any of the areas adjacent to residences in the Casuarina and Oldbury areas, are likely to have significantly more negative strategic and social implications than positive, as the proposal will impact on all facets of community amenity.

The City of Kwinana and the community, have consistently opposed the proposal(s) due to amenity impacts, environmental impacts, land management and associated cost impacts and proposal justifications that are incorrect or questionable.

### **COMMUNITY ENGAGEMENT:**

The Casuarina Wellard Progress Association (CWPA) has been made aware of the advertised amendment. City officers have been collaborating with the CWPA in regards to the Banksia Road Sand Mine approvals as per Council Resolution 8 August 2018.

### **PUBLIC HEALTH IMPLICATIONS**

The officer's recommendation/proposal has the potential to help improve the following determinants of health -

- Built Environment –Environmental Quality; Neighbourhood Amenity; Disease Prevention;

## 14.2 BOOMERANG ROAD CLEARING PERMIT AMENDMENT CPS 4935/2

**RISK IMPLICATIONS:**

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

Risk Event	Failing to respond on a proposal opposed by the City and Community
Risk Theme	Inadequate environmental management
Risk Effect/Impact	People/Health Environment Reputation
Risk Assessment Context	Strategic Operational
Consequence	Moderate
Likelihood	Likely
Rating (before treatment)	High
Risk Treatment in place	Reduce (mitigate the risk)
Response to risk treatment required/in place	Provide comment on CPS 4935/2 and request referral to EPA
Rating (after treatment)	Moderate

**COUNCIL DECISION****364****MOVED CR M ROWSE****SECONDED CR D WOOD**

**That Council endorse the City's submission prepared in response to the advertised amendment to CPS 4935/1 (Attachment A).**

**CARRIED  
5/0**

13 December 2018

Our Ref.: D18/74960

Ryan Mincham  
Native Vegetation Regulation  
Department of Water and Environmental Regulation  
Locked Bag 33  
CLOISTERS SQUARE WA 6850

Dear Mr Mincham

#### **CPS 4935 – CITY OF KWINANA COMMENTS**

The City of Kwinana is pleased to have an opportunity to provide comment on the amendment to Clearing Permit CPS 4935/2 for Extractive industry (sand mining) on Boomerang Road, Oldbury (Shire of Serpentine Jarrahdale).

The site sits within a regionally significant ecological linkage adjacent to the City of Kwinana. Together with the Banksia Road (Rifle Range) site, the two sites provide a valuable foraging and roosting habitat for two species of federally protected Black Cockatoos. The Boomerang Road application area has received relevant approvals to commence clearing although conditions of the approval have not been met within stated timeframes requiring the proponent to apply for an amendment to that condition.

The City does not support removal of native vegetation in this location nor does the City support the amendment the applicant is seeking to make to Clearing Permit CPS 4935/1. The proponent has had ample time to fulfill Condition 11 of the Clearing Permit, yet has not made any significant effort to do so. This condition was required to have been completed 18

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#### **City of Kwinana Administration**

Corner Gilmore Avenue and Sulphur Road, Kwinana WA 6167

**PO Box** 21, Kwinana WA 6966 | **Telephone** 08 9439 0200 | **NRS** 133 677 (hearing/speech impaired)

**Email** [customer@kwinana.wa.gov.au](mailto:customer@kwinana.wa.gov.au) | **Website** [kwinana.wa.gov.au](http://kwinana.wa.gov.au)



months prior to this amendment being requested. Failure to do so has diminished community confidence in the process and could be soon to demonstrate the proponent's disregard for the important environmental requirements and responsibilities of their approvals. The application for amendment should be refused and a new clearing permit should be required.

The proponent has stated that the permit should be amended for the following reasons:

- *The current wording of the approval is clearly unworkable. The corresponding EPBC Act (Environmental Protection and Biodiversity Conservation Act) approval requires the same conservation covenant prior to undertaking clearing;*
- *Delays in obtaining other statutory approvals/clearance of approval conditions as a precondition to commencement of vegetation clearing, meant that securing an irrevocable covenant prior to 8 July 2017 was impracticable;*
- *The applicant had commenced the process for securing the conservation covenant;*
- *The amended condition will be tied to the actual need for a covenant (meaning that the proposed amendment will better address the environmental need for the condition); and*
- *The applicant has not cleared any native vegetation, and will not clear until the conservation covenant has been secured. As such, there is no environmental impact arising from delaying the securing of the conservation covenant until prior commencement of clearing.*

The City has reviewed the stated reasoning to justify the amendment request and has the following comments.

#### Point 1

- The (Federal) EPBC Act requirements are not linked to conditional requirements imposed at a State level.
- The proponent was aware that conservation covenants were conditional to two approvals (EPBC and Clearing Permit) yet failed to undertake appropriate steps to implement the condition.
- The process to register a covenant, if all occupiers are in agreement, is not complicated.

Point 2

- The details of the 'other statutory approvals/clearance of approval conditions' are not detailed in this reasoning although the other conditions on the clearing permit are unlikely to place any restriction on the achievement of condition 11.
- The proponent would have been aware of delays and their implications and should have made application to amend condition 11 prior the stated timeframe expiring.

Point 3

- The proponent has not evidenced the claim in the application that the process for securing a covenant had commenced. This point also somewhat contradicts the applicant's previous point.

Point 4

- The need for the covenant has already been identified and timing specified. Application of the covenant is required and no valid rationale has been provided for the failure to achieve this to date.

Point 5

- While this may be the case and clearing has yet to commence, the proponent had sufficient time to amend the condition before the condition timeframe expired. Should the amendment be successful, the community will not have any certainty of when this change to their local amenity will occur.

As such, the City requests that Clearing Permit Application Assessment CPS493/2 be refused and CPS 4935/1 revoked.

Given that the application has been made to the Department of Water and Environmental Regulation (DWER), it is incumbent on DWER to refer new and significant proposals to the EPA as per the requirements of the *Environment Protection Act 1986*.

Yours sincerely

Carol Adams  
**Mayor**



Department of Water and Environmental Regulation  
Department of Mines, Industry Regulation and Safety

## Application for an amendment to a clearing permit

*Environmental Protection Act 1986, section 51M*

### FORM C4

Clearing of native vegetation is prohibited in Western Australia except where a clearing permit has been granted or an exemption applies. A person who causes or allows unauthorised clearing commits an offence.

CPS No.
Date stamp

Part 1: Assessment bilateral agreement	
<p>If the amendment of a clearing permit will or is likely to impact on a matter of national environmental significance identified under the <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> (EPBC Act) the original application must have been assessed in accordance with the bilateral assessment, and a variation under the EPBC Act is required prior to submitting this amendment application form.</p> <p>Further information is located in <i>Form Annex C7</i> and <i>A guide to native vegetation clearing processes under the Assessment bilateral agreement</i> available at <a href="http://www.der.wa.gov.au/our-work/clearing-permits">www.der.wa.gov.au/our-work/clearing-permits</a>.</p>	<p>Do you want your proposed clearing action assessed in accordance with, or under, an EPBC Act Accredited Process such as the assessment bilateral agreement?</p> <p><input type="checkbox"/> Yes EPBC number: _____</p> <p><input checked="" type="checkbox"/> No Proceed to Part 2</p> <p>List the controlling provisions identified in the notification of the controlled action decision.</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div> <p><input type="checkbox"/> <i>Form Annex C7</i> is complete and the required supporting information is attached.</p>




Part 2: Clearing permit details					
<p>Amendments can only be made to active clearing permits.</p> <p>Applications must be made more than 90 working days prior to the existing permit expiring to ensure there is adequate time to assess the amendment.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 2px;">Permit number for existing clearing permit</td> <td style="padding: 2px;">CPS 4935/1</td> </tr> <tr> <td style="padding: 2px;">Permit holder's name (as it appears on the existing clearing permit)</td> <td style="padding: 2px;">Hanson Construction Materials Pty Ltd</td> </tr> </table>	Permit number for existing clearing permit	CPS 4935/1	Permit holder's name (as it appears on the existing clearing permit)	Hanson Construction Materials Pty Ltd
Permit number for existing clearing permit	CPS 4935/1				
Permit holder's name (as it appears on the existing clearing permit)	Hanson Construction Materials Pty Ltd				
FILE REFERENCE	Permit expiry date: 07 August 2034				
	Mark this box if there are less than 90 working days until the expiry of the existing permit. <input type="checkbox"/>				

Part 4: Proposed amendments	
<p>Additional information to support the assessment of your application to amend may be attached.</p> <p>Please ensure you have included the following as part of your application:</p> <ul style="list-style-type: none"> <li>• a photocopy of the granted clearing permit, with proposed changes highlighted, and</li> <li>• payment of the prescribed fee.</li> </ul>	<p>Indicate the proposed change/s to your clearing permit by selecting the relevant box/es:</p> <p><input type="checkbox"/> Extend the duration of the clearing permit.</p> <p><input checked="" type="checkbox"/> Vary / add / remove a permit condition relating to a matter other than the size or boundary of the area to be cleared.</p> <p><input type="checkbox"/> Amend the size of the area permitted to be cleared, or add / remove a land parcel on the clearing permit.</p> <p><input type="checkbox"/> Redescribe the boundary of the area authorised to be cleared [for an area permit only]</p> <p><input type="checkbox"/> Make a correction to the clearing permit.</p> <p><input type="checkbox"/> Other.</p> <p>Provide details of the proposed change(s), and the rationale for it / them.</p> <p>Condition 11 of CPS 4935/1 currently specifies a time for securing a conservation covenant, being prior to 8 July 2017. The applicant is seeking to amend the timing of condition 11 to "prior to undertaking clearing".</p> <p>Condition 11 of CPS 4935/1 should be amended for the following reasons:</p> <ul style="list-style-type: none"> <li>• the current wording of condition 11 is clearly unworkable. The corresponding EPBC Act approval requires the same conservation covenant prior to undertaking clearing;</li> <li>• delays in obtaining other statutory approvals/clearance of approval conditions as a precondition to commencement of vegetation clearing, meant that securing an irrevocable covenant prior to 8 July 2017 was impracticable;</li> <li>• the applicant had commenced the process for securing the conservation covenant;</li> <li>• the amended condition will be tied to the actual need for a covenant (meaning that the proposed amendment will better address the environmental need for the condition); and</li> <li>• the applicant has not yet cleared any native vegetation, and will not clear until the conservation covenant has been secured. As such, there is no environmental impact arising from delaying the securing of the conservation covenant until prior to commencement of clearing.</li> </ul>
<p>For an application to amend the size of the area permitted to be cleared, or add a land parcel to the clearing permit, you must have the authority of the landowner to access the land and undertake the clearing.</p> <p>Evidence of authority can include, for example, a copy of the certificate of title or a letter of authority from the land owner.</p> <p>Note: the letter of authority must explicitly state the applicant has authority to clear on the land.</p>	<p>State the nature of the applicant's authority to access the land to be cleared.</p> <p>[Attach evidence of authority]</p> <p>The applicant is the permit holder and the registered proprietor of Lot 6 On Diagram 47557.</p> <p>The applicant has entered into two Deeds for Extraction of Sand (<b>Deeds</b>) with each of the registered proprietors of Lot 300 on Diagram 75682 and Lot 301 On Diagram 75682, both dated 27 June 2008 and novated on 29 January 2016. The Deeds provide the permit holder with a licence to access Lots 300 and 301 for the purpose of clearing. Hanson understands that it has previously provided a copy of the Deeds to the Department of Water and Environmental Regulation (refer also to p. 10 of the Clearing Permit Decision Report for CPS 4935/1).</p>
<p>Provide additional property details if required – if applying to extend the size of the area to be cleared into another land parcel.</p>	<p>Land description: volume and folio number, lot or location number(s), Crown lease or reserve number, pastoral lease number or mining tenement number of all properties.</p> <ul style="list-style-type: none"> <li>• Lot 6 On Diagram 47557;</li> <li>• Lot 300 On Diagram 75682; and</li> <li>• Lot 301 On Diagram 75682.</li> </ul>

# CPS 4935/2 - Context Map



## Legend

-  Imagery
-  Clearing Instruments Proposals
-  Local Government Authority



(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

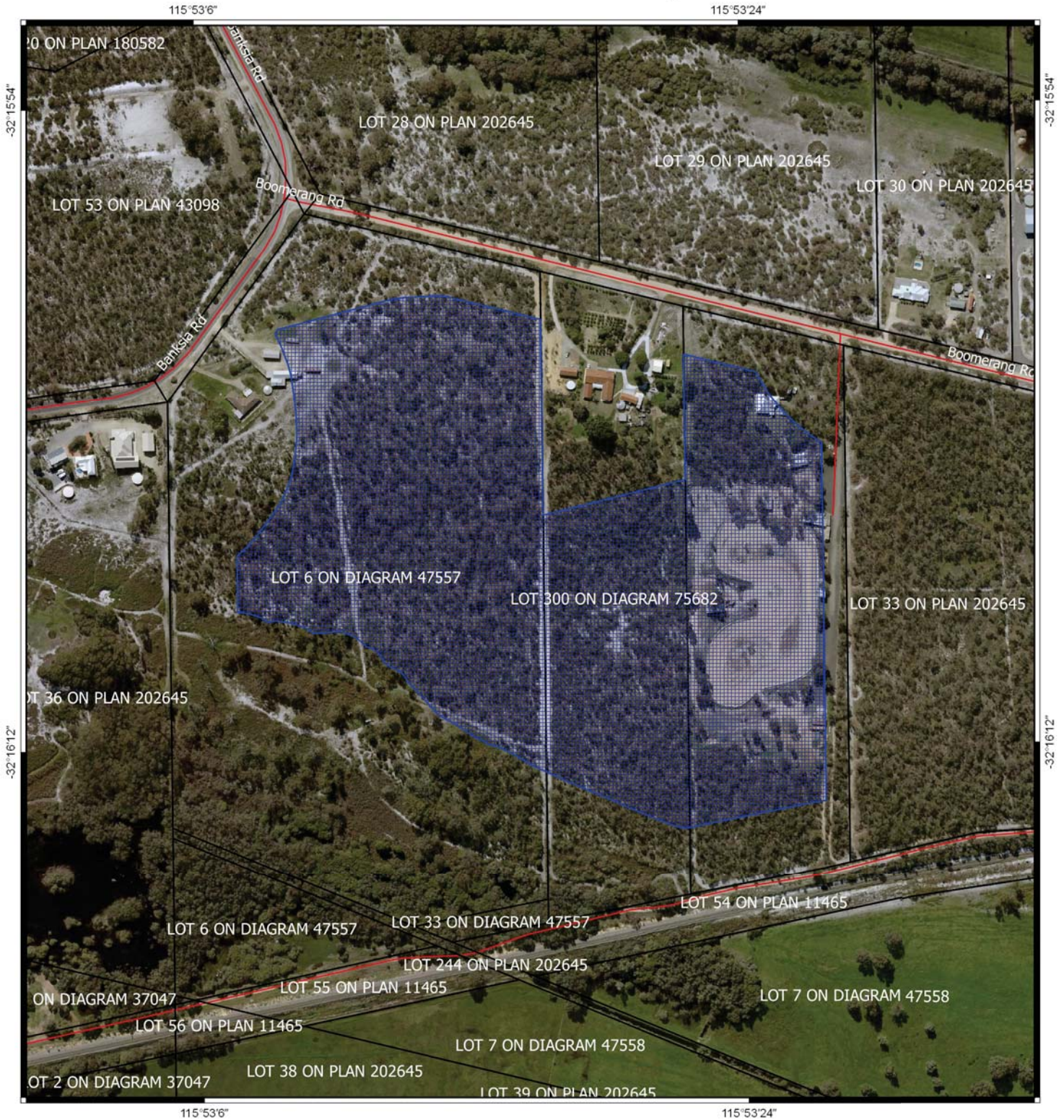
..... Date .....





GOVERNMENT OF  
WESTERN AUSTRALIA  
WA Crown Copyright 2018

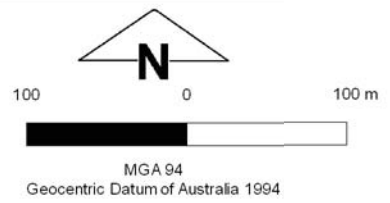


# CPS 4935/2 - Map



## Legend

-  Areas applied to clear
-  base layers
-  cadastre
-  Local Government Authorities
-  Road Centrelines
- Image



Officer with delegated authority under Section 20  
of the Environmental Protection Act 1986



**GOVERNMENT OF  
WESTERN AUSTRALIA**



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 4935/1
<b>Permit Holder:</b>	Hanson Construction Materials Pty Ltd
<b>Duration of Permit:</b>	7 August 2016 to 7 August 2034

### ADVICE NOTE

The funds referred to in condition 10 of this permit are intended for contributing towards the purchase of 35.46 hectares of native vegetation with similar environmental values containing black cockatoo habitat within the Swan Coastal Plain Bioregion.

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

- 1. Purpose for which clearing may be done**  
Clearing for the purpose of sand extraction.
- 2. Land on which clearing is to be done**  
LOT 301 ON DIAGRAM 75682, OLDBURY  
LOT 300 ON DIAGRAM 75682, OLDBURY  
LOT 6 ON DIAGRAM 47557, OLDBURY
- 3. Area of Clearing**  
The Permit Holder must not clear more than 11.6 hectares of native vegetation within the area hatched yellow on attached Plan 4935/1a.
- 4. Application**  
This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.
- 5. Type of clearing authorised**  
The Permit Holder shall not clear any native vegetation after 6 December 2024.

### PART II – MANAGEMENT CONDITIONS

- 6. Avoid, minimise etc clearing**  
In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
  - (a) avoid the clearing of native vegetation;
  - (b) minimise the amount of native vegetation to be cleared; and
  - (c) reduce the impact of clearing on any environmental value.

## **7. Weed control**

- (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
  - (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
  - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) Prior to leaving the area(s) cross-hatched yellow on attached Plan 4935/1a, the Permit Holder must clean earth-moving machinery of soil and vegetation.

## **8. Site Restoration plan**

The Permit Holder must implement and adhere to the document Boomerang Road Oldbury - Site Restoration Management Plan, March 2016 (V1b) submitted to the Department of Environment Regulation on 1 April 2016, within the area of land cross-hatched red on attached Plan 4935/1c.

## **9. Hydrological Management Plan**

The Permit Holder must implement and adhere to the document Groundwater Profile Modelling, Version Rev 2, March 2016, submitted to the Department of Environment Regulation on 1 April 2016.

## **10. Monetary contributions to a fund maintained for the purpose of establishing or maintaining vegetation (offset)**

Prior to undertaking any clearing authorised under this Permit and no later than 7 October 2016, the Permit Holder shall provide documentary evidence to the CEO that funding of \$301,410 has been transferred to the Department of Environment Regulation for the purpose of establishing or maintaining native vegetation.

## **11. Offsets – conservation covenant**

Prior to 8 July 2017, the Permit Holder shall:

- (a) give a conservation covenant under section 30B of the *Soil and Land Conservation Act 1945* setting aside the *covenant area* for the protection and management of vegetation in perpetuity; and
- (b) provide to the CEO a copy of the executed conservation covenant.

## **PART III - RECORD KEEPING AND REPORTING**

### **12. Records must be kept**

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the species composition, structure and density of the cleared area;
  - (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).
- (b) In relation to actions done to implement the Site Restoration Plan and Hydrological Management Plan under this Permit:
  - (i) a description of the Site Restoration Plan activities undertaken;
  - (ii) the date(s) the Site Restoration Plan activities were undertaken;
  - (iii) a description of the Hydrological Management Plan activities undertaken; and
  - (iv) the date(s) the Hydrological Management Plan activities were undertaken;

### 13. Reporting

- (a) The Permit Holder must provide to the CEO on or before 1 July of each year, a written report:
- (i) of records required under condition 12 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 1 July of each year.
- (c) Prior to 7 July 2034, the Permit Holder must provide to the CEO a written report of records required under condition 12 of this Permit where these records have not already been provided under condition 13(a) of this Permit.

### DEFINITIONS

The following meanings are given to terms used in this Permit:

*Covenant area* means the area of land cross-hatched red on attached Plan 4935/1b;

*fill* means material used to increase the ground level, or fill a hollow;

*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

*weed/s* means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

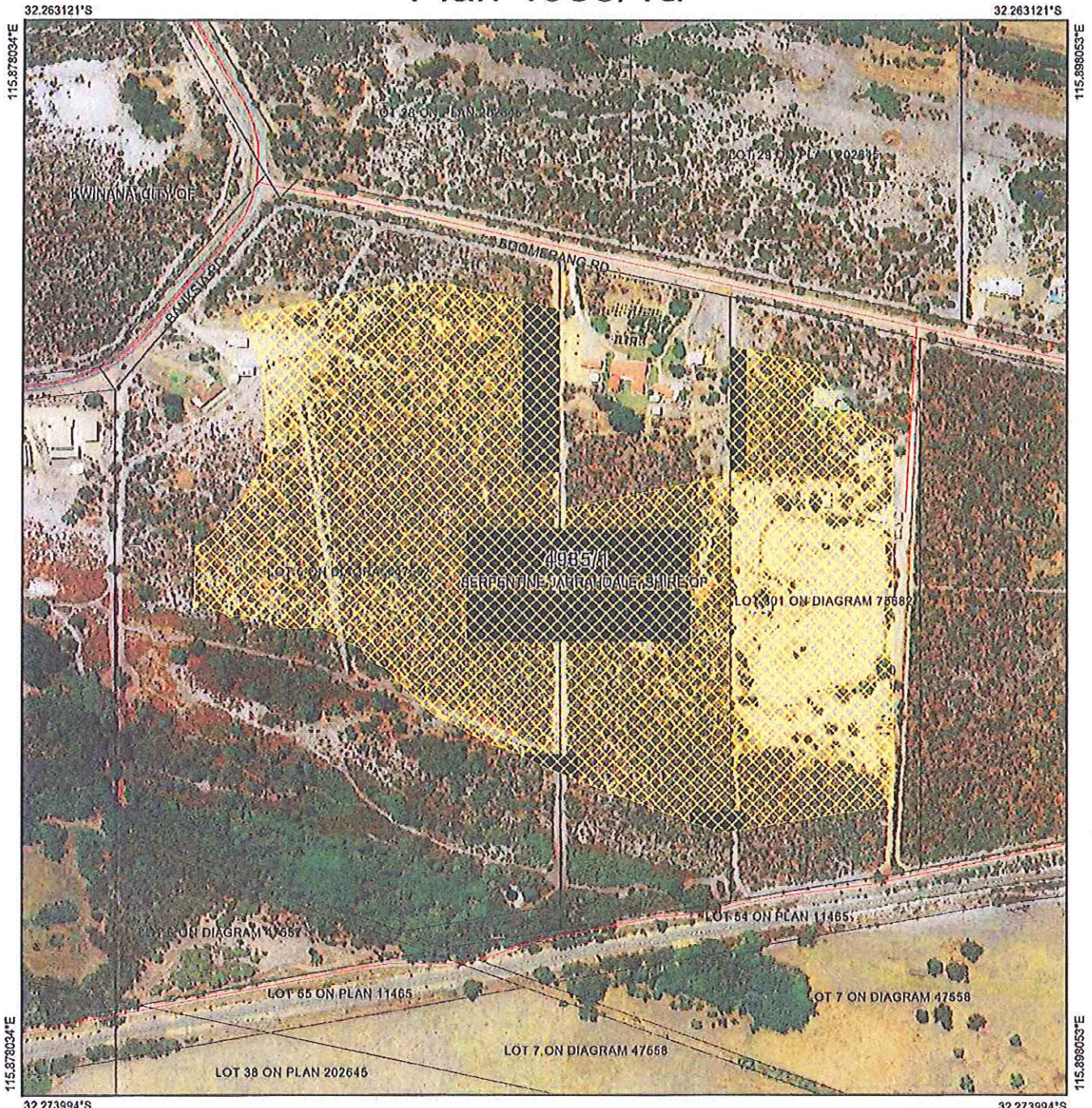


Kelly Faulkner  
EXECUTIVE DIRECTOR  
LICENSING AND APPROVALS

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

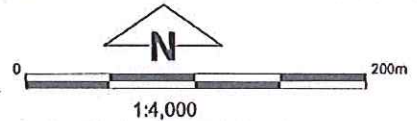
7 July 2016

# Plan 4935/1a



## Legend

-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority
-  Cadastre



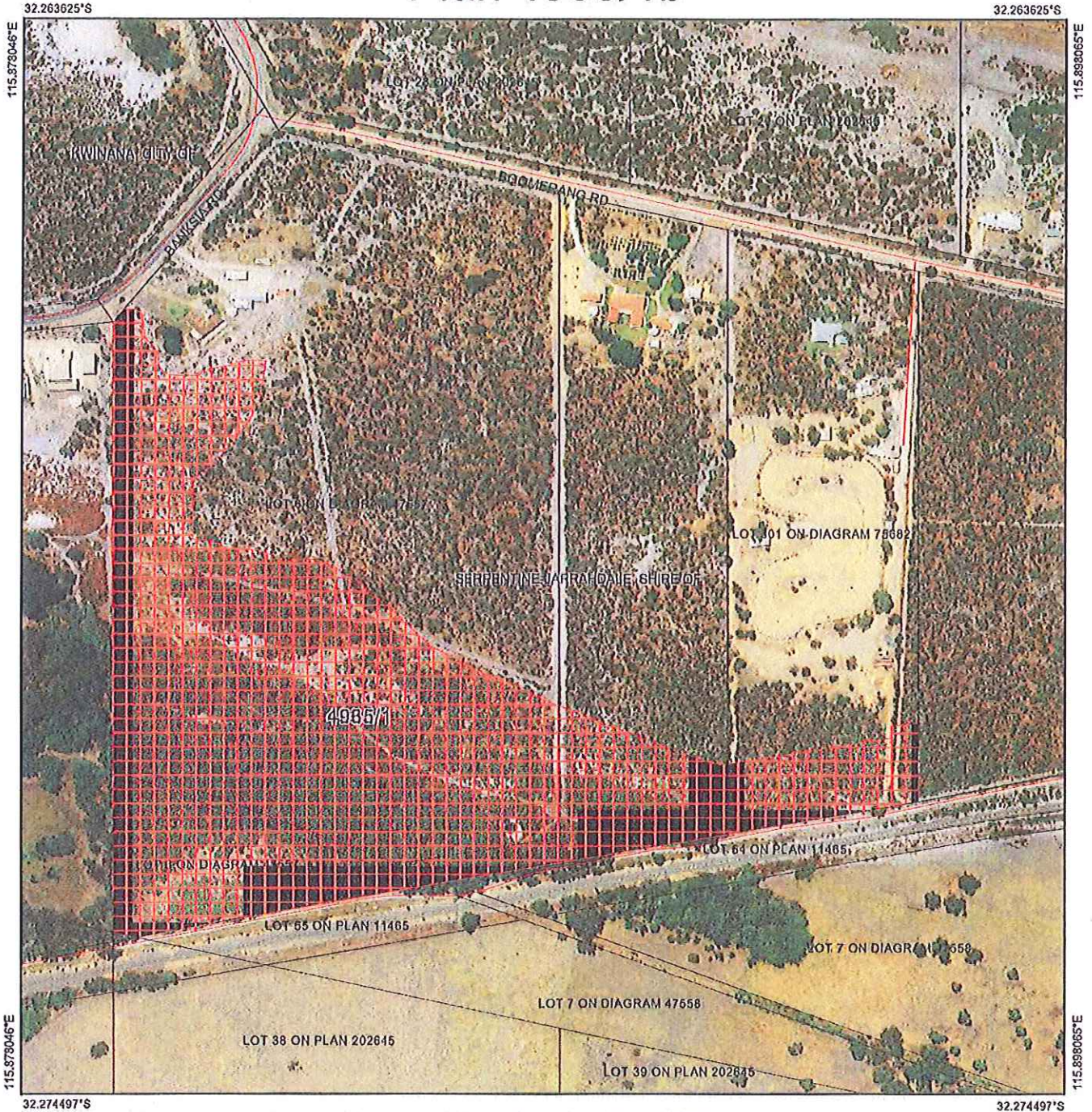
*Kelly Faulkner*  
 Kelly Faulkner Date 7/7/16

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986



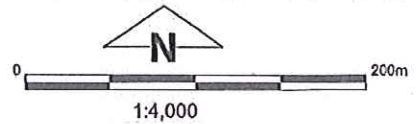
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# Plan 4935/1b



## Legend

-  Roads
-  Imagery
-  Local Government Authority
-  Clearing Instruments Conditions
-  Cadastre



(Approximate when reproduced at A4)  
GDA 94 (Lat/Long)  
Geocentric Datum of Australia 1994

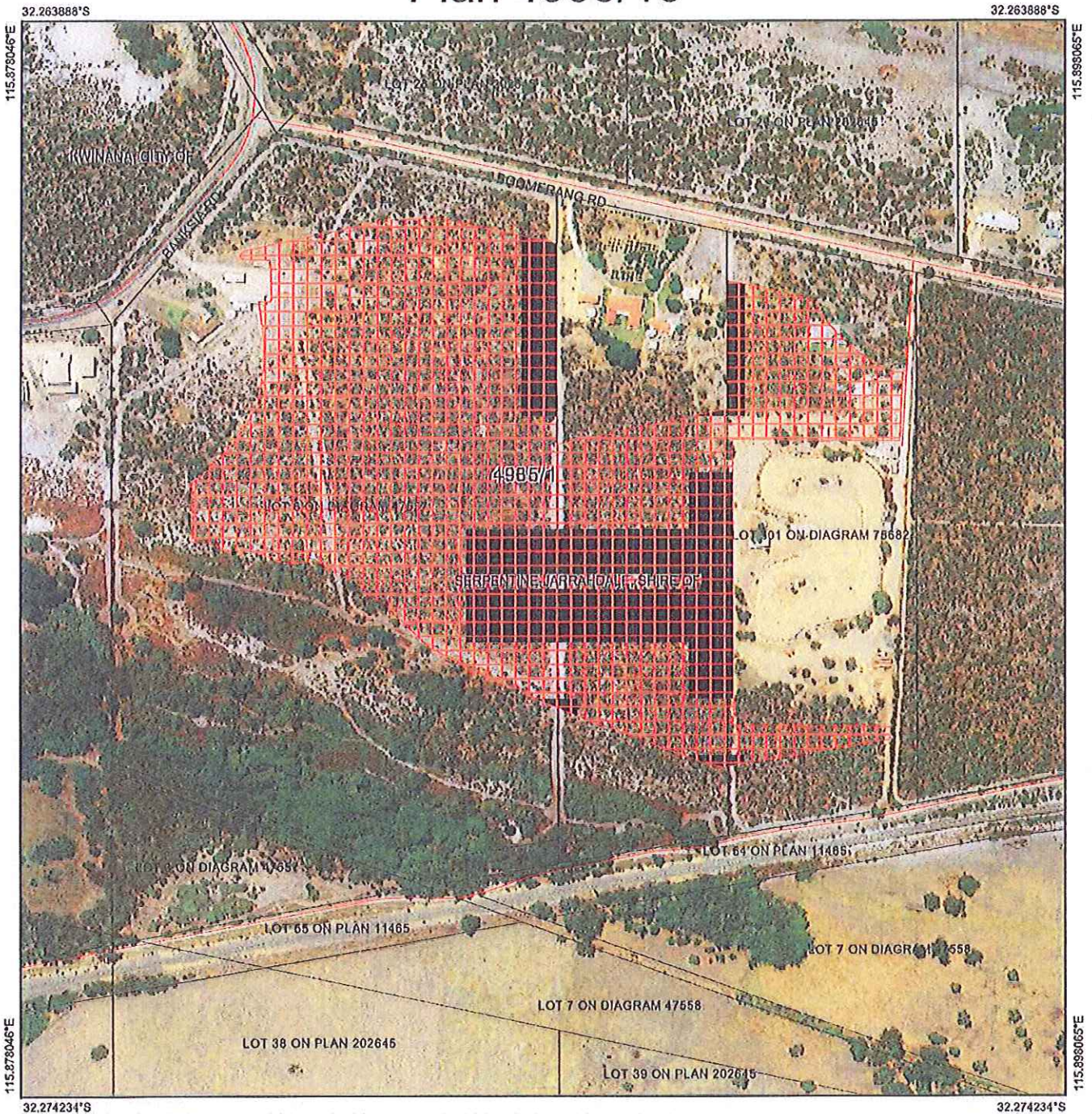
*Kelly Faulkner*  
Date 7/7/16  
Kelly Faulkner

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# Plan 4935/1c



## Legend

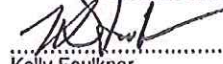
-  Roads
-  Imagery
-  Local Government Authority
-  Clearing Instruments Conditions
-  Cadastre



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(Approximate when reproduced at A4)  
GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

  
Date 7/7/16  
Kelly Faulkner

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 4935/1  
Permit type: Purpose Permit

### 1.2. Applicant details

Applicant's name: Hanson Construction Materials Pty Ltd

### 1.3. Property details

Property: LOT 301 ON DIAGRAM 75682, OLDBURY  
LOT 300 ON DIAGRAM 75682, OLDBURY  
LOT 6 ON DIAGRAM 47557, OLDBURY

Local Government Authority: SERPENTINE-JARRAHDAL, SHIRE OF  
DER Region: Greater Swan  
DPaW District: SWAN COASTAL  
LCDC:  
Localities: OLDBURY

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11.6		Mechanical Removal	Extractive industry

### 1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 7 July 2016

#### Reasons for Decision:

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986 (EP Act), and it has been concluded that the proposed clearing is at variance to clearing principles (a), (b) and (e), may be at variance to principles (d), (g), (h), (i) and (j) and is not likely to be at variance to the remaining clearing principles.

An assessment determined that the proposed clearing of 11.6 hectares of native vegetation includes:

- foraging habitat and potential nesting habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and the forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*);
- high biological diversity and a regionally significant ecological linkage; and
- native vegetation considered to be a significant remnant of native vegetation in an area that has been extensively cleared.

Consistent with the WA Environmental Offset Policy (2011) and WA Environmental Offsets Guidelines (2014), and pursuant to section 51I(2)(b) of the EP Act, in order to mitigate the significant environment impacts described above the Permit Holder is required to provide an offset that comprised the following components:

- documented evidence that a monetary contribution towards the purchase of 35.46 hectares of remnant vegetation that includes habitat for the three black cockatoos has been transferred to the Department of Environment Regulation;
- develop a Site Restoration Plan for the revegetation of 12.5 hectares; and
- place a conservation covenant on 11.6 hectares of vegetation on Lot 6 on Diagram 47557 and Lot 300 and Lot 301 on Diagram 75682, Oldbury.

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
The application area has been mapped as the following Beard vegetation associations: -968 - Medium woodland; jarrah, marri & wandoo; and	The proposal is to clear 11.6 hectares of native vegetation within a 24 hectare area for the purpose	Degraded; Structure severely disturbed; regeneration to good condition requires intensive	The vegetation condition was obtained from the former Department of Environment and Conservation (DEC) site inspection (DEC 2012a) conducted on 13 April 2012 and a flora report



-1001- Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina (Shepherd et al. 2001).

And Heddle vegetation complexes:

-Bassendean Complex Central And South - Transition Vegetation Complex - Woodland of *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri) with well defined second storey of *Allocasuarina fraseriana* (Sheoak) and *Banksia grandis* (Bull Banksia) on the deeper soils and a closed scrub on the moister sites. The understory species reflect similarities with the adjacent vegetation complexes; and

Serpentine River Complex - Closed scrub of *Melaleuca* species and fringing woodland of *Eucalyptus rudis* (Flooded Gum) - *Melaleuca raphiophylla* (Swamp Paperbark) along streams (Heddle et al. 1980).

of sand extraction.

management (Keighery 1994).

To

Excellent; Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994).

undertaken in October 2008 (RPS 2012a).

Three community types occur within the application area:

The majority of the application area (central portion) consisted of low woodland of *Banksia attenuata* and *Banksia menziesii* with *Allocasuarina fraseriana* over *Jacksonia furcellata*, *Macrozamia fraseri* over sedgeland of *Lyginia barbata*, *Desmocladius flexuosa* and *Burchardia congesta* and *Dasyopogon bromeliifolius*. The majority of this community occurs in excellent (Keighery 1994) condition with some degraded and very good (Keighery 1994) condition areas (DEC 2012a).

*Banksia menziesii* and *Banksia attenuata* woodland with *Allocasuarina fraseriana* over *Kunzea glabrescens*, *Hibbertia hypericoides*, *Macrozamia fraseri* and *Xanthorrhoea preissii* over *Desmocladius flexuosus* and *Mesomelaena pseudostygia*. This area occurs in very good (Keighery 1994) condition with some grassy weeds (DEC 2012a).

*Eucalyptus marginata* and *Allocasuarina fraseriana* woodland with *Banksia illicifolia* and *Kunzea glabrescens* over weeds. This area occurs in a good (Keighery 1994) condition (DEC 2012a).

### 3. Assessment of application against clearing principles

#### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

##### Comments Proposed clearing is at variance to this Principle

The application proposes to clear 11.6 hectares of native vegetation within a 24 hectare footprint area on Lot 6 on Diagram 47557 and Lots 300 and 301 on Diagram 75682, Oldbury for the purpose of sand extraction.

The vegetation within the application area ranges from degraded to excellent (Keighery 1994) condition, with the majority of the vegetation within the applied area being in excellent (Keighery 1994) condition (nine hectares) (DEC 2012a). The areas that are in a degraded to completely degraded (Keighery 1994) condition (1.6 hectares) are limited to areas of disturbance including access tracks, previously disturbed areas on Lot 300 and a motor cross track which is located in the central portion of Lot 301. A small portion (one hectare) occurs in a good (Keighery 1994) condition in the southwest corner of the application area.

An appropriately timed flora survey of the application area conducted by RPS Environment and Planning Pty Ltd (RPS) was undertaken in October 2008 and identified 122 flora species. The survey did not identify any flora of conservation significance within the application area (RPS 2012a).

Eight fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 (WC Act) have been recorded within the local area (10 kilometre radius); including Carnaby's cockatoo (*Calyptorhynchus latirostris*); Baudin's cockatoo (*Calyptorhynchus baudinii*); forest red-tailed cockatoo (*Calyptorhynchus banksii* subsp. *naso*); chuditch (*Dasyurus geoffroyi*); and the southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*) (Parks and Wildlife 2007-).

The application area is located within the distribution range of Carnaby's Cockatoo, Baudin's cockatoo and forest red-tailed cockatoo. Black cockatoos have a preference for feeding habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp. *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia 2012). The application area comprises of *Eucalyptus* and *Banksia* woodland in a predominantly excellent (Keighery 1994) condition and is mapped as unconfirmed Carnaby's cockatoo feeding habitat with one confirmed roost site mapped within the local area. The application area is likely to be used as significant foraging habitat for individuals that roost nearby (DEC 2012b).

The application area also contains habitat for quenda (*Isodon obesulus fusciventer*) listed as priority 5 under the WC Act. A former Department of Environment and Conservation (DEC) site inspection in 2012 identified numerous quenda diggings throughout the application area (DEC 2012a).

The application area has been identified as part of an ecological linkage under the Perth Greenways Plan and the Shire of Serpentine-Jarrahdale Local Biodiversity Strategy (Del Marco and Penna 2007). Ecological linkages have been defined as 'a series of (both contiguous and non-contiguous) patches of native vegetation which, by virtue of their proximity to each other, act as stepping stones of habitat which facilitate the maintenance of ecological processes and the movement of organisms within, and across, a landscape' (Molloy et al. 2009). The application area forms part of a chain of remnants linking reserves to the north, south and west of the application area as well as the darling range to the east, through a highly cleared local area. Given this, the application area is significant in the movement of local fauna within the landscape.

On the basis that the application area contains significant foraging habitat for black cockatoos and conservation significant fauna, contains vegetation in a very good to excellent (Keighery 1994) condition and forms part of an important ecological linkage, it is considered that the application area comprises a high level of biological diversity.

Given the above, the proposed clearing is at variance to this principle.

To counterbalance the significant residual impacts the proposed clearing will have on biological diversity, the applicant has agreed to an offset which consists of:

- providing a monetary contribution towards the purchase of 35.46 hectares of land within the local area, containing foraging and potential breeding habitat for the three black cockatoos;
- placing a conservation covenant on 11.6 hectares of remnant native vegetation in the south western corner of Lot 6 on Diagram 47557 and Lot 300 and Lot 301 on Diagram 75682, Oldbury. This area will maintain some ecological linkage function of Lots 6, 300 and 301 and contains significant habitat for quenda; and
- revegetation of 12.5 hectares of a previously cleared area with species suitable for black cockatoo foraging and breeding habitat.

#### Methodology

#### References:

- Commonwealth of Australia (2001)
  - Commonwealth of Australia (2012)
  - Cockerill et al. (2013)
  - DEC (2012a)
  - DEC (2012b)
  - DEC (2012d)
  - Del Marco and Penna (2007)
  - Keighery (1994)
  - Molloy et al. (2009)
  - Parks and Wildlife (2007- )
  - Rocla and Hanson (2015)
  - RPS (2012a)
  - RPS (2016)
- GIS Databases
- SAC Bio Datasets – accessed March 2016
  - NLWRA, Current Extent of Native Vegetation

#### **(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.**

#### Comments

#### **Proposed clearing is at variance to this Principle**

Eight fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 (WC Act) have been recorded within the local area (10 kilometre radius); including Carnaby's cockatoo (*Calyptorhynchus latirostris*); Baudin's cockatoo (*Calyptorhynchus baudinii*); forest red-tailed cockatoo (*Calyptorhynchus banksii* subsp. *naso*); chuditch (*Dasyurus geoffroii*); and the southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*). In addition, there are two priority 3 species, six priority 4 species and two priority 5 species within the local area; including quenda (*Isodon obesulus fusciventer*); western brush wallaby (*Macropus irma*); lined skink (*Lerista lineata*) and black-striped snake (*Neelaps calonotos*) (Parks and Wildlife 2007-).

The application area is located within the distribution range of Carnaby's Cockatoo, Baudin's cockatoo and forest red-tailed cockatoo. Black cockatoos have a preference for feeding habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp. *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia 2012). Basic ecological theory, expert opinion and recent evidence, suggests that the remaining native and pine plantation feeding habitat on the Swan Coastal Plain is just sufficient to support the current population of Carnaby's cockatoo. Therefore, it is considered that any reduction in feeding habitat will result in a reduction in the carrying capacity of the region and therefore a decline in the population of Carnaby's cockatoo. A recent study involving population analysis modelling suggests that if clearing continues to occur at its current rate without effective habitat restoration, the species is likely to decline to extinction in less than 20 years (Cockerill et al. 2013). The application area comprises of Eucalyptus and Banksia woodland in a predominantly excellent (Keighery 1994) condition, is mapped as unconfirmed Carnaby's cockatoo feeding habitat and there is one confirmed roost site mapped within the local

area (10 kilometre radius). The application area is likely to contain significant foraging habitat for individuals that roost nearby (DEC 2012b).

A tree survey of the application area identified seven habitat trees that have a diameter at breast height (DBH) of 500 millimetres or greater (RPS 2011a); however it is not identified if these trees contained hollows. A site visit (DEC 2012a) of the application area did note several mature Eucalyptus trees that may have the potential to develop suitable hollows in the future and one mature tree containing a hollow that may be suitable for Carnaby's cockatoo.

The Carnaby's cockatoo recovery plan (DEC 2012b) summarises habitat critical to the survival of Carnaby's cockatoos as:

- The eucalypt woodlands that provides nest hollows used for breeding, together with nearby vegetation that provides feeding, roosting and watering habitat that supports successful breeding;
- Woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established; and
- In the non-breeding season the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resources.

The recovery plan also states, "Success in breeding is dependent on the quality and proximity of feeding habitat within 12 kilometre of nesting sites. Along with the trees that provide nest hollows, the protection, management and increase of this feeding habitat that supports the breeding of Carnaby's cockatoo is a critical requirement for the conservation of the species" (DEC 2012b). Given the above, the application area contains significant habitat for black cockatoo's.

Quenda are listed as priority 5 by the Department of Parks and Wildlife. Priority 5 is defined as species that are managed under a specific conservation program, the cessation of which would result in the species becoming threatened. A DEC (2012a) site inspection observed numerous quenda diggings within the application area, consistent with a resident population occurring near the wetland to the south. Vegetation within the application area in good (Keighery 1994) or better condition would provide habitat for the local population of quenda. The proposed clearing of 11.6 hectares will reduce available habitat for the locally occurring quenda population (DEC 2012d).

Fifteen avian species protected under international agreement have been recorded within the local area (Parks and Wildlife 2007-). Fourteen of these species are associated with wetland environments and the application area falls approximately 430 metres away from a conservation category wetland and under 75 metres from a resource enhancement wetland and a multiple use wetland. The rainbow bee-eater is a migratory species that arrives in the south west of Western Australia in late September-early October nesting in burrows dug in the ground (DotE 15). This species was observed within Lot 6 during the fauna survey (GHD 2006), and it is likely that the application area provides significant local habitat for this protected species. Threat abatement and recovery for the rainbow bee-eater is currently considered to be a low priority for management (DotE 2015). The fauna survey on Lot 6 (GHD 2006) also identified local bird species including the scarlet robin (*Petroica multicolor*), common bronzewing (*Phaps chalcoptera*) and the New Holland honeyeater (*Phylidonyris novaehollandiae*) which are listed as Regionally Significant birds on the Swan Coastal Plain (Government of Western Australia 2000). These species have a limited distribution range and are particularly sensitive to habitat loss.

The application area has been identified as part of an ecological linkage under the Perth Greenways Plan and the Shire of Serpentine-Jarrahdale Local Biodiversity Strategy (Del Marco and Penna 2007). Ecological linkages have been defined as 'a series of (both contiguous and non-contiguous) patches of native vegetation which, by virtue of their proximity to each other, act as stepping stones of habitat which facilitate the maintenance of ecological processes and the movement of organisms within, and across, a landscape' (Molloy et al. 2009). The application area forms part of a chain of remnants linking reserves to the north, south and west of the application area as well as the darling range to the east, through a highly cleared local area. Given this, the application area is significant in the movement of local fauna within the landscape.

On the basis that the application area includes significant foraging habitat for the three black cockatoos and significant habitat for other conservation significant fauna within an extensively cleared area, it is considered that the application area comprises significant habitat for indigenous fauna.

Given the above, the proposed clearing is at variance to this principle.

To counterbalance the significant residual impacts the proposed clearing will have on biological diversity, the applicant has agreed to an offset which consists of:

- providing a monetary contribution towards the purchase of 35.46 hectares of land within the local area, containing foraging and potential breeding habitat for the three black cockatoos;
- placing a conservation covenant on 11.6 hectares of remnant native vegetation in the south western corner of Lot 6 on Diagram 47557 and Lot 300 and Lot 301 on Diagram 75682, Oldbury. This area will maintain some ecological linkage function of Lots 6, 300 and 301 and contains significant habitat for quenda; and
- revegetation of 12.5 hectares of a previously cleared area with species suitable for black cockatoo foraging and breeding habitat.

Commonwealth of Australia (2001)  
Commonwealth of Australia (2012)  
Cockerill et al (2013)  
DEC (2012a)  
DEC (2012b)  
Del Marco and Penna (2007)  
DotE (2015)  
GHD (2006)  
Government of Western Australia (2000)  
Keighery (1994)  
Molloy et al (2009)  
RPS (2011a)

GIS Datasets:  
- Carnaby Cockatoo breeding sites  
- Carnaby Cockatoo feeding  
- Hydrography linear

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments** Proposed clearing is not likely to be at variance to this Principle  
Seven rare flora species have been recorded within the local area (10 kilometre radius).

A spring flora and vegetation survey of the application area undertaken in 2012 (RPS 2012a) did not record any declared rare flora species. The site was surveyed through plot based survey and opportunistic collection.

Given the above, the proposed clearing is not likely to be at variance to this principle.

**Methodology** References:  
RPS (2012a)

GIS Databases:  
- SAC Bio Datasets - accessed March 2016

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.**

**Comments** Proposed clearing may be at variance to this Principle

Seven threatened ecological communities (TEC) have been recorded within the local area (10 kilometre radius).

A flora survey of the application area (RPS 2012a) did not identify any TEC's within the application area, therefore it is not likely that the vegetation within the application area comprises a TEC.

An occurrence of the TEC - Communities of Tumulus Springs (organic mound springs, Swan Coastal Plain), has been recorded approximately 87 metres south of the application area on the same soil and vegetation type. There are eight occurrences of this mound springs TEC, with a total area of 21 hectares recorded. The Oldbury occurrence covers about 0.75 hectares (3.6 per cent of total mapped occurrences) and is the southern most occurrence of this TEC on the Swan Coastal Plain. Unlike the other known occurrences, its hydrology is not driven by the Gnangara Mound (DEC 2012d).

Wetlands on the Swan Coastal Plain fall into recharge, discharge and throughflow systems. Recharge systems depend on local flow systems, while discharge systems are generally reliant on both local and regional flow systems. The conceptual model for this TEC occurrence is a discharge system, which means the organic mound spring responds to local, as well as regional groundwater changes. In order to evaluate impacts to the spring, it is necessary to map and understand the ground and surface water flow paths and volumes into and out of the spring itself (ie determining water balance) for both the local and regional flow systems (DEC 2012c and DEC 2012d).

The groundwater flowpaths in the local (shallow) system will be impacted upon by the proposed clearing and impact the water regime of the TEC given the size of the application area and likely increase in the groundwater discharge to the nearby wetlands (DEC 2012d). A local (shallow) flow system investigation was required including the identification of local flow system boundaries to establish the full impact of the proposed clearing on the TEC. The water level increase or decrease within the TEC may cause changes to solute balances. Therefore the former DEC and DER requested the applicant undertake additional hydrological assessments and prepare a Hydrological Management Plan. Additional work was undertaken in conjunction with the Department of Parks and Wildlife (RPS 2016) to determine the degree of detail required to determine the impact of the clearing on the hydrology of the TEC.

The applicant has undertaken a further series of hydrological assessments and groundwater profile modelling (RPS 2016) to estimate the potential impacts of the proposed clearing on the TEC. The hydrological assessments concluded that the hydrology of the TEC is significantly controlled by anthropogenic factors. Groundwater modelling of the proposed clearing indicates that groundwater levels are predicted to increase by up to 0.14 meters during the proposed clearing (RPS 2016).

Therefore the application area may be necessary for the maintenance of a TEC and the proposed clearing may be at variance to this Principle.

A condition has been placed on the permit requiring the applicant to adhere to a groundwater profile modelling document that contains management and contingency measures if the groundwater level trigger within the TEC is breached.

**Methodology**

**References:**

DEC (2012c)  
DEC (2012d)  
RPS (2012a)  
RPS (2016)

**GIS Datasets**

- SAC Bio Datasets - accessed March 2016  
- Soils, statewide  
- Pre-European Vegetation

**(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.**

**Comments**

**Proposed clearing is at variance to this Principle**

The application area is located within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) Bioregion, which has approximately 39 per cent of its pre-European vegetation extent remaining (Government of Western Australia 2014).

The application area is mapped as Beard vegetation associations 968 and 1001, which have approximately seven and 23 per cent of their pre-European extents remaining within the Swan Coastal Plain bioregion respectively (Government of Western Australia 2014), and has Heddle vegetation complexes Serpentine River Complex and Bassendean Complex-Central And South which retain approximately 10 and 26 per cent of their pre-European extent respectively (Parks and Wildlife 2015).

The application area is located within the Shire of Serpentine Jarrahdale, within which there is approximately 53 per cent pre-European extent remaining (Government of Western Australia 2014).

The local area (10 kilometre radius) retains approximately 25 per cent native vegetation.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001). However, the Environmental Protection Authority recognises the Perth Metropolitan Region to be a constrained area, which provides for the reduction of this threshold to 10 per cent of the pre-European extent (EPA 2006). As the application area is zoned rural it does not fit the definition of a "constrained area" as defined by the Environmental Protection Authorities Guidance for the Assessment of Environmental Factors (EPA 2006).

The application area contains significant habitat for conservation significant fauna. It also forms part of a regionally significant ecological linkage aiding in the dispersal of fauna and biological material across the landscape. The application area also comprises of a high level of biological diversity and includes vegetation in excellent (Keighery 1994) condition. Therefore the application area is considered a significant remnant.

Noting that the mapped vegetation types and the vegetation cover within the local government or local area retain less than the 30 per cent threshold, it is considered that the application area is located within an extensively cleared area.

Given the above, the proposed clearing is at variance to this principle.

To counterbalance the significant residual impacts the proposed clearing will have on biological diversity, the applicant has agreed to an offset which consists of:

- providing a monetary contribution towards the purchase of 35.46 hectares of land within the local area, containing foraging and potential breeding habitat for the three black cockatoos;
- placing a conservation covenant on 11.6 hectares of remnant native vegetation in the south western corner of Lot 6 on Diagram 47557 and Lot 300 and Lot 301 on Diagram 75682, Oldbury. This area will maintain some ecological linkage function of Lots 6, 300 and 301 and contains significant habitat for quenda; and
- revegetation of 12.5 hectares of a previously cleared area with species suitable for black cockatoo foraging and breeding habitat.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
<b>IBRA Bioregion*</b>				
Swan Coastal Plain	1,501,221	580,697	39	37
<b>Local government authority*</b>				
Shire of Serpentine-Jarrahdale	90,049	47,610	53	86
<b>Beard Vegetation Association in Bioregion*</b>				
968	136,188	9,143	7	18
1001	57,410	13,240	23	13
<b>Hedde Vegetation Complex**</b>				
Serpentine River Complex	19,855	2,028	10	3
Bassendean Complex-Central And\South:	87,476	22,869	26	5

**Methodology** References:  
Commonwealth of Australia (2001)  
EPA (2006)  
\*Government of Western Australia (2014)  
\*\*Hedde et al. (1980)  
Parks and Wildlife (2015)

GIS Datasets  
- Hedde Vegetation Complexes  
- NLWRA, Current Extent of Native Vegetation  
- Pre-European Vegetation

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Comments** **Proposed clearing is not likely to be at variance to this Principle**  
According to available datasets, no wetlands or watercourses are mapped within the application area.

There are multiple wetlands mapped within 5 kilometres of the application area, the closest wetland is a resource enhancement wetland (REW) located under 75 metres south of the application area. This REW is located within Lot 6 and a conservation covenant will be placed over the wetland. There is also a multiple use wetland (MUW) 75 metres south and 200 metres north of the application area and two conservation category wetlands (CCW) located 436 metres south west of the application area and 700 metres west of the application area. The nearest watercourses are the Birriga Main Drain and Manjedal Brook, located approximately 815 metres south-east and 1.8 kilometres south of the application area.

Noting the soil and vegetation types found within the application area, and given the distance to the nearest wetland, it is considered that the application area is unlikely to include vegetation growing in association with a wetland or watercourse.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** GIS Databases:  
- Hydrography, linear  
- Geomorphic Wetlands, (Mgt Categories), Swan Coastal Plain

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments** **Proposed clearing may be at variance to this Principle**  
The soil types mapped within the application area are Cb39 and Kf9. Cb39 is described as subdued dune-swale terrain: chief soils are leached sands and Kf9 is described as low lying, poorly drained flats with some gilgais: chief soils are black and grey cracking clays (Northcote et al. 1960-68).

Noting the extent of clearing proposed (11.6 hectares), and noting that sandy soils typically have a high risk of

wind erosion and phosphorus export, it is considered that the proposed clearing may cause land degradation in the form of wind erosion.

Given the porous nature of the soils the proposed clearing is unlikely to cause appreciable land degradation through waterlogging and water erosion.

Given the above, the proposed clearing may be at variance to this Principle.

The applicant has advised that clearing will occur over seven stages across 20 years with sequential revegetation (RPS 2011b and RPS 2016). It is considered that staged clearing will assist in mitigating appreciable land degradation in the form of wind erosion.

**Methodology**   References:  
Northcote et al. (1960-68)  
RPS (2011b)  
RPS (2016)

GIS Databases:  
- Soils, statewide

**(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**

**Comments      Proposed clearing may be at variance to this Principle**

Banksia Nature Reserve (R28167) is located approximately 850 metres north of the application area and separated from the application area by cleared land and remnant vegetation. Banksia Nature Reserve forms part of Jandakot Regional Park, is listed on the Register of National Estate and identified as a System 6 Reserve.

The nearest Bush Forever sites are 70 (Duckpond Bushland, Peel Estate) and 68 (Jackson Road Bushland, Peel Estate), which are located approximately 600 metres south and 600 metres east south-east of the application area respectively. Twenty eight other Bush Forever sites are located within the local area (10 kilometre radius).

The application area has been identified as part of an ecological linkage under the Perth Greenways Plan and the Shire of Serpentine-Jarrahdale Local Biodiversity Strategy (Del Marco and Penna 2007). Ecological linkages have been defined as 'a series of (both contiguous and non-contiguous) patches of native vegetation which, by virtue of their proximity to each other, act as stepping stones of habitat which facilitate the maintenance of ecological processes and the movement of organisms within, and across, a landscape' (Molloy et al. 2009). The application area forms part of a chain of remnants linking reserves to the north, south and west of the application area as well as the darling range to the east, through a highly cleared local area.

The proposed clearing may cause degradation of local ecological linkages and impede fauna movement between local conservation areas.

On the basis of the distance to the closest conservation area, and noting the connectivity between the application area and nearby conservation areas, it is considered that the proposed clearing may impact on the environmental values of nearby conservation areas.

Given the above, the proposed clearing may be at variance to this Principle.

**Methodology**   References:  
Del Marco and Penna (2007)  
Molloy et al (2009)

GIS Databases:  
- Bush Forever Sites  
- Parks and Wildlife Tenure

**(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**

**Comments      Proposed clearing may be at variance to this Principle**

According to available datasets, no wetlands or watercourses are mapped within the application area. There are multiple wetlands mapped within 5 kilometres of the application area, the closest wetland is a resource enhancement wetland (REW) located under 75 metres south of the application area. This REW is located within Lot 6 and a conservation covenant will be placed over this wetland. There is also a multiple use wetland (MUW) 75 metres south and 200 metres north of the application area and two conservation category wetlands (CCW) located 436 metres south west of the application area and 700 metres west of the application area. The nearest watercourses are the Birriga Main Drain and Manjedal Brook, located approximately 815 metres south-

east and 1.8 kilometres south of the application area.

Groundwater salinity is mapped between 500-1000 milligrams per litre total dissolved solids which is considered to be marginal.

An occurrence of the TEC - Communities of Tumulus Springs (organic mound springs, swan coastal plain), has been recorded approximately 87 metres south of the application area on the same soil and vegetation type. The conceptual model for this TEC occurrence is a discharge system, which means the organic mound spring responds to local, as well as regional groundwater changes.

The applicant has undertaken a series of hydrological assessments and groundwater profile modelling (RPS 2016) to estimate the potential impacts of the proposed clearing on groundwater and the nearby organic mound spring. Additional work was undertaken with the Parks and Wildlife (RPS 2016) to determine the degree of detail required to determine the impact of the clearing on local hydrology.

The groundwater modelling of the proposed clearing indicates that groundwater levels are predicted to increase by up to 0.14 metres during the proposed clearing (RPS 2016). The predicted water level increase within the groundwater table may cause changes to solute balances within adjacent wetlands. Sulfide minerals and acidity can be altered by changes to water levels resulting in the formation of acid sulfate soils and release of other contaminants such as aluminium (DEC 2012b).

Given the close proximity of the application area to the organic mound spring distance, the proposed clearing may cause deterioration in the quality of surface or underground water entering nearby wetland areas.

Given the predicted increase in groundwater levels and potential changes, it is considered that the proposed clearing may cause deterioration in the quality of groundwater.

Given the above, the proposed clearing may be at variance to this Principle.

**Methodology**

**References:**

RPS (2016)  
DEC (2012b)

**GIS Databases:**

- Hydrography, linear
- Geomorphic Wetlands, (Mgt Categories), Swan Coastal Plain
- Groundwater salinity
- Salinity Risk LM 25m

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Comments**

**Proposed clearing may be at variance to this Principle**

According to available datasets, no wetlands or watercourses are mapped within the application area. There are multiple wetlands mapped within 5 kilometres of the application area, the closest wetland is a resource enhancement wetland (REW) located under 75 metres south of the application area. This REW is located within Lot 6 and a conservation covenant will be placed over this wetland. There is also a multiple use wetland (MUW) 75 metres south and 200 metres north of the application area and two conservation category wetlands (CCW) located 436 metres south west of the application area and 700 metres west of the application area. The nearest watercourses are the Birriga Main Drain and Manjedal Brook, located approximately 815 metres south-east and 1.8 kilometres south of the application area.

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Therefore it is considered that the proposed clearing may result in an increase in the incidence or intensity of flooding on nearby wetlands.

Given the above, the proposed clearing may be at variance to this Principle.

**Methodology**

**References:**

RPS (2016)



GIS Datasets:

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- Hydrography, Linear
- SAC Biodatasets - accessed March 2016
- Soils, statewide

**Planning instruments and other relevant matters.**

**Comments** On 23 September 2008 Rocla Pty Ltd trading as Rocla Quarry Products (Rocla) submitted an application CPS 2757/1 to clear 24.78 ha of native vegetation for sand extraction on Lot 300 and 301 on Diagram 75682 and Lot 6 on Diagram 47557, Oldbury. On 15 October 2009 this application was refused based on environmental grounds. The applicant appealed this decision on 23 November 2009.

On 7 October 2010 the Minister for Environment dismissed the appeal and stated that: 'If Rocla wish to clear vegetation at this site in the future, in addition to undertaking restoration, the Minister noted that it will also need to identify measures to offset the loss of the values identified through the DEC's assessment of the proposal. This may include, for example, identification of offsite vegetation which might be secured or restored to ensure ecological linkages are maintained' (Minister for Environment 2010).

On 13 March 2012 Rocla reapplied for a clearing permit and reduced the application area from the original 24.78 hectares to 11.6 hectares of native vegetation within Lot 300, 301 and Lot 6, Oldbury, for the purpose of sand extraction, in the Shire of Serpentine-Jarrahdale. The application was received by the former Department of Environment and Conservation (DEC) and included a proposed offset.

On 29 January 2016 Rocla Pty Ltd (Rocla) sold its extractive industry business, including its Western Australian assets to Hanson Construction Materials Pty Ltd (Hanson). In a letter to DER on 11 December 2015, Rocla requested that all permit applications be transferred to Hanson (Rocla and Hanson 2015).

The application area comprises three adjacent properties. The applicant provided approval from the land owners that Rocla has approval to apply to clear the application area for sand extraction.

The application area has been identified as containing regionally significant basic raw materials (sand) by the Geological Survey of Western Australia (DMP 2012 and DMP 2011). The mapping shows basic raw material areas and does not indicate government endorsement of approval or priority to mine in these areas and that further consideration such as environmental constraints will need to be taken into account before it can be used for planning purposes (DMP 2011).

The application area is not within a priority resource location or a key extraction area within the Basic Raw Materials Statement of Planning Policy No. 2.4 (SPP2.4) (WAPC 2000). State Planning Policy 2.4 identifies the location and extent of known basic raw material resources, protects priority resource locations, ensures that the use of development of land for the extraction of basic raw materials does not adversely affect the environment or amenity and provides a consistent planning approval process for extractive industry proposals. On 26 March 2014, the Western Australian Planning Commission (WAPC) resolved to approve the development application WAPC 29-50066-2 for Lot 6 Banksia Road and Lots 300 and 301 Boomerang Road, Oldbury (WAPC 2014) as the area was recognised as a sand extraction area in SPP2.4 (WAPC 2014).

The application area is zoned 'Rural' under the local town planning scheme. On 7 July 2014 Rocla were granted Planning approval - Extractive Industry by the Shire of Serpentine Jarrahdale for L6 Banksia Road, L300 Boomerang Road and L301 Boomerang Road, Oldbury (Shire of Serpentine Jarrahdale 2014).

The Department of Water (2012) advised that the application area is located within the Serpentine groundwater area, proclaimed under the Rights in Water Irrigation Act 1914. Therefore a licence is required if groundwater abstraction is to take place.

No Aboriginal Sites of Significance have been recorded within the application area.

The application was advertised for public comment in The West Australian newspaper on 26 March 2012 with a 21 day submission period. One public submission was received in relation to this project. The submission objected to the proposed clearing on the basis that the application is likely to impact on a tumulus spring TEC, the local hydrology of the area and in turn on species that rely on the TEC, such as Carnaby's cockatoo and graceful sun moth (Submission 2012). The submission also states that revegetation would be difficult on the site and that research and provision of restoration documents is not a suitable offset. Additionally, offsetting clearing in Gingin does not appear to meet the intent of biodiversity conservation in the local area and does not offset the impact on the offset mound spring TEC. These matters have been considered under the relevant Clearing Principles.

**Methodology**

**References:**

- Department of Water (2012)
- DMP (2011)
- DMP (2012)
- Minister for Environment (2010)

Rocla and Hanson (2015)  
Submission (2012)  
Shire of Serpentine Jarrahdale (2014)  
WAPC (2014)  
WAPC (2000)

GIS Databases:  
- Aboriginal Sites of Significance

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- Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species, Canberra.
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- DMP (2011) Regionally Significant Basic Raw materials - Swan Coastal Plain and Adjoining Areas. Geological Survey of Western Australia. Department of Mines and Petroleum. 22 December 2011. DER ref: A537465
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- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, Perth.
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- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Minister for Environment (2010) Minister's Appeal Determination. Appeal against refusal to grant clearing permit 2757/1 - Lot 6 Banksia Road and Lots 300 and 301 Boomerang Road, Oldbury, Shire of Serpentine - Jarrahdale.
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- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
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Lots 300 and 301 Boomerang Road, Oldbury. DEC ref A502913

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WAPC (2000) Statement of Planning Policy No 2.4 Basic Raw Materials. Western Australian Planning Commission, Perth Western Australia.

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## 15 Reports - Built Infrastructure

### 15.1 Draft Waste Education Plan 2019 - 2020

#### DECLARATION OF INTEREST:

There were no declarations of interest declared.

#### SUMMARY:

The City of Kwinana Waste Management Strategy (WMS) prepared by MRA and adopted by Council in 2017 identifies, 'Educating the community to ensure positive waste separation behaviour change occurs' as one of the four key aims.

While the City of Kwinana's (the City's) waste generation rates are in keeping with the State average, the City's waste diversion rates are below the State average and the 2020 target of 65%. An audit of a sample of the City's waste and recycling bins further indicates that a large portion of recyclable materials are incorrectly placed in the waste bin. This is not a good result for the environment and also costs the City's ratepayers more to dispose of waste to landfill.

The City's Waste Minimisation Officer coordinates programs and information to educate the community on sustainable waste management practices with the aim of minimising waste, improving recycling and reducing contamination in the kerbside collection bins.

The Draft Waste Education Plan 2019 – 2020 (Attachment A) provides background information, establishes the City's current practices, sets targets for improvement and provides an action plan for the next two years. The plan is hereby presented to Council for consideration and endorsement.

#### OFFICER RECOMMENDATION:

That Council endorse the Draft Waste Education Plan 2019 – 2020 at Attachment A.

#### DISCUSSION:

In March 2017 Council adopted the City of Kwinana WMS prepared by MRA.

The City of Kwinana WMS lists four key aims, of which the second aim is:  
*Educating the community to ensure positive waste separation behaviour change occurs.*

The Western Australian Waste Strategy: Creating the Right Environment of 2012 sets a target of 65% waste diversion from landfill from kerbside collections for all Perth metropolitan local governments.

The 2017/18 Waste Census completed by the City for the Department of Water and Environmental Regulation (DWER) indicates that:

- The City's waste generation rate at 19 kgs per household per week is similar to the metropolitan average; and that
- The City's waste diversion rate of 23% is below the Perth metropolitan average of 40%.

### 15.1 DRAFT WASTE EDUCATION PLAN 2019 - 2020

The biennial audit of a sample of the City's waste and recycle bins conducted by the Southern Metropolitan Regional Council (SMRC) on behalf of the City provided evidence that:

- The contamination rate in the recycle bins was at 13.6%. The contamination rate has increased since 2016. However, is similar to the contamination rates between 2010 and 2014.
- 32.2% of the contents of the waste bin were recyclable. This rate has been gradually increasing since 2010.

The City's Waste Minimisation Officer has been recently employed to coordinate the City's waste education programs and initiatives to encourage behaviour change for improvements to the waste management practices by the community.

The Draft Waste Education Plan 2019 – 2020 (Draft Plan) aligns with the objectives of the City's WMS and integrates objectives of the Western Australian Waste Strategy 2012 and the *Waste Avoidance and Resource Recovery Act 2007* (WARR Act). The Draft Plan includes key actions that will facilitate engagement of community stakeholders with existing and innovative waste avoidance, reuse and sustainability programs.

Programs such as bin tagging, composting and worm farming, waste minimisation workshops, Garage Sale Trail, Recycle Right, Clean Schools Waste and Waste Wise Schools, increased presence at public events, social media and web based educational formats aim to increase community engagement, are popular and have proven to be effective in delivering waste education and sustainable practice messages.

Informing and educating the community about the principles of the waste hierarchy adopted by the WARR Act and Western Australian Waste Strategy 2012 is a corner stone principle of the Draft Plan.

Based on the available information and requirement for improvement, the Aims, Objectives and Targets of the Draft Plan are as follows:

#### Aim –

Increase community awareness and understanding of current waste management practices consistent with the requirements of the City of Kwinana Waste Management Strategy and the State Waste Strategy (2012).

#### Objectives –

1. Maximise waste diversion from current waste collection systems.
2. Minimise contamination in kerbside collection bins.
3. Minimise waste generation.
4. Increase community awareness of sustainable waste practices and initiatives.

#### Targets –

- Objective 1 - Increase waste diversion by 1% each financial year commencing with baseline data from the Waste Census 2017/18 of 23%.
- Objective 2.1 - Reduce contamination in recycle bins by 1% biennially commencing with baseline data from SMRC Waste Audit 2018 of 13.6%.
- Objective 2.2 - Reduce recyclable material in waste bins by 5% biennially commencing with baseline data from SMRC Waste Audit 2018 of 32.2%.

**15.1 DRAFT WASTE EDUCATION PLAN 2019 - 2020**

- Objective 3 - Reduce kerbside waste generation per household by 10kg per household per year commencing with baseline data obtained from the Waste Census of 19kgs per household per year.
- Objective 4 - Delivery of 90% of relevant set actions in the Action Plan each year.

The Waste Education Plan objectives and actions are comprehensive and complement future innovation. However, the draft Waste Strategy 2030, if adopted as advertised may require a re-focus of the City's Education Plan. In any event, the Draft Plan has been limited to a two-year period to align with the proposed review of the City's WMS as proposed in the City's Long Term Financial Plan.

**LEGAL/POLICY IMPLICATIONS:**

Section 40(3)(f) of the *Waste Avoidance and Resources Recovery Act 2007* allows Local Governments to include proposed strategies and targets for managing and reducing waste in their waste plans.

**FINANCIAL/BUDGET IMPLICATIONS:**

The actions of the draft Waste Education Plan 2019 – 2020 will be implemented according to what funds are made available through the City's annual budget processes.

**ASSET MANAGEMENT IMPLICATIONS:**

Endorsement of the draft Waste Education Plan 2019 – 2020 does not impact on any of the City's assets.

**ENVIRONMENTAL IMPLICATIONS:**

The Waste Education Plan 2019 – 2020 aims to protect the environment by educating the community on the principles of the waste hierarchy with waste avoidance as a priority followed by resource recovery and landfill as the last option.

**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	Community Services	6.1. Encourage waste minimisation and recycling as well as ensure appropriate disposal and reuse.

## 15.1 DRAFT WASTE EDUCATION PLAN 2019 - 2020

**COMMUNITY ENGAGEMENT:**

As per the City's Community Engagement Policy, the Draft Waste Education Plan 2019 – 2020 is classed as Lower Impact: All of Kwinana. The Policy specifies informing the community of the Draft Plan by media release, notice in the local newspaper, notice in newsletter and a website post once adopted.

Community feedback is to be obtained at all events, activities and seminars to assess the effectiveness of the actions in achieving their objectives.

**PUBLIC HEALTH IMPLICATIONS**

Endorsement of the Draft Plan has the potential to help improve the following determinant of health factors:

- Built Environment – Environmental Quality and Disease Prevention through reduced greenhouse gas emissions ;
- Health Behaviours – Participation in organised workshops and programs; and
- Socio-economic Factors – Employment and Income. Increased recycling generates more local and regional employment than landfilling. Waste avoidance and recycling also ensures more savings for the community.

**RISK IMPLICATIONS:**

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

Risk Event	Failure to address community behaviour change to ensure improved waste management practices, reduce contamination and increase waste diversion.
Risk Theme	Failure to fulfil statutory regulations or compliance requirements, if the requirements of the State Waste Strategy are enforced. Inadequate project/change management
Risk Effect/Impact	Financial Environment Compliance
Risk Assessment Context	Strategic
Consequence	Moderate
Likelihood	Almost certain
Rating (before treatment)	High
Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Prepare a Waste Education Plan and implement the actions of the plan.
Rating (after treatment)	Low

15.1 DRAFT WASTE EDUCATION PLAN 2019 - 2020

**COUNCIL DECISION**

**365**

**MOVED CR P FEASEY**

**SECONDED CR M ROWSE**

**That Council endorse the Draft Waste Education Plan 2019 – 2020 at Attachment A.**

**CARRIED  
5/0**



# Draft Waste Education Plan 2019-2020



KPW015280



Don't bag your recycling

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# 1 Background

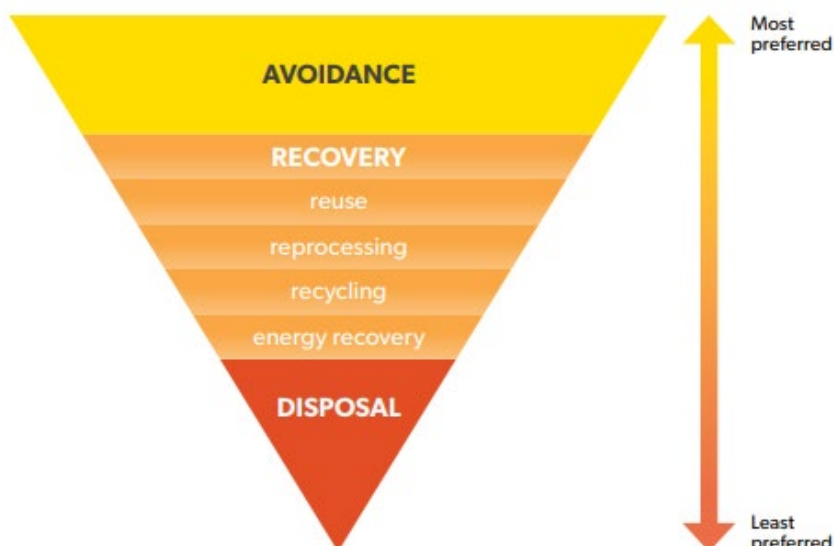
In March 2017, Council adopted the City of Kwinana Waste Management Strategy 2017 (the Strategy). The key aims of the Strategy include:

- Implement best practice disposal and recovery options for the delivery of kerbside waste and recycling services;
- Educate the community to ensure positive waste separation behaviour change occurs;
- Implement an efficient, clean and cost effective bulky waste collection service; and
- Prevent and best manage litter and illegal dumping in the region through efficient placement of public place bins.

## 1.1 The State Waste Strategy

The *Waste Avoidance and Resource Recovery Act 2007* (WARR Act) established the Waste Authority and its functions, and prescribes the requirements of waste management for local governments. An integral principle of the WARR Act is the Waste Hierarchy (Figure 1), which informs the decisions of the Waste Authority and is considered a useful guide to assist in the development of waste education and communication programs. Waste avoidance is the most preferred option in the hierarchy.

**Figure 1: Waste Hierarchy**



Drawing from existing best practice waste education programs and strategies, both locally and internationally, the strategy envisions that the City will facilitate education programs to ensure positive waste separation behaviour change occurs.

This is further identified in the draft State Waste Strategy 2030 released in October 2018 which lists the following three objectives to guide the community and enable the development of a sustainable, low-waste and circular economy.

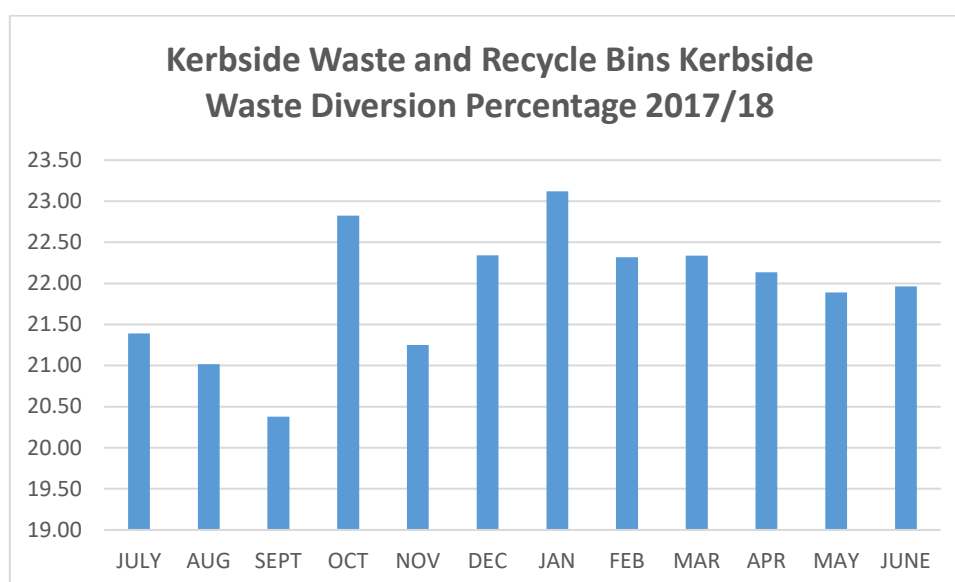
**Figure 2: Draft State Waste Strategy 2030 Objectives and Targets**

OBJECTIVES	Avoid <i>Western Australians generate less waste.</i>	Recover <i>Western Australians recover more value and resources from waste.</i>	Protect <i>Western Australians protect the environment by managing waste responsibly.</i>
TARGETS	<ul style="list-style-type: none"> <li>○ 2025 – 10% reduction in waste generation per capita</li> <li>○ 2030 – 20% reduction in waste generation per capita</li> </ul>	<ul style="list-style-type: none"> <li>○ 2025 – Increase material recovery to 70%</li> <li>○ 2030 – Increase material recovery to 75%</li> <li>○ Recover energy only from residual waste</li> </ul>	<ul style="list-style-type: none"> <li>○ 2030 – No more than 15% of waste generated in Perth and Peel regions is landfilled.</li> <li>○ 2030 – All waste is managed and/or disposed to better practice facilities</li> </ul>

## 1.2 City of Kwinana Waste Diversion Statistics

The City’s records for kerbside waste and recycling bins show that the City’s waste diversion percentage is well below the State target of 65%, averaging at 22% for the 2017/18 financial year as shown in Figure 3.

**Figure 3: Waste Diversion Percentages**



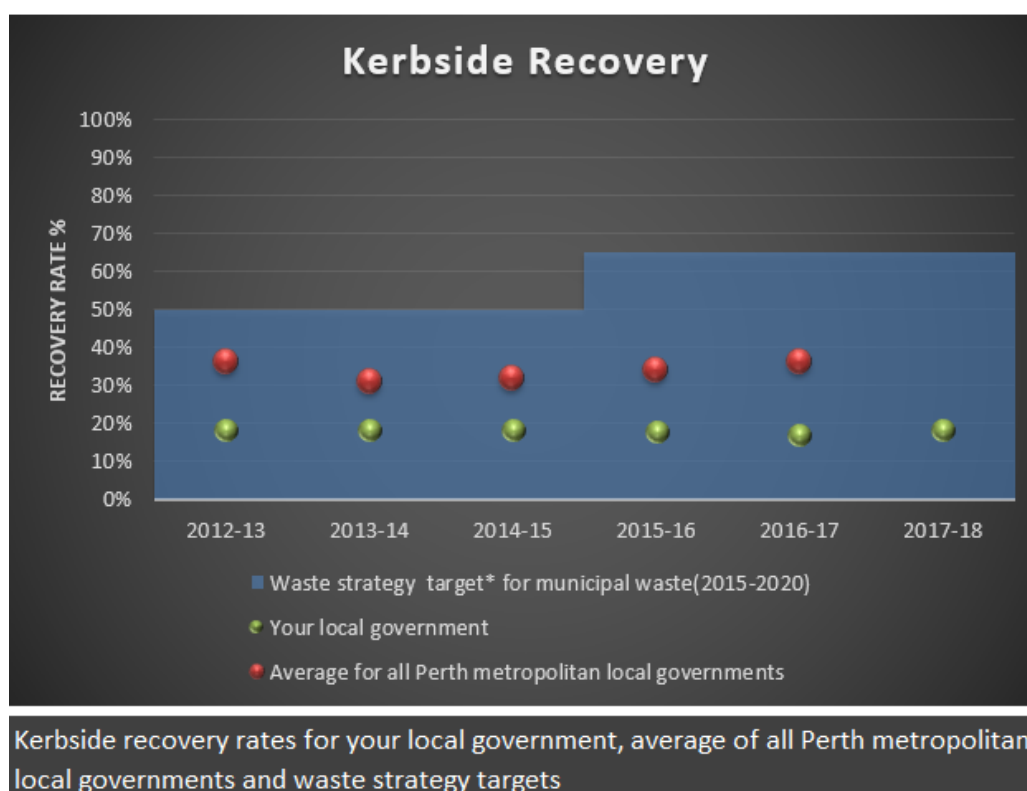
The City of Kwinana Waste Management Strategy 2017 considered various governance, social, environmental and economic factors as part of a multi-criteria analysis and rated the 2-bin system with waste from the green-lid bins to the waste to energy (WTE) plant in Kwinana as the best option for the City of Kwinana to achieve the set diversion targets. If the draft State Waste Strategy 2030 is adopted this may result in a different approach being required. Whilst, this plan has regard to the draft State Waste Strategy 2030, it is based on the current adopted approach, which has informed the City’s Waste Management Strategy (2017).

### 1.3 Kerbside Recovery Rates

The Department of Water and Environment Regulation (DWER) conducts an annual census of the waste and recycling services provided to households and commercial premises by local government in Western Australia. Information gathered through the census includes the quantity of materials collected, disposed to landfill and recovered by each type of waste and recycling service offered.

The City of Kwinana kerbside recovery rates for 2017/18 of 18% fell well below the State average as shown in Figure 4 and also the target diversion rate of 65% by 2020.

**Figure 4: DWER Kerbside Recovery Rates 2012/13-2017/18**



#### Kerbside recovery rate

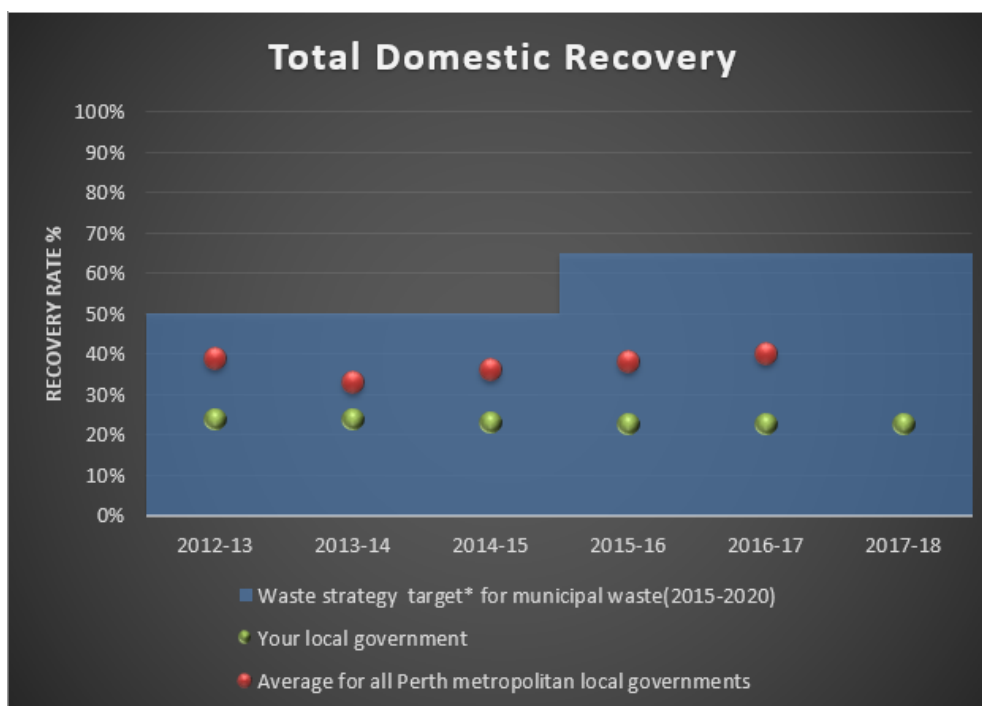
Kerbside recovery rates:	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Your local government	18%	18%	18%	18%	17%	18%
Average for all Perth metropolitan local governments	36%	31%	32%	34%	36%	
Waste strategy target* for municipal waste(2015-2020)	50%	50%	50%	65%	65%	65%

The recovery targets set out in the draft Waste Strategy 2030 for Objective 1 are:

- **2020** – Increase MSW material recovery to 65%
- **2025** – Increase MSW material recovery to 67%
- **2030** – Increase MSW material recovery to 70%

The City of Kwinana Total Domestic Recovery (kerbside and verge side separation) rates also fell well below the State average as shown in Figure 5.

**Figure 5: DWER Total Domestic Recovery Rates 2012/13-2017/18**



Recovery rates for all services for your local government, average of all Perth metropolitan local governments and waste strategy targets

**Recovery rate for all services**

Total recovery rates:	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Your local government	24%	24%	23%	23%	23%	23%
Average for all Perth metropolitan local governments	39%	33%	36%	38%	40%	
Waste strategy target* for municipal waste(2015-2020)	50%	50%	50%	65%	65%	65%

Resource allocation to waste education has increased since 2016 with the employment of a full-time Waste Minimisation Officer. The use of social media has increased with the aim of attracting the attention of a larger audience. This has enabled greater targeting of particular age groups; for example - persons ages 0 to 35 years, who may not necessarily have been reached by the printed media traditionally used for waste education.

A focused Waste Education Program of events and activities that is well communicated and promoted is considered important to support further improvements to waste diversion.

This plan therefore aims to increase waste diversion by 1% each financial year commencing with the baseline data of 23% - Objective 1.

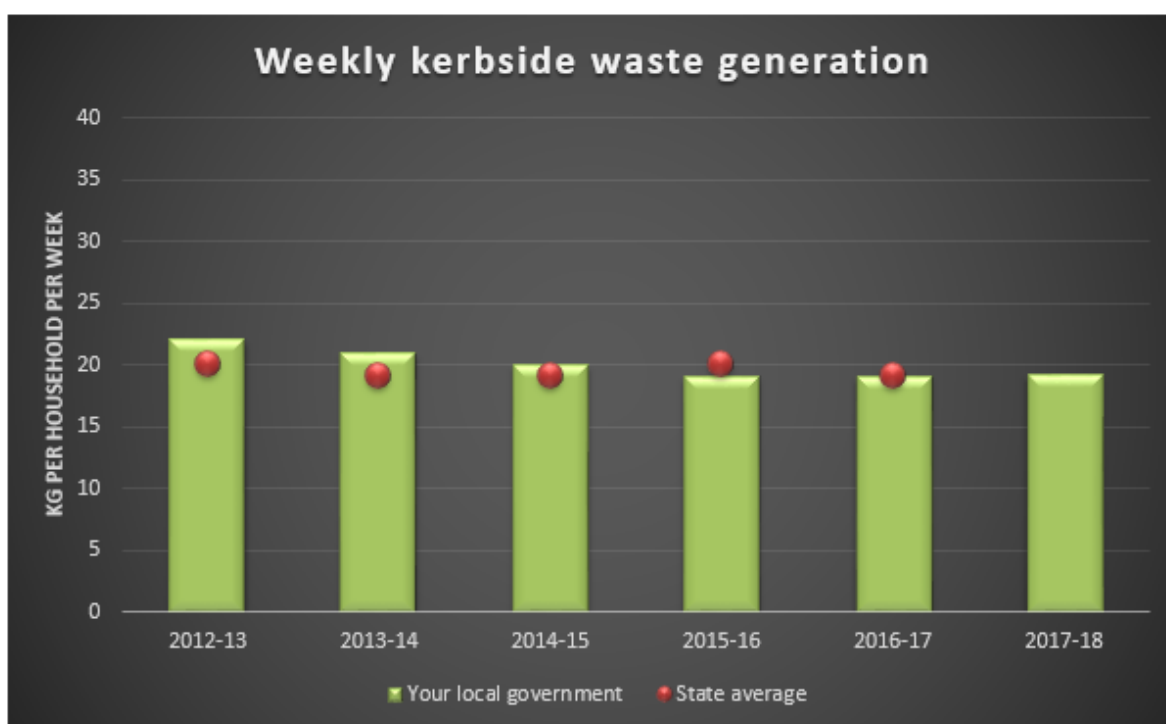
A typical Western Australian household creates approximately 28kg of waste each week. Approximately 10kg of this is recycled and the other 18kg is sent to landfill. On average WA households are generating around 20% more waste than the national average. The City's waste generation has reduced slightly since 2012-13, however currently sits at 19kg per household per week.

The avoid targets set out in the draft State Waste Strategy 2030 for Objective 2.2 are:

- **2025** – Reduction in waste generation per capita by 5%
- **2030** – Reduction in waste generation per capita by 10%

To achieve these targets the City would be required to reduce to approximately 18kg per household per week by 2025 and work towards 17 kg per household per week by 2030.

**Figure 6: DWER Weekly Kerbside Waste Generation 2012/13 – 2017/18**



Domestic kerbside waste generation, kilograms per household per week compared with state average

**Kerbside waste generation per household**

Waste per household per week (kg):	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Your local government	22	21	20	19	19	19
State average	20	19	19	20	19	

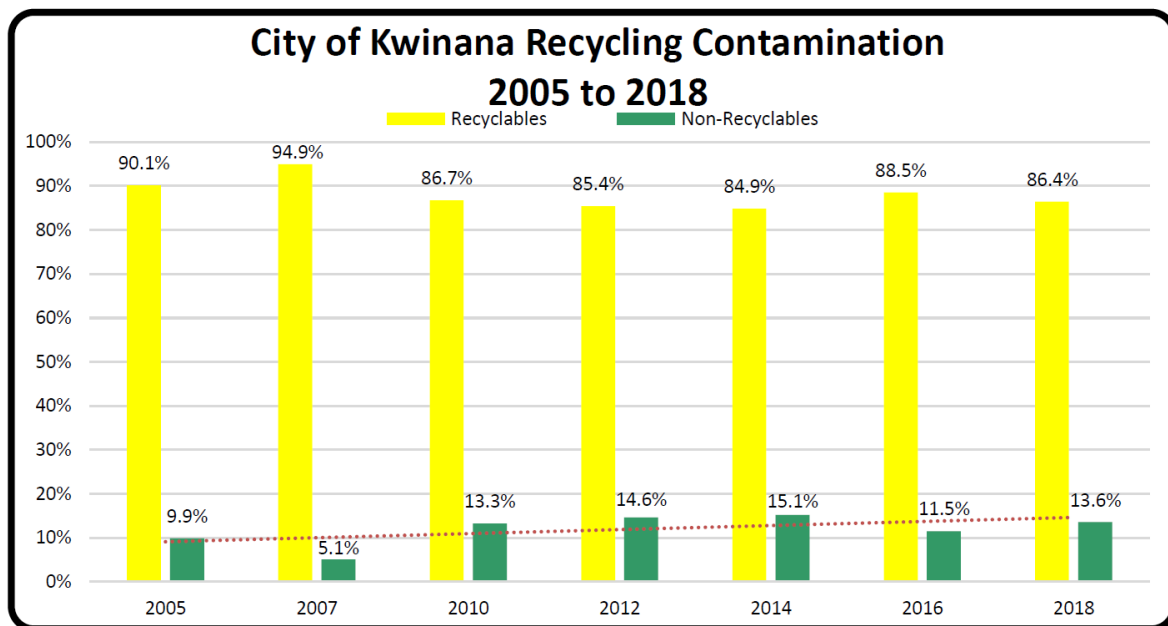
The plan aims to reduce kerbside waste generation per household by 10 kg per household per year - Objective 3. This equates to a reduction in 165 tonnes per annum for the 16,500 households in the City of Kwinana.



## 1.4 Contamination Rates

Biennial waste audits have been conducted by the SMRC from 2008 – 2015 in the same chosen sample area of the City. The Municipal Solid Waste (MSW) and recycling streams collected were sorted into categories of recyclable and non-recyclable components. The contamination rates for recycling and MSW component breakdown are shown in Figure 7 and Figure 8 respectively.

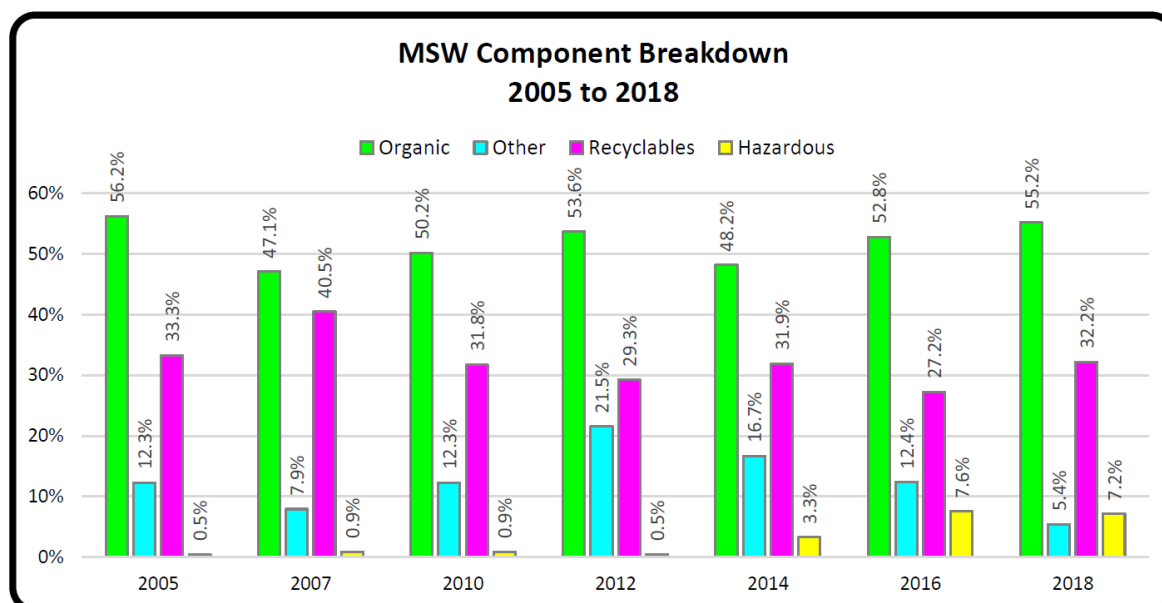
**Figure 7: Recyclables Contamination June 2005 to May 2018**



Contamination rates in the recycling bins have remained fairly consistent since 2010, and are currently at 13.6%. As displayed in Figure 7, there was only 5.1% contamination in 2007. However, as shown in Figure 8, it appears that recycling was very poor in that year as the waste bins contained 40.5% recyclables.

This Plan aims to reduce contamination in recycle bins by 1% biennially commencing with the baseline data of 13.6% – Objective 2.1. This means that the target of the City is to achieve 12.6% contamination by 2020.

**Figure 8: Municipal Solid Waste Component Breakdown June 2005 to May 2018**



Organic material makes up the majority of waste contained in the green waste bins averaging at 52% from 2005 to 2018.

It is also evident that based on the 2018 results, 32.2% of materials in the waste bin should be recycled as shown in Figure 8.

Hazardous items placed in the waste bin has also increased since 2014. Household Hazardous Waste (HHW) includes unwanted household products that contain chemicals or substances that can be harmful to the environment. The HHW program provides eight facilities in the metropolitan area of WA for the public to safely drop off their hazardous items for free. The closest points for Kwinana residents are located at Millar Road Landfill Facility and Henderson Waste Recovery Park. It is plausible that this has led to more amounts of hazardous materials in the waste bin. This Plan therefore, lists an action to host one HHW Collection Day in the City of Kwinana.

The City has recently arranged two collection bins for empty aerosol cans located at the Administration Office and the Works Depot. Residents are able to deposit empty aerosols in the receptacles and they are serviced by SUEZ and taken to a facility for recycling.

This plan aims to reduce recyclable material in waste bins by 5% biennially commencing with the baseline data of 32.2% - Objective 2.2. The target for the City in 2020 is therefore to have less than 27.2% recyclables in the waste bin at the 2020 audit.

## 2 Situational Analysis

### 2.1 Regional Characteristics

The City of Kwinana (the City) is situated in Perth's outer southern suburbs between 25 km and 37 km south of the Perth CBD and covers an area of approximately 120 km<sup>2</sup>.

According to the Australian Bureau of Statistics (ABS), the City of Kwinana had an estimated residential population of 41,866 as of 30 June 2017. This equates to a rate of growth of 1,808 persons per year since 2016 with 40,058 population in 2016.

In October 2018, waste collection services were provided to 16,241 households across the City.

The City's population is set to grow, with ID Forecast predicting an increase in the number of residents to 58,335 by 2024. This presents a number of challenges and requires that the City constantly resource ongoing and new waste education measures.

### 2.2 Current waste education and communication programs

#### 2.2.1 Waste Minimisation Officer

The role of the City's Waste Minimisation Officer is to establish strong working partnerships with schools, stakeholders and community groups within the City. The City's Waste Minimisation Officer currently provides:

- Waste and Recycling educational displays at events and workshops;
- Monthly Waste and Recycling social media posts;
- Waste and Recycling information stalls – partnership with Marketplace;
- Organisation and delivery of home worm farm and composting workshops;
- Promotion and organising the annual Garage Sale Trail event;
- Promotion of the Recycle Right campaign;
- Coordination and implementation of Bin Tagging programs;
- Visits and talks to schools/community groups;
- Organising and facilitating tours of the recycling facility for schools and community;
- Drafting the marketing material including recycle bin stickers, waste and recycle annual calendars etc.;
- Workplace recycling initiatives;
- Promotion and delivery of waste reduction workshops; and
- Management of customer enquiries in relation to waste minimisation.

The City's Waste Minimisation Officer liaises directly with other waste stakeholders including WA Local Government Association (WALGA), Department of Water and Environmental Regulation (DWER), Waste Wise Schools, Clean Schools, Keep Australia Beautiful, Switch Your Thinking, Waste Management Association of Australia (WMAA) and the Waste Educators Working Group.

City of Kwinana schools/centres that have participated in waste reduction/recycling programs include:

- Little Rascals Daycare Medina
- North Parmelia Primary School
- Orelia Primary School
- Medina Primary School
- Peter Carnley Anglican School
- Kings College
- St Vincents Primary School
- Early Years workshop via Little Green Steps at the Regional Resource Recovery Centre (RRRC) – attendance by Kwinana educators
- Clean Schools and Waste Wise School Workshops (Keep Australia Beautiful)
- Steam Workshops (Medina Primary School, Honeywood Primary School, North Parmelia Primary School, Bertram Primary School)

Educating members of the public provides an opportunity to inform others - friends, family and the wider community about waste and recycling.

## 2.2.2 Southern Metropolitan Regional Council (SMRC)

The City is a member of the SMRC and pays an annual contribution to SMRC for governance, research and development, communication and education. The SMRC is responsible for delivering innovative and sustainable waste management solutions for the benefit of the member local governments and the environment. Other member local governments are Town of East Fremantle, City of Fremantle and City of Melville. The SMRC provides the City with:

- Tours of the Regional Resource Recovery Centre.
- School incursions and presentations from the SMRC's Education Officer.
- Involvement in educational and promotional campaigns and events.
- Support and funding for joint local government programs
- Advice and assistance.

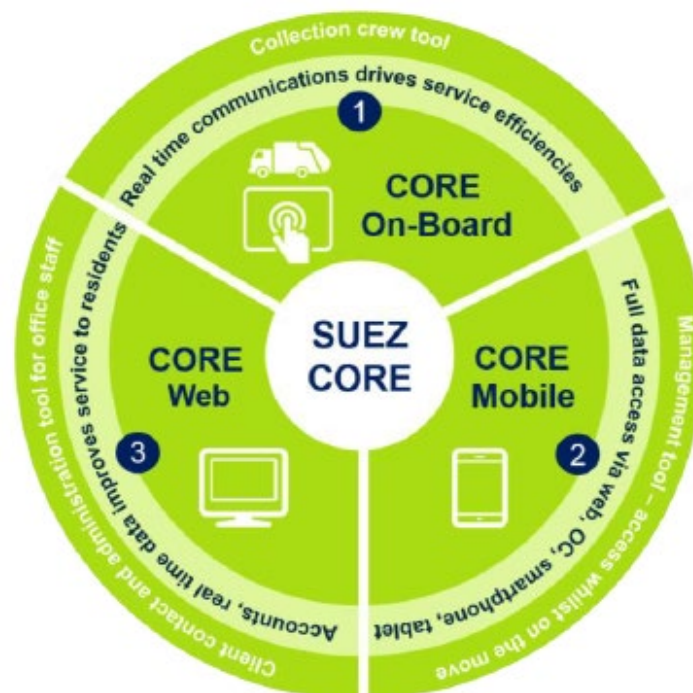


### 2.2.3 SUEZ Recycling and Recovery Pty Ltd (SUEZ)

The City's waste contractor, SUEZ provides bin stickers that are utilised for educational (bin placement criteria) and non-conformance (overweight, overloaded or contamination) related issues which are communicated to non-compliant users. Suez plan to provide a viewing deck for educational tours of the resource recovery facility at Bibra Lake. The tours will incur a user pays fee.

Recently there have been some changes to what items can be placed in the recycling bin. In conjunction with the Consistent Communications Collective, SUEZ has provided the City with a series of social media posts and FAQ's on the changes.

SUEZ is also looking to partner with the City on waste education messaging and a mobile application (app). SUEZ has committed to providing the City with its latest SUEZ CORE technology which includes live tracking of trucks and pictures of bins being emptied. This technology will provide the City with detailed information of bin presentation and households regularly contaminating bins.



## 2.2.4 Bin Tagging Program

### 2.2.4.1 Bin Tagging Pilot 2015

Bin tagging is a method of providing direct feedback on the content of waste and recycling bins to residents by placing a tag on each bin to indicate if the contents are appropriate. The tags provide specific feedback on the content of the bin as well as some general guidance on what can and should not be placed in the kerbside bin.

The City participated in the pilot program in 2015 in conjunction with WALGA with successful results as displayed in Figure 9. Approximately 2,000 properties were audited over four fortnightly periods. The rate of correct recycling improved, the amount of overall contamination decreased and the amount of recyclables in the waste bin reduced. The correct recycling rates increased from 36% in the first fortnight to 69% in the last fortnight.

**Figure 9: Bin Tagging Results 2015**

TOTAL	Fortnights (Number of households)				Fortnights (Percentage of households)			
	1	2	3	4	1	2	3	4
<b>WASTE</b>								
Recycling in waste bin	1010	905	525	557	69.13%	63.96%	38.32%	40.19%
No bin - Waste	352	398	443	424	19.42%	21.95%	24.43%	23.43%
Total Contamination	1536	1268	561	687				
<b>RECYCLING</b>								
Recycling ok	488	622	753	891	36.36%	47.96%	59.90%	68.91%
No bin - Recycling	471	516	556	517	25.98%	28.46%	30.67%	28.56%
Recycling in bags	468	458	296	239	34.87%	35.31%	23.55%	18.48%
Total contamination	1344	963	521	555	0.74	0.53	0.29	0.31
Overfull - Recycling					4.5%	9.5%	6.2%	4.4%
Total Households	1813	1813	1813	1810				

### 2.2.4.2 Bin Tagging Review 2016

A follow up review was conducted in February 2016 sampling 295 households within the City that were part of the initial bin tagging pilot in 2015. The review demonstrated that improvements to the community's waste management behaviour had been ongoing with 57.5% of the households recycling correctly.

**Figure 10: Bin Tagging Review Results 2016**

Waste Bin	Baseline Audit		Taping week		1 year later	
	HH	%	HH	%	HH	%
Recycling in Waste Bin (R)	167	57.20%	87	29.50%	103	35.20%
No Contamination (NC)	87	29.05%	134	45.85%	129	43.75%
No Bin (NB)	26	8.85%	49	16.30%	42	13.90%
Overfull Bin (O)	9	3.05%	9	3.20%	6	2.00%
<b>Recycling Bin</b>						
Recycling in Bags (B)	73	25.30%	44	15.15%	49	16.20%
No Contamination (NC)	89	30.15%	164	55.55%	169	57.45%
No Bin (NB)	54	18.05%	60	20.00%	52	17.55%
Overfull Bin (O)	18	6.55%	14	4.25%	6	2.00%
Sum contamination rate	190		87		77	



### 2.2.4.3 Bin Tagging 2017

A smaller scale bin tagging program was conducted by City staff in November 2017 on 563 properties. The rate of correct recycling improved, the amount of overall contamination decreased and the recyclables in the waste bin reduced as shown in Figure 11. The correct recycling rates increased from 43% in the first fortnight to 51% in the last fortnight. The amount of recyclables placed in the waste bin is of concern with 31% of properties continuing to place recyclables in the waste bin.

**Figure 11: Bin Tagging Results 2017**

TOTAL	Fortnight 1	Percentage	Fortnight 2	Percentage	Fortnight 3	Percentage
<b>WASTE BIN</b>						
Recycling in waste bin	220	39.08	226	40.14	176	31.26
No contamination	211	37.48	206	36.59	239	42.45
No Bin presented	100	17.76	110	19.54	130	23.09
Overfull Bin	5	0.89	10	1.78	0	0
<b>RECYCLE BIN</b>						
Recycling in Bags	101	17.94	73	12.97	61	10.83
No contamination	241	42.81	261	46.36	287	50.98
Total contamination	144	25.58	150	26.64	104	18.47
No Bin presented	135	23.98	150	26.64	152	27.00
Overfull bin	21	3.73	16	2.84	18	3.20

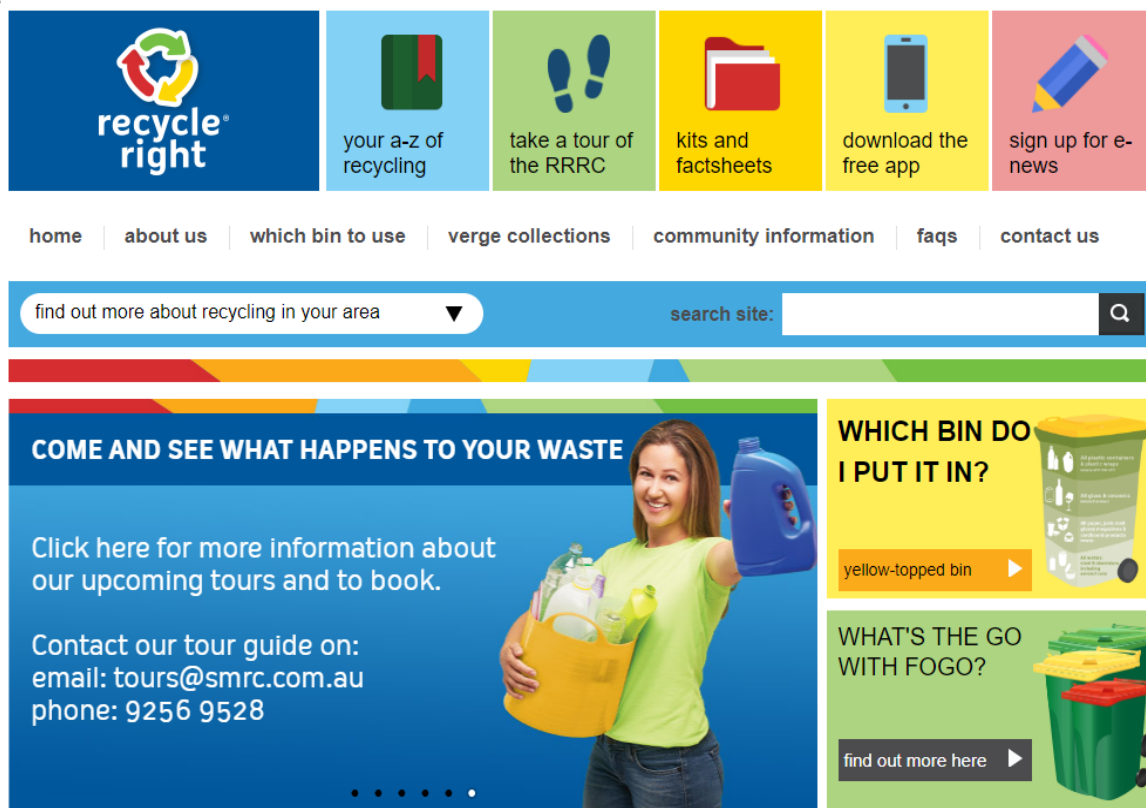
Bin Tagging has proven to be very successful in influencing kerbside behaviour change and reducing contamination in both the waste and recycle bins. The City will continue to use bin tagging to engage residents in better source separation practices as these results suggest that the barrier to the community's performance reflects the level of waste education inputs.

## 2.2.5 Recycle Right

Recycle Right is a campaign which encourages and assists residents and businesses in Western Australia to recycle, reduce their rubbish and buy more recycled products. Developed by the SMRC, the campaign has its own website and a mobile phone app dedicated to waste and recycling in WA.

Recycle Right has a dedicated link to each local government area and lists the items in an A-Z guide to assist residents to follow the 3 R's rule – Reduce, Reuse and Recycle.

The Catalyse Waste Attitudes and Behaviour Survey results (see section 2.3), show that community awareness of Recycle Right and the Recycle Right mobile phone app is not high within the City and requires further promotion.



## 2.2.6 Recycle bin stickers and public place bin stickers

Many residents are unsure of the correct items that can be placed in the recycle bin. Even though many products are recyclable, they cannot be recycled through the kerbside recycle bin. Recycle bin stickers have been developed to encourage the correct items to be disposed and are available to residents. The stickers as below are placed on all new recycle bins and replacement bins by the City's contractor and are also distributed at events and workshops.

### What goes in your yellow-topped bin?



**Plastic Containers & Bottles**  
(clean, empty, no lids)



**Aluminium & Steel**  
(clean & empty)



**Paper (not shredded)**  
**Cardboard (flattened)**



**Glass**  
(clean & empty)

---

**These items don't belong in this bin:**



**NO aerosol cans or gas bottles**



**NO batteries or electronic waste**



**NO clothes or textiles**



**NO garden or food waste**



**NO materials in bags**



**NO nappies**



**NO soft plastics or bags**



**NO ropes, cables or hose**

Thank you for recycling right! Your efforts help us recycle valuable resources.

**All items should be clean, dry and empty with lids removed and placed in the bin loosely**





For all your recycling information and hints and tips on living more sustainably, please visit [recycleright.wa.gov.au](http://recycleright.wa.gov.au)

Public place bins are designed to encourage correct separation with images on the wraps. By providing residents with an easy method of categorising their waste they can see which items they can and cannot recycle or dispose of accordingly.

## 2.2.7 Social Media

Social media is a useful tool to promote waste management tips, initiatives and recycling information. Regular social media posts are communicated on various platforms in conjunction with the Annual Marketing Plan (Attachment A).

## 2.2.8 Events

The City developed a formal partnership with the Kwinana Marketplace Shopping Centre to enable both parties to pool resources and promote community focused initiatives that target areas such as: health; job readiness; community safety; environmental sustainability and community services.

The Waste Minimisation Officer hosts a waste and recycling information stall at the Marketplace at various times during the year aligned to waste minimisation e.g. Plastic Bag Ban, Plastic Free July and National Recycling Week and also attends community events.

## 2.2.9 Community Workshops

The home worm farm workshops have proved to be very popular with the community. The workshops include a demonstration about recycling organic waste at home and gives residents the opportunity to purchase a subsidised Worm Café. Seven workshops have been held to date with a total of 221 attendees. The average number of purchases of Worm Cafes is 17 per session.

The first home composting workshop was held in November 2018 in conjunction with National Recycling Week. The workshop included a demonstration using 220L composting bins. Residents have the opportunity to purchase the twin compost bins at a subsidised purchase cost and the workshop was well attended with 44 community members.

By utilising one of these methods, residents can reduce the volume of household waste by approximately one third. Composting not only reduces waste in the kerbside bin but also creates organic fertiliser. Opportunity exists to offer Bokashi compost bins to residents at a reduced cost to encourage further reduction of kitchen waste in the community.



### 2.2.10 Community Tours

Regular free tours of the RRRC are held for the community to educate interested people on the recycling process. The tour takes approximately one and a half hours and residents receive an informative behind the scenes look from the observation deck at the facility. They learn how all the different waste types are recycled, learn the importance of making sure that waste is placed in the correct bin and where the waste goes to be recycled.

### 2.2.11 Own Your Impact

The State Government have developed a website, Own Your Impact, [www.ownyourimpact.com.au](http://www.ownyourimpact.com.au) to encourage behaviour change. The program aims to get households thinking more about the waste they generate. The program is committed to reducing waste and to support households and workplaces to do the same. There are many resources available on the web page for homes, schools and workplaces.

Through better education it is hoped that all Western Australians will own their impact, working towards reducing the volume of waste produced at home and in the community by:

- Wasting less and buying only what we need to consume (Avoid);
- Recycling more and re-purposing, repairing and reusing items to give them a longer life (Recover); and
- Improving the recovery of materials so that more can be recycled and less will need to be produced from scratch (Protect).

The campaign and website was launched in September 2018.



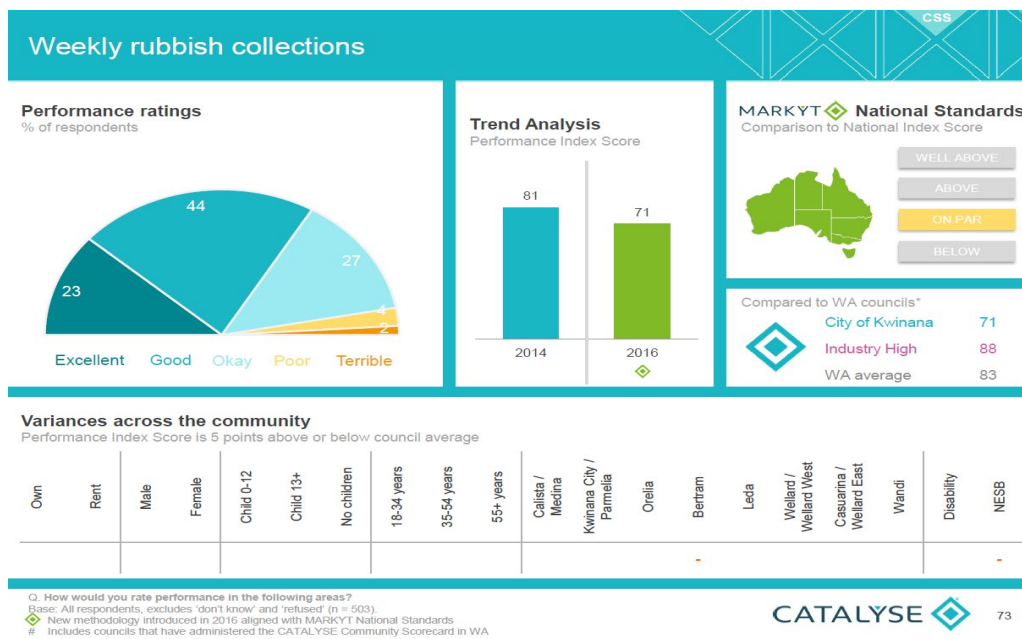
The graphic features the 'Own Your Impact' logo in the top left, which includes a green handprint icon and the text 'OWN YOUR impact'. Below the logo is a blurred background image of people on a beach. A green horizontal band across the middle contains the text 'Waste is everyone's problem' in white, followed by 'IT'S TIME WE OWN IT.' in large, white, hand-drawn letters. Below this band is a photograph of a discarded plastic water bottle on a sandy beach. A white rounded rectangle overlaid on the bottom of the image displays the number '891,963,522' in large red font. Below the number, in small black text, it reads 'kilograms of household waste have been sent to landfill in WA so far this year.' At the bottom of the graphic, the text 'WA, LET'S BREAK UP WITH WASTE' is written in a blue, hand-drawn font.

## 2.3 Community Satisfaction

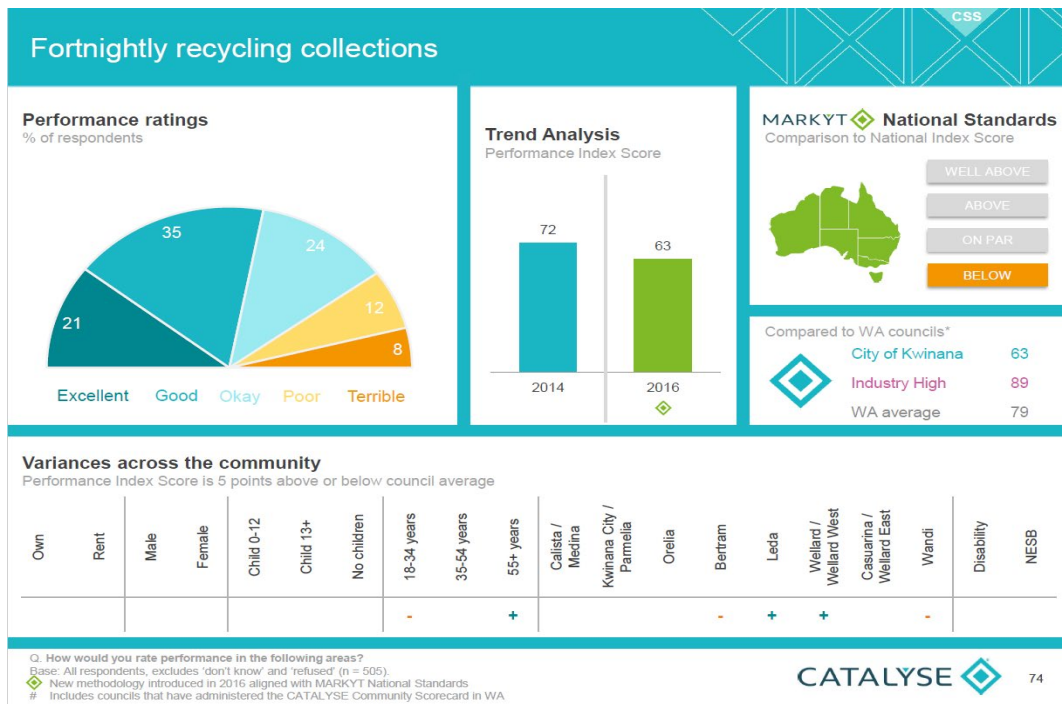
### 2.3.1 Catalyse Community and Wellbeing Survey 2016

In May 2016, the City arranged a Community Services and Wellbeing Survey prepared by Catalyse to better understand and meet local community and wellbeing needs. The results shown in Figures 12, 13 and 14 in the scorecard show that the community perceptions in Kwinana have fallen below the industry standards for waste collections.

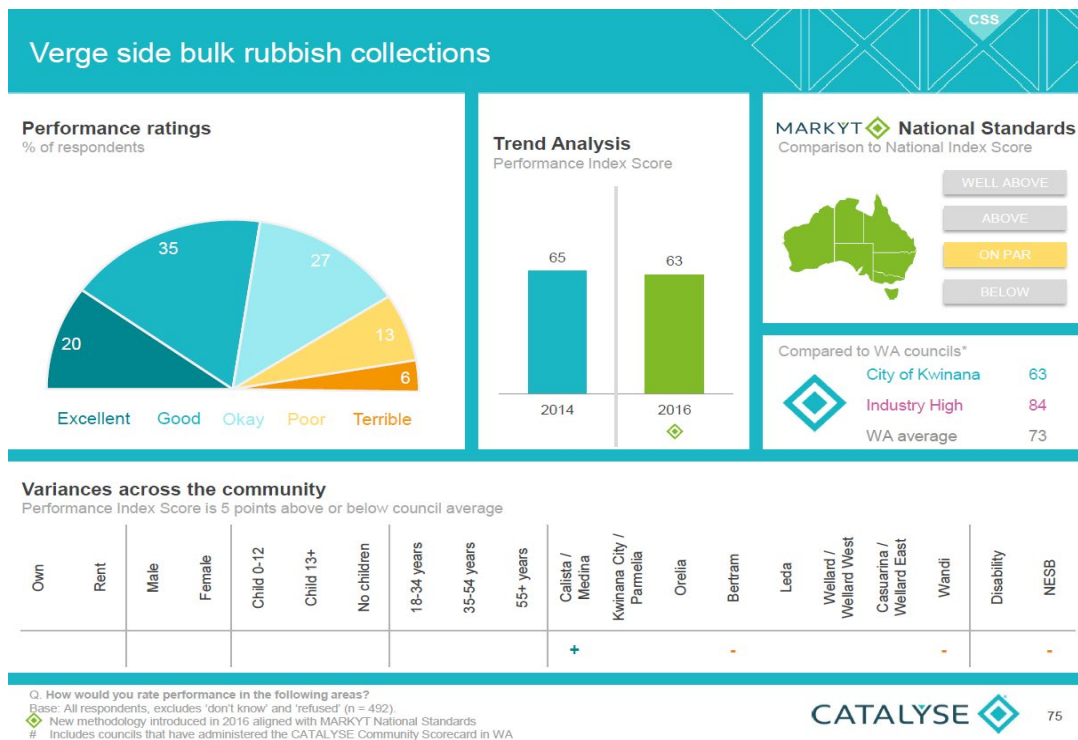
**Figure 12: Performance Ratings for Weekly rubbish collections**



**Figure 13: Performance ratings for fortnightly recycling collections**



**Figure 14: Performance ratings for verge side bulk waste collections**



### 2.3.2 SMRC Catalyse Waste Attitudes and Behaviour Survey 2018

In April 2018, the SMRC conducted a survey to measure waste attitudes and behaviour. The scorecard was promoted through various communication channels. Scorecards were also mailed to 5,000 randomly selected households – 1,000 in each member local government area at that time. 826 residents who live within one of SMRC's member councils completed a postal or online survey.

A summary of the results for Kwinana indicated:

- 95% of residents think it is very important to increase recycling.
- 85% agree that recycling helps to reduce the impact of climate change and global warming.
- 61% of residents believe they do not get enough waste and recycling information.
- A large number of SMRC and Kwinana residents highlighted the need for improved drop off facilities for junk and hazardous materials.
- 73% of Kwinana residents felt the recycling collection service was good.
- The RRRC facility in Canning Vale was rated well by 68% of Kwinana residents.
- The main suggestions to improve communication and education were to provide a more comprehensive list of what can be recycled and which bins to use for different items.
- Encourage companies to reduce waste, including plastics, packaging, bags, straws and disposable cups.
- Introduce more initiatives to encourage people to reduce and re-use items.
- Introduce a third bin.
- There is increased interest in building waste to energy plants.
- Use a variety of communication channels to reach people with waste information such as bin stickers, community talks and documentaries.



Community suggestions to encourage residents to recycle correctly or reduce waste further shows that education is the highest ranking as shown in Figure 15.

**Figure 15: Community suggestions to recycle or reduce waste further**



### 3 Stakeholders

The following stakeholders have been identified as either being interested in, concerned about, affected by, having a vested interest in, or are involved in some way or another with waste management in the City of Kwinana.

#### 3.1 Primary Stakeholders

- Residents, schools, businesses, sporting groups, clubs, associations, community groups and environmental organisations of the City of Kwinana
- Staff and elected members of the City of Kwinana

#### 3.2 Other Stakeholders

- SUEZ Recycling and Recovery Pty Ltd (SUEZ)
- Western Maze Pty Ltd T/A WA Recycling Services
- Southern Metropolitan Regional Council
- Minister for Environment
- Western Australian Local Government Association (WALGA)
- Department of Water and Environmental Regulation (DWER)
  - The Waste Authority of WA
  - Waste Wise Schools
  - Keep Australia Beautiful WA
- WMAA Waste Educators Working Group
- Department of Education and Sustainable Schools WA
- Waste management service providers
- Not-for profit environmental organisation/programs, including:
  - Mobile Muster
  - Planet Ark (National Recycling Week, Close the Loop cartridge recycling)
  - Switch Your Thinking
  - Little Green Steps program
  - Plastic Free July
  - Charity organisations (Good Samaritan Industries, Spine & Limb Foundation, St Vincent's, Salvation Army, etc.)

## 4 Aims & Objectives

### 4.1 Aim

Increase community awareness and understanding of current waste management practices consistent with the requirements of the City of Kwinana Waste Management Strategy and the State Waste Strategy 2030.

### 4.2 Objectives

1. Maximise waste diversion from current waste collection systems;
2. Minimise contamination in kerbside collection bins;
3. Minimise waste generation; and
4. Increase community awareness of sustainable waste practices and initiatives.

### 4.3 Targets

- Objective 1 - Increase waste diversion by 1% each financial year commencing with baseline data from the Waste Census 2017/18 of 23%.
- Objective 2.1 - Reduce contamination in recycle bins by 1% biennially commencing with baseline data from SMRC Waste Audit 2018 of 13.6%.
- Objective 2.2 - Reduce recyclable material in waste bins by 5% biennially commencing with baseline data from SMRC Waste Audit 2018 of 32.2%.
- Objective 3 - Reduce kerbside waste generation per household by 10 kg per household per year commencing with baseline data obtained from the 2017/18 Waste Census of 19kg per household per week.
- Objective 4 - Deliver a minimum 90% of relevant set actions in the Action Plan each year.

## 5 Target Audience

The following groups have been identified as the target audiences for the community waste education program.

### 5.1 Residents

The actions and beliefs of residents directly affect the quality and quantity of waste and recycling collected and consequently disposed of by the City of Kwinana. If residents do not have the appropriate knowledge, skills and attitude towards waste and recycling, they cannot be expected to make informed decisions. As the *Waste Management Strategy 2017* focuses on the waste services provided to residents by the City, this is the key target audience.

The desired outcome is improved recycling practices by the local community, reduced waste generation and the increased understanding and awareness of waste as a resource.

### 5.2 Schools

The City currently has eight schools involved in the Clean Schools Program funded by Keep Australia Beautiful. Ten schools are involved in the Waste Wise schools program funded by the Waste Authority. The SMRC and the City's Waste Minimisation Officer also attend schools for incursions and presentations. These partnerships assist in the promotion and distribution of waste and recycling information. Further Clean School and Waste Wise workshops are planned to encourage new participants to the program.

### 5.3 Non-residential entities / Commercial properties

Commercial properties in the City are entitled to the same service as residential properties if requested. Many businesses opt for their own private contractor. A waste audit is planned for small businesses to gauge recycling methods, and to offer advice on waste minimisation. The City's fee structure encourages material recovery by charging less for recycling.

### 5.4 Internal target groups

City staff and Elected Members present an opportunity to lead by example and provide opportunities for residents to participate in reducing waste and correct recycling practices. City staff and Elected Members through their behaviour and attitudes have the ability to influence and support the waste behaviours and attitudes of the wider community.

Some employees are also residents of the City, and along with Elected Members, have the potential to communicate the City's waste messages to the wider community. It is therefore important that internal communications are informative and motivating.

There is an opportunity to reduce the amount of waste produced through internal operations, such as the implementation of the City's Administration Office Worm Farm and removal of under desk waste bins. Approximately 16kgs of food waste per week is being diverted. This makes a direct contribution to waste reduction.

The major aim of the Plan, for internal groups, is to introduce opportunities to increase recycling and reduce waste generated by the City's facilities. Raising awareness of how waste is processed in the City is important.

Events held for both staff and the broader community provide a unique opportunity for positive waste management practices and messages to be communicated to attendees. During the event approvals process, encouraging the use of low or no waste products and practices, as well as consideration of waste collection and management processes, would help promote the City of Kwinana Waste Management Strategy 2017 'Where do we want to get to - Educating the community to ensure positive waste separation behaviour change occurs' in a practical manner.

## **5.5 Other Local Governments and the broader community**

Networking with other local governments and industry gives opportunities to exchange best practice knowledge, have access to new waste programs or initiatives and stay updated with industry developments.

## 6 Education and Communication Methods

### 6.1 Waste Authority Key Messages

The Waste Authority has six key messages that aim to foster engagement and behaviour change in individuals and communities across the State. Future waste education programs developed by the City will align with these messages.

#### **1 Your actions make a difference**

Everyone can choose to do the right thing and adopt smarter waste management practices in the home, business and public open spaces.

#### **2 Put it in the right bin**

Everyone needs to be involved - it's important to not only put litter in the bin, but also in the right bin.

#### **3 Accept and take responsibility**

It's time for everyone to accept and take responsibility for their waste, as it is a valuable resource that can be recovered and recycled to reduce the use of raw materials and protect our environment.

#### **4 Driving smarter waste management**

We support the community, business and industry to improve the management of waste and recycling in WA.

#### **5 We invest the landfill levy in waste programs**

We use the landfill levy to fund key programs and incentives, and work collaboratively to create the right environment for Western Australians for decades to come.

#### **6 Waste recycling has true value**

Recycling is good for the environment and has positive economic benefits including creating more jobs than landfill

### 6.2 Waste Authority Communications Guidelines (2015)

The Waste Authority Communications Guidelines (2015) provides guidance and suggestions to assist local government in the rollout of waste related community engagement. One of the recommended studies, undertaken by WRAP UK (*Barriers to recycling at home*, 2008) reported that there are a variety of factors which influence people's waste and recycling behaviours and attitudes, with these attitudes contributing to their 'recycling competence' as shown in Figure 16.

Figure 16 – Relevance of communications at each competence level

Recycling rate	Recycling Competence level (1 to 7)	Description	WRAP Committed recycler status	Population %		7. Honestly Disengaged	6. Stalled Starters	5. Cautious participants	4. Sideline supporters	3. Concerned consumers	2. Waste watchers	1. Positive greens
0%	1. Recycling unaware	Just not on their radar, no idea about it at all	Non recycler	}	6%	✓	✓					
0%	2. Aware but inactive	Knows about it but have not seriously contemplated doing it	Non recycler			✓	✓					
Sporadic	3. Contemplated but not engaged	May have dabbled, possibly elsewhere, may do occasionally, drifted back	Recycler but not 'committed'	}	23%		✓	✓				
A little	4. Unreliable	Recycle but sometimes forget, sometimes miss out, recycle opportunistically not regularly	Recycler but probably not 'committed'			✓	✓	✓				
A fair amount	5. Trying their best	Usually take part, recycle 'staple' items like newspapers but confused about other items	Committed recycler	}	41%				✓	✓		
A lot	6. Broadly competent	Reliable and regular but may still miss out some materials or collections	Super-committed recycler								✓	✓
100%	7. The complete recycler	Recycle all available items of all recyclable materials all of the time	Super-committed recycler	}	30%						✓	✓

**Figure 17: Relevance of each communications message and media to people at each Recycling Competence Level**

Recycling Competence Level (1 to 7)	Message Description	a. Instructional - What, When and How to recycle. Details of Services and how to use them	b. What is recycling? Why is the council asking you to do it? What are the benefits to individuals & environment	c. Dispelling the myths - education. What is good and bad in recycling and waste disposal.	d. What happens to the recyclables that are collected	e. Feedback and thanks - How our district is doing compared to the rest of the UK and Europe.	f. What is the cost of recycling, the cost of waste disposal and LATS fines/allowances
<b>1. Recycling unaware</b>	Just not on their radar, no idea about it all	Communications methods: <ul style="list-style-type: none"> <li>• Instructional leaflets</li> <li>• Collection calendars</li> <li>• Bin/Box stickers</li> <li>• Contamination tags</li> </ul>					
<b>2. Aware but inactive</b>	Know about it but have not seriously contemplated doing it		Communications methods: <ul style="list-style-type: none"> <li>• Door knocking with leaflets</li> <li>• Targeted local displays/events</li> <li>• TV and local radio advertising</li> <li>• Local and national newspapers</li> <li>• Outdoor advertising</li> </ul>				
<b>3. Contemplated but not engaged</b>	May have dabbled, possibly elsewhere, may do occasionally, drifted back						



<b>4. Unreliable</b>	Recycle but sometimes forget, sometimes miss out, recycle opportunistically not regularly			Communications methods: <ul style="list-style-type: none"> <li>• Leaflets</li> <li>• Newsletters</li> <li>• PR</li> <li>• Council newspaper</li> <li>• Local press</li> <li>• National TV documentaries</li> </ul>			
<b>5. Trying their best</b>	Usually take part, recycle 'staple' items but confused about other items				Communications methods: <ul style="list-style-type: none"> <li>• Vehicle livery</li> <li>• PR</li> <li>• Newsletters</li> <li>• Council Newspaper</li> <li>• Advertorials</li> <li>• Events/Displays</li> </ul>		
<b>6. Broadly competent</b>	Reliable and regular but may still miss out some materials or collection					Communications methods: <ul style="list-style-type: none"> <li>• PR</li> <li>• Newsletters</li> <li>• Council newspaper</li> <li>• Advertorials</li> <li>• Events/displays</li> </ul>	
<b>7. 'The Complete Recycler'</b>	Recycle all available items of all recyclable materials all of the time						Communications methods: <ul style="list-style-type: none"> <li>• PR Newsletters</li> <li>• Council</li> <li>• Newspaper</li> <li>• Advertorials</li> </ul>

In order to educate residents, different messages and communications methods are required as displayed in Figure 17. Some households may not consider waste as a priority, whilst others may be looking for ways to improve their waste reduction. The City's waste education plan therefore aims to provide support for residents at all stages of engagement, and ideally move more residents from Level 1 Recycling Unaware to more competent levels.

### 6.3 Social Practice Theory / Behaviour Change

Social practice is a theory within psychology that seeks to determine the link between practice and context within social situations. Practices are routine activities with shared social meanings. E.g. cooking, cleaning, gardening, driving, skateboarding, recycling, and reusing - it is 'the doing, not the thinking'.

Practices have three main features:

- Material – the infrastructure, tools, equipment or other 'stuff' required to undertake a practice.
- Competence – both the individual's knowledge, habits and skills and the institutional understandings such as policies and procedures which shape a practice.
- Meaning – the cultural resonance, importance, purpose and image of a practice that governs how or whether it is carried out.

They change continually and gradually over time as their elements (material, competence, meaning) individually change.

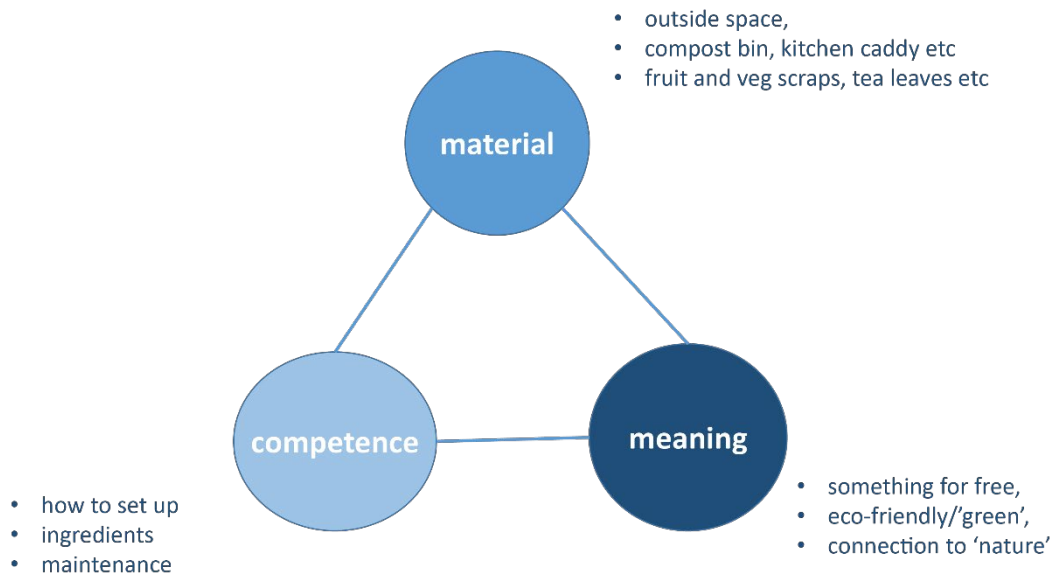
Many of the approaches currently used to instil 'good' waste behaviours are based on psychological theories and are therefore focussed on individuals' behaviours. Over time, they have evolved to incorporate social influences, but still focus on influencing individuals.

Social Practice Theory is distinct from attitudes and habit-based methods as the practice, rather than the individual, is the subject of intervention. Practices are repeated ongoing, often routine activities with shared social meanings. Their elements and the links between them change over time alongside changes in the practice. A practice may appear similar to behaviour but the term practice also includes social meaning, competence and infrastructures

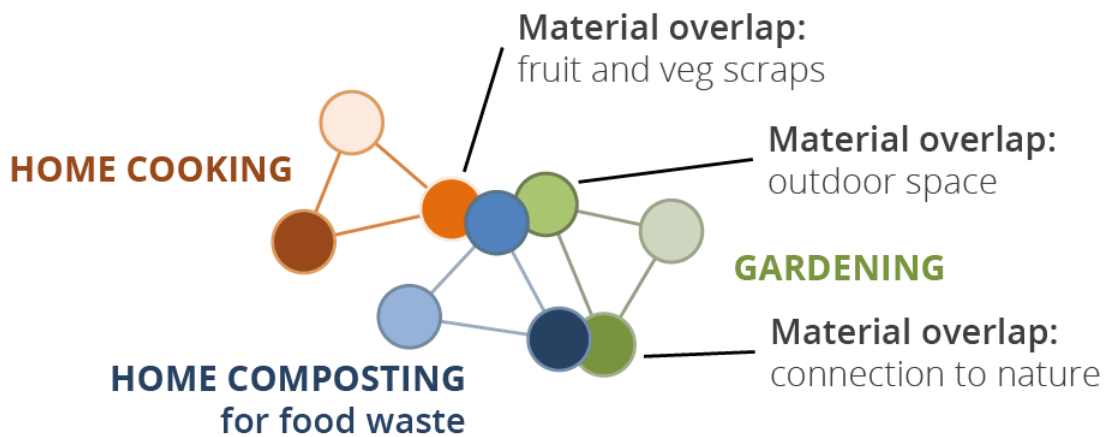
Figure 18 contains an example using home composting for food waste as a practice. It includes examples of items required to undertake the practice classified under material, competence and meaning. This analysis indicates that home composting food waste will only persist in the presence of both gardening and home cooking as practices, as the elements required for home composting are common with elements for these practices. As urban density increases, gardens shrink or disappear. Those that cook 'from scratch' may be outnumbered by those that rely on take-away, eating out or pre-prepared food. If home cooking and gardening are not common across a population, home composting cannot be a mainstream ('normal') solution to the management of kitchen food waste.

**Figure 18 - Home composting of food waste**

**Practices in practice – home composting food waste**



	Home composting food waste	Gardening	Home cooking
Material	Outside space Compost bin Fruit and veg scraps etc.	Outdoor space Tools Seeds/seedlings etc.	Sink Stove Ingredients – fruit and veg etc.
Competence	How to set up Ingredients Maintenance etc.	Plant needs Soil needs Plant maintenance etc.	Recipes Experience Hygiene etc.
Meaning	Something for free, Eco-friendly 'green' Connection to nature etc.	Relaxation Display Connection to nature, etc.	Sociability Nurture Fuel etc.



Social work practice is part of a process of evidence building where ideas have to be adapted or abandoned in the light of changing circumstances or new information. Different approaches are needed to suit different circumstances. No single theory can explain everything.

An example of such practice is the Administration Office waste management. Officers under desk waste bins were altered to recycle bins and the City's cleaning contractor no longer serviced them. Large recycle and small waste bins were strategically placed throughout the building and staff became responsible for their own waste that they generate. This involves sorting the waste at the end of each day and placing food waste in the staff kitchen food caddies for the worm farm and placing recyclables and other waste in the centralised bins. Many staff have altered the way they manage their waste at home by becoming more aware of the system in the workplace and have continued the practice in their homes. There are a variety of education and communication methods to influence changing the behaviours and attitudes of the community. Not all methods will suit all members of the community.

The action plan outlines a range of actions to assist in improving the recycling and waste related behaviours across the City of Kwinana. The Plan will be reviewed at the end of 2019 to determine continued relevance for 2020. A full review of the plan will be undertaken at the end of 2020.

## 7 Budget

The total budget allocated for the 2018/19 financial year for the waste education program is \$124,054. The funds for the program are derived from the annual waste fees and are further broken down into the following project items:

1. Annual waste and recycling calendar and brochure	\$15,000
2. Newspaper advertising and targeted promotion	\$12,320
3. Recycle Right stickers/public place bin stickers	\$6,500
4. General educational tools	\$5,000
5. New and special waste minimisation initiatives	\$9,498
6. Household Hazardous Waste Removal program	\$2,000
7. Home worm farm / composting workshops	\$25,000
8. Bin tagging	\$40,000
9. Garage Sale Trail	\$5,000
10. Tours of the Regional Resource Recovery Centre	\$3,736

The Action Plan indicates which project item will be used to fund each action. As an example, Item 1 above has been listed as 7.1 in the Action Plan under the Budget Allocation column.

## 8 Action Plan

### Objectives

1. Maximise waste diversion from current waste collection systems
2. Minimise contamination in kerbside collection bins
3. Minimise waste generation
4. Increase community awareness of sustainable waste practices and initiatives

No.	Action	Objective	New	Current	Timeline	Measure of Success	Budget Allocation	Responsibility
1	Bin Tagging of 2,000 households	1, 2 and 3		X	Feb 19 – April 19	6 % improvement of kerbside waste management practices annually	7.8	Waste Minimisation Officer (WMO)
2	Facilitate 4 home worm farm workshops each year	3 and 4		X	March, June, Aug, Nov 2019 March, June, Aug, Nov 2020	Purchase of 80 Worm Cafes per year	7.7	WMO
3	Facilitate 3 home composting workshops each year	3 and 4		X	March, May, Sept 2019 March, May, Sept 2020	Purchase of 60 compost bins per year	7.7	WMO
4	Organise 5-6 recycling facility tours for schools and the community	2 and 3		X	2-3 tours every 6 months on average	20 participants per tour	7.10	WMO / SMRC
5	Organise and facilitate a household hazardous waste (HHW) collection	2	X		May 2019 1 collection day/weekend	Divert 100kg of HHW from landfill	7.5	WMO

No.	Action	Objective	New	Current	Timeline	Measure of Success	Budget Allocation	Responsibility
6	Facilitate incursion programs by SMRC to local schools and early learning centres	4		X	1 incursion each quarter	Completion of 4 per year	7.4	WMO/SMRC
7	Organise the Garage Sale Trail Campaign	3		X	Aug - Oct 2019 Aug - Oct 2020	Annual Impact report findings	7.9	WMO
8	Arrange and deliver waste and recycling information stalls at public events and shopping centres	4		X	1 per quarter	Completion of 20 community surveys at each event	7.4	WMO
9	Design and organise bin stickers and other promotional material	2		X	As required	Feedback provided by community members	7.3	WMO
10	Facilitate topical waste reduction workshops	3 and 4		X	2 workshops per year	Survey – percentage of satisfied participants	7.5	WMO
11	Waste minimisation newspaper advertisements	All		X	2 advertisements per year	Completion of 2 advertisements	7.2	WMO
12	Educate and promote correct placement of junk and green waste verge collection items	3	X		Social media posts before each collection round	Reduction in amount of unauthorised goods on verge	7.2	WMO / Admin Officer Waste and Special Projects (AOWSP)
13	Update and arrange distribution of annual waste/recycling	1 and 2		X	May – June each year	Delivery to each household by June 2019	7.1	WMO / AOWSP

No.	Action	Objective	New	Current	Timeline	Measure of Success	Budget Allocation	Responsibility
	calendar and verge collection brochures							
14	Social media waste and recycling posts <ul style="list-style-type: none"> <li>• General posts</li> <li>• Mobile Muster</li> <li>• Special programs &amp; campaigns</li> </ul>	1,2 and 3		X	Monthly, as required	Completion of at least 12 posts per year	7.5	WMO
15	Draft and distribute a community waste survey	All	X		One per year May – June.	Increase in percentage of satisfied community members	7.5	WMO
16	Website update for waste and recycling page including videos on correct practices	All	X	X	February 2019	Improvement in accessibility and applicability of information on the website	7.5	WMO / Marketing
17	Partner with Keep Australia Beautiful to deliver Clean Schools program and Waste Wise Schools	4		X	One teacher workshop per annum	Increase school participation	Nil	WMO
18	Create a policy and checklist for waste minimisation at community events	3 and 4	X		Complete by June 2019	Practical application of the policy and checklist at local events	Nil	WMO / Events team
19	Use SUEZCORE technology to educate	1 and 2	X		As required	Follow up at least 90-100% of reported cases of contamination	Nil	WMO / AOWSP



No.	Action	Objective	New	Current	Timeline	Measure of Success	Budget Allocation	Responsibility
	the community when implemented							
20	Waste Education trailer/van to store display bins and materials	4	X		December 2019	Receiving grant funding and completion of project	Grant application	WMO
21	Promote state-wide recycling consistent communications model and Own your Impact	All	X		Ongoing	Number of clicks from the City's website	7.5	WMO
22	Arrange and deliver the Grow it Local initiative	3 and 4	X		March - May 2019	Number of participants involved in the project	7.5	WMO
23	Promote REDcycle collection points to remove soft plastic placement in recycle bins	2 and 3		X	Ongoing	Reduction of soft plastics in recycle bin from audit results	Nil	WMO
24	Promote special programs, eg The Last Straw and Responsible Cafes	2 and 4	X		2019 and 2020	Participation rates	Nil	WMO
25	Audit a local business and provide advice on waste collection receptacles and improvements to recovering waste	2 and 3	X		Complete by June 2019	Diverting recoverable waste from landfill	Nil	WMO

No.	Action	Objective	New	Current	Timeline	Measure of Success	Budget Allocation	Responsibility
26	Facilitate the provision of recycling stations for depositing of batteries, light globes and mobile phones in the City	2 and 3	X		Complete by June 2019	Quantity of materials received	7.5	WMO / SMRC
27	Billboard advertising for special projects	1, 2 and 3	X		As required	Community waste survey responses	7.5	WMO
28	Make available discounted Bokashi buckets for purchase by residents	3 and 4	X		Introduce by September 2019	Take-up of rate of Bokashi buckets	7.7	WMO
29	Complete actions as per Environmental Health Annual Marketing Strategy	All		X	June 19	All actions completed	All	WMO

## 9 Glossary of Terms

AOWSP	Admin Officer Waste and Special Projects
City	City of Kwinana
DWER	Department of Water and Environmental Regulation
HHW	Household hazardous waste
MSW	Municipal solid waste
RRRC	Regional Resource Recovery Centre
SMRC	Southern Metropolitan Regional Council
WALGA	Western Australian Local Government Authority
WARR Act	<i>Waste and Resource Recovery Act 2007</i>
WMAA	Waste Management Association of Australia
WMO	Waste Minimisation Officer
WTE	Waste to energy

## 10 References

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- Department of Water and Environmental Regulation – *Waste and Recycling Census 2017-2018* – August 2018
- Libby Eustance - *What will it take for good waste practices to become normal in the Western Suburbs of Perth* - Social Practice Theory Masters Dissertation - November 2016.

## 15.2 Comments and Recommendations to the City of Rockingham on the East Rockingham Waste to Energy Facility Development Application – Lot 1 (No.26) Office Road, East Rockingham

### DECLARATION OF INTEREST:

There were no declarations of interest declared.

### SUMMARY:

The City has received a Development Application, for comment from the City of Rockingham, for the proposed East Rockingham Waste to Energy Plant located on Lot 1 (No.26) Office Road, East Rockingham, which adjoins the southern boundary of the City of Kwinana (Refer Attachments A-E). As the development cost exceeds \$10 million, the application will be determined by the Metro South West Joint Development Assessment Panel (JDAP). It is anticipated that the JDAP will consider the proposal at a meeting to be held in early February 2019.

Pursuant to the City of Rockingham Local Planning Scheme No.2, the site is zoned 'Special Industry' and falls within the Industrial Precinct 14 (IP14) Structure Plan area. Under the provisions of the IP14 Structure Plan, the proposal is located within Precinct 2 – Environmentally Acceptable Heavy Industry. A proposal for a waste to energy plant on the subject lot was previously considered and approved by the EPA (EPA Report No. 1513 and Ministerial Statement 994) in June 2014. The previous proposal was also granted development approval by the JDAP in September 2014 (DAP/14/00530).

More recently Council, at its Ordinary Council Meeting of 14 February 2018, considered a submission to the Environmental Protection Authority (EPA) on a revised proposal for the East Rockingham Waste to Energy Plant. The proponents of the proposed waste to energy plant sought approval from the EPA to change the previously approved method of operation from a 'gasification' waste to energy technology to a 'moving grate' waste to energy technology (similar to the technology approved for the Phoenix Waste to Energy Plant in the Kwinana Industrial Area). The revised EPA proposal also sought approval of the following changes:

- An increase to the annual waste throughput from the previously approved 225,000 tonnes per annum (TPA) to 330,000 TPA;
- Removal / deletion of the previously approved Materials Recycling Facility;
- Increasing the power generation capacity of the plant from the approved 16.2 megawatts (MW) to 28.2 MW;
- Changing the approved waste feedstock to permit the use of up to 30,000 TPA of sewerage sludge; and
- Re-positioning the building layout on site.

The EPA has subsequently considered the revised proposal and have concluded that the proposal is environmentally acceptable, and may be implemented subject to conditions. It should be noted that this proposal is affected by the changes to conditions of approval proposed by the EPA outlined in a report to Council on 14 November 2018. The environmental approval of the proposal by the Minister for Environment is expected to occur in December 2018. In this regard, the current development application represents the next step of approval processes for the waste to energy plant, and reflects the revised proposal approved by the EPA.

**15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM**

City Officers have reviewed the development application documentation for the proposal and have identified a number of matters that need further consideration. A number of these matters have also identified the need for conditions of approval to be recommended to the City of Rockingham and the JDAP. These matters are discussed in detail within the following report.

In regards to the above, City Officers have prepared a submission to the City of Rockingham on the East Rockingham Waste to Energy Development Application (Attachment G) and recommend the following.

**OFFICER RECOMMENDATION:**

That Council endorses the submission (Attachment G) on the East Rockingham Waste to Energy Development Application, and forward it to the City of Rockingham for its consideration.

**DISCUSSION:**

The East Rockingham Waste to Energy proposal is located on Lot 1 Office Road, East Rockingham in the Rockingham Industrial Zone (Refer Attachments A – E). In regards to the land use planning aspects of the proposal, the development of a waste to energy plant on this lot has previously received planning approval from the JDAP in September 2014 (DAP/14/00530), and is a permissible use within the 'Special Industry' Zone. In this context, whilst the proposal has changed from an environmental technology point of view, the land use requirements from a town planning perspective have not changed.

The previously approved proposal was for a 'gasification technology' waste to energy plant, which has been revised to a 'moving grate technology' waste to energy plant (similar to the technology approved for the Phoenix Energy proposal within the Kwinana Industrial Area). The EPA has subsequently considered the revised proposal and have concluded that the proposal is environmentally acceptable, and may be implemented subject to conditions. The environmental approval of the proposal by the Minister for Environment is expected to occur in December 2018. In this regard, the current development application for consideration represents the next step of approval processes for the waste to energy plant, and reflects the revised proposal approved by the EPA.

The proposed development application comprises of the following components:

- Construction and Operation of a Resource Recovery Facility (Waste to Energy Plant);
- The plant is comprised of an administration building, waste bunker, moving grate combustion system, boiler, bottom ash handling and treatment area and other associated infrastructure;
- A maximum building height of 60.3 metres which relates to the 'Stack', the other buildings on site range in height from 4 – 50 metres;
- Two separate vehicle access points from Office Road to separate light and commercial vehicles entering and exiting the facility; and
- Associated car parking and landscaping areas.

**15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM**

The combustion process will operate 7 days per week, 24 hours per day. It will be staffed with permanent employees based on a rotating 12 hour shift pattern.

With respect to the previously approved waste to energy plant on the subject lot, (refer Attachment F) the siting of buildings and plant have changed as part of this current application (refer Attachment E). In this regard a number of buildings have been moved on the site, most notably is the relocation of the administration building and vehicle weighbridge and truck staging areas.

The administration building and vehicle weighbridge / truck staging areas have effectively exchanged locations on site (refer Attachments E and F). The administration building is now proposed to be located adjacent to the Office Road boundary, and the vehicle weighbridge and truck staging area has been relocated to run parallel to the eastern boundary. Additionally, the waste bunker area has been relocated adjacent to the southern property boundary in lieu of being located on the Office Road frontage. The remainder of the buildings and plant remain in the general location as previously approved. The building setbacks to Office Road for the processing areas of the plant have been increased under the current proposed application from 69 metres under the original application to 95 metres under the current application. From a streetscape and general amenity point of view, the current application presents a better streetscape and amenity outcome when compared to the previous approval.

The purpose of this report is to consider the submission to the City of Rockingham (Attachment G) for the revised East Rockingham Waste to Energy proposal currently open for public comment. The aspects of the development application addressed in the submission are outlined below.

Location:

One concern that was also raised by the City in its EPA submission, relates to the location of the proposed waste to energy facility in the context of the broader Kwinana Industrial Area and the predominant wind direction experienced in the area. Whilst it is acknowledged that the East Rockingham Waste to Energy facility has received previous approvals to operate a Waste to Energy Plant on the subject lot (approval under the *Environmental Protection Act 1986* (EPA Report No. 1513, Ministerial Statement 994, EPA Report No. 1624, and development approval under the City of Rockingham Local Planning Scheme (DAP/14/00530)), City Officers hold concern regarding the location of the facility and the potential air quality impacts it may generate for residents within the Calista, Leda and Medina localities. City Officers are of the opinion that given the prevailing wind direction in the area, during periods of plant shut down or facility down time, the proposal has the potential to negatively impact on the air quality of the residents of Calista, Medina and Leda through the release of fugitive gas and odour emissions. In this regard, it is the opinion of City Officers that the location of the proposal should be reconsidered and an alternative site be sought closer to the core of the Kwinana Industrial Area (KIA) where the prevailing wind direction will direct any fugitive emissions over the existing industrial areas and not residential zoned land.

15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM

Air Quality:

The air quality emissions report provided as part of the Environmental Review process predicted that the emissions from the facility would comply with the relevant standards in most cases. However, City Officers have concerns with certain aspects of the modelling with particular regard to any potential fugitive emissions during emergency shutdown scenarios. The application states that during a number of emergency shut down situations, remaining waste still smouldering on the grate may release some pollutants (CO, VOC) which are not treatable in the air pollution control system. These pollutants may be released untreated into the atmosphere and then subject to the prevailing winds from the south west, blowing towards residential areas. City Officers raised the potential air quality concern as part of the Environmental Review process, and it was considered by the EPA that the emissions from the plant could be managed.

In regard to air quality, City Officers consider that a condition be recommended to the City of Rockingham as follows:

- *'The proponent shall make near to real time data on emissions publicly available by displaying emissions on the proponents website and at the site entrance.'*

A similar condition was placed on the approval of the Phoenix Waste to Energy proposal located within the core of the Kwinana Industrial Area. The above recommended condition is considered appropriate given the uncertainty regarding the potential fugitive emissions during emergency shutdown scenarios. In this regard, by providing real time data to the broader community the proponent can be held to account for any exceedances of the EPA approved emissions levels.

Odour:

The odour report provided as part of the Environmental Review predicts that during periods of unplanned and planned shut downs, an odour contour of 2.5 odour units will be present up to 750 metres from the facility. In this regard, the City is aware of a number of cases where 2 odour units have caused significant impacts on sensitive receptors for up to 2 kilometres (from the odour source) - Biowise McLaughlin Road, Postans, and Wool Scourers East Rockingham. These impacts have occurred on many occasions. As such, City Officers are of the opinion that an odour contour which exceeds 2.5 odour units beyond the boundary of the facility is unacceptable, and all measures should be undertaken to reduce this odour emission as far as possible so as not to cause any odour impacts on the surrounding areas.

With regard to odour, City Officers consider that the facility should seek to reduce odour emissions as far as practicable. The EPA approval for the plant has recommended that the operator undertake additional odour modelling upon commissioning of the facility (with a view to implementing opportunities to further reduce odour emissions) and employ a public odour complaints and resolution register. In this regard, City Officers consider that a condition should be recommended to the City of Rockingham requiring the proponent implement an odour complaints register.

The recommended condition is as follows:

- *'Prior to occupation of the development, the proponent shall implement, and thereafter maintain for the life of the development, a public odour complaints register and resolution procedure to address any odour concerns raised by the public to the satisfaction of the City of Rockingham in consultation with the City of Kwinana. The applicant shall provide a copy of the register of complaints and resolution outcomes on a quarterly basis to the City of Rockingham and City of Kwinana.'*



15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM

Noise:

Noise emissions from the facility will have the potential to impact on residences located within the suburbs of Calista and Leda. In particular, residences in the vicinity of Westbrook Road, Wellard Road, Edmund Place, Coleman Road and Harrison Way in Calista, as well as residents in Sloan Drive and Mercer Court in Leda are modelled as receiving sound level impacts in the range of 25 – 30 decibels. The aforementioned residential streets are located on elevated land that is less sheltered from noise originating in the Western Trade Coast (WTC) due to topographical undulations along the axis of Wellard Road. Noise modelling systems have design criteria that can attribute up to a 5 decibel “error margin” in predictions which is considered acceptable. However, in the case of the Calista and Leda residential streets listed above, an error of 5 dB (A) in combination with a 5 dB (A) (tonal component identified as part of the flu gas emissions but then discounted in the noise modelling), may result in exceedances of the Noise Regulations assigned night time levels.

With regard to noise emissions from the facility, cumulative noise levels generated from the WTC have reached levels where they are impacting on the surrounding residential areas within Medina and Calista. In this regard, the position of the City of Kwinana and Kwinana Industries Council is that noise levels generated from the WTC should continue to be improved upon through redevelopment and upgrade to existing industry, and new industry will be encouraged to reduce noise levels as far as possible. In this regard, City Officers consider that a condition and advice note should be recommended to the City of Rockingham, as follows:

- Condition: *‘Within 60 days of commissioning of the plant operations, the proponent shall provide to the City of Rockingham, certification from a suitably qualified acoustic consultant that the noise emissions resulting from the operations on the site comply with the Environmental Protection Act and Regulations. The certification shall demonstrate that the plant, at all times for the life of the development, will comply with the Environmental Protection (Noise) Regulations 1997 from time of commencement of operations through to maximum throughput capacity. The proponent is to undertake works to address any of the outcomes arising from the certification provided by the acoustic consultant and maintain compliance with the certification requirements at all times.’*
- Advice: *‘The proponent is advised to liaise with the Kwinana Industries Council (KIC) to include the noise emissions from the development into the KIC cumulative noise model.’*

Traffic Modelling and Road Network

Traffic modelling for the proposal indicates that the plant will accept waste up to six days a week between 6:00 a.m. and 4:00 p.m. The traffic report estimates that the development will generate approximately 206 vehicular movements per day (50% inbound / 50% outbound) as follows:

- 146 truck movements including:
  - 65 trucks (standard refuse trucks up to 27.5m B Double trucks) arriving and departing each day, six days per week to deliver waste;
  - Up to 7 trucks per week to transport materials and remove bottom ash residue for disposal;
  - An estimated average rate of 1 vehicle per day entering or exiting the site while delivering chemicals; and
- 60 light vehicle movements (based on 30 full time staff during operation).

**15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM**

The traffic modelling has stated that all of the heavy vehicle traffic associated with the development will be originating from and destined to the south via Mandurah Road and Kulija Road to access Kwinana Freeway and of the light vehicle movements 50% originate from and are destined to the north and 50% originate from and are destined to the south. The proposed truck route accessing the development is to head north along Mandurah Road and turn onto Office Road to the development. Trucks exiting the development will head west along Office Road and turn south onto Patterson Road, Ennis Avenue, Dixon Road then onto Kulija Road to the Kwinana Freeway.

City Officers have considered the traffic modelling for the proposal and consider that the surrounding road network has the capacity to accommodate the increase in traffic proposed by the development. In this regard however, City Officers note that as a result of increased traffic, the standard of Office Road should be upgraded to cater for the increased heavy vehicle traffic. Office Road is currently a single carriageway with no kerbing, drainage or lighting. In this regard, the standard of Office Road should be increased to facilitate the proposed 24-hour operation of the proposed waste to energy facility. In addition, the Office Road / Patterson Road and Office Road / Mandurah Road intersections are not designed to accommodate B-Double vehicles.

City Officers have subsequently recommended the following road upgrade conditions to the City of Rockingham:

- *'The proponent shall upgrade the full length of Office Road to the satisfaction of the City of Rockingham in consultation with the City of Kwinana and shall include the following requirements:*
  - i. *Kerbing, drainage, lighting and landscaping;*
  - ii. *Pavement widening in the vicinity of the proposed site crossovers to allow trucks to enter and exit the development lane correct and to facilitate passing vehicle movements;*
  - iii. *Upgrading of the Office Road / Mandurah Road intersection to facilitate and accommodate the lane correct turning movements of B-Double trucks proposed to enter the development.'*
- *'The proponent shall upgrade the intersection of Office Road and Patterson Road in accordance with the recommendations of the 'Transport Impact Statement – Proposed Materials Recovery and Waste Conversion Facility – Document #1308009-TIA-003 – Dated 26 April 2018 – Prepared by Shawmac Consulting Civil and Traffic Engineers' to the satisfaction of the City of Rockingham on advice of Main Roads Western Australia. All works and associated costs shall be at the proponent's expense with construction to be completed prior to occupation of the site.'*

Waste Management

Whilst the development application addresses the plant waste acceptance criteria to ensure all wastes processed through the facility comply with the requirements of the EPA approvals, the application does not address how any wind-blown or fugitive waste on-site will be managed. City Officers have considered the development application supporting documentation and hold concerns that there may be the potential for rubbish to become wind-blown or prematurely released from waste vehicles entering and exiting the development. In this regard, City Officers recommend the following condition to address the management of waste on site.

**15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM**

- *'A Waste Management Plan that addresses the management and maintenance of fugitive waste generated on site or from trucks entering / exiting the development shall be submitted to and approved by the City of Rockingham prior to occupancy of the development. Upon commencement of operations the Waste Management Plan shall be thereafter implemented and maintained for the life of the development to the satisfaction of the City of Rockingham.'*

**Conclusion**

The proposed East Rockingham Waste to Energy Plant complies with the City of Rockingham Local Planning Scheme No.2 from a land use permissibility perspective, and as such, can be approved on the subject site. As discussed in this report, the proposal for a waste to energy plant was previously granted planning approval on the subject lot by the JDAP in September 2014. The current development application for assessment is reflective of the proposal assessed by the EPA which is expected to receive Ministerial approval in December 2018. Whilst the application is approvable under the City of Rockingham Local Planning Scheme No.2, the matters as discussed in this report require further consideration. A number of recommended conditions of approval are proposed to manage potential impacts resulting from the waste to energy facility.

**LEGAL/POLICY IMPLICATIONS:**

For the purpose of Councillors considering a financial or impartiality interest only, the proponent is New Energy Corporation Pty Ltd and the land owner is Landcorp.

*Environmental Protection Act 1986;  
Planning and Development Act 2005;  
City of Rockingham Local Planning Scheme No.2.*

**FINANCIAL/BUDGET IMPLICATIONS:**

There are no financial management implications related to this item.

**ASSET MANAGEMENT IMPLICATIONS:**

There are no asset management implications related to this item.

**ENVIRONMENTAL IMPLICATIONS:**

The East Rockingham Waste to Energy Revised Proposal has been assessed by the EPA with regard to the potential environmental impacts it may cause. The environmental approval of the proposal by the Minister for Environment is expected to occur in December 2018. The purpose of this report is to consider the development application and the potential impacts of the facility in respect to social amenity, odour, noise and air quality.

**15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM**

**STRATEGIC/SOCIAL IMPLICATIONS:**

This proposal will support the achievement of the following outcome and objective strategy detailed in the Corporate Business Plan.

Plan	Outcome	Objective
Corporate Business Plan	Regulatory and Legal	6.6 To implement the long term strategic land use planning for the social, economic and environmental wellbeing of the City.

**COMMUNITY ENGAGEMENT:**

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

**PUBLIC HEALTH IMPLICATIONS:**

The proposal has the potential to negatively impact on the following determinants of health Built Environment – Environmental Quality and Neighbourhood Amenity.

**RISK IMPLICATIONS:**

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

Risk Event	The City of Rockingham / Metro South-West JDAP consider the proposal without considering the issues raised in the City's submission.
Risk Theme	Providing inaccurate advice/ information
Risk Effect/Impact	People/Health
Risk Assessment Context	Strategic
Consequence	Moderate
Likelihood	Possible
Rating (before treatment)	Moderate
Risk Treatment in place	Share – Specific conditions provided to the City of Rockingham in response to request for comment.
Response to risk treatment required/in place	Ensure City of Rockingham are aware of the City's concerns regarding the revised proposal.
Rating (after treatment)	Moderate

15.2 COMMENTS AND RECOMMENDATIONS TO THE CITY OF ROCKINGHAM ON THE EAST ROCKINGHAM WASTE TO ENERGY FACILITY DEVELOPMENT APPLICATION – LOT 1 (NO.26) OFFICE ROAD, EAST ROCKINGHAM

**COUNCIL DECISION**

**366**

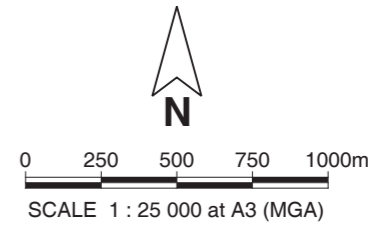
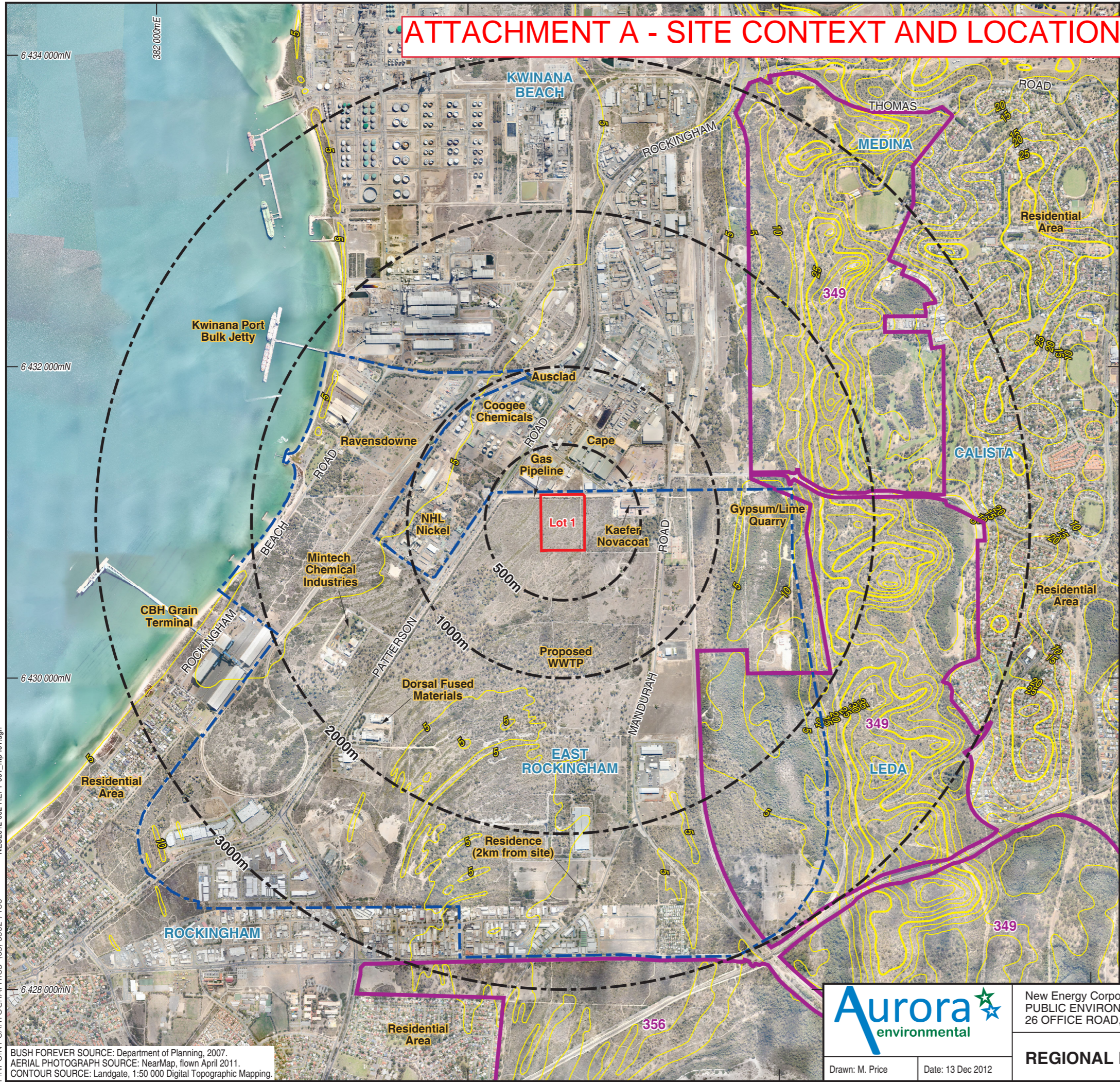
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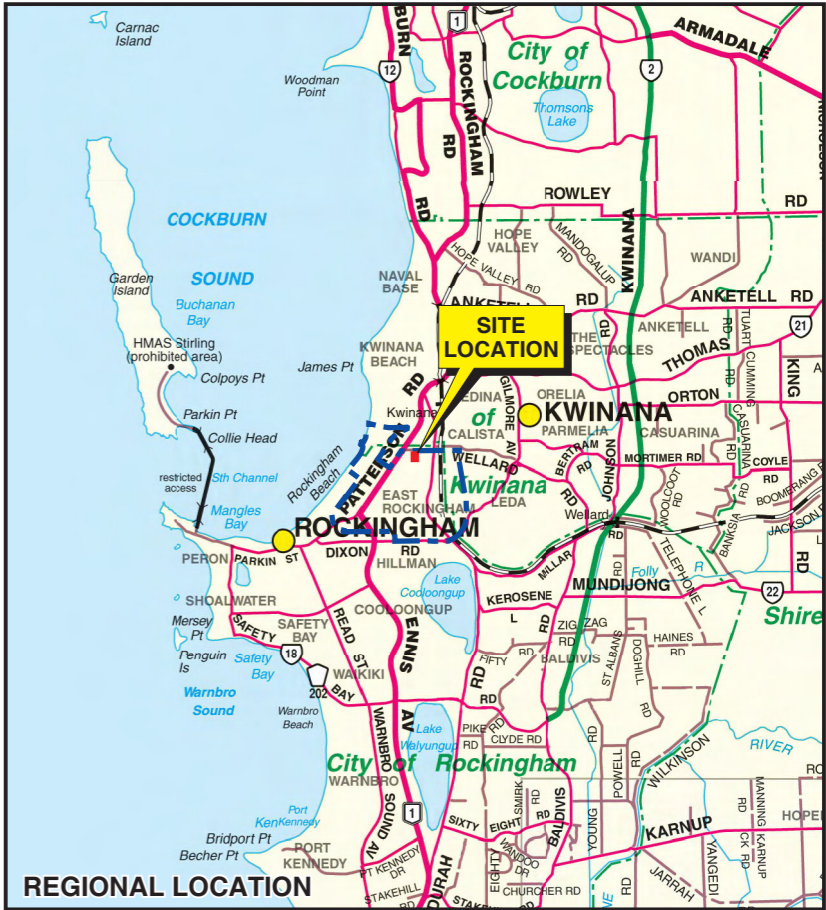
**That Council endorses the submission (Attachment G) on the East Rockingham Waste to Energy Development Application, and forward it to the City of Rockingham for its consideration.**

**CARRIED  
5/0**

# ATTACHMENT A - SITE CONTEXT AND LOCATION



- Legend**
- Site Boundary
  - - - Rockingham Industrial Zone Boundary
  - Topographic Contour (m AHD)
  - Bush Forever Site Boundary
  - 349 Bush Forever Site Number



PINPOINT CARTOGRAPHICS (08) 9562 7136  
 NEC2012-002-REPT-001\_mp-101.dgn

BUSH FOREVER SOURCE: Department of Planning, 2007.  
 AERIAL PHOTOGRAPH SOURCE: NearMap, flown April 2011.  
 CONTOUR SOURCE: Landgate, 1:50 000 Digital Topographic Mapping.



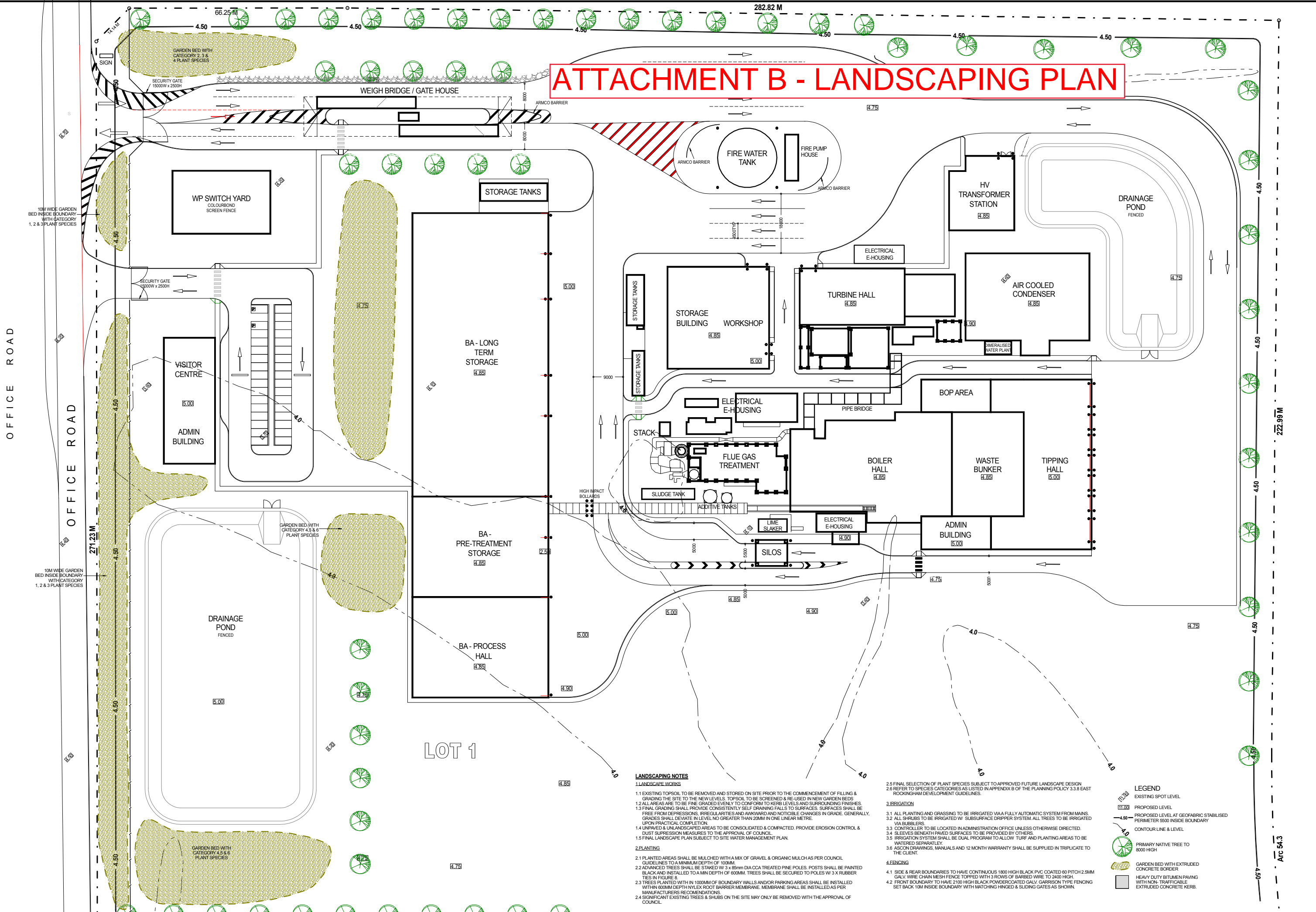
Drawn: M. Price      Date: 13 Dec 2012

New Energy Corporation  
 PUBLIC ENVIRONMENTAL REVIEW - NEC WASTE TO ENERGY  
 26 OFFICE ROAD, EAST ROCKINGHAM

## REGIONAL LOCATION & SURROUNDING LANDUSE

**Figure 1**  
 Job: NEC2012-002

# ATTACHMENT B - LANDSCAPING PLAN



### LANDSCAPING NOTES

- 1. LANDSCAPE WORKS**
  - 1.1 EXISTING TOPSOIL TO BE REMOVED AND STORED ON SITE PRIOR TO THE COMMENCEMENT OF FILLING & GRADING THE SITE TO THE NEW LEVELS. TOPSOIL TO BE SCREENED & RE-USED IN NEW GARDEN BEDS.
  - 1.2 ALL AREAS ARE TO BE FINE GRADED EVENLY TO CONFORM TO KERB LEVELS AND SURROUNDING FINISHES.
  - 1.3 FINAL GRADING SHALL PROVIDE CONSISTENTLY SELF DRAINING FALLS TO SURFACES. SURFACES SHALL BE FREE FROM DEPRESSIONS, IRREGULARITIES AND UNWARRANTED AND NOTICEABLE CHANGES IN GRADE. GENERALLY, GRADES SHALL DEViate IN LEVEL NO GREATER THAN 20MM IN ONE LINEAR METRE.
  - 1.4 UNPAVED & UNLANDSCAPED AREAS TO BE CONSOLIDATED & COMPACTED. PROVIDE EROSION CONTROL & DUST SUPPRESSION MEASURES TO THE APPROVAL OF COUNCIL.
  - 1.5 FINAL LANDSCAPE PLAN SUBJECT TO SITE WATER MANAGEMENT PLAN.
- 2. PLANTING**
  - 2.1 PLANTED AREAS SHALL BE MULCHED WITH A MIX OF GRAVEL & ORGANIC MULCH AS PER COUNCIL GUIDELINES TO A MINIMUM DEPTH OF 100MM.
  - 2.2 ADVANCED TREES SHALL BE STAKED W/ 3 x 85mm DIA CCA TREATED PINE POLES. POSTS SHALL BE PAINTED BLACK AND INSTALLED TO A MIN DEPTH OF 600MM. TREES SHALL BE SECURED TO POLES W/ 3 X RUBBER TIES IN FIGURE 8.
  - 2.3 TREES PLANTED WITH IN 1000MM OF BOUNDARY WALLS AND/OR PARKING AREAS SHALL BE INSTALLED WITHIN 600MM DEPTH NYLEX ROOT BARRIER MEMBRANE. MEMBRANE SHALL BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
  - 2.4 SIGNIFICANT EXISTING TREES & SHRUBS ON THE SITE MAY ONLY BE REMOVED WITH THE APPROVAL OF COUNCIL.

- 2.5 FINAL SELECTION OF PLANT SPECIES SUBJECT TO APPROVED FUTURE LANDSCAPE DESIGN**
- 2.6 REFER TO SPECIES CATEGORIES AS LISTED IN APPENDIX B OF THE PLANNING POLICY 3.3.8 EAST ROCKINGHAM DEVELOPMENT GUIDELINES.**
- 3. IRRIGATION**
  - 3.1 ALL PLANTING AND GRASSING TO BE IRRIGATED VIA FULLY AUTOMATIC SYSTEM FROM MAINS
  - 3.2 ALL SHRUBS TO BE IRRIGATED W/ SUBSURFACE DRIPPER SYSTEM. ALL TREES TO BE IRRIGATED VIA BUBBLERS.
  - 3.3 CONTROLLER TO BE LOCATED IN ADMINISTRATION OFFICE UNLESS OTHERWISE DIRECTED.
  - 3.4 SLEEVES BENEATH PAVED SURFACES TO BE PROVIDED BY OTHERS.
  - 3.5 IRRIGATION SYSTEM SHALL BE DUAL PROGRAM TO ALLOW TURF AND PLANTING AREAS TO BE WATERED SEPARATELY.
  - 3.6 ASCON DRAWINGS, MANUALS AND 12 MONTH WARRANTY SHALL BE SUPPLIED IN TRIPlicate TO THE CLIENT.
- 4. FENCING**
  - 4.1 SIDE & REAR BOUNDARIES TO HAVE CONTINUOUS 1800 HIGH BLACK PVC COATED 60 PITCH 2.5MM GALV. WIRE CHAIN MESH FENCE TOPPED WITH 3 ROWS OF BARBED WIRE TO 2400 HIGH.
  - 4.2 FRONT BOUNDARY TO HAVE 2100 HIGH BLACK POWDERCOATED GALV. GARRISON TYPE FENCING SET BACK 10M INSIDE BOUNDARY WITH MATCHING HINGED & SLIDING GATES AS SHOWN.

### LEGEND

- EXISTING SPOT LEVEL
- PROPOSED LEVEL
- PROPOSED LEVEL AT GEOFABRIC STABILISED PERIMETER 5500 INSIDE BOUNDARY
- CONTOUR LINE & LEVEL
- PRIMARY NATIVE TREE TO 8000 HIGH
- GARDEN BED WITH EXTRUDED CONCRETE BORDER
- HEAVY DUTY BITUMEN PAVING WITH NON-TRAFFICABLE EXTRUDED CONCRETE KERB.

LOT 1



REV	DATE	REVISION DESCRIPTION
F	11/11/2018	LANDSCAPING REVISED TO SUIT NEW SITE LAYOUT - ISSUED FOR DA
E	30/05/2018	LANDSCAPING REVISED TO SUIT NEW SITE LAYOUT - ISSUED FOR DA
D	23/06/2014	LANDSCAPING AT NORTH WEST CORNER MOVED INSIDE BOUNDARY
C	20/06/2014	FENCING DETAILS ADDED
B	12/06/2014	STREET BOUNDARY LANDSCAPING REVISED FOR DEVELOPMENT APRVL
A	14/05/2014	ISSUED FOR DEVELOPMENT APPROVAL

APP'D	CHECK'D	DRAWN	DATE

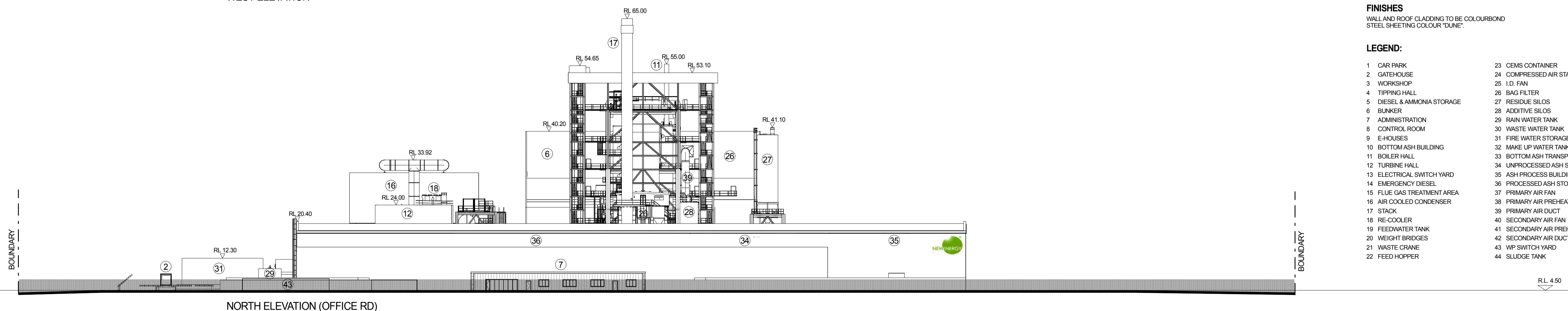
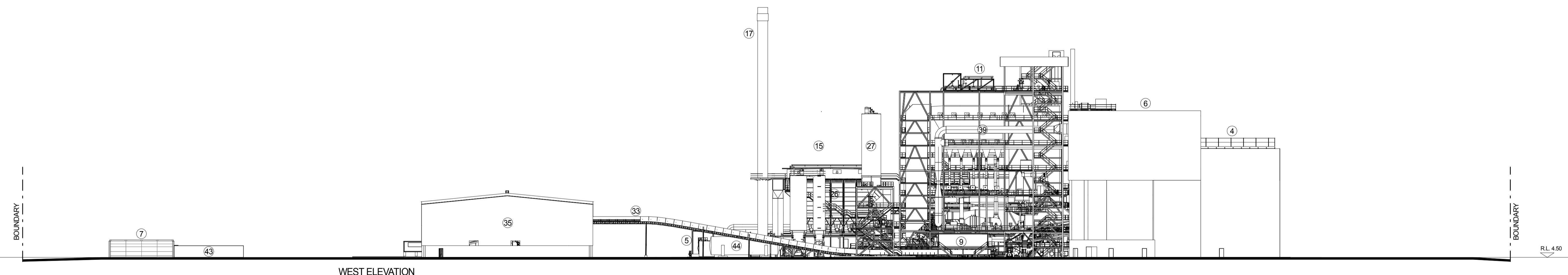
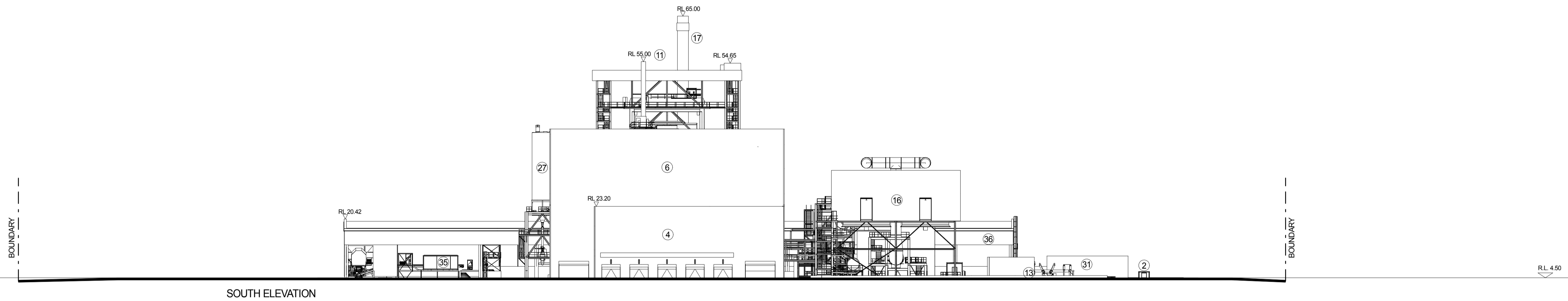
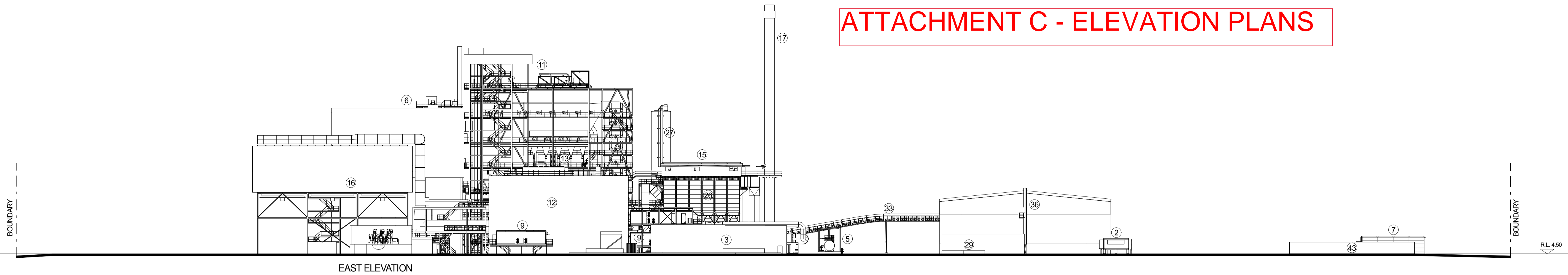
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 REVISION: F

OFFICE ROAD

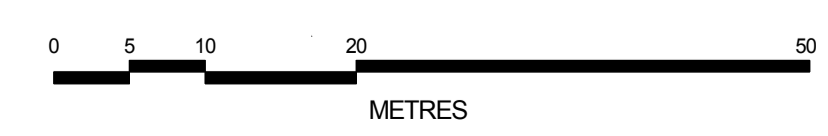
OFFICE ROAD

AC 543

# ATTACHMENT C - ELEVATION PLANS



- FINISHES**  
WALL AND ROOF CLADDING TO BE COLOURBOND STEEL SHEETING COLOUR "DUKE".
- LEGEND:**
- |                            |                                    |
|----------------------------|------------------------------------|
| 1 CAR PARK                 | 23 CEMS CONTAINER                  |
| 2 GATEHOUSE                | 24 COMPRESSED AIR STATION          |
| 3 WORKSHOP                 | 25 I.D. FAN                        |
| 4 TIPPING HALL             | 26 BAG FILTER                      |
| 5 DIESEL & AMMONIA STORAGE | 27 RESIDUE SILOS                   |
| 6 BUNKER                   | 28 ADDITIVE SILOS                  |
| 7 ADMINISTRATION           | 29 RAIN WATER TANK                 |
| 8 CONTROL ROOM             | 30 WASTE WATER TANK                |
| 9 E-HOUSES                 | 31 FIRE WATER STORAGE              |
| 10 BOTTOM ASH BUILDING     | 32 MAKE UP WATER TANKS             |
| 11 BOILER HALL             | 33 BOTTOM ASH TRANSPORT            |
| 12 TURBINE HALL            | 34 UNPROCESSED ASH STORAGE         |
| 13 ELECTRICAL SWITCH YARD  | 35 ASH PROCESS BUILDING (BA PLANT) |
| 14 EMERGENCY DIESEL        | 36 PROCESSED ASH STORAGE           |
| 15 FLUE GAS TREATMENT AREA | 37 PRIMARY AIR FAN                 |
| 16 AIR COOLED CONDENSER    | 38 PRIMARY AIR PREHEATER           |
| 17 STACK                   | 39 PRIMARY AIR DUCT                |
| 18 RE-COOLER               | 40 SECONDARY AIR FAN               |
| 19 FEEDWATER TANK          | 41 SECONDARY AIR PREHEATER         |
| 20 WEIGHT BRIDGES          | 42 SECONDARY AIR DUCT              |
| 21 WASTE CRANE             | 43 WP SWITCH YARD                  |
| 22 FEED HOPPER             | 44 SLUDGE TANK                     |



REF. DRAWING No.	REFERENCE DRAWING TITLE	REV.	DATE	REVISION DESCRIPTION	REV.	DATE	REVISION DESCRIPTION	DRAWN	CHECKED	APPRVD
ERH / 000 / PPL / 001	PRELIMINARY SITE PLAN	B	18/09/2013	ISSUED FOR DEVELOPMENT APPROVAL.	G	31/10/2018	WP SWITCH YARD & PROCESS TANKS ADDED.	DPG		
		C	14/05/2014	ADMIN ELEVATIONS REVISED & SIGNAGE ADDED.						
		D	12/05/2014	MRF BUILDING ELEVATIONS REVISED TO SHOW CONCRETE WALL PANELS.						
		E	20/06/2014	CONCRETE WALL PANELS RENDERED & BUILDING NUMBERS CORRECTED.						
		F	23/06/2014	TEXTURED CONCRETE FINISH ADDED TO WEIGH BRIDGE OFFICE.						
		G	30/05/2018	ELEVATIONS REVISED - ISSUED FOR DEVELOPMENT APPROVAL.						

**PROJECT**  
EAST ROCKINGHAM WASTE TO ENERGY

**DRG TITLE**  
ELEVATIONS

**SHEET SIZE**  
A1

**SCALE**  
1:500

**DRG No.**  
ERH / 000 / PPL / 002

**REVISION**  
G

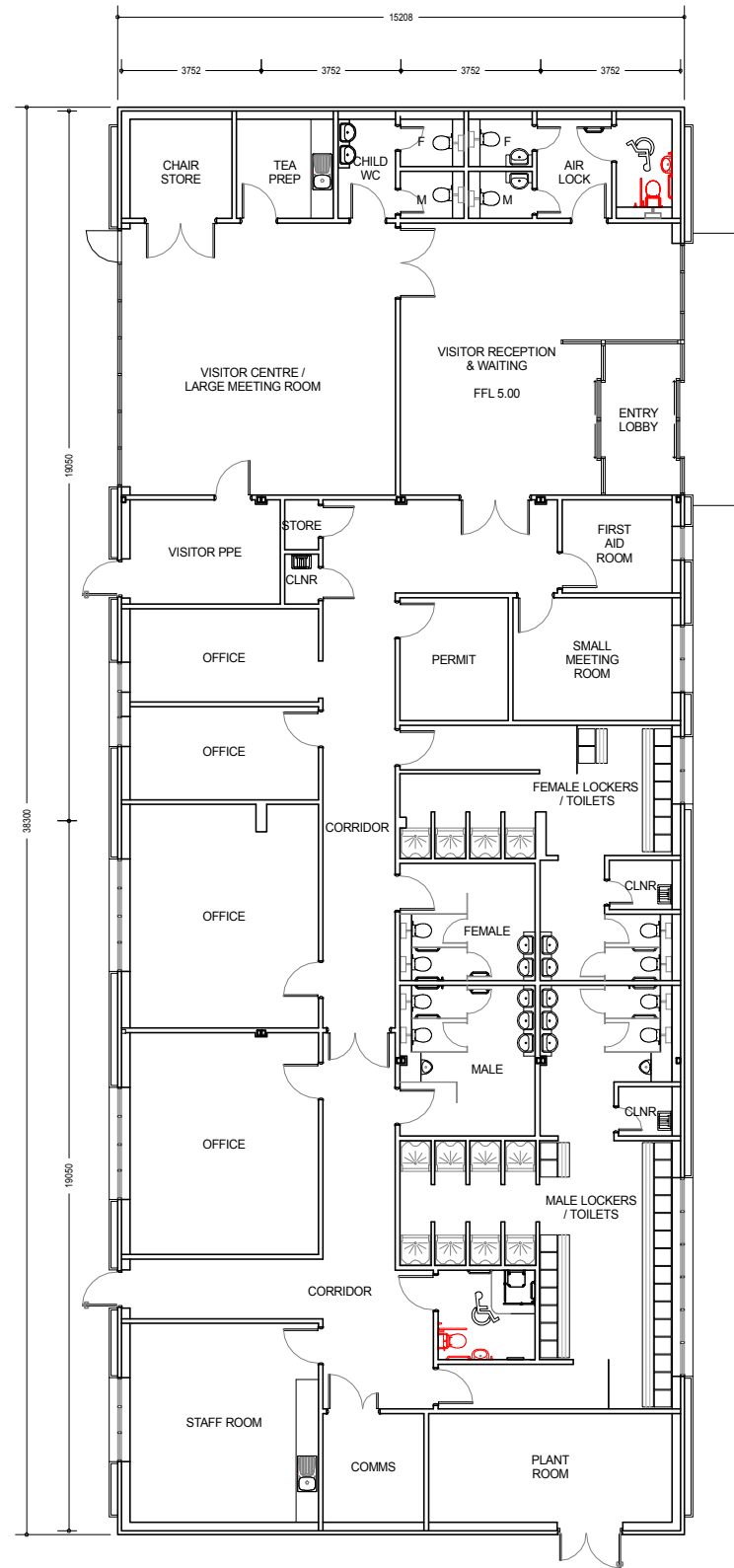
**NEWENERGY**

This drawing is the property of New Energy Corporation and not to be copied without permission.

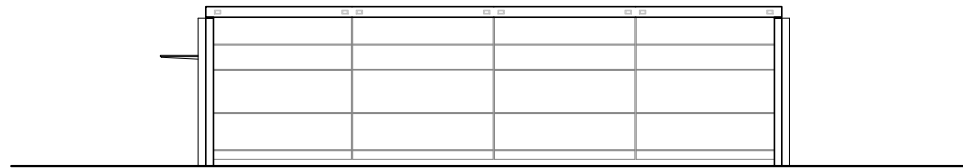
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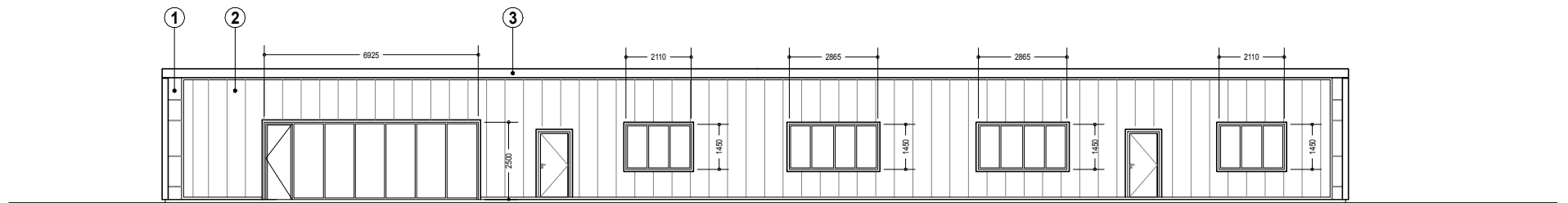
# ATTACHMENT D - OFFICE FLOOR PLAN AND ELEVATIONS



**FLOOR PLAN**



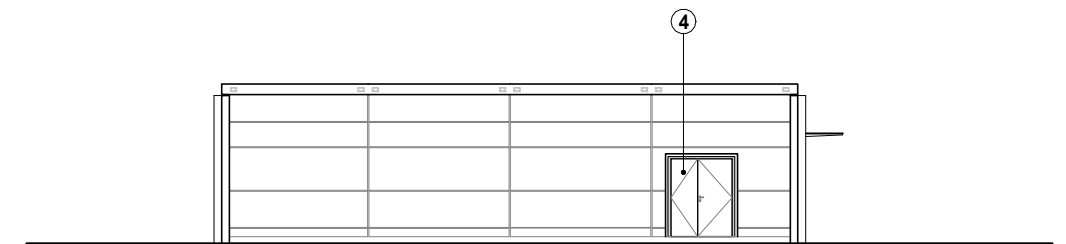
**WEST ELEVATION**



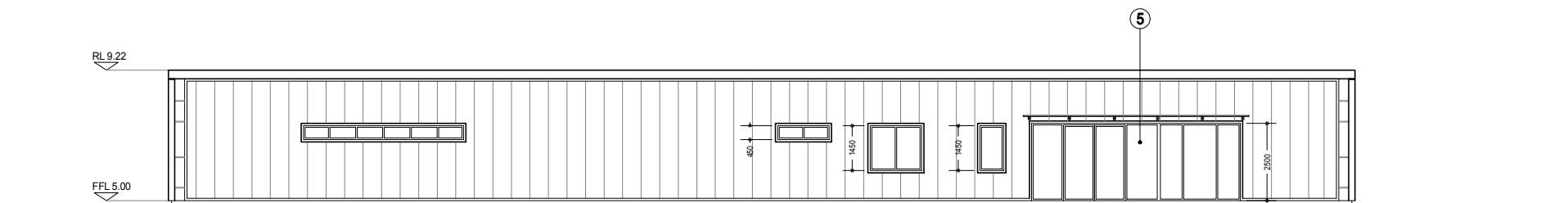
**SOUTH ELEVATION**

**FINISHES**

1. COMPOSITE CLADDING - COLOUR ANTHRACITE (RAL 7016).
2. PRECAST CONCRETE PANEL WITH TEXTURED PAINT FINISH.
3. POWDER COATED METAL FLASHING & CAPPING - COLOUR ANTHRACITE (RAL 7016).
4. STEEL FACED EXTERNAL DOORS - COLOUR MERLIN GREY (RAL 180 40 05).
5. ALUMINIUM FRAMED CURTAIN WALLING & GLAZING - COLOUR MERLIN GREY (RAL 180 40 05).



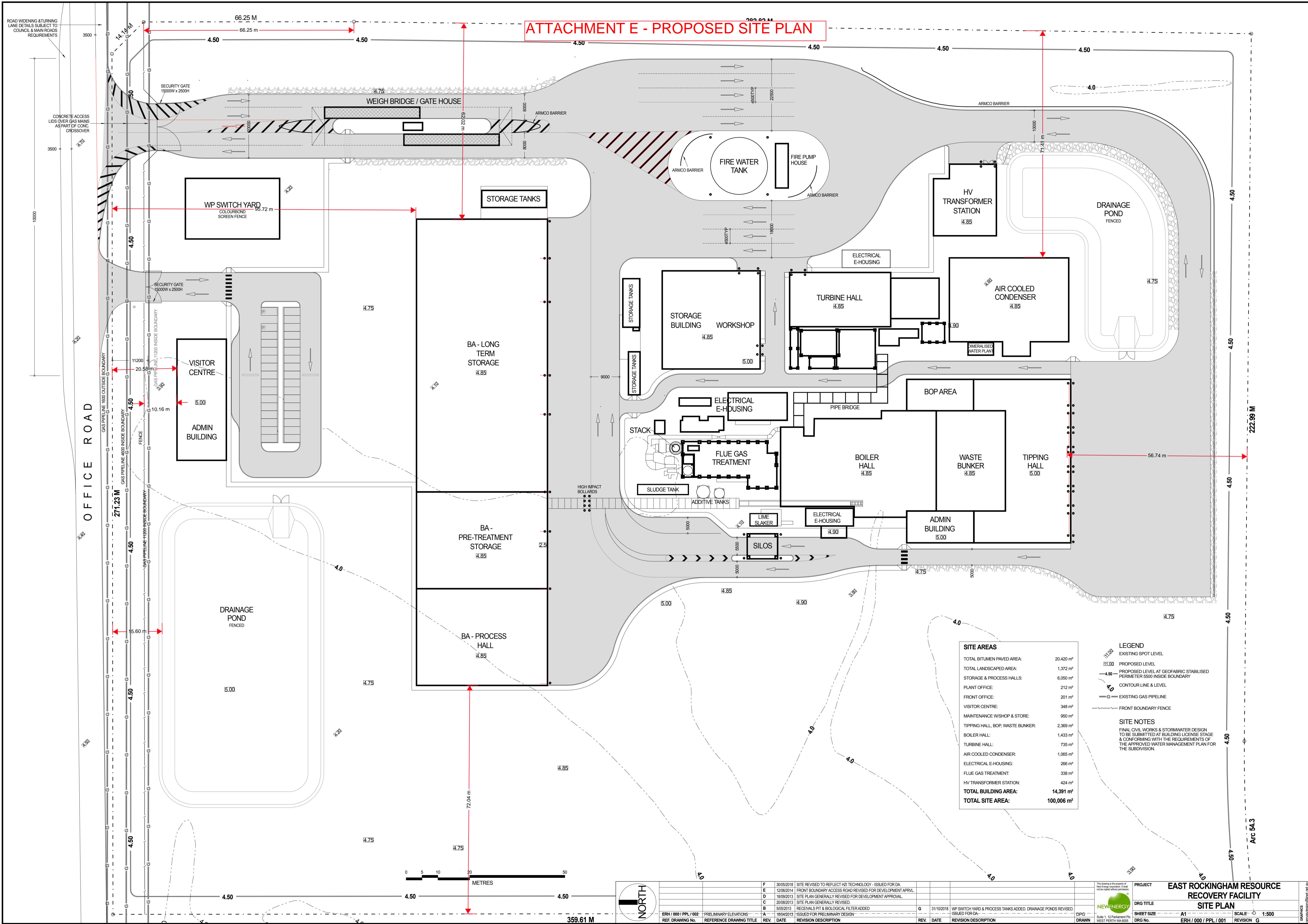
**EAST ELEVATION**



**SOUTH ELEVATION**

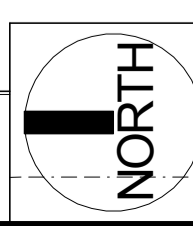
	ERH / 000 / PPL / 001	SITE PLAN	REV.	DATE	REVISION DESCRIPTION	DRAWN	CHECKED	APPRVD	SCALE	1:100															
	REF. DRAWING No.	REFERENCE DRAWING TITLE	REV.	DATE	REVISION DESCRIPTION	DRAWN	CHECKED	APPRVD	SCALE	1:100															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">C</td> <td style="width: 10%;">1/11/2018</td> <td style="width: 50%;">POLYCARBONATE WALLS CHANGED TO PRECAST CONCRETE. ISSUED FOR DA.</td> <td style="width: 10%;">DPG</td> <td style="width: 10%;"></td> </tr> <tr> <td>B</td> <td>30/05/2018</td> <td>REVISED &amp; REISSUED FOR DEVELOPMENT APPROVAL</td> <td>DPG</td> <td></td> </tr> <tr> <td>A</td> <td>14/05/2014</td> <td>ISSUED FOR DEVELOPMENT APPROVAL</td> <td>DPG</td> <td></td> </tr> </table>									C	1/11/2018	POLYCARBONATE WALLS CHANGED TO PRECAST CONCRETE. ISSUED FOR DA.	DPG		B	30/05/2018	REVISED & REISSUED FOR DEVELOPMENT APPROVAL	DPG		A	14/05/2014	ISSUED FOR DEVELOPMENT APPROVAL	DPG		<p style="font-size: small;">PROJECT: EAST ROCKINGHAM WASTE TO ENERGY DRG TITLE: ADMIN OFFICE / EDUCATION CENTRE SHEET SIZE: A1 DRG No.: ERH / 000 / PPL / 003</p>	
C	1/11/2018	POLYCARBONATE WALLS CHANGED TO PRECAST CONCRETE. ISSUED FOR DA.	DPG																						
B	30/05/2018	REVISED & REISSUED FOR DEVELOPMENT APPROVAL	DPG																						
A	14/05/2014	ISSUED FOR DEVELOPMENT APPROVAL	DPG																						

# ATTACHMENT E - PROPOSED SITE PLAN



SITE AREAS	
TOTAL BITUMEN PAVED AREA:	20,420 m <sup>2</sup>
TOTAL LANDSCAPED AREA:	1,372 m <sup>2</sup>
STORAGE & PROCESS HALLS:	6,050 m <sup>2</sup>
PLANT OFFICE:	212 m <sup>2</sup>
FRONT OFFICE:	201 m <sup>2</sup>
VISITOR CENTRE:	348 m <sup>2</sup>
MAINTENANCE W/SHOP & STORE:	950 m <sup>2</sup>
TIPPING HALL, BOP, WASTE BUNKER:	2,369 m <sup>2</sup>
BOILER HALL:	1,433 m <sup>2</sup>
TURBINE HALL:	735 m <sup>2</sup>
AIR COOLED CONDENSER:	1,065 m <sup>2</sup>
ELECTRICAL E-HOUSING:	266 m <sup>2</sup>
FLUE GAS TREATMENT:	338 m <sup>2</sup>
HV TRANSFORMER STATION:	424 m <sup>2</sup>
<b>TOTAL BUILDING AREA:</b>	<b>14,391 m<sup>2</sup></b>
<b>TOTAL SITE AREA:</b>	<b>100,006 m<sup>2</sup></b>

- LEGEND**
- EXISTING SPOT LEVEL
  - PROPOSED LEVEL
  - PROPOSED LEVEL AT GEOTEXTILE STABILISED PERIMETER 5500 INSIDE BOUNDARY
  - CONTOUR LINE & LEVEL
  - EXISTING GAS PIPELINE
  - FRONT BOUNDARY FENCE
- SITE NOTES**
- FINAL CIVIL WORKS & STORMWATER DESIGN TO BE SUBMITTED AT BUILDING LICENSE STAGE & CONFORMING WITH THE REQUIREMENTS OF THE APPROVED WATER MANAGEMENT PLAN FOR THE SUBDIVISION.



REV.	DATE	REVISION DESCRIPTION
F	30/05/2018	SITE REVISED TO REFLECT H2O TECHNOLOGY - ISSUED FOR DA
E	12/06/2014	FRONT BOUNDARY ACCESS ROAD REVISED FOR DEVELOPMENT APPROVAL
D	18/09/2013	SITE PLAN GENERALLY REVISED FOR DEVELOPMENT APPROVAL
C	20/08/2013	SITE PLAN GENERALLY REVISED
B	05/05/2013	RECEIVALS PIT & BIOLOGICAL FILTER ADDED
A	18/04/2013	ISSUED FOR PRELIMINARY DESIGN
G	31/10/2018	WP SWITCH YARD & PROCESS TANKS ADDED. DRAINAGE PONDS REVISED. ISSUED FOR DA

PROJECT: **EAST ROCKINGHAM RESOURCE RECOVERY FACILITY**

DRG TITLE: **SITE PLAN**

SHEET SIZE: **A1** SCALE: **1:500**

DRG No: **ERH / 000 / PPL / 001** REVISION: **G**

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PROJECT: EAST ROCKINGHAM RESOURCE RECOVERY FACILITY  
DRG TITLE: SITE PLAN  
SHEET SIZE: A1 SCALE: 1:500  
DRG No: ERH / 000 / PPL / 001 REVISION: G

**ATTACHMENT F - PREVIOUSLY APPROVED SITE PLAN**

**SITE AREAS**

TOTAL BITUMEN PAVED AREA:	21,433 m <sup>2</sup>
TOTAL LANDSCAPED AREA:	1,372 m <sup>2</sup>
TOTAL M.R.F. AREA:	5,635 m <sup>2</sup>
FUEL FEED & STORAGE AREA:	5,315 m <sup>2</sup>
TOTAL WASTE TO GASIFICATION AREA:	4,550 m <sup>2</sup>
ASH STORE:	450 m <sup>2</sup>
MAINTENANCE W/SHOP & PARTS STORE:	600 m <sup>2</sup>
VISITORS' CENTRE & ADMIN OFFICE:	405 m <sup>2</sup>
STAFF FACILITIES:	240 m <sup>2</sup>
CHEMICAL STORE:	190 m <sup>2</sup>
MAIN CONTROL ROOM:	100 m <sup>2</sup>
PLANT OFFICES:	200 m <sup>2</sup>
<b>TOTAL BUILDING AREA:</b>	<b>16,835 m<sup>2</sup></b>
<b>TOTAL SITE AREA:</b>	<b>100,006 m<sup>2</sup></b>

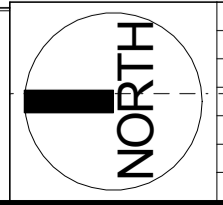
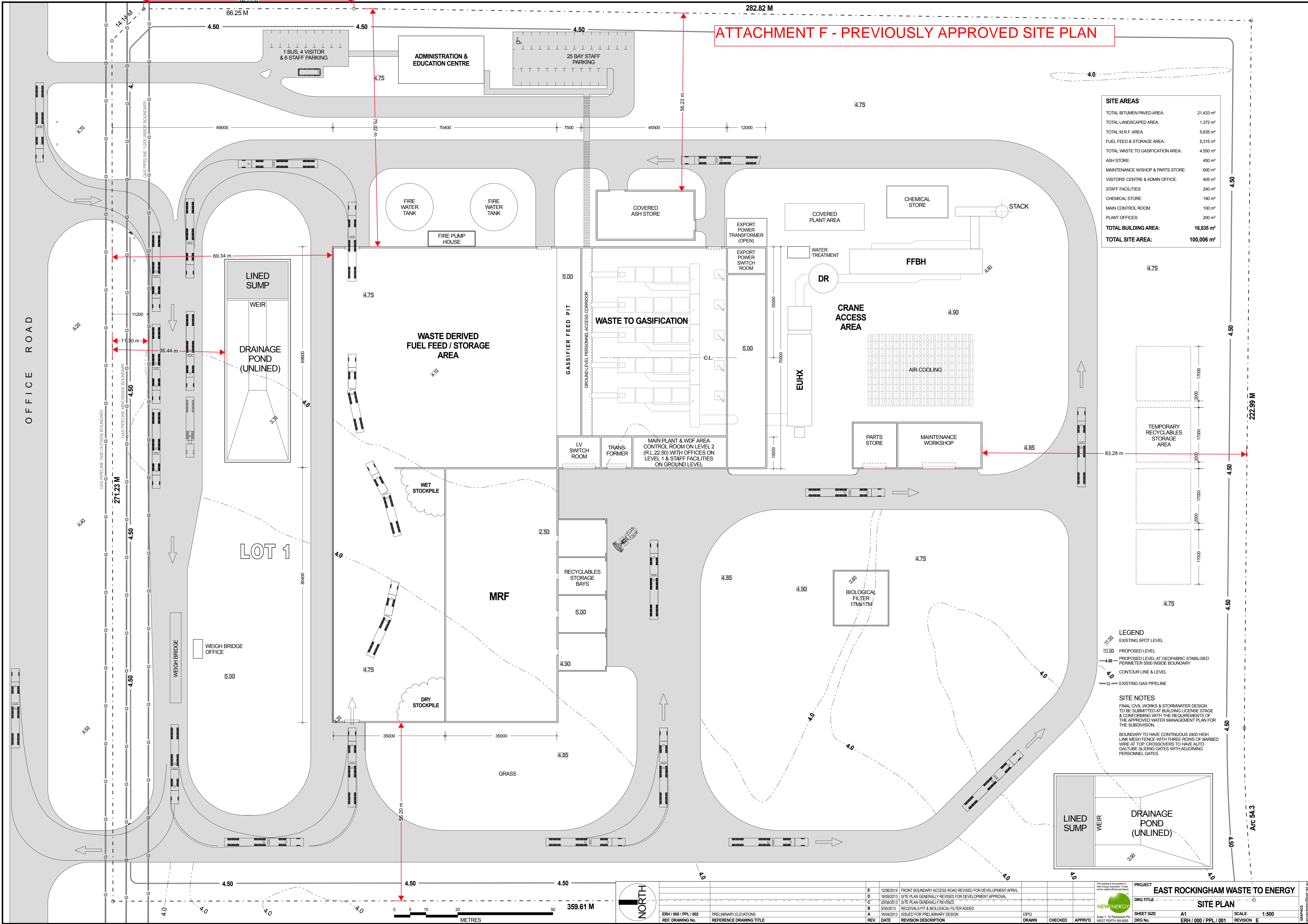
**LEGEND**

- EXISTING SPOT LEVEL
- PROPOSED LEVEL
- PROPOSED LEVEL AT GEOTEXTILE STABILISED PERIMETER 5000 INSIDE BOUNDARY
- CONTOUR LINE & LEVEL
- EXISTING GAS PIPELINE

**SITE NOTES**

FINAL CIVIL WORKS & STORMWATER DESIGN TO BE SUBMITTED AT BUILDING LICENSE STAGE & CONFORMING WITH THE REQUIREMENTS OF THE APPROVED WATER MANAGEMENT PLAN FOR THE SUBDIVISION.

BOUNDARY TO HAVE CONTINUOUS 2000 HIGH LINK MESH FENCE WITH THREE ROWS OF BARBED WIRE AT TOP. CROSSOVERS TO HAVE AUTO GATE/SLIDING GATES WITH ADJOINING PERSONNEL GATES.



ERH / 000 / PPL / 002	PRELIMINARY ELEVATIONS	DPG	DRAWN	CHECKED	APPROVD
REF. DRAWING No.	REFERENCE DRAWING TITLE	SCALE	1:500	REVISION	E

E	12/09/2014	FRONT BOUNDARY ACCESS ROAD REVISED FOR DEVELOPMENT APRIL
D	18/09/2013	SITE PLAN GENERALLY REVISED FOR DEVELOPMENT APPROVAL
C	20/08/2013	SITE PLAN GENERALLY REVISED
B	05/05/2013	RECEIVALS PIT & BIOLOGICAL FILTER ADDED
A	16/04/2013	ISSUED FOR PRELIMINARY DESIGN

PROJECT		<b>EAST ROCKINGHAM WASTE TO ENERGY</b>	
DRG TITLE		<b>SITE PLAN</b>	
SHEET SIZE	A1	SCALE	1:500
DRG No.	ERH / 000 / PPL / 001	REVISION	E



359.61 M

Atc 543

OFFICE ROAD

LOT 1

LINED SUMP

WEIR

DRAINAGE POND (UNLINED)

WEIGH BRIDGE OFFICE

WEIGH BRIDGE

FIRE WATER TANK

FIRE WATER TANK

FIRE PUMP HOUSE

WASTE DERIVED FUEL FEED / STORAGE AREA

WASTE TO GASIFICATION

MAIN PLANT & WDF AREA CONTROL ROOM ON LEVEL 2 (R.L. 22.50) WITH OFFICES ON LEVEL 1 & STAFF FACILITIES ON GROUND LEVEL

LV SWITCH ROOM

TRANSFORMER

RECYCLABLES STORAGE BAYS

MRF

WET STOCKPILE

DRY STOCKPILE

GRASS

WET STOCKPILE

BIOLOGICAL FILTER 17Mx17M

CRANE ACCESS AREA

CHEMICAL STORE

STACK

FFBH

DR

EUHX

EXPORT POWER TRANSFORMER (OPEN)

EXPORT POWER SWITCH ROOM

COVERED PLANT AREA

WATER TREATMENT

COVERED ASH STORE

ADMINISTRATION & EDUCATION CENTRE

1 BUS, 4 VISITOR & 6 STAFF PARKING

25 BAY STAFF PARKING

13 December 2018

Michael Parker  
Chief Executive Officer  
City of Rockingham  
PO Box 2142  
Rockingham DC WA 6967

Dear Michael,

**Submission Response – Proposed East Rockingham Waste to Energy Facility – Lot 1 (No.26) Office Road, East Rockingham**

I refer to the City of Rockingham's letter of 9 November 2018 seeking the City of Kwinana's (the City) comments and recommendations on the proposed East Rockingham Waste to Energy Facility on the abovementioned land.

The City has taken the opportunity to review the proposal and wish to make the following comments.

Location

Whilst the City is cognisant to the fact that the East Rockingham Waste to Energy Proposal has previously received an approval to operate a Waste to Energy Plant under the provisions of the Environmental Protection Act (EPA Report No. 1513 and Ministerial Statement 994), and has also received development approval under the City of Rockingham Local Planning Scheme (DAP/14/00530), the City of Kwinana hold concerns regarding the location of the facility and the potential air quality impacts it may generate for residents within the Calista, Leda and Medina localities.

As discussed in the EPA's report of June 2017, on the Mandogalup urban development buffer, the predominant winds in the region are typical of coastal environments in the Perth Metropolitan Region and are characterised by strong offshore breezes during the early morning to midday periods followed by strong onshore breezes in the afternoon to evening periods. The strong south-west to south-south-west breezes are of particular concern to the City especially during shut down periods for the plant (both scheduled and un-scheduled). The City are of the opinion that during these periods of shut down or facility down time, the proposal has the potential to negatively impact on the air quality of the residents of Calista, Medina and Leda through the release of fugitive gas and odour emissions. Additionally, the Public Environmental Review (PER) documents note that there are two residential premises located on Wellard Road approximately 1 kilometre to the east of the facility, however does not adequately address, nor give weight to, the potential impacts of the facility on these residences.

In this regard, it is the opinion of the City that the proposal location should be reconsidered and an alternative site be sought closer to the core of the Kwinana Industrial Area (KIA) where the prevailing wind direction will direct any fugitive emissions over the existing industrial areas and not residential zoned land.

**Administration**

Cnr Gilmore Ave & Sulphur Rd, Kwinana WA 6167 | PO Box 21, Kwinana WA 6966 | **Hours** Mon-Fri 8am-5pm (Cashier hours 8am-4pm)  
**Telephone** 08 9439 0200 | **Facsimile** 08 9439 0222 | **TTY** 08 9419 7513 | [admin@kwinana.wa.gov.au](mailto:admin@kwinana.wa.gov.au) | [www.kwinana.wa.gov.au](http://www.kwinana.wa.gov.au)

## Air Quality Emissions

Whilst the Air Quality Impact Assessment provided as part of the PER appears to predict that the emissions from the facility will comply with the relevant standards, the City has concerns with aspects of the modelling, these concerns were raised as part of the PER process with the EPA also.

In this respect, the assessment assumes that the modelled emission rates will not be exceeded at any time, including during combustor start-ups and shutdowns. However, the assessment does not appear to have modelled any potential fugitive emissions during emergency shutdown scenarios. Under certain circumstances, the PER document stated remaining waste still smouldering on the grate may release some pollutants (CO, VOC) which are not treatable in the air pollution control system. These pollutants may be released untreated into the atmosphere and then subject to the prevailing winds from the south west, blowing towards residential areas. The EPA have concluded in its report (EPA Report No. 1624) that air quality emissions from the plant could be managed. In this regard, the City consider that the following condition be included in the Responsible Authority Report recommendation to the Metro South West Joint Development Assessment Panel (JDAP):

***‘The proponent shall make near to real time data on emissions publicly available by displaying emissions on the proponents website or at the site entrance.’***

A similar condition was adopted by the JDAP on the Phoenix Waste to Energy proposal located within the core of the Kwinana Industrial Area. The above recommended condition is considered appropriate given the uncertainty regarding the potential fugitive emissions during emergency shutdown scenarios. In this regard, by providing real time data to the broader community the proponent can be held to account for any exceedances of the EPA approved emissions levels.

## Odour Management

Predicted odour levels during facility down time are of concern to the City, this concern was also referred to the EPA as part of the PER submission period. Whilst there are no residences within the predicted 2.5 odour unit contour (as per Figure 13 of the PER document) during system down times, odours beyond the boundary of the facility may cause a significant impact on the City of Kwinana.

The odour report provided as part of the Environmental review predicts that during periods of unplanned and planned shut downs, an odour contour of 2.5 odour units will be present up to 750 metres from the facility. In this regard, the City is aware of a number of cases where 2 odour units have caused significant impacts on sensitive receptors for up to 2 kilometres (from the odour source) - Biowise McLaughlin Road, Postans, and Wool Scourers East Rockingham are examples. These impacts have occurred on many occasions that ultimately resulted in the closure of the Biowise operations. In addition, there are two dwellings located on Wellard Road approximately 1 kilometre to the east of the facility. Whilst these premises are not located within a residential zone, they are sensitive premises which should not be impacted by odour emissions from the facility.

As such, the City are of the opinion that an odour contour which exceeds 2.5 odour units beyond the boundary of the facility is unacceptable, and all measures should be undertaken to reduce this odour emission as far as possible so as not to cause any odour impacts on the surrounding areas. The EPA approval for the plant has recommended that the operator undertake additional odour modelling upon commissioning of the facility (with a view to implementing opportunities to further reduce odour emissions) and employ a public odour complaints and resolution register.

In regards to the above, the City recommend the following condition be considered for inclusion:

***‘Prior to occupation of the development, the proponent shall implement, and thereafter maintain for the life of the development, a public odour complaints register and resolution procedure to address any odour concerns raised by the public to the satisfaction of the City of Rockingham in consultation with the City of Kwinana. The applicant shall provide a copy of the register of complaints and resolution outcomes on a quarterly basis to the City of Rockingham and City of Kwinana.’***

#### Noise Management

Noise emissions from the facility will have the potential to impact on residences located within the suburbs of Calista and Leda. In particular, residences in the vicinity of Westbrook Road, Wellard Road, Edmund Place, Coleman Road and Harrison Way in Calista, as well as residents in Sloan Drive and Mercer Court in Leda are modelled as receiving sound level impacts in the range of 25 – 30 decibels. The aforementioned residential streets are located on elevated land which is less sheltered from noise originating in the Western Trade Coast (WTC) due to topographical undulations along the axis of Wellard Road. Noise modelling systems have design criteria that can attribute up to a 5 decibel “error margin” in predictions which is considered acceptable. However, in the case of the Calista and Leda residential streets listed above, an error of 5 dB (A) in combination with a 5 dB (A) tonal component (identified as part of the flu gas emissions but then discounted in the noise modelling), may result in exceedances of the Noise Regulations assigned night time levels.

With regard to Noise emissions from the facility, cumulative noise levels generated from the WTC have reached levels where they are affecting the surrounding residential areas within Medina and Calista. In this regard, the position of the City of Kwinana and Kwinana Industries Council is that noise levels generated from the WTC should continue to be improved upon through redevelopment and upgrade to existing industry, and new industry will be encouraged to reduce noise levels as far as possible. In this regard, the City recommend the following condition and advice:

***Condition: ‘Within 60 days of commissioning of the plant operations, the proponent shall provide to the City of Rockingham, certification from a suitably qualified acoustic consultant that the noise emissions resulting from the operations on the site comply with the Environmental Protection Act and Regulations. The certification shall demonstrate that the plant, at all times for the life of the development, will comply with the Environmental Protection***

***(Noise) Regulations 1997 from time of commencement of operations through to maximum throughput capacity.'***

***Advice: 'The proponent is advised to liaise with the Kwinana Industries Council (KIC) to include the noise emissions from the development into the KIC cumulative noise model.'***

#### Traffic Modelling and Road Network

Traffic modelling for the proposal indicates that the plant will accept waste up to six days a week between 6:00 a.m. and 4:00 p.m. The traffic report estimates that the development will generate approximately 206 vehicular movements per day (50% inbound/ 50% outbound).

The traffic modelling has stated that all of the heavy vehicle traffic associated with the development will be originating from and destined to the south via Mandurah Road and Kulija Road to access Kwinana Freeway and of the light vehicle movements 50% originate from and are destined to the north and 50% originate from and are destined to the south. The proposed truck route accessing the development is to head north along Mandurah Road and turn onto Office Road to the development, trucks exiting the development will head west along Office Road and turn south onto Patterson Road, Ennis Avenue, Dixon Road then onto Kulija Road to the Kwinana Freeway.

The City has considered the traffic modelling for the proposal and consider that the surrounding road network has the capacity to accommodate the increase in traffic proposed by the development. In this regard however, the City notes that as a result of increased traffic, the standard of Office Road should be upgraded to cater for the increased heavy vehicle traffic. Office Road is currently a single carriageway with no kerbing, drainage or lighting. In this regard, the standard of Office Road should be increased to facilitate the proposed 24-hour operation of the proposed waste to energy facility. In addition, the Office Road / Patterson Road and Office Road / Mandurah Road intersections are not suitably designed to accommodate B-Double vehicles.

In regard to the above, the City recommends the following road upgrade conditions:

- 1. 'The proponent shall upgrade the full length of Office Road to the satisfaction of the City of Rockingham in consultation with the City of Kwinana, and shall include the following requirements:***
  - i. Kerbing, drainage, lighting and landscaping;***
  - ii. Pavement widening in the vicinity of the proposed site crossovers to allow trucks to enter and exit the development lane correct and facilitate passing vehicle movements;***
  - iii. Upgrading of the Office Road / Mandurah Road intersection to facilitate and accommodate the lane correct turning movements of B-Double trucks proposed to enter the development.'***
- 2. 'The proponent shall upgrade the intersection of Office Road and Patterson Road in accordance with the recommendations of the 'Transport Impact Statement – Proposed Materials Recovery and Waster Conversion Facility –***

***Document #1308009-TIA-003 – Dated 26 April 2018 – Prepared by Shawmac Consulting Civil and Traffic Engineers’ to the satisfaction of the City of Rockingham on advice of Main Roads Western Australia. All works and associated costs shall be at the proponent’s expense with construction to be completed prior to occupation of the site.’***

Waste Management

Whilst the development application addresses the plant waste acceptance criteria to ensure all wastes processed through the facility comply with the requirements of the EPA approvals, the application does not address how any wind-blown or fugitive waste on-site will be managed. The City has considered the development application supporting documentation and hold concerns that there may be the potential for rubbish to become wind-blown or prematurely released from waste vehicles entering and exiting the development. In this regard, the City recommend the following condition to address the management of waste on site.

***‘A Waste Management Plan that addresses the management and maintenance of fugitive waste generated on site or from trucks entering / exiting the development shall be submitted to and approved by the City of Rockingham prior to occupancy of the development. Upon commencement of operations the Waste Management Plan shall be thereafter implemented and maintained for the life of the development to the satisfaction of the City of Rockingham.’***

Please call Brenton Scambler on 9439 0257 if you require more information or wish to discuss this matter further.

Yours sincerely

Joanne Abbiss  
Chief Executive Officer



### **15.3 Adoption of Local Development Plan – Stage 42 Wellard Village, Wellard**

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

Deputy Mayor Peter Feasey declared an impartiality interest as his supervisor is the Minister for Housing and the Department of Communities – Housing Division is a joint venture with Satterley.

Councillor Matthew Rowse declared an impartiality interest due to his interest in the Village at Wellard Residents Association and their association with Peet Ltd.

#### **SUMMARY:**

A draft Local Development Plan (LDP) for Stage 42 of the Wellard Village development has been received for consideration under the City of Kwinana Local Planning Scheme No. 2 (LPS2) (refer to Attachments A, B and C).

The draft LDP (refer Attachments B and C) sets out design requirements for the development of the lots indicated within the LDP boundaries. These requirements apply in addition to normal LPS2 and State Planning Policy No. 3.1: Residential Design Codes of Western Australia (R-Codes) requirements and permit certain variations in order to achieve a desired outcome.

Subdivision approval was granted for Stage 42 by the Western Australian Planning Commission (WAPC) on 29 November 2016 with a condition requiring the preparation of an LDP for the subject lots.

The draft LDP is considered against three key local planning policies, Local Planning Policy No. 1 – Landscape Feature and Tree Retention Policy (LPP No 1), Local Planning Policy No. 2 – Streetscapes (LPP No. 2) and Local Planning Policy No. 8 – Designing Out Crime (LPP No. 8) which were adopted by Council on 28 September 2016, 26 April 2017 and 13 June 2018 respectively.

LPP No. 1 focuses on retention of significant trees and landscape features and in this respect, the clearing of vegetation for this stage was undertaken under a previously approved subdivision approval prior to the adoption of LPP No. 1. While City Officers had input into the clearing of this area, a Landscape Feature and Tree Retention Plan was not requested at that time.

LPP No. 2 focuses on improved streetscapes across the City and places an emphasis on trees, landscaping and road design. In this regard, engineering drawings for Stage 42 have been reviewed and approved by the City's Engineering Department which is satisfied the documents comply with the requirements of LPP No. 2. The policy also requires that all LDPs contain built form design provisions relating to garage setbacks, dwelling façade treatment, room ceiling height, fencing and the location of street trees. In this respect, the draft LDP is reflective of the adopted policy.

LPP No. 8 sets out designing out crime considerations for LDPs. The draft LDP responds to the requirements of LPP No. 8 in that all future dwellings on these lots are required to have habitable rooms addressing both the primary and secondary streets to provide passive surveillance.

### 15.3 ADOPTION OF LOCAL DEVELOPMENT PLAN – STAGE 42 WELLARD VILLAGE, WELLARD

It is recommended that Council approves the draft LDP in accordance with Clause 52(1)(a) of *Schedule 2 – Deemed Provisions for Local Planning Schemes* of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

#### **OFFICER RECOMMENDATION:**

That Council approves the Local Development Plan for Stage 42 Wellard Village, Wellard (as per Attachments B and C), pursuant to Clause 52(1)(a) of *Schedule 2 – Deemed Provisions for Local Planning Schemes* of the *Planning and Development (Local Planning Schemes) Regulations 2015* subject to the following modifications being made:

- a) Remove the reference to “BAL 12.5” in the legend and replace this with “BAL affected lot”
- b) Include the following provision:
  - 3e For dwellings on lots where vehicle access is gained solely from a rear laneway, rooms located on the front elevation shall have a minimum ceiling height of 32 vertical brick courses (2.7 metres).

#### **DISCUSSION:**

##### **Land Status**

Metropolitan Region Scheme:	Urban
Local Planning Scheme No. 2:	Residential R25 & R40

##### **Planning Comment**

A LDP is a planning tool which allows certain design requirements, either in addition to or in variance to those stipulated under the Scheme and R-Codes to be imposed on subsequent development of land. These requirements will often cover aspects including dwelling placement and design, solar orientation, private open space, setbacks, garage placement and design, fencing, store areas and service provision. Requirements vary depending on the type of land and design outcome trying to be achieved. Most importantly is the LDP's ability to vary Scheme and R-Code provisions where such variations are needed in achieving the most optimal design outcome.

The draft LDP (Attachments B and C) has been specifically required as a condition of the WAPC's subdivision approval for the subject land. The draft LDP sets out design requirements for the development of the lots indicated within the LDP boundaries within the Stage 42 Wellard Village area. These requirements apply in addition to LPS2 and R-Codes requirements and will permit certain variations in order to achieve an optimal form of development.

##### **Local Planning Policy No. 1 - Landscape Feature and Tree Retention Policy**

The policy focuses on retention of significant trees and landscape features and the location of services. The policy states that prior to subdivision works being undertaken, the proponent is required to submit a Landscape Feature and Tree Retention Plan to the City for approval.

The clearing and earthworks for Stage 42 was undertaken prior to the adoption of this policy, under a previous subdivision approval. As a part of the clearing of land, the

### 15.3 ADOPTION OF LOCAL DEVELOPMENT PLAN – STAGE 42 WELLARD VILLAGE, WELLARD

proponent liaised with City Officers in respect to the clearing of vegetation to ensure that requirements were met as per the subdivision conditions at that time. As a result a Landscape Feature and Tree Retention Plan was not required. Trees have been retained in adjoining stages.

#### Street Tree Locations

To ensure the locations of new street trees are available to prospective purchasers and builders, all proposed street tree plantings are shown on the LDP.

#### Local Planning Policy No. 2 - Streetscapes

As discussed previously, Engineering Drawings for Stage 42 have been approved by the City's Engineering Department. The engineering drawings comply with LPP No. 2 in terms of road infrastructure, location of footpaths and sufficient road reserve widths to accommodate street trees. The draft LDP has been reviewed by the City's Engineering Department in conjunction with the submitted engineering drawings and is supported.

In respect to building articulation and garage setbacks, LPP No. 2 refers to the following;

#### Dwelling facade treatment

*All dwellings to provide an appropriate, high quality design interface with the surrounding streetscape, through the use of at least three of the following architectural design features:*

1. *Articulation in dwelling facade (i.e. varied wall setbacks);*
2. *A minimum of two building materials, colours and/or finishes (E.g. render, brick, cladding);*
3. *Major habitable room openings incorporating large windows to provide surveillance;*
4. *Roof forms that incorporate gables;*
5. *A balcony, portico, or verandah; or*
6. *A built in planter box.*

#### Room ceiling height

*The front elevation of a single storey dwelling will have greater presence when the ceiling height of rooms is greater than the standard 2.4m. For lots where vehicle access is gained solely from a rear laneway or right-of-way, the ceiling height for rooms located on the front elevation shall be minimum 32 vertical brick courses (2.7m).*

The draft LDP includes the dwelling facade treatment provisions of LPP No. 2. These provisions have been incorporated into the LDP for all lots. The draft LDP does not include the room ceiling height provision of LPP No. 2 and as a result the officer recommendation includes a recommendation to adopt the LDP subject to a modification requiring that this provision be incorporated into the draft LDP. Compliance with these provisions will ensure that all dwellings constructed within this LDP area will provide the desired design interface with the surrounding streetscape.

#### Fencing

1. *Cohesive and consistent fencing is to be constructed by the developer along the front boundaries of all of the proposed lots with vehicle access from a rear laneway.*
2. *For all rear-loaded lots, a ground level height difference of between 300mm and 600mm between the front boundary and the street is encouraged.*

### 15.3 ADOPTION OF LOCAL DEVELOPMENT PLAN – STAGE 42 WELLARD VILLAGE, WELLARD

3. *Front fences within the primary street setback being visually permeable above 0.9m to a maximum height of 1.2m above natural ground level.*
4. *For secondary street boundaries, fencing shall be visually permeable above 1200mm behind the primary street setback, for a minimum length of 3m behind the truncation with a habitable room addressing the street.*

Visually permeable consistent fencing is proposed to be constructed by the developer along the front boundary of the proposed laneway lots within this stage. These laneway lots are also elevated above the street to provide a greater presence to dwellings on these lots and enhance the streetscape of Maltby Way. The draft LDP includes Provisions 3 and 4 above, requiring visually permeable fencing for front fences and a portion of the secondary street fencing on all lots within this stage.

#### Garages

- a) *Garages are not to be forward of the dwelling alignment. Garages may be aligned with the dwelling provided they do not exceed the dwelling setback line.*
- b) *Where lots have a frontage of 12 metres or less, garages may exceed 50% of the primary lot frontage to a maximum of 60% of the primary lot frontage.*
- c) *Where garages exceed 50% of the primary lot frontage, they shall comply with the following:*
  - *A clear indication of the dwelling entrance.*
  - *The dwelling entrance shall be the dominant feature of the facade, and shall include a projecting portico or veranda, forward of the dwelling alignment with a minimum depth of 1.5 metres.*
  - *Garages are to be set back at least 0.5 metres behind the dwelling alignment.*
- d) *For any single storey dwelling on a lot with a frontage less than 10 metres in width and where vehicle access is gained solely from the primary street, only a single width garage/carport (including tandem) is permitted.*
- e) *Double garages are permitted on lots less than 10m wide where dwellings are two storeys and where major openings to habitable rooms are provided on the primary street frontage.*
- f) *For all lots where a footpath adjoins the boundary, the garage must be setback a minimum 4.5m from that boundary.*

The draft LDP contains the above provisions and complies with the policy in this regard.

#### Local Planning Policy No. 8 – Designing Out Crime

LPP No. 8 sets out design guidelines to be implemented during the design and assessment of LDPs. Designing out crime considerations for LDPs should take into account building orientation and surveillance. All lots contained in Stage 42 have direct road frontage. The draft LDP provisions require that all dwellings address the primary and secondary street frontages through the provision of major openings to provide surveillance. In addition, all front fences within the primary street setback are required to be visually permeable above 0.9m to a maximum height of 1.2m above the natural ground level. For secondary street boundaries, fencing is required to be visually permeable above 1.2m behind the primary street setback, for a minimum length of 3m behind the truncation. All future dwellings on these lots are required under the draft LDP to have major openings addressing both the primary and secondary streets to provide passive surveillance.

### 15.3 ADOPTION OF LOCAL DEVELOPMENT PLAN – STAGE 42 WELLARD VILLAGE, WELLARD

#### Bushfire Management

A Bushfire Management Plan has been prepared as part of the Local Structure Plan and subdivision for this stage of the Wellard Village development. One lot (Lot 1682) within this stage of development is subject to bushfire construction requirements and as such has been identified on the draft LDP. The Officer Recommendation includes a minor modification to the wording of the LDP, with respect to the bushfire affected lot. This modification requires the removal of reference to a specific BAL level and for this to be replaced to read "BAL affected lot". This modification is required to acknowledge that a further BAL assessment and certification will be required for any future dwelling on this lot at the building permit stage. This modification will ensure the provisions for bushfire construction requirements of the draft LDP are consistent with other recent adopted LDPs.

#### Conclusion

It is considered that the LDP will be a single point of reference that will provide clarity and certainty to builders, property owners and City Officers.

City Officers have assessed the provisions and requirements of the draft LDP and are supportive, subject to the recommended amendments on the basis that it is consistent with the City's relevant Local Planning Policies and similar LDPs approved throughout the City.

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

For the purposes of Councillors considering a declaration of interest, the land owner is Peet Limited and Department of Housing Joint Venture and the applicant is Creative Design and Planning.

The following strategic and policy based documents were considered in assessing the application:

#### Legislation

*Planning and Development Act 2005*

*Planning and Development (Local Planning Schemes) Regulations 2015*

#### State Planning Policies

State Planning Policy No. 3.1 – Residential Design Codes of Western Australia

State Planning Policy No. 3.7 – Planning in Bushfire Prone Areas

Liveable Neighbourhoods Operational Policy

#### Schemes

Metropolitan Region Scheme

City of Kwinana Local Planning Scheme No. 2

#### Local Planning Policies

Local Planning Policy No. 1 – Landscape Feature and Tree Retention

Local Planning Policy No. 2 – Streetscapes

Local Planning Policy No. 8 – Designing Out Crime

**15.3 ADOPTION OF LOCAL DEVELOPMENT PLAN – STAGE 42 WELLARD VILLAGE, WELLARD****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 LDP encourages the use of passive solar urban design. The LDP also identifies additional street trees which will be required for all lots.

**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	Adoption of the draft LDP will encourage a good quality built form outcome.	4.4 Create diverse places and spaces where people can enjoy a variety of lifestyles with high levels of amenity

**COMMUNITY ENGAGEMENT:**

The draft LDP has been prepared by the developer and the lots have not yet been created and are all in the ownership of the developer. The draft LDP was not advertised as it is not considered to adversely affect any owners or occupiers within the area covered by the plan or an adjoining area. The application is considered to be of low impact and would only affect the current landowners.

**PUBLIC HEALTH IMPLICATIONS**

The recommendations of this report have the potential to:

- help improve on the following determinants of health and factors –
  - Built Environment – Built Environment Quality and Neighbourhood Amenity; and
  - Socio-economics – Community Safety.

## 15.3 ADOPTION OF LOCAL DEVELOPMENT PLAN – STAGE 42 WELLARD VILLAGE, WELLARD

**RISK IMPLICATIONS:**

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

Risk Event	Appeal of Council's decision on the draft LDP.
Risk Theme	Failure to fulfil statutory regulations or compliance requirements Providing inaccurate advice/ information.
Risk Effect/Impact	Reputation Compliance
Risk Assessment Context	Strategic
Consequence	Minor
Likelihood	Possible
Rating (before treatment)	Low
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. Consideration of the application within the Statutory timeframes. Compliance of the proposal with LPS2, R-Codes, Bushfire Guidelines and relevant Policies. Liaising with the applicant throughout the application process.
Rating (after treatment)	Low

**COUNCIL DECISION**

367

MOVED CR M ROWSE

SECONDED CR D WOOD

That Council approves the Local Development Plan for Stage 42 Wellard Village, Wellard (as per Attachments B and C), pursuant to Clause 52(1)(a) of Schedule 2 – Deemed Provisions for Local Planning Schemes of the *Planning and Development (Local Planning Schemes) Regulations 2015* subject to the following modifications being made:

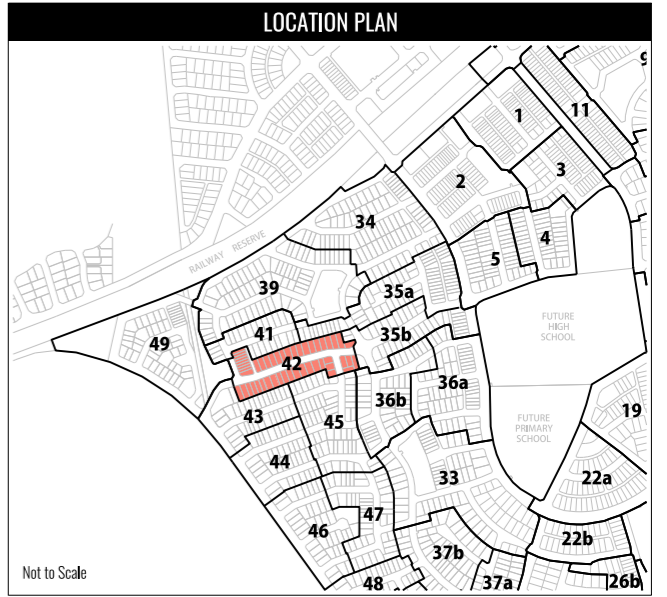
- a) Remove the reference to “BAL 12.5” in the legend and replace this with “BAL affected lot”
  - b) Include the following provision:
    - 3e For dwellings on lots where vehicle access is gained solely from a rear laneway, rooms located on the front elevation shall have a minimum ceiling height of 32 vertical brick courses (2.7 metres).

CARRIED  
5/0



Subject Site





**LEGEND**

- Local Development Plan Boundary
- R25 Coding
- R40 Coding
- Primary Dwelling Orientation
- Secondary Dwelling Orientation
- Recommended Garage Location
- Footpaths
- Retaining Wall
- No Vehicle Access
- Bushfire Attack Level (12.5)
- Retained Trees
- Approximate street tree location. Refer to approved Landscaping Plan available from the City for detail. Street trees are not to be removed or relocated by landowners.

**ENDORSEMENT OF REGISTERED TOWN PLANNER**  
 This Local Development Plan has been adopted by Council and signed by the Principal Planner.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

The requirement to consult with adjoining or other land owners to vary the Residential Design Codes in accordance with the Local Development Plan is not required except where variations to the provisions of the Local Development Plan are sought.

Planning Approval is not required, but a Building Permit is required, for the construction of a dwelling on any lot within the area covered by the Local Development Plan (including lots with a land area less than 260m<sup>2</sup>) except where variations to the provisions of the Local Development Plan are sought.

**LDP PROVISIONS – VILLAGE AT WELLARD STAGE 42**

The provisions addressed below and on the reverse plan relate to Stage 42 within The Village at Wellard Estate, Wellard.

The requirements of the Residential Design Codes (R-Codes) apply unless otherwise provided for below.

The following standards represent variations to the R-Codes and constitute 'Deemed-to-Comply' requirements pursuant to the Codes.

1. R-CODE VARIATIONS		
a) Minimum Open Space*:		
i. R25:		40%
ii. R40:		30%

2. SETBACK PROVISIONS		
	Minimum	Maximum
a) Dwelling:		
i. Primary Street:		
- R25:	3.0m	5.0m
- R40:	2.0m	4.0m
b) Garage Setbacks:		
i. Primary Street:	4.5m	-
ii. Rear Laneway:	0.5m	1.5m
iii. Secondary Street:	Nil	-
Boundary Walls: (Parapets)	For all R40 lots and lots with a frontage of 10m or less, lot boundary walls are permitted to both side boundaries for a maximum length prescribed by the front and rear setback requirements (with the exception of side street boundaries).	

NOTES – MINIMUM OPEN SPACE	
*NB:	
•	For R25 lots, minimum open space may be reduced to 40%, subject to the provision of a 30m <sup>2</sup> Outdoor Living Area.
•	For R40 lots, minimum open space may be reduced to 30%, subject to the provision of a 20m <sup>2</sup> Outdoor Living Area.
•	In both instances a minimum dimension of 4m is required with two thirds of this area uncovered and located behind the street setback area.

**3. BUILDING FORM, ORIENTATION & DWELLING FACADE**

- a) The design of dwellings shall include an articulated front elevation in the direction of the 'Primary Dwelling Orientation' arrow shown on the Local Development Plan. The front elevation shall consist of at least one major opening to a habitable room overlooking the 'Primary Dwelling Orientation'.
- b) The design of dwellings on applicable lots shall include a side elevation, which has at least one major opening facing the direction of the 'Secondary Dwelling Orientation' arrow shown on the Local Development Plan.  
The part of the dwelling which includes the required major opening shall be well articulated and its view not obstructed by visually impermeable fencing.

- c) All dwellings to provide an appropriate, high quality design interface with the surrounding streetscape, through the use of at least three of the following architectural design features:
  - i. Articulation in dwelling facade (i.e. varied wall setbacks);
  - ii. A minimum of two building materials, colours and/or finishes (E.g. render, brick, cladding);
  - iii. Major habitable room openings incorporating large windows to provide surveillance;
  - iv. Roof forms that incorporate gables;
  - v. A balcony, portico, or verandah; or
  - vi. A built-in planter box.
- d) Where possible, dwellings are to be designed to take advantage of northern solar orientation.

**4. VEHICULAR ACCESS & GARAGES/CARPORTS**

- a) All garages are to have doors to enclose them.
- b) Recommended garage locations apply to lots identified on the Local Development Plan; this referencing the side of the lot to which the garage location is recommended. Recommended garage locations do not prescribe boundary walls.
- c) Garages are not to be forward of the dwelling alignment. Garages may be aligned with the dwelling provided they do not exceed the dwelling setback line.
- d) Where lots have a frontage of 12 metres or less, garages may exceed 50% of the primary lot frontage to a maximum of 60% of the primary lot frontage.
- e) Where garages exceed 50% of the primary lot frontage, they shall comply with the following:
  - i. A clear indication of the dwelling entrance.
  - ii. The dwelling entrance shall be the dominant feature of the facade, and shall include a portico or veranda, forward of the dwelling alignment with a minimum depth of 1.5 metres.
  - iii. Garages are to be set back at least 0.5 metres behind the dwelling alignment.
- f) For any single storey dwelling on a lot with a frontage less than 10 metres in width and where vehicle access is gained solely from the primary street, only a single width garage/carport (including tandem) is permitted.
- g) Double garages are permitted on lots less than 10m wide where dwellings are two storeys and where major openings to habitable rooms are provided on the primary street frontage.
- h) For all lots where a footpath adjoins the boundary, the garage must be setback a minimum 4.5m from that boundary.

**5. UNIFORM ESTATE BOUNDARY FENCING**

- a) Any Estate provided fencing/retaining on private lots shall not be modified without written approval from the City and shall be maintained as visually permeable by landowners where applicable.

**6. FENCING**

- a) Front fences within the primary street setback shall be visually permeable above 0.9m to a maximum height of 1.2m above natural ground level.
- b) For secondary street boundaries, fencing shall be visually permeable above 1200mm behind the primary street setback, for a minimum length of 3m behind the truncation with a habitable room addressing the street.

**7. STREET TREES**

- a) In accordance with the City's Streetscape Policy, a minimum of one street tree lot is required (or as agreed with the city). Street trees will be provided by the developer within the road verge, and maintained for a minimum of two years until established (or as agreed with the City). Street trees are to be generally located as shown on the Local Development Plan, subject to detailed landscape design and crossover locations. Refer to approved landscape plans (available from the City) for detail. Street trees are not to be relocated or removed by landowners.

**8. ACOUSTICS**

- a) The following noise requirements will be met for Lots 1608-1614, 1624 and 1625:

BUILDING ELEMENTS	REQUIREMENTS
a) Walls:	<ul style="list-style-type: none"> <li>• All walls are to be of double brick cavity construction, minimum 90mm thick brick / 50mm cavity/ 90mm thick brick.                             <ul style="list-style-type: none"> <li>○ Each brick must be laid with all joints filled solid with mortar;</li> <li>○ Any alternatives are to satisfy RW 50 airborne acoustic rating.</li> </ul> </li> <li>• For the wall on the zero lot boundary:                             <ul style="list-style-type: none"> <li>○ Cavity is to be kept clean so that the bricklayer is to work neatly and minimise mortar droppings and the like. Any mortar that drops onto the anti-vibration ties is to be cleaned off immediately;</li> <li>○ The inside leaf of brickwork is to be finished with 13mm thick cement render (i.e. not direct stick plasterboard);</li> <li>○ After completing construction of the wall and assuming the neighbouring lot is vacant, the wall is to be flush so that any mortar does not protrude the line of the brickwork.</li> </ul> </li> </ul>
b) Windows:	<ul style="list-style-type: none"> <li>• Windows to be minimum 4mm thick glass in high quality residential grade frame achieving minimum R<sub>w</sub> + C<sub>tr</sub> 23 acoustic rating.</li> </ul>
c) Roof/ Ceiling:	<ul style="list-style-type: none"> <li>• Ceilings to be minimum 10mm thick plasterboard with R 2.0 insulation laid above, between the ceiling joists.</li> <li>• Alternative roof/ceiling construction to achieve minimum R<sub>w</sub> 42.</li> <li>• Eaves are to be enclosed with minimum 4mm thick fibre cement sheeting.</li> </ul>
d) Mechanical:	<ul style="list-style-type: none"> <li>• Any fans, air-conditioning or the like must be selected on the basis of quiet operation;</li> <li>• Air-conditioning units are to be:                             <ul style="list-style-type: none"> <li>○ Roof mounted on appropriate anti-vibration mounts and shall be located as central as practicable on the lot to maximise distance and line of site to adjoined dwellings; or</li> <li>○ Unit to be no more than 1.5m above ground level and located so that there is a dividing fence between dwellings (e.g. within alcove or rear courtyard).</li> </ul> </li> </ul>

**9. NOTIFICATION TO PROSPECTIVE PURCHASERS**

- a) The Developer is required to give prospective purchasers a complete copy of all the requirements of this Local Development Plan prior to Offer and Acceptance being made.

**LOCAL DEVELOPMENT PLAN**

Stage 42, The Village at Wellard Page 2 of 2

A PEET Limited and Department of Housing Joint Venture Project

NORTH

Scale: 1:1000 @ A3

0 10 20 30m

PLAN: PACWE-4-032 REVISION: A  
 DATE: 08/11/2018 DRAWN: JP  
 PROJECTION: PCG 94 PLANNER: CH  
 DATUM: AHD CHECK: CH

**Creative**  
DESIGN + PLANNING

A 28 Brown Street, East Perth WA 6004  
 P (08) 9325 0200  
 E info@creativedp.com.au  
 W creativedp.com.au

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## **15.4 Amendment 3 to the Anketell North Local Structure Plan – Lots 188 and 652 Anketell 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 3) to the Anketell North Local Structure Plan (ANLSP) (Attachment A) for Lots 188 and 652, Anketell Road (Lots 188 and 652) has been lodged with the City of Kwinana (the City) in accordance with Schedule 2, Clause 16(3) of the *Planning and Development Regulations 2015* (P&D Regulations).

Amendment 3 covers approximately 5.62 hectares (ha) of land situated immediately south of Anketell Road and west of Treeby Road. Lots 188 and 652 are under one ownership but there are three lots in separate ownership situated between the two lots. The amendment proposes that the northern portions of Lots 188 and 652 be included in the ANLSP and be shown as Commercial (approx. 2.7ha) and Mixed Use (approx. 0.3ha). The amendment also proposes modifications to the residential density and road layout over the balance of Lots 188 and 652 that are situated within the existing approved ANLSP.

The approved ANLSP spans the northern part of Anketell and includes the multiple landholdings which front Anketell Road which is a strategic freight route into the Kwinana Industrial Area and future Westport. The proposed Wandii District Centre is situated on the northern side of Anketell Road, opposite the ANLSP .

Council has considered two previous amendments to the ANLSP (Amendments 1 and 2) for those lots fronting Anketell Road which proposed strip retail and commercial land uses or higher density residential.

A significant concern of Council has been ensuring that the most appropriate land uses are determined as part of the ANLSP (service commercial land uses rather than noise sensitive residential land uses), and, that there is a clear strategy for the integration of traffic access and parking for any strip service commercial land uses along Anketell Road. It is also important that the uses and traffic access are complementary to the land uses proposed for the District Centre on the northern side of Anketell Road.

Council refused two previous ANLSP amendments (Amendments 1 and 2) as it has not been satisfied that these matters have been resolved and has advised the Western Australian Planning Commission (WAPC) of its recommendations.

In August 2018, the WAPC considered the first of the past two proposed amendments to the ANLSP (Lots 2 and 3 Anketell Road). Whilst providing its support, the WAPC conditioned that a consolidated Concept Plan was to be prepared by those proponents for the lots fronting Anketell Road (west of Treeby Road) and that this was to be done in collaboration with the other land owners. The consolidated Concept Plan was to address the concerns previously expressed by Council about appropriate land uses, traffic access/egress off Anketell Road, parking and reciprocal rights of access across the lots fronting Anketell Road.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

The consolidated Concept Plan (Attachment B) has now been prepared in collaboration with the adjoining landowners who have subsequently provided their support for the plan. City Officers have considered the Concept Plan and are satisfied that it adequately addresses the matters noted above and the requirements of the WAPC determination.

In respect to this amendment (Amendment 3), City Officers take the view that the amendment can be supported subject to some additional modifications to Part 1 of the ANLSP text and the plan. These modifications build on the recommendations of the consolidated Concept Plan and include requirements for a more detailed Traffic and Pedestrian Management Plan (TPMP), Local Development Plan (LDP) and Traffic Noise Assessment (TNA) to be prepared as a part of subdivision approvals for the subject lots.

Amendment 3 was advertised in May/June 2018 and three submissions were received from State Government agencies; one submission from the owner of Lot 4 Anketell Road and one submission from the owner of the Cockburn Gateway Shopping Centre. City Officers take the view that none of the submissions necessitated amendments to Amendment 3. The submissions, and the City's comments on the submissions are summarised in the Schedule of Submissions (Attachment C).

**OFFICER RECOMMENDATION:**

That Council takes the following action with respect to the amendment to the Anketell North Local Structure Plan (ANLSP) for Lots 188 and 652 Anketell Road, Anketell (Amendment 3):

1. Recommends to the Western Australian Planning Commission (WAPC) that Amendment 3 to the ANLSP for Lots 188 and 652 (as detailed in Attachment A) be approved subject to the following amendments:
  - a) The left in - left out intersection off Anketell Road into Lot 652 shown on the proposed amendment be removed.
  - b) The Commercial area designation adjacent to Anketell Road be replaced with the Service Commercial area designation and delete the term Mixed Use and replace with the term Residential – R40.
  - c) Inclusion of the following requirements in Part 1 of the ANLSP text (as detailed in Attachment J) to Council's satisfaction:
    - i) Preparation of a Traffic and Pedestrian Management Plan (TPMP) for the proposed Service Commercial area to be approved as part of the subdivisional approval. The TPMP should:
      - demonstrate that the proposed reciprocal right of way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service Commercial area;
      - identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions;
      - provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre; and
      - identify the vehicle access ways running east – west, between the Service Commercial and Residential areas, as 15 metre minimum width gazetted public road reserves.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

- ii) Preparation of a Local Development Plan (LDP) for the proposed Service Commercial areas and adjoining Residential areas as part of the subdivisional approval for Lots 188 and 652. The LDP should address the following matters:
    - Access, height and orientation of the dwellings within the abutting Residential area to address and meet noise and light impacts from the adjoining Service Commercial Area, Anketell Road and Kwinana Freeway. The LDP will 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;
    - requirement for Service Commercial built form to orientate towards Anketell Road;
    - positioning of Service Commercial servicing areas to prevent adverse impacts on abutting residential development from noise and light emissions;
    - how the design of the consolidated built form of the Service Commercial and immediately abutting Residential dwellings will minimise noise impacts from the Service Commercial areas and Anketell Road such that noise impacting on residential land uses south of Boney Road meets acceptable levels; and
    - The application of the principles of Council's Local Planning Policy No 8: Designing out Crime and Local Planning Policy No 7 Uniform Fencing.
  - iii) Preparation of a Traffic Noise Assessment (TNA) as a pre-cursor to a LDP.
  - d) the maximum amount of creditable POS (comprising both unrestricted and restricted POS) provided in Amendment 3, specifically in relation to that proposed on Lot 652, should be capped at 2,300m<sup>2</sup> and that the configuration of the unrestricted POS be designed to provide a functional pocket park (as identified on the marked-up plan at Attachment K). The area of POS which is proposed to wholly provide a drainage function, and is noted in Amendment 3 as comprising approximately 2,085m<sup>2</sup>, can remain as such, bearing in mind the configuration shown at Attachment K.
2. Request that the WAPC impose a condition on future subdivision applications requiring the preparation of a Landscape Feature and Tree Retention Plan in accordance with the City's Local Planning Policy No. 1. It is recommended that the Landscape Feature and Tree Retention Plan is developed in consultation with the City at the detailed design stage.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

3. Recommends to the WAPC that the Concept Plan (Attachment B) be amended as follows:-
  - a) replace the reference to Residential on Lot 652 and replace it with Service Commercial.
  - b) clearly annotate the plan to show the Service Commercial areas which should be all of the land within the Concept Plan with the exception of the Residential lots immediately north of Bonney Road.
  - c) align the road east of the roundabout on Albina Avenue, with the eastern roundabout leg as a straight road. The northern leg proposed as a right of carriageway to have adequate separation from the roundabout in accordance with Austroads Standards to ensure no queuing into the roundabout.
4. Forward this Ordinary Council Meeting Report, Council's recommendations and the Schedule of Submissions (Attachment C) to the WAPC pursuant to Schedule 2, Clause 20 of the *Planning and Development Regulations 2015*.

**BACKGROUND:**

Original approved ANLSP

The WAPC granted approval to the original ANLSP on 17 December 2015. The approved ANLSP (Attachment G) excludes the land immediately south of Anketell Road (including Lots 188 and 652) that had been proposed as Commercial in the advertised version of the ANLSP. The land on the south side of Anketell Road (including the northern portion of Lots 188 and 652) is identified as *Subject to Further Investigation* in the approved ANLSP.

When the WAPC granted approval to the ANLSP, it advised (letter dated 18 December 2015) that the following information would be required before the area on the south side of Anketell Road could be considered for inclusion in the ANSLP:

- a) The requirements of State Planning Policy 5.4 - Road and Rail Transport Noise and Freight Considerations in Land Use Planning would need to be met inclusive of the appropriate land uses and the necessary noise mitigation strategy via a noise management plan;
- b) The required type, extent and form of Commercial land uses that will provide for and support the needs of the ANLSP and complement the land uses and development envisaged for the Wandi District Centre; and
- c) Options to provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre.

These requirements have been considered by the City in its assessment of all three amendments to the ANLSP, including the proposed amendment for Lots 188 and 652.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

Current proposed amendment to the ANLSP for Lots 188 and 652 Anketell Road, Anketell

The City received the proposed amendment to the ANLSP for Lots 188 and 652 on 23 February 2018, in accordance with Schedule 2, Clause 16(3) of the P&D Regulations.

The amendment proposes that the northern portion of Lots 188 and 652 (approx. 2ha) be included in the ANLSP and identified as Commercial and Mixed Use. The amendment also proposes minor modifications to the residential density and road layout over the balance of Lots 188 and 652 (approx. 3.62ha) situated within the approved ANLSP area.

The amendment area is zoned Urban under the Metropolitan Region Scheme (MRS) and Development under Local Planning Scheme No. 2 (LPS2).

The amendment for Lots 188 and 652 is one of three amendments to the ANLSP that the City has received. The previous amendments were for:

- Lots 2 and 3 Anketell Road (to the east of Lot 188) (Amendment 1); and
- Lot 4 Anketell Road (to the west of Lot 652) (Amendment 2).

The location of the amendments is shown in Attachment D.

Amendment 1

Amendment 1 was refused by Council in December 2017, for the following reasons:

- a) Residential uses on Lots 2 and 3 may cause conflict with the use of Anketell Road as a 24/7 Strategic Freight Route to the future Outer Harbour.
- b) Residential development on Lots 2 and 3 will prevent the land fronting onto Anketell Road (between the Freeway and Treeby Road) from being developed in a manner that facilitates reciprocal vehicular access between landholdings to optimise access and egress to Anketell Road.
- c) The proposed amendment will result in ad hoc and fragmented development along Anketell Road and prevent proper and orderly planning in the area adjacent to the Wandi District Centre and Anketell Road (west of Treeby Road).
- d) The proposed amendment is premature and any decision to permit residential land uses within the amendment area should await the outcome of the investigation by the Westport Taskforce into Western Australia's freight transport needs.
- e) A retail and commercial analysis should be undertaken prior to amending the ANLSP to assist in a more robust understanding of land uses most suited to the locational opportunities of the site in the medium to long term.

Amendment 2

The northern portion of Amendment 2 was also refused by Council in June 2018, pending resolution of the following matters to Council's satisfaction:

- a) Preparation of a commercial analysis for the Service Commercial area to the City's satisfaction. The commercial analysis will assist to inform a more robust understanding of commercial land uses most suited to the location opportunities of the site in the medium to long term;

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

- b) Removal of the Commercial designation adjacent to Anketell Road and replacement with the Service Commercial designation or an alternate commercial zone that precludes residential or other sensitive land uses;
- c) Preparation of a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial land. The TPMP should:
  - provide reciprocal rights of access to facilitate co-ordinated and efficient vehicle access between the Service Commercial areas;
  - identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions; and
  - provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre.
- d) Inclusion of a requirement in the ANLSP for a Local Development Plan (LDP) to be prepared for the broader Service Commercial area. The LDP should address the following matters:
  - built form to block vehicle noise from Anketell Road;
  - requirement for built form to orientate towards Anketell Road;
  - built form to have regard to the broader service commercial area in the ANLSP; and
  - positioning of service areas to prevent adverse impacts on abutting residential development from noise and light emissions.

**WAPC Schedule of Modifications**

On 14 August 2018, the WAPC Statutory Planning Committee endorsed a Schedule of Modifications to Amendment 1 (Attachment E), which requires that changes be made to the amendment prior to it being approved by the WAPC. The Schedule of Modifications was prepared in consultation with City Officers, and Department of Planning Lands and Heritage (DPLH) requires that the City also consider the modifications.

Not all of the WAPC's required modifications are relevant to Amendment 3. The relevant requirements are listed in Table 1 below. City Officers are satisfied that the updated Concept Plan adequately resolves these issues.

**Table 1: Relevant requirements of the WAPC's Schedule of Modifications**

<b>WAPC Schedule of Modifications (relevant to Lots 188 and 652)</b>	<b>City Officers Comment</b>
1. Identification of the requirement for reciprocal rights of access to be provided to facilitate co-ordinated and efficient vehicle access to the Service Commercial areas.	City Officers recommend that the amendment to the ANLSP for Lots 188 and 652 be approved pending inclusion of a requirement to prepare a Traffic and Pedestrian Management Plan (TPMP) that addresses this requirement.
2. Stipulation that the intersection of the proposed new internal north-south road and Anketell Road is to be constructed as a left in/left out intersection in accordance with Main Roads WA's Vehicle Access Strategy for Anketell Road.	The intersection of the proposed new internal north-south road and Anketell Road is identified as left in - left out only in the updated Concept Plan. Access arrangements to Lots 188 and 652 have regard to this.



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3.	Preparation of a consolidated Concept Plan for the whole of the excluded area on the approved ANSLP Map, in collaboration with the landowners of Lots 4, 188 and 652.	An updated Concept Plan (Attachment B) outlining vehicle movement, reciprocal rights of access and built form has also been received by the City demonstrating how the development of Lots 188, 2, 3, 4 and 652 will be coordinated.
4.	<p>Updating Part 1 of the ANLSP text provisions to include the following: Requirement for a Local Development Plan to be prepared for Service Commercial areas, with direction regarding key relevant considerations to be addressed (i.e. built form to shield/block vehicle noise from Anketell Road, requirement for built form to orientate towards Anketell Road and positioning of service areas and access ways to minimise impacts on abutting residential development).</p> <p>Requirement for a Traffic Management Plan (TMP) to be prepared and submitted with an Application for Planning Approval for Service Commercial land. The TMP will be required to demonstrate how the design of the development and its proposed access arrangements will minimise impacts on nearby residential development (i.e. identification of access points, parking areas, loading areas and management of operations to minimise adverse impacts on abutting residential development and associated amenity).</p>	<p>City Officers recommend that the amendment to the ANLSP for Lots 188 and 652 be approved subject to requirement to prepare a Local Development Plan.</p> <p>City Officers recommend that the amendment to the ANLSP for Lots 188 and 652 be approved pending inclusion of a requirement to prepare a Traffic and Pedestrian Management Plan.</p>

Additional comments from DPLH

Additional comments were provided by the DPLH to assist with the implementation of the WAPC's Schedule of Modifications (Attachment F). The comments relevant to Amendment 3 are set out in Table 1. City Officers are satisfied that the updated Concept Plan adequately resolves these issues as summarised in Table 2 and outlined in this report.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

**Table 2: Additional comments provided by DPLH to assist with the implementation of the WAPC's Schedule of Modifications**

<b>DPLH comment</b>		<b>City Officers Comment</b>
1.	An indicative street block layout is to be identified on Lot 652 to the west of Narran Street to illustrate the intended co-ordinated planning and development outcome.	The lot design has been included in the updated Concept Plan as required.
2.	The orientation of development on the western side of Lot 3 and Lot 652 is to be amended to also orientate to Anketell Road.	The orientation has been identified on the updated Concept Plan as required.
3.	It is to be demonstrated that the proposed Reciprocal Right of Way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service Commercial land use and development outcome (i.e. delivery trucks). The Reciprocal Right of Way arrangements are to be identified as indicative.	The requirement to prepare a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial area is included as an action in the Officer Recommendation. TPMP shall: <ul style="list-style-type: none"> <li>•demonstrate that the proposed reciprocal right of way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service Commercial area;</li> <li>•identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions; and</li> </ul>
		•provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre.
4.	'Landscaping' and 'Parking & Access' are both to be identified as indicative and subject to the requirements of the City's Local Planning Scheme No. 2 (LPS 2).	'Landscaping' and 'Parking & Access' have been identified in the updated Concept Plan as required.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

5.	Consideration is to be given to illustrating that the relevant development requirements (i.e. setbacks, plot ratio, landscaping, car parking, loading and unloading areas) of the City's TPS2 can indicatively be achieved in the development of the proposed Service Commercial areas.	The main issues of concern to City Officers in relation to Amendments 1, 2 and 3 were to ensure that: (a) the most appropriate land uses are determined as part of the structure plans (retail and commercial land uses rather than noise sensitive residential); and (b) there is a clear strategy for the integration of traffic access and parking for future retail and commercial land uses along Anketell Road. City Officers are satisfied that the updated Concept Plan adequately resolves these issues and that the consideration of setbacks, plot ratio, landscaping, car parking, loading and unloading areas can be dealt as part of the recommended Local Development Plan.
6.	Consideration is to be given to the identification of preferred land uses on the proposed Service Commercial lots.	City Officers are satisfied that the updated Concept Plan adequately resolves the main issues in relation to Amendments 1, 2 and 3 which were to ensure that: (a) the most appropriate land uses are determined as part of the structure plans (retail and commercial land uses rather than noise sensitive residential), and (b) there is a clear strategy for the integration of traffic access and parking for future retail and commercial land uses along Anketell Road. City Officers are satisfied that the updated Concept Plan adequately resolves these issues and that Local Planning Scheme No. 2 is the appropriate mechanism for controlling land use within the proposed Service Commercial area.
7.	Arrangements for the implementation of the proposed reciprocal rights of access. It is the DPLH's expectation that evidence of these arrangements being in place on title will be provided in advance of the determination of subdivision applications for Service Commercial land so as to ensure that the requirements of Item 2 of the Schedule of Modifications are realised.	City Officers agree with this requirement and no further action is required at this stage. The Officer Recommendation includes a requirement to prepare a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial area. TPMP shall demonstrate that the proposed reciprocal right of way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service Commercial area.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

8.	Preparation of a Traffic Noise Assessment (TNA) as a precursor to subdivision and/or development approval and arrangements for the subsequent implementation of the recommendations of the TNA.	City Officers agree with this requirement and no further action is required at this stage. The requirement to prepare a TNA is included as an action in the Officer Recommendation, as a precursor to a LDP
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Updated Concept Plan

The updated Concept Plan and supporting documentation was received by the City on 1 November 2018. Whilst some modifications are sought, in general, City Officers are satisfied that the updated Concept Plan adequately resolves the main issues that were raised by Council in relation to Amendments 1 and 2 (reciprocal vehicle access and traffic noise), and a number of additional matters raised by the WAPC. The main issues that have been resolved by the updated Concept Plan are:

- a) identification of reciprocal rights of access that facilitate coordinated and efficient vehicle access to the Service Commercial areas (in accordance with City of Kwinana and WAPC requirements);
- b) stipulation that the intersection of the proposed internal north-south road and Anketell Road is to be constructed as a left in/left out intersection in accordance with Main Roads WA's Vehicle Access Strategy for Anketell Road (in accordance with Main Roads City of Kwinana and WAPC requirements);
- c) identification of the Mixed Use/Residential on Lot 188, shown in the advertised version of the amendment for Lots 188 and 652, as Residential (in accordance with City of Kwinana and WAPC requirements);
- d) identification of a subdivision design on Lot 652 to illustrate the intended coordinated planning and development outcome (in accordance with WAPC requirements); and
- e) Landscaping, Parking and Access are to be identified as indicative and subject to the requirements of the City's Local Planning Scheme No. 2 (LPS2).

There are a number of modifications that City Officers believe require amendment as part of the final adoption of the Concept Plan by the WAPC.

- a) replace the reference to Residential on Lot 2<sup>1</sup> and replace it with Service Commercial. It is considered appropriate that the Service Commercial area within this lot should be expanded and consolidated to provide maximum development potential given the depth and width of the lot.
- b) clearly annotate the plan to show the Service Commercial areas which should be all of the land within the Concept Plan with the exception of the Residential lots immediately north of Bonney Road.
- c) align the road east of the roundabout on Albina Avenue, with the eastern roundabout leg as a straight road. The northern leg proposed as a right of carriageway to have adequate separation from the roundabout in accordance with Austroads Standards to ensure no queuing into the roundabout.

<sup>1</sup> That the Lot number has been amended from 652 to 2 as it was incorrectly referenced in the Ordinary Council Meeting Agenda.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

- d) the maximum amount of creditable POS (comprising both unrestricted and restricted POS) provided in Amendment 3, specifically in relation to that proposed on Lot 652, should be capped at 2,300m<sup>2</sup> and that the configuration of the unrestricted POS be designed to provide a functional pocket park (as identified on the marked-up plan at Attachment K). The area of POS which is proposed to provide a drainage and bushfire management function, and is noted in Amendment 3 as comprising approximately 2,085m<sup>2</sup>, can remain as such, bearing in mind the configuration shown at Attachment K.

**Discussion and Recommendations on the Amendment 3**

City Officers recommend to Council that the amendment to the ANLSP for Lots 188 and 652, be approved pending inclusion of requirements in the ANLSP to:

- a) Prepare of a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial land. The TPMP should:
- demonstrate that the proposed reciprocal right of way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service commercial area;
  - identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions; and
  - provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre to the north.
- b) Preparation of a Local Development Plan (LDP) for the broader Service Commercial area and abutting Residential area. The LDP should address the following matters:
- built form to block vehicle noise from Anketell Road;
  - requirement for built form to orientate towards Anketell Road;
  - built form to have regard to the broader service commercial/mixed use area in the ANLSP;
  - positioning of service areas to prevent adverse impacts on abutting residential development from noise and light emissions;
  - identify the vehicle access ways running east – west, between the Service Commercial and Residential areas, as 15 metre minimum width gazetted public road reserves; and
  - The application of the principles of Council's Local Planning Policy No 8: Designing out Crime and Local Planning Policy No 7 Uniform Fencing.
- c) Preparation of a Traffic Noise Assessment (TNA) as a pre-cursor to subdivision and/or development approval and arrangements for the subsequent implementation of the recommendations of the TNA.

**STRATEGIC PLANNING ISSUES**

In September 2017, the State Government established the Westport Taskforce to investigate a total supply chain solution to Western Australia's growing freight volumes (including a new Outer Harbour) recognising the importance of providing high standard freight corridors to the future Outer Harbour.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

The provision of freight corridors to connect the future Outer Harbour to the broader metropolitan transport network requires a number of east - west links across the south west metropolitan sub-region to be upgraded, including Anketell Road. For this reason, Anketell Road is identified as a Strategic Freight Route in the Perth Freight Transport Network Plan for Transport @ 3.5 million (Department of Transport, 2016).

As a Strategic Freight Route to the future Outer Harbour, Anketell Road will provide operations for heavy vehicles up to 36.5m in length; and vehicles carrying Over-Size Over-Mass and Heavy Wide Cargos. The future Outer Harbour will need to be capable of operating on a 24/7 basis, which may cause night time noise and vibration exposure to properties in the vicinity of Anketell Road.

City Officers are of the view that orderly and proper planning and the determination of optimal long term land uses on Lots 188 and 652 (and adjoining properties), should take the following matters into consideration:

- Optimisation of land use in the vicinity of Kwinana Freeway, Wandi District Centre and Anketell Road;
- Safe and Efficient Freight Transport Network Controlled access and egress to Anketell Road; and
- Land uses compatibility – Traffic noise from Anketell Road.

The consideration of these long term issues in the context of the proposed amendment to the ANLSP are discussed below:

a) Optimisation of land use in the vicinity of Kwinana Freeway, Wandi District Centre and Anketell Road

Lots 188 and 652 are adjacent to the proposed Wandi District Centre and Anketell Road. The amendment for Lots 188 and 652 proposes commercial land uses abutting Anketell Road.

City Officers are of the view that orderly and proper planning and the determination of the long term optimal uses of Lots 188 and 652, should take into consideration the close proximity of the Kwinana Freeway, Wandi District Centre and Anketell Road.

The State Planning Policy 4.2 – Activity Centres for Perth and Peel (SPP4.2) describes a District Centre as a centre that focuses on providing services, facilities and job opportunities that reflect the particular needs of its catchment. SPP4.2 states that health, welfare, community services, entertainment, recreation, commercial and cultural facilities likely to attract a significant number of employees or users and/or generate significant vehicle trips should generally be located in, or adjacent to, activity centres.

The City's Local Commercial and Activity Centres Strategy (LCACS) states that there is considerable potential for bulky goods retail floor space within the Wandi District Centre due to its accessibility to the Kwinana Freeway.

The updated Concept Plan shows that Service Commercial built form will buffer proposed residential uses within the amendment area from acoustic impacts associated with Anketell Road.

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b) Safe and Efficient Freight Transport Network – Controlled access and egress to Anketell Road

As a Strategic Freight Route, Anketell Road will be permitted to carry road trains with Over Size, Over Mass and Heavy Wide Cargos.

Main Roads WA (MRWA) has adopted a Vehicle Access Strategy for Anketell Road (between Kwinana Freeway and Lyon Road) in which the intersection at Treeby Road is identified as having full movement controlled access. This access strategy was adopted by the WAPC in December 2015. The only left in/left out access point identified in the Vehicle Access Strategy to the lots on the southern side of Anketell Road is positioned at Lot 3 (east of Lot 188) due to proximity to the Kwinana Freeway on/off ramp

The amendment for Lots 188 and 652 proposes to reposition the approved left in/left out access 195m westward to Lot 188. This is not supported by MRWA because it compromises the functionality of the Anketell Road/Kwinana Freeway intersection and impedes the ability to extend the existing deceleration lane further eastwards, for a design speed of 90km/h.

The limited access west of Treeby Road, from the lots on the southern side of Anketell Road (including Lot 188 and 652), places a constraint on the level of vehicular access available to these lots. City Officers are of the view that this necessitates that the fragmented landholdings abutting Anketell Road (west of Treeby Road) should be planned in a coordinated and integrated manner so that all of the lots are able to share access to Treeby Road.

City Officers recommend to Council that the amendment to the ANLSP for Lots 188 and 652, be approved on the basis that the updated Concept Plan:

- identifies reciprocal rights of access to facilitate co-ordinated and efficient vehicle access to the Service Commercial areas (in accordance with City of Kwinana and WAPC requirements); and
- stipulates that the intersection of the proposed internal north-south road and Anketell Road is to be constructed as a left in/left out intersection in accordance with Main Roads WA's Vehicle Access Strategy for Anketell Road (in accordance with City of Kwinana and WAPC requirements).

c) Land Use Compatibility - Traffic Noise from Anketell Road

Anketell is a Strategic Freight Route to be used by heavy vehicles travelling to and from the future Outer Harbour. The Outer Harbour is likely to operate on a 24/7 basis, and vehicles travelling along Anketell Road may cause night time noise and vibration exposure to properties in the vicinity of the road.

State Planning Policy - 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP5.4) (WAPC, 2009) aims to minimise the adverse impact of transport noise on noise sensitive residential development by achieving:

- acceptable indoor noise levels in noise sensitive areas [ $L_{Aeq(Day)}$  40dB(A) in living areas and  $L_{Aeq(Night)}$  35dB(A) in bedrooms]; and
- a reasonable degree of acoustic amenity in at least one outdoor living area [ $L_{Aeq(Day)}$  55dB(A) and  $L_{Aeq(Night)}$  50dB(A)].

The proponent submitted an Acoustic Assessment (Herring and Storer Acoustics, 2017) in support of the proposed amendment to the ANLSP.

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The results of the acoustic assessment indicate that because the land adjacent to Anketell Road is proposed to be developed for commercial purposes, these buildings will provide a significant barrier to the residential lots to the south negating the requirement for any further amelioration.

City Officers consider that a coordinated and integrated service commercial area (showrooms, warehouses and bulky goods) is an appropriate land use fronting onto Anketell Road (west of Treeby Road) because these land uses would:

- utilise the exposure to Anketell Road and its future strategic freight road function;
- benefit from the close proximity to the Kwinana Freeway;
- complement the commercial function of the Wandi District Centre; and
- enable vehicle access to Treeby Road and car parking to be coordinated in an efficient manner across all of the lots (situated west of Treeby Road).

City Officers recommend to Council that the amendment to the ANLSP for Lots 188 and 652, be approved pending inclusion of a requirement in the ANLSP to:

- Prepare of a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial land. The TPMP should:
  - demonstrate that the proposed reciprocal right of way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service commercial area;
  - identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions; and
  - provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre to the north.
- Inclusion of a requirement in the ANLSP for a Local Development Plan (LDP) to be prepared for the broader Service Commercial area. The LDP should address the following matters:
  - built form to block vehicle noise from Anketell Road;
  - requirement for built form to orientate towards Anketell Road;
  - built form to have regard to the broader service commercial/mixed use area in the ANLSP; and
  - positioning of service areas to prevent adverse impacts on abutting residential development from noise and light emissions.
- Preparation of a Traffic Noise Assessment (TNA) as a pre-cursor to subdivision and/or development approval and arrangements for the subsequent implementation of the recommendations of the TNA.

### **LIVEABLE NEIGHBOURHOODS ASSESSMENT**

The WAPC requires LSPs to be prepared in accordance with objectives and requirements of Liveable Neighbourhoods (WAPC, 2009). The proposed amendment to the ANLSP has been assessed by City Officers against the following elements of Liveable Neighbourhoods:



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**Element 1 - Community Design**

Lots 188 and 652 are situated within the ANLSP, which has been designed to meet the objectives and requirements of Liveable Neighbourhoods as outlined in the assessment of Elements 2-7 below.

**Element 2 - Movement Network**

As discussed earlier in this report the matters resolved by the amended Concept Plan are:

- identification of reciprocal rights of access that facilitate co-ordinated and efficient vehicle access to the Service Commercial areas (in accordance with City of Kwinana and WAPC requirements); and
- stipulation that the intersection of the proposed internal north-south road and Anketell Road is to be constructed as a left in/left out intersection in accordance with Main Roads WA's Vehicle Access Strategy for Anketell Road (in accordance with City of Kwinana and WAPC requirements).

City Officers recommend that the amendment be approved pending inclusion of a requirement in the ANLSP to prepare of a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial land. The TPMP should:

- demonstrate that the proposed reciprocal right of way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service commercial area;
- identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions; and
- provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre to the north.

The City's Engineering Department advises that two of the vehicle access ways running east – west between the Service Commercial and Residential areas, be identified as 15 metre wide gazetted public road reserves in a Traffic and Pedestrian Management Plan.

The City's Engineering Department further advised that the road reserves are to be designed in accordance with Liveable Neighbourhoods to an access road standard, however the design and cross sections are to be such that semi-trailer service vehicles can access the Service Commercial uses, provide for verges for servicing and streetscapes, and provide a buffer/separation between the Residential and Service Commercial areas.

These roads provide access to residential dwellings and commercial premises, and also serve as through roads for general traffic, hence are to be gazetted as public roads. Other proposed roads located north of the Service Commercial uses are to be private roads/driveways, with right of carriageway agreements for access.

The City's Engineering Department also advise that the road east of the roundabout on Albina Avenue, is to be aligned with the eastern roundabout leg as a straight road. The northern leg proposed as a right of carriageway (as part of the Service Commercial area) is to have adequate separation from the roundabout in accordance with Austroads standards to ensure no queuing into the roundabout.

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**Element 3 - Lot Layout**

The amendment to the ANLSP for Lots 188 and 652 proposes a yield of approximately 60 residential lots varying in size between 229m<sup>2</sup> and 540m<sup>2</sup>. The detailed plan for Lot 188 (Attachment H) indicates an additional 16 lots in the Mixed Use area (shown in red), however City Officers recommend that this area be shown as Service Commercial to preclude residential or other sensitive land uses in the vicinity of Anketell Road.

The dwelling yield falls short of the 15 dwellings per gross urban zone target set by Directions 2031. However, City Officers support the proposed lot yield on the basis that 1.67ha of the amendment area is allocated to Service Commercial and the area of public open space (POS) provided is in excess of the 10% Liveable Neighbourhoods requirement.

**Element 4 - Public Parkland**

The area of POS provided in the proposed amendment for Lots 188 and 652 exceeds the 10% minimum requirement set under Liveable Neighbourhoods as set out in the table below (3,402m<sup>2</sup> required – 4,415m<sup>2</sup> provided) as set out in the table below.

	<b>Required</b>	<b>Actual</b>
<b>10% POS</b>	3,402m <sup>2</sup>	4,415m <sup>2</sup>
<b>Max restricted permitted</b>	680m <sup>2</sup>	352m <sup>2</sup>
<b>Min unrestricted permitted</b>	2,721m <sup>2</sup>	4,063m <sup>2</sup>
<b>Non credited</b>		2,085m <sup>2</sup> (drainage and fire buffer along boundary)

The approved ANLSP provides a strip of POS along the western boundary for a drainage and a bushfire buffer. There is no proposed POS proposed on Lot 188 under the approved ANLSP. The POS in the approved ANLSP has been repositioned in the proposed amendment as shown in the plans below.

The total area of POS proposed in Amendment 3 exceeds the amount of POS identified in the adopted ANLSP and subsequently reflected in the Development Contribution Plan (DCP) for Development Contribution Area 4 (DCA4). City Officers are of the view that an excess amount of POS, as proposed in Amendment 3, could compromise the delivery of POS in the balance of ANLSP, specifically, the Local Sporting Ground with Facility Building that is proposed in both DCP4 (land component) and Amendment 145 to the City's LPS2 (the Facility Building).

It is recommended that the maximum amount of creditable POS (comprising both unrestricted and restricted POS) provided in Amendment 3, specifically in relation to that proposed on Lot 652, should be capped at 2,300m<sup>2</sup> and that the configuration of the unrestricted POS be designed to provide a functional pocket park (as identified on the marked-up plan at Attachment K). The area of POS which is proposed to wholly provide a drainage function, and is noted in Amendment 3 as comprising approximately 2,085m<sup>2</sup>, can remain as such, bearing in mind the configuration shown at Attachment xx.

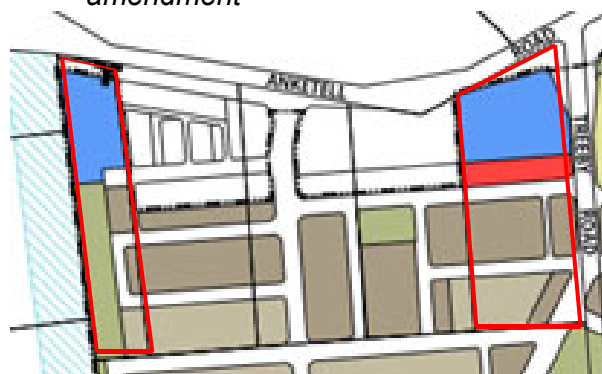
**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

This alternative proposal would result in not only a more functional area of POS being provided within the respective walkable catchment, but also would not present a material change to the landowner's POS liability.

*Location of POS in approved ANLSP*



*Location of POS in proposed amendment*



#### **Element 5 - Urban Water Management**

The following water management plans and strategies have been prepared for the proposed amendment to the ANLSP for Lots 188 and 652. These strategies include:

- Jandakot Drainage and Water Management Plan - Peel Main Drain Catchment (Department of Water, 2009);
- Anketell North Urban Cell - Local Water Management Strategy (March, 2014); and
- Stormwater Management Report - Lots 188 and 652 Anketell Road, Anketell (Hitesh Dubal, January 2018).

These plans address water management within the amendment area providing a greater level of detail at each successive stage of the planning process. The system of stormwater management proposed for Lots 188 and 652 in the Stormwater Management Report (January, 2018) is consistent with the Local Water Management Strategy (March, 2014) that was approved as part of the ANLSP.

#### **Element 6 - Utilities**

The Engineering Services Report prepared to support the proposed amendment for Lots 188 and 652 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.

The servicing agencies have not raised concerns with the proposed amendment to the ANLSP for Lots 188 and 652.

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**Element 7 - Activity Centres and Employment**

City Officers support Service Commercial land uses on Lot 188 and 652 (abutting Anketell Road) on the basis that this location has:

- direct frontage and exposure to the Anketell Road and its future strategic freight road function;
- close proximity to the future Wandie District Centre;
- close proximity to the Kwinana Freeway; and
- provides a suitable barrier between residential dwellings and traffic noise from Anketell Road.

**SUMMARY AND RESPONSE TO ISSUES RAISED IN THE SUBMISSIONS**

Five submissions were received during the submission period, including: three submissions from State government agencies; the owner of Lot 4 Anketell Road; and the owner of the Cockburn Gateway Shopping Centre.

An outline of each submission and the City Officer comments in response to the submissions is provided in the Schedule of Submissions (Attachment C). The main issues raised in the submissions and the City's response to the issues are summarised in Table 3 below. Some of these matters have already been discussed as part of the Report.

**Table 3: City Officers response to the main issues raised in the submissions**

<b>Main Issues Raised In Submissions</b>		<b>City Officers Comments</b>
1.	Left in - left out access to Lot 652 from Anketell Road is not supported by Main Roads.	City Officers support this position of the Main Roads. Amendment 3 should be amended to remove this access/egress.  The updated Concept Plan does not show this intersection. City Officers are satisfied that the updated Concept Plan adequately resolves this issue.
2.	The amendment and BMP have adequately identified issues arising from the bushfire hazard level assessment and considered how compliance with the bushfire protection criteria can be achieved at subsequent planning stages. As the issues identified will not affect the amendment to the structure plan, DFES recommends the amendment proceed, but the applicant should be advised that modifications to the BMP will need to be undertaken to support subsequent stages of the planning process (subdivision and development applications) to ensure an effective bushfire management outcome.	Agreed

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

3.	The proposed amendment to the ANLSP should not be supported until a fit for purpose retail and commercial analysis is undertaken to assist in a more robust and detailed understanding of land uses most suited to the locational opportunities of the site in the medium to long term.	City Officers are satisfied that the updated Concept Plan adequately resolves the main issues in relation to Amendments 1, 2 and 3 which were to ensure that the most appropriate land uses are determined as part of the structure plans (retail and commercial land uses rather than noise sensitive residential), and, that there is a clear strategy for the integration of traffic access and parking for future retail and commercial land uses along Anketell Road. The WAPC has requested that Amendment 1 be modified to remove the Residential Designation adjacent to Anketell Road and replace it with a Service Commercial designation. The WAPC also requested a consolidated concept plan for Lots 188, 4 and 652 Anketell Road and to identify coordinated and efficient access for the Service Commercial areas. In effect the WAPC has supported the future use of Lots 188, 2, 3, 4 and 652 as Service Commercial.
4.	To avoid future land use conflicts built form controls should respond to the future dwellings that will be adjacent.	The City recommends that the proposed amendment to the ANLSP for Lots 188 and 652 be approved subject to the resolution of the following matters to Council's satisfaction: <ul style="list-style-type: none"> <li>a) Inclusion of a requirement in the ANLSP for a Local Development Plan (LDP) to be prepared for the broader Service Commercial area.</li> <li>b) Preparation of a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial land.</li> </ul>

**OTHER MATTERS ASSESSED BY THE CITY**

In addition to Liveable Neighbourhoods, the City has also assessed the LSP against the following matters:

Retention of Significant Trees

City Officers recommend that the WAPC be requested to impose a condition on future subdivision applications requiring the preparation of a Landscape Feature and Tree Retention Plan in accordance with Local Planning Policy No. 1, to ensure that the retention of significant trees is optimised as part of the civil design and earthworks. It is recommended that the Landscape Feature and Tree Retention Plan is developed in consultation with the City at the detailed design stage.

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

**Bushfire Management**

State Planning Policy 3.7 – Planning in Bushfire Prone Areas (SPP 3.7) states that LSPs should be accompanied by a Bushfire Management Plan (BMP) which includes a Bushfire Hazard Level assessment or Bushfire Attack Level (BAL) Contour Map for those areas identified as bushfire prone.

The ANLSP area is identified as a Bushfire Prone Area in the Map of Bushfire Prone Areas (2015), therefore, a BMP is required to support the proposed amendment to the LSP.

A BMP (October 2017) has been prepared for the proponent by Eco Logical Australia to support the proposed amendment to the ANLSP for Lots 188 and 652.

The proponent has advised that the existing vegetation on Lots 188 and 652 will be cleared to enable development and retention of significant trees and is of the view that the remnant vegetation currently on site will not create a bushfire hazard because there will be:

- a staged clearing process (in accordance with AS 3959);
- adequate separation of future built assets from classified vegetation; and
- ongoing fuel management that will be undertaken in and around individual development stages (in accordance with AS 3959).

The Department of Fire and Emergency Services (DFES) has advised that the proposed amendment and BMP have adequately identified issues arising from the bushfire hazard level assessment and considered how compliance with the bushfire protection criteria can be achieved at subsequent planning stages.

**LEGAL/POLICY IMPLICATIONS:**

For the purpose of Councillors considering a financial or impartiality interest only, the proponent/owners of Lot 188 are Kumar Meshgin, Chuen Shiung Chai and Hoa Thuy Tien Nguyen; and Lot 652 are Filton Pty Ltd (Lot 652).

**Acts and Regulations**

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

**Schemes**

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

**State Government Policies**

- Jandakot Drainage and Water Management Plan - Peel Main Drain Catchment
- Liveable Neighbourhoods 2009
- Perth Freight Transport Network Plan for Transport @ 3.5 million (DoT, 2016)
- State Planning Policy 3.7 – Planning in Bushfire Prone Areas
- State Planning Policy 4.2 – Activity Centres for Perth and Peel

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

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

Local Planning Policies

- Local Planning Policy No. 1 - Landscape Feature and Tree Retention
- Local Commercial and Activity Centres Strategy (LCACS)
- Council's Local Planning Policy No 8: Designing out Crime
- Local Planning Policy No 7 Uniform Fencing

**FINANCIAL / BUDGET IMPLICATIONS:**

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

If development proceeds, Council will receive additional rates income.

**ASSET MANAGEMENT IMPLICATIONS:**

The City will be financially responsible for maintaining POS, roads, verge trees and footpaths within the LSP 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)*. 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 & 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.

**STRATEGIC/SOCIAL IMPLICATIONS:**

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

**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

<b>Plan</b>	<b>Outcome</b>	<b>Objective</b>
<i>Strategic Community Plan</i>	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:**

The City advertised the amendment to the ANLSP for 26 days between 14 May and 8 June 2018 in accordance with Schedule 2, Clause 18 of the P&D Regulations.

Public advertising was carried out in the following manner:

- Nearby land owners and State government agencies were notified of the proposal in writing and invited to comment;
- The proponent erected a sign 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 ANLSP 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:

- Main Roads WA
- Department of Fire and Emergency Services
- Water Corporation

Submissions were received from all of these State government agencies during the advertising period.

Submissions were also received from two planning consultancies on behalf of the owner of the Cockburn Gateway Shopping Centre; and the owner of Lot 4 Anketell Road. The submissions and City Officers comments are summarised in the Schedule of Submissions in accordance with clause 20(2) of the P&D Regulations.

**PUBLIC HEALTH IMPLICATIONS:**

The City will require that future development applications within the ANLSP area are accompanied by noise studies to demonstrate that the proposed built form will not result in sensitive land uses being exposed to unacceptable noise emissions, to the satisfaction of the City.

The City will only support land uses in locations where it can be confident there will not be long-term noise conflicts.



**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

**RISK IMPLICATIONS:**

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

Risk Event	The WAPC may not adopt the City's advice which may constrain 24/7 operation of the future Outer Harbour.
Risk Theme	Failure to fulfil statutory regulations or compliance requirements
Risk Effect/Impact	Compliance
Risk Assessment Context	Strategic
Consequence	Moderate
Likelihood	Possible
Rating (before treatment)	Moderate
Risk Treatment in place	<p>The 60 day period in which the City is required to report to the WAPC, under Schedule 2 Clause 20 of the P&amp;D Regulations, expired on the 6 August 2018 (60 days from close of advertising).</p> <p>City Officers have been liaising with the WAPC and the proponent in regards to Amendment 3 and Amendments 1 and 2 previously determined by Council. On 14 August 2018, the WAPC's Statutory Planning Committee endorsed a Schedule of Modifications to Amendment 1 to the ANLSP, which requires that changes be made to Amendment 1 and the concept plan (for the area the subject of Amendments 1, 2 and 3).</p> <p>Amendment 3 could not be progressed until the proponent had lodged an updated Concept Plan with the City.</p> <p>The City received the updated Concept Plan from the WAPC on 1 November 2018. The City prepared this report for the first available Council meeting after reviewing the Concept Plan.</p>
Response to risk treatment required/in place	The City is to give due regard to the amended ANLSP when providing advice to the WAPC in relation to subdivision applications and making decisions in relation to development applications.
Rating (after treatment)	Moderate

15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION

**COUNCIL DECISION**

368

**MOVED CR S LEE**

**SECONDED CR P FEASEY**

**That Council takes the following action with respect to the amendment to the Anketell North Local Structure Plan (ANLSP) for Lots 188 and 652 Anketell Road, Anketell (Amendment 3):**

- 1. Recommends to the Western Australian Planning Commission (WAPC) that Amendment 3 to the ANLSP for Lots 188 and 652 (as detailed in Attachment A) be approved subject to the following amendments:**
  - a) The left in - left out intersection off Anketell Road into Lot 652 shown on the proposed amendment be removed.**
  - b) The Commercial area designation adjacent to Anketell Road be replaced with the Service Commercial area designation and delete the term Mixed Use and replace with the term Residential – R40.**
  - c) Inclusion of the following requirements in Part 1 of the ANLSP text (as detailed in Attachment J) to Council’s satisfaction:**
    - i) Preparation of a Traffic and Pedestrian Management Plan (TPMP) for the proposed Service Commercial area to be approved as part of the subdivisional approval. The TPMP should:**
      - demonstrate that the proposed reciprocal right of way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service Commercial area;**
      - identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions;**
      - provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandi District Centre; and**
      - identify the vehicle access ways running east – west, between the Service Commercial and Residential areas, as 15 metre minimum width gazetted public road reserves.**
    - ii) Preparation of a Local Development Plan (LDP) for the proposed Service Commercial areas and adjoining Residential areas as part of the subdivisional approval for Lots 188 and 652. The LDP should address the following matters:**
      - Access, height and orientation of the dwellings within the abutting Residential area to address and meet noise and light impacts from the adjoining Service Commercial Area, Anketell Road and Kwinana Freeway. The LDP will 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;**
      - requirement for Service Commercial built form to orientate towards Anketell Road;**
      - positioning of Service Commercial servicing areas to prevent adverse impacts on abutting residential development from noise and light emissions;**

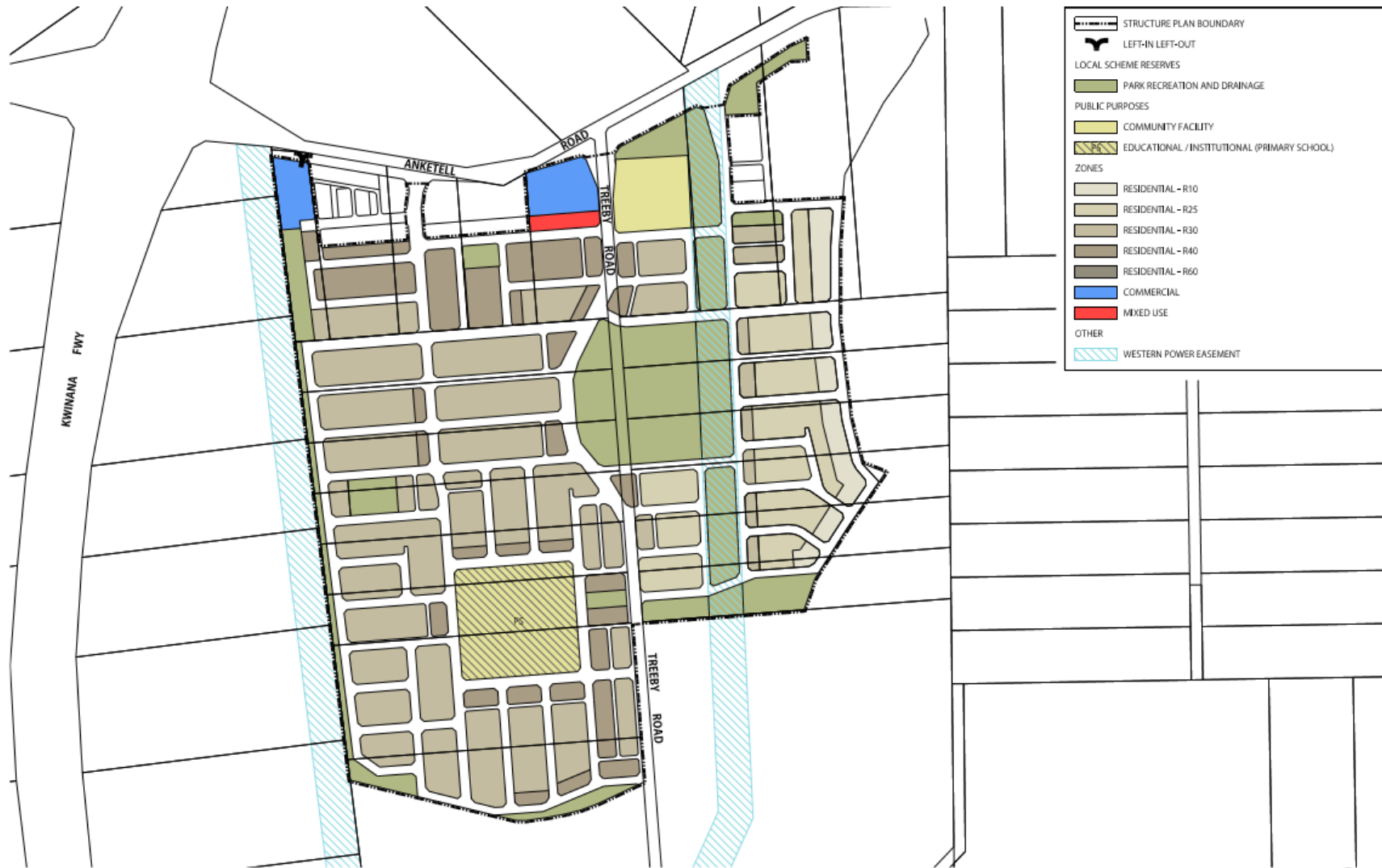
**15.4 AMENDMENT 3 TO THE ANKETELL NORTH LOCAL STRUCTURE PLAN – LOTS 188 AND 652 ANKETELL ROAD, ANKETELL - CONSIDERATION OF SUBMISSIONS AND RECOMMENDATION TO THE WESTERN AUSTRALIAN PLANNING COMMISSION**

- how the design of the consolidated built form of the Service Commercial and immediately abutting Residential dwellings will minimise noise impacts from the Service Commercial areas and Anketell Road such that noise impacting on residential land uses south of Boney Road meets acceptable levels; and
  - The application of the principles of Council's Local Planning Policy No 8: Designing out Crime and Local Planning Policy No 7 Uniform Fencing.
- iii) Preparation of a Traffic Noise Assessment (TNA) as a pre-cursor to a LDP.
- d) the maximum amount of creditable POS (comprising both unrestricted and restricted POS) provided in Amendment 3, specifically in relation to that proposed on Lot 652, should be capped at 2,300m<sup>2</sup> and that the configuration of the unrestricted POS be designed to provide a functional pocket park (as identified on the marked-up plan at Attachment K). The area of POS which is proposed to wholly provide a drainage function, and is noted in Amendment 3 as comprising approximately 2,085m<sup>2</sup>, can remain as such, bearing in mind the configuration shown at Attachment K.
2. Request that the WAPC impose a condition on future subdivision applications requiring the preparation of a Landscape Feature and Tree Retention Plan in accordance with the City's Local Planning Policy No. 1. It is recommended that the Landscape Feature and Tree Retention Plan is developed in consultation with the City at the detailed design stage.
3. Recommends to the WAPC that the Concept Plan (Attachment B) be amended as follows:-
- a) replace the reference to Residential on Lot 2 and replace it with Service Commercial.
  - b) clearly annotate the plan to show the Service Commercial areas which should be all of the land within the Concept Plan with the exception of the Residential lots immediately north of Bonney Road.
  - c) align the road east of the roundabout on Albina Avenue, with the eastern roundabout leg as a straight road. The northern leg proposed as a right of carriageway to have adequate separation from the roundabout in accordance with Austroads Standards to ensure no queuing into the roundabout.
4. Forward this Ordinary Council Meeting Report, Council's recommendations and the Schedule of Submissions (Attachment C) to the WAPC pursuant to Schedule 2, Clause 20 of the *Planning and Development Regulations 2015*.

**CARRIED**  
5/0

**NOTE – That the Officer Recommendation has been amended at point 3(a) to reference the correct Lot number.**

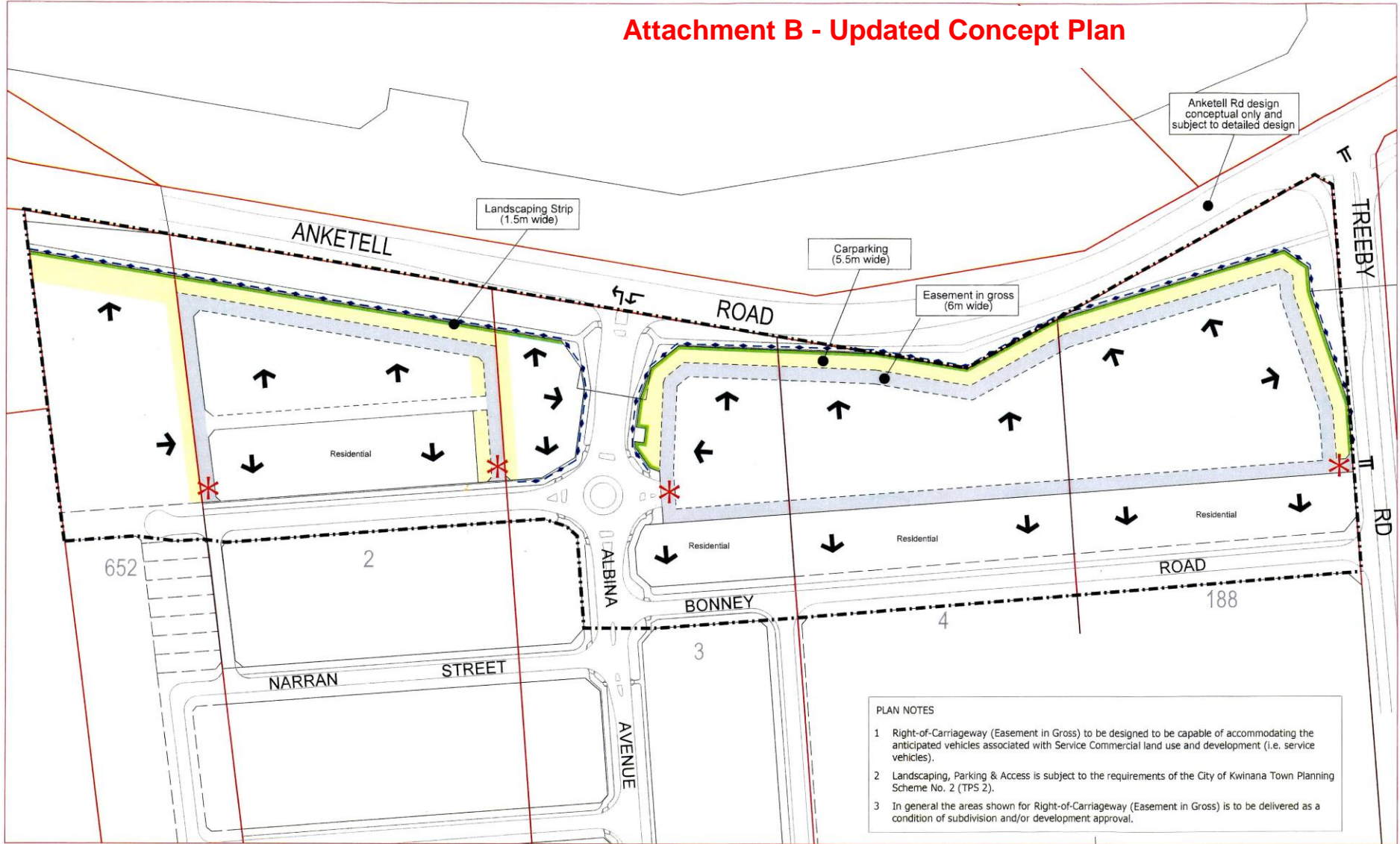
**Attachment A –  
Amendment No. 3 to the Anketell North LSP  
Lots 188 & 652 Anketell Road, Anketell**



**PLAN 1 - LOCAL STRUCTURE PLAN MAP**

Anketell North

# Attachment B - Updated Concept Plan



Anketell Rd design conceptual only and subject to detailed design

Landscaping Strip (1.5m wide)

Carparking (5.5m wide)

Easement in gross (6m wide)

- PLAN NOTES**
- 1 Right-of-Carriageway (Easement in Gross) to be designed to be capable of accommodating the anticipated vehicles associated with Service Commercial land use and development (i.e. service vehicles).
  - 2 Landscaping, Parking & Access is subject to the requirements of the City of Kwinana Town Planning Scheme No. 2 (TPS 2).
  - 3 In general the areas shown for Right-of-Carriageway (Easement in Gross) is to be delivered as a condition of subdivision and/or development approval.

Plan No.: 620932-19  
 Revision: REV.5  
 Scale: 1:1500@A3

© The plan must be approved in accordance with the provisions of the Planning and Development Act 2005.  
 Level 10, 3 Master Road Osborne Park WA 6017 www.veris.com.au

LEGEND	
	Landscaping (indicative only)
	Service Commercial Building envelope (indicative only)
	Reciprocal Right of Way Easement (indicative only)
	Parking & Access (indicative only)
	Service Commercial Precinct Boundary
	Original lot boundary
	Full Movement
	Restricted Movement
	Primary orientation of development
	Design details for access points to be undertaken at development approval stage.
	No Vehicular Access

**SERVICE COMMERCIAL CONCEPT PLAN**  
**LOTS 2, 3, 4, 188 & 652 ANKETELL ROAD**  
**ANKETELL**  
**PLAN 5**



DATE DRAWN: 27/02/2018  
 DRAWN BY: RUF  
 CHECKED BY: JF

FILE: 680227 - subdivision Lot 2, 3, 4 and 188 2003-19 rev 5  
 V DATE: 6/02  
 H DATE: 14/02/2018 (50)


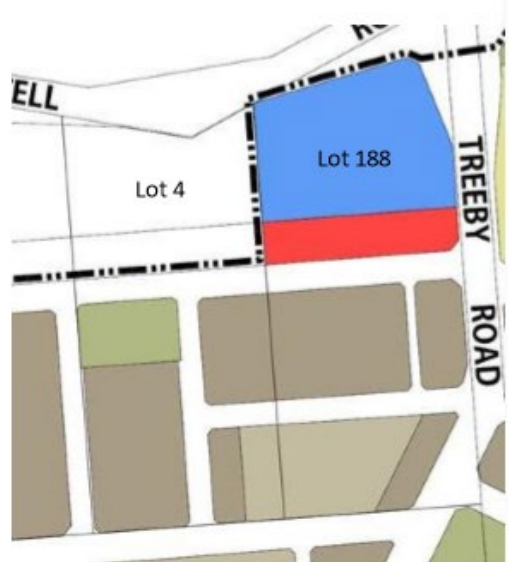
**SCHEDULE OF SUBMISSIONS**  
 Proposed Amendment to the Anketell North Local Structure Plan  
 Lot 188 and 652 Anketell Road, Anketell

SUBMITTER AND ADDRESS	NATURE AND SUMMARY OF SUBMISSION	CITY OF KWINANA COMMENT
<p>1. <b>Main Roads WA</b></p> <p>Contact:                      Ms Assunta Dinardo                      Statutory Road Planning</p>	<p><b>OBJECTION</b></p> <p>The applicant is seeking to reposition the approved left in/left out from Lot 3 (depicted as Road B as per the attached concept P09159 C002 Rev 8), 195 metres westwards to be located at the north-western portion of Lot 652.</p> <p>This amendment and repositioning of the Road B access is not supported by Main Roads for the following reasons:</p> <ul style="list-style-type: none"> <li>• Main Roads position is to protect the functionality of Anketell Road and there needs to be a solid recognition by developers that Anketell Road is a major Primary Regional Freight Route which will service the future Kwinana Quays Project, Latitude 32, KIA and AMC precincts.</li> <li>• The road environment on this designated freight route is changing from rural to urban. Main Roads advises that it is imperative that Anketell Road from Kwinana Freeway to east of Lyon Road is constructed to its ultimate dual carriageway configuration with the dedicated turn pockets.</li> <li>• Main Roads in consultation with the developer's engineering and transport consultants and the then Department of Planning developed a planning design concept for Anketell Road. This included a vehicle access strategy for Anketell Road east of the Kwinana Freeway to just east of Lyon Road. This access strategy was adopted within the Local Structure Plan endorsed by the WAPC in December 2015.</li> <li>• The proposed re-location of the left in/left out access compromises the functionality of the Anketell Road/Kwinana Freeway intersection and impedes the ability to extend the existing deceleration lane further eastwards, for a design speed of 90km/h.</li> <li>• It is not appropriate for developers to request that these 'locked in' access arrangements and planning design concepts be altered to suit their individual commercial needs to accommodate perceived improved accessibility to their commercial centres.</li> </ul> <p>Main Roads advises that it supports the findings in the noise report and offers the following comments:</p> <ul style="list-style-type: none"> <li>• The 2.4 metre noise wall at the boundary of the development and both multi residential buildings and commercial buildings is recommended to reduce noise levels. The thickness and material of the noise wall must be detailed in the report. As per Section 5.3.2 of the Implementation Guidelines, noise walls should be at least 15 kg/m<sup>2</sup> surface density and consistent with the Subdivision Acoustic Assessment for Lots 2 &amp; 3 Anketell Road, Anketell (Ref: 21287-3-16150-03).</li> </ul>	<p>The original concept plan prepared by the proponent identified left in/ left out access to Anketell Road from Lot 652.</p> <p>The updated Concept Plan does not show this intersection. City Officers are satisfied that the updated Concept Plan adequately resolves this issue.</p> <p>The City does not support the requirement for a 2.4 metre along the frontage of the service commercial area because it will prevent passing traffic from seeing the service commercial area.</p> <p>The City recommends that the amendment for Lots 188 and 652 be approved subject to the inclusion of a requirement in the ANLSP for a:</p> <p>a) Local Development Plan (LDP) to be prepared for the broader Service Commercial area. The LDP should address the following matters:</p> <ul style="list-style-type: none"> <li>• built form to block vehicle noise from Anketell Road,</li> <li>• requirement for built form to orientate towards Anketell Road,</li> <li>• positioning of service areas to prevent adverse impacts on abutting residential development from noise and light emissions.</li> </ul> <p>b) Traffic Noise Assessment (TNA) as a pre-cursor to subdivision and/or development approval and arrangements for the subsequent implementation of the recommendations of the TNA.</p>
<p>2. <b>Water Corporation</b></p>	<p><b>NO OBJECTION</b></p> <p>The subject area is located within Water Corporation planning areas for water and sewerage servicing. The</p>	<p>Noted</p>

**SCHEDULE OF SUBMISSIONS**  
 Proposed Amendment to the Anketell North Local Structure Plan  
 Lot 188 and 652 Anketell Road, Anketell

	Contact: Brett Coombes Senior Urban Planner Assets Planning Group	developer's consulting engineers will need to liaise with the Water Corporation to make any changes and adjustments to the adopted water planning for this area resulting from the LSP changes, at the time of subdivision.  These matters can be dealt with at the subdivision stage.	
3.	<b>Department of Fire and Emergency Services</b>  Contact: Jackie Holm Land Use Planning Officer	<b>NO OBJECTION</b> Holistic consideration should be given to the staging of development to ensure that the offsite bushfire hazards (vegetation with a BHL of moderate or extreme) is managed to reduce the bushfire risk posed to the subject site.  It should also be noted that a BAL Contour Map and associated BMP will be required for each stage of subdivision or development.  The structure plan and BMP have adequately identified issues arising from the bushfire hazard level assessment and considered how compliance with the bushfire protection criteria can be achieved at subsequent planning stages.  As the issues identified will not affect the amendment to the structure plan, DFES recommends the structure plan proceed, but the applicant should be advised that modifications to the BMP will need to be undertaken to support subsequent stages of the planning process (subdivision and development applications) to ensure an effective bushfire management outcome.	Noted
4.	<b>Element Advisory</b> (On behalf of the Perron Group as owners of the Cockburn Gateway Shopping City)  Contact: Michelle Huggins	<b>OBJECTION</b> Element consider that the proposed amendment to the ANLSP should not be supported until a fit for purpose retail and commercial analysis is undertaken to assist in a more robust and detailed understanding of land uses most suited to the locational opportunities of the site in the medium to long term.  It is essential that a fit for purpose retail and commercial analysis to be undertaken prior to amending the ANLSP to determine the types of non—residential land uses that would complement the Wandi District Centre and benefit from being situated in Close proximity to the Kwinana Freeway and Anketell Road.  Following the outcome of the retail and commercial analysis, the City will be able to determine exactly which zone under its Town Planning Scheme No. 2 (TPS2) would ultimately best fit the future non-residential land uses on Lots 188 and 652, and any other specific land use guidance that ought to apply.  Currently the proposed amendment to the ANLSP for Lot 652 proposes the 'Commercial Zone' for almost half the site. We note that a portion of Lot 652 previously identified as 'Park Recreation & Drainage' on the approved ANLSP has been reduced in size to accommodate the 'Commercial Zone'. The proposed amendment to the ANLSP for Lot 188 proposes the 'Commercial Zone' and 'Mixed Use Zone' for a significant portion of the site.  From our brief review of Table I — Zoning and Use Classes' under TPS2 it appears that the 'Commercial Zone' may permit some land uses which are not envisaged by the City for this area. For example, should the modifications to Lots 188 and 652 be adopted as currently proposed, a 'Shop' would be a permitted land use as per the 'Commercial Zone' under TPS2. We understand that a 'Shop' use in this location may actually impede the future development of the Wandi District Centre  We understand that the City should not support these ad hoc amendments to the ANLSP for Lots 188, 652 and 4 Anketell Road, Anketell without further investigation. The City should have a better understanding of the most appropriate land uses for this area and the potential impacts of the proposed 'Commercial Zone' on the surrounding land specifically the Wandi District Centre prior to amending the ANLSP.	The WAPC has requested that Amendment 1 be modified to remove the Residential Designation adjacent to Anketell Road and replace it with Service Commercial designation. The WAPC also requested a consolidated concept plan for Lots 188, 4 and 652 Anketell Road and to identify coordinated and efficient access for the Service Commercial areas.  In effect the WAPC has supported the future use of Lots 188, 2, 3, 4 and 652 as Service Commercial.  City Officers recommend the Commercial designation adjacent to Anketell Road be replaced with the Service Commercial.

**SCHEDULE OF SUBMISSIONS**  
 Proposed Amendment to the Anketell North Local Structure Plan  
 Lot 188 and 652 Anketell Road, Anketell

5.	<p><b>Taylor Burrell Barnett</b>                  (On behalf of 316 Property Pty Ltd)</p> <p>Contact:                  Luke Montgomery                  Senior Associate</p>	<p>The subject amendment to the LSP is generally supported; however, there are some aspects which we wish to draw the City's attention during its consideration.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p style="display: flex; justify-content: space-around; font-size: small;"> <span>Figure 1 - Proposed Structure Plan – Lot 4 Anketell Road</span> <span>Figure 2 - Proposed Structure Plan – Lot 188 Anketell Road</span> </p> <p><u>Commercial and Mixed Use land</u>                  Mixed Use (identified in red above) land on Lot 188 abuts Residential land on Lot 4 (south of the proposed Commercial land). We note the requirement of the LSP for a Local Development Plan to be prepared over Commercial and/or Mixed Use lots. To avoid future land use conflicts and inappropriate built form outcomes where Residential land within Lot 4 abuts Mixed Use land within Lot 188, we request that any variations to the R-Codes or other built form controls appropriately respond and are sensitive to future dwellings which will be adjacent. For example, this could include requirements to limit building height to two storeys and limiting the length of boundary wall, to say, two thirds of the length of the common boundary.</p> <p>With regard to the Commercial land within Lot 188, we request a provision to be included within Part 1 of the SP which will require appropriate access arrangements from Anketell Road, which will connect into Lot 4 through a Reciprocal Rights of Access Agreement. This will ensure that access to Lot 4, albeit indirectly, is provided from Anketell Road, which is necessary for the development of the Commercial land within Lot 4.</p>	<p>The advertised amendment prepared by the proponent identified an area of Mixed Use on Lot 188, Anketell Road. The updated Concept Plan shows this area as Service Commercial.</p> <p>The City recommends that the proposed amendment to the ANLSP for Lots 188 and 652 be approved subject to the resolution of the following matters to Council's satisfaction:</p> <ol style="list-style-type: none"> <li>a) Inclusion of a requirement in the ANLSP for a Local Development Plan (LDP) to be prepared for the broader Service Commercial area. The LDP should address the following matters:                         <ul style="list-style-type: none"> <li>• built form to block vehicle noise from Anketell Road,</li> <li>• requirement for built form to orientate towards Anketell Road,</li> <li>• built form to have regard to the broader commercial area in the ANLSP;</li> <li>• positioning of service areas to prevent adverse impacts on abutting residential development from noise and light emissions.</li> </ul> </li>   <li>b) Preparation of a Traffic and Pedestrian Management Plan (TPMP) for the Service Commercial land. The TPMP should:                         <ul style="list-style-type: none"> <li>• provide reciprocal rights of access to facilitate co-ordinated and efficient vehicle access between the Service Commercial areas;</li> <li>• identify access points and loading areas and demonstrate how nearby residential development will not be adversely impacted by noise and light emissions; and</li> <li>• provide for safe pedestrian/cycle connectivity between the ANLSP area and the Wandri District Centre.</li> </ul> </li> </ol>
<p>In addition to the above, it is noted that there are no land use permissibility requirements within Town Planning Scheme No. 2 relating to the Mixed-Use zone. Given the uncertainty regarding what land uses could be approved within the Mixed Use land adjacent to Residential land, we seek clarification of the types of land uses expected to be discretionary and permitted. A request is made to avoid any conflict with Residential land within Lot 4.</p>			



**SCHEDULE OF SUBMISSIONS**  
Proposed Amendment to the Anketell North Local Structure Plan  
Lot 188 and 652 Anketell Road, Anketell

Residential Land Use

In response to the Residential R40 land within Lot 188 adjacent to Lot 4 as identified on the advertised Concept Plan (as shown in Figure 3), there are narrow lots assumed likely to be developed for terrace housing which are front accessed. As depicted on the SP for Lot 4, R25 coded lots will be subdivided adjacent to the R40 land within Lot 188. To ensure appropriate built form outcomes and streetscape, we request that lots with an R40 density coding abutting land with an R25 density coding, require the preparation of an LDP. Built form controls to be addressed should include appropriate front setbacks and length of boundary walls to ensure that future residential development on Lot 188 does not unduly impact residences within Lot 4.

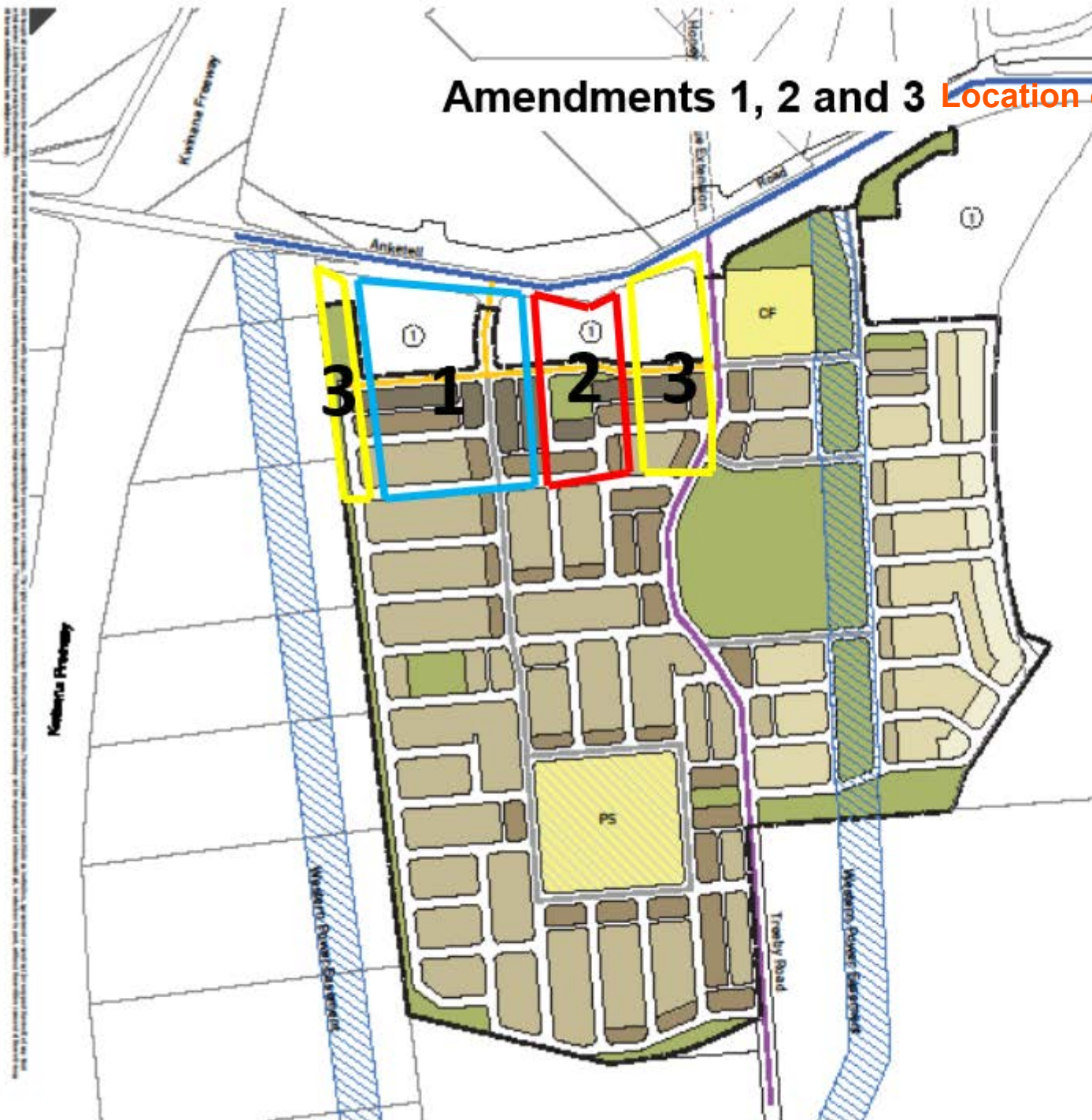


Figure 3 – Extract of Proposed Concept Plan – Lot 188 Anketell Road

The advertised amendment prepared by the proponent identified an area of Mixed Use/ Residential on Lot 188, Anketell Road. The updated Concept Plan shows this area as Residential as required by the WAPC.

City Officers recommend that an LDP be prepared for the Service Commercial area and the abutting residential area.

Amendments 1, 2 and 3 Location of amendments to the ANLSP



LEGEND LOCAL SCHEME LOCAL SCHEME RESERVES

Park Recreation & Drainage

**PUBLIC PURPOSES**  
 CF Community Facility  
 PS Educational/Institutional  
 PS Primary School

ZONES

Residential - R10  
 Residential - R25  
 Residential - R30  
 Residential - R40  
 Residential - R45

OTHER

District Distributor Integrator A  
 District Distributor Integrator B  
 Neighbourhood Connector A  
 Neighbourhood Connector B  
 Access Street B  
 Structure Plan Boundary  
 Western Power Easement

① The portion of LSP area which is most likely affected by noise is excluded from the LSP area until matters raised by the WAPC have been addressed to the satisfaction of the WAPC, including addressing the requirements of GPP 24 Road and Rail Transport Noise and Freight Considerations in Land Use Planning, inclusive of the appropriate land uses and the necessary noise mitigation strategy via a noise management plan.

0 100 200 Metres



www.rowegroup.com.au  
 info@rowegroup.com.au  
 08 9221 1911

Date Drawn: 2014-02-20  
 Job Ref: 4583  
 Scale: 1:4,000 @ A3  
 Client: Manmoh Northme  
 Designer: P. Fitzgerald  
 Drawn: K. Treloar  
 Projection: MGA50 GD49  
 Plan ID: 4583-LSP-04-P

Anketell North Local Structure Plan Map

City of Kwinana

# Attachment E

## Schedule Of Modifications (SPN/0338M-2)

### Amendment No. 1 to the Anketell North Local Structure Plan | Lots 2 & 3 Anketell Road

Amendment No. 1 is to be modified, to the satisfaction of the Western Australian Planning Commission, in accordance with the following Schedule of Modifications:

1. Removal of the Residential designation adjacent to Anketell Road and replacement with the Service Commercial designation.
2. Identification of the requirement for reciprocal rights of access to be provided to facilitate co-ordinated and efficient vehicle access to the Service Commercial areas.
3. Stipulation that the intersection of the proposed new internal north-south road and Anketell Road is to be constructed as a left in/left out intersection in accordance with Main Roads WA's Vehicle Access Strategy for Anketell Road.
4. Preparation of a consolidated Concept Plan for the whole of the excluded area on the approved ANSLP Map, in collaboration with the landowners of Lots 4, 188 and 652.
5. Updating of the Part 1 text provisions to include the following:
  - a. Requirement for a Local Development Plan to be prepared for Service Commercial areas, with direction regarding key relevant considerations to be addressed (i.e. built form to shield/block vehicle noise from Anketell Road, requirement for built form to orientate towards Anketell Road and positioning of service areas and access ways to minimise impacts on abutting residential development).
  - b. Requirement for a Traffic Management Plan (TMP) to be prepared and submitted with an Application for Planning Approval for Service Commercial land. The TMP will be required to demonstrate how the design of the development and its proposed access arrangements will minimise impacts on nearby residential development (i.e. identification of access points, parking areas, loading areas and management of operations to minimise adverse impacts on abutting residential development and associated amenity).
6. Updating of all Structure Plan documentation and resubmission to the DPLH and relevant agencies for assessment. The ANLSP Map, Report and supporting Technical Appendices will need to be updated to reflect the modifications to the land use designations and movement network outlined above and, where appropriate, provided to the relevant agencies for further consideration and endorsement.

The proposed changes to residential densities and the local movement network in the southern portion of the Amendment No. 1 area which reflect subdivision approvals issued by the WAPC are considered acceptable.

In undertaking Modifications 1 and 2 above, the following should guide the implementation of these changes:

- Consideration is to be given to disconnecting the road network between the proposed service commercial area and the balance of the residential area to the south with the aim of separating service commercial and residential traffic; and
- The land use transition from service commercial to residential to be accommodated at the rear of lots, in accordance with Element 3 - Lot Layout of Liveable Neighbourhoods, so as to provide for compatible uses and streetscape outcomes across roads where possible.

In relation to Modification 6 above, the Bushfire Management Plan (BMP) has not been referred to the Department of Fire and Emergency Services (DFES) for assessment, given the proposed land use designation is not supported. The BMP, once updated, will need to be provided to DFES for assessment.

# Attachment F - DPLH Instructions

## Anketell North Local Structure Plan Amendment 1 DPLH & City of Kwinana Post-SPC Advice

### Introduction

The comments below are provided as an adjunct to the enclosed Schedule of Modifications that was endorsed by the Statutory Planning Committee (SPC) at its meeting on 14 August 2018 regarding Amendment 1 to the Anketell North Local Structure Plan (LSP). The comments are intended to assist with the further appreciation and implementation of the Schedule of Modifications.

### Local Structure Plan Map

The LSP Map is to identify:

- A Service Commercial designation adjacent to Anketell Road on Lots 2 and 3 (as per Item 1 of the Schedule of Modifications); and
- The notional alignment of the proposed Reciprocal Right of Way easement (as per Item 2 of the Schedule of Modifications and as depicted on the Concept Plan).

### Concept Plan

In relation to Item 4 of the Schedule of Modifications, the Veris 'Service Commercial Concept Plan' (Plan No: 620932-19, dated: 6 August 2018) generally articulates the key principles and development outcomes documented in the report considered by the SPC. Some refinement of the Concept Plan is, however, required. In this regard, the following preliminary comments are provided by DPLH and the **City of Kwinana** regarding the Concept Plan:

### Required Modifications

1. No direct access to Anketell Road is to be shown (i.e. the Left In/Left Out designation on Lot 652 and 'Subject to MRWA Approval' notation are to be removed), in accordance with the position of Main Roads WA and the Department of Transport. The 'Reciprocal Right of Way' and 'Parking & Access' in this area is to be modified accordingly.
2. A 'No Vehicle Access' restriction is to be identified along the full frontage of Anketell Road and along the northern portions of Albina Avenue and Treeby Road (generally as per Item 3 of the Schedule of Modifications).
3. The reference to 'Insert Symbol' at the intersection of Albina Avenue and Anketell Road is to be removed.
4. The reference to 'Mixed Use/Residential' on Lot 188 is to be changed to 'Residential', in order to facilitate a co-ordinated planning and development outcome.
5. An indicative street block layout is to be identified on Lot 652 to the west of Narran Street to illustrate the intended co-ordinated planning and development outcome.
6. The orientation of development on the western side of Lot 3 and Lot 652 is to be amended to also orientate to Anketell Road.
7. It is to be demonstrated that the proposed Reciprocal Right of Way and circulation arrangements are capable of accommodating the anticipated vehicles associated with a Service Commercial land use and development outcome (i.e. delivery trucks). The Reciprocal Right of Way arrangements are to be identified as indicative.

# Attachment F - DPLH Instructions

## Anketell North Local Structure Plan Amendment 1 DPLH & City of Kwinana Post-SPC Advice

8. 'Landscaping' and 'Parking & Access' are both to be identified as indicative and subject to the requirements of the City of Kwinana's Town Planning Scheme No. 2 (TPS 2).

### Recommended Modifications

9. Consideration is to be given to illustrating that the relevant development requirements (i.e. setbacks, plot ratio, landscaping, car parking, loading and unloading areas) of the City's TPS 2 can indicatively be achieved in the development of the proposed Service Commercial areas.
10. Consideration is to be given to the identification of preferred land uses on the proposed Service Commercial lots.

In addressing the above comments, it may be necessary for additional explanatory plans and/or written information to be provided to demonstrate that the matters above have been (or can be) appropriately addressed.

The applicants of Amendments 1, 2 and 3 are encouraged to collectively consider the manner in which the Concept Plan is referenced in the LSP documentation (i.e. Part 1 or Part 2).

### **Part 1 Provisions**

A tracked changes word document of the existing Part 1 provisions is to be provided that incorporates the required provisions as per Item 5 of the Schedule of Modifications (i.e. Local Development Plan, Traffic Management Plan).

In addition, it is likely that the inclusion of additional provisions to address the matters below will be necessary:

1. Arrangements for the implementation of the proposed reciprocal rights of access. It is the DPLH's expectation that evidence of these arrangements being in place on title will be provided in advance of the determination of subdivision applications for Service Commercial land so as to ensure that the requirements of Item 2 of the Schedule of Modifications are realised.
2. Preparation of a Traffic Noise Assessment (TNA) as a pre-cursor to subdivision and/or development approval and arrangements for the subsequent implementations of the recommendations of the TNA.

It is recommended that any modifications to the Part 1 provisions be structured in such a way so as to make it clear what reporting is required and/or what matters need to be addressed at each of the stages in the planning process (i.e. as pre-cursors to the lodgement of subdivision or development applications or as conditions of subdivision or development approval).

### **Process**

The process for the implementation of the SPC's modifications is to be as follows:

1. The applicant of Amendment 1 is to prepare an updated Concept Plan and tracked changes version of Part 1 (and any other necessary supplementary information) and is to provide this concurrently to DPLH and the City.

# Attachment F - DPLH Instructions

## Anketell North Local Structure Plan Amendment 1 DPLH & City of Kwinana Post-SPC Advice

- Evidence of agreement of the landowners of Amendments 2 and 3 to the updated Concept Plan and Part 1 changes is to accompany submission of this information.
2. DPLH and the City will review the updated information and respond to the applicant of Amendment 1 accordingly (i.e. in principle support or advice regarding further modifications, explanation etc.).
  3. The applicant of Amendment 1 is to update and resubmit the LSP documentation (in accordance with the manner and form outlined below) for final determination (i.e. approval) by the WAPC, in consultation with the City.
    - It is noted that the SPC's modifications require technical reports to be updated to the satisfaction of the relevant agencies. It is recommended that the applicant secure endorsement of the relevant agencies where possible prior to resubmission to DPLH.

DPLH and the City will liaise directly with the applicant of Amendment 1 and will keep the applicants of Amendments 2 and 3 informed as appropriate.

### Documentation Format

The modified documentation that is submitted for determination (approval) for Amendment 1 is to comprise of the following:

1. Certification Page, Table of Modifications, Executive Summary, Summary Table and Table of Contents, as per the WAPC's *Structure Plan Framework*
2. Updated Part 1 Provisions
3. Updated Structure Plan Map
4. Existing Part 2 Report
  - Existing Rowe Group report can remain unchanged.
5. Existing Technical Appendices
  - Existing Rowe Group report can remain unchanged.
6. Amendment 1 Planning Report and Technical Appendices
  - This is to be an updated version of the report prepared in support of Amendment 1 and is to outline the details of, and rationale for, the modified LSP proposal.
  - The technical appendices are to be updated to reflect the requirements of the SPC's Modifications.

Amendments 2 and 3 will need to follow the same format as outlined above, with appropriate updates and modifications to each element as applicable. A new Planning Report and set of Technical Appendices to outline the details of the proposed changes and the associated planning rationale will be required for each subsequent amendment.

It is the DPLH's expectation that the format and content of each of the Planning Reports for Amendments 1, 2 and 3 will be consistent with one another to the extent that is relevant (i.e. descriptions of the local and regional context, the applicable planning framework, the attached objectives for the area in question etc.).

# Attachment G – Approved Anketell North LSP



# Attachment H – Detailed Plan Lot 188 Anketell Road





## Attachment I – Detailed Plan Lot 652 Anketell Road



Plan 2: Subdivision Concept Plan - Lot 188

# NORTH ANKETELL

## STRUCTURE PLAN AMENDMENT REPORT

Prepared for Anketell Trust

February 2018



## TABLE OF AMENDMENTS

AMENDMENT No.	SUMMARY OF THE AMENDMENT	AMENDMENT TYPE	DATE APPROVED BY WAPC

## TABLE OF DENSITY PLANS

DENSITY PLAN No.	AREA OF DENSITY PLAN APPLICATION	DATE APPROVED BY WAPC

## DOCUMENT STATUS

VERSION	COMMENT	PREPARED BY	REVIEWED BY	REVIEW DATE	APPROVED BY	ISSUE DATE
1	Client Draft	DR	TV	06/02/18	JH	12/02/18

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# NORTH ANKETELL LSP AMENDMENT REPORT

FEBRUARY 2018

**Prepared for:** **Anketell Trust**  
PO Box 246  
APPLECROSS WA 6953  
T: 9364 5300

**Prepared by:** **Creative Design + Planning**  
28 Brown Street  
EAST PERTH WA 6004  
T: 9325 0200 E: info@creativedp.com.au F: 9325 4818

**In Collaboration with:** **A.KHosravi Eng Services**  
T: 0438 887 455 E: ak\_consulting@hotmail.com

**GTA Consultants**  
PO Box 7025  
Cloisters Square  
PERTH WA 6850  
T: 6169 1000 E: perth@gta.com.au F: 6169 1000

**Eco Logical**  
PO Box 7537  
Cloisters Square  
PERTH WA 6850  
T: 6218 2200 E: danielp@ecoaus.com.au

**Herring Storer**  
PO Box 219  
COMO WA 6952  
T: 9367 6200 E: reception@hsaacoustics.com.au F: 9474 2579

**Water Resources Engineering**  
T: 0430 088 420 E: dubalhitesh@gmail.com

## ENDORSEMENT OF STRUCTURE PLAN

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

IT IS CERTIFIED THAT THIS STRUCTURE PLAN 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 *Planning and Development Act 2005* for that purpose, in the presence of:

\_\_\_\_\_ Witness

\_\_\_\_\_ Date

\_\_\_\_\_ Date of Expiry



## Executive Summary

This Structure Plan Amendment has been prepared to modify the Anketell North Local Structure Plan endorsed by Western Australian Planning Commission (WAPC) on 18 December 2015.

This Structure Plan Amendment has been prepared on behalf of Anketell Trust by the following specialist consultant team:

- Creative Design + Planning – *urban design, town planning*
- A.KHosravi Eng Services – *engineering*
- Water Resources Engineering – *hydrology*
- Eco Logical – *bushfire management*
- Herring Storer Acoustics – *noise management*
- GTA Consultants – *traffic and transport analysis*

### PURPOSE

The Structure Plan amendment provides an overarching planning framework to guide and facilitate the development of the subject land for urban purposes and has been prepared in accordance with the provisions under *Schedule 2 Part 4 of the Planning and Development (Local Planning Scheme) Regulations 2015*.

The proposed amendment is to allow for commercial and residential uses within the area identified as ‘Investigation Area 1’ on the approved Structure Plan. Through the design process for the Investigation Area, a number of small design modifications are proposed to the road network and density to provide the best planning outcomes for the subject lots.

The Structure Plan amendment has been submitted for approval by the Western Australian Planning Commission

## Executive Summary Table

ITEM	DATA
Structure Plan Amendment Area	5.62ha
Area of each land use proposed (approx.):	
Residential:	1.72ha
Commercial/Mixed Use:	2.0ha
Public Open Space:	0.66ha
Anketell Road Widening:	0.34ha
Roads (internal):	0.90ha
Total estimated lot yield	76
Estimated number of dwellings	76
Estimated residential site density	~12 + dwellings/gross urban zone <sup>1</sup> ~25 + dwellings/site hectare <sup>2</sup>
Estimated population <i>(based on 2.8 persons per dwelling)</i>	212
Estimated commercial floor space	0.59ha
Estimated number and % of public open space given over to: Neighbourhood Parks (>3,000m <sup>2</sup> ):	13%

### FOOTNOTES:

- 1 Gross Urban Zone’ refers to the definition under WAPC’s Directions 2031 and supporting documents.
- 2 ‘Residential Site Hectare’ refers to the definition under Element 1 of WAPC’s Liveable Neighbourhoods.

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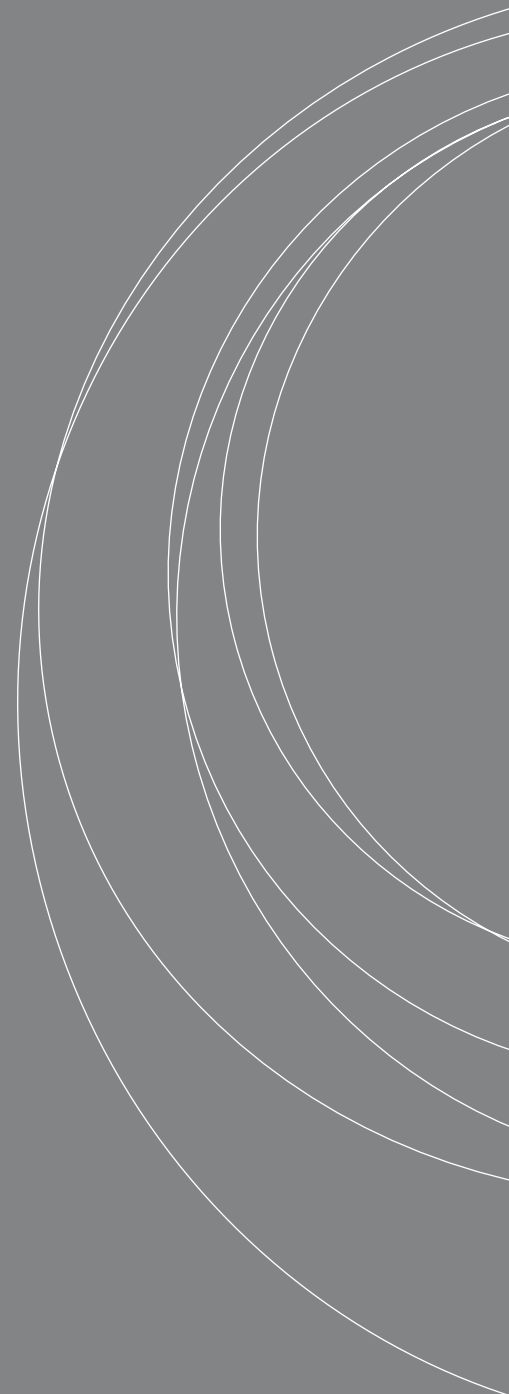


# ABBREVIATIONS

ASS	Acid Sulfate Soils
AS	Australian Standard
BMP	Bushfire Management Plan
CBD	Central Business District
DFES	Department of Fire and Emergency Services
DPLH	Department of Planning, Lands and Heritage
ERIC	Eastern Residential Intensification Concept
Ha	Hectare
LDP	Local Development Plan
LWMS	Local Water Management Strategy
MRS	Metropolitan Region Scheme
MRWA	Main Roads Western Australia
OBRM	Office of Bushfire Risk Management
OMSRS	Draft Outer Metropolitan Perth & Peel Sub Regional Structure Plan
POS	Public Open Space
PTA	Public Transport Authority
RMD Codes	Residential Medium Density Codes (WAPC Bulletin 112/2016)
SPP	State Planning Policy
TPS2	City of Kwinana Town Planning Scheme No.2
UWMP	Urban Water Management Plan
vpd	Vehicles per day
WAPC	Western Australian Planning Commission

# PART ONE

## IMPLEMENTATION



## 1 Structure Plan Area

This Structure Plan shall apply to the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan Map (**Plan 1**).

## 2 Operation

This Structure Plan comes into effect on the date it is approved by the Western Australian Planning Commission.

The Structure Plan is to be given due regard when considering development of subdivision applications.

## 3 Staging

The development of the subject land will be implemented in stages. The staging plan is indicative as timing, location and composition of the future stages will be dependent on market demand.

Access to Lot 652 is dependent upon adjoining development, in this regard staging and development of Lot 652 will be developed once road access is constructed up to the adjoining lot boundary.

## 4 Subdivision and Development Requirements

### 4.1 Land Use Permissibility

- a) Land use permissibility within the subject land is to be in accordance with the corresponding zone or reserve under the City of Kwinana Town Planning Scheme No.2 (TPS2).

### 4.2 Hazards and Separation Areas

- a) Residential lots identified within the Bushfire Prone Area of the Bushfire Management Plan (**Appendix 3**) will require a Bushfire Attack Level assessment to be undertaken at subdivision stage.
- b) A Detailed Noise Management Plan is to be prepared and implemented in accordance with State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning for lots identified as affected by noise under Figure B1 of Appendix B in the Acoustic Assessment (**Appendix 4**).

### 4.3 Public Open Space

- a) The Structure Plan (**Plan 1**) nominates an area of 5.2864ha as creditable Public Open Space. The proposed Public Open Space exceeds the minimum 10% requirement as outlined in Part Two of this report.
- b) An updated Public Open Space schedule is to be provided at the time of subdivision for determination by the WAPC upon advice of the City of Kwinana.

## 4.4 Residential Density Targets

- a) Density Targets within the 'Urban' portion of the Structure Plan area include:
  - i. The density target for the 'gross urban zone' is 15 dwellings per hectare across the subject land; and
  - ii. The density target in terms of 'site hectare' is 25 dwellings per hectare across the subject land.

The WAPC, in consultation with the City of Kwinana, will consider a lower density target at the time of subdivision or development where the developer demonstrates environmental and community benefits. This may include providing additional public open space areas beyond the prescribed 10% requirement to retain quality natural vegetation, or for any other environmental benefits deemed worthy at the time of assessment.

## 5 Local Developments Plans

Local Development Plans will be prepared for the subject land pursuant to the WAPC's Local Development Plan Framework and Schedule 2, 'Deemed Provisions for Local Planning Schemes' of the Planning and Development (Local Planning Schemes) Regulations 2015.

### 5.1 Prescribed Requirements

Local Development Plans will be prepared to inform applications for subdivision and development in regard to the following:

- a) Lots affected by noise which exceeds the noise target as defined by State Planning Policy 5.4 in relation to Kwinana Freeway and Anketell Road;
- b) Lots within a 100m catchment of 'Classified Vegetation' (Bushfire Hazard Zone) thus deemed at risk from bushfire pursuant to Australian Standards;
- c) Commercial and/or Mixed-Use Lots;
- d) Lots with rear laneway access;
- e) Lots with a common boundary to an area of Public Open Space
- f) Lots designated as grouped or multiple dwelling sites; and
- g) Lots with a frontage of less than 12m.

## 6 Other Requirements

### 6.1 Notifications on Title

Notifications are to be placed on titles of all affected lots to advise of:

- a) Construction standards to achieve higher noise standards in accordance with State Planning Policy 5.4 'Road and Rail; Transportation Noise and Freight Considerations in Land Use Planning'.
- b) Building setbacks and construction standards to achieve a Bushfire Attack Level -29 or lower in accordance with 'Australian Standards (AS3959-2009): Construction of buildings in bushfire prone areas'.

### 6.2 Developer Contributions

- a) Development Contribution Arrangements:

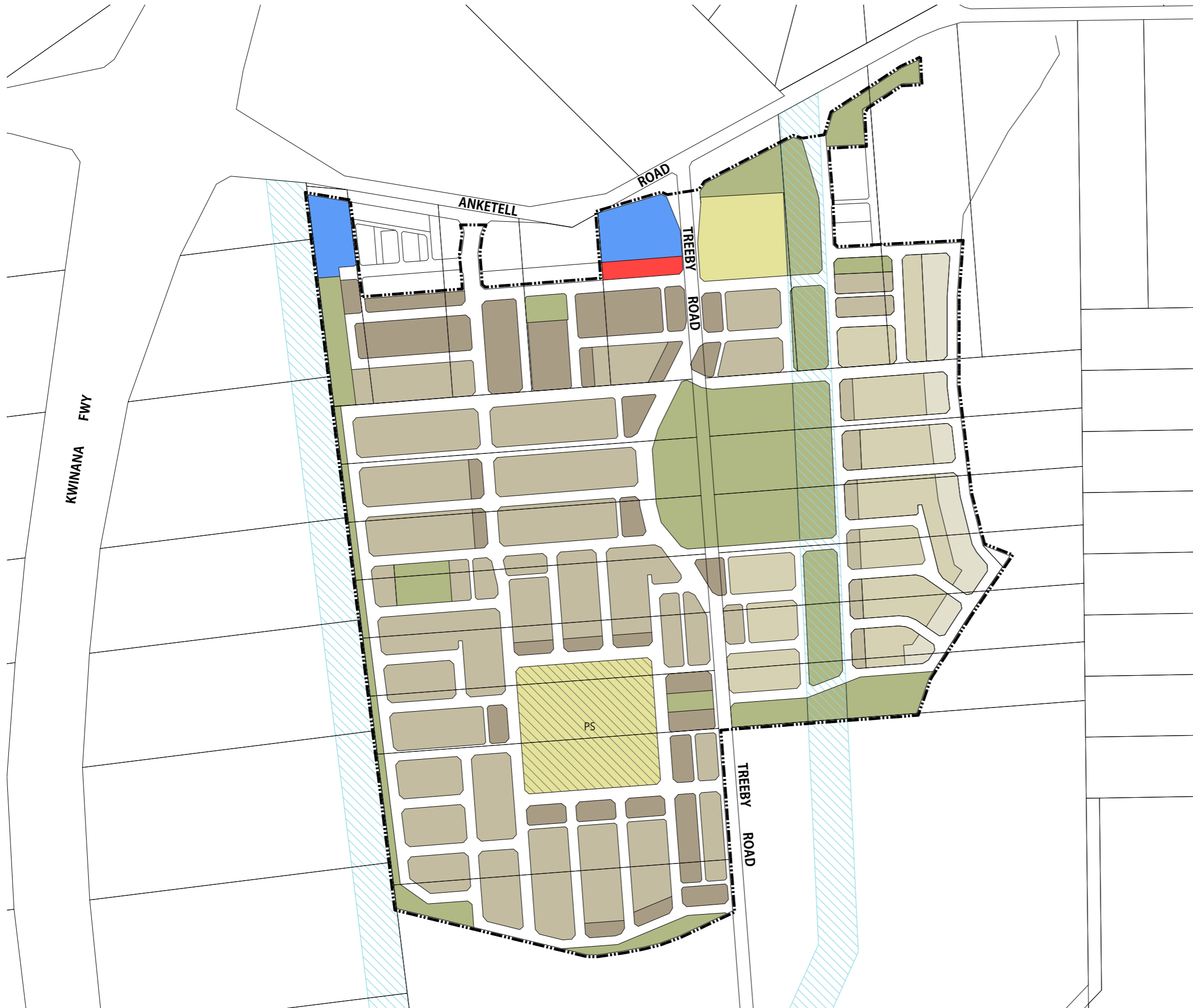
Under the City of Kwinana Town Planning Scheme No. 2, the following development contribution arrangements apply and/or are contemplated:

- Development Contribution Area 9 for the funding of community infrastructure; and
- Development Contribution Area 4 for 'hard' infrastructure.

## 7 Additional Information

Additional Information	Approval Stage	Consultation Required
Public Open Space Schedule	Subdivision application	City of Kwinana
Bushfire Attack Level Assessment	<ul style="list-style-type: none"> <li>• Subdivision application/condition of Subdivision for identified lots, or</li> <li>• Development application for identified lots</li> </ul>	City of Kwinana Department of Fire and Emergency Services
Detailed Noise Management Plan	<ul style="list-style-type: none"> <li>• Subdivision application/condition of Subdivision for identified lots, or</li> <li>• Development application for identified lots.</li> </ul>	City of Kwinana Main Roads WA Department of Environment Regulation

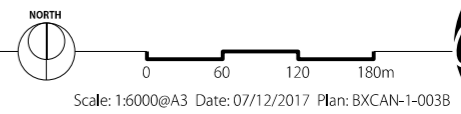


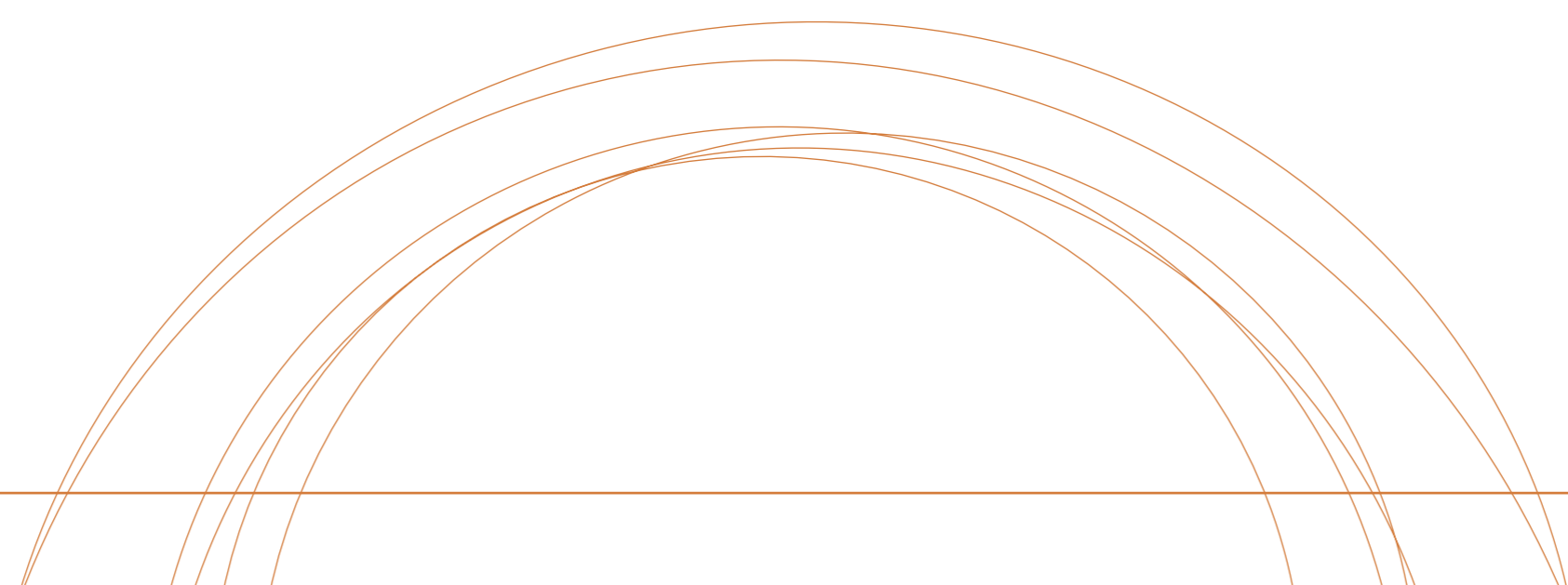
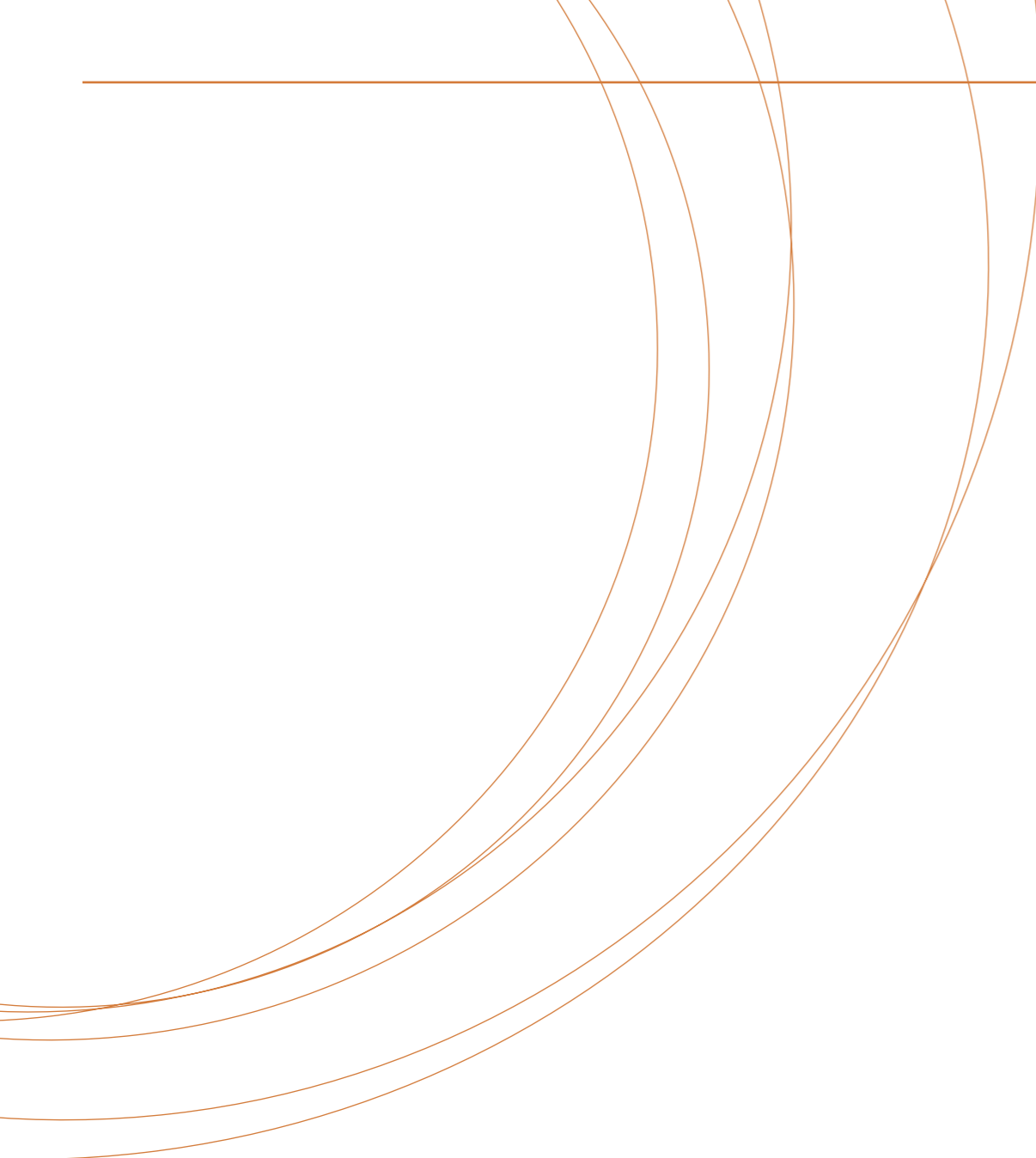


LEGEND	
	STRUCTURE PLAN BOUNDARY
LOCAL SCHEME RESERVES	
	PARK RECREATION AND DRAINAGE
PUBLIC PURPOSES	
	COMMUNITY FACILITY
	PS EDUCATIONAL / INSTITUTIONAL (PRIMARY SCHOOL)
ZONES	
	RESIDENTIAL - R10
	RESIDENTIAL - R25
	RESIDENTIAL - R30
	RESIDENTIAL - R40
	RESIDENTIAL - R60
	COMMERCIAL
	MIXED USE
OTHER	
	WESTERN POWER EASEMENT

**PLAN 1 - LOCAL STRUCTURE PLAN MAP**

Anketell North





# PART TWO

## EXPLANATORY SECTION



# 1 Planning Background

## 1.1 Introduction & Purpose

This report provides the background, context and justification for a proposed amendment to the Anketell North Local Structure Plan (Structure Plan). The proposed amendment seeks modifications for Lot 188 Treeby Road and Lot 65 Anketell Road, Anketell and involves an extension of the Structure Plan boundary and change to the zoning.

The purpose of this amendment is to bring forward the delivery of commercial land uses to the area and proposed a small amount of design modifications to the road network and densities to provide the best planning outcomes for the subject land.

## 1.2 Land Description

### 1.2.1 Location

The subject land is located south of Anketell Road, approximately 28km south of the Perth Central Business District (CBD) and 16km north east of the Rockingham Strategic Metropolitan Activity Centre (refer **Figure 1**).

Lot 188 is bound by Anketell Road to the north, Treeby Road to the east and rural uses to the south and west. The Kwinana Freeway is located less than 1 km to the west of the subject land. Lot 652 is bound by Anketell Road to the north, Parks and Recreation to the west and rural uses to the east and south.

### 1.2.2 Area and Land Use

The subject land is 5.62ha and has been historically used for rural purposes.

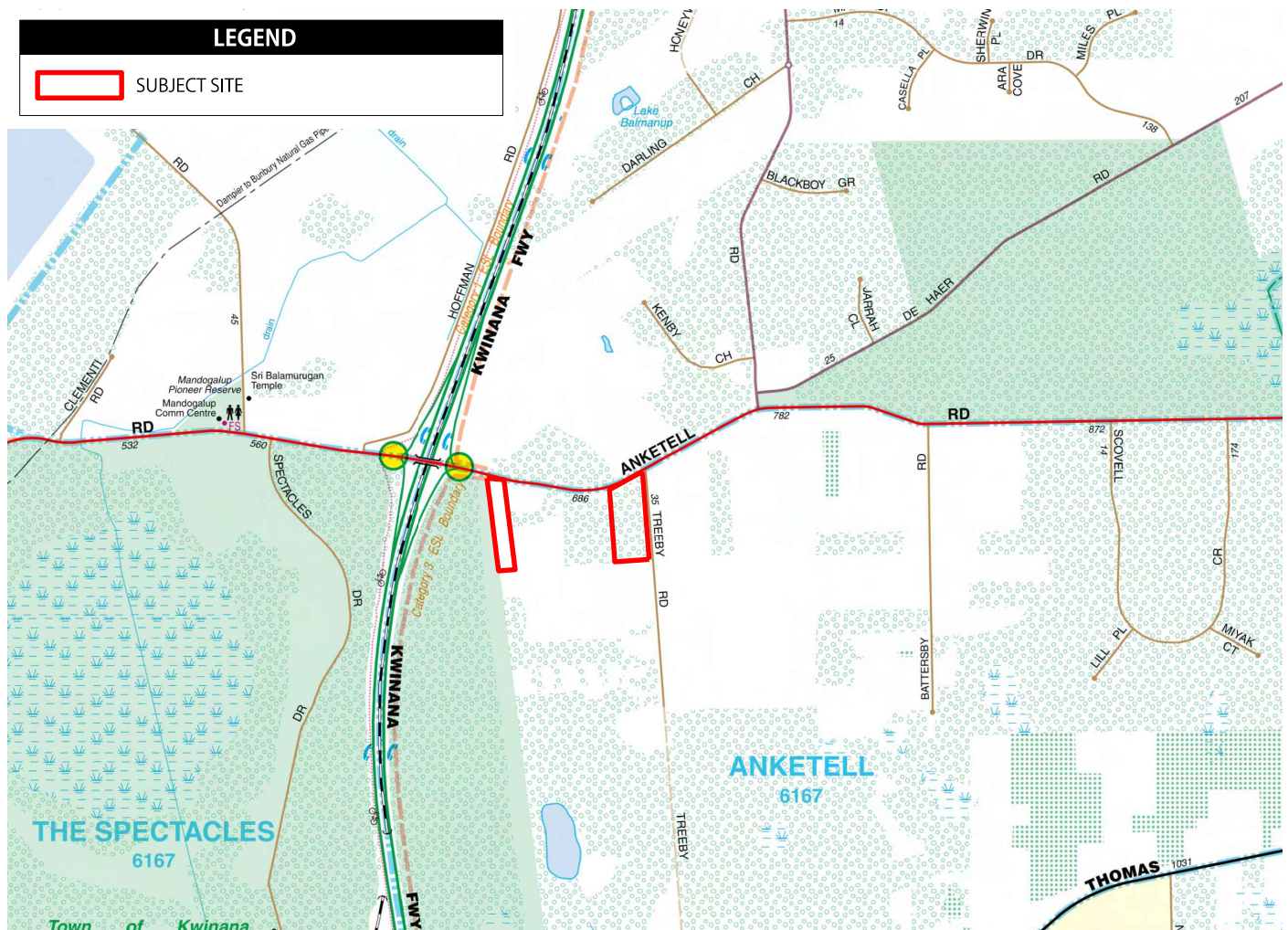
### 1.2.3 Legal Description and Ownership

The subject lots are described in the table below:

**Table 1: Title Details and Land Ownership**

Lot	Owner	Vol/Folio	Area (ha)
652	Filton Pty Ltd	2037/444	2.01ha
188	Qumars Meshgin, Chuen Shiong Chai and Hoa Thuy Tien Nguyen	2506/479	3.61ha
		<b>Total Area</b>	<b>5.62ha</b>

Certificate of Titles are attached as **Appendix 1**.



**Figure 1: Location Plan**

### 1.3 Planning Framework

#### 1.3.1 Zoning and Reservations

##### 1.3.1.1 METROPOLITAN REGION SCHEME

Pursuant to the Metropolitan Region Scheme (MRS), the majority of the subject land is zoned 'Urban' (Figure 2 refers). The most northern portion of the subject land is zoned 'Urban Deferred' consistent with the ultimate Anketell Road reservation required for 'Other Regional Roads' and subject to reservation by the WAPC.

##### 1.3.1.2 CITY OF KWINANA TOWN PLANNING SCHEME NO.2

Under the City of Kwinana Town Planning Scheme No.2 (TPS2) the subject land is zoned 'Development'. The northern portion of both Lots is zoned 'Rural A' consistent with the 'Urban Deferred' zone under the MRS; this is subject to the ultimate Anketell Road reservation (Figure 3 refers).

The subject land forms part of Development Contribution Area 9 and is subject to the development contribution requirements outlined in Clause 6.16 and Schedule 5 of TPS2.

#### 1.3.2 Regional and Sub-Regional Structure Plan

##### 1.3.2.1 JANDAKOT STRUCTURE PLAN

The subject land is located within the Jandakot Structure Plan area. The Jandakot Structure Plan provides a strategic direction to coordinate the development of the region and identifies the subject land for 'medium-term urban'.

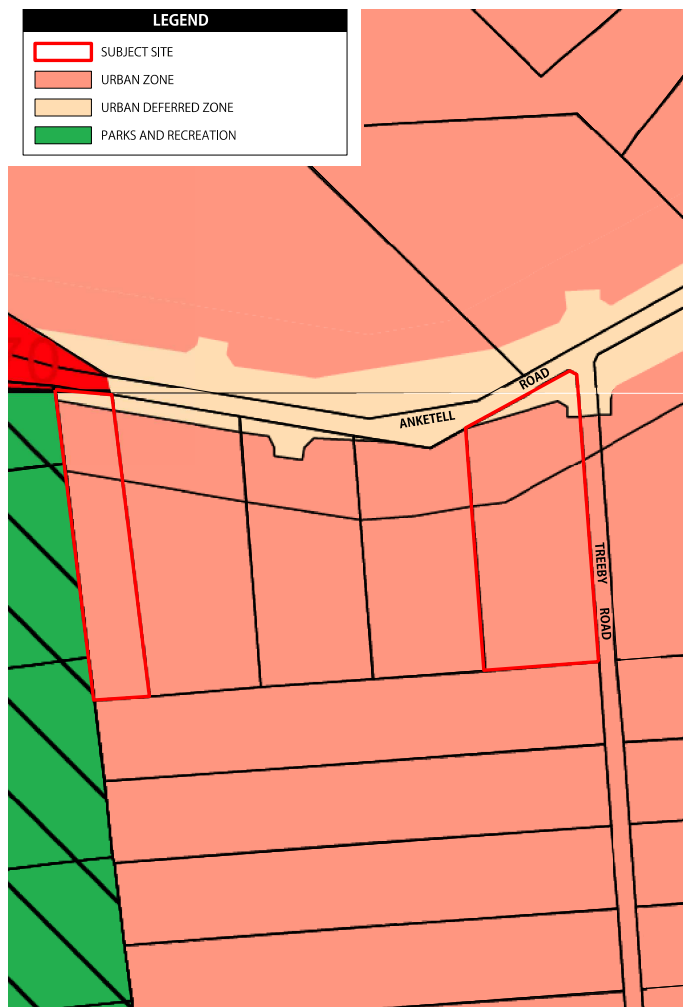


Figure 2: MRS Plan

##### 1.3.2.2 EASTERN RESIDENTIAL INTENSIFICATION CONCEPT (ERIC)

The ERIC provides strategic direction and refinement of the future urban areas identified under the Structure Plan. The ERIC identifies the subject land as 'Residential R25 and higher'. The ERIC also shows the Wandii District Centre positioned further north than the LCACS.

##### 1.3.3 Anketell North Local Structure Plan

The subject land is encompassed by the Anketell North Local Structure Plan (Structure Plan) (Figure 4 refers).

City of Kwinana advice notes that the subject land was originally included as Commercial, however subsequently withheld from the Structure Plan by the WAPC subject to a Noise Management Plan and further detailed planning progressing for the Wandii District Centre due north.

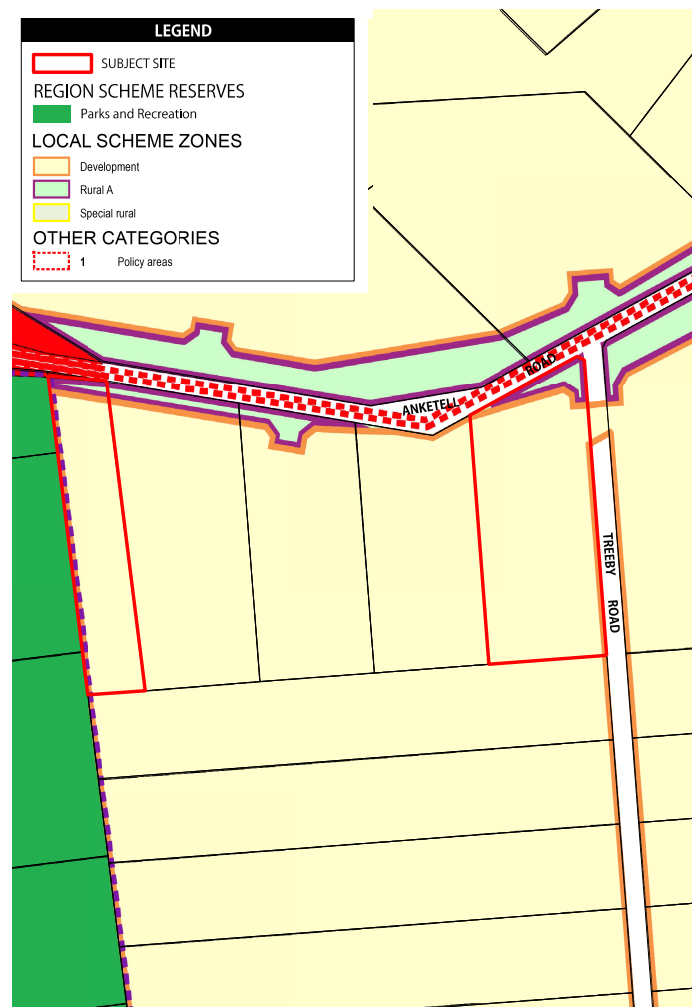


Figure 3: Town Planning Scheme



Figure 4: Approved Anketell North LSP (current Feb 2018)

### 1.3.4 Policies and Strategies

#### 1.3.4.1 STATE PLANNING POLICY (SPP4.2) ACTIVITY CENTRES FOR PERTH AND PEEL

SPP4.2 provides a framework for the planning and development of new activity centres and redevelopment of existing centres in Perth and Peel.

SPP4.2 identifies the Wandi District Centre as the primary centre serving the ERIC Urban Corridor.

#### 1.3.4.2 DRAFT STATE PLANNING POLICY (SPP5.4) ROAD AND RAIL NOISE

Under the both the current and draft State Planning Policy (SPP5.4) *Road and Rail Noise*, Anketell Road is identified as a 'Primary Freight Road'. The proposed amendment will facilitate future commercial development adjacent to Anketell Road.

A portion of the subject land was excluded from the approved Structure Plan as a result of potential noise impacts associated with Anketell Road; albeit the majority of commercial land uses do not fall within the definition of noise sensitive land uses. The proponent is not seeking to develop the subject land for any uses which are classified as noise sensitive and its inclusion now is supported by a noise management plan.

#### 1.3.4.3 CITY OF KWINANA DRAFT LOCAL PLANNING STRATEGY (LPS)

The draft LPS identifies the subject land as 'Future Residential Areas'. The land to the north of Anketell Road is identified as the future Wandi District Activity Centre.

#### 1.3.4.4 CITY OF KWINANA LOCAL COMMERCIAL AND ACTIVITY CENTRES STRATEGY (LCACS)

The LCACS provides the hierarchy of activity centres for the City of Kwinana based on comprehensive research and analysis. The Strategy Map identifies two (2) future activity centres in close proximity to the subject land; being the Wandi District Activity Centre and the Anketell Local Centre.

The future Wandi District Activity Centre is planned directly north of Anketell road. It is not expected to commence development until 2021 and is forecast to ultimately deliver between 16,000m<sup>2</sup> and 20,000m<sup>2</sup> Shop/Retail Nett Lettable Area (NLA).

A potential Local Centre is located to the south of the subject land (Anketell Local centre). The Anketell Local Centre will deliver a maximum of 800m<sup>2</sup> NLA.

## 2 Site conditions and Constraints

### 2.1 Environmental Assessment

An Environmental Assessment was undertaken for the original approved Structure Plan, this inclusive of the proposed amendment area.

The Environmental Assessment indicated the following relative to the subject land within the Structure Plan amendment area:

- The predominant soil type within the Structure Plan amendment area is Spearwood S2a Phase (211Sp\_S2a) which is suitable for urban development;
- The mapping indicates that the subject land has no known risk of ASS occurring;
- There are no geomorphic wetlands are identified as occurring within the subject land;
- There are no hydrological (surface water or groundwater) constraints to urban development of the subject land.
- There is no presence of Protected (Declared Rare and Priority) Flora or Threatened Ecological Communities;
- The majority of the Structure Plan area was historically cleared for semi-rural land uses. The remaining predominant vegetation complex surveyed is (Hh) *Low Forest A of Banksia attenuate, Banksia menziesii and Allocasuarina fraseriana over Open Scrub of Kunzea glabrescens over Heath B dominated by Hibbertia hypericoides* in grey sand. The condition of the vegetation was classified as 'Degraded' to 'Completely Degraded'.
- There are no Bush Forever sites.
- There are no known Aboriginal or Other Heritage Sites on or near the subject land.
- There are no known contaminated sites identified on the subject land.

## 2.2 Movement Network

A technical note has been prepared by GTA Consultants to assess the impact of the proposed Structure Plan amendment to allow for commercial and residential uses within Lot 188 Treeby Road and Lot 652 Anketell Road, Anketell (**Appendix 2** refers). The key findings of the existing movement network are as follows:

- A new left in/left out (LILO) is to be provided from Anketell Road, servicing the subject amendment area in the north-west portion of the Structure Plan area (Lot 652), approximately 195m west of the originally planned and approved LILO.
- The proposed commercial development within Lot 652 is expected to generate 400 trips daily or 80 trips in the peak hour. This is considered marginal and does not change the outcomes of the previously recommended road hierarchy or intersections forming the concurrent Lot 2 and 3 Structure Plan Amendment amendment.
- The proposed commercial and mixed-use development within Lot 188 is expected to generate some 1,685 trips daily or 119 trips in the peak hour. This estimate, as distributed per the trip assignments in the approved Structure Plan, has been determined not to change the outcomes of the previously recommended road hierarchy or intersection forms.

### 2.2.1 Anketell Road

Anketell Road is classified a '*District Distributor A*' under the Main Roads WA Functional Road Hierarchy and currently is constructed as a two-lane undivided road of a rural standard. Anketell Road remains an '*Integrator A*', consistent with previous studies whereby it is expected to carry between 12,000 and 20,000 vehicles per day (vpd). The intersection of Anketell Road and Treeby Road is proposed as a traffic signal controlled intersection.

### 2.2.2 Treeby Road

The projected traffic volume for Treeby Road is estimated to marginally increase from 8000vpd to 9400vpd as a result of the proposed uses within the Structure Plan amendment area. However, Treeby Road will remain an '*Integrator B*' consistent with the previous road hierarchy classification.

### 2.2.3 Existing Pedestrian and Cycle Networks

Anketell Road is identified as a 'Good Road Riding Environment' according to the Department of Transport's Perth Bike Map series. Anketell Road also provides a connection to the 2.5m wide Principal Shared Path on the Western side of the Kwinana Freeway that functions as a major north south connector for modes of active transport.

### 2.2.4 Existing Public Transport Network

At present, the closest bus route to the Structure Plan amendment area is Route 257, 2 kilometres to the north-east and servicing new development north of Anketell. It is proposed that the Public Transport Authority (PTA) plans to extend Route 257 south to service the Structure Plan area, thus connecting patrons to Aubin Grove and Kwinana Stations.

## 3 Landuse and Subdivision Requirements

### 3.1 Design Philosophy

The Structure Plan amendment proposes a mix of commercial and residential land uses within the amendment area that details the expansion of the Structure Plan boundary. Design has taken consideration of the accessibility and functionality of the amendment area to ensure that it appropriately connects with the remainder of the Structure Plan area. Opportunities to include commercial land uses directly adjacent to Anketell Road have been maximised in an effort to mitigate potential noise management issues associated with Anketell Road.

The design philosophy has been predicted upon the following objectives:

- provision of a range of lot sizes according with the density targets of Directions 2031 to encourage diversity of lot product, built form and affordability measures;
- to provide suitable interface to Anketell Road to address noise mitigation;
- to provide a suitable interface to external and internal boundaries;
- to deliver a safe pedestrian and cyclist environment within the immediate Structure Plan area and ensure external connectivity to strategic community nodes and major public transport stations; and
- to implement sound engineering and drainage solutions for the Structure Plan area.

## 3.2 External Design Influences

### 3.2.1 Bushfire Management

A Bushfire Management Plan has been prepared by Eco Logical Australia to support this Structure Plan Amendment (**Appendix 3** refers).

Both Lot 652 and Lot 188 are within a designated bushfire prone area as per the *Western Australia State Map of Bush Fire Prone Areas (DFES 2017)*, this triggers bushfire planning requirements under State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7 [WAPC]; 2015).

Bushfire fuel types (i.e. vegetation class), and bushfire hazards were assessed in accordance with methodology contained within the *Guidelines for Planning in Bushfire Prone Areas v 1.2 (WAPC 2017)*. The on-site vegetation extent is proposed to be cleared to enable development of a significant urban built footprint amongst areas of landscaped/managed POS and various easements. Therefore, for the purposes of strategic level planning, it is not considered that the current on-site vegetation extent to be a bushfire hazard issue post-development, since these hazards can be managed through a staged clearing process, adequate separation of future built assets from classified vegetation, and ongoing fuel management that can be undertaken in and around individual development stages.

The planning proposal was assessed against bushfire protection criteria contained within the Guidelines (Location, Siting and Design of Development, Vehicular Access, and Water Supply). All criteria are able to be met using acceptable solutions outlined in the Guidelines.

It is considered that the bushfire hazards within and adjacent to Lot 652 and Lot 188 and the associated bushfire risk is readily manageable through standard management responses outlined in the Guidelines and AS3959-2009. Implementation of the proposed management measures will enable Lot 652 and Lot 188 to be developed with manageable level of bushfire risk whilst maintaining full compliance with the Guidelines and AS3959-2009. As such, the proposed development is consistent with the aim and objectives of SPP 3.7 and associated guidelines and is recommended for approval.

### 3.2.2 Noise Management

An Acoustic Assessment has been prepared by Herring Storer to identify the level of noise that would be received at the proposed residential development within the Structure Plan amendment area (**Appendix 4** refers). A summary of the key findings is outlined within the acoustic assessment is conveyed below.

Anketell Road is likely to be undergo a major upgrade and re-alignment in the future, which would affect noise levels associated with the adjacent Structure Plan area. Therefore, the acoustic assessment is based on forecasted traffic volume and noise levels associated with the future road alignment.

SPP 5.4 *Road and Rail Transport Noise and Freight Considerations in Land Use Planning* outlines that where a major road project is to be constructed in the vicinity of a future noise sensitive land use, the infrastructure provider and developer are both responsible for ensuring that the noise criteria objectives are achieved.

SPP 5.4 outlines appropriate noise criteria for noise-sensitive development that can be used to assess if the development is compliant. The acoustic assessment is guided by noise criteria contained within SPP 5.4 and the outcomes indicate that without any noise amelioration measures, noise received at residential lots in the future would exceed the “Noise Target” as outlined within SPP 5.4.

The acoustic assessment indicates that the commercial land uses adjacent to Anketell Road would provide a significant barrier to the residential lots located to the rear. Despite this, in some locations noise received at residential lots does exceed the “Target” and therefore these lots would require further noise amelioration methods, which would potentially include Noise barriers and “Quiet House” design; this addressed in detail as part of the subdivision phase.

## 3.3 Land Composition

The subject land will be predominantly developed for ‘Residential’ purposes and supported by the ‘Commercial’ land uses fronting Anketell Road.

The land use composition ‘Urban’ area includes as follows:

**Table 2:** Land Composition

Land Uses	Area (Ha)	Percentage
Residential	1.72	30.70%
Commercial	1.67	29.72%
Mixed Use	0.33	5.86%
Public Open Space	0.66	11.72%
Anketell Road Widening	0.34	6.02%
Road Reserves	0.90	15.98%
Total	5.62ha	100%

## 3.4 Dwelling Forecasts

### 3.4.1 Directions 2031

The subject land comprises 5.62ha of which majority of the land area is zoned 'Urban'. The exception being the northern portion zoned 'Urban Deferred' under the MRS, this is subject to the ultimate Anketell Road reservation required for 'Other Regional Roads' by the WAPC. With the exclusion of the 'Urban Deferred' portion, the subject land has a gross urban zone of 5.28ha. Based on the dwelling projections of Directions 2031 and accompanying Outer Metropolitan Perth and Peel Sub-Regional Strategy (OMSRS), it is projected that the subject land will generate the following dwelling yields:

**Table 3:** Directions 2031 Dwelling Targets

Directions 2031 Scenario	Projected Dwellings
'Connected City' @ 15 dwellings per gross urban zone	79 dwellings
'Business as usual' @ 10 dwellings per gross urban zone	52 dwellings

Preliminary subdivision concept plans and yield projections prepared over the subject land estimate approximately ~77 dwellings will be accommodated based on lot averages and development potential (refer **Plans 2 & 3**).

The dwelling yield projections fall marginally short of the 15 dwellings per gross urban zone target of Directions 2031. The reason for this shortfall is the allocation of 1.67ha of commercial uses and 0.66ha of POS which exceeds the minimum 10% under WAPC's Liveable Neighbourhoods (refer section 3.6) within the subject land. The subject land will potentially accommodate a population in the order of 212+ people, calculated at a rate of 2.8 persons per household.

The dwelling yield projections are subject to the final design for respective subdivision stages, including review of detailed drainage and environmental constraints. Preferred lot mix and market demand at the time of land release will also influence final dwelling yields.

### 3.4.2 Liveable Neighbourhoods Forecasts

Based on the *Liveable Neighbourhoods 'Site Hectare'* definition the 'developable area' of the subject land equates to 2.05ha. As such the overall *Liveable Neighbourhoods* density for the subject land will be in the order of 77 dwellings which equals 37 dwellings per site hectare.

The projected densities will fulfil the Liveable Neighbourhoods target of an average of 22 dwellings per site hectare for the overall development.

The subject land has been assigned a base coding of 'Residential R40', with a portion of the subject land allocated 'Residential R30'.

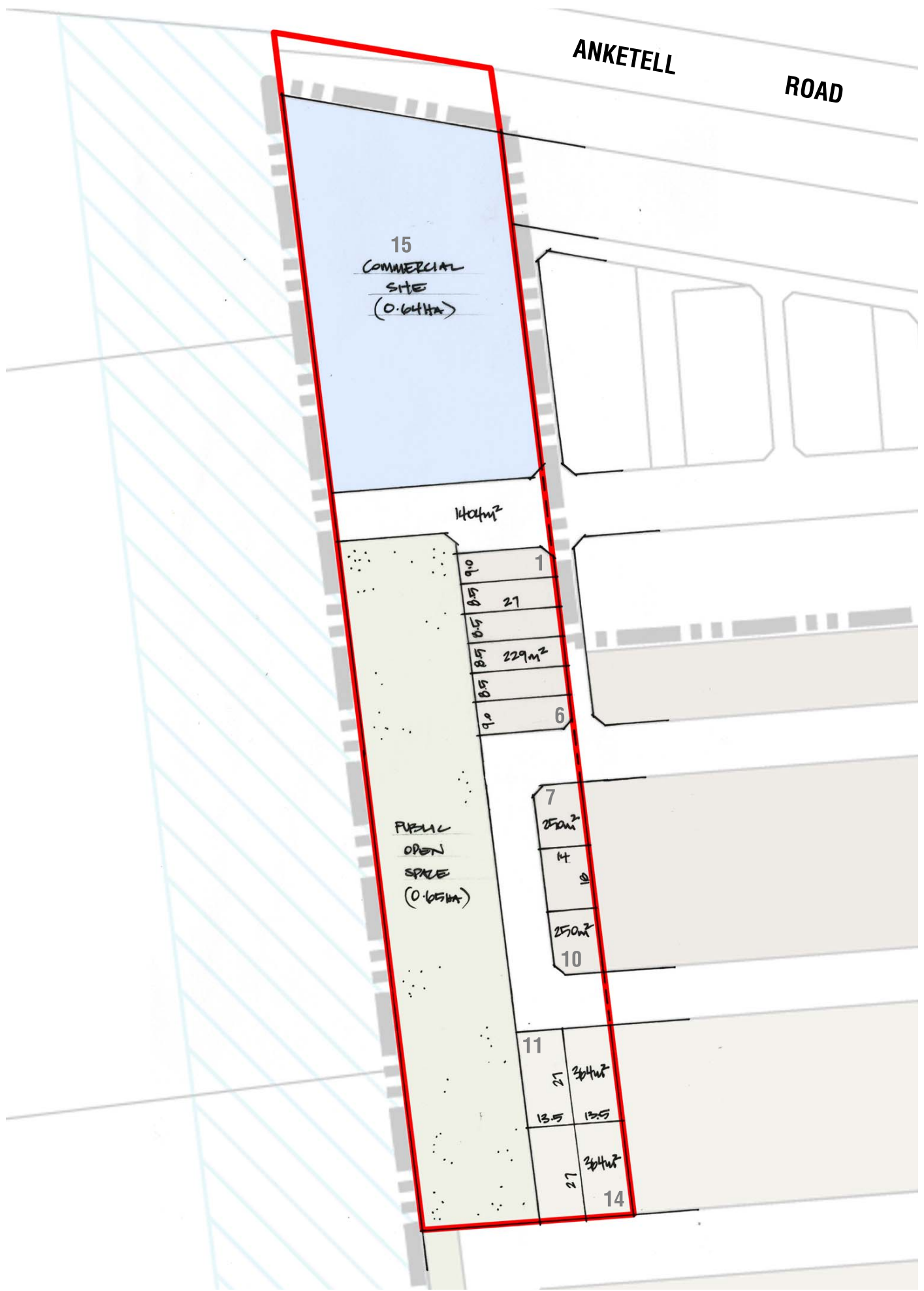
## 3.5 Local Development Plans

Local Development Plans are to be prepared for the Structure Plan area pursuant to the WAPC's *Local Development Plan Framework* and Schedule 2, 'Deemed Provisions for Local Planning Schemes' of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

### 3.5.1 Prescribed Requirements

Local Development Plans are to be prepared and implemented for lots comprising one or more of the following site attributes:

- Lots affected by noise which exceeds the noise target as defined by State Planning Policy 5.4 in relation to Kwinana Freeway and Anketell Road;
- Lots within a 100m catchment of 'Classified Vegetation' (Bushfire Hazard Zone) thus deemed at risk from bushfire pursuant to Australian Standards;
- Commercial and/or Mixed-Use Lots;
- Lots with rear laneway access;
- Lots with a common boundary to an area of Public Open Space
- Lots designated as grouped or multiple dwelling sites; and
- Lots with a frontage of less than 12m.



Plan 2: Subdivision Concept Plan - Lot 188





Plan 3: Subdivision Concept Plan - Lot 652

### 3.6 Public Open Space

The provision of Minimum 10% POS is provided in accordance with the WAPC's *Liveable Neighbourhoods*. All figures are rounded up for the purpose of calculations and will be reviewed in detail at the Subdivision Design phase.

The POS proposed within the subject land is designed to connect with other POS areas planned throughout the approved Structure Plan. The POS will be developed and landscaped to a high standard by the proponent for the benefit of future residents.

POS allocations within the subject land are demonstrated in **Table 3** and **4**:

**Table 3: Land Use Budget**

Public Open Space		Area (Ha)
Structure Plan Area (Lot 188 & Lot 652)		5.62
Deductions	1:1 Drainage Deduction	0.2085
	Anketell Road Widening	0.34
	Commercial	1.67
Total Deductions:		2.2185
Gross Subdivisible Area		3.40
<b>POS Requirement @ 10%</b>		<b>0.3402</b>
<i>Maximum Restricted Open Space Permitted (20%):</i>		<i>0.0680</i>
<i>Minimum Unrestricted Open Space Required (80%):</i>		<i>0.2721</i>

**Table 4: POS Calculation**

		Drainage Provisions and Creditable Open Space			
		Non Credit	Restricted POS (20% Max)	Unrestricted POS (80% Min)	Total Credited Open Space
POS Area	Land Area (ha)	Deduction	>1:1 – 1:5 Yr	Above 1:5 Yr	Combined
All Figures provided in Hectares (Ha)					
<b>A</b>	0.6500	0.2085	0.0352	0.4063	0.4415
<b>Total</b>	<b>0.6500</b>	<b>0.2085</b>	<b>0.0352</b>	<b>0.4063</b>	<b>0.4415</b>

### 3.7 Stormwater Management

Lot 188 and Lot 652 Anketell Road were encompassed by the approved Local Water Management Strategy (LWMS). A Storm Water Management Plan was prepared by Water Resources Engineering in support of the proposed Structure Plan amendment (refer, **Appendix 5**). This report has been prepared to detail stormwater management in response to the changes made to the Structure Plan with key findings outlined below.

The report addresses LWMS catchments 8.1.1, 8.1.2 and 8.1.3 as the subject land is contained to these respective catchment zones. The stormwater management for the subject land remains practically unchanged from the approved LWMS, with the exception being the location and size of the basin within Catchment 8.1.1. The basin 8.1.1b has been moved further south from the approved LWMS.

The proposed stormwater management system is capable of maintaining the 1 in 100-year Average Recurrence Interval (ARI) event runoff onsite, including infiltration basin. Soakwells are proposed to retain and infiltrate up to 1 in 1-year ARA event runoff from the lots on the subject land.

### 3.8 Infrastructure Coordination, Servicing and Staging

An engineering servicing assessment was conducted by A. Khosravi Engineering Services (refer **Appendix 6**).

#### 3.8.1 Earthworks

Earthworks will be limited to those necessary for the major distributor roads and remoulding of various areas within Lot 652 to fulfil drainage requirements along the southern boundary. Earthworking is proposed to be minimal so that the natural topography can be retained where possible.

A pre-development site visit has revealed that site classification across the subject land should be "Class A".

#### 3.8.2 Roadworks

All subdivision roads will be constructed to the City's standard, and generally designed as follows (unless otherwise nominated by a traffic engineer):

- Neighbourhood Roads: 20m wide road reservation, 3m wide carriageway lanes and on-road cycling accommodated within the 6m wide pavement.
- Access Roads: 14.2 – 15.4m wide road reservation with 6m wide carriageways.

Pavement widths will be in accordance with *Liveable Neighbourhoods* criteria and dual use paths and footpaths will also be provided in accordance with the Department of Planning and Infrastructures requirements.

#### 3.8.3 Power

All electrical power reticulation required to service the subject land will be underground in accordance with WAPC policy.

An existing high and low voltage aerial network extends along Anketell Road and Treeby Road. The introduction of transformers and the associated upgrade of aerials where deemed necessary the subject land could be serviced with underground power.

#### 3.8.4 Water Supply

All lots created can be serviced with the construction of proposed water reticulation mains varying in size from 250mm, 200mm and 150mm diameter.

#### 3.8.5 Wastewater Disposal

Wastewater generated from the subject land will gravitate through proposed future gravity pipe network along Treeby Road and Anketell Road into the existing Thomson's Lake Pumping Station M-174.

#### 3.8.6 Telecommunication

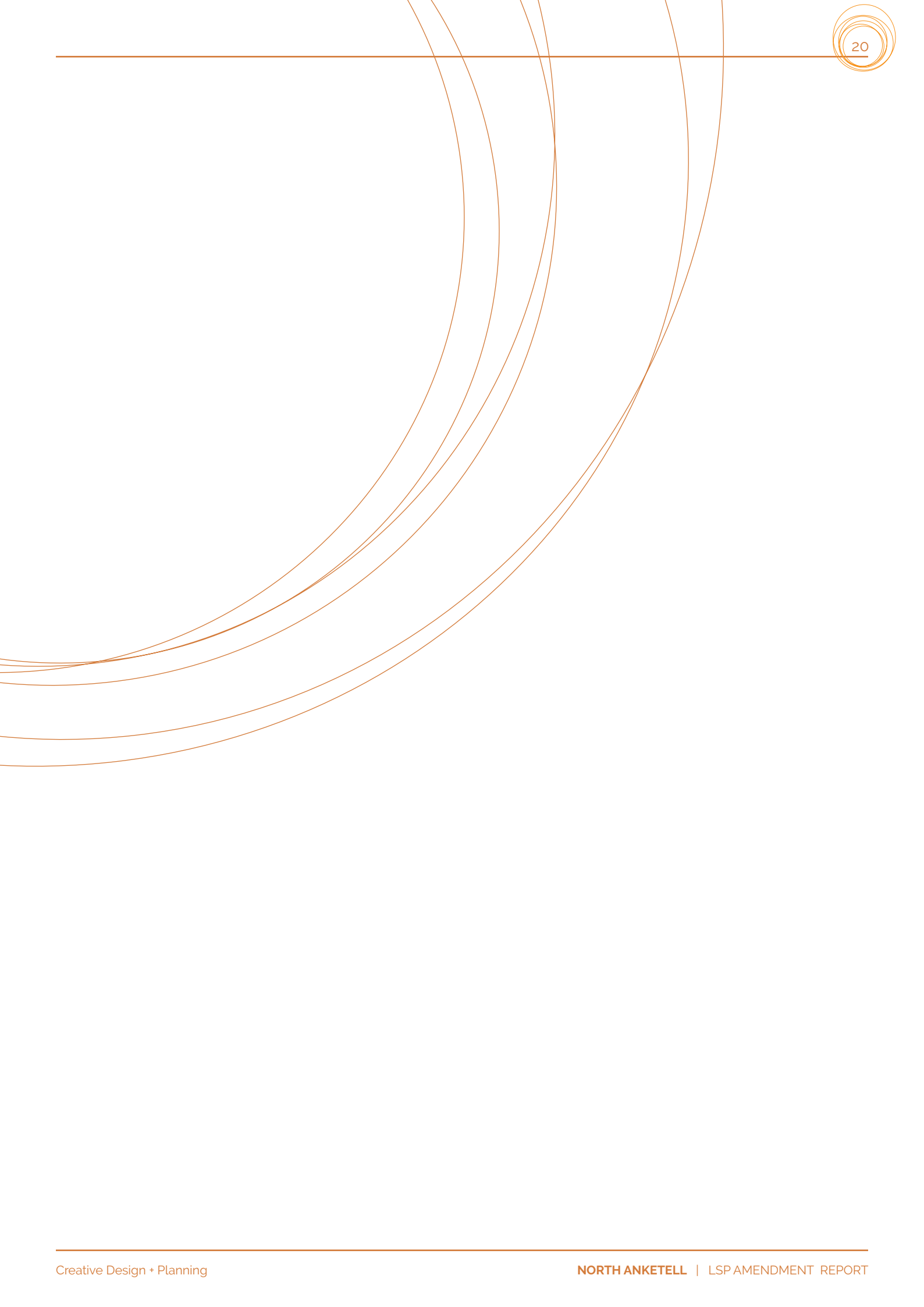
The existing telecommunication infrastructure within Anketell Road and Treeby Road has the capacity to be extended to service the subject land.

#### 3.8.7 Gas

The proposed 160HP, ATCO gas main infrastructure within Anketell Road can be extended to service the subject land.

# Appendix 1

## **CERTIFICATES OF TITLE**





REGISTER NUMBER <b>652/P3475</b>	
DUPLICATE EDITION <b>3</b>	DATE DUPLICATE ISSUED <b>10/6/2008</b>

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 2037 FOLIO 444

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 652 ON PLAN 3475

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

FILTON PTY LTD OF PO BOX 246, APPLECROSS

(T K616517 ) REGISTERED 5/6/2008

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

1. THE LAND THE SUBJECT OF THIS CERTIFICATE OF TITLE EXCLUDES ALL PORTIONS OF THE LOT DESCRIBED ABOVE EXCEPT THAT PORTION SHOWN IN THE SKETCH OF THE SUPERSEDED PAPER VERSION OF THIS TITLE. VOL 2037 FOL 444.
2. K616518 MORTGAGE TO NATIONAL AUSTRALIA BANK LTD REGISTERED 5/6/2008.

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: 2037-444 (652/P3475)  
PREVIOUS TITLE: 1442-750  
PROPERTY STREET ADDRESS: 656 ANKETELL RD, ANKETELL.  
LOCAL GOVERNMENT AUTHORITY: CITY OF KWINANA

WESTERN



AUSTRALIA

REGISTER NUMBER <b>188/DP25096</b>	
DUPLICATE EDITION <b>3</b>	DATE DUPLICATE ISSUED <b>13/10/2015</b>

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME **2506** FOLIO **479**

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 188 ON DEPOSITED PLAN 25096

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

QUMARS MESHGIN OF 10 LEVERBURGH STREET ARDROSS  
IN 1/2 SHARE  
CHUEN SHIUNG CHAI  
HOA THUY TIEN NGUYEN  
BOTH OF 65 STRICKLAND STREET SOUTH PERTH  
AS JOINT TENANTS IN 1/2 SHARE  
AS TENANTS IN COMMON

(T N246849 ) REGISTERED 9/2/2016

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

1. \*N246850 MORTGAGE TO NATIONAL AUSTRALIA BANK LTD REGISTERED 9/2/2016.

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: DP25096  
PREVIOUS TITLE: 1264-404  
PROPERTY STREET ADDRESS: 28 TREEBY RD, ANKETELL.  
LOCAL GOVERNMENT AUTHORITY: CITY OF KWINANA

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING  
N246850

ORIGINAL—NOT TO BE REMOVED FROM OFFICE OF TITLES

Application F840714

WESTERN



AUSTRALIA

REGISTER BOOK VOL. FOL.

Volume 1442 Folio 750

CT 2037 444



# CERTIFICATE OF TITLE

UNDER THE "TRANSFER OF LAND ACT, 1893" AS AMENDED

I certify that the person described in the First Schedule hereto is the registered proprietor of the undermentioned estate in the undermentioned land subject to the easements and encumbrances shown in the Second Schedule hereto.

*G Sack*

REGISTRAR OF TITLES



Dated 29th March, 1995

### ESTATE AND LAND REFERRED TO

Estate in fee simple in portion of Cockburn Sound Location 16 and being part of Lot 652 on Plan 3475 (Sheet 3), delineated on the map in the Third Schedule hereto.

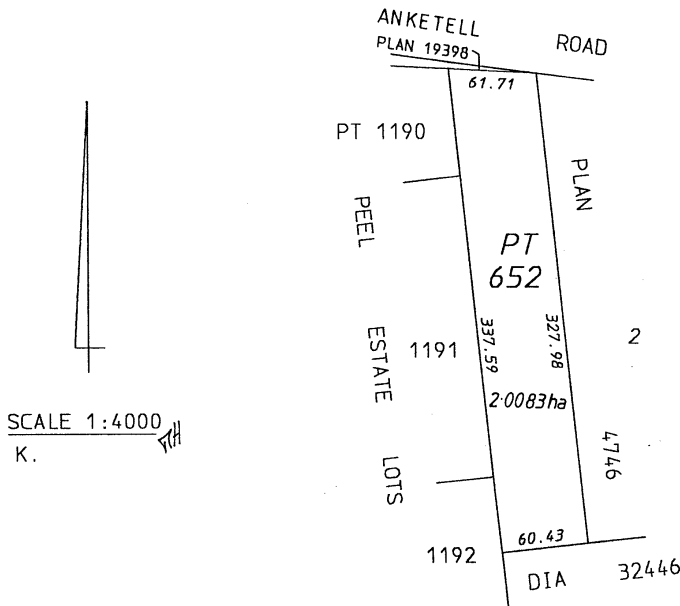
### FIRST SCHEDULE (continued overleaf)

Patricia Marie Brown and Ida Sophia Gabrielle Mahomed both of 381 Hope Valley Road, Mandogalup, as tenants in common in equal shares.

### SECOND SCHEDULE (continued overleaf)

- MORTGAGE E147204 to Town & Country W.A. Building Society. Registered 11.7.89 at 9.52 hrs.

### THIRD SCHEDULE



PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

NOTE: ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS.

E67590/3/89-20M-L/4664

Page 1 (of 2 pages) VOL. 2037 FOL. 444

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**FIRST SCHEDULE (continued)**

NOTE: ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS

REGISTERED PROPRIETOR

INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	TIME	SEAL	CERT. OFFICER
<p style="font-size: 2em; opacity: 0.5; transform: rotate(-90deg);">Superseaded - Copy for Sketch Only</p>					

**SECOND SCHEDULE (continued)**

NOTE: ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS

PARTICULARS

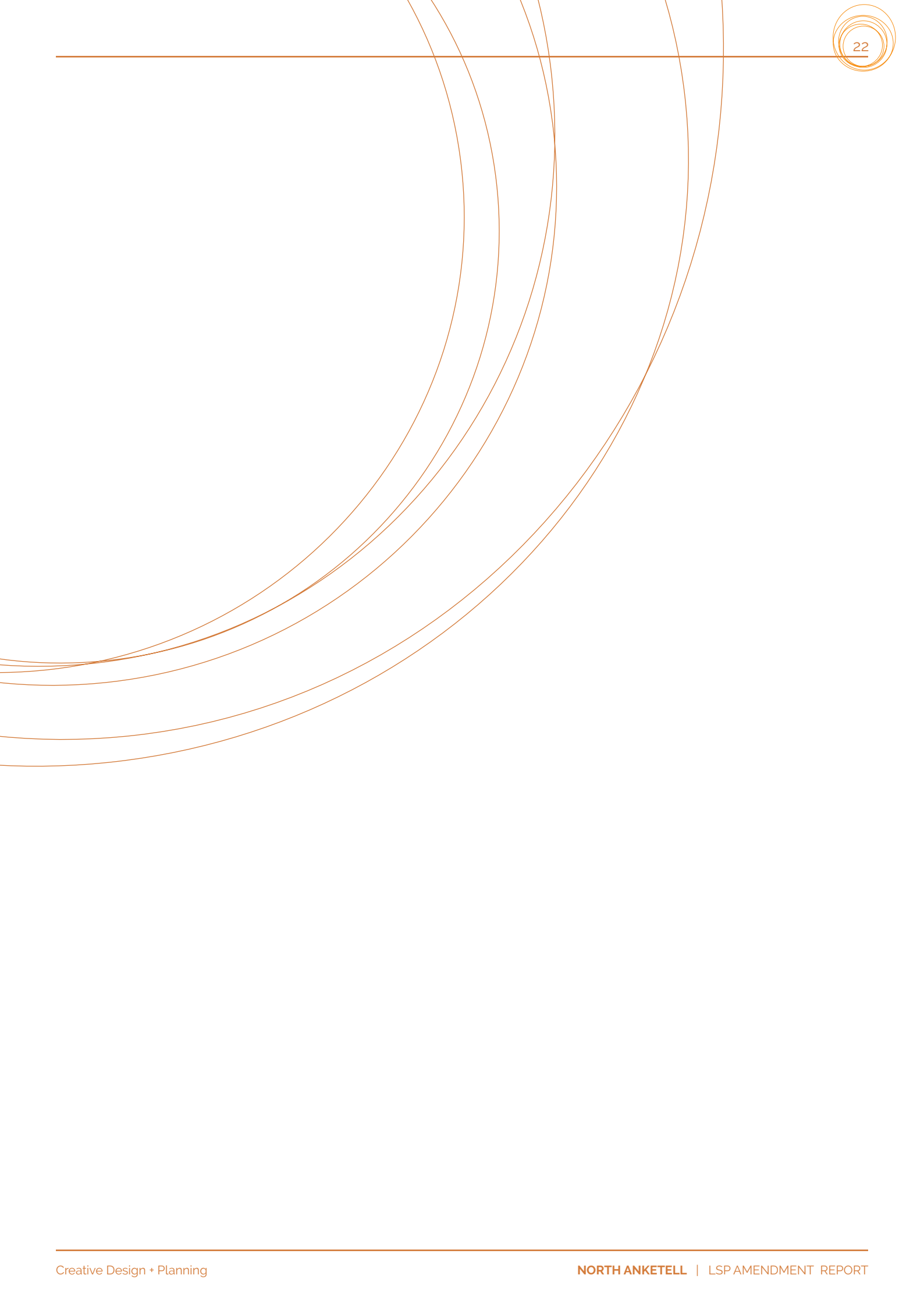
INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	TIME	SEAL	CERT. OFFICER	CANCELLATION	NUMBER	REGISTERED OR LODGED	SEAL	CERT. OFFICER
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CERTIFICATE OF TITLE VOL. 2037 FOL. 44

# Appendix 2

## **TRANSPORT ASSESSMENT TECHNICAL NOTE**

(GTA CONSULTANTS)



## TECHNICAL NOTE

**TO:** Tamara Vreeken, Senior Town Planner, Creative Design + Planning

**CC:** City of Kwinana

**FROM:** GTA Consultants

**DATE:** 23/10/2017

**OUR REF:** W113840

**RE:** **Anketell North Local Structure Plan Amendment**  
**Lot 652 and 188 Anketell Road, Anketell - Transport Assessment**

Dear Tamara

### Background and Introduction

GTA Consultants (GTA) has been commissioned by Creative Design + Planning on behalf of Anketell Trust to prepare a supporting transport assessment technical note for the proposed amendment to the Anketell North Local Structure Plan (LSP).

To date, the City of Kwinana has approved, or are currently assessing, the following transport assessments for the LSP:

- *Anketell North LSP, Anketell, Updated Traffic Report, October 2015*, Transcore for Rowe Group Planners, approved by WAPC in December 2015
- *Lots 2 & 3 Anketell Road, Anketell North LSP Amendment, February 07*, Transcore for Veris. Currently under assessment by City of Kwinana and WAPC. The amendments include subdivision of Lots 2 & 3 and modification to the land use and road network within the north-west part of the LSP area. The amendment also includes provision of a vehicle right turn facility from Anketell Road into the north-west area at the intersection of Anketell Road and LSP Road 1. This intersection was originally planned as left in/left out.

### Lot 652 and Lot 188 – Proposed LSP Amendment

This technical note applies to Lot 652 (north-west part of the LSP area) and Lot 188 (north-east part of the LSP area) which are areas just outside the original LSP boundary. Figure 1 below notes the subject amendment area (Lot 652 & Lot 188) relative to the overall Anketell North LSP (approved) and the Lots 2 & 3 amendments (under assessment) mentioned above.

The amendment sought by Anketell Trust is to include the subdivision areas of Lots 652 & Lot 188 in the LSP. This area will include commercial and mixed-use land uses and a new left in/left out (LILLO) from Anketell Road to the north-west part of the LSP area, approximately

melbourne  
sydney  
brisbane  
canberra  
adelaide  
gold coast  
townsville  
**perth**

Level 2, 5 Mill Street  
PERTH WA 6000  
PO Box 7025,  
Cloisters Square  
PERTH WA 6850  
t// +618 6169 1000

195m west of the originally planned and approved LILO (now LILO – Right in being sought by Veris).

Figure 1: Subject Lots 652 & 188 LSP Amendment Area (relative to Lots 2 & 3 amendment area)



(Base Map Source: Creative Design + Planning)

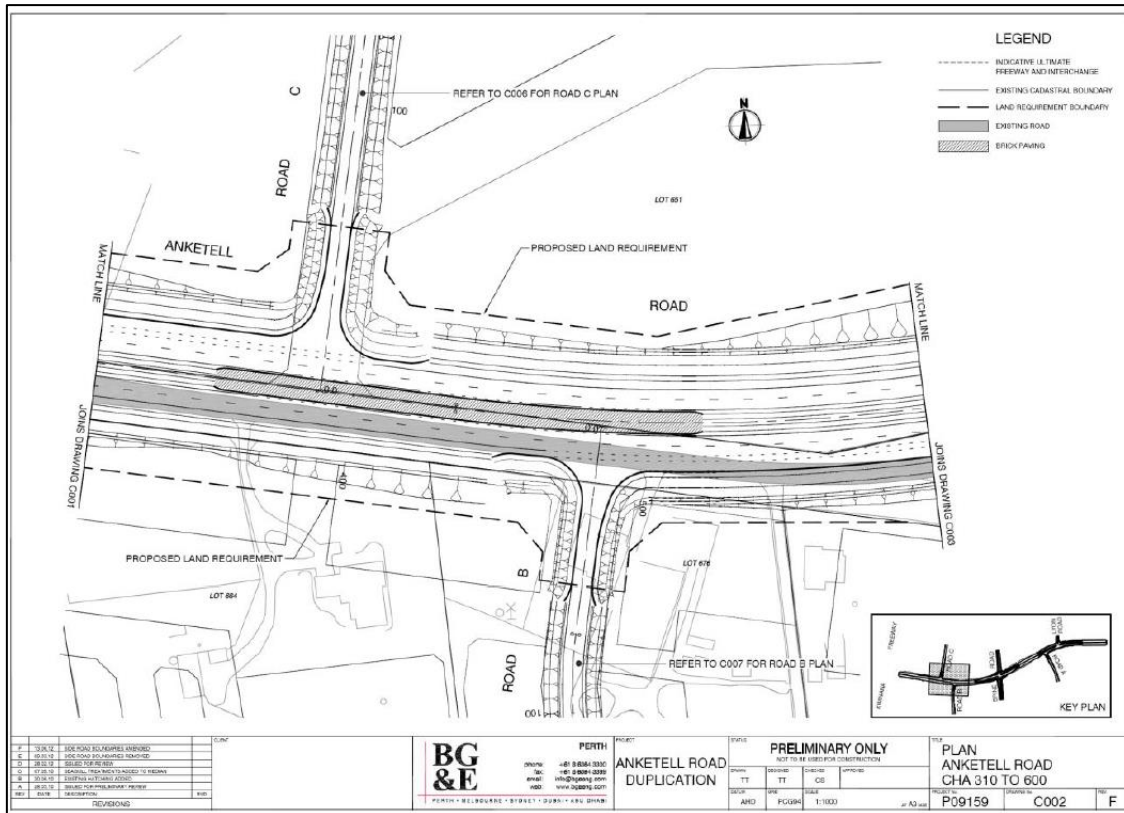
### Site Location and Existing Road Network

The site is located south of Anketell Road, east of the Kwinana Freeway and west of Treeby Road, in Anketell, approximately 28km south of Perth CBD.

Anketell Road is classified a District Distributor A under the Main Roads WA Functional Road Hierarchy and is currently constructed as a two-lane undivided road of a rural standard. The previous LSP document notes that it carried about 9,400 vehicles per day (vpd) in February 2016 just east of Mandogalup Road. The *Perth Freight Transport Network Plan* published on the Department of Transport website also indicate that Anketell Road will be classified as a strategic freight road and widened to a four-lane dual carriageway from the west of Kwinana Freeway to Battersby Road. Anketell Road will also provide RAV 7 access to service future growth within the Kwinana Industrial Area, Latitude 32 Industry Zone, Australian Maritime Complex and Rockingham Industry Zone.

Main Roads WA has informed the previous LSP document on the form of the ultimate Anketell Road layout. The planned intersection arrangements, east of Kwinana Freeway has been included in the BG&E design drawings reproduced in Figure 2.

**Figure 2: Approved design of Anketell Road for the LILO into LSP Road 1**



Notwithstanding the above, the current Lots 2 & 3 LSP Amendment (under assessment) seeks to provide a median opening at LSP Road 1 to provide a right turn pocket from Anketell Road into the LSP area. The LSP Amendment document notes this movement will attract some 3,000vpd which in turn would result in the removal of similar right turn movement demands at the downstream Treeby Road intersection, improving the operation of this key intersection. The permeability and connectivity to the proposed retail/commercial areas on both sides of LSP Road 1 are also noted to improve with the modified LILO-RI. Further, the truck and service vehicle traffic associated with the commercial land uses to the north of the LSP area would also be separated from the residential area, which would be a good overall outcome. For the purposes of this technical note, GTA has been requested by Creative Design + Planning to assume the right turn in will be approved by WAPC for the purposes of lodgement of this LSP Amendment.

Kwinana Freeway is a Primary Distributor road and reserved as a Primary Regional Road in the Metropolitan Regional Scheme (MRS). It is constructed as four lanes divided and carries around 97,200vpd (2013/2014 data) south of Rowley Road.

Treeby Road is a local road aligned in a north-south direction just east of the amendment subject sites. It provides local access to existing residential developments within the LSP area. Treeby Road forms as priority T-intersection with Anketell Road just to the north-east corner of subject Lot 188. The southern side of Treeby Road is currently unconstructed and therefore does not connect to

Thomas Road. Traffic volumes on this road are currently not available, however the volume is not expected to be significant and it is related to the existing rural residential developments.

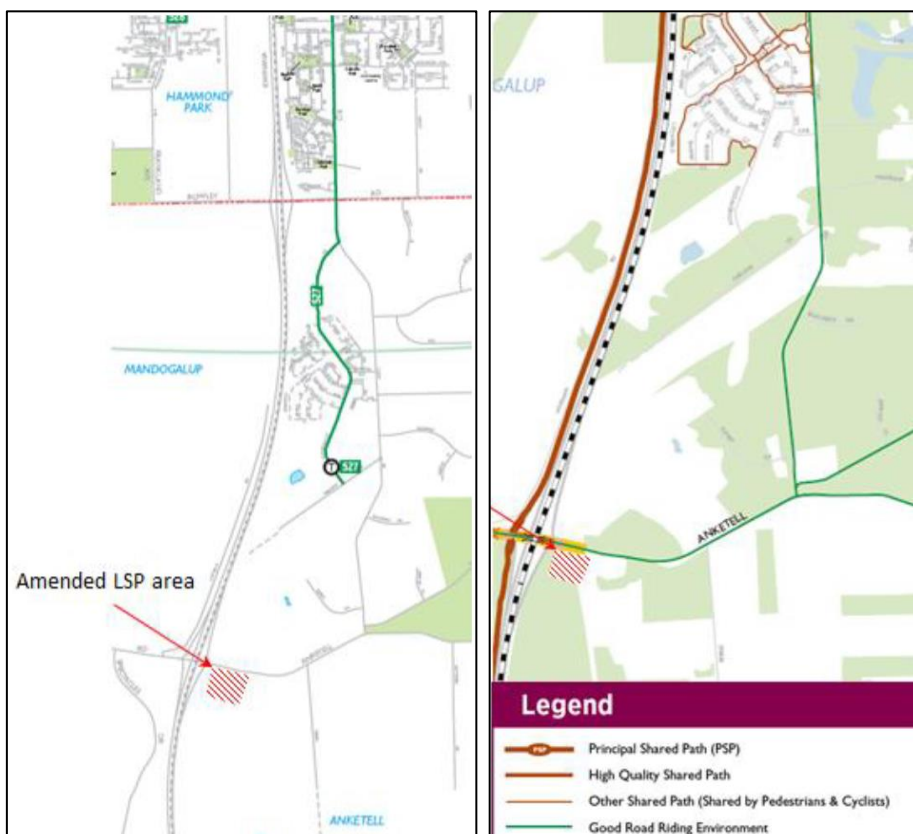
### Public Transport and Active Transport

Figure 3 depicts the closest existing bus services and nearby pedestrian and cyclist facilities.

The closest existing bus route to the LSP Amendment area is Bus Route 527 which currently operates in the new developments north of Anketell Road, approximately 2km away. As this is well outside of acceptable walking catchments (400m), the previous LSP document notes the Public Transport Authority (PTA) plans to extend Route 527 south to service the Anketell LSP area and provide connectivity to Aubin Grove and Kwinana Stations.

Anketell Road is a 'Good Road Riding Environment' according to the Department of Transport's Perth Bike Map series. This also provides connection to the 2.5m wide Principal Shared Path on the western side of Kwinana Freeway.

**Figure 3: Snapshots of closest existing Bus Services and Pedestrian and Cyclist facilities**



(Map Source: Lots 2 & 3 Anketell LSP Amendment Document, Transcore)

### Proposed LSP Amendment Development

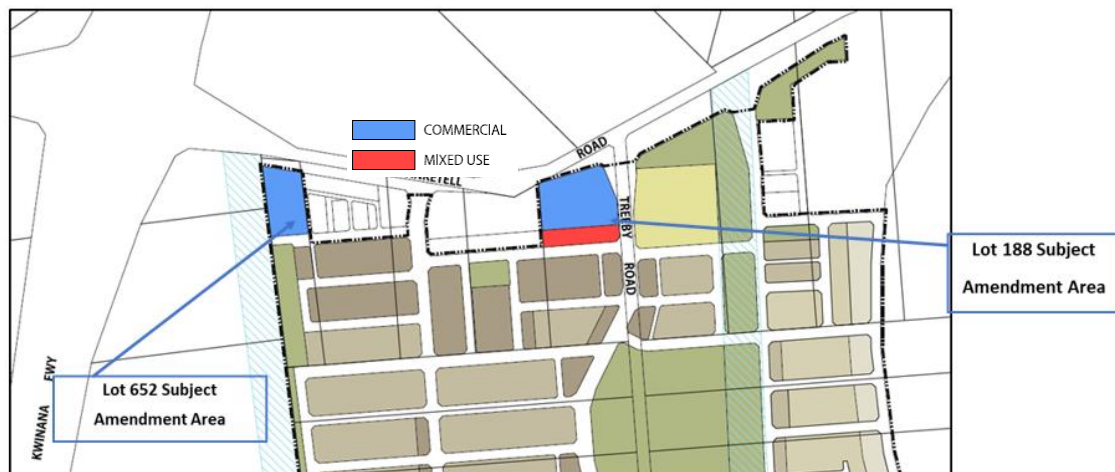
The proposed land uses for the LSP Amendment area are noted in Table 1 and illustrated in Figure 4.

**Table 1: Intended Land Uses for LSP Amendment Lot 652 & 188 areas**

Lot No.	Intended Land Use	Gross Floor Area (approx.)
652	Commercial	6,500m <sup>2</sup> Site Area – 4,000m <sup>2</sup> GFA
188	Commercial	9,450m <sup>2</sup> Site Area – 1,200m <sup>2</sup> GFA
188	Mixed Use (50% office/commercial and 50% residential)	3,000m <sup>2</sup> Site Area – 2,250m <sup>2</sup> GFA (75% cover)

(Reference: Creative Design + Planning, email to GTA, dated 10 & updated 26 October 2017)

**Figure 4: Proposed Lot 652 & 188 LSP Amendment Areas**



On the basis that these areas were excluded from the original LSP area, the traffic generation is defined in the next section for consideration of intersection form and road hierarchy.

### Analysis of the Transport Network

The traffic generation of the intended uses are noted in Table 2 **Error! Reference source not found..**

**Table 2: Vehicle Traffic Generation Estimates**

Intended Land Use	Gross Floor Area (approx.)	Trip Gen Rate (Max, PM peak)	Trip Gen Rate (Daily)	Trip Gen (PM)	Trip Gen (Daily)
Commercial	4,000m <sup>2</sup>	2/100m <sup>2</sup>	10/100m <sup>2</sup>	80	400
Commercial – Retail (food)	600m <sup>2</sup> <sup>(a)</sup>	10/100m <sup>2</sup>	121/100m <sup>2</sup>	60	726
Commercial – Retail (non-food)	600m <sup>2</sup> <sup>(a)</sup>	4/100m <sup>2</sup>	121/100m <sup>2</sup>	24	726
Mixed Use – Office/Commercial	1,125m <sup>2</sup>	2/100m <sup>2</sup>	10/100m <sup>2</sup>	23	113
Mixed Use – Residential	1,125m <sup>2</sup> <sup>(b)</sup>	0.8/dwelling	8/dwelling	12	120
Total (Lot 652)				<b>80</b>	<b>400</b>



Intended Land Use	Gross Floor Area (approx.)	Trip Gen Rate (Max, PM peak)	Trip Gen Rate (Daily)	Trip Gen (PM)	Trip Gen (Daily)
Total (Lot 188)				<b>119</b>	<b>1,685</b>

Reference for rates are from WAPC Guidelines (2016) and Approved LSP Document, Oct 2015

<sup>(a)</sup> Assume 50% retail food; 50% retail non-food

<sup>(b)</sup> Assume 150m<sup>2</sup> apartments at 2 levels = 15 dwellings.

Table 2 indicates that the proposed LSP Amendment would add an additional 80 trips/hour or around 400 trips/day from Lot 652 in the north-west portion of the LSP. Similarly, the LSP Amendment would add an additional 119 trips/hour or around 1,685 trips/day from Lot 188 in the north-east portion of the LSP.

The addition of 400vpd traffic to the north-west portion is only marginal. This traffic is expected to predominantly use the proposed new LILo, which will be subject to Main Roads WA approval. Even in the absence of the LILo, this quantum of additional traffic is not considered to make a material difference to the operations of the already approved intersection forms or change the previously proposed road hierarchy for LSP Road 1 (Neighbourhood Connector A).

However, the 1,685vpd to be generated in the north-east portion from Lot 188 is notable. These trips will be distributed as per the trip distribution and assignment to the external zones as noted in the approved LSP (October 2015). This being:

- West 68.75% (13.75% to Kwinana, 51.25% to Freeway North, 18.75% to Freeway South)
- East 12.5% (to East Armadale)
- South 18.75% (to south east)
- TOTAL = 100%

The original approved LSP used EMME transport modelling software to estimate future projected traffic volumes for the LSP area. This model was refined for the Amendment LSP for Lot 2 & 3, the outputs of which are reproduced in Figure 5.

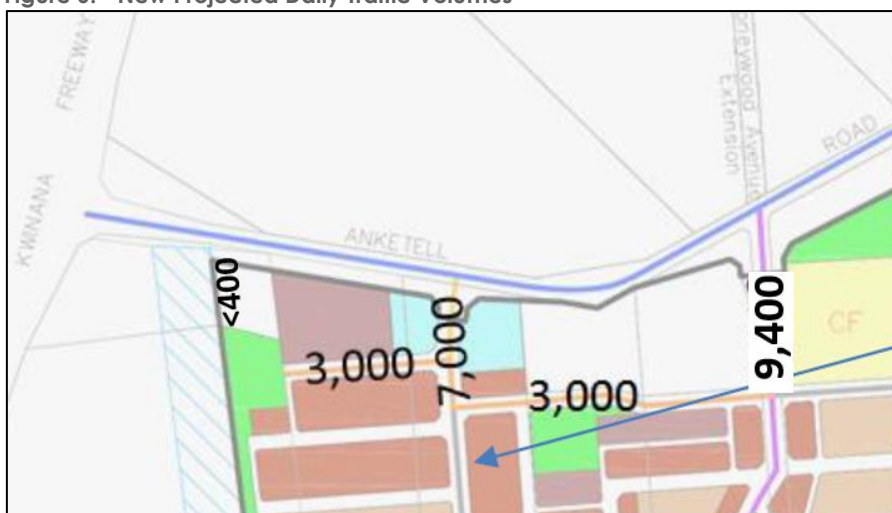
**Figure 5: Projected Daily Traffic Volumes (Right-In assumed to be approved at LSP Road 1)**



(Reference: Lots 2 & 3 Anketell LSP Amendment Document, Transcore)

As per the trip assignments in the original LSP, 18.75% (316vpd) will be distributed to the south via Treeby Road. The remaining 1,369vpd (or 96vph) will traverse the Anketell Road / Treeby Road intersection. The amended projected daily volumes will therefore be as per Figure 6, rounded to the nearest 100vpd.

**Figure 6: New Projected Daily Traffic Volumes**



On the basis of the new 9,400vpd expected on Treeby Road (in lieu of 8,000vpd), the previous road hierarchy set for Treeby Road as an Integrator B still holds true. Anketell Road also remains an Integrator A as previously proposed, expected to carry 12,000vpd to 20,000vpd in the vicinity in the

year 2031 (as noted in the Amendment LSP Report for Lots 2 & 3). The intersection of Anketell Road / Treeby Road will also be proposed as traffic signal controlled.

### Summary of Findings

In summary:

- GTA has undertaken an amendment to the transport assessment report for Anketell North LSP to support the subject amendment areas of Lot 652 & Lot 188. This area will include commercial and mixed-use land uses and a new left in/left out (LILLO) from Anketell Road to the north-west part of the LSP area (Lot 652), approximately 195m west of the originally planned and approved LILLO.
- GTA has determined future year traffic flows on Anketell Road and Treeby Road and carried out a trip generation exercise for the ultimate development (2031) to determine peak hour and daily traffic to be generated.
- Lot 652 proposed Commercial development is expected to generate 400 trips daily or 80 trips in the peak hour, which is marginal and does not change the outcomes of the previously recommended road hierarchy or intersection forms in the Lot 2 & 3 Amendment LSP.
- Lot 188 proposed Commercial and Mixed Use is expected to generate some 1,685 trips daily or 119 trips in the peak hour. This estimate, once distributed as per the original assignments in the approved LSP, has been determined not to change the outcomes of the previously recommended road hierarchy or intersection forms. Treeby Road will be classified as an Integrator B, Anketell Road will be classified as an Integrator A and the intersection of Anketell Road / Treeby Road proposed as a signalised intersection.

As a result of the above, the findings of this technical note are that it does not change the Structure Planned outcomes of the previous LSP approval and the Amendment LSP for Lot 2 & 3 that is currently under assessment.

Yours sincerely

**GTA CONSULTANTS**

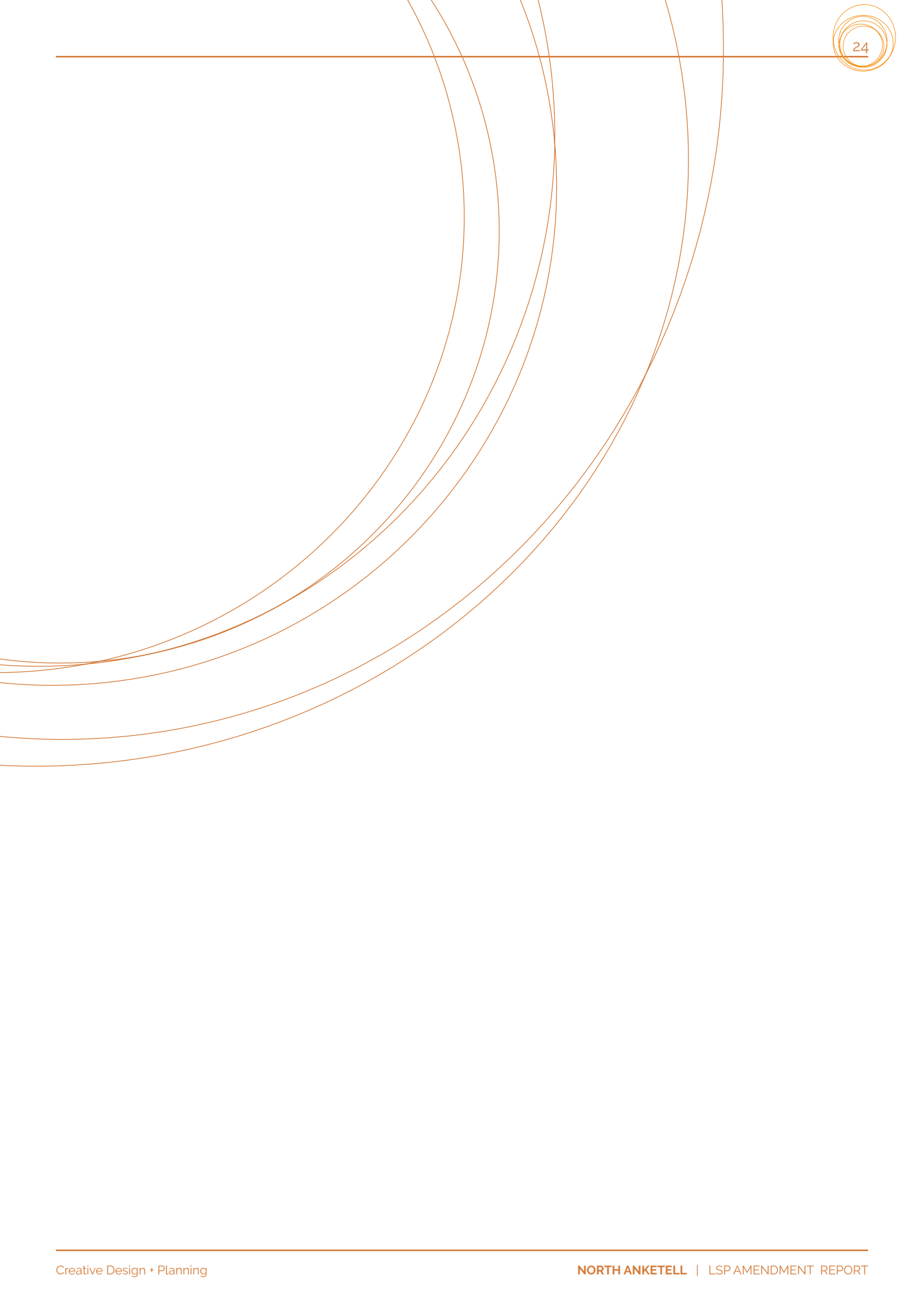


**Tanya Moran – Director, GTA Consultants Perth**

# Appendix 3

## **BUSHFIRE MANAGEMENT PLAN**

(ECO LOGICAL AUSTRALIA)



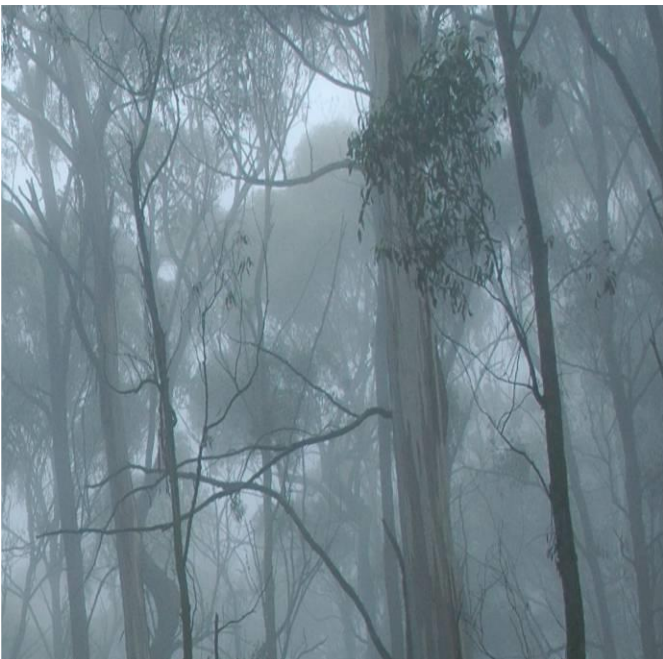


## Bushfire Management Plan

Lot 652 Anketell Rd and Lot 188 Treeby Rd, Anketell

Prepared for  
**Anketell Trust**

18 October 2017



## DOCUMENT TRACKING

Item	Detail
Project Name	Bushfire Management Plan, Lot 652 Anketell Rd and Lot 188 Treeby Rd, Anketell
Project Number	7987
Project Manager	Daniel Panickar (BPAD37802-L2)
Prepared by	Daniel Panickar (BPAD37802-L2)
Reviewed by	Bruce Horkings (BPAD29962-L3)
Approved by	Bruce Horkings (BPAD29962-L3)
Status	FINAL
Version Number	V2
Last saved on	18 October 2017

This report should be cited as 'Eco Logical Australia, October 2017. *Bushfire Management Plan, Lot 652 Anketell Rd and Lot 188 Treeby Rd, Anketell.* Prepared for Anketell Trust.'

---

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Template 29/9/2015

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## Abbreviations

Abbreviation	Description
APZ	Asset Protection Zone
AS	Acceptable Solutions
BAL	Bushfire Attack Level
BHL	Bushfire Hazard Level
BMP	Bushfire Management Plan
ELA	Eco Logical Australia
m	Meters
MNES	Matters of National Environmental Significance
PS	Performance Solution
SPP	State Planning Policy
WAPC	Western Australian Planning Commission

# 1 Introduction

## 1.1 Project Overview

Eco Logical Australia (ELA) was commissioned by Anketell Trust to prepare a Bushfire Management Plan (BMP) to support a Structure Plan amendment for Lot 652 Anketell Road and Lot 188 Treeby Road, Anketell (hereafter referred to as Lot 652 and Lot 188 respectively, **Figure 1**).

Both Lot 652 and Lot 188 are within a designated bushfire prone area as per the *Western Australia State Map of Bush Fire Prone Areas* (DFES 2017), which triggers bushfire planning requirements under *State Planning Policy 3.7 Planning in Bushfire Prone Areas* (SPP 3.7; Western Australian Planning Commission [WAPC] 2015). Therefore, a BMP is required to accompany the submission of the amended Structure Plan in accordance with the associated *Guidelines for Planning in Bushfire Prone Areas v 1.2* (the Guidelines; WAPC 2017).

This assessment has been prepared by ELA Senior Bushfire Consultant, Daniel Panickar (FPAA BPAD Level 2 Certified Practitioner No. BPAD37802-L2) and quality assurance undertaken by ELA Senior Bushfire Consultant, Bruce Horkings (FPAA BPAD Level 3 Certified Practitioner No. BPAD29962).

## 1.2 Purpose and application of the plan

The primary purpose of this BMP is to act as a technical supporting document to inform planning assessment.

This BMP is also designed to provide guidance on how to plan for and manage the bushfire risk to the Lot 652 and Lot 188 through implementation of a range of bushfire management measures in accordance with the Guidelines.

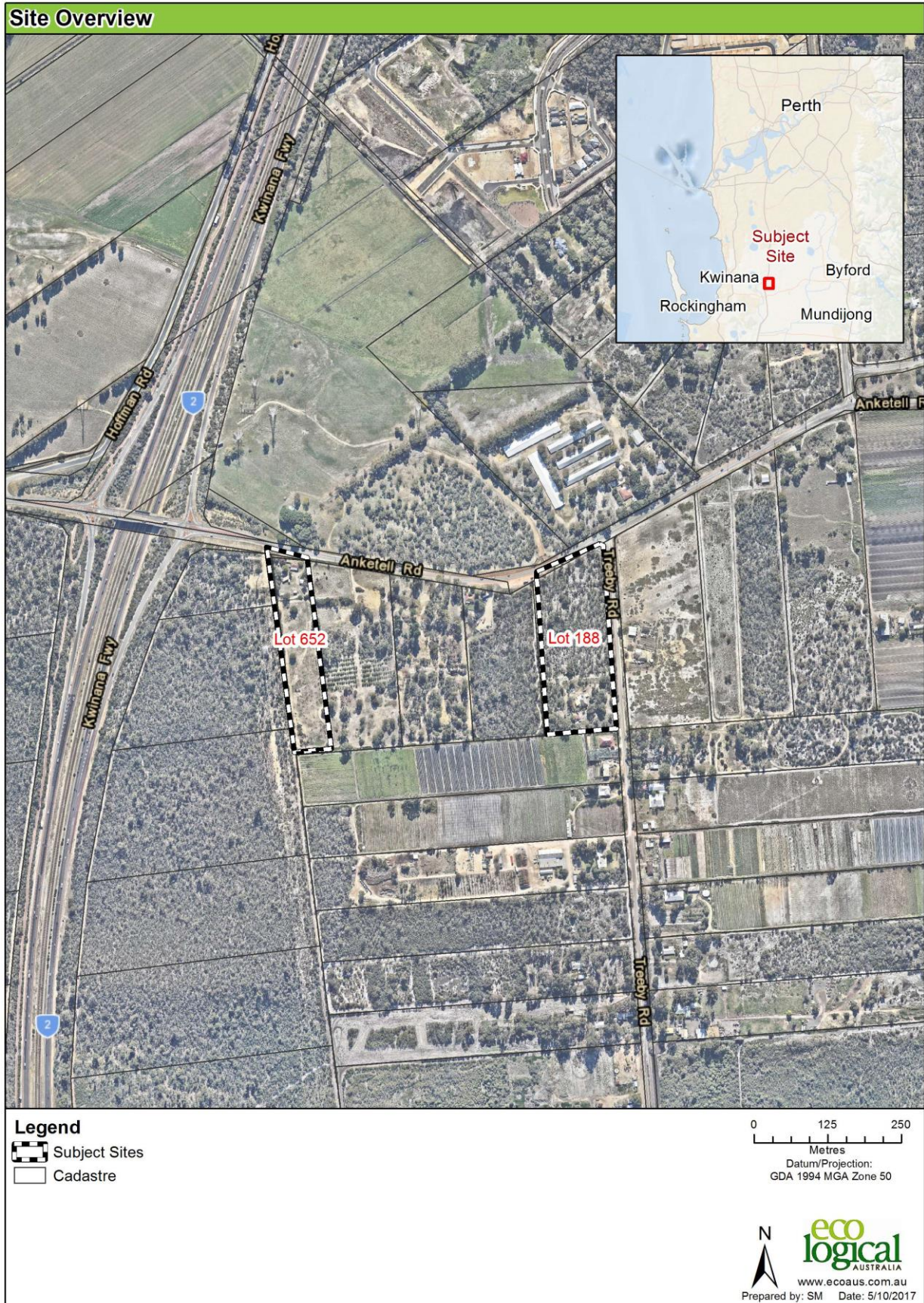


Figure 1: Site overview

## 2 Spatial consideration of bushfire threat

### 2.1 General

Lot 652 and Lot 188 are located in the City of Kwinana, and are bound by Anketell Rd to the north, agricultural land to the south and rural-residential properties/undeveloped bushland to the east and west. Lot 652 contains an existing dwelling with associated structures in the northern portion of the property, while the remainder has been historically cleared and is dominated by grassy weeds. Lot 188 has historically been used for rural-residential purposes, and is proposed to be cleared for future residential development.

### 2.2 Bushfire fuels

Vegetation within Lot 652 and Lot 188 and surrounding 150 m (the assessment area) was assessed in accordance with the Guidelines and *AS 3959-2009 Construction of Buildings in Bushfire Prone Areas* (SA 2009) with regard given to the *Visual guide for bushfire risk assessment in Western Australia* (DoP 2016). Site inspection was undertaken on 30 August 2017.

The following vegetation classes and exclusions were identified within the assessment area as depicted in **Figure 2** and listed below:

- Class A forest;
- Class B woodland;
- Class D scrub;
- Class G grassland; and
- Exclusions as per clause 2.2.3.2 (e) and (f) (i.e. non-vegetated areas and low-threat vegetation).

Photographs relating to each vegetation type are included in **Appendix A**.

The Bushfire Hazard Level (BHL) assessment addresses this topic further in **Section 2.5**.

### 2.3 Topography and slope under vegetation

Effective slope under vegetation was assessed for a distance of 150 m from Lot 652 and Lot 188 in accordance with the Guidelines and AS 3959-2009 and is summarised below. Topographical contours are shown in **Figure 2**. The BHL assessment addresses this topic further in **Section 2.5**.

#### 2.3.1 Slope under vegetation – Lot 652

- North: >0° to 5° downslope;
- South: effectively upslope/flat (areas with no classified vegetation excluded from slope assessment);
- East: effectively upslope/flat; and
- West: effectively upslope/flat.

#### 2.3.2 Slope under vegetation – Lot 188

- North: >0° to 5° downslope;
- South: >0° to 5° downslope (areas with no classified vegetation excluded from slope assessment);
- East: >0° to 5° downslope; and
- West: >0° to 5° downslope.

## **2.4 Bushfire history, risk of ignition and potential bushfire scenarios**

Visual assessment of the surrounding vegetation within the assessment area did not identify any recent fire scars and fire history was not able to be determined. Accumulation of vegetative matter over time, combined with the moderate to high risk of ignition associated with high levels of public access and proximity to urban areas would potentially facilitate a bushfire occurrence in this area.

The rural-residential nature of land surrounding Lot 652 and Lot 188 contributes to the mixture of grass, scrub and woodland fuels in these areas (**Figure 2**). Regular firebreaks, cleared areas, and the surrounding road network will allow for relatively straightforward access to fire-fronts by firefighting services.

The most likely bushfire scenarios with the potential to impact Lot 652 and Lot 188 are detailed below.

### **2.4.1 Bushfire scenarios – Lot 652**

The most likely bushfire scenario with the potential to impact Lot 652 would be an ignition to the west, which driven by south-westerly afternoon winds during the bushfire season, would spread towards the subject site (BoM 2017). The relatively small area of vegetation to the east however (approx. 2.65 ha), suggests that a bushfire occurrence would be unlikely to escalate to its full rate of spread potential.

Land to the south and east of Lot 652 has been cleared and used for agriculture. A bushfire occurrence in this area is highly unlikely. Classified vegetation on land to the north, is separated from Lot 652 by Anketell Road and firebreaks (approx. 28 m). Any bushfire occurrence in this area is highly unlikely to result in direct flame contact with Lot 652, and impacts would likely be restricted to reduced levels of radiant heat, as well as ember attack as a result of spotting.

### **2.4.2 Bushfire scenarios – Lot 188**

The most likely bushfire scenario with the potential to impact Lot 188 would be an ignition to the west, within Jandakot Regional Park, which driven by south-westerly afternoon winds during the bushfire season, would spread towards the subject site (BoM 2017). Vegetation within this area and the adjacent Beeliar Regional Park has been subject to multiple bushfires over the past 20 years, and the continuity of vegetation and fuels in these areas is likely to facilitate the escalation of a bushfire occurrence to its full rate of spread potential.

Land to the east of Lot 188 contains small (less than 1 ha) pockets of remnant Banksia woodland surrounded by historically cleared land and orchards. While a bushfire occurrence in this area is possible, and could be driven by morning, easterly winds towards Lot 188; the discontinuity of fuels (i.e. segmented by firebreaks, tracks and cleared areas), suggests that any such occurrence would be unlikely to be as severe as the scenario to the west.

As with Lot 652, land to the south of Lot 188 has been cleared and is used for agriculture. A bushfire occurring in this area is highly unlikely. Classified vegetation on land to the north, is separated from Lot 188 by Anketell Road and firebreaks (approx. 28 m). Any bushfire occurrence in this area is highly unlikely to result in direct flame contact with Lot 188, and impacts would likely be restricted to reduced levels of radiant heat, as well as ember attack as a result of spotting.

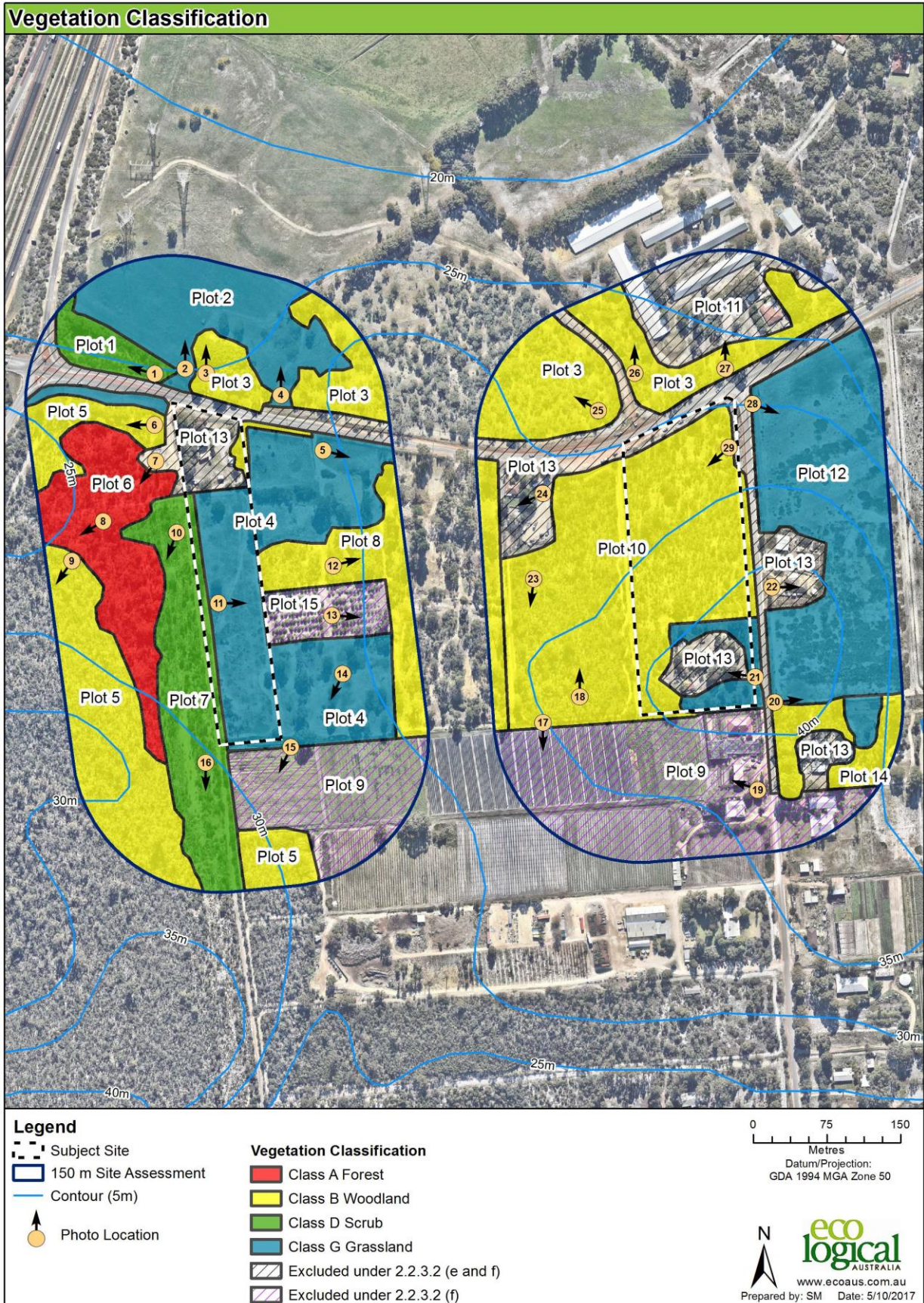


Figure 2: Vegetation classification

## 2.5 Bushfire Hazard Level (BHL) assessment

A Bushfire Hazard Level (BHL) assessment is a high-level assessment which determines the potential intensity of a bushfire for a particular area and categorises land as having a low, moderate or extreme BHL.

Bushfire hazard levels have been assessed for Lot 652 and Lot 188 in accordance with methodology contained within the Guidelines. ELA has mapped the bushfire hazard levels within Lot 652 and Lot 188 and adjacent 150 m as per the pre-development conditions discussed in **Section 2.2**. A summary of results is provided in **Table 1** and **Figure 3**. As Lot 652 and Lot 188 are proposed to be cleared for development, a post-development BHL assessment is provided in **Figure 4** and **Table 1**.

**Table 1: Bushfire Hazard Level Assessment**

Plot	Vegetation classification	Effective slope	Pre-development hazard rating	Post-development hazard rating
1	Class D scrub	Downslope 0° to 5°	Extreme	Extreme
2	Class G grassland	Downslope 0° to 5°	Moderate	Moderate
3	Class B woodland	Downslope 0° to 5°	Extreme	Extreme
4	Class G grassland	Upslope / Flat land	Moderate	Moderate and Low (areas cleared for development)
5	Class B woodland	Upslope / Flat land	Extreme	Extreme
6	Class A forest	Upslope / Flat land	Extreme	Extreme
7	Class D scrub	Upslope / Flat land	Extreme	Extreme and Low (areas cleared for development)
8	Class B woodland	Upslope / Flat land	Extreme	Extreme
9	Excluded as per clause 2.2.3.2 (f)	N/A	Low	Low
10	Class B woodland	Downslope 0° to 5°	Extreme	Extreme and Low (areas cleared for development)
11	Excluded as per clause 2.2.3.2 (e) & (f)	N/A	Low	Low
12	Class G grassland	Downslope 0° to 5°	Moderate	Moderate and Low (areas cleared for development)
13	Excluded as per clause 2.2.3.2 (e) & (f)	N/A	Low	Low
14	Class B woodland	Downslope 0° to 5°	Extreme	Extreme
15	Excluded as per clause 2.2.3.2 (e)	N/A	Low	Low

\* All areas located within 100 m of moderate or extreme bushfire hazards areas also represent a moderate bushfire hazard level by default to reflect the increased level of risk (WAPC 2017).

## 2.6 Identification of issues arising from the BHL assessment

The on-site vegetation extent is proposed to be cleared to enable development of a significant urban built footprint amongst areas of landscaped/managed Public Open Space (POS) and various easements. Therefore, for the purposes of strategic level planning, ELA does not consider the current on-site vegetation extent to be a bushfire hazard issue post-development, since these hazards can be managed through a staged clearing process, adequate separation of future built assets from classified vegetation, and ongoing fuel management that can be undertaken in and around individual development stages.

On the basis of the above information, ELA considers that the bushfire hazards within and adjacent to Lot 652 and Lot 188 and the associated bushfire risk is readily manageable through standard management responses and compliance with acceptable solutions outlined in the Guidelines and AS 3959-2009. These management measures will need to be factored into subdivision design as early as possible to ensure a suitable, compliant and effective bushfire management outcome is achieved to ensure protection of future life and property assets.

Demonstration of compliance with the relevant requirements of SPP 3.7, the Guidelines and AS 3959-2009 at future planning stages will also depend on the developer's ability to coordinate the timing and staging of clearing and development works within the subject site with those developments proposed on adjacent landholdings in the aim of avoiding bushfire impacts from temporary retained vegetation.

Environmental considerations regarding clearing for development are addressed in **Section 5**.



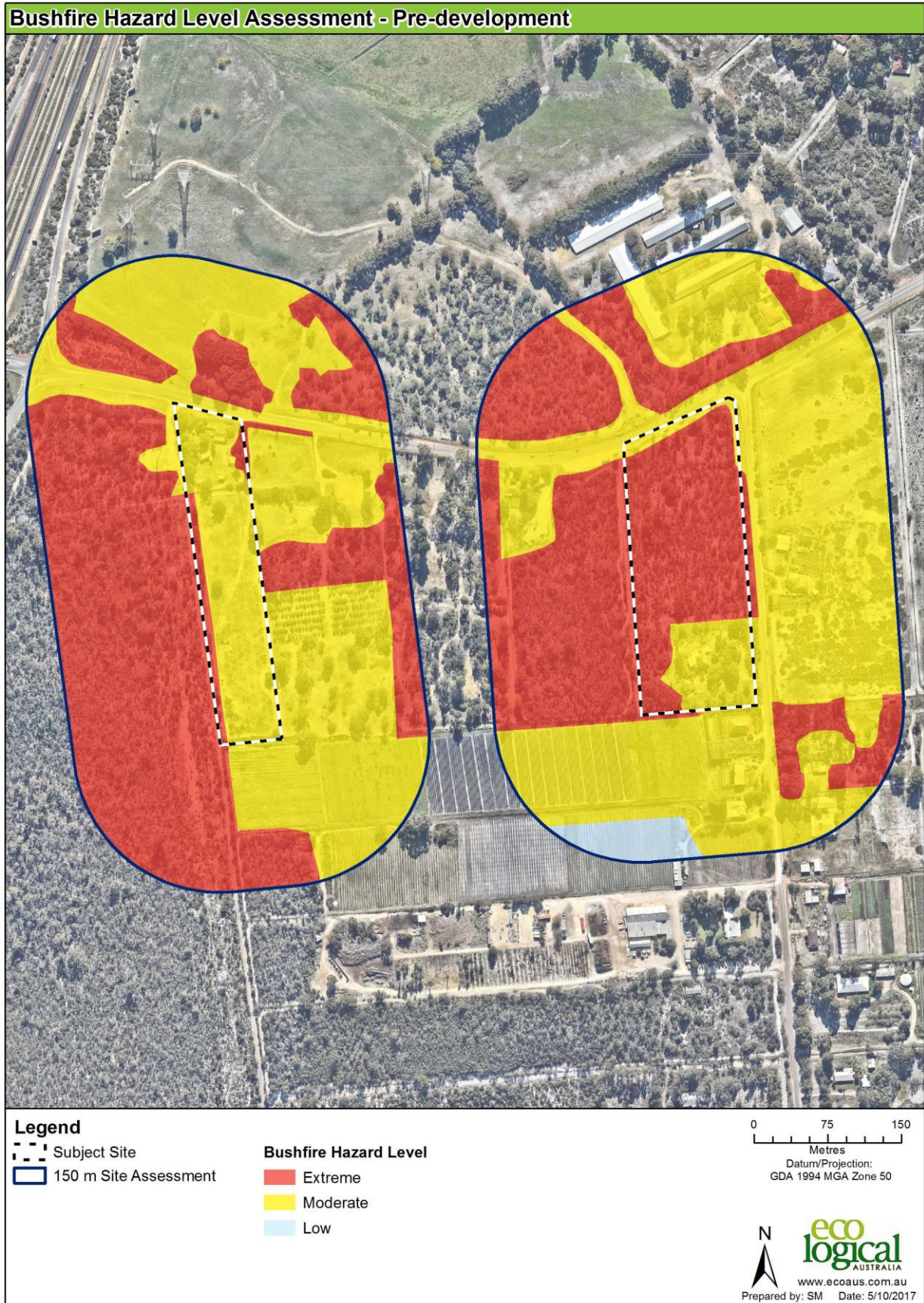


Figure 3: Bushfire Hazard Level (BHL) assessment pre-development



Figure 4: Bushfire Hazard Level (BHL) assessment post-development

### 3 Proposal compliance and justification

The proposed development is required to comply with SPP 3.7 and the Guidelines, as per the following policy measures:

#### 6.2 Strategic planning proposals, subdivision and development applications

- a)** Strategic planning proposals, subdivision and development applications within designated bushfire prone areas relating to land that has or will have a Bushfire Hazard Level (BHL) above low and/or where a Bushfire Attack Level (BAL) rating above BAL-LOW apply, are to comply with these policy measures.
- b)** Any strategic planning proposal, subdivision or development application in an area to which policy measure 6.2 a) applies, that has or will, on completion, have a moderate BHL and/or where BAL-12.5 to BAL-29 applies, may be considered for approval where it can be undertaken in accordance with policy measures 6.3, 6.4 or 6.5.
- c)** This policy also applies where an area is not yet designated as a bushfire prone area but is proposed to be developed in a way that introduces a bushfire hazard, as outlined in the Guidelines.

#### 6.3 Information to accompany strategic planning proposals

A strategic planning proposal, where 6.2 (above) applies, must be accompanied by the following information:

- a)** (i) the results of a BHL assessment determining the applicable hazard levels across the subject land, in accordance with the methodology set out in the guidelines. BHL assessments should be prepared by an accredited Bushfire Planning Practitioner, Or  
  
(ii) where the lot layout of the proposal is known, a BAL Contour Map to determine the indicative acceptable BAL ratings across the subject site, in accordance with the Guidelines. The BAL Contour Map should be prepared by an accredited Bushfire Planning Practitioner;
- b)** The identification of any bushfire hazard issues arising from the relevant assessment; and
- c)** Clear demonstration that compliance with the bushfire protection criteria in the Guidelines can be achieved in subsequent planning stages.

This information can be provided in the form of a Bushfire Management Plan or an amended Bushfire Management Plan where one has been previously endorsed.

Implementation of this BMP is expected to meet the following objectives of SPP 3.7:

- 5.1: Avoid increasing the threat of bushfire to people, property and infrastructure. The preservation of life and the management of bushfire impact is paramount;
- 5.2: Reduce vulnerability to bushfire through the identification and assessment of bushfire hazards in decision-making at all stages of the planning and development process;
- 5.3: Ensure that planning proposals and development applications take into account bushfire protection requirements and include specified bushfire protection measures where land has or will have a moderate or extreme bushfire hazard level, and/ or where a rating higher than BAL-Low applies; and

- 5.4: Achieve a responsible approach between bushfire management measures and landscape amenity and biodiversity conservation values, with consideration of the potential impacts of climate change.

In response to the above requirements of SPP 3.7 and the Guidelines, bushfire management measures, as outlined in **Section 4** have been devised for the proposed development in accordance with Guideline acceptable solutions to meet compliance with bushfire protection criteria. The 'acceptable solutions assessment' is provided in **Section 4** to assess the proposed bushfire management measures against each bushfire protection criteria in accordance with the Guidelines and demonstrate that the measures proposed meet the intent of each element of the bushfire protection criteria.

## 4 Bushfire management measures

This section assesses the proposal against the Bushfire Performance Criteria as outlined in the Guidelines and listed below:

- Location;
- Siting and design of development;
- Vehicular access; and
- Water.

ELA has identified a range of bushfire management measures that on implementation will enable all proposed areas to be developed with a manageable level of bushfire risk whilst maintaining compliance with the intent of the Bushfire Performance Criteria.

**Table 2** outlines the Acceptable Solutions (AS) that are relevant to the proposal, identifies where a Performance Solution (PS) has been used instead of an AS and summaries how the intent of each Bushfire Protection criteria has been achieved.

**Table 3** contains a full assessment of the proposal against a Bushfire Performance Criteria.

**Table 2: Summary of solutions used to achieve bushfire performance criteria**

Bushfire Performance Criteria	AS	PS	N/A	Comment
Element 1: Location	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Post development, the subject site will not be situated in an area subject to a bushfire hazard level greater than Moderate ( <b>Figure 4</b> ).
Element 2: Siting and design of development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As the lot layout is currently unconfirmed, APZs are unable to be prescribed at this level of planning. APZs will be defined in BMPs supporting future planning applications to ensure that all future lots will be subject to a BAL rating of BAL-29 or lower.
Element 3: Vehicular access	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development layout is not yet confirmed. Current access to/ from the subject site is via Anketell Road to the north, which is a major road allowing for two-way access (i.e. east and west) ( <b>Figure 5</b> ). The final development design will not interfere with this access network and will provide additional routes as required.  All roads constructed as part of future development can comply with requirements outlined in the Guidelines ( <b>Appendix C</b> ).
Element 4: Water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The subject site has a reticulated water supply.

**Table 3: Assessment against Bushfire Performance Criteria**

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
<p><b>Element 1: Location</b></p>	<p><b>Intent:</b> To ensure that strategic planning proposals, subdivision and development applications are in areas with the least possible risk of bushfire to facilitate the protection of people, property and infrastructure.</p> <p><b>Performance Principle (P1):</b> The strategic planning proposal, subdivision and development application is in an area where the bushfire hazard assessment is or will, on completion, be moderate or low, or a BAL-29 or below, and the risk can be managed. For minor development in areas where BAL-40 or BAL-FZ applies, demonstrating that the risk can be managed to the satisfaction of the Department of Fire and Emergency Services and the decision-maker.</p>	<p><b>Acceptable solution A1.1 Development location</b></p> <p>The strategic planning proposal, subdivision and development application is in an area that is or will, on completion, be subject to either a moderate or low bushfire hazard level, or BAL-29 or below.</p> <p><b>Management measures / development response</b></p> <p>Post -development, Lot 652 and Lot 188 can be situated in areas subject to a bushfire hazard level of Moderate or lower (<b>Figure 4</b>).</p>	<p>The proposed development is considered <b>compliant</b> with Element 1 Location.</p>

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
<p><b>Element 2: Siting and design of development</b></p>	<p><b>Intent:</b> To ensure that the siting of development minimises the level of bushfire impact.</p> <p><b>Performance Principle (P2):</b> The siting and design of the strategic planning proposal, subdivision or development application, including roads, paths and landscaping, is appropriate to the level of bushfire threat that applies to the site. That it minimises the bushfire risk to people, property and infrastructure, including compliance with AS 3959 if appropriate.</p>	<p><b>Acceptable Solution A2.1 Asset Protection Zone (APZ)</b></p> <p>Every building is surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the requirements in <b>Appendix B</b>.</p> <p><b>Management measures / development response</b></p> <p>As the lot layout is currently unconfirmed, APZs are unable to be prescribed at this level of planning. Based on vegetation classification on surrounding land, these APZs are expected to range from 9 m to 25 m, which can be accommodated into any future subdivision design. This will ensure that all future lots can be subject to a BAL rating of BAL-29 or lower. It is also highly likely that neighbouring land will be developed at the same time as Lot 652 and Lot 188, which would result in reductions to, or potential removal of APZ requirements altogether.</p> <p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p>	<p>The proposed development is considered <b>compliant</b> with Element 2 Siting and design of development.</p>

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
<p><b>Element 3: Vehicular access</b></p>	<p><b>Intent:</b> To ensure that the vehicular access serving a subdivision/development is safe in the event of a bushfire occurring.</p> <p><b>Performance Principle (P3):</b> The internal layout, design and construction of public and private vehicular access in the subdivision/development allows emergency and other vehicles to move through it easily and safely at all times.</p>	<p><b>Acceptable Solution A3.1 Two access routes</b></p> <p>Two different vehicular access routes are provided, both of which connect to the public road network, provide safe access and egress to two different destinations and are available to all residents/the public at all times and under all weather conditions.</p> <p><b>Management measures / development response</b></p> <p>The development layout is not yet confirmed. Current access to/ from both Lot 652 and Lot 188 is via Anketell Road to the north, which is a major road allowing for two-way access (i.e. east and west) (<b>Figure 5</b>). The final development design will not interfere with this access network and can provide additional routes as required.</p> <p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p> <hr/> <p><b>Acceptable Solution A3.2 Public road</b></p> <p>A public road is to meet the requirements in Table 4, Column 1 of the Guidelines (reproduced in <b>Appendix C</b>).</p> <p><b>Management measures / development response</b></p> <p>All public roads can comply with relevant requirements.</p>	<p>The proposed development is considered <b>compliant</b> with Element 3 Vehicular access.</p>



Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
		<p><b>Acceptable Solution A3.3 Cul-de-sac</b></p> <p>A cul-de-sac and/or a dead-end road should be avoided in bushfire prone areas. Where no alternative exists (i.e. the lot layout already exists and/or will need to be demonstrated by the proponent), the following requirements are to be achieved:</p> <ul style="list-style-type: none"> <li>• Requirements in Table 4, Column 2 of the Guidelines (reproduced in <b>Appendix C</b>);</li> <li>• Maximum length: 200 metres (if public emergency access is provided between cul-de-sac heads maximum length can be increased to 600 metres provided no more than eight lots are serviced and the emergency access way is no more than 600 metres); and</li> <li>• Turn-around area requirements, including a minimum 17.5 metre diameter head.</li> </ul> <p><b>Management measures / development response</b></p> <p>The development layout is not yet confirmed for Lot 652 and Lot 188. If cul-de-sacs are required for the development of the subject site, they will conform to the requirements in Table 4, Column 2 of the Guidelines (reproduced in <b>Appendix C</b>).</p> <p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p> <hr/> <p><b>Acceptable Solution A3.4 Battle-axe</b></p> <p>Battle-axe access leg should be avoided in bushfire prone areas. Where no alternative exists, (this will need to be demonstrated by the proponent) all of the following requirements are to be achieved:</p> <ul style="list-style-type: none"> <li>• Requirements in Table 4, Column 3 of the Guidelines (reproduced in <b>Appendix C</b>);</li> <li>• Maximum length: 600 metres; and</li> <li>• Minimum width: six metres.</li> </ul>	

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
		<p><b>Management measures / development response</b></p> <p>The development layout is not yet confirmed for Lot 652 and Lot 188. If battle-axe properties are required for the development of the subject site, they will conform to the requirements in Table 4, Column 2 of the Guidelines (reproduced in <b>Appendix C</b>).</p> <p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p> <hr/> <p><b>Acceptable Solution A3.5 Private driveway longer than 50 m</b></p> <p>A private driveway is to meet all of the following requirements:</p> <ul style="list-style-type: none"> <li>• Requirements in Table 4, Column 3 of the Guidelines (reproduced in <b>Appendix C</b>);</li> <li>• Required where a house site is more than 50 metres from a public road;</li> <li>• Passing bays: every 200 metres with a minimum length of 20 metres and a minimum width of two metres (i.e. the combined width of the passing bay and constructed private driveway to be a minimum six metres);</li> <li>• Turn-around areas designed to accommodate type 3.4 fire appliances and to enable them to turn around safely every 500 metres (i.e. kerb to kerb 17.5 metres) and within 50 metres of a house; and</li> <li>• Any bridges or culverts are able to support a minimum weight capacity of 15 tonnes.</li> <li>• All-weather surface (i.e. compacted gravel, limestone or sealed).</li> </ul> <p><b>Management measures / development response</b></p> <p>The development layout is not yet confirmed for Lot 652 and Lot 188. If 50 m private driveways are required for the development of the subject site, they will conform to the requirements in Table 4, Column 2 of the Guidelines (reproduced in <b>Appendix C</b>).</p>	

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
		<p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p> <p><b>Acceptable Solution A3.6 Emergency access way</b></p> <p>An access way that does not provide through access to a public road is to be avoided in bushfire prone areas. Where no alternative exists (this will need to be demonstrated by the proponent), an emergency access way is to be provided as an alternative link to a public road during emergencies. An emergency access way is to meet all of the following requirements:</p> <ul style="list-style-type: none"> <li>• Requirements in Table 4, Column 4 of the Guidelines (reproduced in <b>Appendix C</b>);</li> <li>• No further than 600 metres from a public road;</li> <li>• Provided as right of way or public access easement in gross to ensure accessibility to the public and fire services during an emergency; and</li> <li>• Must be signposted.</li> </ul> <p><b>Management measures / development response</b></p> <p>The development layout is not yet confirmed for Lot 652 and Lot 188. It is anticipated that emergency access will not be required for the development of Lot 652 and Lot 188. However, if emergency access is required, they will conform to the requirements in Table 4, Column 2 of the Guidelines (reproduced in <b>Appendix C</b>).</p> <p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p>	

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
		<p><b>Acceptable Solution A3.7 Fire service access routes (perimeter roads)</b></p> <p>Fire service access routes are to be established to provide access within and around the edge of the subdivision and related development to provide direct access to bushfire prone areas for fire fighters and link between public road networks for firefighting purposes. Fire service access routes are to meet the following requirements:</p> <ul style="list-style-type: none"> <li>• Requirements Table 4, Column 5 of the Guidelines (reproduced in <b>Appendix C</b>)</li> <li>• Provided as right of ways or public access easements in gross to ensure accessibility to the public and fire services during an emergency;</li> <li>• Surface: all-weather (i.e. compacted gravel, limestone or sealed);</li> <li>• Dead end roads are not permitted;</li> <li>• Turn-around areas designed to accommodate type 3.4 appliances and to enable them to turn around safely every 500 metres (i.e. kerb to kerb 17.5 metres);</li> <li>• No further than 600 metres from a public road;</li> <li>• Allow for two-way traffic and;</li> <li>• Must be signposted.</li> </ul> <p><b>Management measures / development response</b></p> <p>The development layout is not yet confirmed for Lot 652 and Lot 188. It is anticipated that fire access around perimeter roads will not be required for the development of Lot 652 and Lot 188. However, if fire emergency access is required, they will conform to the requirements in Table 4, Column 2 of the Guidelines (reproduced in <b>Appendix C</b>).</p> <p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p>	

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
		<p><b>Acceptable Solution A3.8 Firebreak width</b></p> <p>Lots greater than 0.5 hectares must have an internal perimeter firebreak of a minimum width of three metres or to the level as prescribed in the local firebreak notice issued by the local government.</p> <p><b>Management measures / development response</b></p> <p>The development layout is not yet confirmed for Lot 652 and Lot 188, however the site currently contains a 3 m firebreak around the perimeter. If any future lots are greater than 3001 m<sup>2</sup>, fire breaks will be incorporated into the development layout, as per the City of Kwinana Firebreak notice (City of Kwinana, 2017).</p> <p>Future BMPs, to support subsequent planning applications, will address this element in greater detail.</p>	

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
<p><b>Element 4: Water</b></p>	<p><b>Intent:</b> To ensure that water is available to the subdivision, development or land use to enable people, property and infrastructure to be defended from bushfire.</p> <p><b>Performance Principle (P4):</b> The subdivision, development or land use is provided with a permanent and secure water supply that is sufficient for firefighting purposes.</p>	<p><b>Acceptable solution A4.1 Reticulated areas</b></p> <p>The subdivision, development or land use is provided with a reticulated water supply in accordance with the specifications of the relevant water supply authority and Department of Fire and Emergency Services.</p> <p><b>Management measures / development response</b></p> <p>Lot 652 and Lot 188 are currently connected to a reticulated water supply which ensures a year-round supply of water is provided that meets minimum water supply requirements.</p> <hr/> <p><b>Acceptable solution A4.2 Non-reticulated areas</b></p> <p>Water tanks for firefighting purposes with a hydrant or standpipe are provided and meet the following requirements:</p> <ul style="list-style-type: none"> <li>• Volume: minimum 50,000 litres per tank;</li> <li>• Ratio of tanks to lots: minimum one tank per 25 lots (or part thereof);</li> <li>• Tank location: no more than two kilometres to the further most house site within the residential development to allow a 2.4 fire appliance to achieve a 20 minute turnaround time at legal road speeds;</li> <li>• Hardstand and turn-around areas suitable for a type 3.4 fire appliance (i.e. kerb to kerb 17.5 metres) are provided within three metres of each water tank; and</li> <li>• Water tanks and associated facilities are vested in the relevant local government.</li> </ul> <p><b>Management measures / development response</b></p> <p>Lot 652 and Lot 188 are located within a reticulated area and therefore A4.2 is not applicable.</p>	<p>The proposed development is considered <b>compliant</b> with Element 4 Water.</p>

Bushfire protection criteria	Intent and Performance Principle	Design response	Compliance statement
		<p><b>Acceptable solution A4.3 Individual lots within non-reticulated areas</b></p> <p>Single lots above 500 square metres need a dedicated static water supply on the lot that has the effective capacity of 10,000 litres.</p> <p><b>Management measures / development response</b></p> <p>Lot 652 and Lot 188 are located within a reticulated area and therefore A4.3 is not applicable.</p>	

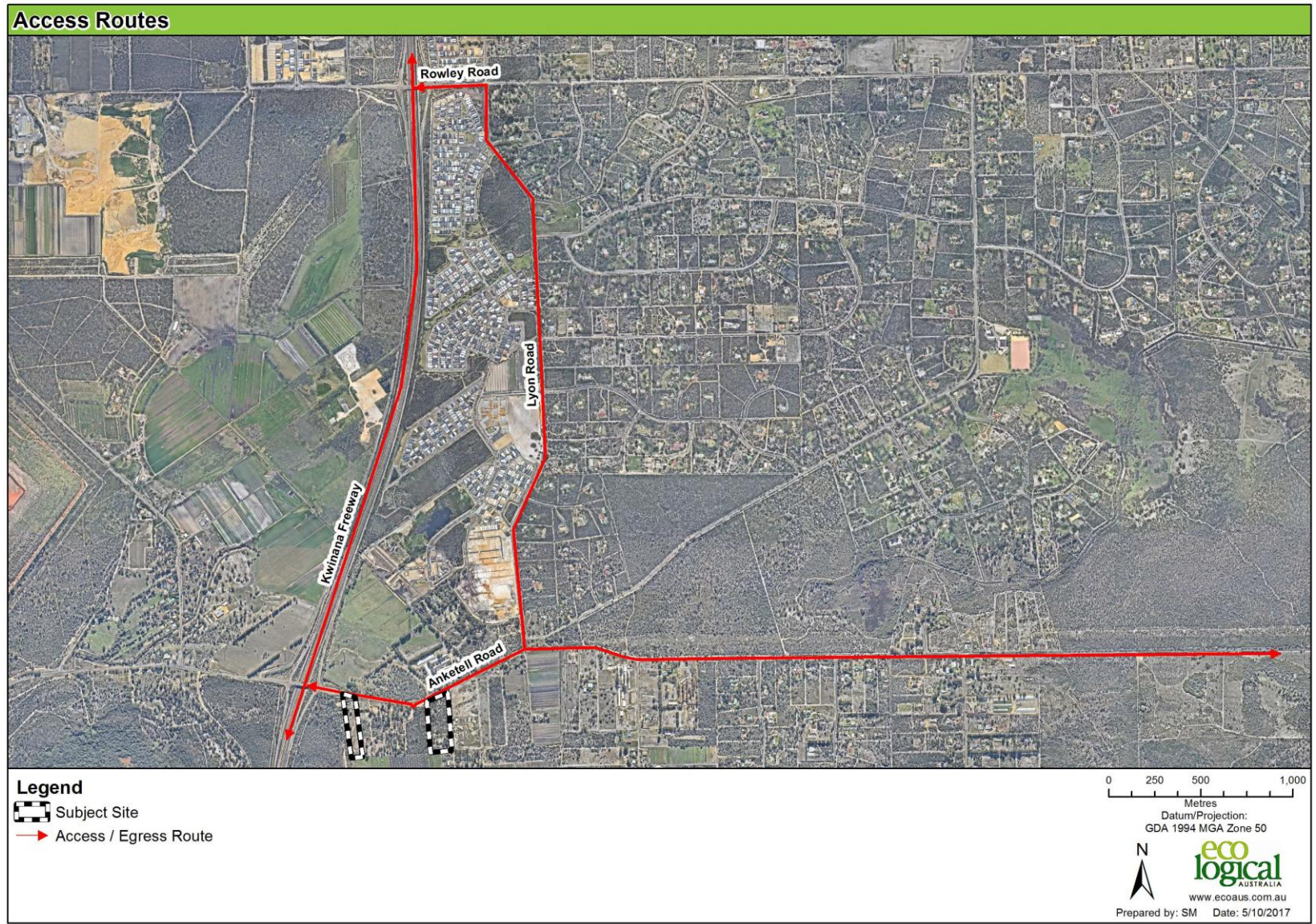


Figure 5: Access map



## 5 Implementation and enforcement

This BMP has been prepared as a strategic guide to demonstrate how development compliance will be delivered at future planning stages in accordance with the Guidelines. In this respect, the management measures documented in **Section 4**, where applicable, will be incorporated into development design as early as possible and confirmed through subdivision design. Therefore, aside from the revision of this BMP or preparation of a BMP addendum to accompany future subdivision applications, there are no further items to implement, enforce or review at this stage of the planning process.

The revised BMP or addendum to this BMP is required to meet the relevant commitments outlined in this strategic level BMP, address the relevant requirements of SPP 3.7 (i.e. Policy Measure 6.4) and demonstrate in detail how the proposed development will incorporate the relevant acceptable solutions to meet the performance requirements of the Guidelines. The revised BMP or BMP addendum will need to include the following detailed information:

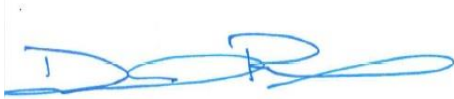
- Proposed lot layout;
- Post development vegetation class, effective slope and separation distance;
- Post development bushfire hazard level and 100 m wide BAL application requirements;
- A BAL contour map demonstrating that proposed development areas will achieve a rating of BAL–29 or lower;
- Width and alignment of compliant APZs;
- How bushfire management will be addressed during development staging (if applicable);
- Fuel management or application of AS 3959-2009 in response to on-site POS (if and where required);
- Vehicular access provisions, including demonstration that a minimum of two access routes will be achieved in accordance with acceptable solution A3.1;
- Water supply provisions with regards to reticulated water;
- Acceptable solutions assessment against the bushfire protection criteria;
- Proposed works program outlining all measures requiring implementation and the appropriate timing and responsibilities for implementation;
- Document review protocol; and
- Summary of stakeholder consultation (if applicable).

On the basis of the information contained in this BMP, ELA considers the bushfire hazards within and adjacent to Lot 652 and Lot 188 and the associated bushfire risk is readily manageable through standard management responses outlined in the Guidelines and AS 3959-2009. ELA considers that on implementation of the proposed management measures, Lot 652 and Lot 188 will be able to be developed with a manageable level of bushfire risk whilst maintaining full compliance with the Guidelines and AS 3959-2009.

Future clearing of vegetation within Lot 652 and Lot 188 in accordance with subdivision approvals will be exempt from requiring a Native Vegetation Clearing Permit as per clause 9, schedule 6 of the *Environmental Protection Act 1986*. Any impacts to Matters of National Environmental Significance (MNES) as a result of the proposed development will be addressed through liaison/ referral (if required) with/ to the Commonwealth Department of the Environment and Energy as per the requirements of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

## 6 Conclusion

In the author's professional opinion, the bushfire protection requirements listed in this assessment provide an adequate standard of bushfire protection for the proposed development. As such, the proposed development is consistent with the aim and objectives of SPP 3.7 and associated guidelines and is recommended for approval.



Daniel Panickar

**Senior Bushfire Consultant**

**FPAA BPAD Certified Practitioner**

**No. BPAD37802-L2**



# References

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Western Australian Planning Commission (WAPC). 2015. *State Planning Policy 3.7 Planning in Bushfire Prone Areas*. WAPC, Perth.

Western Australian Planning Commission (WAPC). 2017. *Guidelines for Planning in Bushfire Prone Areas Version 1.2 (including appendices)*. WAPC, Perth.

# Appendix A Plates

Plot	Photo ID	Photo and vegetation class
1	1	<div style="text-align: center;">  <p>☼ 256°W (T)   ● 32°12'36"S, 115°51'9"E ±6m   ▲ 29m</p> </div>  <p style="text-align: right;">30 Aug 2017, 09:37</p> <p>Class D scrub (3 m tall height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
2	2	<div style="text-align: center;">  <p>☼ 5°N (T)   ● 32°12'35"S, 115°51'9"E ±8m   ▲ 37m</p> </div>  <p style="text-align: right;">30 Aug 2017, 09:38</p> <p>Class G grassland</p>

Plot	Photo ID	Photo and vegetation class
2	4	<p>Class G grassland</p>

Plot	Photo ID	Photo and vegetation class
3	3	<p>Class B woodland</p>

Plot	Photo ID	Photo and vegetation class
3	25	<p>Class B woodland (3 m tall height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
3	26	<p>Class B woodland (3 m tall height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
3	27	<p>Class B woodland</p>

Plot	Photo ID	Photo and vegetation class
4	5	<p>Class G grassland</p>

Plot	Photo ID	Photo and vegetation class
4	11	 <p>☀ 83°E (T) ☉ 32°12'46"S, 115°51'10"E ±12m ▲ 10m</p>  <p>30 Aug 2017, 09:28</p> <p>Class G grassland</p>

Plot	Photo ID	Photo and vegetation class
4	14	 <p>☀ 165°S (T) ☉ 32°12'46"S, 115°51'15"E ±8m ▲ 43m</p>  <p>30 Aug 2017, 09:08</p> <p>Class G grassland</p>



Plot	Photo ID	Photo and vegetation class
5	6	<p>Class B woodland (3 m height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
5	9	<p>Class B woodland (3 m height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
6	7	<p>Class A forest (3 m height gauge in foreground)</p>



Plot	Photo ID	Photo and vegetation class
6	8	<p>Class A forest (3 m height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
7	10	<div> <p>30 Aug 2017, 09:24</p> </div> <p>Class D scrub (3 m height gauge in foreground) - regrowth. Western Power management requirements may allow for reclassification at a later stage.</p>

Plot	Photo ID	Photo and vegetation class
7	16	<div> <p>30 Aug 2017, 09:16</p> </div> <p>Class D scrub</p>


Plot	Photo ID	Photo and vegetation class
8	12	<p>Class B woodland (3 m height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
9	15	<p>Excluded as per clause 2.2.3.2 (f)</p>

Plot	Photo ID	Photo and vegetation class
9	17	<div style="text-align: center;">  <p>201°S (T) ● 32°12'48"S, 115°51'23"E ±8m ▲ 42m</p> </div>  <p style="text-align: right;">30 Aug 2017, 08:59</p> <p>Excluded as per clause 2.2.3.2 (f)</p>

Plot	Photo ID	Photo and vegetation class
9	19	<div style="text-align: center;">  <p>252°W (T) ● 32°12'52"S, 115°51'31"E ±16m ▲ 62m</p> </div>  <p style="text-align: right;">30 Aug 2017, 08:49</p> <p>Excluded as per clause 2.2.3.2 (f)</p>

Plot	Photo ID	Photo and vegetation class
10	18	 <p>Class B woodland</p>

Plot	Photo ID	Photo and vegetation class
10	23	 <p>Class B woodland (3 m height gauge in foreground)</p>

Plot	Photo ID	Photo and vegetation class
10	29	<div style="text-align: center;">  <p>☼ 206°SW (T)   ● 32°12'37"S, 115°51'30"E ±8m   ▲ 35m</p> </div>  <p>Class B woodland</p>


\*Plot 11 – no photo – private property (excluded as per clause 2.2.3.2 [e] & [f])


Plot	Photo ID	Photo and vegetation class
12	28	<div style="text-align: center;">  <p>☼ 162°S (T)   ● 32°12'38"S, 115°51'31"E ±6m   ▲ 34m</p> </div>  <p>Class G grassland</p>

Plot	Photo ID	Photo and vegetation class
13	21	<p>30 Aug 2017, 08:52</p> <p>Excluded as per clause 2.2.3.2 (e) &amp; (f)</p>

Plot	Photo ID	Photo and vegetation class
13	22	<p>30 Aug 2017, 08:43</p> <p>Excluded as per clause 2.2.3.2 (e) &amp; (f)</p>



Plot	Photo ID	Photo and vegetation class
14	20	 <p>30 Aug 2017, 08:45</p> <p>Class B woodland</p>

Plot	Photo ID	Photo and vegetation class
15	13	 <p>30 Aug 2017, 09:07</p> <p>Excluded as per clause 2.2.3.2 (e)</p>

# Appendix B Standards for Asset Protection Zones

The following standards have been extracted from the *Guidelines for Planning in Bushfire Prone Areas v 1.2* (WAPC 2017).

Every habitable building is to be surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:

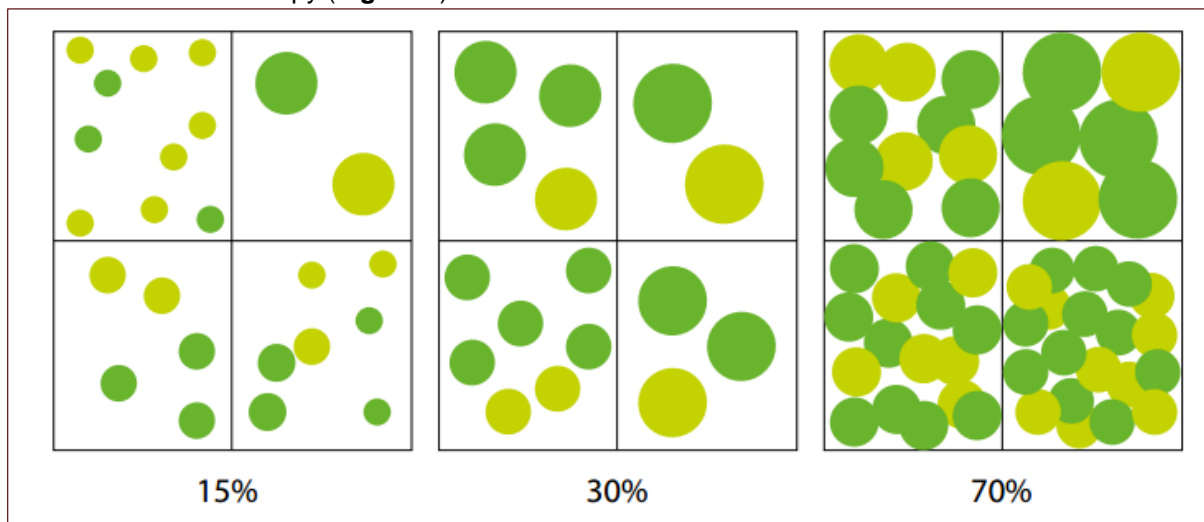
**a. Width:** Measured from any external wall or supporting post or column of the proposed building, and of sufficient size to ensure the potential radiant heat impact of a fire does not exceed 29kW/m<sup>2</sup> (BAL 29) in all circumstances.

**b. Location:** the APZ should be contained solely within the boundaries of the lot on which a 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 (see explanatory notes).

**c. Management:** the APZ is managed in accordance with the requirements of '*Standards for Asset Protection Zones*' (below):

- 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 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare

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 (**Figure 6**).



**Figure 6: Illustrated tree canopy cover projection (WAPC 2017)**

- **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 5m<sup>2</sup> 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 millimetres 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 millimetres or less.

#### **Additional notes**

The Asset Protection Zone (APZ) is an area surrounding a building that is managed to reduce the bushfire hazard to an acceptable level. Hazard separation in the form of using subdivision design elements or excluded and low threat vegetation adjacent to the lot may be used to reduce the dimensions of the APZ within the lot.

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. 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.

# Appendix C Vehicular access technical requirements

Technical requirements	Public road	Cul-de-sac	Private driveway	Emergency access way	Fire service access route
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal distance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	N/A	4.5	4.5	4.5
Maximum grade <50 m	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 crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius	8.5	8.5	8.5	8.5	8.5

\* Refer to E3.2 Public roads: Trafficable surface

eco  
logical  
AUSTRALIA



**HEAD OFFICE**

Suite 2, Level 3  
668-672 Old Princes Highway  
Sutherland NSW 2232  
T 02 8536 8600  
F 02 9542 5622

**CANBERRA**

Level 2  
11 London Circuit  
Canberra ACT 2601  
T 02 6103 0145  
F 02 9542 5622

**COFFS HARBOUR**

35 Orlando Street  
Coffs Harbour Jetty NSW 2450  
T 02 6651 5484  
F 02 6651 6890

**PERTH**

Level 1 Bishops See  
235 St Georges Terrace  
Peth WA 6000  
T 08 6218 2200  
F 02 9542 5622

**DARWIN**

16/56 Marina Boulevard  
Cullen Bay NT 0820  
T 08 8989 5601  
F 08 8941 1220

**SYDNEY**

Suite 1, Level 1  
101 Sussex Street  
Sydney NSW 2000  
T 02 8536 8650  
F 02 9542 5622

**NEWCASTLE**

Suites 28 & 29, Level 7  
19 Bolton Street  
Newcastle NSW 2300  
T 02 4910 0125  
F 02 9542 5622

**ARMIDALE**

92 Taylor Street  
Armidale NSW 2350  
T 02 8081 2685  
F 02 9542 5622

**WOLLONGONG**

Suite 204, Level 2  
62 Moore Street  
Austinmer NSW 2515  
T 02 4201 2200  
F 02 9542 5622

**BRISBANE**

Suite 1, Level 3  
471 Adelaide Street  
Brisbane QLD 4000  
T 07 3503 7192  
F 07 3854 0310

**HUSKISSON**

Unit 1, 51 Owen Street  
Huskisson NSW 2540  
T 02 4201 2264  
F 02 9542 5622

**NAROOMA**

5/20 Canty Street  
Narooma NSW 2546  
T 02 4302 1266  
F 02 9542 5622

**MUDGEES**

Unit 1, Level 1  
79 Market Street  
Mudgee NSW 2850  
T 02 4302 1234  
F 02 6372 9230

**GOSFORD**

Suite 5, Baker One  
1-5 Baker Street  
Gosford NSW 2250  
T 02 4302 1221  
F 02 9542 5622

**ADELAIDE**

2, 70 Pirie Street  
Adelaide SA 5000  
T 08 8470 6650  
F 02 9542 5622

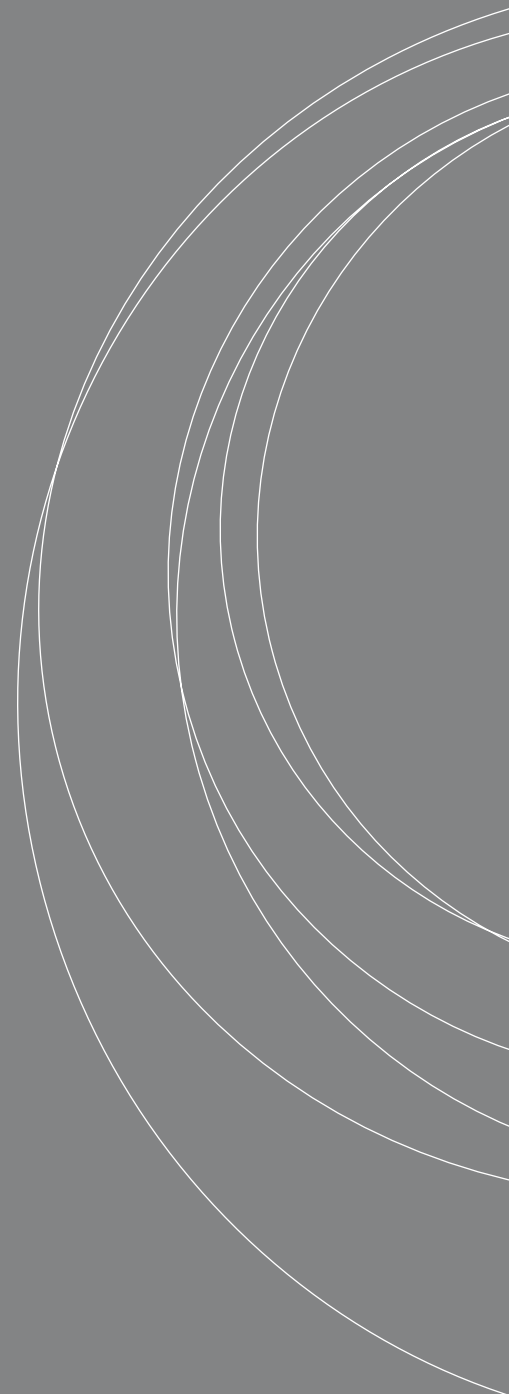
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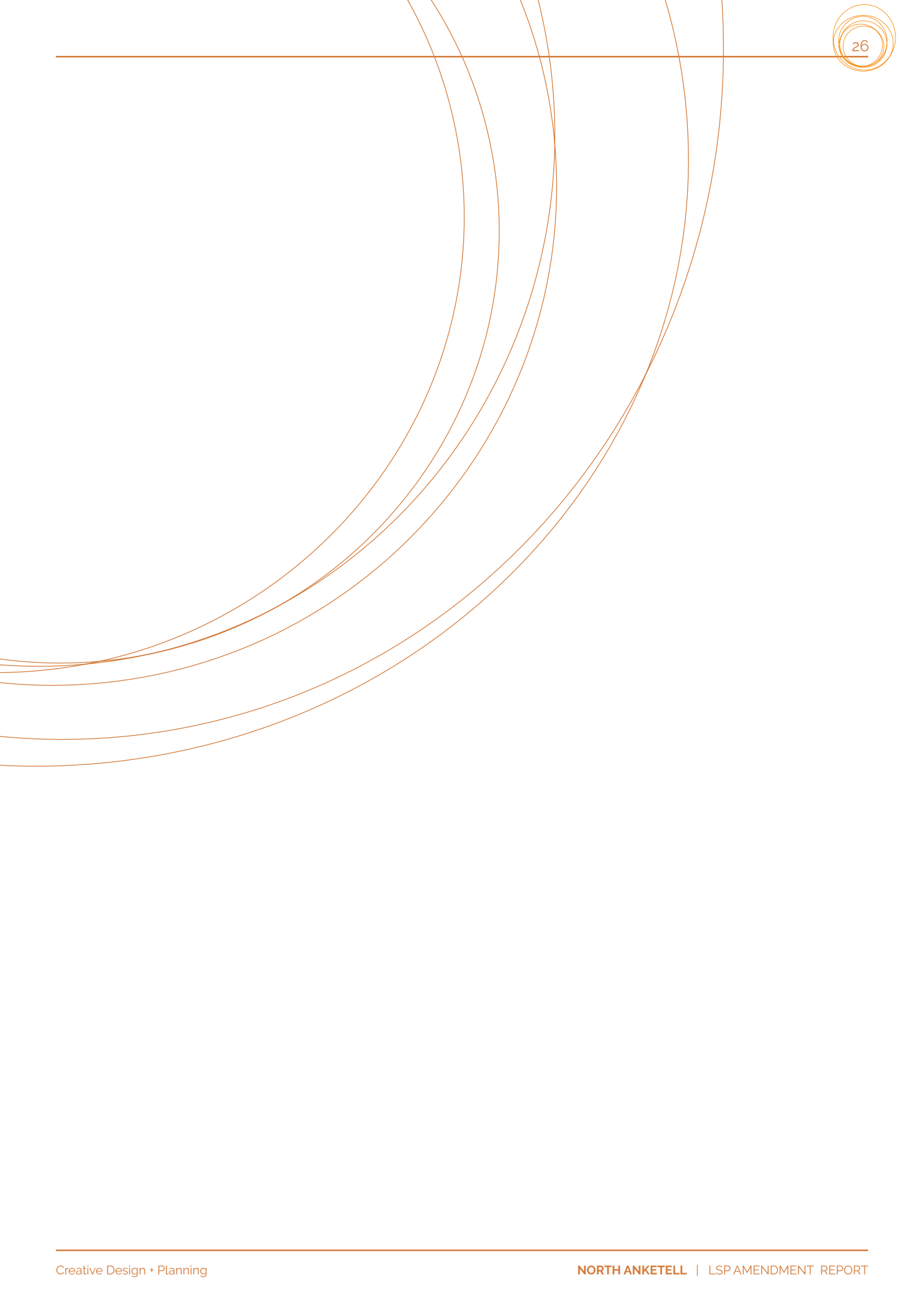
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# Appendix 4

## **ACOUSTIC ASSESSMENT**

(HERRING STORER ACOUSTICS)







**LOT 652 ANKETELL ROAD AND LOT 188 TREEBY ROAD,  
ANKETELL**

**SUBDIVISION ACOUSTIC ASSESSMENT**

**FOR**

**CREATIVE DESIGN AND PLANNING**

**OCTOBER 2017**

**OUR REFERENCE: 22408-1-17181**





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**ACOUSTIC ASSESSMENT**  
**ANKETELL**

Job No: 17181  
Document Reference: 22408-1-17181

FOR

**CREATIVE DESIGN AND PLANNING**

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## APPENDICIES

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B	Noise Contour Plot
C	Quiet House Design Guidelines
D	Monitoring Results

## **EXECUTIVE SUMMARY**

Herring Storer Acoustics was commissioned by Creative Design and Planning, on behalf of Qumars Meshgin to undertake an acoustical assessment of noise that would be received at the proposed residential development located at Lot 652 Anketell Road and Lot 188 Treeby Road, Anketell from road traffic noise associated with the future Anketell Road.

Under the Western Australian Planning Commission (WAPC) Planning Policy 5.4 “Road and Rail Transport Noise and Freight Considerations in Land Use Planning” (SPP 5.4), the appropriate criteria for assessment for this development are:

### **EXTERNAL**

$L_{Aeq(Day)}$  of 60 dB(A);  
 $L_{Aeq(Night)}$  of 55 dB(A).

### **INTERNAL**

$L_{Aeq(Day)}$  of 40 dB(A) in living and work areas; and  
 $L_{Aeq(Night)}$  of 35 dB(A) in bedrooms.

Additional to the above, noise received at an outdoor area should also be reduced as far as practicable, with an aim of achieving an  $L_{Aeq}$  of 50 dB(A) during the night period.

From information provided, we understand that Anketell Road may, in the future, undergo a re-alignment, which would affect noise levels onto the development. Therefore, this report considers noise level associated with the proposed future road alignment.

The modification to Anketell Road would be considered as major upgrade and hence the infrastructure provided is obliged to achieve compliance with the “Noise Limits” at the ground floor. This normally requires the infrastructure provider to construct the barrier walls. However, in this case as, as outlined in the policy under Section 5.3.2 where a major road project is to be constructed in the vicinity of a future noise sensitive land use, the infrastructure provider and developer are both responsible for ensuring that the objectives of this policy are achieved. Similarly, for an upgrade to Anketell Road, the infrastructure provider would be responsible for achieving compliance with the “Noise Limits”, which in this case would be the use of a dense graded asphalt road surface. However, once again, discussions should take place between the infrastructure provider and the developer to ensure that a mutually beneficial noise management plan is developed and implemented.

The results of the acoustic assessment indicate that without any noise amelioration, noise received at the residences in the future would exceed the “Noise Target” as outlined in the Western Australian Planning Commission (WAPC) Planning Policy 5.4 “Road and Rail Transport Noise and Freight Considerations in Land Use Planning”.

For residential developments, the possible noise amelioration options that are normally considered are:

- Noise bunds and / or barriers; and
- “Quiet House” design applied to the first row of residences.

For this proposal, the first row of Lots located adjacent to the Anketell Road are to contain commercial buildings. These buildings would provide a significant barrier to the residential lots behind.

However, the noise modelling indicates that in some locations, noise received at some Lots does exceed the "Target" and these Lots require further noise amelioration in the form of "Quiet House" design.

Individual noise control in the form of "Quiet House" design has been developed for individual lots with the details contain within this report. Alternative construction would be possible if a suitably qualified acoustical consultant assessed the individual building requirements at the time of building licence approval.

For those residence that receive noise in excess of the "Target", Notifications on Titles are also required.

## 1. INTRODUCTION

Herring Storer Acoustics was commissioned by Creative Design and Planning, on behalf of Qumars Meshgin to undertake an acoustical assessment of noise that would be received at the proposed residential development located at Lot 652 Anketell Road and Lot 188 Treeby Road, Anketell from road traffic noise associated with the future Anketell Road.

Lot 652 Anketell Road and Lot 188 Treeby Road are identified in the Anketell North Local Structure Plan (LSP) as being commercial land use for the façade lots on Anketell Road and residential Lots for those behind the commercial.

As part of the study, the following was carried out:

- Measure existing noise levels at the proposed development site, from noise associated with the current Anketell Road traffic.
- Determine by noise modelling the noise that would be received at proposed residences within this stage of the scheme amendment from vehicles travelling on the roadway (Anketell Road) for the future road alignment.
- Assess the predicted noise levels for compliance with the appropriate criteria.
- Provide detailed information as to noise control requirements such as quiet house design, noise walls and notification on titles.

## 2. CRITERIA

The WAPC released on 22 September 2009 State Planning Policy 5.4 “*Road and Rail Transport Noise and Freight Considerations In Land Use Planning*”. Section 5.3 – Noise Criteria, which outlines the acoustic criteria, states:

### “5.3 - NOISE CRITERIA”

*Table 1 sets out the outdoor noise criteria that apply to proposals for new noise-sensitive development or new major roads and railways assessed under this policy.*

*These criteria do not apply to—*

- *proposals for redevelopment of existing major roads or railways, which are dealt with by a separate approach as described in section 5.4.1; and*
- *proposals for new freight handling facilities, for which a separate approach is described in section 5.4.2.*

*The outdoor noise criteria set out in Table 1 apply to the emission of road and rail transport noise as received at a noise-sensitive land use. These noise levels apply at the following locations —*

- *for new road or rail infrastructure proposals, at 1 m from the most exposed, habitable façade of the building receiving the noise, at ground floor level only; and*
- *for new noise-sensitive development proposals, at 1 m from the most exposed, habitable façade of the proposed building, at each floor level, and within at least one outdoor living area on each residential lot.*

Further information is provided in the guidelines.

**Table 1: Outdoor Noise Criteria**

Time of day	Noise Target	Noise Limit
Day (6 am–10 pm)	$L_{Aeq(Day)} = 55 \text{ dB(A)}$	$L_{Aeq(Day)} = 60 \text{ dB(A)}$
Night (10 pm–6 am)	$L_{Aeq(Night)} = 50 \text{ dB(A)}$	$L_{Aeq(Night)} = 55 \text{ dB(A)}$

The 5 dB difference between the outdoor noise target and the outdoor noise limit, as prescribed in Table 1, represents an acceptable margin for compliance. In most situations in which either the noise-sensitive land use or the major road or railway already exists, it should be practicable to achieve outdoor noise levels within this acceptable margin. In relation to the sites, however, there is an expectation that the design of the proposal will be consistent with the target ultimately being achieved.

Because the range of noise amelioration measures available for implementation is dependent upon the type of proposal being considered, the application of the noise criteria will vary slightly for each different type. Policy interpretation of the criteria for each type of proposal is outlined in sections 5.3.1 and 5.3.2.

The noise criteria were developed after consideration of road and rail transport noise criteria in Australia and overseas, and after a series of case studies to assess whether the levels were practicable. The noise criteria take into account the considerable body of research into the effects of noise on humans, particularly community annoyance, sleep disturbance, long-term effects on cardiovascular health, effects on children's learning performance, and impacts on vulnerable groups such as children and the elderly. Reference is made to the World Health Organization (WHO) recommendations for noise policies in their publications on community noise and the Night Noise Guidelines for Europe. See the policy guidelines for suggested further reading.

### 5.3.1 Interpretation and application for noise-sensitive development proposals

In the application of these outdoor noise criteria to new noise-sensitive developments, the objective of this policy is to achieve –

- acceptable indoor noise levels in noise-sensitive areas (for example, bedrooms and living rooms of houses, and school classrooms); and
- a reasonable degree of acoustic amenity in at least one outdoor living area on each residential lot<sup>1</sup>.

If a noise-sensitive development takes place in an area where outdoor noise levels will meet the noise target, no further measures are required under this policy.

In areas where the noise target is likely to be exceeded, but noise levels are likely to be within the 5dB margin, mitigation measures should be implemented by the developer with a view to achieving the target levels in a least one outdoor living area on each residential lot<sup>1</sup>. Where indoor spaces are planned to be facing any outdoor area in the margin, noise mitigation measures should be implemented to achieve acceptable indoor noise levels in those spaces. In this case, compliance with this policy can be achieved for residential buildings through implementation of the deemed-to-comply measures detailed in the guidelines.

---

<sup>1</sup> For non residential noise-sensitive developments, (e.g. schools and child care centres) consideration should be given to providing a suitable outdoor area that achieves the noise target, where this is appropriate to the type of use.

*In areas where the outdoor noise limit is likely to be exceeded (i.e. above  $L_{Aeq(Day)}$  of 60 dB(A) or  $L_{Aeq(Night)}$  of 55 dB(A)), a detailed noise assessment in accordance with the guidelines should be undertaken by the developer. Customised noise mitigation measures should be implemented with a view to achieving the noise target in at least one outdoor living or recreation area on each noise-sensitive lot or, if this is not practicable, within the margin. Where indoor spaces will face outdoor areas that are above the noise limit, mitigation measures should be implemented to achieve acceptable indoor noise levels in those spaces, as specified in the following paragraphs.*

*For residential buildings, acceptable indoor noise levels are  $L_{Aeq(Day)}$  of 40 dB(A) in living and work areas and  $L_{Aeq(Night)}$  of 35 dB(A) in bedrooms<sup>2</sup>. For all other noise-sensitive buildings, acceptable indoor noise levels under this policy comprise noise levels that meet the recommended design sound levels in Table 1 of Australian Standard AS 2107:2000 Acoustics—Recommended design sound levels and reverberation times for building interiors.*

*These requirements also apply in the case of new noise-sensitive developments in the vicinity of a major transport corridor where there is no existing railway or major road (bearing in mind the policy's 15-20 year planning horizon). In these instances, the developer should engage in dialogue with the relevant infrastructure provider to develop a noise management plan to ascertain individual responsibilities, cost sharing arrangements and construction time frame.*

*If the policy objectives for noise-sensitive developments are not achievable, best practicable measures should be implemented, having regard to section 5.8 and the guidelines."*

The Policy, under Section 5.7, also provides the following information regarding "Notifications on Titles" :

"5.7 - NOTIFICATION ON TITLE

*If the measures outlined previously cannot practicably achieve the target noise levels for new noise-sensitive developments, this should be notified on the certificate of title.*

*Notifications on certificates of title and/or advice to prospective purchasers advising of the potential for noise impacts from major road and rail corridors can be effective in warning people who are sensitive to the potential impacts of transport noise. Such advice can also bring to the attention of prospective developers the need to reduce the impact of noise through sensitive design and construction of buildings and the location of outdoor living areas.*

*The notification is to ensure that prospective purchasers are advised of—*

- *the potential for transport noise impacts; and*
- *the potential for quiet house design requirements to minimise noise intrusion through house layout and noise insulation (see the guidelines).*

---

<sup>2</sup> For residential buildings, indoor noise levels are not set for utility spaces such as bathrooms. This policy encourages effective "quiet house" design, which positions these non-sensitive spaces to shield the more sensitive spaces from transport noise (see guidelines for further information).

*Notification should be provided to prospective purchasers and be required as a condition of subdivision (including strata subdivision) for the purposes of noise-sensitive development as well as planning approval involving noise-sensitive development, where noise levels are forecast or estimated to exceed the target outdoor noise criteria, regardless of proposed noise attenuation measures. The requirement for notification as a condition of subdivision and the land area over which the notification requirement applies, should be identified in the noise management plan in accordance with the guidelines.*

*An example of a standard form of wording for notifications is presented in the guidelines.”*

### 3. NOISE MONITORING

Noise monitoring was undertaken at the boundary of the proposed development between the 27<sup>th</sup> June and the 4<sup>th</sup> July 2016. From these measurements, the noise received at the development from vehicles travelling along Anketell Road was determined.

The results of the noise data logging are summarised in Table 3.1 with the graphical data contained in Appendix D.

**TABLE 3.1 – DETERMINATION OF TRANSPORTATION NOISE AT LOGGERS, dB(A)**

Location	L <sub>A10 18hr</sub>	L <sub>Aeq(day)</sub>	L <sub>Aeq(night)</sub>
Boundary of Development (7 metres from the road edge)	71.0	69.2	62.2

Based on the noise monitoring, the calculated difference between the L<sub>A10,18hour</sub> and L<sub>Aeq,8hour</sub>, and the L<sub>Aeq10,18hr</sub> and L<sub>Aeq,16 hr</sub> is -8.8 and -1.8 dB respectively. As the difference between day and night L<sub>Aeq</sub> noise levels is greater than 5 dB(A) (i.e. 7 dB(A)), hence, the day period is the critical period for compliance.

### 4. MODELLING

To determine the requirements of any noise amelioration, acoustic modelling was carried out using the computer program ‘SoundPlan’. Acoustic modelling was carried out for road traffic flows 20 years in the future.

**TABLE 4.1 - NOISE MODELLING INPUT DATA**

Parameter	Current Anketell Road	Future Anketell Road
Traffic flows	7,226 vpd	20,000 vpd
Heavy Vehicles (%)	19.6%	19.6%
Speed Limit (km/hr)	80/110	80/110
Road Surface	Chip Seal	Chip Seal
Façade Correction	+2.5 dB(A)	+2.5 dB(A)

Noise modelling was carried out for noise received within the development for current traffic volumes and road alignment to calibrate the noise model.

Advice has been provided by WAPC, MRWA and City of Kwinana that there is to be a major upgrade of Anketell Road in the future. This upgrade will likely align the road closer to the development boundary. Advice was also sought on the projected future traffic volumes, with the values shown in Table 4.1 above.



Based on the above information the following scenarios have been considered:

**Scenario 1** – Future road alignment with future traffic volumes, no noise control (Appendix B Figure B1).

**Scenario 2** – Future road alignment with future traffic volumes, with commercial buildings in Lot 4 (Appendix B Figure B2).

Whilst there is no detail or design on the future alignment general information has been provided, with the proposed future roadway noted on the City of Kwinana’s Indian Ocean Gateway.

## 5. TRAFFIC NOISE ASSESSMENT

Under the WAPC State Planning Policy 5.4, for this development, the Noise Limits as listed in Table 1 are the appropriate noise levels to be achieved. Based on the noise monitoring, the difference between the  $L_{Aeq(16hr)}$  and the  $L_{Aeq(8hr)}$  would be greater than 5 dB(A). Therefore, if compliance with the day period noise limit is achieved, then compliance with the night period noise limits would also be achieved. The policy states that the outdoor criteria applies to the ground floor level only, however, it also states that noise mitigation measures should be implemented with a view to achieving the target levels in least one outdoor living area.

For residential premises, the Policy states that residence should be designed to meet the following acceptable internal noise levels:

Living and Work Areas	$L_{Aeq(Day)}$ of 40 dB(A)
Bedrooms	$L_{Aeq(Night)}$ of 35 dB(A)

The results of the acoustic assessment indicate that noise received at the ground floor level of the residential lots located behind commercial lots from future Anketell Road traffic could, in some locations, exceed the above “Target”, however would be below the noise “Limit”.

Table 5.1 details the noise level at the building envelop for each proposed development Lot with Figure 1 in Appendix A showing the location map.

**TABLE 5.1 – DEVELOPMENT NOISE LEVELS (GROUND FLOOR)**

<b>Scenario 2: Future Traffic Volumes – Future Road Alignment and Future Residential Building</b>		
<b>Location</b>	<b>L<sub>AeqDay</sub></b>	<b>Requirements</b>
Lot 188 - 1	58	N
Lot 188 - 2	56	N
Lot 188 - 3	56	N
Lot 188 - 4	56	N
Lot 188 - 5	54	Nil
Lot 188 - 6	56	N
Lot 188 - 7	55	N
Lot 188 - 8	56	N
Lot 188 - 9	59	A, N
Lot 188 - 10	60	A, N
Lot 188 - 11	61	A, N
Lot 188 - 12	53	Nil
Lot 188 - 13	58	Nil
Lot 652 - 1	54	Nil
Lot 652 - 2	53	Nil
Lot 652 - 3	53	Nil
Lot 652 - 4	52	Nil
Lot 652 - 5	52	Nil
Lot 652 - 6	51	Nil
Lot 652 - 7	51	Nil

Note: Nil No Requirements  
 N Notification on Title  
 A Package A Quiet House Design  
 B Package B Quiet House Design  
 C Package C Quiet House Design

As the first row of lots located adjacent to the Anketell Road are to contain commercial premises, these buildings would provide a significant barrier to the residential lots behind.

Therefore, to comply with the Policy, the following options have been provided:

- Rear Lots – Notification on Titles where noise level exceeds an L<sub>Aeq(Day)</sub> of 55 dB(A).
- Rear Lots – Package A to Lots where noise level is between an L<sub>Aeq(Day)</sub> of 59 and 61 dB(A).

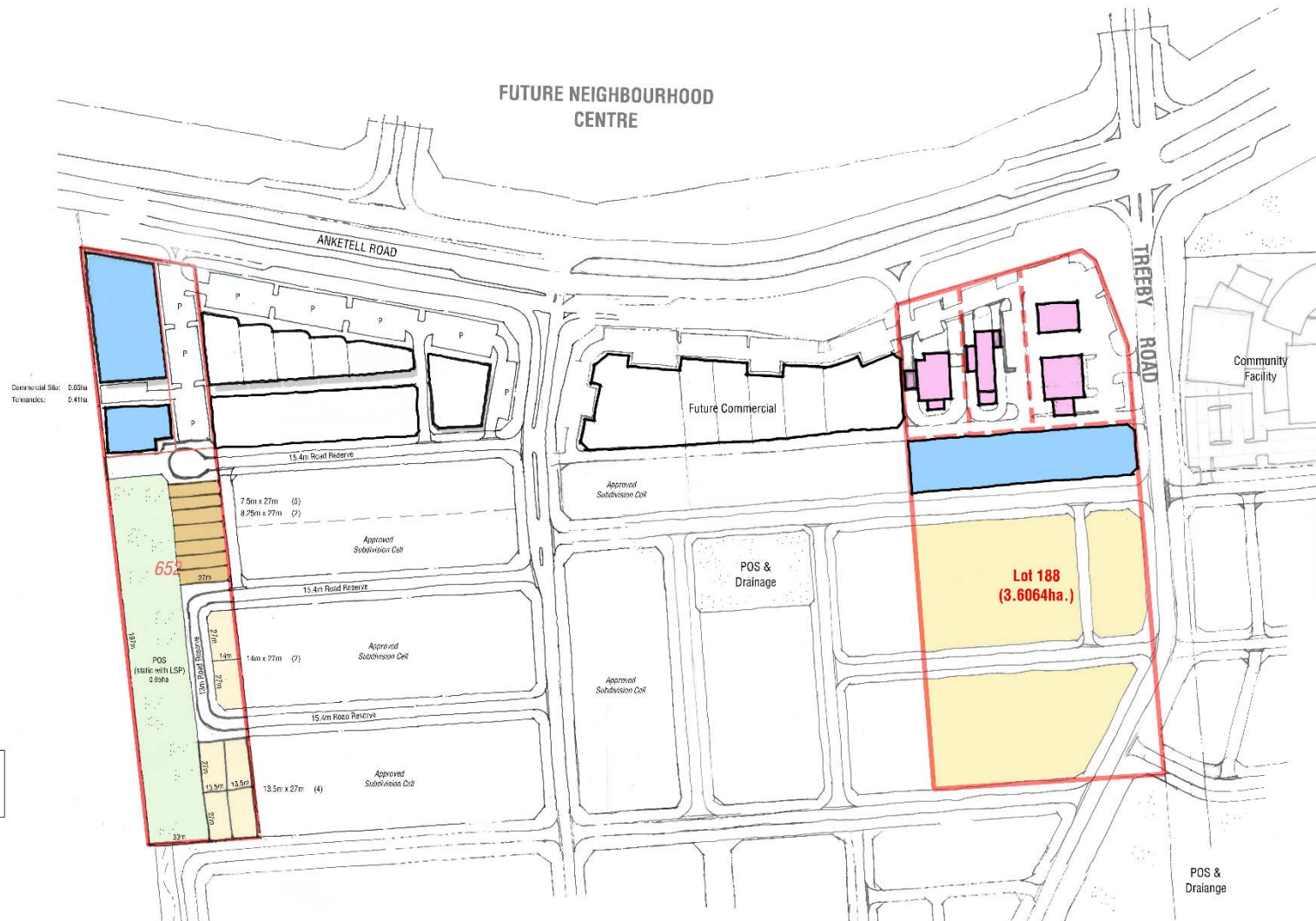
The modification to Anketell Road would be considered as major upgrade and hence the infrastructure provided is obliged to achieve compliance with the “Noise Limits” at the ground floor. This normally requires the infrastructure provider to construct the barrier walls. However, in this case as, as outlined in the policy under Section 5.3.2 where a major road project is to be constructed in the vicinity of a future noise sensitive land use, the infrastructure provider and developer are both responsible for ensuring that the objectives of this policy are achieved. Similarly, for an upgrade to Anketell Road, the infrastructure provider would be responsible for achieving compliance with the “Noise Limits”, which in this case would be the use of a dense graded asphalt road surface. However, once again, discussions should take place between the infrastructure provider and the developer to ensure that a mutually beneficial noise management plan is developed and implemented.

Individual noise control in the form of “Quiet House” design has been developed for individual lots with the details contained in Appendix C. Alternative construction would be possible if a suitably qualified acoustical consultant assessed the individual building requirements at the time of building licence approval.

## **APPENDIX A**

FIGURE A1 – SITE LAYOUT

FIGURE A1 – SITE LAYOUT



**INDICATIVE CONCEPT PLAN**

Lot 652 & 188 Anketell Road, Anketell



0m 30m



FIGURE A2 – RECEIVER LOCATION MAP LOT 652 ANKETELL ROAD

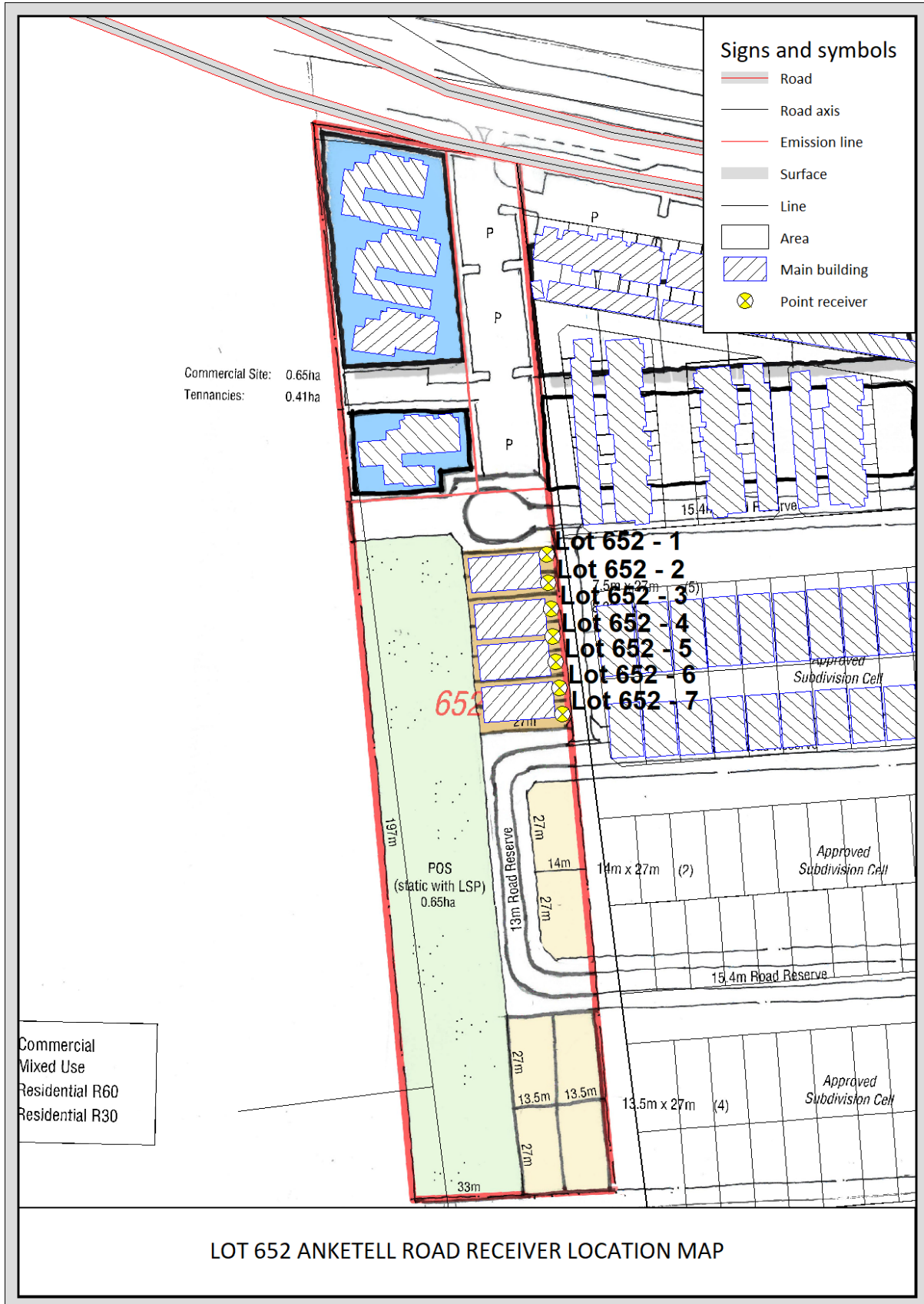
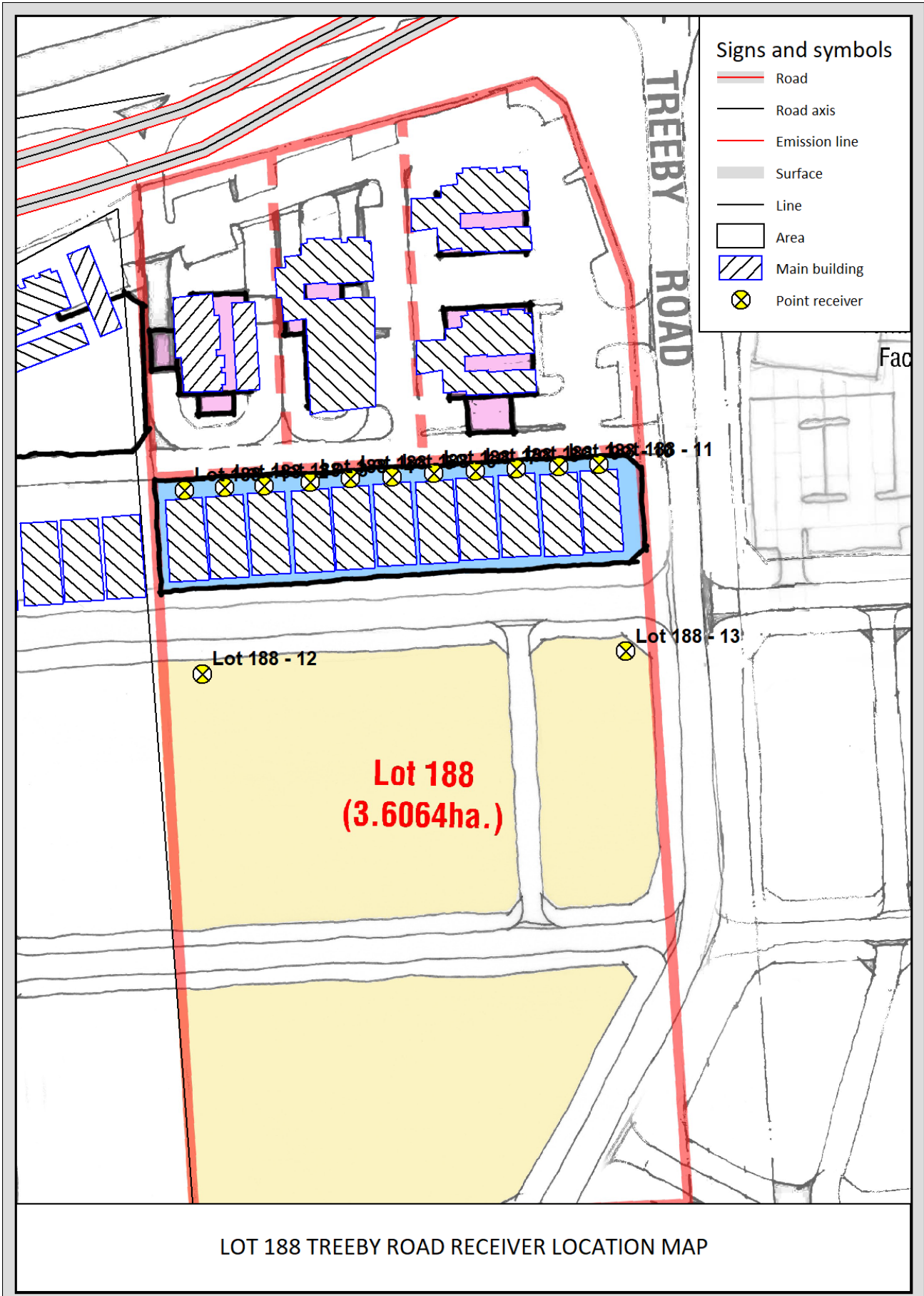
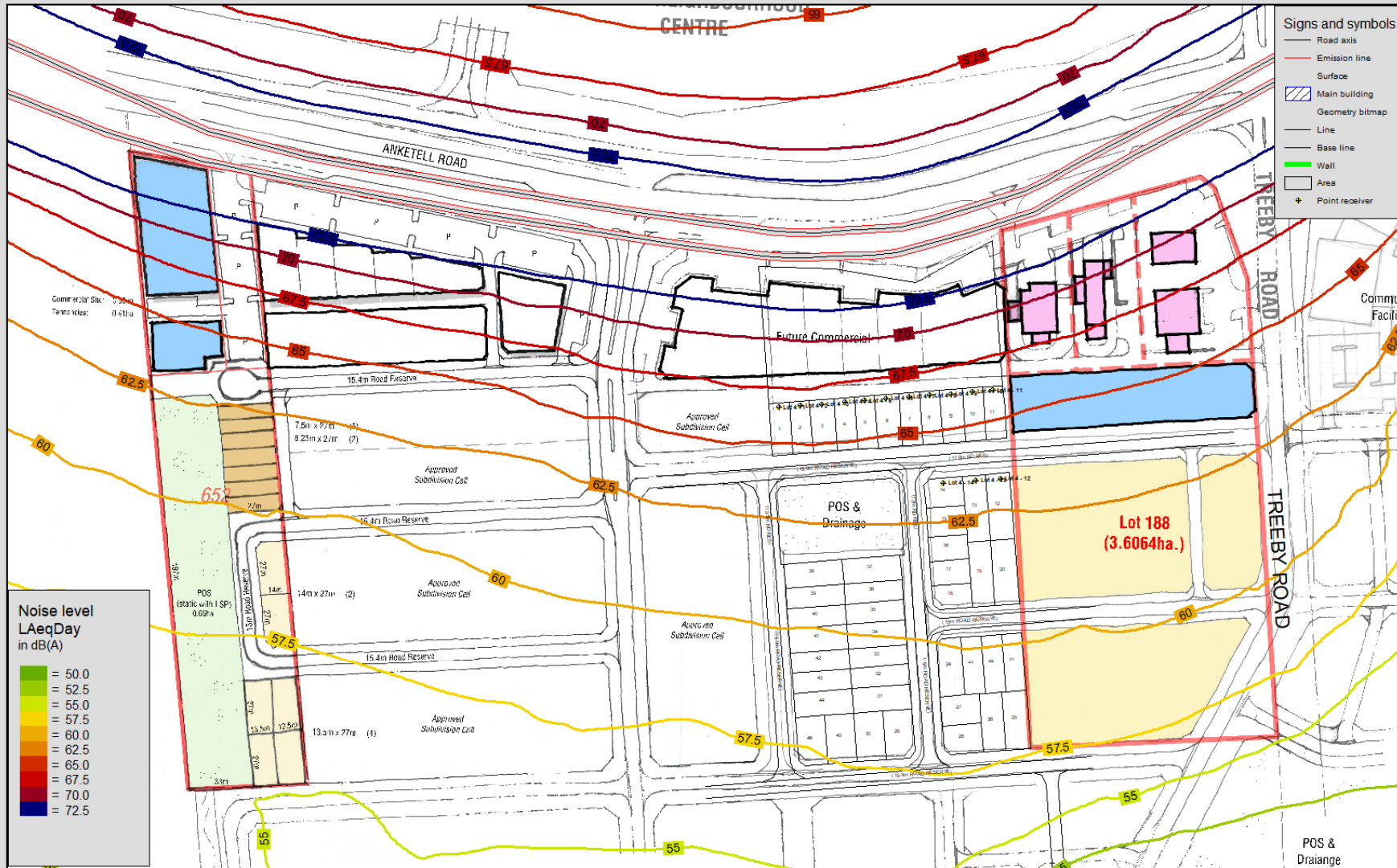


FIGURE A3 – RECEIVER LOCATION MAP LOT 188 TREEBY ROAD

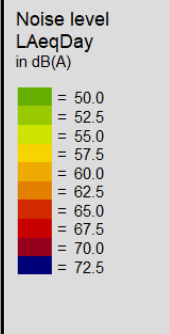


## **APPENDIX B**

NOISE CONTOURS PLOT



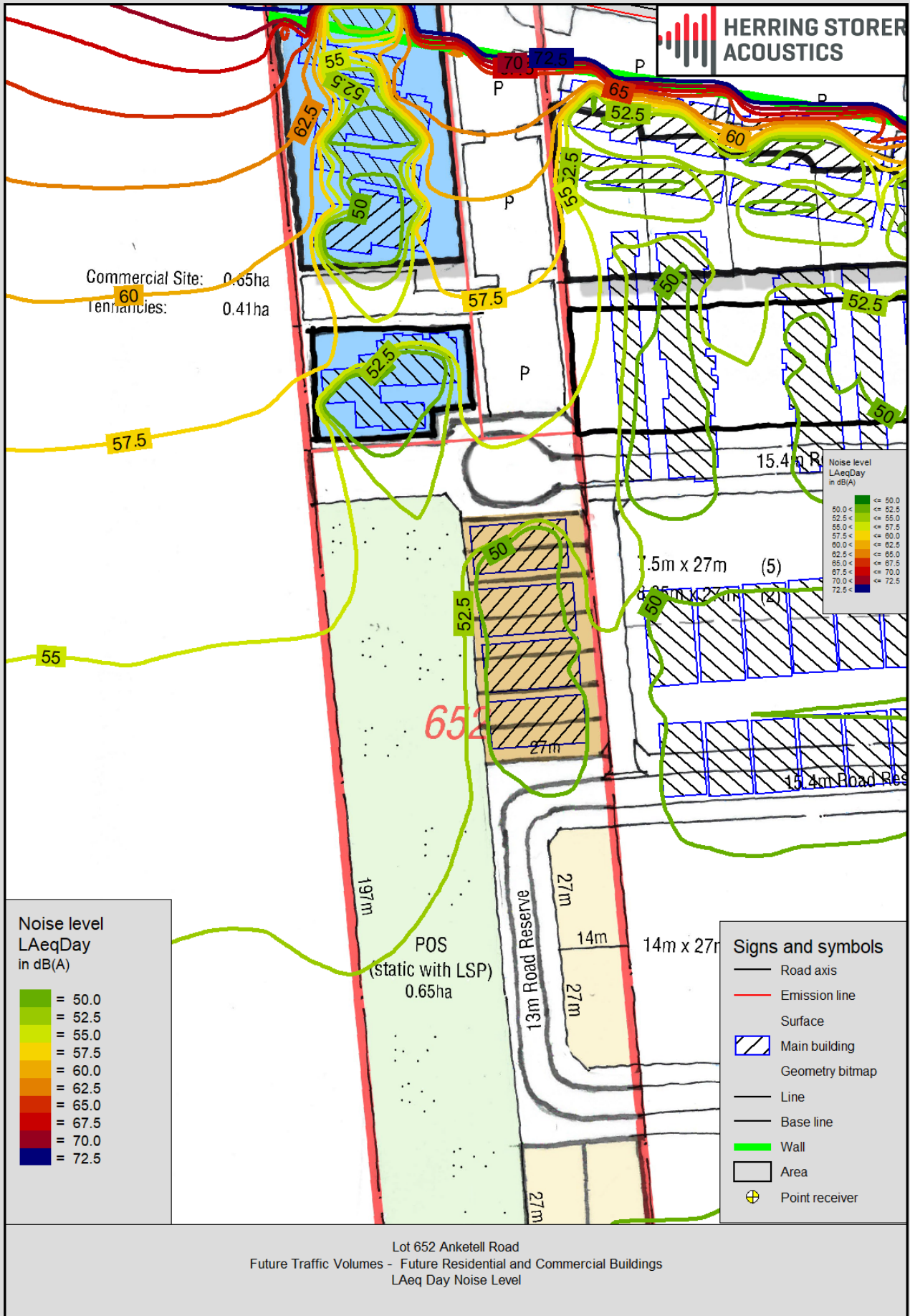
- Signs and symbols
- Road axis
  - Emission line
  - Surface
  - ▨ Main building
  - ▨ Geometry bitmap
  - Line
  - Base line
  - Wall
  - Area
  - ♦ Point receiver

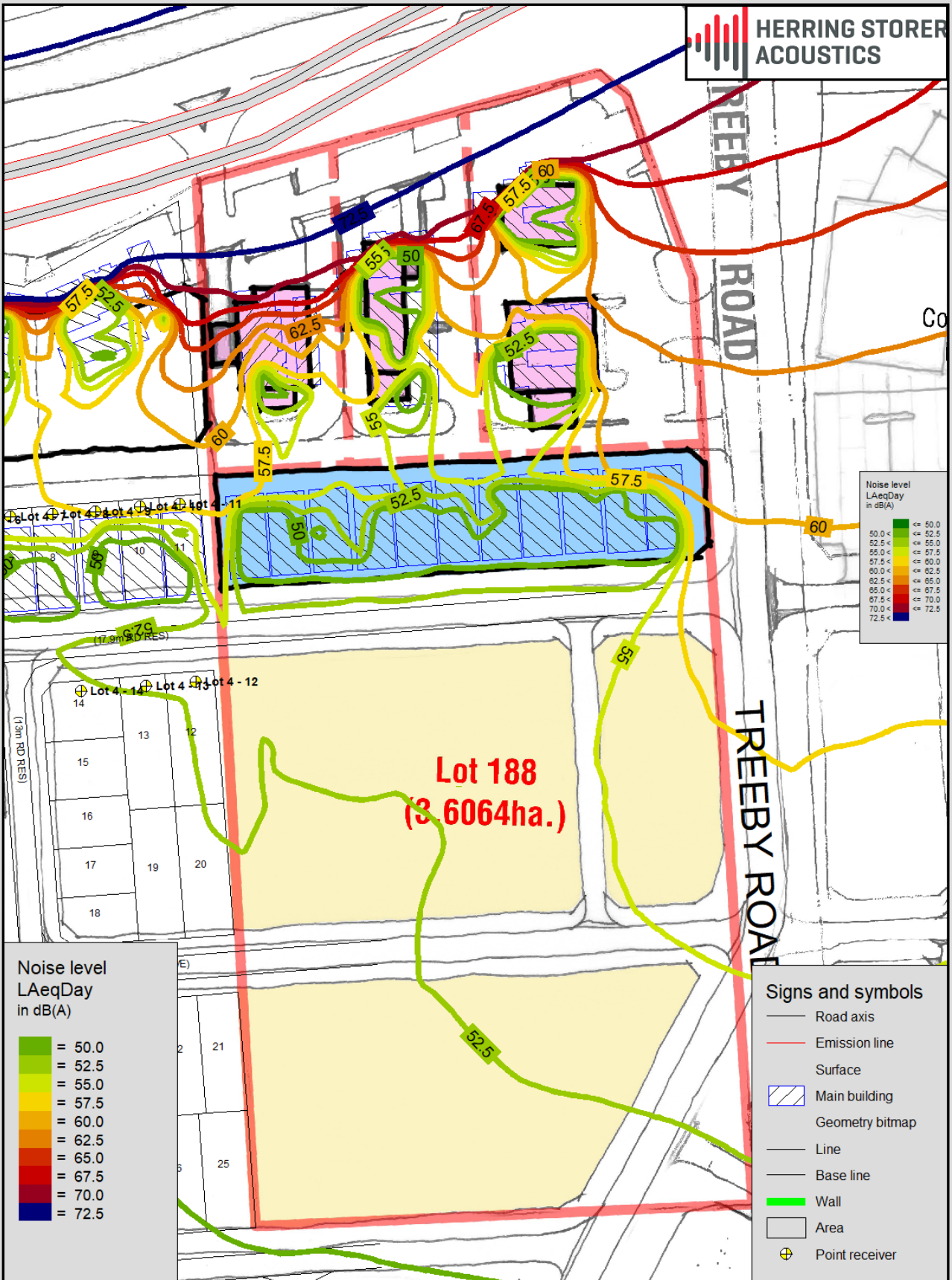


Lot 652 Anketell Road and 188 Treeby Road  
 Future Traffic Volumes - No Noise Control  
 LAeq Day Noise Level





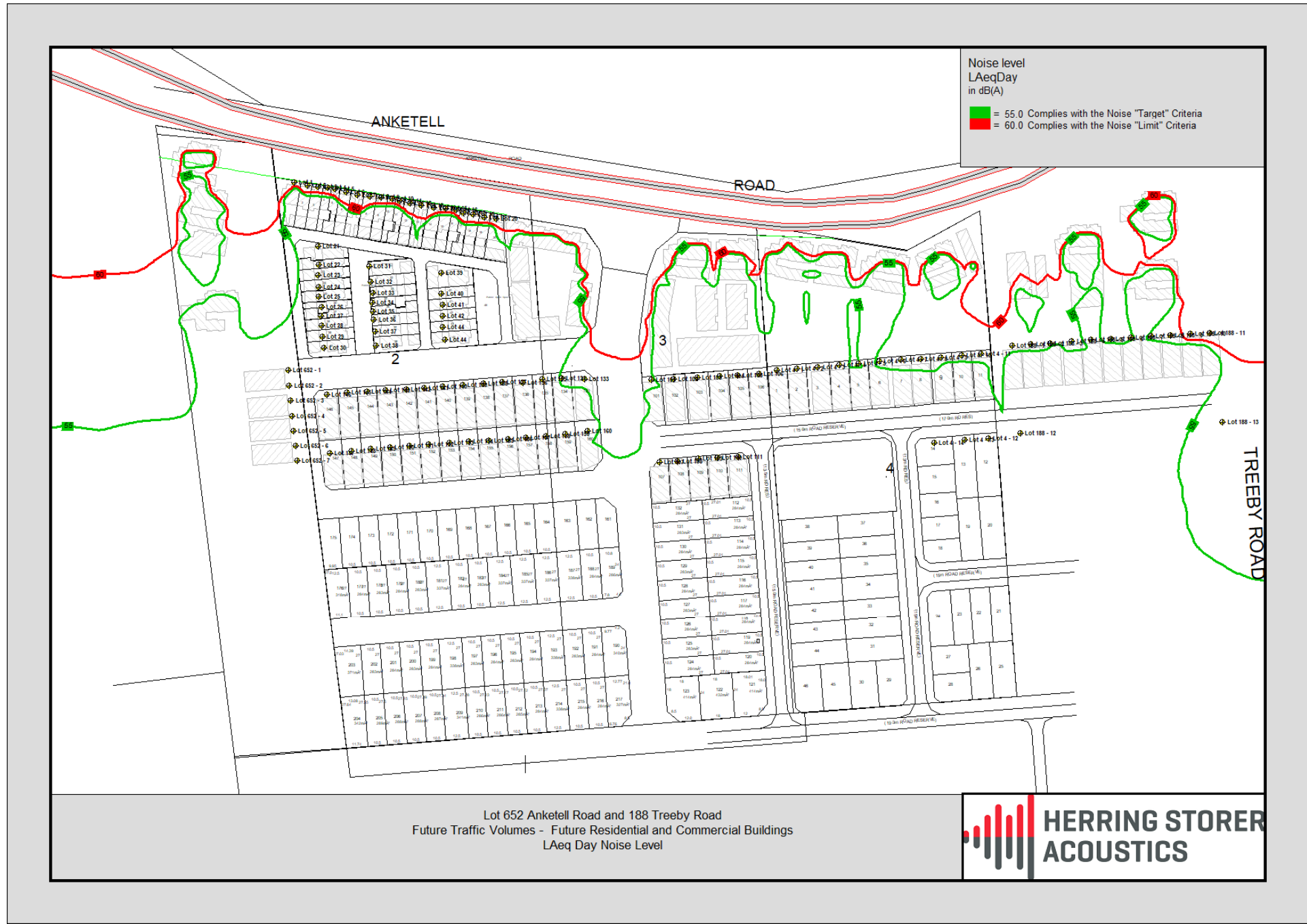


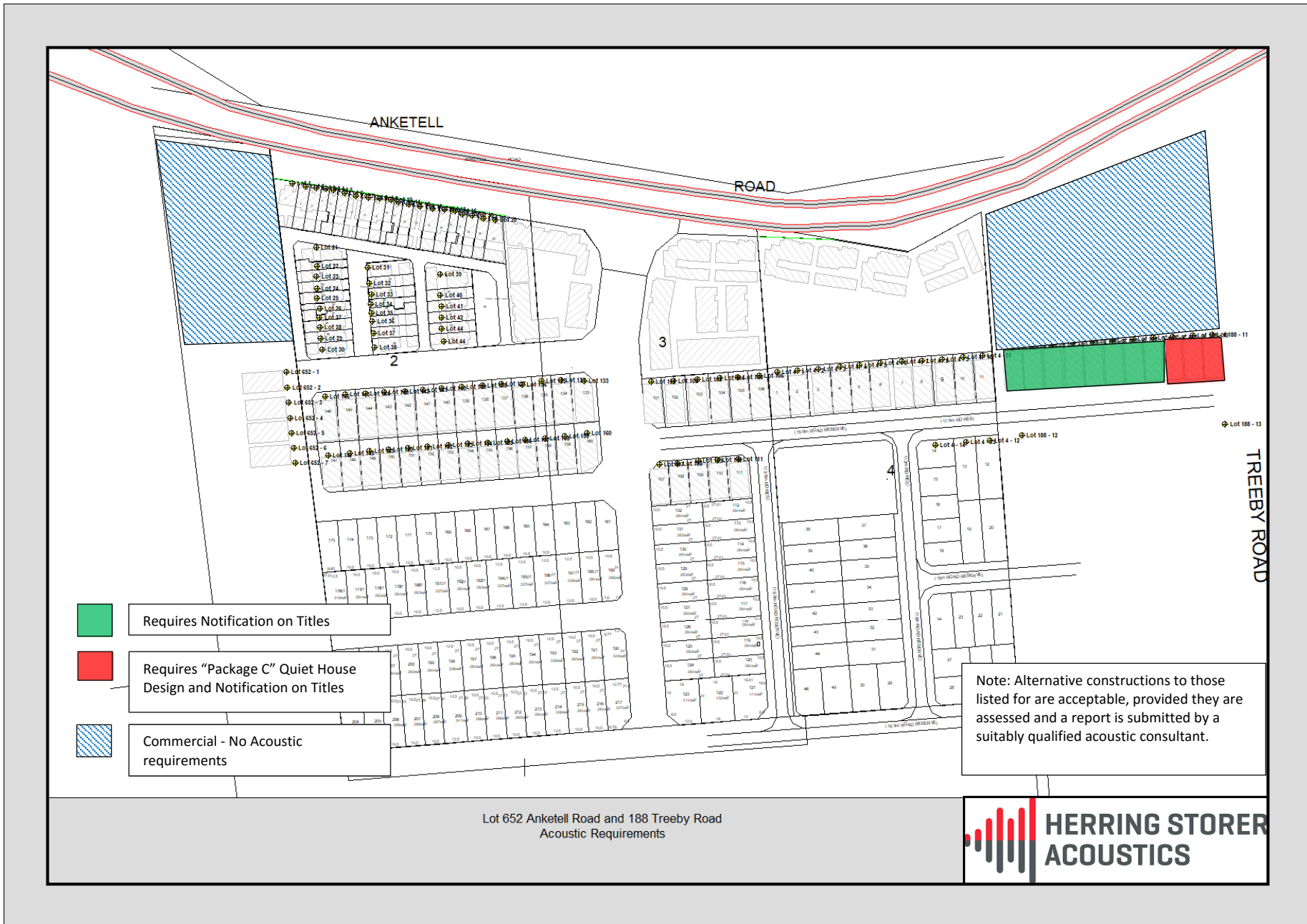


Lot 188 Treeby Road  
 Future Traffic Volumes - Future Residential and Commercial Buildings  
 LAeq Day Noise Level

# **APPENDIX C**

## QUIET HOUSE DESIGN GUIDELINES





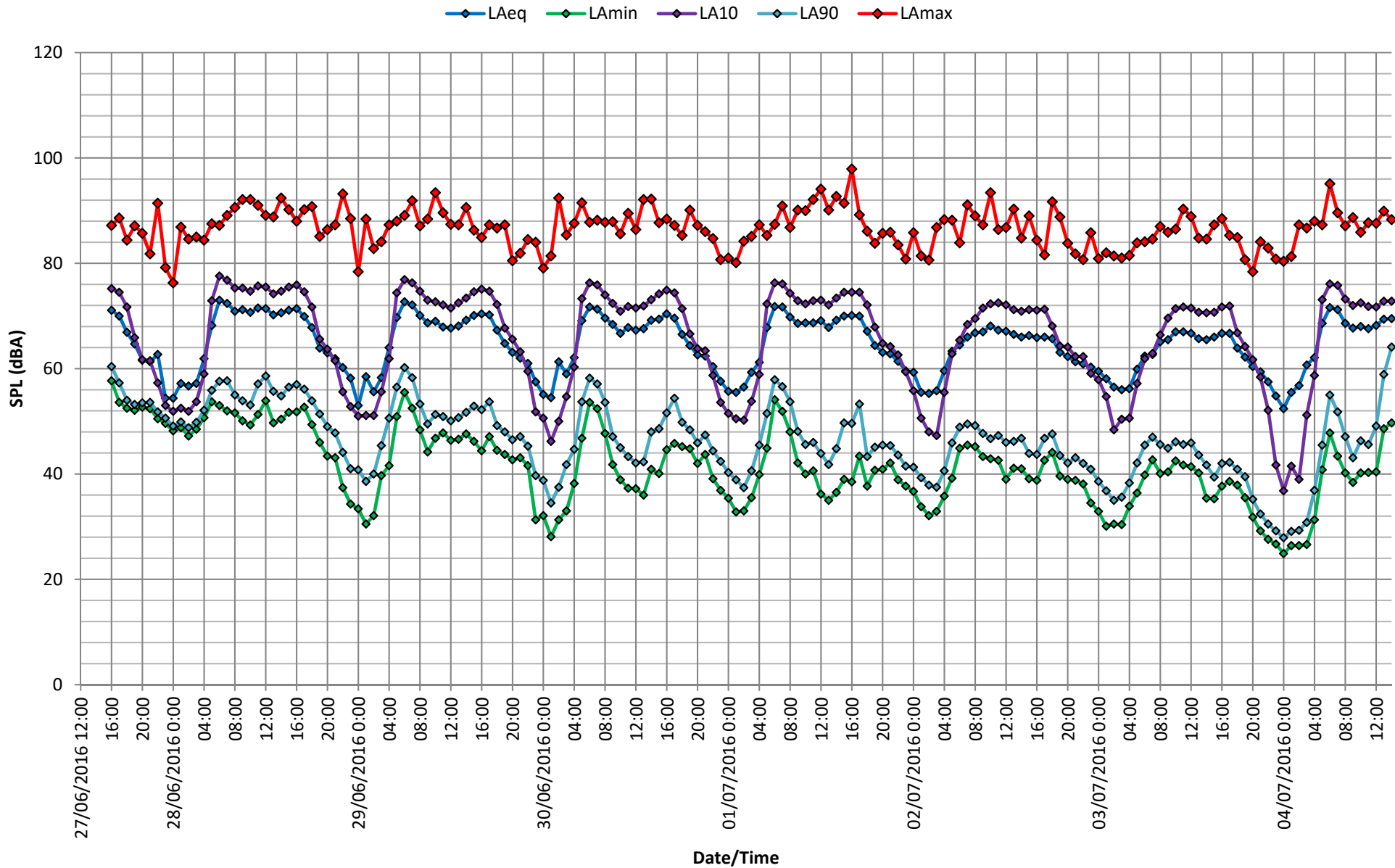
Area	Orientation to road or rail corridor	Package A L <sub>Aeq</sub> ,Day up to 60dB L <sub>Aeq</sub> ,Night up to 55dB	Package B L <sub>Aeq</sub> ,Day up to 63dB L <sub>Aeq</sub> ,Night up to 58dB	Package C L <sub>Aeq</sub> ,Day up to 65dB L <sub>Aeq</sub> ,Night up to 60dB	
Bedrooms	Facing	<ul style="list-style-type: none"> <li>Walls to R<sub>w</sub>+C<sub>tr</sub> 45dB</li> <li>Windows and external door systems: Minimum R<sub>w</sub>+C<sub>tr</sub> 28dB (Table 6.4), total glazing area up to 40% of room floor area. [if R<sub>w</sub>+C<sub>tr</sub> 31dB: 60%] [if R<sub>w</sub>+C<sub>tr</sub> 34dB: 80%]</li> <li>Roof and ceiling to R<sub>w</sub>+C<sub>tr</sub> 35dB (1 layer 10mm plasterboard)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to R<sub>w</sub>+C<sub>tr</sub> 50dB</li> <li>Windows and external door systems: Minimum R<sub>w</sub>+C<sub>tr</sub> 31dB (Table 6.4), total glazing area up to 40% of room floor area. [if R<sub>w</sub>+C<sub>tr</sub> 34dB: 60%]</li> <li>Roof and ceiling to R<sub>w</sub>+C<sub>tr</sub> 35dB (1 layer 10mm plasterboard)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to R<sub>w</sub>+C<sub>tr</sub> 50dB</li> <li>Windows and external door systems: Minimum R<sub>w</sub>+C<sub>tr</sub> 34dB (Table 6.4), total glazing area limited to 40% of room floor area [if 20% of floor area or less, R<sub>w</sub>+C<sub>tr</sub> 31dB]</li> <li>Roof and ceiling to R<sub>w</sub>+C<sub>tr</sub> 40dB (2 layers 10mm plasterboard)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	
	Side-on	<ul style="list-style-type: none"> <li>As above, except glazing R<sub>w</sub>+C<sub>tr</sub> values for each package may be 3dB less, or max % area increased by 20%</li> </ul>			
	Opposite	<ul style="list-style-type: none"> <li>No requirements</li> <li>As per Package A 'Side On'</li> <li>As per Package A 'Facing'</li> </ul>	<ul style="list-style-type: none"> <li>No requirements</li> <li>As per Package A 'Side On'</li> <li>As per Package A 'Facing'</li> </ul>	<ul style="list-style-type: none"> <li>No requirements</li> <li>As per Package A 'Side On'</li> <li>As per Package A 'Facing'</li> </ul>	
Indoor living and work Areas	Facing	<ul style="list-style-type: none"> <li>Walls to R<sub>w</sub>+C<sub>tr</sub> 45dB</li> <li>Windows and external door systems: Minimum R<sub>w</sub>+C<sub>tr</sub> 25dB (Table 6.4), total glazing area limited to 40% of room floor area. [if R<sub>w</sub>+C<sub>tr</sub> 28dB: 60%] [if R<sub>w</sub>+C<sub>tr</sub> 31dB: 80%]</li> <li>External doors other than glass doors to R<sub>w</sub>+C<sub>tr</sub> 26dB (Table 6.4)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to R<sub>w</sub>+C<sub>tr</sub> 50dB</li> <li>Windows and external door systems: Minimum R<sub>w</sub>+C<sub>tr</sub> 28dB (Table 6.4), total glazing area up to 40% of room floor area. [if R<sub>w</sub>+C<sub>tr</sub> 31dB: 60%] [if R<sub>w</sub>+C<sub>tr</sub> 34dB: 80%]</li> <li>External doors other than glass doors to R<sub>w</sub>+C<sub>tr</sub> 26dB (Table 6.4)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to R<sub>w</sub>+C<sub>tr</sub> 50dB</li> <li>Windows and external door systems: Minimum R<sub>w</sub>+C<sub>tr</sub> 31dB (Table 6.4), total glazing area up to 40% of room floor area. [if R<sub>w</sub>+C<sub>tr</sub> 34dB: 60%]</li> <li>External doors other than glass doors to R<sub>w</sub>+C<sub>tr</sub> 30dB (Table 6.4)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	
	Side-on	<ul style="list-style-type: none"> <li>As above, except the glazing R<sub>w</sub>+C<sub>tr</sub> values for each package may be 3dB less, or max % area increased by 20%</li> </ul>			
	Opposite	<ul style="list-style-type: none"> <li>No requirements</li> </ul>	<ul style="list-style-type: none"> <li>As per Package A 'Side On'</li> </ul>	<ul style="list-style-type: none"> <li>As per Package A 'Facing'</li> </ul>	
Other indoor areas	Any	<ul style="list-style-type: none"> <li>No requirements</li> </ul>	<ul style="list-style-type: none"> <li>No requirements</li> </ul>	<ul style="list-style-type: none"> <li>No requirements</li> </ul>	
Outdoor living areas	Any (Section 6.2.3)	<ul style="list-style-type: none"> <li>As per Package C, and/or</li> <li>At least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2 metres height above ground level</li> </ul>	<ul style="list-style-type: none"> <li>As per Package C, and/or</li> <li>At least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level</li> </ul>	<ul style="list-style-type: none"> <li>At least one outdoor living area located on the opposite side of the building from the transport corridor</li> </ul>	

**Table C1 – Quiet House Design “Deemed to Satisfy” Construction Guidelines**

## **APPENDIX D**

### **NOISE MONITORING RESULTS**

### Noise Logging, Anketell Road



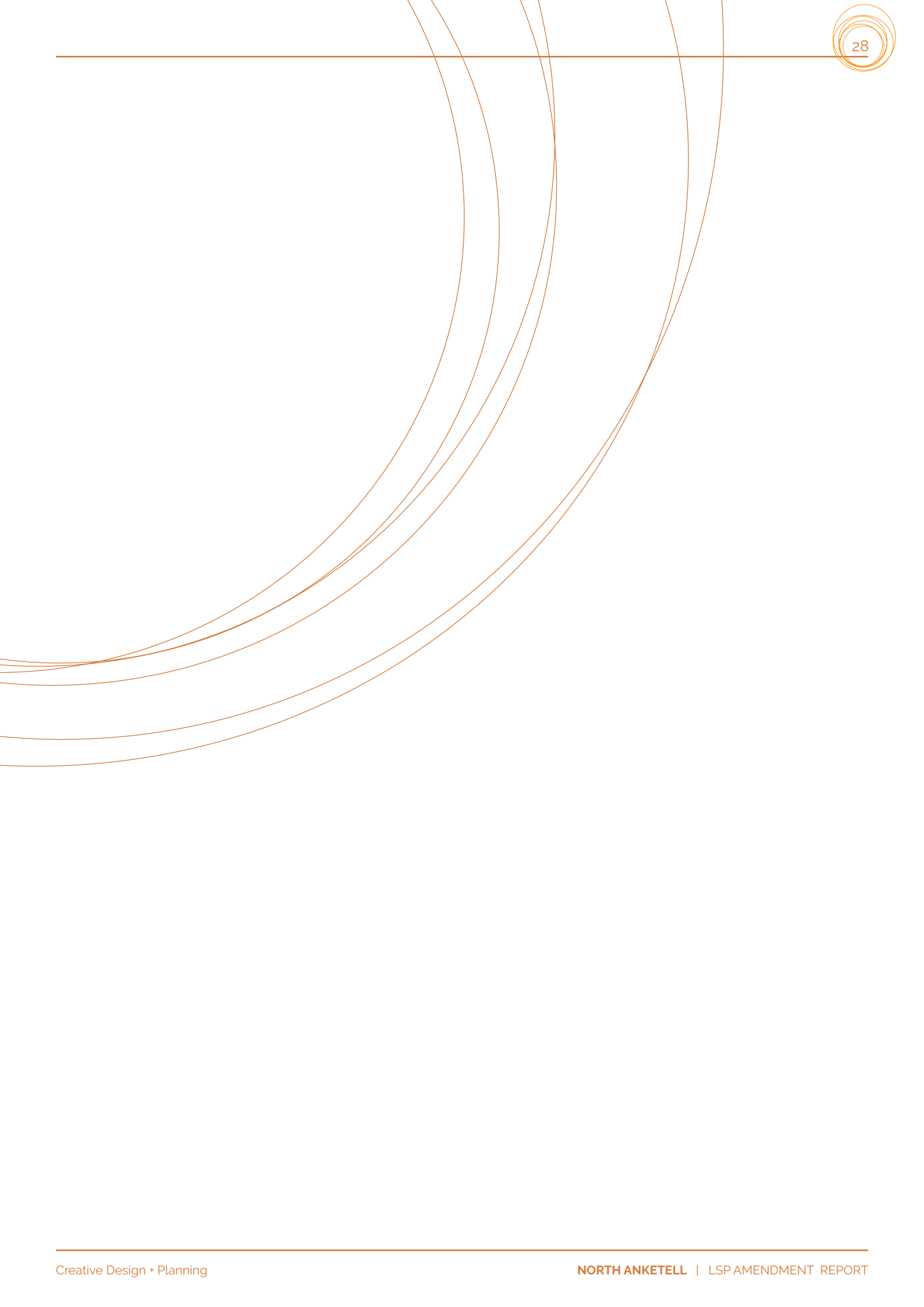




# Appendix 5

## **STORMWATER MANAGEMENT REPORT**

(WATER RESOURCES ENGINEERING)





**Hitesh Dubal**

MEng (Civil – Water Resources) BEng (Civil)

Consultant – Water Resources Engineering

ABN No. 30 720 659 465

Phone: 0430 088 420

Email: [dubalhitesh@gmail.com](mailto:dubalhitesh@gmail.com)

**LETTER REPORT ON  
STORM WATER MANAGEMENT PLAN  
ISSUE NO.1**

**Proposed Development  
Lot 188 Treeby Road & Lot 652 Anketell Road  
Anketell WA 6167**

**Qumars Meshgin**

**Jan 2018**

**HD170010**



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## Letter Report on Stormwater Management (Lot 188 Treeby Road and Lot 652 Anketell Road Anketell WA)

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Hitesh Dubal: Consultant – Water Resources Engineering, has been engaged by Qumars Meshgin to prepare letter report on Stormwater Management for the Residential, Mixed Use and Commercial Development at Lot 188 Treeby Road and Lot 652 Anketell Road (subject site) in Anketell WA (Refer Figure 1 – Proposed Commercial Concept Plan). The Local Water Management Strategy has been prepared by Bio-Science and approved by relevant authorities for the North Anketell Structure Plan in 2015. The Lot 188 Treeby Road and Lot 652 Anketell Road (subject site) was part of the approved LWMS and Structure Plan. This letter report has been prepared to detail stormwater management of the subject site due to the changes made in the Structure Plan (Refer Figure 2 – Anketell North Revised LSP, Sep 2017 – Creative Design + Planning) and Figure 3 – Anketell North Approved LSP, July 2015 – RAW Group). The subject site is within the catchment 8.1.1, 8.1.2 and 8.1.3 and therefore only those catchments (and relevant infiltration/detention basins) are described in this report. This report has been prepared based on the approved LWMS however the site conditions are unknown which may affect the development.

### Identification of Land

---

Lot 188 Treeby Road is uniquely positioned at the intersection of Treeby Road and Anketell Road on the southern side of the Anketell Road. Lot 188 is positioned east of Lot 4 which is a future residential and commercial development. Lot 652 Anketell Road is uniquely positioned on the southern side of the Anketell Road and on the western side of Lot 2 Anketell Road which is a future residential, commercial development.

Lot 188 is sloping from RL 41 mAHD on the common southern boundary with Lot 30 in a northerly direction to RL 30 mAHD at the interface with Anketell Road. Lot 652 is sloping from RL 25 mAHD on the common southern boundary with Lot 30 in a northerly direction to RL 20 mAHD at the interface with Anketell Road.

### Stormwater Management

---

The stormwater drainage system throughout subject site has been designed using a major/minor approach. The minor drainage system is defined as the system of underground pipes, kerbs, and gutters designed to carry runoff generated by low frequency Average Recurrence Interval (ARI) storms, typically less than and up to 5-year ARI events. The major drainage system is defined as the arrangement of roads to provide safe passage of stormwater runoff from extreme events which exceeds the capacity of the minor system.

A breakdown of the storm water management techniques used on the site includes:

- Lot runoff: the use of drainage soakwells to retain and infiltrate roof runoff up to 1 in 1 yr ARI event. This will provide the at source water quality and quantity management for lot runoff.
- Flow Conveyance: provide pipe systems and road gutters to convey runoff for storm events up to the 5-yr ARI event and road reserve up to 100-yr ARI event.
- Retention/Infiltration Basin: Provide an adequate storage to attenuate post-development flows up to the 1 in 100 Yr. ARI event onsite.

The stormwater management for the subject site is not much changed from the approved Local Water Management Strategy however the location and size of the basin within Catchment 8.1.1 (refer Figure 4 Catchment Plan) has been changed which has been described in following sections. The size and location of the basin within Catchment 8.1.3 remains same and therefore has not been discussed in depth in this report.



Catchments 8.1.1 and 8.1.2 discharges into the basin 8.1.1b. Basin 8.1.1b has been moved further south compare to the originally approved structure plan and LWMS.

### Lot Level Management (Soakwells)

Soakwells are widely used for direct infiltration of stormwater. They consist of a vertical perforated liner, with stormwater entering via an inlet pipe at the top of the device. The base of the soakwell is open or perforated and usually covered with a geotextile. Alternatively, pervious material, such as gravel, can be used to form the base of the soakwells.

Soakwells have been sized to capture and retain (at minimum) the 1-year ARI runoff from roof areas to promote at source infiltration within individual lots. A permeability of  $2 \times 10^{-4}$  m/s was used for sizing of the soakwells and based on a proposed development density for the site of R30 and R40, an average roof area for each lot of 200 sqm was used for each residence.

Based on the approved LWMS the following combination of the Soakwells are possible for the individual lots:

2 x 1.5 m (dia) x 0.9 m (depth)

1 x 1.8 m (dia) x 1.5 m (depth)

Further assessment will be required at UWMP stage considering the detailed civil engineering design, geotechnical investigation and permeability values for the subject site.

### Hydrologic and Hydraulic Analysis

In order to develop a relevant stormwater management strategy for the proposed residential development, hydrologic and hydraulic modelling have been undertaken for the catchment with post-development scenario by using the Urban Drainage Design and infiltration model. Hydrologic and Hydraulic models were constructed after reviewing relevant information.

The runoff co-efficient has been considered for the development are as follows:

**Table 1 Summary of Catchment Runoff Coefficients**

Scenario	Sub-Catchment	Runoff Coefficients		
		1yr	5yr	100yr
Post-Development	Road Reserve	0.85	0.85	0.85
	Lots	0.3	0.4	0.65

The size and location of the basin has been changed due to change of the overall layout and structure Plan. The revised size of the basin and water levels for the different ARI events are as follows:

**Table 2 Basin Details (8.1.1b)**

Scenario	Basin	ARI Event	Max Water Depth	Area (m2)	Volume (m3)
Post-Development	Basin 8.1.1b	1 in 1 Yr	0.14	2085	279
		1 in 5 Yr	0.32	2438	686
		1 in 100 Yr	0.7	3206	1748



NOTE: Refer Figure 5 for 1-Yr, 5-Yr and 100-Yr ARI Event Plan.

Further detailed modelling should be carried out at UWMP stage.

## Assumptions

---

1. Geotechnical Investigation has not been carried out for the subject site and therefore details regarding the soil profile is not available at this stage.
2. The Permeability value of  $2 \times 10^{-4}$  m/s has been considered for the subject as mentioned in the LWMS in Section 6.4.2 for Soakwell design. As a safety measure permeability value of  $1 \times 10^{-4}$  has been considered for the design of the infiltration basin.
3. Size of the Basin 8.1.1b is modelled considering 1:6 side slopes and total 1.0 m depth (including 0.3 m free board).

## Conclusion

---

1. It is concluded that the proposed Stormwater Management System is capable of maintaining the 1 in 100 Yr ARI event runoff onsite including Infiltration basin. There is no outlet proposed as per the approved LWMS from Basin 8.1.1b. The naming convention has been maintained as per the approved LWMS to provide better understating. Detailed analysis will be required at UWMP stage.
2. Soakwells are proposed to retain and infiltrate up to 1 in 1 yr ARI event runoff from the lots on site. Design of Soakwells should be revisited at UWMP Stage.
3. Catchment 8.1.3 has not change in layout and therefore no analysis has been done for the basin 8.1.3b. Also, Basin 8.1.3b is outside the subject site and will be design by others.

Kindly please do not hesitate to contact me if you need any further information. Thanks.

Regards

**Hitesh Dubal**

ME (Civil – Water Resources) BE (Civil Eng.)  
Consultant – Water Resources Engineer

Mobile - 0430088420

Email - dubalhitesh@gmail.com



## **Figures:**

---

**Figure 1 Proposed Commercial Concept Plan (Creative Design + Planning July 2017)**

**Figure 2 Anketell North Revised LSP (Creative Design + Planning Sep 2017)**

**Figure 3 Anketell North Approved LSP (RAWE Group July 2015)**

**Figure 4 Catchment Plan (Catchments 8.1.1, 8.1.2 and 8.1.3)**

**Figure 5 Events Plan**

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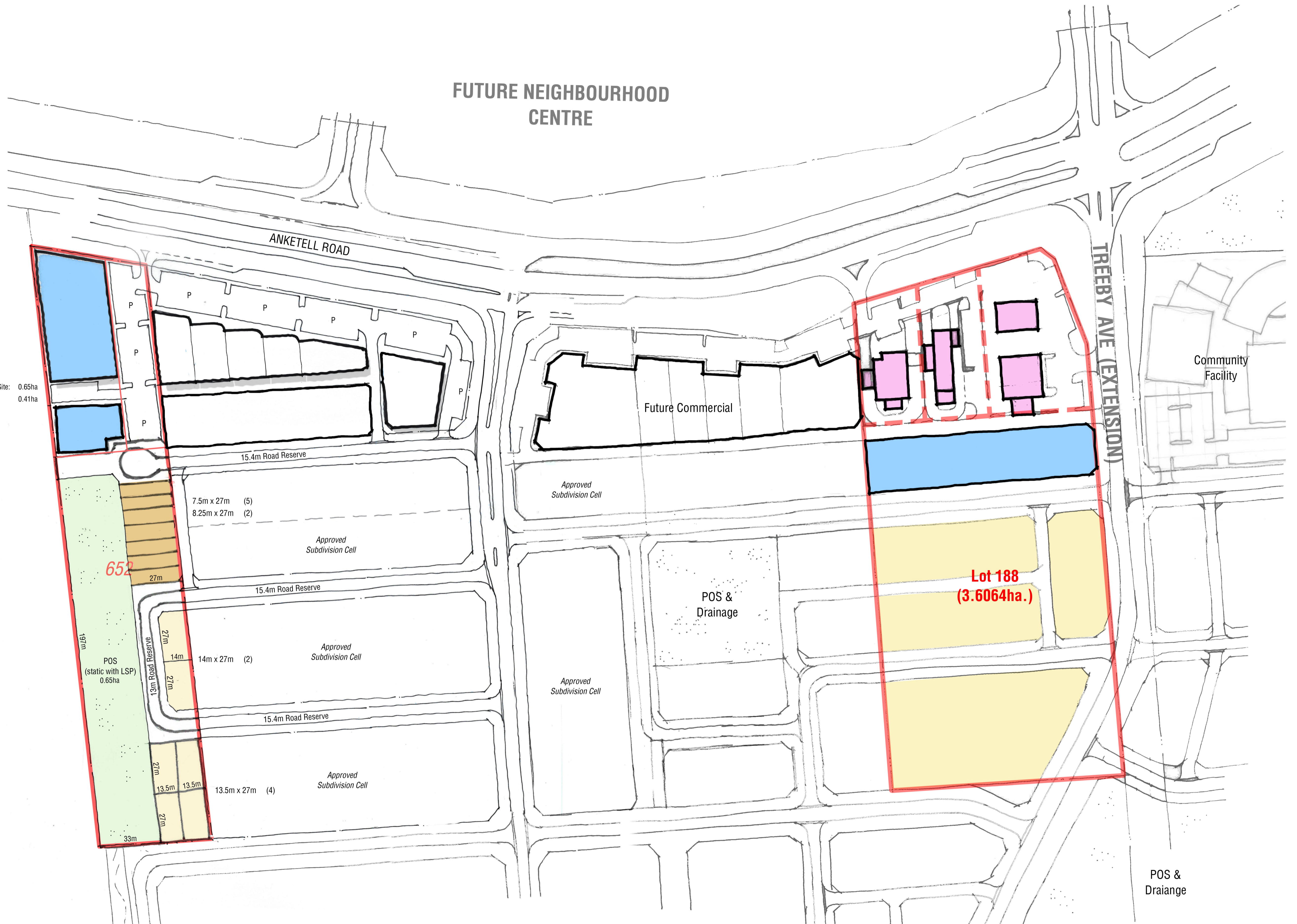
**Figure 1 Proposed Commercial Concept Plan (Creative Design + Planning July 2017)**

---

FUTURE NEIGHBOURHOOD CENTRE

Commercial Site: 0.65ha  
 Tennancies: 0.41ha

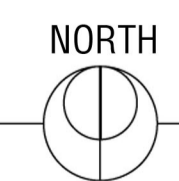
LEGEND	
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<span style="display:inline-block; width:10px; height:10px; background-color: #ADD8E6; border: 1px solid black;"></span>	Mixed Use
<span style="display:inline-block; width:10px; height:10px; background-color: #D2B48C; border: 1px solid black;"></span>	Residential R60
<span style="display:inline-block; width:10px; height:10px; background-color: #FFFACD; border: 1px solid black;"></span>	Residential R30



**PROPOSED COMMERCIAL CONCEPT PLAN**

Lot 652 & 188 Anketell Road, Anketell

**Indicative concept for discussion purposes only**



0m 30m

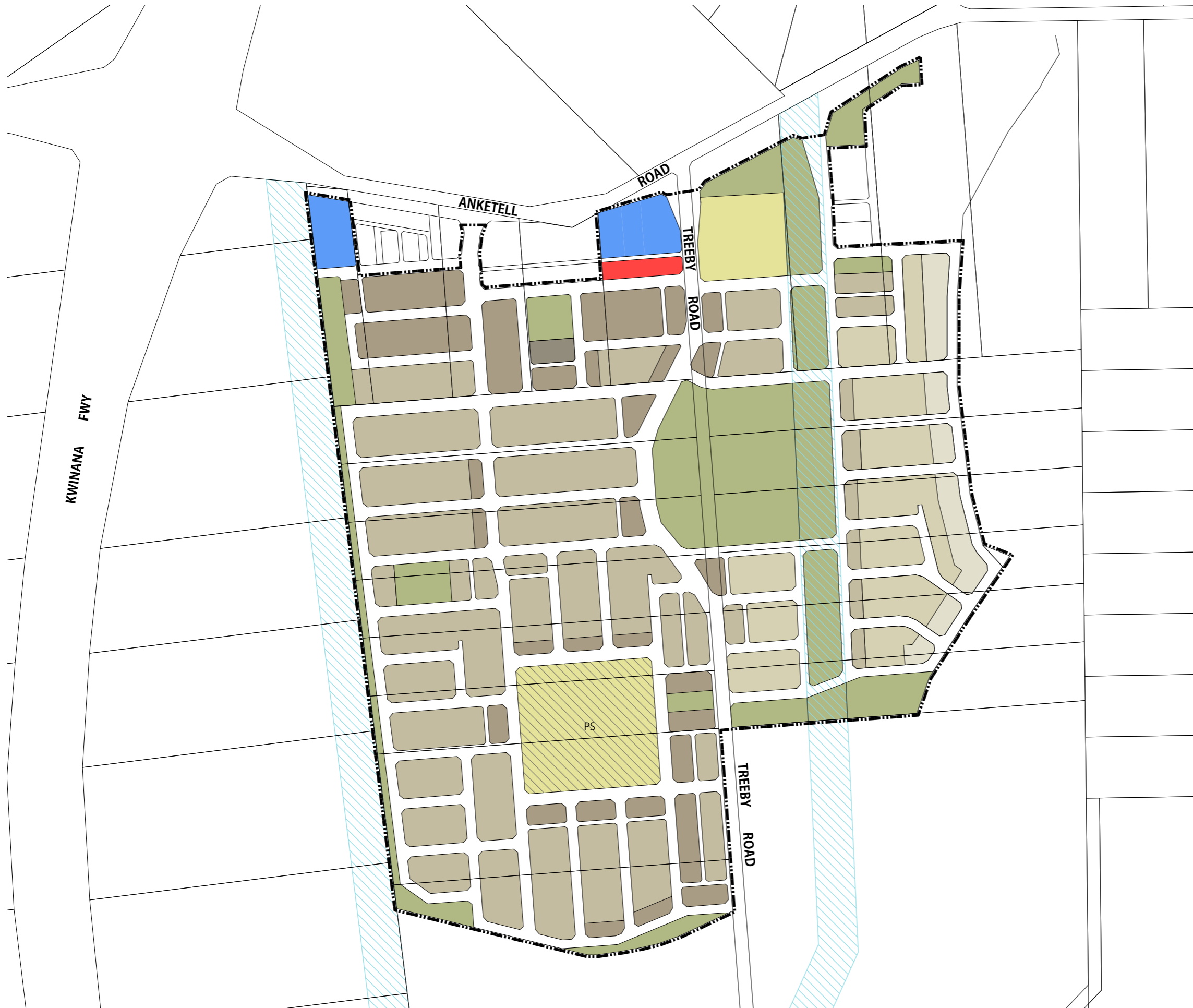
Job: BxcAn Scale: 1:1000@A1 Date: 27 July 2017



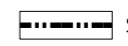













**Figure 2 Anketell North Revised LSP (Creative Design + Planning Sep 2017)**

---



**LEGEND**

-  STRUCTURE PLAN BOUNDARY
- LOCAL SCHEME RESERVES
-  PARK RECREATION AND DRAINAGE
- PUBLIC PURPOSES
-  COMMUNITY FACILITY
-  EDUCATIONAL / INSTITUTIONAL (PRIMARY SCHOOL)
- ZONES
-  RESIDENTIAL - R10
-  RESIDENTIAL - R25
-  RESIDENTIAL - R30
-  RESIDENTIAL - R40
-  RESIDENTIAL - R60
-  COMMERCIAL
-  MIXED USE
- OTHER
-  WESTERN POWER EASEMENT

**REVISED LOCAL STRUCTURE PLAN MAP**

Anketell North



0 60 120 180m

Scale: 1:6000@A3 Date: 13/09/2017 Plan: BXCAN-1-003A





**Figure 3 Anketell North Approved LSP (RAWES Group July 2015)**

---



**Legend**

- Structure Plan Boundary
- Residential - R10
- Residential - R25
- Residential - R30
- Residential - R40
- Residential - R60
- Rural Water Protection
- Commercial
- Other Regional Roads
- Public Purposes
- PS Primary School
- CP Community Purpose
- Pedestrian Crossing(Potential Location)
- Power Line Easement
- Public Open Space
- Non-Credited Public Open Space

0 1:50 500 Metres

**REVISIONS**

Rev	Date	Drawn
F	2013.08.06	S Blanchard
G	2013.08.15	S Blanchard
H	2013.10.11	S Blanchard
D	2013.07.15	M Sullivan



**ROWE GROUP**  
 PLANNING DESIGN DELIVERY

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

Date Drawn: 2013-06-10  
 Job Ref: 4583  
 Scale: 1:4000 A3  
 Client: Mammoth Nominees  
 Designer: K Kyle  
 Drawn: K Trenberth  
 Projection: MGA50  
 Plan ID: 4583-LSP-01-H

**DRAFT**

Data supplied by Landgate



**Anketell North Structure Plan**  
 Anketell

**Local Structure Plan**

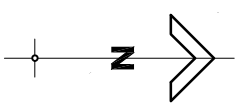
**FIGURE 2:**

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**BASIN DETAILS - 8.1.1B**

ARI Event	Floor Area (m <sup>2</sup> )	Water Depth (m)	Surface Area at Flood Level (m <sup>2</sup> )	Flood Storage (m <sup>3</sup> )
1 in 1 Yr	1835	0.14	2086	279
1 in 5 Yr	1835	0.32	2438	686
1 in 100 Yr	1835	0.70	3206	1748



LOT 188 TREEBY RD  
AND  
LOT 652 ANKETELL RD  
ANKETELL  
STORMWATER MGMT  
PLAN  
FOR  
QUMARS MESHGIN

REV.	DESCRIPTION	APPR.	DATE
A	FOR APPROVAL	HMD	10/01/18

**HITESH DUBAL**  
Consultant - Water Resources Engineering  
ABN No. 30 832 230766  
Phone +6143 008 8420  
Email dubalhitesh@gmail.com

**FIGURE 5**  
**EVENT PLAN**

DRAWING TITLE :

DEVEL. APPLIC. No.: DATE : 10/01/18  
PROJECT LEADER : HMD  
DESIGNER : HMD  
DRAFTSPERSON : HMD  
CHECKED : HMD

SCALE : NTS DATUM : AHD FULL SIZE : A3  
PROJECT No.: 170010\_2017-18 DRAWING No.: A004 REVISION: A





## **Appendix A**

### **Abstract of Stormwater Management Section from Approved LWMS (Bio-Science 2014)**

---



## 6.0 Stormwater Management Strategy

This LWMS proposal addresses how urban surface and stormwater quantity and quality should be managed to protect ecological, socio-economic and cultural values. It will assist decision making ensuring structural and non-structural remedial measures in developments are undertaken in a cost-effective, integrated and coordinated manner within a close proximity to the guidance given in the Stormwater Management Manual for WA (DoW). The approach will also be consistent with the key design objectives of water sensitive urban design practices detailed in the previous sections.

### 6.1 Conceptual Management Strategy

Surface runoff water flows over the catchment and can potentially inundate a development by exceeding the water holding capacity and drainage infrastructure. This becomes a greater problem in and around Perth where shallow superficial aquifers can reduce the infiltration rate of soils that intercept surface water flow. Suspended particles and pollutants in carrier water often cause long term damage to drainage systems, groundwater and ecosystems. Developments decrease the effective permeability of the overall site, and hence, increase peak runoff rates, flooding and erosion potential. Efforts will be made to manage risk by disconnecting constructed impervious areas from receiving water bodies (preventing direct discharge) and by reducing the amount of constructed impervious areas (DoW, 2009). This will be achieved using basins and infiltration systems.

Surface water flows are to be managed at both lot level and development scale to maintain predevelopment hydrology by retaining or detaining surface water, and to infiltrate runoff close to source. Drainage is split into two categories, minor and major, based on capacity requirements of varying ARI events;

- Minor Drainage- rooftop guttering, underground pipes, culverts, gullies, roadside swales and rain gardens
- Major drainage- specific road arrangements for overland flows, drainage basin reserves, overland swale systems, attenuation and infiltration areas

Minor drainage systems are designed to accommodate ARI events of a frequency up to 1 in 5 years whilst major drainage is designed to convey stormwater from events up to, and including, magnitudes of 1 in 100 year ARI storm events. Drainage systems are designed to attenuate the peak volume safely allowing time for slow release into the downstream network whilst offering water quality treatment prior to discharge. The release of water into receiving bodies should be at predevelopment rates and controlled by invert levels, orifice plates, riser pipes, weirs or similar infrastructure.



The design concepts for managing stormwater across the Anketell North Urban Cell are:

- Employ soakwells in lots to retain and infiltrate the 1-year ARI event and avoid direct runoff to the street conveyance system; this will increase infiltration and detention periods whilst reducing peak flow rates
- Rain gardens along roads to infiltrate 1 year ARI events
- Provide pipe systems within the road reserve to convey runoff for storm events up to the 5 year ARI storm event to the basins and legal discharge points (LPDs)
- Provide safe overland flow paths for 100 year ARI storm events to the basins and discharge points
- Retention/Detention: Provide adequate storage to attenuate post-development flows to predevelopment conditions and maintain the required free-board to finished lot levels
- Discharge to receiving environment: Provide an outlet to the nearest regional drainage line and ensure that flow rates and water qualities are within the design limits

### 6.2 Structural and Non-Structural BMPs

To maintain and improve water quality this development will use the treatment train approach to ‘source control’ pollutants using best management practices (BMPs) as detailed in the DoW report Stormwater Management Manual for WA (DoW, 2009). BMPs can be a cost effective means of reducing operation and maintenance expenditure post-development especially when utilising non-structural methods. BMPs are used in two forms; structural and non-structural.

The proposed development should employ a combination of the following BMPs at each level to achieve the required stormwater treatment;

**Table 10: WSUD Elements, Scale and Ownership**

Scale	Ownership	Best Management Practice: Water Quantity and Quality
Lot	Lot owner	Soakwells Rainwater tanks and porous pavement where appropriate. Gardens and amended soils
Street	Local Authority	Infiltration/vegetated roadside swales. Rain gardens Sediment traps
Catchment		Compensating, storage and infiltration basins. Conveyance swales in the Western Power Easement



The City of Kwinana offers advice on an extensive selection of Water and Energy Initiative BMPs that their residents can adopt throughout the household. The advice is made available through the council website and can be supplied to the new residents during handover.

### **6.2.1 Lot Level BMPs**

- Soakwells are widely used for direct infiltration of the relatively clean runoff from roofs generated in frequently occurring events (up to 5 year ARI) especially in the free draining sand soils. Soakwells will be to CoK specifications
- Soil sampling is required to ascertain the phosphorus retention capacities and particularly that of the fill to be used
- Reducing areas of lawns that may require fertiliser and irrigation
- Minimise connected impervious areas to no more than 70% of the lot. Applications where impervious surfaces exceed 70% of the lot should only be considered where compensation measures are taken to reduce the amount of stormwater runoff proposed
- Rainwater harvesting tanks shall be made available during planning and construction stages
- Education campaigns to increase residential awareness of pollutant control i.e. by using fertilisers correctly and using techniques for minimising stormwater runoff pollutants. Information is to be provided to new homeowners by developers and builders
- Inclusion of native planting suitable to Perth soil conditions in garden design and landscaping strategies

### **6.2.2 Street Levels BMPs**

Treatment of storm runoff from road surfaces that potentially contain nutrients, heavy metals, hydrocarbons and other pollutants is paramount in WSUD. Grassed swales and bioretention measures will be used to promote settlement of suspended particulate matter and offer a degree of nutrient removal from carrier water and reduce eutrophication in the receiving bodies of water whilst improving the aesthetics of the development.

Infiltration/bioretention systems, such as rain gardens, vegetated swales and leaky manholes, will be incorporated into road design across the development to assist in providing attenuation and temporary storage, critical to water quality treatment. Street sweeping will reduce particulate contaminants entering stormwater networks to improve the overall effectiveness of bioretention systems and reduce costs associated with maintenance.

### **6.2.3 Catchment Level BMPs**

Catchment level BMPs are predominantly storage basins to improve water quality prior to any discharge into regional drains or infiltration. Detention basins are most effective when the contaminants are primarily particulate but removal of soluble (bio-available) contaminants, such as phosphorous and nitrogen, may also be achieved when retention times are sufficient and



basins are vegetated. Rainfall events less than 100 years will be conveyed to basins through vegetated swales and rain gardens.

In general, bioretention areas in storage basins are required to constitute a minimum of 2% of the impervious connected area. The basins will also utilise high PRI materials in their design to improve nutrient stripping. Source controls compliment basin and swale use by limiting the use of nutrient application through appropriate landscape design and plant species selection. Conceptual basin designs are provided in Appendix D. The basins provide visual/landscape amenity and ecological diversity. In the case of linear storage basins, consideration should be given to vegetation to reduce aesthetic intrusiveness.

The LWMS assumes that drainage for the LSP can be accommodated in part, in the area presently zoned Urban Deferred under the MRS (to the north of the LSP). Given the advanced state of planning and the pattern of land ownership for that area, it has been assumed that this land will ultimately convert to an Urban zone, facilitating a level of concurrence with the development of land within the LSP. If the land proves unavailable for drainage at the relevant stage of approval/development of dependant land in the LSP area, then alternate means for temporary or permanent drainage to service the relevant portion of the LSP must be provided by the developer. This drainage service will likely involve directing a larger portion of surface flows south into detention basins.

Some water from large storm events will be directed to Treeby Lake as per the predevelopment flow conditions. This will also improve the hydrologic regime of the lake by ensuring a continued water supply to the lake in a time of declining rainfall and groundwater. The *Jandakot Drainage and Water Management Plan* (DoW, 2009) identified the requirement for 31,500m<sup>3</sup> of storage for the 100 year event to be provided across the development. The structures required to direct the water to the lake will be defined at the UWMP stage, however current planning identifies overland flow as the likely method. Overland flow will most likely be facilitated by the basin overflow system i.e. weir or riser pipe/ orifice plate structures to allow flows once a set invert level is reached in low frequency events. Overland flow paths will require some protection from erosion i.e. rock lined swales. The road surfaces will also be used to channel surface water flows towards basins in 100 year storm events.

#### **6.2.4 Site Constraints and Structural BMP Selection**

The primary requirement of stormwater management is to maximise infiltration through the use of structural source control BMPs. To identify the most appropriate source control BMPs, the following is required:

- Investigations to determine baseline water quantity and quality



- Site specific geotechnical and hydro-geological assessments to ascertain whether the site is capable of infiltrating the runoff generated primarily based on local soil types and conditions and ground water levels
- Subdivision layouts detailing streetscapes

The site conditions and constraints that must be considered (in addition to the efficiency of BMPs to reduce nutrient loads) prior to the selection of appropriate BMPs is summarised in **Table 11**.

**Table 11: BMPs and Site Constraints**

Structural BMP	Consideration
Infiltration (soakwells, porous pavements)	Ground water level and quality Soil types (i.e. permeability, phosphorous retention capacity, acid sulfate and contaminated zones)
Bio-retention	Groundwater level and quality Soil types (i.e. permeability, phosphorous retention capacity, acid sulfate and contaminated zones) Subdivision layout

### 6.3 Hydrological Modelling

To develop a relevant stormwater management strategy for the proposed development, hydrologic and hydraulic modelling have been undertaken for the catchment with existing and post-development scenarios. A computer simulated model was produced by Bioscience using XP SWMM software package to calculate runoff rates for different average recurrence interval (ARI) rainfall events. XP is a comprehensive package for dynamic modeling of stormwater by developing link-node (1D) and spatially distributed hydraulic models (2D) for analysis and design to aid in water resource management.

The XP model setup utilises topographical data to create an elevation base map or digital terrain map (DTM). The DTM is split into post development catchment boundaries based on topography and the local structure plan (LSP) as shown in **Figure 14**. The link and node details for the site are input manually to represent the real world (and proposed) drainage network onsite from information collected during site investigations and provided by the developer/ engineer. The runoff sub-catchments are each designated a landuse runoff coefficient and drainage node based on surface covering and geotechnical information i.e. sand, sandy clay, clay, grass, road. All links and nodes are joined together in a continuously branched drainage system with outfall points to match the proposed legal discharge points (LPDs) onsite. The software is capable of comprehensively modelling the hydrologic and hydraulic components of stormwater management systems to determine sub-catchments peak discharge flows and detention basin volumes required to manage surface water flows. The XP model was calibrated against the DoW and VDM predevelopment flow conditions.



Preliminary analysis of the development and its constraints are summarised in this LWMS and further detailed analysis will be undertaken as a part of the cell structure and UWMP. Data used as input into the hydrologic module of the XP model to generate runoff hydrographs for the sub-catchments can be found in **Appendix B**.

### **6.3.1 Rainfall**

Design rainfall for the hydrologic model has been determined based on Australia Rainfall and Runoff (ARR, IE 2000) Intensity Frequency Duration (IFD) data for Jandakot. Hydrologic and hydraulic analysis has been undertaken with 1, 5, and 100-year ARI storms for duration between 15 minutes and 72 hours. The IFD data used in the modelling are tabulated in **Appendix B**.

### **6.3.2 Post Development Land Use Assumptions and Loss Models**

Different soil types and land uses have different infiltration characteristics and runoff rates that have been factored into the model and calculations. Land uses for the post-development scenario have been extracted from the Local Structure Plan (**Figure 2**). The aerial images show the existing catchments are comprised of rural and bush land with predominantly sandy soils and have very little impervious surfaces. The proposed land uses in the post-development scenario include single and group housing residences, commercial and retail areas, a community purposes site, public open spaces (POS) and road reserves and result in increased runoff.

Catchments 1, 2.1, 2.3, 3.2, 4, 5.2, 6.2 and 7.2 are external to the North Anketell development and are not to be developed and runoff will remain the same as predevelopment rates identified in Section 3. The volumes of surface water generated from these sub catchments have been included in drainage calculations to assess the existing and proposed water management strategy and discharge flows from the proposed LPDs. Undeveloped areas generally have a very low runoff rate up to the 100 year event as surface water infiltration rate is high.

Anketell North Urban Cell sub-catchments was divided into each of the proposed land uses (i.e. R20 residential, commercial, POS) and the fraction impervious calculated as a weighted coefficient. An average roof area was assumed for each residential land use category and soakwells sized to infiltrate the 1 year ARI event from the roofs. These values are used to calculate runoff rates. A summary of the post development weighted runoff coefficients for each catchment, along with the associated peak discharge is provided in **Table 12**.

**Table 12: Summary of Hydrologic Analysis**

Sub Catchment Number	Area (ha)	Weighted Coeff. Of Runoff	XP Surface Runoff Volume (m <sup>3</sup> )			
			1 year	5 year	10 year	100 year
8.1.1	6.545	<b>0.767</b>	681	1279	1405	2631
8.1.2	2.798	<b>0.662</b>	251	472	519	971
8.1.3	5.944	<b>0.673</b>	542	1019	1119	2096
7.1.1	6.699	<b>0.663</b>	602	1132	1243	2328
7.1.2	3.327	<b>0.636</b>	287	540	593	1110
7.1.3	2.418	<b>0.603</b>	198	372	408	765
7.1.4	4.152	<b>0.612</b>	345	648	712	1333
7.1.5	5.761	<b>0.614</b>	480	902	990	1854
7.2	13.477	<b>0.035</b>	64	120	132	247
2.4.1	3.106	<b>0.612</b>	258	485	532	997
2.4.2	8.978	<b>0.644</b>	784	1475	1619	3032
2.2.1	6.977	<b>0.633</b>	599	1126	1236	2316
2.2.2	7.431	<b>0.624</b>	629	1182	1298	2431
2.2.3	3.946	<b>0.655</b>	351	659	724	1356
2.2.4	12.05	<b>0.689</b>	1127	2119	2326	4357
3.1.1	5.563	<b>0.216</b>	163	307	337	630
3.1.2	9.976	<b>0.628</b>	850	1598	1755	3287
3.1.3	5.521	<b>0.498</b>	373	701	770	1443
3.2.1	10.272	<b>0.035</b>	49	92	101	189
3.2	30.057	<b>0.015</b>	47	115	126	278
4	82.814	<b>0.015</b>	129	317	348	765
5.2	29.647	<b>0.035</b>	141	265	291	544
2.1	53.736	<b>0.015</b>	84	206	226	496
2.3	18.025	<b>0.015</b>	28	69	76	166
1	35.129	<b>0.015</b>	55	134	148	324
<b>TOTALS:</b>			<b>9,116</b>	<b>17,334</b>	<b>19,033</b>	<b>35,947</b>

## 6.4 Hydraulic Modelling

The sub-catchment hydrographs generated during the hydrologic modelling were routed through a hydraulic network representing the development in the hydraulic mode of XP-SWMM to ascertain the peak flow rates, flood levels and required peak storage volumes.

### 6.4.1 Drainage Flow Paths

In predevelopment conditions surface water flows overland either towards the soakage area (LPD1) and the northern discharge point (LPD2) or south to Treeby Road Lake and the Peel Sub P





Drain (LPD3). The sandy nature of the soil across the study area resulted in high infiltration rates that, in frequent rainfall events, can have little or no notable runoff.

Significant storage of 31,500m<sup>3</sup> exists in Treeby Road Lake (see DoW Ultimate Drainage Plan 100 year events **Appendix C**). Results of predevelopment modelling indicate (**Figure 7**) that for all storms up to and including the 100 year ARI event, no runoff is discharged from Treeby Road Lake. In the post-development scenario catchments 1 and 2 do not contribute runoff at the LPD during all events up to and including the 100 year ARI. Treeby lake provide considerable mitigation of peak discharges and significantly lowers peak discharges observed at LPD3.

Development of the study area requires modifications to the existing surface elevations and land uses resulting in changes to the existing flow patterns. Increased post development surface water will be managed through the drainage network as described in Section 6.2. All devices are sized to maintain pre-development peak discharges. The alignment of the Peel Sub P Drain is to remain the same ensuring the flow within it supports the hydrologic regimes and maintains ecological habitats. Surface water flow paths, catchment names and basin locations for post development events are shown in **Figure 15**. Outflows from the development are given in the 1, 5 and 100 year event plans (**Figures 16-18**).

Major and minor stormwater management for events up to the 100 year ARI storms consist of conventional piped drainage and kerb system with intermittent bio-retention/infiltration systems (swales and basins). During the less frequent 5 to 100 year ARI events, flows will exit the high flow outlet of the basins and continue as overland flow to the existing lakes and regional drains (Figures 16-18 give outflow rates).

#### **6.4.2 Soak Wells**

Soak wells have been sized to capture and retain (at a minimum) the 1-yr ARI runoff from roof areas to promote at source infiltration within individual lots. A permeability of  $2 \times 10^{-4}$ m/s was used for sizing of the soak wells and based on a proposed development density for the site of R20, an average roof area for each lot of 200m<sup>2</sup> was used for each residence.

A summary of the possible configurations for the site is shown in **Table 13**

**Table 13: R20 Soakwell Calculations for the Subject Site**

Nominal Diameter (mm)		1500	1500	1500	1800	1800	1800	1800	1800
Internal Diameter (m) Liner		1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8
Depth (m)		0.9	1.2	1.5	0.6	0.9	1.2	1.5	1.8
Allowable Roof Area (m <sup>2</sup> )		107	127	147	117	154	183	212	237
Storm Duration (min)	Rain-Fall (mm/hr)	LOCALITY OF JANDAKOT ROOF/PAVEMENT AREA ABLE TO BE DRAINED BY VARIOUS SIZE SOAKWELLS							
10	44.4	222	294	365	217	320	423	526	629
15	36.2	184	243	301	181	265	350	434	518
20	31.0	164	215	266	162	236	310	384	458
30	24.6	142	185	228	143	205	267	329	391
45	19.3	126	163	200	129	182	235	288	340
60	16.1	118	151	184	123	170	218	265	312
90	12.5	110	139	167	118	159	200	240	281
120	10.4	107	133	158	117	154	191	228	264
240	6.7	107	127	147	126	154	183	212	240
360	5.2	113	130	147	138	163	188	212	237
480	4.3	120	136	151	151	173	196	218	240
600	3.7	128	142	157	164	184	205	225	246
720	3.3	136	149	163	177	196	215	234	253
1080	2.6	159	171	182	213	229	246	262	279
1440	2.1	182	192	203	247	262	277	292	307
1800	1.8	204	214	223	280	294	308	322	336
Soakwells Required		2	2	2	2	2	2	1	1

#### 6.4.3 Detention Structure Configuration

Detention basins are proposed across the Anketell Urban Cell (North and South). A summary of the basin volumes required is included as **Table 14**. The locations of the basins are shown in **Figure 15**. Basin cross sections are provided in **Appendix D**.

Detention basins have been designed with batter slopes of 1:6, to have a maximum depth of 1.2m during the major 100 year ARI storm event and to provide adequate freeboard to ensure the integrity of the top of bund (TOB) during a major storm event. Several of the basins have riser type structures to control discharge to predevelopment rates. Swales are to have a maximum depth of 0.5m. Water depth is acceptable to 0.3m under the Western Power lines for conveyance only.



**Table 14: Detention Basin Summaries**

Basin	Base Area	MGL	Existing Surface Level	Base Level	1 Year			5 Year			100 Year			Total Volume Available
					Max Volume RQD	Max Surface Area	TWL	Max Volume RQD	Max Surface Area	TWL	Max Volume RQD	Max Surface Area	TWL	
8.1.1(b)	2000	14.1	29	28.015	0	2000	28.015	750	2272	28.366	2380	2814	29.008	2980
8.1.3(b)	750	16.4	34	33.102	0	800	33.102	230	948	33.374	1142	1591	34.100	1485
7.1.1(b)	2000	17.8	25	23.800	0	2000	23.800	826	2265	24.038	2450	3165	24.758	3260
7.1.4(b)	100	20.2	26.2	25.000	0	100	25.000	246	724	25.667	840	1600	Weir @ 26.1	840
7.1.2(b)	750	19.3	26	24.900	0	750	24.900	151	875	25.086	1448	1732	25.956	1450
7.1.3(b)	270	19.4	26	24.163	0	350	24.163	146	405	24.450	552	864	25.187	716
2.4.2(b)	1000	16.5	31	30.496	0	1800	30.496	530	1874	30.802	2230	2644	31.557	2610
2.2.2(b)	1500	16.2	18.4	17.200	0	1500	17.200	749	2030	17.626	2756	3200	Riser @ 18.200	2760
2.2.3(b)	365	18.8	21.5	20.403	0	365	20.403	188	613	20.791	929	1300	21.578	965
2.2.4(b)	443	17.8	20	18.800	0	443	18.800	736	1549	19.278	2178	3100	Riser @ 20.000	2180
3.1.3(b)	3000	20.4	22	20.993	0	2200	20.993	810	3380	21.247	3330	4450	Riser @ 21.9	4750
Treeby Lake	31500	15.5	16	15.500	0	30000	15.500	3628	32205	15.617	18840	39793	16.002	31500

*Rain gardens, swales and soakwells will infiltrate rainfall from the 1 year event at source*



#### **6.4.4 Detention Basin Outlet Structures**

Basins and outlet structures have been designed and modelled to achieve a comparable LPD outlet flow with the predevelopment conditions. Surface water volumes and storage requirements were calculated to provide adequate attenuation within the basins. The outlet type, invert and outflow rate for each basin and LPD are given in **Table 15**.

All basins and outlet pipe work have been sized for 1, 5, 10 and 100 year ARI events within the XP SWMM model with results for the 1, 5 and 100 year ARI events given in **Table 15**.

Basins 2.2.2(b) and 2.2.4(b) have been sized up to the 100 year ARI event to have minor flow into Treeby Lake to maintain predevelopment flow conditions and water dependent ecosystems. Flow modification can be achieved through the further usage of outlet structures such as orifice plates and weirs to divert flow when required. The Ultimate Drainage System in the Water Corporation's Peel Main Drainage Plan states that the total water volume for storage in Treeby Lake is to be 31,500m<sup>3</sup> with a maximum water level of 16.0mAHD. There is potential to increase water level in the lake to cater for 100 year events. This will require further modelling at UWMP stage to balance flow and water levels in the lake.

Swales running under the Western Power overhead powerlines are interconnected (under roads) by multiple culverts, sized to convey required loads in all events up to 100 years. The swale/culvert systems convey flow under gravity to basins 7.1.1(b) and 3.1.3(b) for infiltration or restricted flow into regional drains.

Basins and swales are to be grassed or vegetated with nutrient stripping plants and utilise soil improvement to offer an efficient treatment to surface water flows throughout the development.

Further detailed basin modelling will be undertaken at UWMP stage to finalise storage requirements and ensure scour and erosion protection is offered by restriction of flow velocities.

**Table 15: Summary of Peak Discharges of Basins and the LPDs**

Basin	Base Level	Outlet Type	Outlet Invert Level	Peak Discharge Flow (m <sup>3</sup> /s)		
				1 Year	5 Year	100 Year
8.1.1(b)	28.015	None	N/A	0	0	0
8.1.3(b)	33.102	None	N/A	0	0	0
7.1.1(b)	23.800	None	N/A	0	0	0
7.1.4/2(b)	25.000	Weir to 7.1.2(b)	26.1	0	0	0.35
7.1.2(b)	24.900	1*150mm Pipe	25.1	0	0.051	0.074
7.1.3(b)	24.163	None	N/A	0	0	0
2.4.2(b)	30.496	None	N/A	0	0	0
2.2.2(b)	17.200	150mm Pipe and high level overflow riser into Treeby Lake flow path	17.3 & 18.4	0	0.032	0.081
2.2.3(b)	20.403	None	N/A	0	0	0
2.2.4(b)	18.800	2*150mm Pipe & high level overflow riser into Treeby Lake flow path	18.9 & 19.9	0	0.017	0.084
3.1.3(b)	20.993	150mm Pipe & overflow riser pipe to Peel Sub P Drain	21.1 & 21.9	0	0.014	0.062
Treeby Lake	15.500	Weir overflow to Peel Sub P Drain	16.1	0	0	0
LPD1	N/A	Discharge North West	N/A	0	0	0
LPD2	N/A	Discharge North to future Wandj Development	N/A	0	0.051	0.074
LPD3	N/A	Discharge South to Peel Sub P Drain	N/A	0	0.014	0.062

The Jandakot DWMP figures 4.2b & 4.3a (Appendix C) identified the predevelopment discharge rates for each LPD in 10 and 100 year events:

- LPD 1 - Discharge: All events fully infiltrated
- LPD 2 - Discharge: 10 year: 0.065m<sup>3</sup>/s (50% flow north to Peel Sub R)  
100 year: 0.085m<sup>3</sup>/s (50% flow north Peel Sub R)
- LPD 3 - Discharge: 10 year: 0.030m<sup>3</sup>/s  
100 year: 0.060m<sup>3</sup>/s

All post development flows closely meet the predevelopment flows identified in the Jandakot DWMP and will ensure protection of infrastructure downstream of the development and will not inundate the Anketell South proposed development drainage system.



## 6.5 Flood Management

Managing storm runoff aims at preventing and/or minimising the risk of flooding. Road pipe drainage systems typically manage stormwater up to the 5-yr ARI event while the road reserves are designed to cater for overland flow up to the 100yr ARI. The UWMP will further develop these concepts to an engineered design.

### 6.5.1 Local 1 in 1 Year ARI and 1 in 5 Year Events

- Soakwells will collect and infiltrate roof runoff at source up to the minimum 1 year ARI event
- Rain gardens will collect and treat rain fall from 1 year events from roads
- A road pipe drainage system with leaky manholes will collect and convey flows up to the 5 year ARI event, discharging into bioretention pockets and infiltration systems incorporated into the median of the collector roads and within the designated drainage reserves
- Flush kerbing will be implemented to allow sheet flow and reduce pipe lengths and the need for side entry pits where possible
- Bubble-up pits are proposed at the entrance of the bioretention systems where runoff cannot enter as overland flow. These bioretention pockets have been sized to infiltrate/retain up to the 1 year 1 hour ARI event from all connected impervious areas on the site
- The 1 and 5 year ARI event plans are included as **Figures 16** and **17** respectively

### 6.5.2 Local 1 in 100 Year ARI Events

- The road kerb system will convey flows that exceed the capacity of the pipe drainage system in the 100-yr ARI event, discharging into the proposed detention basins. Detailed design of the drainage system will be undertaken during the UWMP to ensure that adequate freeboard is achieved from the local 1 in 100 year event
- The road network provides flood storage as well as conveyance in the 100 year storm events
- Minimum habitable floor level to be a minimum 0.5m above 100year flood levels to ensure public safety
- The 100 year event plan is included as **Figure 18**

Analysis at UWMP stage of flow velocities will determine scouring protection measures in the development and determine final floor levels to ensure they are minimum 0.5m above flood level. Surface flow velocity and depth checks will also be undertaken to ensure public safety during critical 100 year storm events.

## 6.6 Surface Water Quality Management

The DoW *Jandakot Drainage and Water Management Plan* indicates that the department is currently developing water quality targets and in the interim, treatment trains should be based



on the methodology established in the *Stormwater Management Manual for Western Australia*. Surface water quality should be managed through:

- On site retention of 1 year 1 hour ARI event flows in soakwells, swales and rain gardens
- Bioretention systems sized as 2% of the connected impervious areas
- Non-structural measures to reduce applied nutrient loads

#### **6.6.1 Lot Drainage Systems**

Whilst lot runoff may contain some gross pollutants, organic matter, sediments, nutrients and other contaminants, these are to be contained and removed by the lot drainage system. Contaminant loads are most effectively reduced by facilitating infiltration by;

- Soakwells to infiltrate clean roof runoff which would otherwise be discharged and come into contact with contaminants
- Lot levels are generally flat which reduces runoff rates and allows more time for the water to infiltrate and inhibits re-suspension of contaminants

The above measures assist in containing pollutants within lots and prevent the contamination of downstream receiving waters. Furthermore, nutrients may be reduced by appropriate use of fertilizers and using plants with a high nutrient uptake. These measures are to be promoted by providing educational material at the point of sale.

#### **6.6.2 Development Drainage System**

Surface runoff from roads will be directed through the development via the swale, rain garden, pipe and basin drainage network. The pipe network will convey water up to the 5-yr ARI event. Recent policies promote stormwater treatment measures that are designed to treat the peak flow from the 1-yr 1-hr ARI event. This would capture most minor and first flush events and will result in treatment of over 98% of the average annual stormwater runoff (DoE, 2004). Where practical, median infiltration/bioretention systems will be incorporated into the road reserve to promote at source infiltration.

To satisfy this requirement all flow from the 1-year 1-hr ARI event will be retained within vegetated swales and/or the vegetated core of the infiltration basins. Bubble-up pits and side entry pits will be used to direct piped runoff into the vegetated area which efficiently remove sediments and thus aid in further nutrient reductions. In addition, the swales and entry grates will collect gross pollutants.

The swales and detention/infiltration basins are to be vegetated with local native species selected for their ability to take up nutrients as well as contain high PRI materials to aid in phosphorus removal. The landscape design and list of vegetation species will be provided in the UWMP.



In addition to structural controls, maintenance practices are equally important for maintaining the effectiveness of the stormwater quality system. Excessive vegetation should be trimmed and/or removed routinely to promote growth and continual take up of nutrients, including routine removal of sediments and vegetative material (e.g. turf clippings) from the drainage network and road surfaces that would otherwise ultimately end up in the basins. A detailed maintenance plan will be included in the UWMP however the developer is likely to undertake this work until an agreed handover date (or survival rate is achieved) with the local authority is reached.

### 6.7 Ecological Protection

As the urban landscape changes, increased peak surface water flows rates are generated that potentially impact receiving environments by causing erosion and increasing the period of inundation of vegetation. Management of this risk is essential in maintaining and improving current hydrological regimes and supporting biodiversity across the development. Protection shall be offered to ensure wetlands do not suffer negative impacts from drying out due to diverted surface flows and localised lowering of groundwater table.

As previously identified, predevelopment surface water flows generated in the northern portion of the study area drain to Treeby Road Lake prior to ultimate discharge at the southern LPD. Changes to the urban fabric will essentially increase flows to Treeby Road Lake and alter the current hydrological regime. Consultation with the authors of the *Wetland Management Strategy*, Anketell Central Precinct (Lots 13 & 100 Treeby Road) assisted in developing a flow management strategy that did not adversely affect the hydrology and ecology of Treeby Road Lake. The objectives of this management strategy consisted of:

- Ensuring low flows (<5 year ARI) do not enter the lake
- Ensuring the maximum depth of the lake does not increase by more than 10%
- Maximising infiltration of runoff to ensure the lake continues to be fed by groundwater
- Allowing the large ARI events to continue to enter the lake

Outlet structures of the detention basins have been designed such that the low flow culverts will discharge to either the pipe drainage network, or as overland flow into the Peel Sub P Drain. This satisfies the requirements that the small ARI events (<5 year) do not enter the lake.

Whilst it is acknowledged that directing water to the lake will change its current hydrology, the lake being replenished with water from large storm events will improve its inundation periods that have reduced due to the drying climate. Peak water levels in the lake will be controlled through its connectivity with the Peel Sub P Drain at Thomas road by the outlet structures.





As discussed in Section 4.2.2, a wetland management strategy has been developed for the Treeby Road Lake. For more details, please refer to *Wetland Management Strategy, Anketell Central Precinct (Lots 13 & 100 Treeby Road)*, prepared by Endemic (March 2010).

### **6.8 Disease Water Vector and Nuisance Insects Management**

Mosquitoes breed in standing water in natural and man-made wetlands, as well as a range of water bodies and storage containers in urban environments. They can breed in fresh, brackish and saline water conditions and different mosquito species have different habitat requirements. To reduce health risks from mosquitoes, retention and detention systems are designed to ensure that between the month of November and May, detained stormwater is fully infiltrated in a time period not exceeding 96 hours.

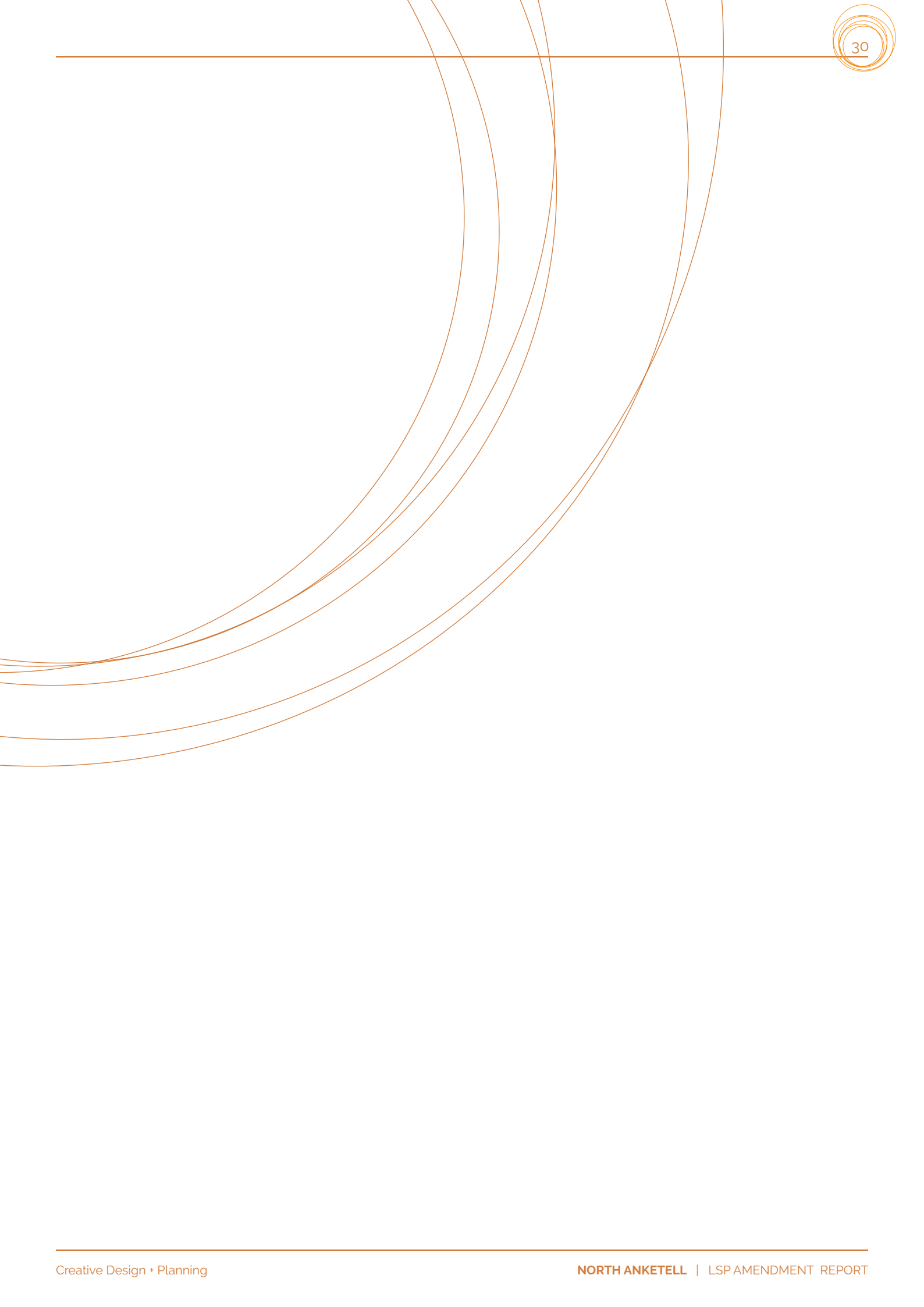
The most effective mosquito management programs are integrated programs, involving more than just the application of chemicals to kill larval or adult mosquitoes. Appropriate land use planning is crucial for achieving adequate buffers between wetlands and residential and recreational land uses.

Direct methods, including physical control (such as source reduction by filling, draining or removing breeding sites, screening rainwater tanks, wearing protective clothing), biological control (such as adding fish to ponds), chemical control (the use of pesticides to kill mosquitoes and the use of personal repellents) and cultural control (such as planning outdoor activities to avoid mosquito activity times, or building screened outdoor living areas) are also important components of an integrated mosquito management program. Application of pesticides for mosquito control must be in accordance with the product label. Environmental approval may be required if mosquito management actions are to be undertaken in conservation areas.

# Appendix 6

## **SERVICING REPORT**

(A. KHOSRAVI ENGINEERING SERVICES)



# **A. KHOSRAVI ENGINEERING SERVICES**

## **CONSULTING ENGINEERS – PROJECT MANAGERS**

Our Ref: 5208

4 January 2018

Creative Planning  
P.O.Box 7655  
Cloisters Square  
WA 6850

Attention: Frank Arangio

Dear Frank

### **SERVICING REPORT**

#### **LOT 188 TREEBY ROAD AND Lot 652 ANKETELL ROAD - ANKETELL**

This report has been commissioned by Qumars Meshgin to detail servicing requirements for the single residential developments, mixed use and commercial developments at Lot 188 Treeby Road and Lot 652 Anketell Road in Anketell. The report has been prepared by A.Khosravi Engineering Services whilst every care has been taken in preparation of this report, Government Regulations, Local Authority requirements, plus site conditions unknown to A.Khosravi Engineering Services at the time of writing this report may affect the development of this lot.

### **SERVICING CAPABILITY**

#### **Introduction**

The proposed development area will be provided with full services in a high standard of development. A.Khosravi Engineering Services have provided the following summary of engineering requirements.

Lot 188 Rd is uniquely positioned at the intersection of Treeby Rd and Anketell Rd on the southern side of Anketell Rd. Lot 188 is positioned east of Lot 4 which is a future residential and commercial development.

Lot 652 Anketell Rd is uniquely positioned on the southern side of Anketell Rd and on the western side of Lot 2 Anketell Rd which is a future residential , commercial development.

This document will form the basis of engineering input into the overall submission for Lot 188 Treeby Rd and Lot 652 Anketell Rd, which will be complied by the nominated Planner Creative Planning. The document will aim to satisfy the requirement of WAPC and other relevant regulatory authorities in the structure planning process.

## Earthworks

Lot 188 is sloping from RL 41 m AHD on the common southern boundary with Lot 30 in a northerly direction to RL 30m AHD at the interface with Anketell Rd  
Lot 652 is sloping from RL 25 m AHD on the common southern boundary with Lot 30 in a northerly direction to RL 20m AHD at the interface with Anketell Rd.

Apart from the earthworks necessary for the major distributor roads the only other major earthworks treatment will be remoulding of various areas within lot 652 to achieve the drainage requirements to the southern side of this lot.  
It is intended to design for the absolute minimum of earthworks so that the natural topography could be retained.

Pre-development site visit of the site has revealed that site classification across the site should be "Class A".

## Roadworks

The subdivision roads within the subject area will be constructed in accordance with the City of Kwinana's subdivisional Guidelines and Standards. We would expect the following configuration for the roads unless nominated otherwise by the traffic engineer.

- **Neighbourhood Roads** 20 m wide road reservation with 3m wide pavement lanes, on-road cycling accommodated within the 6m wide pavement.
- **Community Roads** 14.2 – 15.4 m wide road reservation with 3m wide pavement lanes.

All paving will be black asphalt with traffic calming devices as required and car-parking areas will be in red asphalt. Pavement widths will be in accordance with Livable Neighborhood criteria.

Mountable and semi mountable kerbing will bound the roads with flush kerbing to be considered where POS abuts road reserve to allow runoff into the grassed areas.

Dual Use Paths and footpaths will also be provided in accordance with the guide lines and the Department of Planning and Infrastructures requirements.

## **Servicing**

### **Water Supply**

In the Water Corporation ultimate scheme, all lots created can be serviced with the construction of proposed water reticulation mains varying in size from 250mm, 200mm and 150mm in diameters would be able to service the subject sites.

### **Wastewater Disposal**

In the Water Corporation ultimate scheme, wastewater generated from Lot 188 Treeby Rd and lot 652 Anketell Rd gravitates through proposed future gravity pipe network along Treeby Rd and Anketell Rd into Thomson's Lake Pumping Station M-174

### **Power Supply**

All electrical power reticulation to the proposed development areas will be underground in accordance with WAPC Policy.

The existing high and low voltage aerial network extends along Anketell Road and Treeby Road by introduction of transformers including upgrading of aerials as deemed necessary the subject lands could be serviced with underground power.

### **Telecommunication**

The existing telecommunication infrastructure within Anketell Rd and Treeby Rd could be extended to service Lot 188 Treeby Rd and Lot 652 Anketell Rd.

### **ATCOgas**

The proposed 160 HP, ATCOgas main infrastructure within Anketell Rd could be extended to service Lot 188 Treeby Rd and Lot 652 Anketell Rd.

### **Stormwater Drainage**

The stormwater drainage requirements within the subject sites will need to be constructed in accordance with the City of Kwinana's subdivisional Guide lines, Bioscience Local Water Management Strategy (LWMS) and letter report on stormwater management prepared by Hitesh Dubal.

As a general principle for accommodating stormwater drainage, the Water Corporation, Department of Water and environmental Regulations, advise that developers should endeavour to retain as much surface runoff on-site as possible in

accordance with water sensitive design guidelines and to make provision for nutrient stripping strategies in compliance with LWMS.

The drainage strategy for the subject land is to maximise infiltration to the groundwater through the provision of landscaped basins which could be periodically wet during the winter depending on the storm intensity and dry in summer. It is also proposed to provide large soakage areas within the base of drainage structures to further assist in disposal of stormwater via infiltration.

In the event of discharge of stormwater run-off being permitted from the urban development of the subject land. Stormwater run-off will be required to be compensated to the pre-development levels. It should be noted that preliminary site visit has revealed that disposal of stormwater run-off from the site via soakwells and infiltration would be permissible due to the permeability of onsite sandy material.

Effectively the LWMS emphasises the use of Water Sensitive Urban Design (WSUD) principles in particular stormwater treatment and management of water quality. LWMS outlines the requirements for various elements which will be incorporated into the detailed design as deemed applicable and necessary so that the best possible stormwater drainage design is achieved.

Yours sincerely  
**A.Khosravi Engineering Services**

*A.Khosravi*

Addy Khosravi MIE Aust CPEng NPER



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PO BOX 6697 EAST PERTH WA 6892

P (08) 9325 0200 | F 9325 4818



Recommended POS Relocation



Reduced to drainage and fire buffer along boundary only

Recommend POS Relocation

PLAN 1 - LOCAL STRUCTURE PLAN MAP

Anketell North

## **15.5 Adoption of Local Planning Policy No.11: Site Requirements and Standards for Development within the Industrial Zones**

### **DECLARATION OF INTEREST:**

Mayor Carol Adams declared an impartiality interest due to her husband providing a submission to the item on behalf of Kwinana Industries Council (KIC).

### **SUMMARY:**

This report presents Draft Local Planning Policy No. 11 (Draft LPP): Site Requirements and Standards for Development within the Industrial Zones (refer Attachment A), for adoption under the City's Local Planning Scheme No.2 (LPS2). The Draft LPP provides greater clarity and guidance to landowners, developers and City of Kwinana Officers on the assessment of applications on land zoned for industrial purposes under LPS2. The existing Local Planning Policy, Development within Industrial Zones (refer Attachment B) will be rescinded.

Council considered the Draft LPP at its Ordinary Council Meeting held on 10 October 2018, and resolved to adopt the document for advertising purposes. City Officers subsequently advertised the Draft LPP and one submission has been received. This submission is from the Kwinana Industries Council (KIC), which, while supporting the draft policy, has raised a number of concerns with landscaping and crime prevention (refer Attachment C). It is proposed that these matters be the subject of further consultation with the KIC following adoption of the policy.

The Draft LPP will align with modern changes in construction standards and provide an updated set of design criteria to help ensure a high standard of built form is achieved throughout the City's Industrial Zones. The Draft LPP will be considered in the assessment of development applications for uses on industrial zoned land under LPS2.

City Officers propose only minor amendments to the Draft LPP (refer Attachment A) to address textual changes.

### **OFFICER RECOMMENDATION:**

That Council:

1. Adopt Local Planning Local Planning Policy No. 11: Site Requirements and Standards for Development within the Industrial Zones, as detailed in Attachment A.
2. Endorse the responses to the submission received as detailed in the Schedule of Submissions (Attachment C)
3. Publish notice of the adoption of Local Planning Policy No.11: Site Requirements and Standards for Development within the Industrial Zones in a newspaper circulating in the Scheme area.
4. Rescind Local Planning Policy: Development within the Industrial Zones, as detailed in Attachment B.
5. Request City Officers engage further with the Kwinana Industry Council in respect to its concerns about landscaping and crime prevention within the Kwinana Industrial Area.

### 15.5 ADOPTION OF LOCAL PLANNING POLICY NO.11: SITE REQUIREMENTS AND STANDARDS FOR DEVELOPMENT WITHIN THE INDUSTRIAL ZONES

#### **DISCUSSION:**

To encourage and accommodate current approaches to industrial development, the Draft LPP has been prepared to allow a more flexible and practical approach to development within the City's industrial zones. It should be noted there are sections of the current policy, which remain essentially unchanged and have been carried over in the Draft LPP.

With the final adoption of the Draft LPP by Council, the current Planning Policy, "Development within the Industrial Zones", will be rescinded.

#### LPP No. 11 Site Requirements and Standards for Development within the Industrial Zones

The primary focus of the Draft LPP is to establish and outline the City's position with respect to acceptable variations to LPS2. The Draft LPP establishes the extent of variations to LPS2 that Council is prepared to consider, and specifies the corresponding development requirements which apply when seeking such variations. To encourage and accommodate current approaches to industrial development, the Draft LPP has been prepared to allow a more flexible and practical approach to development within these zones.

#### Setbacks

The current setback provisions for the industrial zones under LPS2 are considered restrictive and do not take into account modern building practices. Rather than linking setbacks with zonings, the Draft LPP links setbacks to the utilisation of the property. The one-size fits all approach of LPS2 is proposed to be complemented by the Draft LPP with a more flexible and less restrictive approach to utilisation of an industrial property. By reducing setbacks and permitting buildings to be built on side or rear boundaries, it helps reduce outside storage of equipment and materials and represents a more effective use of industrial land.

The Draft LPP requires that any development proposing reduced boundary setbacks must include a minimum of three to five (3-5) of the General Design Principles outlined in the policy. The General Design Principles outlined in the Draft LPP have been prepared to deliver good quality built form outcomes. It is important to note, however, that reduced setbacks will only be considered where the provisions of the Draft LPP have been complied with and all assessments will be based on the merits of a development application.

#### Landscaping

Achieving quality landscaping in industrial areas is a challenge. In addition to this, the current policy and LPS2 does not take into account lot sizes (many industrial properties have extensive frontages) and water restrictions causing maintenance issues for large landscaping areas.

Clause 6.8.7 of LPS2 requires a minimum of 5% of the site to be developed and maintained as a landscape area. The requirement can be reduced to 2.5% where the applicant agrees to landscape the verge. However, there are a significant number of multi-hectare lots within the industrial zones which (under LPS2) will require thousands of square metres of landscaped areas to be provided. Over, these areas would become difficult for property owners to maintain appropriately.

### 15.5 ADOPTION OF LOCAL PLANNING POLICY NO.11: SITE REQUIREMENTS AND STANDARDS FOR DEVELOPMENT WITHIN THE INDUSTRIAL ZONES

The Draft LPP aims to achieve quality smaller landscaping areas that can be appropriately maintained to a high standard. The focus is on establishing landscaping areas within the verge that will positively contribute to the streetscape. The Draft LPP sets minimum landscaping areas appropriate for varying lot sizes and provides some flexibility for multi-hectare lots. Landscaping strips are encouraged under the Draft LPP to encourage improved visual amenity for all street frontages.

#### Plot Ratio / Site Cover

The Draft LPP provides for increased flexibility for industrial development by allowing the maximum plot ratio/site coverage requirements of LPS2 to be varied, as long as adequate onsite car parking, landscaping, accessways, loading/unloading and storage areas are provided. By allowing more flexibility, development of lots within the industrial zones can be better utilised. It allows businesses to expand and remain in the same location.

#### Fencing

LPS2 requires that any security fence be subject to a minimum 1.5 metre setback from the front boundary of a lot. The Draft LPP encourages minimal fencing within the front setback area, however where fencing cannot be located behind the front building line, a higher quality fencing combined with good quality landscaping will be encouraged.

Fencing will be permitted with a nil setback to the front property boundary where;

- i. The fencing is necessary for security purposes; and
- ii. Quality fencing is proposed; and
- iii. Landscaping on the site is substantially upgraded or new landscaping is proposed along the frontage that meets the requirements of LPS2 or the acceptable areas outlined in the Draft LPP.

#### Public Art

The Draft LPP aims to seek opportunities to introduce art on both public and private land, which will add to the visual interest and character of the City of Kwinana's Industrial Areas. Opportunities to introduce art within both public and private land, as part of development, are encouraged as per the City of Kwinana's Local Planning Policy No.5: Development Contribution towards Public Art.

#### Crime Prevention Through Environmental Design (CPTED)

The Draft LPP has incorporated CPTED principles following Elected Member feedback relating to the impact of landscaping on the safety/security of the site (eg. a potential hiding place for criminals targeting industrial areas). In this regard, the Draft LPP directs landowners and applicants to incorporate the requirements of the City of Kwinana's Local Planning Policy No. 8: Designing Out Crime. This policy is to be considered for all future development within the City of Kwinana.

#### Community Consultation

Council considered the Draft LPP (refer to Attachment A) at its Ordinary Council Meeting held on 10 October 2018, and resolved to adopt the document for advertising purposes. In accordance with Council's resolution, City Officers advertised the Draft LPP from Friday 19 October 2018 to Friday 9 November 2018 inclusive. One submission was received from the Kwinana Industries Council (KIC) (refer Attachment C).

### 15.5 ADOPTION OF LOCAL PLANNING POLICY NO.11: SITE REQUIREMENTS AND STANDARDS FOR DEVELOPMENT WITHIN THE INDUSTRIAL ZONES

The KIC submission was in support of the Draft LPP but raised concerns regarding landscaping and its' maintenance, and the potential for criminal activity to occur utilising landscaping areas for cover. The submission also requested some minor wording changes within the Draft LPP. All other points raised were supportive in nature and have been noted.

#### Landscaping and Criminal Activity

The most notable of the concerns raised was regarding the Draft LPP approach to mandating a percentage of landholdings for landscaping and the problems it can create for amenity given that there are few incentives for industry to maintain these areas such as road verges. KIC raises the question about whether landscaping as currently proposed is necessary. Alternative approaches to landscaping are suggested including those which may reduce the capacity for criminal activity in the City's Industrial Zones.

In this respect, City Officers are of the view that good quality landscaping outcomes are an important part of good planning for industrial areas, largely from a visual amenity perspective.

One purpose of the Draft LPP is to introduce more flexibility and a performance-based approach towards landscaping with the focus on quality, potentially smaller landscaping areas that can be realistically maintained, which also seek to improve the amenity of the City's industrial areas.

The application of areas and percentages under LPS2 for landscaping in industrial areas is an approach to new development that seeks to ensure a consistent and relatively simple approach to the delivery of landscaping and hence, the visual amenity/ streetscape on private land in industrial zones. The Draft LPP aims to allow flexibility to the provisions of the LPS2 but retains the approach to the delivery of landscaping.

The KIC suggestion that an alternative approach be pursued has merit for future discussion and City Officers support further discussion with KIC about landscaping in the City's Industrial Zones. Such discussion may also influence work currently being undertaken by the City's Engineering Department which is presently preparing a Landscaping Strategy for consideration for the public realm across the City including street tree planting in industrial areas.

With regard to potential criminal activity, Council has recently adopted the City of Kwinana Local Planning Policy No. 8: Designing Out Crime (LPP8). A fundamental aspect of the policy are the concepts of Crime Prevention Through Environmental Design (CPTED). These focus on influencing offender decisions that precede criminal acts to minimise the potential of these acts occurring. In this respect, the location and type of landscaping may well have an influence on the capacity for crime.

The Draft LPP includes 'Part 6.4 Crime Prevention Through Environmental Control' requiring that development should apply the CPTED principles. Applicants must address this and it is anticipated City Officers will consider the approaches made on a case by case basis balancing CPTED principles with best quality and appropriate landscaping design.

**15.5 ADOPTION OF LOCAL PLANNING POLICY NO.11: SITE REQUIREMENTS AND STANDARDS FOR DEVELOPMENT WITHIN THE INDUSTRIAL ZONES****Wording Changes**

KIC made a recommendation to change the word “likely” to “with the potential” in part 15 of the Draft LPP. City Officers agree with these changes and the Draft LPP has been amended to reflect this detail.

**Conclusion**

City Officers have considered the submission made on the Draft LPP and as a result have undertaken minor modifications to the document. No further modifications to the Draft LPP are proposed. The version that was previously presented to Council on 10 October 2018 has had minor wording changes made, but is overall the same version of the Draft LPP that is recommended for adoption (refer to Attachment A). Therefore, City Officers recommend that the Draft LPP (refer Attachment A) be adopted without further modification and Policy: Development within the Industrial Zones, as detailed in Attachment B, be rescinded.

**LEGAL/POLICY IMPLICATIONS:**

The following strategic and policy based documents were considered in the formulation of this Draft LPP

**Schemes**

City of Kwinana Local Planning Scheme No.2

**Local Planning Policies**

Development within the Industrial Zones Policy

Council Policy - Street Trees and Verge Treatments Policy

Council Policy - Pavement and Drainage for Residential, Commercial and Industrial Areas

Local Planning Policy No.5 - Development Contributions towards Public Art

Local Planning Policy No.8 - Designing Out Crime

**Regulations**

*Planning and Development (Local Planning Schemes) Regulations 2015*

**FINANCIAL/BUDGET IMPLICATIONS:**

The preparation and advertising of the Draft LPP will be undertaken within the City's existing budget. There are no other direct financial implications associated with the Draft LPP.

**ASSET MANAGEMENT IMPLICATIONS:**

No direct asset management implications are associated with the Draft LPP.

**ENVIRONMENTAL IMPLICATIONS:**

No direct environmental implications are associated with the Draft LPP.

**15.5 ADOPTION OF LOCAL PLANNING POLICY NO.11: SITE REQUIREMENTS AND STANDARDS FOR DEVELOPMENT WITHIN THE INDUSTRIAL ZONES**

**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	A well planned City.	4.4 Create diverse places and spaces where people can enjoy a variety of lifestyles with high levels of amenity.

**PUBLIC HEALTH IMPLICATIONS:**

The Draft LPP has the potential to help improve the amenity of the City's Industrial Zones.

**COMMUNITY ENGAGEMENT:**

A requirement of the *Planning and Development (Local Planning Schemes) Regulations, 2015*, is that local planning policies are advertised for a minimum of 21 days in a paper circulating the Scheme area. In this regard, following Council's resolution of 10 October draft LPP11 was advertised from 19 October 2018 to 9 November 2018 in the *Weekend Courier*. Written letters were also sent to the key stakeholders within the City of Kwinana, advising of the opportunity to provide a submission on the Draft LPP.

In accordance with the provision of the *Planning and Development (Local Planning Schemes) Regulations, 2015*, notice of adoption of LPP11 is required to be published in a newspaper circulating in the City of Kwinana. This will also be published on the City's website and a post added to the City's Facebook page.

**RISK IMPLICATIONS:**

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

Risk Event	Lack of policy may result in underutilised and poorly developed industrial sites within the City
Risk Theme	Failure to control the development of industrial areas throughout the City.
Risk Effect/Impact	Reputation Compliance
Risk Assessment Context	Strategic
Consequence	Moderate
Likelihood	Possible
Rating (before treatment)	Moderate

**15.5 ADOPTION OF LOCAL PLANNING POLICY NO.11: SITE REQUIREMENTS AND STANDARDS FOR DEVELOPMENT WITHIN THE INDUSTRIAL ZONES**

Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Adoption of the Draft LPP provides greater clarity and guidance to developers and the City on the development of industrial areas within the City, thereby mitigating the risk.
Rating (after treatment)	Low

**COUNCIL DECISION**

**369**

**MOVED CR P FEASEY**

**SECONDED CR M ROWSE**

**That Council:**

- 1. Adopt Local Planning Local Planning Policy No. 11: Site Requirements and Standards for Development within the Industrial Zones, as detailed in Attachment A.**
- 2. Endorse the responses to the submission received as detailed in the Schedule of Submissions (Attachment C)**
- 3. Publish notice of the adoption of Local Planning Policy No.11: Site Requirements and Standards for Development within the Industrial Zones in a newspaper circulating in the Scheme area.**
- 4. Rescind Local Planning Policy: Development within the Industrial Zones, as detailed in Attachment B.**
- 5. Request City Officers engage further with the Kwinana Industry Council in respect to its concerns about landscaping and crime prevention within the Kwinana Industrial Area.**

**CARRIED  
5/0**



# Local Planning Policy No.11

## Site Requirements and Standards for Development within the Industrial Zones



<p><b>Local Planning Policy No.11</b></p> <p><b>Site Requirements and Standards for Development within Industrial Zones</b></p>	<p>D18/18258</p>
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**1. Title**

Local Planning Policy No.11 - Site Requirements and Standards for Development within Industrial Zones

**2. Purpose**

Local Planning Policy No.11 is intended to complement the City of Kwinana Local Planning Scheme No.2 (LPS2) and provide more flexibility for development through the identification of circumstances where a variation to site requirements and development standards may apply.

This Policy will:

- a) Explain the existing LPS2 requirements; and
- b) Outline variations to the LPS2 requirements through alternative development standards and site requirements that may be applied to development within the industrial zones.

**3. Objectives**

- a) To provide guidelines for City Officers, developers, landowners and other key stakeholders on the planning requirements and considerations for all development within the General Industry and Light Industry zones.
- b) To clearly identify the circumstances where Council will consider variations to the site requirements and development standards outlined in LPS2 for industrial zoned lots.
- c) To encourage a high standard of development with flexible development controls, which recognise the realistic commercial needs of businesses, while helping to ensure industrial development has minimal impact on the Cockburn Sound Catchment.
- d) To ensure the appropriate provision and siting of landscaping, security fencing, and verge parking ensuring that the City of Kwinana (the City) is not exposed to risk of public liability.

#### 4. Definitions

- Verge - means land within the gazetted road reserve, between the carriageway/pavement and the common boundary of the road reserve and lots fronting the road reserve.
- Verge Parking - means parking of vehicles within the verge.
- Extended Parking - means a parking area constructed within the verge but is physically linked and integrated with parking areas on private land within the setback area and all access/egress to the parking area is via an approved crossover.
- Kerb Access Parking - means a parking area constructed within the verge not physically linked or integrated with parking areas on private land and where the means of access/egress to the parking area is via a mountable kerb and parking bays are aligned at 90<sup>0</sup> or 45<sup>0</sup> or parallel to the road carriageway/pavement.
- Parking Embayment - means a parking area within the verge where parking bays are aligned parallel to and at the same vertical level of the road carriageway and the parking bays or bordered by continuation of the kerb.
- Security Fencing - means a barrier, railing, or other upright structure, which encloses a property to prevent and/or control access and incorporates deterrents such as barbwire, razor wire, spiked fencing, electric fencing or other types of deterrents in the design.

#### 5. Intent of the Industrial Zones

The City of Kwinana's Industrial Zones are intended to cater for a wide range of light, service, general and heavy industries.

#### 6. General Design Principles for Industrial Zones

The City's intent for the Industrial Zones is to facilitate good quality design outcomes for both industrial operators and the wider community. When preparing proposals for new development or extensions / re-development, landowners and applicants are encouraged to consider and include the following design elements.

## 6.1 Legibility

- a) The building should be designed to address the street, providing a legible entrance for pedestrians and a positive contribution to the streetscape through a predominant use of glazing;
- b) All customer service areas and employee amenities shall be consolidated within the front of the building area, and the operational areas should be located to the rear of the site;
- c) Offices and administrative components should be designed as focal points, and include a building element such as a veranda, canopy or colonnade facing the public street and parking areas;
- d) Canopies, awnings and solar shading devices should be thoughtfully integrated into the façade as required on elevations visible to the street;
- e) On corner lots, buildings should address the secondary street through the use of windows, articulated elevations and major openings; and
- f) Blank walls facing streets will not be permitted.

## 6.2 Form and Layout

- a) The street facade of the building should provide a visual richness and variety. This can be achieved in the use of form, colour, texture and materials and by the following design features;
  - i. Changes in wall planes and height;
  - ii. Varied façade alignment;
  - iii. Projections and/or recessions;
  - iv. The use of different building materials and colours;
  - v. Incorporating horizontal or vertical elements such as recessed walls or banding;
  - vi. Defining the window openings, fenestration, building entrances and doors;
  - vii. Integrated signage;
  - viii. The use of vertical, horizontal and/or angled grids.
  - ix. Emphasis of structural and functional elements such as sun shading devices, noise barriers, louvre vents and exposed braces; and
  - x. Feature roof forms, parapets and overhanging elements.
- b) The scale and selection of building forms, material and elements should relate to the perceived use i.e. the office components should be expressed differently to the warehouse or factory component of the development;

- c) Roof forms should be designed to provide a 'clean' appearance, minimising visual clutter;
- d) Building forms should be designed for adaptability through the provision of flexible spaces and regular building form designed to accommodate a multitude of uses and may be converted or divided in the future;
- e) Glazing should bring daylight to customer service areas and provide surveillance to the street; and
- f) Materials used for the construction of walls on or near boundaries should be rendered or painted and fully integrated into the building design.

### **6.3 Ancillary Structures and Equipment**

- a) Ancillary structures (such as security kiosks, maintenance buildings and outdoor equipment enclosures) or additions to the original development should integrate similar design attributes originally utilised on the main structure including colour, form and materials;
- b) External fixtures and equipment such as roof ventilation, exhaust towers and plumbing pipes should be effectively screened from view using roof structures and architectural elements. All roof top equipment should be screened from public view by materials of the same nature as the building's basic materials;
- c) Temporary structures (e.g. portable modular units, sea containers etc.) should not be located where they will be directly visible from the public street, or are to be appropriately screened;
- d) Storage yards are to be placed behind the primary street building setback line; and
- e) Aboveground water storage tanks are to be positioned within the side setback areas (including secondary streets) or to the rear of the building mass.

### **6.4 Crime Prevention through Environmental Design (CPTED)**

Developments are to minimise the opportunity for crime and maximise people's perception of safety. Developments should be designed to incorporate CPTED principles in accordance with the City's Local Planning Policy No.8: Designing Out Crime.

## **7. City of Kwinana Local Planning Scheme No.2 Requirements**

LPS2 is a statutory document which controls development within the City and prescribes standards and requirements for setbacks, plot ratio/site coverage, minimum landscaping

areas, fencing setbacks, building materials and appearance, car parking and crossovers, loading and unloading areas, and waste water and effluent disposal.

Notwithstanding the above, if a proposed development does not comply with a requirement or standard prescribed by LPS2, the Council has discretion to consider each application on its individual merit, and may vary a standard or requirement in accordance with Clause 6.2 of LPS2.

The following elements have been prepared by Council for consideration when assessing development proposals with variations to the requirements of LPS2. The following sections of this Policy outline the development standards and site requirements, to be considered and implemented, when variations to the provisions of LPS2 are sought as part of a development proposal.

## 8. Setbacks

### 8.1 Setback Objectives

To provide flexibility for maximum development and use of the land in a manner that does not negatively affect streetscape and encourages upgrading of the aesthetics of industrial sites.

### 8.2 Setbacks under LPS2

The minimum boundary setback requirements of LPS2 are as follows:

TABLE 1: EXTRACT OF CITY OF KWININA LOCAL PLANNING SCHEME NO. 2

Zone	Front	Side	Rear	Secondary Street Setback
General Industry	15 metres	6 metres	9 metres	6 metres
Light Industry	9 metres	3 metres	6 metres	4.5 metres

### 8.3 Acceptable Setback Variations

In considering variations to boundary setbacks, Council shall have regard to the provisions of Clause 6.3.2 and 6.8.5 of LPS2, except as varied by the following section.

To provide more certainty for landowners and developers this Policy outlines the City's position in regards to variations to the boundary setbacks of both Light and General Industrial uses, in accordance with Table 2 below (subject to the provisions of Part 8.3.1 and 8.3.2).

**TABLE 2: ACCEPTABLE SETBACK VARIATIONS SUBJECT TO CONDITIONS**

<b>Lot Size</b>	<b>Primary Street Setback</b>	<b>Side</b>	<b>Rear</b>	<b>Secondary Street Setback</b>
Lots less than 5000m <sup>2</sup>	9 metres – May be varied subject to conditions	Nil – conditions apply	Nil – conditions apply	Determined by Building Code and Landscaping.
Lots of 5000m <sup>2</sup> and greater	15 metres – May be varied subject to conditions	Nil – conditions apply	Nil – conditions apply	Determined by Building Code and Landscaping.

It is accepted that the generic setback requirements may not be appropriate or desirable in all cases and the City has the discretion to consider variations on their individual merit. The City will favourably consider setback variations for development proposals that incorporate elements of the General Design Principles outlined in this Policy.

### **8.3.1 Requirements for Acceptable Primary Street Setback Variations**

The City is prepared to consider a reduced Primary Street setback where:

- (i) New developments, or extensions to existing buildings, incorporate a minimum of five (5) design elements outlined in Part 6.1 and 6.2 of this policy;
- (ii) Upgrading of the site is proposed. (e.g. upgrading of existing landscaping, provision of new landscaping areas, verge treatment, screening of external storage);
- (iii) Upgrading of an existing building is proposed. Upgrading works may include but not be limited to;
  - Rendering/ bagging and painting existing old brickwork for portions of an existing façade visible from the street;
  - Professionally re-coating or painting existing metal sheeting for portions of an existing façade visible from the street;
  - Replacing or modifying older windows and doors;

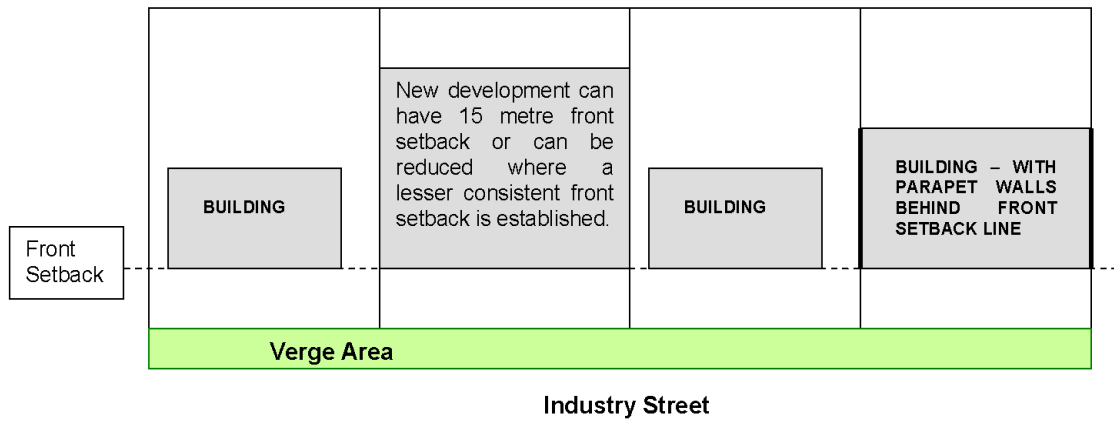
- Construction of new entry statements such as porticos, new front doors, verandahs and awnings; and
  - Replacing/repairing and painting gutters and downpipes.
- (iii) The variation is necessary to facilitate redevelopment or extensions with good quality elevations; and
- (iv) The variation will negate the need for external storage, result in an increased level of amenity, increase opportunities for onsite car parking, contribute positively to the existing streetscape or where the applicant can demonstrate some other planning benefit to the wider community.

### **8.3.2 Requirements for Acceptable Side, Rear and Secondary Street Setback Variations**

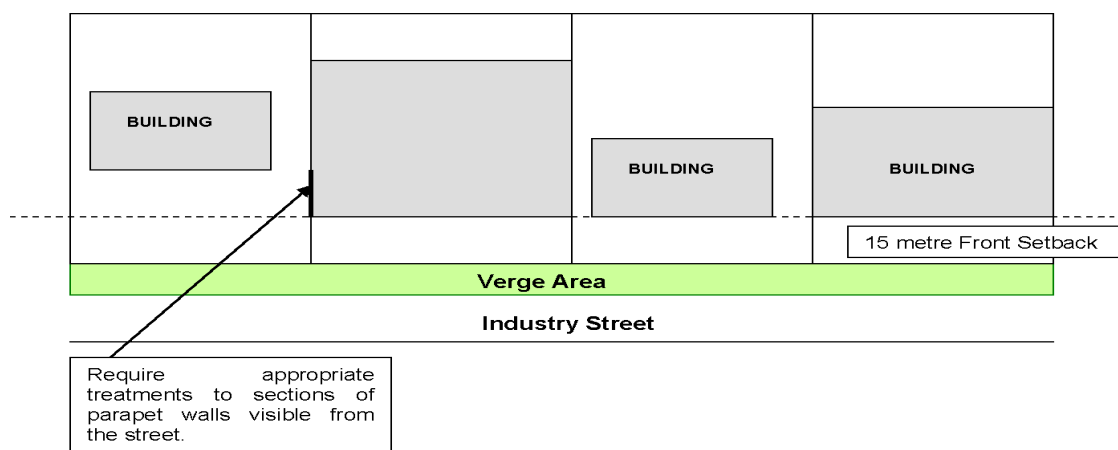
The City is prepared to consider reduced Side, Rear and Secondary Street setbacks where:

- (i) The development incorporates a minimum of three (3) design elements outlined in Part 6.1 and 6.2 of this policy;
- (ii) Parapet walls are located having regard to visibility from the street and relationship to buildings on adjacent lots - refer Figure 1;
- (iii) Side and/or Rear parapet walls, which are visible from the street, shall incorporate appropriate architectural treatments to reduce the visual impact of blank walls (e.g. grooves/patterns combined with textures/colours) – Refer Figure 2;
- (iv) The variation is necessary to facilitate development or building extensions with good quality elevations;
- (v) The variation will negate the need for external storage, result in an increased level of amenity, increase opportunities for onsite car parking, contribute positively to the existing streetscape or where the applicant can demonstrate some other planning benefit to the wider community; and
- (vi) Maximum wall height on the boundary does not exceed 9 metres.





**FIGURE 1: PARAPET WALLS BEHIND THE FRONT SETBACK LINE**



**FIGURE 2: PARAPET WALLS VISIBLE WITH SUITABLE TREATMENT**

## 9. Landscaping

Clause 6.8.7 of LPS2 requires a minimum of 5% of the site to be developed and maintained as landscape area. The requirement can be reduced to 2.5% where the applicant agrees to landscape the verge.

### 9.1 Landscaping Objectives

This Policy aims to achieve:

- a) Quality smaller landscaping areas that can be realistically maintained to a high standard;
- b) Upgrading of landscaping throughout the whole Kwinana Industrial Area;
- c) The use of native and water wise species;
- d) Landscaping of the street verge that will contribute to the streetscape;
- e) Minimum areas appropriate for varying lot sizes and some flexibility for multi-hectare lots;
- f) Landscaping strips to act as a visual buffer adjacent to all street frontages.

## 9.2 Acceptable Landscaping Variations

Variations to LPS2 landscaping requirements will be supported where they comply with the following:

**TABLE 3: ACCEPTABLE LANDSCAPING VARIATIONS SUBJECT TO CONDITIONS.**

<b>Lot size</b>	<b>Minimum landscaping*</b>
Up to 10,000 <sup>2</sup>	A 3 metre wide landscape strip being provided adjacent to the primary street boundary for the width of the property, which may be reduced by up to half if landscaping/tree planting is provided within the verge.
Secondary Street Frontages	A minimum 1.5m metre landscaping area shall be applied to all secondary street frontages.
Large / Multi Hectare Lots	In exceptional circumstances where a lot has extensive and / or multiple street frontages, the City may allow; <ul style="list-style-type: none"> <li>(i) A 3 metre landscaping area located adjacent to the primary street boundary;</li> <li>(ii) Landscaping for secondary streets to be provided in the verge where the applicant demonstrates landscaping will be of a high quality;</li> <li>(iii) The use of trees to break up any large expanses of car parking areas visible from the street.</li> </ul>

Any landscaping which is located within the verge shall be installed and thereafter maintained, to a high standard, in accordance with the City's Policy – Street Trees and Verge Treatments.

**\*Note: Landscaping areas may be required to increase over the areas listed above dependent on any land area requirement for effluent disposal.**

## 10. Plot Ratio and Site Coverage

### 10.1 Existing LPS2 Requirements

Clause 6.8.4 of LPS2 applies the following as maximum plot ratio and site coverage requirements:

**TABLE 4: EXTRACT OF THE CITY OF KWINANA LOCAL PLANNING SCHEME NO. 2**

<b>Zone</b>	<b>Plot Ratio</b>	<b>Site Coverage</b>
Light Industry	1.0	70%
General Industry	0.8	65%

### **10.2 Plot Ratio and Site Coverage Objective**

To allow increased flexibility of the maximum building floor area as long as adequate on site car parking, landscaping, accessways, loading/unloading and storage areas are provided.

### **10.3 Acceptable Variations to Plot Ratio and Site Coverage**

It is recognised that the area that can be developed for buildings on any lot is typically constrained by the need to provide adequate on site car parking, landscaping, accessways, loading/unloading and storage areas.

The City is therefore prepared to support variations to plot ratio and site coverage requirements for all development where;

- i) There is adequate onsite parking to service the existing and proposed development; and
- ii) The application complies with the setback requirements of LPS2 or the acceptable setbacks outlined in Part 8 of this Policy; and
- iii) The application complies with the landscaping requirements of LPS2 or the acceptable landscaping areas outlined in Part 9 of this Policy; and
- iv) The proposal will result in an upgrade of the aesthetics of the site (landscaping, resurfacing / repairing car parking/ verge treatment).

## **11. Fencing**

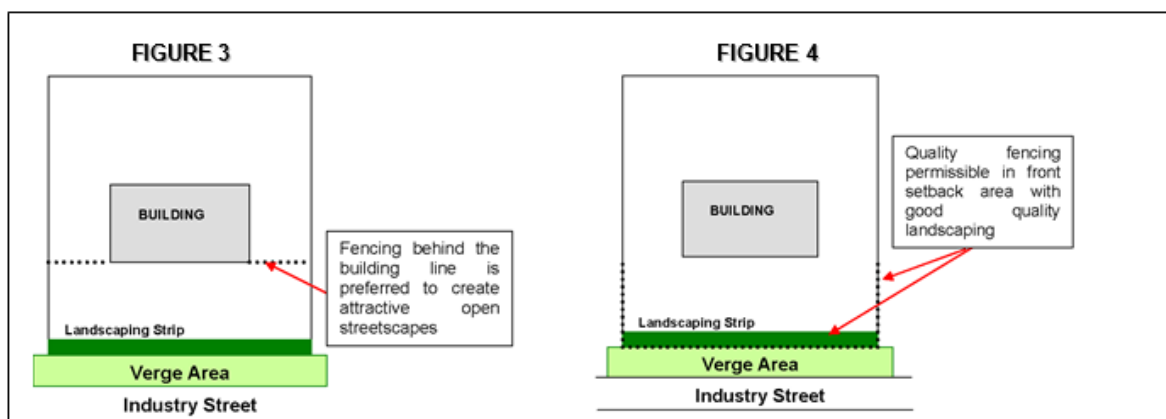
### **11.1 Existing LPS2 Requirements**

Clause 6.8.12 of LPS2 requires that any security fence be subject to a minimum 1.5 metre setback from the front boundary of a lot. Minimum fencing standards within the

Industrial areas is black PVC coated chain or link mesh.

## 11.2 Objectives for Fencing

To encourage minimal fencing within the front setback area. Where fencing cannot be located behind the front building line, a higher quality fencing combined with good quality landscaping will be encouraged.



## 11.3 Acceptable variations to fencing setback

Fencing will be permitted with a nil setback to the front property boundary where;

- i) The fencing is necessary for security purposes; and
- ii) Quality fencing (Garrison or Masonry Pillars with open style infill panels) is proposed; and
- iii) Landscaping on the site is substantially upgraded or new landscaping is proposed along the frontage that meets the minimum landscaping requirements of LPS2 or the acceptable landscaping areas outlined in Part 9 of this Policy.

## 12. Transportable/Non-permanent Structures

### 12.1 LPS2 Requirements

Clause 6.8.6 of LPS2 requires that all buildings and ancillary structures shall be located, designed and constructed so that the external appearance arising from height, expanse, method of construction, materials used, colour and texture of external finish serve to blend the development into the natural landscape and surrounding built environment and minimise the visual impact of

the development.

## **12.2 Objectives for Transportable / Non-permanent Structures**

The City's objective with regard to transportable/non-permanent structures is to minimise the typically adverse visual impact of such structures (offices, amenities etc.) on streetscapes and to encourage the general upgrade of the aesthetics of industrial sites.

## **12.3 Transportable / Non-permanent Structures requirement for Approval**

With the exception of transportable buildings / non-permanent structures used as part of construction works for approved buildings and development, all transportable or non-permanent type structures require planning approval.

## **12.4 Development Standards for Transportable / Non-permanent Structures**

Transportable or non-permanent structures sited behind the building line, which are not visible from the street or public thoroughfares, may be approved on a permanent basis subject to the following criteria:

- a. The transportable structure is ancillary to the main office or administration function on the property; and
- b. The finish, materials and colours used in construction of the transportable or non-permanent structure is to be visually sympathetic to that of the main building. More specifically a minimum of three of the following architectural features are incorporated into the transportable or non-permanent structure design:
  - i. Incorporate a facade comprising of two different building materials or two different colours;
  - ii. Incorporate defined window openings, fenestration, building entrances and doors;
  - iii. Incorporate the use of vertical, horizontal and/or angled grids;
  - iv. Incorporate articulated building frontages and/or features;
  - v. Incorporate structural and functional elements such as sun shading devices, noise barriers and louvre vents.

## **13. Verge Parking**

### **13.1 Existing LPS2 Requirements**

Clause 6.8.8 of LPS2 requires that car parking spaces shall be provided, designed, constructed and maintained in accordance with the provisions of Part

VII of LPS2 and approved plan relating thereto.

### **13.2 Objectives for Verge Parking**

That as far as practicable all vehicle parking associated with land use and development applications shall be accommodated onsite.

That verge parking will only be considered:

- i. in circumstances where expansion of existing industrial premises is only possible if verge parking is permitted; and
- ii. in defined areas where such parking does not prejudice traffic safety, traffic circulation, access, amenity or pose a threat to infrastructure located in the road verge.

### **13.3 Acceptable Variations to Verge Parking**

Verge parking will only be considered where the landowner seeks a reduction in car parking based on staff numbers and operational requirements and where physically car parking cannot fit on site.

### **13.4 Verge Parking Locations**

Verge parking will only be considered for installation in the extended parking, embayment parking, or kerb access parking locations identified in Appendix B of this Policy.

### **13.5 Verge Parking Layouts**

The City's acceptable verge parking layouts are depicted in Appendix A of this Policy.

### **13.6 Implementation**

#### **13.6.1 Verge Parking of any form is inappropriate where:**

- a) The road is reserved under the Metropolitan Region Scheme, has known road widening requirements or is subject to Main Roads WA Control of Access notice.
- b) Such parking obstructs traffic sight lines because of its location near an intersection or road curvature or vertical elevation.

- c) Such parking compromises the functioning and maintenance of essential services (electricity, gas, water, sewer, telephone) and is opposed by the relevant public utility agency.
- d) Such parking inhibits manoeuvring of industrial traffic.
- e) Such parking renders the use of the public road network unsafe.

**13.6.2** Kerb Access Parking and Extended Access Parking (refer to Appendix A) is inappropriate where;

- a) Traffic speeds and volumes on the road are unacceptably high.
- b) The functional role of the road is a local, district or regional distributor.
- c) The road represents a through route.
- d) The gradients on the adjacent roads prevent effective emergency stopping.
- e) The topography of the locality prevents adequate sight distance.
- f) Where medians or islands have been installed in the vicinity.
- g) Verge width is less than 7.5 metres.
- h) Distance from intersection is less than specified under Main Roads WA Traffic regulations and therefore impacts on safe traffic movement at the intersection.

**13.6.3** Embayment Parking (refer to Appendix A) is inappropriate where;

- a) Road reserve and carriageway/pavement widths are inadequate.
- b) Road gradients in the vicinity prevent emergency stopping.
- c) Topography in the vicinity obstructs safe traffic sight lines.
- d) Verge width is less than 3.5 metres.

### **13.7 Consideration of Verge Parking**

- a) The City may decline support for verge parking if in its opinion such parking poses a threat to traffic and pedestrian safety and the smooth flow of traffic.
- b) The City in considering individual applications involving verge parking shall have regard to the criteria for verge parking listed in Part 13.6.1 of this policy.
- c) Verge Parking will only be considered in relation to development proposals for expansion of long standing existing industrial developments where such

expansion could not comply with LPS2 requirements in respect of onsite parking, as a result of insufficient available land area.

- d) Verge parking will not be considered where new development is proposed on vacant lots, where parking could be accommodated onsite with redesign of the proposed development or where a change of use and/or ownership (respectively) is proposed or is in process.
- e) Verge parking will only be considered where the proponent provides the City with written agreement from all public utility agencies to the extent that the installation of verge parking will not prejudice the function or maintenance of electricity, gas, water, sewer, telephone or other communication infrastructure.

### **13.8 Conditions of Verge Parking**

- a) Where the City and Public Utilities approve verge parking, the owner/proponent shall indemnify the City and Public Utilities against public liability claims to a value of \$10,000,000 against damage to or injury arising from the use and works, undertaken in the course of establishing and the operation of verge parking. The indemnity should also include damage to services in the verge arising from works undertaken in the verge in order to establish verge parking. Where public utilities require access to the verge for upgrade and maintenance purposes, the landowner/proponent shall reinstate the verge and parking area immediately thereafter at no cost to the City or the Public Utility. The proponent shall also meet all costs associated with relocation of services.
- b) The requirement to indemnify the City, referred to in (a) above shall be secured by legally binding agreement between the landowner/developer and the City and shall be secured by a bond and the cost associated with the drafting, preparation and registration of the agreement will be met by the landowner/proponent.
- c) The approval and agreement should also require the acknowledgement by the owner that the permanent use of the verge for parking cannot be granted and that at some time in the future, the City or other public agencies may require the parking area be removed and the verge area be reinstated at no cost to the City.



- d) Verge parking areas shall be sealed and drained at the proponent's cost to the City's specifications and all stormwater drainage from the paved areas is to be directed towards and disposed of on the proponent's landholding.
- e) Verge parking areas shall be landscaped to the satisfaction of the City, equivalent to 5% of the area within the verge used for parking and shall include the installation of reticulation and thereafter be maintained to a high standard to the satisfaction of the City.
- f) The layout of Extended Parking areas shall ensure that all vehicles are able to manoeuvre and leave the subject property in a forward gear and via an approved crossover.
- g) Verge parking areas shall not be used for the loading, unloading or storage of goods.
- h) For Embayment Parking entry and exit, curves should be to the City's specifications.

#### **14. Effluent and Wastewater Disposal**

**14.1** All proposed or upgrades to on-site effluent disposal systems are to be nutrient retentive. Conventional septic systems are not permitted within the Industrial area. Expansions of an existing development's effluent disposal system shall be in accordance with City's Policy - Nutrient Retentive Effluent Disposal Systems.

**14.2** Development shall not discharge wastewater to the environment or be used as a 'wet industry' without the prior approval of the City and Department of Water and Environmental Regulation.

For further advice on this matter, please refer to the following documents:

- a) *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974;*
- b) City of Kwinana Policy - Nutrient Retentive Effluent Disposal Systems;
- c) Code of Practice for the design, manufacture and installation and operation of aerobic treatment units;
- d) *Environmental Protection (Unauthorised Discharges) Regulations 2004.*
- e) All proposed development is required to comply with the current Western Australian Government Sewerage Policy.

## 15. Groundwater Protection

**15.1** Where applications are processed by the City, or where members of the community are using chemicals, fuel storage and other organic matters with the potential to impact on the groundwater in the long term, the following documents will need to be considered, to minimise risk and liability:

- a) Water quality protection note, land use compatibility in public drinking water sources;
- b) *Health Act (Underground Water Supply) Regulations 1959*;
- c) Environmental Management Plan for Cockburn Sound and its Catchment.

**15.2** Where applications are processed by the City or members of the community are using chemicals, fuel storage and other organic matter, with the potential to impact on groundwater in the long term, the following conditions shall be imposed to minimise risk and liability:

- a) All storage containers, facilities or tank farms where chemicals, fuel and organic matter are used, stored or handled, shall be bunded equal to 110% capacity of the product used, stored or handled, to prevent pollution of groundwater, including drinking water.
- b) Where large capacities in excess of 5000 litres are capable of being stored, or are present in tanks, containers or other facilities, it shall be necessary to install impervious membrane protection under the tank, containers or other facility. The membrane shall direct any spilt liquid or spillage of chemicals, including fuels and organic matter, to a protected area surrounding each tank, container or other facility, which shall discharge to a waste treatment and recovery process.
- c) When a development is proposed to be developed, modified or changed, the proponent shall be advised that the City requires that the environment and the health of the community is to be protected from any potential environmental and health impacts from the development including the processes and practices.
- d) The proponent shall be required to provide the appropriate groundwater protection and bore monitoring systems and all monitoring bores installed shall be based on professional hydro-geological advice. The advice shall be provided to the City's Environmental Health Services prior to the installation commencing.

- e) The proponent shall be advised to seek professional hydro-geological advice pertaining to any existing contamination, the processes and practices proposed or utilised and the potential for groundwater contamination from chemicals spilt and/or leaks and contaminated stormwater run-off from the development.

## **16. Sealing/Drainage**

All proposed paving and drainage is to be installed as per the specifications for Pavement and Drainage of Trafficable Areas and Parking Areas, and Non-Trafficable and Lay-Down Areas to the satisfaction of the City of Kwinana.

## **17. Public Art**

The objective of this section is to seek opportunities to introduce art on both public and private land, which will add to the visual interest and character of the City's Industrial Areas. Art may be incorporated into built form, along streetscapes, within lot frontages and so on. Art may be painted, constructed, sculptured or an interesting architectural feature or such like. It may be linked with the marketing of the company or industrial type. The aim is to create visual interest, a point of difference and to encourage the general upgrade of the aesthetics of the City's industrial areas.

Opportunities to introduce art within both public and private land, as part of development, are encouraged in accordance with the City's Local Planning Policy No.5: Development Contribution Towards Public Art.

## **18. Kwinana Beach and Naval Base - Development of Regional Significance**

### **18.1 Background**

- The State Government of Western Australia has identified the Kwinana Industrial Area under the State Planning framework as a Strategic Industrial Area of significant economic and strategic importance to the State economy.
- The central core of the Kwinana Industrial Area is intended to accommodate existing (and planned) heavy industries, which generate offsite impacts including, risks and hazards, reduced air quality, odours, noise and vibration which are subject to licensing by various state government regulatory agencies

which in part requires separation from uses attracting members of the public non-employees of industry.

- The establishment of uses attracting members of the public into areas subject to industrial impacts is inappropriate from a public health and safety and environmental perspective.
- The establishment of uses attracting members of the public into areas in close proximity to these industries will in many cases, result in minimum separation distances referred to in licences or used as the basis for issuing licences issued by State Government agencies, not being met.
- Depending on the particular issue, the City's objectives for business services and facilities with the Kwinana Industrial Area may from time to time not necessarily be consistent with State Government objectives.
- At present LPS2 permits (with varying levels of Council use of discretionary powers) certain uses within the General Industrial Zone (which includes the central core of the Kwinana Industrial Area), which may attract members of the public into areas subject to unacceptable levels of industrial impacts.
- The Western Australian Planning Commission (WAPC) whose role it is to protect State Government Interest in the planning process is not always aware of proposals, which may impact on State Interest within the Kwinana Industrial Area.
- Local Government is able to refer proposals for development which it believes are of State or Regional significance to the Western Australian Planning Commission for determination.

## **18.2 Implementation**

- a) Where the City receives development applications for the establishment of a new retail, commercial, service commercial, light industrial or service industrial, or uses of a similar nature (or expansion thereof) which, in the opinion of the City, is likely to attract members of the public into an area exposed to industrial impacts, within Policy Area 15 Kwinana Industrial Strip, and Policy Area No 14 Naval Base in Part 4 of LPS2, and the City intends to grant approval of the use or development, the City shall deem that the proposed use or development is of State or Regional Significance and refer the application to the WAPC for determination under the Metropolitan Region Scheme.
- b) Such referral should occur irrespective of the value of development proposed.

- c) Maintenance and refurbishment of existing approved development where no expansion or change of use is proposed shall not be deemed to be of State or Regional Significance in the context of this Policy and do not necessitate referral to the WAPC.

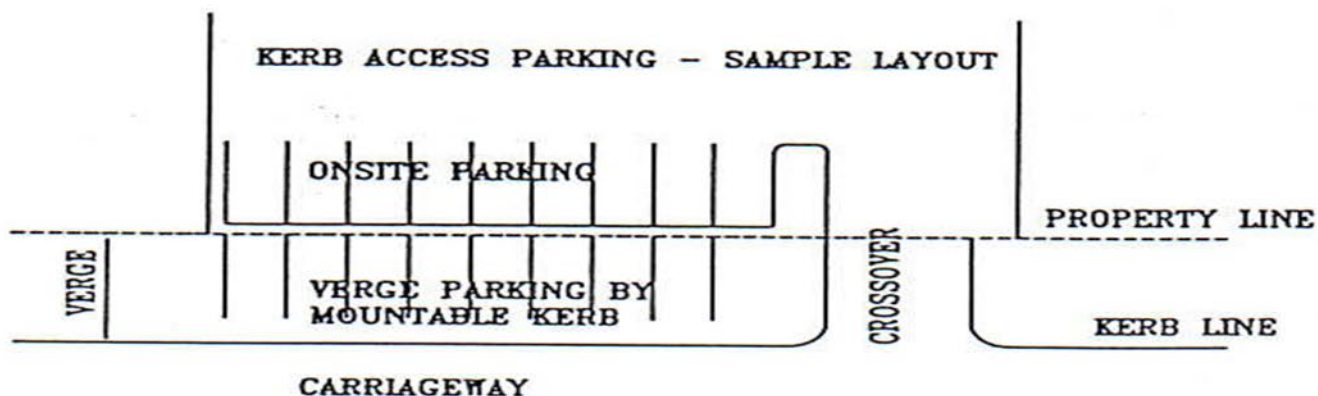
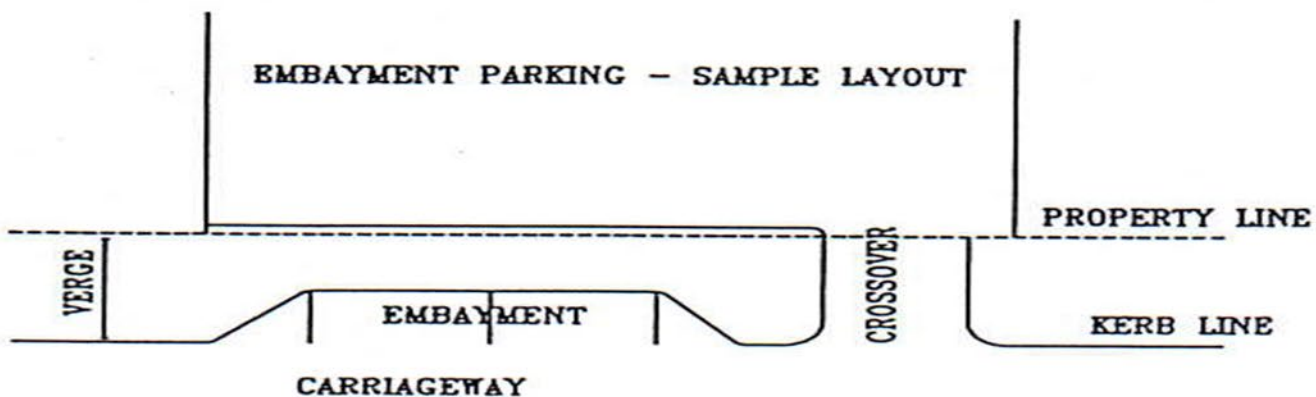
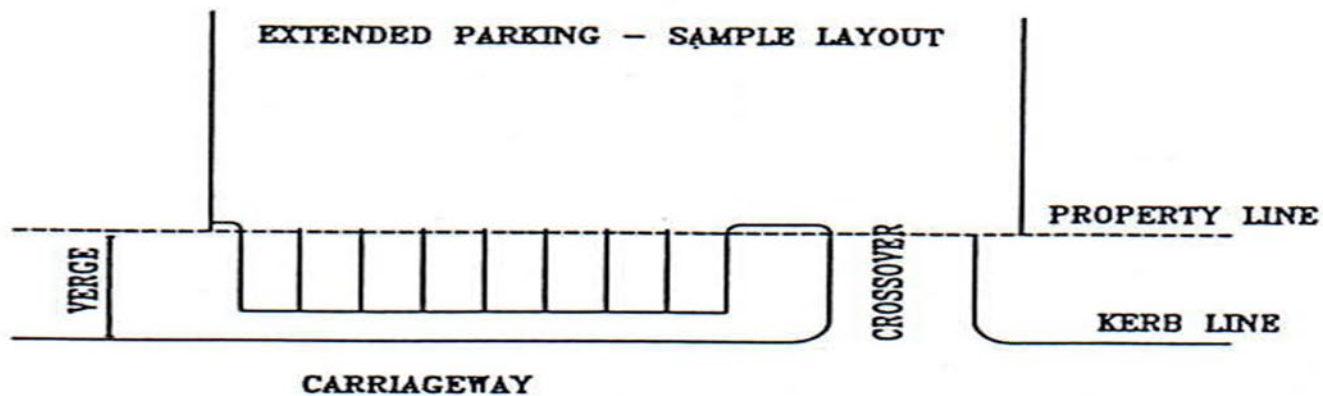
## **19. Medina Light (Golf Course) Industrial Estate**

### **19.1 Gentle Road Amalgamation of Lots**

That as a condition of Development Approval, Council impose a requirement to amalgamate front and rear portions of Lots 149-159 with Lots 184-191 Gentle Road, Medina if under the same ownership.

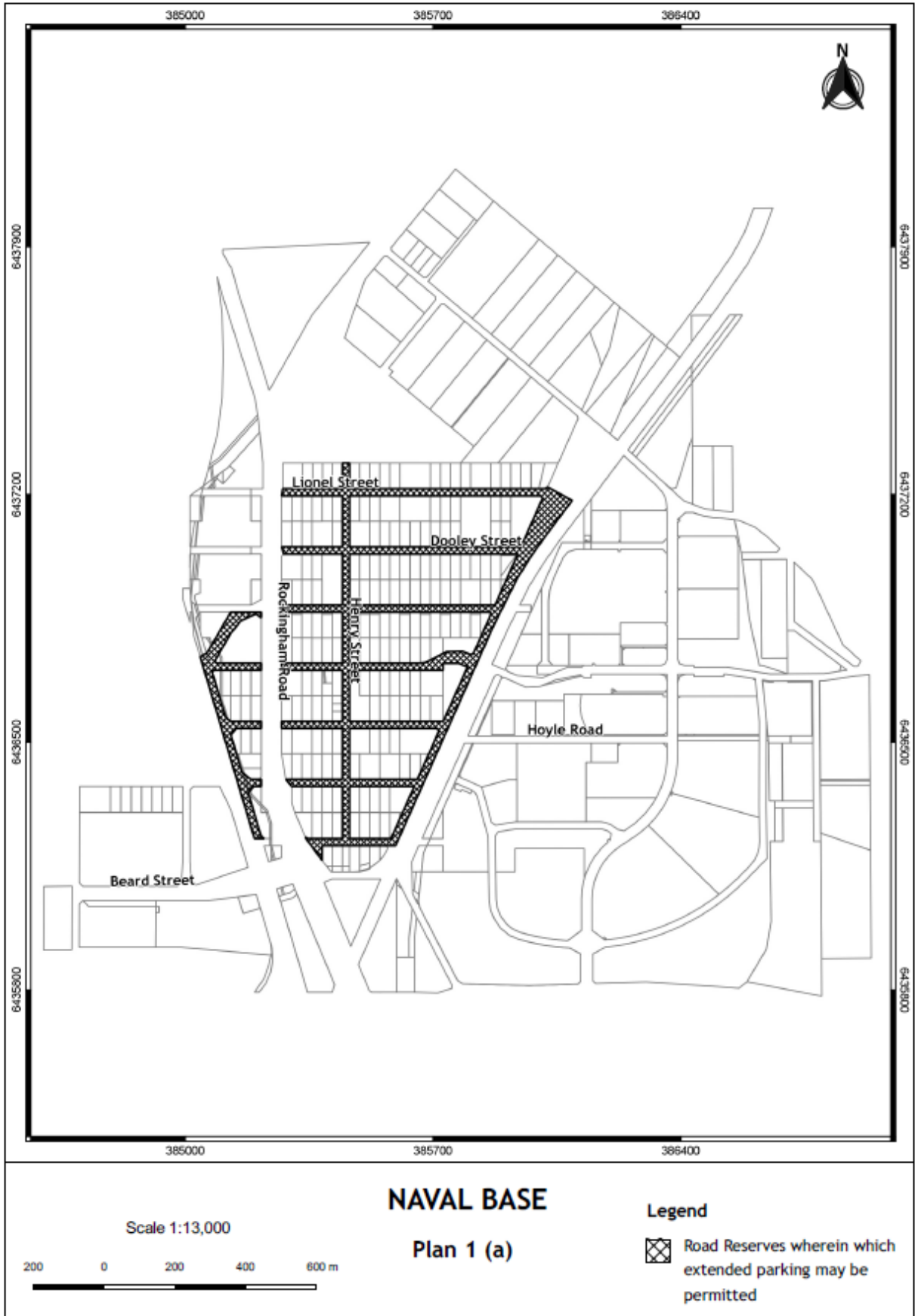
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APENDIX A: VERGE PARKING LAYOUTS



**APPENDIX B: VERGE PARKING LOCATIONS**

The City of Kwinana will only consider Extended Parking in industrial zoned areas delineated on Plan 1 (a - c).

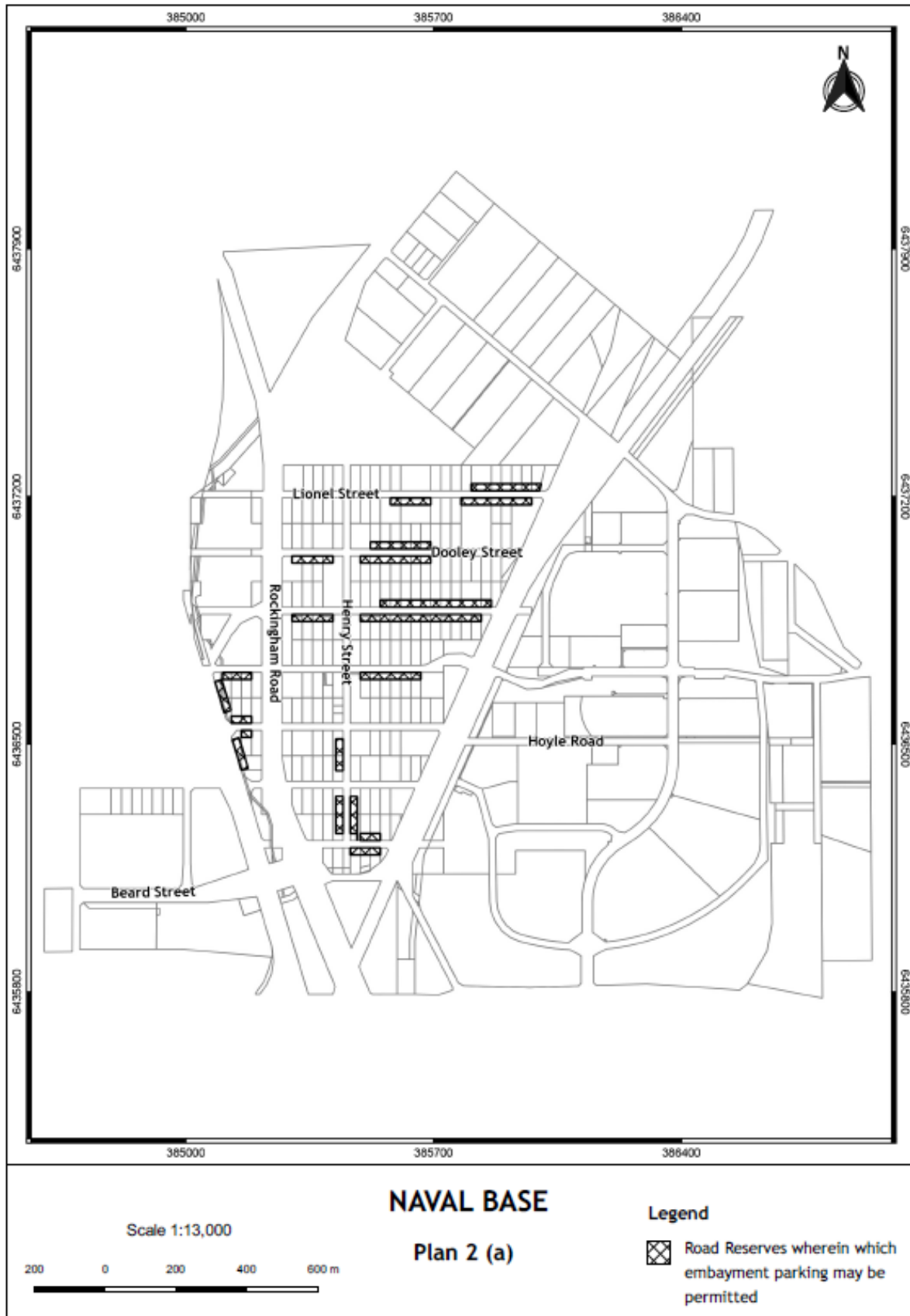


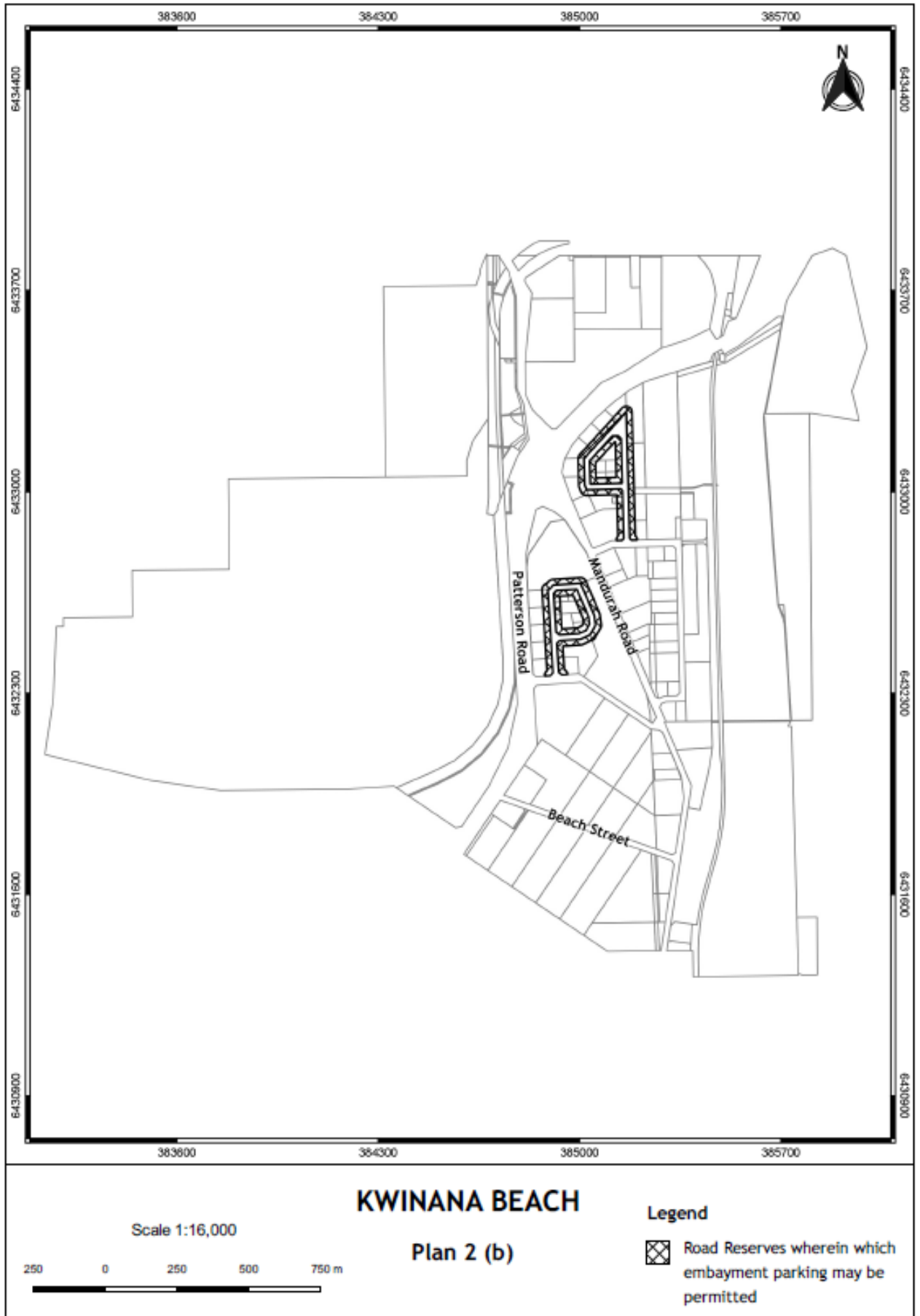






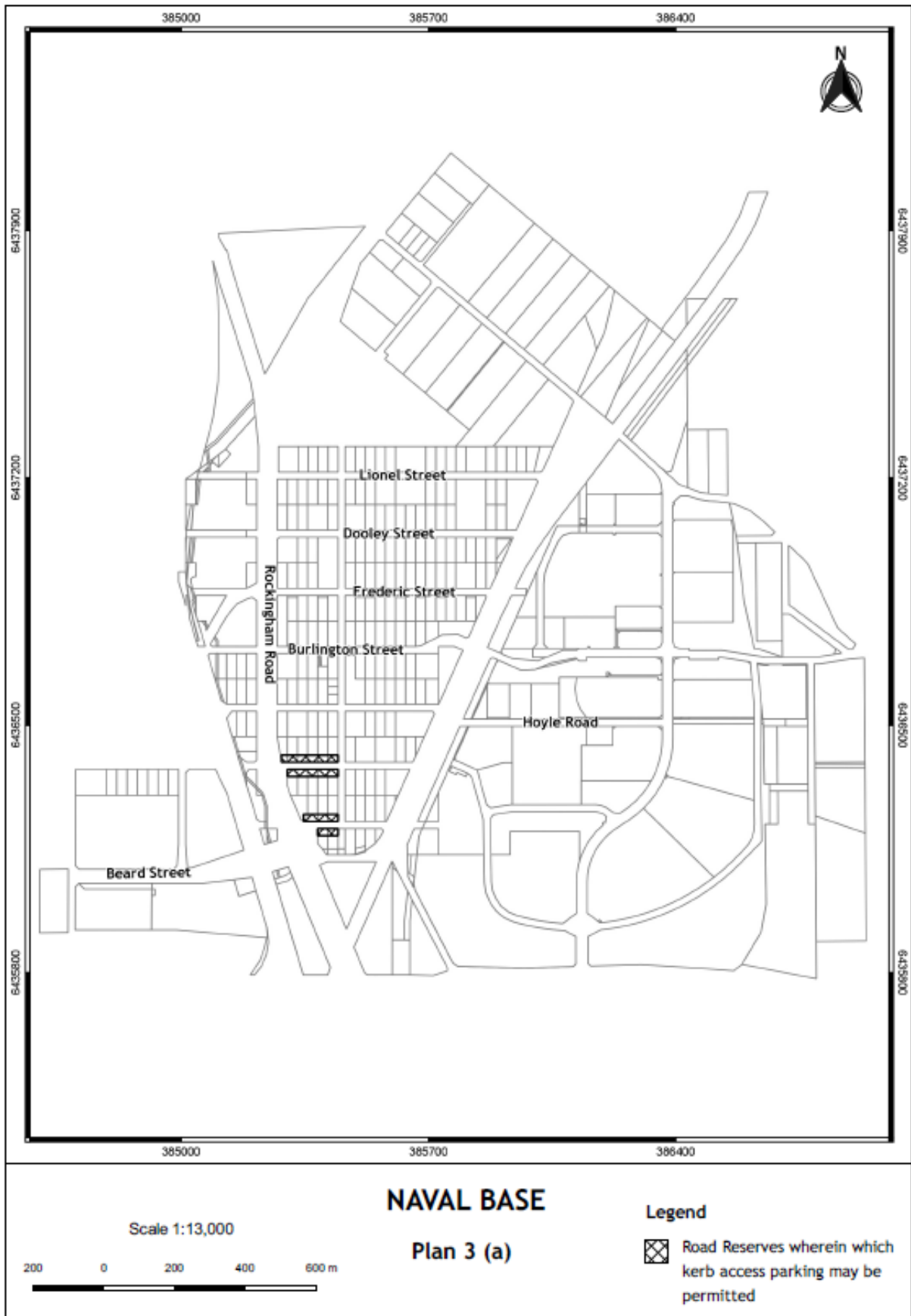
The City of Kwinana will only consider Embayment Parking in areas delineated on Plan 2 (a-c).







The City of Kwinana will only consider Kerb Access parking in areas delineated on Plan 3 (a-c).







Name of Policy	Local Planning Policy No.11: Site Requirements and Standards for Development within the Industrial Zones
Date of Adoption and resolution No	<i>Insert the date on which the Policy was first adopted by Council and the resolution No</i>
Review dates and resolution No #	<i>List the dates on which the Policy was reviewed by Council and the resolution Nos</i>
Next review due date	<i>Insert the date on which the next review should be completed by</i>
Legal Authority	Planning and Development (Local Planning Schemes) Regulations 2015 – Schedule 2 Deemed Provisions (Division 2)
Directorate	City Regulation
Department	Statutory Planning
Related documents	This Policy shall be read in conjunction with the City of Kwinana’s Local Planning Policy No.8: Designing Out Crime and Local Planning Policy No.5: Development Contribution Towards Public Art.

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**POLICY**

**DEVELOPMENT WITHIN THE INDUSTRIAL ZONES**



## DEVELOPMENT WITHIN THE INDUSTRIAL ZONES

**To provide guidance to landowners and Council to ensure that the use and development within Industrial Zones is in a manner appropriate to the intentions of the zoning, minimises impact on neighbouring properties and the environment, and provides guidelines for the referral of applications to the Western Australian Planning Commission.**

Adopted:	27/09/2006 #519
Last amended:	11/07/2012 #163
Legal Authority	Town Planning Scheme No 2

### Policy:

**PURPOSE:**

- To ensure a high level of sealing and draining on all industrial premises.
- To define circumstances where Council may exercise discretion to vary Town Planning Scheme No 2 car parking standards within industrial areas, to enable vehicle parking within road verges.
- To facilitate the expansion of existing industrial development on sites approaching maximum development and delaying/avoiding the need for industries to relocate to larger landholdings.
- To ensure that formal approved verge parking does not expose Council to risk of public liability.
- To ensure the appropriate provision and sitting of landscaped areas on all industrial premises.
- To ensure industrial development within the Industrial area has a minimal impact on the Cockburn Sound Catchment.
- To remove the possibility of leakages and/or spills and consequent damage to the environment, including the groundwater which may be the only local source of drinking water.
- To ensure that a high standard of development is maintained throughout the industrial zones.
- To create uniformity in conditions of approval relating to chemical/fuel storage tanks and organic matter.
- To ensure the appropriate groundwater protection and monitoring systems are provided, and installed based on professional hydro-geological advice, when industries are either developed or the processes and practices change so that potential pollutants are prevented from causing any environmental or health impact on the local groundwater.
- To ensure that all proposals of a non-heavy industrial nature which are likely to attract members of the public into the Kwinana Industrial Area are referred to the State Government for their assessment.
- To establish and foster high standards of industrial development within the Kwinana Beach and Naval Base Localities.
- To require the amalgamation of front and rear portions of Lots 149-159 with Lots 184-191 Gentle Road, Medina as a condition of Development Approval in order to achieve direct public road frontage for the rear lots.

**DEVELOPMENT WITHIN THE INDUSTRIAL ZONES**

Development within the Industrial Zones should be in accordance with the provisions of Council's Town Planning Scheme No.2 Division 5 – Industrial Zones (6.8) and the relevant Policy Area. When considering an application to commence development in the Industrial Zones, the City of Kwinana shall have regard to the following matters:

**1. ALL INDUSTRIAL AREAS**

**1.1 SEALING/DRAINAGE**

1.1.1 All existing and proposed trafficked and storage areas on lots within the Industrial Zones are to be suitably paved and drained in accordance with the provisions of Town Planning Scheme No.2, to ensure stormwater is disposed of on-site and to ensure no dust nuisance occurs.

1.1.2 All proposed paving and drainage is to be installed as per the specifications outlined in sections (a) and (b) below. It should be noted that any alternative materials must not be installed without the prior approval of Council's Manager Engineering & Facility Services.

a) Specifications for Pavement & Drainage of Trafficable Areas and Parking Areas

Subgrade

Sub grade soil needs to be compacted to at least 95 % of maximum dry density or to at least to 9 blows with Perth Sand penetrometer, calibrated to establish relation between number of blows and relative density of sandy soil. Perth sand penetrometer to be strictly used for sandy soils. For clayey soil other modes like nuclear density meter for finding relative compaction are used. Soil to be compacted shall be free from vegetation and other deleterious material.

Subbase

Limestone material used in the subbase shall be free from sand, roots, capstone and other foreign material and shall comply with grading requirement as determined in accordance MRWA standards/AS standards. The degree of compaction for limestone Subbase to be at least 95% of MDD. The minimum thickness requirement for Subbase material is 150mm and the tolerance in level of the prepared surface shall be  $\pm 15$  mm.

Base Course

The Base course material shall consist of either Rock base, Ferricrete or 2% Bitumen stabilised limestone. Rockbase material for the base course shall be crushed Granite of good quality free from weathered rock, flaky material and other deleterious materials. The material shall be of uniform quality and the particle size distribution needs to conform to AS/MRWA standards. The base course shall be compacted to 98% relative compaction. The minimum thickness requirement for Rockbase or ferricrete to be 100mm but for Bituminous Stabilized Limestone it may be reduced to 75mm.

Sealing

The sealing shall be preferably achieved with dense graded asphalt (7mm or 10mm size aggregate) Marshall mix of 50 blows or 75 blows depending on the traffic volume & type of traffic. Other modes of sealing like Slurry sealing or Double / Double sealing could be used but prior approval for any sealing other than Dense Graded Asphalt shall be obtained from Manager of Engineering services. The minimum compacted thickness of DGA to be 30 mm if used directly over compacted road base. If Primer sealing with 5mm/ 7mm aggregate is applied over Base course before Asphalt then the compacted thickness of DGA could be reduced to 25 mm.

Drainage

All sealed areas must to be drained to Council's requirement of 1 in 20 year storm intensity. For soak wells Council's requirement for 1 in 20 year storm is 1 m<sup>3</sup> capacity of soak well for every 45 m<sup>2</sup> of catchment area, but the depth of Soakwell to be determined on the basis of water table level .The bottom of the Soakwell in all weather conditions to be above the water table level. If soak wells are not used and the drainage is achieved by providing Swales/Sump/Infiltration Basins, then proper design for 1 in 20 year storm intensity must be submitted to Council's Manager of Engineering Services for approval.

- b) Specifications for Pavement & Drainage of Non-Trafficable Areas and Laydown/Storage Areas

OPTION 1:

Subgrade

Compact the existing soil to at least 92 % of Maximum Dry Density after removing vegetation and other unacceptable material from the soil to be compacted.

Sub-base

Limestone Conforming to standard specification of road building to be laid and compacted to the density of at least 93% of MDD with minimum compacted thickness of 100 mm.

Base – Course

Base course could be either Rock base, Recycled Concrete or Recycled Asphalt material but needs to conform to the general specification of road base material. Base course to be compacted to at least 94% of MDD using minimum compacted thickness of 75 mm.

Sealing (Optional)

The entire area could be sealed with Primer seal or any other mode of cost effective sealing product. Sealing would make the pavement impermeable which would require extra soakage capacity from drainage consideration.

Drainage

After compaction of road base material to the required specification , the pavement could be used as non trafficable area but it would need to be drained either by grading the pavement towards some permeable area like Swale / Sump or by installation of Soakwells.

**DEVELOPMENT WITHIN THE INDUSTRIAL ZONES**

For unsealed Pavement minimum required should be to contain 1 in 20 year storm, over 72 hour duration, within the property.  
 With sealing option as per item 4, the drainage requirement would be for 45 M2 of catchment area 1 M3 of soakage capacity.

OR

OPTION 2:

Subgrade

Compact the existing soil to at least 92 % of Maximum Dry Density after removing vegetation and other unacceptable material from the soil to be compacted.

Sub-base/Base – Course

Sub-base/Base course material to be used over compacted soil could be either Rock base, Recycled Concrete or Recycled Asphalt material but needs to conform to the general specification of road base material. Base course to be compacted to at least 94% of MDD using minimum compacted thickness of 100 mm.

Sealing (Optional)

The entire area could be sealed with Primer seal or any other mode of cost effective sealing product. Sealing would make the pavement impermeable which would require extra soakage capacity from drainage consideration.

Drainage

After compaction of road base material to the required specification , the pavement could be used as non trafficable area but it would need to be drained either by grading the pavement towards some permeable area like Swale/ Sump or by installation of Soakwells.

For unsealed Pavement minimum required should be to contain 1 in 20 year storm, over 72 hour duration, within the property.

With sealing option as per item 4, the drainage requirement would be for 45 M2 of catchment area 1 M3 of soakage capacity.

**1.2 VERGE PARKING**

1.2.1 PRINCIPLES

- That as far as practicable all vehicle parking associated with land use and development applications shall be accommodated onsite.
- That verge parking will only be considered in circumstances where expansion of existing industrial premises is only possible if verge parking is permitted.
- That verge parking will only be considered in defined areas where such parking does not prejudice traffic safety, traffic circulation access, amenity or pose a threat to infrastructure located in the road verge.

1.2.2 INTERPRETATIONS (see attached sample layouts):

- Verge - means land within the gazetted road reserve, between the carriageway/pavement and the common boundary of the road reserve and lots fronting the road reserve.
- Verge Parking - means parking of vehicles within the verge.
- Extended Parking - means a parking area constructed within the verge but is physically linked and integrated with parking areas on private land within the setback area and all access/egress to the parking area is via an approved crossover.
- Kerb Access Parking - means a parking area constructed within the verge not physically linked or integrated with parking areas on private land and where the means of access/egress to the parking area is via a mountable kerb and parking bays are aligned at 90<sup>o</sup> or 45<sup>o</sup> or parallel to the road carriageway/pavement.
- Parking Embayment - means a parking area within the verge where parking bays are aligned parallel to and at the same vertical level of the road carriageway and the parking bays or bordered by continuation of the kerb.

1.2.3 IMPLEMENTATION

Verge Parking of any form is inappropriate where: (see constraints Plan 4)

- a. The road is reserved under the Metropolitan Region Scheme, has known road widening requirements or is subject to Main Roads WA Control of Access notice.
- b. Such parking by reason of location, near an intersection or road curvature or vertical elevation obstructs traffic sight lines.
- c. Such parking compromises the functioning and maintenance of essential services (electricity, gas, water, sewer, telephone) and is opposed by the relevant public utility agency.
- d. Such parking inhibits manoeuvring of industrial traffic.
- e. Such parking renders the use of the public road network unsafe.

Kerb Access Parking is inappropriate where;

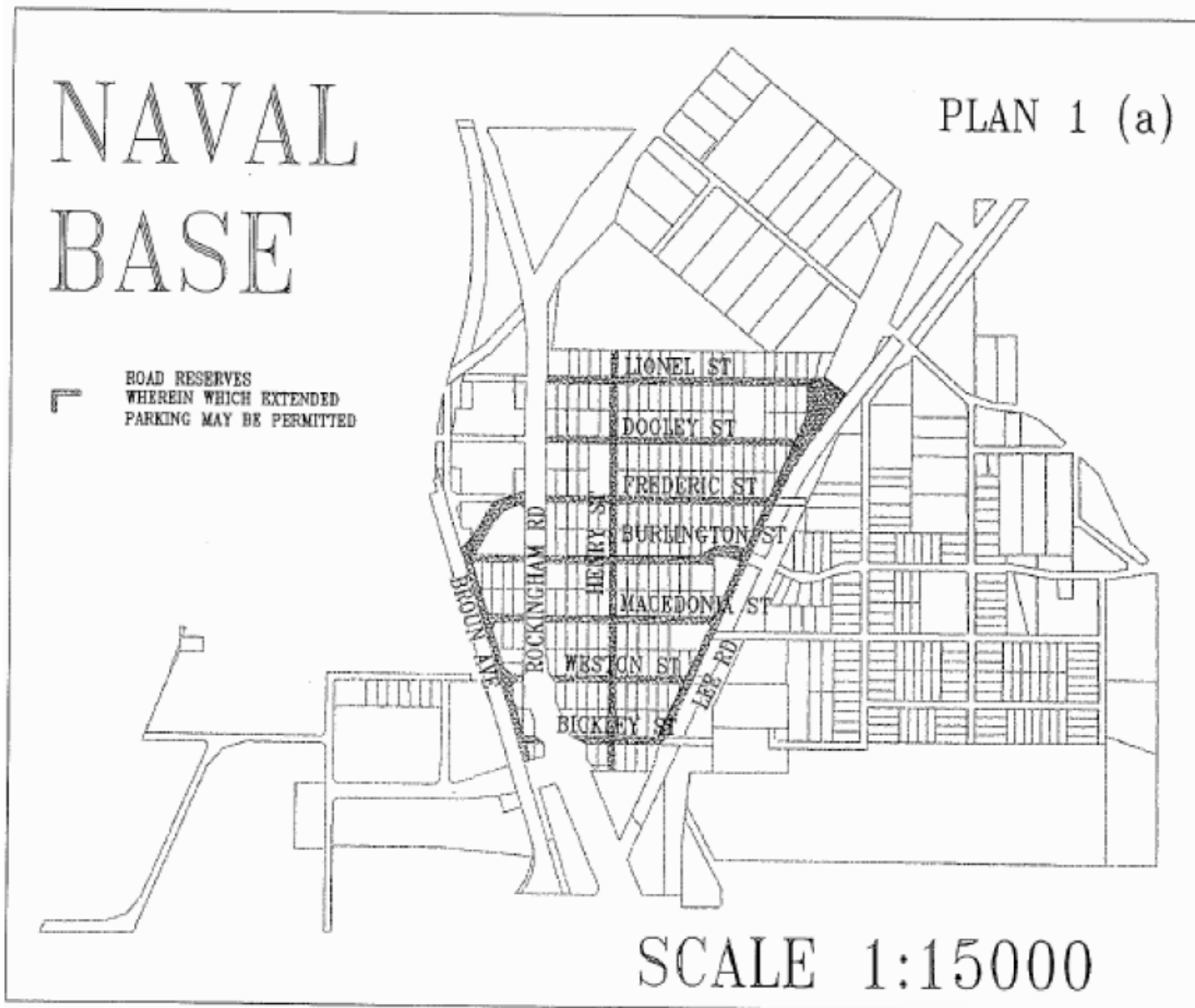
- a. Traffic speeds and volumes on the road are unacceptably high.
- b. The functional role of the road is a local, district or regional distributor.
- c. The road represents a through route.
- d. The gradients on the adjacent roads prevent effective emergency stopping.
- e. The topography of the locality prevents adequate sight distance.
- f. Where medians or islands have been installed in the vicinity.
- g. Verge width is less than 7.5 metres.
- h. Distance from intersection is less than specified under Main Roads WA Traffic regulations and therefore impacts on safe traffic movement at the intersection.

Embayment Parking is inappropriate where;

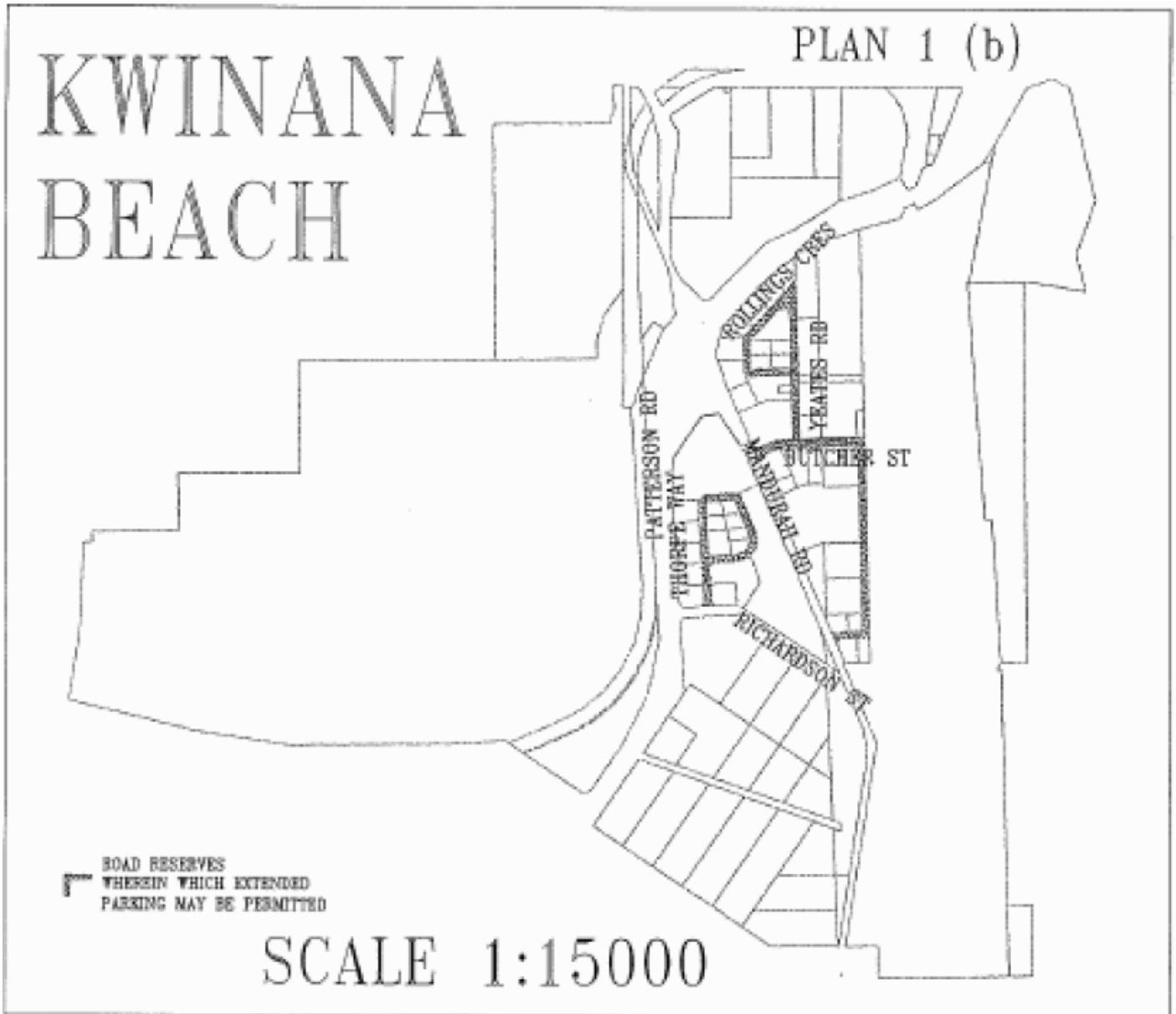
- a. Road reserve and carriageway/pavement widths are inadequate.
- b. Road gradients in the vicinity prevent emergency stopping.
- c. Topography in the vicinity obstructs safe traffic sight lines.
- d. Verge width is less than 3.5 metres.

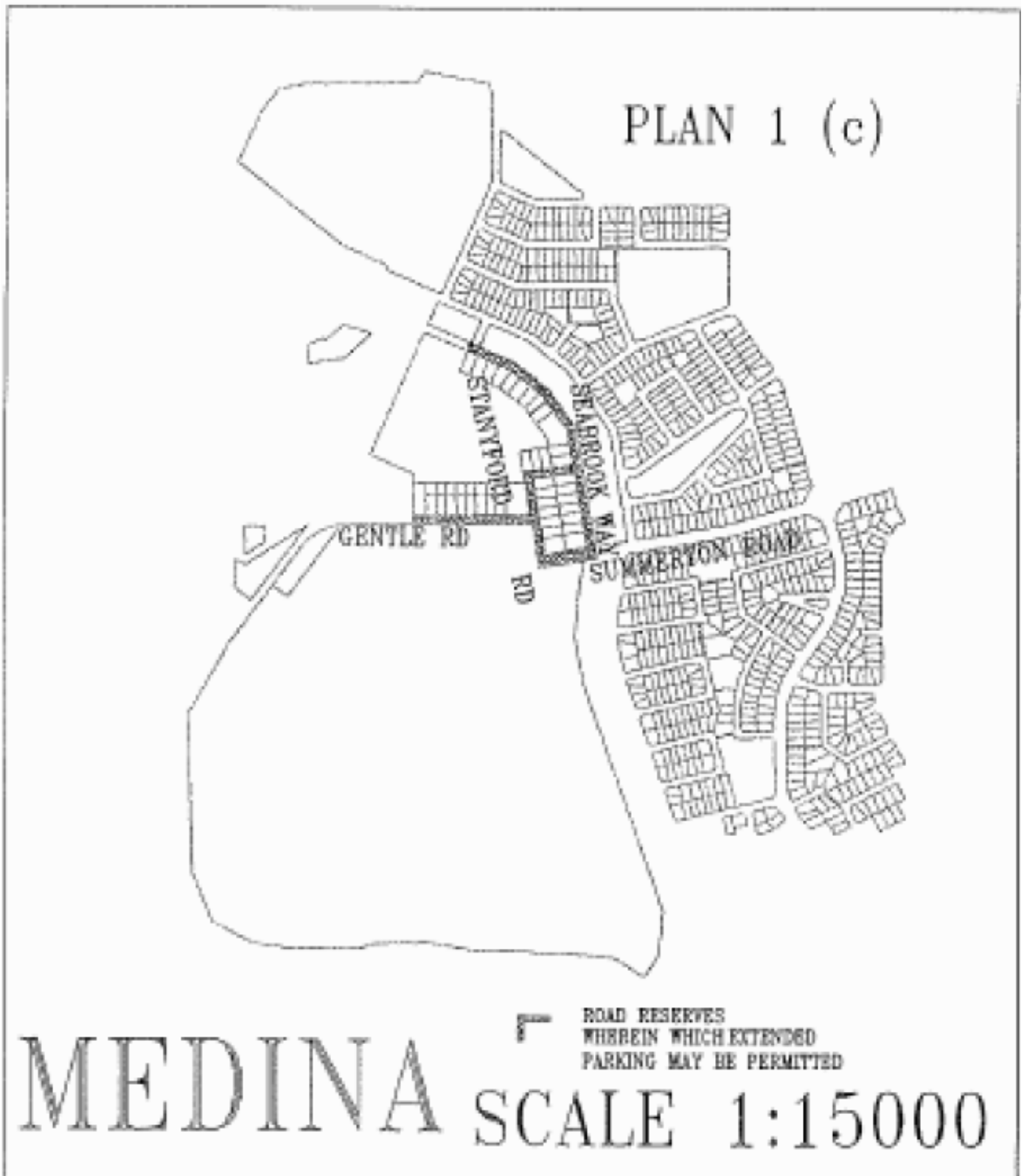
DEVELOPMENT WITHIN THE INDUSTRIAL ZONES

1. COUNCIL WILL ONLY CONSIDER EXTENDED PARKING IN INDUSTRIAL ZONED AREAS DELINEATED ON PLAN 1 (A-C).

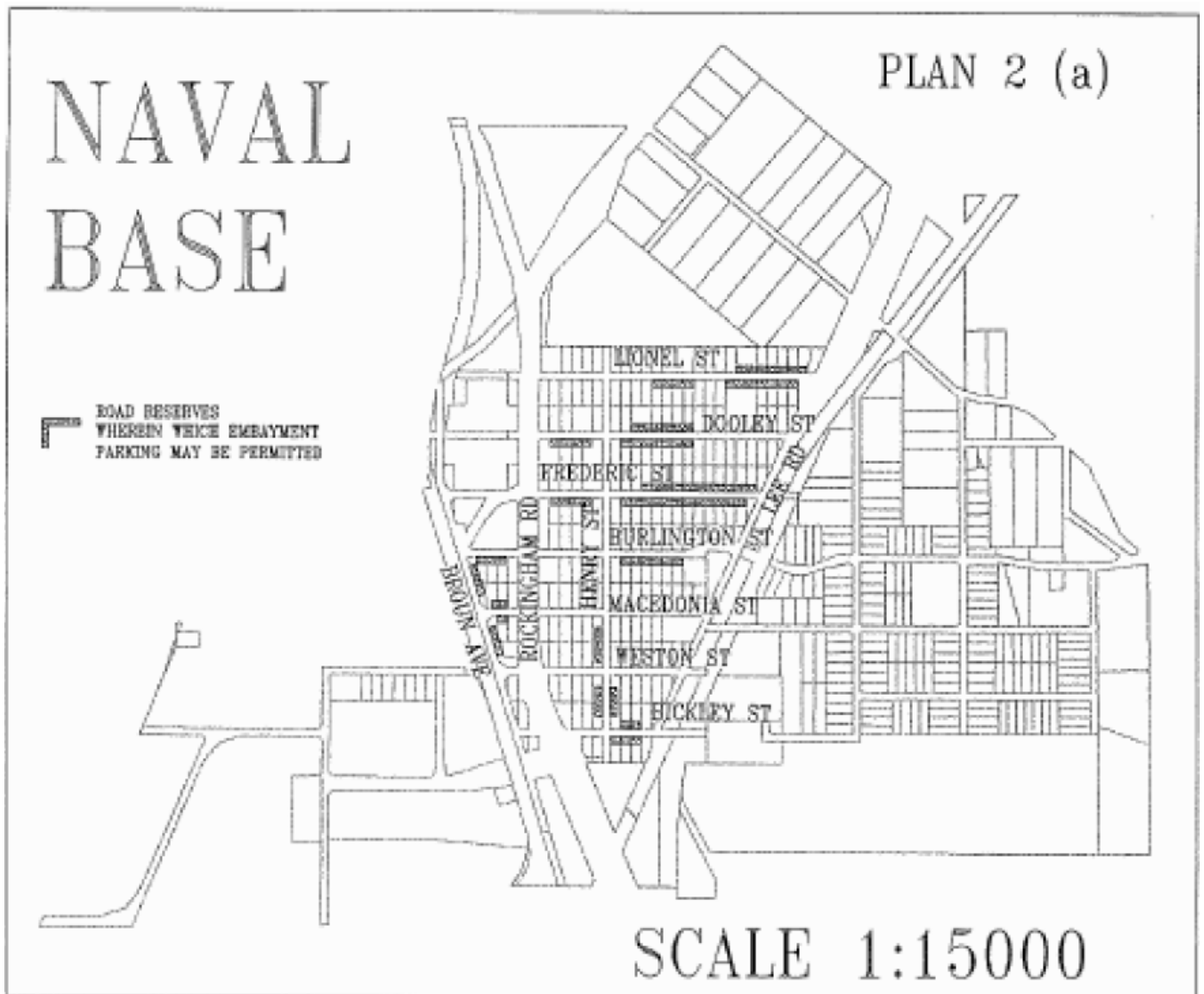


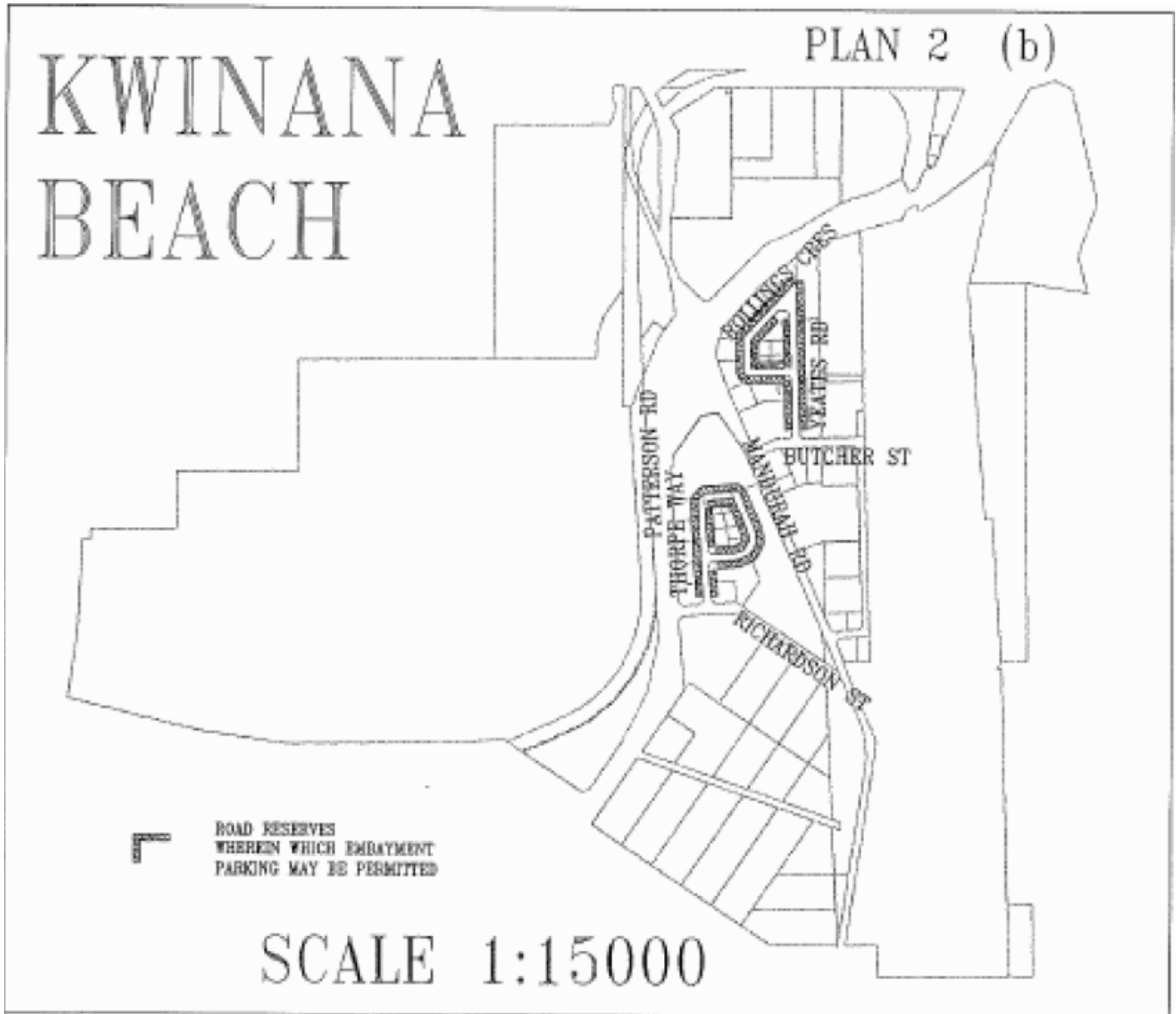






COUNCIL WILL ONLY CONSIDER EMBAYMENT PARKING IN AREAS DELINEATED ON PLAN 2 (A-C).



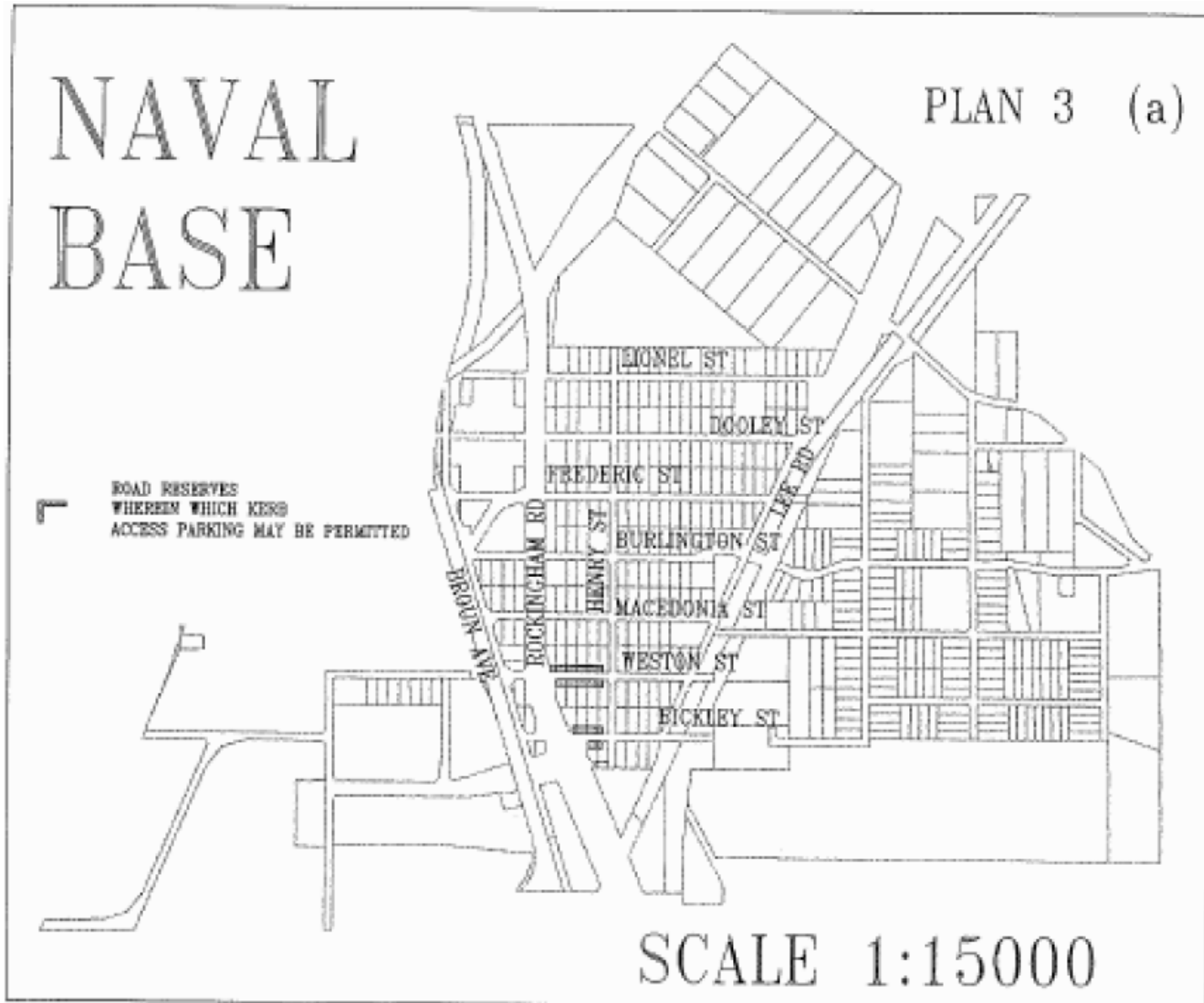


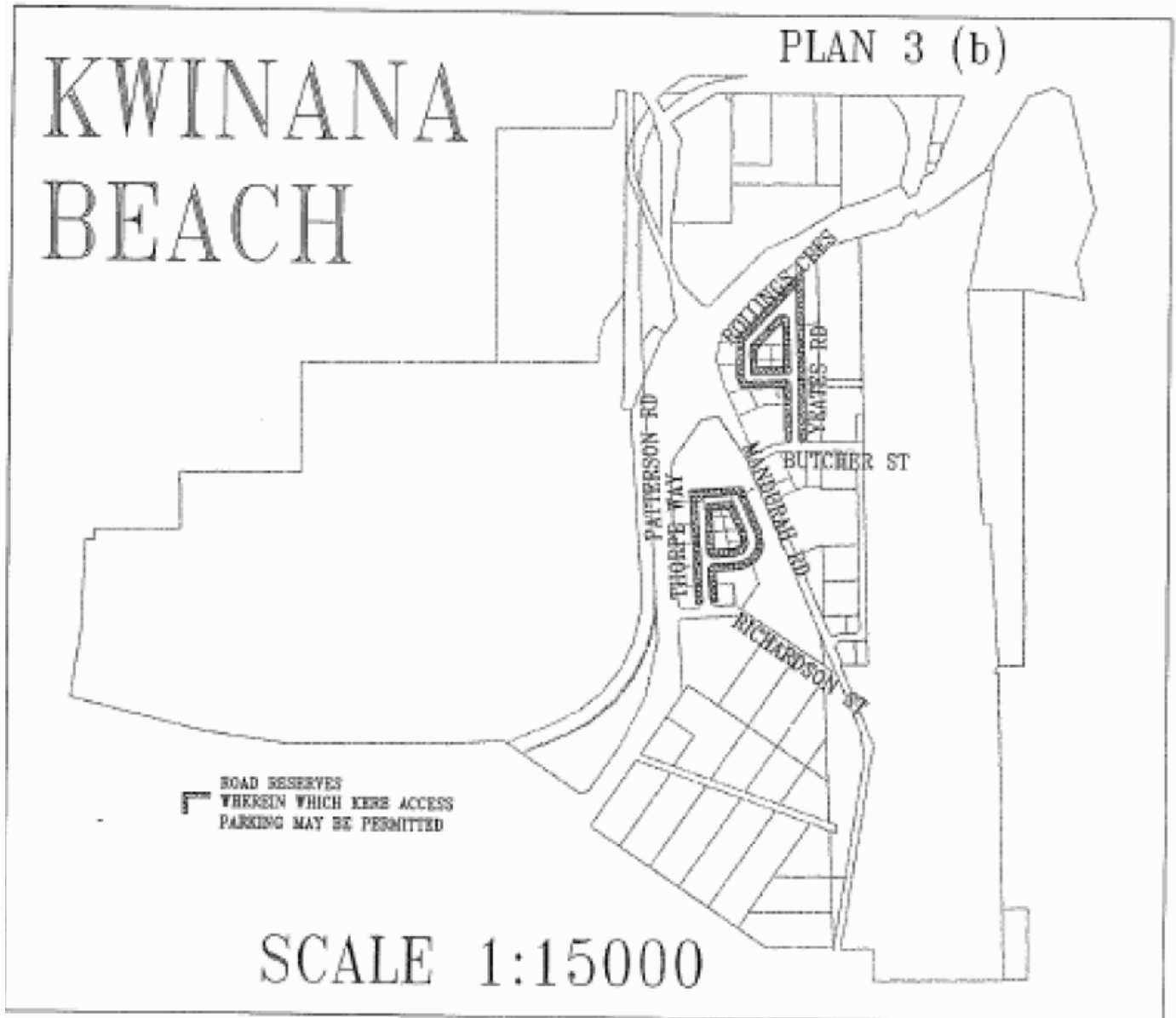
PLAN 2 (c)

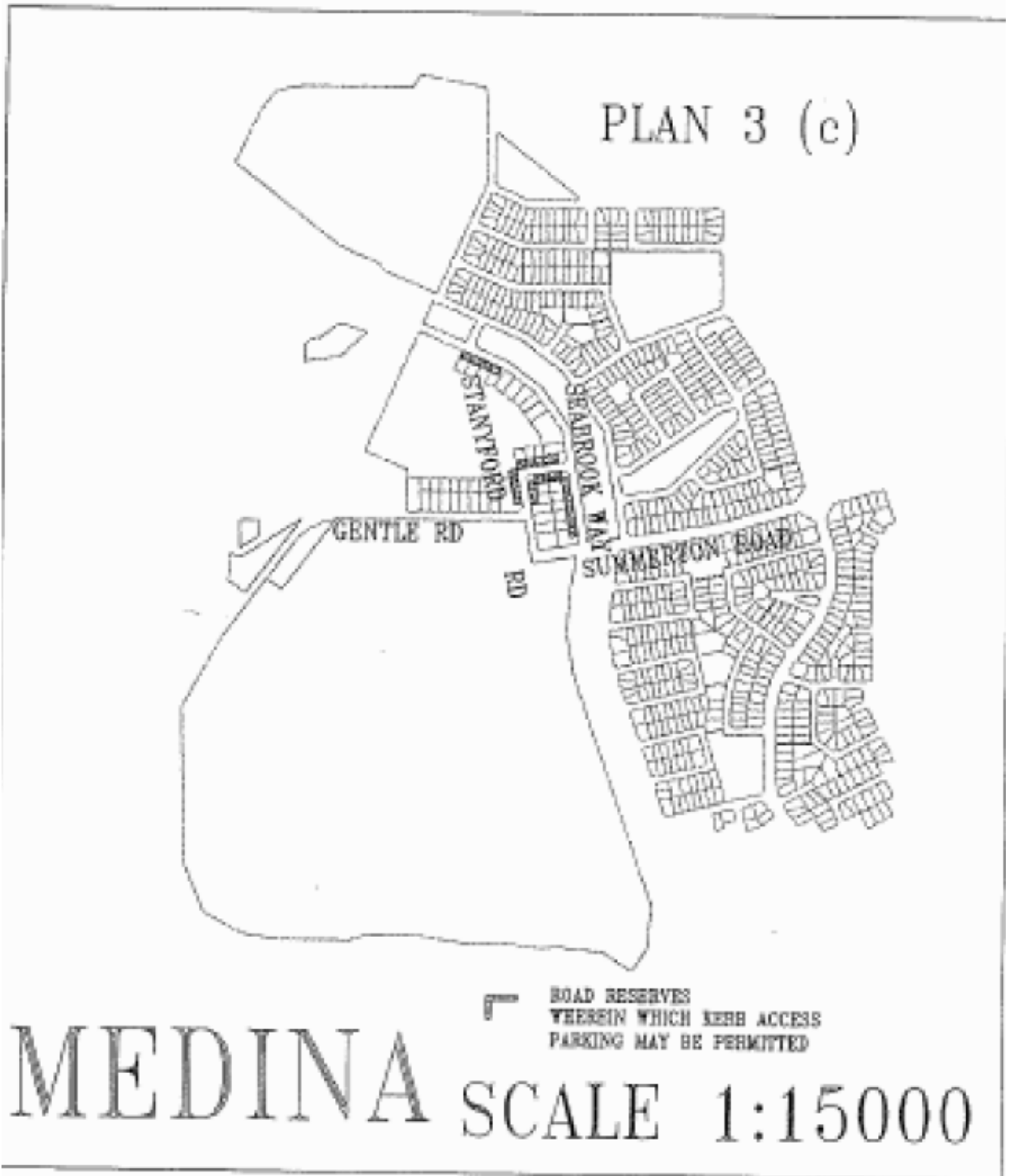


MEDINA  ROAD RESERVES  
WHEREIN WHICH EMBAYMENT  
PARKING MAY BE PERMITTED  
SCALE 1:15000

COUNCIL WILL ONLY CONSIDER KERB ACCESS PARKING IN AREAS DELINEATED ON PLAN 3 (A-C).






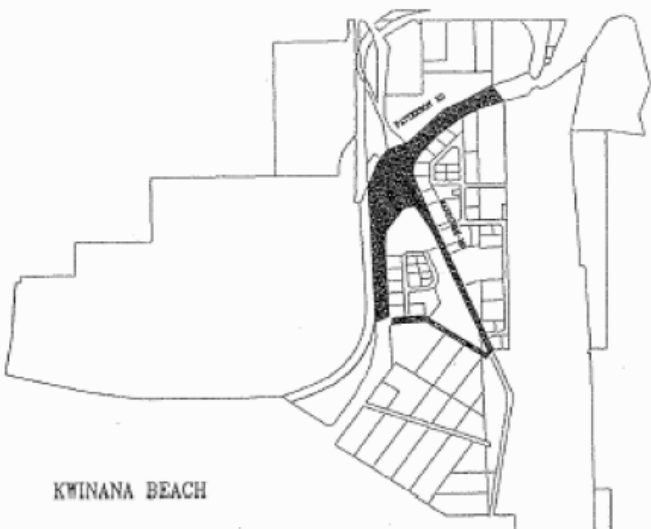
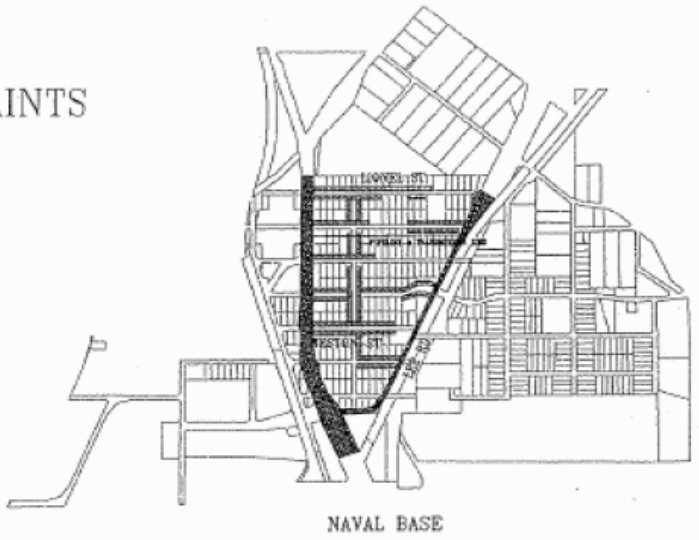




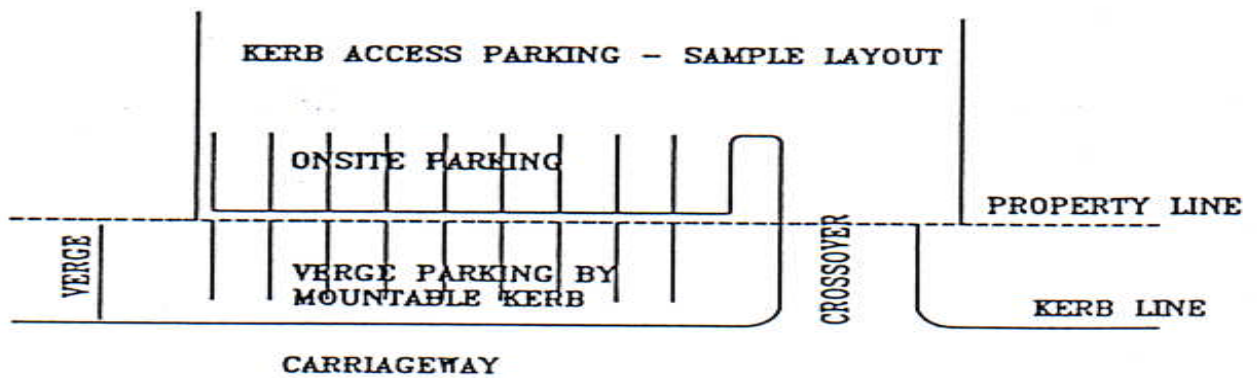
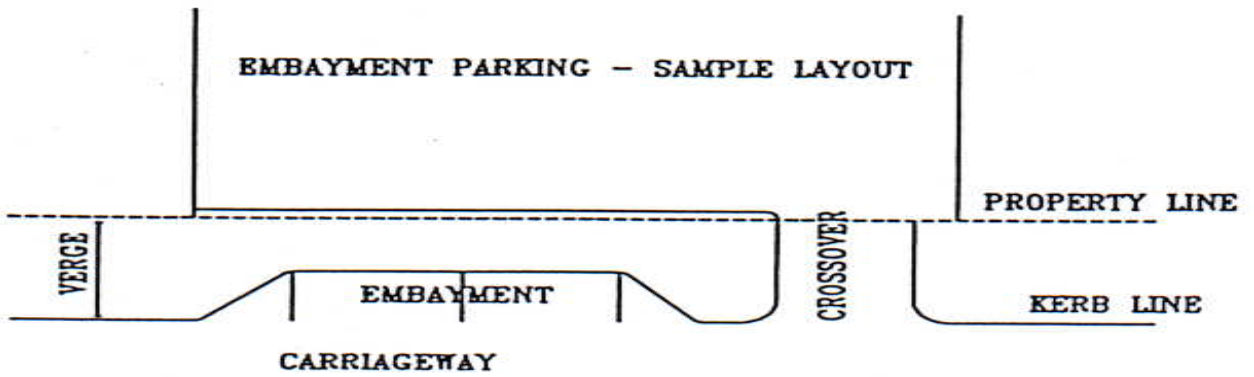
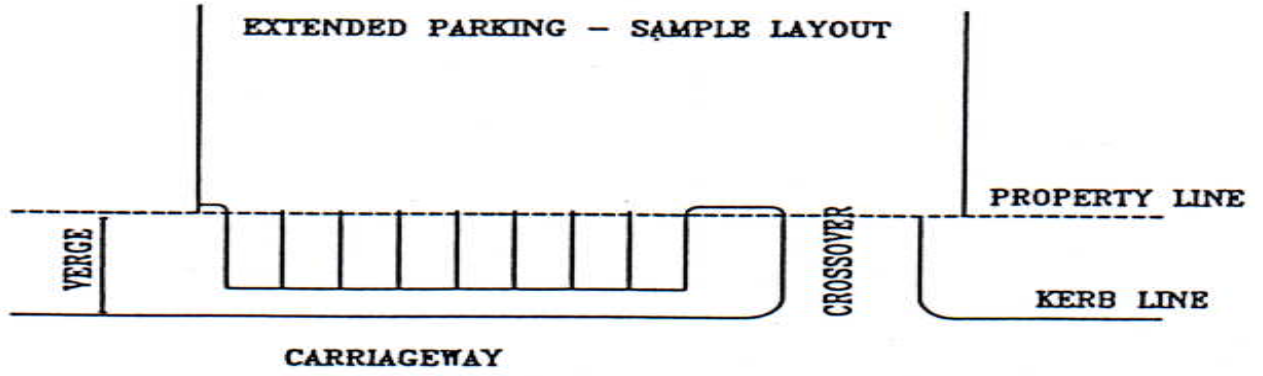


# VERGE PARKING CONSTRAINTS PLAN 4

-  REGIONAL, DISTRICT OR LOCAL DISTRIBUTOR
-  EMERGENCY STOPPING DISTANCE
-  SIGHT DISTANCE



- a. Council may decline support for verge parking if in its opinion such parking poses a threat to traffic and pedestrian safety and the smooth flow of traffic.
- b. Council in considering individual applications involving verge parking shall have regard to the above criteria for verge parking.
- c. Verge Parking will only be considered in relation to development proposals for expansion of long standing existing industrial developments where such expansion could not comply with Town Planning Scheme Requirements in respect of onsite parking, as a result of insufficient available land area.
- d. Verge parking will not be considered where new development is proposed on vacant lots, where parking could be accommodated onsite with redesign of proposed development or where a change of use and/or ownership (respectively) is proposed or is in process.
- e. Verge parking will only be considered where the proponent provides Council with written agreement from all public utility agencies to the extent that the installation of verge parking will not prejudice the function or maintenance of electricity, gas, water, sewer, telephone or other communication infrastructure.
- f. Where Council and Public Utilities approve verge parking the owner/proponent shall indemnify Council and Public Utilities against public liability claims to a value of \$10,000,000 against damage to or injury arising from the use and works, undertaken in the course of establishing and operation of verge parking. The indemnity should also include damage to services in the verge arising from works undertaken in the verge in order to establish verge parking. Where public utilities require access to the verge for upgrade and maintenance purposes, the landowner/proponent shall reinstate the verge and parking area immediately thereafter at no cost to Council or the Public Utility. The proponent shall also meet all costs associated with relocation of services.
- g. The requirement to indemnify Council, referred to in (f) above shall be secured by legally binding agreement between the landowner/developer and Council and shall be secured by caveat and the cost associated with the drafting, preparation and registration of the agreement will be met by the landowner/proponent.
- h. The approval and agreement should also require the acknowledgement by the owner that the permanent use of the verge for parking cannot be granted and that at some time in the future, Council or other public agencies may require the parking area be removed and the verge area be reinstated at no cost to Council.
- i. Verge parking areas shall be brick paved or sealed and drained at the proponent's cost to Council's specifications and all stormwater drainage from the paved areas is to be directed towards and disposed of on the proponent's landholding.
- j. Verge parking areas shall be landscaped to the satisfaction of Council, equivalent to 5% of the area within the verge used for parking and shall include the installation of reticulation and be maintained thereafter to the satisfaction of Council.
- k. The layout of Extended Parking areas shall ensure that all vehicles are able to manoeuvre and leave the subject property in a forward gear and via an approved crossover.
- l. Verge parking areas shall not be used for the loading, unloading or storage of goods.
- m. For embayment parking entry and exit, curves should be to Council specifications.
- n. Verge parking will generally not be supported in situations where it is proposed in conjunction with a development proposal which increases the site coverage and plot ratio above maximum levels specified under the scheme.



### **1.3 LANDSCAPING**

- 1.3.1 Areas of landscaping which are to be included as part of the minimum 5% requirement shall be located primarily within the front of the subject lot.
- 1.3.2 Council encourages the use of native species as these will reduce maintenance requirements and water demand.
- 1.3.3 The proponent is required to ensure that at least 50% of proposed landscaped areas are vegetated using mature/advanced species which is no less than 1.5 metres in height.
- 1.3.4 Landscaping is to be provided within parking areas at a rate of 1 tree per 4 bays to provide shade for parked cars and to soften the impact of paved carparking viewed from adjacent sites and roads.
- 1.3.5 Appropriate landscaping, including mature/advanced species, is to be used to screen service, storage and other areas as determined by Council's Planning Department.
- 1.3.6 A landscaping plan is required to be submitted at the building licence stage which outlines the proposed species and location of vegetation.
- 1.3.7 Verges adjacent to industrial sites are to be landscaped/turfed and reticulated to the satisfaction of Council's Engineering Department.
- 1.3.7 A landscaping bond or bank guarantee of \$9.50 per square metre shall be paid to council prior to the issue of a Building Licence.

### **1.4 EFFLUENT AND WASTEWATER DISPOSAL**

- 1.4.1 All proposed effluent disposal systems are to be nutrient retentive. Conventional septic systems are no longer permitted within the Industrial Area.
- 1.4.2 Proposed development shall not discharge wastewater to the environment or be used as a 'wet industry' without the prior approval of the City of Kwinana and Department of Environment.
- 1.4.3 All proposed settling and storage ponds are to be constructed to the satisfaction of the City of Kwinana, so as to prevent infiltration of effluent rich waste water into the groundwater, and to prevent the export of nutrients off-site or into adjacent waterways.
- 1.4.4 All loading / unloading or batching areas are to be suitably bunded. Such areas are to be of impermeable surfaces, with all drainage being captured and treated on-site.
- 1.4.5 All proposed development is required to comply with the current Western Australian Government Sewerage Policy.

## 1.5 GROUND WATER PROTECTION

- 1.5.1 Where applications are processed by Council, or members of the community are using chemicals, fuel storage and other organic matter, likely to impact on groundwater in the long term, the following conditions shall be imposed to minimise risk and liability:
- a) All storage containers, facilities or tank farms where chemicals, fuel and organic matter are used, stored or handled, shall be bunded equal to 110% capacity of the product used, stored or handled, to prevent pollution of groundwater, including drinking water.
  - b) Where large capacities in excess of 5000 litres are capable of being stored, or are present in tanks, containers or other facilities, it shall be necessary to install impervious membrane protection under the tank, containers or other facility. The membrane shall direct any spilt liquid or spillage of chemicals, including fuels and organic matter, to a protected area surrounding each tank, container or other facility which shall discharge to a waste treatment and recovery process.
  - c) When a development is proposed to be developed, modified or changed, the proponent shall be advised that Council requires the environment and the health of the community to be protected from any potential environmental and health impacts from the development including the processes and practices.
  - d) The proponent shall be required to provide the appropriate groundwater protection and bore monitoring systems and all monitoring bores installed shall be based on professional hydro-geological advice. The advice shall be also provided to Council's Manager Environmental Health Services prior to the installation commencing.
  - e) The proponent shall be advised to seek professional hydro-geological advice pertaining to any existing contamination, the processes and practices proposed or utilised and the potential for groundwater contamination from chemicals spilt and/or leaks and contaminated stormwater run-off from the development.

## 1.6 TRANSPORTABLE/NON-PERMANENT STRUCTURES

- 1.6.1 Transportable or non-permanent type structures (offices, amenities etc.) shall only be approved for a maximum period of no longer than 12 months. Following the expiry of the approval period, the proponent must remove the structure.
- 1.6.2 The proponent may submit an application for renewal of approval. In such cases the approval period may only be extended a further 6 months, after which the structure must be removed or replaced with a permanent building.

## **2. KWINANA BEACH AND NAVAL BASE**

### **2.1 DEVELOPMENT OF REGIONAL SIGNIFICANCE**

#### **2.1.1 BACKGROUND**

- The State Government of Western Australia has identified the Kwinana Industrial Area under the State Planning Strategy as an area vital to the state economy.
- The central core of the Kwinana Industrial Area is intended to accommodate existing (and planned) heavy industries, which generate offsite impacts including, risks and hazards, reduced air quality, odours, noise and vibration which are subject to licensing by various state government regulatory agencies which in part requires separation from uses attracting members of the public non employees of industry.
- The establishment of uses attracting members of the public into areas subject to industrial impacts is inappropriate from a public health and safety and environmental perspective.
- The establishment of uses attracting members of the public into areas in close proximity to these industries will in many cases, result in minimum separation distances referred to in licences or used as the basis for issuing licences issued by State Government agencies, not being met.
- Depending on the particular issue, Council's objectives for business services and facilities with the Kwinana Industrial Area may from time to time not necessarily be consistent with State Government objectives.
- At present Town Planning Scheme No. 2 permits (with varying levels of Council use of discretionary powers) certain uses within the General Industrial Zone (which includes the central core of the Kwinana Industrial Area), which may attract member of the public into areas subject to unacceptable levels of industrial impacts.
- The Western Australian Planning Commission whose role it is to protect State Government Interest in the planning process is not always aware of proposals, which may impact on State Interest within the Kwinana Industrial Area.
- Local Government is able to refer proposals for development which it believes are of State or Regional significance to the Western Australian Planning Commission for determination.

#### **2.1.2 IMPLEMENTATION**

- a) Where Council receives applications for Approval to Commence Development for establishment of a new retail, commercial, service commercial light industrial or service industrial or similar nature, (or expansion thereof) likely to attract members of the public into an area exposed to industrial impacts within Policy Area 15 Kwinana Industrial Strip and Policy Area No 14 Naval Base in Part 4 of Town Planning Scheme No. 2 and Council intends to grant Approval Commence Development of the use or development, Council shall deem that the proposed use or development is of State or Regional Significance and refer the application to the Western Australian Planning Commission for determination under the Metropolitan Region Scheme.
- b) Such referral should occur irrespective of the value of development proposed.

#### DEVELOPMENT WITHIN THE INDUSTRIAL ZONES

- c) Maintenance and refurbishment of existing approved development where no expansion or change of use is proposed shall not be deemed to be of State or Regional Significance in the context of this Policy and do not necessitate referral to the Western Australian Planning Commission.

## **2.2 DESIGN GUIDELINES**

- 2.2.1 All development within the Kwinana Industrial Area within the Kwinana Beach and Naval Base localities shall comply with the “Challenger Industrial Park - Development Guidelines”.
- 2.2.2 Within the area referred to as the Improvement Plan 14 Area no development proposal shall be approved by Council or Council Officers without first having been endorsed by LandCorp.

## **3. MEDINA LIGHT (GOLF COURSE) INDUSTRIAL ESTATE**

### **3.1 GENTLE ROAD AMALGAMATION OF LOTS**

- 3.1.1 That as a condition of Development Approval, Council impose a requirement to amalgamate front and rear portions of Lots 149-159 with Lots 184-191 Gentle Road, Medina if under the same ownership.

**SCHEDULE OF SUBMISSIONS**

Proposed Local Planning Policy No. 11: Site Requirements and Standards for Development within the Industrial Zones

SUBMITTER AND ADDRESS	NATURE AND SUMMARY OF SUBMISSION	CITY OFFICERS COMMENT
<p><b>1. Kwinana Industries Council (KIC)</b></p> <p>Contact: Chris Oughton Director</p>	<p><b>6.4 Crime Prevention through Environmental Design.</b></p> <p>Opportunistic and organised crime (primarily theft of copper and other valuable materials) is rife in the industrial areas. The landscape intent of the Draft Policy covered later in the document could potentially encourage a form of landscaping that assists criminals by obscuring their on-site activities from the public domain. A form of landscaping themed around single trunk, small to medium trees (e.g. Agonis flexuosa, Eucalyptus ficifolia etc.) planted within a bark-mulch garden bed is far superior for visibility purpose than dense shrub gardens that often reach a stable height of 2-3 metres.</p>	<p>Noted – Council has recently adopted the City of Kwinana Local Planning Policy No. 8: Designing Out Crime (LPP8). Fundamental aspects of the policy are the concepts of Crime Prevention Through Environmental Design (CPTED). These focus on influencing offender decisions that precede criminal acts to minimise the potential of these acts occurring. In this respect, the location and type of landscaping may well have an influence on the capacity for crime.</p> <p>Proposed Local Planning Policy 11: Site Requirements and Standards for Development within Industrial Zones (LPP11) includes 'Part 6.4 Crime Prevention Through Environmental Control' requiring that development should apply the CPTED principles. Applicants must address this and it is anticipated City Officers will consider the approaches made on an application by application basis balancing CPTED principles with best quality and appropriate landscaping design.</p>
	<p><b>8.3 Acceptable Setback Variations.</b></p> <p>It is good the Draft Policy provides for discretion on individual merit.</p>	<p>Noted</p>
	<p><b>9. Landscaping</b></p> <p>KIC provides several comments in regard to Landscaping:</p> <p>To provide some context KIC's comments, we ask the reader to visit the segment of Hope Valley Road to the west of the railway line. The landscaping can be described as 'prissy'. It is high quality IF AND ONLY IF someone takes responsibility for the ongoing maintenance, which they don't. In the main, industrial areas are practical places, where people are focused on the business of business. They do not usually think about the landscaping on the verge, or indeed even on their properties. Often we see weed infested and unkempt shrub beds, where some plants are dead, missing, or overgrown, and where litter collects.</p> <p>Several years ago, the City commissioned an industrial landscaping master plan. KIC assisted with this and supported the final document. KIC considered this an excellent reference document in guiding decisions in the industrial landscaping sphere. It also provided a plan for the landscape enhancement of the road reserves in the context of ongoing public road rehabilitation. KIC</p>	<p>Noted – City Officers consider the provision of high standard landscaping within the City's industrial zones is critical to the quality and amenity of these areas. The City promotes visually pleasing development and streetscapes within its industrial zones that does not hinder business but provides for a quality environment that encourages further business.</p> <p>While ongoing landscaping maintenance can be problematic, it is not unreasonable to expect that landscaped areas (including verges) which are defined and determined at the planning approval stage be maintained by landowners thereafter.</p> <p>One of the purposes of draft LPP11 however is to introduce more flexibility and a performance-based approach towards landscaping with the focus on quality, potentially smaller landscaping areas that can be realistically maintained but which also seeks to add to the amenity of the City's industrial areas.</p> <p>Noted. The "Masterplan" addressed in the submission was the "Kwinana Industrial Area Landscape Strategy" undertaken in 2011. This plan focused on upgrades for landscaping of the major roads through the Kwinana Industrial Area, however, the strategy was a</p>



**SCHEDULE OF SUBMISSIONS**

Proposed Local Planning Policy No. 11: Site Requirements and Standards for Development within the Industrial Zones

	<p>propose that this plan be reviewed and considered as a formal reference source for the Draft Policy. KIC would be happy to participate in one such review.</p> <p>KIC requested the City to rethink its approach to industrial landscaping where it comes to the percentage lot size requirements for landscaping. This is done from the perspective of the relatively new phenomenon of crime, for simplicity of maintenance, for practicality reasons, and of course for general amenity. The percentage approach, has not achieved consistently high standard outcomes in the past, and inconsistent maintenance input soon causes the deterioration of even the best of examples. Perhaps a more practical approach can be pursued, one that can achieve a 'reasonably good amenity' outcome for industrial areas? A potential way this could be achieved is through considering things in a collective sense, the requirements for car parking (on and off site), landscaping (on and off site), fencing alignments and setbacks (front and side).</p> <p>For example, can the landscaping form verge car parking simply be a single tree (ultimately for shade and amenity purposes) at the front of and between two bays, with a mulched bed to receive the storm-water runoff (water wise design) as opposed to running it onto the industrial site? Can the car parking be both on and off (verge) site with no landscaping other than the trees as described, and the security fence adjoining the on-site periphery of the bays?</p> <p>Car parking and percentage lot areas set aside for landscaping strips provides a 'quantitative context' for planners to assess against, but does this approach allow the flexibility to achieve something that is much better?</p> <p>S.9 .1 Landscaping Objectives (under (f) Land scaping strips to act as visual buffer adjacent to all street frontages) is good in theory, but it may not deliver optimal outcomes in the longer term, for all of the reasons already outlined. After all, the outcome sought is only really a visually pleasing, safe, environmentally acceptable industrial area, which allows business to get on with what it needs to be good at and where the criminals are discouraged from breaking into steal. On-site</p>	<p>broad concept and focused on the public realm and was not a plan for individual properties. More recently, the City is preparing a Landscape Strategy for the whole of the City and this strategy will consider street trees within the public realm in the City's industrial zones.</p> <p>Noted. As discussed above, the provision of high standards of landscaping within the City's industrial zones is considered good planning and critical to the quality and amenity of these areas. The City should be promoting visually pleasing development and streetscapes within its industrial zones and reap the benefit from the environmental advantages which good landscaping can deliver.</p> <p>The application of areas and percentages under the City's existing Local Planning Scheme No.2 (LPS2) for landscaping in industrial areas is an approach to new development that seeks to ensure a consistent and relatively simple approach to the delivery of landscaping and hence, the visual amenity / streetscape on private land in industrial zones. Draft LPP11 seeks to provide additional flexibility to the provisions of the LPS2 having regard to other requirements of sites; including effluent disposal.</p> <p>It is acknowledged that this approach can be problematic in so far that that it tends to be a one size fits all approach to landscape provision. Further, its effectiveness is largely reliant on ongoing maintenance of landscaped areas, including verges, by landowners (albeit that this is not considered to be an unreasonable expectation of development).</p> <p>The KIC suggestion that an alternative approach be pursued has merit for future discussion but City Officers take the view that the current approach be maintained at present.</p> <p>It should be noted that the Draft LPP does provide significant variations to LPS2 with respect to:-</p> <ul style="list-style-type: none"> <li>• Built form</li> <li>• Boundary setbacks,</li> <li>• Plot ratio and site coverage,</li> <li>• Landscaping; and</li> <li>• Parking reductions under certain circumstances including the capacity to park on verges.</li> </ul> <p>Not Agreed. While City Officers support further discussion by the City with KIC about landscaping in the City's industrial zones, the provision of high standards of landscaping within the City's industrial zones is considered good planning and critical to the quality and</p>
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**SCHEDULE OF SUBMISSIONS**

Proposed Local Planning Policy No. 11: Site Requirements and Standards for Development within the Industrial Zones

	<p>landscaping may be better applied to creating pleasing outdoor areas for staff to enjoy during breaks, rather than toward strip planting along fence lines and boundaries.</p>	<p>amenity of these areas. A visual buffer not only contributes to a more visually pleasing streetscape, it enables businesses to adequately screen their sites where there is outdoor storage, refuse areas, loading /unloading, etc, which detract from the customer experience. It is considered best practice and good business to ensure such areas are screened and maintained. . It is of course important that this be balanced by the application of CPTED principles as part of development approvals.</p>
	<p><b>13.2 Objectives for Verge Parking</b></p> <p>Objectives are supported, but would be worthwhile allowing for variations based on the discussion above.</p>	<p>Noted – Variations may be considered on their merits having regard to traffic safety, access, traffic circulation, amenity or potential impact to infrastructure.</p>
	<p><b>13.8 (d).</b></p> <p>Draft Policy position supported, but would be worthwhile allowing for variations based on the discussion above. The objective is to minimise the effects of stormwater runoff into the roadway collection system.</p>	<p>Noted –. Variations may be considered on their merits having regard to traffic safety, access, traffic circulation, amenity or potential impact to infrastructure.</p>
	<p><b>15. Groundwater Protection.</b></p> <p>Change the word "likely" to "with the potential" - appears in 15.1 and 15.2.</p>	<p>Noted – Changes made.</p>
	<p><b>17. Public Art</b></p> <p>The principle is supported;</p> <p>However, a proliferation of site-based pieces may detrimentally add up to produce an overall effect of untidiness and poorly maintained clutter. Is it not better to have large 'industrial' scale pieces in public places where they will be maintained?</p>	<p>Noted - The submitter makes a valid point regarding proliferation of public art. It should be noted this would be on a case-by-case approach and the City of Kwinana's Local Planning Policy No. 5: Development Contribution Towards Public Art (LPP5) addresses these concerns. LPP5 outlines how the contribution towards public art will be achieved and provides guidance for the placement of Art or the payment of cash in lieu, whichever is more appropriate. LPP5 is considered as part of any Development Application and this document is referenced in the Draft LPP.</p>
	<p><b>18. Kwinana Beach and Naval Base - Development of Regional Significance (dash point 6)</b></p> <p>The intent of this series of dash-points is strongly supported.</p> <p>In providing this support the KIC add that the additional investment in Wells Park by the City would encourage increased use of the facilities by the public. The Draft Policy states that "... LPS2 permits certain uses which may attract members of the public into areas subject to</p>	<p>Noted</p>

**SCHEDULE OF SUBMISSIONS**

Proposed Local Planning Policy No. 11: Site Requirements and Standards for Development within the Industrial Zones

		<p>unacceptable levels of industrial impacts". Clearly, the risks associated with approving uses that attract more members of the public into the core is well understood.</p> <p>Wells Park is in the industrial core, and adjacent to significant land based and maritime industry risk. This risk profile is set to intensify with the arrival of the Puma Energy petroleum tank farm, the expansion of Nickelwest and the addition of two bitumen plants. There are (and will be additional) chemical process enterprises related to the new energy metals industry that we are aware of setting up in the precinct around the park.</p> <p>The City needs to be aware that in continuing to upgrade Wells Park over time, it is encouraging higher numbers of the recreating public into a high-risk industrial environment. Whilst the City is legitimately able to exclude itself from capture within its Draft Policy, the effect of continuing with upgrades to the park is in essence contrary to the intent of the Draft Policy.</p>	<p>Noted – City Officers endeavour to ensure compliance through the application of appropriate resources.</p>
		<p>KIC conclude with a comment not directly related to the Draft Policy, but to ensuring compliance with it over time. There are numerous examples of properties within the various industrial areas that do not comply with the existing Policy, let alone the proposed one.</p> <p>The City is encouraged to apply resources to require compliance so that it is consistent in its application of the Policy. This is viewed as an element of the overall policy environment that can have a significant positive effect towards the achievement of the industrial landscape environment that the Draft Policy seeks to achieve.</p>	

## 16 Reports - Civic Leadership

### 16.1 Adoption of the 20-year Long Term Financial Plan 2019/2020 to 2038/2039

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

There were no declarations of interest declared.

#### **SUMMARY:**

In accordance with section 5.56 of the *Local Government Act 1995*, Council is required to plan for the future of the district. As part of the integrated planning framework set out by the Department of Local Government, Sport and Cultural Industries, the Long Term Financial Plan balances the financial capacity of the City with the outcomes from the Strategic Community Plan, Corporate Business Plan, Workforce Plan and Asset Management Plans.

The Long Term Financial Plan informs the Corporate Business Plan by identifying and forecasting the City's finances over the next 20 years. The City of Kwinana is planning for a positive and sustainable future. The City seeks to maintain, and where possible, improve service levels into the future, while maintaining a sound financial position. The aim is to achieve this with the imposition of the least possible financial burden for the Kwinana community.

At its Ordinary Meeting held on 28 June 2017, Council adopted the Kwinana 2030 – Strategic Community Plan 2017-2027. The Strategic Plan is derived from extensive community consultation which included the Community Perceptions Survey (online and postal), a stall at community events (held at five community events), Community Workshops (eight workshops held in total) and a Strategic Community Plan online survey. The Long Term Financial Plan outlines how the City plans to fund the delivery of the Strategic Community Plan.

#### **OFFICER RECOMMENDATION:**

That Council adopt the 20 Year Long Term Financial Plan 2019/2020 to 2038/2039 detailed in Attachment A.

#### **DISCUSSION:**

In 2016, the Department of Local Government and Communities (now called Department of Local Government, Sports and Cultural Industries) introduced the Integrated Planning Framework which outlines strategic documents that local governments must have in place. The City of Kwinana's Long Term Financial Plan is a twenty year plan that uses the 2018/2019 approved budget as the baseline data. Assumptions are then made to the baseline data, which are detailed in the Long Term Financial Plan, to project the funding amounts for future years.

The attached statutory form of the Long Term Financial Plan has been prepared in accordance with the Elected Member workshop sessions at Forums held from September 2018 to November 2018. The Long Term Financial Plan is part of Council's commitment and response to ensure the financial viability of the City in the context of ageing assets, community expectations and the Integrated Planning Framework.

16.1 ADOPTION OF THE 20-YEAR LONG TERM FINANCIAL PLAN 2019/2020 TO 2038/2039

The Corporate Business Plan and the Workforce Plan have been considered in the City’s Long Term Financial Plan for the next five years, ensuring that actions that achieve the community aspirations can financially be delivered. Projections in the Workforce Plan beyond 2021 are based on new employees required as part of new Infrastructure being constructed in accordance with the City’s Developer Contribution Scheme. The Long Term Financial Plan includes a Capital Works Plan which details a list of capital projects for the next 20 years and the funding assumptions for these works.

The objective of the Department of Local Government, Sport and Cultural Industries’ approach to Integrated Planning and Reporting is to create a process of continuous improvement. The Department of Local Government, Sport and Cultural Industries anticipates that over time, local governments will progress to an advanced level in their planning and integration. To aid the process of continuous improvement and alignment with community aspirations, the Strategic Community Plan and Corporate Business Plan must be periodically reviewed and the City’s performance regularly monitored and reported. The diagram below demonstrates the relationship between the Long Term Financial Plan, as an informing strategy, and the Strategic Community Plan and Corporate Business Plan.



\*Department of Local Government and Communities – Integrated Planning and Reporting: Framework and Guidelines, 2016

There are a number of significant items included in the Long Term Financial Plan that have enabled the City to keep the rate increases to a minimal 3.5% and these include:

- In an attempt to force efficiencies in the City’s operating costs there has been no increase (including CPI) in the operating costs for the next four years.

#### 16.1 ADOPTION OF THE 20-YEAR LONG TERM FINANCIAL PLAN 2019/2020 TO 2038/2039

- In an attempt to gain efficiencies, utilities (power, water, gas) have only been increased by CPI per annum from 2022. This is well below the average increase in utility costs compared to the CPI rate over the last five years. The reason for adopting a lower rate than the average utility rate increase is that the City is proactively addressing its power costs by progressively installing solar power infrastructure on its buildings. These installations effectively pay for themselves and the return on investment is realised within a number of years.
- Increase in salaries and wages has been forecast at 1.5% or CPI per annum, whichever is greater, for the life of the plan.
- Additions to the City's workforce will be kept to a minimum. New appointments will generally be limited to self-funded positions or to service the new community infrastructure or improved services.
- The City's current practice for its passenger and light commercial fleet is for passenger vehicles to be retained for three years/60,000 kms and light commercials to be retained for four years/80,000 kms.
- Capital expenditure is limited in the first five years. The City's roads program, for example, will only see the majority of work carried out where there is grant funding approved. The cuts do not mean the work will not be done, it simply means it has been rescheduled to later years when it will be more affordable for the City. The City's Asset Management Plans will be reviewed and adjusted to reflect the changes.

In future years, the Annual Budget will be developed on the basis of the Long-Term Financial Plan. Therefore, it is expected that the next review of the Long Term Financial Plan will take place in June 2019.

The Long Term Financial Plan should be used as a guide; however, Council can change assumptions in the Long Term Financial Plan when considering the next financial year's budget.

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

Section 5.56 of the *Local Government Act 1995* states:

- (1) *A local government is to plan for the future of the district.*
- (2) *A local government is to ensure that plans made under subsection (1) are in accordance with any regulations made about planning for the future of the district.*

Section 6.2(2) of the *Local Government Act 1995* states:

*In the preparation of the annual budget the local government is to have regard to the contents of the plan for the future of the district made in accordance with section 5.56 and to prepare a detailed estimate for the current year of —*

- (a) *the expenditure by the local government; and*
- (b) *the revenue and income, independent of general rates, of the local government; and*
- (c) *the amount required to make up the deficiency, if any, shown by comparing the estimated expenditure with the estimated revenue and income.*

The Integrated Planning and Reporting Long Term Financial Plan Guidelines issued by the Department of Local Government and Communities in September 2016 states:

## 16.1 ADOPTION OF THE 20-YEAR LONG TERM FINANCIAL PLAN 2019/2020 TO 2038/2039

*To retain alignment with the Corporate Business Plan, the Long Term Financial Plan needs to be a rolling and iterative document that is subject to annual review. More substantial reviews occur in conjunction with the two-yearly Strategic Reviews, alternating between the Minor Strategic Review and the Major Strategic Review.*

### **FINANCIAL/BUDGET IMPLICATIONS:**

The Long Term Financial Plan is a key element of the Integrated Planning and Reporting Framework and is the informing strategy that enables the City to determine its capability to sustainably deliver assets and services to the community. It allows the City to set priorities, within its resourcing capabilities, to deliver short, medium and long term community needs.

The Long Term Financial Plan outlines the City's long term financial sustainability, allows early identification of financial issues and the longer term impacts, shows the linkages between specific plans and strategies, and enhances the transparency and accountability of the City to the community.

The City's Long Term Financial Plan has used assumptions to project out 20 years using the baseline data from the 2018/2019 budget. There are no direct financial implications to Council from the adoption of the Long Term Financial Plan and the Long Term Financial Plan will be used as a guide when considering the budget for the next financial year.

### **ASSET MANAGEMENT IMPLICATIONS:**

Due to the City experiencing high levels of population growth in the first 10 years of the Long Term Financial Plan, there is limited financial investment in the capital work that has been identified. From 2028, the Long Term Financial Plan shows that significant investment occurs into the renewal of assets from surplus municipal funds and the City's financial ratios related to asset management improve.

It is recommended that where there are surplus funds identified through budget reviews that these funds are transferred to the Asset Management Reserve to fund capital works instead of funding these works through loan funds.

The City is monitoring the asset management gap and will ensure that as funding becomes available, the investment in asset management will be proactively addressed.

The City acknowledges that the City's Auditors for the financial year ended 30 June 2018 noted in their management report that the results of the following ratios were below the standards set by DLGSC and are impacted by the limited investment in asset renewal and available surplus to fund capital expenditure:

## 16.1 ADOPTION OF THE 20-YEAR LONG TERM FINANCIAL PLAN 2019/2020 TO 2038/2039

## 1. Operating Surplus Ratio

*The Operating Surplus Ratio represents the percentage by which the operating surplus (or deficit) differs from the City's own source revenue which includes rates and operating grants. The City's ratio (after adjustment for FAGs and Loss on revaluation of infrastructure) has slightly deteriorated in the current year from negative 0.11 to negative 0.13 and it has been negative for the last 3 years. Analysis of the City's Statement of Comprehensive Income indicates the deterioration of the ratio has been attributed to the increase in operating expenses (in particular, depreciation, employee costs and material and contracts) more than the increase in operating revenue. Discussion with management indicated they will continue their effort in identifying practical ways of increasing the City's operating position in the future in order to increase the ratio above the basic acceptable target level. This includes considering the sustainability of the current rating structure, identifying potential new avenues of revenue, and finding the optimum level of the City's operating expenses.*

*The formula for the operating surplus ratio is:*

*Operating Revenue minus operating expense divide Own Source Operating Revenue  
Where:*

*Operating Revenue - Revenue that is operating revenue for the purposes of the AAS, excluding grants and contributions for the development or acquisition of assets*

*Operating Expense - Expenses that are operating expenses for the purposes of the AAS.*

*Own Source Operating Revenue - Revenue from rates and service charges, fees and user charges, reimbursements and recoveries, interest income and profit on disposal of assets.*

The standards set by the Department of Local Government, Sports and Cultural Industries (DLGSC) is that the basic standard is between 1% and 15% (0.01 and 0.15) and the advanced standard is greater than 15% (>0.15).

**Officer Comment**

The City recognised \$12.1 million in gifted assets as a result of civil infrastructure being handed over to the City as a result of development. The operating surplus ratio includes non-cash expenses which includes depreciation and profit and loss on sale of assets. The depreciation cost for the 2017/2018 financial year was \$14.3 million. It is important for local governments to recognise that assets depreciate and there should be sufficient funds available for renewal and replacement of these assets. DLGSC states that this ratio indicates how much of a local government's percentage of total own source revenue is available to help fund proposed capital expenditure, transfer to cash reserves or to reduce debt. However non-cash items are not required to be included in the calculation of a rate setting statement. The DLGSC requires a rate setting statement, which determines how much rates income is required to be raised to balance a budget, to exclude non-cash items such as depreciation.

The City's 2017/2018 operating surplus ratio is negative, indicating that City's current services and depreciation expenses are higher than the total operating income. For a high growth local government such as Kwinana, this ratio will be lower than an established local government and will improve in the future as the number of rateable properties increase and the depreciation due to the recognition of gifted assets starts to reduce.



## 16.1 ADOPTION OF THE 20-YEAR LONG TERM FINANCIAL PLAN 2019/2020 TO 2038/2039

## 2. Asset Sustainability Ratio

*The Asset Sustainability Ratio expresses capital expenditure on renewal and replacement of existing assets as a percentage of depreciation costs. It is used to identify any potential decline or improvement in asset conditions. A percentage of less than 100% on an ongoing basis indicates assets may be deteriorating at a greater rate than spending on renewal or replacement. This ratio has deteriorated further from last year and is trending downwards, and has been below the Department of Local Government, Sport and Cultural Industries target level of 0.90 for the last 2 years. An analysis of the City's Statement of Comprehensive Income indicates the main reasons for the deterioration of this ratio to be:*

- a) A significant reduction in the City's capital renewal expenditure for the year. This was due mainly to the City's resources being utilised on the completion of the Calista Oval Destination Park and Kwinana Outdoor Youth Space Skate Park. Capital expenditure on new projects is not taken into account in calculating this ratio and may be a reason for short term fluctuations; and*
- b) An increase in the depreciation expense from \$12.5m to \$14.4m for the current year. The increase was mainly due to additional infrastructure assets (in particular roads) worth \$13.6m contributed by developers and the revaluation of buildings last year. To help the City maintain its assets base more effectively and improve this ratio, the above matters should be considered in the City's asset management planning in the future.*

*The formula for the asset sustainability ratio is:*

*Capital Renewal and Replacement Expenditure divide Depreciation Expense*

*Where*

*Capital Renewal and Replacement Expenditure - Expenditure to renew or replace existing assets. In other words, it is expenditure on an existing asset to return the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure. As it reinstates existing service potential it may reduce operating and maintenance costs.*

*Depreciation - Has the meaning given in the AAS. Under AASB 116 paragraph 6, being depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. In other words, depreciation represents the allocation of the value of an asset (its cost less its residual value) over its estimated useful life to the local government. Depreciation expense can be sourced from the audited annual financial report.*

*The standards set by DLGSC is that the basic standard is met if the ratio can be measured and is 90% (0.90) and the improving standard is met if the ratio is between 90% and 110% (0.90 and 1.10).*

*Officer Comment*

*The DLGSC states that the purpose of this ratio is to indicate whether a local government is replacing or renewing existing non-financial assets at the same rate that its overall asset stock is wearing out.*

**16.1 ADOPTION OF THE 20-YEAR LONG TERM FINANCIAL PLAN 2019/2020 TO 2038/2039**

The City of Kwinana is a high growth local government and continues to work to balance the expectations of the community and the services provided with the revenue sources available at the time. As the City continues to advance in its development and grows towards its projected population, revenue sources receivable through rates and other fees and charges income will also increase. More funds will be available for the renewal and maintenance of the assets, improving the above financial ratios. Currently the City's focus is delivering the services that the community require and as the City's operating income increases, greater investment in capital renewal and capital replacement will occur.

Ratios provide useful information when compared to industry and internal benchmarks and can assist in identifying trends. Whilst not conclusive in themselves, understanding ratios, their trends and how they interact is beneficial for the allocation of scarce resources and planning for the future.

**ENVIRONMENTAL IMPLICATIONS:**

The environment and the services that are being delivered to ensure that the natural environment is protected are funded and detailed in the Long Term Financial Plan.

**STRATEGIC/SOCIAL IMPLICATIONS:**

This proposal will support the achievement of the following outcomes and objectives detailed in the Corporate Business Plan.

Plan	Outcome	Objective
Corporate Business Plan	Civic Leadership	5.1 An active and engaged Local Government, focussed on achieving the community's vision
Corporate Business Plan	Business Performance	5.4 Ensure the financial sustainability of the City of Kwinana into the future

**COMMUNITY ENGAGEMENT:**

The community engagement occurred as part of the major review of the Strategic Community Plan in 2017. The Corporate Business Plan was developed in 2018 to achieve the aspirations, outcomes, objectives and strategies that the community identified as part of the Strategic Community Plan. The Long Term Financial Plan ensures the Corporate Business Plan actions are financially capable of being delivered to achieve the objectives set out in the Strategic Community Plan.

**PUBLIC HEALTH IMPLICATIONS**

The recommendations and services provided to the community that are included in the Long Term Financial Plan have the potential to significantly improve the following determinants of health:

- Built Environment – Sanitation; Environmental Quality; Neighbourhood Amenity; Disease Prevention

## 16.1 ADOPTION OF THE 20-YEAR LONG TERM FINANCIAL PLAN 2019/2020 TO 2038/2039

- Health Behaviours – Participation
- Socio-economic Factors – Education; Employment; Income; Family and Social Support; Community Safety
- Clinical Care – Access to Care; Quality of Care

**RISK IMPLICATIONS:**

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

Risk Event	Insufficient funds to deliver the community priorities
Risk Theme	Business and community disruption Failure to fulfil statutory regulations or compliance requirements Inadequate asset sustainability practices Ineffective management of facilities/venues/events Inadequate environmental management
Risk Effect/Impact	Service Delivery People/Health Financial Environment Reputation Compliance Property
Risk Assessment Context	Strategic
Consequence	Major
Likelihood	Unlikely
Rating (before treatment)	Moderate
Risk Treatment in place	Avoid - remove cause of risk
Response to risk treatment required/in place	Workshop with Elected Members the financial sustainability and funding options to deliver a balanced budget
Rating (after treatment)	Moderate

**COUNCIL DECISION**

370

**MOVED CR S LEE****SECONDED CR P FEASEY**

**That Council adopt the 20 Year Long Term Financial Plan 2019/2020 to 2038/2039 detailed in Attachment A.**

**CARRIED  
5/0**

# 20 Year Long Term Financial Plan

2019/2020 to 2038/2039

December 2018



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## Introduction

### Purpose of the 20 Year Long Term Financial Plan

The City of Kwinana's Long Term Financial Plan ('*Plan*') is an important financial tool for the City. The *Plan*, in conjunction with the Strategic Community Plan, Corporate Business Plan, Asset Management Plans and Workforce Plan aim to achieve the City's goals and drive its vision of being "Rich in spirit, alive with opportunities and surrounded by nature – it's all here".

The City will encounter many challenges and opportunities over the next 20 years. Significant changes in population levels and demographics bring with them changing community needs and expectations. This *Plan* will play a critical role in providing the guidance that is required to assess the necessary funding requirements to afford capital replacement programs and new capital projects; deliver community Services and programs; and the City's capacity to maintain overall financial sustainability.

### Previous Plan

The *Plan* covers the years 2020 to 2039 and is referred to as the 20 Year Long Term Financial Plan. The previous Plan ('*previous Plan*') will also be referred to throughout this document. The *previous Plan* covers the years 2016 to 2035 and was adopted by Council at the Ordinary Council Meeting 28 September 2016.

### Integrated Planning and Reporting Framework

Section 5.56 of the *Local Government Act 1995* provides that –

*(1) a local government is to plan for the future of the district."*

In 2011, the then Department of Local Government and Communities (now the Department of Local Government, Sport and Cultural Industries (DLGSC)) introduced its Integrated Planning and Reporting Framework to encourage a movement towards best practice strategic planning and reporting standards across the Western Australian local government industry.

A significant component of this Framework is the development of a Long Term Financial Plan to inform the resourcing requirements and financial capacity of a local government to achieve its stated objectives and priorities.

The below figure demonstrates the relationship the Long Term Financial Plan, as an informing strategy, has to the Strategic Community Plan and Corporate Business Plan.



\*Department of Local Government and Communities – Integrated Planning and Reporting: Framework and Guidelines, 2016

## Executive Summary

### Key Highlights

The Long Term Financial Plan (*Plan*) demonstrates the significant level of major projects and operations required to deliver the City's vision:

**“Rich in spirit, alive with opportunities and surrounded by nature – it’s all here.”**

The key highlights for the *Plan* are summarised below:

Item	Details
New Capital Investment	<ul style="list-style-type: none"><li>• New, upgrade and renewal capital expenditure over the 20 years of the <i>Plan</i> - \$458m</li></ul>
Loan Borrowings	<ul style="list-style-type: none"><li>• With the exception of the \$2.5m City Centre Redevelopment, all loan borrowings are projected to be repaid by the end of the 2037 financial year.</li></ul>
Rates % Increases	<ul style="list-style-type: none"><li>• Average of 3.50% increase on base rates revenue per annum</li><li>• Rates growth average increase of 2.63% per annum</li></ul>
Fees and Charges % Increases	<ul style="list-style-type: none"><li>• Fees and charges increase on average by 3.23% per annum</li></ul>
Operating Expenses	<ul style="list-style-type: none"><li>• Cash operating expenses including new expenditure (excludes depreciation and loss on sale of assets) increase on average by 3.66% per annum</li><li>• New operating costs (relating to increases in service levels or new services) over the 20 years of the <i>Plan</i> - \$116m</li><li>• Additional Workforce Plan costs required over the 20 years of the <i>Plan</i> - \$103m</li></ul>

### Assumptions

The *Plan* is to be updated regularly; this allows the City to continually refine the assumptions. Below are some of the key assumptions:

- Economy – Perth Consumer Price Index (CPI) is forecast by the Department of Treasury to be 1.5% in 2018/19. It is projected to increase to 2% in 2019/20 and then to 2.5% in 2020/21 and 2021/22. From 2022/23 onwards the City has made its own assumptions:
  - 3.00% 2022/23.
  - 3.50% from 2023/24.The increase is based on historical trends and the need to build in prudent cost projections.
- Service levels have been assumed to be maintained at current levels except for where increases or decreases to service levels have been identified and are detailed within Appendix Three.

### Key Ratios

Five Key Ratios and Indicators have been calculated and are used by DLGSC to assist in assessing a local governments financial performance. Ratios and indicators provide useful information when compared to industry and internal benchmarks and can assist in identifying trends. Whilst not conclusive in themselves, understanding ratios, their trends and how they interact is beneficial for the allocation of resources and planning for the future.



Appendix Two summarises the results of the ratios in the *Plan* against the targets/standards set by DLGSC for each ratio.

## Cashflows

The *Plan* sets out to achieve a “balanced budget”. This occurs when the municipal closing surplus/(deficit) is nil. This means that the municipal funds available at the end of each financial year is zero, with the exception of cash held in reserve funds which are set aside for a particular purpose.

The *Plan* commences with an opening reserve fund cash balance of \$47.6million, which is gradually depleted to fund capital projects over the first 13 years of the *Plan*. New loan borrowings are required to fund capital projects between the 2023 and 2027 financial years. In the later years of the *Plan* there are available municipal funds to use for capital projects instead of using reserves and borrowings. From 2033/34 the reserves balance begins to increase steadily, resulting in a projected balance in cash funds held in reserve at the end of the *Plan* of \$116.5million.

## Key Changes since the Previous Long Term Financial Plan

The *previous Plan* for the period 2016 to 2035 was adopted by Council on 28 September 2016. The key changes in the current update are:

- The *Plan* projects an average rate increase of 3.5% on the base rates with a growth in the rates base of an average 2.63% per annum. The *previous Plan* forecasts rate increases to comprise of 3% per annum for the first 3 years to 2019 and then increasing to 4% for the duration of the *previous Plan* for Residential Rates and for Industry increases of 6% for the first 2 years and then an increase in line with Residential Rates. Rateable property growth was projected to increase by approximately 2.5% per year, gradually diminishing to 1.1%.
- Employment Costs in the *Plan* have been projected to increase in line with CPI. (2% per annum was included in the *previous Plan*).
- Between 2020 to 2035 capital expenditure in the *previous Plan* totalled \$435m. The *Plan* projects \$399m for the same period and a total of \$458m for the 20 years.

## Risks and Opportunities

The Long Term Financial Plan includes estimates and assumptions, and therefore carries some risks and opportunities. Further assessment of the risk and opportunities is provided in the Risk Assessment section of the *Plan*.

## Background

### Key Statistics

The City of Kwinana is a unique community, set among extensive native bushland and public open space. The City is currently undergoing rapid growth in population, investment and industrial expansion, including Western Australia's premier heavy industry zone - the Kwinana Industrial Area - that generates billions of dollars each year for the state's economy.

Kwinana is amongst the most culturally and linguistically diverse municipalities in the Perth metropolitan region. The population in Kwinana is made up of residents from more than 50 different countries with one in three residents born overseas.

Kwinana is the second fastest growing local government area in Western Australia, with the population predicted to reach 85,158 by 2036.

City of Kwinana Key Statistics	
Population (Estimated 2017)	41,866
Distance between Perth CBD and the Kwinana City Centre	39km
Rateable properties (Budget 2018/2019)	18,008
Number of businesses (Business Register September 2018)	6,153
Headline Gross Regional Product (ABS June 2017 Gross State Product)	\$3.096 billion
Public open spaces (November 2018)	145

### Services

The City provides an extensive range of services to the community, including but not limited to:

- Waste management
- Infrastructure maintenance including roads, footpaths, parks and reserves, and street lighting
- Building regulatory services and approvals
- Planning regulatory services and approvals
- Environmental health services
- Community development, education and youth services
- Library, community centres, festivals, arts and cultural events
- City Assist services
- Parks, natural areas and management of the environment
- Health and recreational development and facilities
- Economic development and advocacy

The *Plan* has been prepared on the basis that the City will continue to deliver its services to the same level and standard as provided at the time of the adoption of the *Plan*, with additional operational and capital requests as outlined in Appendices Three, Four and Five

## Guiding Principles

### Basic Principles

**Sustainability:** The *Plan* is to be developed on the principles of financial, social and environmental sustainability. The *Plan* must demonstrate to our stakeholders that the City is viable and prudent in protecting its assets into the future.

**Transparency:** The *Plan* will be transparent and include information related to how the *Plan* has been developed and the underlying assumptions contained therein.

**Prudence:** The City will base the *Plan* on sound financial judgement, information available at the time and will apply reasonable tests to the assumptions made to confirm their validity. The *Plan* will encompass anticipating and planning for change.

**Consistency:** The City will adhere to the guiding principles and the assumptions made in the development and use of the *Plan*. This will ensure the users of the *Plan* can understand the assumptions and projections made and how they impact the future of the City.

**Performance and Accountability:** The *Plan* is a key element of the City's Integrated Planning Framework and will be used as the foundation for the preparation of the Annual Budget. The City will review the *Plan* at least annually to assess it against the adopted budget, Corporate Business Plan review, other key strategies and plans adopted during the year and to review the forward projections.

**Flexible Long Term Approach:** The objective of the *Plan* is to achieve a nil closing municipal surplus. Where this cannot be achieved and results in a deficit in one year, where available funds in selected reserves will be transferred into the municipal fund. Where there are excess funds resulting in a surplus in one year, additional municipal funds will be transferred into reserves to reduce the surplus amount to nil.

**Service Levels and Asset Management:** Local government is asset intensive. The demands of providing and maintaining City assets and delivering appropriate levels of service to the community drive the *Plan*. Financial and social sustainability is equally important when considering the benefits of assets to the Community and the affordability of desired service levels. The City's asset management plans must outline the whole of life costs for each asset and investment of assets must be considered with prudent financial management.

## Key Targets/Assumptions

### Targets/Ratios

- The City is required to report seven ratios in the statutory annual financial statements. Whilst recognising that all seven ratios are important, the City's Long Term Financial Plan will focus primarily on:
  - Average Rates increases of 5% or less (Community)
  - Balanced Cash Budget (Liquidity)
  - Operating Surplus Ratio percentage (Operating Results)
  - Asset Sustainability percentage (Asset Management)
  - Debt Service Coverage Ratio (Treasury Management)
- Projections in the Long Term Financial Plan will be based on the notion that each year the rate setting statement will (as close as possible) be balanced (representing a nil

closing municipal surplus). In this respect the City will generate an annual operating surplus sufficient to allow it to meet:

- Borrowing/financial costs (e.g. interest expense from loan borrowings) for new capital expenditure
- Anticipated costs and income for new facilities from the year the facility becomes operational
- Asset management costs for each asset (including maintenance and refurbishment/rehabilitation expenditure) to a level that the City can afford
- The Long Term Financial Plan will aim to achieve an Operating Surplus Ratio greater than 2%, based on a five-year average with a target to achieve a ratio of 15%.
- Growth in operating revenue will be in excess of the growth in Operating Expenses, in so far as necessary to achieve the targets for each ratio set out in the *Plan*.

### Rates Strategy

Council's rating strategy takes into consideration the key values contained within *Rating Policy Differential Rates (s.6.33) March 2016* released by the then Department of Local Government and Communities being:

- Objectivity;
- Fairness and Equity;
- Consistency;
- Transparency and Administrative Efficiency.

As part of the budget deliberations for the 2018/2019 adopted budget, Council commenced the five-year plan to reduce the number of rating categories to ensure the City is meeting the values set out for differential rating. The first stage occurred as part of the 2018/2019 budget, however the strategy proposes harmonisation of the following categories by 2023/24:

Current Rating Category 2018/2019	Proposed Rating Category by 2023/24
<b>Gross Rental Value (GRV)</b>	
Improved Residential	Improved Residential
Improved Special Residential	Improved Residential
Vacant Residential	Vacant
Vacant Non-Residential	Vacant
Light Industrial and Commercial	Improved Commercial and Industrial
General Industry and Service Commercial	Improved Commercial and Industrial
Large Scale General Industry and Service Commercial	Improved Commercial and Industrial
<b>Unimproved Value (UV)</b>	
General Industry	General Industry
Rural	Rural
Mining and Industrial	Mining and Industrial

As part of the annual budget deliberations, the City will review each rate category and where possible, attempt for the rate in the dollars to close the gap with the least financial impact in doing so. For example, this may mean that the Improved Residential rate in the dollar decreases while the Improved Special Residential rate in the dollar increases, therefore reducing the percentage increase of the Improved Special Residential rate category over the five years to meet the Improved Residential rate category.

## Loan Borrowings/Treasury

The City invests in capital expenditure that benefits inter-generations. As such, loan borrowings are sometimes the most equitable finance option to fund capital expenditure.

A project can be funded by loan borrowings if it meets the following criteria:

1. Benefit is intergenerational and at a minimum the benefit will be longer than five years;
2. Loan is for the length of time before major intervention works are required (based on the asset management plan);
3. Must be identified/included in the Long Term Financial Plan to ensure the impact and capacity to repay the costs of servicing the loan is considered;
4. Loan terms will be between five to 20 years;
5. Must be to fund capital expenditure; and
6. Debt Service Coverage Ratio in any one year cannot be less than a ratio of three with an aim to exceed five.

## Funding/Reserves

- Grant, subsidies and contribution funding projections are to be conservative and are only to be included in the Plan where it is reasonable to expect that these funding options will be secured. Where a project is expected to be funded partly or in full by a grant, contribution or reimbursement, the project will not commence unless the funding has been confirmed.
- The purpose and transfers to and from reserves are to be outlined in the *Plan*. Reserves are established for the purpose of setting aside funds in current and past years to assist in funding future projects/services (reserve purpose). Transferring funds to reserves ensures the community who are benefiting now, will contribute to funding the purpose into the future. Having reserves eases the financial impact of a community when a project is required to be funded in one year due to funds being collected over a period of time.

## New Expenditure

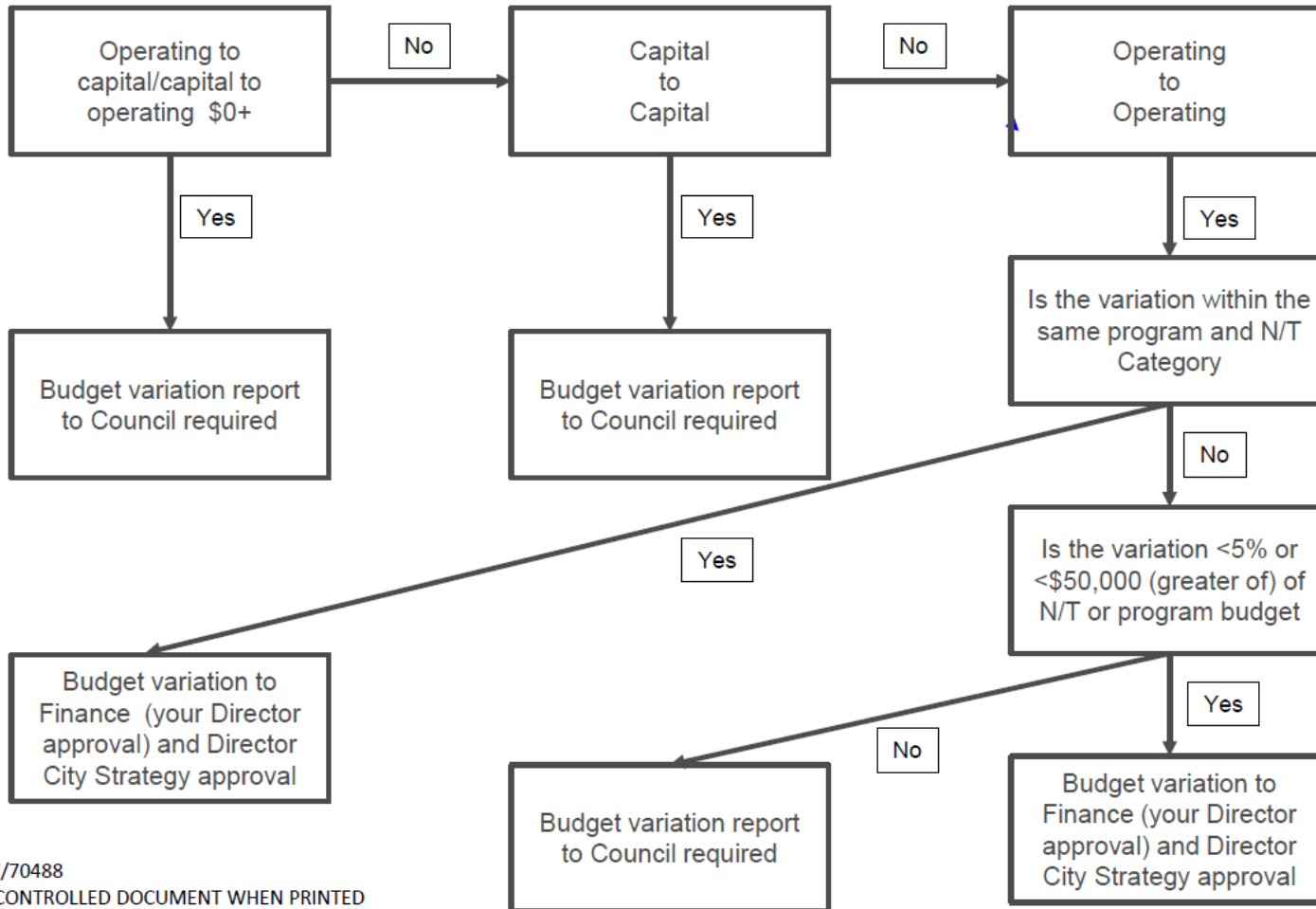
- Whole of life costs are identified for all new expenditure.
- Asset Management Plans are funded where possible, within the parameters established in the Guiding Principles. Initially, the investment required to close the gap on required versus actual expenditure will be a staged approach and the *Plan* outlines how the City intends to close the gap in future years.
- Priority will be given to Asset Management Plans that have demonstrated that replacement expenditure is based on economic life modelling, and deferral of the replacement would reduce the Asset Sustainability Ratio.
- Asset Sustainability Ratio will aim to achieve a target between 90% and 110% based on a five-year average. However, where the age of assets is 'young' then it may be unnecessary to achieve this ratio as the City would not replace assets before their replacement date.
- City assets that are not required for operational or community use are to be rationalised and their viability assessed.

## Process

- Estimates are to be conservative based on best available information at the time.
- The *Plan* will be prepared and reviewed during the Annual Budget process, which will enable the *Plan* to be used to inform the Annual Budget for the following year.
- The Annual Budget process will consider the impacts on the *Plan*, including the Guiding Principles and the ratio targets. Additionally, the mid-year budget process will also consider the impacts on the *Plan*.
- Any strategic risks identified in the *Plan* will be included in the City's Organisational Risk Register and monitored by City Officers and the Audit Committee.
- The guidelines recognise that section 6.8 of the *Local Government Act 1995* states that a *local government is not to incur expenditure from its municipal fund for an additional purpose except where the expenditure —*
  - (a) is incurred in a financial year before the adoption of the annual budget by the local government; or*
  - (b) is authorised in advance by resolution (absolute majority); or*
  - (c) is authorised in advance by the mayor or president in an emergency.*

The operating expenditure within the Annual Budget is adopted at the Nature and Type and Program level, and for capital expenditure as a note with detailed information. Taking into consideration section 6.8 of the *Local Government Act 1995* and the material variances adopted by Council of each year under regulation 34(1)(c) of the *Local Government (Financial Management) Regulations 1996*, the following budget variation process will be followed for variations to the Annual Budget that fall outside of the usual adoption of the Annual Budget and/or the Annual Budget Review.

# Budget Variation Report to Council Process Map



D17/70488  
UNCONTROLLED DOCUMENT WHEN PRINTED

## Assumptions

### Disclaimer

Readers of the Long Term Financial Plan should note that the document is used predominately as a planning tool. As such, it is based on many assumptions and includes several projects and proposals that in some cases:

- Have been approved by Council and are in progress;
- Have been considered by Council but are yet to receive final approval;
- Have only been considered by Council at a strategy level; and/or
- Are operational in nature and based on the continued provision of services and maintenance of City assets and infrastructure in accordance with management and other plans.

The scope, timing and budget of projects or proposals have been included based on the best available information and knowledge at the time of adoption. Adoption of the Long Term Financial Plan by Council does not constitute a commitment or agreement to any of the projects or proposals that are outlined.

### Information Used in the Long Term Financial Plan

The *Plan* uses the Annual Budget for 2018/19 as the baseline ('*baseline*') of the *Plan*.

The estimates for the future years' uses the baseline as the starting point and then projects the future estimates using assumptions from a variety of sources:

- State and Federal Budgets
- Economic Forecasts (WALGA/Dept. Treasury)
- 2016 Census Data
- Asset Management Plans
- Capital Works Programs
- City Strategy and Planning Documents/Plans e.g. Developer Contribution Plans, Parks for People Strategy, Community Infrastructure Plan

The assumptions explained in detail in this section are broken down into the following five categories:

1. External Factors
2. Operating Income and Operating Expenses
3. Capital Projects and their impacts on Operating Income and Operating Expenses
4. Capital Proceeds
5. Funding

Appendix Nine provides the details of the key escalation rates for each year.

### Escalation

All figures have been escalated in the *Plan* using assumptions/key escalation rates, except where indicated otherwise. The basis of the escalation factors is explained within this section with further details provided in Appendix Nine.



## Key Escalation Rates/Assumptions – External Factors

Factor	Details
State and Federal Budgets	<ul style="list-style-type: none"> <li>• Superannuation Guarantee increase to 12% is paused with the next increment beginning in 2021/22 to 10.00%, and the staged increase to 12.00% by 2025/26. For further details, refer to Employment Costs below.</li> </ul>
Population and Regional Growth	<ul style="list-style-type: none"> <li>• The City of Kwinana is Western Australia's second fastest growing local government area, with the state's fastest growing local government area neighbouring the City's border (Shire of Serpentine-Jarrahdale).</li> <li>• The 2018 population forecast for the City is 44,791 with expectations that it will grow to 85,158 by 2036, a 90.12% change for that period.</li> </ul>
Property Growth	<ul style="list-style-type: none"> <li>• .id forecast predict that the City will consist of 30,989 dwellings by 2036, with growth rates being based on an average of 2.63% per annum for the <i>Plan</i>.</li> <li>• Increases in dwellings is used to forecast additional rates revenue.</li> </ul>
Commercial Growth	<ul style="list-style-type: none"> <li>• City of Kwinana's Gross Regional Product in 2016 was estimated at \$3.57 billion, which represents 1.40% of the state's GSP (Gross State Product).</li> <li>• In the year ended 30 June 2016, there were 17,051 jobs located in the City.</li> </ul>
Consumer Price Index (CPI)	<ul style="list-style-type: none"> <li>• For the year to December 2017, CPI for Perth increased 0.80%.</li> <li>• The Department of Treasury have provided forecast data to 2020/21. Perth CPI is forecast by the Department of Treasury to grow at 1.50% in 2018/19, and is projected to increase to 2.00% in 2019/20, then to 2.50% for 2020/21 and 2021/22.</li> <li>• From 2022/23 onwards the City has made its own assumptions: <ul style="list-style-type: none"> <li>○ 3% 2022/23.</li> <li>○ 3.5% from 2023/24.</li> </ul> <p>The increase is based on historical trends and the need to build in prudent cost projections.</p> </li> <li>• CPI is not used as the escalation rate for all income or expenses by the City. The City evaluates each nature and type of income or expense and considers the appropriate escalation factor to apply, with further details provided in the assumptions below.</li> </ul>

## Assumptions – Operating Income and Operating Expenses

Factor	Details
Baseline and Budget 2019/20	The baseline for the <i>Plan</i> is the adopted Annual Budget for 2018/19 adjusted for any one off income or expenditure items. Year one of the <i>Plan</i> will inform the Annual Budget 2019/20.
Service Levels	Service levels have been assumed to be maintained at current levels except for where increases or decreases to service levels have been identified and are detailed within Appendix Three.
<b>Operating Income</b>	
Rates	<ul style="list-style-type: none"> <li>• 3.5% annual increase on the rates base for the life of the <i>Plan</i>.</li> <li>• Changes in valuations have not been factored into the calculation of rates.</li> </ul>
Operating Grants, Subsidies and Contributions	Refer to the information provided in ‘Assumptions – Funding’.
Fees and Charges	Fees and Charges are increased in line with CPI expectations and where other market forces impact the income expected to be received from fees and charges a note will be provided.
Interest Earnings	Refer to the information provided in ‘Assumptions – Funding’.
Other Revenue	Other Expenditure items are increased in line with CPI expectations.
<b>Operating Expenses</b>	
Employee Costs	<ul style="list-style-type: none"> <li>• Superannuation Guarantee costs are projected to increase from 9.50% to 12.00% in 2025/26 with the following staged increases: <ul style="list-style-type: none"> <li>○ 2021/22 – 10%</li> <li>○ 2022/23 – 10.5%</li> <li>○ 2023/24 – 11%</li> <li>○ 2024/25 – 11.5%</li> <li>○ 2025/26 – 12%</li> </ul> </li> <li>• The City matches voluntary staff Superannuation Contributions up to 6% as per the City of Kwinana Collective Agreement. It is assumed for the purpose of the <i>Plan</i> that the average additional Superannuation contribution by the City is 2.5% of Salaries and Wages.</li> <li>• Remaining Employment Costs are projected to increase by the greater of 1.50% or CPI for the remainder of the <i>Plan</i>.</li> <li>• The City’s maximum rate charged for Worker’s Compensation is 3.2%, however the average rate charged for the three years prior to the <i>Plan</i> was 2%. This rate (2%) is applied to Salaries and Wages for the whole of the <i>Plan</i>.</li> </ul>
Materials and Contracts	Materials and Contracts are increased in line with CPI expectations.
Refuse Charges, Tipping Fees and Waste Management Expenses	<ul style="list-style-type: none"> <li>• State landfill levy rates are increased by \$10/tonne in 2018/19 and with the rate expected to remain the same each year thereafter.</li> <li>• In 2021/22 it is assumed that the City will utilise Waste to Energy Plants as a form of waste disposal instead of landfill. This is expected to reduce the cost per tonne of waste disposal however as this is not certain, base costs have been increased in line with CPI.</li> </ul>

Utility Charges	<ul style="list-style-type: none"> <li>WALGA economic data projects the cost for electricity and street lighting to increase by 3.3% for 2019/20, 3.4% for 2020/21 and 2.5% for 2021/22. This has been used to inform the escalation for utilities within the <i>Plan</i> with 2.5% used for the remainder of the plan years.</li> </ul>
Depreciation	<ul style="list-style-type: none"> <li>The City is continuing to review the basis of depreciation expenses as part of an increased focus on Asset Management Planning for each class of assets.</li> <li>The <i>Plan</i> assumes that depreciation will increase in line with the costs of replacement so an escalation factor of CPI has been used.</li> </ul>
Interest Expenses	Refer to the information provided in 'Assumptions – Funding'.
Insurance Expenses	<ul style="list-style-type: none"> <li>Except for Workers Compensation premiums (which are included in Employee Costs), insurance premiums have been assumed to have no increases for the 2019/20. This is due to the Member Fund, that the City is a part of, utilising surpluses to maintain stability in premiums for this period.</li> <li>Beginning in 2020/21 insurance expenses are then assumed to increase by CPI.</li> </ul>
Other Expenditure	Other Expenditure has been increased in line with CPI expectations.

## Assumptions – Funding

Factor	Details																																								
Interest percentage on Loans	<p>WATC (West Australian Treasury Corporation) were consulted and provided forecasts to 2026/27. For five, ten and fifteen year fixed term loans, the following assumptions are included in the <i>Plan</i>:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>5 Year Fixed Loan</th> <th>10 Year Fixed Loan</th> <th>15 Year Fixed Loan</th> </tr> </thead> <tbody> <tr> <td>2018/19</td> <td>3.23%</td> <td>3.78%</td> <td>4.17%</td> </tr> <tr> <td>2019/20</td> <td>3.49%</td> <td>4.02%</td> <td>4.38%</td> </tr> <tr> <td>2020/21</td> <td>3.75%</td> <td>4.26%</td> <td>4.58%</td> </tr> <tr> <td>2021/22</td> <td>4.00%</td> <td>4.50%</td> <td>4.79%</td> </tr> <tr> <td>2022/23</td> <td>4.26%</td> <td>4.74%</td> <td>4.99%</td> </tr> <tr> <td>2023/24</td> <td>4.52%</td> <td>4.98%</td> <td>5.20%</td> </tr> <tr> <td>2024/25</td> <td>4.78%</td> <td>5.22%</td> <td>5.40%</td> </tr> <tr> <td>2025/26</td> <td>5.04%</td> <td>5.46%</td> <td>5.61%</td> </tr> <tr> <td>2026/27+</td> <td>5.30%</td> <td>5.70%</td> <td>5.81%</td> </tr> </tbody> </table>	Year	5 Year Fixed Loan	10 Year Fixed Loan	15 Year Fixed Loan	2018/19	3.23%	3.78%	4.17%	2019/20	3.49%	4.02%	4.38%	2020/21	3.75%	4.26%	4.58%	2021/22	4.00%	4.50%	4.79%	2022/23	4.26%	4.74%	4.99%	2023/24	4.52%	4.98%	5.20%	2024/25	4.78%	5.22%	5.40%	2025/26	5.04%	5.46%	5.61%	2026/27+	5.30%	5.70%	5.81%
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Repayment Terms of Loans	All new borrowings are based 10 year fixed term principal and interest loans.																																								
Interest Earnings from Investments	Based on historical information and to ensure the City maintains a conservative approach to funding, investments are assumed to earn interest at a rate of 1% less than the five year fixed term borrowings rate. Interest has been calculated based on the previous years' earnings escalated by the percentage change in expected interest rates.																																								
Operating Grants, Subsidies and Contributions	Unless it has been identified as part of the <i>Plan</i> , operating grants, subsidies and contributions are expected to continue and have been escalated in-line with CPI.																																								
Non-Operating Grants, Subsidies and Contributions	<ul style="list-style-type: none"> <li>Based on expectations of subdivisions within the DCA areas.</li> <li>Road grants are expected to continue to be received to fund 2/3 of road renewal expenditure, other non-operating grants, contributions and subsidies will be included where the expectation of receiving a grant is high. Should a grant not be received in line with expectations capital projects to be funded from the grant will not proceed until funding is confirmed.</li> </ul>																																								
Reserves	<ul style="list-style-type: none"> <li>The City Infrastructure Reserve has been created by combining the Future Community Infrastructure Reserve and the Infrastructure Reserve. The purpose of this reserve is to fund the City's Contributions to community infrastructure projects.</li> <li>The Asset Replacement Reserve was renamed to the Plant and Equipment Replacement Reserve to better reflect the purpose of this reserve.</li> <li>Employee Leave Reserve has been amended to hold 50% of the employee leave liability and excess funds transferred to the Plant and Equipment Replacement Reserve and the Asset Management Reserve in 2019. In the year 2031 these funds have been reimbursed to the Employee Leave Reserve.</li> </ul>																																								

	<ul style="list-style-type: none"> <li>• To assist in funding, the renewal and replacement of Assets, the interest on the Employee Leave and Refuse Reserves for the life of the plan has been allocated to the Asset Management Reserve.</li> <li>• The Future Community Infrastructure Reserve has been closed and funds transferred to the City Infrastructure Reserve</li> <li>• \$3,785,141 was transferred from the Refuse Reserve to the Asset Management Reserve in 2019. In the years 2032 to 2034 these funds have been reimbursed to the Refuse Reserve.</li> <li>• No transfers to reserves are occurring for all asset related Reserves except for the interest earned on the balance of funds held in the respective reserve until a surplus is reached.</li> </ul>
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## Impacts

### Ratios and Financial Estimates

#### Financial Statements

The Plan is summarised in the Statement of Financial Activity by Nature or Type, otherwise known as the Rate Setting Statement (Appendix One).

#### Key Ratios and Indicators – Overview

Appendix Two summarises the results of the *Plan* against the targets for each key ratio and indicator, with further explanation provided below.

#### Key Ratios

##### *Operating Surplus Ratio*

The Operating Surplus Ratio represents the percentage by which the operating surplus (or deficit) differs from the City's own source revenue which includes rates and operating grants.

The formula for the operating surplus ratio is:

Operating Revenue minus operating expense divide Own Source Operating Revenue

*Where:*

*Operating Revenue - Revenue that is operating revenue for the purposes of the AAS, excluding grants and contributions for the development or acquisition of assets*

*Operating Expense - Expenses that are operating expenses for the purposes of the AAS.*

*Own Source Operating Revenue - Revenue from rates and service charges, fees and user charges, reimbursements and recoveries, interest income and profit on disposal of assets.*

The standards set by the Department of Local Government, Sports and Cultural Industries (DLGSC) is that the basic standard is between 1% and 15% (0.01 and 0.15) and the advanced standard is greater than 15% (>0.15).

The City's target within the *Plan* for the Operating Surplus Ratio is to aim to achieve a ratio greater than 2%, based on a five-year average with a target to achieve 15%. The City is projected to reach the 2% target by the end of the 2035 financial year, with the ratio improving each year to 5% in 2039.

This ratio includes non-cash expenses which includes depreciation and profit and loss on sale of assets. It is important for local governments to recognise that assets depreciate and there should be sufficient funds available for renewal and replacement of these assets. The Department of Local Government, Sport and Cultural Industries (DLGSC) states that this ratio indicates how much of a local government's percentage of total own source revenue is available to help fund proposed capital expenditure, transfer to cash reserves or to reduce debt. However non-cash items are not required to be included in the calculation of a rate setting statement. The DLGSC require a rate setting statement, which determines how much rates income is required to be raised to balance a budget, to exclude non-cash items such as depreciation.

The City's projected operating surplus ratio is projected to be negative until 2033, indicating that City's current services and depreciation expenses are higher than the total operating income. For a high growth local government such as Kwinana, this ratio will be lower than an established local government and will improve in the future as the number of rateable properties increase and the depreciation from the gifting of new assets from developers reduces.

### *Asset Sustainability Ratio*

The Asset Sustainability Ratio expresses capital expenditure on renewal and replacement of existing assets as a percentage of depreciation costs. It is used to identify any potential decline or improvement in asset conditions. A percentage of less than 100% on an ongoing basis indicates assets may be deteriorating at a greater rate than spending on renewal or replacement.

The formula for the asset sustainability ratio is:

Capital Renewal and Replacement Expenditure divide Depreciation Expense

Where:

*Capital Renewal and Replacement Expenditure - Expenditure to renew or replace existing assets.*

*In other words, it is expenditure on an existing asset to return the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure. As it reinstates existing service potential it may reduce operating and maintenance costs.*

*Depreciation - Has the meaning given in the AAS. Under AASB 116 paragraph 6, Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. In other words, depreciation represents the allocation of the value of an asset (its cost less its residual value) over its estimated useful life to the local government. Depreciation expense can be sourced from the audited annual financial report.*

The standards set by DLGSC is that the basic standard is met if the ratio can be measured and is 90% (0.90) and the improving standard is met if the ratio is between 90% and 110% (0.90 and 1.10).

The City's target within the *Plan* for the Asset Sustainability Ratio is to aim to achieve a target of between 90% and 110% based on a five-year average.

During the *Plan*, the City is not projected to achieve the target of 90%-110% for its Asset Sustainability Ratio. The City of Kwinana is a high growth local government and continues to work to balance the expectations of the community and the services provided with the revenue sources available at the time. As the City continues to mature in its development and grows towards its projected population, revenue sources receivable through rates and

other fees and charges income will also increase. As surplus funds are achieved in the years from 2034 more funds will be available for the renewal and maintenance of the assets, improving the above financial ratios. The *Plan* has allocated these surplus funds to asset renewal and replacement reserves to ensure they are available should they be required to fund renewal and replacement projects. The Adjusted Asset Sustainability Ratio shown in Appendix Two demonstrates the positive impact on the Asset Sustainability ratio should these funds be utilised on renewal expenditure instead of being set aside in reserve.

#### *Debt Service Coverage Ratio*

The Debt Service Coverage Ratio represents a local governments ability to service debt out of its uncommitted or general purpose funds available for its operations.

The formula for the debt service coverage ratio is:

Annual Operating Surplus before Interest and Depreciation divide Principal and Interest

Where:

*Annual Operating Surplus before Interest and Depreciation – operating revenue minus net operating expense*

*Depreciation – has the meaning given in the AAS. Under AASB 116 paragraph 6, Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. In other words, depreciation represents the allocation of the value of an asset (its cost less its residual value) over its estimated useful life to the local government. Depreciation expense can be sourced from the audited annual financial report.*

*Interest – interest expense for moneys borrowed, credit obtained or financial accommodation arranged under section 6.20 of the Local Government Act 1995.*

*Principal and Interest – all principal and interest for money borrowed, credit obtained or financial accommodation arranged under section 6.20 of the Local Government Act 1995.*

The standards set by DLGSC is that the basic standard is met if the ratio can be measured and is greater than 2.00 (200%) and the advanced standard is met if the ratio is greater than 5.00 (500%).

The City's target within the *Plan* for the Debt Service Coverage Ratio is for one year to be no less than a ratio of three (3.00) with an aim to exceed five (5.00). In the first nine years of the *Plan* to 2028, the City relies on utilising loan borrowings to achieve some of its capital works program resulting in a Debt Service Coverage ratio of less than 3.00, however in 2029 as funds are beginning to be repaid in full, the City's ratio is 3.22 and continues to improve each year.

## Key Indicators

### *Rates Percentage Increase*

The rates percentage increase is not a standard set by the Department of Local Government, Sport and Cultural Industries, however the City's target for the *Plan* was to aim to have a rates percentage increase of no more than 5%. The *Plan* has projected an average increase on the base rates of 3.5% for the life of the *Plan*. However, it must be emphasised that the rates percentage increases are projections and are not necessarily the increases that will be applied when budgets are adopted by Council each year.

### *Balanced Cash Budget*

A key objective of the *Plan* is to have a "balanced budget" such that the closing surplus/(deficit) for each financial year should be zero, or as close to zero as possible. This objective demonstrates that the City is able to provide services to the community and invest in its infrastructure, whilst being able to have moderate increases in rates. Appendix One summarises the rate setting calculations to demonstrate that funds match expenses and the budgets are balanced.

The projections show that until the year 2028 the City requires reserve funds and loan borrowings to fund expenditure for capital projects and to balance the budgets for each year. From 2028 the City has the funds necessary to carry out projects and transfer municipal funds into asset renewal and replacement reserves to ensure that the City's asset sustainability and asset management plan requirements will be able to be met into the future.

## Funding and Cashflows

### Overall Cashflow

The *Plan* commences with an opening reserve fund cash balance of \$47.6million, which is gradually depleted to fund capital projects over the first 13 years of the *Plan*. The reserve balance is as low as \$11.8million by June 2032, with only \$1million in asset replacement and renewal reserves. New loan borrowings are required to fund capital projects between the 2023 and 2027 financial years.

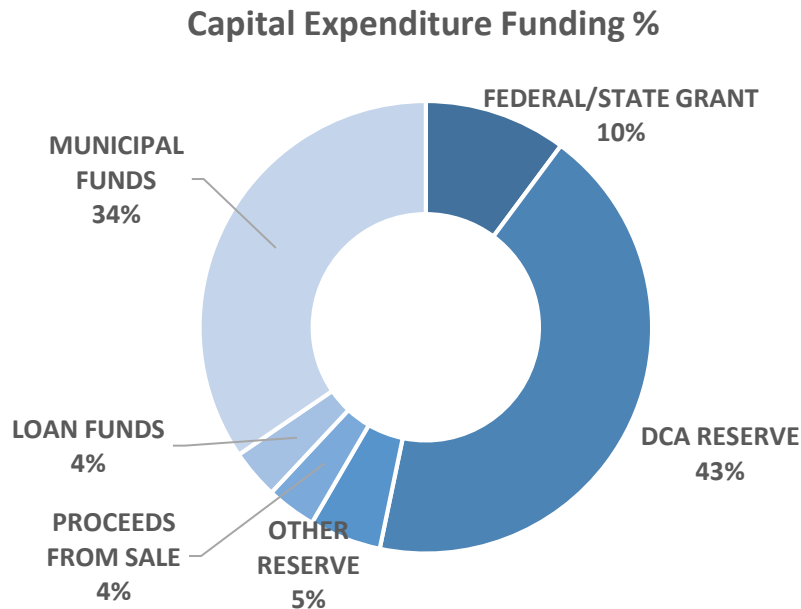
Cash surpluses are achieved in the later years and from 2033/34 the reserves balance begins to increase steadily, resulting in a projected balance in cash funds held in reserve at the end of the *Plan* of \$116.5million.



## Capital Expenditure Funding

Appendix Six provides a summary of the funding of capital expenditure within the *Plan*.

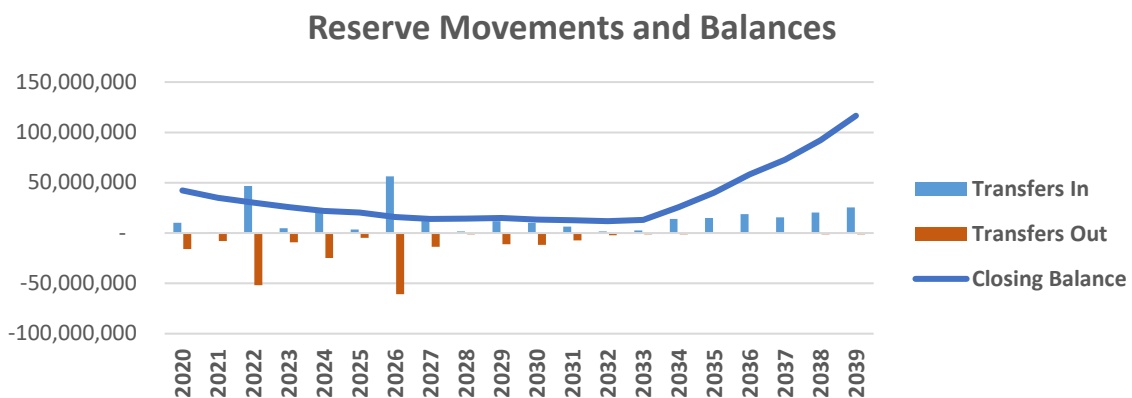
Detailed analysis has been undertaken, year by year, project by project, to evaluate the appropriate method of funding whilst aiming to maintain a conservative rates increase of 3.5% and achieving a balanced budget surplus each year. The below chart summarises the percentage mix of funding for the \$458million of capital expenditure over the 20 years.



## Reserves Movements

Appendix Eight provides details of the reserve movements within the *Plan*. The below chart summarises the overall movements in reserves over the 20 years. This shows that:

- The Reserve funds are gradually depleted over the first 13 years of the *Plan* to fund capital projects including developer contribution funded projects.
- The reserve balance is as low as \$11.8million by June 2032, with only \$1million in asset replacement and renewal reserves.
- The reserve balance increases steadily from 2033/34, due to available operating surpluses in the later years.



## Loans

There are \$18.6million of borrowings projected within the *Plan*, spread across multiple years and repaid over the following 10 years, with the exception of the City Centre Redevelopment loan which is interest only. The new borrowings of \$18.6million are detailed in Appendix Seven.

The maximum balance owing is estimated to be \$23.5million at the commencement of the *Plan*. This reduces gradually to June 2023 where new borrowings begin to be utilised. All loans with the exception of the City Centre Redevelopment loan (\$2.5m) are projected to be repaid in full by June 2037.

Loans are deemed necessary, where there are insufficient operating surpluses available to meet all capital requirements. Utilising loan funds allows the funding of capital costs to be spread over time and provides for greater intergenerational equity in the distribution of the funding burden; however, this does result in interest costs being payable to the financier.

## Risk Assessment

### Overall Comment

The 20 Year Long Term Financial Plan is a planning tool and is based on many assumptions. It also includes projects and proposals that in some cases:

- Have been approved by Council and are in progress;
- Have been considered by Council but are yet to receive final approval;
- Have only been considered by Elected Members at a strategy level;
- Have only been considered by Officers;
- Are operational in nature and based on the continued provision of services and maintenance of City assets and infrastructure in accordance with management and other Plans.

Any of the assumptions for any of the projects or proposals not already approved by Council could be inaccurate in timing and financial estimates. They have, however, been included based on the best available information and knowledge at the time the *Plan* is prepared. Adoption of the 20 Year Long Term Financial Plan by Council does not constitute a commitment or agreement to any of the projects or proposals that have not already been approved.

Periodic review and update of the *Plan* will ensure that it remains a relevant and useful document to manage the City's financial sustainability into the future.

### Projects Not Included in the *Plan*

There are a number of projects which have been subject to some discussion, but not included in the *Plan* as sufficient due diligence has not yet been able to be carried out. This could be due to a requirement for a Council decision, further internal analysis or unresolved external factors such as State Government participation or a combination of these.

Projects considered but not included due to further investigation and due diligence required are:

1. Wells Beach Foreshore Upgrade
2. City Operations Centre Upgrade

### Future Improvements in the Updates to the *Plan*

The *Plan* has been developed with the best available data at the time of preparation. During the development of the *Plan*, several improvements have been identified which were not able to be incorporated in this version of the *Plan*, but will be improved in future iterations. In essence the *Plan* is a living document and a continuous improvement process. The following improvements have been identified:

Issue	Details
Updated asset management plans	The <i>Plan</i> relies on many data sources and heavily on the information held within the City's Asset Management Plans. The Asset Management Plans for each asset class are in the process of being updated to provide the City with a clearer long-term strategy which includes the estimated replacement requirements and any potential asset management gaps. Draft Asset Management Plans were used to inform the <i>Plan</i> where information was available.
Whole of Life costs	It is important that the future operating expenses and operating income are estimated for capital expenditure, as often the one-off costs are minor in comparison to the resources required to operate and maintain the new or upgraded assets. Net operating costs for new community facilities have been incorporated into the <i>Plan</i> where the information is available and able to be reliably estimated, however there is further improvement required in this area.
Further analysis on drivers to income and expenditure items	To better analyse the impact of changes to cost drivers and assumptions utilised within the <i>Plan</i> , further research and analysis of drivers of core operating income and expenditure is required.

## Scenario Modelling

The review of the *Plan* involves considering many scenarios and options, for example the scheduling of projects and assumptions regarding increases to costs.

Projections rely heavily on assumptions. Variations to the projections carry a high risk to the reliability of the *Plan* and the financial sustainability of the City. The table below provides some sensitivity analysis of having lower rates increases in the *Plan* than currently assumed for the years 2020 to 2023. The top row summarises the assumptions that are currently in the *Plan*, with increases of 3.5% to the base rates for the life of the *Plan*.

The first alternative scenario is having rates increases of 1% less than the current assumptions. The table indicates the cash impacts after one year, after four years and the full impact on the 20 years of the *Plan*. Meanwhile the second scenario considers the rates increases being 2% less than the current estimates.

Impacts to funding the provision of services and infrastructure projects and maintenance, will also have other consequences in relation to the following:

- Higher borrowings may be required
- Projects may need to be delayed or removed
- Operating surpluses may be insufficient to afford renewal of assets at their end of life

Scenarios	Rates Increase %				Impact on Cash \$m		
	2020	2021	2022	2023	1 Year Impact (2020)	4 Year Impact (2023)	20 Year Impact (2039)
Proposed Plan	3.5%	3.5%	3.5%	3.5%			
1% less of an increase	2.5%	2.5%	2.5%	2.5%	\$0.4m	\$4.48m	\$163.9m
2% less of an increase	1.5%	1.5%	1.5%	1.5%	\$0.8m	\$8.88m	\$307.6m

## Appendices

Appendix One – Statement of Financial Activity / Rate Setting Statement by Nature or Type

Appendix Two – Key Ratios and Indicators

Appendix Three – New Operating Expenses

Appendix Four – New Workforce Plan Expenses

Appendix Five – Detailed Capital Expenditure

Appendix Six – Summary Capital Expenditure Funding

Appendix Seven – Information on Borrowings

Appendix Eight – Information on Reserves

Appendix Nine – Assumptions

**Appendix 1**  
**Statement of Financial Activity / Rate Setting Statement**  
**(By Nature or Type)**  
*Note figures are 000's*

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Opening Funding Surplus (Deficit)</b>	500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Revenue from operating activities</b>																				
Rates	41,115	43,649	46,309	49,196	52,227	55,397	58,725	62,225	65,897	69,735	73,761	77,925	82,291	86,758	91,436	96,125	101,031	104,567	108,227	112,015
Operating Grants, Subsidies and Contributions	7,594	7,735	7,913	8,111	8,354	8,647	8,949	9,263	9,587	9,922	10,270	10,629	11,001	11,386	11,785	12,197	12,624	13,066	13,523	13,996
Fees and Charges	11,945	12,183	12,488	12,800	13,184	13,646	14,123	14,618	15,129	15,659	16,207	16,774	17,361	17,969	18,598	19,249	19,922	20,620	21,341	22,088
Service Charges	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Earnings	2,110	2,162	2,221	2,288	2,363	2,446	2,538	2,641	2,487	2,594	2,706	2,822	2,944	3,070	3,202	3,340	3,484	3,633	3,790	3,953
Other Revenue	626	623	678	793	878	936	1,125	1,171	975	1,065	1,403	1,508	1,311	1,337	1,176	1,286	1,243	1,835	1,542	1,269
<b>Revenue from operating activities</b>	<b>63,389</b>	<b>66,352</b>	<b>69,610</b>	<b>73,188</b>	<b>77,007</b>	<b>81,072</b>	<b>85,461</b>	<b>89,917</b>	<b>94,076</b>	<b>98,976</b>	<b>104,346</b>	<b>109,659</b>	<b>114,908</b>	<b>120,520</b>	<b>126,196</b>	<b>132,197</b>	<b>138,304</b>	<b>143,721</b>	<b>148,423</b>	<b>153,321</b>
<b>Expenditure from operating activities</b>																				
Employee Costs	(29,512)	(29,963)	(30,636)	(31,328)	(32,162)	(33,152)	(34,179)	(35,132)	(36,118)	(37,139)	(38,196)	(39,290)	(40,422)	(41,594)	(42,807)	(44,062)	(45,361)	(46,705)	(48,097)	(49,537)
Materials and Contracts	(25,572)	(26,039)	(26,668)	(27,309)	(28,102)	(29,053)	(30,058)	(31,075)	(32,128)	(33,218)	(34,345)	(35,513)	(36,721)	(37,971)	(39,265)	(40,604)	(41,990)	(43,425)	(44,910)	(46,447)
Utility Charges	(2,439)	(2,522)	(2,585)	(2,650)	(2,729)	(2,825)	(2,924)	(3,026)	(3,132)	(3,242)	(3,355)	(3,473)	(3,594)	(3,720)	(3,850)	(3,985)	(4,124)	(4,269)	(4,418)	(4,573)
Depreciation on Non-Current Assets	(13,877)	(14,155)	(14,509)	(14,872)	(15,318)	(15,854)	(16,409)	(16,983)	(17,577)	(18,193)	(18,829)	(19,488)	(20,171)	(20,877)	(21,607)	(22,363)	(23,146)	(23,956)	(24,795)	(25,663)
Interest Expenses	(1,138)	(1,041)	(973)	(848)	(945)	(959)	(906)	(952)	(969)	(805)	(651)	(548)	(460)	(371)	(286)	(222)	(173)	(136)	(120)	(120)
Insurance Expenses	(565)	(576)	(588)	(599)	(614)	(632)	(649)	(667)	(686)	(705)	(726)	(746)	(768)	(790)	(813)	(837)	(862)	(887)	(914)	(941)
Other Expenditure	(124)	(127)	(130)	(133)	(137)	(142)	(147)	(152)	(158)	(163)	(169)	(175)	(181)	(187)	(194)	(201)	(208)	(215)	(222)	(230)
<b>Expenditure from operating activities</b>	<b>(73,229)</b>	<b>(74,423)</b>	<b>(76,089)</b>	<b>(77,740)</b>	<b>(80,008)</b>	<b>(82,616)</b>	<b>(85,272)</b>	<b>(87,988)</b>	<b>(90,769)</b>	<b>(93,465)</b>	<b>(96,272)</b>	<b>(99,233)</b>	<b>(102,316)</b>	<b>(105,510)</b>	<b>(108,822)</b>	<b>(112,274)</b>	<b>(115,864)</b>	<b>(119,594)</b>	<b>(123,476)</b>	<b>(127,511)</b>
<b>Operating activities excluded from budget</b>																				
Add back Depreciation	13,877	14,155	14,509	14,872	15,318	15,854	16,409	16,983	17,577	18,193	18,829	19,488	20,171	20,877	21,607	22,363	23,146	23,956	24,795	25,663
<b>Amount attributable to operating activities</b>	<b>4,538</b>	<b>6,084</b>	<b>8,030</b>	<b>10,320</b>	<b>12,317</b>	<b>14,310</b>	<b>16,598</b>	<b>18,912</b>	<b>20,884</b>	<b>23,703</b>	<b>26,903</b>	<b>29,914</b>	<b>32,763</b>	<b>35,886</b>	<b>38,982</b>	<b>42,286</b>	<b>45,586</b>	<b>48,083</b>	<b>49,742</b>	<b>51,472</b>
<b>New Operating Proposals</b>																				
New Employment Expenses	(386)	(815)	(1,214)	(1,246)	(2,116)	(2,852)	(2,877)	(3,906)	(5,122)	(5,298)	(5,480)	(6,406)	(7,254)	(7,504)	(7,764)	(8,032)	(8,309)	(8,597)	(8,894)	(9,202)
New Service/Changes to Services Proposals	(1,152)	(1,574)	(1,782)	(2,435)	(2,951)	(3,688)	(4,202)	(4,720)	(5,580)	(5,861)	(6,164)	(6,834)	(7,610)	(7,852)	(8,044)	(8,690)	(8,707)	(8,946)	(9,690)	(9,541)
<b>New Operating Proposals</b>	<b>(1,539)</b>	<b>(2,388)</b>	<b>(2,995)</b>	<b>(3,681)</b>	<b>(5,067)</b>	<b>(6,540)</b>	<b>(7,079)</b>	<b>(8,626)</b>	<b>(10,702)</b>	<b>(11,159)</b>	<b>(11,644)</b>	<b>(13,240)</b>	<b>(14,864)</b>	<b>(15,356)</b>	<b>(15,808)</b>	<b>(16,722)</b>	<b>(17,016)</b>	<b>(17,542)</b>	<b>(18,584)</b>	<b>(18,742)</b>
<b>Amount available for capital and other commitments</b>	<b>2,999</b>	<b>3,696</b>	<b>5,035</b>	<b>6,638</b>	<b>7,249</b>	<b>7,770</b>	<b>9,519</b>	<b>10,287</b>	<b>10,182</b>	<b>12,544</b>	<b>15,259</b>	<b>16,674</b>	<b>17,898</b>	<b>20,530</b>	<b>23,174</b>	<b>25,564</b>	<b>28,570</b>	<b>30,541</b>	<b>31,158</b>	<b>32,730</b>
<b>Investing activities</b>																				
Grants, Subsidies and Contributions	4,212	1,576	47,353	15,198	21,891	7,070	56,728	12,235	2,126	11,063	10,649	6,231	1,897	1,958	2,021	2,087	2,155	2,225	2,298	2,373
Proceeds from Disposal of Assets	525	621	561	604	706	729	770	747	786	689	826	754	819	988	993	1,049	1,018	1,071	938	1,126
Land and Buildings	(1,771)	(5,388)	(4,284)	(7,926)	(10,153)	(2,925)	(14,904)	(14,486)	(1,363)	(7,168)	(13,678)	(8,130)	(1,962)	(2,056)	(2,246)	(2,624)	(2,411)	(2,232)	(2,038)	(1,761)
Plant, Furniture and Equipment	(1,881)	(1,432)	(1,258)	(1,478)	(1,614)	(1,618)	(1,788)	(1,814)	(1,874)	(1,389)	(1,788)	(2,140)	(1,857)	(2,338)	(2,173)	(2,347)	(2,412)	(2,414)	(2,147)	(2,399)
Infrastructure Assets - Roads	(3,249)	(2,085)	(9,447)	(17,526)	(14,308)	(8,603)	(9,372)	(4,064)	(4,206)	(8,793)	(4,506)	(4,664)	(4,827)	(4,996)	(5,171)	(5,352)	(5,539)	(5,733)	(4,542)	(4,678)
Infrastructure Assets - Parks and Reserves	(1,575)	(598)	(39,746)	(1,790)	(5,727)	(2,073)	(41,770)	(3,845)	(1,112)	(2,032)	(5,131)	(6,848)	(9,844)	(9,743)	(1,118)	(1,915)	(1,012)	(7,076)	(4,791)	(1,381)
Infrastructure Assets - Footpaths	(204)	(186)	(191)	(196)	(202)	(209)	(216)	(224)	(231)	(240)	(248)	(257)	(266)	(275)	(284)	(294)	(305)	(315)	(326)	(338)
Infrastructure Assets - Drainage	(2,584)	(922)	(265)	(551)	(1,496)	(290)	(3,665)	(311)	(321)	(333)	(344)	(356)	(369)	(382)	(395)	(409)	(423)	(438)	(453)	(469)
Infrastructure Assets - Street Lighting	(251)	(28)	(135)	(139)	(366)	(148)	(153)	(158)	(164)	(170)	(176)	(182)	(188)	(195)	(201)	(209)	(216)	(223)	(231)	(239)
Infrastructure Assets - Bus Shelters	(48)	(49)	(51)	(52)	(54)	(56)	(59)	(61)	(64)	(67)	(70)	(73)	(76)	(120)	(128)	(136)	(144)	(149)	(154)	(160)
Infrastructure Assets - Car Parks	(41)	(311)	(212)	0	(224)	0	(240)	0	(257)	0	(275)	0	(295)	(305)	(316)	(327)	(339)	(350)	(363)	(375)
<b>Amount attributable to investing activities</b>	<b>(6,865)</b>	<b>(8,803)</b>	<b>(7,675)</b>	<b>(13,856)</b>	<b>(11,548)</b>	<b>(8,123)</b>	<b>(14,669)</b>	<b>(11,981)</b>	<b>(6,681)</b>	<b>(8,439)</b>	<b>(14,740)</b>	<b>(15,664)</b>	<b>(16,968)</b>	<b>(17,464)</b>	<b>(9,018)</b>	<b>(10,477)</b>	<b>(9,627)</b>	<b>(15,636)</b>	<b>(11,810)</b>	<b>(8,301)</b>
<b>Financing Activities</b>																				
Proceeds from New Debentures	0	0	2,500	4,918	3,218	1,863	3,208	2,914	0	0	0	0	0	0	0	0	0	0	0	0
Self-Supporting Loan Principal	17	17	18	18	19	20	20	21	22	22	23	24	25	0	0	0	0	0	0	0
Transfer from Reserves	15,827	8,076	51,700	9,186	24,873	4,859	60,817	13,513	1,340	11,165	11,821	7,240	2,271	1,217	1,263	985	686	1,066	1,110	1,157
Repayment of Debentures	(1,642)	(2,087)	(4,689)	(2,237)	(2,621)	(3,002)	(2,660)	(3,025)	(3,384)	(3,344)	(2,240)	(1,813)	(1,758)	(1,821)	(1,290)	(946)	(754)	(370)	0	0
Transfer to Reserves	(10,336)	(899)	(46,888)	(4,668)	(21,191)	(3,387)	(56,236)	(11,729)	(1,479)	(11,949)	(10,124)	(6,460)	(1,469)	(2,463)	(14,129)	(15,126)	(18,875)	(15,601)	(20,458)	(25,585)
<b>Amount attributable to financing activities</b>	<b>3,866</b>	<b>5,107</b>	<b>2,640</b>	<b>7,218</b>	<b>4,299</b>	<b>353</b>	<b>5,150</b>	<b>1,694</b>	<b>(3,501)</b>	<b>(4,106)</b>	<b>(519)</b>	<b>(1,010)</b>	<b>(931)</b>	<b>(3,067)</b>	<b>(14,156)</b>	<b>(15,088)</b>	<b>(18,943)</b>	<b>(14,905)</b>	<b>(19,348)</b>	<b>(24,428)</b>
<b>Closing Funding Surplus (Deficit)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Appendix 2**  
**Key Ratios and Indicators**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Operating Surplus Ratio <i>Target: &gt; 2% with aim to achieve &gt; 15%</i>	-18%	-16%	-14%	-11%	-10%	-10%	-8%	-7%	-8%	-6%	-3%	-3%	-2%	0%	1%	2%	4%	5%	4%	5%
Asset Sustainability Ratio <i>Target: 90% - 110%</i>	33%	33%	28%	29%	33%	34%	47%	48%	33%	33%	53%	57%	47%	48%	37%	42%	36%	60%	47%	33%
Adjusted Asset Sustainability Ratio* <i>Target: 90% - 110%</i>	33%	33%	28%	29%	33%	34%	47%	48%	33%	33%	53%	57%	47%	48%	89%	104%	113%	120%	125%	127%
Debt Service Coverage Ratio <i>Target: &gt; 3.00 with aim to achieve &gt; 5.00</i>	1.31	1.51	1.06	2.43	2.30	2.20	2.92	2.83	2.56	3.22	5.50	7.29	8.28	9.53	14.89	22.07	31.02	60.61	261.19	274.32
Rates Percentage Increase <i>Target: &lt; 5%</i>	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Balanced Cash Budget <i>Target: Balanced Budget = 0</i>	(0)	0	0	(0)	(0)	0	(0)	(0)	0	0	0	0	(0)	(0)	(0)	(0)	0	(0)	(0)	(0)

\*Adjusted Asset Sustainability Ratio has been adjusted to include the funds transferred to asset renewal and replacement reserves from 2034, as these funds would be available to expend on renewal should it be required.

**Appendix 3**  
**New Operating Expenses**  
*Note: Figures are 000's*

New Operating Item	Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
<b>City Engagement</b>		<b>65</b>	<b>159</b>	<b>141</b>	<b>228</b>	<b>680</b>	<b>1,258</b>	<b>1,272</b>	<b>1,914</b>	<b>2,515</b>	<b>2,697</b>	<b>2,833</b>	<b>3,482</b>	<b>3,952</b>	<b>4,151</b>	<b>4,234</b>	<b>4,447</b>	<b>4,535</b>	<b>4,764</b>	<b>4,858</b>	<b>5,103</b>
CDO Arts & Culture	ANZAC Day - RSL Support to host event	10	10	11	11	11	12	12	12	13	13	14	14	15	15	16	16	17	18	18	19
CDO Arts & Culture	Increase to Big Concert sponsorship income	-20	-21	-21	-22	-22	-23	-24	-25	-26	-27	-28	-29	-30	-31	-32	-33	-34	-35	-36	-38
CDO Arts & Culture	Increase to Big Concert expenditure offset by increase to funding	20	21	21	22	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	38
CDO Arts & Culture	Increase is for community art in each of the three place management areas @ \$3k each to meet objectives as outlined in the Community Engagement Service Review Business Case and Draft Place Management Approach document	9	9	10	10	10	10	11	11	12	12	12	13	13	14	14	15	15	16	16	17
CDO Recreation	Local Community Insurance Scheme	4	4	4	4	4	5	5	5	5	5	6	6	6	6	7	7	7	7	8	8
Community Safety	Public Area Lighting Plan	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Community Services Admin	Additional Data for Community Wellbeing & Library Customer Survey	0	36	0	38	0	41	0	43	0	47	0	50	0	53	0	57	0	61	0	66
DCA 10,11,12,13 - District B Community Centre	New Facility - Net Cost	0	0	0	0	0	0	0	0	0	0	0	218	452	468	484	501	519	537	556	575
DCA 10,11,12,13 - District B Youth Centre	New Facility - Net Cost	0	0	0	0	0	0	0	0	0	0	0	175	362	375	388	401	415	430	445	461
DCA 8,9 - District A Youth Centre	New Facility - Net Cost	0	0	0	0	0	0	0	152	315	326	338	350	362	375	388	401	415	430	445	461
DCA 8,9,10,11,12,13 - Branch Library (serves Districts A & B)	New Facility - Net Cost	0	0	0	0	256	529	548	567	587	607	628	650	673	697	721	746	773	800	828	857
DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	New Facility - Net Cost	0	0	0	0	0	0	0	278	576	596	617	639	661	684	708	733	759	785	813	841
DCA 9 - Local Sporting Ground with Facility Building (Treeby Rd)	New Facility - Net Cost	0	0	0	0	0	0	9	19	19	20	21	21	22	23	24	25	25	26	27	28
Library	Increase in this area required due to Interlibrary loan changes increasing demand for local stock purchasing.	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9
Recquatic - Aquatics	Required servicing of Heat Exchange, Hoist, Solar Pool Heating	6	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	10	10	10	11
Youth Centre	Youth Well Being Survey income	0	-5	0	-5	0	-6	0	-6	0	-7	0	-7	0	-8	0	-8	0	-9	0	-9
Youth Centre	Youth Well Being Survey expenditure	0	10	0	11	0	12	0	12	0	13	0	14	0	15	0	16	0	18	0	19
Youth Centre	Crime Prevention Funding - Youth Diversionary Program income	-20	-21	-21	-22	-22	-23	-24	-25	-26	-27	-28	-29	-30	-31	-32	-33	-34	-35	-36	-38
Youth Centre	Crime Prevention Funding - Youth Diversionary Program expenditure	20	21	21	22	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	38
DCA 10 - Local Community Centre Casuarina/Anketell	New Facility - Net Cost	0	0	0	0	63	131	135	140	145	150	155	161	166	172	178	184	191	197	204	212
DCA 10 - Local Sporting Ground with Facility Building - Casuarina/Anketell	New Facility - Net Cost	0	0	0	0	0	0	0	9	19	20	21	21	22	23	24	25	25	26	27	28
DCA 10 - Local Sporting Ground with Clubroom - Casuarina/Anketell	New Facility - Net Cost	0	0	0	0	0	0	0	0	0	0	42	86	89	93	96	99	103	106	110	114
DCA 12 - Local Sporting Ground with Community Centre / Clubroom - Wellard West	New Facility - Net Cost	0	0	40	82	84	87	90	93	96	100	103	107	111	115	119	123	127	131	136	141
DCA 14 - Local Sporting Ground with Facility Building - Wellard Village Primary School	New Facility - Net Cost	0	0	0	0	0	0	9	19	19	20	21	21	22	23	24	25	25	26	27	28
DCA 8 - Local Community Centre - Mandogalup	New Facility - Net Cost	0	0	0	0	0	0	0	70	145	150	155	161	166	172	178	184	191	197	204	212
DCA 8 - Local Sporting Ground with Facility Building - Mandogalup	New Facility - Net Cost	0	0	0	0	0	0	0	9	19	20	21	21	22	23	24	25	25	26	27	28
DCA 8,9,10,11,12,13 - Hard Court Clubrooms (District A & B)	New Facility - Net Cost	0	0	0	0	0	0	0	0	0	0	55	113	117	122	126	130	135	139	144	149
DCA 9 - Local Community Centre (large Scale) - Wandri	New Facility - Net Cost	0	0	0	0	172	355	368	381	394	408	422	437	452	468	484	501	519	537	556	575
DCA 9 - Local Sporting Ground with Facility Building (Wandri Highschool Site)	New Facility - Net Cost	0	0	0	0	0	0	0	9	19	20	21	21	22	23	24	25	25	26	27	28
DCA 9 - Local Sports Ground Clubroom - Honeywood	New Facility - Net Cost	0	31	65	66	68	70	73	75	78	81	83	86	89	93	96	99	103	106	110	114
District C Sporting Ground Medina Oval Redevelopment (Not DCA funded)	New Facility - Net Cost	0	0	0	0	0	0	0	0	39	81	83	86	89	93	96	99	103	106	110	114
Library & Community Centres	Development of Digital Strategy	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Appendix 3  
New Operating Expenses  
Note: Figures are 000's

New Operating Item	Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
<b>City Infrastructure</b>		<b>788</b>	<b>1,238</b>	<b>1,486</b>	<b>1,957</b>	<b>2,103</b>	<b>2,198</b>	<b>2,534</b>	<b>2,682</b>	<b>2,872</b>	<b>2,858</b>	<b>2,987</b>	<b>3,138</b>	<b>3,245</b>	<b>3,548</b>	<b>3,574</b>	<b>3,703</b>	<b>3,833</b>	<b>4,007</b>	<b>4,324</b>	<b>4,250</b>
Asset Management	Asset Management Consultants	122	21	62	147	39	17	54	47	135	20	21	64	55	160	24	25	25	66	245	28
Asset Management	Fiona Harris Pavilion - hardware to bring over to Security Commander system	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asset Management	Koorliny CCAC - hardware to bring over to Security Commander system	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asset Management	Medina Hall - hardware to bring over to Security Commander system	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asset Management	Relocation of security systems to City Assist - software	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asset Management	Thomas Kelly Pavilion - hardware to bring over to Security Commander system	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asset Management	Wellard Pavilion - hardware to bring over to Security Commander system	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asset Management	Wheatfield Cottage - hardware to bring over to Security Commander system	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asset Management	Recquatic Plant & Equipment Replacement Strategy	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depot Operating Overheads	Review and Update of Groundwater Strategy	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Infrastructure Maintenance	Additional contributed/converted infrastructure assets maintenance expenses per Depot LTFP	21	71	106	129	173	192	203	232	249	257	266	280	298	308	319	335	347	359	371	384
Infrastructure Management Overheads	Surveying - current budget only include surveying for Design team - require surveying funding for traffic related projects	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9
Infrastructure Management Overheads	Traffic Consultancy	20	21	21	22	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	38
Infrastructure Management Overheads	Engineering Equipment Battery replacements (traffic counters)	0	0	0	0	4	0	6	4	4	9	0	0	0	0	0	0	0	0	0	0
Parks & Reserve Maintenance	Additional contributed/converted parks and reserves assets maintenance expenses per Depot LTFP	592	1,111	1,292	1,654	1,859	1,960	2,241	2,369	2,452	2,538	2,665	2,759	2,855	3,041	3,191	3,303	3,419	3,538	3,662	3,791
<b>City Legal</b>		<b>15</b>	<b>21</b>	<b>27</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>39</b>	<b>40</b>	<b>41</b>	<b>43</b>	<b>44</b>	<b>46</b>	<b>47</b>	<b>49</b>	<b>51</b>	<b>53</b>	<b>54</b>	<b>56</b>
Law, Order & Public Safety	Review of Essential Services information pamphlets in the areas of Parking, Animal Owner Responsibility, Emergency Management related matters	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9
Law, Order & Public Safety	Additional CCTV Maintenance costs	10	16	21	27	28	29	30	31	32	33	34	36	37	38	40	41	42	44	45	47
<b>City Regulation</b>		<b>51</b>	<b>104</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>138</b>	<b>71</b>	<b>0</b>	<b>0</b>	<b>164</b>	<b>85</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Mainstream Waste	Waste Management Strategy	0	52	0	0	0	0	60	0	0	0	0	71	0	0	0	0	85	0	0	0
Strategic Planning	Additional consultants for Strategic Planning Projects/Scheme Reviews	51	52	0	0	0	116	0	0	0	0	138	0	0	0	0	164	0	0	0	0
<b>City Strategy</b>		<b>233</b>	<b>52</b>	<b>128</b>	<b>218</b>	<b>134</b>	<b>81</b>	<b>300</b>	<b>87</b>	<b>154</b>	<b>266</b>	<b>165</b>	<b>100</b>	<b>369</b>	<b>107</b>	<b>190</b>	<b>327</b>	<b>203</b>	<b>123</b>	<b>453</b>	<b>131</b>
Customer Services	Knowledge Base Ongoing Maintenance, subscription and training costs	0	0	21	22	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	38
Elections	Election Year Expenses	102	0	106	0	112	0	120	0	129	0	138	0	148	0	158	0	169	0	181	0
Financial Services - Rates	GRV Valuation Year	132	0	0	141	0	0	156	0	0	173	0	0	192	0	0	213	0	0	236	0
Marketing & Communications	Community Perceptions survey to occur every two years.	0	52	0	54	0	58	0	62	0	67	0	71	0	76	0	82	0	88	0	94
<b>Grand Total</b>		<b>1,152</b>	<b>1,574</b>	<b>1,782</b>	<b>2,435</b>	<b>2,951</b>	<b>3,688</b>	<b>4,202</b>	<b>4,720</b>	<b>5,580</b>	<b>5,861</b>	<b>6,164</b>	<b>6,834</b>	<b>7,610</b>	<b>7,852</b>	<b>8,044</b>	<b>8,690</b>	<b>8,707</b>	<b>8,946</b>	<b>9,690</b>	<b>9,541</b>

Appendix 4  
New Workforce Plan Expenses  
Note: Figures are 000's

Position	Award Level	FTE	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
<b>City Engagement</b>		<b>46.39</b>	<b>146</b>	<b>240</b>	<b>321</b>	<b>329</b>	<b>883</b>	<b>1,477</b>	<b>1,529</b>	<b>2,382</b>	<b>3,293</b>	<b>3,409</b>	<b>3,528</b>	<b>4,171</b>	<b>4,856</b>	<b>5,026</b>	<b>5,202</b>	<b>5,384</b>	<b>5,572</b>	<b>5,767</b>	<b>5,969</b>	<b>6,178</b>	
<b>City Engagement - Admin</b>		<b>2.19</b>	<b>146</b>	<b>149</b>	<b>152</b>	<b>156</b>	<b>161</b>	<b>166</b>	<b>172</b>	<b>178</b>	<b>184</b>	<b>191</b>	<b>198</b>	<b>205</b>	<b>212</b>	<b>219</b>	<b>227</b>	<b>235</b>	<b>243</b>	<b>251</b>	<b>260</b>	<b>269</b>	
City Engagement Review Additional FTE Salaries and Wages		2.19	146	149	152	156	161	166	172	178	184	191	198	205	212	219	227	235	243	251	260	269	
<b>Community Engagement</b>		<b>0.20</b>	<b>18</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>31</b>	<b>32</b>	
Community Safety Officer	LGO CA 6/4	0.20	18	18	19	19	20	20	21	22	23	23	24	25	26	27	28	29	30	31	31	32	
<b>Community Services - Community Centres</b>		<b>11.00</b>	<b>74</b>	<b>151</b>	<b>155</b>	<b>318</b>	<b>494</b>	<b>511</b>	<b>618</b>	<b>731</b>	<b>756</b>	<b>783</b>	<b>960</b>	<b>1,148</b>	<b>1,188</b>	<b>1,230</b>	<b>1,273</b>	<b>1,318</b>	<b>1,364</b>	<b>1,411</b>	<b>1,461</b>		
DCA 10 - Local Community Centre Staff	LGO CA 4/1	1.00				38	79	82	84	87	90	94	97	100	104	107	111	115	119	123	128		
DCA 10 - Local Community Centre Staff	LGO CA 5/1	1.00				41	86	89	92	95	99	102	106	109	113	117	121	125	130	134	139		
DCA 8 - Local Community Centre Staff	LGO CA 4/1	1.00							42	87	90	94	97	100	104	107	111	115	119	123	128		
DCA 8 - Local Community Centre Staff	LGO CA 5/1	1.00							46	95	99	102	106	109	113	117	121	125	130	134	139		
DCA 9 - Local Community Centre (large Scale)	LGO CA 4/1	1.00				38	79	82	84	87	90	94	97	100	104	107	111	115	119	123	128		
DCA 9 - Local Community Centre (large Scale)	LGO CA 5/1	1.00				41	86	89	92	95	99	102	106	109	113	117	121	125	130	134	139		
District B Community Centre Staff	LGO CA 4/1	2.00											97	201	208	215	222	230	238	247	255		
District B Community Centre Staff	LGO CA 5/1	1.00											53	109	113	117	121	125	130	134	139		
Local Community Centre/Clubroom District B (Wellard West)	LGO CA 4/1	1.00		35	72	74	76	79	82	84	87	90	94	97	100	104	107	111	115	119	123	128	
Local Community Centre/Clubroom District B (Wellard West)	LGO CA 5/1	1.00		38	79	81	83	86	89	92	95	99	102	106	109	113	117	121	125	130	134	139	
<b>Community Services - Dry Recreation Centre</b>		<b>9.00</b>							<b>385</b>	<b>798</b>	<b>826</b>	<b>855</b>	<b>885</b>	<b>916</b>	<b>948</b>	<b>981</b>	<b>1,015</b>	<b>1,051</b>	<b>1,087</b>	<b>1,125</b>	<b>1,165</b>		
District A & B Dry Recreation Centre	LGO CA 3/1	5.00							193	400	414	429	444	459	475	492	509	527	545	565	584		
District A & B Dry Recreation Centre	LGO CA 5/1	3.00							138	286	296	306	317	328	339	351	363	376	389	403	417		
District A & B Dry Recreation Centre	LGO CA 7/1	1.00							54	112	116	120	124	128	133	138	142	147	153	158	163		
<b>Community Services - Library</b>		<b>10.00</b>				<b>385</b>	<b>797</b>	<b>824</b>	<b>853</b>	<b>883</b>	<b>914</b>	<b>946</b>	<b>979</b>	<b>1,013</b>	<b>1,049</b>	<b>1,086</b>	<b>1,124</b>	<b>1,163</b>	<b>1,204</b>	<b>1,246</b>	<b>1,289</b>		
District A & B Branch Library	LGO CA 3/1	5.00				174	361	374	387	400	414	429	444	459	475	492	509	527	545	565	584		
District A & B Branch Library	LGO CA 5/1	4.00				166	344	356	368	381	394	408	422	437	452	468	485	502	519	537	556		
District A & B Branch Library	LGO CA 6/1	1.00				44	92	95	99	102	106	109	113	117	121	125	130	134	139	144	149		
<b>Community Services - Youth Development</b>		<b>14.00</b>							<b>326</b>	<b>675</b>	<b>699</b>	<b>724</b>	<b>1,119</b>	<b>1,542</b>	<b>1,596</b>	<b>1,652</b>	<b>1,709</b>	<b>1,769</b>	<b>1,831</b>	<b>1,895</b>	<b>1,961</b>		
District A - Youth Centre	LGO CA 4/1	1.00							42	87	90	94	97	100	104	107	111	115	119	123	128		
District A - Youth Centre	LGO CA 5/1	5.00							230	476	493	510	528	546	565	585	606	627	649	672	695		
District A - Youth Centre	LGO CA 7/1	1.00							54	112	116	120	124	128	133	138	142	147	153	158	163		
District B Youth Centre	LGO CA 3/1	1.00											44	92	95	98	102	105	109	113	117		
District B Youth Centre	LGO CA 5/1	5.00											264	546	565	585	606	627	649	672	695		
District B Youth Centre	LGO CA 7/1	1.00											62	128	133	138	142	147	153	158	163		
<b>City Infrastructure</b>		<b>4.00</b>		<b>84</b>	<b>86</b>	<b>178</b>	<b>184</b>	<b>191</b>	<b>197</b>	<b>306</b>	<b>317</b>	<b>328</b>	<b>453</b>	<b>469</b>	<b>485</b>	<b>502</b>	<b>519</b>	<b>538</b>	<b>556</b>	<b>576</b>	<b>596</b>		
Engineering Services		4.00		84	86	178	184	191	197	306	317	328	453	469	485	502	519	538	556	576	596		
Engineering Technical Officer - Design	LGO CA 6/1	1.00										102	106	109	113	117	121	125	130	134	139	144	149
Engineering Technical Officer - Design/Projects	LGO CA 6/1	1.00													113	117	121	125	130	134	139	144	149
Engineering Technical Officer - Projects	LGO CA 6/1	1.00					89	92	95	99	102	106	109	113	117	121	125	130	134	139	144	149	
Engineering Technical Officer - Traffic	LGO CA 6/1	1.00			84	86	89	92	95	99	102	106	109	113	117	121	125	130	134	139	144	149	

**Appendix 4**  
**New Workforce Plan Expenses**  
*Note: Figures are 000's*

Position	Award Level	FTE	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
<b>City Legal</b>		<b>3.97</b>	<b>71</b>	<b>149</b>	<b>231</b>	<b>237</b>	<b>327</b>	<b>339</b>	<b>351</b>	<b>363</b>	<b>376</b>	<b>389</b>	<b>402</b>	<b>416</b>	<b>431</b>	<b>446</b>	<b>462</b>	<b>478</b>	<b>495</b>	<b>512</b>	<b>530</b>	<b>548</b>
<b>Essential Services</b>		<b>3.97</b>	<b>71</b>	<b>149</b>	<b>231</b>	<b>237</b>	<b>327</b>	<b>339</b>	<b>351</b>	<b>363</b>	<b>376</b>	<b>389</b>	<b>402</b>	<b>416</b>	<b>431</b>	<b>446</b>	<b>462</b>	<b>478</b>	<b>495</b>	<b>512</b>	<b>530</b>	<b>548</b>
Compliance Officer	LGO CA 5/1	2.00		77	157	161	166	172	178	184	190	197	204	211	219	226	234	242	251	260	269	278
CCTV Maintenance and Enquiry Officer	LGO CA 5/1	1.00					83	86	89	92	95	99	102	106	109	113	117	121	125	130	134	139
Casual City Assist Officers (3 Officers Casual Hours - 1,921 hours)	LGO CA 4/4	0.97	71	72	74	76	78	81	84	87	90	93	96	100	103	107	111	114	119	123	127	131
<b>City Regulation</b>		<b>2.60</b>	<b>0</b>	<b>53</b>	<b>145</b>	<b>148</b>	<b>153</b>	<b>158</b>	<b>102</b>	<b>106</b>	<b>110</b>	<b>113</b>	<b>117</b>	<b>121</b>	<b>126</b>	<b>130</b>	<b>135</b>	<b>139</b>	<b>144</b>	<b>149</b>	<b>155</b>	<b>160</b>
<b>Environment</b>		<b>1.00</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Environmental Field Officer	LGO CA 3/4	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Environmental Health</b>		<b>1.60</b>	<b>0</b>	<b>53</b>	<b>145</b>	<b>148</b>	<b>153</b>	<b>158</b>	<b>102</b>	<b>106</b>	<b>110</b>	<b>113</b>	<b>117</b>	<b>121</b>	<b>126</b>	<b>130</b>	<b>135</b>	<b>139</b>	<b>144</b>	<b>149</b>	<b>155</b>	<b>160</b>
Environmental Health Officer	LGO CA 6/4	1.00			90	93	95	99	102	106	110	113	117	121	126	130	135	139	144	149	155	160
Environmental Health Officer - CLAG	LGO CA 6/4	0.60		53	54	56	57	59														
<b>City Strategy</b>		<b>2.50</b>	<b>35</b>	<b>182</b>	<b>187</b>	<b>191</b>	<b>197</b>	<b>204</b>	<b>211</b>	<b>219</b>	<b>226</b>	<b>234</b>	<b>242</b>	<b>251</b>	<b>260</b>	<b>269</b>	<b>278</b>	<b>288</b>	<b>298</b>	<b>308</b>	<b>319</b>	<b>330</b>
<b>City Strategy Team</b>		-																				
Corporate Business System Implementation Team - Officer - 24 Months included in capital expenditure budget	LGO CA 6/4	-																				
Corporate Business System Implementation Team - Project Manager - 24 Months - included in capital expenditure budget	Neg	-																				
<b>Finance</b>		<b>1.50</b>	<b>35</b>	<b>106</b>	<b>108</b>	<b>111</b>	<b>114</b>	<b>118</b>	<b>122</b>	<b>127</b>	<b>131</b>	<b>136</b>	<b>140</b>	<b>145</b>	<b>150</b>	<b>156</b>	<b>161</b>	<b>167</b>	<b>173</b>	<b>179</b>	<b>185</b>	<b>191</b>
Finance Officer - Rates	LGO CA 4/1	1.50	35	106	108	111	114	118	122	127	131	136	140	145	150	156	161	167	173	179	185	191
<b>Marketing &amp; Communications</b>		<b>1.00</b>	<b>0</b>	<b>77</b>	<b>79</b>	<b>81</b>	<b>83</b>	<b>86</b>	<b>89</b>	<b>92</b>	<b>95</b>	<b>99</b>	<b>102</b>	<b>106</b>	<b>109</b>	<b>113</b>	<b>117</b>	<b>121</b>	<b>125</b>	<b>130</b>	<b>134</b>	<b>139</b>
Digital Communications Officer	LGO CA 5/1	1.00		77	79	81	83	86	89	92	95	99	102	106	109	113	117	121	125	130	134	139
Project Officer - Digital Communications Officer - 1 year contract included in capital expenditure	LGO CA 5/1	-																				
<b>Grand Total</b>		<b>59.46</b>	<b>251</b>	<b>624</b>	<b>968</b>	<b>993</b>	<b>1,738</b>	<b>2,362</b>	<b>2,383</b>	<b>3,267</b>	<b>4,311</b>	<b>4,462</b>	<b>4,618</b>	<b>5,413</b>	<b>6,141</b>	<b>6,356</b>	<b>6,578</b>	<b>6,808</b>	<b>7,047</b>	<b>7,293</b>	<b>7,549</b>	<b>7,813</b>
<b>Additional Employment Expenses</b>																						
Superannuation			30	78	126	134	243	343	346	474	625	647	670	785	890	922	954	987	1,022	1,058	1,095	1,133
Workers Compensation			5	12	19	20	35	47	48	65	86	89	92	108	123	127	132	136	141	146	151	156
Contingency for Step Increases/Reviews all staff			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Total Additional Workforce Plan Costs</b>			<b>386</b>	<b>815</b>	<b>1,214</b>	<b>1,246</b>	<b>2,116</b>	<b>2,852</b>	<b>2,877</b>	<b>3,906</b>	<b>5,122</b>	<b>5,298</b>	<b>5,480</b>	<b>6,406</b>	<b>7,254</b>	<b>7,504</b>	<b>7,764</b>	<b>8,032</b>	<b>8,309</b>	<b>8,597</b>	<b>8,894</b>	<b>9,202</b>

**Appendix 5**  
**Detailed Capital Expenditure**  
*Note: Figures are 000's*

Project	DESCRIPTION OF WORKS	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	Grand Total
<b>Buildings</b>		<b>1,771</b>	<b>5,388</b>	<b>4,284</b>	<b>7,926</b>	<b>8,224</b>	<b>2,925</b>	<b>14,904</b>	<b>14,486</b>	<b>1,363</b>	<b>7,168</b>	<b>13,678</b>	<b>8,130</b>	<b>1,962</b>	<b>2,056</b>	<b>2,246</b>	<b>2,624</b>	<b>2,411</b>	<b>2,232</b>	<b>2,038</b>	<b>1,761</b>	<b>107,578</b>
Arts & Cultural Centre Upgrade - Stage 1 of 3	Per Community Infrastructure Plan			102																		102
Arts & Cultural Centre Upgrade - Stage 2 of 2	Installation of storage shed, upgrade little theatre, upgrade quadrangle.	90																				90
Arts & Cultural Centre Upgrade - Stage 2 of 3	Works Studio 1 & 2, MA studio and training room, maintenance work				984																	984
Arts & Cultural Centre Upgrade - Stage 3 of 3	Per Community Infrastructure Plan					1,008																1,008
Building Contingency		102	104	106	109	112	116	120	124	129	133	138	143	148	153	158	164	169	175	181	188	2,769
Building Renewals - Banksia Park (Village)		57	57	58	59	61	62	64	66	69	71	74	76	79	82	85	88	91	94	97	101	1,491
Building Renewals - Callistemon Court (Village)		111	115	121	126	134	143	153	164	175	188	201	216	231	248	265	284	304	326	350	374	4,229
Building Renewals - Per Building Asset Management Plan		254	259	265	272	280	290	300	311	321	333	344	356	1,394	1,459	1,620	1,966	1,719	1,505	1,274	957	15,479
Building Upgrades - Calista Oval Tennis Clubrooms	Installation of Modular Universal Accessible Toilet and Renovation of Existing Toilet	15	140																			155
Building Upgrades - Sloan Reserve Ablutions	Renovation of existing toilet block to cater for DDA compliance	51																				51
Building Upgrades - Wandl Resource Centre	Installation of a UV water filter for potable water supply	6																				6
Building Upgrades & Renewal - Smirk Cottage	As per conservation management plan recommendations			52	27																	78
DCA 10 - Local Community Centre Casuarina/Anketell	100% DCA Funded			159	1,546	1,593																3,298
DCA 10 - Local Sporting Ground with Clubroom - Casuarina/Anketell										135	1,324	1,370										2,829
DCA 10 - Local Sporting Ground with Facility Building - Casuarina/Anketell							46	457	473													976
DCA 10,11,12,13 - District B Community Centre	19% City 81% DCA Funded (25% each DCA)										318	3,129	3,238									6,685
DCA 10,11,12,13 - District B Youth Centre	19% City 81% DCA Funded (25% each DCA)										392	3,859	3,994									8,245
DCA 12 - Local Sporting Ground with Community Centre / Clubroom - Wellard West	3% City 97% DCA Funded		2,787	2,857																		5,644
DCA 14 - Local Sporting Ground with Facility Building - Wellard Village Primary School	Per Community Infrastructure Plan					45	441	457														943
DCA 8 - Local Community Centre - Mandogalup	100% DCA Funded						174	1,706	1,766													3,646
DCA 8 - Local Sporting Ground with Facility Building - Mandogalup	100% DCA Funded						46	457	473													976
DCA 8,9 - District A Youth Centre	1% City 99% DCA Funded (50/50 DCA 8/9)						342	3,363	3,481													7,185
DCA 8,9,10,11,12,13 - Branch Library (serves Districts A & B)	13% City 87% DCA Funded (17% each DCA)			314	3,061	3,153																6,529
DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	13% City 87% DCA Funded (17% each DCA)						694	6,825	7,064													14,584
DCA 8,9,10,11,12,13 - Hard Court Clubrooms (District A & B)	12% City 88% DCA Funded (17% each DCA)									438	4,309	4,459										9,206
DCA 9 - Local Community Centre (large Scale) - Wandl	1% City 99% DCA Funded			170	1,660	1,710																3,540
DCA 9 - Local Sporting Ground with Facility Building (Treeby Rd)	28% City 72% DCA Funded					45	441	457														943
DCA 9 - Local Sporting Ground with Facility Building (Wandl Highschool)	28% City 72% DCA Funded						43	457	473													972
DCA 9 - Local Sports Ground Clubroom - Honeywood	Honeywood Primary School Oval Pavilion 1% City 99% DCA Funded	1,010	1,030																			2,040
Family Daycare Building Replacement of Playroom, Kitchenette and Toy Library			673																			673
Family Daycare Playground Renewal			146																			146
	Subject to a feasibility study, works will be required to be undertaken within 5 years, further information will be known and included in the next review of the LTFP																					
Operations Centre Upgrade			0	0	0																	0
Unallocated Projects		76	78	80	82	84	87	90	93	96	100	103	107	111	115	119	123	127	131	136	141	2,077
<b>Bus Shelters</b>		<b>48</b>	<b>49</b>	<b>51</b>	<b>52</b>	<b>54</b>	<b>56</b>	<b>59</b>	<b>61</b>	<b>64</b>	<b>67</b>	<b>70</b>	<b>73</b>	<b>76</b>	<b>120</b>	<b>128</b>	<b>136</b>	<b>144</b>	<b>149</b>	<b>154</b>	<b>160</b>	<b>1,770</b>
Bus Shelters - New	Bus Shelters - Various Locations	11	12	12	13	14	15	16	17	18	19	20	22	23	25	26	28	29	30	31	32	410
Bus Shelters - Upgrade	Bus Shelters - Various Locations	37	37	38	39	40	42	43	45	46	48	50	51	53	95	101	108	115	119	123	128	1,360
Bus Shelters Renewal	Bus Shelters - Various Locations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Car Parks</b>		<b>41</b>	<b>311</b>	<b>212</b>	<b>0</b>	<b>224</b>	<b>0</b>	<b>240</b>	<b>0</b>	<b>257</b>	<b>0</b>	<b>275</b>	<b>0</b>	<b>295</b>	<b>305</b>	<b>316</b>	<b>327</b>	<b>339</b>	<b>350</b>	<b>363</b>	<b>375</b>	<b>4,231</b>
Car Park - New	Wandl Community Centre Car park		311																			311
Car Park - New	Peace park (Parmelia Ave) disabled car parking bays	41																				41
Car Park Renewal per Asset Management Plan			0	212	0	224	0	240	0	257	0	275	0	295	305	316	327	339	350	363	375	3,880
<b>Computing Infrastructure</b>		<b>735</b>	<b>88</b>	<b>27</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>479</b>	<b>37</b>	<b>38</b>	<b>40</b>	<b>41</b>	<b>42</b>	<b>44</b>	<b>45</b>	<b>47</b>	<b>1,907</b>
City Website Redevelopment	Website Redevelopment Stage 2 of 3	193																				193
City Website Redevelopment	Website Redevelopment Stage 3 of 3		62																			62
City Website Redevelopment	Website Redevelopment												443									443
Computing Equipment	Various Computing Equipment Purchases as per Manager ICT/City Requirements	23	26	27	27	28	29	30	31	32	33	34	36	37	38	40	41	42	44	45	47	690
Supplier Implementation, Project Team Implementation Costs, QMS System Implementation, Data Migration (Annual Licencing included in Operating Costs) - Stage 2 of 3		519																				519

**Appendix 5**  
**Detailed Capital Expenditure**  
*Note: Figures are 000's*

Project	DESCRIPTION OF WORKS	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	Grand Total
<b>Drainage</b>		<b>2,584</b>	<b>922</b>	<b>265</b>	<b>551</b>	<b>1,496</b>	<b>290</b>	<b>3,665</b>	<b>311</b>	<b>321</b>	<b>333</b>	<b>344</b>	<b>356</b>	<b>369</b>	<b>382</b>	<b>395</b>	<b>409</b>	<b>423</b>	<b>438</b>	<b>453</b>	<b>469</b>	<b>14,777</b>
DCA 2 - Peel Sub N Drain - Lot 64 Woolcoot Rd & Lot 379 Millar, 27 & 201 Mortimer Rd's		1,945																				1,945
DCA 2 - Peel Sub N1 Drain - Lot 378 & 90 Millar Rd		334																				334
DCA 2 - Peel Sub N2 Drain - Lot 64 Woolcoot Rd					280																	280
DCA 3 - Peel Sub O Drain - Casuarina								1,034														1,034
DCA 3 - Peel Sub P Drain - Anketell Sth & Casuarina						1,216																1,216
DCA 3 - Peel Sub P1 Drain - Casuarina								1,199														1,199
DCA 3 - Peel Sub P1A Drain - Casuarina								1,131														1,131
Drainage - New		254	373																			626
Drainage - Upgrade			0	265	272	280	290	300	311	321	333	344	356	369	382	395	409	423	438	453	469	6,411
Drainage - Upgrade	Drainage Nets x 3 19/20	51																				51
Drainage Renewals per Asset Management Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stormwater Management Infrastructure (DCA 1)	100% DCA Funded		549																			549
<b>Footpaths</b>		<b>204</b>	<b>186</b>	<b>191</b>	<b>196</b>	<b>202</b>	<b>209</b>	<b>216</b>	<b>224</b>	<b>231</b>	<b>240</b>	<b>248</b>	<b>257</b>	<b>266</b>	<b>275</b>	<b>284</b>	<b>294</b>	<b>305</b>	<b>315</b>	<b>326</b>	<b>338</b>	<b>5,006</b>
Footpath - Upgrade		21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Footpath Renewals As per Asset Management Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Footpaths - New	Various	183	186	191	196	202	209	216	224	231	240	248	257	266	275	284	294	305	315	326	338	4,985
<b>Furniture &amp; Equipment</b>		<b>112</b>	<b>47</b>	<b>21</b>	<b>109</b>	<b>22</b>	<b>23</b>	<b>66</b>	<b>75</b>	<b>103</b>			<b>28</b>	<b>36</b>		<b>122</b>		<b>42</b>		<b>254</b>		<b>1,059</b>
Library - self check out station replacement	Replacement of 3 current stations upon reaching end of life				33					39						46				54		171
Library - self check out stations for Community Centres			26					30					36					42				134
Library - self returns shelves		20										28										48
Public Art Acquisition	Public Art Acquisition to be fully funded by contributions to Public Art	20	21	21	22	22	23															130
Requatic - Plant and Equipment replacement and installation	Basketball backboard and supports replacement								62												91	153
Requatic - Plant and Equipment replacement and installation	Score board installation and replacement	10							12												18	41
Requatic - Plant and Equipment replacement and installation	Court divider net							36														36
Requatic - Plant and Equipment replacement and installation	Replacement - pool blankets, buddy, lane ropes, pool cleaner, mats	25			54					64					76						91	311
Removal of Library Circulation Desk	Removal of Large circulation desk and replacement with 4 smaller staff pods. And additional library furniture required as part of upgrade	36																				36
<b>Land</b>						<b>1,929</b>																<b>1,929</b>
DCA 2,3,4,5,6,7 - Branch Library Land	9.43% DCA 2, 17.20% DCA 3, 10.84% DCA 4, 12.90% DCA 5, 29.89% DCA 6					772																772
DCA 4,5 - Local Community Centre Land	39.99% DCA 4, 60.01% DCA 5					482																482
DCA 4,5,6 - District Youth Centre Land	28.04% DCA 4, 42.07% DCA 5, 29.89% DCA 6					675																675
<b>Motor Vehicles</b>		<b>893</b>	<b>911</b>	<b>934</b>	<b>957</b>	<b>986</b>	<b>1,020</b>	<b>1,056</b>	<b>1,093</b>	<b>1,131</b>	<b>1,171</b>	<b>1,212</b>	<b>1,254</b>	<b>1,298</b>	<b>1,391</b>	<b>1,391</b>	<b>1,439</b>	<b>1,490</b>	<b>1,542</b>	<b>1,596</b>	<b>1,652</b>	<b>24,418</b>
New Vehicle - Building Maintenance	Light Fleet - 2WD Single Cab Ute	0																				0
New Vehicle - Environment	Light Fleet - 4WD Dual Cab Ute	0																				0
Plant Replacement Program - Light Fleet	Light Fleet	893	911	934	957	986	1,020	1,056	1,093	1,131	1,171	1,212	1,254	1,298	1,391	1,391	1,439	1,490	1,542	1,596	1,652	24,418
<b>Parks &amp; Reserves</b>		<b>1,575</b>	<b>598</b>	<b>39,746</b>	<b>1,790</b>	<b>5,727</b>	<b>2,073</b>	<b>41,770</b>	<b>3,845</b>	<b>1,112</b>	<b>2,032</b>	<b>5,131</b>	<b>6,848</b>	<b>9,844</b>	<b>9,743</b>	<b>1,118</b>	<b>1,915</b>	<b>1,012</b>	<b>7,076</b>	<b>4,791</b>	<b>1,381</b>	<b>149,129</b>
Bertram Street Tree Planting Program	Bertram Street Tree Planting Program	112	114	117	120	123	128	132														845
DCA 2,3,4,5,6,7 - District Sporting Ground	9.43% DCA 2, 17.20% DCA 3, 10.84% DCA 4, 12.90% DCA 5, 29.89% DCA 6					3,657																3,657
DCA 3 - Casuarina Public Open Space								38,147														38,147
DCA 4 - Anketell North Public Open Space				18,756																		18,756
DCA 5 - Wandil Public Open Space		283																				283
DCA 6 - Mandogalup Public Open Space				20,178																		20,178
District C Sporting Ground (Medina Oval Extension/Upgrade)	77% City 23% DCA Funded											634	6,236	6,454								13,325
District C Sporting Ground (Medina Oval Extension/Upgrade) - Masterplan and Changeroom Development		355																				355
Johnson Road Landscaping (G)	Install landscaping, inclusive of trees, mulch and groundcovers													221								221
KIA Street Tree Planting Program (B)	KIA Street Tree Planting Program	76	78	80	82	84	87	90														576
Public Open Space (POS) Upgrades - Parks for People Strategy		162	166	170	174	179	186	192	199	206	213	220	228	236	305	316	327	339	350	363	375	4,906
Public Open Space/Parks & Reserves Renewals	Per Draft Asset Management Plan (Parmelia Ave - Bertram Rd)	465	241	367	560	882	1,417	3,208	3,646	906	1,819	4,910	5,986	3,150	2,984	802	1,588	673	6,726	4,429	1,006	45,765
Streetscape Upgrade - Challenger Avenue Landscape Upgrade (E)	Streetscape Upgrade - Challenger Avenue						256															256
Streetscape Upgrade - Orelia Avenue	Streetscape Upgrade - Orelia Avenue	122																				122
Streetscape Upgrade - Sulphur Road (Gilmore to Meares Avenue) (C) Extension/Upgrade)	Streetscape Upgrade - Sulphur Road 52% City 48% DCA Funded			80	76	779	803															76
Wells Beach Foreshore Upgrade	Subject to a feasibility study, further information will be known and included in the next review of the LTFP		0																			0
<b>Plant &amp; Equipment</b>		<b>141</b>	<b>386</b>	<b>276</b>	<b>385</b>	<b>578</b>	<b>545</b>	<b>636</b>	<b>615</b>	<b>608</b>	<b>185</b>	<b>514</b>	<b>371</b>	<b>522</b>	<b>787</b>	<b>743</b>	<b>867</b>	<b>838</b>	<b>829</b>	<b>252</b>	<b>700</b>	<b>10,778</b>
Plant Replacement Program - Plant & Equipment	Heavy Plant and Equipment	141	386	276	385	578	545	636	615	608	185	514	371	522	787	743	867	838	829	252	700	10,778

Appendix 5  
Detailed Capital Expenditure  
Note: Figures are 000's

Project	DESCRIPTION OF WORKS	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	Grand Total
<b>Roads</b>		<b>3,249</b>	<b>2,085</b>	<b>9,447</b>	<b>17,526</b>	<b>14,308</b>	<b>8,603</b>	<b>9,372</b>	<b>4,064</b>	<b>4,206</b>	<b>8,793</b>	<b>4,506</b>	<b>4,664</b>	<b>4,827</b>	<b>4,996</b>	<b>5,171</b>	<b>5,352</b>	<b>5,539</b>	<b>5,733</b>	<b>4,542</b>	<b>4,678</b>	<b>131,658</b>
DCA 1 - Bertram Road Upgrade – Challenger Road to Wellard Road (Item K)	33.09% Developer (40.07% DCA but City 6.98% of that) 66.91% City of Kwinana						4,809															4,809
DCA 1 - Culvert and road crossing over the Peel Main Drain linking Lots 661 and 670 (Item M)						729																729
DCA 1 - Wellard Road Upgrade – Bertram Road to Cavendish (Item J)	DCA 31.35% (41.4882 however City responsible 10.14% Homestead Ridge/Emerald Park) City 68.65%				8,726																	8,726
DCA 1 - Wellard Road Upgrade – Cavendish to Millar Road (Item J) - Remaining Costs	DCA 20.88% (25.79% City 4.91%) 79.12% City				4,989																	4,989
DCA 2 - Millar Road	Millar Road - Chg 470 to 577 (107m) - AMEX to complete	289						406														289
DCA 2 - Sunrise Boulevard Internal Collector Road (a) - Lot 28																						406
DCA 2 - Sunrise Boulevard Internal Collector Road (b) - Lot 59		345																				345
DCA 2 - Sunrise Boulevard Internal Collector Road (c) - Lot 440					260																	260
DCA 2,3 - Mortimer Road								5,039														5,039
DCA 3,4 - Thomas Road				6,985																		6,985
DCA 4,5 - Anketell Road						7,506																7,506
DCA 5 - Honeywood Avenue Internal Collector Road						2,407																2,407
DCA 5 - Lyon Road		729																				729
DCA 6 - Hammond Road Extension											2,253											2,253
DCA 6 - Internal Collector Road											2,186											2,186
General Traffic Management	Traffic Calming	81	83	85	87	90	93	96	99	103	106	110	114	118	122	126	131	135	140	145	150	2,216
Gilmore avenue and Dalrymple drive intersection	Black Spot fully funded		40																			40
Gilmore avenue signalised pedestrian crossing	Black Spot 2/3		321																			321
Road Reseal Renewals - MRRG	2/3 Funded MRRG	1,218	1,242	1,273	1,305	1,344	1,391	1,440	1,491	1,543	1,597	1,653	1,710	1,770	1,832	1,896	1,963	2,031	2,103	2,176	2,252	33,233
Road Reseal Renewals - RTR	100% Funded	391	399	409	419	431	446	462	478	495	512	530	549	568	588	608	630	652	675	698	723	10,662
Roads - Upgrade	Various	195	0	695	1,739	1,800	1,863	1,928	1,996	2,066	2,138	2,213	2,290	2,371	2,454	2,539	2,628	2,720	2,815	1,523	1,553	37,527
<b>Street Lighting</b>		<b>251</b>	<b>28</b>	<b>135</b>	<b>139</b>	<b>366</b>	<b>148</b>	<b>153</b>	<b>158</b>	<b>164</b>	<b>170</b>	<b>176</b>	<b>182</b>	<b>188</b>	<b>195</b>	<b>201</b>	<b>209</b>	<b>216</b>	<b>223</b>	<b>231</b>	<b>239</b>	<b>3,773</b>
Remedial Works for Public Area Lighting Plan				106	109	112	116	120	124	129	133	138	143	148	153	158	164	169	175	181		2,377
Street Lighting - New	Leath Rd	223																				223
Street Lighting - New	Challenger Ave					223																223
Street Lighting - Upgrade	Reactive work - street light requests during the year	28	28	29	30	31	32	33	34	35	37	38	39	41	42	43	45	47	48	50	52	762
Street Lighting Renewal per Asset Management Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Grand Total</b>		<b>11,602</b>	<b>11,000</b>	<b>55,590</b>	<b>29,658</b>	<b>34,145</b>	<b>15,922</b>	<b>72,167</b>	<b>24,963</b>	<b>9,594</b>	<b>20,190</b>	<b>26,215</b>	<b>22,650</b>	<b>19,683</b>	<b>20,409</b>	<b>12,033</b>	<b>13,613</b>	<b>12,801</b>	<b>18,932</b>	<b>15,047</b>	<b>11,801</b>	<b>458,013</b>

**Appendix 6  
Summary Capital Expenditure Funding**

YEAR	FEDERAL / STATE GRANT	DCA RESERVE	OTHER RESERVE	PROCEEDS FROM SALE	LOAN FUNDS	MUNICIPAL FUNDS	TOTAL FUNDING
2019/20	1,202,775	4,924,979	4,120,334	525,263		828,623	11,601,973
2020/21	1,473,874	4,272,929	3,514,612	621,180		1,117,404	10,999,999
2021/22	1,282,635	49,317,576	2,090,327	561,366		2,337,763	55,589,666
2022/23	11,371,263	8,386,112	504,311	603,680	4,918,154	3,874,454	29,657,975
2023/24	1,566,374	23,819,589	753,894	705,816	3,218,232	4,080,708	34,144,613
2024/25	4,579,976	3,576,276	977,420	728,781	1,863,217	4,195,989	15,921,659
2025/26	1,422,166	59,939,403	628,348	769,890	3,208,214	6,198,929	72,166,949
2026/27	1,471,942	12,637,010	622,942	747,150	2,914,283	6,569,338	24,962,664
2027/28	1,523,460	518,563	565,380	785,899		6,200,343	9,593,645
2028/29	1,576,781	10,113,531	791,201	688,594		7,020,321	20,190,428
2029/30	1,631,968	10,937,329	619,210	826,313		12,200,357	26,215,178
2030/31	1,689,087	6,004,081	862,075	754,031		13,340,401	22,649,675
2031/32	1,748,205	1,434,289	1,998,655	818,779		13,683,541	19,683,469
2032/33	1,809,392	1,484,489	940,128	987,848		15,187,615	20,409,472
2033/34	1,872,721		982,100	993,253		8,184,868	12,032,942
2034/35	1,938,266		699,051	1,049,281		9,926,402	13,613,000
2035/36	2,006,105		395,335	1,018,289		9,380,817	12,800,545
2036/37	2,076,319		770,743	1,071,100		15,013,499	18,931,661
2037/38	2,148,990		809,647	938,483		11,149,430	15,046,550
2038/39	2,224,205		850,759	1,126,180		7,599,423	11,800,567
<b>Grand Total</b>	<b>46,616,502</b>	<b>197,366,157</b>	<b>23,496,472</b>	<b>16,321,175</b>	<b>16,122,100</b>	<b>158,090,225</b>	<b>458,012,631</b>

**Appendix 7**  
**Information on Borrowings**

Particulars	2020					2021				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	671,800	0	95,471	576,329	45,130	576,329	0	101,531	474,797	38,476
Loan 107 - Administration / Chambers Building Refurbishment	2,268,000	0	190,524	2,077,476	83,947	2,077,476	0	197,794	1,879,682	76,677
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	122,474	0	27,312	95,162	9,555	95,162	0	29,407	65,755	7,290
Loan 100 - Youth Specific Space	1,398,797	0	128,303	1,270,494	73,138	1,270,494	0	134,365	1,136,129	66,273
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	158,336	0	49,501	108,835	10,255	108,835	0	52,710	56,126	6,729
Loan 95 - Orelia Oval Pavilion	293,937	0	65,548	228,389	22,932	228,389	0	70,577	157,812	17,496
Loan 97 - Orelia Oval Pavilion Extension	1,486,497	0	211,250	1,275,247	99,859	1,275,247	0	224,660	1,050,587	85,136
Loan 102 - Library & Resource Centre	7,421,567	0	601,391	6,820,176	379,163	6,820,176	0	629,004	6,191,172	347,777
Loan 104 - Recquatic Refurbishment	3,350,000	0	0	3,350,000	159,189	3,350,000	0	277,849	3,072,151	155,847
Loan 105 - Bertram Community Centre	1,296,840	0	27,568	1,269,272	50,850	1,269,272	0	112,530	1,156,743	48,147
Loan 106 - Destination Park - Calista	1,420,421	0	99,153	1,321,268	53,613	1,321,268	0	102,291	1,218,977	49,749
<b>Transport</b>										
Loan 98 - Streetscape Beautification	906,929	0	128,886	778,043	60,925	778,043	0	137,067	640,976	51,943
Loan 101 - City Centre Redevelopment	2,500,000	0	0	2,500,000	79,298	2,500,000	0	0	2,500,000	79,250
Loan 108 - City Centre Redevelopment - Refinance Loan 101	0	0	0	0	0	0	0	0	0	0
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	0	0	0	0	0	0	0	0	0	0
Loan 110 - Branch Library Stage 2	0	0	0	0	0	0	0	0	0	0
Loan 111 - Subregional Sporting Ground Stage 2	0	0	0	0	0	0	0	0	0	0
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	0	0	0	0	0	0	0	0	0	0
Loan 113 - Major Upgrades - Roads FY2023	0	0	0	0	0	0	0	0	0	0
Loan 114 - Major Upgrades - Roads FY2024	0	0	0	0	0	0	0	0	0	0
Loan 115 - Arts Centre Upgrade Stage 3	0	0	0	0	0	0	0	0	0	0
Loan 116 - Branch Library Stage 3	0	0	0	0	0	0	0	0	0	0
Loan 117 - Major Upgrades - Roads FY2025	0	0	0	0	0	0	0	0	0	0
Loan 118 - Public Open Space Renewals/Replacements FY2026	0	0	0	0	0	0	0	0	0	0
Loan 119 - Major Upgrades - Roads FY2027	0	0	0	0	0	0	0	0	0	0
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	0	0	0	0	0	0	0	0	0	0
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	266,681	0	16,709	249,972	10,552	249,972	0	17,269	232,703	9,869
	<b>23,562,279</b>	<b>0</b>	<b>1,641,617</b>	<b>21,920,662</b>	<b>1,138,406</b>	<b>21,920,662</b>	<b>0</b>	<b>2,087,053</b>	<b>19,833,609</b>	<b>1,040,659</b>



**Appendix 7  
Information on Borrowings**

Particulars	2022					2023				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	474,797	0	107,976	366,821	31,413	366,821	0	114,830	251,991	23,900
Loan 107 - Administration / Chambers Building Refurbishment	1,879,682	0	205,341	1,674,341	69,130	1,674,341	0	213,176	1,461,164	61,294
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	65,755	0	31,663	34,092	4,855	34,092	0	34,092	0	2,226
Loan 100 - Youth Specific Space	1,136,129	0	140,713	995,415	59,110	995,415	0	147,361	848,054	51,606
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	56,126	0	56,126	0	2,841	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	157,812	0	75,991	81,821	11,652	81,821	0	81,820	0	5,344
Loan 97 - Orelia Oval Pavilion Extension	1,050,587	0	238,920	811,667	69,508	811,667	0	254,086	557,581	52,883
Loan 102 - Library & Resource Centre	6,191,172	0	657,885	5,533,287	315,089	5,533,287	0	688,092	4,845,194	280,877
Loan 104 - Recquatic Refurbishment	3,072,151	0	289,216	2,782,935	142,512	2,782,935	0	301,048	2,481,887	128,629
Loan 105 - Bertram Community Centre	1,156,743	0	116,232	1,040,511	43,760	1,040,511	0	120,055	920,456	39,229
Loan 106 - Destination Park - Calista	1,218,977	0	105,528	1,113,449	45,790	1,113,449	0	108,868	1,004,581	41,712
<b>Transport</b>										
Loan 98 - Streetscape Beautification	640,976	0	145,768	495,208	42,417	495,208	0	155,021	340,187	32,264
Loan 101 - City Centre Redevelopment	2,500,000	0	2,500,000	0	35,094	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	0	2,500,000	0	2,500,000	90,551	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	0	0	0	0	0	0	983,535	0	983,535	0
Loan 110 - Branch Library Stage 2	0	0	0	0	0	0	397,960	0	397,960	0
Loan 111 - Subregional Sporting Ground Stage 2	0	0	0	0	0	0	280,988	0	280,988	0
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	0	0	0	0	0	0	1,516,338	0	1,516,338	0
Loan 113 - Major Upgrades - Roads FY2023	0	0	0	0	0	0	1,739,333	0	1,739,333	0
Loan 114 - Major Upgrades - Roads FY2024	0	0	0	0	0	0	0	0	0	0
Loan 115 - Arts Centre Upgrade Stage 3	0	0	0	0	0	0	0	0	0	0
Loan 116 - Branch Library Stage 3	0	0	0	0	0	0	0	0	0	0
Loan 117 - Major Upgrades - Roads FY2025	0	0	0	0	0	0	0	0	0	0
Loan 118 - Public Open Space Renewals/Replacements FY2026	0	0	0	0	0	0	0	0	0	0
Loan 119 - Major Upgrades - Roads FY2027	0	0	0	0	0	0	0	0	0	0
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	0	0	0	0	0	0	0	0	0	0
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	232,703	0	17,847	214,856	9,169	214,856	0	18,444	196,412	8,445
	<b>19,833,609</b>	<b>2,500,000</b>	<b>4,689,207</b>	<b>17,644,403</b>	<b>972,890</b>	<b>17,644,403</b>	<b>4,918,154</b>	<b>2,236,894</b>	<b>20,325,663</b>	<b>848,159</b>

**Appendix 7  
Information on Borrowings**

Particulars	2024					2025				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	251,991	0	122,119	129,872	15,914	129,872	0	129,872	0	7,401
Loan 107 - Administration / Chambers Building Refurbishment	1,461,164	0	221,311	1,239,854	53,160	1,239,854	0	229,755	1,010,099	44,716
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	848,054	0	154,323	693,731	43,763	693,731	0	161,614	532,116	35,519
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	557,581	0	270,214	287,367	35,214	287,367	0	287,367	0	16,376
Loan 102 - Library & Resource Centre	4,845,194	0	719,686	4,125,508	245,182	4,125,508	0	752,731	3,372,778	207,680
Loan 104 - Recquatic Refurbishment	2,481,887	0	313,364	2,168,523	114,225	2,168,523	0	326,184	1,842,339	99,144
Loan 105 - Bertram Community Centre	920,456	0	124,005	796,451	34,566	796,451	0	128,085	668,366	29,717
Loan 106 - Destination Park - Calista	1,004,581	0	112,313	892,268	37,513	892,268	0	115,867	776,401	33,144
<b>Transport</b>										
Loan 98 - Streetscape Beautification	340,187	0	164,861	175,326	21,484	175,326	0	175,326	0	9,991
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	983,535	0	79,851	903,684	43,371	903,684	0	83,484	820,200	39,737
Loan 110 - Branch Library Stage 2	397,960	0	32,309	365,651	17,549	365,651	0	33,780	331,871	16,078
Loan 111 - Subregional Sporting Ground Stage 2	280,988	0	22,813	258,175	12,391	258,175	0	23,851	234,325	11,353
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	1,516,338	0	123,107	1,393,231	66,866	1,393,231	0	128,710	1,264,521	61,264
Loan 113 - Major Upgrades - Roads FY2023	1,739,333	0	141,212	1,598,121	76,699	1,598,121	0	147,638	1,450,484	70,273
Loan 114 - Major Upgrades - Roads FY2024	0	1,800,210	0	1,800,210	0	1,800,210	0	144,492	1,655,718	83,638
Loan 115 - Arts Centre Upgrade Stage 3	0	1,008,123	0	1,008,123	0	1,008,123	0	80,916	927,207	46,837
Loan 116 - Branch Library Stage 3	0	409,899	0	409,899	0	409,899	0	32,900	376,998	19,044
Loan 117 - Major Upgrades - Roads FY2025	0	0	0	0	0	0	1,863,217	0	1,863,217	0
Loan 118 - Public Open Space Renewals/Replacements FY2026	0	0	0	0	0	0	0	0	0	0
Loan 119 - Major Upgrades - Roads FY2027	0	0	0	0	0	0	0	0	0	0
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	0	0	0	0	0	0	0	0	0	0
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	196,412	0	19,062	177,351	7,701	177,351	0	19,700	157,651	6,925
	<b>20,325,663</b>	<b>3,218,232</b>	<b>2,620,550</b>	<b>20,923,345</b>	<b>945,348</b>	<b>20,923,345</b>	<b>1,863,217</b>	<b>3,002,270</b>	<b>19,784,292</b>	<b>958,587</b>

**Appendix 7  
Information on Borrowings**

Particulars	2026					2027				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	1,010,099	0	238,522	771,577	35,949	771,577	0	247,623	523,953	26,847
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	532,116	0	169,250	362,866	26,905	362,866	0	177,246	185,620	17,880
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	0	0	0	0	0	0	0	0	0	0
Loan 102 - Library & Resource Centre	3,372,778	0	787,292	2,585,485	168,560	2,585,485	0	823,441	1,762,044	127,632
Loan 104 - Recquatic Refurbishment	1,842,339	0	339,528	1,502,812	83,498	1,502,812	0	353,418	1,149,394	67,213
Loan 105 - Bertram Community Centre	668,366	0	132,298	536,068	24,728	536,068	0	136,651	399,417	19,573
Loan 106 - Destination Park - Calista	776,401	0	119,534	656,866	28,660	656,866	0	123,317	533,550	24,033
<b>Transport</b>										
Loan 98 - Streetscape Beautification	0	0	0	0	0	0	0	0	0	0
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	820,200	0	87,283	732,917	35,938	732,917	0	91,255	641,661	31,966
Loan 110 - Branch Library Stage 2	331,871	0	35,317	296,554	14,541	296,554	0	36,924	259,630	12,934
Loan 111 - Subregional Sporting Ground Stage 2	234,325	0	24,936	209,388	10,267	209,388	0	26,071	183,317	9,132
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	1,264,521	0	134,567	1,129,954	55,406	1,129,954	0	140,690	989,264	49,283
Loan 113 - Major Upgrades - Roads FY2023	1,450,484	0	154,356	1,296,127	63,555	1,296,127	0	161,380	1,134,747	56,530
Loan 114 - Major Upgrades - Roads FY2024	1,655,718	0	151,422	1,504,295	76,708	1,504,295	0	158,685	1,345,611	69,445
Loan 115 - Arts Centre Upgrade Stage 3	927,207	0	84,797	842,410	42,957	842,410	0	88,864	753,546	38,890
Loan 116 - Branch Library Stage 3	376,998	0	34,478	342,520	17,466	342,520	0	36,132	306,389	15,812
Loan 117 - Major Upgrades - Roads FY2025	1,863,217	0	146,154	1,717,063	95,377	1,717,063	0	153,882	1,563,181	87,648
Loan 118 - Public Open Space Renewals/Replacements FY2026	0	3,208,214	0	3,208,214	0	3,208,214	0	248,772	2,959,442	171,818
Loan 119 - Major Upgrades - Roads FY2027	0	0	0	0	0	0	1,995,925	0	1,995,925	0
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	0	0	0	0	0	0	918,358	0	918,358	0
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	157,651	0	20,359	137,292	6,126	137,292	0	21,041	116,251	5,300
	<b>19,784,292</b>	<b>3,208,214</b>	<b>2,660,094</b>	<b>20,332,412</b>	<b>906,391</b>	<b>20,332,412</b>	<b>2,914,283</b>	<b>3,025,393</b>	<b>20,221,302</b>	<b>951,688</b>

**Appendix 7  
Information on Borrowings**

Particulars	2028					2029				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	523,953	0	257,072	266,881	17,399	266,881	0	266,881	(0)	7,590
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	185,620	0	185,620	0	8,419	0	0	0	0	0
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	0	0	0	0	0	0	0	0	0	0
Loan 102 - Library & Resource Centre	1,762,044	0	861,250	900,794	84,868	900,794	0	900,794	0	39,950
Loan 104 - Recquatic Refurbishment	1,149,394	0	367,876	781,518	50,267	781,518	0	382,926	398,592	32,589
Loan 105 - Bertram Community Centre	399,417	0	141,146	258,271	14,252	258,271	0	145,790	112,481	8,742
Loan 106 - Destination Park - Calista	533,550	0	127,220	406,330	19,271	406,330	0	131,246	275,084	14,341
<b>Transport</b>										
Loan 98 - Streetscape Beautification	0	0	0	0	0	0	0	0	0	0
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	641,661	0	95,408	546,254	27,813	546,254	0	99,750	446,504	23,472
Loan 110 - Branch Library Stage 2	259,630	0	38,604	221,026	11,254	221,026	0	40,361	180,665	9,497
Loan 111 - Subregional Sporting Ground Stage 2	183,317	0	27,257	156,060	7,946	156,060	0	28,498	127,563	6,706
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	989,264	0	147,093	842,172	42,880	842,172	0	153,786	688,385	36,187
Loan 113 - Major Upgrades - Roads FY2023	1,134,747	0	168,724	966,023	49,187	966,023	0	176,402	789,620	41,509
Loan 114 - Major Upgrades - Roads FY2024	1,345,611	0	166,296	1,179,315	61,834	1,179,315	0	174,271	1,005,044	53,859
Loan 115 - Arts Centre Upgrade Stage 3	753,546	0	93,126	660,420	34,627	660,420	0	97,592	562,828	30,161
Loan 116 - Branch Library Stage 3	306,389	0	37,865	268,524	14,079	268,524	0	39,681	228,843	12,263
Loan 117 - Major Upgrades - Roads FY2025	1,563,181	0	162,020	1,401,161	79,511	1,401,161	0	170,588	1,230,573	70,943
Loan 118 - Public Open Space Renewals/Replacements FY2026	2,959,442	0	262,541	2,696,901	158,050	2,696,901	0	277,071	2,419,830	143,520
Loan 119 - Major Upgrades - Roads FY2027	1,995,925	0	152,990	1,842,935	111,618	1,842,935	0	161,834	1,681,101	102,774
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	918,358	0	70,393	847,965	51,357	847,965	0	74,463	773,503	47,288
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	116,251	0	21,745	94,506	4,449	94,506	0	22,473	72,033	3,565
	<b>20,221,302</b>	<b>0</b>	<b>3,384,245</b>	<b>16,837,058</b>	<b>968,833</b>	<b>16,837,058</b>	<b>0</b>	<b>3,344,407</b>	<b>13,492,651</b>	<b>804,704</b>

Appendix 7  
Information on Borrowings

Particulars	2030					2031				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	(0)	0	0	(0)	0	(0)	0	0	(0)	0
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	0	0	0	0	0	0	0	0	0	0
Loan 102 - Library & Resource Centre	0	0	0	0	0	0	0	0	0	0
Loan 104 - Recquatic Refurbishment	398,592	0	398,592	0	14,215	0	0	0	0	0
Loan 105 - Bertram Community Centre	112,481	0	112,481	(0)	2,826	(0)	0	0	(0)	0
Loan 106 - Destination Park - Calista	275,084	0	135,399	139,685	9,256	139,685	0	139,685	0	4,015
<b>Transport</b>										
Loan 98 - Streetscape Beautification	0	0	0	0	0	0	0	0	0	0
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	446,504	0	104,289	342,215	18,932	342,215	0	109,035	233,180	14,187
Loan 110 - Branch Library Stage 2	180,665	0	42,198	138,468	7,660	138,468	0	44,118	94,350	5,740
Loan 111 - Subregional Sporting Ground Stage 2	127,563	0	29,794	97,768	5,409	97,768	0	31,150	66,618	4,053
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	688,385	0	160,784	527,601	29,189	527,601	0	168,101	359,500	21,872
Loan 113 - Major Upgrades - Roads FY2023	789,620	0	184,430	605,191	33,481	605,191	0	192,822	412,368	25,088
Loan 114 - Major Upgrades - Roads FY2024	1,005,044	0	182,630	822,414	45,500	822,414	0	191,389	631,025	36,741
Loan 115 - Arts Centre Upgrade Stage 3	562,828	0	102,273	460,555	25,480	460,555	0	107,178	353,376	20,575
Loan 116 - Branch Library Stage 3	228,843	0	41,584	187,259	10,360	187,259	0	43,578	143,681	8,366
Loan 117 - Major Upgrades - Roads FY2025	1,230,573	0	179,609	1,050,965	61,922	1,050,965	0	189,107	861,858	52,424
Loan 118 - Public Open Space Renewals/Replacements FY2026	2,419,830	0	292,406	2,127,424	128,185	2,127,424	0	308,589	1,818,835	112,002
Loan 119 - Major Upgrades - Roads FY2027	1,681,101	0	171,190	1,509,911	93,418	1,509,911	0	181,087	1,328,824	83,521
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	773,503	0	78,767	694,735	42,983	694,735	0	83,321	611,414	38,429
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	72,033	0	23,225	48,808	2,654	48,808	0	24,003	24,805	1,713
	<b>13,492,651</b>	<b>0</b>	<b>2,239,651</b>	<b>11,253,000</b>	<b>651,221</b>	<b>11,253,000</b>	<b>0</b>	<b>1,813,164</b>	<b>9,439,836</b>	<b>548,477</b>

**Appendix 7  
Information on Borrowings**

Particulars	2032					2033				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	(0)	0	0	(0)	0	(0)	0	0	(0)	0
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	0	0	0	0	0	0	0	0	0	0
Loan 102 - Library & Resource Centre	0	0	0	0	0	0	0	0	0	0
Loan 104 - Recquatic Refurbishment	0	0	0	0	0	0	0	0	0	0
Loan 105 - Bertram Community Centre	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 106 - Destination Park - Calista	0	0	0	0	0	0	0	0	0	0
<b>Transport</b>										
Loan 98 - Streetscape Beautification	0	0	0	0	0	0	0	0	0	0
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	233,180	0	113,996	119,184	9,225	119,184	0	119,184	(0)	4,037
Loan 110 - Branch Library Stage 2	94,350	0	46,125	48,224	3,733	48,224	0	48,224	0	1,634
Loan 111 - Subregional Sporting Ground Stage 2	66,618	0	32,568	34,050	2,635	34,050	0	34,050	(0)	1,153
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	359,500	0	175,751	183,749	14,222	183,749	0	183,749	0	6,225
Loan 113 - Major Upgrades - Roads FY2023	412,368	0	201,597	210,771	16,314	210,771	0	210,771	0	7,140
Loan 114 - Major Upgrades - Roads FY2024	631,025	0	200,568	430,457	27,562	430,457	0	210,188	220,269	17,942
Loan 115 - Arts Centre Upgrade Stage 3	353,376	0	112,319	241,057	15,435	241,057	0	117,706	123,352	10,048
Loan 116 - Branch Library Stage 3	143,681	0	45,668	98,013	6,276	98,013	0	47,859	50,154	4,085
Loan 117 - Major Upgrades - Roads FY2025	861,858	0	199,107	662,751	42,424	662,751	0	209,636	453,115	31,895
Loan 118 - Public Open Space Renewals/Replacements FY2026	1,818,835	0	325,668	1,493,168	94,923	1,493,168	0	343,692	1,149,476	76,899
Loan 119 - Major Upgrades - Roads FY2027	1,328,824	0	191,556	1,137,268	73,052	1,137,268	0	202,630	934,637	61,977
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	611,414	0	88,138	523,276	33,612	523,276	0	93,234	430,042	28,517
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	24,805	0	24,805	0	739	0	0	0	0	0
	<b>9,439,836</b>	<b>0</b>	<b>1,757,867</b>	<b>7,681,969</b>	<b>459,901</b>	<b>7,681,969</b>	<b>0</b>	<b>1,820,922</b>	<b>5,861,047</b>	<b>371,302</b>

**Appendix 7  
Information on Borrowings**

Particulars	2034					2035				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	(0)	0	0	(0)	0	(0)	0	0	(0)	0
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	0	0	0	0	0	0	0	0	0	0
Loan 102 - Library & Resource Centre	0	0	0	0	0	0	0	0	0	0
Loan 104 - Recquatic Refurbishment	0	0	0	0	0	0	0	0	0	0
Loan 105 - Bertram Community Centre	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 106 - Destination Park - Calista	0	0	0	0	0	0	0	0	0	0
<b>Transport</b>										
Loan 98 - Streetscape Beautification	0	0	0	0	0	0	0	0	0	0
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 110 - Branch Library Stage 2	0	0	0	0	0	0	0	0	0	0
Loan 111 - Subregional Sporting Ground Stage 2	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	0	0	0	0	0	0	0	0	0	0
Loan 113 - Major Upgrades - Roads FY2023	0	0	0	0	0	0	0	0	0	0
Loan 114 - Major Upgrades - Roads FY2024	220,269	0	220,269	(0)	7,861	(0)	0	0	(0)	0
Loan 115 - Arts Centre Upgrade Stage 3	123,352	0	123,351	0	4,402	0	0	0	0	0
Loan 116 - Branch Library Stage 3	50,154	0	50,154	(0)	1,790	(0)	0	0	(0)	0
Loan 117 - Major Upgrades - Roads FY2025	453,115	0	220,722	232,394	20,809	232,394	0	232,394	0	9,137
Loan 118 - Public Open Space Renewals/Replacements FY2026	1,149,476	0	362,714	786,762	57,877	786,762	0	382,788	403,974	37,803
Loan 119 - Major Upgrades - Roads FY2027	934,637	0	214,345	720,292	50,263	720,292	0	226,737	493,556	37,871
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	430,042	0	98,624	331,419	23,127	331,419	0	104,325	227,093	17,425
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	0	0	0	0	0	0	0	0	0	0
	<b>5,861,047</b>	<b>0</b>	<b>1,290,178</b>	<b>4,570,869</b>	<b>285,879</b>	<b>4,570,869</b>	<b>0</b>	<b>946,244</b>	<b>3,624,625</b>	<b>221,986</b>

**Appendix 7  
Information on Borrowings**

Particulars	2036					2037				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	(0)	0	0	(0)	0	(0)	0	0	(0)	0
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	0	0	0	0	0	0	0	0	0	0
Loan 102 - Library & Resource Centre	0	0	0	0	0	0	0	0	0	0
Loan 104 - Recquatic Refurbishment	0	0	0	0	0	0	0	0	0	0
Loan 105 - Bertram Community Centre	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 106 - Destination Park - Calista	0	0	0	0	0	0	0	0	0	0
<b>Transport</b>										
Loan 98 - Streetscape Beautification	0	0	0	0	0	0	0	0	0	0
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 110 - Branch Library Stage 2	0	0	0	0	0	0	0	0	0	0
Loan 111 - Subregional Sporting Ground Stage 2	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	0	0	0	0	0	0	0	0	0	0
Loan 113 - Major Upgrades - Roads FY2023	0	0	0	0	0	0	0	0	0	0
Loan 114 - Major Upgrades - Roads FY2024	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 115 - Arts Centre Upgrade Stage 3	0	0	0	0	0	0	0	0	0	0
Loan 116 - Branch Library Stage 3	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 117 - Major Upgrades - Roads FY2025	0	0	0	0	0	0	0	0	0	0
Loan 118 - Public Open Space Renewals/Replacements FY2026	403,974	0	403,974	(0)	16,617	(0)	0	0	(0)	0
Loan 119 - Major Upgrades - Roads FY2027	493,556	0	239,845	253,711	24,763	253,711	0	253,711	(0)	10,897
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	227,093	0	110,357	116,737	11,394	116,737	0	116,737	0	5,014
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	0	0	0	0	0	0	0	0	0	0
	<b>3,624,625</b>	<b>0</b>	<b>754,175</b>	<b>2,870,450</b>	<b>172,524</b>	<b>2,870,450</b>	<b>0</b>	<b>370,447</b>	<b>2,500,000</b>	<b>135,661</b>



**Appendix 7  
Information on Borrowings**

Particulars	2038					2039				
	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments	Principal Outstanding at Beginning of Year	New Loans	Principal Repayments	Principal Outstanding at End of Year	Interest Repayments
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Governance</b>										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	(0)	0	0	(0)	0	(0)	0	0	(0)	0
<b>Education &amp; Welfare</b>										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
<b>Recreation and Culture</b>										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	0	0	0	0	0	0	0	0	0	0
Loan 102 - Library & Resource Centre	0	0	0	0	0	0	0	0	0	0
Loan 104 - Recquatic Refurbishment	0	0	0	0	0	0	0	0	0	0
Loan 105 - Bertram Community Centre	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 106 - Destination Park - Calista	0	0	0	0	0	0	0	0	0	0
<b>Transport</b>										
Loan 98 - Streetscape Beautification	0	0	0	0	0	0	0	0	0	0
Loan 101 - City Centre Redevelopment	0	0	0	0	0	0	0	0	0	0
Loan 108 - City Centre Redevelopment - Refinance Loan 101	2,500,000	0	0	2,500,000	119,750	2,500,000	0	0	2,500,000	119,750
<b>New Loans</b>										
Loan 109 - Arts Centre Upgrade Stage 2	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 110 - Branch Library Stage 2	0	0	0	0	0	0	0	0	0	0
Loan 111 - Subregional Sporting Ground Stage 2	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	0	0	0	0	0	0	0	0	0	0
Loan 113 - Major Upgrades - Roads FY2023	0	0	0	0	0	0	0	0	0	0
Loan 114 - Major Upgrades - Roads FY2024	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 115 - Arts Centre Upgrade Stage 3	0	0	0	0	0	0	0	0	0	0
Loan 116 - Branch Library Stage 3	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 117 - Major Upgrades - Roads FY2025	0	0	0	0	0	0	0	0	0	0
Loan 118 - Public Open Space Renewals/Replacements FY2026	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 119 - Major Upgrades - Roads FY2027	(0)	0	0	(0)	0	(0)	0	0	(0)	0
Loan 120 - DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	0	0	0	0	0	0	0	0	0	0
<b>Self Supporting Loans</b>										
<b>Recreation and Culture</b>										
Loan 103B - Golf Club Refurbishment	0	0	0	0	0	0	0	0	0	0
	<b>2,500,000</b>	<b>0</b>	<b>0</b>	<b>2,500,000</b>	<b>119,750</b>	<b>2,500,000</b>	<b>0</b>	<b>0</b>	<b>2,500,000</b>	<b>119,750</b>

Appendix 8  
Information on Reserves

Reserve	2020					2021				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	841,635	18,522	128,164	(111,286)	858,513	858,513	24,034	135,348	(115,244)	878,617
Asset Management Reserve	330,316	286,513	5,282,139	(2,013,173)	3,599,282	3,599,282	295,498	295,498	(2,142,257)	1,752,523
Plant & Equipment Replacement Reserve	659,929	14,523	514,523	(509,023)	665,430	665,430	18,629	18,629	(266,590)	417,469
Banksia Park Reserve	86,769	1,910	58,417	(56,507)	88,679	88,679	2,483	59,556	(57,074)	91,161
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	85,478	1,881	1,881	0	87,359	87,359	2,446	2,446	0	89,805
Contiguous Local Authorities Group Reserve	257,721	5,672	5,672	0	263,393	263,393	7,374	7,374	(52,940)	217,826
Employee Leave Reserve	3,891,252	0	0	(1,945,626)	1,945,626	1,945,626	0	0	0	1,945,626
Family Day Care Reserve	1,349,465	29,699	29,699	0	1,379,164	1,379,164	38,609	38,609	(818,819)	598,954
Future Community Infrastructure Reserve	901,851	0	0	(901,851)	0	0	0	0	0	0
Golf Course Cottage Reserve	28,520	628	628	0	29,148	29,148	816	816	0	29,964
Information Technology Reserve	507,574	11,137	11,137	(518,711)	(0)	(0)	(0)	(0)	0	(0)
City Infrastructure Reserve	345,879	27,460	1,079,311	(891,334)	533,856	533,856	14,945	14,945	(93,923)	454,878
Public Art Reserve	0	0	20,300	(20,300)	0	0	0	20,706	(20,706)	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	8,795,702	0	0	(3,785,141)	5,010,561	5,010,561	0	0	(86,844)	4,923,717
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	162,782	3,582	3,582	0	166,364	166,364	4,657	4,657	0	171,022
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	335,941	7,393	7,393	0	343,334	343,334	9,612	9,612	0	352,946
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>18,580,814</b>	<b>408,920</b>	<b>7,142,846</b>	<b>(10,752,952)</b>	<b>14,970,708</b>	<b>14,970,708</b>	<b>419,102</b>	<b>608,196</b>	<b>(3,654,396)</b>	<b>11,924,508</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	1,542,068	10,832	10,832	0	1,552,900	1,552,900	11,952	11,952	(549,261)	1,015,591
DCA 2 - Hard Infrastructure - Wellard	5,743	40	2,907,327	(2,913,070)	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	0	0	38,534	(38,534)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	0	0	20,517	(20,517)	0	0	0	20,517	(20,517)	0
DCA 5 - Hard Infrastructure - Wandl	1,493,545	10,491	10,491	(1,059,013)	445,023	445,023	3,425	3,425	(47,056)	401,392
DCA 6 - Hard Infrastructure - Mandogalup	0	0	17,996	(17,996)	0	0	0	17,996	(17,996)	0
DCA 7 - Hard Infrastructure - Mandogalup West	25,720	181	181	0	25,901	25,901	199	199	0	26,100
DCA 8 - Soft Infrastructure - Mandogalup	0	0	4,302	(4,302)	0	0	0	4,302	(4,302)	0
DCA 9 - Soft Infrastructure - Wandl/Anketell	10,882,338	76,440	76,440	(1,010,260)	9,948,518	9,948,518	76,568	76,568	(1,030,259)	8,994,826
DCA 10 - Soft Infrastructure - Casuarina/Anketell	473,009	3,323	3,323	(6,645)	469,687	469,687	3,615	3,615	(6,645)	466,656
DCA 11 - Soft Infrastructure - Wellard East	6,738,607	47,334	47,334	0	6,785,941	6,785,941	52,227	52,227	0	6,838,168
DCA 12 - Soft Infrastructure - Wellard West	6,887,880	48,382	48,382	0	6,936,262	6,936,262	53,384	53,384	(2,703,718)	4,285,928
DCA 13 - Soft Infrastructure - Bertram	288,252	2,025	2,025	(3,349)	286,928	286,928	2,208	2,208	(3,349)	285,787
DCA 14 - Soft Infrastructure - Wellard/Leda	604,540	4,246	4,246	0	608,786	608,786	4,685	4,685	0	613,472
DCA 15 - Soft Infrastructure - City Site	166,029	1,166	1,166	0	167,195	167,195	1,287	1,287	0	168,482
<b>Sub-Total Developer Contribution Reserves</b>	<b>29,107,731</b>	<b>204,460</b>	<b>3,193,096</b>	<b>(5,073,687)</b>	<b>27,227,140</b>	<b>27,227,140</b>	<b>209,551</b>	<b>290,900</b>	<b>(4,421,637)</b>	<b>23,096,403</b>
<b>Total Reserves</b>	<b>47,688,545</b>	<b>613,380</b>	<b>10,335,942</b>	<b>(15,826,639)</b>	<b>42,197,848</b>	<b>42,197,848</b>	<b>628,653</b>	<b>899,096</b>	<b>(8,076,033)</b>	<b>35,020,911</b>

Appendix 8  
Information on Reserves

Reserve	2022					2023				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	878,617	31,729	145,489	(120,720)	903,387	903,387	38,847	155,111	(126,461)	932,036
Asset Management Reserve	1,752,523	311,360	311,360	(1,532,754)	531,129	531,129	314,404	314,404	(280,288)	565,245
Plant & Equipment Replacement Reserve	417,469	15,076	15,076	(229,215)	203,329	203,329	8,743	8,743	0	212,073
Banksia Park Reserve	91,161	3,292	61,421	(58,129)	94,453	94,453	4,062	63,269	(59,207)	98,515
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	89,805	3,243	3,243	0	93,048	93,048	4,001	4,001	0	97,049
Contiguous Local Authorities Group Reserve	217,826	7,866	7,866	(54,263)	171,429	171,429	7,372	7,372	(55,620)	123,181
Employee Leave Reserve	1,945,626	0	0	0	1,945,626	1,945,626	0	0	0	1,945,626
Family Day Care Reserve	598,954	21,630	21,630	0	620,584	620,584	26,686	26,686	0	647,270
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	29,964	1,082	1,082	0	31,046	31,046	1,335	1,335	0	32,381
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	454,878	16,427	16,427	(128,284)	343,021	343,021	14,750	14,750	(16,600)	341,171
Public Art Reserve	0	0	21,224	(21,224)	0	0	0	21,754	(21,754)	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	4,923,717	0	0	(89,015)	4,834,702	4,834,702	0	0	(91,241)	4,743,461
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	171,022	6,176	6,176	0	177,198	177,198	7,620	7,620	0	184,818
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	352,946	12,746	12,746	0	365,692	365,692	15,725	15,725	0	381,417
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>11,924,508</b>	<b>430,627</b>	<b>623,740</b>	<b>(2,233,605)</b>	<b>10,314,643</b>	<b>10,314,643</b>	<b>443,546</b>	<b>640,771</b>	<b>(651,171)</b>	<b>10,304,243</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	1,015,591	9,468	9,468	0	1,025,059	1,025,059	11,427	709,092	(1,734,150)	0
DCA 2 - Hard Infrastructure - Wellard	0	0	0	0	0	0	0	539,507	(539,507)	(0)
DCA 3 - Hard Infrastructure - Casuarina	0	0	3,531,121	(3,531,121)	(0)	(0)	(0)	38,534	(38,534)	(0)
DCA 4 - Hard Infrastructure - Anketell	0	0	22,268,869	(22,268,869)	(0)	(0)	(0)	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandii	401,392	3,742	3,742	(47,056)	358,078	358,078	3,992	3,992	(47,056)	315,014
DCA 6 - Hard Infrastructure - Mandogalup	0	0	20,195,893	(20,195,893)	(0)	(0)	(0)	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	26,100	243	243	0	26,343	26,343	294	294	0	26,637
DCA 8 - Soft Infrastructure - Mandogalup	0	0	53,179	(53,179)	(0)	(0)	(0)	480,602	(480,602)	(0)
DCA 9 - Soft Infrastructure - Wandii/Anketell	8,994,826	83,853	83,853	(227,960)	8,850,719	8,850,719	98,663	98,663	(2,130,048)	6,819,335
DCA 10 - Soft Infrastructure - Casuarina/Anketell	466,656	4,350	4,350	(214,328)	256,679	256,679	2,861	1,772,639	(2,029,318)	(0)
DCA 11 - Soft Infrastructure - Wellard East	6,838,168	63,748	63,748	(48,877)	6,853,039	6,853,039	76,394	76,394	(476,300)	6,453,133
DCA 12 - Soft Infrastructure - Wellard West	4,285,928	39,955	39,955	(2,820,188)	1,505,695	1,505,695	16,785	16,785	(476,300)	1,046,180
DCA 13 - Soft Infrastructure - Bertram	285,787	2,664	2,664	(52,226)	236,225	236,225	2,633	243,424	(479,649)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	613,472	5,719	5,719	(3,293)	615,898	615,898	6,866	6,866	(32,422)	590,342
DCA 15 - Soft Infrastructure - City Site	168,482	1,571	1,571	(3,293)	166,760	166,760	1,859	1,859	(32,422)	136,197
<b>Sub-Total Developer Contribution Reserves</b>	<b>23,096,403</b>	<b>215,314</b>	<b>46,264,376</b>	<b>(49,466,284)</b>	<b>19,894,494</b>	<b>19,894,494</b>	<b>221,773</b>	<b>4,027,163</b>	<b>(8,534,820)</b>	<b>15,386,837</b>
<b>Total Reserves</b>	<b>35,020,911</b>	<b>645,941</b>	<b>46,888,116</b>	<b>(51,699,890)</b>	<b>30,209,138</b>	<b>30,209,138</b>	<b>665,319</b>	<b>4,667,934</b>	<b>(9,185,992)</b>	<b>25,691,080</b>

Appendix 8  
Information on Reserves

Reserve	2024					2025				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	932,036	41,427	160,827	(133,769)	959,094	959,094	45,204	168,424	(142,880)	984,638
Asset Management Reserve	565,245	322,443	322,443	(523,264)	364,424	364,424	328,019	328,019	(463,822)	228,621
Plant & Equipment Replacement Reserve	212,073	9,426	9,426	0	221,499	221,499	10,440	10,440	(42,782)	189,157
Banksia Park Reserve	98,515	4,379	64,974	(60,596)	102,894	102,894	4,850	67,170	(62,320)	107,743
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	97,049	4,314	4,314	0	101,363	101,363	4,777	4,777	0	106,140
Contiguous Local Authorities Group Reserve	123,181	5,475	5,475	(57,289)	71,367	71,367	3,364	3,364	(59,294)	15,437
Employee Leave Reserve	1,945,626	0	0	0	1,945,626	1,945,626	0	0	0	1,945,626
Family Day Care Reserve	647,270	28,770	28,770	0	676,040	676,040	31,863	31,863	0	707,904
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	32,381	1,439	1,439	0	33,820	33,820	1,594	1,594	0	35,414
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	341,171	15,164	15,164	(13,859)	342,477	342,477	16,142	16,142	(242,424)	116,194
Public Art Reserve	0	0	22,407	(22,407)	0	0	0	23,191	(23,191)	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	4,743,461	0	0	(93,978)	4,649,483	4,649,483	0	0	(97,267)	4,552,216
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	184,818	8,215	8,215	0	193,032	193,032	9,098	9,098	0	202,131
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	381,417	16,953	16,953	0	398,370	398,370	18,776	18,776	0	417,147
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>10,304,243</b>	<b>458,006</b>	<b>660,408</b>	<b>(905,160)</b>	<b>10,059,491</b>	<b>10,059,491</b>	<b>474,128</b>	<b>682,859</b>	<b>(1,133,981)</b>	<b>9,608,369</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	0	0	729,343	(729,344)	(0)	(0)	(0)	1,591,250	(1,591,250)	(0)
DCA 2 - Hard Infrastructure - Wellard	(0)	(0)	738,083	(738,082)	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	(0)	(0)	1,992,879	(1,992,879)	(0)	(0)	(0)	38,534	(38,534)	(0)
DCA 4 - Hard Infrastructure - Anketell	(0)	(0)	4,977,817	(4,977,817)	(0)	(0)	(0)	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandl	315,014	4,688	7,096,171	(7,411,185)	(0)	(0)	(0)	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	(0)	981,155	(981,155)	(0)	(0)	(0)	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	26,637	396	711,445	(738,082)	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	(0)	(0)	495,321	(495,321)	0	0	0	494,239	(494,240)	(0)
DCA 9 - Soft Infrastructure - Wandl/Anketell	6,819,335	101,492	101,492	(2,226,376)	4,694,451	4,694,451	93,133	93,133	(628,409)	4,159,175
DCA 10 - Soft Infrastructure - Casuarina/Anketell	(0)	(0)	2,090,428	(2,090,428)	(0)	(0)	(0)	153,165	(153,165)	0
DCA 11 - Soft Infrastructure - Wellard East	6,453,133	96,042	96,042	(491,019)	6,058,156	6,058,156	120,187	120,187	(100,674)	6,077,669
DCA 12 - Soft Infrastructure - Wellard West	1,046,180	15,570	15,570	(491,019)	570,732	570,732	11,323	11,323	(100,674)	481,380
DCA 13 - Soft Infrastructure - Bertram	0	0	494,367	(494,368)	(0)	(0)	(0)	104,024	(104,023)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	590,342	8,786	8,786	(77,399)	521,730	521,730	10,351	10,351	(428,445)	103,635
DCA 15 - Soft Infrastructure - City Site	136,197	2,027	2,027	(33,824)	104,400	104,400	2,071	2,071	0	106,471
<b>Sub-Total Developer Contribution Reserves</b>	<b>15,386,837</b>	<b>229,003</b>	<b>20,530,928</b>	<b>(23,968,297)</b>	<b>11,949,468</b>	<b>11,949,468</b>	<b>237,064</b>	<b>2,703,845</b>	<b>(3,724,984)</b>	<b>10,928,328</b>
<b>Total Reserves</b>	<b>25,691,080</b>	<b>687,009</b>	<b>21,191,336</b>	<b>(24,873,457)</b>	<b>22,008,958</b>	<b>22,008,958</b>	<b>711,191</b>	<b>3,386,704</b>	<b>(4,858,965)</b>	<b>20,536,697</b>

Appendix 8  
Information on Reserves

Reserve	2026					2027				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	984,638	50,424	177,590	(152,617)	1,009,611	1,009,611	54,049	185,705	(163,536)	1,031,780
Asset Management Reserve	228,621	344,466	344,466	(411,636)	161,451	161,451	351,110	351,110	(310,536)	202,025
Plant & Equipment Replacement Reserve	189,157	9,687	9,687	0	198,844	198,844	10,645	10,645	(82,492)	126,997
Banksia Park Reserve	107,743	5,518	69,613	(64,095)	113,261	113,261	6,063	72,442	(66,378)	119,324
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	106,140	5,435	5,435	0	111,576	111,576	5,973	5,973	0	117,549
Contiguous Local Authorities Group Reserve	15,437	791	791	0	16,228	16,228	869	869	0	17,097
Employee Leave Reserve	1,945,626	0	0	0	1,945,626	1,945,626	0	0	0	1,945,626
Family Day Care Reserve	707,904	36,252	36,252	0	744,156	744,156	39,838	39,838	0	783,993
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	35,414	1,814	1,814	0	37,228	37,228	1,993	1,993	0	39,221
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	116,194	5,950	5,950	0	122,145	122,145	6,539	6,539	0	128,684
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	4,552,216	0	0	(100,671)	4,451,545	4,451,545	0	0	(104,195)	4,347,350
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	202,131	10,351	10,351	0	212,482	212,482	11,375	11,375	0	223,857
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	417,147	21,362	21,362	0	438,509	438,509	23,475	23,475	0	461,984
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>9,608,369</b>	<b>492,050</b>	<b>683,311</b>	<b>(729,019)</b>	<b>9,562,660</b>	<b>9,562,660</b>	<b>511,928</b>	<b>709,963</b>	<b>(727,137)</b>	<b>9,545,486</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	(0)	(0)	(0)	0	(0)	(0)	(0)	(0)	0	(0)
DCA 2 - Hard Infrastructure - Wellard	0	0	2,925,752	(2,925,752)	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	(0)	(0)	44,070,304	(44,070,304)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	(0)	(0)	20,517	(20,517)	(0)	(0)	(0)	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandl	(0)	(0)	47,056	(47,056)	(0)	(0)	(0)	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	(0)	17,996	(17,996)	(0)	(0)	(0)	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	(0)	(0)	4,821,613	(4,821,613)	(0)	(0)	(0)	4,990,219	(4,990,219)	0
DCA 9 - Soft Infrastructure - Wandl/Anketell	4,159,175	93,634	93,634	(3,321,137)	931,672	931,672	37,306	2,166,299	(3,097,970)	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	1,447,301	(1,447,301)	0	0	0	1,497,723	(1,497,724)	(0)
DCA 11 - Soft Infrastructure - Wellard East	6,077,669	136,824	136,824	(989,882)	5,224,611	5,224,611	209,202	209,202	(1,024,528)	4,409,286
DCA 12 - Soft Infrastructure - Wellard West	481,380	10,837	536,947	(989,882)	28,445	28,445	1,139	996,082	(1,024,528)	(0)
DCA 13 - Soft Infrastructure - Bertram	0	0	993,231	(993,231)	0	0	0	1,026,647	(1,026,648)	(0)
DCA 14 - Soft Infrastructure - Wellard/Leda	103,635	2,333	438,651	(443,441)	98,845	98,845	3,958	3,958	0	102,803
DCA 15 - Soft Infrastructure - City Site	106,471	2,397	2,397	0	108,868	108,868	4,359	4,359	0	113,227
<b>Sub-Total Developer Contribution Reserves</b>	<b>10,928,328</b>	<b>246,025</b>	<b>55,552,223</b>	<b>(60,088,110)</b>	<b>6,392,441</b>	<b>6,392,441</b>	<b>255,964</b>	<b>11,018,592</b>	<b>(12,785,718)</b>	<b>4,625,315</b>
<b>Total Reserves</b>	<b>20,536,697</b>	<b>738,075</b>	<b>56,235,534</b>	<b>(60,817,130)</b>	<b>15,955,101</b>	<b>15,955,101</b>	<b>767,893</b>	<b>11,728,555</b>	<b>(13,512,855)</b>	<b>14,170,801</b>

Appendix 8  
Information on Reserves

Reserve	2028					2029				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	1,031,780	57,714	194,018	(175,234)	1,050,563	1,050,563	60,018	201,131	(187,768)	1,063,927
Asset Management Reserve	202,025	363,308	500,134	(321,405)	380,754	380,754	375,105	2,068,342	(532,247)	1,916,849
Plant & Equipment Replacement Reserve	126,997	7,104	7,104	0	134,100	134,100	7,661	7,661	0	141,761
Banksia Park Reserve	119,324	6,675	75,416	(68,741)	125,999	125,999	7,198	78,385	(71,186)	133,197
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	117,549	6,575	6,575	0	124,124	124,124	7,091	7,091	0	131,215
Contiguous Local Authorities Group Reserve	17,097	956	956	0	18,053	18,053	1,031	1,031	0	19,084
Employee Leave Reserve	1,945,626	0	0	0	1,945,626	1,945,626	0	0	0	1,945,626
Family Day Care Reserve	783,993	43,854	43,854	0	827,847	827,847	47,294	47,294	0	875,142
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	39,221	2,194	2,194	0	41,414	41,414	2,366	2,366	0	43,780
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	128,684	7,198	7,198	0	135,882	135,882	7,763	7,763	0	143,645
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	4,347,350	0	0	(107,842)	4,239,508	4,239,508	0	0	(111,616)	4,127,892
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	223,857	12,522	12,522	0	236,379	236,379	13,504	13,504	0	249,883
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	461,984	25,842	25,842	0	487,826	487,826	27,869	27,869	0	515,695
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>9,545,486</b>	<b>533,941</b>	<b>875,812</b>	<b>(673,222)</b>	<b>9,748,076</b>	<b>9,748,076</b>	<b>556,901</b>	<b>2,462,438</b>	<b>(902,817)</b>	<b>11,307,696</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 2 - Hard Infrastructure - Wellard	0	0	0	0	0	0	0	0	0	(0)
DCA 3 - Hard Infrastructure - Casuarina	0	0	38,534	(38,534)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	(0)	0	20,517	(20,517)	(0)	(0)	0	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandii	(0)	0	47,056	(47,056)	(0)	(0)	0	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	0	17,996	(17,996)	(0)	(0)	0	4,457,108	(4,457,107)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	68,584	(68,585)	0	0	0	636,362	(636,362)	(0)
DCA 9 - Soft Infrastructure - Wandii/Anketell	0	0	74,591	(74,592)	(0)	(0)	0	642,369	(642,369)	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	(0)	0	203,871	(203,871)	(0)	(0)	0	2,089,028	(2,089,028)	(0)
DCA 11 - Soft Infrastructure - Wellard East	4,409,286	0	0	(64,283)	4,345,003	4,345,003	0	0	(775,973)	3,569,030
DCA 12 - Soft Infrastructure - Wellard West	(0)	0	64,283	(64,283)	(0)	(0)	0	775,973	(775,973)	(0)
DCA 13 - Soft Infrastructure - Bertram	(0)	0	67,555	(67,555)	0	0	0	779,322	(779,322)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	102,803	0	0	0	102,803	102,803	0	0	0	102,803
DCA 15 - Soft Infrastructure - City Site	113,227	0	0	0	113,227	113,227	0	0	0	113,227
<b>Sub-Total Developer Contribution Reserves</b>	<b>4,625,315</b>	<b>0</b>	<b>602,987</b>	<b>(667,271)</b>	<b>4,561,032</b>	<b>4,561,032</b>	<b>0</b>	<b>9,486,269</b>	<b>(10,262,240)</b>	<b>3,785,059</b>
<b>Total Reserves</b>	<b>14,170,801</b>	<b>533,941</b>	<b>1,478,799</b>	<b>(1,340,493)</b>	<b>14,309,108</b>	<b>14,309,108</b>	<b>556,901</b>	<b>11,948,707</b>	<b>(11,165,057)</b>	<b>15,092,755</b>

Appendix 8  
Information on Reserves

Reserve	2030					2031				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	1,063,927	54,651	200,743	(201,196)	1,063,474	1,063,474	55,162	206,406	(215,582)	1,054,298
Asset Management Reserve	1,916,849	410,445	716,613	(344,297)	2,289,165	2,289,165	427,776	427,776	(570,156)	2,146,785
Plant & Equipment Replacement Reserve	141,761	7,282	7,282	0	149,043	149,043	7,731	7,731	0	156,774
Banksia Park Reserve	133,197	6,842	80,559	(73,717)	140,039	140,039	7,264	83,601	(76,337)	147,303
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	131,215	6,740	6,740	0	137,955	137,955	7,156	7,156	0	145,111
Contiguous Local Authorities Group Reserve	19,084	980	980	0	20,065	20,065	1,041	1,041	0	21,105
Employee Leave Reserve	1,945,626	0	0	0	1,945,626	1,945,626	0	1,084,677	0	3,030,303
Family Day Care Reserve	875,142	44,954	44,954	0	920,096	920,096	47,725	47,725	0	967,820
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	43,780	2,249	2,249	0	46,029	46,029	2,388	2,388	0	48,417
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	143,645	7,379	7,379	0	151,023	151,023	7,833	7,833	0	158,857
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	4,127,892	0	0	(115,523)	4,012,370	4,012,370	0	0	(119,566)	3,892,804
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	249,883	12,836	12,836	0	262,719	262,719	13,627	13,627	0	276,346
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	515,695	26,490	26,490	0	542,185	542,185	28,123	28,123	0	570,308
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>11,307,696</b>	<b>580,848</b>	<b>1,106,825</b>	<b>(734,733)</b>	<b>11,679,788</b>	<b>11,679,788</b>	<b>605,824</b>	<b>1,918,083</b>	<b>(981,641)</b>	<b>12,616,230</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 2 - Hard Infrastructure - Wellard	(1)	0	0	0	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	0	0	38,534	(38,534)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	(0)	0	20,517	(20,517)	(0)	(0)	0	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandii	(0)	0	47,056	(47,056)	(0)	(0)	0	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	0	17,996	(17,996)	(0)	(0)	0	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	(0)	0	658,484	(658,484)	0	0	0	4,302	(4,302)	0
DCA 9 - Soft Infrastructure - Wandii/Anketell	0	0	664,491	(664,491)	0	0	0	10,309	(10,309)	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	(0)	0	3,428,772	(3,428,772)	0	0	0	1,471,197	(1,471,197)	0
DCA 11 - Soft Infrastructure - Wellard East	3,569,030	0	0	(2,069,208)	1,499,822	1,499,822	0	0	(1,499,822)	0
DCA 12 - Soft Infrastructure - Wellard West	(0)	0	2,069,208	(2,069,208)	(0)	(0)	0	1,464,552	(1,464,552)	(0)
DCA 13 - Soft Infrastructure - Bertram	0	0	2,071,772	(2,071,772)	0	0	0	1,467,901	(1,467,901)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	102,803	0	0	0	102,803	102,803	0	0	(102,803)	(0)
DCA 15 - Soft Infrastructure - City Site	113,227	0	0	0	113,227	113,227	0	0	(113,227)	0
<b>Sub-Total Developer Contribution Reserves</b>	<b>3,785,059</b>	<b>0</b>	<b>9,016,830</b>	<b>(11,086,037)</b>	<b>1,715,853</b>	<b>1,715,853</b>	<b>0</b>	<b>4,542,364</b>	<b>(6,258,217)</b>	<b>(0)</b>
<b>Total Reserves</b>	<b>15,092,755</b>	<b>580,848</b>	<b>10,123,655</b>	<b>(11,820,770)</b>	<b>13,395,641</b>	<b>13,395,641</b>	<b>605,824</b>	<b>6,460,447</b>	<b>(7,239,858)</b>	<b>12,616,229</b>

Appendix 8  
Information on Reserves

Reserve	2032					2033				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	1,054,298	52,804	209,381	(230,996)	1,032,683	1,032,683	57,609	219,707	(247,508)	1,004,882
Asset Management Reserve	2,146,785	454,259	454,259	(1,688,611)	912,432	912,432	455,452	455,452	(610,765)	757,119
Plant & Equipment Replacement Reserve	156,774	7,852	7,852	0	164,626	164,626	9,184	9,184	0	173,810
Banksia Park Reserve	147,303	7,378	86,426	(79,048)	154,680	154,680	8,629	90,483	(81,854)	163,309
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	145,111	7,268	7,268	0	152,379	152,379	8,501	8,501	0	160,879
Contiguous Local Authorities Group Reserve	21,105	1,057	1,057	0	22,163	22,163	1,236	1,236	0	23,399
Employee Leave Reserve	3,030,303	0	0	0	3,030,303	3,030,303	0	0	0	3,030,303
Family Day Care Reserve	967,820	48,473	48,473	0	1,016,293	1,016,293	56,695	56,695	0	1,072,988
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	48,417	2,425	2,425	0	50,842	50,842	2,836	2,836	0	53,678
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	158,857	7,956	7,956	0	166,813	166,813	9,306	9,306	0	176,119
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	3,892,804	0	452,488	(123,751)	4,221,541	4,221,541	0	1,411,150	(128,082)	5,504,609
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	276,346	13,841	13,841	0	290,186	290,186	16,188	16,188	0	306,375
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	570,308	28,563	28,563	0	598,871	598,871	33,409	33,409	0	632,280
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>12,616,230</b>	<b>631,875</b>	<b>1,319,988</b>	<b>(2,122,406)</b>	<b>11,813,812</b>	<b>11,813,812</b>	<b>659,045</b>	<b>2,314,147</b>	<b>(1,068,210)</b>	<b>13,059,749</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 2 - Hard Infrastructure - Wellard	0	0	0	0	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	0	0	38,534	(38,534)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	(0)	0	20,517	(20,517)	(0)	(0)	0	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandii	(0)	0	47,056	(47,056)	(0)	(0)	0	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	0	17,996	(17,996)	(0)	(0)	0	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	4,302	(4,302)	0	0	0	4,302	(4,302)	0
DCA 9 - Soft Infrastructure - Wandii/Anketell	0	0	10,309	(10,309)	0	0	0	10,309	(10,309)	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	6,645	(6,645)	0	0	0	6,645	(6,645)	0
DCA 11 - Soft Infrastructure - Wellard East	0	0	0	0	0	0	0	0	0	0
DCA 12 - Soft Infrastructure - Wellard West	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 13 - Soft Infrastructure - Bertram	0	0	3,349	(3,349)	0	0	0	3,349	(3,349)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 15 - Soft Infrastructure - City Site	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Developer Contribution Reserves</b>	<b>(0)</b>	<b>0</b>	<b>148,708</b>	<b>(148,708)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>148,708</b>	<b>(148,708)</b>	<b>(0)</b>
<b>Total Reserves</b>	<b>12,616,229</b>	<b>631,875</b>	<b>1,468,696</b>	<b>(2,271,114)</b>	<b>11,813,812</b>	<b>11,813,812</b>	<b>659,045</b>	<b>2,462,855</b>	<b>(1,216,918)</b>	<b>13,059,749</b>



Appendix 8  
Information on Reserves

Reserve	2034					2035				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	1,004,882	52,891	220,701	(265,200)	960,383	960,383	26,559	200,282	(284,153)	876,511
Asset Management Reserve	757,119	489,075	9,041,911	(632,142)	9,166,888	9,166,888	531,116	11,030,541	(327,133)	19,870,296
Plant & Equipment Replacement Reserve	173,810	9,148	2,860,094	0	3,033,903	3,033,903	83,900	3,583,709	0	6,617,612
Banksia Park Reserve	163,309	8,596	93,354	(84,759)	171,905	171,905	4,754	92,519	(87,765)	176,659
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	160,879	8,468	8,468	0	169,347	169,347	4,683	4,683	0	174,030
Contiguous Local Authorities Group Reserve	23,399	1,232	1,232	0	24,630	24,630	681	681	0	25,312
Employee Leave Reserve	3,030,303	0	0	0	3,030,303	3,030,303	0	0	0	3,030,303
Family Day Care Reserve	1,072,988	56,475	56,475	0	1,129,463	1,129,463	31,234	31,234	0	1,160,698
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	53,678	2,825	2,825	0	56,503	56,503	1,563	1,563	0	58,066
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	176,119	9,270	9,270	0	185,389	185,389	5,127	5,127	0	190,515
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	5,504,609	0	1,636,362	(132,565)	7,008,406	7,008,406	0	0	(137,205)	6,871,201
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	306,375	16,126	16,126	0	322,500	322,500	8,919	8,919	0	331,419
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	632,280	33,279	33,279	0	665,559	665,559	18,406	18,406	0	683,965
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>13,059,749</b>	<b>687,384</b>	<b>13,980,096</b>	<b>(1,114,665)</b>	<b>25,925,180</b>	<b>25,925,180</b>	<b>716,942</b>	<b>14,977,662</b>	<b>(836,256)</b>	<b>40,066,586</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 2 - Hard Infrastructure - Wellard	0	0	0	0	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	0	0	38,534	(38,534)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	(0)	0	20,517	(20,517)	(0)	(0)	0	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandii	(0)	0	47,056	(47,056)	(0)	(0)	0	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	0	17,996	(17,996)	(0)	(0)	0	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	4,302	(4,302)	0	0	0	4,302	(4,302)	0
DCA 9 - Soft Infrastructure - Wandii/Anketell	0	0	10,309	(10,309)	0	0	0	10,309	(10,309)	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	6,645	(6,645)	0	0	0	6,645	(6,645)	0
DCA 11 - Soft Infrastructure - Wellard East	0	0	0	0	0	0	0	0	0	0
DCA 12 - Soft Infrastructure - Wellard West	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 13 - Soft Infrastructure - Bertram	0	0	3,349	(3,349)	0	0	0	3,349	(3,349)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 15 - Soft Infrastructure - City Site	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Developer Contribution Reserves</b>	<b>(0)</b>	<b>0</b>	<b>148,708</b>	<b>(148,708)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>148,708</b>	<b>(148,708)</b>	<b>(0)</b>
<b>Total Reserves</b>	<b>13,059,749</b>	<b>687,384</b>	<b>14,128,804</b>	<b>(1,263,373)</b>	<b>25,925,179</b>	<b>25,925,179</b>	<b>716,942</b>	<b>15,126,370</b>	<b>(984,964)</b>	<b>40,066,586</b>

Appendix 8  
Information on Reserves

Reserve	2036					2037				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	876,511	16,358	196,201	(304,459)	768,254	768,254	10,285	196,462	(326,213)	638,503
Asset Management Reserve	19,870,296	555,637	13,836,258	0	33,706,553	33,706,553	581,926	11,376,209	(350,434)	44,732,329
Plant & Equipment Replacement Reserve	6,617,612	123,506	4,550,379	0	11,167,992	11,167,992	149,518	3,747,612	0	14,915,604
Banksia Park Reserve	176,659	3,297	94,173	(90,876)	179,956	179,956	2,409	96,505	(94,096)	182,365
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	174,030	3,248	3,248	0	177,278	177,278	2,373	2,373	0	179,652
Contiguous Local Authorities Group Reserve	25,312	472	472	0	25,784	25,784	345	345	0	26,129
Employee Leave Reserve	3,030,303	0	0	0	3,030,303	3,030,303	0	0	0	3,030,303
Family Day Care Reserve	1,160,698	21,662	21,662	0	1,182,360	1,182,360	15,830	15,830	0	1,198,190
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	58,066	1,084	1,084	0	59,149	59,149	792	792	0	59,941
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	190,515	3,556	3,556	0	194,071	194,071	2,598	2,598	0	196,669
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	6,871,201	0	0	(142,007)	6,729,194	6,729,194	0	0	(146,977)	6,582,217
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	331,419	6,185	6,185	0	337,604	337,604	4,520	4,520	0	342,124
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	683,965	12,765	12,765	0	696,730	696,730	9,328	9,328	0	706,057
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>40,066,586</b>	<b>747,770</b>	<b>18,725,984</b>	<b>(537,342)</b>	<b>58,255,228</b>	<b>58,255,228</b>	<b>779,924</b>	<b>15,452,575</b>	<b>(917,720)</b>	<b>72,790,084</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 2 - Hard Infrastructure - Wellard	0	0	0	0	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	0	0	38,534	(38,534)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	(0)	0	20,517	(20,517)	(0)	(0)	0	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandii	(0)	0	47,056	(47,056)	(0)	(0)	0	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	0	17,996	(17,996)	(0)	(0)	0	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	4,302	(4,302)	0	0	0	4,302	(4,302)	0
DCA 9 - Soft Infrastructure - Wandii/Anketell	0	0	10,309	(10,309)	0	0	0	10,309	(10,309)	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	6,645	(6,645)	0	0	0	6,645	(6,645)	0
DCA 11 - Soft Infrastructure - Wellard East	0	0	0	0	0	0	0	0	0	0
DCA 12 - Soft Infrastructure - Wellard West	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 13 - Soft Infrastructure - Bertram	0	0	3,349	(3,349)	0	0	0	3,349	(3,349)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 15 - Soft Infrastructure - City Site	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Developer Contribution Reserves</b>	<b>(0)</b>	<b>0</b>	<b>148,708</b>	<b>(148,708)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>148,708</b>	<b>(148,708)</b>	<b>(0)</b>
<b>Total Reserves</b>	<b>40,066,586</b>	<b>747,770</b>	<b>18,874,692</b>	<b>(686,050)</b>	<b>58,255,228</b>	<b>58,255,228</b>	<b>779,924</b>	<b>15,601,283</b>	<b>(1,066,428)</b>	<b>72,790,083</b>

Appendix 8  
Information on Reserves

Reserve	2038					2039				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
	\$		\$	\$	\$	\$		\$	\$	\$
<b>Municipal Reserves</b>										
Aged Persons Units Reserve	638,503	7,136	199,868	(349,519)	488,852	488,852	4,502	204,019	(374,488)	318,384
Asset Management Reserve	44,732,329	607,327	15,011,758	(362,699)	59,381,388	59,381,388	633,921	18,849,808	(375,393)	77,855,802
Plant & Equipment Replacement Reserve	14,915,604	166,688	4,968,165	0	19,883,769	19,883,769	183,097	6,255,059	0	26,138,828
Banksia Park Reserve	182,365	2,038	99,467	(97,429)	184,403	184,403	1,698	102,576	(100,878)	186,101
City Assist Initiative Reserve	0	0	0	0	0	0	0	0	0	0
Community Services & Emergency Relief Reserve	179,652	2,008	2,008	0	181,659	181,659	1,673	1,673	0	183,332
Contiguous Local Authorities Group Reserve	26,129	292	292	0	26,421	26,421	243	243	0	26,664
Employee Leave Reserve	3,030,303	0	0	0	3,030,303	3,030,303	0	0	0	3,030,303
Family Day Care Reserve	1,198,190	13,390	13,390	0	1,211,580	1,211,580	11,157	11,157	0	1,222,737
Future Community Infrastructure Reserve	0	0	0	0	0	0	0	0	0	0
Golf Course Cottage Reserve	59,941	670	670	0	60,611	60,611	558	558	0	61,169
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
City Infrastructure Reserve	196,669	2,198	2,198	0	198,867	198,867	1,831	1,831	0	200,698
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Rates Strategy Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	6,582,217	0	0	(152,121)	6,430,096	6,430,096	0	0	(157,446)	6,272,650
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	342,124	3,823	3,823	0	345,947	345,947	3,186	3,186	0	349,133
Street Tree Replacement Reserve	0	0	0	0	0	0	0	0	0	0
Workers Compensation Reserve	706,057	7,890	7,890	0	713,948	713,948	6,574	6,574	0	720,522
Youth Engagement Reserve	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Municipal Reserves</b>	<b>72,790,084</b>	<b>813,461</b>	<b>20,309,529</b>	<b>(961,768)</b>	<b>92,137,845</b>	<b>92,137,845</b>	<b>848,440</b>	<b>25,436,685</b>	<b>(1,008,205)</b>	<b>116,566,325</b>
<b>Developer Contribution Reserves</b>										
DCA 1 - Hard Infrastructure - Bertram	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 2 - Hard Infrastructure - Wellard	0	0	0	0	0	0	0	0	0	0
DCA 3 - Hard Infrastructure - Casuarina	0	0	38,534	(38,534)	0	0	0	38,534	(38,534)	0
DCA 4 - Hard Infrastructure - Anketell	(0)	0	20,517	(20,517)	(0)	(0)	0	20,517	(20,517)	(0)
DCA 5 - Hard Infrastructure - Wandii	(0)	0	47,056	(47,056)	(0)	(0)	0	47,056	(47,056)	(0)
DCA 6 - Hard Infrastructure - Mandogalup	(0)	0	17,996	(17,996)	(0)	(0)	0	17,996	(17,996)	(0)
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	4,302	(4,302)	0	0	0	4,302	(4,302)	0
DCA 9 - Soft Infrastructure - Wandii/Anketell	0	0	10,309	(10,309)	0	0	0	10,309	(10,309)	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	6,645	(6,645)	0	0	0	6,645	(6,645)	0
DCA 11 - Soft Infrastructure - Wellard East	0	0	0	0	0	0	0	0	0	0
DCA 12 - Soft Infrastructure - Wellard West	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 13 - Soft Infrastructure - Bertram	0	0	3,349	(3,349)	0	0	0	3,348	(3,348)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	(0)	0	0	0	(0)	(0)	0	0	0	(0)
DCA 15 - Soft Infrastructure - City Site	0	0	0	0	0	0	0	0	0	0
<b>Sub-Total Developer Contribution Reserves</b>	<b>(0)</b>	<b>0</b>	<b>148,708</b>	<b>(148,708)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>148,707</b>	<b>(148,707)</b>	<b>(0)</b>
<b>Total Reserves</b>	<b>72,790,083</b>	<b>813,461</b>	<b>20,458,237</b>	<b>(1,110,476)</b>	<b>92,137,845</b>	<b>92,137,845</b>	<b>848,440</b>	<b>25,585,392</b>	<b>(1,156,912)</b>	<b>116,566,325</b>

## Information on Reserves - Reserve Purposes

Reserve name	Purpose of the reserve:
Aged Persons Unit Reserve	to be used to provide funds for the capital acquisition and maintenance of the Aged Persons Units, Callistemon Court.
Asset Management Reserve	to be used to provide funds for renewal projects for the City's building and infrastructure assets, thereby extending the useful economic life of such assets.
Plant & Equipment Replacement Reserve	to be used to replace existing fleet, plant and other City assets.
Banksia Park Reserve	to be used to provide funds for the capital acquisitions and maintenance of the Banksia Park Retirement Village.
City Assist Initiative Reserve	to be used to provide for infrastructure and other initiatives to enhance the safety and security of the City.
Community Services & Emergency Relief Reserve	to be used to provide funding to alleviate the effect of any disaster within the City of Kwinana boundaries and to provide funds to develop community services.
Contiguous Local Authorities Group Reserve	to be used to restrict funds received for the prevention, control and education of mosquito management.
Employee Leave Reserve	to be used to ensure that adequate funds are available to finance employee leave entitlements.
Family Day Care Reserve	to be used to provide for the capital acquisitions and maintenance of this facility.
Golf Course Cottage Reserve	to be used to provide funds for the maintenance of this building.
Information Technology Reserve	to be used for the implementation and maintenance of the City's software requirements.
City Infrastructure Reserve	to be used to provide funds to create new City assets or for the major upgrade of City assets to increase the service level provided by the asset.
Public Art Reserve	to be used to receive monies paid as cash-in-lieu for public art and the provision of public art expenditure under this Local Planning Policy 5.
Rates Strategy Reserve	to be used to assist in the future management of the City's rating strategy.
Refuse Reserve	to be used to provide funds for the costs and subsidy of Waste Management in the City.
Restricted Grants and Contributions Reserve	to be used to restrict funds, being city funds, grants and contributions, required to complete projects from prior financial years.
Settlement Agreement Reserve	to be used to provide funds to account for future negotiated settlement agreement payments.
Street Tree Replacement Reserve	to be used to achieve the objectives of Local Planning Policy 2: Streetscapes where replacement of street trees is required.

Workers Compensation Reserve	to be used to fund workers compensation costs incurred by the City where the maximum contribution amount for a previous year has been reached and there is a claim which remains open and requires to City to pay costs relating to the open claims in the current and future years.
Youth Engagement Reserve	to be used to assist with youth engagement and diversion initiatives.
DCA 1 - Hard Infrastructure - Bertram	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 1 - Hard Infrastructure Bertram.
DCA 2 - Hard Infrastructure - Wellard	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 2 - Hard Infrastructure Wellard.
DCA 3 - Hard Infrastructure - Casuarina	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 3 - Hard Infrastructure Casuarina.
DCA 4 - Hard Infrastructure - Anketell	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 4 - Hard Infrastructure Anketell.
DCA 5 - Hard Infrastructure - Wandi	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 5 - Hard Infrastructure Wandi.
DCA 6 - Hard Infrastructure - Mandogalup	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 6 - Hard Infrastructure Mandogalup.
DCA 7 - Hard Infrastructure - Mandogalup West	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 7 - Hard Infrastructure Mandogalup West.
DCA 8 - Soft Infrastructure - Mandogalup	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 8 - Soft Infrastructure Mandogalup.
DCA 9 - Soft Infrastructure - Wandi/Anketell	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 9 - Soft Infrastructure Wandi/Anketell.
DCA 10 - Soft Infrastructure - Casuarina/Anketell	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 10 - Soft Infrastructure Casuarina/Anketell.
DCA 11 - Soft Infrastructure - Wellard East	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 11 - Soft Infrastructure Wellard East.
DCA 12 - Soft Infrastructure - Wellard West	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 12 - Soft Infrastructure Wellard West.

DCA 13 - Soft Infrastructure - Bertram	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 13 - Soft Infrastructure Bertram.
DCA 14 - Soft Infrastructure - Wellard/Leda	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 14 - Soft Infrastructure Wellard/Leda.
DCA 15 - Soft Infrastructure - City Site	to be used to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 15 - Soft Infrastructure City Site.

**Appendix 9  
Assumptions**

Inflation Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Multiplier Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Rates	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Grants & Contributions	1.50%	2.00%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Fees and Charges	1.50%	2.00%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Interest Earnings	2.23%	2.49%	2.75%	3.00%	3.26%	3.52%	3.78%	4.04%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Other Revenue	1.50%	2.00%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Salaries & Wages	1.50%	2.00%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Superannuation	9.50%	9.50%	10.00%	10.50%	11.00%	11.50%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12.00%	12.00%
Superannuation Co-Contribution	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Total Superannuation	12.00%	12.00%	12.50%	13.00%	13.50%	14.00%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%	14.50%
Other Employee Costs	1.50%	2.00%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Workers Compensation Premium	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Population	47,314	49,837	52,360	54,883	57,406	59,929	62,452	64,975	67,498	70,021	72,544	75,067	77,590	80,113	82,636	85,159	85,158	85,158	85,158	85,158	85,158
Dwellings	18,787	19,540	20,292	21,104	21,916	22,720	23,524	24,332	25,139	25,939	26,738	27,510	28,281	29,003	29,724	30,357	30,989	30,989	30,989	30,989	30,989
Growth Rate	4.33%	4.01%	3.85%	4.00%	3.85%	3.67%	3.54%	3.43%	3.32%	3.18%	3.08%	2.89%	2.80%	2.55%	2.49%	2.13%	2.08%	0.00%	0.00%	0.00%	0.00%
Materials & Contracts	1.50%	2.00%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Utilities	3.30%	3.40%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Interest Rates - Borrowings 5 Year Fixed	3.23%	3.49%	3.75%	4.00%	4.26%	4.52%	4.78%	5.04%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%
Interest Rates - Borrowings 10 Year Fixed	3.78%	4.02%	4.26%	4.50%	4.74%	4.98%	5.22%	5.46%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%	5.70%
Interest Rates - Borrowings 15 Year Fixed	4.17%	4.38%	4.58%	4.79%	4.99%	5.20%	5.40%	5.61%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%
Insurance Expenses	0.00%	2.00%	2.50%	2.50%	3.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%

## **16.2 Review of Local Commercial and Activity Centre Improvement Grant Funding Policy**

### **DECLARATION OF INTEREST:**

There were no declarations of interest declared.

### **SUMMARY:**

The Local Commercial and Activity Centre Grants (the Grants) are managed in accordance with the Local Commercial and Activity Centre Grants Policy (the Policy) (Attachment A). The Policy was last reviewed by Council at its Ordinary Council Meeting held on 11 April 2018.

Applications for the 2018/19 financial year grants were reviewed by the Local Commercial and Activity Centre Improvement Grant Funding Panel (Panel) who were appointed by Council at the Ordinary Council Meeting held on 25 October 2017. A number of applications did not meet one requirement, which requires the applicant to have a lease or ownership for at least two years from the time of approval. The issue also arose in the previous year's applications. Rather than each application be presented to Council where this requirement is not met, it is recommended that the Policy be amended to reflect the common scenario of small scale retailers having an ongoing rental arrangement, suitable to the panel, rather than a long term lease.

The City has budgeted \$50,000 towards this year's grant funding, which has not been fully allocated. It is also recommended that the Grant remain open and applications assessed on a first lodged, first assessed basis, with the Panel considering applications throughout the year until the financial year allocation has been exhausted.

It is recommended that the reviewed policy be adopted as detailed in Attachment A.

### **OFFICER RECOMMENDATION:**

That Council:

1. Adopt the amended Local Commercial and Activity Centre Improvement Grant Funding Policy, as outlined in Attachment A; and
2. Note that the applications for the Grant will remain open until such time as the budget allocation is exhausted, based on a first received, first assessed basis, where the Local Commercial and Activity Centre Improvement Grant Funding Panel approves the applications.

### **DISCUSSION:**

The Local Commercial and Activity Centre Grants were created to address the disparity in investment between the businesses located in the Kwinana Central Business District and Wellard and those in the older centres. The Grant allows for upgrades to the aesthetics of the building, public realm or for internal changes or equipment to support the viability of the business.



## 16.2 REVIEW OF LOCAL COMMERCIAL AND ACTIVITY CENTRE IMPROVEMENT GRANT FUNDING POLICY

The Grants were first run in the 2017/18 financial year and 16 applications were approved. This included five applications that did not have an ongoing lease, but had a long term rental history and association with the area. Council approved the funding requests made by the applicants who did not meet the criteria of having a lease or ownership for at least two years from the time of approval, as outlined in 5.2.1 of the Policy.

There were four applications which again failed to meet the lease or ownership for at least two years from the time of approval criteria. In order to address this, it is recommended to change the wording in the Policy to allow the Panel to approve grant applications in this scenario, rather than bring each application to Council.

Clause 5.2.1 of the Policy states that a requirement of the Grant is that the business: *Have a lease or ownership for a premise for at least two years from the time of approval.*

It is proposed to amend the Policy to read: *Have ownership of the premise or a lease for at least two years from the time of approval, or demonstrate an ongoing rental arrangement confirmed in writing by the owner of the property that is acceptable to the panel.*

The City budgeted \$50,000 for the grant funding. Applications closed on 23 November 2018, and applications covering approximately \$30,000 were received. It is intended to keep the Grants open and consider applications on an as received basis until the funds are expended.

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

There are no specific provisions in the *Local Government Act 1995* relating to the distribution of grants by local governments.

The Grants are required to be approved in accordance with the Local Commercial and Activity Centre Improvement Grant Funding Council Policy.

### **FINANCIAL/BUDGET IMPLICATIONS:**

There are no additional financial implications as a result of this report. The grant is funded through the annual budget process which allocated \$50,000 for the 2018/2019 financial year and the allocation will be expended in accordance with the Policy.

### **ASSET MANAGEMENT IMPLICATIONS:**

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

### **ENVIRONMENTAL IMPLICATIONS:**

There are no environmental implications as a result of this report.

**16.2 REVIEW OF LOCAL COMMERCIAL AND ACTIVITY CENTRE IMPROVEMENT GRANT FUNDING POLICY****STRATEGIC/SOCIAL IMPLICATIONS:**

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

<b>Plan</b>	<b>Outcome</b>	<b>Objective</b>
Strategic Community Plan	A thriving local economy	2.5 Stimulate economic development and encourage diversification

**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.

**RISK IMPLICATIONS:**

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

Risk Event	Inadequate processes leave applicants feeling that the process was unfair or that the best outcomes were not achieved.
Risk Theme	Inadequate engagement practices
Risk Effect/Impact	Reputation
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Unlikely
Rating (before treatment)	Low
Risk Treatment in place	Accept - do nothing, accept its full impact
Response to risk treatment required/in place	The transparent policy and selection process provides for the clear assessment of applications.
Rating (after treatment)	Low

**COUNCIL DECISION**

371

**MOVED CR****SECONDED CR**

**That Council:**

- 1. Adopt the amended Local Commercial and Activity Centre Improvement Grant Funding Policy, as outlined in Attachment A; with the addition of inserting a new clause which states:**

**16.2 REVIEW OF LOCAL COMMERCIAL AND ACTIVITY CENTRE IMPROVEMENT GRANT FUNDING POLICY**

**5.2.11 Not be a member of Council or an employee of the City, or a closely associated person of a Councillor or employee of the City, as defined in Section 5.62 of the *Local Government Act 1995*.**

- 2. Note that the applications for the Grant will remain open until such time as the budget allocation is exhausted, based on a first received, first assessed basis, where the Local Commercial and Activity Centre Improvement Grant Funding Panel approves the applications.**

**CARRIED  
5/0**

**NOTE – That the Officer Recommendation has been changed to include a clause that prevents an Elected Members and City employees or a closely associated person relating to Elected Members and City employees to be eligible for the grant.**

# Council Policy

## Local Commercial and Activity Centre Improvement Grant Funding



# Council Policy

**Local Commercial and Activity Centre Improvement Grant Funding**

D18/74074

**1. Title**

Local Commercial and Activity Centre Improvement Grant Funding

**2. Purpose**

The City of Kwinana recognises that Local Commercial and Activity Centres play a vital role in both the local economy and residents' quality of life. In order to ensure that this crucial sector continues to provide essential services to the community, a grant program has been developed which will complement the City's Local Commercial and Activity Centres Strategy. The grant funds will be allocated on a competitive basis via an Expression of Interest (EOI) process.

**3. Scope**

**3.1 Local Commercial and Activity Centres**

The following Local Commercial and Activity Centres are eligible to apply for funding via the EOI as defined by the Local Commercial and Activity Centre Strategy:

- Medina (including the Light Industrial Area)
- Parmelia
- Calista
- Orelia

**3.2 Term of Policy**

This Policy shall be reviewed following a period of three years. Funding for the programme is subject to annual budget allocations as determined by Council.

**4. Definitions**

There are no specific definitions associated with this Policy.

**5. Policy Statement**

The City of Kwinana's Strategic Community Plan 2017 - 2022 identifies the need to develop a diverse and thriving economy, which benefits the residents by providing employment opportunities and enhanced services. Particular emphasis has been placed on Local Commercial and Activity Centres via strategies and recent capital investment. These areas are a focal point for the communities they serve and often reflect the unique sense of place of each community. The objectives of the Policy will ensure the grant funds are distributed in an equitable manner to assist the City and local businesses in achieving the goals and aspirations as detailed in the Strategic Community Plan. Through the provision of a grant funding programme, it is envisioned that the financial assistance will support local businesses to improve amenity, culture, vibrancy and economic outcomes.

The grants will take the form of reimbursement for specified types of expenses related to upgrading local businesses. The purpose of these grants is to address the disparity in investment between businesses located in the Kwinana Central Business District (CBD) and those in other local shopping centres. These smaller centres serve a vital purpose in making goods and services accessible to members of the community who may find it difficult to reach the CBD.

The Policy also requires the formation of a selection panel comprised of three elected members, and two City Officers to be appointed by the CEO, who will assess the applications against the eligibility assessment criteria for the Local Commercial and Activity Centre Improvement Grant Funding programme.

**5.1 The following expenses will be considered for grant funding under this Policy:**

- 5.1.1** The removal and replacement of obtrusive security features to make the property more inviting, while providing the necessary security;
- 5.1.2** External improvements permanently affixed to the property (permanent outdoor signage is an eligible expense) or works directly upon the external premises (must have building owner's written consent);
- 5.1.3** Enhanced public realm (for which a broad definition shall apply) and will include, but not be limited to, improvements or creation of alfresco areas or enhanced landscaping, such as a flower bed;
- 5.1.4** A business that has been trading at its current location for a period of 12 months prior to making application to the Local Commercial and Activity Centre Improvement Incentive, may apply for items related to internal improvements. Eligible expenses include vital equipment that is permanent in nature, or those which provide for an enhanced consumer experience not currently available within the premise or within businesses in the immediate vicinity.

**5.2 In order to be eligible for a grant, a business must meet the following criteria:**

- 5.2.1** Have ownership of the premise or a lease for at least two years from the time of approval, or demonstrate an ongoing rental arrangement confirmed in writing by the owner of the property, that is acceptable to the panel;
- 5.2.2** Have all current, or be able to obtain, insurances, permits and licences for business operation, including being registered by the City of Kwinana and holding an ABN. These approvals must be obtained prior to any application being approved;
- 5.2.3** Have all current, or be able to obtain, insurances, permits and licences for the works proposed. These approvals must be obtained prior to any funds being dispersed;
- 5.2.4** All grant applications must have two written quotes for the work if the value exceeds \$1000. Grants will not be given for works already undertaken. (Disbursement of grant funding will only occur on receipt of final paid invoice);
- 5.2.5** The grant will not fund operational expenses such as wages, stock or marketing;
- 5.2.6** The applicant must be the owner-operator of that business location (franchises are eligible);

- 5.2.7** Applicants must provide the most recent financial statements that demonstrate solvency of the business (these documents will be kept strictly confidential);
- 5.2.8** The project must be complete three months from project approval unless otherwise approved by the City;
- 5.2.9** Applications for grants in areas zoned Light Industry under Town Planning Scheme No.2, will be limited to funding under parts 5.1.1 and 5.1.2, only and will be on a matching dollar basis; and
- 5.2.10** Successful applicants must enter into an agreement with the City. The agreement must include the following information:
- agreement to allow the City to promote the programme, the City's support and the outcomes through the City's media;
  - agreed scope of benefits to the business and the community;
  - acquittal of funding; and
  - provision to the City, on a date determined within the agreement, of the achieved benefit as a result of the grant funding.
- 5.2.11** Not be a member of Council or an employee of the City, or a closely associated person of a Councillor or employee of the City, as defined in Section 5.62 of the Local Government Act 1995.

**5.3 The Local Commercial and Activity Centre Improvement Grant funds will be distributed based upon merit with evaluation based upon:**

- 5.3.1** The leveraging of private funds as a result of the grant;
- 5.3.2** The benefit to the local community;
- 5.3.3** The extent to which the proposal brings new products or services to the community;
- 5.3.4** The extent to which the proposal demonstrates financial viability or sound management;
- 5.3.5** The extent to which the project is ready to be implemented (investment ready);
- 5.3.6** The equal distribution of the funds based upon geographic location (to the degree that this is practical based upon quality of submissions);
- 5.3.7** The maximum grant allocated to an individual project will be \$3,000;
- 5.3.8** Preference will be given to applicants who have not received funding in the round immediately preceding the current round of funding;
- 5.3.9** Preference will be given to applications that focus on the external aesthetics of the premises and the amenity of the area.
- 5.3.10** An evaluation matrix is included in Appendix One.

**6. Financial/Budget Implications**

This grant funding program will be subject to allocations as determined by Council in its annual budget.

**7. Asset Management Implications**

There are no specific asset management implications associated with this Policy.

**8. Environmental Implications**

There are no specific environmental implications associated with this Policy.

**9. Strategic/Social Implications**

<b>Plan</b>	<b>Outcome</b>	<b>Objective</b>
Strategic Community Plan 2017 - 2027	A thriving local economy	2.5 Stimulate economic development and encourage diversification

**10. Occupational Safety and Health Implications**

There are no specific OSH implications associated with this Policy.

**11. Risk Assessment**

Risk Event	Inadequate EOI process leaves applicants feeling that the process was somehow unfair and that the best outcomes were not achieved.
Risk Theme	Inadequate engagement practices
Risk Effect/Impact	Financial Reputation
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Possible
Rating (before treatment)	Low
Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Transparent application and selection process which provides clear and equitable assessment of projects that enhance services within the community through development of a robust policy.
Rating (after treatment)	Low

**12. References**

Name of Policy	Local Commercial Activity Centre Improvement Grant Funding
Date of Adoption and resolution No	
Review dates and resolution No #	Nil



Next review due date	Prior to December 2021
Legal Authority	There are no specific provisions in the <i>Local Government Act 1995</i> relating to the distribution of grants by local governments. However, authority for such a grant programme can be found by reading together sections 3.1 and 3.18 of the <i>Local Government Act 1995</i> .
Directorate	City Strategy
Department	Economic Development
Related documents	<p><b>Acts/Regulations</b> <i>Local Government Act 1995</i></p> <p><b>Plans/Strategies</b> Strategic Community Plan 2017 – 2027 Corporate Business Plan 2017 – 2022</p> <p><b>Policies</b> Nil</p> <p><b>Work Instructions</b> To be written</p>

**Note: Changes to References may be made without the need to take the Policy to Council for review.**

## Appendix One

### Evaluation Matrix

Each application will be scored by the *Commercial and Activity Centre Improvement Grant Funding Panel* by the following evaluation matrix. All scores will then be added to create a final score to rank applications.

<b>Criteria</b>	<b>Maximum Score</b>
The leveraging of private funds as a result of the grant	10
The benefit to the community	10
The extent to which the proposal brings new products or services to the community;	10
The extent to which the proposal demonstrates financial viability or sound management;	10
The extent to which the project is ready to be implemented (investment ready);	10
The equal distribution of the funds based upon geographic location (to the degree that this is practical based upon quality of submissions);	10
<b>SUBTOTAL</b>	
If no previous grant secured in previous round	+20% OF SUBTOTAL
If outcome is focused on external aesthetics	+20% OF SUBTOTAL
<b>TOTAL</b>	

### 16.3 Accounts for payment for the month ended 30 November 2018

#### DECLARATION OF INTEREST:

There were no declarations of interest declared.

#### SUMMARY:

The purpose of this report is to present to Council a list of accounts paid under delegated authority for the month ended 30 November 2018, as required by the *Local Government (Financial Management) Regulations 1996*.

#### OFFICER RECOMMENDATION:

That Council:

1. Accepts the list of accounts, totalling \$5,593,794.52, paid under delegated authority in accordance with Regulation 13(1) of the *Local Government (Financial Management) Regulations 1996* for the period ended 30 November 2018, as contained within Attachment A.
2. Accepts the detailed transaction listing of credit card expenditure paid for the period ended 30 November 2018, as contained within Attachment B.

#### DISCUSSION:

Council has delegated, to the Chief Executive Officer, the exercise of its power to make payments from the City's Municipal and Trust funds. In accordance with Regulation 13 of the *Local Government (Financial Management) Regulations 1996* a list of accounts paid is to be provided to Council, where such delegation is made.

The following table summarises the payments for the period by payment type, with full details of the accounts paid contained within Attachment A.

<b>Payment Type</b>	<b>Amount (\$)</b>
Automatic Payment Deductions	\$ 69,265.15
Cheque Payments - #200934 to 200936	\$ 987.75
EFT Payments - #3779 to 3795	\$ 4,084,762.63
Payroll Payments – 04/11/18, 18/11/18	\$ 1,438,778.99
<b>Sub Total Attachment A</b>	<b>\$ 5,593,794.52</b>

Contained within Attachment B is a detailed transaction listing of credit card expenditure paid for the period ended 30 November 2018. This amount is included within the total payments, listed above.

## 16.3 ACCOUNTS FOR PAYMENT FOR THE MONTH ENDED 30 NOVEMBER 2018

**LEGAL/POLICY IMPLICATIONS:**

Regulation 13 of the *Local Government (Financial Management) Regulations 1996* states:

13. *Payments from municipal fund or trust fund by CEO, CEO's duties as to etc.*
- (1) *If the local government has delegated to the CEO the exercise of its power to make payments from the municipal fund or the trust fund, a list of accounts paid by the CEO is to be prepared each month showing for each account paid since the last such list was prepared —*
- (a) *the payee's name; and*
  - (b) *the amount of the payment; and*
  - (c) *the date of the payment; and*
  - (d) *sufficient information to identify the transaction.*
- (2) *A list of accounts for approval to be paid is to be prepared each month showing*
- (a) *for each account which requires council authorisation in that month —*
    - (i) *the payee's name; and*
    - (ii) *the amount of the payment; and*
    - (iii) *sufficient information to identify the transaction;*  
*and*
  - (b) *the date of the meeting of the council to which the list is to be presented.*
- (3) *A list prepared under subregulation (1) or (2) is to be —*
- (a) *presented to the council at the next ordinary meeting of the council after the list is prepared; and*
  - (b) *recorded in the minutes of that meeting.*

**FINANCIAL/BUDGET IMPLICATIONS:**

There are no financial implications that have been identified as a result of this report or recommendation

**ASSET MANAGEMENT IMPLICATIONS:**

There are no asset management implications that have been identified as a result of this report or recommendation.

**ENVIRONMENTAL IMPLICATIONS:**

There are no environmental implications that have been identified as a result of this report or recommendation.

## 16.3 ACCOUNTS FOR PAYMENT FOR THE MONTH ENDED 30 NOVEMBER 2018

**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 that have been identified as a result of this report or recommendation.

**PUBLIC HEALTH IMPLICATIONS**

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

**RISK IMPLICATIONS:**

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

Risk Event	That Council does not accept the payments.
Risk Theme	Failure to fulfil statutory regulations or compliance requirements
Risk Effect/Impact	Compliance
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Possible
Rating (before treatment)	Low
Risk Treatment in place	Reduce – mitigate risk
Response to risk treatment required/in place	Officers provide a full detailed listing of payments made in a timely manner
Rating (after treatment)	Low

16.3 ACCOUNTS FOR PAYMENT FOR THE MONTH ENDED 30 NOVEMBER 2018

**COUNCIL DECISION**

372

**MOVED CR P FEASEY**

**SECONDED CR D WOOD**

**That Council:**

1. **Accepts the list of accounts, totalling \$5,593,794.52, paid under delegated authority in accordance with Regulation 13(1) of the *Local Government (Financial Management) Regulations 1996* for the period ended 30 November 2018, as contained within Attachment A.**
2. **Accepts the detailed transaction listing of credit card expenditure paid for the period ended 30 November 2018, as contained within Attachment B.**

**CARRIED  
5/0**

## Cheque Listing

Payments made between  
01/11/2018 to 30/11/2018



<u>Chq/Ref</u>	<u>Pmt Date</u>	<u>Payee</u>	<u>Amount</u>	<u>Tran</u>	<u>Date</u>	<u>Invoice</u>	<u>Description</u>	<u>Amount</u>
<b>Automatic Deductions</b>								
30759	07/11/2018	Go Go On-Hold Pty Ltd	264.00	INV	07/11/2018	00030759	On-hold Message Service November 18	264.00
1695006	22/11/2018	Caltex Australia Petroleum Pty Ltd	9,394.06	INV	22/11/2018	0301695006	Fleet fuel 010918 to 300918	9,394.06
21118	27/11/2018	Commonwealth Bank	127.15	INV	27/11/2018	021118A	Credit Card Director City Regulation to 021118	127.15
21118	27/11/2018	Commonwealth Bank	37.30	INV	27/11/2018	021118B	Credit Card Chief Executive Officer to 021118	37.30
21118	27/11/2018	Commonwealth Bank	2,320.76	INV	27/11/2018	021118C	Credit Card Executive Assistant to 021118	2,320.76
21118	27/11/2018	Commonwealth Bank	2,602.26	INV	27/11/2018	021118D	Credit Card Manager Human Resources to 021118	2,602.26
21118	28/11/2018	Commonwealth Bank	170.09	INV	28/11/2018	021118E	Credit Card Director City Legal to 021118	170.09
21118	28/11/2018	Commonwealth Bank	6,448.96	INV	28/11/2018	021118F	Credit Card Director City Engagement 021118	6,448.96
21118	28/11/2018	Commonwealth Bank	1,286.95	INV	28/11/2018	021118G	Credit Card Functions Officer to 021118	1,286.95
21118	28/11/2018	Commonwealth Bank	9,697.28	INV	28/11/2018	021118H	Credit Card Director City Strategy to 021118	9,697.28
5256257	14/11/2018	iinet Technologies Pty Ltd	59.95	INV	14/11/2018	105256257	Monthly Internet Charges The Zone	59.95
10376286	22/11/2018	BP Australia Pty Ltd	22,781.61	INV	22/11/2018	10376286	Fleet fuel 010918 to 300918	22,781.61
10548773	27/11/2018	iinet Technologies Pty Ltd	138.65	INV	27/11/2018	105487738	Monthly Internet Charges Village	138.65
23189115	14/11/2018	Fines Enforcement Registry	762.00	INV	14/11/2018	23189115	FER Lodgement fee	762.00
36	22/11/2018	Wright Express Australia Pty Ltd	1,857.04	INV	22/11/2018	36	Fleet fuel 010918 to 300918	1,857.04
64527	02/11/2018	Library Idea, LLC	3,280.96	INV	02/11/2018	64527 & 64528	Library items	3,280.96
90011538	14/11/2018	TPG Internet Pty Ltd	49.99	INV	14/11/2018	I190011538	Kwinana South Station Internet 101118 to 091218	49.99
90013120	14/11/2018	TPG Internet Pty Ltd	49.99	INV	14/11/2018	I190013120	Mandogalup Station internet 101118 to 091218 Social	49.99
9362	05/11/2018	Sprout Social	6,641.45	INV	05/11/2018	9362	Media Scheduling 12 months	6,641.45
0	26/11/2018	Esanda	1,294.70	INV	26/11/2018	LATO01641902A	Monthly Lease Fees KWN700	1,294.70
<b>Total Automatic Deductions</b>			<b>69,265.15</b>					

**Cheques**

200934	14/11/2018	City Of Kwinana - Pay Cash	283.50	INV	14/11/2018	291018--D/Wells	Petty cash recoup to 291018 Darius Wells	30.60
				INV	15/11/2018	121118-Library	Petty cash recoup to 121118 Library	90.55
				INV	15/11/2018	12/11/18-FDC	Petty cash recoup to 121118 Family Day Care	162.35

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200935	21/11/2018	City Of Kwinana - Pay Cash	285.10	INV	20/11/2018	30/10/18-Village	Petty cash recoup to 301018 Village	150.10
				INV	21/11/2018	14/11/18-Recq	Petty cash recoup to 141118 Recquatic	135.00
200936	29/11/2018	City Of Kwinana - Pay Cash	419.15	INV	29/11/2018	28/11/2018-Admin	Petty cash recoup to 281118 Admin	419.15
<b>Total Cheques</b>			<b>987.75</b>					
<b>EFT</b>								
3779	07/11/2018	EFT TRANSFER: - 02/11/2018	-360.00				Payment Reversal Creditor #10611	
3779	13/11/2018	EFT TRANSFER: - 02/11/2018	-1,152.65				Payment Reversal Creditor #3424	
3780	02/11/2018	EFT TRANSFER: - 02/11/2018	2,919.97					
3780.1423-01		Telstra	2,491.62	INV	02/11/2018	9385375010Oct18	Charges to 241018 Internet and Data	2,491.62
3780.1592-01		Water Corporation of Western Austra	34.40	INV	02/11/2018	9021511329Oct18	14U Reserve at Glenfinlass Parade	34.40
3780.2125-01		Synergy	393.95	INV	02/11/2018	566370150Oct18	6U Chipperton Road	393.95
3781	17/11/2018	EFT TRANSFER: - 09/11/2018	531,943.17					
3781.1002-01		LGIS Insurance Broking	11,073.32	INV	06/11/2018	062-201921	Plant insurance 17/18 Adjustment	11,073.32
3781.10157-01		Neil Menezes	700.00	INV	07/11/2018	000011	Woodworking workshop 041018	700.00
3781.10202-01		TJS Services Group Pty Ltd	63,831.84	INV	07/11/2018	158653	General cleaning August 18	21,277.28
				INV	07/11/2018	158654	General cleaning September 18	21,277.28
				INV	07/11/2018	158652	General cleaning July 18	21,277.28
3781.10373-01		Green Willows Industrial Cleaning a	825.00	INV	06/11/2018	19	Clubhouse and Office cleaning	250.00
				INV	08/11/2018	20	Vacate clean Callistemon Court U52	325.00
				INV	08/11/2018	21	Clubhouse and office cleaning	250.00
3781.10411-01		Rob Solo Artist	250.00	INV	07/11/2018	07	Entertainment November 18	250.00
3781.10504-01		Drive Safe Australia (WA)	1,800.00	INV	06/11/2018	00014827	Driver Training 271018 x 8 staff	1,800.00
3781.10506-01		Specialised Security Shredding	20.24	INV	05/11/2018	00303439	GC Bin exchange	20.24
3781.10573-01		Promapp Pty Ltd	7,096.19	INV	08/11/2018	INV-1365	Business Process Modelling Software	7,096.19
3781.10575-01		The Kwinana Local	1,541.23	INV	06/11/2018	528641-5	Catering 251018	1,541.23
3781.10611-01		Jack Thomas Nockels	360.00	INV	24/10/2018	A/N23024	Crossover subsidy rebate	360.00
3781.10643-01		MetroCert Building Approvals	475.00	INV	08/11/2018	INV0445	Shade structure for Positive Vibes Festival	475.00
3781.10644-01		Bay Building Services	1,000.00	INV	08/11/2018	329790	Callistemon Court 31 excess for insurance claim	1,000.00



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3781.10646-01		Mithun Nandakumar	1,759.82	INV	07/11/2018	7.4	Rates Refund	1,759.82
3781.10650-01		Rachel Marie Murray	175.00	INV	08/11/2018	29thOctober18	Financial Assistance Ice Skating Championship	175.00
3781.10651-01		Jennifer Jean Robinson	175.00	INV	08/11/2018	29thOctober18	Financial Assistance Ice Skating Championship	175.00
3781.10652-01		Fiona Anne Lorraine Peffer	10.00	INV	08/11/2018	5thNovember18	Refund of dog registration	10.00
3781.10653-01		Stacey Janine Hobbins	720.00	INV	08/11/2018	5thNovember18	Reimbursement of 2019 CPA Membership Renewal	720.00
3781.10654-01		Janice Jones	1,000.00	INV	08/11/2018	2ndNovember18	2018/19 Rates Incentive Prize Winner	1,000.00
3781.10655-01		Hilary Jane Gunning	1,000.00	INV	08/11/2018	2ndNovember18	2018/19 Rates Incentive Prize Winner	1,000.00
3781.10656-01		Bruce William Fyfe	250.00	INV	08/11/2018	1stNovember18	Senior Security Subsidy Scheme 2018	250.00
3781.10657-01		Mona Faye Downs	250.00	INV	08/11/2018	1stNovember18	Senior Security Subsidy Scheme 2018	250.00
3781.10658-01		Alan Arthur Kemp	776.80	RFD	08/11/2018	319730	Refund Callistemon Court bond	470.00
				RFD	08/11/2018	533365	Refund pet bond Callistemon Court	306.80
3781.10659-01		Sarah King	100.00	RFD	07/11/2018	1319150	Refund bond hall hire 270718	100.00
3781.10660-01		Rochelle De Jager	100.00	RFD	07/11/2018	1362437	Refund bond Patio hire 221018	100.00
3781.10661-01		Zoe Humphris	100.00	RFD	07/11/2018	1213112	Refund bond Patio hire 27118	100.00
3781.10662-01		Kendal Masterton	100.00	RFD	07/11/2018	1236476	Refund bond Patio hire 041118	100.00
3781.10663-01		Nothando Gwizi	1,000.00	RFD	07/11/2018	1318880	Refund bond Hall hire 250718	1,000.00
3781.10664-01		Jessica Alpine	100.00	RFD	07/11/2018	1326709	Refund bond Patio hire 041118	100.00
3781.10665-01		Lee-Anne Debrouwer	100.00	RFD	07/11/2018	1345876	Refund bond Patio hire 031118	100.00
3781.10666-01		Sun Xiulian	99.28	INV	08/11/2018	Refund	Pro Rata refund food premises annual fee 18/19	99.28
3781.10667-01		Ebony Agent	100.00	RFD	07/11/2018	1356753	Refund bond Patio hire 171018	100.00
3781.1157-01		Quality Traffic Management Pty Ltd	8,983.28	INV	07/11/2018	26190	Traffic management 021018	756.05
				INV	07/11/2018	26176	Traffic management design for Symphony Spectacular	831.89
				INV	07/11/2018	26197	Traffic controller 241018	826.67
				INV	07/11/2018	26194	Traffic controllers 221018	1,977.36
				INV	07/11/2018	26195	Traffic management 241018	1,261.15
				INV	07/11/2018	26198	Traffic management 251018	756.05
				INV	07/11/2018	26193	Traffic management 161018	1,044.01

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				INV	07/11/2018	26192	Traffic management 161018	823.90
				INV	07/11/2018	26191	Traffic management 051018	706.20
3781.1276-01		Satellite Security Services	440.00	INV	06/11/2018	IV004029	Service hydro room alarm	440.00
3781.1280-01		Scitech Discovery Centre	1,300.00	INV	07/11/2018	GE327912	Interactive Exhibits Positive Vibes Youth Festival	1,300.00
3781.1282-01		Sealanes (1985) Pty Ltd	927.30	INV	05/11/2018	F5631230A	Gatorade for Kwinana South Fire Brigade	927.30
3781.1393-01		Sunny Sign Company Pty Ltd	354.64	INV	07/11/2018	397140	Double sided signs	148.50
				INV	08/11/2018	394205	Signs and parts	206.14
3781.1423-01		Telstra	41,472.71	INV	09/11/2018	1170168000Oct18	Usage to 161018 Corporate Phone account	41,420.26
				INV	06/11/2018	0335568200Oct18	Usage to October 18 Banksia Park	52.45
3781.1474-01		Toll Transport Pty Ltd	36.86	INV	06/11/2018	1032476	Courier service 241018	36.86
3781.1491-01		Works Social Club	1,145.00	INV	08/11/2018	31stOctober18	Reimbursement for Team Building event 261018	1,145.00
3781.1505-01		Trailer Parts Pty Ltd	58.47	INV	07/11/2018	996796	Parts for trailer	58.47
3781.1520-01		Truck & Car Panel & Paint	1,500.00	INV	07/11/2018	00004136	Insurance excess for smash repair KWN2027	500.00
				INV	07/11/2018	00004132	Insurance excess KWN2077	500.00
				INV	07/11/2018	00004131	Insurance excess KWN2077	500.00
3781.1646-01		Rockingham Powersports	522.60	INV	07/11/2018	140766	Service and repairs KWN1839	261.30
				INV	07/11/2018	140764	Service and repairs KWN1726	261.30
3781.1649-01		Dennis Cleve Wood	95.48	INV	08/11/2018	October18	Reimbursement of travel expenses	95.48
3781.1669-01		Zipform Pty Ltd	2,350.84	INV	07/11/2018	185514	Dog and Cat Registration Renewals 2018	2,350.84
3781.1767-01		Construction Training Fund	13,505.81	INV	08/11/2018	October18	CTF Levy Remittance October 2018	13,505.81
3781.1831-01		Spare Parts Puppet Theatre	3,586.00	INV	08/11/2018	5112	Schools Engagement Project 1st payment	3,586.00
3781.1937-01		Coles Myer Ltd - Gift Card Accounti	9,609.85	INV	08/11/2018	IN781984	Gift vouchers staff christmas bonus	7,710.00
				INV	08/11/2018	IN782015	Gift Cards	1,899.85
3781.2048-01		Palm Lakes Gardens & Landscape Serv	724.50	INV	07/11/2018	39-28/10/2018	Brick paving repairs Wellard Village	724.50
3781.2097-01		Beaver Tree Services Aust Pty Ltd	12,055.05	INV	07/11/2018	67454	Tree pruning	807.15
				INV	07/11/2018	67482	Tree pruning	2,299.41
				INV	07/11/2018	67483	Tree pruning	2,414.93
				INV	07/11/2018	67515	Bee removal Adventure Playground	550.00
				INV	07/11/2018	67518	Tree pruning	33.63

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				INV	07/11/2018	67519	Various tree works	3,675.86
				INV	08/11/2018	67546	General vegetation clearance	2,274.07
3781.2125-01		Synergy	3,024.55	INV	06/11/2018	223615720Oct18	1149U Banksia Park	411.35
				INV	06/11/2018	130957780Oct18	474U Callistemon Court and Banksia Park	197.25
				INV	06/11/2018	884861450Oct18	4405U Banksia Park	1,310.80
				INV	06/11/2018	277773560Oct18	3748U Banksia Park	1,105.15
3781.218-01		Bob Jane T-Mart	703.00	INV	07/11/2018	136851	Tyres and alignment	703.00
3781.2224-01		Prestige Catering & Event Hire	9,654.15	INV	08/11/2018	00023287	Catering 251018	9,621.15
				INV	08/11/2018	00023321	Additional catering 251018	33.00
3781.2410-01		ABCO Products	418.69	INV	08/11/2018	366683	Cleaning items	418.69
3781.248-01		Bunnings Building Supplies	227.49	INV	07/11/2018	2163/01610677	Screwdriver bits and pest control spike	86.60
				INV	06/11/2018	2163/01522947	Hardware items for Coastcare Project	140.89
3781.2492-01		Yakka Pty Ltd	194.05	INV	08/11/2018	10899474	Sleeve shirts	194.05
3781.2781-01		Caterlink	2,539.90	INV	07/11/2018	810079	Glass door display fridge	2,539.90
3781.2846-01		Environmental Health Australia (SA)	520.34	INV	08/11/2018	SINV601776	ASFA inspection pads	520.34
3781.2852-01		Downer EDI Works Pty Ltd	75.19	INV	07/11/2018	6005379	7mm asphalt	75.19
3781.2937-01		Bolinda Publishing Pty Ltd	79.16	INV	08/11/2018	128314	CD Audiobook	79.16
3781.3212-01		Marketforce Pty Ltd	615.00	INV	08/11/2018	29703	Design and build Snapchat GeoFilter	615.00
3781.339-01		Civica Pty Ltd	12,098.21	INV	07/11/2018	M/LG010212	Online Applications December 18 to November 19	3,646.08
				INV	07/11/2018	M/LG010193	Licence Support and Maintenance Dec 18 to Nov 19	8,452.13
3781.342-01		CJD Equipment Pty Ltd	780.82	INV	08/11/2018	006229271	Induction sensor and labour	780.82
3781.3452-01		Western Maze Pty Ltd	504.74	INV	08/11/2018	00016184	E-Waste collection Sept to Oct 2018	504.74
3781.3565-01		St Vincent's School	50.00	INV	08/11/2018	22ndOctober2018	Graduation Book donation 2018	50.00
3781.357-01		BullAnt Security Pty	110.00	INV	06/11/2018	10,178,888	Service and repairs to padlocks	110.00
3781.358-01		Coastline Mowers	1,645.90	INV	07/11/2018	18498#4	V belt	138.00
				INV	07/11/2018	18486	Parts	346.15
				INV	07/11/2018	18511#5	Filter air	188.40
				INV	06/11/2018	18451	Service pole saw	240.10
				INV	08/11/2018	18348#5	Air filters and chains	321.05

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				INV	08/11/2018	18430#12	Air filters	49.00
				INV	07/11/2018	18534#5	Brushcutter cords	363.20
3781.3632-01		Eclipse Soils Pty Ltd	550.00	INV	08/11/2018	KWIN01R043389	Tipping Sulphur Road Resurfacing	550.00
3781.4022-01		Rockingham Hyundai	375.55	INV	08/11/2018	F1088	Registration fee for previous invoice F1088	375.55
3781.410-01		Council On The Ageing (WA) Inc	1,320.00	INV	05/11/2018	00006169	Living Longer Living Stronger program annual fee	1,320.00
3781.4112-01		Cleverpatch Pty Ltd	168.08	INV	07/11/2018	308509	Arts and crafts supplies	37.35
				INV	08/11/2018	310708	Art supplies Darius Wells	130.73
3781.4125-01		LD Total	3,452.46	INV	07/11/2018	94786	Removal of material from Abingdon Lake	1,622.50
				INV	07/11/2018	94740	Lake pak installation	179.96
				INV	07/11/2018	94739	Supply 10m3 pine bark	1,650.00
3781.413-01		Covs Parts Pty Ltd	504.46	INV	07/11/2018	1650088676	Assorted globes	276.93
				INV	07/11/2018	1650089224	Assorted filters	95.75
				INV	07/11/2018	1650089163	Car mirror	49.06
				INV	07/11/2018	1650089188	Magnetic vacuum kit	82.72
3781.4655-01		Natsync Environmental	880.00	INV	06/11/2018	00002688	Interpretation Services	880.00
3781.4661-01		Envirolab Services (WA) Pty Ltd	877.80	INV	05/11/2018	PE614015	Water testing	877.80
3781.4692-01		Elliotts Irrigation Pty Ltd	1,928.30	INV	05/11/2018	B11404	Iron filter servicing Emerald and Belgravia Oct 18	490.60
				INV	05/11/2018	B11398	Iron filter servicing Wellard October 18	1,437.70
3781.4861-01		Big W	197.00	INV	05/11/2018	176724/176723	Items for playgroup	197.00
3781.5061-01		Department of Planning -DAP	5,603.00	INV	07/11/2018	DA9291	JDAP application DAP/18/01514	5,603.00
3781.5361-01		Integral Development Associates Pty	24,398.00	INV	08/11/2018	INV-2084	Professional fee 50% Deposit	21,945.00
				INV	08/11/2018	INV-2055	Professional service	2,453.00
3781.5387-01		Woodlands Distributors & Agencies	924.00	INV	08/11/2018	KWA1-006	Waste bag dispensers	924.00
3781.546-01		Enzed Fremantle	454.19	INV	07/11/2018	51131	Assorted hose items	454.19
3781.5506-01		Peel Group Riding for the Disabled	330.00	INV	08/11/2018	KS026483	Kidsport voucher	330.00
3781.5520-01		Master Lock Service	790.00	INV	08/11/2018	00005438	Medina Hall Replace lock on hall gate.	275.00
				INV	07/11/2018	00005465	Repair sliding door lock	190.00
				INV	06/11/2018	00005463	Service door closer and lock	110.00
				INV	06/11/2018	00005464	Keys for display cabinets	215.00

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3781.5823-01		Accord Security Pty Ltd	4,284.70	INV	07/11/2018	00022953	Security service period ending 281018	4,284.70
3781.5921-01		Custom Composts	1,300.64	INV	07/11/2018	406606	Supply 2 pallets of C-Life Turf Perfect	1,300.64
3781.5996-01		CMS Engineering Pty Ltd	2,983.64	INV	08/11/2018	29440	Service exhaust fans Recquatic	313.50
				INV	08/11/2018	29433	Air conditioning maintenance Parmelia House Aug 18	877.80
				INV	08/11/2018	29430	Air conditioner service Fiona Harris Pavilion	597.74
				INV	08/11/2018	29436	Air conditioner service Admin Building Aug 18	660.00
				INV	08/11/2018	29442	Air conditioner service John Wellard Centre	534.60
3781.5997-01		Evolution Sports Imports Pty Ltd	282.00	INV	05/11/2018	47894	Futsal balls	282.00
3781.6018-01		ALSCO Pty Ltd	207.59	INV	05/11/2018	CPER1876822	Linen hire	45.30
				INV	05/11/2018	CPER1880076	Linen hire	77.37
				INV	05/11/2018	CPER1876820	Linen hire	18.88
				INV	05/11/2018	CPER1878765	Linen hire	66.04
3781.6267-01		Woolworths Group Limited	1,424.72	INV	05/11/2018	3286439	Goods for art & crafts for St Vincents Fair	9.20
				INV	05/11/2018	30833236	Cafe items Recquatic	161.95
				INV	05/11/2018	3286446	Supplies fro Mooditj Kulungars playgroup	111.35
				INV	05/11/2018	3286424	Supplies for Mooditj Kulungars playground	130.44
				INV	05/11/2018	2988599	Supplies for Mooditj Kulungars playgroup	132.91
				INV	05/11/2018	3286442	Items for Children's Week event	177.33
				INV	07/11/2018	3435101	Milk for Zone	4.00
				INV	08/11/2018	3377973	Insect Repellent outside crews and admin	98.99
				INV	08/11/2018	3435111	Food for Term 4 Drop In and Program	29.12
				INV	08/11/2018	3286450	Items for Zone event	55.70
				INV	08/11/2018	3286409	Items for Anti Poverty Day event	240.50
				INV	08/11/2018	3435103	Depot morning tea supplies	95.00
				INV	08/11/2018	3377954	Depot morning tea supplies	95.26
				INV	08/11/2018	3435105	Party food and Candy for Halloween Party	60.97
				INV	08/11/2018	3435104	Food for Term 4 Master Chef program	22.00
3781.6332-01		Drainflow Services Pty Ltd	15,840.00	INV	07/11/2018	00002632	Sludge clean out	15,840.00
3781.6370-01		Elexacom	19,458.66	INV	07/11/2018	24746	Repair street lights on Hutchins Way	1,712.93
				INV	07/11/2018	24653	Install weatherproof GPO for HWS	290.31
				INV	07/11/2018	24648	Event test and tag 131018	418.00
				INV	07/11/2018	24641	Repaired BBQ at Wells Park	1,254.07
				INV	07/11/2018	24650	RCD injection testing Recquatic	934.23

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				INV	06/11/2018	24654	Serviced power points Callistemon Court	180.87
				INV	06/11/2018	24699	Replaced GPO	99.24
				INV	06/11/2018	24701	Replaced lamp and lamp holder	369.04
				INV	08/11/2018	24706	Install power points and circuit Thomas Pavilion	942.74
				INV	08/11/2018	24716	Relocate GPO for fridge Parmelia House	508.81
				INV	08/11/2018	24713	Install LED flood Recquatic	523.79
				INV	08/11/2018	24703	Service emergency & exit lights Mandogalup Station	165.44
				INV	08/11/2018	24702	Service exit light Administration	61.18
				INV	08/11/2018	24692	Preventative Maintenance Repairs Arts Centre	886.58
				INV	08/11/2018	24694	Maintenance repairs Mandogalup Fire Station	1,141.99
				INV	08/11/2018	24695	Preventative Maintenance Repair Wellard Pavilion	1,037.43
				INV	08/11/2018	24705	Preventative maintenance repairs Snr Citizens Ctre	1,406.04
				INV	08/11/2018	24707	Preventative Maintenance Repairs Recquatic	1,745.15
				INV	08/11/2018	24642	Various electrical works Admin	5,780.82
3781.6583-01		ALS Library Services Pty Ltd	33.73	INV	08/11/2018	00058142	Library stocks	33.73
3781.7388-01		Morris Jacobs	155.00	INV	07/11/2018	4	Facilitate Tuesday Art 061118	155.00
3781.7436-01		Action Glass Pty Ltd	577.50	INV	06/11/2018	B18753	Install shower screen Callistemon Court U33	577.50
3781.7522-01		GPS Linemarking	2,678.50	INV	07/11/2018	INV-807	Line markings for various ovals	2,678.50
3781.7523-01		Housing Authority	33,306.63	RFD	08/11/2018	1097977	Refund subdivision bond	33,306.63
3781.7541-01		Tiffany Pearson	200.00	INV	08/11/2018	6thNovember18	Refund of items for Zone School Holiday Program	200.00
3781.7586-01		Critters Up close	300.00	INV	07/11/2018	INV-0007	School Holiday Program incursion	300.00
3781.7605-01		Flying Canape	2,147.00	INV	05/11/2018	11479	Catering 301018	2,147.00
3781.762-01		Blackwood & Sons Ltd	232.43	INV	07/11/2018	PE5444RD	Items for Depot	232.43
3781.7625-01		Flex Industries Pty Ltd	345.13	INV	07/11/2018	59972	Service KWN2048	345.13
3781.7658-01		Dedeland Developments Pty Ltd	436.35	INV	07/11/2018	7.4	Rates Refund	436.35
3781.7696-01		Allied Pumps Pty Ltd	1,875.50	INV	08/11/2018	76468	Wandi Pavilion Scheduled six monthly services	1,875.50

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3781.7812-01		Starbucks Flooring	250.00	INV	06/11/2018	INV-000474	Install new vinyl	250.00
3781.8069-01		Herbert Smith Freehills	620.18	INV	07/11/2018	50020348	Audit fees to 221018	620.18
3781.8224-01		Axiis Contracting	140,904.50	INV	08/11/2018	4031	Install soakwell and supply fencing	6,088.50
				INV	08/11/2018	4030	Construction of ramp and stairs Walgreen Crescent	134,816.00
3781.835-01		Kwinana Golf Club Inc	295.00	INV	05/11/2018	107041	Venue hire for Small Business Lunch 091118	295.00
3781.8368-01		Ian Leslie Pope	44.00	INV	08/11/2018	5thNovember18	Reimbursement of HR licence	44.00
3781.8809-01		Running Wild Fitness	450.00	INV	08/11/2018	110122	Facilitate Children's event 261018	450.00
3781.8852-01		Eco Eats Catering	250.20	INV	06/11/2018	INV0411	Catering for Bush Plant ID Workshop 281018	250.20
3781.8899-01		Majestic Plumbing	2,151.38	INV	06/11/2018	210576	Service bottled refill Skate Park	86.75
				INV	06/11/2018	210575	Service hose tap Koorliny Arts Centre	203.74
				INV	06/11/2018	210547	Serviced kitchen tap Callistemon Court	127.45
				INV	07/11/2018	210593	Service blocked toilet Medina Oval Magenup	317.94
				INV	07/11/2018	210623	Equestrian Centre works	493.83
				INV	08/11/2018	210653	Service blockage Medina Oval	97.75
				INV	08/11/2018	210656	Service UV system Casuarina Fire Station	737.17
				INV	08/11/2018	210680	Inspect hydroboil boiler unit Thomas Pavilion	86.75
3781.8984-01		Baldivis Transport Pty Ltd	175.00	INV	08/11/2018	00001720	Bulk water supply 270918	175.00
3781.9013-01		Department of Mines, Industry	22,241.25	INV	08/11/2018	October18	Building Services Levy 2018	22,241.25
3781.9019-01		Kearns Garden Supplies	9.30	INV	08/11/2018	31	Hooks for Family Day Care	9.30
3781.903-01		Lo-Go Appointments	3,678.40	INV	08/11/2018	00418519	Temp staff week ending 201018	1,839.20
				INV	08/11/2018	00418559	Temp staff week ending 271018	1,839.20
3781.9076-01		Charles Service Company	270.60	INV	07/11/2018	00031375	Cleaner for Positive Vibes Youth Festival	270.60
3781.9547-01		Retech Rubber	522.50	INV	08/11/2018	00002627	Repair softfall playground Sandringham Park	522.50
3781.9592-01		Parties Kids Remember	460.00	INV	08/11/2018	38772	Entertainment 311018	460.00
3782	07/11/2018	EFT TRANSFER: - 09/11/2018	13,795.30					
3782.2853-01		Maxxia Pty Ltd	4,886.90	INV	04/11/2018	PY01-10-Maxxia P	Payroll Deduction	2,329.37
				INV	04/11/2018	PY01-10-Maxxia P	Payroll Deduction	2,557.53
3782.3376-01		Health Insurance Fund of WA (HIF)	1,168.40	INV	04/11/2018	PY01-10-Health I	Payroll Deduction	1,168.40

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3782.3719-01		City of Kwinana - Xmas fund	7,740.00	INV	04/11/2018	PY01-10-TOK	Payroll Deduction	7,740.00
3783	09/11/2018	EFT TRANSFER: - 13/11/2018	202,969.00				PAYG Tax Withheld	
3783.153-01		Australian Taxation Office	202,969.00	INV	04/11/2018	PY01-10-Australi	Payroll Deduction	202,565.00
				INV	04/11/2018	PY99-10-Australi	Payroll Deduction	404.00
3784	14/11/2018	EFT TRANSFER: - 14/11/2018	22,505.53					
3784.568-01		Bright Futures In Home Care - Payro	22,505.53	INV	14/11/2018	221018 to 041118	IHC Payroll 221018 to 041118	22,505.53
3785	14/11/2018	EFT TRANSFER: - 14/11/2018	139,838.51					
3785.565-01		Bright Futures Family Day Care - Pa	139,838.51	INV	14/11/2018	221018 to 041118	FDC Payroll 221018 to 041118	139,838.51
3786	14/11/2018	EFT TRANSFER: - 16/11/2018	734,815.03					
3786.10034-01		Rockingham Christ of Church	428.90	RFD	14/11/2018	1325556	Refund bond Hall hire 220818	428.90
3786.10079-01		Compu-Stor	16.30	INV	13/11/2018	00249780	26 x Storage box standard	16.30
3786.10202-01		TJS Services Group Pty Ltd	30,275.72	INV	12/11/2018	160399	General cleaning Depot 011018 and 311018	317.16
				INV	12/11/2018	160419	Extra cleaning 300918 William Bertram Centre	121.00
				INV	12/11/2018	160418	Steam clean of chairs Darius Wells 201018	489.50
				INV	12/11/2018	160400	General cleaning 011018 John Wellard Centre	3,500.43
				INV	12/11/2018	160401	General cleaning 011018 and 311018	4,055.70
				INV	12/11/2018	160417	Carpet steam cleaning 151018 Ken Jackman hall	374.00
				INV	12/11/2018	160414	Cleaning products delivery William Bertram Centre	140.65
				INV	12/11/2018	160398	General cleaning various locations 311018	21,277.28
3786.1034-01		North Lake Electrical Pty Ltd	17,000.50	INV	13/11/2018	52301	Install pump control cubicle	17,000.50
3786.10373-01		Green Willows Industrial Cleaning a	250.00	INV	15/11/2018	22	Spring cleaning Clubhouse and Office	250.00
3786.10408-01		ASV Sales and Service	3,927.00	INV	14/11/2018	213477	Equipment hire	3,927.00
3786.10495-01		Frederica Dorise Ross	650.94	INV	13/11/2018	7.5	Rates Refund	650.94
3786.10506-01		Specialised Security Shredding	10.12	INV	13/11/2018	00303804	GC bin exchange	10.12
3786.10508-01		FE Technologies Pty Ltd	825.00	INV	14/11/2018	1006445	Disc tags	825.00
3786.10526-01		Total Chess	600.00	INV	15/11/2018	241	Seniors Group chess lessons	600.00
3786.10603-01		Sian Amanda Blamey Brown	200.00	INV	14/11/2018	123	Performance fee 2018 Arts and Culture Awards	200.00



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3786.10640-01		Perth Aquatic, Seed and Ecological	3,520.00	INV	14/11/2018	00003026	Maintenance Management Plan	3,520.00
3786.10647-01		Bertram Community Playgroup	146.00	INV	13/11/2018	Refund	Cancellation Hire November	146.00
3786.10668-01		G J Parsons	1,866.00	INV	12/11/2018	IV00000000031	Provide electronic service for Meter Event Cinema	1,866.00
3786.10671-01		Sanmar Properties Pty Ltd	10,764.18	INV	13/11/2018	7.5	Rates Refund	10,764.18
3786.10672-01		Elwira Maria Short	895.01	INV	13/11/2018	7.5	Rates Refund	895.01
3786.10675-01		Teegan Knealle	100.00	RFD	14/11/2018	1371370	Refund bond Hall hire 061118	100.00
3786.10676-01		Kelly Lough	100.00	RFD	14/11/2018	1317004	Refund bond Hall hire 050718	100.00
3786.10677-01		Courtney Barrett	100.00	RFD	14/11/2018	1317218	Refund bond Hall hire 090718	100.00
3786.10678-01		Emily Green	100.00	RFD	14/11/2018	1317610	Refund bond Patio hire 060718	100.00
3786.10679-01		Sarah Jane O'Neil	100.00	RFD	14/11/2018	1320594	Refund bond Patio hire 010818	100.00
3786.10680-01		Patrice Campbell-Lamare	100.00	RFD	14/11/2018	1353744	Refund bond Hall hire 041018	100.00
3786.10681-01		Alex Bartlett	100.00	RFD	14/11/2018	1374119	Refund bond Patio hire 081118	100.00
3786.1072-01		Paint Industries	1,674.81	INV	13/11/2018	59590	Assorted paint	282.17
				INV	13/11/2018	59605	Eco green graffiti	907.50
				INV	14/11/2018	59617	Challenger Beach Toilets 10L Flint Grey	485.14
3786.1130-01		Port Printing Works	277.20	INV	13/11/2018	INV027459	Kwinana Recquatic Swim School 2019 Calendar	237.60
				INV	13/11/2018	INV027625	Business Cards	39.60
3786.1157-01		Quality Traffic Management Pty Ltd	20,148.26	INV	13/11/2018	26170	Traffic management Cowcher Way	831.89
				INV	13/11/2018	26167	Traffic management Sulphur Road	1,323.71
				INV	13/11/2018	26145	Traffic controllers	3,506.01
				INV	13/11/2018	26196	Traffic controllers 221018	918.06
				INV	14/11/2018	26168	Contract 608KWN16 Provision of Traffic Management	9,566.79
				INV	14/11/2018	26189	Contract 608KWN16 Provision of Traffic Management	2,165.68
				INV	14/11/2018	26296	Traffic controllers 301018	682.66
				INV	14/11/2018	26295	Traffic management 261018	470.80
				INV	14/11/2018	26294	Traffic controllers 251018	682.66
3786.1159-01		SoundPack Solutions Pty Ltd	214.50	INV	12/11/2018	INV-10724	100 x Single DVD cases clear; 100 x CD outer cases	214.50

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3786.1178-01		Holcim (Australia) Pty Ltd	643.28	INV	13/11/2018	9406032851	Cnr Sonning Lane & Charvil Mews - 1M3 concrete	256.08
				INV	14/11/2018	9405049292	1m3 concrete	387.20
3786.1265-01		Sai Global Ltd	665.62	INV	13/11/2018	SAIG11S-878528	Licence for 12 months	665.62
3786.1276-01		Satellite Security Services	709.50	INV	12/11/2018	IV004093	Service emergency door at Recquatic	709.50
3786.134-01		Australia Post	872.85	INV	13/11/2018	1007958783	Agency commission period ending 311018	872.85
3786.1360-01		Saint John Ambulance Australia (WA)	140.00	INV	14/11/2018	FAINV00156689	First Aid for Mental Health training	140.00
3786.1367-01		Star Trophies	773.25	INV	12/11/2018	00014607	Trophies for arts and leadership awards	773.25
3786.1369-01		Premier & Cabinet Department of	103.95	INV	14/11/2018	161688	Advertising 021018	103.95
3786.1408-01		Sylvia Ayton Snowden	276.50	INV	15/11/2018	9thNovember2018	Reimbursement of items for Family Day Care	276.50
3786.1423-01		Telstra	7,711.93	INV	14/11/2018	9385375010Nov18	Internet and Data	2,491.62
				INV	14/11/2018	3752384000Oct18	Family Daycare centre	19.25
				INV	14/11/2018	3764775000Oct18	Depot Burglar Alarm	19.25
				INV	13/11/2018	1355246271Oct18	Mobiles/Devices for whole organisation to 261018	5,181.81
3786.1528-01		Twights Plumbing Pty Ltd	1,729.90	INV	13/11/2018	F9756	Service hot water system Callistemon Court U16	1,498.00
				INV	13/11/2018	F9762	Repair reticulation Callistemon Court U39	231.90
3786.1589-01		Waste Stream Management Pty Ltd	429.00	INV	13/11/2018	00828291	Tipping concrete October 18	429.00
3786.1592-01		Water Corporation of Western Austra	809.79	INV	14/11/2018	9000334597Nov18	Feilman Building water	313.14
				INV	14/11/2018	9000295305Nov18	Sloans cottage water	56.51
				INV	14/11/2018	9000345691Oct18	Waste Steam water	31.94
				INV	14/11/2018	9000374062Nov18	Wells Park Toilets water	91.67
				INV	14/11/2018	9000294409Nov18	Leda hall water	316.53
3786.1614-01		Westbooks	257.02	INV	12/11/2018	301006	Junior titles for Library	12.57
				INV	12/11/2018	301013	Junior title for Library	14.79
				INV	12/11/2018	301004	Junior titles for Library	40.68
				INV	12/11/2018	301003	Junior book selection for Story Time	152.00
				INV	12/11/2018	301005	Library items	36.98
3786.1685-01		Quickmail	1,728.89	INV	13/11/2018	00039449	Printing of envelopes Community Engagement	1,728.89
3786.1726-01		Kyocera Document Solutions Australi	4,924.10	INV	13/11/2018	2853271369	Knowledge Centre copy cost	384.55

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				INV	13/11/2018	2852371366	Depot copy cost	481.34
				INV	13/11/2018	2852371382	Admin Centre copy cost	648.99
				INV	13/11/2018	2852371383	Darius wells library and resources centre	225.98
				INV	13/11/2018	2852371368	Business Incubator copy cost	202.42
				INV	13/11/2018	2852371379	Knowledge Centre Public copy cost	62.13
				INV	13/11/2018	2852371381	John Wellard Community Centre copy cost	37.32
				INV	13/11/2018	2852371367	Admin CEO copy cost	39.60
				INV	13/11/2018	2852371375	Finance copy cost	215.10
				INV	13/11/2018	2852371380	Admin centre CSO copy cost	94.86
				INV	13/11/2018	2852371378	Recquatic Centre copy cost	552.81
				INV	13/11/2018	2852371376	Bright futures day care copy cost	183.96
				INV	13/11/2018	2852371370	Library staff copy cost	197.77
				INV	13/11/2018	2852371374	GSS copy cost	410.86
				INV	13/11/2018	2852371384	Admin CSO Zone copy cost	182.23
				INV	13/11/2018	2852371386	Callistemon court unit copy cost	73.08
				INV	13/11/2018	2852371372	Youth Zone upstairs copy cost	82.77
				INV	13/11/2018	2852371373	Planning copy cost	554.84
				INV	13/11/2018	2852371385	Bertram community centre copy cost	57.01
				INV	13/11/2018	2852371377	Works depot copy cost	199.12
				INV	13/11/2018	2852371371	Zone Gaming room ground floor copy cost	37.36
3786.1762-01		Officeworks BusinessDirect	49.52	INV	13/11/2018	40755778	Batteries and pens	49.52
3786.1856-01		Cornerstone Legal	220.00	INV	13/11/2018	15620	Legal fees Matter No 004670	220.00
3786.1869-01		United Cinemas Rockingham	300.00	INV	15/11/2018	November 1 2018	Excursion on 290119	300.00
3786.19-01		Absolute Painting Services	726.00	INV	13/11/2018	INV-0668	Assorted painting services	671.00
				INV	13/11/2018	INV-0666	Service kitchen ceilings Banksia Park U19	55.00
3786.2021-01		Subway Kwinana	192.00	INV	14/11/2018	327652	Catering for Depot Social Club XFT	192.00
3786.2097-01		Beaver Tree Services Aust Pty Ltd	17,899.65	INV	13/11/2018	67569	Vegetation clearance Thomas road	4,779.58
				INV	13/11/2018	67591	Removal of stump Sloan drive Leda Tree	1,229.84
				INV	13/11/2018	67592	Stump removal Runneymede	2,080.16
				INV	13/11/2018	67617	Emergency call out Art centre	448.45
				INV	13/11/2018	67620	Tree Relocation Rushbrooke Drive	737.00
				INV	13/11/2018	67624	October Verge Tree Watering	3,845.04
				INV	15/11/2018	67538	Beautification of median isle Thomas Road	4,779.58
3786.2121-01		Suez	1,246.76	INV	14/11/2018	28952071	Green waste 22 and 24 October 2018	1,246.76

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3786.2125-01		Synergy	160,865.65	INV	13/11/2018	792417950Nov18	Street lighting 6085 lights	110,685.70
				INV	13/11/2018	135567600Nov18	Darius Library 34U	9,181.40
				INV	13/11/2018	168917550Oct18	Toilets at Wells Park 2602U	623.90
				INV	13/11/2018	224882670Oct18	Little Rascals Out of School 849U	330.85
				INV	13/11/2018	023172940Oct18	Bertram Park POS 110U	137.00
				INV	13/11/2018	221037310Oct18	Thomas Oval Pavilion 1205U	427.60
				INV	13/11/2018	165493420Oct18	Smirks Museum 94U	131.00
				INV	13/11/2018	2060513890Oct18	Model Railways Change Rooms 173U	152.10
				INV	13/11/2018	766868640Oct18	Smirks Cottage 571U	258.35
				INV	13/11/2018	157165580Oct18	Lights - Thomas Oval Pavilion 1157U	179.85
				INV	13/11/2018	882732750Oct18	Harrison Way 1U	104.45
				INV	13/11/2018	685078510Oct18	Gawler Way 2U	103.00
				INV	13/11/2018	700373810Oct18	Rutherford Park 61U	117.05
				INV	13/11/2018	958335710Nov18	Orelia Oval 5766U	1,340.10
				INV	13/11/2018	129764890Nov18	Lambeth Park POS 3216U	745.55
				INV	13/11/2018	107029100Nov18	Wellard Community Centre 5819U	1,579.20
				INV	13/11/2018	144372270Nov18	Thomas Oval Retic 2163U	348.25
				INV	13/11/2018	185126570Oct18	Borthwick Park Retic 75U	119.50
				INV	13/11/2018	925767370Oct18	Gilmore Avenue Retic 487U	250.35
				INV	13/11/2018	098975100Oct18	Sandringham Park 834U	340.40
				INV	13/11/2018	504616220Nov18	Rogan Park 195U	140.15
				INV	13/11/2018	676621320Nov18	Margaret Feilman 6U	1,696.65
				INV	13/11/2018	127609840Nov18	Darius Top Floor 98U	137.30
				INV	13/11/2018	285940430Oct18	Rhodes Park 370U	266.65
				INV	13/11/2018	845563650Oct18	BBQ Apex Park 12U	109.10
				INV	13/11/2018	192738060Oct18	Flood lights 1 U	106.20
				INV	13/11/2018	422268910Nov18	Depot 5639U	1,563.35
				INV	13/11/2018	149872970Nov18	Incubator 4717U	1,131.60
				INV	13/11/2018	258360080Nov18	Adventure Park 4498U	970.65
				INV	13/11/2018	118367820Nov18	New Thomas Oval Pavilion 3749U	928.15
				INV	13/11/2018	177581220Nov18	Recreation Centre 73U	17,964.15
				INV	13/11/2018	856518550Nov18	Decorative lighting 31USM	2,544.85
				INV	13/11/2018	141057240Nov18	The Zone 13U	3,896.60
				INV	13/11/2018	179469390Nov18	Bertram Community Centre 3204U	861.75
				INV	13/11/2018	566370150Nov18	Chipperton Park 5U	1,392.90

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3786.218-01		Bob Jane T-Mart	143.00	INV	13/11/2018	136892	Tyres and puncture repairs	143.00
3786.2224-01		Prestige Catering & Event Hire	1,239.60	INV	13/11/2018	00023407	Catering 011118	887.00
				INV	13/11/2018	00023409	Catering 051118	352.60
3786.2256-01		GlobalX Information Services Pty Lt	47.30	INV	14/11/2018	PSI0155985	Legal Name Searches October 18	47.30
3786.2339-01		ZircoData Pty Ltd	516.80	INV	14/11/2018	ZDW0041389	Offsite storage & retrieval October	516.80
3786.235-01		Bristol Cleaning Services	420.00	INV	13/11/2018	1018-2	Window cleaning Callistemon Court U52	90.00
				INV	13/11/2018	1018C	Window cleaning Clubhouse	240.00
				INV	13/11/2018	1018-1	Window cleaning Banksia Park U19	90.00
3786.2410-01		ABCO Products	216.15	INV	14/11/2018	369058	Utility brush	54.98
				INV	14/11/2018	369260	Foam soap dispenser	15.40
				INV	14/11/2018	368748	Darius Wells Library and Resource Centre	145.77
3786.248-01		Bunnings Building Supplies	3,839.76	INV	13/11/2018	2163/01212209	Hardware items for Environment	107.16
				INV	13/11/2018	2163/01523657	Pool panel flat top	448.90
				INV	14/11/2018	2163/01109009	Paint supplies	2,713.51
				INV	14/11/2018	2163/01613859	John Wellard Community Centre Hook and eye	44.48
				INV	14/11/2018	2163/01614232	Dunlop cleaner and polish	47.94
				INV	14/11/2018	2163/01614234	AEG laser measurer	189.05
				INV	14/11/2018	2163/01613887	Painting supplies for Chisham Oval toilets	142.22
				INV	14/11/2018	2163/01613885	Painting supplies for Challenger Beach toilet	146.50
3786.2507-01		Ixom Operations Pty Ltd	1,118.46	INV	14/11/2018	6031438	supply of cl2 plus bottle handling charges	988.88
				INV	14/11/2018	6033386	supply of cl2 plus bottle handling charges	129.58
3786.2546-01		Sigma Chemicals	1,056.00	INV	14/11/2018	122293/01	15 x bag bicarb and 5 x bag soda ash	646.25
				INV	15/11/2018	121494/01	Pool chemicals Recquatic	409.75
3786.2565-01		Ausco Modular Pty Ltd	1,435.50	INV	12/11/2018	7145039	Demountable hire for Building	1,435.50
3786.264-01		Cabcharge Australia Ltd	6.00	INV	13/11/2018	00989066P1811	Cab charges 081018 to 041118	6.00
3786.2646-01		Neverfail Springwater	60.56	INV	14/11/2018	504241	Bottled water Admin	60.56
3786.2652-01		Modern Teaching Aids Pty Ltd	130.79	INV	14/11/2018	43493302	Items for swim school 2 giant fish fishing games	130.79
3786.2698-01		Wilson Security Pty Ltd	772.20	INV	13/11/2018	W00228159	Mobile security patrols Callistemon Court	772.20
3786.2852-01		Downer EDI Works Pty Ltd	357.65	INV	14/11/2018	6005684	Asphalt 25/10 10mm Gran AC50BD Asphalt 26/10	357.65

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3786.2937-01		Bolinda Publishing Pty Ltd	79.16	INV	14/11/2018	129537	Audiobook for Library	79.16
3786.3155-01		PFD Food Services Pty Ltd	579.25	INV	14/11/2018	KM663229	Standing order for Cafe supplies	579.25
3786.3212-01		Marketforce Pty Ltd	7,980.82	INV	15/11/2018	24339	Advert 201018	727.67
				INV	15/11/2018	24334	Advert 191018 Public Notice Bee Keeping	638.31
				INV	15/11/2018	24322	Advert 051018 Youth Festival Positive Vibes	646.48
				INV	15/11/2018	24333	Advert 261018 Small Business Grants 2018	491.04
				INV	15/11/2018	24323	Advert 051018	998.54
				INV	15/11/2018	24324	Advert 031018 Positive Vibes	941.49
				INV	15/11/2018	24335	Advert 191018 Public Notice	432.06
				INV	15/11/2018	24327	Advert 051018 Fire Notice 2018	3,105.23
3786.327-01		City Farmers Rockingham	245.97	INV	14/11/2018	247769	Various dog leads	83.98
				INV	14/11/2018	248653	Cat carrier	60.00
				INV	14/11/2018	247768	Dog lead and cat carrier	101.99
3786.333-01		City of Mandurah	8,521.35	INV	15/11/2018	173837	Reimbursement of LSL	8,521.35
3786.3334-01		Bertram Primary School	100.00	RFD	14/11/2018	1326645	Refund bond Patio hire	100.00
3786.357-01		BullAnt Security Pty	139.55	INV	14/11/2018	10,179,111	Remove broken key Callistemon Court U4	139.55
3786.358-01		Coastline Mowers	52.00	INV	13/11/2018	18580 # 12	File kit for 192T chainsaw	52.00
3786.3596-01		KLMedia Pty Ltd	112.85	INV	14/11/2018	1133725	DVD titles September 18 orders	112.85
3786.3877-01		Schweppes Australia Pty Ltd	228.18	INV	12/11/2018	9003196778	Assorted drinks for Recquatic	228.18
3786.3920-01		Sports Master Athletic Internationa	1,596.00	INV	14/11/2018	M5404	Focus mitt professional Punch Master	1,596.00
3786.4002-01		Savage Surveying	715.00	INV	12/11/2018	21537	Detailed survey for Varris Park Orelia	715.00
3786.407-01		Winc Australia Pty Ltd	507.33	INV	12/11/2018	9025741770	Laminating pouches	16.19
				INV	12/11/2018	9025710813	Stationery Darius Wells	9.22
				INV	15/11/2018	9025599184	Stationery Family Day Care	433.93
				INV	15/11/2018	9025780758	Stationery Family Day Care	47.99
3786.4106-01		Kennards Hire Rockingham - Generato	350.00	INV	14/11/2018	19852834	Turf cutter hire for 301018	175.00
				INV	14/11/2018	19876104	Turf cutter hire for 061118	175.00
3786.4112-01		Cleverpatch Pty Ltd	219.45	INV	14/11/2018	309336	Australian animals sand art sheet	219.45
3786.412-01		Courier Australia	26.10	INV	13/11/2018	0354	Courier charges to 261018	26.10
3786.4125-01		LD Total	66,531.75	INV	13/11/2018	95030	Landscape maintenance Latitude 32 October 18	2,162.35

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				INV	13/11/2018	95032	Landscape maintenance Sunrise Estate October18	999.58
				INV	13/11/2018	95038	Landscape maintenance Whistling Grove October 18	1,965.14
				INV	13/11/2018	95029	Landscape maintenance Honeywood Rise October 18	986.65
				INV	13/11/2018	95036	Landscape maintenance Wellard Glen October 18	978.62
				INV	13/11/2018	95023	Landscape maintenance Belgravia October 18	5,023.14
				INV	13/11/2018	95027	Landscape maintenance Honeywood October 18	14,790.71
				INV	13/11/2018	95034	Landscape maintenance Wellard Village October 18	28,342.69
				INV	13/11/2018	95025	Landscape maintenance Emerald Park October 18	3,740.56
				INV	14/11/2018	94737	October Additional Irrigation repair works	4,063.69
				INV	14/11/2018	94746	October Additional Irrigation repair works	1,167.34
				INV	14/11/2018	94736	October Additional Irrigation repair works	234.34
				INV	14/11/2018	94748	October Additional Irrigation repair works	243.60
				INV	14/11/2018	94251	October Additional Irrigation repair works	329.16
				INV	14/11/2018	94243	October Additional Irrigation repair works	1,504.18
3786.4190-01		AC Cooling Services	342.00	INV	14/11/2018	2296	Supply remote controller to air conditioner	100.00
				INV	14/11/2018	2063	Service air conditioner Callistemon Court	121.00
				INV	13/11/2018	2273	Service air conditioner Callistemon Court U5	121.00
3786.4245-01		ED Property Services	1,056.00	INV	13/11/2018	00001154	Repair gate and fence Banksia Park	77.00
				INV	13/11/2018	00001158	Service windows Banksia Park U19	110.00
				INV	13/11/2018	00001157	Assorted repairs Callistemon Court U52	187.00
				INV	13/11/2018	00001159	Painting service Banksia Park U63	110.00
				INV	13/11/2018	00001156	Repair ceiling vent Callistemon Court U75	77.00
				INV	13/11/2018	00001155	Repair ceiling and painting Banksia Park U6	308.00
				INV	14/11/2018	00001162	Repairs to wall Banksia Park U31	187.00
3786.4256-01		Rockingham Skylights	175.00	INV	14/11/2018	11901	Install perspex cover Callistemon Court U50	175.00
3786.4382-01		Stonehenge Ceramics	1,625.00	INV	13/11/2018	C0531	Re grout shower Callistemon Court U63	375.00
				INV	13/11/2018	C0492	Re grout and seal floors Banksia Park U19	575.00
				INV	13/11/2018	C0126	Re grout shower walls and floors Banksia Park U65	675.00

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3786.4387-01		Kott Gunning	1,760.00	INV	13/11/2018	237080	Legal fees Reference No 180690/EKL	1,760.00
3786.4477-01		Trophy Express	162.50	INV	15/11/2018	9928	Medals for Lap It Up Club Recquatic	162.50
3786.4552-01		Public Libraries Western Australia	250.00	INV	14/11/2018	542	Public Libraries Western Australia (PLWA) membership	250.00
3786.457-01		Porter Consulting Engineers	5,720.00	INV	14/11/2018	00018532	Design modification Millar Road	5,720.00
3786.4664-01		AMPAC Debt Recovery (WA) Pty Ltd	2.82	INV	12/11/2018	50718	Debt recovery fees October 18 Library	2.82
3786.4719-01		Complete Office Supplies Pty Ltd	64.07	INV	12/11/2018	07847701	Stationery A4 Clipfolder	50.70
				INV	12/11/2018	07860768	Stationery Darius Wells Library	13.37
3786.4800-01		Web In A Box	270.00	INV	13/11/2018	45668	Web hosting	270.00
3786.483-01		Landgate	1,130.24	INV	13/11/2018	343936-10001098	GRV chargeable Schedule G2018/21	230.74
				INV	14/11/2018	885585	Land enquiries October 18	899.50
3786.4861-01		Big W	90.00	INV	14/11/2018	176714	Swim nappies for proshop assorted sizes	90.00
3786.4891-01		Display Me	316.24	INV	14/11/2018	N0114033	Raffle Barrel Table	316.24
3786.4947-01		Future Power WA Pty Ltd	32,188.62	INV	12/11/2018	00001447	Construction of Medina Oval sports lighting	32,188.62
3786.5071-01		JB HiFi Commercial Division	90.44	INV	14/11/2018	01-6676211-121-1	Aspen Iphone cases	90.44
3786.5079-01		Kids Just Wanna Have Fun Amusement	1,760.00	INV	15/11/2018	4191	Amusement machines hire 141218	1,760.00
3786.5520-01		Master Lock Service	240.00	INV	14/11/2018	00005480	Service gate Callistemon Court U45	120.00
				INV	14/11/2018	00005478	Repair sliding door Banksia Park U20	120.00
3786.5530-01		Nature Play Solutions Pty Ltd	396.00	INV	15/11/2018	00002886	20 x Bags of mud including delivery	396.00
3786.5743-01		Programmed Maintenance Services Ltd	2,640.00	INV	14/11/2018	SINV537760	Supply relief caretaker 291018 to 021118	2,640.00
3786.5752-01		Perdaman Advanced Energy Pty Ltd	7,768.86	INV	13/11/2018	00000529	Install photovoltaic power system	7,768.86
3786.5882-01		Promotions Only	163.35	INV	13/11/2018	798776570	Lanyards and tyvek bracelets	163.35
3786.5958-01		West Coast Profilers	14,719.21	INV	14/11/2018	19660	Hire of profiler 011118	12,640.21
				INV	14/11/2018	19661	Hire of equipment	2,079.00
3786.5996-01		CMS Engineering Pty Ltd	13,355.87	INV	14/11/2018	30154	Monthly air con maintenance October18	3,093.22
				INV	14/11/2018	30155	Monthly air con maintenance October 18	1,570.21
				INV	14/11/2018	30156	Monthly air con maintenance October 18	1,060.64
				INV	14/11/2018	30038	Calibrate all innotech wall sensors	965.25
				INV	14/11/2018	30042	Administration Replace disposable filters on AC	553.30



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				INV	14/11/2018	30039	Administration Work to VAV's	794.20
				INV	14/11/2018	30041	Administration Coil cleans and economy dampers	828.85
				INV	14/11/2018	30040	Administration replace the disposable filters	672.10
				INV	14/11/2018	30037	Recquatic Staff room airconditioning leaking	745.80
				INV	14/11/2018	30044	Recquatic Air con in group fitness studio 1	192.50
				INV	14/11/2018	30055	Senior Citizens Repair Cool Room	1,925.00
				INV	14/11/2018	30043	Business Incubator board room airconditioner	192.50
				INV	12/11/2018	29441	Service air conditioner unit The Zone	762.30
3786.6005-01		Cheryl Ann Martin	400.00	INV	14/11/2018	8thNovember	Artwork for 2018 Arts and Culture Awards	400.00
3786.6018-01		ALSCO Pty Ltd	69.82	INV	13/11/2018	CPER1882553	Linen hire for OCM	69.82
3786.6252-01		Amanda Kendle Consulting	438.00	INV	14/11/2018	0001798	2 hour Public talk Managing digital reputations	438.00
3786.6267-01		Woolworths Group Limited	1,723.21	INV	14/11/2018	3435108	Tissues for Recquatic centre	71.68
				INV	14/11/2018	30960183	Cafe splash stock	99.29
				INV	14/11/2018	3435129	Items for Library Melbourne Cup Lunch Social XFT	61.99
				INV	14/11/2018	3435133	Morning tea supplies Depot	147.00
				INV	14/11/2018	3435136	Food for Term 4 Drop In and Programs	62.55
				INV	14/11/2018	30861822	Items for Admin	159.20
				INV	14/11/2018	30968264	Items for Admin	158.85
				INV	14/11/2018	31095217	Items for Admin	102.27
				INV	14/11/2018	3435134	Items for Darius Wells	212.45
				INV	15/11/2018	3435125	Vouchers for Community Engagement	200.00
				INV	15/11/2018	3435120	Food for Term 4 Drop In and Programs	21.50
				INV	15/11/2018	3435130	Food for Term 4 Master Chef program	26.55
				INV	15/11/2018	31055460	Stock for Recquatic cafe	101.10
				INV	15/11/2018	31099926	Stock for Recquatic cafe	103.33
				INV	15/11/2018	3435118	Food and supplies for Mooditj Kulungars	195.45
3786.6277-01		Kim Baden McClennan	44.05	INV	15/11/2018	15thNovember2018	Reimbursement of HR licence	44.05
3786.6289-01		Clockwork Print	3,976.50	INV	13/11/2018	INV-0054697	Marketplace hoarding boards	1,082.40
				INV	13/11/2018	INV-0054700	Roadside banners	528.00
				INV	13/11/2018	INV-0054701	Symphony Classic pull-up banner	269.50

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				INV	13/11/2018	INV-0054768	Corflute event signage A frame signs	2,096.60
3786.6370-01		Elexacom	30,777.94	INV	13/11/2018	24766	Supply and installation of suspended powerpoint	661.72
				INV	13/11/2018	24778	Replacing faulty street lights on Gilmore Ave	8,613.41
				INV	13/11/2018	24693	Remove damaged pathway lights Callistemon Court	467.12
				INV	13/11/2018	24756	Testing and tagging of Darius Wells Library	253.00
				INV	13/11/2018	24759	Replaced fan knob	74.22
				INV	13/11/2018	24761	Replaced 2 x spitfires	1,097.57
				INV	13/11/2018	24688	Investigate and repair street lights Meares Avenue	7,085.75
				INV	12/11/2018	24767	Tag and testing of electrical leads Depot	121.18
				INV	12/11/2018	24769	Replaced globes and globe holder at car park Admin	557.54
				INV	12/11/2018	24773	Maintenance repairs Margaret Feilman Centre	536.22
				INV	12/11/2018	24777	Serviced lights at Depot 101018	532.51
				INV	14/11/2018	24724	Underground cable repairs along Gilmore Ave	4,530.64
				INV	14/11/2018	24760	William Bertram Com Centre Preventative Maintenance	979.68
				INV	14/11/2018	24758	Records Department secondary power points	38.93
				INV	14/11/2018	24754	Darius Wells/Resource Centre Preventative Maintenance	3,495.76
				INV	14/11/2018	24753	Recquatic Compound Gate switch not working	286.97
				INV	14/11/2018	24751	Rhodes park lighting	1,210.87
				INV	15/11/2018	24755	Service BBQ Casuarina Fire Station	234.85
3786.638-01		GHD Consultant Engineers	17,356.35	INV	12/11/2018	9102057	Development feasibility study Kwinana Beach	17,356.35
3786.6382-01		Zip Heaters	397.16	INV	14/11/2018	3063838	Service hydro tap units Darius Wells creche	397.16
3786.6457-01		Total Green Recycling	605.00	INV	13/11/2018	INV5034	E- Waste Recycling	605.00
3786.6583-01		ALS Library Services Pty Ltd	84.71	INV	14/11/2018	00058291	Assorted titles for Library	84.71
3786.6700-01		Sprayking WA Pty Ltd	9,080.46	INV	14/11/2018	00001639	Hardstand weed control October 18	9,080.46
3786.684-01		Hart Sport	288.70	INV	15/11/2018	10005330	Hart Ultra Plus Netballs and strip mesh carry bag	288.70
3786.6844-01		Donald Cant Watts Corke	2,750.00	INV	12/11/2018	W15015-04	Costing report	2,750.00

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3786.694-01		Heatley Sales Pty Ltd	4,041.29	INV	14/11/2018	C847178	312102 Steel Blue Argyle Black - Size 7.5	2,812.09
				INV	14/11/2018	C847619	312102 Steel Blue Argyle Black - Size 7.5	1,229.20
3786.7-01		AAA Windscreens & Tinting	175.00	INV	13/11/2018	INV-41780	Supply and fit RH rear window 1EZH639	175.00
3786.7168-01		Exit Waste	1,872.20	INV	14/11/2018	3585A	Fiona Harris Pavilion Attend site to clean	1,872.20
3786.7388-01		Morris Jacobs	155.00	INV	15/11/2018	5	Facilitate Tuesday Arty 131118	155.00
3786.7436-01		Action Glass Pty Ltd	1,014.20	INV	14/11/2018	B19165	Refit shower door Callistemon Court U52	209.00
				INV	14/11/2018	B19312	Service door Banksia Park U43	198.00
				INV	13/11/2018	B18935	Service sliding doors Callistemon Court U36	305.25
				INV	13/11/2018	B18934	Service sliding door Callistemon Court U4	301.95
3786.7574-01		Premier Photo Booths	749.00	INV	15/11/2018	INV-1029	4 hour hire for the Christmas Function 141218	749.00
3786.7575-01		Pickles Auctions	808.50	INV	14/11/2018	26012198	Vehicle Impounds Including Off Road Vehicles	264.00
				INV	14/11/2018	26012199	Vehicle Impounds Including Off Road Vehicles	258.50
				INV	14/11/2018	26012215	Vehicle Impounds Including Off Road Vehicles	143.00
				INV	14/11/2018	26012216	Vehicle Impounds Including Off Road Vehicles	143.00
3786.7605-01		Flying Canape	397.50	INV	12/11/2018	11480	Catering 301018	397.50
3786.762-01		Blackwood & Sons Ltd	238.93	INV	14/11/2018	KW1870RE	Uniform	10.91
				INV	14/11/2018	KW3087RG	Uniform	67.68
				INV	14/11/2018	KW0141RF	Uniform	104.50
				INV	14/11/2018	KW1868RE	Uniform	14.04
3786.7689-01		VARIDESK	522.50	INV	15/11/2018	IVC-2-949215	Dual monitor arms	522.50
				INV	15/11/2018	KW0147RF	Uniform	41.80
3786.7732-01		Griffin Civil	43,483.75	INV	12/11/2018	00000973	Sulphur Road drainage upgrade Claim 1	43,483.75
3786.7780-01		Moore Stephens (WA) Pty Ltd	1,815.00	INV	13/11/2018	309597	Audit Certification of the acquittal of R2R	1,815.00
3786.7809-01		Frontline Fire and Rescue Equipment	2,498.49	INV	13/11/2018	62129	Fire boot	258.50
				INV	13/11/2018	62096	Mask respirators	2,165.63
				INV	13/11/2018	62095	Alloy Adaptor	74.36

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3786.7812-01		Starbucks Flooring	1,960.00	INV	13/11/2018	INV-000478	Replace flooring Callistemon Court U52	1,960.00
3786.7831-01		Blackroll Australia	939.00	INV	14/11/2018	INV-3447	Blackroll loop band blue (strong)	939.00
3786.7917-01		Rick Wolters	250.00	INV	14/11/2018	8thNovember18	Reimbursement HR	250.00
3786.7937-01		Kerb Direct Kerbing Pty Ltd	5,326.07	INV	14/11/2018	6933	Kerbing repairs Hope Valley Road	5,326.07
3786.795-01		K Mart	476.00	INV	15/11/2018	161472	Nerf Guns for January holiday programs	250.00
				INV	14/11/2018	149452	Items for Library	25.00
				INV	14/11/2018	158461	Assorted goods for Kwinana Kids Play and Learn	201.00
3786.7969-01		The Baha'is of Kwinana	1,000.00	RFD	14/11/2018	1320814	Refund bond Hall hire 030818	1,000.00
3786.8027-01		Fiona Susan Bettsworth	225.00	INV	15/11/2018	15thNovember2018	Reimbursement HR	225.00
3786.8227-01		Emerald Gardens and Landscaping	242.00	INV	12/11/2018	5thNovember18	Watering of plant at KIC site	242.00
3786.8234-01		Fire And Safety Australia Pty Ltd	2,000.00	INV	14/11/2018	TI020872	Permit Issuer training x 2 sessions on 7 November	2,000.00
3786.8302-01		Chris Kershaw Photography	880.00	INV	15/11/2018	L2332	Photography for 2019 Calendar	880.00
3786.8319-01		Poolwerx Spearwood	1,995.09	INV	14/11/2018	104460-1	Daily water test and balance	1,995.09
3786.8325-01		Envirosweep	1,897.50	INV	12/11/2018	59135	Monthly footpath sweeping September 18	1,897.50
3786.8336-01		Lynne Brooke	48.70	INV	13/11/2018	2ndNovember18	Reimbursement of meals Family Daycare conference	48.70
3786.8522-01		Trevor John Wachmer	44.05	INV	13/11/2018	5thNovember18	Reimbursement of HR licence	44.05
3786.8595-01		Purearth	8,453.68	INV	14/11/2018	00000848	Collection of road sweepings	8,453.68
3786.8649-01		Ezy2c GPS Tracking	16.50	INV	15/11/2018	61469	SMS Delivery Fee	16.50
3786.867-01		Lamp Replacements	55.00	INV	14/11/2018	IN1017440	Thomas Kelly Pavilion PLC 18W	55.00
3786.87-01		Zone Bowling	249.00	INV	15/11/2018	22-00569577	Excursion 150118 Deposit	249.00
3786.8756-01		Ohura Consulting	8,094.19	INV	15/11/2018	454	Performance Management Assistance	2,983.75
				INV	15/11/2018	453	New Position Descriptions Project	4,228.95
				INV	15/11/2018	450	Facilitation of Enterprise Agreement 2018	881.49
3786.8784-01		Southern Cross Bush Band	600.00	INV	15/11/2018	12thNovember18	Deposit Australia Day event 260118	600.00
3786.8841-01		Links Modular Solutions	3,250.50	INV	13/11/2018	19493	Kwinana Recquatic Wristbands	3,250.50

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3786.888-01		Les Mills Australia	443.43	INV	14/11/2018	954905	License Fees	443.43
3786.8894-01		Landscape and Maintenance Solutions	24,594.43	INV	14/11/2018	INV-0878	Mowing Maintenance	1,878.58
				INV	14/11/2018	INV-0880	Broadacre mowing of Sportsgrounds	10,832.54
				INV	14/11/2018	INV-0881	Mowing and brushcutting of Medina Avenue	1,980.00
				INV	14/11/2018	INV-0879	Passive and Streetscape mowing October 18	9,903.31
3786.8899-01		Majestic Plumbing	10,954.02	INV	13/11/2018	210701	Plumbing repairs Banksia Park U69	125.47
				INV	13/11/2018	210654	Service laundry sink Callistemon Court U48	184.49
				INV	13/11/2018	210678	Unblocked sink Callistemon Court U4	97.75
				INV	13/11/2018	210716	Various plumbing repairs Callistemon Court	97.75
				INV	13/11/2018	210655	Replace hot water system Banksia Park Unit 55	1,461.90
				INV	13/11/2018	210679	Service hot water system Banksia Park U55	86.75
				INV	13/11/2018	210700	Service hot water system Banksia Park U29	86.75
				INV	14/11/2018	210788	Various plumbing repairs Banksia Park	266.00
				INV	14/11/2018	210592	Relight gas hot water system Banksia Park U19	136.25
				INV	15/11/2018	00210610	Install emergency wash and shower unit	7,535.00
				INV	12/11/2018	210737	Service and clear drains John Wellard Centre	875.91
3786.8979-01		Vocus Communications	1,694.00	INV	14/11/2018	P344765	Monthly internet service November 18	1,694.00
3786.8998-01		McLeods	6,331.82	INV	14/11/2018	105527	Legal fee Matter No 43330	457.60
				INV	14/11/2018	105541	Legal fee Matter No 43250	1,489.07
				INV	13/11/2018	42958	Legal fee Matter No 42958	656.70
				INV	13/11/2018	105593	Legal Expenses - Matter No. 43401	3,728.45
3786.903-01		Lo-Go Appointments	5,948.89	INV	15/11/2018	00418560	Temp staff week ending 271018	2,136.82
				INV	15/11/2018	00418520	Temp staff week ending 201018	2,136.82
				INV	14/11/2018	00418229	Temp staff week ending 010918	1,675.25
3786.9044-01		TenderLink	201.30	INV	13/11/2018	AU-259166	Tenderlink service	201.30
3786.9114-01		D P & L W Webb	200.00	INV	14/11/2018	31/10/18	10 x big box story book	200.00
3786.9121-01		Rebound Arena	550.00	INV	15/11/2018	13705473-35921	Excursion on 220119 Deposit	550.00
3786.9139-01		Sibylle Diane Gwenrelle	100.00	RFD	14/11/2018	1362435	Refund bond Hall hire 231018	100.00

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3786.9344-01		Critical Room Solutions Pty Ltd	385.00	INV	13/11/2018	00000274	Yearly signage subscription	385.00
3786.9345-01		Accidental Health & Safety Perth	750.73	INV	14/11/2018	614440	Oxygen unit	344.87
				INV	14/11/2018	614495	Wound Dressing	405.86
3786.9511-01		Baldivis Childrens Forest	220.00	INV	15/11/2018	1123	Term 4 Playgroup in the Park	220.00
3786.9547-01		Retech Rubber	2,277.00	INV	14/11/2018	00002590	Repair playground Orelia Pavilion	401.50
				INV	14/11/2018	00002606	Repair playground Thomas Oval	324.50
				INV	14/11/2018	00002612	Repair edgings and rubber soft falls Emerald Park	1,127.50
				INV	14/11/2018	00002635	Repair soft fall Wellard Park	423.50
3786.9572-01		Aaron Thomas	650.00	INV	14/11/2018	103	Spring Open Mic event	650.00
3786.9590-01		My Media Intelligence Pty Ltd	702.44	INV	13/11/2018	INV-0962	Monthly monitoring coverage	702.44
3786.9712-01		Gem Property Sales & Management	1,152.00	INV	13/11/2018	7.5	Rates Refund	1,152.00
3786.978-01		Microcom Pty Ltd trading as MetroCo	620.40	INV	14/11/2018	INV026794	Road cleats and vent plugs	620.40
3786.9783-01		Fleetwood Pty Ltd	28,399.46	INV	14/11/2018	SI27829	Refund of retentions Bertram Oval facility	28,399.46
3786.9855-01		African Oz Drum 'N' Dance	450.00	INV	15/11/2018	248	Incursion on 310119	450.00
3786.9865-01		Amazing Clean Rockingham	365.00	INV	14/11/2018	C9339	Cleaning of venetian blinds Banksia Park U19	365.00
3786.9945-01		Jo-Anne Fichtner	100.00	RFD	14/11/2018	1354162	Refund bond Patio hire 091018	100.00
3786	28/11/2018	EFT TRANSFER: - 16/11/2018	-663.22				Payment Reversal Creditor #10673	
3787	16/11/2018	EFT TRANSFER: - 16/11/2018	251,921.62					
3787.10152-01		SuperChoice	251,921.62	INV	31/10/2018	October2018-01	Superannuation-October2018-01	183,615.38
				INV	31/10/2018	October2018-03	Superannuation-October2018-03	4,959.24
				INV	31/10/2018	October2018-06	Superannuation-October2018-06	2,745.14
				INV	31/10/2018	October2018-07	Superannuation-October2018-07	3,430.04
				INV	31/10/2018	October2018-13	Superannuation-October2018-13	1,631.67
				INV	31/10/2018	October2018-14	Superannuation-October2018-14	6,229.51
				INV	31/10/2018	October2018-16	Superannuation-October2018-16	1,131.93
				INV	31/10/2018	October2018-17	Superannuation-October2018-17	11,084.64
				INV	31/10/2018	October2018-18	Superannuation-October2018-18	2,015.38
				INV	31/10/2018	October2018-20	Superannuation-October2018-20	405.75
				INV	31/10/2018	October2018-21	Superannuation-October2018-21	922.07
				INV	31/10/2018	October2018-22	Superannuation-October2018-22	264.30

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				INV	31/10/2018	October2018-24	Superannuation-October2018-24	2,636.33
				INV	31/10/2018	October2018-28	Superannuation-October2018-28	52.82
				INV	31/10/2018	October2018-29	Superannuation-October2018-29	697.63
				INV	31/10/2018	October2018-30	Superannuation-October2018-30	1,058.55
				INV	31/10/2018	October2018-37	Superannuation-October2018-37	1,173.26
				INV	31/10/2018	October2018-43	Superannuation-October2018-43	194.65
				INV	31/10/2018	October2018-46	Superannuation-October2018-46	2,011.04
				INV	31/10/2018	October2018-48	Superannuation-October2018-48	1,026.83
				INV	31/10/2018	October2018-50	Superannuation-October2018-50	493.29
				INV	31/10/2018	October2018-53	Superannuation-October2018-53	903.92
				INV	31/10/2018	October2018-54	Superannuation-October2018-54	1,208.22
				INV	31/10/2018	October2018-55	Superannuation-October2018-55	1,868.74
				INV	31/10/2018	October2018-56	Superannuation-October2018-56	1,139.39
				INV	31/10/2018	October2018-58	Superannuation-October2018-58	462.51
				INV	31/10/2018	October2018-59	Superannuation-October2018-59	1,778.94
				INV	31/10/2018	October2018-60	Superannuation-October2018-60	1,116.57
				INV	31/10/2018	October2018-61	Superannuation-October2018-61	502.04
				INV	31/10/2018	October2018-63	Superannuation-October2018-63	280.50
				INV	31/10/2018	October2018-65	Superannuation-October2018-65	637.46
				INV	31/10/2018	October2018-66	Superannuation-October2018-66	447.74
				INV	31/10/2018	October2018-67	Superannuation-October2018-67	1,388.76
				INV	31/10/2018	October2018-72	Superannuation-October2018-72	946.14
				INV	31/10/2018	October2018-73	Superannuation-October2018-73	1,320.80
				INV	31/10/2018	October2018-75	Superannuation-October2018-75	76.48
				INV	31/10/2018	October2018-76	Superannuation-October2018-76	285.74
				INV	31/10/2018	October2018-77	Superannuation-October2018-77	1,414.73
				INV	31/10/2018	October2018-78	Superannuation-October2018-78	533.18
				INV	31/10/2018	October2018-79	Superannuation-October2018-79	1,130.31
				INV	31/10/2018	October2018-80	Superannuation-October2018-80	1,779.80
				INV	31/10/2018	October2018-81	Superannuation-October2018-81	533.20
				INV	31/10/2018	October2018-82	Superannuation-October2018-82	3,811.89
				INV	31/10/2018	October2018-83	Superannuation-October2018-83	407.88
				INV	31/10/2018	October2018-84	Superannuation-October2018-84	167.23
<hr/>								
3788	22/11/2018	EFT TRANSFER: - 23/11/2018	6,307.00					
3788.2853-01		Maxxia Pty Ltd	5,138.60	INV	18/11/2018	PY01-11-Maxxia P	Payroll Deduction	2,429.44

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				INV	18/11/2018	PY01-11-Maxxia P	Payroll Deduction	2,709.16
3788.3376-01		Health Insurance Fund of WA (HIF)	1,168.40	INV	18/11/2018	PY01-11-Health I	Payroll Deduction	1,168.40
3789	22/11/2018	EFT TRANSFER: - 23/11/2018	936,498.25					
3789.10015-01		Kleenit Pty Ltd	550.00	INV	20/11/2018	127608	Removal of graffiti from water tank	550.00
3789.10080-01		Josh Humphreys Creative	150.00	INV	15/11/2018	11/11/2018	Coastcare Project Graphics design	150.00
3789.10081-01		Peter Bryan Stevenson	250.00	INV	20/11/2018	16thNovember2018	Senior Security Subsidy Scheme 2018	250.00
3789.10202-01		Facilities First Australia	539.00	INV	21/11/2018	150714	Darius Wells Library and Resource Centre Carpet	539.00
3789.10311-01		Go Doors Pty Ltd	909.15	INV	20/11/2018	407760	Recquatic Bifold doors to court yard repairs	286.00
				INV	20/11/2018	80050	Parmelia House Main door auto-closure function repair	623.15
3789.1034-01		North Lake Electrical Pty Ltd	1,382.70	INV	19/11/2018	52356	Electrical repairs Gawler Way	1,382.70
3789.10459-01		Propel Youth Arts WA	55.00	INV	21/11/2018	13	Subsidised fee payment for Lyrik participants	55.00
3789.10535-01		Tuhoronuku	200.00	RFD	21/11/2018	1348303	Refund bond Hall hire 280918	200.00
3789.10548-01		RSPCA WA Inc	933.05	INV	20/11/2018	13thNovember18	City of Kwinana Staff Donation	933.05
3789.10583-01		Green Services	2,600.00	INV	21/11/2018	1219	Compost workshop 171118	2,600.00
3789.1059-01		Vodafone Messaging	176.00	INV	20/11/2018	11215451	Pager Network Access fee November 18	176.00
3789.10630-01		Summers Consulting	1,507.00	INV	21/11/2018	INV-605	Mosquito Monitoring 021118	1,507.00
3789.10641-01		The Event Mill	27,500.00	INV	16/11/2018	11522	Event Budget Rock Symphony Spectacular 2018	27,500.00
3789.10645-01		Tredwell Management Services	21,881.20	INV	21/11/2018	00000634	Feasibility Study & Business Plan for Wellard	21,881.20
3789.10683-01		Imex Solutions WA Pty Ltd	1,089.00	INV	20/11/2018	00000804	Set up and fresh Live to Test	544.50
				INV	20/11/2018	00000802	HP Trim services 200118	544.50
3789.10686-01		Moving on Removals	450.00	INV	19/11/2018	1055	Furniture removals 311018	450.00
3789.10688-01		Fremantle Futsal Club	150.00	INV	16/11/2018	KS026645	Kidsport voucher	150.00
3789.10692-01		Lesley Jean Baohm	1,000.00	INV	22/11/2018	19thNovember18	2018/19 Rates Incentive Prize Winner	1,000.00
3789.10693-01		Krystal Murace	1,000.00	INV	20/11/2018	15thNovember2018	2018/19 Rates Incentive Prize Winner	1,000.00
3789.10694-01		Ian Lawrence Jefferys	250.00	INV	20/11/2018	16thNovember18	Senior Security Subsidy Scheme 2018	250.00



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3789.10695-01		Elizabeth Sarah Breznansky	250.00	INV	20/11/2018	16thNovember18	Senior Security Subsidy Scheme 2018	250.00
3789.10696-01		Charles Ernest Humfrey	250.00	INV	20/11/2018	16thNovember18	Senior Security Subsidy Scheme 2018	250.00
3789.10697-01		Doreen Lawes	250.00	INV	20/11/2018	16thNovember18	Senior Security Subsidy Scheme 2018	250.00
3789.10698-01		Quiana Rolton	100.00	RFD	21/11/2018	1374117	Refund bond Patio hire 091118	100.00
3789.10699-01		Umarah Manzoor	100.00	RFD	21/11/2018	1371162	Refund bond Patio hire 051118	100.00
3789.10700-01		Suzana Peters	2,000.00	RFD	21/11/2018	1361973	Refund bond Hall hire 171118	2,000.00
3789.10701-01		Marlon Panes Pabilona	1,000.00	RFD	21/11/2018	1336191	Refund bond Hall hire 050918	1,000.00
3789.10702-01		Tamika Richardson	100.00	RFD	21/11/2018	1324352	Refund bond Hall hire 150818	100.00
3789.10703-01		Hayley Johanson	100.00	RFD	21/11/2018	1320578	Refund bond Patio hire 300718	100.00
3789.10704-01		Lee Fletcher	100.00	RFD	21/11/2018	1315915	Refund bond Patio hire 250618	100.00
3789.10705-01		Malissa Kelly	100.00	RFD	21/11/2018	1318188	Refund bond Patio hire 180718	100.00
3789.10706-01		Karla Hitchcock	100.00	RFD	21/11/2018	1315093	Refund bond Hall hire 150618	100.00
3789.10707-01		Raylene Indich	1,600.49	RFD	21/11/2018	1324787	Refund bond hall hire 200818	128.29
				RFD	21/11/2018	1317720	Refund bond Hall hire 120718	1,000.00
				RFD	21/11/2018	1338269	Refund bond Hall hire 110918	150.00
				RFD	21/11/2018	1346227	Refund bond Hall hire 250918	150.00
				RFD	21/11/2018	1354159	Refund bond Hall hire 081018	172.20
3789.10708-01		Manoj Chaitanya Goud Gandu	540.00	INV	21/11/2018	A/N22535	Crossover subsidy rebate	540.00
3789.10709-01		Vinish Varghese Payyappilly	360.00	INV	21/11/2018	A/N22094	Crossover subsidy rebate	360.00
3789.10710-01		Saket Digvijay Podisetty	540.00	INV	21/11/2018	A/N19490	Crossover subsidy rebate	540.00
3789.10711-01		Russell Francis McKenney	540.00	INV	21/11/2018	A/N23285	Crossover subsidy rebate	540.00
3789.10713-01		Channel 7 Telethon Trust	1,082.23	INV	21/11/2018	19thNovember18	City of Kwinana staff donation	1,082.23
3789.10714-01		Charlie Teo Foundation	1,082.23	INV	21/11/2018	13thNovember18	City of Kwinana staff donation	1,082.23
3789.10715-01		Newsonic Pty Ltd	140,006.98	INV	22/11/2018	20thNovember18	Reimbursement of DCA5 Stage 3	140,006.98
3789.11-01		ABA Automatic Gates	1,212.27	INV	20/11/2018	IN080659	Replace boom gate	1,212.27
3789.1142-01		Sonic Health Plus	396.00	INV	19/11/2018	1639259	Pre employment medicals 241018	198.00
				INV	19/11/2018	1641548	Pre employment medical 291018	198.00
3789.1157-01		Quality Traffic Management Pty Ltd	36,988.98	INV	20/11/2018	23676	Provision of Traffic Management	6,482.58

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				INV	20/11/2018	23674	Contract 608KWN16 Provision of Traffic Management	30,506.40
3789.1178-01		Holcim (Australia) Pty Ltd	1,541.76	INV	20/11/2018	9406050465	26 Coleford Road Wellard 1 M3 concrete	429.44
				INV	21/11/2018	9406056123	Cnr Pace Road and Harley Way Medina 2 M3 concrete	598.40
				INV	19/11/2018	9406038356	1.6m3 concrete	513.92
3789.1249-01		Royal Life Saving Society	2,740.00	INV	20/11/2018	95515	Staff lifeguard re-qualification course 061018	2,740.00
3789.1265-01		Sai Global Ltd	545.36	INV	19/11/2018	SAIG11S-880577	Luminaires for road and street lighting	116.78
				INV	19/11/2018	SAIG11S-880576	Lighting for roads and public spaces	139.19
				INV	16/11/2018	SAIG11S-877590	SAI Global Licence for 12 months	289.39
3789.1272-01		Sanity Music Stores Pty Limited	59.99	INV	20/11/2018	40807	Junior DVD's for Library	59.99
3789.130-01		Australasian Performing Rights	1,986.27	INV	16/11/2018	00119956/00071	Fitness centres Background music per member	1,986.27
3789.1360-01		Saint John Ambulance Australia (WA)	256.00	INV	16/11/2018	FAINV00158331	Provide First Aid Training	128.00
				INV	16/11/2018	FAINV00157540	Provide First Aid Training	128.00
3789.1369-01		Premier & Cabinet Department of	118.80	INV	19/11/2018	161789	Advertising 021118	118.80
3789.1393-01		Sunny Sign Company Pty Ltd	841.50	INV	20/11/2018	398527	Signs x 20	841.50
3789.1455-01		Returned Services League Of Austral	88.00	INV	16/11/2018	0112	1 x Wreath provided for Remembrance Day 2018	88.00
3789.1516-01		Trisley's Hydraulic Services Pty Lt	3,253.80	INV	20/11/2018	108389	Supply parts for service of pool pump	385.00
				INV	21/11/2018	80203095	Strip and clean all soda ash pump	434.28
				INV	21/11/2018	80203096	Clean and inspection of all backwash pumps	212.52
				INV	21/11/2018	80203115	Supply and install new backwash sump pump	2,222.00
3789.1614-01		Westbooks	56.19	INV	20/11/2018	301407	Junior book selection for Story Time	12.57
				INV	20/11/2018	301406	Junior books	7.39
				INV	20/11/2018	301405	Junior popular titles to complete series	36.23
3789.1733-01		McMullen Nolan Group Pty Ltd	32,835.00	INV	20/11/2018	95541	Street Tree and Public Open Space Spatial Data Con	32,835.00
3789.1833-01		Host Direct	364.65	INV	20/11/2018	156989	Dishwasher chemicals	42.90
				INV	20/11/2018	156983	Dishwasher chemicals	226.05
				INV	20/11/2018	156984	Dishwasher chemicals	95.70
3789.188-01		Beaurepaires Tyres Kwinana	183.36	INV	20/11/2018	U548351033	Fitting light truck and balance light truck	61.96

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				INV	20/11/2018	U548351121	Puncture and balance light truck	69.74
				INV	20/11/2018	U548351048	Puncture and balance light truck	51.66
3789.19-01		Absolute Painting Services	2,574.00	INV	20/11/2018	INV-0686	Magenup Equestrian Centre Main Hall Flooring	858.00
				INV	15/11/2018	INV-0684	APU 52 complete repaint throughout unit	1,716.00
3789.2024-01		Institute of Public Works Engineeri	957.50	INV	15/11/2018	23683	Plant and Vehicle Management Workshop	434.50
				INV	19/11/2018	23666	Practice Notes	523.00
3789.2097-01		Beaver Tree Services Aust Pty Ltd	39,773.62	INV	20/11/2018	67660	November Verge Tree Watering	3,893.38
				INV	19/11/2018	67648	Tree watering Industrial Area week ending 021118	1,582.49
				INV	19/11/2018	67630	Tree watering week ending 021118	2,281.88
				INV	16/11/2018	67675	Power line Clearance Zone 4 as per 601KWN16	32,015.87
3789.2121-01		Suez	333,162.59	INV	19/11/2018	164288	Waste collection October 18	148,113.20
				INV	19/11/2018	28942500	Mixed Waste collection October 18	183,894.61
				INV	19/11/2018	28990683	General waste October 18	927.08
				INV	19/11/2018	28998802	Comingle Recycle Skip Bin 301018	227.70
3789.2125-01		Synergy	11,495.30	INV	16/11/2018	198694990Nov18	Admin Parmelia House and Art Centre 43U	11,495.30
3789.218-01		Bob Jane T-Mart	1,846.00	INV	20/11/2018	137142	Tyre alignment	515.00
				INV	20/11/2018	137295	Alignment Thrust	921.00
				INV	16/11/2018	137001	Tyre replacements	410.00
3789.2410-01		ABCO Products	716.96	INV	16/11/2018	369733	10L bucket and lid	27.68
				INV	20/11/2018	370347	Cleaning products	689.28
3789.248-01		Bunnings Building Supplies	684.27	INV	20/11/2018	2163/01526272	1 x Marquee 3 x 3m easy up non permanent gazebo	89.00
				INV	15/11/2018	2163/01614700	Wells Park Ablutions/Kwinana Park	38.07
				INV	16/11/2018	2163/01616136	TV Wall Bracket	69.35
				INV	20/11/2018	2163/01616651	Hardware items for Family Day Care	151.82
				INV	20/11/2018	2163/01526053	Items for shelving Darius Wells	63.64
				INV	20/11/2018	2163/01617048	Hardware parts for Wellard Pavilion	51.08
				INV	21/11/2018	2163/01697644	Painting supplies for Recquatic	86.04
				INV	21/11/2018	2163/01698054	Treated pine for Wandl hall	135.27
3789.2638-01		Metrocon Pty Ltd	17,630.80	INV	21/11/2018	20591	Wellard Pavilion Store room Claim 2	17,630.80

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3789.2652-01		Modern Teaching Aids Pty Ltd	115.94	INV	21/11/2018	43509549	Assorted paints	115.94
3789.2852-01		Downer EDI Works Pty Ltd	158.53	INV	16/11/2018	9307612	Emulsion 200L	158.53
3789.2903-01		Connect CCS	2,787.79	INV	20/11/2018	00094239	Overcalls fee for October	2,787.79
3789.2937-01		Bolinda Publishing Pty Ltd	425.57	INV	16/11/2018	129919	Playaway Audio players x 4	425.57
3789.2971-01		Local Community Insurance Services	660.00	INV	21/11/2018	051-619179	Insurance Uninsured buskers and performers	660.00
3789.302-01		Chadson Engineering	144.65	INV	16/11/2018	A0079552	Palintest tablets	144.65
3789.3105-01		Poly Pipe Traders	1,889.37	INV	20/11/2018	0009439	Assorted retic parts	179.70
				INV	20/11/2018	00094030	Assorted retic parts	1,709.67
3789.3212-01		Marketforce Pty Ltd	3,005.23	INV	19/11/2018	24325	Advertising online 230918	165.94
				INV	19/11/2018	24326	Advertising online 280918	185.36
				INV	19/11/2018	24328	Advertising online 051018	185.36
				INV	19/11/2018	24329	Advertising online 051018	185.36
				INV	19/11/2018	24330	Advertising online 121018	185.36
				INV	19/11/2018	24338	Advertising online 241018	185.36
				INV	19/11/2018	24337	Advertising 191018	317.66
				INV	19/11/2018	24331	Advertising 191018	436.90
				INV	19/11/2018	24332	Advertising 121018 Bike and Walk Plan	317.66
				INV	19/11/2018	24336	Advertising 191018 & 261018	840.27
3789.3293-01		Signaltech	165.00	INV	16/11/2018	3364	APU 47 Tighten tv point at wall	165.00
3789.335-01		City of Rockingham	31,791.44	INV	20/11/2018	102033	Tip fees to 011118	31,791.44
3789.339-01		Civica Pty Ltd	6,124.95	INV	15/11/2018	M/LG009463	License, Support & Maintenance Period 01/09/2017	6,124.95
3789.342-01		CJD Equipment Pty Ltd	896.43	INV	20/11/2018	1778530	Rocker Arm	41.78
				INV	20/11/2018	1779468	Switch V70369708	121.21
				INV	16/11/2018	006230380	Volvo mechanical equipment and induction sensor	733.44
3789.3423-01		Andrea Harold	250.00	INV	19/11/2018	29thOctober18	Reimbursement of dish stands Family Day Care	250.00
3789.3424-01		Dale Alcock Homes Pty Ltd	1,152.65	INV	31/10/2018	24thOctober18	Refund building fee permit BP2018/652	1,152.65
3789.349-01		Clever Designs	733.00	INV	16/11/2018	16482	City Collection Front Panel T Shirts	733.00

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3789.358-01		Coastline Mowers	4,707.30	INV	16/11/2018	18525 # 4	WAP8075 Low profile wheel and tyre 18X10.5-10	964.60
				INV	16/11/2018	18539 # 4	Fuel and oil filters	44.95
				INV	16/11/2018	18540 # 4	Bearings seals and O rings	232.95
				INV	16/11/2018	18605 # 5	Blade set and holders	901.60
				INV	16/11/2018	18645 # 5	Nuts and bolts	288.00
				INV	16/11/2018	18524 # 4	Blade flails and hub	391.60
				INV	20/11/2018	18655 # 5	General nuts, bolt and washers	912.60
				INV	20/11/2018	18711 # 4	RBP53472201000 Front wheel and tyre	686.00
				INV	20/11/2018	18715 # 5	SIU361-2088-313-145, High flow pump 13.6LM	285.00
3789.3583-01		Altiform	5,126.00	INV	16/11/2018	01019107	Parkline Range Bench Seat	5,126.00
3789.36-01		ADH Fencing	77.00	INV	15/11/2018	00005064	100 x inline insulators	77.00
3789.362-01		Cockburn Party Hire	2,480.03	INV	15/11/2018	00003617	Arts and Culture Awards Event 2018 Festoon lights	1,850.03
				INV	15/11/2018	00003839	Arts and Culture Awards Event 2018 Festoon lights	630.00
3789.3686-01		KAJ Installations & Services	232.00	INV	15/11/2018	00004946	APU Garage 19 Supply and program 2x new remote con	116.00
				INV	15/11/2018	00004945	APU Garage No. 5. Supply and program 2x remote	116.00
3789.3977-01		MRP Osborne Park-General Pest/Termi	10,154.97	INV	15/11/2018	77213	Pest Control Senior Citizens	352.94
				INV	15/11/2018	77238	Pest Control Darius Wells	217.00
				INV	15/11/2018	77220	Pest Control Darius Wells	197.00
				INV	15/11/2018	77237	Pest Control Calista Tennis Club	111.24
				INV	15/11/2018	77212	Pest Control Depot	255.00
				INV	15/11/2018	77214	Pest Control Smirks Cottage	366.71
				INV	15/11/2018	77210	Pest Control Feilman Building	246.17
				INV	15/11/2018	77208	Pest Control Recquatic	247.00
				INV	15/11/2018	77209	Pest Control Incubator	187.00
				INV	15/11/2018	77211	Pest Control Admin Building	724.79
				INV	15/11/2018	77218	Pest Control Sloans Cottage	708.37
				INV	15/11/2018	77239	Pest Control Zone	215.00
				INV	15/11/2018	77221	Pest Control Zone	434.00
	INV	15/11/2018	77217	Pest Control Out of School Care	128.54			

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				INV	15/11/2018	77215	Pest Control Leda Hall	283.25
				INV	15/11/2018	77216	Pest Control Wellard Pavilion	321.31
				INV	20/11/2018	77433	Pest Control Depot	217.00
				INV	20/11/2018	77383	Pest Inspection Depot	155.94
				INV	20/11/2018	77384	Pest Control Fiona Harris Pavilion	230.00
				INV	20/11/2018	77446	Pest Inspection Stidworthy	187.00
				INV	20/11/2018	77444	Pest Inspection Victory Life	187.00
				INV	20/11/2018	77445	Pest Inspection Rhodes Park	108.50
				INV	20/11/2018	77443	Pest Inspection Mandogalup Station	272.00
				INV	20/11/2018	77441	Pest Inspection William Bertram Centre	197.00
				INV	20/11/2018	77442	Pest Inspection Challenger Beach	108.50
				INV	20/11/2018	77438	Pest Control Fiona Harris	235.66
				INV	20/11/2018	77439	Pest Control Thomas Kelly	474.08
				INV	20/11/2018	77440	Pest Control John Wellard Centre	667.00
				INV	20/11/2018	77437	Pest Control Smirk Cottage	257.50
				INV	20/11/2018	77436	Pest inspection Sloan House	83.53
				INV	20/11/2018	77435	Pest inspection Rotary Club	105.06
				INV	20/11/2018	77434	Pest inspection Medina Hall	289.97
				INV	20/11/2018	77432	Pest Control Margaret Feilman	205.00
				INV	20/11/2018	77431	Pest Control Thomas Oval	235.66
				INV	20/11/2018	77430	Pest Control Recquatic	362.25
				INV	20/11/2018	77219	Pest Control Wheatfield Cottage	472.50
				INV	20/11/2018	77265	Pest Control Wheatfield Cottage	108.50
3789.407-01		Winc Australia Pty Ltd	1,986.56	INV	20/11/2018	9025867655	Stationery Darius Wells	391.01
				INV	20/11/2018	9025889478	Stationery	7.88
				INV	16/11/2018	9025740230	Canon desktop calculator Post it notes	70.20
				INV	16/11/2018	9025822616	Printing Paper Business Incubator 15 Boxes	308.88
				INV	19/11/2018	9025880142	Stationery	1,147.11
				INV	19/11/2018	9025217404	Stationery Depot	61.48
3789.4106-01		Kennards Hire Rockingham - Generato	175.00	INV	21/11/2018	19898561	Turf cutter hire for 13 November	175.00

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3789.4125-01		LD Total	14,490.71	INV	20/11/2018	95033	Landscape maintenance Wellard Village October 18	6,561.23
				INV	20/11/2018	95024	Landscape maintenance Emerald Park October 18	1,135.94
				INV	20/11/2018	95022	Landscape maintenance Belgravia October 18	1,118.79
				INV	20/11/2018	95026	Landscape maintenance Honeywood October 18	4,475.13
				INV	20/11/2018	95031	Landscape maintenance Sunrise Estate October 18	202.86
				INV	20/11/2018	95037	Landscape maintenance Whistling Grove October 18	348.34
				INV	20/11/2018	95028	Landscape maintenance Honeywood October 18	281.20
				INV	20/11/2018	95035	Landscape maintenance Wellard Glen October 18	367.22
3789.413-01		Covs Parts Pty Ltd	777.15	INV	20/11/2018	1650090486	2.5kg Fire Ext ABE	151.56
				INV	20/11/2018	1650090675	2 x alternator dot, 1 x aircon belt	24.24
				INV	20/11/2018	8/11/18	Brake shoes KWN1896	52.00
				INV	20/11/2018	1650091615	Air and fuel filters	549.35
3789.4134-01		WA Independant Steel	220.00	INV	20/11/2018	8896	Reo bar	220.00
3789.4279-01		Data #3 Limited	339.34	INV	20/11/2018	01773399	Ink cartridges	339.34
3789.4350-01		T J Depiazzi & Sons	3,185.60	INV	21/11/2018	96918	Supply and Deliver 50m3 of Pinebark Mulch	3,185.60
3789.4719-01		Complete Office Supplies Pty Ltd	264.07	INV	20/11/2018	07903691	Stationery Library	221.72
				INV	20/11/2018	07904979	Stationery Library	42.35
3789.4790-01		Spotlight Pty Ltd	96.21	INV	16/11/2018	0065010744238	Floor Rug for reading area at Kwinana Recquatic	59.99
				INV	16/11/2018	0065010740339	2 x cellophane bags	36.22
3789.4861-01		Big W	427.69	INV	16/11/2018	176949	Items for School Holiday Program	89.50
				INV	16/11/2018	176950	Gift baskets for prizes for Wellard Twilight	100.00
				INV	16/11/2018	176688	Christmas Decorations John Wellard Community Centre	199.94
				INV	21/11/2018	176955	Items for Girls Group activity	38.25
3789.4891-01		Display Me	111.31	INV	20/11/2018	N0114549	Steel Mesh Brochure Holder Stand	111.31
3789.492-01		Dianne Stronach	96.70					

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				INV	19/11/2018	12November18	Reimbursement of photo frames Family Day Care	96.70
3789.50-01		Dept of Primary Industries & Region	880.50	INV	21/11/2018	7161939	Treatment of plants found with Tordon granules	880.50
3789.5279-01		OCP Sales	4,439.60	INV	20/11/2018	00049837	UHF radios	2,816.00
				INV	15/11/2018	00049815	Vertex VX456 CB 80 CB IP67 waterproof	1,623.60
3789.5288-01		West Oz Wildlife	467.50	INV	20/11/2018	1561	Outdoor Movie entertainment 101118	467.50
3789.5581-01		Totally Workwear Rockingham	82.43	INV	21/11/2018	RK5186.D1	Various replacement hats and nets for summer	82.43
3789.5627-01		Tyrecycle Pty Ltd	280.60	INV	20/11/2018	735094	Tyre collection	280.60
3789.5646-01		Bent Logic	946.00	INV	20/11/2018	00032575	RFID key tag	946.00
3789.5743-01		Programmed Maintenance Services Ltd	10,017.52	INV	20/11/2018	SINV535928	Gardening & Lawn mowing October 18	10,017.52
3789.5750-01		Kev's Wheelie Kleen	759.00	INV	15/11/2018	#3006	Administration Rubbish bins	66.00
				INV	15/11/2018	#3007	Darius Wells Library and Resource Centre	247.50
				INV	20/11/2018	3144	Administration Wheelie Bin Cleans 2 weekly	198.00
				INV	20/11/2018	3145	Darius Wells Library and Resource Centre	247.50
3789.5754-01		Talis Consultants Pty Ltd	2,562.36	INV	20/11/2018	17683	Groundwater Monitoring period 311018	2,562.36
3789.5823-01		Accord Security Pty Ltd	248.05	INV	15/11/2018	00023006	Darius Wells Library and Resource Centre Security	248.05
3789.5858-01		Vizcom Technologies	297.00	INV	20/11/2018	19753	Service microphone input Darius Wells	297.00
3789.5975-01		Shane Craig Beresford	350.00	INV	21/11/2018	19thNovember18	Reimburse for Team Building Milestone IT	350.00
3789.5995-01		Zenien Pty Ltd T/as ATFT Astuta Tru	7,834.97	INV	16/11/2018	I5777	Upgrade to William Bertram Centre CCTV system	6,723.97
				INV	16/11/2018	I5776	William Bertram CCTV Maintenance	1,111.00
3789.5996-01		CMS Engineering Pty Ltd	1,318.90	INV	20/11/2018	30339	Service air conditioner Incubator	744.70
				INV	20/11/2018	30340	Service air conditioner Senior Citizens	574.20
3789.6007-01		Adventure 4 x 4 Pty Ltd	350.00	INV	20/11/2018	4560 # 6	55X23 Bushranger Max Air III	350.00
3789.6018-01		ALSCO Pty Ltd	179.30	INV	16/11/2018	CPER1876823	Linen hire for OCM forums meetings	113.26
				INV	16/11/2018	CPER1885967	Linen hire for OCM forums meetings	66.04



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3789.6050-01		HiTech Sports Pty Ltd	555.50	INV	20/11/2018	2435	Replacement controller for stadium scoreboard	555.50
3789.6224-01		The Grant Finder	247.50	INV	20/11/2018	00129	Outdoor movie event	247.50
3789.6267-01		Woolworths Group Limited	873.46	INV	19/11/2018	3435144	Supplies for Mooditj Kulungars playgroup	52.38
				INV	16/11/2018	31160848	Catering and Admin goods	231.44
				INV	16/11/2018	3435138	Outdoor Movie night survey price voucher	200.00
				INV	16/11/2018	3435137	Sing for Your Life Community Concert supplies	99.00
				INV	16/11/2018	3435145	Milk for Zone general use	11.00
				INV	16/11/2018	3435139	Supplies for Family day care	62.50
				INV	20/11/2018	3435147	Food for Term 4 Master Chef program	20.56
				INV	20/11/2018	3038288	Consumables for John Wellard Centre	50.00
				INV	21/11/2018	31302998	Admin items	146.58
3789.6289-01		Clockwork Print	235.40	INV	16/11/2018	INV-0054938	Cling Window Stickers for John Wellard Community	235.40
3789.6368-01		ATI-Mirage Pty Ltd	3,740.00	INV	20/11/2018	00036188	PRINCE2 Foundation and Practitioner Training	3,740.00
3789.6370-01		Elexacom	15,758.34	INV	20/11/2018	24845	Medina Girl Guides Hall 1 x emergency light fail	829.98
				INV	20/11/2018	24850	Fiona Harris Pavilion Preventative Maintenance	1,042.72
				INV	20/11/2018	24849	Medina Girl Guides Emergency and Evacuation Lights	311.41
				INV	16/11/2018	24820	Call out to look at faulty hydro backwash pump RCD	236.34
				INV	16/11/2018	24846	APU16 - installation of weather GPO for new HWS	510.14
				INV	15/11/2018	24816	Kwinana Adventure Park Lighting on the toilet block	1,773.55
				INV	15/11/2018	24818	Bertram Oval Club Facility Preventative Maintenance	165.44
				INV	15/11/2018	24815	Bertram Oval Club Facility Preventative Maintenance	215.36
				INV	15/11/2018	24808	Margaret Feilman Centre Ground floor	444.96
				INV	15/11/2018	24812	Thomas Oval Pavilion Emergency and Evacuation Lights	311.41
				INV	15/11/2018	24819	Statement lights Cnr of Patterson Road and Office	654.35

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				INV	21/11/2018	24433	Mandogalup Fire Station PM Repairs Exit 3	603.55
							Failed	
				INV	21/11/2018	24446	Childcare/Clubrooms (Wandi) Emergency and Evacuation	77.86
				INV	20/11/2018	24700	Inspect lighting Callistemon Court U17	77.86
				INV	20/11/2018	24698	Investigate and service GPO Callistemon Court U27	81.87
				INV	20/11/2018	24697	Service GPO Callistemon Court U28	81.88
				INV	20/11/2018	24696	Service smoke alarm Callistemon Court U29	82.26
				INV	20/11/2018	24768	Service light switches Callistemon Court U72	523.09
				INV	20/11/2018	24893	Service light caging at the Zone	2,499.52
				INV	20/11/2018	24894	Preventative maintenance Thomas Kelly pavilion	3,665.39
				INV	20/11/2018	24898	PM Repairs Kwinana Tennis Club	1,324.26
				INV	20/11/2018	28413	Repair carpark lights	245.14
3789.6397-01		iikon	1,100.00	INV	15/11/2018	949	Facilitation of the Road Maintenance Cost Contribution	1,100.00
3789.6414-01		Janet Elizabeth Bramwell	104.00	INV	20/11/2018	15thNovember18	Reimbursement of Christmas items Darius Wells	104.00
3789.6639-01		Multispares Ltd	1,066.81	INV	20/11/2018	3273769	Disc Pad Set and Wear Indicator	1,066.81
3789.664-01		StrataGreen	1,147.28	INV	20/11/2018	100979	Horticultural items	1,147.28
3789.6812-01		Australian Grown	756.25	INV	15/11/2018	SI21813	50 x black bags with In Home Care Logo	187.00
				INV	15/11/2018	SI21722	140 x City shopper tote bag with black	569.25
3789.6860-01		Advance Scanning Services	770.00	INV	20/11/2018	20163027	HP Gas Supervision Sulphur Road Resurfacing	280.50
				INV	20/11/2018	20163003	Locate & Proving HP Gas main Gilmore Avenue	489.50
3789.694-01		Heatley Sales Pty Ltd	332.58	INV	19/11/2018	C849558	Safety boot	164.81
				INV	20/11/2018	C849926	Safety boot	167.77
3789.7-01		AAA Windscreens & Tinting	414.00	INV	16/11/2018	INV-41826	Supply and Fit RH Door Glass	414.00
3789.720-01		Hydramet Pty Ltd	118.25	INV	20/11/2018	75002960	Chlorine gas Hazchem sign	118.25
3789.7403-01		Jasman Enterprises Pty Ltd	308.00	INV	20/11/2018	00022970	Swivel S/Steel	308.00
3789.7436-01		Action Glass Pty Ltd	1,119.91	INV	20/11/2018	B19539	Reglazed window panels Family Day Care	750.86
				INV	15/11/2018	B 17562	156 Medina Avenue repair window	369.05

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3789.7488-01		Caroline Helen Henning	25.00	INV	21/11/2018	14thNovember18	Reimbursement of workshop 220918	25.00
3789.7490-01		Lifeline WA	1,082.24	INV	20/11/2018	13thNov2018	City of Kwinana Staff donation	1,082.24
3789.7551-01		Vanessa Liebenberg	2,000.00	INV	15/11/2018	010	Coastcare Project: Alcoa Mural for Orelia Primary	2,000.00
3789.7605-01		Flying Canape	2,054.00	INV	15/11/2018	11476	Function at Koorliny Arts Centre	2,054.00
3789.762-01		Blackwood & Sons Ltd	5,743.29	INV	19/11/2018	KW7432RH	Caps and smoke lenses	145.53
				INV	19/11/2018	PE7433RH	Smoke lenses	80.52
				INV	16/11/2018	KW0142RF	Uniform	195.25
				INV	16/11/2018	KW6592RF	Uniform	81.80
				INV	16/11/2018	PE2820RI	Bushmans 40% Deet tick repellent	108.02
				INV	16/11/2018	KW4402RF	Uniform	244.97
				INV	16/11/2018	KW1834RE	Uniform	14.04
				INV	16/11/2018	KW1869RE	Uniform	50.16
				INV	16/11/2018	KW0143RF	Uniform	120.67
				INV	16/11/2018	KW9527RF	Uniform	79.09
				INV	16/11/2018	KW4401RF	Uniform	244.97
				INV	16/11/2018	KW1873RE	Uniform	14.04
				INV	16/11/2018	KW1871RE	Uniform	50.16
				INV	16/11/2018	KW0148RF	Uniform	120.67
				INV	16/11/2018	KW0091RG	Uniform	79.09
				INV	16/11/2018	KW0162RF	Uniform	271.32
				INV	16/11/2018	KW1750RE	Uniform	50.16
				INV	15/11/2018	KW1728RE	Uniform	14.04
				INV	15/11/2018	KW0140RF	Uniform	244.97
				INV	15/11/2018	KW0139RF	Uniform	228.80
				INV	15/11/2018	KW1727RE	Uniform	14.04
				INV	15/11/2018	KW4400RF	Uniform	244.97
				INV	15/11/2018	KW1872RE	Uniform	50.16
				INV	15/11/2018	KW0145RF	Uniform	260.78
				INV	15/11/2018	KW1830RE	Uniform	14.04

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				INV	15/11/2018	KW4403RF	Uniforms	244.97
				INV	15/11/2018	KW1835RE	Uniforms	14.04
				INV	15/11/2018	KW1732RE	Uniforms	50.16
				INV	15/11/2018	KW0169RF	Uniforms	244.97
				INV	15/11/2018	KW0167RF	Uniforms	244.97
				INV	15/11/2018	KW1832RE	Uniforms	50.16
				INV	15/11/2018	KW1807RE	Uniforms	129.25
				INV	15/11/2018	KW0166RF	Uniforms	104.50
				INV	15/11/2018	KW9528RF	Uniforms	214.07
				INV	15/11/2018	KW1748RE	Uniforms	50.16
				INV	15/11/2018	KW1691RE	Uniforms	14.04
				INV	15/11/2018	KW4405RF	Uniforms	199.76
				INV	15/11/2018	KW1753RE	Uniforms	129.25
				INV	15/11/2018	KW7745RF	Uniforms	104.50
				INV	15/11/2018	KW0163RF	Uniforms	228.80
				INV	15/11/2018	KW1751RE	Uniforms	50.16
				INV	15/11/2018	KW1836RE	Uniforms	14.04
				INV	15/11/2018	KW4404RF	Uniforms	244.97
				INV	15/11/2018	KW0138RF	Uniforms	244.97
				INV	15/11/2018	KW1726RE	Uniforms	50.16
				INV	21/11/2018	KW4824RG	Uniforms	93.13
3789.7791-01		Befriend Inc	550.00	INV	15/11/2018	INV-0311	Facilitator for Skills Boosting and Networking	550.00
3789.7812-01		Starbucks Flooring	1,400.00	INV	20/11/2018	INV-000484	Install carpets Callistemon Court U72	1,400.00

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3789.7833-01		Kwinana Veterinary Hospital Pty Ltd	289.05	INV	15/11/2018	36342	Dog Euthanasia & Disposal	120.00
				INV	15/11/2018	36186	Dog Medication	49.25
				INV	15/11/2018	34930	Microchipping	65.00
				INV	15/11/2018	36205	Dog Medication	54.80
3789.7958-01		Rockingham Districts Little Athleti	65.00	INV	16/11/2018	KS026651	Kidsport voucher	65.00
3789.8224-01		Axiis Contracting	9,697.11	INV	19/11/2018	4063	Construct concrete footpath	9,697.11
3789.8227-01		Emerald Gardens and Landscaping	550.00	INV	15/11/2018	08/11/2018	Weed control at KIC Coastcare	550.00
3789.8234-01		Fire And Safety Australia Pty Ltd	2,000.00	INV	15/11/2018	TI020873	Permit Issuer training x 2 sessions on 7 November	2,000.00
3789.8302-01		Chris Kershaw Photography	990.00	INV	16/11/2018	L2347	Arts, culture and entertainment awards Thursday 8	440.00
				INV	15/11/2018	L2338	Photography for Citizenship Ceremonies	550.00
3789.8325-01		Envirosweep	11,981.20	INV	19/11/2018	59770	Carpark sweeping October 18	2,944.70
				INV	20/11/2018	59776	Footpath Sweeping as per tender contract	1,369.50
				INV	20/11/2018	59768	Road sweeping By Individual Road	3,241.70
				INV	20/11/2018	59934	Daintree loop, Sanctuary drive and Alexander Park	726.00
				INV	21/11/2018	60140	Road Sweeping per Suburb	3,699.30
3789.8337-01		Cancer Council WA	1,082.23	INV	21/11/2018	13thNovember18	City of Kwinana staff donation	1,082.23
3789.8400-01		Katherine Ann Schilling	122.94	INV	22/11/2018	22ndNovember18	Reimburse Hi Vis for security Symphony Spectacular	122.94
3789.8426-01		Pacific BioLogics Pty Ltd	3,108.16	INV	19/11/2018	20180731	Larval collection kit and Briquets bucket	3,108.16
3789.8539-01		TCS Instruments	675.40	INV	20/11/2018	1000480	Road tube 100m	675.40
3789.8582-01		Bushfire Prone Planning	572.00	INV	19/11/2018	BPP-18560	Bush Fire Management Advice	572.00
3789.8596-01		Bop Till You Drop WA	380.00	INV	16/11/2018	I5662	Incursion on 24 January 2019	380.00
3789.8649-01		Ezy2c GPS Tracking	604.01	INV	15/11/2018	60718	SMS Delivery Fee	78.65
				INV	15/11/2018	61147	12 mths Ezy2c Website Subscription Renewal	525.36

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3789.8815-01		AD Engineering International Pty Lt	528.00	INV	20/11/2018	21915	WAN Annual service cost for ADEI WAN 3G	528.00
3789.8899-01		Majestic Plumbing	7,317.87	INV	16/11/2018	210787	Service burst pipe Wellard Pavilion	333.63
				INV	16/11/2018	210807	Service hot water system Callistemon Court U43	327.49
				INV	20/11/2018	210858	Various plumbing repairs Callistemon Court U2	127.45
				INV	20/11/2018	210814	Casuarina/Wellard Fire Station - pressure pump	86.75
				INV	20/11/2018	210856	Service male toilet Calista Tennis Club	86.75
				INV	20/11/2018	00210823	Septic Tank Removal Medina Oval	6,355.80
3789.8996-01		Fridgair Industries Pty Ltd	1,331.37	INV	20/11/2018	31155	Service freezer in Zone	1,331.37
3789.8998-01		McLeods	7,530.01	INV	21/11/2018	105337	Legal Matter No. 42801	931.48
				INV	20/11/2018	105644	Legal Expenses Matter No. 43335	2,475.07
				INV	15/11/2018	105592	Legal Expenses Matter No 43302	1,315.60
				INV	15/11/2018	105591	Legal Expenses - Matter No 43301	574.75
				INV	15/11/2018	105590	Legal Expenses - Matter No 43276	2,233.11
3789.9019-01		Kearns Garden Supplies	415.60	INV	20/11/2018	53-Oct2018	Hardware items Callistemon Court	54.54
				INV	20/11/2018	54-Oct2018	Hardware items Banksia Park	361.06
3789.9030-01		Air Liquide Australia	490.15	INV	15/11/2018	VC8771	Hire of medical oxygen and Air Industrial	109.16
				INV	20/11/2018	VA9102	Hire of medical oxygen and Air Industrial	105.63
				INV	20/11/2018	FK7966	Hire of medical oxygen and Air Industrial	166.20
				INV	20/11/2018	UY9838	Hire of medical oxygen and Air Industrial	109.16
3789.903-01		Lo-Go Appointments	4,815.82	INV	20/11/2018	00418521	Temp staff week ending 201018	1,840.20
				INV	20/11/2018	00418600	Temp staff week ending 031118	1,183.22
				INV	20/11/2018	00418561	Temp staff week ending 271018	1,792.40
3789.905-01		Local Government Professionals	531.00	INV	19/11/2018	8691	Membership Subscriptions 2018/19	531.00
3789.9345-01		Accidental Health & Safety Perth	776.15	INV	16/11/2018	614724	First aid supplies	539.70
				INV	16/11/2018	614446	Oxygen unit (SN: 21906 and SN: 21111)	236.45
3789.9511-01		Baldivis Childrens Forest	22.00	INV	19/11/2018	1122	Forest visit 080918	22.00
3789.9520-01		Environmental Health Australia (New	550.00					

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				INV	16/11/2018	2512	I'm Alert Food Safety Program	550.00
3789.9547-01		Retech Rubber	4,774.00	INV	16/11/2018	00002603	Litchfield Park Honeywood trim back and infill	4,774.00
3789.9732-01		Builders Training of WA	189.45	INV	20/11/2018	00006170	Advanced Diploma of Building Surveying	189.45
3789.9764-01		Datacom Systems (AU) Pty Ltd - WA	1,903.00	INV	16/11/2018	INV0013883	Monthly Saas fee for website Nov 18	1,903.00
3789	27/11/2018	EFT TRANSFER: - 23/11/2018	-360.00				Payment Reversal Creditor #10712	
3790	23/11/2018	EFT TRANSFER: - 23/11/2018	146,077.04					
3790.565-01		Bright Futures Family Day Care - Pa	146,077.04	INV	23/11/2018	041118 TO 181118	FDC Payroll 041118 to 181118	500.00
				INV	23/11/2018	051118 to 181118	FDC Payroll 051118 to 181118	145,577.04
3791	23/11/2018	EFT TRANSFER: - 23/11/2018	28,606.30					
3791.568-01		Bright Futures In Home Care - Payro	28,606.30	INV	23/11/2018	041118 to 181118	IHC Payroll 041118 to 181118	24,499.20
				INV	23/11/2018	051118 to 181118	IHC Payroll 051118 to 181118	4,107.10
3792	26/11/2018	EFT TRANSFER: - 26/11/2018	89.94					
3792.727-01		iinet Technologies Pty Ltd	89.94	INV	26/11/2018	105644169	Monthly Internet Charges Wellard CC to 251218	89.94
3793	27/11/2018	EFT TRANSFER: - 27/11/2018	197,966.00				PAYG Tax Withheld	
3793.153-01		Australian Taxation Office	197,966.00	INV	18/11/2018	PY01-11-Australi	Payroll Deduction	197,966.00
3794	29/11/2018	EFT TRANSFER: - 30/11/2018	865,139.50					
3794.10227-01		Draeger Australia Pty Ltd	1,221.13	INV	28/11/2018	3904047462	BA sets yearly service and inspection	1,221.13
3794.1036-01		North Parmelia Primary School	250.00	INV	28/11/2018	27thNovember18	Lyrik Awards Round 23	250.00
3794.10365-01		Light Application Pty Ltd	792.00	INV	28/11/2018	00018496	Remote service access plan Medina Oval	792.00
3794.10373-01		Green Willows Industrial Cleaning a	450.00	INV	28/11/2018	24	Cleaning of Clubhouse and office	200.00
				INV	27/11/2018	23	Cleaning of Clubhouse and office	250.00
3794.1046-01		OCE Australia Ltd	541.53	INV	28/11/2018	1461793	Colourwave printer	307.74
				INV	28/11/2018	1460511	Monthly Charges for ColorWave 550 Scanner	233.79
3794.10506-01		Specialised Security Shredding	10.12	INV	28/11/2018	00304400	GC bin exchange 151118	10.12
3794.10507-01		David Wills and Associates	14,300.00	INV	29/11/2018	00029654	Building Assets Structural Integrity Audit	14,300.00
3794.10573-01		Promapp Pty Ltd	1,823.25	INV	28/11/2018	INV-1828	Saas monthly subscription November 18	1,823.25
3794.10673-01		Anthony Borg	663.22	INV	13/11/2018	7.5	Rates Refund	663.22

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3794.10685-01		Hi Speed Gas Pty Ltd	322.85	INV	27/11/2018	2016973	Repairs to oil fryer Recquatic	322.85
3794.10691-01		Canopy Adventure Pty Ltd	100.00	INV	29/11/2018	LPPCHDD9T	Deposit for Trees Adventure January SHP	100.00
3794.10717-01		Suitcase Circus	700.00	INV	28/11/2018	1183	Performance and skills sessions 300918	700.00
3794.10719-01		Ebonie Faith Cortez	250.00	INV	26/11/2018	22ndNovember18	Lyrik Award Round 22	250.00
3794.10721-01		Brian Trevor Rowe	100.00	RFD	27/11/2018	1213113	Refund bond Patio hire 291118	100.00
3794.10722-01		Carers WA	200.00	RFD	27/11/2018	1340598	Refund bond Hall hire 151118	200.00
3794.10723-01		Charlie Came	100.00	RFD	27/11/2018	1324352	Refund bond Hall hire 150818	100.00
3794.10724-01		Anita Buchanana	100.00	RFD	27/11/2018	1287547	Refund bond Hall hire 230418	100.00
3794.10725-01		Malisa Sothandara	100.00	RFD	27/11/2018	1238462	Refund bond Hall hire 080118	100.00
3794.10726-01		Jo Hicks	100.00	RFD	27/11/2018	1315207	Refund bond Hall hire 1315207	100.00
3794.10727-01		Lucinda Kate Sharman	100.00	RFD	27/11/2018	1322824	Refund bond Patio hire 130818	100.00
3794.10728-01		Sheena Dessent	100.00	RFD	27/11/2018	1340110	Refund bond Patio hire 120918	100.00
3794.10729-01		Serpentine Primary School	100.00	RFD	27/11/2018	1370908	Refund bond Hall hire 311018	100.00
3794.10730-01		Vanessa Mckay	300.00	RFD	27/11/2018	1258495	Refund bond Patio hire 230218	300.00
3794.10731-01		DRG Digital	2,800.60	INV	27/11/2018	2919	Bluebeam Revu subscription renewal	2,800.60
3794.10734-01		Paul James Bosworth	50.00	INV	28/11/2018	978440	Refund of 360L bin upgrade fee	50.00
3794.10735-01		Atoa Martin	262.90	INV	28/11/2018	20thNovember18	Refund of cancelled membership	262.90
3794.10736-01		Vineeta Kurien	30.00	INV	28/11/2018	19thNovember18	Refund swim lessons	30.00
3794.10737-01		Jacob Forsyth	175.00	INV	28/11/2018	21stNovember18	Financial assistance National Futsal Championship	175.00
3794.10739-01		Rockingham Toyota	39,158.21	INV	29/11/2018	RI21200025	Toyota Camry IGQE726	39,158.21
3794.1130-01		Port Printing Works	415.80	INV	28/11/2018	INV028625	School Holiday Program brochures	145.20
				INV	28/11/2018	INV028471	Business cards	93.50
				INV	28/11/2018	INV028458	Christmas Giveaway flyers Recquatic	90.20
				INV	28/11/2018	INV028460	Birthday Party flyer Recquatic	86.90
3794.1157-01		Quality Traffic Management Pty Ltd	46,594.29	INV	28/11/2018	25596	Update Traffic Management Plan	198.00
				INV	27/11/2018	26388	Traffic management for traffic counters	850.21
				INV	27/11/2018	26387	Traffic Management Gilmore avenue	1,841.66
				INV	27/11/2018	25955	Traffic management for street light repairs	1,556.34



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				INV	27/11/2018	26390	Lane closure for sump maintenance Gilmore Ave	803.13
				INV	27/11/2018	26389	Traffic management for street light repairs Gilmore	988.68
				INV	29/11/2018	26475	Traffic management 131118	920.83
				INV	28/11/2018	26456	Design traffic management plan	831.89
				INV	28/11/2018	25893	Traffic management Wandi Drive September 18	17,859.46
				INV	28/11/2018	26474	Traffic control 131118	729.74
				INV	28/11/2018	26470	Traffic control 011118	1,096.63
				INV	28/11/2018	26473	Traffic management 021118	588.50
				INV	28/11/2018	26471	Traffic management 151118	2,579.63
				INV	28/11/2018	26472	Contract 608KWN16 - Provision of Traffic Management	15,749.59
3794.1178-01		Holcim (Australia) Pty Ltd	979.44	INV	28/11/2018	9406064191	.4m3 concrete	256.08
				INV	28/11/2018	9406061700	.80m3 concrete	336.16
				INV	28/11/2018	9406058723	2m3 concrete	387.20
3794.1197-01		Repco Auto Parts	350.89	INV	28/11/2018	4330109991	Hydraulic filter	21.99
				INV	27/11/2018	4330109105	Parts	256.30
				INV	26/11/2018	4330109166	Parts	72.60
3794.1205-01		Ridleys Towing & Transport	625.00	INV	28/11/2018	3336	Bus cleaning September 18	60.00
				INV	28/11/2018	3334	Bus driver September 18	87.50
				INV	28/11/2018	3335	Bus driver 17 September 18	50.00
				INV	28/11/2018	3333	Bus cleaning August 18	100.00
				INV	28/11/2018	3331	Bus driver 060818	75.00
				INV	28/11/2018	3332	Bus driver August 2018 various	212.50
				INV	28/11/2018	3337	Bus cleaning November 18	40.00
3794.1245-01		Rotary Club of Kwinana Inc.	1,100.00	INV	27/11/2018	0000353	Traffic Management Plan Wellard Markets	1,100.00
3794.1249-01		Royal Life Saving Society	1,177.20	INV	27/11/2018	87881	Aquatics Certificates	1,177.20
3794.1266-01		Salmat Targeted Media Pty Ltd	2,652.94	INV	27/11/2018	1000606955	Distribution of postcards to 39,000 households	2,652.94
3794.1272-01		Sanity Music Stores Pty Limited	239.84	INV	26/11/2018	11023	Junior Music CD's for collection	239.84
3794.1276-01		Satellite Security Services	900.63	INV	26/11/2018	IV004253	Service creche auto door Darius Wells	735.63

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				INV	26/11/2018	IV004247	Replaced DGP02 battery John Wellard Centre	165.00
3794.1393-01		Sunny Sign Company Pty Ltd	74.25	INV	27/11/2018	396582	Littlemore Road signs	74.25
3794.1423-01		Telstra	209.79	INV	27/11/2018	1197198700Nov18	Charges to 160218 Mandog/Hope Valley Fire Stn	161.28
				INV	28/11/2018	0335568200Nov18	Usage to 091118 Banksia Park	48.51
3794.1474-01		Toll Transport Pty Ltd	110.66	INV	26/11/2018	1033777	Courier service 12 and 13/11/2018	110.66
3794.1516-01		Trisley's Hydraulic Services Pty Lt	983.40	INV	28/11/2018	80203119	Annual pool pump inspection Recquatic	983.40
3794.1520-01		Truck & Car Panel & Paint	500.00	INV	27/11/2018	00004076	Excess only 1EWS395	500.00
3794.1524-01		Turfmaster Facility Management	56,981.09	INV	28/11/2018	615931	Annual turf renovation program	9,776.04
				INV	28/11/2018	615935	Annual turf renovation program Wells park	2,755.48
				INV	28/11/2018	615927	Annual turf renovation Gilmore Senior Oval	11,091.70
				INV	28/11/2018	615928	Annual turf renovation program Gilmore Hockey	9,600.24
				INV	28/11/2018	615929	Annual turf renovation Wellard Oval	12,759.49
				INV	28/11/2018	615930	Annual turf renovation Bertram Oval	10,998.14
3794.1530-01		Wormald Australia Pty Ltd	1,702.25	INV	28/11/2018	7853529	Fire Extinguisher Replacement x 7	1,170.40
				INV	28/11/2018	7853527	Fire extinguisher and blanket replacement	256.30
				INV	28/11/2018	7853617	Exchange of fire extinguisher	275.55
3794.1572-01		Western Australian Local Government	1,012.00	INV	28/11/2018	I3074126	Course Effective Supervision 6 and 7 November 18	1,012.00
3794.1589-01		Waste Stream Management Pty Ltd	429.00	INV	27/11/2018	00828481	Tipping concrete sand/rubble 5m3	429.00
3794.1592-01		Water Corporation of Western Austra	1,823.22	INV	26/11/2018	9000313235Nov18	5U Peace Park	12.29
				INV	26/11/2018	9014051352Nov18	19U Bertram Community Centre	583.11
				INV	26/11/2018	9014249617Nov18	0U Bertram Oval Club Facility	536.80
				INV	26/11/2018	9013918698Nov18	4U Water Fountain Moombaki Reserve	9.83
				INV	26/11/2018	9000323724Nov18	165U Frank Konechy Centre	673.82
				INV	26/11/2018	9000319469Nov18	2U Chisham Oval Toilets	7.37
3794.1621-01		Western Australian Treasury Corpora	12,712.78	INV	28/11/2018	Loan103B-07/12/1	Loan 103B	12,712.78
3794.1629-01		Weston Road Systems	495.00	INV	26/11/2018	PR64	Line marking Walgreen Crescent	495.00
3794.1649-01		Dennis Cleve Wood	2,905.34	INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67

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				INV	25/11/2018	MEETINGFEES18/	Meeting Fees	2,613.67
3794.1676-01		Visimax Safety Products	75.45	INV	28/11/2018	00005744	Slip lead nylon	75.45
3794.1689-01		Sandra Elizabeth Lee	2,905.34	INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67
				INV	25/11/2018	MEETINGFEES18/	Meeting Fees	2,613.67
3794.1856-01		Cornerstone Legal	2,797.60	INV	28/11/2018	15696	Legal fee Matter No 004670	1,045.00
				INV	26/11/2018	15710	Legal fee Matter No 004739	1,752.60
3794.2048-01		Palm Lakes Gardens & Landscape Serv	968.00	INV	28/11/2018	27/11/2018	Repairs to bollards and brick paving	968.00
3794.2068-01		Echelon Australia Pty Ltd	1,056.00	INV	26/11/2018	156-017938	Incident Investigation training 261018	1,056.00
3794.2097-01		Beaver Tree Services Aust Pty Ltd	83,106.29	INV	26/11/2018	67689	Arts centre tree pruning 21-29 Sulphur	2,201.80
				INV	26/11/2018	67697	Road Kwinana South Volunteer tree pruning	1,076.24
				INV	26/11/2018	67692	23 Dooley St Naval Base	874.48
				INV	28/11/2018	67758	Clearance of sumps and dead trees	13,229.04
				INV	28/11/2018	67749	Chipping and mulching	2,751.64
				INV	28/11/2018	67745	Stump grinding	5,399.45
				INV	28/11/2018	67754	Mulching and chipping	2,574.32
				INV	28/11/2018	67748	Tree removal	1,229.84
				INV	28/11/2018	67759	Tree removal and pruning	2,212.95
				INV	28/11/2018	67719	Tree removal and clearance	28,405.63
				INV	28/11/2018	67747	Various works around Kwinana	23,150.90
3794.2125-01		Synergy	1,046.75	INV	27/11/2018	169027190Nov18	0U Entry Statement Lighting Johnson Rd	61.20
				INV	27/11/2018	169027380Nov18	0U Entry Statement Lighting Gemstone/Johnson	102.50
				INV	27/11/2018	921049150Nov18	2924U Medina Hall	883.05
3794.218-01		Bob Jane T-Mart	1,095.00	INV	26/11/2018	111382	Tyre Alignment	881.00
				INV	26/11/2018	137331	Tyre Repairs	214.00
3794.2224-01		Prestige Catering & Event Hire	4,050.40	INV	27/11/2018	0003541	Catering 19/11/18	398.30
				INV	27/11/2018	0002351	Catering 9/11/18	1,930.50
				INV	27/11/2018	00023514	Catering 7/11/18	394.40
				INV	27/11/2018	00023521	Catering 14/11/18	435.00
				INV	27/11/2018	00023518	Catering 12/11/18	436.20

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				INV	27/11/2018	00023527	Catering 17/11/18	456.00
3794.24-01		Accuonboard	737.55	INV	28/11/2018	3267	Calibration for Volvo loader L70F	737.55
3794.2410-01		ABCO Products	220.51	INV	29/11/2018	368389	Cleaning items	193.58
				INV	26/11/2018	370914	Cleaning items	26.93
3794.2460-01		Allcom Communications	453.75	INV	28/11/2018	28180	Service of 4 CV radios	453.75
3794.2463-01		Battery World	36.00	INV	28/11/2018	IN6080150893	Batteries	36.00
3794.248-01		Bunnings Building Supplies	1,384.08	INV	28/11/2018	2163/01614308	Wall TV bracket William Bertram Centre	58.90
				INV	28/11/2018	2163/01527401	Pool cleaning supplies, wet floor signs, cable tie	305.43
				INV	28/11/2018	2163/01527403	Pool cleaning supplies, wet floor signs, cable tie	83.98
				INV	26/11/2018	2163/01618269	Timber skirting and aluminium angles for Zone	443.99
				INV	26/11/2018	2163/01618556	The Zone - Siker flex	134.51
				INV	26/11/2018	2163/01524169	Bertram Oval Club Facility - Rails and hooks	82.88
				INV	26/11/2018	2163/99731605	Bertram Oval Club Facility - Rails and hooks	205.10
				INV	27/11/2018	2163/01091979	Hardware items for Recquatic	69.29
3794.2483-01		Picton Press	1,453.18	INV	27/11/2018	38991	Printing of Essential Services Contact Guides	1,453.18
3794.2507-01		Ixom Operations Pty Ltd	988.88	INV	26/11/2018	6038759	Supply of cl2 plus bottle handling charges	988.88
3794.2546-01		Sigma Chemicals	150.15	INV	28/11/2018	121794/01	My spa shock treatment 10kg	150.15
3794.2646-01		Neverfail Springwater	353.08	INV	27/11/2018	124899	Neverfail bottled water	113.55
				INV	27/11/2018	530690	Neverfail bottled water	30.28
				INV	28/11/2018	530681	Neverfail bottled water	209.25
3794.275-01		Cannon Hygiene Australia Pty Ltd	1,303.37	INV	26/11/2018	96241072	Monthly Service	46.20
				INV	26/11/2018	96241073	Monthly Service	66.00
				INV	26/11/2018	96240297	Monthly Service	1,186.74
				INV	26/11/2018	96237338	Monthly Service	4.43
3794.2852-01		Downer EDI Works Pty Ltd	463.97	INV	28/11/2018	6005765	3.6 tonne cement	463.97
3794.2981-01		Peter Edward Feasey	4,756.67	INV	25/11/2018	DEPMAYFEE18/19	Deputy Mayoral Allowance	1,851.33
				INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67
				INV	25/11/2018	MEETINGFEES18/	Meeting Fees	2,613.67

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3794.30-01		Carol Elizabeth Adams	11,617.50	INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67
				INV	25/11/2018	MAYALLOW18/19	Mayoral Allowance	7,405.33
				INV	25/11/2018	MEETING18/19	Meeting Fees	3,920.50
3794.3130-01		Craig Treeby	360.00	INV	28/11/2018	27thNovember18	First 50% phone and internet allowance 2018/2019	360.00
3794.3155-01		PFD Food Services Pty Ltd	566.70	INV	27/11/2018	KM827907	Items for Recquatic cafe	414.05
				INV	28/11/2018	KM908274	Standing order for Cafe Supplies	152.65
3794.3320-01		Arbor Logic	379.50	INV	26/11/2018	00003982	Tree report Abingdon Park Wellard	379.50
3794.3338-01		AAA Blinds Port Kennedy	88.00	INV	28/11/2018	6942	APU 67 Turn around blind slats at lounge window	88.00
3794.3452-01		Western Maze Pty Ltd	35,362.43	INV	28/11/2018	00016242	Greenwaste collection Area 2	18,042.94
				INV	28/11/2018	00016210	Greenwaste collection 161118	17,319.49
3794.357-01		BullAnt Security Pty	194.45	INV	26/11/2018	10,179,758	Hasp and staple hinges x 2 (estimated cost)	72.80
				INV	26/11/2018	10,179,934	Duplicate key for customers	90.60
				INV	26/11/2018	10,179,940	Depot 1 x 10.2 key	31.05
3794.358-01		Coastline Mowers	147.10	INV	26/11/2018	18707	Maintenance service of hedger	147.10
3794.3596-01		KLMedia Pty Ltd	355.57	INV	26/11/2018	1134110	Selected DVDs for Library	312.47
				INV	26/11/2018	1134354	1 x DVD	43.10
3794.3686-01		KAJ Installations & Services	160.00	INV	27/11/2018	00004966	Various repairs Callistemon Court U26	160.00
3794.3710-01		Local Government Managers Australia	5,720.00	INV	29/11/2018	00008045	Rego 2019 Australasian Management Challenge	5,720.00
3794.3730-01		Smith Family	50.00	INV	26/11/2018	22ndNovember18	Lyrik Award donated by North Parmelia Primary	50.00
3794.381-01		Community Perspectives	9,996.80	INV	26/11/2018	1723	Community Infrastructure Review 2018	9,996.80
3794.3867-01		Paul John Neilson	2,622.48	INV	28/11/2018	12thNovember18	Refund Telstra reimbursement already paid	2,622.48
3794.3977-01		MRP Osborne Park-General Pest/Termi	474.50	INV	28/11/2018	77490	Pest Control Sloan Cottage	257.50
				INV	28/11/2018	77491	Pest Control William Bertram	217.00
3794.4002-01		Savage Surveying	2,387.00	INV	27/11/2018	21547	Detailed Survey DCA9 Honeywood clubroom (Nele)	1,254.00
				INV	27/11/2018	21546	Detailed survey DCA12 Pavilion/Community centre	1,133.00
3794.407-01		Winc Australia Pty Ltd	342.00	INV	27/11/2018	9025910085	Stationery	211.08

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				INV	28/11/2018	9025920102	Stationery	130.92
3794.4112-01		Cleverpatch Pty Ltd	318.37	INV	28/11/2018	308117	Craft supplies	318.37
3794.412-01		Courier Australia	26.36	INV	28/11/2018	0348	Courier charges to 310818	26.36
3794.413-01		Covs Parts Pty Ltd	643.08	INV	28/11/2018	1650092663	Assorted tools	643.08
3794.4245-01		ED Property Services	4,279.00	INV	28/11/2018	00001167	BP43 Repair to roof due to leak to bedroom	220.00
				INV	28/11/2018	00001173	BP 25 Repair to damaged wall	198.00
				INV	28/11/2018	00001169	APU 71 Investigate damaged skirting board	99.00
				INV	28/11/2018	00001170	APU 60 & 62 Repairs to roof/eave	132.00
				INV	28/11/2018	00001171	APU 12 Investigate water mark on lounge ceiling	220.00
				INV	28/11/2018	00001166	BP villa 12 Supply and install colorbond fence	1,870.00
				INV	27/11/2018	00001164	Fit screen door handle Callistemon Court U66	330.00
				INV	27/11/2018	00001165	Install fence Callistemon Court U5	1,210.00
3794.4382-01		Stonehenge Ceramics	950.00	INV	28/11/2018	C0689	RegROUT and seal bathroom floors	950.00
3794.4551-01		Jaycar Pty Ltd	69.95	INV	28/11/2018	45122187769	Megaphone siren	69.95
3794.4647-01		Penguin Island Cruises Pty Ltd	645.00	INV	28/11/2018	3091	Orelia Primary excursion Coastcare project	645.00
3794.4692-01		Elliotts Irrigation Pty Ltd	1,614.80	INV	26/11/2018	108373	Iron filter servicing	1,124.20
				INV	26/11/2018	B11709	Iron filter servicing	490.60
3794.4719-01		Complete Office Supplies Pty Ltd	421.51	INV	26/11/2018	07916924	Air Wick Aero Air Freshener	6.96
				INV	26/11/2018	07918167	Stationery Recquatic	280.85
				INV	28/11/2018	07919062	Stationery Recquatic	14.23
				INV	28/11/2018	07914175	Stationery Depot	119.47
3794.4790-01		Spotlight Pty Ltd	110.90	INV	28/11/2018	0065010759027	Christmas Decorations for William Bertram Centre	110.90
3794.480-01		Department of Transport	44.20	INV	28/11/2018	4105730	Disclosure of Information fees	44.20
3794.4853-01		Ashley Thomas Harding	252.60	INV	28/11/2018	19thNovember18	Refund for Team Milestone event 11 staff x \$25 each	252.60
3794.4861-01		Big W	111.25	INV	26/11/2018	176952	Sheets for Display	48.00

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				INV	26/11/2018	174956	Pedigree Vital Protection adult dog food	52.00
				INV	28/11/2018	176691	Outlet plug safety cover	11.25
3794.4947-01		Future Power WA Pty Ltd	26,590.26	INV	28/11/2018	00001449	Medina oval sport lighting Payment claim 2	19,539.85
				INV	28/11/2018	00001451	Replacement of Halytech Controller	3,178.78
				INV	28/11/2018	00001450	Variation for Alternate Trenching Route	3,871.63
3794.5035-01		Quell Clean	330.00	INV	28/11/2018	00051195	BP 37 Vacate clean	330.00
3794.5062-01		Tony Aveling & Associates Pty Ltd	1,800.00	INV	28/11/2018	10008195	Diploma of Leadership and Management	1,800.00
3794.5071-01		JB HiFi Commercial Division	288.10	INV	28/11/2018	DE16697583-100-1	Apple adaptors and USB cables	288.10
3794.5143-01		Wendy Gaye Cooper	3,365.84	INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67
				INV	25/11/2018	MEETINGFEES18/	Meeting Fees	2,613.67
				INV	28/11/2018	Nov2018	Reimbursement of Conference expenses	460.50
3794.5247-01		Abraham Pattiselanno	200.59	INV	26/11/2018	22ndNovember18	Reimbursement of items for Lyrik events	200.59
3794.5258-01		Susan Michele Wiltshire	400.00	INV	28/11/2018	26thNovember18	Reimburse Team Building Milestone event	400.00
3794.5381-01		Centrecare	1,180.66	INV	26/11/2018	19830	EAP Annual Registration and Management Fee	1,026.66
				INV	26/11/2018	19831	EAP Approved Additional Session	154.00
3794.5387-01		Woodlands Distributors & Agencies	1,751.75	INV	28/11/2018	KWA1-007	Dog waste bags	1,751.75
3794.546-01		Enzed Fremantle	366.48	INV	28/11/2018	51598	Hydraulic hose	149.47
				INV	26/11/2018	51569	Pressure Cleaner hose	217.01
3794.5520-01		Master Lock Service	180.00	INV	28/11/2018	00005505	Repair lock on door between finance and toilets	180.00
3794.5537-01		Girl Guides WA Inc	150.00	INV	26/11/2018	KS025387	Kidsport voucher	150.00
3794.5581-01		Totally Workwear Rockingham	120.01	INV	27/11/2018	RK5208.D1	2 x PPE pant King Gee	120.01
3794.5644-01		Inclusive Building Consultants	330.00	INV	28/11/2018	00002256	Certificate of Design Compliance	330.00
3794.5776-01		Eddie Mouna	360.00	INV	28/11/2018	27thNovember18	First 50% phone and Internet allowance 2018/2019	360.00
3794.5800-01		Western Australian Council of Socia	550.00	INV	26/11/2018	00005626	Presenter for Community Skills Boosting workshop 2	550.00
3794.5823-01		Accord Security Pty Ltd	5,141.62	INV	28/11/2018	00023005	Security Darius Wells to 061118	5,141.62
3794.5841-01		Mandurah Volkswagen	196.19	INV	28/11/2018	3905M	Holder for vehicle	196.19

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3794.5904-01		Rockingham Pest Control	4,950.00	INV	26/11/2018	INV-00025803	Callistemon Court annual termite inspection	4,950.00
3794.5958-01		West Coast Profilers	19,934.75	INV	26/11/2018	19710	Hire of profiler and demobiliser	11,618.75
				INV	26/11/2018	19712	Hire of profiler, bobcat and tipper	1,848.00
				INV	26/11/2018	19714	Hire of profiler, bobcat and tipper	3,234.00
				INV	26/11/2018	19715	Hire of profiler, bobcat and tipper	3,234.00
3794.5996-01		CMS Engineering Pty Ltd	3,060.20	INV	28/11/2018	9550	Darius Wells Supply & install indoor fan motor	3,060.20
3794.6000-01		Scott Printers Pty Ltd	21,719.50	INV	27/11/2018	127649	Printing of 40,000 postcards	2,585.00
				INV	27/11/2018	127787	Printing of the Spirit Newsletter	2,137.30
				INV	27/11/2018	127788	Printing of the Spirit Newsletter	5,612.20
				INV	27/11/2018	127789	Printing of the Spirit Newsletter	11,385.00
3794.6018-01		ALSCO Pty Ltd	66.04	INV	26/11/2018	111310	Linen hire	66.04
3794.6050-01		HiTech Sports Pty Ltd	203.50	INV	28/11/2018	2453	Replacement basketball ring for court 2	203.50
3794.6064-01		Cathedral Office Products Pty Ltd	298.10	INV	28/11/2018	00023706	Notice board for Darius Wells	298.10
3794.6091-01		Plants & Garden Rentals	110.00	INV	28/11/2018	00012714	Desktop planter hire December 18	110.00
3794.6224-01		The Grant Finder	953.00	INV	28/11/2018	00131	Facilitate Boredom Busters classes	728.00
				INV	28/11/2018	00130	Turn The Lights On event	225.00
3794.6261-01		Rebecca J Flanagan	1,650.00	INV	28/11/2018	201018	Music and Rhyme Time	1,650.00
3794.6267-01		Woolworths Group Limited	1,817.81	INV	28/11/2018	3286449	Items for Sing For Your Life event	37.30
				INV	28/11/2018	3038289	Items for John Wellard Centre	50.43
				INV	28/11/2018	31499761	Items for Admin	181.97
				INV	28/11/2018	31456833	Cafe items for Recquatic	190.26
				INV	29/11/2018	31278751	Cafe items for Recquatic	203.21
				INV	27/11/2018	3413307	Assorted items for Recquatic	33.60
				INV	28/11/2018	3413322	Food for Term 4 Drop In and Programs	36.91
				INV	28/11/2018	3413323	Food for Nightfields program	70.98
				INV	27/11/2018	3413306	Cafe supplies for a Birthday Party	62.40
				INV	27/11/2018	111336	Depot morning tea supplies	140.49
				INV	27/11/2018	3413305	Food for Term 4 Drop In and Programs	56.67
				INV	27/11/2018	3413303	Food for Beatball	52.54



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				INV	26/11/2018	3413308	Spotify Gift Cards for LyriK program	144.00
				INV	26/11/2018	31335658	Items for Admin	251.05
				INV	26/11/2018	3413321	Milk for the Zone	6.00
				INV	26/11/2018	3413320	Gift Cards for catering of Kwinana Youth Advisory	300.00
3794.6289-01		Clockwork Print	1,398.10	INV	28/11/2018	INV-0055142	Elf cut out plus 6 fence panels for Christmas Tree	584.10
				INV	28/11/2018	INV-0055101	Recquatic Banner Bugs	814.00
3794.6332-01		Drainflow Services Pty Ltd	7,480.00	INV	26/11/2018	00002698	Clean out filter pits Abingdon Park 617KWN16	7,480.00
3794.6368-01		ATI-Mirage Pty Ltd	7,480.00	INV	28/11/2018	00036237	PRINCE2 Foundation and Practitioner Training	3,740.00
				INV	28/11/2018	00036236	PRINCE2 Foundation and Practitioner Training	3,740.00
3794.6370-01		Elexacom	6,763.59	INV	29/11/2018	24952	Relocation of electricity pole Callistemon Court	2,535.79
				INV	26/11/2018	24570	Repair power points Darius Wells Library 100918	116.78
				INV	26/11/2018	24625	Preventative Repairs Medina hall	728.35
				INV	27/11/2018	24900	Install cable poles Callistemon Court U10	2,967.07
				INV	27/11/2018	24892	Install WP power point Banksia Park U55	415.60
3794.638-01		GHD Consultant Engineers	11,000.00	INV	28/11/2018	610052191	Geophysics Assessment SS Kwinana Wreck	11,000.00
3794.662-01		Green Skills Inc / Ecojobs	1,911.61	INV	28/11/2018	P1136	Hire of personnel for handweeding	1,911.61
3794.6688-01		Rockingham Basketball and Recreatio	165.00	INV	26/11/2018	KS026779	Kidsport voucher	165.00
3794.69-01		Alinta Gas	26.60	INV	27/11/2018	449998994Nov18	11U Peace Park BBQ	26.60
3794.6923-01		A Bonza Bounce	400.00	INV	28/11/2018	1194	Hiring of Marble obstacle course	400.00
3794.7387-01		Farmtastic Party Hire	250.00	INV	26/11/2018	2018783	Incursion on 20 December 2018	250.00
3794.7388-01		Morris Jacobs	310.00	INV	27/11/2018	6	Facilitate Tuesday Arty 201118	155.00
				INV	28/11/2018	7	Facilitate Tuesday Arty 271118	155.00
3794.7398-01		AP Photography	290.00	INV	28/11/2018	23112018	Photography Turning on the Christmas Lights	290.00
3794.7436-01		Action Glass Pty Ltd	209.00	INV	27/11/2018	B19651	Replace broken door Banksia Park U26	209.00
3794.7557-01		Sheila Mills	2,944.43	INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67
				INV	25/11/2018	MEETINGFEE18/19	Meeting Fees	2,613.67

## Cheque Listing

Payments made between  
01/11/2018 to 30/11/2018



<u>Chq/Ref</u>	<u>Pmt Date</u>	<u>Payee</u>	<u>Amount</u>	<u>Tran</u>	<u>Date</u>	<u>Invoice</u>	<u>Description</u>	<u>Amount</u>
				INV	28/11/2018	Ocotbe18	Reimbursement of travel expenses October 18	39.09
3794.7575-01		Pickles Auctions	121.00	INV	28/11/2018	DI00098852	Vehicle Impounds Including Off Road Vehicles	121.00
3794.7587-01		Subway Bertram	99.90	INV	28/11/2018	02	Platters for Heartbeat Club 161118	99.90
3794.762-01		Blackwood & Sons Ltd	2,056.39	INV	26/11/2018	KW1731RE	Uniform	50.16
				INV	26/11/2018	KW1833RE	Uniform	129.25
				INV	26/11/2018	KW7744RF	Uniform	120.67
				INV	26/11/2018	KW0164RF	Uniform	244.97
				INV	26/11/2018	KW0165RF	Uniform	170.39
				INV	26/11/2018	PE4029RK	Uniform	24.64
				INV	26/11/2018	KW1747RE	Uniform	50.16
				INV	26/11/2018	KW0146RF	Uniform	228.80
				INV	26/11/2018	KW0161RF	Uniform	255.51
				INV	26/11/2018	KW1749RE	Uniform	50.16
				INV	26/11/2018	KW1777RE	Uniform	129.25
				INV	26/11/2018	KW7746RF	Uniform	104.50
				INV	26/11/2018	KW1752RE	Uniform	129.25
				INV	26/11/2018	KW0168RF	Uniform	38.87
				INV	26/11/2018	PE1121RK	Uniform	30.20
				INV	26/11/2018	KW1806RE	Uniform	97.61
				INV	28/11/2018	KW0144RF	Uniform	151.84
				INV	28/11/2018	KW1730RE	Uniform	50.16
3794.7732-01		Griffin Civil	40,659.36	INV	26/11/2018	00000975	Sulphur Road Resurfacing Drainage Upgrade	8,721.33
				INV	26/11/2018	00000976	Supply and Install Drainage Gilmore	31,938.03
3794.7765-01		ArborCarbon Pty Ltd	5,170.00	INV	27/11/2018	INV_101102	Assessment of Trees at Pimlico Gardens POS	5,170.00
3794.7780-01		Moore Stephens (WA) Pty Ltd	4,015.00	INV	28/11/2018	309787	Independent Auditors Report	4,015.00
3794.7809-01		Frontline Fire and Rescue Equipment	602.36	INV	26/11/2018	62281	Replacement for damaged nozzles and fittings	602.36
3794.7812-01		Starbucks Flooring	1,540.00	INV	28/11/2018	INV-000492	Remove and install carpet Callistemon Court U71	1,540.00
3794.7937-01		Kerb Direct Kerbing Pty Ltd	4,921.39	INV	28/11/2018	6957	Install kerbings	4,921.39

## Cheque Listing

Payments made between  
01/11/2018 to 30/11/2018



<u>Chq/Ref</u>	<u>Pmt Date</u>	<u>Payee</u>	<u>Amount</u>	<u>Tran</u>	<u>Date</u>	<u>Invoice</u>	<u>Description</u>	<u>Amount</u>
3794.795-01		K Mart	594.00	INV	28/11/2018	167222	Men and Women assorted Active Wear tops	594.00
3794.805-01		Mervyn Thomas Kearney	2,905.34	INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67
				INV	25/11/2018	MEETINGFEES18/	Meeting Fees	2,613.67
3794.8099-01		Total Tools Rockingham	375.70	INV	27/11/2018	54312	Shovel square mouth long handle	32.90
				INV	27/11/2018	52738	Tools	342.80
3794.8119-01		The Smart Security Company P/L	132.00	INV	28/11/2018	65196	BP 29 Bright Rd Repair to medi alarm unit	132.00
3794.8167-01		Mega Glow Yoga	350.00	INV	28/11/2018	21November18	Yoga and healing meditation 251118	350.00
3794.828-01		Koorliny Arts Centre	223,966.58	INV	26/11/2018	00003695	1st quarter management fees 2018/19	111,983.29
				INV	26/11/2018	00003769	2nd quarter management fees 2018/19	111,983.29
3794.8330-01		Solomons Flooring Willetton	1,125.00	INV	28/11/2018	100132	Supply and install flooring Final Payment	1,125.00
3794.8346-01		Skateboarding WA	2,200.00	INV	26/11/2018	INV-0490	Annual skateboarding programs 131018	2,200.00
3794.835-01		Kwinana Golf Club Inc	309.00	INV	28/11/2018	108368	Small Business Lunch refreshments 091118	309.00
3794.8454-01		Kwinana Community Financial Service	200.00	RFD	27/11/2018	1346188	Refund bond Hall hire 221118	200.00
3794.8478-01		Honeywood Residents Group Inc.	5,500.00	INV	27/11/2018	27thNovember18	Community Event Funding Carols by Candlelight	5,500.00
3794.850-01		Gilmore College	3,520.00	INV	26/11/2018	20thNovember18	Community Funding Program Love Bites	3,520.00
3794.8524-01		Annette Helen Williams	53.35	INV	27/11/2018	9thNovember18	Refund of cancelled Building Better Bodies Workshop	53.35
3794.855-01		Kwinana Tigers Junior Hockey Club	600.00	INV	26/11/2018	KS024977	Kidsport voucher x 4	600.00
3794.860-01		Kwinana Volunteer Fire & Rescue Ser	621.00	INV	28/11/2018	27thNovember18	Mitigation burn Casuarina Prison 2018	621.00
3794.8610-01		John Scarfe	525.00	INV	26/11/2018	65	Citizenship pens as gifts	525.00
3794.867-01		Lamp Replacements	891.00	INV	27/11/2018	IN1017694	Recquatic DL LED	891.00
3794.8828-01		Lucretia De Koker	250.00	INV	28/11/2018	7thNovember18	Financial assistance for U16 Cricket Tour	250.00
3794.8899-01		Majestic Plumbing	2,353.62	INV	27/11/2018	210885	Backwash drainage pipes to be unblocked	899.89
				INV	28/11/2018	210895	Repair female staff toilet near staff kitchen	349.42
				INV	28/11/2018	211026	APU - Various plumbing jobs 625KWN17	173.49
				INV	28/11/2018	210947	APU - Various plumbing jobs 625KWN17	218.08

## Cheque Listing

Payments made between  
01/11/2018 to 30/11/2018



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				INV	28/11/2018	210948	BP Various plumbing repairs 625KWN17	206.54
				INV	28/11/2018	210923	APU Various plumbing repairs 625KWN17	506.20
3794.8984-01		Baldivis Transport Pty Ltd	175.00	INV	26/11/2018	00001733	Casuarina/Wellard Hall Water Delivery	175.00
3794.9019-01		Kearns Garden Supplies	417.59	INV	26/11/2018	32	Assorted tapes	24.45
				INV	28/11/2018	76/78	Assorted hardware items	393.14
3794.903-01		Lo-Go Appointments	1,159.79	INV	28/11/2018	00418667	Temp staff week ending 171118	1,159.79
3794.9043-01		Ruckus Scooters Pty Ltd	550.00	INV	26/11/2018	INV-0024	Scooter clinic 071018	550.00
3794.9081-01		Kwinana Smash Repairs	1,032.40	INV	27/11/2018	14,714	1GFP948 Repair accident damage	532.40
				INV	28/11/2018	14,811	Excess only repairs 1EWZ823	500.00
3794.9313-01		Dept of Local Government, Sport and	200.00	RFD	27/11/2018	1289161	Refund bond Hall hire 300418	200.00
3794.934-01		Mandogalup Volunteer Fire Brigade	926.61	INV	28/11/2018	27thNovember18	Mitigation burn Casuarina Prison 2018	926.61
3794.9405-01		Matthew James Rowse	2,905.34	INV	25/11/2018	ICTALLOW18/19	ICT Allowance	291.67
				INV	25/11/2018	MEETINGFEES18/	Meeting Fees	2,613.67
3794.9486-01		Youth Work WA	32.74	INV	26/11/2018	YW000128	Ticket to 2018 WA Youth Work Awards	32.74
3794.9488-01		Bright Light Signs Pty Ltd	770.00	INV	26/11/2018	00013769	VMS Signage from 26/11 to 1/12 for Symphony Spectacular	770.00
3794.9494-01		Reece's Event Hire	7,915.60	INV	28/11/2018	36193	Hire of infrastructure Positive Vibes Youth Fest	7,915.60
3794.9521-01		Edge Flight Allstars	744.40	RFD	27/11/2018	1380291	Refund bond Hall hire 161118	744.40
3794.967-01		Medina Primary School	100.00	RFD	27/11/2018	1370908	Refund bond Patio hire 311018	100.00
3794.9732-01		Builders Training of WA	810.46	INV	26/11/2018	00006305	Advanced Diploma of Building Surveying	810.46
3794.979-01		Midland Brick Company Pty Ltd	617.76	INV	27/11/2018	1768361	Supply & Deliver 1 x pack Heavy Duty Red 60mm, etc	617.76
3794.9899-01		Creative Minds	300.00	INV	27/11/2018	110707	Boredom Busters event	300.00
3795	29/11/2018	EFT TRANSFER: - 30/11/2018	5,906.34					
3795.151-01		Australian Services Union	497.25	INV	18/11/2018	PY01-11-Aust Ser	Payroll Deduction	207.20
				INV	18/11/2018	PY01-11-Aust Ser	Payroll Deduction	35.05
				INV	04/11/2018	PY01-10-Aust Ser	Payroll Deduction	207.20
				INV	04/11/2018	PY01-10-Aust Ser	Payroll Deduction	47.80

## Cheque Listing

Payments made between  
01/11/2018 to 30/11/2018



<u>Chq/Ref</u>	<u>Pmt Date</u>	<u>Payee</u>	<u>Amount</u>	<u>Tran</u>	<u>Date</u>	<u>Invoice</u>	<u>Description</u>	<u>Amount</u>
3795.487-01		Child Support Agency	2,487.92	INV	04/11/2018	PY01-10-Child Su	Payroll Deduction	1,243.96
				INV	18/11/2018	PY01-11-Child Su	Payroll Deduction	1,243.96
3795.530-01		Easifleet	2,021.73	INV	29/11/2018	118048	Novated lease for November 2018	2,021.73
3795.892-01		LGRCEU	899.44	INV	18/11/2018	PY01-11-LGREC U	Payroll Deduction	427.94
				INV	04/11/2018	PY01-10-LGREC U	Payroll Deduction	471.50
<b>Total EFT</b>			<b>4,084,762.63</b>					
<b>Payroll</b>								
PY01-10	04/11/2018	Payroll	621,614.69					
PY99-10	04/11/2018	Payroll - Interim	771.64					
PY01-11	18/11/2018	Payroll	816,392.66					
<b>Total Payroll</b>			<b>1,438,778.99</b>					
<b>Grand Total</b>			<b>-5,593,794.52</b>					

# Credit Card Transactions

1/11/2018 to 30/11/2018

Transaction No	Tran Type	Tran Reference	Invoice Date	Actual	Transaction Description
<b>Credit Card Director City Regulation to 021118</b>				<b>\$127.15</b>	
4204812	Invoice	021118A	02/11/2018	\$4.68	Parking Meeting at Minister Dawson's Office
4204812	Invoice	021118A	02/11/2018	\$10.91	EPA Meeting Banksia Sand Mine
4204812	Invoice	021118A	02/11/2018	\$100.00	The National Hotel Deposit for Event on 071218
4204812	GST	021118A	02/11/2018	\$11.56	GST
<b>Credit Card Chief Executive Officer to 021118</b>				<b>\$37.30</b>	
4204814	Invoice	021118B	02/11/2018	\$33.91	Wilson Parking Westport Meeting Perth
4204814	GST	021118B	02/11/2018	\$3.39	GST
<b>Credit Card Executive Assistant to 021118</b>				<b>\$2,320.76</b>	
4204843	Invoice	021118C	02/11/2018	\$10.91	Travel Insurance A/Director City Infrastructure Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$10.91	Travel Insurance A/Director City Infrastructure Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$10.91	Travel Insurance Cr Cooper Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$10.91	Travel Insurance Cr Cooper Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$18.42	Breakfast A/Director City Infrastructure Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$18.42	Breakfast Cr Cooper Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$208.18	Accommodation Cr Cooper Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$208.18	Accommodation A/Director City Infrastructure Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$289.65	Return Airfare Cr Cooper Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$352.19	Return Airfare A/Director City Infrastructure Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$485.55	Airfare A/Director City Infrastructure Green Leaf Award
4204843	Invoice	021118C	02/11/2018	\$485.55	Airfare Cr Cooper Green Leaf Award
4204843	GST	021118C	02/11/2018	\$210.98	GST
<b>Credit Card Manager Human Resources to 021118</b>				<b>\$2,602.26</b>	
4204863	Invoice	021118D	02/11/2018	\$24.98	Online Writing Course Marketing & Communications
4204863	Invoice	021118D	02/11/2018	\$45.45	Autoload Smartrider 039467253
4204863	Invoice	021118D	02/11/2018	\$45.45	Autoload Smartrider 027920065
4204863	Invoice	021118D	02/11/2018	\$74.50	Condolence Flowers
4204863	Invoice	021118D	02/11/2018	\$74.50	Arrangement for Birth of Baby Technical Officer
4204863	Invoice	021118D	02/11/2018	\$172.73	Renewal Pesticide Licence Env Field Officer

# Credit Card Transactions

1/11/2018 to 30/11/2018

Transaction No	Tran Type	Tran Reference	Invoice Date	Actual	Transaction Description
4204863	Invoice	021118D	02/11/2018	\$245.45	Accommodation Cities Power Summit Oct 2018
4204863	Invoice	021118D	02/11/2018	\$305.03	Advertising Coordinator Community Engagement & Place role
4204863	Invoice	021118D	02/11/2018	\$459.95	Years of Service Recognition Voucher
4204863	Invoice	021118D	02/11/2018	\$919.91	Years of Service Recognition Voucher
4204863	GST	021118D	02/11/2018	\$234.31	GST
<b>Credit Card Director City Legal to 021118</b>				<b>\$170.09</b>	
4205218	Invoice	021118E	02/11/2018	\$8.18	Company Extract Perth Symphony Orchestra
4205218	Invoice	021118E	02/11/2018	\$13.64	NPII Name Search
4205218	Invoice	021118E	02/11/2018	\$13.64	NPII Name Search
4205218	Invoice	021118E	02/11/2018	\$119.17	Name badges
4205218	GST	021118E	02/11/2018	\$15.46	GST
<b>Credit Card Director City Engagement to 021118</b>				<b>\$6,448.96</b>	
4205231	Invoice	021118F	02/11/2018	\$-7.17	Refund Positive Vibes event youth tent
4205231	Invoice	021118F	02/11/2018	\$-7.02	Refund Positive Vibes event youth tent
4205231	Invoice	021118F	02/11/2018	\$-7.02	Refund Positive Vibes event youth tent
4205231	Invoice	021118F	02/11/2018	\$-5.85	Refund Positive Vibes event youth tent
4205231	Invoice	021118F	02/11/2018	\$7.15	Facebook Promotion for youth activities
4205231	Invoice	021118F	02/11/2018	\$24.55	Positive Vibes event supplies
4205231	Invoice	021118F	02/11/2018	\$59.00	Positive Vibes event supplies
4205231	Invoice	021118F	02/11/2018	\$523.64	Facebook promotion for youth activities
4205231	Invoice	021118F	02/11/2018	\$5,323.66	Lolly run lollies for 13000 lolly bags
4205231	GST	021118F	02/11/2018	\$538.02	GST
<b>Credit Card Functions Officer to 021118</b>				<b>\$1,286.95</b>	
4205336	Invoice	021118G	02/11/2018	\$7.27	Road Maintenance Workshop mints for tables
4205336	Invoice	021118G	02/11/2018	\$13.85	Pioneers Lunch cheese board
4205336	Invoice	021118G	02/11/2018	\$14.51	Pioneers Lunch extra gift bags
4205336	Invoice	021118G	02/11/2018	\$40.52	Pioneers Lunch photos for tables
4205336	Invoice	021118G	02/11/2018	\$54.68	Pioneers Lunch chocolate bars as gifts
4205336	Invoice	021118G	02/11/2018	\$67.27	Pioneers Lunch extra frames for tables

# Credit Card Transactions

1/11/2018 to 30/11/2018

Transaction No	Tran Type	Tran Reference	Invoice Date	Actual	Transaction Description
4205336	Invoice	021118G	02/11/2018	\$68.18	1 year licence using Phopo in calendar
4205336	Invoice	021118G	02/11/2018	\$85.45	Pioneers Lunch frames/giftbags
4205336	Invoice	021118G	02/11/2018	\$115.35	Local Org Xmas Event table centrepieces
4205336	Invoice	021118G	02/11/2018	\$204.86	Citizenship ceremony badges and envelopes
4205336	Invoice	021118G	02/11/2018	\$226.36	Pioneers Lunch frame for centrepieces
4205336	Invoice	021118G	02/11/2018	\$271.65	Local Org Xmas Event table centrepieces
4205336	GST	021118G	02/11/2018	\$117.00	GST
<b>Credit Card Director City Strategy to 021118</b>				<b>\$9,697.28</b>	
4205374	Invoice	021118H	02/11/2018	\$0.70	International Transaction Fee
4205374	Invoice	021118H	02/11/2018	\$1.24	International Transaction Fee
4205374	Invoice	021118H	02/11/2018	\$2.76	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$21.82	QBE Flight Insurance - Cr Mills & Cr Cooper
4205374	Invoice	021118H	02/11/2018	\$25.51	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$26.72	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$28.12	Zapier Software Licence
4205374	Invoice	021118H	02/11/2018	\$37.56	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$47.77	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$49.65	Typeform subscription youth programs
4205374	Invoice	021118H	02/11/2018	\$50.53	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$69.45	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$81.18	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$92.64	Burst SMS credit top up
4205374	Invoice	021118H	02/11/2018	\$93.85	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$100.00	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$100.00	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$107.65	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$112.45	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$158.95	Google Adwords
4205374	Invoice	021118H	02/11/2018	\$185.27	Burst SMS credit top up
4205374	Invoice	021118H	02/11/2018	\$185.27	Burst SMS credit top up



# Credit Card Transactions

1/11/2018 to 30/11/2018

Transaction No	Tran Type	Tran Reference	Invoice Date	Actual	Transaction Description
4205374	Invoice	021118H	02/11/2018	\$203.17	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$236.16	Email Marketing Software
4205374	Invoice	021118H	02/11/2018	\$300.00	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$398.95	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$490.32	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$696.61	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$809.09	Registration Cr Mills Connecting Transport Networks
4205374	Invoice	021118H	02/11/2018	\$809.09	Registration Cr Cooper Connecting Transport Networks
4205374	Invoice	021118H	02/11/2018	\$909.09	Conference Cr Cooper and Manager Retirement Villages
4205374	Invoice	021118H	02/11/2018	\$1,045.00	Facebook Advertising
4205374	Invoice	021118H	02/11/2018	\$1,730.53	Flights Cr Cooper & Cr Mills Connecting Transport Networks
4205374	GST	021118H	02/11/2018	\$490.18	GST

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**Grand Total: \$22,690.75**

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## **17 Urgent Business**

Nil

## **18 Councillor Reports**

### **18.1 Deputy Mayor Peter Feasey**

Deputy Mayor Peter Feasey reported that he had attended the Local Organisations Christmas Function which was a great night and the deputy Mayor passed on his congratulations to Darren Taylor whom was the Martin Waudby Leadership Award. The Deputy Mayor passed on his congratulations to the City Officers whom were involved in putting the event together.

Deputy Mayor Feasey advised that he attended the Kwinana Senior Citizens' Centre Annual Christmas Luncheon and that it had been a great day.

Deputy Mayor Feasey mentioned that he had attended the Honeywood Primary School Graduation and that he had presented an award on behalf of the City.

Deputy Mayor Feasey wished all the Councillors and City Officers a very merry Christmas and a happy and safe New Year.

### **18.2 Councillor Sandra Lee**

Councillor Sandra Lee reported that she had attended the Coastal and Marine Program Manager Farewell and she wished him well for his retirement and future.

Councillor Lee advised that she had attended the Leda Primary School Class of 2018 Leavers' Ceremony.

Councillor Lee mentioned that she had attended the Cockburn Sound Management Committee.

Councillor Lee reported that she had attended the Local Organisations Christmas Function and that the City Officers did a wonderful job, and that everyone enjoyed the evening and it was a great night.

Councillor Lee advised that she had attended the Kwinana Kids Christmas Party that was held at the Frank Konecny Community Centre and that it had been a lovely family day with many people in attendance.

Councillor Lee mentioned that she had attended the Wellard Twilight Christmas Markets and that there were lots of stalls there, a band playing and that she loved that the streets were closed off which allowed for pedestrians to walk around.

Councillor Lee reported that she had attended the Seniors Christmas Lunch which was held at the Ken Jackman Hall and that everyone had enjoyed themselves.

## 18 COUNCILLOR REPORTS

Councillor Lee passed on her thanks to all City Officers for their tremendous support, as Elected Members wouldn't be able to fulfil all of their duties and responsibilities.

Councillor Lee wished everyone a happy New Year and a wonderful Christmas.

### 18.3 Councillor Matthew Rowse

Councillor Matthew Rowse passed on his thanks to all City Officers involved in the Local Organisations Christmas Function, Councillor Rowse reported that it had been a great event with the layout at Medina Hall being superb.

Councillor Rowse advised that he had attended the Local Emergency Management Committee (LEMC) Meeting and hopes that there will be no disasters but in the unfortunate event that there was it is a relief that we will be in safe capable hands.

Councillor Rowse wished everyone a Merry Christmas and Happy New Year.

### 18.4 Councillor Dennis Wood

Councillor Dennis Wood reported that he attended the Local Organisations Christmas Function.

Councillor Wood advised that he attended several of the Seniors Christmas Luncheons.

Councillor Wood mentioned that he had attended the Wellard Primary School End of Year Ceremony.

## 19 Response to Previous Questions

Nil

## 20 Mayoral Announcements (without discussion)

Mayor Carol Adams reported that she had attended the Coastal and Marine Program Manager Farewell, Mr Wilson is retiring after 12 years with NRM and the City of Kwinana.

The Mayor advised that she had attended the Fremantle Multicultural Centre presentation (conservation English Long Table) end of year celebration.

The Mayor mentioned that she had attended the Lolly Bagging Event and passed on her thanks to all of the volunteers as 67,000 lollies were placed into over 13,000 bags ready for Christmas morning.

The Mayor reported that she had attended a visit from Colin Pettit, the Young People's Commissioner. The Mayor advised that she had attended the Zone Youth Space and had spoken with the Youth Advisory Council. The Mayor mentioned that she had attended the City of Kwinana Skate Park and Adventure Park.

## 20 MAYORAL ANNOUNCEMENTS (WITHOUT DISCUSSION)

The Mayor reported that she had attended the Reece Whitby MLA, Member for Baldivis Thank you to Stakeholders and Volunteers Event.

The Mayor advised that she had attended the City of Kwinana, Alcoa and Coogee Chemical Education Scholarship Presentation and that there had been 16 recipients.

The Mayor mentioned that she had attended the Kwinana Kids Christmas Party that was held at the Frank Konecny Centre.

The Mayor reported that she had attended the Kwinana Senior Citizens' Centre Annual Christmas Luncheon.

The Mayor advised that she had attended the Wellard Twilight Christmas Markets.

The Mayor mentioned that she had attended the Senior Citizen Luncheons held at John Wellard Community Centre and the Darius Wells Library and Resource Centre at the Darius Wells Library and Resource Centre.

The Mayor reported that she had attended the Kwinana Citizens Advice Bureau Meeting.

The Mayor advised that she had attended the following School Presentations/Assemblies:

- Bertram Primary School
- Medina Primary School
- Orelia Primary School
- Calista Primary School

The Mayor mentioned that upcoming events of note are:

- Westport Reference Group
- Kwinana Industries Council Christmas function
- Boola Maara – Conciliation Action Plan Meeting
- Tianqi Lithium Official Office Opening
- Lolly Run, Christmas Morning

The Mayor stated that as this is the last Ordinary Council Meeting for the year, she would like to take the opportunity to thank the Chief Executive Officer (CEO), the Executive Officers and City Officers for all of their assistance and support provided throughout 2018. The Mayor added that it has been a very busy year and the Elected Members appreciate all the hard work the City Officers do to help us make Kwinana such a great place to live, work and recreate.

The Mayor referred to the Elected Members and passed on her thanks for all of their support that they have provided, their friendship and fellowship provided throughout the year and their unwavering commitment to the Kwinana Community.

The Mayor wished that everyone enjoy their time off, have a great Christmas, a relaxing break and that she looks forward another productive year in 2019.

## 21 Matters Behind Closed Doors

Nil

## **22 Meeting Closure**

The Mayor declared the meeting closed at 7:51pm.

Chairperson:

23 January 2019