Ordinary Council Meeting

11 December 2019

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

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

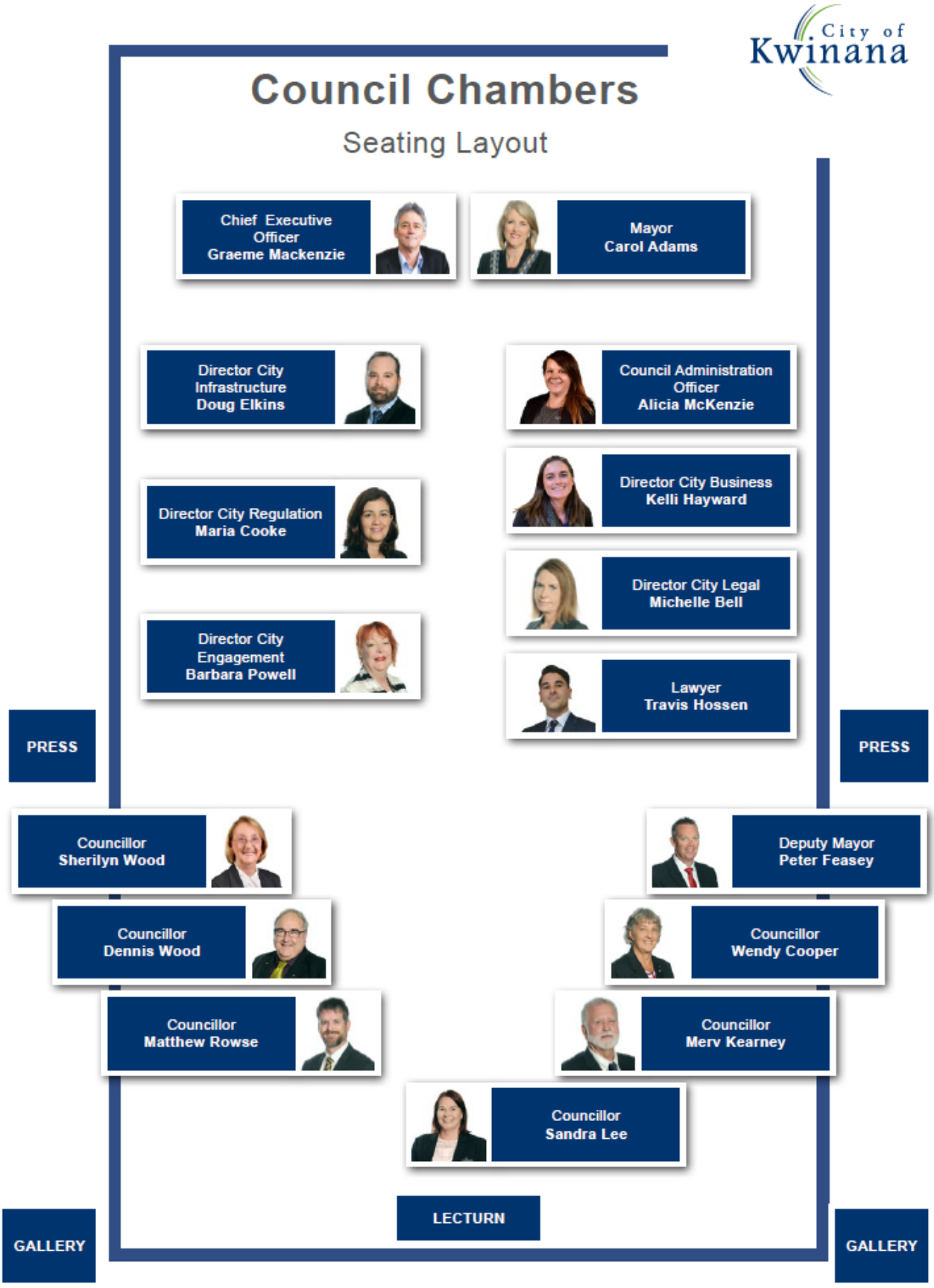
We will demonstrate and be defined by our core values, which are:

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*.



Council Chambers

Seating Layout



EMERGENCY GUIDE

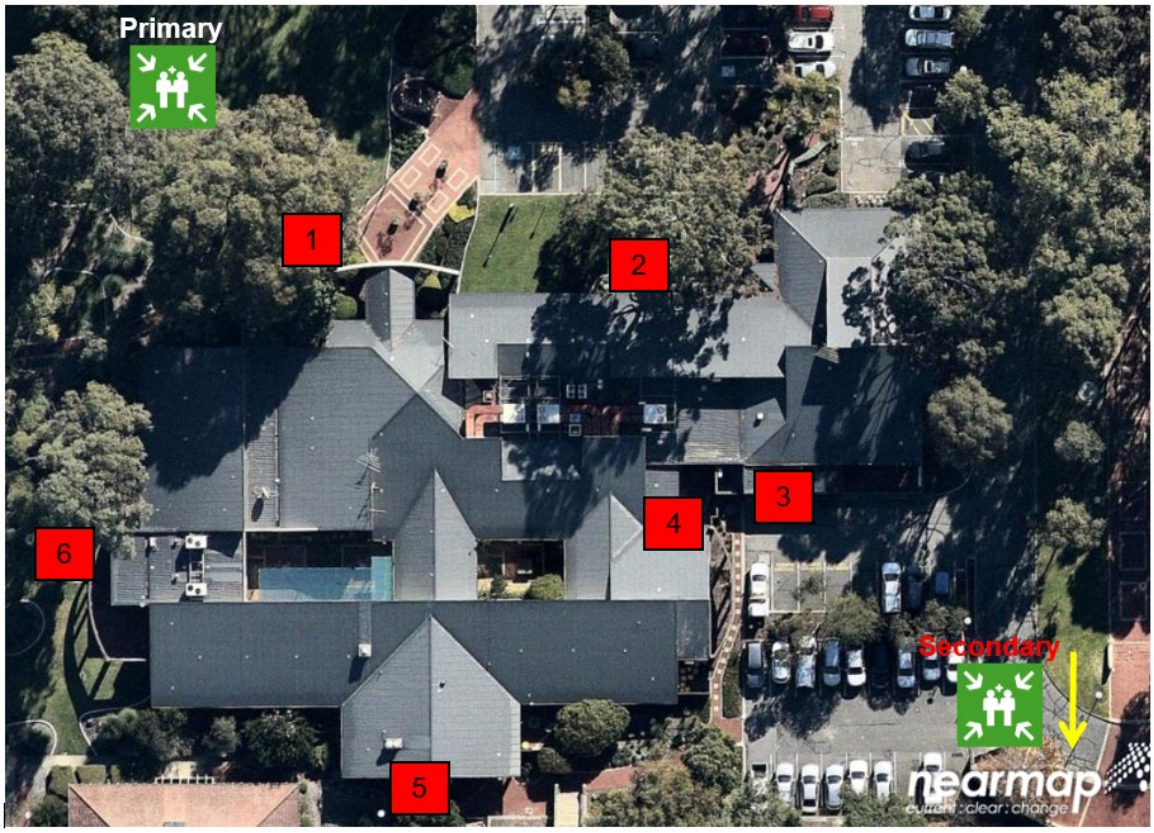
Council Chambers

The City of Kwinana values the health and safety of its employees, contractors and visitors. Please ensure you are familiar with the emergency procedures in place at the City of Kwinana to ensure your safe evacuation.

Fire Alarm

On hearing the fire alarm, if you are instructed to evacuate, all individuals must:

- remain calm;
- pay attention to the responsible officer (in charge);
- when instructed to evacuate, leave via the appropriate emergency exit as directed;
- assemble at the designated Muster Point; and
- await the arrival Emergency Services. You must not re-enter the building until the all clear has been given by Emergency Services.



Administration Centre – Access, Egress (Red) and Assembly Points (Green)

Assembly Points:

- Primary - North-west of the main entrance near Gilmore Avenue.
- Secondary - South-east of the facility on grass area near Koorliny Arts Centre.

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Present:

MAYOR CAROL ADAMS
DEPUTY MAYOR PETER FEASEY
CR W COOPER
CR M KEARNEY
CR S LEE
CR D WOOD
CR S WOOD

MR G MACKENZIE	-	Chief Executive Officer
MRS K HAYWARD	-	Director City Business
MRS B POWELL	-	Director City Engagement
MR D ELKINS	-	Director City Infrastructure
MRS M COOKE	-	Director City Regulation
MRS M BELL	-	Director City Legal
MR T HOSSEN	-	Lawyer
MS A MCKENZIE	-	Council Administration Officer

Members of the Press	1
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1 Opening and announcement of visitors

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

2 Acknowledgement of country

Presiding Member read the Acknowledgement of county

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

3 Dedication

Presiding Member read the dedication

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

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

4 Attendance, apologies, Leave(s) of absence (previously approved)

Apologies

Nil

Leave(s) of Absence (previously approved):

Councillor Matthew Rowse from 8 December 2019 to 5 January 2020.

5 Public Question Time

Nil

6 Receiving of petitions, presentations and deputations:

6.1 Petitions:

Nil

6.2 Presentations:

Nil

6.3 Deputations:

6.3.1 Mr Chris Oughton on behalf of Kwinana Industries Council regarding item 17.3, Proposed Scheme Amendment 159 to Local Planning Scheme No. 2 to rezone portions of Lots 3, 52 and 9002 Rowley Road, Mandogalup from 'Rural A' to 'Development' and 17.4, Request to amend Local Planning Scheme No. 2 to rezone portions of Lots 11, 9002, 9006 and 9033 Hoffman Road, Mandogalup from 'Rural A' to 'Development':

Good evening Your Worship and Councillors. Thank you for the opportunity to speak to this evening.

This submission is in relation to the two reports about applications from developers QUBE and Satterley to achieve Development Zones status for part of the Mandogalup locality. Clearly their ultimate intentions are to achieve planning approval for residential development following a structure planning process.

KIC supports the Officer's recommendations in refusing the applications, but in doing so, we would like the Council to be aware of some of industry's concerns.

The locality is inappropriate for the accommodation of the developers' ultimate residential development aspirations. The proposed Development Zone is:

- bounded to the north by a proposed major freight route (Rowley Road) and
- to the south by a major freight route (Anketell Road). We know that the inevitable emissions (air and noise) will be problematic for any future residents located too close, and ultimately will lead to dissatisfaction and conflict.
- to the east is the Kwinana Freeway, and
- to the west is the Alcoa RSA.

6.3 DEPUTATIONS

- Bounding the western extent of the proposed indicative subdivisional layouts, and running through the areas is a major electrical transmission tower network easement. We know people are nervous about living close to these structures.
- through the Mandogalup areas are water drainage easements for the Peel Main Drain, further constricting development.
- A major Bush Forever reservation exists within the area.
- A transition zone also bounds the western flank of the proposals, the purpose of which is to transition from industrial uses to residential, or from one use to another less compatible use. The transition zone is supposed to reside within the zone that would ultimately become the residential zone, according to the City's LPP.
- IP 47 is in progress for the remainder of the Mandogalup locality, and the future use that is approved by the Statutory Planners could easily be a light or special industrial zone.
- Finally, the Health Department has consistently said it will require as a condition of planning approval, that the new residential titles must have a notification stating a warning as to the adverse effects of dust in the area.

So, looking at the Development Zone proposals objectively, one must surely ask why would anyone in their right mind want to insert a sliver of residential properties into such an inappropriate area?

The answer seems to be clear. Developers are posturing. They appear to want to pre-emptively stamp 'residential use' on the area, possibly in order to exert greater influence on the higher-level IP47 process.

Developers with an interest in this area have made their wishes clear in the past; they want to achieve residential development westwards as far as they can, and the existence of sketch residential layout plans to this effect have been presented to state planners and to others. Therefore, this intention cannot be denied.

Given the applications are for Development Zone status for the area, the applicants have been generous in indicating to the degree of detail they have, the residential subdivisional layouts. It is pleasing they have, because they raise a couple more quite significant faults with their proposals.

- Firstly, their POS -Drainage (QUBE) is indicated as being partly outside the proposed Development Zone, and inside the IP47 area. POS is supposed to be located within the (future) development. Here, it is not. The developer is firstly not intending to meet their planning obligations through failing to locate a drainage reserve (POS) within the development, and secondly it is not only pre-empting the outcome of the IP47 process, but seems to be trying to establish a case for preliminary agreement from the City that the encroachment has been agreed.

6.3 DEPUTATIONS

- The second point I would raise relates to the road intersections associated with the Mandogalup locality into Anketell Road (and Rowley Road which has already been approved).
    - The intersection treatments proposed are out of context with the requirements of entry into identified, future major freight routes. Close inspection of the proponent's attachments show a roundabout intersection with Rowley Road (previously approved), and a set of traffic lights for Anketell, and worse, only single lane going through. Clearly the developers have ignored the State level strategic (and Statutory) planning documents that depict these two roads as major freight routes. They cannot possibly have considered the impacts of their depicted intersection treatments on these proposed major freight routes. Nor could they have considered future growth of heavy traffic associated with the downgrading of Thomas Road as the dangerous goods route, nor the proposed new port in Kwinana. But if they have considered these changes, then clearly they have simply ignored them. It is not possible that the Department of Transport or Main Roads could approve these intersection treatments, as they would adversely constrict these critical freight routes. Further compromise of these routes must be stopped and stopping it starts with raising a major objection to the Development Zone applications with the Department of Transport, Main Roads, and with the WAPC, and to alert the Westport Chairperson about the potential for these major freight networks to be further compromised by possible residential encroachment.
    - It is my understanding that there is a Planning Control Area laid over the portion of Anketell Road west of the Kwinana Freeway, adjoining the Mandogalup area westwards. It seems impossible that the intersection as proposed could be approved by the Planning authorities, but strange decisions in similar circumstances seem to have occurred in the past. Council is asked to note these points in respect to the compromising nature of the proposed intersection treatments upon the designated major freight roads as part of its objection to the applications.

I'm not sure if Councillors are aware that commercial, or light industrial, or special industrial uses are approvable the same areas as nominated by the residential property developers, and are approvable via a Development Zone process. It is therefore not a foregone conclusion that the area identified in the reports, because of its current zoning, must be inevitably set aside for residential housing.

Indeed, if the IP47 process identifies an industrial (light or special for example) as the future use for the area it encompasses, it would be entirely logical to consider this same use for the remainder of the Mandogalup locality. This would make far more sense than to have an unsustainable sliver of residential land bounded by heavy freight routes and an industrial area. It just doesn't make sense.

6.3 DEPUTATIONS

In respect to the Anketell and Rowley Road intersections proposed by the developers, and in the event of the success of their applications, Council is asked to give serious consideration to the erection of substantial roadside signs in these localities to give clear notice to potential future residential landholders that (separately) Rowley Road and Anketell Road are designated as a major freight traffic route for vehicles servicing the industrial area, future port and including the transportation of dangerous goods, road trains and high wide loads etc.

It is noted that the proposed development zone applications depict residential development being located quite close to these east west freight corridors. SPP 5.4 requires the provision of adequate buffers, and it does not look like these buffer requirements have been addressed by the applicants. In addition, the Perth Air Quality Management Plan recommends the requirement for a buffer of between 300 and 500 meters from major freight routes. I ask Councillors to recall the issues I recently highlighted in respect to residential subdivisional approvals into close proximity to the Anketell Road heavy freight route reservation.

Council is encouraged to consider initiating its own Development Zone Scheme amendment over the same land as applicable to the residential property developers; an amendment to have the land zoned ultimately for light, special or commercial development. As I indicated earlier, these are approvable uses in an Urban-zoning context.

Council is also encouraged to show strong leadership in relation to these applications, about what it believes should be the future land uses within the entire Mandogalup locality. It is possible the residential property developers could be undertaking posturing activities to obtain leverage going into the IP47 process, and precedents should they be successful. One wonders if this can be interpreted as trying to influence the government's statutory planning processes.

6.3.2 Mr Trent Will, Planning Solutions on behalf of Hy-Tec Industrial Pty Ltd regarding item 17.8, Development Assessment Panel Application – General Industry – Concrete Batching Plant (mobile and fixed), Office and Associated Parking:

Planning Solutions acts on behalf of Hy-Tec Industrial Pty Ltd in support of an application for the proposed Concrete Batching Plant on Lot 252 (61) Donaldson Road, Kwinana Beach (subject site).

We are pleased with the officer's recommendation and we thank the officers for their prompt assessment of the application and for their understanding with regard to our request for an extended approval timeframe.

Background
This same application has previously been approved by the City in January 2018. However, this approval is due to lapse next month. We are seeking the same approval, but we have lodged a fresh application which requests a five year approval timeframe. There have been no changes to the previously approved plans.

6.3 DEPUTATIONS

Approval Timeframe
We appreciate the requested five year timeframe is longer than the typical approval timeframe and would like to briefly explain the reasoning for this to the Council.

This extended timeframe is sought to allow adequate time for the proponent to acquire a site, obtain planning and environmental approvals and commence works for a proposed aggregate quarry on a site outside the Perth metropolitan area that will service the approved concrete batching plant in Kwinana.

Aggregate is a key component of the concrete batching process. A concrete batching plant requires a constant and reliable supply of aggregate in order to function effectively. In this instance, the proposed off-site aggregate quarry is intrinsic to the business plan for the approved concrete batching plant on the subject site, and necessary to support the approved development.

It is anticipated the quarry can commence operation within three to four years subject to planning and environmental approvals, which will allow the approved concrete batching plant to substantially commence within five years.

The five year timeframe would provide my client with the necessary certainty to progress the work associated with the quarry and would mitigate the risk that the approval for the concrete batching plant would expire before the quarry is fully operational.

Planning Considerations
From a planning perspective, one of the key reasons approvals are time limited is to account for potential changes in the planning framework which may occur in the future. However, in this instance, it is difficult to envisage the site being zoned for anything other than industrial uses in the next five years. Whilst the area may accommodate works associated with the future port, I note Westport has raised no objection to the proposal.

Thank you for your time and consideration. I would be pleased to answer any questions from Councillors.

7 Confirmation of minutes

7.1 Ordinary Meeting of Council held on 27 November 2019:

COUNCIL DECISION
027
MOVED CR S LEE **SECONDED CR D WOOD**

That the Minutes of the Ordinary Meeting of Council held on 27 November 2019 be confirmed as a true and correct record of the meeting.

CARRIED
7/0

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

Deputy Mayor Peter Feasey declared an impartiality interest in items 17.7, Adoption of Amended Local Development Plan Stage 26 (Formerly known as Stage 26 – 27), The Village at Wellard and Adoption of Local Development Plan Stage 27A The Village at Wellard, 18.6, Review of Charitable Rate Exemption Policy and 25.1, Minister for Works – Suites 2-5 Parmelia House, 10 Hutchins Way, Kwinana due to his supervisor being the Minister for Housing and the items referring to Departments he is responsible for.

Mayor Carol Adams declared an impartiality interest in item 17.6, Amended Development Assessment Panel Application – General Industry – Waste to Energy Plant, Brick Plant and associated Office/Training Building and Infrastructure due to the applicant recently hosting a working lunch for the Australian Leaders Forum, which she attended.

Mayor Carol Adams declared an impartiality interest in item 18.8, Accounts for payment for the month ended 30 November 2019 as her sister is an employee of the City and received a refund from the City of Kwinana Christmas Club Fund that staff had been paying.

9 Requests for leave of absence

Nil

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

Nil

11 Any business left over from previous meeting

Nil

12 Recommendations of committees

12.1 Audited Annual Financial Report for the year ended 30 June 2019

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

The Audit Committee is to examine the Annual Financial Report, review any matters raised by the Auditor in the Management Report and ensure that appropriate action is taken in respect to those matters raised.

The year ended 30 June 2019 represents the first year that the City's Auditors have been the Office of the Auditor General (OAG) for Western Australia. The OAG subsequently contracted the audit work to Moore Stephens (WA) Pty Ltd, however it is the OAG that issue the final opinion and any relevant management points.

This report presents the audited Annual Financial Report including the Independent Auditor's Report and the Management Letter from the City's Auditors for the year ended 30 June 2019. An unqualified opinion was issued, meaning that the City of Kwinana's financial records and statements are fairly and appropriately presented, and in accordance with *Australian Accounting Standards Board (AASB)* and the *Local Government Act 1995*.

OFFICER RECOMMENDATION:

That the Audit Committee recommends that Council, at its next Ordinary Council Meeting, receive:

1. The Annual Financial Report for the year ended 30 June 2019, including the Independent Auditor's Report as detailed in Attachment A;

2. The Auditor's Management Letter as detailed in Confidential Attachment B; and

3. The Audit Concluding Memorandum as detailed in Confidential Attachment C.

AUDIT COMMITTEE RECOMMENDATION:

That Council receive:

1. The Annual Financial Report for the year ended 30 June 2019, including the Independent Auditor's Report as detailed in Attachment A;

2. The Auditor's Management Letter as detailed in Confidential Attachment B; and

3. The Audit Concluding Memorandum as detailed in Confidential Attachment C.

12.1 AUDITED ANNUAL FINANCIAL REPORT FOR THE YEAR ENDED 30 JUNE 2019

DISCUSSION:

Closing Surplus for the year ended 30 June 2019
The audit of the Annual Financial Report for the year ended 30 June 2019 was completed in November 2019. The final closing surplus at 30 June 2019 was $2,478,347. The 2019/2020 adopted Annual Budget estimated a closing surplus brought forward of $1,504,912. The increase in the expected carried forward surplus is $973,435, predominantly due to the 2019/2020 Financial Assistance Grants ($946k) being recognised as revenue when received in June 2019. The budget review process is currently underway, where options to utilise any additional surplus will be presented to Council at an Ordinary Council Meeting to be held in February 2020.

Financial Performance of the City of Kwinana
Total rates raised (income) and operating expenditure are increasing over a three-year average as a result of the growth of the City. The City's reserve balance is also improving its performance with a positive trend over a three-year average. Detailed in the table below is key financial information for 2018/2019 and the previous five financial years for comparison:

	Key Financial Information ($) for Financial Years Ended					
	2014	2015	2016	2017	2018	2019
Total Rates Raised	28,833,801	31,596,063	33,835,973	34,375,003	35,057,664	38,074,897
Operating Revenue (including Rates)	58,427,070	67,270,911	64,093,908	61,204,478	63,450,484	64,005,670
Non-Operating Revenue	15,638,037	17,562,326	34,499,186	20,034,001	15,409,897	14,907,344
Operating Expenditure	(57,104,791)	(58,724,546)	(64,704,411)	(66,028,465)	(67,582,523)	(71,878,813)
Actual Net Result	19,586,530	19,377,926	33,953,002	15,042,185	11,277,858	7,034,201
Capital Expenditure (including contributed assets)	(13,892,109)	(18,969,282)	(42,370,310)	(23,811,470)	(19,553,153)	(16,515,230)
Loan Borrowings Principal Outstanding	19,792,290	22,226,890	23,256,410	22,689,134	22,071,411	21,552,398
Cash & Cash Equivalents (including Reserves & Restricted Cash)	38,294,906	48,278,546	55,295,009	53,726,269	52,896,908	57,236,543

It is recommended to review the performance of a local government over a three and six-year average to identify the longer-term trends. A local government may experience a one off item in one year that results in the performance not reflecting the normal operations. The following table demonstrates the three and six-year increase in each of the financial categories:

	% Increase/(Decrease)	
	3 Year Average	**6 Year Average**
Total Rates Raised	4%	7%
Operating Revenue (including Rates)	0%	3%
Non-Operating Revenue	(23%)	2%
Operating Expenditure	4%	7%
Actual Net Result	(39%)	(12%)
Capital Expenditure (including contributed assets)	(26%)	6%
Loan Borrowings Principal Outstanding	(3%)	(2%)
Cash & Cash Equivalents (including Reserves & Restricted Cash)	1%	12%

12.1 AUDITED ANNUAL FINANCIAL REPORT FOR THE YEAR ENDED 30 JUNE 2019

Independent Auditor's Report

As a requirement of the *Local Government Act 1995* the City's Auditors are required to report on certain compliance matters and any other matters which arise during the course of their audit. The Independent Auditor's Report is the format in which the Auditors report this information.

The Independent Audit Report for the year ended 30 June 2019 identifies the following findings:

1. Adverse trends in Ratios

The Current Ratio, Asset Sustainability Ratio and the Operating Surplus Ratio have been below the Department of Local Government, Sport and Cultural Industries (DLGSC) standard for the past 3 years. The financial ratios are reported in Note 31 of the financial report.

a) Current Ratio

The Current Ratio focuses on the liquidity position of a local government. The ratio is used to determine if a Local Government has sufficient assets to meet its short-term commitments.

The formula for the Current ratio is:

Current assets minus restricted assets divided by current liabilities minus liabilities associated with restricted assets

Where:

Current Assets – means the total current assets as shown in Statement of Financial Position

Current Liabilities – means the total current liabilities as shown in Statement of Financial Position

Restricted Asset – means an asset the use of which is restricted, wholly or partly by a law made or a requirement imposed outside the control of the local government. This includes all section 6.11 cash reserves as restricted by the Local Government Act, unspent specific grants and other restricted cash identified by the local government.

Liabilities associated with Restricted Assets – means the lesser value of a current liability or the cash component of restricted assets held to fund that liability.

The standards set by the Department of Local Government, Sports and Cultural Industries (DLGSC) is that the standard is met if the ratio is greater than 1:1 (100% or greater).

Officer Comment

In prior years the Banksia Park Retirement Village Unit Contributions payable had been split between current and non current liabilities dependant on the City's view on timing of lease terminations. However, upon review by the OAG, there is no unconditional right to defer settlement of the liability and as such, the contributions must be recognised as a current liability in accordance with AASB101 Presentation of Financial Statements.

The correction of this reclassification is quite significant, transferring $22 million from non current liabilities to current liabilities, which directly impacts the Current Ratio. The effect of this adjustment has reduced the City's ratio from being above the benchmarked rate to between 25-30% when restated for the last 3 years.

The City will look at what actions can be taken to improve the ratio over the coming year.

b) 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 divided by 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 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*. This ratio has deteriorated slightly from last year and has been below the Department of Local Government, Sport and Cultural Industries target level of 0.90 for the last 3 years.

An analysis of the City's Statement of Comprehensive Income indicates the deterioration of this ratio is due to the year on year increases to depreciation expense. The increasing depreciation is predominantly related to additional infrastructure assets contributed by developers ($10.4m in 2019).

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. The Long Term Financial Plan identifies that more funds will be available for the renewal and maintenance of the assets in future years, 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.

c) 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 divided by 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's ratio has deteriorated in the current year from (0.07) to (0.14). Analysis of the City's Statement of Comprehensive Income indicates the deterioration of the ratio is attributable to the increase in operating expenses (in particular, depreciation and employee costs) being more than the increase in operating revenue.

The ratio includes non-cash expenses such as depreciation and profit and loss on sale of assets. The depreciation cost for the 2018/2019 financial year was $15.4 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 the percentage of total own source revenue that is available to fund proposed capital expenditure, transfer to cash reserves or reduce debt. The DLGSC however, also require a rate setting statement that excludes such non-cash items, to determine the level of rates income required to balance a budget. The rate setting statement's purpose is also to determine the amount available to fund proposed capital expenditure, transfer to cash reserves or to reduce debt.

The City's negative operating surplus ratio indicates that the City's current services and/or 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. The City 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 operating expenses.

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.

2. Negative unrestricted cash position at year-end

The City's unrestricted cash position as at 30 June 2019 is a negative balance of $75,760 as the City had transferred funds to reserves that exceeded the balance of unrestricted cash that was in the Municipal Fund.

Implication
The City is effectively funding its operations using restricted cash; this exposes the City to the risk of non-conformation with its obligations relating to the restricted cash. The City runs the risk of non-compliance with Section 6.11 of the Local Government Act 1995 in the future if the transfer of funds into reserves is not managed properly.

Officer Comment

The full Officer comment can be found in Confidential Attachment B.

However, City Officers will review our options to improve the City's cash flow management. These strategies may include;

- Continue to actively improve the collection of outstanding rates and sundry receivables.
- Consider the timing of payments approaching end of year and prior to the collection of the following year rates.
- Consider accessing overdraft facilities when required.
- Budgeting for a surplus to ensure the City has sufficient cash available to fund budgeted expenditure.

LEGAL/POLICY IMPLICATIONS:

Section 6.4 of the *Local Government Act 1995* states:

(1) A local government is to prepare an annual financial report for the preceding financial year and such other financial reports as are prescribed.

(2) The financial report is to —
(a) be prepared and presented in the manner and form prescribed; and
(b) contain the prescribed information.

(3) By 30 September following each financial year or such extended time as the Minister allows, a local government is to submit to its auditor —
(a) the accounts of the local government, balanced up to the last day of the preceding financial year; and
(b) the annual financial report of the local government for the preceding financial year.

FINANCIAL/BUDGET IMPLICATIONS:

The end of year surplus result differs from the forecast surplus in the 2019/2020 budget by $973,435. This surplus is predominantly attributable to the Financial Assistance Grants paid in June 2019 of $945,794. The remaining surplus funds of $27,641 will be addressed as part of the 2019/2020 budget review process.

ASSET MANAGEMENT IMPLICATIONS:

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

12.1 AUDITED ANNUAL FINANCIAL REPORT FOR THE YEAR ENDED 30 JUNE 2019

ENVIRONMENTAL IMPLICATIONS:

There are no environmental implications as a result of this report.

STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective detailed in the Corporate Business Plan.

Plan	Outcome	Objective
Corporate Business Plan	Business Performance	5.4 Ensure the financial sustainability of the City of Kwinana into the future

COMMUNITY ENGAGEMENT:

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

PUBLIC HEALTH IMPLICATIONS

There are no 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	Annual Financial Report not completed and lodged in specified timeframes with the Department of Local Government, Sport and Cultural Industries.
Risk Theme	Failure to fulfil statutory regulations or compliance Providing inaccurate advice/information
Risk Effect/Impact	Financial Reputation Compliance
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Unlikely
Rating (before treatment)	Low
Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Annual Financial Statement and Audit cycle forms part of the finance corporate compliance calendar.
Rating (after treatment)	Low

12.1 AUDITED ANNUAL FINANCIAL REPORT FOR THE YEAR ENDED 30 JUNE 2019

COUNCIL DECISION

028

MOVED CR P FEASEY **SECONDED CR S LEE**

1. **That Council receive:**

   a. **The Annual Financial Report for the year ended 30 June 2019, including the Independent Auditor's Report as detailed in Attachment A;**
   b. **The Auditor's Management Letter as detailed in Confidential Attachment B;**
   c. **The Audit Concluding Memorandum as detailed in Confidential Attachment C; and**

2. **That Council requests a report be presented to Council that outlines how the City can strategically address the long term financial sustainability issues identified in the Office of the Auditor General's report (sustainability indicators such as the ratios).**

CARRIED
7/0

NOTE – That the Audit Committee Recommendation has been amended to amend the original numbering and include an additional recommendation, shown at point 2 above.

ATTACHMENT A

City of Kwinana

Annual Financial Report

for the Year Ended 30 June 2019



CITY OF KWINANA

FINANCIAL REPORT

FOR THE YEAR ENDED 30TH JUNE 2019

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COMMUNITY VISION

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

Principal place of business:
Corner Gilmore Avenue and Sulphur Road
Kwinana WA 6167

CITY OF KWINANA
FINANCIAL REPORT
FOR THE YEAR ENDED 30TH JUNE 2019

Local Government Act 1995
Local Government (Financial Management) Regulations 1996

STATEMENT BY CHIEF EXECUTIVE OFFICER

The attached financial report of the City of Kwinana for the financial year ended 30 June 2019 is based on proper accounts and records to present fairly the financial position of the City of Kwinana at 30 June 2019 and the results of the operations for the financial year then ended in accordance with the Local Government Act 1995 and, to the extent that they are not inconsistent with the Act, the Australian Accounting Standards.

Signed on the 25th day of NOVEMBER 2019

Graeme Mackenzie
Chief Executive Officer

CITY OF KWINANA
STATEMENT OF COMPREHENSIVE INCOME
BY NATURE OR TYPE
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	Restated 2018 Actual
		$	$	$
Revenue				
Rates	23(a)	38,074,897	38,101,480	35,057,664
Operating grants, subsidies and contributions	2(a)	8,608,169	7,639,227	8,468,213
Fees and charges	2(a)	11,876,679	11,694,484	12,949,200
Interest earnings	2(a)	2,309,386	2,690,500	3,067,213
Other revenue	2(a)	2,946,617	1,489,872	3,895,968
		63,815,748	61,615,563	63,438,258
Expenses				
Employee costs		(27,064,970)	(28,625,503)	(26,770,022)
Materials and contracts		(24,574,645)	(26,006,186)	(24,786,855)
Utility charges		(2,414,314)	(2,361,417)	(2,333,379)
Depreciation on non-current assets	11(b)	(15,359,581)	(13,672,393)	(14,200,785)
Interest expenses	2(b)	(1,110,457)	(1,111,762)	(1,153,004)
Insurance expenses		(571,974)	(570,108)	(558,909)
Other expenditure		(20,507)	(122,653)	(167,643)
		(71,116,448)	(72,470,022)	(69,970,597)
		(7,300,700)	(10,854,459)	(6,532,339)
Non-operating grants, subsidies and contributions	2(a)	14,907,344	4,285,605	15,409,897
Profit on asset disposals	11(a)	6,178	11,132	12,226
(Loss) on asset disposals	11(a)	(152,265)	(200,172)	(181,971)
Fair value adjustments to financial assets through Profit & Loss - Banksia Park Deferred Management Fee	8	(610,100)	0	(4,648)
Fair value adjustments to financial assets through Profit & Loss - Local Government House Trust	8	122,620	0	0
Share of profit or loss of associates accounted for using the equity method - SMRC	21	61,124	0	0
(Loss) on revaluation of Infrastructure - Street Lights	10(a)	0	0	(9,803)
Reversal of prior year loss on revaluation of Infrastructure - Parks & Ovals	10(a)	0	0	2,762,144
		14,334,901	4,096,565	17,987,845
Net result for the period		**7,034,201**	**(6,757,894)**	**11,455,506**
Other comprehensive income				
Items that will not be reclassified subsequently to profit or loss				
Changes in asset revaluation surplus	12	0	0	57,147,876
Total other comprehensive income for the period		**0**	**0**	**57,147,876**
Total comprehensive income/(loss) for the period		**7,034,201**	**(6,757,894)**	**68,603,382**

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF COMPREHENSIVE INCOME
BY PROGRAM
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	Restated 2018 Actual
		$	$	$
Revenue	2(a)			
Governance		277,380	35,760	512,047
General purpose funding		42,768,055	42,579,130	40,042,948
Law, order, public safety		545,969	330,500	423,460
Health		92,426	153,066	198,151
Education and welfare		9,843,996	7,168,961	10,763,316
Community amenities		5,596,612	5,534,442	6,521,169
Recreation and culture		2,993,510	2,999,817	3,013,006
Transport		307,985	179,611	421,207
Economic services		1,188,472	1,280,762	1,303,720
Other property and services		201,343	1,353,514	239,234
		63,815,748	61,615,563	63,438,258
Expenses	2(b)			
Governance		(2,212,220)	(2,545,436)	(5,255,813)
General purpose funding		(756,875)	(790,130)	(1,200,118)
Law, order, public safety		(3,440,502)	(3,356,460)	(3,158,348)
Health		(997,155)	(944,776)	(1,183,022)
Education and welfare		(11,451,861)	(11,267,355)	(10,889,290)
Community amenities		(9,561,640)	(10,245,967)	(9,473,565)
Recreation and culture		(21,521,585)	(21,262,322)	(18,780,034)
Transport		(14,601,299)	(15,283,330)	(13,325,267)
Economic services		(1,599,830)	(1,861,358)	(1,886,284)
Other property and services		(3,863,024)	(3,801,126)	(3,665,852)
		(70,005,991)	(71,358,260)	(68,817,593)
Finance Costs	2(b)			
Governance		(51,272)	(51,364)	(57,150)
Education and welfare		(91,138)	(91,300)	(94,793)
Recreation and culture		(819,581)	(820,507)	(844,658)
Transport		(148,466)	(148,591)	(156,403)
		(1,110,457)	(1,111,762)	(1,153,004)
		(7,300,700)	(10,854,459)	(6,532,339)

CITY OF KWINANA
STATEMENT OF COMPREHENSIVE INCOME
BY PROGRAM
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	Restated 2018 Actual
		$	$	$
Non-operating grants, subsidies and contributions	2(a)	14,907,344	4,285,605	15,409,897
Profit on disposal of assets	11(a)	6,178	11,132	12,226
(Loss) on disposal of assets	11(a)	(152,265)	(200,172)	(181,971)
Fair value adjustments to financial assets through Profit & Loss - Banksia Park Deferred Management Fee	8	(610,100)	0	(4,648)
Fair value adjustments to financial assets through Profit & Loss - Local Government House Trust	8	122,620	0	0
Share of profit or loss of associates accounted for using the equity method - SMRC	21	61,124	0	0
(Loss) on revaluation of Infrastructure - Street Lights	10(a)	0	0	(9,803)
Reversal of prior year loss on revaluation of Infrastructure - Parks & Ovals	10(a)	0	0	2,762,144
		14,334,901	4,096,565	17,987,845
Net result for the period		**7,034,201**	**(6,757,894)**	**11,455,506**
Other comprehensive income				
Items that will not be reclassified subsequently to profit or loss				
Changes in asset revaluation surplus	12	0	0	57,147,876
Total other comprehensive income for the period		**0**	**0**	**57,147,876**
Total comprehensive income/(loss) for the period		**7,034,201**	**(6,757,894)**	**68,603,382**

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF FINANCIAL POSITION
AS AT 30TH JUNE 2019

	NOTE	2019	2018 Restated *	1 July 2017 Restated *
		$	$	$
CURRENT ASSETS				
Cash and cash equivalents	3	11,888,157	9,367,549	3,382,610
Trade receivables	5	4,541,131	4,729,412	3,937,509
Other financial assets	8	45,662,914	43,892,452	50,761,369
Inventories	6	32,920	34,180	36,203
Other assets	7	656,144	491,927	107,861
TOTAL CURRENT ASSETS		62,781,266	58,515,520	58,225,552
NON-CURRENT ASSETS				
Trade receivables	5	711,755	678,782	599,197
Other financial assets	8	3,468,175	3,923,258	3,888,934
Investments accounted for using the equity method	21	319,244	0	0
Property, plant and equipment	9*	150,793,069	154,855,122	159,163,834
Infrastructure	10	362,312,960	357,614,778	288,754,573
TOTAL NON-CURRENT ASSETS		517,605,203	517,071,940	452,406,538
TOTAL ASSETS		580,386,469	575,587,460	510,632,090
CURRENT LIABILITIES				
Trade and other payables	13*	21,391,450	23,240,753	26,386,486
Borrowings	14	1,451,093	777,133	617,723
Employee related provisions	15	4,902,379	4,627,270	4,522,884
TOTAL CURRENT LIABILITIES		27,744,922	28,645,156	31,527,093
NON-CURRENT LIABILITIES				
Borrowings	14	20,101,305	21,294,278	22,071,411
Employee related provisions	15	469,604	447,068	436,010
TOTAL NON-CURRENT LIABILITIES		20,570,909	21,741,346	22,507,421
TOTAL LIABILITIES		48,315,831	50,386,502	54,034,514
NET ASSETS		532,070,638	525,200,958	456,597,576
EQUITY				
Retained surplus	*	244,608,437	241,396,775	231,669,958
Reserves - cash backed	4	55,730,366	52,072,348	50,343,659
Revaluation surplus	12	231,731,835	231,731,835	174,583,959
TOTAL EQUITY		532,070,638	525,200,958	456,597,576

* See note 29 for details regarding prior year adjustments and impact of change in accounting policy

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	RETAINED SURPLUS	RESERVES CASH BACKED	REVALUATION SURPLUS	TOTAL EQUITY
		$	$	$	$
Balance as at 1 July 2017		**231,669,958**	**50,343,659**	**174,583,959**	**456,597,576**
Comprehensive income					
Net result for the period - Restated		11,455,506	0	0	11,455,506
Other comprehensive income	12	0	0	57,147,876	57,147,876
Total comprehensive income		11,455,506	0	57,147,876	68,603,382
Transfers from/(to) reserves		(1,728,689)	1,728,689	0	0
Balance as at 30 June 2018		**241,396,775**	**52,072,348**	**231,731,835**	**525,200,958**
Initial Application of AASB 9	27 (c)	(164,521)	0	0	(164,521)
Restated total equity at the beginning of the financial year		**241,232,254**	**52,072,348**	**231,731,835**	**525,036,437**
Comprehensive income					
Net result for the period		7,034,201	0	0	7,034,201
Total comprehensive income		7,034,201	0	0	7,034,201
Transfers from/(to) reserves		(3,658,018)	3,658,018	0	0
Balance as at 30 June 2019		**244,608,437**	**55,730,366**	**231,731,835**	**532,070,638**

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual $	2019 Budget $	2018 Actual $
CASH FLOWS FROM OPERATING ACTIVITIES				
Receipts				
Rates		37,773,991	38,305,198	34,142,548
Operating grants, subsidies and contributions		6,390,524	7,453,423	8,106,746
Fees and charges		11,876,679	11,694,484	12,949,200
Interest received		1,884,438	2,690,500	3,067,213
Goods and services tax received		2,835,628	0	2,861,322
Other revenue		2,946,617	1,489,872	3,895,968
		63,707,877	61,633,477	65,022,997
Payments				
Employee costs		(27,141,971)	(28,925,502)	(26,684,529)
Materials and contracts		(25,580,365)	(25,246,302)	(27,821,794)
Utility charges		(2,414,314)	(2,361,417)	(2,333,379)
Interest expenses		(1,111,761)	(1,111,762)	(1,231,824)
Insurance paid		(571,974)	(570,108)	(558,909)
Goods and services tax paid		(531,932)	0	(2,835,644)
Other expenditure		(20,507)	(122,653)	(172,291)
		(57,372,824)	(58,337,744)	(61,638,370)
Net cash provided by (used in) operating activities	16	6,335,053	3,295,733	3,384,627
CASH FLOWS FROM INVESTING ACTIVITIES				
Payments for purchase of property, plant & equipment	9(a)	(2,102,378)	(7,395,250)	(2,237,698)
Payments for construction of infrastructure		(3,982,448)	(7,816,908)	(5,163,939)
Proceeds from/ (payments for) financial assets at amortised cost		(1,819,027)	0	6,814,300
Non-operating grants, subsidies and contributions		4,476,940	4,285,605	3,258,381
Proceeds from self supporting loans	14(b)	16,168	16,168	15,644
Proceeds from sale of property, plant & equipment	11(a)	373,433	423,500	531,347
Net cash provided by (used in) investment activities		(3,037,312)	(10,486,885)	3,218,035
CASH FLOWS FROM FINANCING ACTIVITIES				
Repayment of borrowings	14(b)	(777,133)	(777,133)	(617,723)
Proceeds from new borrowings	14(c)	0	2,268,000	0
Net cash provided by (used In) financing activities		(777,133)	1,490,867	(617,723)
Net increase (decrease) in cash held		2,520,608	(5,700,285)	5,984,939
Cash at beginning of year		9,367,549	55,089,545	3,382,610
Cash and cash equivalents at the end of the year	16	11,888,157	49,389,260	9,367,549

This statement is to be read in conjunction with the accompanying notes.

The budgeted cash and cash equivalents include term deposits that are now classified as financial assets. Refer to Note 3 for the breakdown of total cash, cash equivalents, and all term deposits.

CITY OF KWINANA
RATE SETTING STATEMENT
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	2018 Actual
		$	$	$
OPERATING ACTIVITIES				
Net current assets at start of financial year - surplus/(deficit)	24 (b)	1,898,805	1,345,947	3,194,697
		1,898,805	1,345,947	3,194,697
Revenue from operating activities (excluding rates)				
Governance		277,380	35,760	518,239
General purpose funding		4,693,158	4,477,650	4,985,284
Law, order, public safety		545,969	330,500	423,460
Health		92,426	153,066	198,151
Education and welfare		9,843,996	7,168,961	10,763,316
Community amenities		5,596,612	5,534,442	6,521,169
Recreation and culture		2,993,510	2,999,818	3,013,006
Transport		307,985	179,611	421,207
Economic services		1,188,472	1,280,762	1,303,720
Other property and services		207,521	1,364,646	245,268
		25,747,029	23,525,216	28,392,820
Expenditure from operating activities				
Governance		(2,299,800)	(2,596,800)	(5,336,852)
General purpose funding		(756,875)	(790,130)	(1,200,118)
Law, order, public safety		(3,478,283)	(3,369,960)	(3,204,357)
Health		(997,155)	(950,887)	(1,183,022)
Education and welfare		(12,153,099)	(11,379,613)	(10,988,731)
Community amenities		(9,564,944)	(10,248,550)	(9,479,501)
Recreation and culture		(22,360,221)	(22,098,138)	(19,625,946)
Transport		(14,752,938)	(15,431,921)	(13,511,758)
Economic services		(1,609,317)	(1,861,358)	(1,886,284)
Other property and services		(3,906,181)	(3,942,836)	(988,306)
		(71,878,813)	(72,670,193)	(67,404,875)
Non-cash amounts excluded from operating activities	24(a)	14,289,865	13,861,433	8,765,697
Amount attributable to operating activities		(29,943,114)	(33,937,598)	(27,051,661)
INVESTING ACTIVITIES				
Non-operating grants, subsidies and contributions	2(a)	14,907,344	4,285,605	15,409,897
Proceeds from disposal of assets	11(a)	373,433	423,500	531,347
Proceeds from self supporting loans	14(b)	16,168	16,168	15,644
Purchase of property, plant and equipment	9(a)	(2,102,378)	(7,395,250)	(2,237,698)
Purchase and construction of infrastructure	10(a)	(14,412,852)	(7,816,908)	(17,315,455)
Amount attributable to investing activities		(1,218,285)	(10,486,885)	(3,596,265)
FINANCING ACTIVITIES				
Repayment of borrowings	14(b)	(777,133)	(777,133)	(617,723)
Proceeds from borrowings	14(c)	0	2,268,000	0
Transfers to reserves (restricted assets)	4	(9,700,454)	(4,667,140)	(9,116,017)
Transfers from reserves (restricted assets)	4	6,042,436	9,499,275	7,387,328
Amount attributable to financing activities		(4,435,151)	6,323,002	(2,346,412)
Surplus/(deficit) before imposition of general rates		(35,596,550)	(38,101,480)	(32,994,338)
Total amount raised from general rates	23	38,074,897	38,101,480	35,057,664
Surplus/(deficit) after imposition of general rates	24(b)	**2,478,347**	**0**	**2,063,326**

This statement is to be read in conjunction with the accompanying notes.

1. BASIS OF PREPARATION

The financial report comprises general purpose financial statements which have been prepared in accordance with Australian Accounting Standards (as they apply to local governments and not-for-profit entities) and Interpretations of the Australian Accounting Standards Board, and the *Local Government Act 1995* and accompanying regulations.

The *Local Government (Financial Management) Regulations 1996* take precedence over Australian Accounting Standards. Regulation 16 prohibits a local government from recognising as assets Crown land that is a public thoroughfare, such as land under roads, and land not owned by but under the control or management of the local government, unless it is a golf course, showground, racecourse or recreational facility of State or regional significance. Consequently, some assets, including land under roads acquired on or after 1 July 2008, have not been recognised in this financial report. This is not in accordance with the requirements of *AASB 1051 Land Under Roads paragraph 15* and *AASB 116 Property, Plant and Equipment paragraph 7.*

Accounting policies which have been adopted in the preparation of this financial report have been consistently applied unless stated otherwise. Except for cash flow and rate setting information, the report has been prepared on the accrual basis and is based on historical costs, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and liabilities.

CRITICAL ACCOUNTING ESTIMATES

The preparation of a financial report in conformity with Australian Accounting Standards requires management to make judgements, estimates and assumptions that effect the application of policies and reported amounts of assets and liabilities, income and expenses.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances; the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

THE LOCAL GOVERNMENT REPORTING ENTITY

All funds through which the City controls resources to carry on its functions have been included in the financial statements forming part of this financial report.

In the process of reporting on the local government as a single unit, all transactions and balances between those funds (for example, loans and transfers between funds) have been eliminated.

All monies held in the Trust Fund are excluded from the financial statements. A separate statement of those monies appears at Note 26 to these financial statements.

2. REVENUE AND EXPENSES

(a) Revenue

Grant Revenue

Grants, subsidies and contributions are included as both operating and non-operating revenues in the Statement of Comprehensive Income:

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Operating grants, subsidies and contributions			
General purpose funding	1,978,780	1,577,588	1,675,627
Law, order, public safety	182,144	165,000	178,449
Health	35,072	11,000	24,028
Education and welfare	5,708,537	5,181,405	5,819,016
Community amenities	42,017	66,000	63,334
Recreation and culture	353,634	458,623	472,817
Transport	307,985	179,611	234,942
	8,608,169	7,639,227	8,468,213
Non-operating grants, subsidies and contributions			
Law, order, public safety	72,000	0	599,260
Education and welfare	0	0	9,650
Community amenities	3,144,657	2,861,616	527,801
Recreation and culture	39,603	213,170	519,860
Transport	11,604,814	1,210,819	13,753,326
Other property and services	46,270	0	0
	14,907,344	4,285,605	15,409,897
Total grants, subsidies and contributions	23,515,513	11,924,832	23,878,110

SIGNIFICANT ACCOUNTING POLICIES

Grants, donations and other contributions

Grants, donations and other contributions are recognised as revenues when the local government obtains control over the assets comprising the contributions.

Where contributions recognised as revenues during the reporting period were obtained on the condition that they be expended in a particular manner or used over a particular period, and those conditions were undischarged as at the reporting date, the nature of and amounts pertaining to those undischarged conditions are disclosed in Note 22. That note also discloses the amount of contributions recognised as revenues in a previous reporting period which were obtained in respect of the local government's operations for the current reporting period.

Grants, donations and other contributions (Continued)

2. REVENUE AND EXPENSES (Continued)

(a) Revenue (Continued)

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Significant revenue			
Non-Operating Grants, Subsidies & Contributions - Contributed Assets	10,430,404	4,285,605	12,151,516
Other revenue			
Reimbursements and recoveries	832,661	304,898	922,993
Other	2,113,956	1,184,974	2,972,975
	2,946,617	1,489,872	3,895,968
Fees and Charges			
Governance	15,966	35,760	39,593
General purpose funding	195,531	158,000	158,726
Law, order, public safety	303,782	148,900	203,977
Health	42,533	134,066	150,217
Education and welfare	1,995,768	1,968,515	1,962,266
Community amenities	5,541,723	5,439,442	6,445,575
Recreation and culture	2,533,678	2,419,610	2,436,356
Transport	0	0	181,818
Economic services	1,147,445	1,212,691	1,207,161
Other property and services	100,253	177,500	163,511
	11,876,679	11,694,484	12,949,200
Interest earnings			
Loans receivable - clubs/institutions	11,167	11,202	11,802
Reserve accounts interest	1,352,653	1,250,000	1,239,050
Rates instalment and penalty interest (refer Note 23(c))	785,940	650,000	750,045
Other interest earnings	159,626	779,298	1,066,316
	2,309,386	2,690,500	3,067,213

(b) Expenses

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Auditors remuneration			
- Audit of the Annual Financial Report	60,000	35,000	28,454
- Other services	22,298	0	7,150
	82,298	35,000	35,604
Interest expenses (finance costs)			
Borrowings (refer Note 14(b))	1,110,457	1,111,762	1,153,004
	1,110,457	1,111,762	1,153,004
Rental charges			
- Operating leases	533,909	491,610	433,083
	533,909	491,610	433,083

SIGNIFICANT ACCOUNTING POLICIES

Interest earnings

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

Interest earnings (Continued)

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes

3. CASH AND CASH EQUIVALENTS

	NOTE	2019 $	2018 $
Cash at bank and on hand		9,752,320	2,624,639
Short-term Term Deposits		2,135,837	6,742,910
Total cash and cash equivalents		11,888,157	9,367,549
Financial assets at amortised cost (Term deposits)	8(a)	45,348,386	43,529,359
Total cash, cash equivalents, and all term deposits		57,236,543	52,896,908
Comprises:			
- Unrestricted cash and cash equivalents		(75,760)	824,560
- Restricted cash and cash equivalents		57,312,303	52,072,348
		57,236,543	52,896,908
The following restrictions have been imposed by regulations or other externally imposed requirements:			
Reserve accounts			
Aged Persons Units Reserve	4	807,624	748,728
Asset Management Reserve	4	762,988	501,595
Asset Replacement Reserve	4	579,628	498,123
Banksia Park Reserve	4	190,418	115,626
City Assist Initiative Reserve	4	0	100,401
CLAG Reserve	4	275,223	265,873
Community Services & Emergency Relief Reserve	4	88,835	84,017
Employee Leave Reserve	4	4,033,993	4,231,590
Family Day Care Reserve	4	1,489,179	1,462,302
Future Community Infrastructure Reserve	4	1,067,201	1,381,900
Golf Course Cottage Reserve	4	28,887	28,033
Information Technology Reserve	4	2,068,659	1,890,703
Infrastructure Reserve	4	348,075	339,968
Refuse Reserve	4	8,844,888	8,736,657
Renewable Energy Efficiency Reserve	4	53,983	0
Restricted Grants & Contributions Reserve	4	3,170,082	1,688,298
Settlement Agreement Reserve	4	164,874	160,000
Workers Compensation Reserve	4	141,443	338,710
Youth Engagement Reserve	4	0	144,650
DCA 1 - Hard Infrastructure - Bertram	4	228,688	1,887,550
DCA 2 - Hard Infrastructure - Wellard	4	2,435,413	1,877,524
DCA 4 - Hard Infrastructure - Anketell	4	533,009	0
DCA 5 - Hard Infrastructure - Wandi	4	1,073,049	1,309,322
DCA 7 - Hard Infrastructure - Mandogalup (west)	4	2,988	11,713
DCA 8 - Soft Infrastructure - Mandogalup	4	471,270	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	4	11,762,971	10,487,573
DCA 10 - Soft Infrastructure - Casuarina/Anketell	4	225,488	227,912
DCA 11 - Soft Infrastructure - Wellard East	4	6,079,450	5,944,904
DCA 12 - Soft Infrastructure - Wellard West	4	7,741,470	6,663,351
DCA 13 - Soft Infrastructure - Bertram	4	283,533	282,230
DCA 14 - Soft Infrastructure - Wellard/Leda	4	614,490	504,779
DCA 15 - Soft Infrastructure - Townsite	4	162,567	158,316
		55,730,366	52,072,348
Other restricted cash and cash equivalents			
Bonds and Deposits held	26	1,581,937	0
Total restricted cash and cash equivalents		57,312,303	52,072,348

SIGNIFICANT ACCOUNTING POLICIES

Cash and cash equivalents

Cash and cash equivalents include cash on hand, cash at bank, deposits available on demand with banks and other short term highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash

Cash and cash equivalents (Continued)

and which are subject to an insignificant risk of changes in value and bank overdrafts. Bank overdrafts are reported as short term borrowings in current liabilities in the statement of financial position.

4. RESERVES - CASH BACKED

		2019 Actual Opening Balance	2019 Actual Transfer to	2019 Actual Transfer (from)	2019 Actual Closing Balance	2019 Budget Opening Balance	2019 Budget Transfer to	2019 Budget Transfer (from)	2019 Budget Closing Balance	2018 Actual Opening Balance	2018 Actual Transfer to	2018 Actual Transfer (from)	2018 Actual Closing Balance
		$	$	$	$	$	$	$	$	$	$	$	$
(a)	Aged Persons Units Reserve	748,728	58,896	0	807,624	765,541	308,844	(232,750)	841,635	643,364	315,600	(210,236)	748,728
(b)	Asset Management Reserve	501,595	440,034	(178,641)	762,988	501,595	8,721	(180,000)	330,316	566,868	17,817	(83,090)	501,595
(c)	Asset Replacement Reserve	498,123	315,384	(233,879)	579,628	748,122	263,007	(351,200)	659,929	595,442	17,900	(115,219)	498,123
(d)	Banksia Park Reserve	115,626	74,792	0	190,418	134,175	2,333	(49,738)	86,769	107,840	112,975	(105,189)	115,626
(e)	City Assist Initiative Reserve	100,401	2,571	(102,972)	0	100,401	1,743	(102,144)	0	0	100,401	0	100,401
(f)	CLAG Reserve	265,873	43,284	(33,934)	275,223	263,146	14,575	(20,000)	257,721	239,215	30,882	(4,224)	265,873
(g)	Community Services & Emergency Relief Reserve	84,017	4,818	0	88,835	84,017	1,461	0	85,478	26,059	57,958	0	84,017
(h)	Employee Leave Reserve	4,231,590	102,403	(300,000)	4,033,993	4,119,629	71,623	(300,000)	3,891,252	4,074,338	169,645	(12,393)	4,231,590
(i)	Family Day Care Reserve	1,462,302	36,542	(9,665)	1,489,179	1,479,306	25,719	(805,560)	699,465	1,383,878	78,424	0	1,462,302
(j)	Future Community Infrastructure Reserve	1,381,900	35,718	(350,417)	1,067,201	1,538,389	26,746	(663,284)	901,851	1,568,683	44,291	(231,074)	1,381,900
(k)	Golf Course Cottage Reserve	28,033	854	0	28,887	28,033	487	0	28,520	27,264	769	0	28,033
(l)	Information Technology Reserve	1,890,703	413,040	(235,084)	2,068,659	1,890,703	32,871	(1,416,000)	507,574	0	1,890,703	0	1,890,703
(m)	Infrastructure Reserve	339,968	8,107	0	348,075	339,968	5,911	0	345,879	128,213	211,755	0	339,968
(n)	Rates Strategy Reserve	0	0	0	0	0	0	0	0	819,692	0	(819,692)	0
(o)	Refuse Reserve	8,736,657	194,769	(86,538)	8,844,888	8,698,885	180,697	(83,880)	8,795,702	8,636,810	190,371	(90,524)	8,736,657
(p)	Renewable Energy Efficiency Reserve	0	53,983	0	53,983	0	0	0	0	0	0	0	0
(q)	Restricted Grants & Contributions Reserve	1,688,298	2,788,948	(1,307,164)	3,170,082	1,694,812	0	(1,694,812)	0	2,644,457	1,327,747	(2,283,906)	1,688,298
(r)	Settlement Agreement Reserve	160,000	4,874	0	164,874	160,000	2,782	0	162,782	157,743	2,257	0	160,000
(s)	Workers Compensation Reserve	338,710	7,980	(205,247)	141,443	330,200	5,741	0	335,941	210,503	204,225	(76,018)	338,710
(t)	Youth Engagement Reserve	144,650	4,581	(149,231)	0	130,412	2,264	(132,676)	0	270,000	917	(126,267)	144,650
(u)	DCA 1 - Hard Infrastructure - Bertram	1,887,550	155,260	(1,814,122)	228,688	1,851,461	182,424	(491,817)	1,542,068	1,743,837	216,358	(72,645)	1,887,550
(v)	DCA 2 - Hard Infrastructure - Wellard	1,877,524	697,023	(139,134)	2,435,413	1,772,974	429,946	(2,197,177)	5,743	1,969,898	423,144	(515,518)	1,877,524
(w)	DCA 4 - Hard Infrastructure - Anketell	0	633,006	(99,997)	533,009	0	0	0	0	0	0	0	0
(x)	DCA 5 - Hard Infrastructure - Wandi	1,309,322	32,888	(269,161)	1,073,049	1,286,174	661,998	(454,627)	1,493,545	3,104,086	732,392	(2,527,156)	1,309,322
(y)	DCA 7 - Hard Infrastructure - Mandogalup (west)	11,713	12,205	(20,930)	2,988	11,803	14,077	(159)	25,720	8,567	15,326	(12,180)	11,713
(z)	DCA 8 - Soft Infrastructure - Mandogalup	0	478,973	(7,703)	471,270	0	0	0	0	0	0	0	0
(aa)	DCA 9 - Soft Infrastructure - Wandi/Anketell	10,487,573	1,283,101	(7,703)	11,762,971	10,446,476	576,997	(141,136)	10,882,338	9,928,654	571,099	(12,180)	10,487,573
(ab)	DCA 10 - Soft Infrastructure - Casuarina/Anketell	227,912	5,279	(7,703)	225,488	229,412	246,696	(3,099)	473,009	0	240,092	(12,180)	227,912
(ac)	DCA 11 - Soft Infrastructure - Wellard East	5,944,904	586,940	(452,394)	6,079,450	5,734,336	1,081,744	(77,473)	6,738,607	4,374,577	1,583,546	(13,219)	5,944,904
(ad)	DCA 12 - Soft Infrastructure - Wellard West	6,663,351	1,085,824	(7,705)	7,741,470	6,622,131	355,217	(89,468)	6,887,880	6,297,347	378,184	(12,180)	6,663,351
(ae)	DCA 13 - Soft Infrastructure - Bertram	282,230	9,007	(7,704)	283,533	283,730	8,356	(3,833)	288,252	288,108	6,302	(12,180)	282,230
(af)	DCA 14 - Soft Infrastructure - Wellard/Leda	504,779	117,415	(7,704)	614,490	480,660	130,374	(6,494)	604,540	367,092	149,867	(12,180)	504,779
(ag)	DCA 15 - Soft Infrastructure - Townsite	158,316	11,955	(7,704)	162,567	144,189	23,788	(1,948)	166,029	161,124	25,070	(27,878)	158,316
		52,072,348	9,700,454	(6,042,436)	55,730,366	51,870,680	4,667,140	(9,499,275)	47,038,546	50,343,659	9,116,017	(7,387,328)	52,072,348

All of the reserve accounts are supported by money held in financial institutions and match the amount shown as restricted cash in Note 3 to this financial report.

4. RESERVES - CASH BACKED (Continued)

In accordance with Council resolutions in relation to each reserve account, the purpose for which the reserves are set aside and their anticipated date of use are as follows:

	Name of Reserve	Anticipated date of use	Purpose of the reserve
(a)	Aged Persons Units Reserve	Ongoing	This Reserve was established to provide funds for the capital acquisition and maintenance of the Aged Persons Units, Callistemon Court.
(b)	Asset Management Reserve	Ongoing	This Reserve was established to provide funds for asset management renewal projects of the City's building and infrastructure assets, thereby extending the useful economic life of such assets.
(c)	Asset Replacement Reserve	Ongoing	This Reserve is utilised to replace existing fleet, plant and other City assets.
(d)	Banksia Park Reserve	Ongoing	This Reserve has been established to provide funds for the capital acquisition and maintenance of the Banksia Park Retirement Village.
(e)	City Assist Initiative Reserve	Complete	This Reserve was established to provide funds for infrastructure and other initiatives to enhance the safety and security of the City.
(f)	CLAG Reserve	Ongoing	This Reserve was established to provide funds for the prevention and education of Mosquito management.
(g)	Community Services & Emergency Relief Reserve	Ongoing	This Reserve was established to provide funding to alleviate the effect of any disaster within the City of Kwinana boundaries and to provide funds to develop community services.
(h)	Employee Leave Reserve	Ongoing	This Reserve was established for the purpose of ensuring that adequate funds are available to finance employee leave entitlements.
(i)	Family Day Care Reserve	Ongoing	This Reserve provides for the capital acquisitions and maintenance of this facility.
(j)	Future Community Infrastructure Reserve	Ongoing	This Reserve was established to accumulate the City's contributions for the capital funding of future community infrastructure in accordance with Town Planning Scheme #2.
(k)	Golf Course Cottage Reserve	Ongoing	This Reserve was established to provide funds for the maintenance of this building.
(l)	Information Technology Reserve	Ongoing	This Reserve was established to provide funds for the implementation and maintenance of the City's software requirements.
(m)	Infrastructure Reserve	Ongoing	This Reserve was established 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.
(n)	Rates Strategy Reserve	Complete	This Reserve was established to assist in the future management of the City's rating strategy.
(o)	Refuse Reserve	Ongoing	This Reserve was established to provide funds for the costs and subsidy of Waste Management in the City.
(p)	Renewable Energy Efficiency Reserve	Ongoing	This Reserve was established to provide funds for renewable energy and water efficiency initiatives
(q)	Restricted Grants & Contributions Reserve	Ongoing	This Reserve was established to restrict funds required to complete projects relating to prior financial years.
(r)	Settlement Agreement Reserve	Ongoing	This Reserve was established to provide funds to account for future negotiated settlement agreement payments.
(s)	Workers Compensation Reserve	Ongoing	This Reserve was established 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 the City to pay costs relating to the open claims in the current and future years.
(t)	Youth Engagement Reserve	Complete	This Reserve was established to assist with youth engagement and diversion initiatives.
(u)	DCA 1 - Hard Infrastructure - Bertram	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 1 Hard Infrastructure Bertram.
(v)	DCA 2 - Hard Infrastructure - Wellard	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 2 Hard Infrastructure Wellard.
(w)	DCA 4 - Hard Infrastructure - Anketell	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 4 Hard Infrastructure Anketell.
(x)	DCA 5 - Hard Infrastructure - Wandi	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 5 Hard Infrastructure Wandi.
(y)	DCA 7 - Hard Infrastructure - Mandogalup (west)	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 7 Hard Infrastructure Mandogalup (west).
(z)	DCA 8 - Soft Infrastructure - Mandogalup	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 8 Soft Infrastructure Mandogalup.
(aa)	DCA 9 - Soft Infrastructure - Wandi/Anketell	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 9 Soft Infrastructure Wandi/Anketell.
(ab)	DCA 10 - Soft Infrastructure - Casuarina/Anketell	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 10 Soft Infrastructure Casuarina/Anketell.
(ac)	DCA 11 - Soft Infrastructure - Wellard East	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 11 Soft Infrastructure Wellard East.
(ad)	DCA 12 - Soft Infrastructure - Wellard West	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 12 Soft Infrastructure Wellard West.
(ae)	DCA 13 - Soft Infrastructure - Bertram	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 13 Soft Infrastructure Bertram.
(af)	DCA 14 - Soft Infrastructure - Wellard/Leda	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 14 Soft Infrastructure Wellard/Leda.
(ag)	DCA 15 - Soft Infrastructure - Townsite	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 15 Soft Infrastructure Townsite.

5. TRADE RECEIVABLES

	2019	2018
	$	$
Current		
Rates receivable	3,865,054	3,597,121
Sundry receivables	462,500	720,635
GST receivable	312,998	411,656
Allowance for impairment of receivables	(99,421)	0
	4,541,131	4,729,412
Non-current		
Pensioner's rates and ESL deferred	711,755	678,782
	711,755	678,782

SIGNIFICANT ACCOUNTING POLICIES

Trade and other receivables

Trade and other receivables include amounts due from ratepayers for unpaid rates and service charges and other amounts due from third parties for goods sold and services performed in the ordinary course of business.

Trade receivables are recognised at original invoice amount less any allowances for uncollectible amounts (i.e. impairment). The carrying amount of net trade receivables is equivalent to fair value as it is due for settlement within 30 days.

Impairment and risk exposure

Information about the impairment of trade receivables and their exposure to credit risk and interest rate risk can be found in Note 25.

Previous accounting policy: Impairment of trade receivables

In the prior year, the impairment of trade receivables was assessed based on the incurred loss model. Individual receivables which were known to be uncollectible were written off by reducing the carrying amount directly. The other receivables were assessed collectively to determine whether there was objective evidence that an impairment had been incurred but not yet identified. For these receivables the estimated impairment losses were recognised in a separate provision for impairment.

Classification and subsequent measurement

Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets.

Trade receivables are held with the objective to collect the contractual cashflows and therefore measures them subsequently at amortised cost using the effective interest rate method.

Due to the short term nature of current receivables, their carrying amount is considered to be the same as their fair value. Non-current receivables are indexed to inflation, any difference between the face value and fair value is considered immaterial.

6. INVENTORIES

	2019	2018
	$	$
Current		
Stores & Materials	32,920	34,180
	32,920	34,180
The following movements in inventories occurred during the year:		
Carrying amount at 1 July	34,180	34,180
Inventories expensed during the year	(1,260)	0
Carrying amount at 30 June	32,920	34,180

SIGNIFICANT ACCOUNTING POLICIES

General

Inventories are measured at the lower of cost and net realisable value.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

7. OTHER ASSETS

	2019	2018
	$	$
Other current assets		
Prepayments	28,963	467
Accrued Income	627,181	491,460
	656,144	491,927

SIGNIFICANT ACCOUNTING POLICIES

Other current assets

Other non-financial assets include prepayments which represent payments in advance of receipt of goods or services or that part of expenditure made in one accounting period covering a term extending beyond that period.

Other non-financial assets include accrued income which represents income that has been earned but not yet received. Therefore, accrued income is recognised in the accounting period in which it arises.

8. OTHER FINANCIAL ASSETS

	NOTE	2019	2018
		$	$
(a) Current assets			
Financial assets at fair value through profit and loss		297,819	346,925
Other financial assets at amortised cost		45,365,095	43,529,359
Other loans and receivables		0	16,168
		45,662,914	43,892,452
Financial assets at fair value through profit and loss			
- Banksia Park Deferred Management Fee		297,819	346,925
		297,819	346,925
Other financial assets at amortised cost			
- Financial assets at amortised cost - term deposits	3	45,348,386	43,529,359
- Financial assets at amortised cost - self supporting loans		16,709	0
		45,365,095	43,529,359
Financial assets previously classified as loans and receivables			
- Self supporting loans		0	16,168
		0	16,168
(b) Non-current assets			
Other financial assets at amortised cost		249,973	0
Financial assets at fair value through profit and loss		3,218,202	3,656,576
Other loans and receivables		0	266,682
		3,468,175	3,923,258
Other financial assets at amortised cost			
- Financial assets at amortised cost - self supporting loans		249,973	0
		249,973	0
Financial assets at fair value through profit and loss			
- Interest in Local Government House Trust		122,620	0
- Banksia Park Deferrred Management Fees Receivable		3,095,582	3,656,576
		3,218,202	3,656,576
Financial assets previously classified as loans and receivables			
- Self supporting loans		0	266,682
		0	266,682
During the year, the following gains/(losses) were recognised in profit and loss:			
Fair value gains/(losses) on equity investments at fair value through profit and loss are recognised in other gains/(losses) and classified as other property and services			
Movement in fair value of Banksia Park DMF Receivable		(610,100)	(4,648)
Investment in Local Government House Trust		122,620	0
		(487,480)	(4,648)

Self supporting loans have the same terms and conditions as the related borrowing disclosed in Note 14(b).

SIGNIFICANT ACCOUNTING POLICIES

Other financial assets at amortised cost

The City classifies financial assets at amortised cost if both of the following criteria are met:

- the asset is held within a business model whose objective is to collect the contractual cashflows, and
- the contractual terms give rise to cash flows that are solely payments of principal and interest.

Term deposits with original maturities of three months or more were classified as cash and cash equivalents in the 2018 financial report. However, they have now been re-classified to financial assets at amortised cost.

Financial assets at fair value through profit and loss

The City classifies the following financial assets at fair value through profit and loss:

- debt investments which do not qualify for measurement at either amortised cost or fair value through other comprehensive income.
- equity investments which the City has not elected to recognise fair value gains and losses through other comprehensive income.

SIGNIFICANT ACCOUNTING POLICIES (Continued)

Impairment and risk

Information regarding impairment and exposure to risk can be found at Note 25.

Previous accounting policy: Loans and receivables

Non-derivative financial assets with fixed or determinable payments that were not quoted in an active market and are solely payments of principal and interest were classified as loans and receivables and are subsequently measured at amortised cost, using the effective interest rate method.

Refer to Note 27 for explanations regarding the change in accounting policy and reclassification of available for sale financial assets to financial assets at fair value through profit and loss.

9. PROPERTY, PLANT AND EQUIPMENT

(a) Movements in Carrying Amounts

Movement in the carrying amounts of each class of property, plant and equipment between the beginning and the end of the current financial year.

	Land - freehold land	Land - vested in and under the control of Council	Total land	Buildings - specialised	Total buildings	Total land and buildings	Furniture and equipment	Plant and equipment	Computer software/ equipment	Total property, plant and equipment
	$	$	$	$	$	$	$	$	$	$
Balance at 1 July 2017 - restated	35,431,000	12,140,000	47,571,000	104,101,016	104,101,016	151,672,016	1,169,416	6,322,402	0	159,163,834
Additions	0	0	0	783,780	783,780	783,780	152,248	1,301,670	0	2,237,698
(Disposals) - restated	0	0	0	0	0	0	(2,254)	(698,838)	0	(701,092)
Depreciation (expense) - restated	0	0	0	(4,641,717)	(4,641,717)	(4,641,717)	(343,217)	(860,384)	0	(5,845,318)
Carrying amount at 30 June 2018 - restated	35,431,000	12,140,000	47,571,000	100,243,079	100,243,079	147,814,079	976,193	6,064,850	0	154,855,122
Comprises:										
Gross carrying amount at 30 June 2018 - restated	35,431,000	12,140,000	47,571,000	104,884,796	104,884,796	152,455,796	4,486,124	8,984,182	0	165,926,102
Accumulated depreciation at 30 June 2018 - restated	0	0	0	(4,641,717)	(4,641,717)	(4,641,717)	(3,509,931)	(2,919,332)	0	(11,070,980)
Carrying amount at 30 June 2018 - restated	35,431,000	12,140,000	47,571,000	100,243,079	100,243,079	147,814,079	976,193	6,064,850	0	154,855,122
Additions	0	0	0	924,854	924,854	924,854	8,149	860,702	308,673	2,102,378
(Disposals)	0	0	0	0	0	0	0	(519,520)	0	(519,520)
Depreciation (expense)	0	0	0	(4,481,581)	(4,481,581)	(4,481,581)	(260,892)	(902,438)	0	(5,644,911)
Carrying amount at 30 June 2019	35,431,000	12,140,000	47,571,000	96,686,352	96,686,352	144,257,352	723,450	5,503,594	308,673	150,793,069
Comprises:										
Gross carrying amount at 30 June 2019	35,431,000	12,140,000	47,571,000	105,809,650	105,809,650	153,380,650	4,488,944	8,984,624	308,673	167,162,891
Accumulated depreciation at 30 June 2019	0	0	0	(9,123,298)	(9,123,298)	(9,123,298)	(3,765,494)	(3,481,030)	0	(16,369,822)
Carrying amount at 30 June 2019	35,431,000	12,140,000	47,571,000	96,686,352	96,686,352	144,257,352	723,450	5,503,594	308,673	150,793,069

9. PROPERTY, PLANT AND EQUIPMENT (Continued)

(b) Fair Value Measurements

Asset Class	Fair Value Hierarchy	Valuation Technique	Basis of Valuation	Date of Last Valuation	Inputs Used
Land and buildings					
Land - freehold land					
- Independent valuation	2	Market approach using recent observable open market values as evidenced by sales transactions of similar property types	Independent registered valuer	June 2017	Price per square metre
- Independent valuation	3	Market approach using recent observable open market values as evidenced by sales transactions of similar property types, adjusted for condition and comparability, at their current use as highest and best use.	Independent registered valuer	June 2017	Price per square metre adjusted for zoning restrictions
Land - vested in and under the control of Council					
- Independent valuation	3	Improvements to land valued using cost approach	Independent registered valuer	June 2017	Improvements to land using construction costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs
Buildings - specialised					
- Independent valuation	3	Cost approach using depreciated replacement costs	Independent registered valuer	June 2017	Construction costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs
Furniture and equipment					
- Independent valuation	3	Cost approach using depreciated replacement cost	Independent registered valuer	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (level 3) inputs
- Management Valuation	3	Cost approach using depreciated replacement cost	Management valuation	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (level 3) inputs
Plant and equipment					
- Independent Valuation	2	Market approach using recent observable market data for similar assets	Independent registered valuer	June 2016	Market price per item
- Independent Valuation	3	Cost approach using depreciated replacement cost	Independent registered valuer	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs
- Management Valuation	3	Cost approach using depreciated replacement cost	Management valuation	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs

Level 3 inputs are based on assumptions with regards to future values and patterns of consumption utilising current information. If the basis of these assumptions were varied, they have the potential to result in a significantly higher or lower fair value measurement.

During the period there were no changes in the valuation techniques used by the local government to determine the fair value of property, plant and equipment using either level 2 or level 3 inputs.

10. INFRASTRUCTURE

(a) Movements in Carrying Amounts

Movement in the carrying amounts of each class of infrastructure between the beginning and the end of the current financial year.

	Infrastructure - Roads	Infrastructure - Footpaths	Infrastructure - Drainage	Infrastructure - Car Parks	Infrastructure - Bus Shelters	Infrastructure - Street Lights	Infrastructure - Parks & Ovals	Infrastructure - Other	Total Infrastructure
	$	$	$	$	$	$	$	$	$
Balance at 1 July 2017	182,636,623	34,805,073	49,220,758	1,409,348	740,563	938,221	18,475,827	528,160	288,754,573
Additions	9,718,038	1,919,481	2,720,336	344,631	33,521	26,839	2,455,101	97,508	17,315,455
Revaluation increments / (decrements) transferred to revaluation surplus	54,065,551	1,516,411	(4,711,655)	1,525,181	(79,008)	0	4,869,464	(38,068)	57,147,876
Impairment (losses) / reversals	0	0	0	0	0	(9,803)	2,762,144	0	2,752,341
Depreciation (expense)	(4,918,898)	(1,045,795)	(884,616)	(154,554)	(72,860)	(55,799)	(1,153,434)	(69,511)	(8,355,467)
Carrying amount at 30 June 2018	241,501,314	37,195,170	46,344,823	3,124,606	622,216	899,458	27,409,102	518,089	357,614,778
Comprises:									
Gross carrying amount at 30 June 2018	241,501,314	37,195,170	46,344,823	3,124,606	622,216	899,458	27,409,102	518,089	357,614,778
Carrying amount at 30 June 2018	241,501,314	37,195,170	46,344,823	3,124,606	622,216	899,458	27,409,102	518,089	357,614,778
Additions	5,648,124	1,110,130	2,594,192	6,012	16,554	334,163	4,695,095	8,582	14,412,852
Depreciation (expense)	(6,325,113)	(572,233)	(562,737)	(347,178)	(44,444)	(52,909)	(1,712,257)	(97,799)	(9,714,670)
Carrying amount at 30 June 2019	240,824,325	37,733,067	48,376,278	2,783,440	594,326	1,180,712	30,391,940	428,872	362,312,960
Comprises:									
Gross carrying amount at 30 June 2019	247,149,438	38,305,300	48,939,015	3,130,618	638,770	1,233,621	32,104,197	526,671	372,027,630
Accumulated depreciation at 30 June 2019	(6,325,113)	(572,233)	(562,737)	(347,178)	(44,444)	(52,909)	(1,712,257)	(97,799)	(9,714,670)
Carrying amount at 30 June 2019	240,824,325	37,733,067	48,376,278	2,783,440	594,326	1,180,712	30,391,940	428,872	362,312,960

10. INFRASTRUCTURE (Continued)

(b) Fair Value Measurements

Asset Class	Fair Value Hierarchy	Valuation Technique	Basis of Valuation	Date of Last Valuation	Inputs Used
Infrastructure - Roads	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Footpaths	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Drainage	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Car Parks	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Bus Shelters	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Street Lights	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Parks & Ovals	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Other	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)

Level 3 inputs are based on assumptions with regards to future values and patterns of consumption utilising current information. If the basis of these assumptions were varied, they have the potential to result in a significantly higher or lower fair value measurement.

During the period there were no changes in the valuation techniques used to determine the fair value of infrastructure using level 3 inputs.

11. PROPERTY, PLANT AND EQUIPMENT (INCLUDING INFRASTRUCTURE)

SIGNIFICANT ACCOUNTING POLICIES

Fixed assets

Each class of fixed assets within either plant and equipment or infrastructure, is carried at cost or fair value as indicated less, where applicable, any accumulated depreciation and impairment losses.

Initial recognition and measurement between mandatory revaluation dates

All assets are initially recognised at cost where the fair value of the asset at date of acquisition is equal to or above $5,000. All assets are subsequently revalued in accordance with the mandatory measurement framework.

In relation to this initial measurement, cost is determined as the fair value of the assets given as consideration plus costs incidental to the acquisition. For assets acquired at no cost or for nominal consideration, cost is determined as fair value at the date of acquisition. The cost of non-current assets constructed by the City includes the cost of all materials used in construction, direct labour on the project and an appropriate proportion of variable and fixed overheads.

Individual assets acquired between initial recognition and the next revaluation of the asset class in accordance with the mandatory measurement framework, are recognised at cost and disclosed as being at fair value as management believes cost approximates fair value. They are subject to subsequent revaluation at the next anniversary date in accordance with the mandatory measurement framework.

Revaluation

The fair value of fixed assets is determined at least every three years and no more than five years in accordance with the regulatory framework. At the end of each period the valuation is reviewed and where appropriate the fair value is updated to reflect current market conditions. This process is considered to be in accordance with *Local Government (Financial Management) Regulation 17A (2)* which requires property, plant and equipment to be shown at fair value.

Increases in the carrying amount arising on revaluation of assets are credited to a revaluation surplus in equity. Decreases that offset previous increases of the same class of asset are recognised against revaluation surplus directly in equity. All other decreases are recognised in profit or loss.

AUSTRALIAN ACCOUNTING STANDARDS - INCONSISTENCY

Land under control

In accordance with *Local Government (Financial Management) Regulation 16(a)(ii),* the City was required to include as an asset (by 30 June 2013), Crown Land operated by the local government as a golf course, showground, racecourse or other sporting or recreational facility of State or Regional significance.

Upon initial recognition, these assets were recorded at cost in accordance with AASB 116. They were then classified as Land and revalued along with other land in accordance with the other policies detailed in this Note.

Land under roads

In Western Australia, all land under roads is Crown Land, the responsibility for managing which, is vested in the local government.

Effective as at 1 July 2008, Council elected not to recognise any value for land under roads acquired on or before 30 June 2008. This accords with the treatment available in *Australian Accounting Standard AASB 1051 Land Under Roads* and the fact *Local Government (Financial Management) Regulation 16(a)(i) prohibits* local governments from recognising such land as an asset.

In respect of land under roads acquired on or after 1 July 2008, as detailed above, *Local Government (Financial Management) Regulation 16(a)(i)* prohibits local governments from recognising such land as an asset.

Whilst such treatment is inconsistent with the requirements of *AASB 1051, Local Government (Financial Management) Regulation 4(2)* provides, in the event of such an inconsistency, the *Local Government (Financial Management) Regulations* prevail.

Consequently, any land under roads acquired on or after 1 July 2008 is not included as an asset of the City.

11. PROPERTY, PLANT AND EQUIPMENT (INCLUDING INFRASTRUCTURE) (Continued)

(a) Disposals of Assets

	2019 Actual Net Book Value	2019 Actual Sale Proceeds	2019 Actual Profit	2019 Actual Loss	2019 Budget Net Book Value	2019 Budget Sale Proceeds	2019 Budget Profit	2019 Budget Loss	2018 Actual Net Book Value	2018 Actual Sale Proceeds	2018 Actual Profit	2018 Actual Loss
	$	$	$	$	$	$	$	$	$	$	$	$
Furniture and equipment	0	0	0	0	0	0	0	0	2,254	1,062	67	(1,259)
Plant and equipment	519,520	373,433	6,178	(152,265)	612,540	423,500	11,132	(200,172)	698,838	530,285	12,159	(180,712)
	519,520	373,433	6,178	(152,265)	612,540	423,500	11,132	(200,172)	701,092	531,347	12,226	(181,971)

The following assets were disposed of during the year.

Plant and Equipment	2019 Actual Net Book Value	2019 Actual Sale Proceeds	2019 Actual Profit	2019 Actual Loss
	$	$	$	$
Governance				
Subaru Forrester 2.5i	22,860	15,736	0	(7,124)
Mazda CX-5 Maxx Sport	28,967	20,509	0	(8,458)
Toyota Aurion 3.5L V6	21,475	11,645	0	(9,830)
Mazda CX-5 Maxx Sport	14,005	12,555	0	(1,450)
Mazda CX-5 Maxx Sport	29,045	19,600	0	(9,445)
Law, order, public safety				
Hyundai i30 Hatch 2L Auto	21,467	10,509	0	(10,958)
Volkswagon Amarok Utility	26,823	0	0	(26,823)
Community amenities				
Holden Colorado Dual Cab	26,313	23,009	0	(3,304)
Recreation and culture				
Holden Commodore Evoke Wagon VF	18,412	15,736	0	(2,676)
Holden Commodore Evoke Auto V6	23,019	16,191	0	(6,828)
Holden Commodore Evoke Auto V6	21,877	12,327	0	(9,550)
Transport				
Cat Skid Steer Loader	21,685	18,512	0	(3,173)
Economic services				
Holden Colorado Single Cab	18,000	13,236	0	(4,764)
Holden Colorado Single Cab	19,097	14,373	0	(4,724)
Other property and services				
Agrizzi Rota Slasher 72 inch	0	2,273	2,273	0
Massey Ferguson Tractor	49,748	30,000	0	(19,748)
Mitsubishi Tip Truck	30,564	22,176	0	(8,388)
KAP Ride on Mower with Catcher	17,795	6,364	0	(11,431)
Holden Colorado Dual Cab	26,600	23,009	0	(3,591)
Hyundai TQ2 iLoad 3S 2.5L Auto	20,000	20,509	509	0
Hyundai TQ2 iLoad 3S 2.5L Auto	20,000	21,645	1,645	0
Holden Colorado Space Cab	21,934	23,463	1,529	0
Holden Colorado Single Cab	19,834	20,056	222	0
	519,520	373,433	6,178	(152,265)

11. PROPERTY, PLANT AND EQUIPMENT (INCLUDING INFRASTRUCTURE) (Continued)

(b) Depreciation

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Buildings - specialised	4,481,581	3,987,093	4,641,717
Furniture and equipment	260,892	415,005	343,217
Plant and equipment	902,438	906,608	860,384
Infrastructure - Roads	6,325,113	4,923,737	4,918,898
Infrastructure - Footpaths	572,233	1,046,824	1,045,795
Infrastructure - Drainage	562,737	885,486	884,616
Infrastructure - Car Parks	347,178	154,706	154,554
Infrastructure - Bus Shelters	44,444	72,932	72,860
Infrastructure - Street Lights	52,909	55,854	55,799
Infrastructure - Parks & Ovals	1,712,257	1,154,569	1,153,434
Infrastructure - Other	97,799	69,579	69,511
	15,359,581	13,672,393	14,200,785

Revision of useful lives of assets
A review of the City's roads has resulted in the useful life being decreased from 0-120 years down to 0-80 years dependant on the traffic use and structure of the road.

SIGNIFICANT ACCOUNTING POLICIES

Depreciation
The depreciable amount of all fixed assets including buildings but excluding freehold land and vested land, are depreciated on a straight-line basis over the individual asset's useful life from the time the asset is held ready for use. Leasehold improvements are depreciated over the shorter of either the unexpired period of the lease or the estimated useful life of the improvements.

The assets residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the statement of comprehensive income in the period in which they arise.

Depreciation rates
Typical estimated useful lives for the different asset classes for the current and prior years are included in the table below:

Asset Class	Useful life
Buildings	2 to 100 years
Furniture and equipment	
Computer & Audio Visual Equip	2 to 7 years
Office Furniture & Equipment	3 to 15 years
Other Furniture & Equipment	5 to 15 years
Art Works	not depreciated
Plant and equipment	5 to 15 years
Motor Vehicles	3 to 10 years
Other Plant & Equipment	3 to 20 years
Infrastructure	
Roads	0 to 80 years
Footpaths	40 to 80 years
Drainage	80 years
Car Parks	5 to 20 years
Bus Shelters	20 to 25 years
Street Lights	15 to 30 years
Parks & Ovals	10 to 50 years
Other Infrastructure	30 to 40 years

Depreciation (Continued)
When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is treated in one of the following ways:
(a) The gross carrying amount is adjusted in a manner that is consistent with the revaluation of the carrying amount of the asset. For example, the gross carrying amount may be restated by reference to observable market data or it may be restated proportionately to the change in the carrying amount. The accumulated depreciation at the date of the revaluation is adjusted to equal the difference between the gross carrying amount and the carrying amount of the asset after taking into account accumulated impairment losses; or
(b) Eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset.

12. REVALUATION SURPLUS

	2019 Opening Balance	2019 Closing Balance	2018 Opening Balance	2018 Revaluation Increment	2018 Revaluation (Decrement)	Total Movement on Revaluation	2018 Closing Balance
	$	$	$	$	$	$	$
Revaluation surplus - Land - freehold land	78,166,636	78,166,636	78,166,636	0	0	0	78,166,636
Revaluation surplus - Furniture and equipment	199,013	199,013	199,013	0	0	0	199,013
Revaluation surplus - Plant and equipment	1,581,222	1,581,222	1,581,222	0	0	0	1,581,222
Revaluation surplus - Infrastructure - Roads	112,417,177	112,417,177	58,351,626	54,065,551	0	54,065,551	112,417,177
Revaluation surplus - Infrastructure - Footpaths	14,917,826	14,917,826	13,401,415	1,516,411	0	1,516,411	14,917,826
Revaluation surplus - Infrastructure - Drainage	17,185,601	17,185,601	21,897,256	0	(4,711,655)	(4,711,655)	17,185,601
Revaluation surplus - Infrastructure - Car Parks	1,837,027	1,837,027	311,846	1,525,181	0	1,525,181	1,837,027
Revaluation surplus - Infrastructure - Bus Shelters	379,791	379,791	458,799	0	(79,008)	(79,008)	379,791
Revaluation surplus - Infrastructure - Parks & Ovals	4,869,464	4,869,464	0	4,869,464	0	4,869,464	4,869,464
Revaluation surplus - Infrastructure - Other	178,078	178,078	216,146	0	(38,068)	(38,068)	178,078
	231,731,835	231,731,835	174,583,959	61,976,607	(4,828,731)	57,147,876	231,731,835

Movements on revaluation of property, plant and equipment (including infrastructure) are not able to be reliably attributed to a program as the assets were revalued by class as provided for by AASB 116 Aus 40.1.

No assets were revalued this Financial Year. Property, Plant and Equipment will be revalued in the 2020 Financial Year.

13. TRADE AND OTHER PAYABLES

	2019	2018
	$	$
Current		
Sundry creditors	1,826,349	2,686,691
Bonds and Deposits Held (refer Note 26)	1,581,937	0
Accrued salaries and wages	629,954	1,004,600
Accrued Expenses	187,490	291,863
Accrued Interest on long term borrowings	32,295	33,599
Unit Contribution - Banksia Park	17,133,425	19,224,000
	21,391,450	23,240,753

SIGNIFICANT ACCOUNTING POLICIES

Trade and other payables

Trade and other payables represent liabilities for goods and services provided to the City prior to the end of the financial year that are unpaid and arise when the City becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured, are recognised as a current liability and are normally paid within 30 days of recognition.

Trade and other payables (Continued)

Trade and other payables also include the unit contribution payable for the Banksia Park retirement village units. This amount represents non-interest bearing payments made by individuals to the City upon signing a lease agreement to occupy units at the retirement village. The balance is recognised at fair value through profit and loss. Fair value is the amount payable on demand and is measured at the principle amount plus the residents share of any increase/decrease in the market value of the units less deferred management fees calculated in accordance with the lease agreement. As there is no unconditional right to defer the payment beyond 12 months this balance is recognised as a current liability.

14. INFORMATION ON BORROWINGS

(a) Borrowings

	2019	2018
	$	$
Current	1,451,093	777,133
Non-current*	20,101,305	21,294,278
Total	21,552,398	22,071,411

(b) Repayments - Borrowings

Particulars	Loan Number	Institution	Interest Rate	Actual Principal 1 July 2018	30 June 2019 Actual Principal repayments	30 June 2019 Actual Interest repayments	30 June 2019 Actual Principal outstanding	Budget Principal 1 July 2018	30 June 2019 Budget New Loans	30 June 2019 Budget Principal repayments	30 June 2019 Budget Interest repayments	30 June 2019 Budget Principal outstanding	Actual Principal 1 July 2017	30 June 2018 Actual Principal repayments	30 June 2018 Actual Interest repayments	30 June 2018 Actual Principal outstanding
				$	$	$	$	$	$	$	$	$	$	$	$	$
Governance																
Administration Office Renovations	99	WATC	6.35%	761,572	89,773	51,272	671,799	761,573	0	89,773	51,364	671,800	845,986	84,414	57,150	761,572
Administration / Chambers Building Refurbishment	107	WATC	N/A	0	0	0	0	0	2,268,000	0	0	2,268,000	0	0	0	0
Education and welfare																
Youth Specific Space	96	WATC	7.67%	147,840	25,366	11,586	122,474	147,840	0	25,366	11,654	122,474	171,398	23,558	13,543	147,840
Youth Specific Space Stage 2	100	WATC	4.72%	1,521,312	122,515	79,551	1,398,797	1,521,312	0	122,515	79,645	1,398,797	1,521,312	0	81,250	1,521,312
Recreation and culture																
Wellard Sports Pavilion	94	WATC	6.48%	204,825	46,488	13,236	158,337	204,824	0	46,488	13,704	158,336	248,483	43,658	16,363	204,825
Orelia Oval Pavilion	95	WATC	7.67%	354,815	60,877	27,808	293,938	354,815	0	60,878	27,970	293,937	411,355	56,540	32,503	354,815
Orelia Oval Pavilion Stage 2	97	WATC	6.35%	1,685,135	198,641	113,449	1,486,494	1,685,138	0	198,641	113,653	1,486,497	1,871,922	186,787	126,457	1,685,135
Resource & Knowledge Centre	102	WATC	4.59%	7,421,567	0	386,720	7,421,567	7,421,567	0	0	386,720	7,421,567	7,421,567	0	386,720	7,421,567
Recquatic Centre Upgrade	104	WATC	4.09%	3,350,000	0	159,125	3,350,000	3,350,000	0	0	159,125	3,350,000	3,350,000	0	159,126	3,350,000
Bertram Community Centre	105	WATC	3.29%	1,296,840	0	50,827	1,296,840	1,296,840	0	0	50,827	1,296,840	1,296,840	0	50,827	1,296,840
Calista Destination Park	106	WATC	3.16%	1,516,532	96,112	57,249	1,420,420	1,516,532	0	96,112	57,307	1,420,420	1,609,695	93,163	60,860	1,516,532
Transport																
Industrial Area Streetscape	98	WATC	6.35%	1,028,123	121,193	69,217	906,930	1,028,122	0	121,193	69,341	906,929	1,142,082	113,959	77,153	1,028,123
City Centre Redevelopment	101	WATC	2.49%	2,500,000	0	79,250	2,500,000	2,500,000	0	0	79,250	2,500,000	2,500,000	0	79,250	2,500,000
				21,788,561	760,965	1,099,290	21,027,596	21,788,563	2,268,000	760,965	1,100,560	23,295,597	22,390,640	602,079	1,141,202	21,788,561
Self Supporting Loans																
Recreation and culture																
Kwinana Golf Club Refurbishment	103B	WATC	3.35%	282,850	16,168	11,167	266,682	282,849	0	16,168	11,202	266,681	298,494	15,644	11,802	282,850
				282,850	16,168	11,167	266,682	282,849	0	16,168	11,202	266,681	298,494	15,644	11,802	282,850
				22,071,411	777,133	1,110,457	21,294,278	22,071,412	2,268,000	777,133	1,111,762	23,562,278	22,689,134	617,723	1,153,004	22,071,411
Share of SMRC Loan				0			258,120									
				22,071,411			21,552,398									

Self supporting loans are financed by payments from third parties. These are shown in Note 8 as other financial assets at amortised cost.
All other loan repayments were financed by general purpose revenue.

* Non-current portion of borrowings includes $258,120, which represents the City's share of the Southern Metropolitan Regional Council (SMRC) Administration Building loan with the WATC. Due to the balance being immaterial, it has been recognised as at 30 June 2019.

14. INFORMATION ON BORROWINGS (Continued)

(c) New Borrowings - 2018/19

Particulars/Purpose	Institution	Loan Type	Term Years	Interest Rate	Amount Borrowed 2019 Actual	Amount Borrowed 2019 Budget	Amount (Used) 2019 Actual	Amount (Used) 2019 Budget	Total Interest & Charges	Actual Balance Unspent
				%	$	$	$	$	$	$
Loan 107 - Administration / Chambers Building Refurbishment	WATC	Debenture	10	3.52%	0	2,268,000	0	2,268,000	0	0
					0	2,268,000	0	2,268,000	0	0

(d) Undrawn Borrowing Facilities

	2019 $	2018 $
Credit Standby Arrangements		
Bank overdraft limit	0	0
Bank overdraft at balance date	0	0
Credit card limit	100,000	85,000
Credit card balance at balance date	(31,535)	(15,045)
Total amount of credit unused	68,465	69,955
Loan facilities		
Loan facilities - current	1,451,093	777,133
Loan facilities - non-current	20,101,305	21,294,278
Total facilities in use at balance date	21,552,398	22,071,411

SIGNIFICANT ACCOUNTING POLICIES

Financial liabilities

Financial liabilities are recognised at fair value when the City becomes a party to the contractual provisions to the instrument.

Non-derivative financial liabilities (excluding financial guarantees) are subsequently measured at amortised cost. Gains or losses are recognised in profit or loss.

Financial liabilities are derecognised where the related obligations are discharged, cancelled or expired. The difference between the carrying amount of the financial liability extinguished or transferred to another party and the fair value of the consideration paid, including the transfer of non-cash assets or liabilities assumed, is recognised in profit or loss.

Borrowing costs

Borrowing costs are recognised as an expense when incurred except where they are directly attributable to the acquisition, construction or production of a qualifying asset. Where this is the case, they are capitalised as part of the cost of the particular asset until such time as the asset is substantially ready for its intended use or sale.

Risk

Information regarding exposure to risk can be found at Note 25.

15. EMPLOYEE RELATED PROVISIONS

Employee Related Provisions	Provision for Annual Leave	Provision for Long Service Leave	Provision for Other Leave	Total
	$	$	$	$
Opening balance at 1 July 2018				
Current provisions	2,160,304	1,856,610	610,356	4,627,270
Non-current provisions	0	447,068	0	447,068
	2,160,304	2,303,678	610,356	5,074,338
Additional provision	88,485	187,126	22,034	297,645
Balance at 30 June 2019	2,248,789	2,490,804	632,390	5,371,983
Comprises				
Current	2,248,789	2,021,200	632,390	4,902,379
Non-current	0	469,604	0	469,604
	2,248,789	2,490,804	632,390	5,371,983

Amounts are expected to be settled on the following basis:	2019 $	2018 $
Less than 12 months after the reporting date	3,446,078	3,231,609
More than 12 months from reporting date	1,925,905	1,842,729
	5,371,983	5,074,338

Timing of the payment of current leave liabilities is difficult to determine as it is dependent on future decisions of employees. Expected settlement timings are based on information obtained from employees and historical leave trends and assumes no events will occur to impact on these historical trends.

SIGNIFICANT ACCOUNTING POLICIES

Employee benefits

Short-term employee benefits

Provision is made for the City's obligations for short-term employee benefits. Short-term employee benefits are benefits (other than termination benefits) that are expected to be settled wholly before 12 months after the end of the annual reporting period in which the employees render the related service, including wages, salaries and sick leave. Short-term employee benefits are measured at the (undiscounted) amounts expected to be paid when the obligation is settled.

The City's obligations for short-term employee benefits such as wages, salaries and sick leave are recognised as a part of current trade and other payables in the statement of financial position.

Other long-term employee benefits

The City's obligations for employees' annual leave and long service leave entitlements are recognised as provisions in the statement of financial position.

Long-term employee benefits are measured at the present value of the expected future payments to be made to employees. Expected future payments incorporate anticipated future wage and salary levels, durations of service and employee departures and are discounted at 2.5%

Other long-term employee benefits (Continued)

rates determined by reference to market yields at the end of the reporting period on government bonds that have maturity dates that approximate the terms of the obligations. Any remeasurements for changes in assumptions of obligations for other long-term employee benefits are recognised in profit or loss in the periods in which the changes occur.

The City's obligations for long-term employee benefits are presented as non-current provisions in its statement of financial position, except where the City does not have an unconditional right to defer settlement for at least 12 months after the end of the reporting period, in which case the obligations are presented as current provisions.

Provisions

Provisions are recognised when the City has a present legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

Provisions are measured using the best estimate of the amounts required to settle the obligation at the end of the reporting period.

16. NOTES TO THE STATEMENT OF CASH FLOWS

Reconciliation of Cash

For the purposes of the Statement of Cash Flows, cash includes cash and cash equivalents, net of outstanding bank overdrafts. Cash at the end of the reporting period is reconciled to the related items in the Statement of Financial Position as follows:

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Cash and cash equivalents	11,888,157	49,389,260	9,367,549
Reconciliation of Net Cash Provided By Operating Activities to Net Result			
Net result	7,034,201	(6,757,894)	11,455,506
Non-cash flows in Net result:			
Adjustments to fair value of financial assets through profit and loss - Banksia Park DMF Receivable	610,100	0	4,648
Adjustments to fair value of financial assets through profit and loss - Local Government House Trust	(122,620)	0	0
Depreciation	15,359,581	13,672,393	14,200,785
(Profit)/loss on sale of asset	146,087	189,040	169,745
Contributed Assets	(10,430,404)	0	(12,151,516)
Share of profits of associates (SMRC)	(61,124)	0	0
Loss on revaluation of fixed assets	0	0	9,803
Reversal of loss on revaluation of fixed assets	0	0	(2,762,144)
Changes in assets and liabilities:			
(Increase)/decrease in receivables	(9,213)	317,373	(871,487)
(Increase)/decrease in Financial assets	0	0	(384,066)
(Increase)/decrease in inventories	1,260	0	2,023
(Increase)/decrease in other assets	(164,217)	0	0
Increase/(decrease) in payables	(1,849,303)	460,426	(3,145,733)
Increase/(decrease) in provisions	297,645	(300,000)	115,444
Grants contributions for the development of assets	(4,476,940)	(4,285,605)	(3,258,381)
Net cash from operating activities	6,335,053	3,295,733	3,384,627

17. TOTAL ASSETS CLASSIFIED BY FUNCTION AND ACTIVITY

	2019	2018
	$	$
Governance	73,748,984	70,010,999
Law, order, public safety	1,953,715	2,185,717
Health	80,256	93,753
Education and welfare	31,885,016	33,342,265
Community amenities	1,128,260	892,948
Recreation and culture	85,910,119	84,664,247
Transport	330,930,080	329,275,107
Economic services	51,402,122	51,589,540
Other property and services	3,347,917	3,532,884
	580,386,469	575,587,460

18. CONTINGENT LIABILITIES

The City did not have any contingent liabilities as at 30 June 2019.

19. CAPITAL AND LEASING COMMITMENTS

(a) Capital Expenditure Commitments

	2019	2018
	$	$
Contracted for:		
- capital expenditure projects	103,866	209,615
	103,866	209,615
Payable:		
- not later than one year	103,866	209,615
Bertram Oval - Ablution Block	0	181,470
Kwinana Tennis Courts - Fencing	0	24,535
Medina Oval - Carpark	0	3,610
Varris Park Upgrade	81,569	0
Smirks Cottage Tractor Shed Preliminaries	22,297	0
	103,866	209,615

(b) Operating Lease Commitments

Non-cancellable operating leases contracted for but not capitalised in the accounts.

	2019	2018
Payable:	$	$
- not later than one year	438,663	543,070
- later than one year but not later than five years	344,990	746,861
	783,653	1,289,931

SIGNIFICANT ACCOUNTING POLICIES

Leases

Leases of fixed assets where substantially all the risks and benefits incidental to the ownership of the asset, but not legal ownership, are transferred to the City, are classified as finance leases.

Finance leases are capitalised recording an asset and a liability at the lower of the fair value of the leased property or the present value of the minimum lease payments, including any guaranteed residual values. Lease payments are allocated between the reduction of the lease liability and the lease interest expense for the period.

Leases (Continued)

Leased assets are depreciated on a straight line basis over the shorter of their estimated useful lives or the lease term.

Lease payments for operating leases, where substantially all the risks and benefits remain with the lessor, are charged as expenses on a straight line basis over the lease term.

Lease incentives under operating leases are recognised as a liability and amortised on a straight line basis over the life of the lease term.

20. RELATED PARTY TRANSACTIONS

Elected Members Remuneration

The following fees, expenses and allowances were paid to council members and/or the Mayor.	2019 Actual $	2019 Budget $	2018 Actual $
Meeting Fees	273,794	266,594	271,825
Mayor's allowance	88,864	88,864	88,864
Deputy Mayor's allowance	22,216	22,216	22,216
Travelling expenses	2,396	8,600	6,007
Telecommunications allowance	28,000	28,000	27,981
	415,270	414,274	416,893

Key Management Personnel (KMP) Compensation Disclosure

The total of remuneration paid to KMP of the City during the year are as follows:	2019 Actual $	2018 Actual $
Short-term employee benefits	1,343,082	1,203,546
Post-employment benefits	142,026	128,688
Other long-term benefits	31,216	31,216
	1,516,324	1,363,450

Short-term employee benefits
These amounts include all salary, fringe benefits and cash bonuses awarded to KMP except for details in respect to fees and benefits paid to elected members which may be found above.

Post-employment benefits
These amounts are the current-year's estimated cost of providing for the City's superannuation contributions made during the year.

Other long-term benefits
These amounts represent long service benefits accruing during the year.

20. RELATED PARTY TRANSACTIONS (Continued)

Transactions with related parties

Transactions between related parties and the City are on normal commercial terms and conditions, no more favourable than those available to other parties, unless otherwise stated.

No outstanding balances or provisions for doubtful debts or guarantees exist in relation to related parties at year end.

The following transactions occurred with related parties:	2019 Actual $	2018 Actual $
Sale of goods and services	69,384	15,957
Purchase of goods and services	183,964	220,566
Amounts payable to related parties:		
Trade and other payables	0	445

Related Parties

The City's main related parties are as follows:

i. Key management personnel

Any person(s) having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any elected member, are considered key management personnel.

ii. Entities subject to significant influence by the City

An entity that has the power to participate in the financial and operating policy decisions of an entity, but does not have control over those policies, is an entity which holds significant influence. Significant influence may be gained by share ownership, statute or agreement.

21. INVESTMENT IN ASSOCIATES

South Metropolitan Regional Council (SMRC)

The City is a member of the South Metropolitan Regional Council (SMRC), established in 1998 to deliver innovative and responsible waste management solutions for the benefit of the community and environment. The current participants are City of Cockburn (withdrew as at 30 June 2019), Town of East Fremantle, City of Fremantle, City of Melville and City of Kwinana.

The following local governments have previously withdrawn from the regional Council:

City of Canning - June 2010
City of Rockingham - June 2012

The City has held 20% voting rights since the City of Rockingham withdrew membership effective 1 July 2013, representing significant influence in accordance with AASB128 Investments in Associates and Joint Ventures. The City has not previously recognised this interest. However, as the interest is considered immaterial, no prior period adjustment has been made to restate the figures.

The City holds 25% voting rights as at 30 June 2019 after the withrawal of City of Cockburn.

	Note	2019 $
The City's Share of Associate Entity's Net Assets		319,244
Equity Ratio		1.27%
Represented by Share of Associate Entity's Statement of Financial Position		
Current Assets		327,835
Non Current Assets		451,078
Total Assets		778,913
Current Liabilities		198,641
Non-Current Liabilities		261,028
Total Liabilities		459,669
Net Assets		319,244
Net Increase in Share of Associate Entity's Net Assets:		
Net Assets		319,244
Less: City of Kwinana's Share of SMRC Loan Liability	14	(258,120)
		61,124

SIGNIFICANT ACCOUNTING POLICIES

Investment in associates

An associate is an entity over which the City has significant influence. Significant influence is the power to participate in the financial operating policy decisions of that entity but is not control or joint control of those policies. Investments in associates are accounted for in the financial statements by applying the equity method of accounting, whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the City's share of net assets of the associate. In addition, the City's share of the profit or loss of the associate is included in the City's profit or loss.

The carrying amount of the investment includes, where applicable, goodwill relating to the associate. Any discount on acquisition, whereby the City's share of the

SIGNIFICANT ACCOUNTING POLICIES (Continued)

Investment in associates (Continued)

net fair value of the associate exceeds the cost of investment, is recognised in profit or loss in the period in which the investment is acquired.

Profits and losses resulting from transactions between the City and the associate are eliminated to the extent of the City's interest in the associate. When the City's share of losses in an associate equals or exceeds its interest in the associate, the City discontinues recognising its share of further losses unless it has incurred legal or constructive obligations or made payments on behalf of the associate. When the associate subsequently makes profits, the City will resume recognising its share of those profits once its share of the profits equals the share of the losses not recognised.

22. CONDITIONS OVER GRANTS/CONTRIBUTIONS

Grant/Contribution	Opening Balance [1] 1/07/17	Received [2] 2017/18	Expended [3] 2017/18	Closing Balance [1] 30/06/18	Received [2] 2018/19	Expended [3] 2018/19	Closing Balance 30/06/19
	$	$	$	$	$	$	$
Law, order, public safety							
Kwinana South Station Upgrade - Dept of Premier & Cabinet	0	0	0	0	30,000	0	30,000
Mandogalup Station Upgrade - Dept of Premier & Cabinet	0	0	0	0	25,000	0	25,000
FESA ESL Grant	23,923	175,183	(157,485)	41,621	182,144	(180,015)	43,750
Education and welfare							
Connections Your Next Step	1,177	0	(1,177)	0	0	0	0
LYRIK - Youth Incentives Program	0	20,000	0	20,000	20,000	(20,000)	20,000
Community amenities							
BP Coastcare	4,644	0	(4,644)	0	0	0	0
Bushcare Projects	11,039	0	(11,039)	0	0	0	0
Coastcare in the Kwinana Industrial Area	14,774	0	(10,102)	4,672	10,000	(7,011)	7,661
Fauna Survey and Feral Animal Control	11,168	0	(11,168)	0			0
Greening Fund	0	100,000	(685)	99,315		(12,490)	86,825
Street Furniture Maintenance & Bus Shelter Subsidy	8,699	13,108	(21,807)	0			0
Perth Region NRM Support for South Metro Coast	2,336	0	(2,336)	0	5,000	(294)	4,706
SMCC - Challenger Beach Coastal Rehab Project	13,439	16,000	(14,861)	14,578		(14,331)	247
SMCC - Degremont (proAlliance) - Adopt a Beach	7,496	0	(1,861)	5,635		(2,047)	3,588
SMCC - Tronox - Adopt a Beach	0	0	0	0	5,000	(2,554)	2,446
Developer Contributions - DCA 1 - DCA 15	28,243,290	4,341,379	(3,229,495)	29,355,174	5,108,875	(2,849,663)	31,614,386
Recreation and culture							
Beach Emergency Number Signs (BEN Program)	0	4,115	0	4,115	0	(4,115)	0
Medina Oval Lighting	0	150,000	(5,625)	144,375	0	(144,375)	0
Rock Symphony Sponsorship	0	10,000	0	10,000	5,000	(10,000)	5,000
Youth Festival - Lotterywest	0	0	0	0	6,870	0	6,870
Kwinana Tennis Club Cultural Heritage Program	0	0	0	0	3,073	(3,073)	0
Noongar Cultural Heritage Program	1,606	0	(1,606)	0	0	0	0
Wandi Playing Fields - Education Department contr. To goal posts				0	25,500	0	25,500
Silversport - Pilot Seniors Program	4,064	0	(4,064)	0	0	0	0
Transport							
Roads to Recovery 2016/2017 Funding	81,065	645,353	(726,418)	0	0	0	0
Speed Alert Mobile Trailer for Driver Speed Education	26,290	0	(26,290)	0	0	0	0
State Black Spot	1,203	0	(1,203)	0	0	0	0
Total	28,456,213	5,475,138	(4,231,866)	29,699,485	5,426,462	(3,249,968)	31,875,979

For grants and contributions where funds have not been fully expended at 30 June 2019, the balance of the grant has been transferred to the Restricted Grants and Contributions Reserve, relevant Developer Contribution Reserve or remains in net current assets at 30 June surplus. These funds are quarantined as Restricted Cash at year ended 30 June 2019 and will be expended in the 2019/20 year or as determined by the relevant Developer Contribution Scheme.

Notes:
(1) - Grants/contributions recognised as revenue in a previous reporting period which were not expended at the close of the previous reporting period.

(2) - New grants/contributions which were recognised as revenues during the reporting period and which had not yet been fully expended in the manner specified by the contributor.

(3) - Grants/contributions which had been recognised as revenues in a previous reporting period or received in the current reporting period and which were expended in the current reporting period in the manner specified by the contributor.

23. RATING INFORMATION

(a) Rates

RATE TYPE Differential general rate / general rate	Rate in $	Number of Properties	2018/19 Actual Rateable Value	2018/19 Actual Rate Revenue	2018/19 Actual Interim Rates	2018/19 Actual Back Rates	2018/19 Actual Total Revenue	2018/19 Budget Rate Revenue	2018/19 Budget Interim Rate	2018/19 Budget Total Revenue	2017/18 Actual Total Revenue
			$	$	$	$	$	$	$	$	$
Gross rental valuations											
Improved Residential	0.07999	13,747	238,950,796	18,859,093	413,654	11,467	19,284,214	18,859,093	529,676	19,388,769	16,881,680
Vacant Residential	0.16828	376	7,792,630	1,375,819	(55,435)	(3,207)	1,317,177	1,375,819	0	1,375,819	1,309,947
Improved Special Residential	0.07120	815	19,436,231	1,372,308	11,525	(723)	1,383,110	1,372,308	0	1,372,308	1,253,425
Light Industrial and Commercial	0.09043	133	23,230,285	2,118,044	27,193	(2,340)	2,142,897	2,118,044	0	2,118,044	2,081,600
General Industry and Service Commercial	0.08647	319	35,313,111	3,074,926	28,378	(8,387)	3,094,917	3,074,926	0	3,074,926	3,048,910
Large Scale General Industry and Service Commercial	0.08909	47	47,549,186	4,178,852	22,756	37,854	4,239,462	4,178,852	0	4,178,852	4,021,528
Vacant Non Residential	0.10304	35	2,422,880	235,692	30,427	0	266,119	235,692	0	235,692	0
Unimproved valuations											
General Industrial	0.01759	3	121,200,000	2,131,908	0	0	2,131,908	2,131,908	0	2,131,908	2,055,552
Rural	0.00505	143	242,241,000	1,241,497	(3,753)	(630)	1,237,114	1,241,497	0	1,241,497	457,282
Mining	0.00847	25	39,960,000	338,461			338,461	338,461	0	338,461	319,309
Urban/Urban Deferred	0.00000	0	0	0	0	0	0	0	0	0	888,855
Sub-Total		15,643	778,096,119	34,926,600	474,745	34,034	35,435,379	34,926,600	529,676	35,456,276	32,318,088
Minimum payment	**Minimum $**										
Gross rental valuations											
Improved Residential	1,036	1,438	1,658,878	1,481,480	3,991	1,056	1,486,527	1,481,480	0	1,481,480	1,661,240
Vacant Residential	1,036	904	923,572	992,488	(25,891)	452	967,049	992,488	0	992,488	901,155
Improved Special Residential	1,036	4	6,228	3,108	1,036	0	4,144	3,108	0	3,108	6,228
Light Industrial and Commercial	1,348	25	317,800	33,700	2,696	0	36,396	33,700	0	33,700	31,800
General Industry and Service Commercial	1,348	34	47,994	45,832	0	0	45,832	45,832	0	45,832	47,994
Large Scale General Industry and Service Commercial	1,348	0	0	0	0	0	0	2,072	0	2,072	0
Vacant Non Residential	1,036	2	0	2,072	0	0	2,072	0	0	0	0
Unimproved valuations											
General Industrial	1,348	0	923,572	0	0	0	0	0	0	0	0
Rural	1,036	115	1,658,878	66,304	5,572	4,058	75,934	66,304	0	66,304	14,878
Mining	1,348	16	47,994	20,220	1,344	0	21,564	20,220	0	20,220	17,011
Urban/Urban Deferred	0	0	0	0	0	0	0	0	0	0	59,270
Sub-Total		2,538	5,584,916	2,645,204	(11,252)	5,566	2,639,518	2,645,204	0	2,645,204	2,739,576
Total amount raised from general rate		18,181	783,681,035	37,571,804	463,493	39,600	38,074,897	37,571,804	529,676	38,101,480	35,057,664
Discounts/concessions expensed during the year (refer Note 23(b))							(6,477)			(6,243)	(7,302)
							38,068,420			38,095,237	35,050,362

SIGNIFICANT ACCOUNTING POLICIES

Rates

Control over assets acquired from rates is obtained at the commencement of the rating period or, where earlier, upon receipt of the rates.

23. RATING INFORMATION (Continued)

(b) Discounts, Incentives, Concessions, & Write-offs

Rates Discounts

Rate or Fee Discount Granted	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Small Balance Write Off	1,477	1,243	2,302
Rates Incentive Prize	5,000	5,000	5,000
	6,477	6,243	7,302

(c) Interest Charges & Instalments

Instalment Options	Date Due	Instalment Plan Admin Charge	Instalment Plan Interest Rate	Unpaid Rates Interest Rate
		$	%	%
Option One				
Single full payment	07 Sep 2018	$ 0.00	5.50%	11.00%
Option Two				
First instalment	07 Sep 2018	$ 7.70	5.50%	11.00%
Second instalment	21 Jan 2019		5.50%	11.00%
Option Three				
First instalment	07 Sep 2018	$ 23.10	5.50%	11.00%
Second instalment	09 Nov 2018		5.50%	11.00%
Third instalment	21 Jan 2019		5.50%	11.00%
Fourth instalment	25 Mar 2019		5.50%	11.00%
Option Four				
Direct debit option is available on a fortnightly deduction cycle. Instalment plan administration charge is charged annually on a pro-rata basis	28 Jun 2019	$ 6.90	5.50%	11.00%
Option Five				
Direct debit option is available on a weekly deduction cycle. Instalment plan administration charge is charged annually on a pro-rata basis	28 Jun 2019	$ 12.90	5.50%	11.00%

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Interest on unpaid rates	472,700	370,000	453,321
Interest on instalment plan	294,923	280,000	281,864
Deferred Pensioner Interest	18,317	0	14,860
Charges on instalment plan	164,002	118,000	119,040
	949,942	768,000	869,085

24. RATE SETTING STATEMENT INFORMATION

	Note	2018/19 (30 June 2019 Carried Forward)	2018/19 Budget (30 June 2019 Carried Forward)	2018/19 (1 July 2018 Brought Forward)
		$	$	$
(a) Non-cash amounts excluded from operating activities				
The following non-cash revenue or expenditure has been excluded from amounts attributable to operating activities within the Rate Setting Statement in accordance with *Financial Management Regulation 32.*				
Adjustments to operating activities				
Less: Profit on asset disposals	11(a)	(6,178)	(11,132)	(12,226)
Less: Reversal of prior year loss on revaluation of fixed assets		0	0	(2,762,144)
Movement in pensioner deferred rates (non-current)		(32,973)	0	(79,585)
Movement in Banksia Park deferred management fund receivable		610,100	0	4,648
Movement in Banksia Park valuation of unit contribution		(2,090,575)	0	(2,893,000)
Movement in employee benefit provisions		297,645	0	115,445
Add: Loss on disposal of assets	11(a)	152,265	200,172	181,971
Add: Loss on revaluation of fixed assets	10(a)	0	0	9,803
Add: Depreciation on assets	11(b)	15,359,581	13,672,393	14,200,785
Non cash amounts excluded from operating activities		14,289,865	13,861,433	8,765,697
(b) Surplus/(deficit) after imposition of general rates				
The following current assets and liabilities have been excluded from the net current assets used in the Rate Setting Statement in accordance with *Financial Management Regulation 32* to agree to the surplus/(deficit) after imposition of general rates.				
Adjustments to net current assets				
Less: Reserves - restricted cash	3	(55,730,366)	(47,038,546)	(52,072,348)
Less: Financial assets at amortised cost - self supporting loans	8(a)	(16,709)	(16,709)	(16,168)
Less: Banksia Park DMF Receivable	8(a)	(297,819)	0	(346,925)
Add: Current Borrowings	14(a)	1,451,093	1,643,965	777,133
Add: Current Provisions	15	4,902,379	4,222,885	4,627,270
Add: Banksia Park Unit Contributions	13	17,133,425	0	19,224,000
Add: Allowance for impairment of receivables as at 1 July 2018	27(b)	0	0	(164,521)
Total adjustments to net current assets		(32,557,997)	(41,188,405)	(27,971,559)
Net current assets used in the Rate Setting Statement				
Total current assets		62,781,266	52,836,197	58,515,520
Less: Total current liabilities		(27,744,922)	(11,647,792)	(28,645,156)
Less: Total adjustments to net current assets		(32,557,997)	(41,188,405)	(27,971,559)
Net current assets used in the Rate Setting Statement		2,478,347	0	1,898,805

Difference:

There was a difference of $164,521 between the 1 July 2018 surplus brought forward position used in the 2019 audited financial report and the surplus carried forward position as disclosed in the 2018 audited financial report. This difference relates to the recognition of the allowance for impairment of receivables as at 1 July 2018 due to the application of AASB 9: Financial Instruments.

25. FINANCIAL RISK MANAGEMENT

This note explains the City's exposure to financial risks and how these risks could affect the City's future financial performance.

Risk	Exposure arising from	Measurement	Management
Market risk - interest rate	Long term borrowings at variable rates	Sensitivity analysis	Utilise fixed interest rate borrowings
Credit risk	Cash and cash equivalents, trade receivables, financial assets and	Aging analysis Credit analysis	Diversification of bank deposits, credit limits. Investment policy
Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Availablity of commited credit lines and borrowing facilities

The City does not engage in transactions expressed in foreign currencies and is therefore not subject to foreign currency risk.

Financial risk management is carried out by the finance area under policies approved by the Council. The finance area identifies, evaluates and manages financial risks in close co-operation with the operating divisions. Council have approved the overall risk management policy and provide policies on specific areas such as investment policy.

(a) Interest rate risk

Cash and cash equivalents

The City's main interest rate risk arises from cash and cash equivalents with variable interest rates, which exposes the City to cash flow interest rate risk. Short term overdraft facilities also have variable interest rates however these are repaid within 12 months, reducing the risk level to minimal.

Excess cash and cash equivalents are invested in fixed interest rate term deposits which do not expose the City to cash flow interest rate risk. Cash and cash equivalents required for working capital are held in variable interest rate accounts and non-interest bearing accounts. Carrying amounts of cash and cash equivalents at the 30 June and the weighted average interest rate across all cash and cash equivalents and term deposits held disclosed as financial assets at amortised cost are reflected in the table below.

	Weighted Average Interest Rate	Carrying Amounts	Fixed Interest Rate	Variable Interest Rate	Non Interest Bearing
	%	$	$	$	$
2019					
Cash and cash equivalents	0.99%	11,888,157	2,135,837	9,747,750	4,570
Financial assets at amortised cost - term deposits	2.46%	45,348,386	45,348,386	0	0
2018					
Cash and cash equivalents	0.99%	9,367,549	6,742,910	2,619,989	4,650
Financial assets at amortised cost	2.49%	43,529,359	43,529,359	0	0

Sensitivity

Profit or loss is sensitive to higher/lower interest income from cash and cash equivalents as a result of changes in interest rates.

	2019	2018
	$	$
Impact of a 1% movement in interest rates on profit and loss and equity*	572,365	528,969

* Holding all other variables constant

Borrowings

The City manages interest rate risk by borrowing long term and fixing the interest rate to the situation considered the most advantageous at the time of negotiation. The City does not consider there to be any interest rate risk in relation to borrowings. Details of interest rates applicable to each borrowing may be found at Note 14(b).

25. FINANCIAL RISK MANAGEMENT (Continued)

(b) Credit risk

Trade Receivables

The City's major receivables comprise rates annual charges and user fees and charges. The major risk associated with these receivables is credit risk – the risk that the debts may not be repaid. The City manages this risk by monitoring outstanding debt and employing debt recovery policies. It also encourages ratepayers to pay rates by the due date through incentives.

Credit risk on rates and annual charges is minimised by the ability of the City to recover these debts as a secured charge over the land, that is, the land can be sold to recover the debt. The City is also able to charge interest on overdue rates and annual charges at higher than market rates, which further encourages payment.

The level of outstanding receivables is reported to Council monthly and benchmarks are set and monitored for acceptable collection performance.

The City applies the AASB 9 simplified approach to measuring expected credit losses using a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, rates receivable are separated from other trade receivables due to the difference in payment terms and security for rates receivable.

The expected loss rates are based on the payment profiles of rates and fees and charges over a period of 12 months before 1 July 2018 or 1 July 2019 respectively and the corresponding historical losses experienced within this period. Historical credit loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors such as the ability of ratepayers and residents to settle the receivables. Housing prices and unemployment rates have been identified as the most relevant factor in repayment rates, and accordingly adjustments are made to the expected credit loss rate based on these factors. There are no material receivables that have been subject to a re-negotiation of repayment terms.

No expected credit loss was forecast on 1 July 2018 or 30 June 2019 for rates receivable as penalty interest applies to unpaid rates and properties associated with unpaid rates may be disposed of to recover outstanding amounts.

	Current	More than 1 year past due	Total
30 June 2019			
Rates receivable			
Expected credit loss	0.00%	0.00%	0.00%
Gross carrying amount	0	3,865,054	3,865,054
Loss allowance	0	0	0
01 July 2018			
Rates receivable			
Expected credit loss	0.00%	0.00%	0.00%
Gross carrying amount	0	3,597,121	3,597,121
Loss allowance	0	0	0

The loss allowance as at 30 June 2019 and 1 July 2018 (on adoption of AASB 9) was determined as follows for sundry receivables.

	Current	More than 30 days past due	More than 60 days past due	More than 90 days past due	Total
30 June 2019					
Sundry Receivables					
Expected credit loss	1.2%	3.6%	3.5%	35.9%	
Gross carrying amount	149,773	29,983	15,737	267,007	462,500
Loss allowance	1,812	1,084	558	95,967	99,421
01 July 2018					
Sundry Receivables					
Expected credit loss	0.3%	3.2%	9.7%	38.3%	
Gross carrying amount	93,480	166,496	61,992	398,667	720,635
Loss allowance	310	5,408	6,044	152,759	164,521

25. FINANCIAL RISK MANAGEMENT (Continued)

(c) Liquidity risk

Payables and borrowings

Payables and borrowings are both subject to liquidity risk – that is the risk that insufficient funds may be on hand to meet payment obligations as and when they fall due. The City manages this risk by monitoring its cash flow requirements and liquidity levels and maintaining an adequate cash buffer. Payment terms can be extended and overdraft facilities drawn upon if required and disclosed in Note 14(d).

The contractual undiscounted cash flows of the City's payables and borrowings are set out in the liquidity table below. Balances due within 12 months equal their carrying balances, as the impact of discounting is not significant.

	Due within 1 year	Due between 1 & 5 years	Due after 5 years	Total contractual cash flows	Carrying values
2019	$	$	$	$	$
Payables	5,308,025	8,041,713	8,041,713	21,391,450	21,391,450
Borrowings	2,505,552	13,396,661	10,808,530	26,710,743	21,552,398
	7,813,577	21,438,373	18,850,243	48,102,193	42,943,848
2018					
Payables	5,176,753	9,032,000	9,032,000	23,240,753	23,240,753
Borrowings	1,888,752	13,346,702	13,364,041	28,599,495	22,071,411
	7,065,505	22,378,702	22,396,041	51,840,248	45,312,164

26. TRUST FUNDS

Funds held at balance date which are required to be held in trust and which are not included in the financial statements are as follows:

In previous years, bonds and deposits were held as trust monies. In the current year they are included in Restricted cash at Note 3 and shown as a current liability at Note 13.

	1 July 2018	Amounts Received	Amounts Paid	Reclassification to Restricted Cash	30 June 2019
	$	$	$	$	$
APU Security Bonds	15,481	580	(470)	0	15,591
Contiguous Local Authorities Group (CLAG)	200	3,594	(200)	0	3,594
Public Open Space Cash In Lieu	200,061	4,178	0	0	204,239
Hall Security Bonds	71,653	157,087	(161,236)	(67,504)	0
Footpath & Kerbing Security Deposits	410,680	1,123	(147,040)	(264,763)	0
Sports Forfeiture Security Deposits	200	0	0	(200)	0
Bus Hire Security Deposits	3,000	3,000	(2,500)	(3,500)	0
Demolition Security Deposits	2,351	0	0	(2,351)	0
Miscellaneous Deposits	82,423	3,156	(600)	(84,979)	0
Footpath Construction Bonds	2,000	0	0	(2,000)	0
Land Subdivision Bonds	588,211	69,322	(179,734)	(477,799)	0
Road Maintenance Bonds	293,234	53,165	(269,403)	(76,996)	0
Landscaping Subdivision Bonds	138,786	1,739	(1,196)	(139,329)	0
Mortimer Road - Community Trust	10,421	273	0	(10,694)	0
ATU Landscaping Bonds	2,378	0	0	(2,378)	0
Landscaping Development Bonds	64,477	627	0	(65,104)	0
Subdivision Handrails	15,395	0	0	(15,395)	0
Off Road Vehicles	1,510	0	0	(1,510)	0
DCA Contingency Bonds	265,736	47,240	(89,842)	(223,134)	0
Retention Funds	37,524	30,823	(43,751)	(24,596)	0
City of Kwinana Staff Christmas Saver	0	126,057	(6,352)	(119,705)	0
	2,205,721	501,964	(902,324)	(1,581,937)	223,424

27. INITIAL APPLICATION OF AUSTRALIAN ACCOUNTING STANDARDS

During the current year, the City adopted all of the new and revised Australian Accounting Standards and Interpretations which were compiled, became mandatory and which were applicable to its operations.

Whilst many reflected consequential changes associated with the amendment of existing standards, the only new standard with material application is AASB 9 *Financial Instruments* .

AASB 9 Financial instruments

AASB 9 *Financial Instruments* replaces AASB 139 *Financial Instruments: Recognition and Measurement* for annual reporting periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting.

The City applied AASB 9 retrospectively, with an initial application date of 1 July 2018. The adoption of AASB 9 has resulted in changes in accounting policies and adjustments to the amounts recognised in the financial statements. In accordance with AASB 9.7.2.15, the City has not restated the comparative information which continues to be reported under AASB 139. Differences arising from adoption have been recognised directly in accumulated surplus/(deficit).

The effect of adopting AASB 9 as at 1 July 2018 was, as follows:

	Adjustments	01 July 2018
		$
Assets		
Trade receivables	(a),(b)	(164,521)
Total Assets		(164,521)
Total adjustments to Retained Surplus		
Retained surplus	(a),(b)	(164,521)
		(164,521)

The nature of these adjustments are described below:

(a) Classification and measurement

Under AASB 9, financial assets are subsequently measured at amortised cost, fair value through other comprehensive income (fair value through OCI) or fair value through profit or loss (fair value through P/L). The classification is based on two criteria: the City's business model for managing the assets; and whether the assets' contractual cash flows represent 'solely payments of principal and interest' on the principal amount outstanding.

The assessment of the City's business model was made as of the date of initial application, 1 July 2018. The assessment of whether contractual cash flows on financial assets are solely comprised of principal and interest was made based on the facts and circumstances as at the initial recognition of the assets.

27. INITIAL APPLICATION OF AUSTRALIAN ACCOUNTING STANDARDS (Continued)

The classification and measurement requirements of AASB 9 did not have a significant impact on the City. The following are the changes in the classification of the City's financial assets:
- Trade receivables and Loans and advances (i.e. Other debtors) classified as Loans and receivables as at 30 June 2018 are held to collect contractual cash flows and give rise to cash flows representing solely payments of principal and interest. These are classified and measured as Financial assets at amortised cost beginning 1 July 2018.

In summary, upon the adoption of AASB 9, the City had the following required (or elected) reclassifications as at 1 July 2018:

AASB 139 category	AASB 139 value	AASB 9 category amortised cost	Fair value through OCI	Fair value through P/L
	$	$	$	$
Loans and receivables				
Trade receivables*	4,996,538	4,996,538	0	0
Loans and advances	282,850	282,850	0	0
	5,279,388	5,279,388	0	0

* The change in carrying amount is a result of additional impairment allowance. See the discussion on impairment below.

(b) Impairment

The adoption of AASB 9 has fundamentally changed the City's accounting for impairment losses for financial assets by replacing AASB 139's incurred loss approach with a forward-looking expected credit loss (ECL) approach. AASB 9 requires the City to recognise an allowance for ECLs for all financial assets not held at fair value through P/L. Upon adoption of AASB 9, the City recognised an additional impairment on the City's Trade receivables of $164,521 which resulted in a decrease in retained surplus of $164,521 as at 1 July 2018.

Set out below is the reconciliation of the ending impairment allowances in accordance with AASB 139 to the opening loss allowances determined, in accordance with AASB 9:

	Impairment under AASB 139 as at 30 June 2018	Remeasurement	ECL under AASB 9 as at 01 July 2018
	$	$	$
Loans and receivables under AASB 139 / Financial assets at amortised cost under AASB 9	0	164,521	164,521
	0	164,521	164,521

(c) Impact of changes to Retained Surplus

The impact on the City of the changes as at 1 July 2018 is as follows:

	Adjustments	2018
		$
Retained surplus - 30 June 2018		241,396,775
Adjustment to retained surplus from adoption of AASB 9	(164,521)	(164,521)
Retained surplus - 1 July 2018		241,232,254

28. NEW ACCOUNTING STANDARDS AND INTERPRETATIONS FOR APPLICATION IN FUTURE YEARS

The AASB has issued a number of new and amended Accounting Standards and Interpretations that have mandatory application dates for future reporting periods,some of which are relevant to the City.

This note explains management's assessment of the new and amended pronouncements that are relevant to the City, the impact of the adoption of AASB 15 *Revenue from Contracts with Customers* , AASB 16 *Leases* and AASB 1058 *Income for Not-for-Profit Entities* . These standards are applicable to future reporting periods and have not yet been adopted.

(a) Revenue from Contracts with Customers

The City will adopt AASB 15 Revenue from Contracts with Customers (issued December 2014) on 1 July 2019 resulting in changes in accounting policies. In accordance with the transition provisions AASB 15, the City will adopt the new rules retrospectively with the cumulative effect of initially applying these rules recognised on 1 July 2019. In summary the following adjustments are expected to be made to the amounts recognised in the Statement of Financial Position at the date of initial application (1 July 2019):

	Note	AASB 118 carrying amount 30 June 2019	Reclassification	AASB 15 carrying amount 01 July 2019
		$	$	$
Contract liabilities - current				
Unspent grants, contributions and reimbursements		0	215,781	215,781
Developer contributions		0	8,230,641	8,230,641
Contract liabilities non-current				
Developer contributions		0	23,383,745	23,383,745
Adjustment to retained surplus from adoption of AASB 15	28(d)		(31,830,167)	

(b) Leases

The City will adopt AASB 16 retrospectively from 1 July 2019 as a result of a change in accounting policies. In accordance with the transition provisions of AASB 16, the City has applied this Standard to its leases retrospectively, with the cumulative effect of initially applying AASB16 recognised on 1 July 2019. In applying the AASB 16 under the specific transition provisions chosen, the City will not restate comparatives for prior reporting periods.

On adoption of AASB 16, the City will recognise lease liabilties in relation to leases which had previously been classified as an 'operating lease' applying AASB 117. These lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on 1 July 2019. The weighted average lessee's incremental borrowing rates applied to the lease liabilities on 1 July 2019 is 2.35%.

	Note	2019
		$
Operating lease commitments disclosed as at 30 June 2019		783,653
Lease liability recognised as at 1 July 2019		
Discounted using the City's incremental borrowing rate of 2.35%		230,899
Right-of-use asset recognised at at 1 July 2019		226,133
Adjustment to Retained Earnings 1 July 2019	28(d)	4,766
Low-value leases recognised on a straight-line basis as an expense		544,143

On adoption of AASB 16, the City will recognise a right-of-use asset in relation to a lease which had previously been classified as an 'operating lease' applying AASB 117. This right-of-use asset is to be measured as if AASB 16 had been applied since its commencement date by the carrying amount but discounted using the lessee's incremental borrowing rate as on 1 July 2019. Property, plant and equipment increases by $226,133 on 1 July 2019 and an adjustment of $4,766 to retained earnings.

On adoption of AASB 16 Leases (issued February 2016), for leases which had previously been classified as an 'operating lease' when applying AASB 117, the City is not required to make any adjustments on transition for leases for which the underlying asset is of low value. Assets for which the fair value as at the date of acquisition is under $5,000 are not recognised as an asset in accordance with Financial Management Regulation 17A (5).

In applying AASB 16 for the first time, the City will use the following practical expedient permitted by the standard.
- The exclusion of initial direct costs from the measurement of the right-of-use asset at the date of initial application.

28. NEW ACCOUNTING STANDARDS AND INTERPRETATIONS FOR APPLICATION IN FUTURE YEARS (Continued)

(c) Income For Not-For-Profit Entities

The City will adopt AASB 1058 *Income for Not-for-Profit Entities* (issued December 2016) on 1 July 2019 which will result in changes in accounting policies. In accordance with the transition provisions AASB 1058, the City will adopt the new rules retrospectively with the cumulative effect of initially applying AASB 1058 recognised at 1 July 2019. Comparative information for prior reporting periods shall not be restated in accordance with AASB 1058 transition requirements.

In applying AASB 1058 prospectively with the cumulative effect of initially applying the Standard on 1 July 2019 changes will occur to the following financial statement line items by application of AASB 1058 as compared to AASB 1004 Contributions before the change:

	Note	AASB 1004 carrying amount 30 June 2019	Reclassification	AASB 1058 carrying amount 01 July 2019
		$	$	$
Trade and other payables		21,391,450	904,842	22,296,292
Adjustment to retained surplus from adoption of AASB 1058	28(d)		(904,842)	

Prepaid rates are, until the taxable event for the rates has occurred, refundable at the request of the ratepayer. Therefore the rates received in advance give rise to a financial liability that is within the scope of AASB 9. On 1 July 2019 the prepaid rates will be recognised as a financial asset and a related amount recognised as a financial liability and no income recognised by the City. When the taxable event occurs the financial liability will be extinguished and the City will recognise income for the prepaid rates that have not been refunded.

Assets that were acquired for consideration, that were significantly less than fair value principally to enable the City to further its objectives, may have been measured on initial recognition under other Australian Accounting Standards at a cost that was significantly less than fair value. Such assets are not required to be remeasured at fair value.

Volunteer Services in relation to Volunteer Fire Services will not be recognised in revenue and expenditure as the fair value of the services cannot be reliably estimated.

(d) Impact of changes to Retained Surplus

The impact on the City of the changes as at 1 July 2019 is as follows:

	Note	Adjustments	2019
			$
Retained surplus - 30 June 2019			244,608,437
Adjustment to retained surplus from adoption of AASB 15	28(a)	(31,830,167)	
Adjustment to retained surplus from adoption of AASB 16	28(b)	4,766	
Adjustment to retained surplus from adoption of AASB 1058	28(c)	(904,842)	(32,730,243)
Retained surplus - 01 July 2019			211,878,194

29. EFFECT OF CHANGE IN ACCOUNTING POLICY / CORRECTION OF ERROR

Balances relating to the 2018 comparative period have been amended due to a change in accounting policy and correction of error. These amendments have been adjusted as shown below.

(a) Change in Accounting Policy

On the 26th June 2018 Paragraph 17A (5) was inserted into Local Government (Financial Management) Regulations 1996. The regulation stated an asset is to be excluded from the assets of a local government if the fair value of the asset at the date of acquisition by the local government is under $5,000.

Australian Accounting Standard AASB 108 Accounting Policies, Changes in Accounting Estimates and Errors, required this amendment to the asset values to be treated as a change in accounting policy. The standard requires balances to be adjusted retrospectively, unless it is impracticable to determine the period-specific or cumulative effects of the change.

The City has applied this change retrospectively, adjusting the Financial report balances as at 30 June 2018. Assets with a fair value at the date of acquisition of under $5,000 and purchased prior to 30 June 2018 have been excluded from the assets of the City.

(b) Correction of error

The following adjustments have been made to comparative amounts in the 30 June 2018 Financial Report to bring in to account financial activities that were incorrectly classified in prior years.

Banksia Park Retirement Village Unit Contributions payable have historically been split as current and non-current liabilities dependant on the City's view on timing of lease terminations. Irrespective of the City's expectation that the liability will not be settled within the next 12 months, there is no unconditional right to defer settlement of the liability beyond that period and as such the contributions should be recognised wholly as a current liability in accordance with AASB101 Presentation of Financial Statements.

Financial Assistance Grants paid in the current financial year but relating to the future financial year have been reclassified from restricted to unrestricted cash for the 2018 comparatives.

These changes have resulted in restating each of the affected financial statement line items for the prior periods as follows:

2017 Statement of Financial Position	30 June 17 Original Balance $	Increase/ (Decrease) $	1 July 17 Restated $
Non-Current Assets			
Property, plant and equipment	159,964,117	(800,283)	159,163,834
Current Liabilities			
Current Trade and other payables	4,269,486	22,117,000	26,386,486
Non-Current Liabilities			
Non-Current Payables	22,117,000	(22,117,000)	0
Equity			
Retained Surplus	232,470,241	(800,283)	231,669,958
Financial Ratios			
Current Ratio	1.48	(1.19)	0.29
Debt service cover ratio	1.97	(0.18)	1.79
Operating surplus ratio	(0.10)	(0.01)	(0.11)
Own source revenue coverage ratio	0.79	(0.01)	0.78

29. EFFECT OF CHANGE IN ACCOUNTING POLICY / CORRECTION OF ERROR (Continued)

2018	30 June 18 Original Balance	Increase/ (Decrease)	30 June 18 Restated
Statement of Financial Position	$	$	$
Non-Current Assets			
Property, plant and equipment	155,477,757	(622,635)	154,855,122
Current Liabilities			
Current Trade and other payables	4,016,753	19,224,000	23,240,753
Non-Current Liabilities			
Non-Current Payables	19,224,000	(19,224,000)	0
Equity			
Retained Surplus	241,215,987	180,788	241,396,775
Reserves Cash Backed	52,875,771	(803,423)	52,072,348
Statement of Comprehensive Income			
By Nature or Type			
Expenses - Depreciation on non-current assets	(14,379,553)	178,768	(14,200,785)
Loss on disposal of assets	(180,851)	(1,120)	(181,971)
By program			
Governance	(5,286,761)	30,948	(5,255,813)
General purpose funding	(1,200,118)	0	(1,200,118)
Law, order, public safety	(3,165,065)	6,717	(3,158,348)
Health	(1,185,747)	2,725	(1,183,022)
Education and welfare	(10,907,996)	18,706	(10,889,290)
Community amenities	(9,480,011)	6,446	(9,473,565)
Recreation and culture	(18,851,782)	71,748	(18,780,034)
Transport	(13,325,344)	77	(13,325,267)
Economic services	(1,888,929)	2,645	(1,886,284)
Other property and services	(3,704,608)	38,756	(3,665,852)
(Loss) on asset disposals	(180,851)	(1,120)	(181,971)
Net result for the period	11,277,858	177,648	11,455,506
Total comprehensive income for the period	68,425,734	177,648	68,603,382
Rate Setting Statement			
Expenditure from operating activities			
Governance	(5,366,680)	29,828	(5,336,852)
General purpose funding	(1,200,118)	0	(1,200,118)
Law, order, public safety	(3,211,075)	6,717	(3,204,357)
Health	(1,185,747)	2,725	(1,183,022)
Education and welfare	(11,007,437)	18,706	(10,988,731)
Community amenities	(9,485,946)	6,446	(9,479,501)
Recreation and culture	(19,697,694)	71,748	(19,625,946)
Transport	(13,511,834)	77	(13,511,758)
Economic services	(1,888,929)	2,645	(1,886,284)
Other property and services	(1,027,063)	38,756	(988,306)
	(67,582,523)	177,648	(67,404,875)
Non-cash amounts excluded from operating activities	8,943,345	(177,648)	8,765,697
Transfers to reserves (restricted assets)	(9,919,440)	803,423	(9,116,017)
Surplus/(deficit) after imposition of general rates	1,259,903	803,423	2,063,326

29. EFFECT OF CHANGE IN ACCOUNTING POLICY / CORRECTION OF ERROR (Continued)

2018	30 June 18 Original Balance	Increase/ (Decrease)	30 June 18 Restated
	$	$	$
Note 9 - Property, Plant and Equipment			
Opening Balance as at 1st July 2018	159,964,117	(800,283)	159,163,834
Additions	2,237,698	0	2,237,698
Disposals	(699,972)	(1,120)	(701,092)
Depreciation (expense)	(6,024,086)	178,768	(5,845,318)
Carrying amount at 30 June 2018	155,477,757	(622,635)	154,855,122
Note 11(a) - Disposal of Assets			
Netbook Value	699,972	1,120	701,092
Loss on Disposal	(180,851)	(1,120)	(181,971)
Note 11(b) - Depreciation			
Buildings - specialised	4,643,062	1,345	4,641,717
Furniture and equipment	492,885	149,668	343,217
Plant and equipment	888,139	27,755	860,384
Infrastructure - Roads	4,918,898	0	4,918,898
Infrastructure - Footpaths	1,045,795	0	1,045,795
Infrastructure - Drainage	884,616	0	884,616
Infrastructure - Car Parks	154,554	0	154,554
Infrastructure - Bus Shelters	72,860	0	72,860
Infrastructure - Street Lights	55,799	0	55,799
Infrastructure - Parks & Ovals	1,153,434	0	1,153,434
Infrastructure - Other	69,511	0	69,511
	14,379,553	178,768	14,200,785
Note 16 - Notes to the Statement of Cash Flows			
Net Result	11,277,858	(177,648)	11,455,506
Depreciation	14,379,553	178,768	14,200,785
Profit/(loss) on sale of asset	168,625	(1,120)	169,745
Note 17 - Total Assets Classified by Function and Activity			
Governance	70,100,083	89,084	70,010,999
Law, order, public safety	2,204,801	19,084	2,185,717
Health	99,513	5,760	93,753
Education and welfare	33,416,340	74,075	33,342,265
Community amenities	908,486	15,538	892,948
Recreation and culture	84,968,301	304,054	84,664,247
Transport	329,275,107	0	329,275,107
Economic services	51,599,340	9,800	51,589,540
Other property and services	3,638,124	105,240	3,532,884
	576,210,095	622,635	575,587,460
Note 31 - Financial Ratios			
Current Ratio	1.09	(0.83)	0.26
Operating surplus ratio	(0.08)	0.01	(0.07)
Asset renewal funding ratio *	0.78	0.28	1.06

*The asset renewal funding ratio changed due the discount rate being incorrectly entered as 2.5 rather than 2.5% in the 2018 Financial report.

30. OTHER SIGNIFICANT ACCOUNTING POLICIES

a) Goods and services tax (GST)
Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO).

Receivables and payables are stated inclusive of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with receivables or payables in the statement of financial position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the ATO are presented as operating cash flows.

b) Current and non-current classification
The asset or liability is classified as current if it is expected to be settled within the next 12 months, being the City's operational cycle. In the case of liabilities where the City does not have the unconditional right to defer settlement beyond 12 months, such as vested long service leave, the liability is classified as current even if not expected to be settled within the next 12 months. Inventories held for trading are classified as current or non-current based on the City's intentions to release for sale.

c) Rounding off figures
All figures shown in this annual financial report, other than a rate in the dollar, are rounded to the nearest dollar. Amounts are presented in Australian Dollars.

d) Comparative figures
Where required, comparative figures have been adjusted to conform with changes in presentation for the current financial year.

When the City applies an accounting policy retrospectively, makes a retrospective restatement or reclassifies items in its financial statements that has a material effect on the statement of financial position, an additional (third) statement of financial position as at the beginning of the preceding period in addition to the minimum comparative financial statements is presented.

e) Budget comparative figures
Unless otherwise stated, the budget comparative figures shown in this annual financial report relate to the original budget estimate for the relevant item of disclosure.

f) Superannuation
The City contributes to a number of Superannuation Funds on behalf of employees. All funds to which the City contributes are defined contribution plans.

g) Fair value of assets and liabilities
Fair value is the price that the City would receive to sell the asset or would have to pay to transfer a liability, in an orderly (i.e. unforced) transaction between independent, knowledgeable and willing market participants at the measurement date.

As fair value is a market-based measure, the closest equivalent observable market pricing information is used to determine fair value. Adjustments to market values may be made having regard to the characteristics of the specific asset or liability. The fair values of assets that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data.

To the extent possible, market information is extracted from either the principal market for the asset or liability (i.e. the market with the greatest volume and level of activity for the asset or liability) or, in the absence of such a market, the most advantageous market available to the entity at the end of the reporting period (i.e. the market that maximises the receipts from the sale of the asset after taking into account transaction costs and transport costs).

For non-financial assets, the fair value measurement also takes into account a market participant's ability to use the asset in its highest and best use or to sell it to another market participant that would use the asset in its highest and best use.

h) Fair value hierarchy
AASB 13 requires the disclosure of fair value information by level of the fair value hierarchy, which categorises fair value measurement into one of three possible levels based on the lowest level that an input that is significant to the measurement can be categorised into as follows:

Level 1
Measurements based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2
Measurements based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3
Measurements based on unobservable inputs for the asset or liability.

The fair values of assets and liabilities that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data. If all significant inputs required to measure fair value are observable, the asset or liability is included in Level 2. If one or more significant inputs are not based on observable market data, the asset or liability is included in Level 3.

Valuation techniques
The City selects a valuation technique that is appropriate in the circumstances and for which sufficient data is available to measure fair value. The availability of sufficient and relevant data primarily depends on the specific characteristics of the asset or liability being measured. The valuation techniques selected by the City are consistent with one or more of the following valuation approaches:

Market approach
Valuation techniques that use prices and other relevant information generated by market transactions for identical or similar assets or liabilities.

Income approach
Valuation techniques that convert estimated future cash flows or income and expenses into a single discounted present value.

Cost approach
Valuation techniques that reflect the current replacement cost of the service capacity of an asset.

Each valuation technique requires inputs that reflect the assumptions that buyers and sellers would use when pricing the asset or liability, including assumptions about risks. When selecting a valuation technique, the City gives priority to those techniques that maximise the use of observable inputs and minimise the use of unobservable inputs. Inputs that are developed using market data (such as publicly available information on actual transactions) and reflect the assumptions that buyers and sellers would generally use when pricing the asset or liability are considered observable, whereas inputs for which market data is not available and therefore are developed using the best information available about such assumptions are considered unobservable.

i) Impairment of assets
In accordance with Australian Accounting Standards the City's cash generating non-specialised assets, other than inventories, are assessed at each reporting date to determine whether there is any indication they may be impaired.

Where such an indication exists, an impairment test is carried out on the asset by comparing the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, to the asset's carrying amount.

Any excess of the asset's carrying amount over its recoverable amount is recognised immediately in profit or loss, unless the asset is carried at a revalued amount in accordance with another Standard (e.g. AASB 116) whereby any impairment loss of a revalued asset is treated as a revaluation decrease in accordance with that other Standard.

For non-cash generating specialised assets that are measured under the revaluation model ,such as roads, drains, public buildings and the like, no annual assessment of impairment is required. Rather AASB 116.31 applies and revaluations need only be made with sufficient regulatory to ensure the carrying value does not differ materially from that which would be determined using fair value at the ends of the reporting period.

31. FINANCIAL RATIOS

	2019 Actual	2018 Actual	2017 Actual
Current ratio [1]	0.25	0.26	0.29
Asset consumption ratio	0.79	0.81	0.76
Asset renewal funding ratio [3]	0.91	1.06	1.02
Asset sustainability ratio	0.22	0.24	0.31
Debt service cover ratio [2]	4.55	6.44	1.79
Operating surplus ratio [2]	(0.14)	(0.07)	(0.11)
Own source revenue coverage ratio [2]	0.77	0.78	0.78

The above ratios are calculated as follows:

Current ratio	current assets minus restricted assets / current liabilities minus liabilities associated with restricted assets
Asset consumption ratio	depreciated replacement costs of depreciable assets / current replacement cost of depreciable assets
Asset renewal funding ratio	NPV of planned capital renewal over 10 years / NPV of required capital expenditure over 10 years
Asset sustainability ratio	capital renewal and replacement expenditure / depreciation
Debt service cover ratio	annual operating surplus before interest and depreciation / principal and interest
Operating surplus ratio	operating revenue minus operating expenses / own source operating revenue
Own source revenue coverage ratio	own source operating revenue / operating expense

1. The prior years Current Ratio has been restated due to the reclassification of the Banksia Park Retirement Village Unit Contribution from a Non-Current Liability to a Current Liability. Refer Note 29(b)

   This results in a distortion of the ratio as any future lease termination will be accompanied by a corresponding debtor. The City does not expect the full liability to be realised within the next 12 months.

   The 2018 current ratio is also restated due to the reclassification of Financial Assistance Grants from restricted to unrestricted cash.

2. The prior years Debt Service Cover ratio, Operating Surplus ratio and Own Source Revenue coverage ratio have been restated due to a change in accounting policy resulting from the application of Local Government (Financial Management) Regulation 17A(5).

3. The 2018 Asset Renewal Funding ratio has been restated due to the discount rate being inadvertently entered as 250% rather than 2.5%

Auditor General

INDEPENDENT AUDITOR'S REPORT

To the Councillors of the City of Kwinana

Report on the Audit of the Financial Report

Opinion

I have audited the annual financial report of the City of Kwinana which comprises the Statement of Financial Position as at 30 June 2019, the Statement of Comprehensive Income by Nature or Type, Statement of Comprehensive Income by Program, Statement of Changes in Equity, Statement of Cash Flows and Rate Setting Statement for the year then ended, and notes comprising a summary of significant accounting policies and other explanatory information, and the Statement by the Chief Executive Officer.

In my opinion the annual financial report of the City of Kwinana:

(i) is based on proper accounts and records; and

(ii) fairly represents, in all material respects, the results of the operations of the City for the year ended 30 June 2019 and its financial position at the end of that period in accordance with the *Local Government Act 1995* (the Act) and, to the extent that they are not inconsistent with the Act, Australian Accounting Standards.

Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of my report. I am independent of the City in accordance with the *Auditor General Act 2006* and the relevant ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the annual financial report. I have also fulfilled my other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Emphasis of Matter – Basis of Accounting

I draw attention to Note 1 to the annual financial report, which describes the basis of accounting. The annual financial report has been prepared for the purpose of fulfilling the City's annual financial reporting responsibilities under the Act. Regulation 16 of the Local Government (Financial Management) Regulations 1996 (Regulations), does not allow a local government to recognise some categories of land, including land under roads, as assets in the annual financial report. My opinion is not modified in respect of this matter.

Responsibilities of the Chief Executive Officer and Council for the Financial Report

The Chief Executive Officer (CEO) of the City is responsible for the preparation and fair presentation of the annual financial report in accordance with the requirements of the Act, the Regulations and, to the extent that they are not inconsistent with the Act, Australian Accounting Standards. The CEO is also responsible for such internal control as the CEO determines is necessary to enable the preparation of an annual financial report that is free from material misstatement, whether due to fraud or error.

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In preparing the annual financial report, the CEO is responsible for assessing the City's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the State government has made decisions affecting the continued existence of the City.

The Council is responsible for overseeing the City's financial reporting process.

Auditor's Responsibility for the Audit of the Financial Report

The objectives of my audit are to obtain reasonable assurance about whether the annual financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the annual financial report.

As part of an audit in accordance with Australian Auditing Standards, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the annual financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the CEO.

- Conclude on the appropriateness of the CEO's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the City's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the annual financial report or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report, as we cannot predict future events or conditions that may have an impact.

- Evaluate the overall presentation, structure and content of the annual financial report, including the disclosures, and whether the annual financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Council and the CEO regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Report on Other Legal and Regulatory Requirements

In accordance with the Local Government (Audit) Regulations 1996 I report that:

(i) In my opinion, the following material matters indicate significant adverse trends in the financial position of the City:
    a. The Current Ratio, Asset Sustainability Ratio and the Operating Surplus Ratio have been below the Department of Local Government, Sport and Cultural Industries (DLGSC) standard for the past 3 years.

The financial ratios are reported in Note 31 of the financial report.

(ii) The following material matter indicating non-compliance with Part 6 of the *Local Government Act 1995*, the Local Government (Financial Management) Regulations 1996 or applicable financial controls of any other written law was identified during the course of my audit:
    a. The City's unrestricted cash position as at 30 June 2019 is a negative balance of $75,760 as the City had transferred funds into reserves that exceeded the balance of unrestricted cash that was in the Municipal Fund.

(iii) All required information and explanations were obtained by me.

(iv) All audit procedures were satisfactorily completed.

(v) In my opinion, the asset consumption ratio and the asset renewal funding ratio included in the annual financial report were supported by verifiable information and reasonable assumptions.

Other Matter

The annual financial report of the City for the year ended 30 June 2018 was audited by another auditor who expressed an unmodified opinion on that annual financial report. The financial ratios for 2017 and 2018 in Note 31 of the audited annual financial report were included in the supplementary information and/or audited annual financial report for those years.

Matters Relating to the Electronic Publication of the Audited Financial Report

This auditor's report relates to the annual financial report of the City of Kwinana for the year ended 30 June 2019 included on the City's website. The City's management is responsible for the integrity of the City's website. This audit does not provide assurance on the integrity of the City's website. The auditor's report refers only to the annual financial report described above. It does not provide an opinion on any other information which may have been hyperlinked to/from this annual financial report. If users of the annual financial report are concerned with the inherent risks arising from publication on a website, they are advised to refer to the hard copy of the audited annual financial report to confirm the information contained in this website version of the annual financial report.

CAROLINE SPENCER
AUDITOR GENERAL
FOR WESTERN AUSTRALIA
Perth, Western Australia
29 November 2019

13 Enbloc reports:

Nil

14 Reports - Community

14.1 Objection unless Specified Conditions are met – Fireworks Event Notice – Perth Motorplex, Kwinana Beach, Kwinana Motorplex Monster Truck Fireworks Display, Saturday, 7 March 2020

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

An application to hold a fireworks display at Perth Motorplex, Kwinana Beach was received on 21 November 2019 from Cardile International Fireworks Pty Ltd. There is one main motor racing event taking place on Saturday, 7 March 2020. This will be supported by fireworks from 8:00pm to 10:00pm, which is within the 'preferred hours' specified in the Fireworks Event Notice.

The applicant is seeking acknowledgement from the local government to hold the fireworks display event as part of the requirement under the *Dangerous Goods Safety Act 2004* (the Act) and its subsidiary regulations in order to lodge an application with the Department of Mines, Industry Regulation and Safety (DMIRS) – the approving agency.

The application is referred to Council given that it is a power that cannot be delegated.

Council has supported the fireworks displays in the past (subject to conditions) and they have been well managed. It is recommended that the same approach apply for this application and that the event be 'objected to unless specified conditions' as outlined in Attachment B, as per the requirements of *S148(6)(b)* of the Act are met.

OFFICER RECOMMENDATION:

That Council:

1. Authorise the Chief Executive Officer to sign the Fireworks Event Notice as detailed in confidential Attachment A from Cardile International Fireworks Pty Ltd for the Kwinana Motorplex Monster Truck Fireworks Display on Saturday, 7 March 2020 on behalf of the City of Kwinana (the Local Government) with objection unless specified conditions are met.

2. Authorise the Chief Executive Officer to sign the letter of objection unless specified conditions are met as detailed in Attachment B to Cardile International Fireworks Pty Ltd for the Kwinana Motorplex Monster Truck Fireworks Display on Saturday, 7 March 2020 on behalf of the City of Kwinana (the Local Government).

3. Authorise the Chief Executive Officer to sign the Fireworks Event Notice as detailed in confidential Attachment A, from Cardile International Fireworks Pty Ltd for the Kwinana Motorplex Monster Truck Fireworks Display on Saturday, 7 March 2020 on behalf of the City of Kwinana (the Local Government) and the letter of objection unless specified conditions are met as per Attachment B on behalf of the City of Kwinana (the Local Government) where the event is rescheduled to another date and time due to inclement weather.

14.1 OBJECTION UNLESS SPECIFIED CONDITIONS ARE MET – FIREWORKS EVENT NOTICE – PERTH MOTORPLEX, KWINANA BEACH, KWINANA MOTORPLEX MONSTER TRUCK FIREWORKS DISPLAY, SATURDAY, 7 MARCH 2020

DISCUSSION:

The Perth Motorplex venue generally holds up to five approved fireworks events each motor racing season between October and April. There have been no reported incidences of impact on spectators or surrounding properties from previously approved fireworks events. The previous fireworks events have been contracted to various licensed fireworks contractors including the current applicant. As such, fireworks displays are considered to be well managed.

The DMIRS prescribed form – Fireworks Event Notice (Attachment A) submitted by the applicant does not seek approval from the local government but an acknowledgement or objection. Part 3 of this form requests an authorised delegate or the Chief Executive Officer of the local government to acknowledge or state an objection to the fireworks event.

Based on legal advice provided there is no provision within the *Dangerous Goods Safety Act 2004*, subsidiary Regulations or the *Local Government Act 1995* for local government to provide this acknowledgement or objection to the event under delegation. Therefore, a report is prepared to Council for consideration.

The City of Kwinana is objecting to the application in accordance with the explicit terminology of *S148(6)(b)* of the Act to ensure the City's specified conditions are met as part of the City's formal response (Attachment B).

LEGAL/POLICY IMPLICATIONS:

For the purposes of Councillors considering a financial or impartiality interest only, the proponent is Robert Cardile of Cardile International Fireworks Pty Ltd and the current owner is WA Sports Centre Trust.

Relevant legislation applicable to this item.

The *Dangerous Goods Safety (Explosives) Regulations 2007 S148(2)(c)* states that:

Before the holder of a fireworks contractor licence can apply for a fireworks event permit, the holder must sign a fireworks event notice and give it to the following –

(c) the local government of the district in which the event will occur;

The *Dangerous Goods Safety (Explosives) Regulations 2007 S148(6)* states that*:*

(6) On receiving a fireworks event notice, a local government may give the holder a written response that –

(a) agrees to the proposed event; or

(b) objects to it unless certain conditions specified in the response are met; or

(c) objects to it on the grounds that the local government considers the event -

(i) is not in the public interest; or

(ii) will cause danger to the public or unintended damage to any property or to the environment.

FINANCIAL/BUDGET IMPLICATIONS:

There are no financial implications associated with this report.

ASSET MANAGEMENT IMPLICATIONS:

There are no asset management implications associated with this report.

ENVIRONMENTAL IMPLICATIONS:

The fireworks displays are to be conducted in accordance with Safe Use of Outdoor Fireworks in Western Australia Code of Practice.

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	Regulatory and Legal	6.8 - Provide services and advice to the community and all stakeholders to comply with statutory obligations to achieve a healthy community and environment

COMMUNITY ENGAGEMENT:

Community Engagement was not required for this report.

14.1 OBJECTION UNLESS SPECIFIED CONDITIONS ARE MET – FIREWORKS EVENT NOTICE – PERTH MOTORPLEX, KWINANA BEACH, KWINANA MOTORPLEX MONSTER TRUCK FIREWORKS DISPLAY, SATURDAY, 7 MARCH 2020

PUBLIC HEALTH IMPLICATIONS:

The decision to object to the fireworks event notice unless specified conditions are met has the potential to:

- contribute to a negative impact on the following determinants of health and factors–
  - Built Environment – Environmental Quality and Neighbourhood Amenity; and

- help improve the following determinants of health and factors –
  - Health Behaviours – Participation;
  - Socio-economics – Employment and Community Safety.

RISK IMPLICATIONS:

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

Risk Event	Potential harm to persons, environment and property
Risk Theme	Ineffective management of facilities/venues/events
Risk Effect/Impact	People/Health
Risk Assessment Context	Operational
Consequence	Major
Likelihood	Possible
Rating (before treatment)	High
Risk Treatment in place	Reduce - mitigate risk Prepare Contingent Plans - in event risk occurs
Response to risk treatment required/in place	Strict adherence to Fireworks Display Risk Assessment Checklist and Emergency Management Plan submitted by Cardile International Fireworks Pty Ltd as per confidential Attachment A and the Western Australian Outdoor Fireworks Code of Practice shall minimise any risk exposure to operational staff, spectators, properties and environment in general.
Rating (after treatment)	Low

COUNCIL DECISION

029

MOVED CR P FEASEY **SECONDED CR S WOOD**

That Council:

1. **Authorise the Chief Executive Officer to sign the Fireworks Event Notice as detailed in confidential Attachment A from Cardile International Fireworks Pty Ltd for the Kwinana Motorplex Monster Truck Fireworks Display on Saturday, 7 March 2020 on behalf of the City of Kwinana (the Local Government) with objection unless specified conditions are met.**

14.1 OBJECTION UNLESS SPECIFIED CONDITIONS ARE MET – FIREWORKS EVENT NOTICE – PERTH MOTORPLEX, KWINANA BEACH, KWINANA MOTORPLEX MONSTER TRUCK FIREWORKS DISPLAY, SATURDAY, 7 MARCH 2020

2. Authorise the Chief Executive Officer to sign the letter of objection unless specified conditions are met as detailed in Attachment B to Cardile International Fireworks Pty Ltd for the Kwinana Motorplex Monster Truck Fireworks Display on Saturday, 7 March 2020 on behalf of the City of Kwinana (the Local Government).

3. Authorise the Chief Executive Officer to sign the Fireworks Event Notice as detailed in confidential Attachment A, from Cardile International Fireworks Pty Ltd for the Kwinana Motorplex Monster Truck Fireworks Display on Saturday, 7 March 2020 on behalf of the City of Kwinana (the Local Government) and the letter of objection unless specified conditions are met as per Attachment B on behalf of the City of Kwinana (the Local Government) where the event is rescheduled to another date and time due to inclement weather.

CARRIED
7/0

ATTACHMENT B

12 December 2019

Ref No: 80.2019.839.1
Doc No: D19/69947
Officer: JPG

Cardile International Fireworks Pty Ltd
Attn: Robert Cardile
15 Bushey Road
WEMBLEY DOWNS WA 6019

Dear Robert

CITY OF KWINANA OBJECTION UNLESS SPECIFIED CONDITIONS ARE MET: FIREWORKS EVENT NOTICE FOR THE KWINANA MOTORPLEX MONSTER TRUCK FIREWORKS DISPLAY LOCATED AT PERTH MOTORPLEX, KWINANA BEACH.

Thank you for your application to display fireworks at the Perth Motorplex event 'Kwinana Motorplex Monster Truck Fireworks Display' scheduled for Saturday, 7 March 2020 between the hours of 8:00pm to 10:00pm. Your application has gone before the Ordinary Council Meeting on 11 December 2019 with Council's decision as follows:

As per requirements of the *Dangerous Goods Safety (Explosives) Regulations 2007* Section 148(6)(b), Council objects to the application for Fireworks Event Notice from Cardile International Fireworks Pty Ltd for the fireworks display event named 'Kwinana Motorplex Monster Truck Fireworks Display' to be held at Perth Motorplex, Kwinana Beach on Saturday, 7 March 2020 from 8:00pm to 10:00pm, unless the following specified conditions are met:

a. That the fireworks display complies with the Safe Use of Outdoor Fireworks in Western Australia Code of Practice;
b. That the submitted Fireworks Display Risk Assessment Checklist and Emergency Management Plan is strictly adhered to;

c. That the prescribed separation distances between buildings and patrons are strictly in accordance with the Australian Standard 2187·4·1998 Explosives-Storage, Transport and Use Part 4 Pyrotechnics-Outdoor Displays and shall be adhered to at all times;

d. That the separation between spectators including the general public be marked off as a 'No Entry' area and be properly supervised by personnel to ensure no person is exposed to undue risk and potential harm from projectiles;

e. That the 'Fall Out' zone is a non contact area and there is no risk of harm from pyrotechnic residue to spectators, general public or temporary and permanent structures and buildings area;

f. That noise sensitive premises within 500 metres of the event are notified, giving details of date, time and duration seven (7) days prior to the event;

g. That during the period of fireworks display (8:00pm to 10:00pm) a minimum of 500 litres of water for fire fighting purposes shall be available on site on a mobile fire fighting vehicle;

h. That a thorough inspection must be conducted at first light the following day to check that no unfired fireworks, hazardous debris or rubbish remain; and

i. That any verbal or written directions of a Department of Fire and Emergency Services Officer, a Police Officer or an Environmental Health Officer are forthwith adhered to in the interests of public health and safety.

Should you require further information on this matter please contact Environmental Health Officer, Jarod Griffiths, on 9439 0286.

Yours sincerely

Graeme Mackenzie
CHIEF EXECUTIVE OFFICER

15 Reports – Economic

15.1 Scheme Amendment: Home Occupation and Home Business

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

City Officers are continually considering ways to assist and foster small business in the City. Small businesses are an important employer within the City and an invaluable resource to the economy.

The City's Local Planning Scheme No.2 (LPS2) incorporates two land use definitions which allow people to operate a small business from home, being a Home Occupation and a Home Business. Both land uses are associated with a dwelling and require the occupant to operate the business with a key difference relating to the scale of the business.

This amendment seeks to introduce the Home Business land use into Table 1 - Zoning and Use Classes (Table 1) of LPS2. While a Home Business is defined in LPS2, it has not been allocated land use permissibility within Table 1. As a result, applications for a Home Business are routinely considered as a 'Use not Specified'. The insertion of Home Business into Table 1 and its permissibility in the various zones will assist City Officers in the timely consideration of applications and prevent unnecessary delays in the establishment of small businesses within the community.

The amendment also seeks to remove an LPS2 requirement to renew Home Occupation applications on an annual basis. LPS2 currently requires Home Occupation approvals to be renewed annually. The process involves the applicant paying a fee and City Officers issuing a new planning approval. The intent in requiring annual renewal was principally to allow the City to not reapprove Home Occupations that are a nuisance or had an adverse impact on residents in the area. However, where the approval is deemed a nuisance to surrounding land owners, the City has a number of alternative options by which it can seek compliance. Historically, the City has not issued a renewal only once. Currently, there are approximately 100 approved Home Occupations that are subject to the renewal process. The proposed amendment will result in a reduction of approximately $7,000 in income to the City. However, it will save Officer time in processing and make running a home based business in the City easier and less administrative.

The amendment documentation can be seen in Attachment A.

OFFICER RECOMMENDATION:

That Council:

1. Pursuant to Section 75 of the Planning and Development Act 2005 ("Act"), adopt an amendment to the City of Kwinana Local Planning Scheme No. 2 (LPS2) for the purposes of:

15.1 SCHEME AMENDMENT: HOME OCCUPATION AND HOME BUSINESS

a. Adding the use class Home Business to Table I – Zoning and Use Classes as follows:

Use Classes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Home Business	SA	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17 of the Scheme	AA	AA	X	X	X	SA	X	As denoted under Statement of Planning Policy No. 2.3 – Jandakot Groundwater Protection Policy	*	#	+	As denoted on Scheme Map, Clause 6.12 and in the Fifth Schedule	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17

b. Deleting Clause 4.14 of the scheme and renumbering.

c. Delete element (j) of the definition of Home Occupation in Appendix IV – Interpretations to read:

Home Occupation - means an occupation or profession carried on in a dwelling house by a person resident therein that:

(a) does not cause injury to or prejudicially affect the amenity of the neighbourhood including (but without limiting the generality of the foregoing) injury or prejudicial affection due to the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, waste water, or waste products;
(b) does not entail the employment of any person not a member of the occupier's family except in the case of a professional person;
(c) does not occupy an area greater than 20 square metres;
(d) does not require the provision of any essential service main of greater capacity than normally required in the Zone in which it is located;

(e) is not advertised by a sign exceeding 0.2 square metres in area;
(f) does not give rise to any pedestrian or vehicular traffic substantially beyond that which is normal to the neighbourhood in which the business is located;
(g) is so conducted that, with the exception of a sign complying with paragraph (e) hereof, no indication is given that the house is used for other than residential purposes;
(h) does not involve the use of commercial vehicles exceeding 1 tonne in weight for the delivery and collection of materials to or from the premises, and
(i) does not require the outdoor storage of materials or supplies.

2. Refer the amendment to the Environmental Protection Authority ("EPA") as required by Section 81 of the Act, and on receipt of a response from the EPA indicating that the amendment is not subject to formal environmental assessment, cause the amendment to be advertised for a period of 42 days in accordance with the Regulations.

3. Resolve for the purpose of this report it is the opinion of Council the amendment is a 'Standard Amendment' as it satisfies the following criteria of Regulation 34 of the Planning and Development (Local Planning Schemes) Regulations 2015;
   a. An amendment that would have minimal impact on land in the scheme area that is not the subject of the amendment;

   b. An amendment that does not result in any significant environmental, social, economic or governance impacts on land in the scheme area.

DISCUSSION:

LPS2 defines two land uses in Appendix IV (Interpretations) regarding the operation of a small business from a dwelling, being a 'Home Occupation' and a 'Home Business'. Both land uses require the occupant of the dwelling to operate the business, with a key difference relating to the scale of the business. The definition of a Home Business permits an additional 30 square metres of floor area to be dedicated to the business. This is evidenced in the current definitions in LPS2 as follows:

Home Business *– means a business, service or profession carried out in a dwelling or on land around a dwelling by an occupier of the dwelling which –*
(a) does not employ more than 2 people not members of the occupier's household;
(b) will not cause injury to or adversely affect the amenity of the neighbourhood;
(c) does not occupy an area greater than 50 square metres;
(d) does not involve the retail sale, display or hire of goods of any nature;
(e) in relation to vehicles and parking, does not result in traffic difficulties as a result of the inadequacy of parking or an increase in traffic volumes in the neighbourhood, and does not involve the presence, use or calling of a vehicle more than 3.5 tonnes tare weight; and
(f) does not involve the use of an essential service of greater capacity than normally required in the zone;

15.1 SCHEME AMENDMENT: HOME OCCUPATION AND HOME BUSINESS

Home Occupation – *means an occupation or profession carried on in a dwelling house by a person resident therein that:*

(a) does not cause injury to or prejudicially affect the amenity of the neighbourhood including (but without limiting the generality of the foregoing) injury or prejudicial affection due to the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, waste water, or waste products;

(b) does not entail the employment of any person not a member of the occupier's family except in the case of a professional person;

(c) does not occupy an area greater than 20 square metres;

(d) does not require the provision of any essential service main of greater capacity than normally required in the Zone in which it is located;

(e) is not advertised by a sign exceeding 0.2 square metres in area;

(f) does not give rise to any pedestrian or vehicular traffic substantially beyond that which is normal to the neighbourhood in which the business is located;

(g) is so conducted that, with the exception of a sign complying with paragraph (e) hereof, no indication is given that the house is used for other than residential purposes;

(h) does not involve the use of commercial vehicles exceeding 1 tonne in weight for the delivery and collection of materials to or from the premises, and

(i) does not require the outdoor storage of materials or supplies;

(j) has been granted planning approval of Council for a specified period.

<u>Home Business</u>

Currently, only the Home Occupation use is listed in Table 1 (Zoning and Use Classes) of LPS2. Therefore, due to its absence in Table 1, where a Home Business is proposed it must be treated as a 'Use not Specified'. Under LPS2, a 'Use not Specified' is required to be advertised to all adjoining property owners for comment and a report prepared for Councils consideration, leading to unnecessary processing times. The amendment proposes to remove this anomaly of LPS2 by introducing the Home Business use into Table 1. This change will ensure orderly and proper planning, reduce processing timeframes and provide further employment generators throughout the City.

Home Occupations and Home Business are only able to be entertained where there is a dwelling on site. Therefore, the use permissibility directly relates to the permissibility of a dwelling in the various zones as follows:

Use Classes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Home Business	SA	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17 of the Scheme	AA	AA	X	X	X	SA	X	As denoted under Statement of Planning Policy No. 2.3 – Jandakot Groundwater Protection Policy	*	#	+	As denoted on Scheme Map, Clause 6.12 and in the Fifth Schedule	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17

15.1 SCHEME AMENDMENT: HOME OCCUPATION AND HOME BUSINESS

Noting that the scheme identifies the following Key

1. Residential
2. Kwinana Town Centre
3. Commercial
4. Service Commercial
5. Mixed Business
6. General Industry
7. Light Industry
8. Rural A
9. Rural B
10. Rural Water Resource
11. Special Residential
12. Special Rural
13. Special Use
14. Cluster/Communal Rural
15. Development

* As denoted on Scheme Map, Clause 6.9 and in the First Schedule
# As denoted on Scheme Map, Clause 6.10 and in the Second Schedule
+ As denoted on Scheme Map, Clause 6.11 and in the Third Schedule

Home Occupation applications are predominately within the Residential zone. As per the above table, an application for a Home Business is required to be submitted to the City for determination. As noted in the above table, it is proposed the Home Business be classified as an 'SA' use within the Residential zone, requiring all applications be advertised to adjoining property owners prior to determination. The Home Occupation use is currently classified as 'AA' in Table 1, which does not require advertising (although City Officers may advertise where deemed necessary). The reason for classifying a Home Business as an 'SA' use is due to its larger scale (permitting an additional 30 square metres than a Home Occupation) as permitted under the definition. It is envisioned this approach will identify and reduce potential impacts of such businesses.

It is noted that the City has a planning policy which requires residents to apply to store a commercial vehicle on their property. This policy relates to vehicles <u>over 4.5 tonnes only.</u> The introduction of Home business as a permissible use will not conflict with this policy as it limits the use of a commercial vehicle associated with the home business to 3.5 tonnes.

<u>Home Occupation</u>
Home Occupation approvals are required to be renewed annually as per the definition of a Home Occupation (refer to element (j) of the definition above) and Clause 4.14 of the LPS2. Clause 4.14 states the following:

HOME OCCUPATION
Where Planning Approval for a Home Occupation is granted, Council shall limit the period of validity of such approval and in any event shall review the approval annually. Approved Home Occupations are contained in a Home Occupation Register which Council shall keep for the purposes of registering such uses.

The reason for requiring an annual renewal is principally related to the City having discretion to not issue a renewal where complaints are received in relation to the Home Occupation and/or the business is deemed to be incompatible or a nuisance. However, the City has the ability to deal with complaints in relation to an existing home occupation under the existing planning framework, rather than resorting to not issuing a renewal. This is specifically relating to element (b) of the Home Business definition and element (a) of the Home Occupation definition which requires the use to not impact on the amenity of the area. This means that any approval having a detrimental impact would no longer be lawful, as it would fail to meet the definition. Additionally, when an application for a Home Occupation (or Home Business) is lodged, City Officers assess the potential impacts of the proposal on the surrounding area, having regard to orderly and proper planning. It should be noted, City Officers are aware of only one occasion where a Home Occupation approval was not renewed.

15.1 SCHEME AMENDMENT: HOME OCCUPATION AND HOME BUSINESS

In order to reduce constraints on small business owners, this amendment proposes to remove the requirement for annual renewal of Home Occupation approvals, by deleting Clause 4.14 and removing element (j) from the definition of Home Occupation. While the annual renewal relating to the planning process can be removed through this amendment, annual approvals and site inspections for other matters, such as those relating to the City's Environmental Health Department, would remain. This will be explained in writing to business owners impacted by the removal of the annual renewal, once this amendment is finalised.

It is acknowledged that removal of the renewal requirement from LPS2 will result in the reduction of revenue. However it will also remove unnecessary delays and administration fees for small business operators. Furthermore, it will significantly reduce City Officers' time in processing these applications which adds no substantial value to the community.

The proposed changes offer the City a way to remove unnecessary regulation for small business and will give greater certainty to both applicants and decision makers.

LEGAL/POLICY IMPLICATIONS:

Planning and Development Act 2005
Planning and Development (Local Planning Schemes) Regulations 2015
Local Planning Scheme No. 2

FINANCIAL/BUDGET IMPLICATIONS:

Cost of advertising the proposed amendment will be met through the Planning Budget. The amendment will reduce ongoing income associated with Home Occupation renewals, expected to amount to approximately $7,000 per annum.

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.

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	Innovative approval system	2.6 Provide a best practice development approval system that attracts and retains business investment in the area

COMMUNITY ENGAGEMENT:

The following community engagement is proposed to take place:
The application will be advertised consistent with the Planning and Development Regulations 2015 and will include advertising in a local newspaper and a notification on the City's website. Public submissions will be invited for 42 days.

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	City will have reduced ability to not renew problem applications
Risk Theme	Failure to fulfil statutory regulations or compliance requirements
Risk Effect/Impact	Compliance
Risk Assessment Context	Strategic
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	Accept risks and deal with compliance through the planning framework.
Rating (after treatment)	Low

COUNCIL DECISION

030

MOVED CR P FEASEY **SECONDED CR W COOPER**

That Council:

1. **Pursuant to Section 75 of the Planning and Development Act 2005 ("Act"), adopt an amendment to the City of Kwinana Local Planning Scheme No. 2 (LPS2) for the purposes of:**

15.1 SCHEME AMENDMENT: HOME OCCUPATION AND HOME BUSINESS

a. Adding the use class Home Business to Table I – Zoning and Use Classes as follows:

Use Classes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Home Business	SA	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17 of the Scheme	AA	AA	X	X	X	SA	X	As denoted under Statement of Planning Policy No. 2.3 – Jandakot Groundwater Protection Policy	*	#	+	As denoted on Scheme Map, Clause 6.12 and in the Fifth Schedule	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17

b. Deleting Clause 4.14 of the scheme and renumbering.

c. Delete element (j) of the definition of Home Occupation in Appendix IV – Interpretations to read:

Home Occupation - means an occupation or profession carried on in a dwelling house by a person resident therein that:

(a) does not cause injury to or prejudicially affect the amenity of the neighbourhood including (but without limiting the generality of the foregoing) injury or prejudicial affection due to the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, waste water, or waste products;

(b) does not entail the employment of any person not a member of the occupier's family except in the case of a professional person;

(c) does not occupy an area greater than 20 square metres;

(d) does not require the provision of any essential service main of greater capacity than normally required in the Zone in which it is located;

(e) is not advertised by a sign exceeding 0.2 square metres in area;
(f) does not give rise to any pedestrian or vehicular traffic substantially beyond that which is normal to the neighbourhood in which the business is located;
(g) is so conducted that, with the exception of a sign complying with paragraph (e) hereof, no indication is given that the house is used for other than residential purposes;
(h) does not involve the use of commercial vehicles exceeding 1 tonne in weight for the delivery and collection of materials to or from the premises, and
(i) does not require the outdoor storage of materials or supplies.

2. Refer the amendment to the Environmental Protection Authority ("EPA") as required by Section 81 of the Act, and on receipt of a response from the EPA indicating that the amendment is not subject to formal environmental assessment, cause the amendment to be advertised for a period of 42 days in accordance with the Regulations.

3. Resolve for the purpose of this report it is the opinion of Council the amendment is a 'Standard Amendment' as it satisfies the following criteria of Regulation 34 of the Planning and Development (Local Planning Schemes) Regulations 2015;
a. An amendment that would have minimal impact on land in the scheme area that is not the subject of the amendment;

b. An amendment that does not result in any significant environmental, social, economic or governance impacts on land in the scheme area.

CARRIED
7/0

Attachment A

CITY OF KWINANA

LOCAL PLANNING SCHEME NO. 2 AMENDMENT NO. 158

Date Initiated By Council: [to be inserted]

Planning and Development Act 2005

RESOLUTION TO ADOPT AMENDMENT TO LOCAL PLANNING SCHEME

City of Kwinana Local Planning Scheme No.2

Amendment No. 158

Resolved that the local government pursuant to section 75 of the Planning and Development Act 2005, amend the above Local Planning Scheme by

1. Adding the use class 'Home Business' to Table I – Zoning and Use Classes as follows:

Use Classes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Home Business	SA	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17 of the Scheme	AA	AA	X	X	X	SA	X	As denoted under Statement of Planning Policy No. 2.3 – Jandakot Groundwater Protection Policy	*	#	+	As denoted on Scheme Map, Clause 6.12 and in the Fifth Schedule	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17

2. Deleting Clause 4.14 of the scheme and renumbering.

3. Amending the definition of home occupation into Appendix IV – Interpretations to read:

Home Occupation – means an occupation or profession carried on in a dwelling house by a person resident therein that:

(a) does not cause injury to or prejudicially affect the amenity of the neighbourhood including (but without limiting the generality of the foregoing) injury or prejudicial affection due to the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, waste water, or waste products;
(b) does not entail the employment of any person not a member of the occupier's family except in the case of a professional person;
(c) does not occupy an area greater than 20 square metres;
(d) does not require the provision of any essential service main of greater capacity than normally required in the Zone in which it is located;
(e) is not advertised by a sign exceeding 0.2 square metres in area;
(f) does not give rise to any pedestrian or vehicular traffic substantially beyond that which is normal to the neighbourhood in which the business is located;
(g) is so conducted that, with the exception of a sign complying with paragraph (e) hereof, no indication is given that the house is used for other than residential purposes;

(h) does not involve the use of commercial vehicles exceeding 1 tonne in weight for the delivery and collection of materials to or from the premises, and
(i) does not require the outdoor storage of materials or supplies.

The Amendment is Standard under the provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* for the following reason:

The amendment exceeds the threshold of a simple amendment by introducing land use permissibility, but does not satisfy the criteria for a complex amendment as set out in the *Planning and Development (Local Planning Schemes) Regulations 2015*.

Dated this…… day of…….. 20.....

……
(Chief Executive Officer)

REPORT – AMENDMENT NO.158

PROPOSAL TO AMEND A TOWN PLANNING SCHEME

1. Local Government: City of Kwinana

2. Description of Scheme: City of Kwinana Local Planning Scheme No.2

3. Type of Scheme: District Planning Scheme

4. Serial Number: Amendment No. 158

5. Proposal:

1 Adding the use class Home Business to Table I – Zoning and Use Classes as follows:

Use Classes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Home Business	SA	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17 of the Scheme	AA	AA	X	X	X	SA	X	As denoted under Statement of Planning Policy No. 2.3 – Jandakot Groundwater Protection Policy	*	#	+	As denoted on Scheme Map, Clause 6.12 and in the Fifth Schedule	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17

2 Deleting Clause 4.14 of the scheme and renumbering.

3 Amending the definition of home occupation into Appendix IV – Interpretations to read:

Home Occupation – means an occupation or profession carried on in a dwelling house by a person resident therein that:

(a) does not cause injury to or prejudicially affect the amenity of the neighbourhood including (but without limiting the generality of the foregoing) injury or prejudicial affection due to the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, waste water, or waste products;

(b) does not entail the employment of any person not a member of the occupier's family except in the case of a professional person;

(c) does not occupy an area greater than 20 square metres;

(d) does not require the provision of any essential service main of greater capacity than normally required in the Zone in which it is located;
(e) is not advertised by a sign exceeding 0.2 square metres in area;
(f) does not give rise to any pedestrian or vehicular traffic substantially beyond that which is normal to the neighbourhood in which the business is located;
(g) is so conducted that, with the exception of a sign complying with paragraph (e) hereof, no indication is given that the house is used for other than residential purposes;
(h) does not involve the use of commercial vehicles exceeding 1 tonne in weight for the delivery and collection of materials to or from the premises, and
(i) does not require the outdoor storage of materials or supplies.

6. Report by: City of Kwinana

1. Introduction

The City of Kwinana seeks the support of the Western Australian Planning Commission and the approval of the Minister for Planning for the proposed Scheme amendment.

The amendment will provide guidance to planners and applicants by giving land use permissibility for the use class of a Home Business and remove the requirement for the annual renewal of Home Occupations.

While deletion of the Scheme provisions related to annual renewals for Home Occupations would typically make the amendment simple in nature, the introduction of land use permissibility for Home Business within Table 1 – Zoning and Use Classes (Table 1), has the potential to impact residents. For this reason, the amendment is treated as a standard amendment.

2. Proposal

The City is home to a number of home based businesses that are required to be renewed on an annual basis. The current definition of a Home Occupation in the Scheme refers to the requirement for such approvals to be renewed annually. Clause 4.14 of the Scheme similarly requires all Home Occupations to be renewed on an annual basis. This process is inconsistent with most other approvals, which do not require an ongoing payment for an annual renewal. The basis for requiring a renewal was principally to allow the City to not reapprove Home Occupations where complaints by surrounding residents were received. However, City Officers have other effective options to remedy complaints, other than choosing not to renew an approval. As such, the renewal process has become little more than "red tape" and costs home based businesses unnecessary time and money. Therefore, this amendment proposes to remove all references within the Scheme requiring Home Occupations to be renewed on an annual basis.

The use class of Home Business allows for a larger home based business than a Home Occupation. Currently, the Scheme includes the definition of Home Business but does not include it within Table 1. The inclusion of the Home Business use in Table 1 of the Scheme will give decision makers and applicants greater guidance on the permissibility of this land use in various zones. The table inserts into the City's Scheme as set out below:

Use Classes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Home Business	SA	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17 of the Scheme	AA	AA	X	X	X	SA	X	As denoted under Statement of Planning Policy No. 2.3 – Jandakot Groundwater Protection Policy	*	#	+	As denoted on Scheme Map, Clause 6.12 and in the Fifth Schedule	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17

Noting that the scheme identifies the following Key

1. Residential
2. Kwinana Town Centre
3. Commercial
4. Service Commercial
5. Mixed Business
6. General Industry
7. Light Industry
8. Rural A
9. Rural B
10. Rural Water Resource
11. Special Residential
12. Special Rural
13. Special Use
14. Cluster/Communal Rural
15. Development

* As denoted on Scheme Map, Clause 6.9 and in the First Schedule
# As denoted on Scheme Map, Clause 6.10 and in the Second Schedule
+ As denoted on Scheme Map, Clause 6.11 and in the Third Schedule

3. Conclusion

This proposed amendment has the potential to remove the anomaly of annual renewals for home based business. Home based businesses are an essential part of the economy and are often the beginnings of many larger and successful businesses. This amendment will work toward supporting the economic development of the region and remove unnecessary regulation on small business.

SCHEME AMENDMENT NO.158

PLANNING AND DEVELOPMENT ACT 2005

CITY OF KWINANA

The Council of the City of Kwinana, under and by virtue of the power conferred upon it on that behalf by the Planning and Development Act 2005 (as amended), hereby amends Local Planning Scheme No.2 by:

RESOLVED that the local government, in pursuance of section 75 of the Planning and Development Act 2005 (as amended), amends the above Local Planning Scheme by:

1. Adding the use class Home Business to Table I – Zoning and Use Classes as follows:

Use Classes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Home Business	SA	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17 of the Scheme	AA	AA	X	X	X	SA	X	As denoted under Statement of Planning Policy No. 2.3 – Jandakot Groundwater Protection Policy	*	#	+	As denoted on Scheme Map, Clause 6.12 and in the Fifth Schedule	The subdivision, use and development of the land is to be generally in accordance with an approved Structure Plan prepared and adopted under Part 6.17

2. Deleting Clause 4.14 of the scheme and renumbering.

3. Amending the definition of Home Occupation in Appendix IV – Interpretations to read:

Home Occupation – means an occupation or profession carried on in a dwelling house by a person resident therein that:

(a) does not cause injury to or prejudicially affect the amenity of the neighbourhood including (but without limiting the generality of the foregoing) injury or prejudicial affection due to the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, waste water, or waste products;
(b) does not entail the employment of any person not a member of the occupier's family except in the case of a professional person;
(c) does not occupy an area greater than 20 square metres;
(d) does not require the provision of any essential service main of greater capacity than normally required in the Zone in which it is located;
(e) is not advertised by a sign exceeding 0.2 square metres in area;
(f) does not give rise to any pedestrian or vehicular traffic substantially beyond that which is normal to the neighbourhood in which the business is located;
(g) is so conducted that, with the exception of a sign complying with paragraph (e) hereof, no indication is given that the house is used for other than residential purposes;

(h) does not involve the use of commercial vehicles exceeding 1 tonne in weight for the delivery and collection of materials to or from the premises, and
(i) does not require the outdoor storage of materials or supplies.

Initiate Scheme Amendment

Adopted by resolution of the Council of the City of Kwinana at the Ordinary Meeting of Council held on _____.

_____ MAYOR

_____ CHIEF EXECUTIVE OFFICER

Final Approval

Adopted for final approval by resolution of the City of Kwinana at the Ordinary Meeting of the Council held on _____.

The Common Seal of the City of Kwinana was hereunto affixed by authority of a resolution of the Council in the presence of:

_____ MAYOR

_____ CHIEF EXECUTIVE OFFICER

RECOMMENDED/SUBMITTED FOR FINAL APPROVAL

_____ DELEGATED UNDER S.16 OF THE PLANNING AND DEVELOPMENT ACT 2005

_____ MINISTER FOR PLANNING

_____ DATE

16 Reports – Natural Environment

Nil

17 Reports – Built Infrastructure

17.1 Proposed Road Names for Lot 4 Anketell Road, Anketell

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

Brook & Marsh Pty Ltd, the surveyor for the developer of Lot 4 Anketell Road, Anketell, has submitted details of the proposed road names for their development, as indicated in Attachment A. Brook & Marsh Pty Ltd are now seeking Council support for the proposed road names for the initial stages of the development.

Geographic Names has granted 'in principle approval' for the use of these road names, via passing preliminary validation on their 'request road name' web page. The listed alternative road names will be used as a substitute for any proposed road names that are not approved by Geographic Names. The naming theme for the roads in this subdivision is 'Lakes of Australia'. This is a continuation of the theme of the adjacent development at Lots 2 and 3 Anketell Road.

The information regarding the origin of the proposed road names is contained in Attachment B.

OFFICER RECOMMENDATION:

That Council approve the following road names for use within Lot 4 Anketell Road, as shown in Attachment A.

Proposed Names:	Alternative Names:
Goran Street	Toolibin
Seppings Street	Urana
Bonney Road (extension)	

DISCUSSION:

Before the developer of a subdivision can lodge survey diagrams for clearance, all road names need to be approved and indicated on the survey diagram. The process for naming roads must adhere to the Geographic Names Committee guidelines to ensure no duplication of road names occurs within the surrounding areas.

Geographic Names has granted 'in principle approval' for the use of the proposed road names via passing preliminary validation on Landgate's 'request road name' web page. The naming theme for the roads in this subdivision is 'Lakes of Australia'. This theme is an extension of the neighbouring development at Lots 2 and 3 Anketell Road.

Two road names are proposed as alternative road names for use in the event that the proposed names are not approved by the Geographic Names formal approval process. The origin information for these road names can be found in Attachment B.

17.1 PROPOSED ROAD NAMES FOR LOT 4 ANKETELL ROAD, ANKETELL

The proposed road names for Lot 4 Anketell Road, Anketell are:

Proposed Names:	**Alternative Names:**
Goran Street	Toolibin
Seppings Street	Urana
Bonney Road (extension)	

LEGAL/POLICY IMPLICATIONS:

The approval process is in compliance with the Geographic Names Committee Guidelines, and Council Policy – Street Naming.

FINANCIAL/BUDGET IMPLICATIONS:

No financial/budget implications have been identified as a result of this report or recommendation.

ASSET MANAGEMENT IMPLICATIONS:

No asset management implications have been identified as a result of this report or recommendation.

ENVIRONMENTAL IMPLICATIONS:

No environmental implications have been identified as a result of this report or recommendation.

STRATEGIC/SOCIAL IMPLICATIONS:

No strategic/social implications have been identified as a result of this report or recommendation.

COMMUNITY ENGAGEMENT:

There are no community engagement implications.

PUBLIC HEALTH IMPLICATIONS:

There are not public health implications.

17.1 PROPOSED ROAD NAMES FOR LOT 4 ANKETELL ROAD, ANKETELL

RISK IMPLICATIONS:

Risk Event	The approval of the road names is required for titles to be issued for the lots within the subdivision. Should Council or Geographic Names not approve these road names, clearances may be delayed which will have implications for the developer and the owners of these lots.
Risk Theme	Errors omissions delays
Risk Effect/Impact	Service delivery
Risk Assessment Context	Operational
Consequence	Insignificant
Likelihood	Possible
Rating (before treatment)	Low
Risk Treatment in place	Reduce (mitigate the risk)
Response to risk treatment required/in place	Work instructions in place for Geographic Names approvals and sufficient information and alternative names for Council approvals.
Rating (after treatment)	Low

COUNCIL DECISION

031

MOVED CR S LEE **SECONDED CR P FEASEY**

That Council approve the following road names for use within Lot 4 Anketell Road, as shown in Attachment A.

Proposed Names:	**Alternative Names:**
Goran Street	**Toolibin**
Seppings Street	**Urana**
Bonney Road (extension)	

CARRIED
7/0

ANKETELL

ROAD

TREEBY

ROAD

LOT 51
DP 411749

LOT 449
119 m² (82.73)
43.8

5.59

42.82

38.93

5.5m EASEMENT FOR CARPARKING

6m EASEMENT FOR ACCESS

44.28

447
7908 m²

75

71.19

LOT 9002
DP 411751

6m EASEMENT FOR ACCESS

120.68

401 402 403 404 405 406 407 408 409 410 411

BONNEY ROAD

BONNEY ROAD

FUTURE EXTENSION

57.88

LOT 448
RESERVE FOR RECREATION
2802 m²

63.88

439 440 441 438 442 437 443 436 444 435 445 434 446 433 432 431 430 429

414 413 412 415 416 419 420 417 418 424 423 422 421 425 427 428 426

GORAN STREET

SELINA STREET

SEPPINGS STREET

FUTURE EXTENSION

ROAD

LOT 188
DP 25096

111 DP411749
112 DP411749
113 DP411749
114 DP411749
115 DP411749
116 DP411749
117 DP411749
118 DP411749
119 DP411749
120 DP411749

ROAD WIDENING
155 m²

LOT 9002
DP 411751

100.2

30
D32446

Attachment A

NOTE: LOT 449 TO BE ACQUIRED FOR PUBLIC PURPOSES

REV	DATE	REVISION DETAILS
03	10/09/2019	FUTURE EXTENSIONS SHOWN
02	23/08/2019	ROAD NAME REVISED
01	28/05/2019	ROAD NAME REVISED

BROOK MARSH PTY LTD
LICENSED SURVEYORS
ph 9398 2441
fax 9490 1313
P.O BOX 91 GOSNELLS 6990
admin@brookandmarsh.com.au

DRAWN	JOB NUMBER
B.K.	BM 17220
SURVEYED	DATE
W FRANCE LS	23 MAY 2019
CONTOUR INTERVAL	SCALE
--	1:1200
DATUM	CO-ORD SYS.
AHD	PCG 94

0 5 10 15 20 25 50
METRES

PROPOSED ROAD NAMES
LOT 4 ON PLAN 4746
ANKETELL ROAD, ANKETELL

SHEET 1 of 1

CLIENT
JARDIM PROPERTY

REV. 03

DRAWING FILE. 17220 Proposed Road Names Rev03 - Drawing002

A3

Proposed Road Names
Lot 4 on P4746 Anketell Road, Anketell

Proposed Names	Theme	Location	Resource	Title
Goran Street	Lakes of Australia	New South Wales	Google Maps	N/A
Seppings Street	Lakes of Australia	Seppings, Western Australia	Wikipedia	List of Lakes of Australia

Alternative Names	Theme	Location	Resource	Title
Urana Street	Lakes of Australia	Urana, New South Wales	Wikipedia	List of Lakes of Australia
Toolibin Street	Lakes of Australia	Toolibin, Western Australia	Wikipedia	List of Lakes of Australia

Existing Road	Theme	Location	Resource	Title
Bonney Road	Lakes of Australia	South Australia, Australia	Wikipedia	List of Lakes of Australia
Note: Bonney Road to carry on from Lots 2 and 3 Anketell Road subdivision across to Lot 188 on DP25096 as shown on attached plan.				

Attachment B

17.2 Proposed Road Names for Albero Estate, Anketell

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

Terranovis, the developer of Albero Estate, Anketell, has submitted details of a proposed road name for a new road being constructed as part of their development, as indicated in Attachment A. Terranovis are now seeking Council support for the proposed road name, in order to present the name to the Geographic Names Committee. In addition, Terranovis is seeking support for alternative road names, as shown at Attachment B.

Geographic Names has granted 'in principle approval' for the use of these road names, via passing preliminary validation on their 'request road name' web page. The listed alternative road names will be used as a substitute if the proposed road name is not approved by Geographic Names. The naming theme for the roads in this subdivision is 'Lakes of Australia'. This is a continuation of the theme in this development.

The information regarding the origin of the proposed road names is contained in Attachment B.

OFFICER RECOMMENDATION:

That Council approve the following road names for use within Albero Estate, as shown in Attachment A.

Proposed Names:	Alternative Names:
Collerson Street	Menindee
	Mungo
	Sylvester

DISCUSSION:

Before the developer of a subdivision can lodge survey diagrams for clearance, all road names need to be approved and indicated on the survey diagram. The process for naming roads must adhere to the Geographic Names Committee guidelines to ensure no duplication of road names occurs within the surrounding areas.

Geographic Names has granted 'in principle approval' for the use of these road names via passing preliminary validation on Landgate's 'request road name' web page. The naming theme for the roads in this subdivision is 'Lakes of Australia'. This theme is an extension of the existing theme in this development.

Three road names are proposed as alternative road names for use in the event that the proposed name is not approved by the Geographic Names formal approval process. The origin information for these road names can be found in Attachment B.

17.2 PROPOSED ROAD NAMES FOR ALBERO ESTATE, ANKETELL

The proposed road names for Albero Estate, Anketell are:

Proposed Names:	**Alternative Names:**
Collerson Street	Menindee
	Mungo
	Sylvester

LEGAL/POLICY IMPLICATIONS:

The approval process is in compliance with the Geographic Names Committee Guidelines, and Council Policy – Street Naming.

FINANCIAL/BUDGET IMPLICATIONS:

No financial/budget implications have been identified as a result of this report or recommendation.

ASSET MANAGEMENT IMPLICATIONS:

No asset management implications have been identified as a result of this report or recommendation.

ENVIRONMENTAL IMPLICATIONS:

No environmental implications have been identified as a result of this report or recommendation.

STRATEGIC/SOCIAL IMPLICATIONS:

No strategic/social implications have been identified as a result of this report or recommendation.

COMMUNITY ENGAGEMENT:

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

PUBLIC HEALTH IMPLICATIONS:

There are no public health implications as a result of this report.

17.2 PROPOSED ROAD NAMES FOR ALBERO ESTATE, ANKETELL

RISK IMPLICATIONS:

Risk Event	The approval of the road names is required for titles to be issued for the lots within the subdivision. Should Council or Geographic Names not approve these road names, clearances may be delayed which will have implications for the developer and the owners of these lots.
Risk Theme	Errors omissions delays
Risk Effect/Impact	Service delivery
Risk Assessment Context	Operational
Consequence	Insignificant
Likelihood	Possible
Rating (before treatment)	Low
Risk Treatment in place	Reduce (mitigate the risk)
Response to risk treatment required/in place	Work instructions in place for Geographic Names approvals and sufficient information and alternative names for Council approvals.
Rating (after treatment)	Low

COUNCIL DECISION

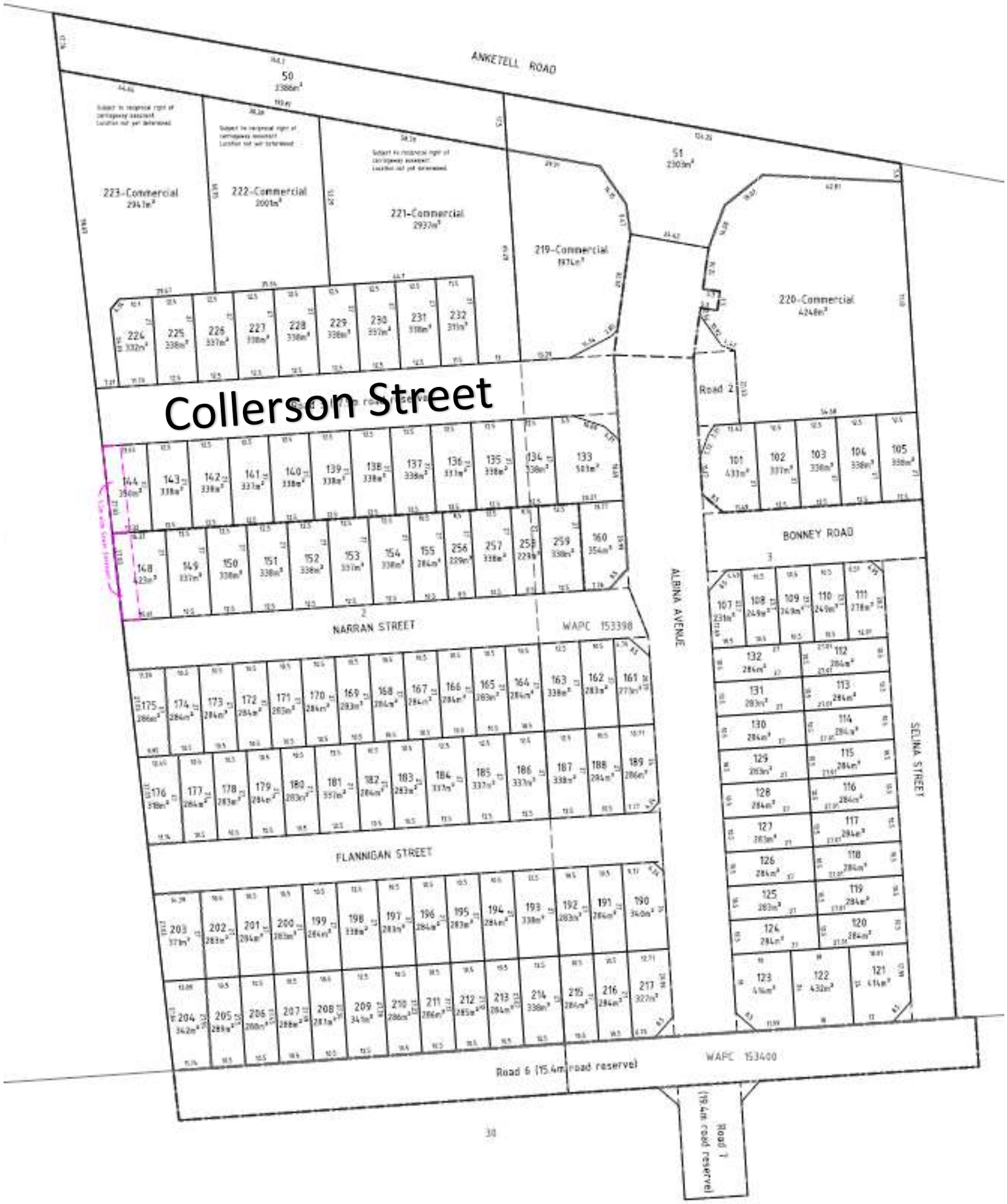
032

MOVED CR W COOPER **SECONDED CR S LEE**

That Council approve the following road names for use within Albero Estate, as shown in Attachment A.

Proposed Names:	**Alternative Names:**
Collerson Street	**Menindee**
	Mungo
	Sylvester

CARRIED
7/0



Attachment A

Proposed Names	Theme	Location	Resource
Collerson Street	Lakes of Australia	Antartica	Wikipedia

Alternative Names	Theme	Location	Resource
Menindee	Lakes of Australia	New South Wales	Wikipedia
Mungo	Lakes of Australia	New South Wales	Wikipedia
Sylvester	Lakes of Australia	Northern Territory	Wikipedia

Attachment B

17.3 Proposed Scheme Amendment 159 to Local Planning Scheme No. 2 to rezone portions of Lots 3, 52 and 9002 Rowley Road, Mandogalup from 'Rural A' to 'Development'

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

The City of Kwinana (City) has received a Scheme Amendment proposal (Attachment A) from the owners of Lots 3, 52 and 9002 Rowley Road, Mandogalup seeking to amend Local Planning Scheme No. 2 (LPS2) for portions of the subject lots from 'Rural A' to 'Development' under Section 75 of the *Planning and Development Act 2005* (PD Act).

The purpose of the Scheme Amendment proposal (Amendment 159) is to allow the subject area to be subdivided and developed once a local structure plan has been adopted in accordance with the process set out in the *Planning and Development (Local Planning Schemes) Regulations 2015* (PD Regulations).

Council has previously provided advice and recommendations in relation to the following matters relevant to the area the subject of Amendment 159. These matters are described in this report.

- Mandogalup East Local Structure Plan
  (Adopted by Western Australian Planning Commission - March, 2018)
- Mandogalup West Local Structure Plan
  (Adopted by Western Australian Planning Commission - March, 2018)
- Metropolitan Region Scheme Lifting of Urban Deferment
  (Council provided comments to Western Australian Planning Commission – June, 2018)
- Local Planning Policy 12 – Mandogalup Future Development
  (Adopted by Council - June, 2018)
- Draft Improvement Plan 47
  (Council provided comments to Western Australian Planning Commission – August, 2018)
- Peer Review of the Mandogalup Dust Assessment
  (Council provided comments to Western Australian Planning Commission – June, 2019)

The area the subject of Amendment 159 is now zoned 'Urban' under the Metropolitan Region Scheme and the City has a regulatory obligation to ensure its local planning scheme is consistent with the region scheme.

The subject area is within Area A, as per the Environmental Protection Authority (EPA) buffer report, which considers the potential health and amenity impacts of dust in this area to be negligible.

The subject area is included within Local Planning Policy 12 (LPP12) and is situated immediately east of IP47.

There are two existing approved structure plans for adjoining land to the north and east, being the Mandogalup West Local Structure Plan and the Mandogalup East Local Structure Plan.

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

There is further 'Urban' zoned land under the MRS to the south that is currently not planned.

Previous Council advice sought to ensure optimal planning outcomes for the Mandogalup area, by way of seeking structure planning which addresses the regional planning context and provides a holistic and cohesive approach to planning.

An indicative structure plan has been submitted with the scheme amendment proposal, and whilst a formal assessment has not been undertaken the following points have been identified as requiring further consideration at the structure planning stage:

- The transition area is not adequately shown nor it is understood how lots would be developed to address LPP12;
- The station precinct does not show service commercial and commercial uses as set out in LPP12;
- The Public Open Space area is not located in the same area as the best quality vegetation on the site.
- Any future structure plan will need to consider and respond to the expected planning outcomes that will result from the IP47 area.

The proposed amendment is considered 'complex' under reg. 34 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

In considering all the issues surrounding this locality, it is considered that proceeding with proposed Scheme Amendment 159 ahead of integrated structure planning for the Mandogalup locality is likely to result in poor planning outcomes and it is not considered appropriate for Amendment 159 to be advertised until such time as there is clarity and certainty with the planning for the Mandogalup locality, including consideration of structure planning options for Improvement Plan 47 by the City and State Government agencies.

Accordingly, it is recommended that Council do not progress proposed Scheme Amendment 159.

OFFICER RECOMMENDATION:

That Council determine, in respect to proposed Scheme Amendment 159 to Local Planning Scheme No. 2 to rezone portions of Lots 3, 52 and 9002 Rowley Road from 'Rural A' to 'Development':

1. That it does not to proceed to advertise proposed Scheme Amendment 159 pursuant to Regulation 37(1)(c) of the *Planning and Development (Local Planning Scheme) Regulations 2015* for the following reasons:-

    a) That piecemeal rezoning of land in the Mandogalup locality is not appropriate until there is clarity and certainty with medium to long term land uses and planning outcomes in the Mandogalup locality;

    b) Following the approval of Amendment 159, a proposed local structure plan for the subject area could be lodged with the City pursuant to the Planning and Development Regulations ahead of the consideration of structure plan options for Improvement Plan 47; and

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

c) That Amendment 159 should not be advertised until medium to long term structure planning for the Mandogalup locality has been carefully considered by the City and State Government in an integrated manner, including Improvement Plan 47. In this respect, representatives of the Western Australian Planning Commission (WAPC) have advised that the technical planning reports have already commenced for the Improvement Plan 47 area and that following community consultation in February 2020, land use planning options for the locality will be made available by June 2020.

2. To advise the WAPC that, pursuant to Regulation 35(2) of the *Planning and Development (Local Planning Scheme) Regulations 2015,* Amendment 159 is complex for the following reasons:

a) It is an amendment that is not addressed by any local planning strategy; and,
b) It is an amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality

3 That further to the above, the Concept Plan (Indicative Structure Plan) included in the existing Amendment documentation is not acceptable to Council.

4 Provide a copy of Council's resolution to the Western Australian Planning Commission within 21 days of the resolution.

PROPOSAL:

A request from the owners of Lots 3, 52 and 9002 Rowley Road, Mandogalup (Qube Property Group) has been received, seeking to rezone Local Planning Scheme No. 2 (LPS2) for portions of the subject lots from 'Rural A' to 'Development' under Section 75 of the *Planning and Development Act 2005* (PD Act).

The subject land is located within the Mandogalup Urban Cell, encompasses approximately 22.5 hectares and is situated south of Rowley, north of Anketell Road and west of the Kwinana Freeway. The subject land is located to the south of the existing Qube Mandogalup East Local Structure Plan and west of the existing Satterley Group Mandogalup East Local Structure Plan area, as shown in red below (Figure 1).

The purpose of the Scheme Amendment proposal (Amendment 159) is to rezone the land to be subdivided and developed once a local structure plan has been adopted in accordance with the process set out in the *Planning and Development (Local Planning Schemes) Regulations 2015* (PD Regulations).

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

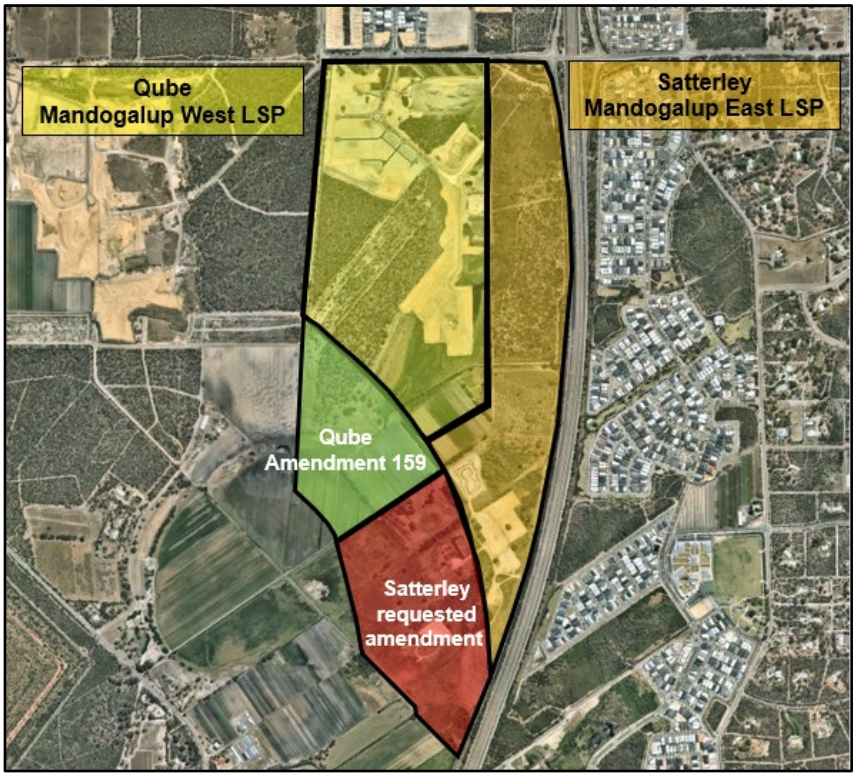


Figure 1: Locality map

BACKGROUND:

The proposed Amendment 159 to rezone portions of Lots 3, 52 and 9002 from 'Rural A' to 'Development' comes in the wake of a complex history of buffer reviews, strategic planning and scheme amendments spanning approximately 20 years. The recent events, and State and Council decisions leading to the request to initiate Amendment 159, are summarised below:

Jandakot Structure Plan and draft Eastern Residential Intensification Concept

The Mandogalup Urban Cell was identified in the Jandakot Structure Plan (JSP) prepared by the WAPC in 2001 and adopted in 2007. The City prepared a more detailed plan for the area titled the Eastern Residential Intensification Concept (ERIC) (2005), based on the broad land uses identified in the JSP. The JSP and ERIC plans identified potential residential areas and air quality buffers in the Mandogalup Urban Cell.

In December 2009, the then Minister for Planning approved the rezoning of an area of land within Mandogalup from 'Rural' to 'Urban Deferred' under the MRS, based on ERIC.

In March 2014, the then Minister for Planning determined to lift the 'Urban Deferred' zoning and apply an 'Urban' zoning to much of the land situated outside the then 1.5 kilometre air quality buffer established by the WAPC.

This 'Urban' zoned land has subsequently been the subject of the Mandogalup West (Qube Property Group) and Mandogalup East Local Structure Plans (MELSP) (Satterley Property Group) (Figure 4) which have been adopted by the WAPC.

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

A portion of land within the 1.5km buffer remained as 'Urban Deferred', and it is this land that is the subject of Amendment 159.

EPA advice to Minister for Environment - Potential health and amenity impacts

In June 2017, the EPA provided advice to the Minister for Environment on the potential health and amenity impacts of dust in determining the size of a buffer for urban development in the Mandogalup area (referred to as the EPA's buffer report). The EPA's advice divided Mandogalup into four areas (A, B, C and D) based on air quality as shown in Figure 2.

Amendment 159 is situated within Area A which is described by the EPA as being located "sufficiently far away from the Alcoa Residue Disposal Area (RDA), and outside the predominant wind field that generates dust from the RDA, that there is negligible health risk or likelihood of unreasonable amenity impacts in this area from RDA dust".

The EPA also advised the Minister for Environment of potential non-compliances of the revised National Environmental Protection Measures (NEPM) air quality standards in the north and north-east Mandogalup area (Areas C and D), near RDA. The EPA requested that Department Water Environmental Regulation (DWER) carry out investigations in Area B to assess health and amenity impacts in the Mandogalup area and assess corrective actions for non-compliance with the NEPM.

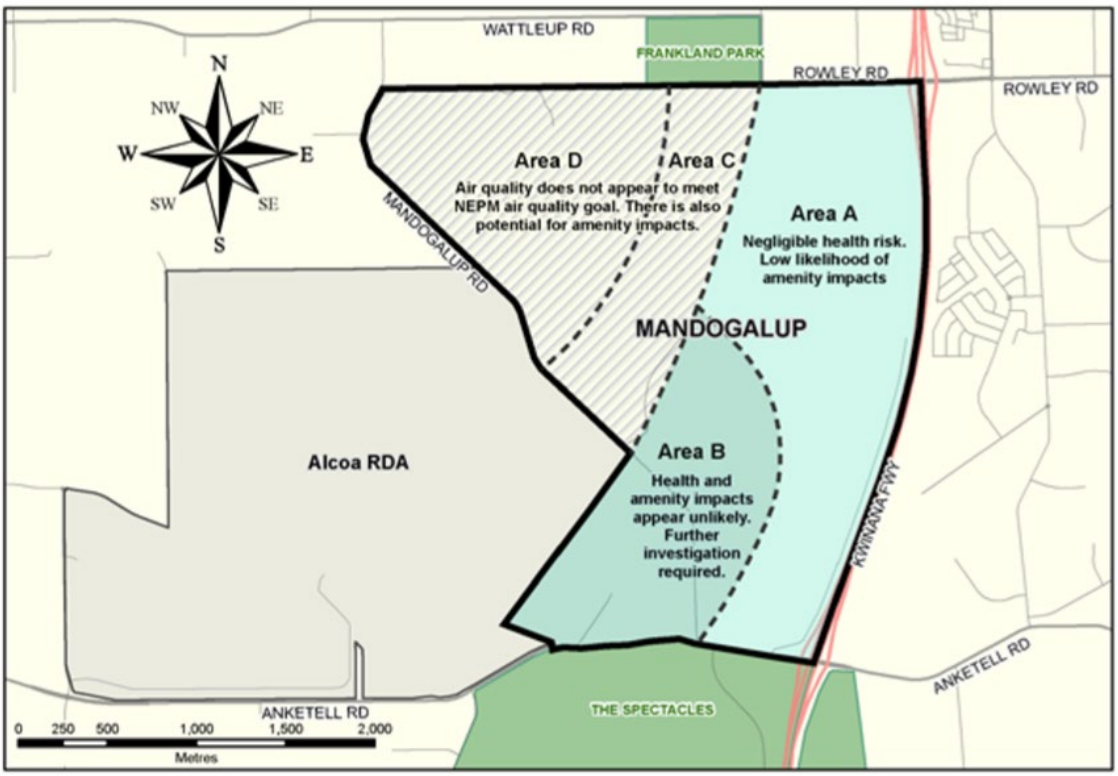


Figure 2: Guidance on potential health and amenity impacts of dust in respect of potential urban development in the Mandogalup area

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Local Planning Policy 12 - Mandogalup Future Development (LPP12)

LPP12 sets out Council's position with respect to land uses and key principles for planning across the entire Mandogalup Urban Cell (including the area the subject of IP47). It provides guidance to landowners, developers and decision makers to ensure that future development, zoning and structure planning in Mandogalup occurs in a manner consistent with orderly and proper planning of the locality.

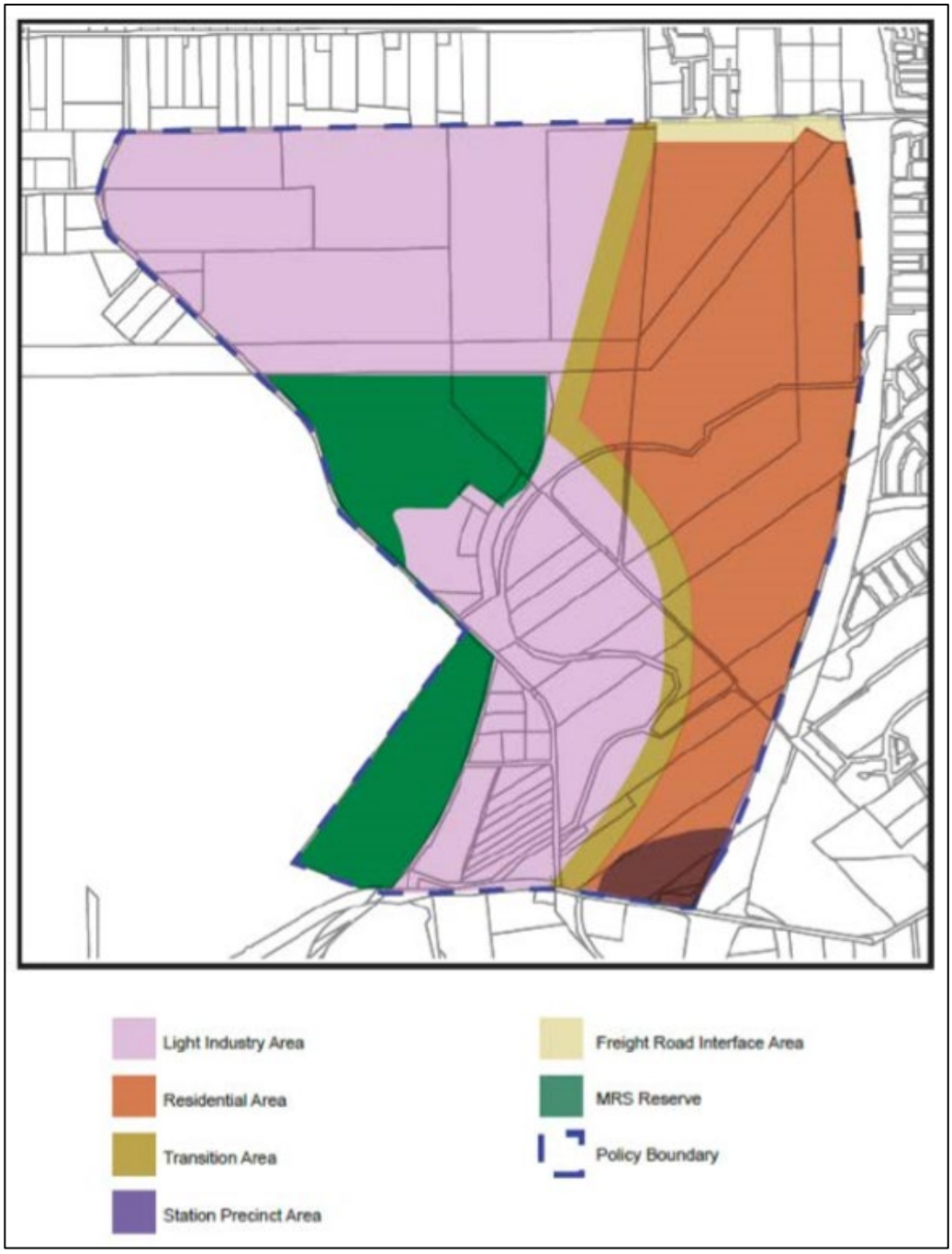


Figure 3: Local Planning Policy 12 – Mandogalup Future Development

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Council prepared LPP12 because there was limited guidance from the State Government for strategic planning in the Mandogalup Urban Cell. The State Government did not resolve to prepare IP47 until May 2018 and did not publish the South Metropolitan Peel Sub-regional Framework until May 2018. LPP12 was advertised in November 2017 and adopted by the City in June 2018.

LPP12 identifies the western part of the Amendment 159 area as a 'Transition' area and the balance of the amendment area as 'Residential' (Figure 3). The 'Transition' area is intended to provide a suitable interface between the residential area (now proposed in Amendment 159) and potential industrial land uses (as identified in the South Metropolitan Peel Sub-regional Framework) where residential and light industrial uses may be provided for on the same 5,000m^2 lot.

Mandogalup West and Mandogalup East Local Structure Plans

The WAPC adopted the Mandogalup West Local Structure Plan (MWLSP) on 22 March 2018 and the Mandogalup East Local Structure Plan (MELSP) on the 28 March 2018. A consolidated plan of the MWLSP and MELSP is shown below (Figure 4).

If Amendment 159 is adopted, it will extend the 'Development' zone on Qube's landholding and require the adopted MWLSP to be amended before subdivision and development can proceed.

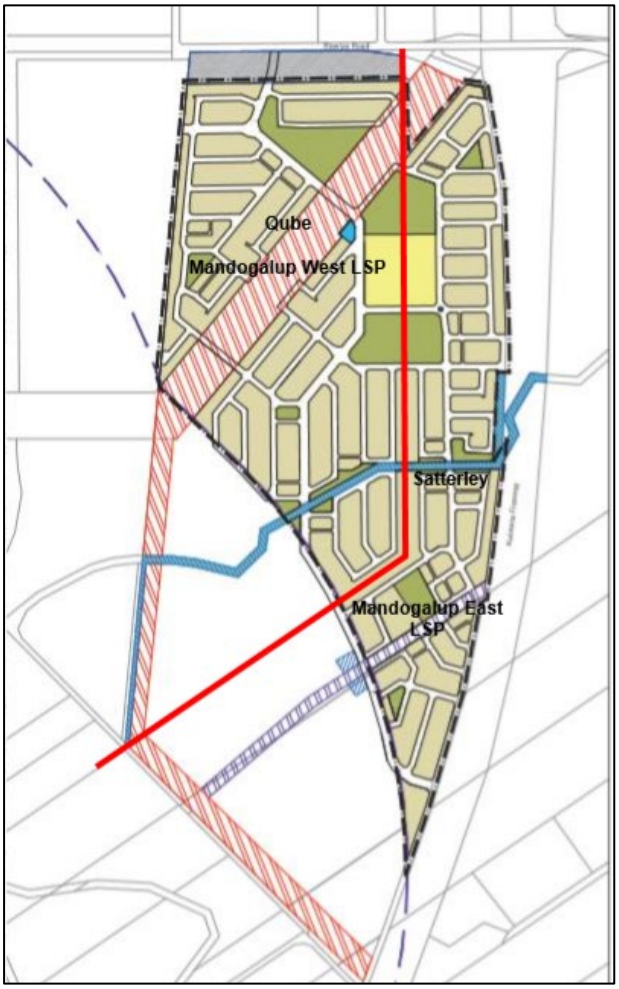


Figure 4: Consolidated plan showing Mandogalup West and Mandogalup East LSPs as adopted by the WAPC

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Improvement Plan 47 (IP47)

In May 2018 the WAPC resolved to prepare IP47 (at the same time that the City was preparing LPP12). The WAPC adopted IP47 in November 2018 which removed statutory planning control for this area from the City, and placed it under the control of the WAPC. The boundary of IP47 is shown below (Figure 5).

The purpose of draft IP47 is stated as follows:-

a) Enable the WAPC to undertake all necessary steps to advance the planning and development within the plan area as provided for under Part 8 of the PD Act;
b) Establish the strategic planning and development intent within the subject area;
c) Provide for a strategic planning framework endorsed by the WAPC, Minister for Planning and the Governor;
d) Authorise the preparation of an improvement scheme;
e) Provide the objectives of the improvement scheme; and
f) Provide guidance to the preparation of statutory plans, statutory referral documentation and policy instruments.

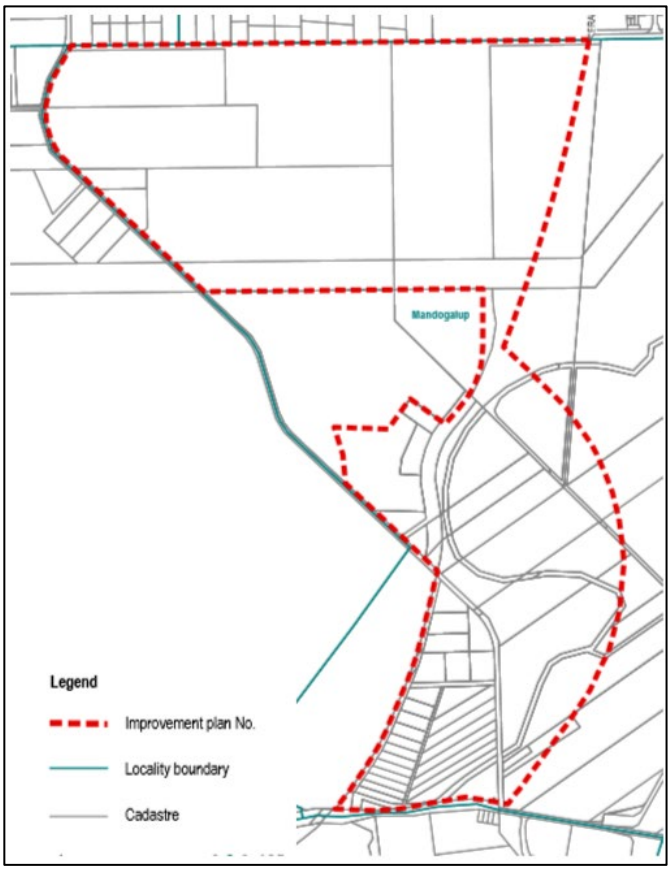


Figure 5: Boundary of Improvement Plan 47

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

IP47 authorises the making of an improvement scheme, by resolution of the WAPC and approval of the Minister for Planning. Preparing the improvement scheme will require detailed technical investigations, including assessment of future land use options, examination of area characteristics/capability and identification of strategies to mitigate any significant health and amenity impacts such as transition land uses. This work will feed into the preparation of a structure plan and, ultimately, preparation of the improvement scheme documentation. The Department of Planning Lands and Heritage has advised that it intends to present a number of planning scenarios for consideration in mid-2020.

The WAPC advised that landowners within Area A (situated to the east of IP47), will be able to progress development opportunities in line with any approved structure plans. In areas not yet subject to structure plan approvals, consideration during the preparation of any plan will need to have due regard to the lands interface with the proposed improvement plan area. If landowners wish to seek a change in zoning for the land, this will require the preparation of a re-zoning submission to both the MRS and LPS2, for consideration by the City and the WAPC.

Council advised the WAPC, in August 2018, that in order to ensure optimal planning outcomes for the Mandogalup area, future rezoning of land under both the MRS and LPS2 should be accompanied by structure planning which addresses the regional planning context, and provide a holistic and cohesive approach to planning across Area A.

Metropolitan Region Scheme Lifting of Urban Deferment

In November 2018, the WAPC resolved to transfer land from the 'Urban Deferred' zone to the 'Urban' zone under the MRS (Figure 6).

The EPA and Council advised the WAPC that they did not support a concurrent amendment to LPS2 to reflect the 'Urban' zoning in the MRS. The EPA advised that it did not support the concurrent rezoning to LPS2 to a 'Development' zone, and expects that a separate LPS amendment will be referred to the EPA for environmental consideration.



Figure 6: Area transferred from 'Urban Deferred' to 'Urban' under the MRS

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Council also advised the WAPC that the MRS amendment and concurrent local amendment for Area A should be based on a more holistic and integrated approach to planning for Mandogalup following the planning for the Improvement Plan and Improvement Scheme, the results of additional dust monitoring and allow for structure planning to take place over the whole of Area A rather than portions.

On this basis, the WAPC did not support the concurrent amendment of LPS2 which has resulted in the landowners requesting the adoption of Amendment 159.

Mapping dust plumes at Mandogalup

The Minister for Environment, in response to the EPA buffer report (June, 2017), requested the Department of Water and Environmental Regulation (DWER) to carry out further investigation into air quality in the Mandogalup area.

In January 2019, DWER issued a report titled, 'Mapping dust plumes at Mandogalup using a LiDAR, Report of air quality monitoring conducted between 1 December 2017 and 31 March 2018' (DWER dust study).

The DWER dust study found contributions to dust levels in Mandogalup from a variety of sources and land uses. There appeared to be general compliance with the *Environmental Protection (Kwinana) (Atmospheric Waste) Regulations* and the National Environmental Protection (Ambient Air Quality) Measures.

The City appointed Talis Consultants to conduct a peer review of the DWER dust study (the peer review) to ensure that the approach and findings could provide the advice necessary to inform land use planning in the area.

The peer review found that the DWER dust study did not address all of the requirements of the EPA's advice to the Minister for Environment to determine health and amenity impacts, or corrective actions to manage non-compliances with air quality standards. The peer review identified limitations with the study and concluded that the DWER dust study on its own, is not appropriate to assess health and amenity impacts.

The peer review concluded that the DWER dust study is best suited to determining the sources of dust impacts and plume movements, but needed to include the direct measurement of particulate matter (PM2.5) dust particles over a longer duration with changes to monitoring locations at the Central and Norkett Road sites, in order for the assessment and its findings to be effectively utilised.

At the Ordinary Council Meeting on 12 June 2019, Council authorised the CEO to write to the:

a) Minister for Planning advising of the peer review findings and the need to maintain the current buffers for urban development in the Mandogalup area until the health and amenity impacts have been further and more comprehensively assessed; and
b) Advising the WAPC of the peer review findings and requesting the deferment of any consideration of the appropriateness of land uses within IP47 until such time as additional studies are undertaken to assess the health and amenity impacts in Mandogalup.

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

City Officers acknowledge that Amendment 159 is situated outside of the IP47 area and Council's recommendation to defer consideration of land uses pending additional studies does not apply to the area the subject of Amendment 159.

DISCUSSION:

The transfer of the subject land to 'Urban' followed the publication of an EPA buffer report which considered the potential health and amenity impacts of dust in determining the size of a buffer for urban development in the Mandogalup area. The EPA buffer report advised that there is negligible impacts to Area A. Amendment 159 is situated within the eastern part of Area A so there is potential for future urban (residential) development in this locality.

However, there are issues surrounding proposed Amendment 159, which includes integration with the planning concepts put forward in LPP12, integration with the land situated immediately east and integration with adjoining IP47 (Figure 7).

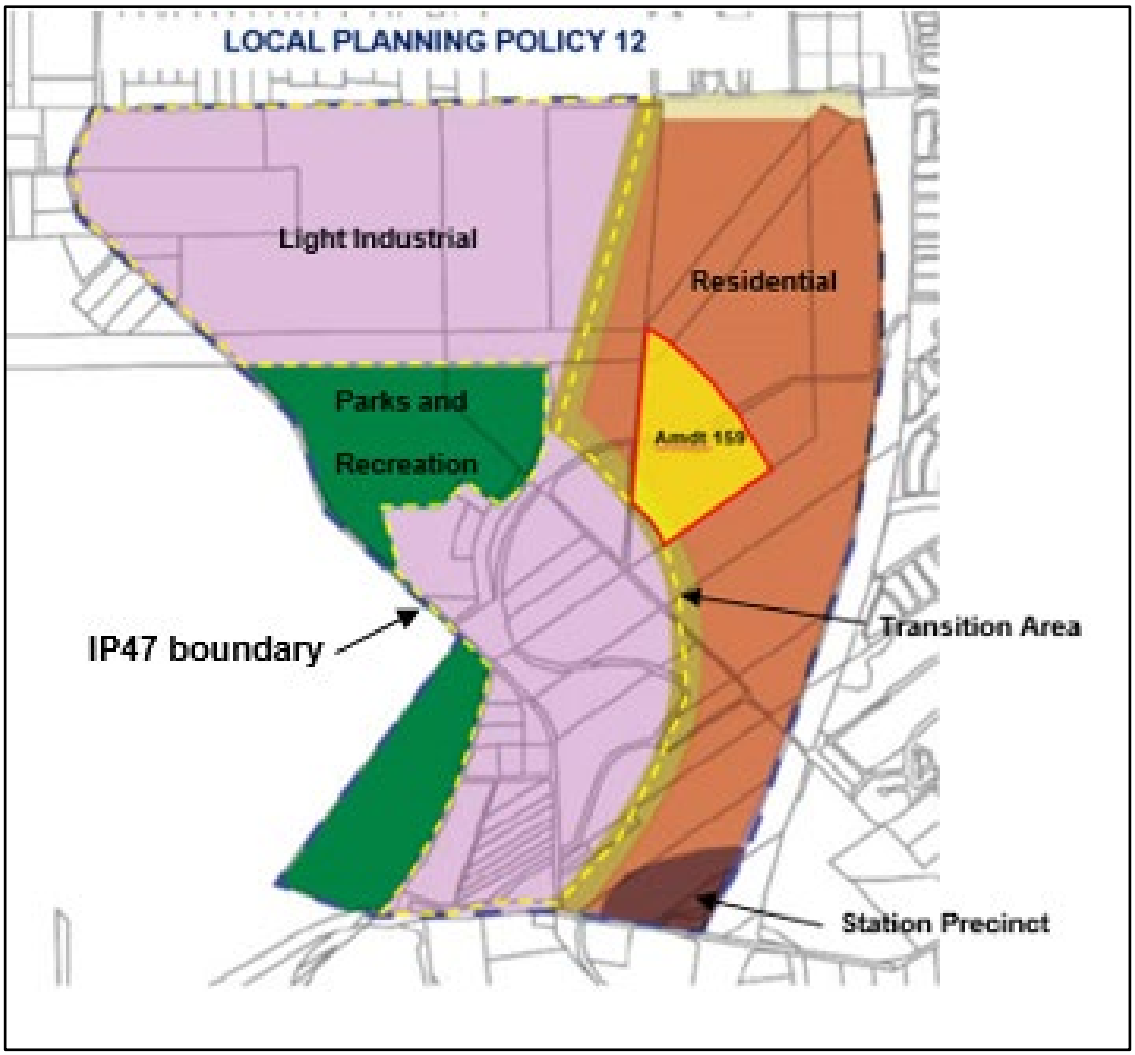


Figure 7: Boundaries of Local Planning Policy 12, Improvement Plan 47 and Amendment 159

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

The south western portion Amendment 159 area is identified in LPP12 as a 'Transition Area' with the remainder identified as 'Residential'. The 'Transition Area' is defined as an area where residential and light industrial uses may be permitted on the same lot (5,000m^2 lots). The 'Transition Area' is intended to provide a suitable interface between the residential area within Amendment 159 and potential industrial land uses within IP47 (as identified in the South Metropolitan Peel Sub-regional Framework).

In its advice to the WAPC in relation to draft IP47, Council advised that in order to ensure optimal planning outcomes for the Mandogalup area, future rezoning of land under both the MRS and LPS2 should be accompanied by structure planning which addresses the regional planning context, and provides a holistic and cohesive approach to planning across Area A.

The applicant has provided a concept plan demonstrating how development could occur throughout the subject land and the adjoining land to the east, however it is not a holistic structure plan that also addresses the IP47 area. City Officers have reviewed the concept plan and there are a number of concerns that would need to be addressed, at a minimum should an amendment progress and a structure plan be lodged, as detailed under the Environmental Implications section of this report.

The area the subject of Amendment 159 is now zoned 'Urban' under the MRS but retains a 'Rural' zone under Local Planning Scheme 2. The *Planning and Development Act 2005* requires a local government to resolve to amend its local planning scheme so it is consistent with the region planning scheme within 90 days of the region planning scheme having effect. The 90 day period has elapsed and as such the City should take the steps necessary to bring its local planning scheme into conformity with the MRS. However, it is considered that the proposed scheme amendment 159 does not address all concerns regarding the proper and orderly planning for the wider area and to progress this scheme amendment would not be appropriate.

City Officers are of the view that the proposed amendment is complex as it satisfies the criterion for a complex amendment as set out in Regulation 34 of the PD Regulations, as discussed under the Legal/Policy Implications section of this report.

It is considered that proceeding with Amendment 159 ahead of integrated structure planning for the wider Mandogalup locality is likely to result in poor planning outcomes and it is not considered appropriate for Amendment 159 to be advertised until such time that there is clarity and certainty with the planning for the Mandogalup locality, including consideration of structure planning options for IP47 by the City and State Government agencies.

<u>Scheme Amendment Documentation and Indicative Structure Plan</u>

It is acknowledged that the Scheme Amendment documentation submitted is comprehensive and includes a number of technical reports. The documentation also includes an indicative structure plan demonstrating how the full area of the Qube and Satterley landholdings could be developed. It is important to note that the indicative structure plan does not include any of the IP47 area.

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

As this is a scheme amendment request and not lodgement of a formal structure plan, City Officers have not undertaken a formal assessment of the indicative structure plan.

However, the City Officers have undertaken an informal review of the indicative structure plan and the following issues are noted.

The transition area, as set out in LPP12, is not adequately shown. LPP12 intends to support Composite Residential/Light Industrial uses where residential and light industrial uses may be provided on the same lot to provide for owner-operator light industrial uses as well as providing a suitable interface between the Light Industry and Residential areas.

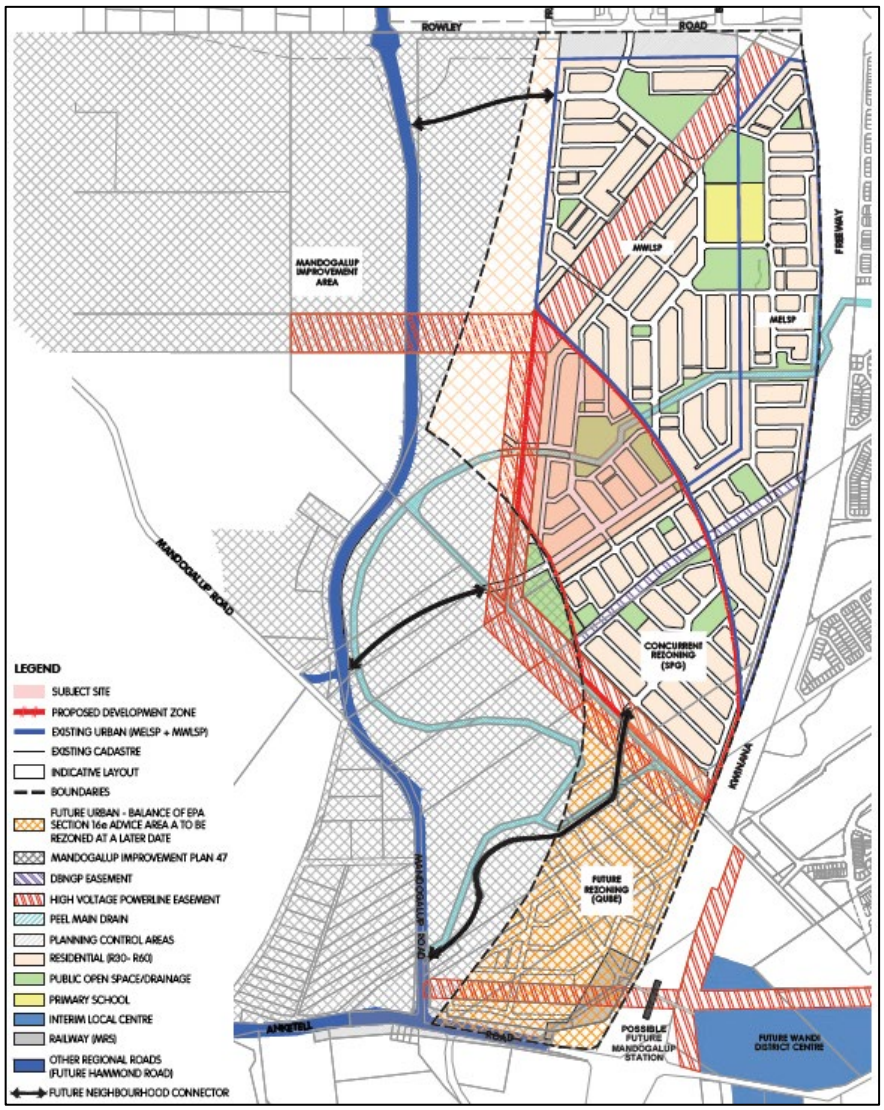


Figure 8 – Indicative Structure Plan

The indicative structure plan also fails to demonstrate how the station precinct addresses the Station Precinct Area of LPP12. The Station Precinct Area is intended for a future railway station and residential uses, as well as service commercial and commercial uses to support the Kwinana Outer Harbour. The indicative structure plan only shows a residential area surrounding the station and no other uses as set out in LPP12.

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Additionally, the indicative structure plan for the subject land indicates a Public Open Space area that is not consistent with the best quality vegetation on the site. This is discussed further under the Environmental Implications section of this report.

Finally, there are wider planning issues that remain unresolved with the IP47 area that may impact the structure planning of this area and will require consideration as a part of any future planning. Total residential development areas, and therefore dwelling yield and population numbers, remain unknown. These, and other factors, have a direct influence over the size and location of commercial nodes, schools (both primary and secondary), public open space requirements and community facility needs amongst others.

LEGAL/POLICY IMPLICATIONS:

For the purpose of Councillors considering a financial or impartiality interest only, the proponent/owner are Qube, Greta White Pty Ltd, JJ White Pty Ltd and Qube Mandogalup Pty Ltd. Lot 3 is a reserve held by the State of Western Australia.

Acts and Regulations

- *Planning and Development Act 2005*
- *Planning and Development (Local Planning Schemes) Regulations 2015*
- Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999
- Improvement Plan 47 - Mandogalup (WAPC, 2018)

Schemes

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

State Government Policies

- Guidance for the Assessment of Environmental Factors No. 3 – Separation Distances between Industrial and Sensitive Land Uses (EPA, 2005)
- South Metropolitan Peel Sub-regional Planning Framework (WAPC, 2018)
- Jandakot Drainage and Water Management Plan - Peel Main Drain Catchment
- Liveable Neighbourhoods 2009
- State Planning Policy 3.0 – Urban Growth and Settlement (WAPC)

Local Planning Policies

- Community Infrastructure Plan 2018
- Local Planning Policy No. 12 – Mandogalup Future Development

Reports

- Parliamentary Standing Committee on Environment and Public Affairs (Report 31) (November, 2012)
- Review of the Kwinana Air Quality Buffer (August, 2002)
- Review of the Kwinana Air Quality Buffer – Position Paper (November, 2008)
- Kwinana Air Quality Review: Options and Recommendations for a Revised Buffer for Areas 5 and 9 (September, 2010)

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

- EPA advice to the Minister for Environment - Consideration of potential health and amenity impacts of dust in determining the size of a buffer for urban development in the Mandogalup area (EPA buffer study) (June, 2017)
- Mapping dust plumes at Mandogalup using a LiDAR, Report of air quality monitoring conducted between 1 December 2017 and 31 March 2018 (Department of Water and Environmental Regulation) (DWER dust study) (January , 2019)

Section 124(3) of the *Planning and Development Act 2005* requires a local government to resolve to amend its local planning scheme so it is consistent with the region planning scheme within 90 days of the region planning scheme having effect.

In respect to the above reference to Regulation 34 of the PD Regulations, the *Planning and Development (Local Planning Schemes) Regulations 2015* specify three different types of Scheme amendments, being basic, standard and complex. A standard amendment is identified under the PD Regulations as any of the following amendments:

a) an amendment relating to a zone or reserve that is consistent with the objectives identified in the scheme for that zone or reserve;
b) an amendment that is consistent with a local planning strategy for the scheme that has been endorsed by the WAPC;
c) an amendment to the scheme so that it is consistent with a region planning scheme that applies to the scheme area, other than an amendment that is a basic amendment;
d) an amendment to the scheme map that is consistent with a structure plan, activity centre plan or local development plan that has been approved under the scheme for the land to which the amendment relates if the scheme does not currently include zones of all the types that are outlined in the plan;
e) an amendment that would have minimal impact on land in the scheme area that is not the subject of the amendment;
f) an amendment that does not result in any significant environmental, social, economic or governance impacts on land in the scheme area; and
g) any other amendment that is not a complex or basic amendment.

A complex amendment is identified under the PD Regulations as any of the following amendments:

a) an amendment that is not consistent with a local planning strategy for the scheme that has been endorsed by the WAPC;
b) an amendment that is not addressed by any local planning strategy;
c) an amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality;
d) an amendment made to comply with an order made by the Minister under Section 76 or 77A of the Act; and
e) an amendment to identify or amend a development contribution area or to prepare or amend a development contribution plan.

The proponent is of the view that the proposed amendment is standard. However, City Officers are of the view that the proposed amendment is complex as it satisfies criterion a) and c) above.

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Regulation 37(1) of the PD Regulations sets out that:

On completion of the preparation of a complex amendment to a local planning scheme or the consideration of a complex amendment to a local planning scheme proposed by an owner of land in the scheme area, the local government must resolve —

(a) to proceed to advertise the amendment to the local planning scheme without modification; or

(b) to proceed to advertise the amendment to the local planning scheme with modifications; or

(c) not to proceed to advertise the amendment to the local planning scheme.

City Officers are of the opinion that the proposed scheme amendment should not proceed to advertise until such time as wider planning considerations for the area are known.

FINANCIAL/BUDGET IMPLICATIONS:

The cost of preparing the amendment documentation has been borne by the proponent.

ASSET MANAGEMENT IMPLICATIONS:

There are no asset management implications arising from the report recommendation.

ENVIRONMENTAL IMPLICATIONS:

The proponent's environmental report indicates that approximately 2ha of 'Good' condition remnant native vegetation is present with the amendment area.

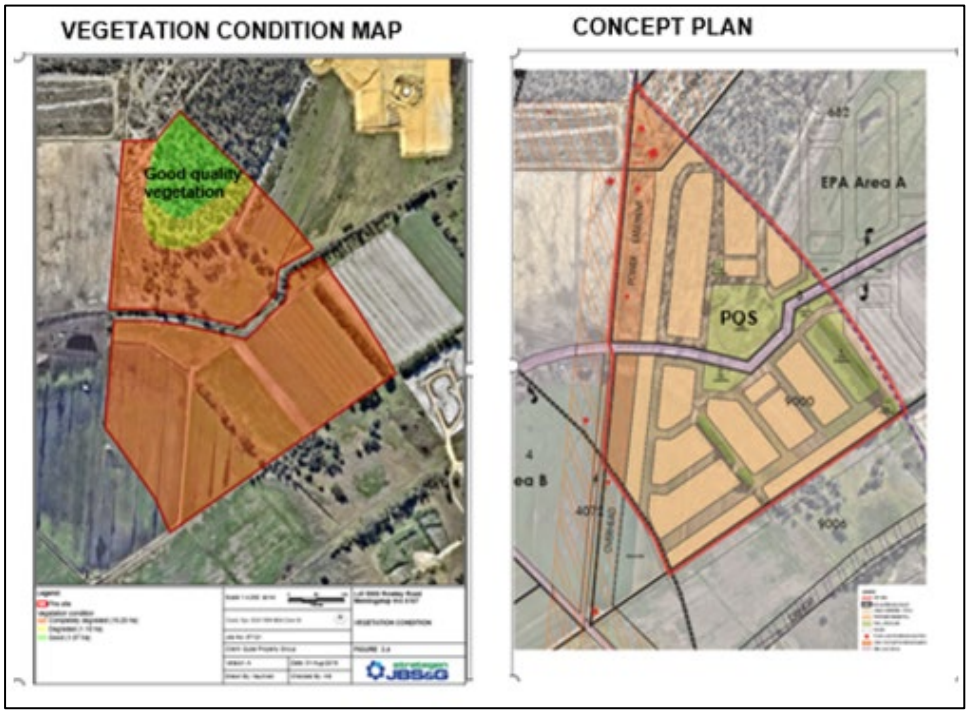


Figure 9: Location of good quality vegetation versus location of POS in concept plan

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

The location of the remnant vegetation does not coincide with the proposed location of the public open space (POS) in concept plan as shown in Figure 9.

Should the amendment proceed and a structure plan be lodged, City Officers recommend that the POS shown in the concept plan is relocated to ensure that the retention of bushland and significant trees is optimised as part of the subdivision design, civil design and earthworks.

STRATEGIC/SOCIAL IMPLICATIONS:

The officer recommendation seeks to support the achievement of the following outcome and objective detailed in the Strategic Community Plan.

Plan	Outcome	Objective
Strategic Community 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.

COMMUNITY ENGAGEMENT:

Under the provisions of the PD Regulations Amendment 159 is considered to be a complex amendment and will be required to be advertised for public comment for a period of 60 days. Should the amendment proceed and subject to EPA approval, the scheme amendment will be advertised under the provisions of the PD Regulations in the following manner:

- A notice will be placed in a local newspaper once over the course of the advertising period and on the City's website;
- Placement of a sign with the area the subject of the proposed amendment giving notice of the proposal;
- Nearby landowners and State Government agencies will be notified of the proposal in writing and invited to comment; and
- Copies of Amendment 159 and relevant documents will be made available for inspection at the City's Administration Office and placed on the City's website.

PUBLIC HEALTH IMPLICATIONS

There are no public health implications arising from the recommendation of the report.

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

RISK IMPLICATIONS:

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

Risk Event	Future development of the Mandogalup area does not comply with Council's policies and fails to achieve an integrated land use outcome.
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	City Officers are of the view that the proposed amendment is complex as it satisfies a the following criterion for a complex amendment as set out in Section 34 of the PD Act: a) It is an amendment that is not addressed by any local planning strategy; and b) An amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality. The PD Regulations requires complex amendments to be referred to the WAPC to determine if any modifications are required before being advertised by the City.
Response to risk treatment required/in place	Once the land is zoned 'Development' under LPS2, the landowners will be required to prepare a local structure plan before the City will recommend subdivision or approve the use or development of land.
Rating (after treatment)	Moderate

17.3 PROPOSED SCHEME AMENDMENT 159 TO LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 3, 52 AND 9002 ROWLEY ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

COUNCIL DECISION

033

MOVED CR P FEASEY **SECONDED CR S WOOD**

That Council determine, in respect to proposed Scheme Amendment 159 to Local Planning Scheme No. 2 to rezone portions of Lots 3, 52 and 9002 Rowley Road from 'Rural A' to 'Development':

1. That it does not to proceed to advertise proposed Scheme Amendment 159 pursuant to Regulation 37(1)(c) of the *Planning and Development (Local Planning Scheme) Regulations 2015* for the following reasons:-

a) That piecemeal rezoning of land in the Mandogalup locality is not appropriate until there is clarity and certainty with medium to long term land uses and planning outcomes in the Mandogalup locality;

b) Following the approval of Amendment 159, a proposed local structure plan for the subject area could be lodged with the City pursuant to the Planning and Development Regulations ahead of the consideration of structure plan options for Improvement Plan 47; and

c) That Amendment 159 should not be advertised until medium to long term structure planning for the Mandogalup locality has been carefully considered by the City and State Government in an integrated manner, including Improvement Plan 47. In this respect, representatives of the Western Australian Planning Commission (WAPC) have advised that the technical planning reports have already commenced for the Improvement Plan 47 area and that following community consultation in February 2020, land use planning options for the locality will be made available by June 2020.

2. To advise the WAPC that, pursuant to Regulation 35(2) of the *Planning and Development (Local Planning Scheme) Regulations 2015,* Amendment 159 is complex for the following reasons:

a) It is an amendment that is not addressed by any local planning strategy; and,
b) It is an amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality

3 That further to the above, the Concept Plan (Indicative Structure Plan) included in the existing Amendment documentation is not acceptable to Council.

4 Provide a copy of Council's resolution to the Western Australian Planning Commission within 21 days of the resolution.

CARRIED
5/2

ATTACHMENT A

RobertsDay
planning·design·place

CITY OF KWINANA
AMENDMENT TO LOCAL PLANNING SCHEME NO.2

PART LOT 9000 ROWLEY ROAD, MANDOGALUP

AUGUST 2019



QUBE

PLANNING AND DEVELOPMENT ACT 2005
RESOLUTION TO ADOPT AMENDMENT TO LOCAL PLANNING SCHEME
CITY OF KWINANA LOCAL PLANNING SCHEME NO. 2
AMENDMENT NO. X

RESOLVED that the Council, in pursuance of Section 75 of the Planning and Development Act 2005, amend the above Local Planning Scheme by:

1. Rezoning a portion of Lot 9000 as shown on the Amendment Map from 'Rural A' to 'Development'; and
2. Amending the Scheme Map accordingly.

The amendment is standard under the provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* for the following reasons:

1. Amendment is consistent with a region planning scheme that applies to the scheme area;
2. Amendment will have minimal impact on land in the scheme area that is not the subject of the amendment; and
3. Amendment does not result in any significant environmental, social, economic or governance impacts on land in the scheme area.

Dated this …….. day of …… 2019

_____

CHIEF EXECUTIVE OFFICER

PLANNING AND DEVELOPMENT ACT 2005

CITY OF KWINANA

LOCAL PLANNING SCHEME NO. 2

AMENDMENT NO. X

The City of Kwinana, under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above Local Planning Scheme by:

1. Rezoning a portion of Lot 9000 as shown on the Amendment Map from 'Rural A' to 'Development'; and
2. Amending the Scheme Map accordingly.

ADOPTION

Adopted by resolution of the Council of the City of Kwinana at the ordinary meeting of the Council held on the ..... day of ..... 2019 .

_____
MAYOR

_____
CHIEF EXECUTIVE OFFICER

LEGEND

REGION SCHEME RESERVES (MRS)
- Other Regional Roads
- Parks and Recreation
- Primary Regional Roads

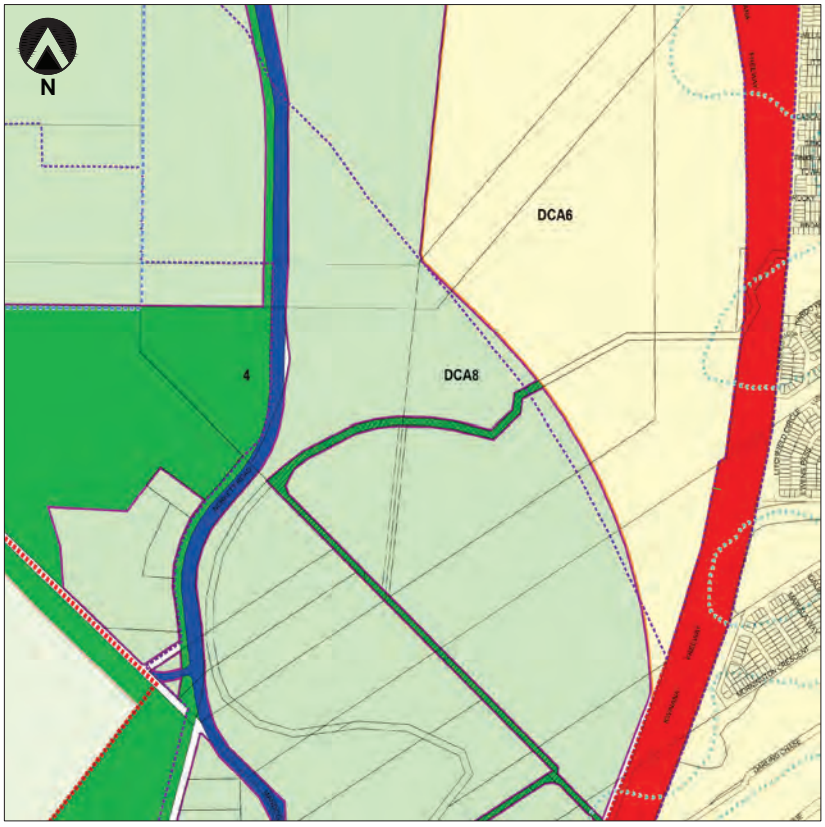
LOCAL SCHEME RESERVES (MRS)
- Park Recreation and Drainage

LOCAL SCHEME ZONES
- Development
- Rural A
- Rural B

OTHER CATEGORIES
(see scheme text for additional information)
- Area of Landscape Protection
- DCA1 Development Contribution Area
- 4 Policy Areas
- No Zone

SIZE A4_1:20000

0 metres 200 400 600 800 1000



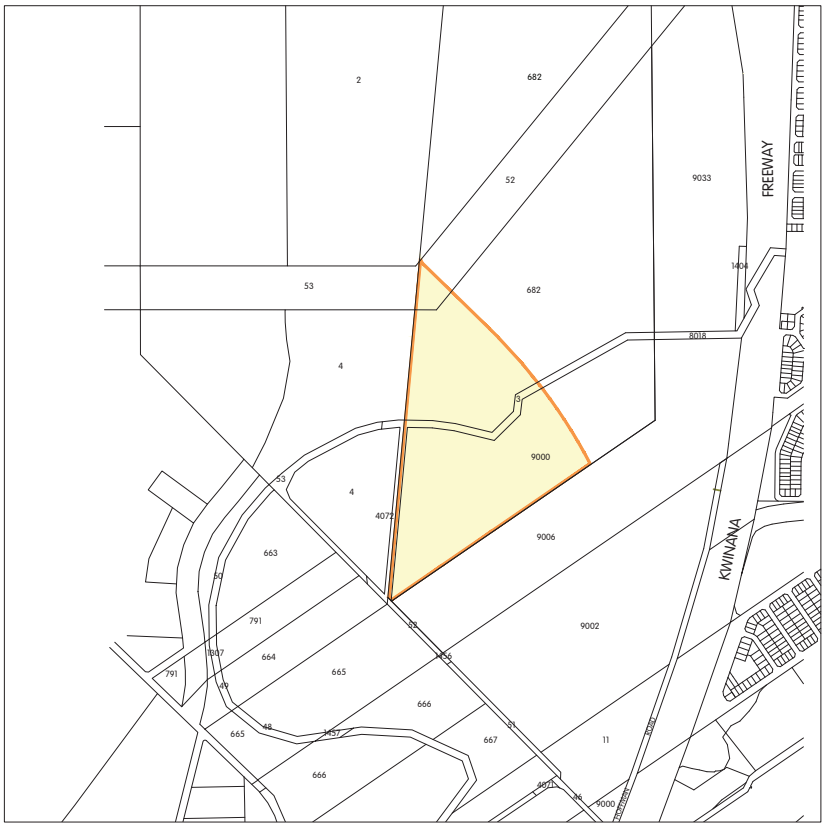
EXISTING

LEGEND

LOCAL SCHEME ZONES
- Development

SIZE A4_1:20000

0 metres 200 400 600 800 1000



PROPOSED

PROPOSED TPS AMENDMENT PLAN
Lot 9000 Rowley Road, Mandogalup
City of Kwinana

FINAL APPROVAL

Adopted for Final Approval by Resolution of the City of Kwinana at the ordinary meeting of the Council held on the

..... day of ..... 20....

and the Common Seal of the City of Kwinana was hereunto affixed by the authority of a resolution of the Council in the presence of:



_____
MAYOR

_____
CHIEF EXECUTIVE OFFICER

Recommended/Submitted for Final Approval

_____
DELEGATED UNDER S.16 OF THE PD ACT 2005

_____
DATE

Final Approval Granted

_____
MINISTER FOR PLANNING

_____
DATE

Title:	City of Kwinana Local Planning Scheme No. 2 (Part Lot 9000 Rowley Road, Mandogalup) Amendment Report, August 2019
Prepared for:	Qube Property Group
Prepared by:	RobertsDay Strategen JBS&G Cossill & Webley Transcore JDA Lloyd George
Reference:	QUB MAN
Revision:	1.1
Date:	28 August 2019

DISCLAIMER

RobertsDay acts in all professional matters as a faithful advisor to its clients and exercises all reasonable skill and care in the provision of its professional services. The information presented herein has been compiled from a number of sources using a variety of methods and as such Roberts Day does not attempt to verify the accuracy, validity or comprehensiveness of any information supplied to Roberts Day by third parties.

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1.0 EXECUTIVE SUMMARY

This request to initiate an amendment to the City of Kwinana Local Planning Scheme No. 2 (LPS2) seeks to rezone a portion of Lot 9000 Rowley Road, Mandogalup from "Rural A" to "Development". The proposed amendment will allow for the subdivision and development of the site for residential purposes, subject to the preparation of a Structure Plan.

This outcome is consistent with the *Section 16(E) Land Use Planning Response* position statement, through which State Government has endorsed residential development of the subject land on the advice of the Environmental Protection Authority (EPA) which identified that there health and amenity impacts in the locality arising from Kwinana Industrial Area operations are negligible.

Rezoning of the subject land as proposed will bring LPS2 into alignment with the Metropolitan Region Scheme (MRS), under which the subject land was transferred from the 'Urban Deferred' to the 'Urban Zone' (1350/27) on the recommendation of the WA Planning Commission, Minister for Planning and State Cabinet.

Comprehensive technical reporting and a thorough planning assessment prepared in support of the proposal demonstrates that the amendment is consistent with the strategic and statutory planning framework applicable to the site, meets all relevant policy requirements and satisfactorily addresses all environmental, technical servicing, access and design considerations necessary to permit rezoning and commence detailed Structure Planning.

It is therefore requested that the City of Kwinana initiate the proposed amendment in accordance with Section 75 of the *Planning and Development Act (2005)* on the following grounds:

- The amendment is consistent with the South Metropolitan Peel Sub-Regional Planning Framework which identifies the site as an area suitable for short-term urban development;
- The proposed rezoning will align LPS2 with the MRS consistent with the November 2018 lifting of urban deferment and ensuing transfer the subject land into the 'Urban' zone to enable development;
- The amendment accords with the position of State Government which endorsed the Section 16(e) findings of the EPA and resolved to support urban development in north east Mandogalup including the subject land;
- The proposed 'Development' zoning establishes a requirement to prepare a Structure Plan over the site through which detailed planning considerations such as interface between development on adjacent properties, road connections, public open space provision and vegetation retention can be addressed;
- An assessment of existing environmental conditions indicates that the subject land is relatively unconstrained and suitable for urban development, noting that approval to clear remnant vegetation and fauna habitat was previously granted following EPBC referral and suitably mitigated through the funding of offset site acquisition; and
- The proposal will facilitate the development of the subject site as a high-quality residential development incorporating significant public open spaces and potential retention of remnant trees that will positively contribute to the amenity of the locality.

2.0 INTRODUCTION

2.1 OVERVIEW

This report has been prepared by RobertsDay on behalf of Qube Mandogalup Development Pty Ltd in support of a proposed 'Standard' Scheme Amendment which seeks to rezone a portion of Lot 9000 Rowley Road, Mandogalup from the 'Rural A' to 'Development' zone of the City of Kwinana Local Planning Scheme No. 2 (LPS2).

The proposed rezoning will allow for future subdivision and development of the site for residential purposes, subject to the preparation of a Structure Plan. Pursuant to the *Section 16(E) Land Use Planning Response* position statement, development of the subject land has been endorsed by the State Government on the advice of the Environmental Projection Authority, which found negligible health and amenity impact from dust generated by industrial activity in the surrounding area.

This report provides justification for the proposed amendment by addressing the strategic and statutory planning framework applicable to the site and evaluating environmental, servicing and design constraints, through which it has been confirmed that the proposed amendment complies with all relevant legislative and policy requirements.

The proposed amendment is supported by an indicative Structure Plan prepared over the subject land (refer section 8). This conceptual plan will inform formal structure planning and demonstrates that residential development of the site can suitably address environmental constraints, integration with adjoining development areas and interface with the Mandogalup Improvement Area irrespective of its ultimate land use.

2.2 AMENDMENT TYPE

Pursuant to the *Planning and Development (Local Planning Schemes) Regulations 2015*, the proposed amendment is 'Standard' as it constitutes an amendment to the Scheme that it is consistent with the Metropolitan Region Scheme (MRS) and does not result in any significant environmental, social economic or governance impacts on land in the Scheme area.

2.3 BACKGROUND AND PLANNING HISTORY

The proposed amendment will bring LPS2 into alignment with the MRS following the determination of the WAPC in November 2018 to transfer the subject land from 'Urban Deferred' to the 'Urban' zone. This transfer was made with the approval of both the Minister for Planning and State Cabinet following confirmation that the subject land, being within 'Area A' of the Kwinana Air Quality Buffer as defined by EPA Section 16(e) advice, is suitable for residential development.

This lifting of urban deferment was preceded by an MRS amendment (1114/33) to rezone the site from 'Rural' to 'Urban Deferred' in November 2009, which was initiated by the WAPC to facilitate the urbanisation of the Mandogalup area. Following this determination, a separate amendment in February 2014 transferred land immediately north of the subject land from 'Urban Deferred' to the 'Urban' zone. The Mandogalup West and Mandogalup East Structure Plans (MWLSP, MELSP) were subsequently endorsed for over area in November 2018, with civil works in the MWLSP area commencing in February 2019 followed by the issuing of first titles in July 2019.

The proposed amendment is therefore consistent with prior planning decision-making of State and Local Government elsewhere in the Mandogalup area and reflects the determination of State Government that the subject land is suitable for residential development and its subsequent decision to transfer the subject land to the 'Urban' zone of the MRS.

3.0 SITE DESCRIPTION

3.1 LOCATION

The subject land is located in south-east Mandogalup, west of the Kwinana Freeway and north of Anketell Road, approximately 7km south of Cockburn City Centre and 8km north of Kwinana Town Centre. The amendment area forms part of the wider Qube landholding at Mandogalup and is situated immediately south of an ongoing residential development, through which access to the subject land will ultimately be provided.

3.2 AREA AND OWNERSHIP

The subject land comprises a 24.55ha portion of Lot 9000 on Deposited Plan 416063, Mandogalup. A portion of the Peel Main Drain reserve, being Lot 3 on Diagram 6205, is included within this area and runs east to west across the subject land.

The registered proprietors of Lot 9000 are Greta White Pty Ltd, JJ White Pty Ltd and Qube Mandogalup Development Pty Ltd. Lot 3 is a reserve held by the State of Western Australia.

Property details are summarised in the table below.

Lot	Plan/Diagram	Certificate of Title	Street Address
9000	DP 416063	2969/180	Not Recorded
3	D 6205	LR3002/140	Not Recorded

3.3 EXISTING AND SURROUNDING LAND USE

The subject land is currently vacant and was historically used for agricultural purposes, reflected by its current 'Rural' zoning. Having been largely cleared of vegetation consistent with its former rural use, the site has limited environmental value (refer to section 5.0 of this report).

Adjoining land to the north and east is also vacant and predominantly zoned 'Development', with initial stages of residential development underway within the northernmost portion of Lot 9000. Land to the south-east is used for agricultural purposes and currently zoned 'Rural'. This land is subject to a separate Scheme Amendment request by Satterley Property Group to facilitate residential development. The subject land will form part of an integrated urban area with these northern, eastern and southern landholdings through coordinated structure planning and infrastructure staging.

Land immediately west of the site is used for agricultural purposes and is separated from the subject land by an approximately 110m wide high voltage powerline easement. As the future land use of this western area is yet to be determined and is the subject of Improvement Plan No. 47 (IP47) which is currently in preliminary stages of preparation, this easement provides an adequate buffer to support residential development of the subject land irrespective of ultimate land use within IP47.

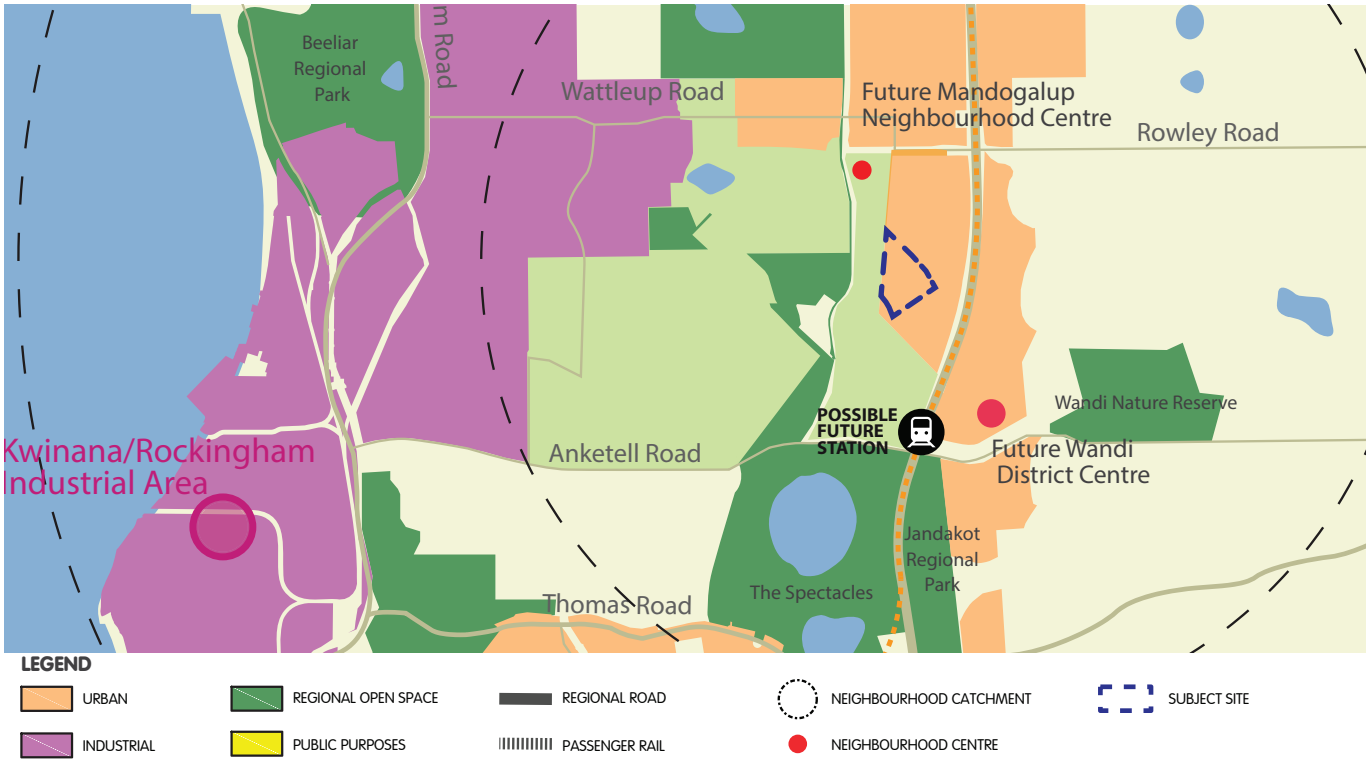


FIGURE 1: Subject Land Location

4.0 PLANNING FRAMEWORK

4.1 EXISTING ZONING AND RESERVATIONS

The subject land is predominantly zoned 'Urban' under the MRS and separately zoned 'Rural' pursuant to LPS2. The Peel Main Drain which traverses the site is zoned 'Urban' and 'Park Recreation and Drainage' under the MRS and TPS2 respectively.

The subject land was transferred from 'Urban Deferred' to 'Urban' following WAPC approval of MRS Amendment 1350/27 in November 2018. In making this determination, the WAPC, Minister for Planning and State Cabinet resolved that the outstanding matter of local air quality and related health impacts arising from Kwinana Industrial Area operations had been sufficiently resolved to allow a determination to be made as to what land should remain within the buffer (and therefore remain in the Rural or Urban Deferred) zone and what land is outside the buffer area (and therefore could be transferred to the Urban zone).

The determination that the subject land was suitable for 'Urban' zoning was informed by EPA Section 16(e) advice titled *Consideration of potential health and amenity impacts of dust in determining the size of a buffer for urban development in the Mandogalup area*. This advice identified the subject land as forming part of 'Area A', in which residential development has been deemed acceptable given that health risks and the likelihood of unreasonable amenity impacts were found to be negligible.

As part of the process of lifting the 'Urban Deferred' zone through Amendment 1350/27, a request pursuant to Section 126(3) of the *Planning and Development Act 2005* was made to concurrently rezone of the land from "Rural" to "Development" under LPS2. The City of Kwinana resolved not to support this request, with the Amendment as ultimately gazetted only providing for rezoning under the MRS. Consequently, the subject land remains zoned 'Rural' under LPS2.

The City's resolution not to support a concurrent amendment was informed by its preference for LPS2 amendments to be postponed pending greater clarity around the outcomes and impact of IP47, to ensure a holistic an integrated urban design outcome for the Mandogalup area. While preparation of IP47 remains preliminary at this time, these matters have been sufficiently resolved as outlined in sections 4.4 and 8.2 of this report.

4.2 REGIONAL AND SUB-REGIONAL PLANNING

The proposed rezoning of the subject land to from 'Rural A' to 'Development' is consistent with regional and sub-regional planning applicable to the application area.

4.2.1 Jandakot Structure Plan (JSP)

The JSP (refer Figure 4) was adopted in 2007 to guide the future urbanisation of the locality following a reduction to the Jandakot Underground Water Pollution Area (UWPCA) in 1998 which identified the subject land and its surrounds as suitable for urban development (refer to Figure 6). The JSP requires that a Local Water Management Strategy (LWMS), consistent with the Jandakot Water Resources Management Strategy (JWRMS), be prepared and lodged with any subsequent Structure Plan. The proposed amendment is consistent with the intent and requirements of the Jandakot Structure Plan.

4.2.2 Draft Eastern Residential Intensification Concept (District Structure Plan) (ERIC)

The ERIC was prepared by the City of Kwinana in November 2005 and provides strategic direction and refinement of the future urban areas identified under the JSP (refer Figure 5). It expands upon the opportunities and constraints inherent to the land and, whilst yet to be formally approved by Council, 'defines a framework by which urban subdivision and development is able to occur in an orderly and coordinated manner'. The proposed amendment is consistent with the intent and requirements of the Jandakot Structure Plan.

4.2.3 Mandogalup Improvement Plan No. 47 (IP47)

IP47 came into effect on 12 April 2019 following publication of a notice in the Government Gazette and provides for the WAPC to prepare an Improvement Scheme (refer Figure 3). This Scheme will be informed by technical investigations and the consideration of development scenarios (rural, urban and industrial, or a combination). This assessment will consider potential rural, urban and industrial development scenarios for the area to define the ultimate statutory and strategic framework. It is expected that preparation of the Improvement Scheme will take at least 2 years.

As the State Government has resolved to limit the extent of the Improvement Plan to the EPA-identified areas 'B', 'C' and 'D', it is not directly applicable to the subject land. Due regard has been given to the interface of the subject land with IP47, as detailed at section 8 of this report. The majority of land bordering IP47 within the amendment area is contained within a high voltage power easement, providing a suitable transition between both areas and negating the need for a specific design response.

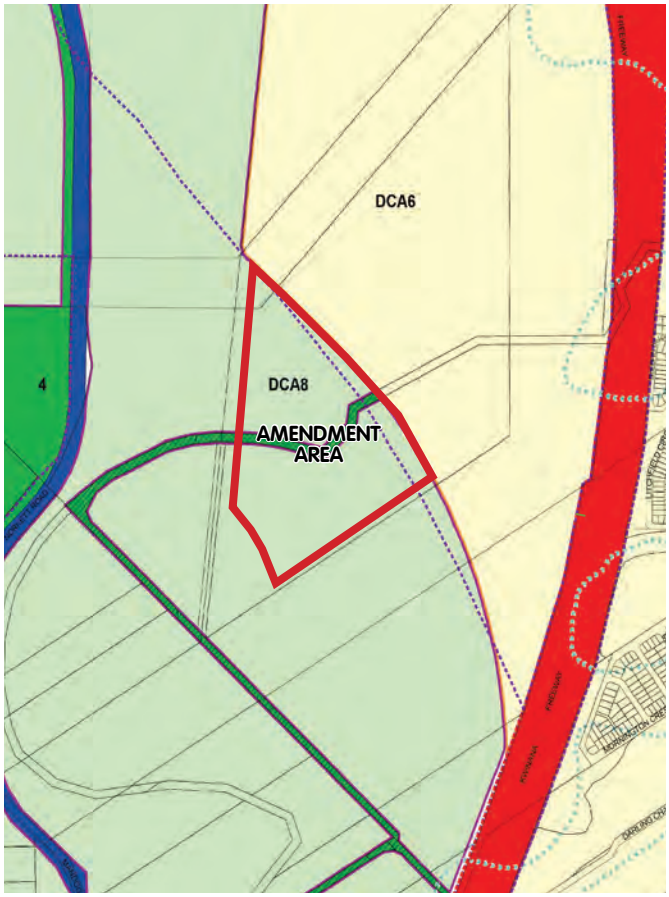


FIGURE 2: Local Planning Scheme No. 2

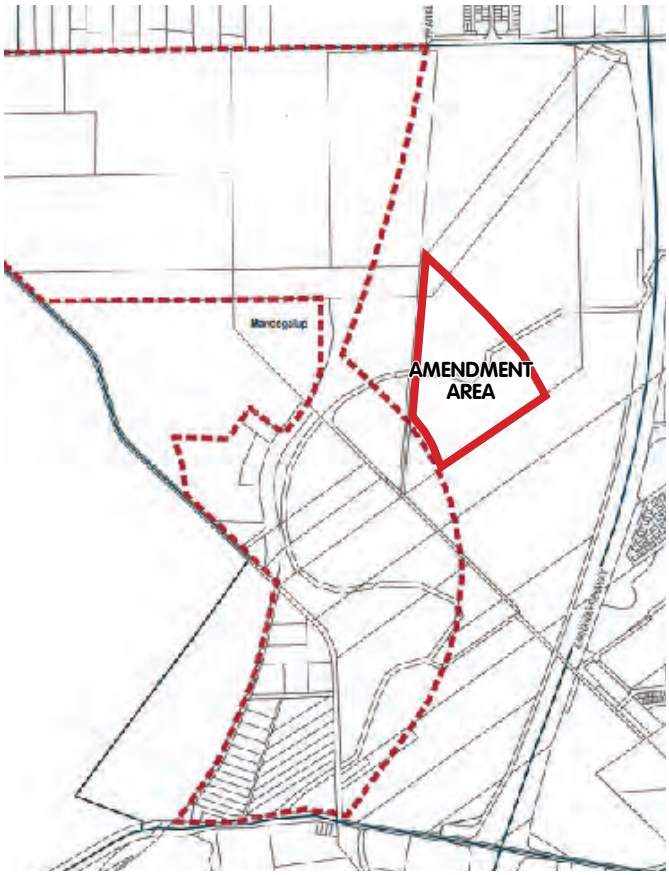


FIGURE 3: Improvement Plan No. 47

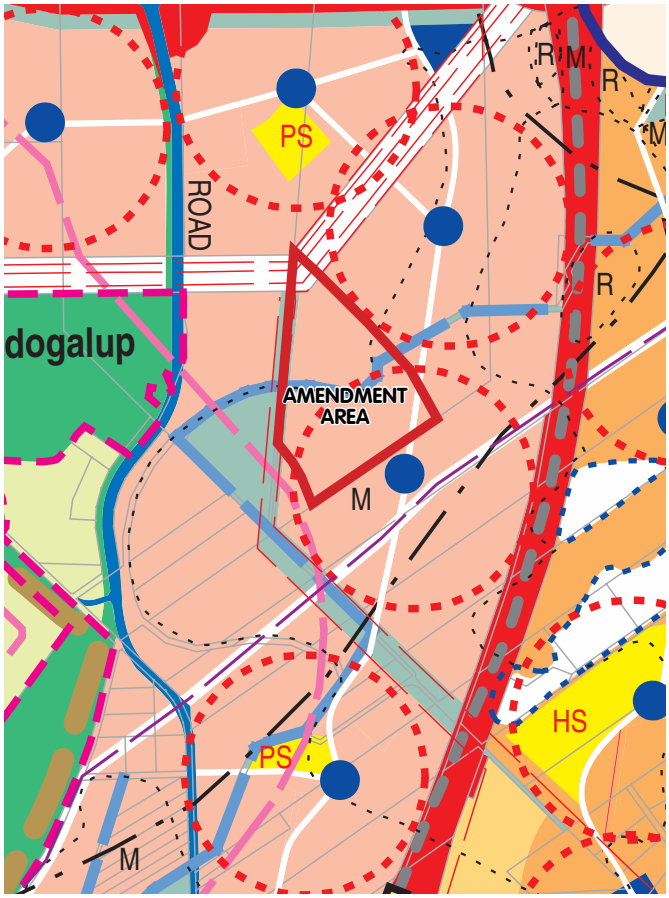


FIGURE 4: Jandakot Structure Plan

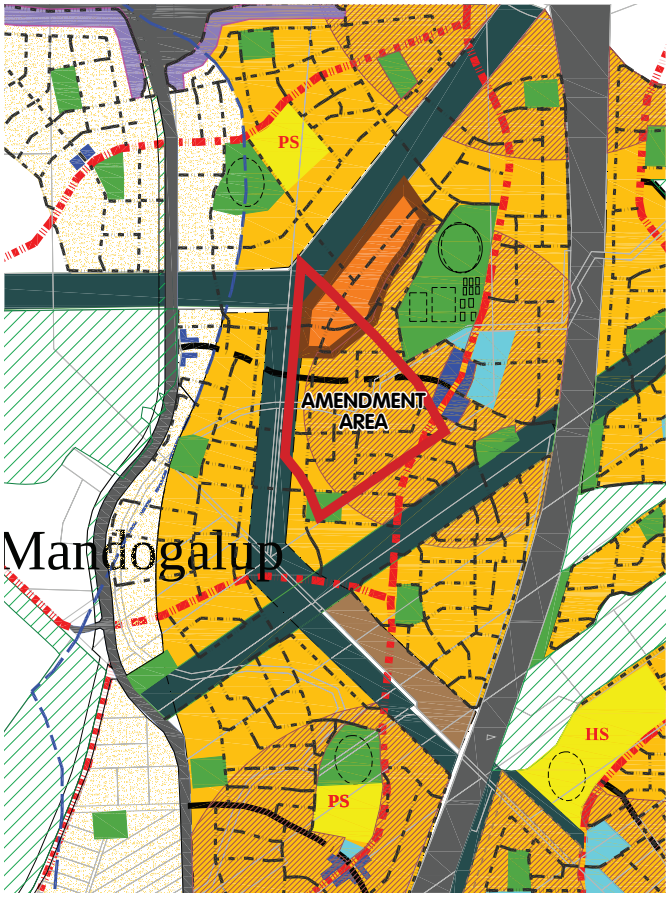


FIGURE 5: Draft ERIC (District Structure Plan)

4.3 STATE PLANNING FRAMEWORK

The proposed rezoning of the subject land to 'Development' accords with the strategic direction of state planning strategy and the requirements of relevant State Planning Policies. Commentary on elements of the State planning framework relevant to the proposed rezoning is provided below.

4.3.1 Perth and Peel @ 3.5 Million South Metropolitan Peel Sub-regional Planning Framework (SMPSPF)

The SMPSPF, adopted in 2018, functions as the primary strategic planning instrument for the south metropolitan region and defines its urban over the next 30 years, determining where new homes and jobs will be located, how to make best use of existing and proposed infrastructure and protecting important environmental assets.

The SMPSPF planning framework designates the subject land as Urban and identifies development of the Mandogalup area as being of strategic importance in consolidating existing urban areas. It further identifies the subject land as being a short term (2015-2021) development prospect.

The proposed amendment is therefore consistent with the intent and requirements of Perth and Peel @ 3.5 Million and the SMPSPF.

4.3.2 State Planning Policy 3.0 – Urban Growth and Settlement (SPP 3)

SPP 3 sets out the principles and considerations which apply to planning for urban growth and settlement in WA. The policy outlines the need to prioritise infill development in Perth to capitalise on existing infrastructure services and job opportunities. The proposed scheme amendment is consistent with the intentions of SPP3 by providing redevelopment opportunities in an already established urban area consistent with State strategic planning.

4.3.3 State Planning Policy 2.1 – Peel Harvey Coastal Plain Catchment (SPP 2.1)

The subject land is situated within The Peel Harvey Coastal Plain catchment, and as such this Policy is applicable to the determination of the proposed Amendment. The Peel-Harvey coastal plain catchment policy ensures that land use changes within the Peel-Harvey estuarine system likely to cause environmental damage to the estuary are brought under planning control and prevented.

The Peel Harvey Catchment Council supports urbanisation of land within the catchment based on completion of water management strategies in accordance with regional water management strategies and design criteria. The Jandakot Drainage and Water Management Plan No.3 (Peel Main Drain Catchment) (JDWMP) identified acceptable regional ground-water levels and an arterial drainage scheme and key design criteria to be addressed through further water management planning. Accordingly, detailed examination of the water catchment and hydrological considerations is contained in the District Water Management Strategy (refer Appendix E).

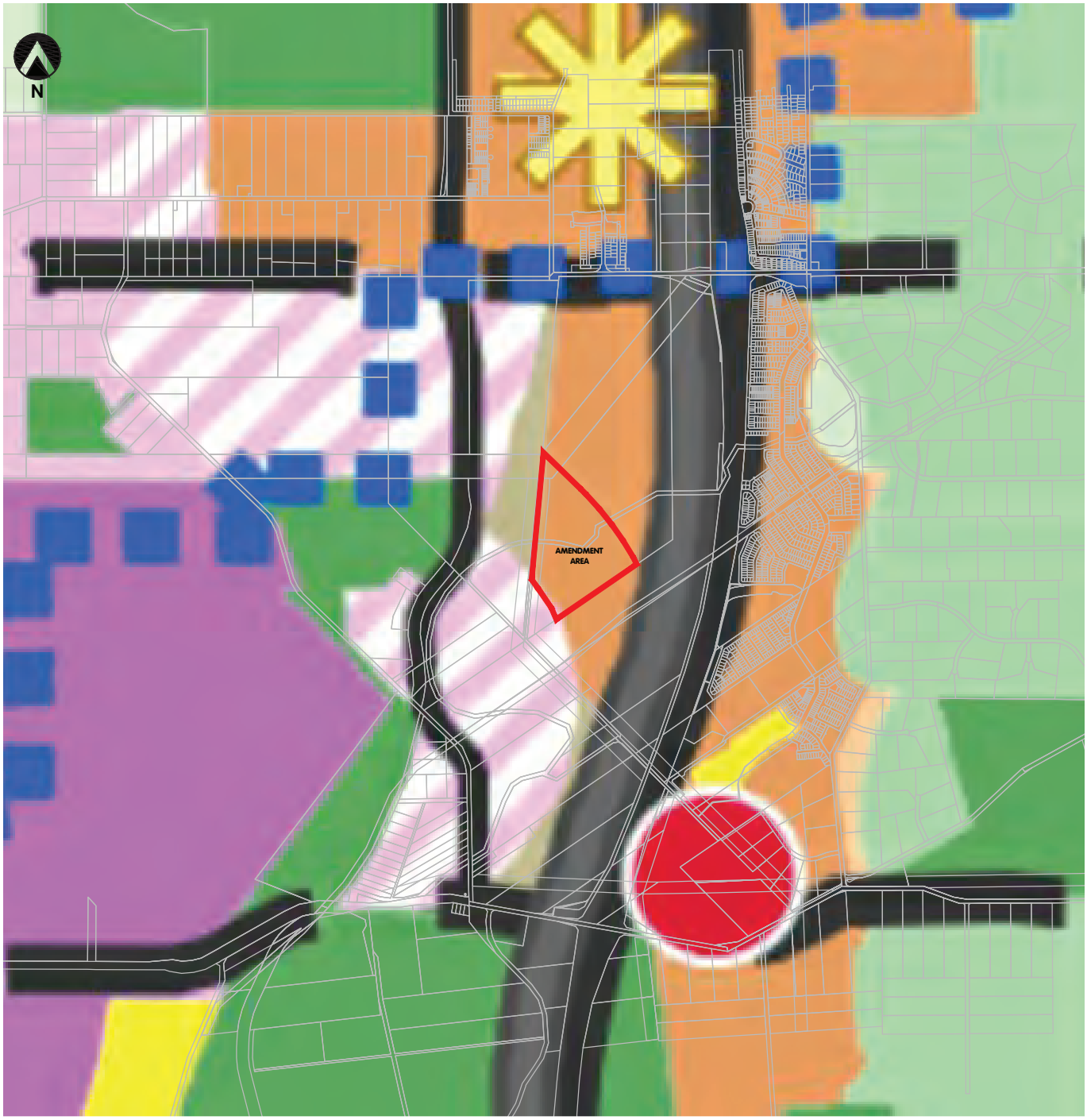
A Local Water Management Plan will be prepared with a Structure Plan to further refine and implement district and local drainage and groundwater quality requirements.

4.3.4 State Planning Policy 3.7 – Bushfire Planning (SPP 3.7)

A portion of the Scheme Amendment area is designated as Bushfire Prone pursuant to SPP 3.7. As Scheme Amendments are defined as a 'Strategic Planning Proposal under Part 7 of SPP 3.7, this policy is a relevant consideration in the determination of this Amendment. An objective of the policy is to ensure that strategic planning proposals take into account bushfire protection requirements.

Section 6.3 of SPP 3.7 requires the identification of any bushfire hazard issues arising from the relevant assessment and clear demonstration that compliance with the bushfire protection criteria in the Guidelines can be achieved in subsequent planning stages. Exceeding the requirements of the policy, the proposed Amendment is supported by a Bushfire Management Plan prepared in accordance with the Guidelines (refer Appendix D).

Compliance with the actions of the Bushfire Management Plan will be demonstrated through future structure planning and subdivision of the subject land.



LEGEND

AMENDMENT AREA

Peel-Harvey Coastal Plain Catchment Area (SPP 2.1)

Framework land uses

Railway

Urban

Urban deferred

Urban expansion

Industrial

Industrial expansion

Industrial investigation (Refer to Table 7 for key considerations)

Rural residential

Rural

Open space

Public purposes

Proposed public purposes

Regional roads (MRS/PRS)

Existing

Proposed

Rail

Passenger rail - existing

Passenger rail - proposed Stage 1 METRONET

NOTE: Transit corridors are shown on Plan 5

Activity centres

District

FIGURE 6: South Metropolitan Peel Sub-Regional Planning Framework Map

4.3.5 State Planning Policy 4.1 – State Industrial Buffer (SPP 4.1)

The purpose of SPP 4.1 is to provide a consistent Statewide approach for the protection and long-term security of industrial zones. As the subject land abuts the IP47 area, in which ultimate land use is yet to be determined but which has nominally been identified as 'Industrial Investigation' under the SMPSRP, the Policy is a relevant consideration in the determination of this Scheme Amendment.

SPP 4.1 notes that in the case of industries of a light/ service nature, the impacts of industrial activity can usually be contained on-site or within industrial area boundaries. More broadly, the WAPC has resolved that the entirety of 'Area A' is suitable for residential development. On this basis, it is expected that in the unlikely event there are any amenity impacts arising from industrial activity within IP47 a if 'Industrial' is ultimately determined to be the preferred land use, these impacts will be addressed through transitional land use arrangements wholly contained within the IP47 area.

This view is supported by EPA Section 16(e) advice pertaining to the Mandogalup area, in which the EPA articulated an expectation that prospective industrial uses in IP47 will be "designed and operated to avoid or minimise emissions, and ensure that unacceptable emissions do not occur beyond the boundary of the premises" and further noted that "while it is uncertain what industries may propose to establish in the Kwinana Industrial Area in the future, modern pollution control equipment is capable of significantly reducing offsite impacts".

Due regard has been given to the interface of the subject land with the improvement plan area, with the presence of a 110m wide high voltage power easement along the entirety of this interface considered to provide a suitably precautionary degree of separation from the IP47 area to allow development within the subject land prior to the finalisation of IP47 and irrespective of its ultimate land use. The currently contemplated design response to the IP47 interface is further detailed in section 8 of this report.

4.3.6 State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP 5.4)

SPP 5.4 aims to minimise the adverse impacts of transport noise without placing undue restrictions on residential development. The policy establishes acceptable criteria for noise levels and identifies mitigation measures.

Acoustic assessment concludes that compliance is achieved with the technical requirements of the Policy and therefore no noise controls are necessary to support the Amendment (refer Appendix F).

4.4 LOCAL PLANNING FRAMEWORK

The proposed rezoning of the subject land to 'Development' is generally consistent with relevant Local Planning Policies, noting that the majority of such policies do not substantially relate to Scheme Amendments and are able to be suitably addressed through structure planning and subdivision following rezoning. Conformity with directly applicable polices is set out below.

4.4.1 Draft Local Planning Strategy (LPS)

The City of Kwinana is preparing a new LPS to guide the strategic growth and development of the City in line with the aspirations identified by the community in the Strategic Community Plan 2017-2027. Preparation of the Strategy is at a preliminary stage with no draft documentation made available for advertising or formally considered by Council.

Given the preliminary status of the Local Planning Strategy and the expectation that it is to be consistent with the SMPSPF, the draft Local Planning Strategy is not considered applicable to the proposed Amendment.

4.4.2 Local Planning Policy 12 Mandogalup Future Development (LPP 12)

LPP 12 seeks to provide guidance to landowners, developers and Council to ensure that future development, zoning and Structure Planning in the Mandogalup area occurs in a manner consistent with orderly and proper planning of the locality and reflecting the highest and best use of land in the context of the region. Aspects of the policy directly applicable to the proposed amendment are addressed below.

4.4.2.4 Transition Area

LPP 12 identifies a 'Transition Area' intended to support "Composite Residential/Light Industrial Uses where residential and light industrial uses may be provided for on the same lot" with a minimum lot size of 0.5 hectares. It is noted that this designation is inconsistent with EPA 16(e) advice which has identified 'Area A' as suitable for unrestricted residential development and indicated an expectation for industrial transitional requirements to be accommodated wholly within industrial areas.

Additionally, the Policy Map omits a 110m wide Western Power easement which traverses the western boundary of the subject land and substantially overlaps the Transition Area identified on the Policy Map. This easement will achieve a transitional development outcome consistent with the objectives of the Policy without requiring restrictions on the form of residential development in the manner suggested by the Policy.

Future Rezoning

LPP 12 requires that future rezoning of land under both the MRS and LPS2 be accompanied by structure planning demonstrating regard to and addressing the regional planning context and provide a holistic and cohesive approach to planning across 'Area A'.

It is specified that this include identification of district transport networks, identifying key land uses including transitional precincts, address key infrastructure provision (power, sewerage and water), protect environmental values and provide a staged approach.

Noting that established planning practice provides for Structure Plans to be prepared subsequent to rezoning, an indicative Structure Plan has been prepared to demonstrate the capacity of the subject land to comply with the objectives of the policy. As detailed in section 8 of this report, the indicative Structure Plan demonstrates that the proposed Amendment will enable a cohesive development outcome across all Urban-zoned land. It further demonstrates that the subject land will form an incremental extension to the approved MWLSP and MELSP urban area, with other 'Area A' land that is currently zoned Rural necessarily subject to a separate amendment and structure planning process.

Based on the above, the proposed amendment is considered to be generally consistent with the policy objectives in providing for a suitable land use interface and coordinated approach to local area planning.

4.4.3 Local Planning Policy No.1 Landscape Feature and Tree Retention (LPP 1)

The primary objective of LPP 1 is to ensure that retention of significant trees and landscape features are optimised through the strategic and statutory planning framework to retain the character of the area. While the policy is not applicable to Scheme Amendments and relates only to Structure Planning, Local Development Plans, Subdivision and development, it has been given regard through the preparation of the indicative Structure Plan.

LPP 1 establishes assessment criteria for the identification of significant trees and landscape features, with a primary focus on the retention of trees that are either characteristic of the area, prominently located, support fauna habitat or are culturally significant.

A preliminary assessment of existing vegetation has been undertaken with a substantial number of trees indicatively identified for retention within open space and road reserves. Identified trees are predominantly planted along rural property boundaries and within paddocks by early occupants of the land. As such they are considered to have a high degree of cultural significance and reflect the rural character and heritage of the area.

The indicative Structure Plan proposes the retention of linear arrangements of mature trees within widened road reserves and POS to the south of the subject land. A significant cluster of native and exotic trees and vegetation abutting the Peel Main Drain is also proposed to be retained within a central POS area. It has been identified that several of these trees contain hollows suitable as black cockatoo habitat (refer section 5.2). This retention will maintain the functionality of POS provided within the amendment area as usable recreational area of the local community, while preserving numerous mature trees of cultural significance and ecological value.

4.4.4 Local Planning Policy (Number Unspecified) Public Open Space

Key objectives of this Policy including ensure that public open space within new urban areas is well planned, distributed and appropriate to the needs of local residents and ensuring that open space is located so as to preserve significant trees and remnant vegetation.

The policy seeks to provide for a variety of open space types through a 'functional distribution' target within each suburb. This distribution target applies to the entirety of the suburb and not individual development areas for practical reasons of POS distribution. It is expected that detailed assessment of POS provision will occur at the Structure Planning and Subdivision stages as appropriate.

The Policy sets a target of 40% conservation open space within each suburb in addition to targets for a range of active and passive uses. As Mandogalup contains approximately 98.95 ha of land reserved as Bush Forever for conservation, equating to approximately 14.3% of the gross suburb area and over three times the amount of conservation area identified under the Policy, this target is considered to have been met.

Noting the significant balance of remnant vegetation already reserved or identified as Bush Forever throughout the Mandogalup locality, inclusive of 1.66 ha of retained vegetation within the MWLSP area, the open space function and potential of major Western Power easements within the area, the range of recreational and sporting uses provided within the MWLSP and MELSP areas and the varied provision of open spaces incorporating vegetation retention proposed by the Indicative Structure Plan, it is considered that the objectives of the policy are able to be satisfied through future development.

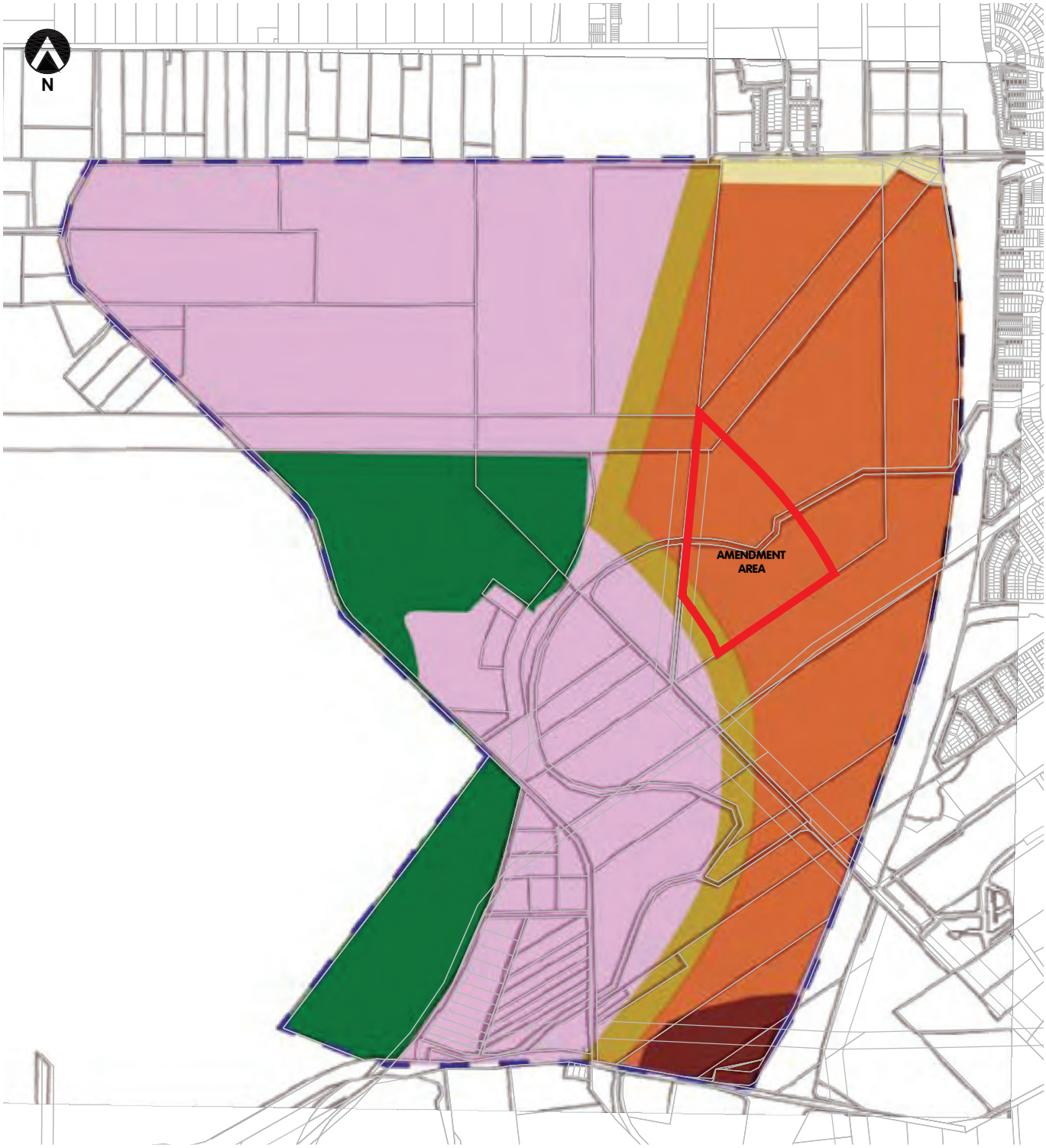


FIGURE 7: Local Planning Policy 12: Mandogalup Future Development Map

4.4.5 Other Local Planning Policies

A number of additional Local Planning Policies relating to residential development have been given due regard in the preparation of this proposed Amendment, including but not limited to:

- Local Planning Policy (Number unspecified) – Residential Development
- Local Planning Policy (Number unspecified) – Residential Subdivision and Development Guidelines
- Local Planning Policy (Number unspecified) – Planning for Bush Fire Protection Guidelines
- Local Planning Policy (Number unspecified) Development Within Cockburn Sound Catchment

As demonstrated by the indicative Structure Plan (refer section 8), compliance with the relevant requirements of the local planning policy framework can be achieved in subsequent planning stages.

4.5 OTHER APPROVALS AND DECISIONS

4.5.1 Endorsed Structure Plans

The land to the north of the subject site is zoned for development through the Mandogalup West Local Structure Plan (MWLSP) and Mandogalup East Local Structure Plan (MELSP). These plans have comprehensively addressed the wider issues associated with partial residential development within the overall Mandogalup development cell to the satisfaction of all stakeholders.

The subject land immediately abuts the MWLSP area and will function as an extension of this urban area, with services and roads extending from and integrating with the MWLSP. This high degree of cohesion and integration reflects the holistic way concept planning for the wider Mandogalup area has been undertaken to ensure that individual landholdings form an integrated urban area on completion (refer to section 8).

The coordinated but separate preparation of both the MWLSP and MELSP demonstrates the ability for the wider Mandogalup area to be cohesively planned by separate parties at the Structure Plan stage and that progressing rezoning of the entirety of 'Area A' as part of a single process is unreasonable and not required to achieve an acceptable development outcome.

4.5.2 Subdivision Approval

Subdivision approval was conditionally granted for the majority of the MWLSP area in June 2018 (WAPC Ref. 155567). This approval provides for the creation and sale of residential lots for residential development, which is currently underway.

Development within the MWLSP area has required the clearing of vegetation abutting the subject land. This clearing was referred to and approved by the Department of Environment and Energy in accordance with the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), with suitable offsets made. A 1.66 ha portion of Excellent vegetation has been retained within POS through separate negotiation with the City.

4.5.3 Amendments 100A and 145 to Town Planning Scheme No. 2

Council resolved to initiate amendments 100A and 145 to TPS2 in June 2015. Both of these amendments relate to development contributions for infrastructure within the City's new urban areas comprising Mandogalup, Wandi, Anketell, Casuarina and Wellard East.

Amendment No. 100A was gazetted in 2017, introducing Development Contribution Areas to LPS 2, and provided a framework for the coordinated delivery and cost sharing of infrastructure.

To complement the 'hard' infrastructure items dealt with through Developer Contribution Plans (DCPs), Amendment 145 was later progressed to provide for 'soft' community infrastructure items. This Amendment is yet to be gazetted while a Community Infrastructure Plan is being finalised. Following finalisation of the Community Infrastructure Plan, Amendment 145 will also be reviewed and finalised accordingly.

Notwithstanding the finalisation of the DCPs for hard infrastructure items and the pending finalisation of the DCPs for community infrastructure items, given the majority of the local infrastructure items for the Mandogalup cell (DCAs 6 and 8) are within the Qube and Satterley landholdings, those landowners have reached private cost-sharing arrangements for that infrastructure. This will be negotiated and reconciled between the two landowners and the City. Those items serving a district function that are not provided locally will still be contributed to by all relevant landowners.

5.0 ENVIRONMENTAL CONSIDERATIONS

An Environmental Assessment of the subject site has been undertaken by Strategen JBS&G to determine the suitability of the subject land for future development based on its environmental value. The Environmental Assessment Report is appended to this report (refer Appendix A).

The assessment shows that the amendment area does not have any environmental constraints or attributes that will limit or preclude the development of the subject land in the manner envisaged by the indicative Structure Plan. Relevant environmental considerations are summarised below, with further detail relating to existing site conditions available within the appended report.

5.1 FLORA AND VEGETATION

A flora and vegetation survey (Emerge Associates, 2011) was previously conducted of the site and surrounding area in support of the Lifting of Urban Deferment under the MRS. Vegetation types identified within the site include VT1 (*Eucalyptus rudis and Melaleuca rhaphiophylla* woodland) and VT3 (*Eucalyptus marginata and Banksia menziesii* woodland) within the Bassendean – Central and South and Herdsman complexes. The survey identified that over 75% of the site is historically cleared having been previously used for agricultural purposes, with remnant vegetation subject to grazing, weeds and partial clearing. As such, vegetation condition within the site ranged from 'Good' to 'Completely Degraded'.

Statistical analyses of vegetation data from the survey area determined that 1.97 ha of VT3 vegetation was most likely associated with Floristic Community Type (FCT) 21a *Central Banksia attenuata – Eucalyptus marginata woodlands*. FCT 21a is not listed as a Threatened Ecological Community under the EPBC Act, nor is it identified as a Priority Ecological Community (PEC) under state legislation. Given this sub-community is known to occur at 50 point locations over approximately 245 kilometres from Yeal to Capel, it is considered to be well represented and at low risk. No other TECs or PECs were identified within the site. As such, the proposed development is not expected to impact any state listed Threatened or Priority Ecological communities, or any Threatened or Priority flora species.

Areas of trees have been identified as suitable for retention per the indicative Structure Plan, subject to completion of detailed technical design. Ultimate tree retention will be determined through structure planning including an assessment of technical and arboricultural feasibility based on tree condition and detailed design. It is noted that the current extent of proposed tree retention includes a number of trees identified as containing hollows potentially suited to black cockatoo habitat.

Given that no TECs or PECs are expected to be impacted by the clearing envisaged by the indicative Structure Plan and the extent of this prospective clearing accounts for only 0.01% and 0.004% of the Bassendean Complex – Central and South and Herdsman Complex respectively, all direct, indirect and cumulative impacts to flora and vegetation are considered minor at a local and regional scale.

5.2 FAUNA AND HABITAT

Based on searches of the EPBC *Protected Matters Search Tool* and the DBCA's *Naturemap* databases, the desktop assessment identified a total of 11 Threatened, four Priority, and one Internationally protected fauna species that may potentially occur within the vicinity of the site. A fauna survey and habitat assessment undertaken in 2011 (Emerge Associates) concluded that of the conservation significant fauna identified, only two species of black cockatoo (CBC and FRTBC) would regularly utilise the site for potential habitat and foraging.

As part of the black cockatoo habitat assessment undertaken by Emerge Associates (2011) for the wider Mandogalup area, evidence of foraging was recorded. A total of 52 significant trees were also recorded within the site, of which 12 contain hollows of a size and orientation suitable for breeding by black cockatoos. As noted above, approximately half of these trees have been identified as potentially suitable for retention within POS per the indicative Structure Plan.

All impacts to CBC and FRTBC within the subject land have been assessed and endorsed through EPBC referral (2014/7126) and have already been suitably offset, with funding provided to DBCA to acquire 188 hectares of black cockatoo foraging habitat. Qube has therefore fulfilled their requirements to offset black cockatoo habitat loss and continue to implement the associated management conditions for the proposal area.

It is noted that site offsets provided per EPBC determination is likely to contain in part areas of Banksia Woodlands TEC. While these offsets relate to addressing impact on black cockatoos, it would appear that the offsets made are also likely to have contributed towards the conservation of this TEC within the region and should be taken into account when assessing net environmental impact.

5.3 LANDFORM AND SOILS

The subject land is similar in geotechnical and soil profile to the existing Urban zoned land to the north which has already been granted LSP approval for residential development. It forms part of the Bassendean dune system which from a regional context consists of Bassendean Sands and Peaty Silt.

Regional ASS mapping indicates that the majority of the site has Moderate to Low (Class 2) ASS disturbance risk. Subdivision and development of land containing ASS will be planned and managed to avoid potential adverse effects on the natural and built environment. In the majority of cases, ASS is a management issue and does not represent a physical constraint to development. If required, an acid sulfate soil management plan will be prepared in accordance with the relevant guidelines for management of ASS (refer Appendix A).

5.4 SITE CONTAMINATION

A portion of the subject land has historically been used for rural and horticultural uses. This land use type has been identified by the DWER as a potentially contaminating activity. A Detailed Site Investigation (DSI) for the site was previously undertaken to assess contamination risk, which concluded that there is no unacceptable risk exists to development workers, future residents, offsite groundwater users or ecological receptors and the site is not considered to require further environmental investigation or remediation.

Further investigations will confirm if further detailed site investigations are required to support future residential development and identify appropriate management controls are in place before subdivision commences (refer Appendix A).

5.5 HYDROLOGY

The amendment area is subject to the provisions of SPP 2.1 given the importance of the regionally significant wetland chain and its location within the catchment of the Ramsar listed wetlands of the Peel Inlet–Harvey Estuary. The Peel Harvey Catchment Council supports urbanisation of land within the catchment based on completion of water management strategies in accordance with regional water management strategies and design criteria. Accordingly, detailed examination of the water catchment and hydrological considerations is contained in the District Water Management Strategy (refer Appendix E).

As part of future planning and development requirements, additional hydrological engineering investigations will be undertaken to enable preparation of a LWMS and UWMP. Necessary management measures will be implemented to ensure that pre-development hydrological flow regimes are maintained and water quality is protected.

It is not expected that the proposed development of the site will result in significant direct, indirect, or cumulative impacts to hydrology within the site. Potential impacts to hydrology will be addressed at subsequent planning and development stages through preparation of a LWMS and UWMP and mitigated through the implementation of best practice urban water management.

5.6 MOSQUITOES AND MIDGES

The risk of mosquitoes breeding within the site is expected to be low. However due to the prevalence of wetlands within the Mandogalup area, and the medium risk of mosquito and midge habitat developing in low-lying areas near and within the Peel Main Drain, management measures will be implemented to prevent mosquitoes and midges adversely affecting the health and welfare of future residents through future stages of planning (refer Appendix A).

5.7 BUSHFIRE HAZARD

As a result of the bushfire prone status of the site, a Bushfire Management Plan (BMP) has been prepared to accompany the proposed Scheme Amendment to address the requirements of SPP 3.7.

A BMP has been prepared in accordance with Guidelines for Planning in Bushfire Prone Areas (refer Appendix D), confirming the suitability of the site for residential development from a bushfire hazard perspective.

6.0 ENGINEERING AND SERVICING CONSIDERATIONS

An Engineering Servicing Report of the subject site has been prepared by Cossil & Webley to assess the serviceability of the subject site. The Engineering Services Report is appended to this report (refer Appendix B).

The provision of service infrastructure will be addressed further during the preparation of the structure plan for the subject site and surrounding sites. Further consultation with the WAPC, City of Kwinana and relevant agencies will be undertaken at this time.

6.1 GEOTECHNICAL SUITABILITY

Existing site topography including soils, groundwater are suitable for residential development. The Site is steeply graded in the northern area from a level of RL35m AHD to a low-lying area in the south at RL13m AHD, requiring substantial modification of ground levels to accommodate development.

A preliminary site-specific geotechnical investigation has been undertaken by Galt Geotechnics, and confirms that the site is suitable for development with the majority of the site being Class A and Class M under Australian Standard AS2870.

6.2 SITE SERVICING

The Engineering Servicing Report confirms that the subject land is able to be connected to all relevant water, sewer, electricity, gas and telecommunications services.

Extension of services will primarily occur from the northern MWLSP area. As such, a high degree of coordination between both areas in terms of site levels, road alignments and servicing corridors is required to ensure that service infrastructure can be feasibly delivered. Specific site servicing considerations are further detailed in the appended report.

6.3 EARTHWORKS STRATEGY

Earthworks for residential development of the Site will require the clearing of existing vegetation within the north-west corner of the site to support cut to fill earthworks, which are needed to provide adequate separation to groundwater in the southern portion of the site. The potential to utilize existing site resources avoids the need to transport fill from external sites which would otherwise contribute to the depletion of scarce Basic Raw Material resources.

As the subject land has generally good separation in the northern area, it is intended to utilise this area as a source of cut to fill the lower lying area to the south. Required cut within the northern part of the site will be in the order of 5 metres. A bulk earthworks plan will be prepared following adoption of a Structure Plan.

Proposed earthworks in the northern portion of the site are also necessary to integrate with the adjacent MWLSP levels, meeting maximum grades for lots, roads, stormwater drains and sewers, and keeping retaining walls maximum heights to within the City of Kwinana's standards. Retention of vegetation in this area would result in significant battering or retaining walls sitting well above the adjacent proposed development levels and actively undermine the expressed position of the City to achieve a cohesive and integrated urban design outcome in the locality.

6.4 DRAINAGE

A District Water Management Strategy (DWMS) has been prepared by JDA Consultant Hydrologists for the Mandogalup area which includes the subject land. A supplementary report (Appendix E) confirms the applicability of the DWMS to the site and assessment of the proposed amendment.

The DWMS notes that drainage catchment areas within the site fall into the catchment of the Peel Main Drain, as determined in the Jandakot District Water Management Plan (DWMP). The DWMS requires stormwater runoff generated from the proposed development to be detained and infiltrated on site in POS areas, with compensated flows from larger events to be directed to the Peel Main Drain.

7.0 TRANSPORT AND ACCESS CONSIDERATIONS

The suitability of the subject land for residential development facilitated by its rezoning as 'Development' is supported by the site's accessibility, given its close proximity to the Kwinana Freeway and regional road network, the Perth-Mandurah rail line and associated regional bike path.

Site access arrangements and forecast traffic impact have been confirmed as acceptable by Transcore through the preparation of a Traffic Impact Statement, as appended to this report (refer Appendix C).

7.1 ROAD NETWORK ACCESS

The subject land is well connected to the regional road network given its proximity to the Kwinana Freeway, providing north-south access through the metropolitan area, with Rowley Road and Anketell Road providing access to the Western Trade Coast to the west and connection to the primary distribution network including Kwinana Freeway and Tonkin Highway to the east.

The approved local distributor route through the MWLSP and MELSP provides direct access to the subject land from Rowley Road in the north and will in the future link directly south to Anketell Road, via the existing Mandogalup Road. The cross section of the local distributor incorporates a fully separated cycle lane, providing active transport access to the wider region.

The southern portion of the site is currently accessible from Anketell Road via Hoffman Road in accordance with existing approved Structure Plans. Existing access arrangements have sufficient capacity to manage interim traffic growth within the subject land and surrounding locality, with long term regional road connections identified for further investigation subject to the ultimate road network configuration being resolved through the preparation of IP47 and conclusion of Westport investigations.

Transcore has prepared a Traffic Impact Assessment to accompany the Town Planning Scheme, which outlines the proposed internal road hierarchy and distribution of traffic from the development to the surrounding external road network. It confirms that existing interim access arrangements are capable of supporting residential development within the subject land

Main access to the site will ultimately be via Rowley Road to the north, proposed Hammond Road to the west and ultimately Anketell Road to the south. As shown on the indicative Structure Plan (Refer Section 8), a range of further road connections are available through the Mandogalup Improvement Plan area to Hammond Road, which can be suitably resolved following finalisation of IP47.

7.2 FUTURE UPGRADES

Rowley Road and Anketell Road are designated as future freight routes servicing the proposed Outer Harbour and accordingly are both the subject of declared Planning Control Areas. Issues such as interim access, noise attenuation and dust and have been addressed through the approved MWLSP and MELSP and are not applicable to the subject land.

There is an existing roundabout on Rowley Road at Irvine Parade which will provide access to Mandogalup as part of the first stage of development. MRWA has advised this intersection may need to be closed or converted to a left-in-leftout at ultimate build-out, once Hammond Road has been extended south of Rowley Road and Rowley Road has been upgraded to 4 lanes.

The future extension of Hammond Road southwards over the future Rowley Road alignment to Anketell Road is reserved Other Regional Road under the MRS. The construction will most likely occur in parallel with the Outer Harbour port access being resolved through the Westport Strategy, which is examining the feasibility of development options for the Outer Harbour and associated access arrangements including road and rail interventions within the Anketell and Rowley corridors.

7.3 TRANSPORT NOISE IMPACT

Given the proximity of the subject land to the Kwinana Freeway and future Hammond Rd extension, a Transport Noise Assessment was undertaken by Herring Storer (refer Appendix F) to determine the impact of transport noise and any applicable management measures required.

Findings of this assessment indicate that noise levels at the subject site are below prescribed target levels. As such, compliance is achieved with SPP 5.4 and no further noise controls necessary to support the Local Planning Scheme Amendment.

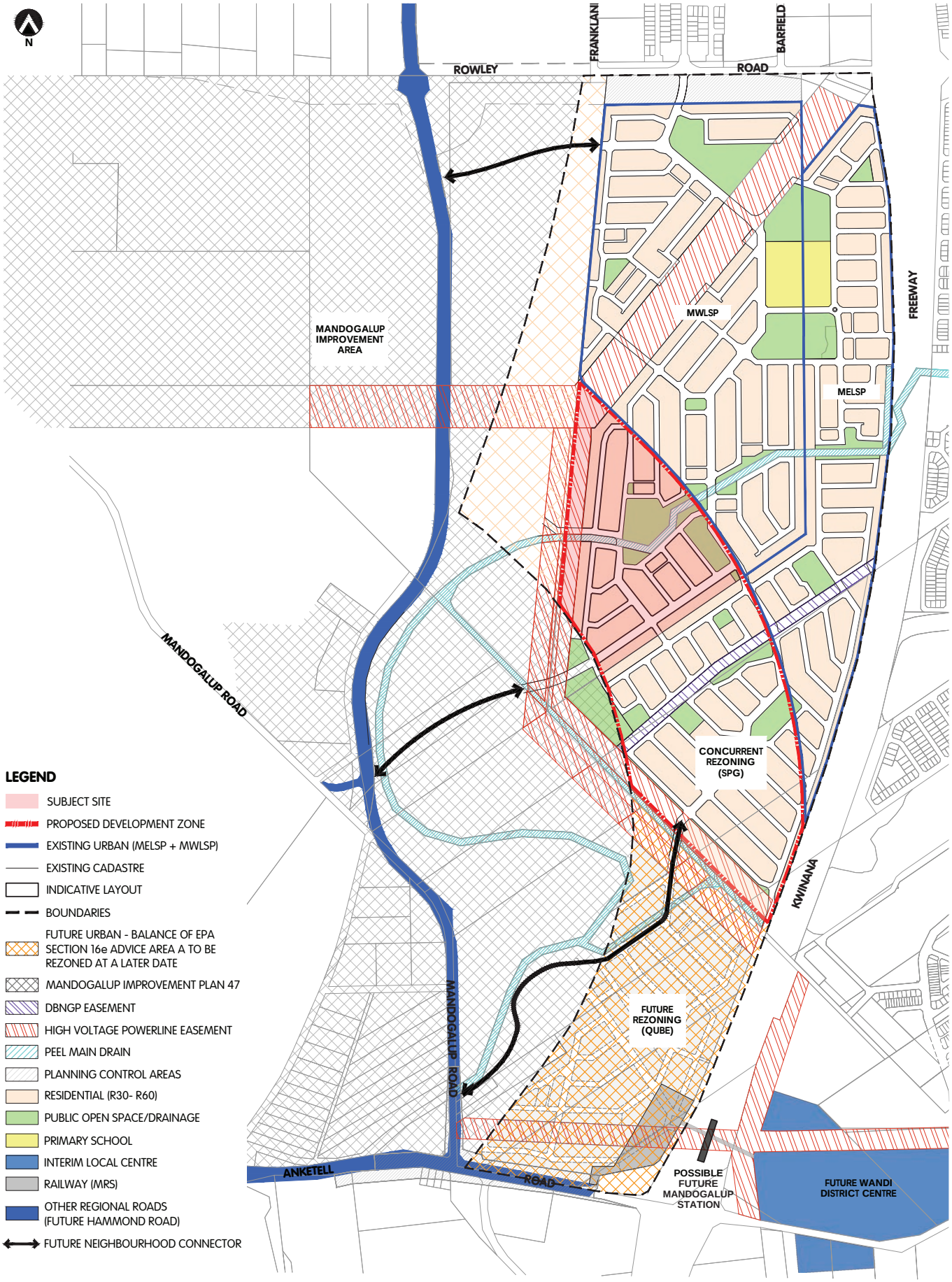


FIGURE 8: Indicative Structure Plan Map

8.0 INDICATIVE STRUCTURE PLAN

In support of this request, an indicative Structure Plan has been prepared consistent with LPP 12 to recognise the agreed parametres for development established and approved through the MWLSP and MELSP, highlight the immediate development potential of the subject land as a logical extension of the MWLSP urban area and demonstrate the capacity of the site to integrate with as yet unresolved future development within the IP47 area and surrounding 'Area A' landholdings.

The indicative Structure Plan allows for planning of the entirety of 'Area A' that is currently zoned Urban under the MRS to be considered in a holistic manner, having regard to:

- LPP12 and the approved planning for existing Urban areas in Mandogalup;
- The potential for a train station precinct within the southern part of the Mandogalup area;
- The results of the recent air quality testing; and
- Ensuring greater integration with the Improvement Plan area

The Rural-zoned portion of 'Area A' south of the subject land has nominally been shown within the indicative Structure Plan, noting that given its MRS zoning is inconsistent with the balance of 'Area A' it will necessarily be subject to a separate but coordinated planning process.

8.1 DESIGN OVERVIEW

The indicative Structure Plan highlights that the subject land constitutes an incremental expansion of approved development to the immediate north and allows the combined residential cell to develop into a robust and sustainable neighborhood.

Development of the subject land will provide a range of residential densities, open space and community facilities and transport systems in accordance with the principles of Liveable Neighbourhoods and State and Local policies, whilst taking site-specific opportunities and constraints into consideration. The plan also demonstrates the ability to adapt to whatever the future land use is determined within IP47. Following the rezoning of the subject land, the Plan will be refined and a Structure Plan/s submitted to the City of Kwinana and the WAPC for consideration.

The key design principles of the Indicative Structure Plan are:

1. An interconnected network of streets to encourage greater walking and cycling, including a central Neighbourhood Connector with an extension of the designated off road cycle route that will connect the precinct to the central retail, education and sporting facilities within MWLSP and MELSP and the Kwinana Freeway Principal Shared Path;
2. Provision of a range of residential densities and living options around key open space areas and the central distributor road which will facilitate walkable access to future bus routes;
3. A linear network of open space that is readily accessible from surrounding households and provides a functional recreational purpose consistent with local needs;
4. Retention of mature and significant trees within strategically located areas of open space and road reserves;
5. Preservation of easements for infrastructure and drainage and co-location with open space areas, acknowledging the separation of uses these areas provide in relating to IP47;
6. Appropriate management of drainage and groundwater levels in accordance with the prepared District Water Management Strategy;
7. Staging of development to facilitate the progressive release of land for urban purposes when the future land use of the balance of the Mandogalup cell are resolved through IP47; and
8. Sustainable and technically feasible earthworks and servicing, consistent with City and Australian Standards.

8.2 IMPROVEMENT PLAN AREA INTERFACE

The Indicative Structure Plan demonstrates that development of the subject land can be progressed in an orderly and proper manner that allows for future integration and transition into as yet undetermined land uses within IP47 to achieve a cohesive urban outcome, without unnecessarily constraining development of the subject land and accommodating staged development progressed by individual landholders in line with accepted planning practice.

This is supported by the following attributes of the Indicative Structure Plan:

- Integration of the subject land into the MWLSP/MELSP, supporting its function as an incidental and logical extension to this existing urban area, with provision made for all requisite road connections, neighbourhood facilities, amenities and servicing infrastructure without any reliance on IP47;
- Provision of road connections to allow for integration with future residential development within adjacent 'Area A' landholdings to the east and south, consistent with the JSP, ERIC and *Section 16(E) Land Use Planning Response* position statement, supporting the establishment of a contiguous and holistically planned urban area irrespective of IP47 outcomes;
- Identification of future major road connections into IP47 which may be accommodated as required without impacting the subject land, allowing for the local road network to be adapted to a number of land use scenarios subject to the finalisation of IP47 and Westport Outer Harbour planning;
- Total separation from the IP47 area is provided by a 110m wide High Voltage Power Easement and indicative Public Open Space along the length of the subject land interface with this future planning area, providing a significant transitional area and separation in the highly unlikely event the balance of IP47 is identified for non-residential purposes.

8.3 APPROACH TO VEGETATION RETENTION

The indicative Structure Plan contemplates the retention of significant vegetation within road reserves and open spaces aligned to the Peel Main Drain. This proposed approach to vegetation retention, which prioritises the preservation of culturally and ecologically significant remnant trees within 'Completely Degraded' areas over the conservation of an isolated and technically compromised remnant of 'Good' condition vegetation in the north of the site, is informed by several environmental, engineering and design considerations:

- The 'Good' quality vegetation in the north of the site has been significantly impacted by grazing, weeds, agriculture and other disturbances, is not of significant environmental value given broad local and regional representation and is of substantially lesser quality than 'Excellent' vegetation retained within POS in the MWLSP area;
- Significant earthworks within the northern portion of the site are required to integrate with adjacent MWLSP earthworks levels and achieve compliance with maximum drainage and road grades, precluding vegetation retention in this location. Conversely, transitional levels adjoining the Peel Main Drain make it technically feasible to retain vegetation within this central area;
- Retention of the northern vegetation is not possible as this would result in significant battering or retaining walls sitting well above the adjacent proposed development levels, which would compromise the functionality and conservation value of the POS and compromise the legibility of the urban environment;
- Areas in which tree retention is contemplated contain specimens of significant cultural value, in that they reflect the agricultural history of the region, and are also of recognised ecological value with several trees identified as suitable for black cockatoo feeding and roosting; and
- The location of open space (and proposed vegetation retention) has been determined based on drainage requirements, open space accessibility and functionality and the urban design and ecological benefits of consolidating open space with the Peel Main Drain to create a continual linear park network to the retained vegetation north-east in the approved subdivision area along the Drain.

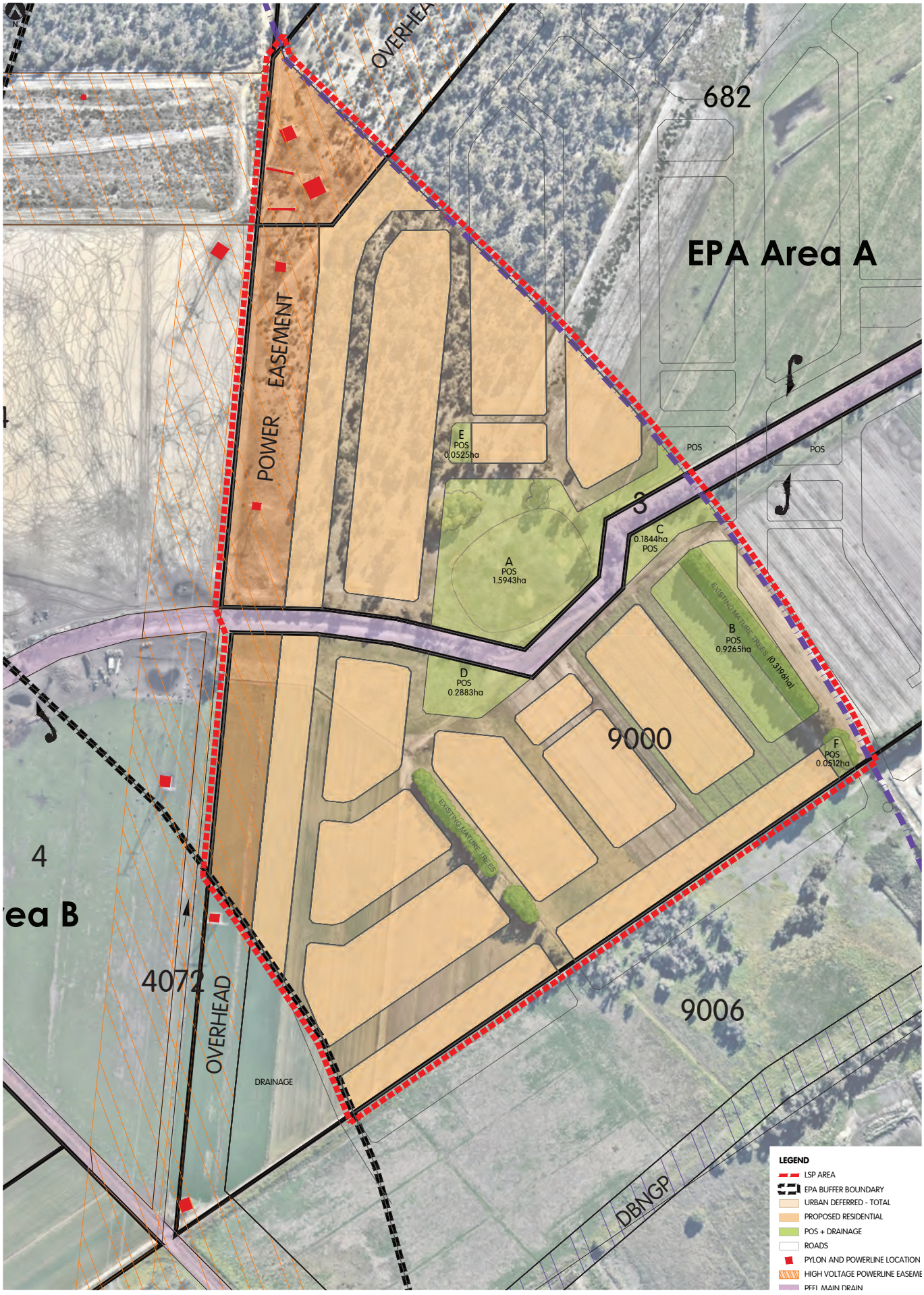


FIGURE 1: **Indicative Open Space Plan (Subject to Change)**

8.4 METRONET PRECINCT OPPORTUNITY

While not within the subject land, the indicative Structure Plan has been developed with regard for the potential provision of an additional Mandurah Line train station at Anketell Road, with an associated Transit-Oriented Precinct within the southernmost portion of 'Area A' and the adjacent Wandi District Centre site consistent with the precinct planning principles of METRONET.

A Mandogalup Station was identified in the JSP and provisioned as a future opportunity during Mandurah Line construction through the provision of track line separation and creation of MRS railway reservations to accommodate station infrastructure.

The potential station has a number of strategic regional benefits, including:

- Appropriate Station separation, being 3km from the Kwinana Station and 6km from the Aubin Grove Station;
- Central positioning relative to the wider Mandogalup/ Success/Casuarina urban cells;
- Adjacency to the IP47 area to support higher order urban uses within this area including predominantly residential development;
- Access to the main Anketell transport corridor linking to the Westport Study Area, including Kwinana Industrial Area and Latitude 32; and
- Close proximity to the large rural residential catchment to the east over the Jandakot Water Mound which may also have future Urban potential if there are further adjustments to the protection area.

Within the immediate Mandogalup, Wandi and Casuarina Neighbourhood Cells a Mandogalup Station could support development of a strategic Precinct consistent with METRONET objectives. The local area offers several advantages that support the provision of a station:

- Direct access to the identified Wandi District Centre with associated employment, services and amenities;
- Undeveloped high density residential opportunities within the immediate walkable catchment including government controlled land in Mandogalup;
- Access to the Wandi High School site and associated district catchment; and
- Government controlled Western Power easement land which can provide efficient access and land for the necessary bus interchange and park and ride facilities, similar to the recent Aubin Grove station.

Whilst any potential commitment to a station is a medium-term prospect, the indicative Structure plan seeks to preserve the option of a Station with structure planning able to be readily adapted to respond to the opportunity should it emerge.

9.0 PROPOSED AMENDMENT AND JUSTIFICATION

9.1 SCHEME AMENDMENT OVERVIEW

The proposed rezoning seeks to amend LPS2 to facilitate the preparation of a Structure Plan over the subject site and enable residential development. It is proposed to amend the Scheme as it applies to the subject land as follows:

- Rezone Portion of Lot 9000 as shown on the Amendment Map from 'Rural A' to 'Development'; and
- Amend the Scheme Map accordingly.

9.2 SCHEME AMENDMENT JUSTIFICATION

It is proposed that the subject land be rezoned from the 'Rural A' zone to the 'Development' zone of LPS2 in order to support future residential development, consistent with the established position of State Government regarding development in the Mandogalup locality. As demonstrated throughout this report, initiation of the proposed amendment is justified on the following grounds:

9.2.1 Strategic Planning Merit

As outlined in Section 4 of this report, the strategic planning framework supports the rezoning of the subject site to 'Development' as the SMPSPF, being the primary strategic plan for the region, identifies the site for urban development. The subject land is similarly identified in regional plans including the JSP and ERIC.

Further, the proposed rezoning to 'Development' is consistent with the *Section 16(E) Land Use Planning Response* position statement, through which the State Government has endorsed development of the subject land for residential purposes on the advice of the EPA, which found negligible health and amenity impact from dust generated by industrial activity in the surrounding area.

9.2.2 Comprehensive and Coordinated Planning

As detailed in section 8 of this report, the amendment area will form a logical and contiguous extension of the approved MWLSP/MELSP area and is capable of being fully integrated into the IP47 area irrespective of ultimate land use. As such, the proposed amendment will support unified and integrated development within Mandogalup and does not contribute to land fragmentation, thereby supporting coordinated planning within the locality. It should also be noted that Qube intends to progress rezoning of the adjacent southern landholding within 'Area A' in the immediate future, consistent with its identified suitability for residential development and further supporting comprehensive planning of the Mandogalup area.

As the amendment proposes to rezone the subject land to 'Development', preparation of a Structure Plan will be required pursuant to LPS2 prior to the determination of a subdivision or development of land. A Structure Plan will create the basis for further coordination and planning within the subject site and surrounding landholdings, as previously supported by the WAPC through the approval of the MWLSP and MELSP, which were prepared separately with consultation and coordination taking place between landowners.

9.2.3 Compliance with Statutory Requirements

The proposed amendment is a logical continuation of previous planning decision-making which will amend LPS2 in a manner consistent with the objectives of the 'Urban' zone of Metropolitan Region Scheme, into which the subject land was transferred following the determination of the WAPC in November 2018.

As demonstrated throughout Sections 4, 5 and 6 of this report, supporting technical analysis has established that the proposed amendment complies with the requirements of all applicable State and Local Planning Policies concerning environmental impact, transport and access, hydrology, bushfire management, land use interface and all other relevant considerations.

Additionally, while the amendment area is not subject to the statutory requirements of IP47, the capacity of the site to integrate with this area without adverse impact has been suitably demonstrated.

9.2.4 Acceptable Environmental Impact

Expected environmental impacts arising from development of the subject land have been assessed against applicable EPA Environmental Factors, through which it has been determined that the site is relatively unconstrained and suitable for urban development based on an evaluation of existing environmental conditions. As such there are no environmental impediments to the subject land being rezoned to 'Development'.

All impacts to fauna arising from site development, primarily relating to black cockatoos, have already been addressed through EPBC referral and the provision of habitat offsets. Vegetation clearing arising from future development of the site is not expected to directly or indirectly impact any state listed Threatened or Priority Ecological communities, or any Threatened or Priority flora species and will result in clearing of less than 0.01-0.004% of identified vegetation complexes at their current extent.

The extent of clearing envisaged by the Indicative Structure Plan is considered acceptable as vegetation identified for clearing is not a listed TEC and is broadly represented within the immediate locality and wider metropolitan area. This clearing is necessitated by site engineering constraints and is suitably mitigated by previously funded habitat offsets consistent with prior EPBC approval and the retention of vegetation with cultural and ecological significance elsewhere within the site.

Key environmental features of the site are proposed to be retained and enhanced, with the indicative Structure Plan proposing the retention of numerous culturally and ecologically significant trees within road reserves and public space aligned to the Peel Main Drain corridor. Detailed planning and approval relating to vegetation clearing and retention will be addressed through the structure planning process.

10.0 CONCLUSION

This report demonstrates that the subject land has the capacity to support development and that all constraints to development have been sufficiently investigated and can be adequately addressed through structure planning.

The proposed rezoning from 'Rural A' to 'Development' is warranted for the following reasons:

a) The amendment is consistent with the designation of the South Metropolitan Peel Sub-Regional Strategy which identifies the site as an area suitable for short-term urban development;

b) The amendment is consistent with the 20198Metropolitan Region Scheme amendment (Ref. 1350/27) to transfer the subject land into the 'Urban' zone to enable its future development;

c) The amendment is consistent with the decision of State Government to endorse the findings by the Environmental Protection Authority to allow for urban development in north east Mandogalup ('Area A') including the subject land;

d) The proposed 'Development' zoning includes the need to prepare a Structure Plan to suitably address detailed planning considerations including appropriate interface between development on adjacent properties, road connections, public open space provision and other matters.

e) The proposed development will have an acceptable environmental impact noting that vegetation identified for clearing is not a listed TEC, is widely represented within the immediate locality and wider metropolitan area, is required to be cleared due to site and earthworks constraints, is suitably mitigated by previously funded offsets consistent with prior EPBC approval and the retention of alternate vegetation with significant cultural and ecological value subject to detailed structure planning; and

f) The proposal will facilitate the development of the subject land as a high-quality residential development that will contribute positively to the amenity of the locality.

On the basis of the above, it is requested that the City of Kwinana formally initiate an amendment to TPS2 to rezone the subject land from the 'Rural A' zone to the 'Development' zone in accordance with Section 75 of the *Planning and Development Act (2005)* to facilitate structure planning and subdivision of the land.

APPENDIX A
ENVIRONMENTAL ASSESSMENT REPORT

QUBE Property Group Pty Ltd

City of Kwinana LPS 2 Amendment Environmental Assessment Report Lot 9000 Rowley Road, Mandogalup

15 August 2019

57121-123348 Rev B

JBS&G Australia Pty Ltd T/A Strategen-JBS&G

www.jbsg.com.au

QUBE Property Group Pty Ltd
City of Kwinana LPS 2 Amendment
Environmental Assessment Report
Lot 9000 Rowley Road, Mandogalup

15 August 2019

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Appendix E Level 1 Fauna Survey and Habitat Assessment – Various Allotments, Mandogalup (Emerge Associates 2011)
Appendix F Black cockatoo habitat assessment results

1. Introduction

1.1 Overview

Qube Property Group Pty Ltd (Qube) are preparing to lodge an amendment to the City of Kwinana's Local Planning Scheme No. 2 (TPS 2) which proposes to rezone Lot 9000 (formerly Lot 682) Rowley Road, Mandogalup (the site; Figure 1.1) from Rural A to Development zone to enable development of the site for residential purposes.

The site is located approximately 26 km south of the Perth Central Business District (CBD) within the City of Kwinana and is approximately 22.4 ha in area.

Market gardening has been the predominant land use of the site since prior to 1953, when native vegetation in the centre and south was cleared. Presently, market gardening occupies the majority of the site, with native vegetation persisting in the north west.

The site is located in north-east Mandogalup, west of the Kwinana Freeway and south of Rowley Road, approximately 7km south of Cockburn City Centre and 7km north of Kwinana Town Centre.

The land to the north is also owned by Qube and Satterley Property Group. This land is zoned Urban for residential development and subject of the Mandogalup West and Mandogalup East Local Structure Plans (MWLSP and MELSP). The land to the south and west is generally zoned Rural under the Metropolitan Region Scheme (MRS) and Rural A under TPS 2.

1.2 Proposed development

Qube have developed a concept plan for the site (Appendix A) which proposes the following land uses:

- Residential development
- Internal public road network
- Public open space for conservation and recreation

1.3 Planning background

1.3.1 Zoning

The site is currently zoned Rural A under the City of Kwinana Local Planning Scheme No. 2 and Urban under the Metropolitan Region Scheme (MRS).

The site forms part of the original MRS Amendment 1114/33 and was rezoned to Urban Deferred in November 2009. The Lifting of Urban Deferment was delayed pending resolution of a buffer to the Alcoa Residue Disposal Area (RDA), located approximately 1.5 km to the west. In February 2018, the State Government endorsed findings by the Environmental Protection Authority (EPA) to allow urban development on the site and adjacent land (Area A) as it found negligible health and amenity impacts from dust in the area.

Subsequently, the site was recently part of an MRS Amendment for a wider area (MRS Amendment 1350/27), which transferred the land from 'Urban Deferred' to 'Urban'. The EPA provided preliminary comment on the lifting of urban deferment and advised of its expectation that significant flora, vegetation and fauna habitat where present should be retained and that it did not support the concurrent rezoning to the City of Kwinana's local planning scheme and instead, should be referred to the EPA for its consideration.

Therefore, rezoning of the site under the City of Kwinana's LPS 2 is now required to ensure the local zoning is consistent with the MRS.

1.3.2 Jandakot Structure Plan

In August 2007, the Jandakot Structure Plan was finalised and adopted. The structure plan coordinates and guides future development of the area, whilst managing key environmental issues.

The structure plan identifies environmental issues such as nutrient, drainage and water resource management as well as conservation areas and how these issues could be addressed during the subsequent stages of planning.

As part of the lifting of urban deferment, an updated District Water Management Strategy (DWMS) was prepared by JDA Consultant Hydrologist and subsequently endorsed. The DWMS confirmed groundwater levels and demonstrated that regional arterial and local drainage volumes can be accommodated as part of future development.

1.3.3 Eastern Residential Intensification Concept

The City of Kwinana prepared the Eastern Residential Intensification Concept (ERIC) in 2005 to provide further guidance on land use planning for the urban growth areas of Mandogalup, Wandi, Anketell, Casuarina and Wellard.

The ERIC plan provides broad guidance on the location of development, key roads, district open space, commercial centres and protection of vegetation and landscape amenity.

The City of Kwinana are using a revised ERIC plan to provide general guidance to the preparation of Local Structure Plans, acknowledging that plans will be refined over time as site specific planning is carried out.

1.3.4 Mandogalup West Local Structure Plan and Subdivision (WAPC 155567)

The approved Mandogalup West Local Structure Plan (MWLSP) covers the remaining northern portion of Lot 9000 and is also part of QUBE's landholdings. The MWLSP sets out land uses, residential densities, public open space network, public and private transport provision, environmental considerations and servicing requirements.

In the context of the MWLSP open space areas, the structure plan provides a hierarchy of POS areas across the site and takes into consideration the requirements for drainage, vegetation retention, engineering and site topography requirements. Further discussion and negotiation with the City of Kwinana have resulted in an agreement that vegetation is retained within POS located within the northern portion of the MWLSP (POS A), as well as the localised retention of trees within road reserves.

In accordance with the MWLSP, a subdivision application (WAPC 155567) was lodged and subsequently approved on 22 June 2018. The following environmental management plans are required to be implemented as conditions of subdivision:

- Acid Sulfate Soils Management Plan (if required based on the results of a self-assessment form)
- Bushfire Management Plan
- Fauna Management Plan
- Tree retention and landscape strategy
- Mosquito and Midge Management Plan

- Urban Water Management Plan

1.4 Environment background

1.4.1 Environment Protection and Biodiversity Conservation Act 1999

The site was included in the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) referral (EPBC 2014/7126) for the wider Lot 9000 (formerly Lot 682), which was approved with conditions on 4 August 2014 (Appendix B). The conditions stipulate the following:

- That the proponent not clear more than 38.7 ha of Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoo foraging and potential breeding habitat
- That the proponent set aside funds for the acquisition of two offset properties
    - No less than 154 ha in size at Lot 102 Wannamal Road South, Cullalla (Shire of Gingin)
    - No less than 34 ha in size at Lot 1143 Wye Road, Nannup (Shire of Nannup).
- That the proponent investigates potential breeding trees within the project area for Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoos if clearing is to be conducted during the breeding season (July – November)

Funding for the acquisition and management of the above off-site offsets was provided to the (then) Department of Parks and Wildlife by Qube on 29 July 2015.

1.4.2 MRS Amendment 1114/33 - EPA advice and recommendations

In consideration of the MRS Amendment, the EPA identified the following environmental issues concerning the site:

- Drainage (management of water quality and quantity)
- Special catchment requirements (Peel Harvey Catchment)
- Wetlands
- Remnant vegetation
- Fauna
- Soil and groundwater contamination
- Emissions impacting on adjoining land uses
- Noise and vibration
- Cockburn sound catchment

After consideration of the information provided and regarding the above issues, the EPA determined that the proposed scheme amendment should not be assessed under Part IV Division 3 of the EP Act. The EPA recommended further consideration of the need to assess proposals arising from the scheme amendment when more information is available, for example, subsequent rezoning, preparation of a development guide plan, structure plan, subdivision or development.

1.5 Purpose and scope of this document

In accordance with Section 48A of the *Environmental Protection Act 1986* (EP Act) all proposed Schemes and amendments are to be referred to EPA for its consideration.

This Environmental Assessment Report (EAR) has been prepared to support the rezoning application for the site and includes identification of:

- applicable legislation, policy and guidance
- the environmental characteristics of the site
- potential environmental impacts associated with the proposed scheme amendment
- appropriate management measures that will be implemented through the local planning approval process and as part of future development of the site.

Section 4 includes an assessment of the proposed scheme amendment against the EPA's Environmental Factors and Objectives.



Legend:

- The site (22.4 ha)
- Lot 9000
- Cadastral boundary
- Roads

Scale 1:8,000 at A4

0 100 200
metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57121

Client: Qube Property Group

Version: A | Date: 01-Aug-2019

Drawn By: hsullivan | Checked By: HS

Lot 682 Rowley Road
Mandogalup WA 6167

SITE LOCATION

FIGURE 1.1

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Image Reference:

2. Legislation, policies and guidelines

Key statutory and policy documents are listed below, and where specifically relevant to the proposed rezoning, are described in detail in the following sections.

2.1 Federal legislation

2.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is administered by the Department of the Environment and Energy (DEE). The EPBC Act aims to protect and manage nine Matters of National Environmental Significance (MNES) throughout Australia including:

- World Heritage Properties
- National Heritage Places
- wetlands of international importance (listed under the Ramsar Convention)
- listed threatened species and ecological communities
- migratory species protected under international agreements
- Commonwealth Marine Areas
- Great Barrier Reef Marine Park
- nuclear actions (including uranium mines)
- a water resource, in relation to coal seam gas development and large coal mining development.

An EPBC referral was made to the DEE for listed threatened species and ecological communities, specifically, impacts to Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) and Forest Red-tailed Black Cockatoo (*Calyptorynchus banksia* naso) foraging habitat and potential breeding habitat. This referral was subsequently approved with conditions on the 4th August 2014, expiring on the 31st July 2024 (EPBC 2014/7126; Appendix B). The conditions associated with the approval stipulate the following:

- That the proponent not clear more than 38.7 ha of Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoo foraging and potential breeding habitat
- That the proponent set aside funds for the acquisition of two offset properties (which has been paid in full)
    - No less than 154 ha in size at Lot 102 Wannamal Road South, Cullalla (Shire of Gingin)
    - No less than 34 ha in size at Lot 1143 Wye Road, Nannup (Shire of Nannup).
- That the proponent investigates potential breeding trees within the project area for Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoos if clearing is to be conducted during the breeding season (July – November)

Funding for the acquisition of the above off-site offsets was provided to the then Department of Parks and Wildlife by Qube on 29 July 2015.

2.2 State legislation

This environmental assessment has been conducted with reference to the following State legislation which provides for the environmental and heritage values, and bushfire risk addressed within this report:

- *Biodiversity Conservation Act 2016* (BC Act)
- *Environmental Protection Act 1986* (EP Act)
- *Biosecurity and Agriculture Management Act 2007* (BAM Act)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)
- *Metropolitan Water Supply, Sewerage and Drainage Act 1909*
- *Aboriginal Heritage Act 1972 (WA)* (AH Act)
- *Contaminated sites Act 2003* (CS Act)
- *Contaminated Sites Regulations 2006* (CS regulations)
- *Planning and Development Act 2005.*

2.2.1 Environmental Protection Act 1986

The *Environmental Protection Act 1986* (EP Act) is administered by the EPA. The Act provides for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment and for matters incidental to or connected with the foregoing.

Part IV of the EP Act makes provisions for the EPA to undertake environmental impact assessment of significant proposals, strategic proposals and land use planning schemes. The EPA uses environmental principles, factors and associated objectives as the basis for assessing whether a proposal or land use planning scheme's impact on the environment is acceptable.

2.2.2 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* has now replaced the *Wildlife Conservation Act 1950* (WC Act). On 3 December 2016, several parts of the new Act were enacted by the State Governor. The remaining parts of the Act and the associated Regulations came into effect on 1 January 2019.

In addition to providing for the protection of flora and fauna, the *Biodiversity Conservation Act 2016* includes provisions for threatened ecological communities, threatening processes, critical habitats and environmental pests.

2.2.3 State Planning Policies

The Western Australian Planning Commission (WAPC) prepares and adopts state planning policies under statutory procedures set out in part 3 of the *Planning and Development Act 2005.* State planning policies relevant to the project are listed below:

- State Planning Policy 2.3: *Jandakot Groundwater Protection Policy* (SPP 2.3)
- State Planning Policy 2.5: *Rural Planning* (SPP 2.5)
- State Planning Policy 2.7: *Public Drinking Water Source Policy* (SPP 2.7)
- State Planning Policy 2.8: *Bushland Policy for the Perth Metropolitan Areas* (SPP 2.8)
- State Planning Policy 2.9: *Water Resources* (SPP 2.9)
- State Planning Policy 3.5: *Historic Heritage Conservation* (SPP 3.5)
- State Planning Policy 3.7: *Planning in Bushfire Prone Areas* (SPP 3.7)
- State Planning Policy 5.3: *Jandakot Airport Vicinity* (SPP 5.3)

- State Planning Policy 5.4: *Road and Rail Transport Noise and Freight Considerations in Land Use Planning – Section 5.3 Noise Criteria* (SPP 5.4)

2.3 Environmental Protection Authority (EPA) guidance

The assessment has given consideration to the recommendations of EPA regulatory guidance as listed below:

- *Environmental Factor Guideline - Social Surroundings*
- *Environmental Factor Guideline - Human Health*
- *Environmental Factor Guideline - Inland Waters*
- *Environmental Factor Guideline - Terrestrial Fauna*
- *Environmental Factor Guideline - Terrestrial Environmental Quality*
- *Environmental Factor Guideline – Landforms*
- *Environmental Factor Guideline - Flora and Vegetation*
- *Technical Guidance - Terrestrial fauna surveys*
- *Technical Guidance - Sampling methods for terrestrial vertebrate fauna*
- *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment*
- *EPA Guidance Statement No. 33 Environmental Guidance for Planning and Development (EPA 2008)*
- *Environmental Protection Bulletin No. 20 Protection of naturally vegetated areas through planning and development.*
- *Mandogalup area dust impacts – s16e advice*

2.4 Local government policies, strategies and guidance

The following local planning policies are relevant to the City of Kwinana and proposed TPS amendment. Reference to these documents has been made throughout the report where applicable.

- *Local Planning Policy No. 1 - Landscape Feature and Tree Retention (2016)*
- *Local Planning Policy No. 12 – Mandogalup Future Development*

3. Overview of existing environment

3.1 Land use

3.1.1 Current land use

The site is currently zoned Rural A under the City of Kwinana Local Planning Scheme No. 2 and Urban under the Metropolitan Region Scheme.

Current land use within the site is comprised predominantly of market gardening in the south and central portion of the site, within remnant vegetation occupying the north.

3.1.2 Previous land use

Based on a review of historical aerial imagery, market garden activities have been undertaken in the southern portion of the site since before 1953. Following expansion of this agricultural area into the central portion of the site between 1965 and 1974, land use has not changed until the present day. All areas not used for market gardens comprise remnant native vegetation.

3.1.3 Surrounding land use

The land to the north of the site is zoned urban and is part of Qube's current program for residential development within the Mandogalup area. It has conditional subdivision approval and provides for key amenity and facilities for that community as well as the incidental expansion that may result from the proposed development of this site.

The Kwinana Freeway is located to the east and is reserved Primary Regional Road. It also includes the central rail corridor for the Perth – Mandurah line.

Land to the south of the subject area is zoned Rural and fall within Area A which is suitable for future Urban development.

Land to the west is zoned Rural and falls within Area's B, C and D. The future use of this land will be resolved by WAPC via the declared Mandogalup Improvement Plan No. 47. It is understood that work on the Mandogalup Improvement Plan No. 47 has commenced.

3.2 Topography, geology and soils

Regional topographic contour mapping indicates that the site is gently undulating, with elevation ranging from approximately 13 m Australian Height Datum (AHD) in the south of the site, to approximately 35 m AHD in the north.

The site is located within the Swan Coastal Plain (SWA2 – Swan Coastal Plain subregion of Western Australia (Mitchell *et al.* 2002). Beard (1990) describes the Swan Coastal Plain as a low-lying coastal plain, often swampy, with sandhills also containing dissected country rising to the duricrusted Dandaragan plateau on Mesozoic, mainly sandy, yellow soils.

The Swan Coastal Plain comprises five major geomorphic systems that lie parallel to the coast, the Quindalup Dunes, Spearwood Dunes, Bassendean Dunes, Pinjarra Plain and Ridge Hill Shelf (Churchward & McArthur 1980; Gibson *et al.* 1994). The site lies within the following systems:

- Bassendean Dunes: Characterised by sand dunes and sand plains comprising swamps and flats on sandy alluvium over sedimentary rocks (DPIRD 2019)
- Spearwood Dunes: Characterised by Dune ridges with deep siliceous yellow brown sands or pale sands with yellow brown subsoil (DPIRD 2019).

3.3 Hydrology

3.3.1 Groundwater

The Perth Groundwater Atlas indicates that maximum groundwater levels within the subject site range between approximately 12m AHD in the south of the site to 16m AHD in the north (DWER 2019). Depth to groundwater ranges from approximately 1m AHD to 17m AHD in the north (Figure 3.1). Groundwater is anticipated to be flowing in a south-westerly direction.

The site is located within the Jandakot groundwater catchment area and Jandakot Confined subarea. There are three aquifers underlying the site; each assigned the name of a major geological unit in which the aquifer occurs. In descending order of depth from the natural surface, these are:

- Superficial Aquifer (Superficial Swan) (unconfined)
- Leederville Aquifer (confined)
- Yarragadee North (confined)

For the purposes of groundwater resource management, the state of Western Australia is divided into groundwater areas. The extraction and licensing of groundwater resources are managed within groundwater areas. The site is located within the Jandakot groundwater area (WALGA 2019). A search of the Department of Water and Environmental Regulation (DWER 2019d) register identified one water license for the area (No. 166922) which is allocated 724,935 KL.

A DWMS was prepared by JDA (2011) for the Mandogalup development cell, in which the site is located. This DWMS provides guidance on water reuse options, stormwater detention basins, monitoring requirements and structural and non-structural controls for stormwater treatment in the area.

Preparation of a Local Water Management Strategy and Urban Water Management Plan will be required for the site at the structure planning and subdivision stages respectively.

3.3.2 Surface water

The site is located within the Serpentine surface water catchment area and Lower Serpentine subarea.

One water course, the Peel Main Drain, runs between the site (ID. 10988452; WALGA 2019) within Lot 3 Deposited Plan 6205. The Peel main drain is an open drain managed by Water Corporation which runs outside the boundary of Lot 9000. The Peel Main Drain outlets at the Serpentine River, which flows to the Peel Inlet - Harvey Estuary system (JDA 2011).

3.3.3 Geomorphic wetlands

The nature of the protection and management that Swan Coastal Plain wetlands should be afforded is guided by the appropriate management category they have been assigned. These management categories are listed below within Table 3.1:

Table 3.1: Wetland management categories and management objectives

Category	Objective
Conservation (C category) Wetlands	To preserve wetland (natural) attributes and functions
Resource Enhancement (R category) wetlands	To restore wetlands through maintenance and enhancement of wetland functions and attributes
Multiple Use (M category) wetlands	To use, develop and manage wetlands in the context of water, town and environmental planning

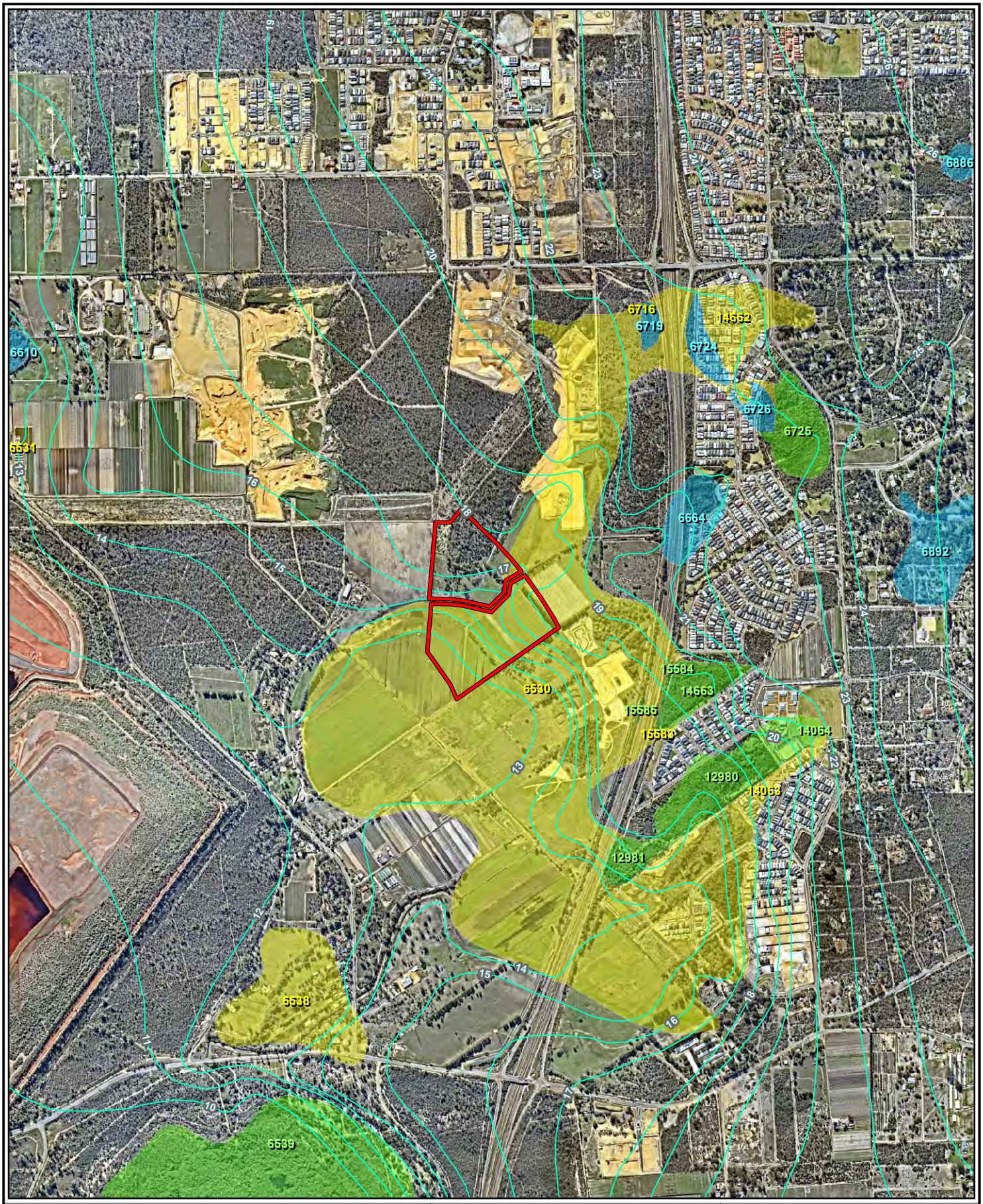
Regional geomorphic wetland mapping (DBCA 1996 -) indicates that there are no conservation category wetlands within the site. The nearest conservation category wetland, UFI 14663, is approximately 0.47 km east of the subject site.

The majority of the site comprises damp land multiple use wetland (MUW), UFI 6530 (Figure 3.1). MUW are typically wetlands with few important ecological attributes and function remaining. Approved development can progress within MUW and therefore these wetland values do not represent a constraint to development, other than the limitations associated with the site's geology and depth to groundwater / perched surface water as previously discussed.

3.3.4 Public drinking water source area

The *Metropolitan Water Supply, Sewerage and Drainage Act 1909* (MWSSD Act) and the *Country Areas Water Supply Act 1947* (CAWS Act) identify and categorise public drinking water source areas as catchment areas, water reserves, or underground water pollution control areas.

The site is not located within a Public Drinking Water Source Area.



Legend:

- The site
- Groundwater contours (max)

Geomorphic Wetlands (DBCA)

- Conservation
- Resource Enhancement
- Multiple Use

Scale 1:20,000 at A4	0 250 500 metres	**Lot 9000 Rowley Road Mandogalup WA 6167**
Coord. Sys. GDA 1994 MGA Zone 50		**HYDROLOGY AND WETLANDS**
Job No: 57121		
Client: Qube Property Group		**FIGURE 1.3**
Version: A	Date: 01-Aug-2019	strategen JBS&G
Drawn By: hsullivan	Checked By: HS	

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Image Reference: www.nearmap.com © - Imagery Date: 16 July 2019

3.4 Acid sulfate soils

Acid sulfate soils (ASS) are naturally occurring, iron-sulfide rich soils, sediments or organic substrates, formed under waterlogged conditions. If exposed to air, these sulfides can oxidise and release sulfuric acid and heavy metals. This process can occur due to drainage, dewatering or excavation.

Regional ASS mapping indicates that a significant portion of the site has been mapped as having a High to Moderate (Class 1) ASS disturbance risk within 3 m of the soil surface, while the remainder of the site has been mapped as having a Moderate to Low (Class 2) ASS disturbance risk (Figure 3.2).

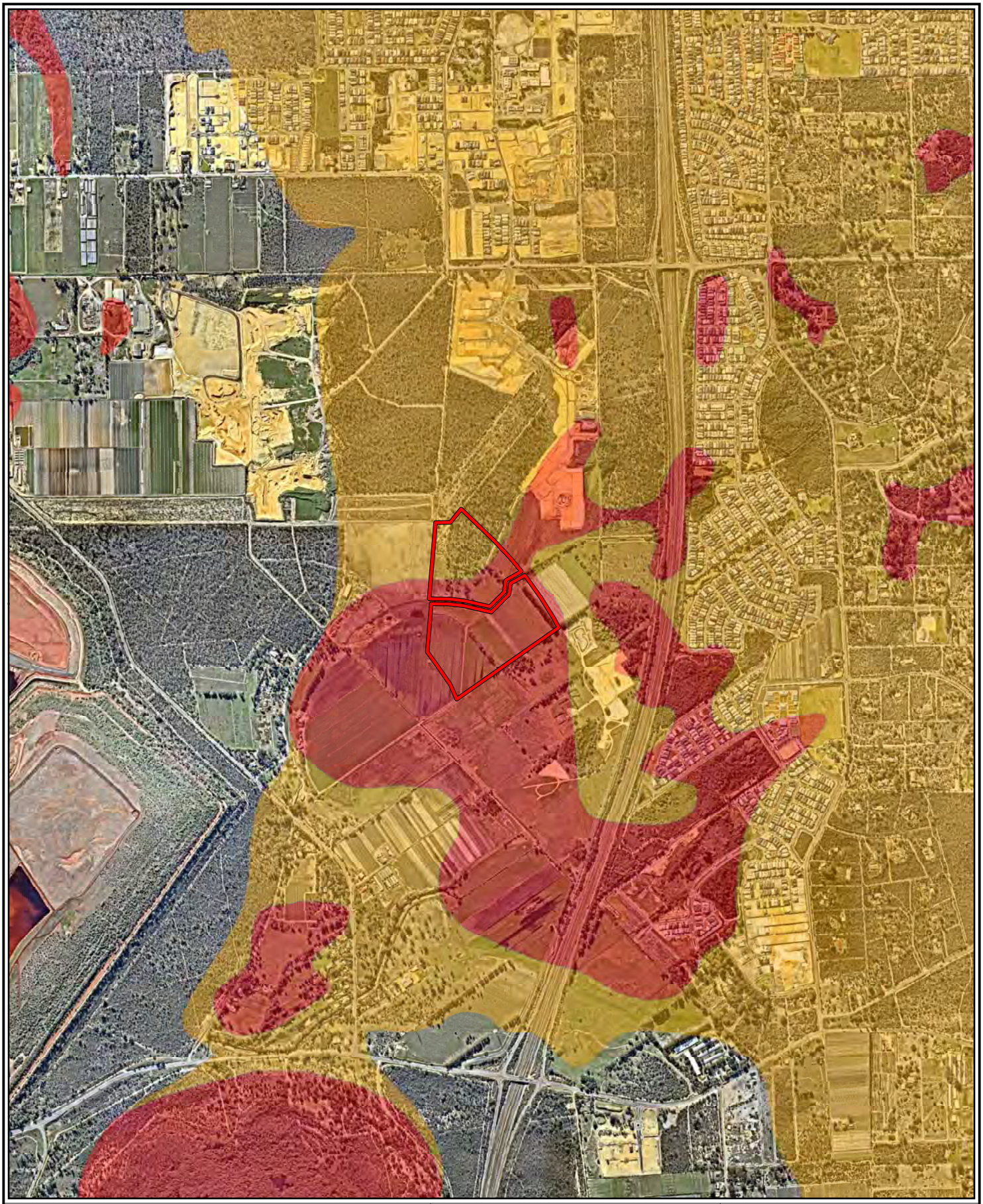
As the site has been mapped as having a High to Moderate Risk, consideration of further ASS investigations may be required in accordance with the *Identification and Investigation of Acid Sulfate Soils and Acidic Landscapes guidelines* (DER 2015a), if the following are proposed within Class 1 of the site:

- earthworks that will disturb more than 100 m^3 of soil
- dewatering or soil draining activity.

The nature of disturbance that triggers ASS investigations for areas within the Class 2 includes the following:

- construction works involving lowering the water table (temporary or permanent)
- earthworks extending to greater than 3 m below natural ground surface
- works within 500 m of wetlands (DER 2015).

Considering the identification of MUW within the site and the mapping of High to Moderate risk of ASS within 3 m of the soil surface, an ASS investigation will be undertaken in accordance with the relevant guideline and to ensure appropriate management measures are implemented prior to subdivision.



Legend:

The site

Acid sulphate soil risk (DWER)

High to moderate risk

Moderate to low risk

Scale 1:20,000 at A4

0 250 500

metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57121

Client: Qube Property Group

Version: A

Date: 01-Aug-2019

Drawn By: hsullivan

Checked By: HS

Lot 9000 Rowley Road
Mandogalup WA 6167

ACID SULFATE SOILS

FIGURE 3.2

strategen JBS&G

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Image Reference: www.nearmap.com © - Imagery Date: 16 July 2019

3.5 Vegetation and flora

3.5.1 Desktop assessment

3.5.1.1 Vegetation

System 6 mapping refers to vegetation assessment undertaken as a Vegetation Complex Scale by Heddle *et al.* (1980). The site occurs within the following vegetation complexes:

- Bassendean Complex - Central and South: Ranges from woodland *of Eucalyptus marginata* (Jarrah) - *Allocasuarina fraseriana* (Sheoak) - Banksia species to low woodland of *Melaleuca* species, and sedgelands on the moister sites.
- Herdsman Complex: Sedgelands and fringing woodland of *Eucalyptus rudis* (Flooded Gum) - *Melaleuca* species.

The Bassendean Complex – Central and South has approximately 26.87% remaining within the state, of which 1.86% is vested within lands protected for conservation.

The Herdsman Complex has approximately 32.11% remaining within the state, of which 10.83% is vested within lands protected for conservation.

At a finer scale, the site is mapped within the Bassendean 1001 vegetation system association by Beard (1990). This association is characterised by medium very sparse woodland of Jarrah, with low woodland of *Banksia* and *Casuarina*. Approximately 21.38% of the pre-European extent of this system association remains within the state, with 3.01% of the current extent protected in conservation.

In terms of biodiversity conservation targets, the National Objectives and Targets for Biodiversity Conservation 2001 – 2005 aims to (Environment Australia 2001):

- Prevent clearing of ecological communities with less than 30% of the original extent remaining
- Recover ecological communities with less than 10% of the original extent remaining.

These national targets are reflected in state government policy for Western Australia and generally, are used to guide planning and decision-making (WAPC 2011). However, in relation to bushland conservation within the Perth Metropolitan Region portion of the Swan Coastal Plain, which is recognised as a constrained area, *State Planning Policy 2.8 – Bushland Policy for the Perth Metropolitan Region* and *Bush Forever* seeks to protect a target of at least 10% of the original extent of each vegetation complex (WAPC 2010).

The current extent for Bassendean Complex – Central and South, Herdsman Complex and Bassendean 1001 vegetation association is well above the 10% threshold for constrained areas.

3.5.1.2 Flora

A desktop assessment of Threatened and Priority Flora and/or communities potentially occurring within 3 km of the site was undertaken using the Department of Biodiversity Conservation and Attractions (DBCAs) *Naturemap* database, and the Department of the Environment and Energy's *Protected Matters Search Tool*. The assessment reports (Appendix B) identified 11 flora taxa of conservation significance (Table 3.2). Of these, seven species listed as Threatened under the Biodiversity Conservation Act 2016 or the EPBC Act were identified. The remaining four flora taxa identified are priority listed flora species (Table 3.2).

The potential for these plants to occur within the project area was assessed based on general habitat requirements and distribution (Table 3.2). Three Threatened, and one Priority flora species were considered to have the potential to occur within the project area:

- *Caledenia hugelii* (T)

- *Dodonaea hackettiana* (P4)
- *Drakea elastica* (T)
- *Drakea micrantha* (T)

The search reports also identified one TEC within the project area. In addition, one TEC and three PEC's were identified within 5 km of the project area (Table 3.2).

Table 3.2: Threatened and Priority flora and communities potentially occurring within the site

Species / Community	Conservation status		Description	Potential to occur
	EPBC Act	BC Act		
Andersonia gracilis	Threatened – Endangered	Threatened	Found on seasonally damp, black sandy clay flats near or on the margins of swamps, often on duplex soils supporting low open heath vegetation with species such as *Calothamnus hirsutus*, *Verticordia densiflora* and *Kunzea recurva* over sedges.	**Unlikely** due to absence of preferred habitat
Caladenia huegelii	Threatened – Endangered	Threatened	A slender orchid from 30 to 50 cm tall. One or two striking flowers characterised by a greenish-cream lower petal with a maroon tip. Other petals are cream with red or pink suffusions. Habitat for this species occurs within well-drained, deep sandy soils in low mixed *Banksia*, *Allocasuarina* and Jarrah woodlands (Western Australian Herbarium 1998-).	**Possible** due to presence of preferred habitat.
Diuris micrantha	Threatened – Vulnerable	Threatened	A slender orchid to 60 cm tall. Yellow flowers with reddish-brown markings measuring 1.3 cm across. Habitat for this species occurs within clay-loam substrates in winter-wet depressions or swamps.	**Unlikely** due to absence of preferred habitat.
Diuris purdiei	Threatened – Endangered	Threatened	A slender orchid to 0.35 m tall. Flowers are yellow and visible from September to October. Habitat for this species is grey-black sand substrates in winter-wet swamps which have high moisture (Western Australian Herbarium 1998-). Diuris purdiei occurs from Perth south to near the Whicher Range, within the Swan (Western Australia) Natural Resource Management Region. It grows on sand to sandy clay soils, in areas subject to winter inundation, and amongst native sedges and dense heath with scattered emergent *Melaleuca preissiana*, *Corymbia calophylla*, *E. marginata* and *Nuytsia floribunda*.	**Unlikely** due to absence of preferred habitat.
Dodonaea hackettiana	-	P4	An erect shrub or tree, 100 to 500 cm tall. Flowers are yellow to green/red and occur mainly from July to October. Habitat for this species occurs in sand and outcropping limestone (Western Australian Herbarium 1998-).	**Possible** due to presence of preferred habitat.
Drakaea elastica	Threatened – Endangered	Threatened	A slender orchid to 30 cm tall with a prostrate, round to heart shaped leaf. Singular, bright green, glossy flower. The species grows on bare patches of sand within otherwise dense vegetation in low-lying areas alongside winter-wet swamps, typically in banksia (*Banksia menziesii*, *B. attenuata* and *B. ilicifolia*) woodland or spearwood (*Kunzea glabrescens*) thicket vegetation. *D. elastica* often occurs with other orchid species.	**Possible** due to presence of marginal habitat (Banksia woodland).
Drakaea micrantha	Threatened – Vulnerable	Threatened	A tuberous, terrestrial herb which has a diminutive red and yellow flower, 1.2–2.5 cm long, on a stem that grows to 30 cm. Flowering occurs form September to October. Its heart-shaped leaf, about 1.5 cm long, is silvery grey with prominent green veins. Habitat for this species occurs within cleared firebreaks or open sandy patches that have been	**Possible** due to presence of preferred habitat.

			disturbed, where competition from other plants has been removed (Western Australian Herbarium 1998-).	
Eleocharis keigheryi	Threatened – Vulnerable	Threatened	A rhizomatous, tufted/clumped perennial herb, reaching a maximum diameter of 40 cm. It has erect, smooth, green stems that are 20–40 cm tall and hollow, supporting cross bars that are 2 mm in diameter. This species grows in small clumps in a substrate of clay or sandy loam. This species is emergent in freshwater creeks, and transient waterbodies such as drainage lines and claypans in water to approximately 15 cm deep. Fringing woodland species and associated species include Swamp Sheoak (*Casuarina obesa*), Flooded Gum (*Eucalyptus rudis*), Red Robin Bush (*Melaleuca lateritia*), Swamp Paperbark (*M. rhaphiophylla*), Common Spike-sedge (*Eleocharis acuta*), *Aponogeton hexatepalus*, Veined Swamp Wallaby Grass (*Amphibromus nervosus*) and herbs such as *Wurmbea*, *Tribonanthes* and *Leptocarpus* spp. (Western Australian Herbarium 1998-).	**Unlikely** due to absence of preferred habitat and associated species.
Lepidosperma rostratum	Threatened – Endangered	-	A rhizomatous sedge to 30 cm in diameter. Stems are circular in cross section and flowers are spike-like and up to 4 cm long. Habitat for this species occurs in sandy soils among low heath comprised of *Banksia telmatiaea* and *Calothamnus hirsutus* in winter-wet swamps (Western Australian Herbarium 1998-).	**Unlikely** due to absence of preferred habitat and associated species.
Pimelea calcicola	-	P3	An erect to spreading shrub to 1 m tall. Flowers are pink and visible between September to November. Habitat for this species occurs in sand on coastal limestone ridges (Western Australian Herbarium 1998-).	**Unlikely** due to absence of preferred habitat.
Stylidium paludicola	-	P3	Reed-like perennial, herb, 35 to 100 cm tall. Leaves are tufted, linear or subulate or narrowly oblanceolate. Flowers are pink and occur in October to December. Habitat for this species occurs in peaty sand over clay and winter wet areas, often in Marri and Melaleuca woodland or Melaleuca shrubland (Western Australian Herbarium 1998-).	**Unlikely** due to absence of preferred habitat and associated species.
Banksia woodlands of the Swan Coastal Plain	Endangered	Various listings; encompasses multiple state listed TEC's and PEC's	Banksia dominated woodlands of the Swan Coastal Plain	**Present.** Mapped within the site (DBCA 2018c)
Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community	Endangered	Various listings; encompasses multiple state listed TEC's and PEC's	Woodlands or forests or other structural forms where the primary defining feature is the presence of *Eucalyptus gomphocephala* (Tuart) trees in the uppermost canopy layer	**Unlikely.** Not mapped within the site

Limestone ridges (SCP 26a)	-	Endangered	*Melaleuca huegelii – Melaleuca systena* shrublands on limestone ridges	**Unlikely.** DBCA maps the site within 5 km
SCP21c	-	Priority 3	Low lying *Banksia attenuate* woodlands or shrublands	**Unlikely.** DBCA maps the site within 5 km
SCP22	-	Priority 3	*Banksia ilicifolia* woodlands	**Unlikely.** DBCA maps the site within 5 km
SCP24	-	Priority 3	Northern Spearwood shrublands and woodlands	**Unlikely.** DBCA maps the site within 5 km

3.5.2 Site assessment

A flora and vegetation survey was previously conducted of the site and surrounding area in support of the Lifting of Urban Deferment under the MRS (Appendix D) (Strategen 2018). This survey was conducted by one Senior Ecologist from Strategen on 3 September 2018. Surveying was conducted according to standards set out in the Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a).

3.5.2.1 Vegetation type

Within the site, a total of two native vegetation types (VTs) were defined and mapped which are summarised below in Table 3.3 and Figure 3.3. Areas containing vegetation in parkland cleared or highly degraded state have not been counted as unique native VTs but have been included in Table 3.3 for area calculation purposes. The total area mapped within the survey area is 22.4 ha which includes parkland cleared and fully cleared areas. The dominant native VT within the survey area is VT3 which can be broadly described as *Eucalyptus marginata, Banksia attenuata* and *Banksia menziesii* woodland.

Table 3.3: Vegetation types

Vegetation Type	Description	Area (ha) within site	% of site
VT1	*Eucalyptus rudis* and *Melaleuca rhaphiophylla* woodland over *Pteridium esculentum*, **Zantedeschia aethiopica*, **Phytolacca octandra* and **Gomphocarpus fruticosus* low shrubland over introduced grasses and herbs including **Ehrharta calycina*, **Cynodon dactylon* and **Cirsium vulgare*. This VT aligns with the Herdsman Complex.	0.12	0.53
VT3	*Eucalyptus marginata*, *Banksia attenuata* and *Banksia menziesii* mid to low woodland of over *Xanthorrhoea preissii*, *Acacia pulchella* and *Stirlingia latifolia* mid shrubland over *Hibbertia hypericoides*, *Hypocalymma robustum* and *Tetraria capillaris* low shrubland. This VT aligns with the Bassendean Complex-Central and South.	3.15	14.06
PC	Parkland cleared areas consisting of *Eucalyptus marginata*, *Banksia attenuata* and *Banksia menziesii* open woodland over **Eragrostis curvula* and **Ehrharta calycina*	2.13	9.5
C	Historically cleared area containing introduces grasses including **Eragrostis curvula* and **Ehrharta calycina*	17	75.89
Total		**22.4**	**100**

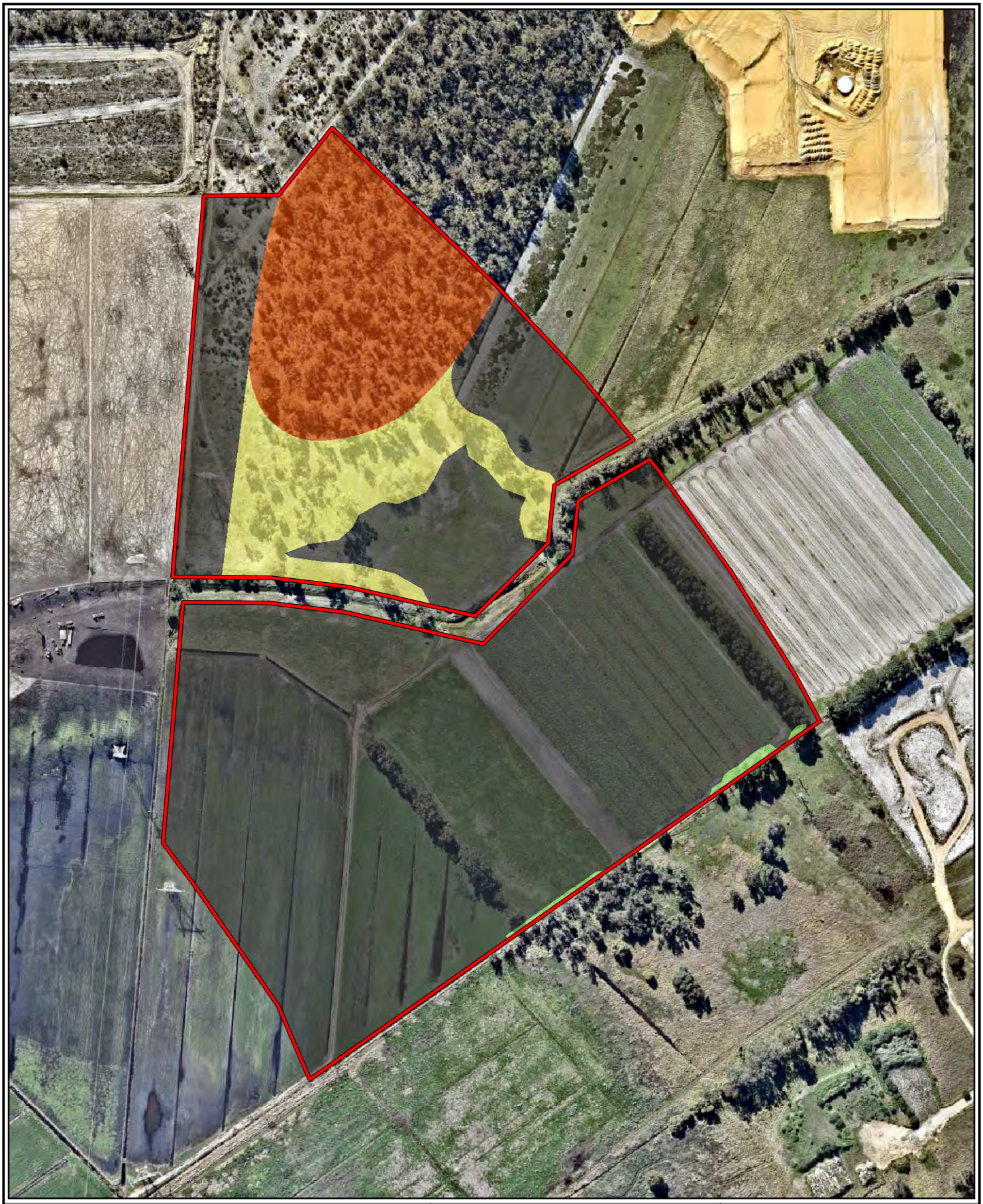
3.5.2.2 Vegetation condition

The site shows signs of having been degraded for a long period of time. The majority of the site has been cleared for agricultural use, with remnant vegetation subject to grazing, weeds and partial clearing as a result. As such, vegetation condition within the site ranged from Good to Completely Degraded (Keighery 1994;Figure 3.4).

Table 3.4 gives a numerical breakdown of the area occupied by each vegetation condition rating within the site.

Table 3.4: Area (ha) covered by each vegetation condition category within the survey area

Vegetation Condition	Area (ha)	Percentage of the survey area
Good	1.97	8.79
Degraded	1.18	5.26
Completely Degraded	19.25	85.94
Total	**22.4**	**100**



Legend:

The site

Vegetation type

- Cleared (17 ha)
- PC (2.13 ha)
- VT1 (0.12 ha)
- VT3 (3.15 ha)

Scale 1:4,000 at A4

0 50 100

metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57121

Client: Qube Property Group

Version: A | Date: 01-Aug-2019

Drawn By: hsullivan | Checked By: HS

Lot 9000 Rowley Road
Mandogalup WA 6167

VEGETATION TYPES

FIGURE 3.3

strategen JBS&G

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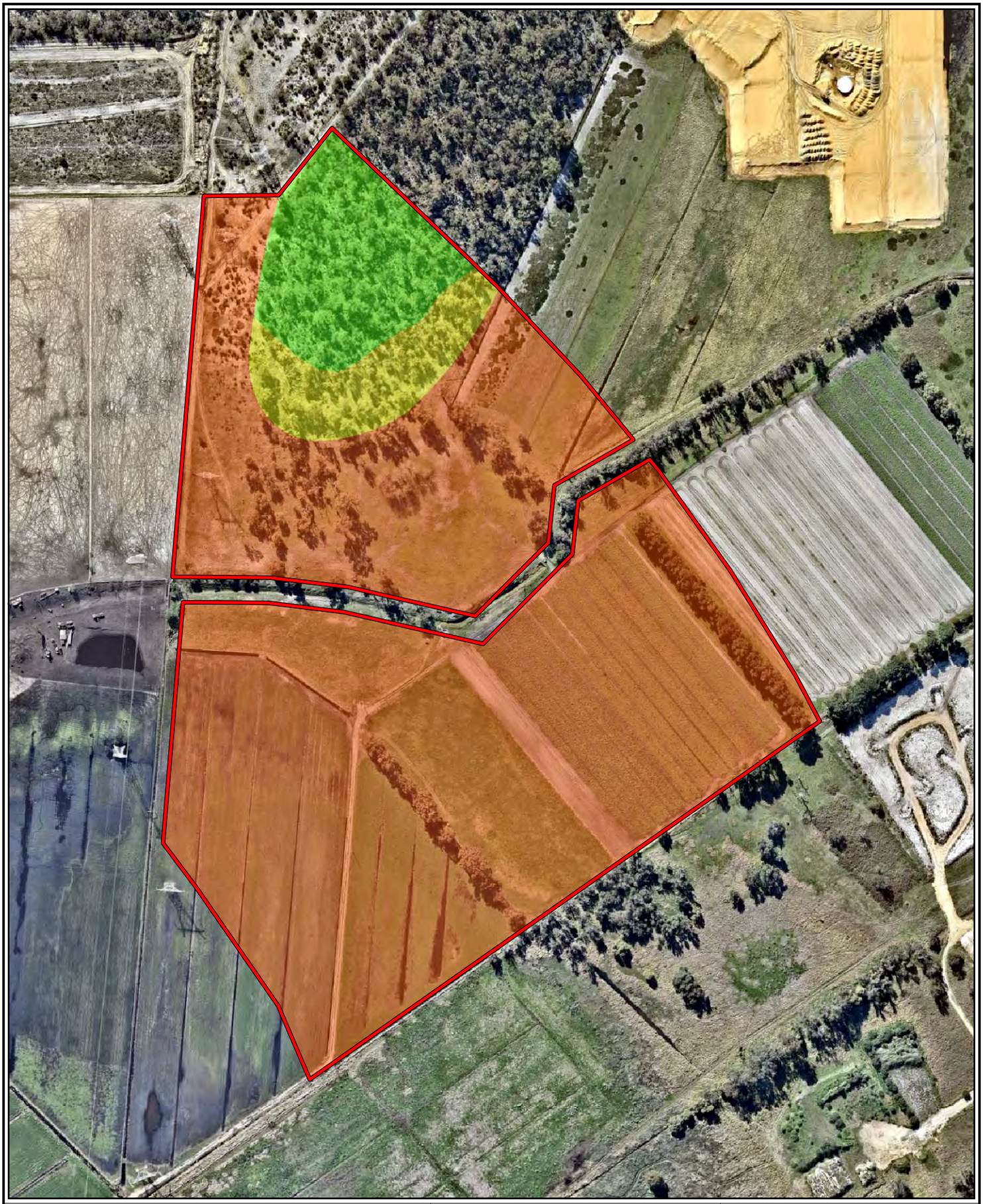
Image Reference: www.nearmap.com © - Imagery Date: 16 July 2019



Legend:

The site

Vegetation condition

- Completely degraded (19.25 ha)
- Degraded (1.18 ha)
- Good (1.97 ha)

Scale 1:4,000 at A4

0 50 100

metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57121

Client: Qube Property Group

Version: A | Date: 01-Aug-2019

Drawn By: hsullivan | Checked By: HS

Lot 9000 Rowley Road
Mandogalup WA 6167

VEGETATION CONDITION

FIGURE 3.4

strategen JBS&G

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Image Reference: www.nearmap.com © - Imagery Date: 16 July 2019

3.5.2.3 Floristic community type

Remnant vegetation of the southern Swan Coastal Plain was surveyed and mapped by Gibson *et al*. (1994) to provide an understanding of the major floristic types and transitions across the region. The major FCTs were defined by classifying the data collected according to the similarities in species composition between plots. When determining the FCT of a new record, a floristic analysis of species composition provides the most robust method that is consistent with the original classification.

Statistical analyses of vegetation data from the survey area determined that VT3 was most likely associated with Floristic Community Type (FCT) 21a Central *Banksia attenuata – Eucalyptus marginata* woodlands, given the location of the project area within the Swan Coastal Plain and the species composition (Strategen 2018).

Whilst this FCT is considered to be a sub-community of the *Banksia woodlands of the Swan Coastal Plain* TEC, which is listed as Endangered under the EPBC Act (TSSC 2016). FCT 21a is not listed as a Threatened Ecological Community (TEC) nor is it listed as a Priority Ecological Community (PEC) under state legislation and is therefore, considered to be well reserved and low risk (Gibson *et al.* 1994).

Within the proposal area, 1.97 ha of vegetation comprising VT3 in Good condition was found to meet the diagnostic criteria of the Banksia Woodlands of the Swan Coastal Plain TEC. Whilst, the remainder of the site has been cleared for agricultural use, with remnant vegetation subject to grazing, weeds and partial clearing as a result.

No other TECs or PECs were identified within the site.

3.5.2.4 Flora

Native flora

A total of 40 native vascular plant taxa from 36 plant genera and 20 plant families were recorded from quadrats within the survey area. The majority of taxa were recorded within the Fabaceae (seven taxa) and Myrtaceae (four taxa) families (Strategen 2018). The relatively low number of plant genera recorded reflects the disturbed nature of the survey area.

Conservation significant flora

No Threatened flora species as listed under section 178 of the EPBC Act or pursuant to section 19 of the BC Act as listed by DBCA were recorded within the site. No Priority flora species as listed by the Western Australian Herbarium (1998-) were recorded within the site.

Introduced (exotic) taxa

A total of 18 introduced (exotic) taxa were recorded within the survey area:

- *Arctotheca calendula
- *Briza maxima
- *Carpobrotus edulis
- *Carthamus lanatus
- *Conyza bonariensis
- *Crassula glomerata
- *Ehrharta longiflora
- *Euphorbia terracina
- *Gladiolus caryophyllaceus
- *Hypochaeris glabra
- *Lysimachia arvensis
- *Oxalis pes-caprae
- *Phytolacca octandra
- *Poaceae sp.
- *Romulea rosea var. australis
- *Solanum nigrum
- *Ursinia anthemoides
- *Zantedeschia aethiopica

One weed species that was identified during the vegetation survey, *Zantedeschia aethiopica* is a Declared Plant species in Western Australia pursuant to section 22 of the *Biosecurity and Agriculture Management Act 2007* (BAM Act). This species typically requires regular and ongoing weed control.

3.6 Terrestrial Fauna

3.6.1 Desktop assessment

A desktop assessment of conservation significant fauna potentially occurring within 3 km of the site was undertaken using the DBCA's *Naturemap* database and the DEE's *Protected Matters Search Tool.* The assessment reports (Appendix B) identified 11 Threatened and four Priority fauna species which may potentially occur in the vicinity of the site. The search reports also identified the potential for one Internationally Protected fauna to occur in the vicinity of the site. These species are listed in Table 3.5 along with a description of their preferred habitat and likelihood of occurrence within the site.

Of the species listed in Table 3.5, the following species were considered likely to utilise the site as habitat, or there was a possibility that they utilise the site based on a desktop assessment:

- *Calyptorhynchus banksii subsp. naso* (FRTBC; Forest Red-tailed Black Cockatoo) - Threatened
- *Calyptorhynchus latirostris* (CBC; Carnaby'S Black Cockatoo) - Threatened
- *Isoodon fusciventer* (Quenda) – P4
- *Lerista lineata* (Perth Slider) – P3
- *Synemon gratiosa* (Graceful Sunmoth) – P4

Table 3.5: Threatened and Priority fauna potentially occurring within the site

Species	Conservation status		Description	Potential to occur
	EPBC Act	BC Act		
Calidris canutus (Red knot)	Threatened – Endangered	Threatened	Red Knots gather in large flocks on the coast in sandy estuaries with tidal mudflats.	**Unlikely.** The site is not on the coast, nor is suitable habitat present
Calidris ferruginea (Curlew Sandpiper)	Threatened – Critically Endangered	Threatened	The Curlew Sandpiper occurs on intertidal mudflats of sheltered coastal areas such as estuaries, bays, inlets and lagoons, in shallow waters. They also occur in non-tidal swamps, lakes and lagoons. They occur less often in inland areas such as ephemeral and permanent lakes, dams, waterholes and bore drains.	**Unlikely.** The site is not on the coast, nor is suitable habitat present
Calyptorhynchus banksii subsp. naso (FRTBC; Forest Red-tailed Black Cockatoo)	Threatened - Vulnerable	Threatened	It inhabits the dense Eucalyptus marginate (Jarrah), E. diversicolor (Karri) and Corymbia calophylla (Marri) forests receiving more than 600mm of annual average rainfall (DSEWPaC 2012).	**Likely**. The site is within the known distribution (DSEWPC 2012).
Calyptorynchus baudinii (BBC; Baudin's Back Cockatoo)	Threatened – Endangered	Threatened	Baundin's Cockatoo occurs predominantly in jarrah, marri and karri eucalypt forests, and less frequently in woodlands and cleared urban areas. During breeding season they forage on banksia, hakea, and dryandra species. During non-breeding season they forage in marri forests. Breeding occurs predominantly in woodland or forest habitats, nesting in hollows of live or dead trees of karri, marri, wandoo and tuart (DSEWPaC 2012). They roost typically in eucalypt trees near permanent water sources.	**Unlikely.** The site is outside the known distribution of the species (DSEWPC 2012).
Calyptorhynchus latirostris (CBC; Carnaby'S Black Cockatoo)	Threatened - Endangered	Threatened	Typically occurs in woodlands and scrubs of semiarid interior of Western Australia, in non-breeding season wandering in flocks to coastal areas, especially pine plantations and Banksia woodlands. Food includes the flowers, nectar and seeds of Banksia, Dryandra, Hakea, Eucalyptus, Corymbia, Grevillea, also seeds of Pinus.	**Likely.** The site is within the known distribution (DSEWPC 2012).
Dasyurus geoffroi (Western Quoll)	Threatened – Vulnerable	Threatened	Forest, mallee shrublands, woodland and desert. The densest populations have been found in riparian jarrah forest.	**Unlikely**. Outside of known distribution area and there is no jarrah forest on site.

Species	Conservation status		Description	Potential to occur
	EPBC Act	BC Act		
Isoodon *Fusciventer* (Quenda)	-	P4	Quenda have a patchy distribution through the Jarrah and Karri forest, the Swan Coastal Plain. Scrubby, often swampy, vegetation with dense cover up to 1 m high, often feeds in adjacent forest and woodland that is burnt on a regular basis and in areas of pasture and cropland lying close to dense cover.	**Possible.** Suitable habitat is present within the site
Leipoa ocellata (Malleefowl)	Threatened - Vulnerable	Threatened	The Malleefowl occurs in shrublands and low woodlands dominated by mallee and acacia species. They favour environments with dense vegetation and require an abundance of leaf litter and a sandy substrate for breeding.	**Unlikely.** Suitable habitat not present
Lerista lineata (Perth Slider, Lined Skink)	-	P3	The restricted mainland habitat occupied by this species is pale sands (calcareous and siliceous) on coastal plains with Banksia and/or Eucalyptus, and coastal and low fixed dunes, supporting heathlands and shrublands, providing a well-developed patchy litter ground cover (Maryan et al. 2015)	**Possible.** Suitable habitat is present on site.
Numenius madagascariensis (Eastern Curlew)	Threatened – Critically Endangered	Threatened	The Eastern Curlew occurs on mudflats or sandflats associated with sheltered coastal areas, such as estuaries, bays, harbours, inlets and lagoons. They are also often recorded within mangroves and saltmarshes. The Eastern Curlew does not breed in Australia. In southern Western Australia, eastern curlews are recorded from Eyre, and there are scattered records from Stokes Inlet to Peel Inlet. The species is a scarce visitor to Houtman Abrolhos and the adjacent mainland and is also recorded around Shark Bay. It is also recorded on Norfolk Island and Lord Howe Island (Marchant & Higgins 1993).	**Unlikely.** The site is not situated on the coast, nor is suitable habitat present within the site.
Oxyura australis (Blue-billed Duck)	-	P3	The Blue-billed Duck is almost wholly aquatic, and is seldom seen on land. Non-breeding flocks, often with several hundred individuals, congregate on large, deep open freshwater dams and lakes in autumn. The Blue-billed duck occurs in freshwater to saline terrestrial wetlands (Birdlife Australia 2019).	**Unlikely.** There is no suitable habitat present within the site.

Species	Conservation status		Description	Potential to occur
	EPBC Act	BC Act		
Pseudocheirus occidentalis (Western Ringtail possum)	Threatened – Critically Endangered	Threatened	There are three main areas known to, or previously known to, support large numbers of western ringtail possums. These three management areas are: • Swan Coastal Plain zone: Peppermint woodlands and Peppermint/Tuart forests on the southern extremity of the Swan Coastal Plain, principally around Busselton. • Southern Forest zone: Jarrah forests near Manjimup where Peppermint is generally absent. • South Coast zone: a diverse range of vegetation types between Denmark and Mount Manypeaks, but principally in near-coastal limestone heath, Jarrah Marri thicket woodland and forest, riparian, Peppermint woodland and Karri forest vegetation.	**Unlikely**. No suitable habitat occurs within the site.
Rostratula australis (Australian Painted Snipe)	Threatened - Endangered	Threatened	The Australian Painted Snipe occurs in shallow terrestrial wetlands, permanent and temporary lakes, swamps and claypans. They favour environments hosting tussocks of grass, sedges, rushes/reeds and samphire. They breed and nest in shallow wetlands with areas of bare wet mud and canopy cover nearby.	**Unlikely.** There are no wet areas present within the site, and no native vegetation surrounding the central minor waterway
Synemon gratiosa (Graceful Sunmoth)	-	P4	Sun-moths are most common in sedgelands, heathlands, woodlands and sometimes in open parts of the forest where their 'foodplants' (various grasses, sedges and mat-rushes) are found. Most sun-moths only breed on one or two plant species - their caterpillars are adapted to feed only on these particular plants. The graceful sunmoth breeds on two species of *Lomandra* mat-rushes (*L. maritima* and *L. hermaphrodita*).	**Possible**. Potential Sunmoth habitat exists within the Banksia woodland community
Tringa nebularia (Common Greenshank, greenshank)	-	IA	The Common Greenshank occurs across a range of inland wetland and sheltered coastal habitats. They forage at the edges of wetlands in soft muds and shallow waters, and along fringing vegetation such as sedges and saltmarsh.	**Unlikely.**

Species	Conservation status		Description	Potential to occur
	EPBC Act	BC Act		
Westralunio carteri (Carter's Freshwater Mussel)	Threatened - Vulnerable	Threatened	The Carter's Freshwater Mussel occurs in freshwater lakes, rivers and streams in sandy or muddy sediments. Greatest densities associated with exposed submerged tree roots (Eucalyptus rudis, Melaleuca spp. and others), woody debris and overhanging riparian vegetation near stream banks and edges of lakes/dams	**Unlikely.** No suitable habitat is present within the site

3.6.2 Site assessment

One level 1 fauna survey and habitat assessment, including a targeted black cockatoo habitat assessment was previously conducted by Emerge Associates (2011) for the site and surrounding Mandogalup area (147 ha total). This survey was conducted as an update to a 2005 zoological survey undertaken by Greg Harewood. Surveying was conducted in accordance with the EPA's *Guidance Statement No. 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia 2004*.

The fauna survey and habitat assessment concluded that of the conservation significant fauna identified, only two species of black cockatoo (CBC and FRTBC) would regularly utilise the site for potential habitat and foraging (Emerge 2011). Whereas, the rainbow bee-eater, cattle egret, great egret, peregrine falcon, white-bellied sea eagle and fork-tailed swift are considered to potentially use the site on occasion and as part a larger home range and unlikely to depend on the site for their ongoing presence in the wider local area (Emerge 2011).

3.6.3 Black cockatoos

As part of the black cockatoo habitat assessment undertaken by Emerge Associates (2011) for the wider Mandogalup area, evidence of foraging was recorded where found. Within the site, foraging evidence from both black cockatoo species was dispersed throughout remnant vegetation within the north of the site. Foraging evidence comprised of chewed Jarrah, Sheoak and Tuart seeds and Banksia cones.

A subsequent black cockatoo habitat assessment specific to the site was undertaken in July by Strategen-JBS&G in order to confirm the results of the 2011 survey. Surveying was conducted by personnel with relevant experience in accordance with the EPA's *Guidance Statement No. 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia 2016* and as specified by the *EPBC Act Referral guidelines for three threatened black cockatoo species*.

The habitat assessment included:

- Using data provided by Emerge Associates (2011) to relocated previously recorded significant trees
- Recording any additional significant trees not previously recorded by Emerge (2011).

Information on the quality of foraging habitat for each species of black cockatoo was recorded for each vegetation type identified in the 2018 flora survey (Strategen 2018). For each significant tree, the following information was recorded:

- GPS location
- species
- approximate diameter at breast height (DBH) in centimetres
- tree health
- presence, size and orientation of hollows
- sightings of black cockatoo species, or other foraging evidence.

Foraging habitat for FRTBC ranged from Poor within VT3 to Very Poor within Parkland Cleared (3.15 ha). For CBC, foraging habitat ranged from Moderate within VT3 to Poor within Parkland cleared (2.13 ha) (DSWEPaC 2012; Table 3.6). FRTBC were also observed foraging on Jarrah fruit during the site survey.

Table 3.6: Black Cockatoo foraging habitat

Vegetation type	Foraging species present	Foraging habitat quality
Vegetation Type 3	FRTBC: *Eucalyptus marginata* CBC: *Allocasuarina fraseriana*, *Eucalyptus marginata*, *Eucalyptus rudis*, *Banksia attenuata*, *Banksia menziesii*	FRTBC: Poor CBC: Moderate
Parkland Cleared	FRTBC: *Eucalyptus marginata* CBC: *Eucalyptus gomphocephala*, *Eucalyptus marginata*, *Eucalyptus rudis*, *Banksia attenuata*, *Banksia menziesii*	FRTBC: Very poor CBC: Poor

A total of 52 significant trees (DBH >500mm) were recorded within the site, of which 12 contained hollows of a size and orientation suitable for breeding by black cockatoos (DSWEPaC 2012; Figure 3.5; Appendix F).

No roosting sites for either species of black cockatoo are mapped within the site boundary (WALGA 2019). The nearest confirmed roost is located approximately 2 km east of the site and has counted 5 CBC and no FRTBC between 2010 and 2018.

It is worthwhile to note that following approval under the EPBC Act in 2014, the following is required to be undertaken:

- a limit on the total amount of black cockatoo foraging habitat to be cleared to 38.7 ha
- a requirement to investigate potential breeding trees prior to clearing, if clearing is to be conducted during the breeding season
- annual compliance reporting
- a requirement to provide funding to the (then) Department of Parks and Wildlife for the acquisition of two properties, containing a total area of 188 ha of black cockatoo foraging habitat. These properties are:
    - No less than 154 ha in size at Lot 102 Wannamal Road South, Cullalla (Shire of Gingin)
    - No less than 34 ha in size at Lot 1143 Wye Road, Nannup (Shire of Nannup).

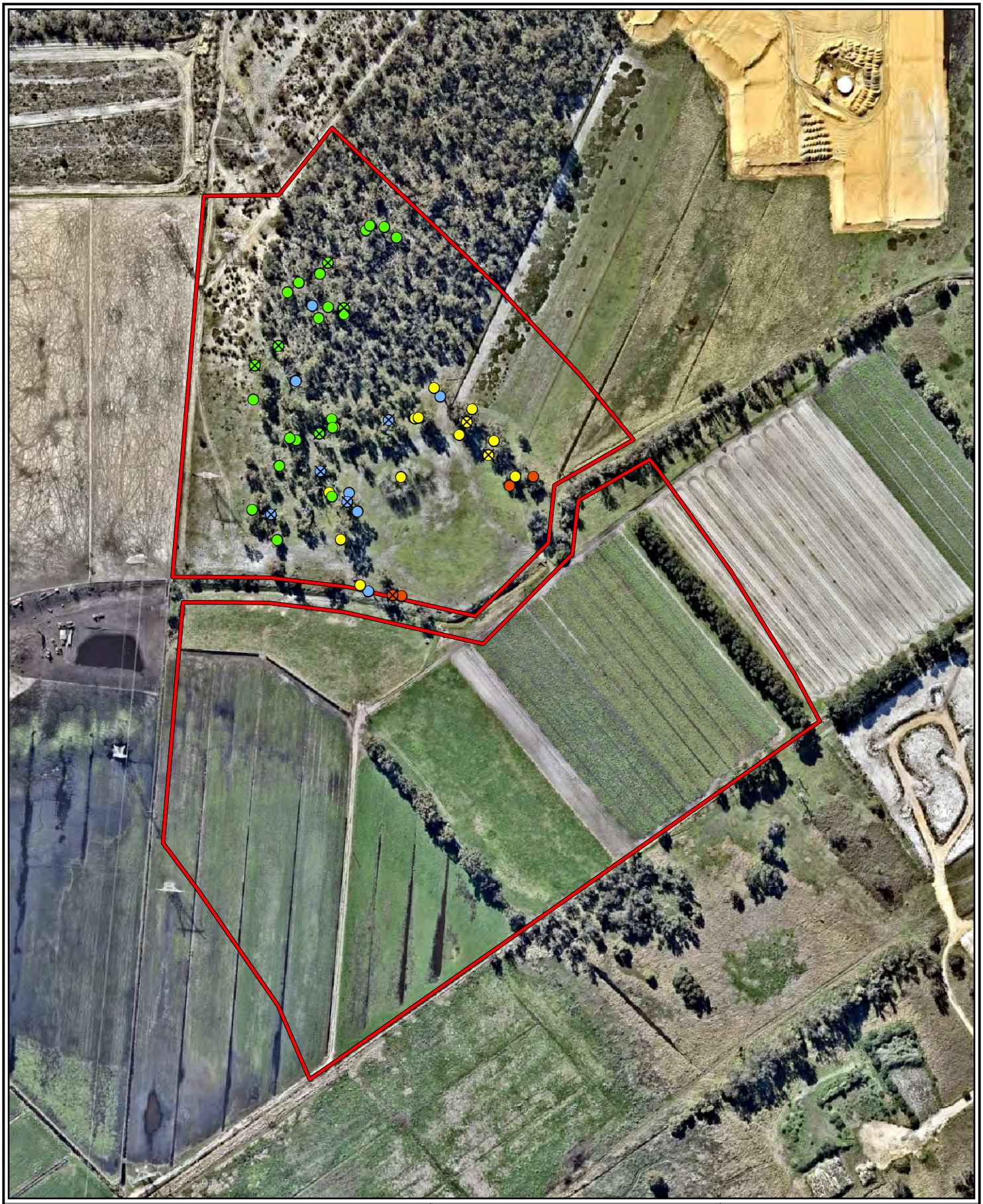
Qube has fulfilled their funding requirements to offset black cockatoo habitat loss and continue to implement the associated management conditions for the proposal area, which includes the scheme amendment area.

3.7 Conservation areas

State Planning Policy 2.8: Bushland Policy for the Perth Metropolitan Region (SPP 2.8) aims to provide a policy and implementation framework that ensures bushland protection and management issues throughout the Perth Metropolitan Region are adequately addressed and integrated with broader land use planning and decision-making (WAPC 2010).

The policy predominantly deals with two distinct subjects, Bush Forever areas and local bushland areas.

No Bush Forever sites or ecological linkages are located within the site. The nearest Bush Forever Site 268 is located within 1 km of the site, approximately 357 m to the west. No Bush Forever Sites will be directly impacted by the proposed TPS amendment.



Legend:

- The site

Black Cockatoo significant trees

- *Eucalyptus gomphocephala* (14)
- *Eucalyptus marginata* (24)
- *Eucalyptus rudis* (4)
- *Eucalyptus* sp. (10)
- Trees with hollows (12)

Scale 1:4,000 at A4	0 50 100 metres	**Lot 9000 Rowley Road Mandogalup WA 6167**
Coord. Sys. GDA 1994 MGA Zone 50		**BLACK COCKATOO SIGNIFICANT TREES**
Job No: 57121		
Client: Qube Property Group		**FIGURE 3.5**
Version: A	Date: 01-Aug-2019	strategen JBS&G
Drawn By: hsullivan	Checked By: HS	

File Name: \\008PMPMR004V001.jbsg.aust\JBS Perth\Projects\1)Open\Qube\57121 Qube TPS Amendment EAR\GIS\Maps\R001_RevA\57121_03_5_BCHabitat.mxd
Image Reference: www.nearmap.com © - Imagery Date: 16 July 2019

3.8 Environmentally Sensitive Areas

Environmentally sensitive areas (ESAs) are declared by the Minister for the Environment under section 15b of the *Environmental Protection Act 1986*. ESAs are only relevant in the limited context of exemptions in the clearing regulations, which do not apply to ESAs.

The site is mapped as an environmentally sensitive area according to the DWER Environmentally Sensitive Areas Map Viewer (2019). This ESA is associated with the Gibbs Road Swamp System (WA078) and associated 50m buffer, a Nationally Important Wetland listed under the DEE's Directory of Important Wetlands (ANCA 2001). This broad ESA includes areas that have been significantly degraded to the point where little to no native vegetation remains, including several residential developments east of the Kwinana Freeway. Within the site boundary, this ESA covers areas historically cleared for agriculture and native vegetation that does not grow in association with a wetland.

3.9 Potentially contaminating activities

The *Contaminated Sites Act 2003* (CS Act) defines contamination as having a substance present in land or water above background concentrations that presents a risk of harm to human health or the environment. The CS Act also provides for the identification, recording, management and remediation of contaminated sites. Contamination commonly occurs through accidental leakage and spillage, or poor site management practices.

A search of the Department of Water and Environment Regulation's (DWER) contaminated sites database (DWER 2019) identified that no part of the site is registered on the database under the *Contaminated Sites Act 2003.* The nearest contaminated site is ID 74385, located approximately 1.1 km south west of the site. This site is classified as Contaminated – Remediation required.

Historical aerial photography visually indicates that market gardening has occurred on the site since prior to 1953. The common contaminate type associated with market gardening operations can include metals, organochlorine pesticides, organophosphate pesticides, carbamates, total petroleum hydrocarbons and monocyclic aromatic hydrocarbons (DER 2014).

A Preliminary Site Investigation (PSI) will be required for the site prior to subdivision to determine if a Detailed Site Investigation is required for the site.

3.10 Bushfire risk

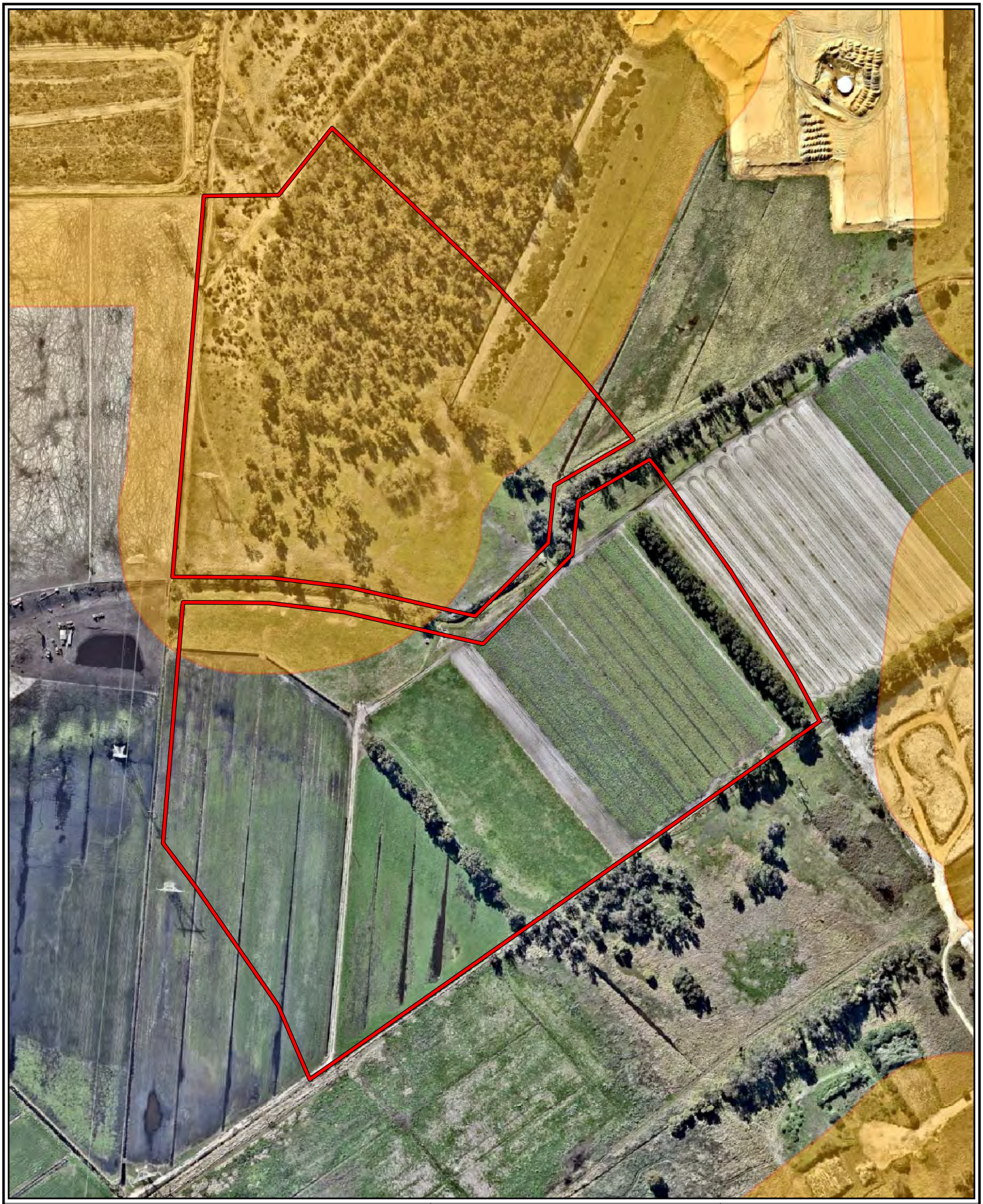
The majority of the site is designated as bushfire prone according to the WA *Map of Bushfire Prone Areas* (DFES 2019; Figure 3.6).

As a result of the bushfire prone status of the site, a Bushfire Management Plan (BMP) is required to accompany the TPS amendment application to address the following requirements of *State Planning Policy 3.7 Planning in Bushfire Prone Areas* (SPP 3.7), namely Policy Measure 6.3:

- a bushfire hazard level (BHL) assessment or where lot layout is known, a Bushfire Attack Level (BAL) contour assessment to determine the indicative acceptable BAL ratings across the site
- identification of any bushfire hazard issues arising from the above assessment
- assessment against the bushfire protection criteria requirements contained within the Guidelines demonstrating compliance can be achieved in subsequent planning stages.

A BMP is currently been prepared in accordance with Guidelines for Planning in Bushfire Prone Areas (WAPC 2017) to support the TPS amendment.

This BMP should be read in conjunction with this EAR.



Legend:

The site

Bushfire prone areas (OBRM, 2018)

Scale 1:4,000 at A4	0 50 100 metres	**Lot 9000 Rowley Road Mandogalup WA 6167**
Coord. Sys. GDA 1994 MGA Zone 50		**BUSHFIRE PRONE AREAS**
Job No: 57121		
Client: Qube Property Group		**FIGURE 3.6**
Version: A	Date: 01-Aug-2019	strategen JBS&G
Drawn By: hsullivan	Checked By: HS	

File Name: \\008PMPMR004V001.jbsg.aust\JBS Perth\Projects\1)Open\Qube\57121 Qube TPS Amendment EAR\GIS\Maps\R001_RevA\57121_03_6_BushfireProneAreas.mxd
Image Reference: www.nearmap.com © - Imagery Date: 16 July 2019

3.11 Heritage

3.11.1 Indigenous heritage

A search of the Department of Planning, Lands and Heritage – Aboriginal Heritage Places mapping tool (DPLH 2019) was conducted which identified the Mandogalup Swamp / Spectacles Aboriginal Heritage Site (Place ID: 3427). The status of this site is "stored data / not a site" and therefore does not meet the criteria for protection under Schedule 5 of the *Aboriginal Heritage Act 1972*. The nearest Registered Aboriginal Heritage site is Wattleup Road Swamp (Place ID: 4357) which is located approximately 1.5 km north west of the site.

3.11.2 European heritage

A search of the Heritage Council of Western Australia *InHerit* database did not identify any European heritage places within the site (SHO 2019). The nearest European heritage listed place is "Mandogalup school – Site of" (Place No: 12100) which is located approximately 660 m south west of the site.

3.12 Mosquitoes and midges

There are almost 100 species of mosquitoes known to occur in Western Australia. Mosquitoes are considered a nuisance and are transmitters of disease-causing viruses and parasites which pose a risk to human health. These diseases include Ross River virus, Barmah Forest virus, Kunjin virus, and the potentially fatal Murray Valley encephalitis virus (Department of Health [DoH], undated).

Breeding habitat varies between different species of mosquito; however, they are all generally capable of breeding in natural or man-made standing bodies of fresh, brackish or saline water. Such waterbodies include lakes, pools, swamps, ground pools, irrigation ditches, tree holes and leaf axils. In urban environments, mosquitoes may breed in pot plant drip trays, septic tanks, roof gutters, ponds, poorly maintained swimming pools, and pet water bowls (DoH, undated).

Due to the prevalence of low-lying dampland wetlands within the City of Kwinana including the Mandogalup area, there is a potential public health risk posed by mosquitoes and nuisance levels and impact upon amenity from midges. In response to this, a Mosquito and Midge Management Strategy (MMMS) was prepared by Strategen (2019) as a condition of subdivision for Lot 9000. This MMMS was designed in consultation with the CoK to ensure a coordinated risk approach that includes:

- a strategy of implementation of physical controls
- an appropriate monitoring program and remedial actions for mosquito control
- a public education strategy.

4. Assessment against EPA Environmental Factors

4.1 Key environmental factors

Table 4 provides a preliminary assessment of the environmental factors established by the EPA for the purposes of environmental impact assessment and is used as a basis for assessing whether a Proposal's impact on the environment is acceptable or may be considered significant.

Based on the assessment, the following key environmental factors have been identified:

- Flora and vegetation (Section 4.2)
- Terrestrial fauna (Section 4.3)

Table 4.1: EPA environmental factors – preliminary assessment

Theme	Environmental factor	Environmental objective	Significance of impact
Sea	Benthic Communities and Habitat	To protect benthic communities and habitats so that biological diversity and ecological integrity are maintained.	The Proposal is not located adjacent or nearby coastal areas.
	Coastal Processes	To maintain the geophysical processes that shape coastal morphology so that the environmental values of the coast are protected.	The Proposal is not located adjacent or nearby coastal areas.
	Marine Environmental Quality	To maintain the quality of water, sediment and biota so that environmental values are protected.	The Proposal is not located adjacent or nearby marine areas.
	Marine Fauna	To protect marine fauna so that biological diversity and ecological integrity are maintained.	The Proposal is not located adjacent or nearby marine areas.
Land	Flora and Vegetation	To protect flora and vegetation so that biological diversity and ecological integrity are maintained.	The Proposal is expected to cause impacts to flora and vegetation. It will involve clearing of 3.27 ha of native vegetation, of which 3.15 ha is VT3 (FCT 21a) and aligned with Bassendean vegetation complex – central and south, and 0.12 ha is VT1 and aligned with Herdsman vegetation complex. (Section 4.2).
	Landforms	To maintain the variety and integrity of significant physical landforms so that environmental values are protected.	The Proposal is not expected to cause significant impacts to landform.
	Terrestrial Fauna	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.	The Proposal is expected to cause impacts to terrestrial fauna. It will involve the clearing of 5.4 ha of fauna habitat, which is comprised of 1.97 ha in good condition and 3.43 ha in degraded to completely degraded condition (Section 4.3).
	Subterranean Fauna	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.	The Proposal is not expected to cause significant impacts to subterranean fauna.
Water	Inland Waters	To maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.	The Proposal may cause potential impacts on inland waters through accidental spills of fuels and chemicals during operation, erosion and sedimentation during operation, but these impacts are not expected to be significant.
Air	Air Quality	To maintain air quality and minimise emissions so that environmental values are protected.	The Proposal may cause potential impacts on air quality due to dust emissions during construction however these impacts are not expected to be significant.
People	Social Surroundings	To protect social surroundings from significant harm.	The Proposal may cause potential impacts on amenity, due to noise and dust emissions during construction but these impacts are not expected to be significant.
	Human Health	To protect human health from significant harm.	The Proposal will not result in significant impacts to human health.

4.2 Key Environmental Factor 1 - Flora and vegetation

4.2.1 Environmental objective

The EPA's Statement of Environmental Principles, Factors and Objectives (EPA 2018b) identifies the following objective for flora and vegetation:

- To protect flora and vegetation so that biological diversity and ecological integrity are maintained.

4.2.2 Policy considerations

Flora and Vegetation surveys that have informed planning for the Proposal have been conducted in accordance with the *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016a) and the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016b).

The EPA outlines a number of key considerations for flora and vegetation within the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016b), which are discussed below, where relevant, with relation to the proposed development.

4.2.3 Receiving environment

Pre-European vegetation within the site comprises one vegetation system association; Bassendean 1001 (medium very sparse woodland of Jarrah, with low woodland of *Banksia* and *Casuarina*), of which 21.38% remains within the state, with 1.86% vested in lands protected for conservation.

Two vegetation complexes are also within the site; Bassendean Complex – Central and South and Herdsman Complex, of which 26.87% and 32.11% of the pre-European extent remains within the state, respectively. The extent remaining of both the Bassendean Complex – Central and South and Herdsman Complex are above the 10% threshold for retention of vegetation complexes in constrained areas such as the Swan Coastal Plain (WAPC 2010). Based on current extents of all Heddle vegetation complexes on the Swan Coastal Plan, both vegetation complexes are considered to be well represented.

Vegetation mapped throughout the site ranges from Good to Completely Degraded (Keighery 1984), with 91.2 % of the site being a combination of Degraded and Completely Degraded.

Flora and vegetation surveying undertaken by Strategen (2018) identified two remnant native vegetation types within the site; VT1 (*Eucalyptus rudis* and *Melaleuca rhaphiophylla* woodland) and VT3 (*Eucalyptus marginata, Banksia attenuata* and *Banksia menziesii* woodland). Each of these vegetation types covers an area of 0.12 and 3.15 ha respectively.

Statistical analyses confirmed that one Vegetation Type (VT3) corresponded to FCT 21a, which is considered to be a sub-community of the *Banksia woodlands of the Swan Coastal Plain* TEC and listed as Endangered under the EPBC Act (TSSC 2016). However, it is worthwhile to note that FCT 21a is not listed as a Threatened or Priority ecological community under state legislation.

This community is considered to occur as a woodland on the Spearwood and Bassendean Dunes and Pinjarra Plain which extends from Gingin south to Bunbury and is known from 50 point locations over about 245 km from Yeal in the north to Capel in the south (TSSC 2016). Therefore, this community is considered to be well represented and at low risk.

4.2.4 Potential impacts

The major impacts associated with the amendment to the LPS include vegetation clearing and associated habitat disturbance. No threatened or priority flora species occur within the site and whilst FCT 21a is a sub-community of EPBC listed Banksia woodlands of the Swan Coastal Plain TEC, it is not listed as a TEC or PEC under state legislation.

The proposed clearing of 3.15 ha of Bassendean Complex – Central and South within the proposed TPS amendment area represents only 0.01% of its current extent on the Swan Coastal Plain (23,533.09 ha). To provide further context, 1.97 ha of Bassendean Complex – Central and South that is in Good vegetation within the proposed TPS amendment area and represents only 0.008% of its current extent.

The proposed clearing of 0.12 ha of Herdsman Complex (which is in Completely Degraded condition) within the proposed TPS amendment area represents only 0.004% of its current extent on the Swan Coastal Plain (3,103.7 ha).

Further analysis has identified that within a 10 km radius of the site there is 2,260.25 ha (Bassendean Complex – Central and South) and 1,008.623 ha (Herdsman Complex) within conservation reserves. In relation to nearby Bush Forever Sites, there is 159.50 ha (Bassendean Complex – Central and South) and 258.25 ha (Herdsman Complex) within Sites 268 and 269.

Given the above, it is considered the proposed clearing of Bassendean Complex – Central and South and Herdsman Complex will not significantly increase the cumulative loss of these vegetation complexes at a regional or local scale.

4.2.5 MWLSP, subdivision design and response to vegetation retention

The proposed areas of vegetation retention within the site have focused on accessibility, usability and ongoing management requirements, and generally align with proposed public open space and the Peel Main Drain. Considerable effort has been made to retain a number of Black cockatoo significant trees (some with hollows) within the central POS which will provide both aesthetic and conservation value to the proposed development. The location of POS (and proposed vegetation retention) has been determined based on drainage requirements, the need to balance cut and fill across the site, accessibility for the catchment and consolidation with the Peel Main Drain. This location also provides a continual linear park network to the retained vegetation north-east in the approved subdivision area along the Drain.

As the site has generally good separation in the northern area, it is intended to utilise this area as a source of cut to fill the lower lying area to the south. Preliminary earthworks levels have been determined based on integration with the adjacent Mandogalup West Structure Plan levels, meeting maximum road grade and services requirements, and keeping retaining walls maximum heights to within the City of Kwinana's standards. Retention of vegetation in this area would result in significant battering or retaining walls sitting well above the adjacent proposed development levels, inhibiting the functionality of the POS. Given the existing disturbance within this vegetation, cattle grazing and weeds, and the isolation of the remnant, it is unlikely it would be viable in the long term as an area for conservation.

It is also worthwhile noting that the conservation POS within the MWLSP and approved subdivision has led to retention of native vegetation for future conservation (Figure 4.1).

4.2.6 EPBC Approval – offsite offset

Following an assessment of impacts to both species of black cockatoo across the entirety of Lot 9000, an EPBC referral was submitted for the proposed development Lot to the Department of Environment and Energy which was subsequently approved on 04 August 2014 (EPBC 2014/7126). Conditions of this approval include the following:

- a limit on the total amount of vegetation associated with black cockatoo foraging habitat to be cleared to 38.7 ha

- a requirement to provide funding to the (then) Department of Parks and Wildlife for the acquisition of two properties, containing a total area of 188 ha of vegetation associated with black cockatoo foraging habitat. These properties are:
    - No less than 154 ha in size at Lot 102 Wannamal Road South, Cullalla (Shire of Gingin)
    - No less than 34 ha in size at Lot 1143 Wye Road, Nannup (Shire of Nannup).

Further inspection of the offset property in Cullalla has highlighted the vegetation is likely to contain Banksia Woodlands TEC and is mapped as being Cullalla Complex, which is described as being a mixture of low open forest of Banksia species - *Eucalyptus todtiana* (Pricklybark) and open woodland of *Corymbia calophylla* (Marri) with second storey of *Eucalyptus todtiana* (Pricklybark) - *B.attenuata* - *Banksia menziesii* (Firewood Banksia) - *Banksia ilicifolia* (Holly-leaved Banksia). Whilst 154 ha vegetation was provided to address impacts to black cockatoos, it would appear that the offset site is likely to have also contributed towards the overall conservation of Banksia Woodlands TEC.

4.2.7 Management measures

The following management measures and proposed environmental scheme provisions have been identified to ensure potential impacts to flora and vegetation are appropriately managed as development progresses (Table 4.2 overleaf).

Table 4.2: Management requirements for flora and vegetation

Parameter	Proposed scheme provisions / Management actions	Timing/responsibility
Protection of adjacent remnant vegetation	Development and approval of a Construction Environmental Management Plan (CEMP) as a condition of subdivision to incorporate environmental elements during pre-construction and during construction: • identification of potential threats/impacts and risks associated with construction activities within and adjacent to areas of remnant vegetation (i.e. dieback, fauna and habitat management) • clear demarcation of clearing areas • inductions and pre-start meetings to include fauna and vegetation management requirements • installation of temporary fencing to prevent unauthorised access • environmental outcomes and performance indicators • management measures and monitoring • contingency response and corrective actions • reporting and review.	Prior to bulk earthworks and as a condition of subdivision. City of Kwinana / developer.
Tree retention	Development of a Landscape Feature and Tree Retention Plan prior to local structure planning, which will include: • location, species, size and structural health of significant trees (>50cm DBH) on site • assessment of the feasibility of tree retention in response to engineering, bushfire and recreational requirements.	Prior to local structure plan. Developer in consultation with the City of Kwinana

4.2.8 Predicted outcome

Whilst FCT 21a is a sub-community of the EPBC listed Banksia Woodlands of the Swan Coastal Plain, the proposed development is not expected to directly or indirectly impact any state listed Threatened or Priority Ecological communities, or any Threatened or Priority flora species.

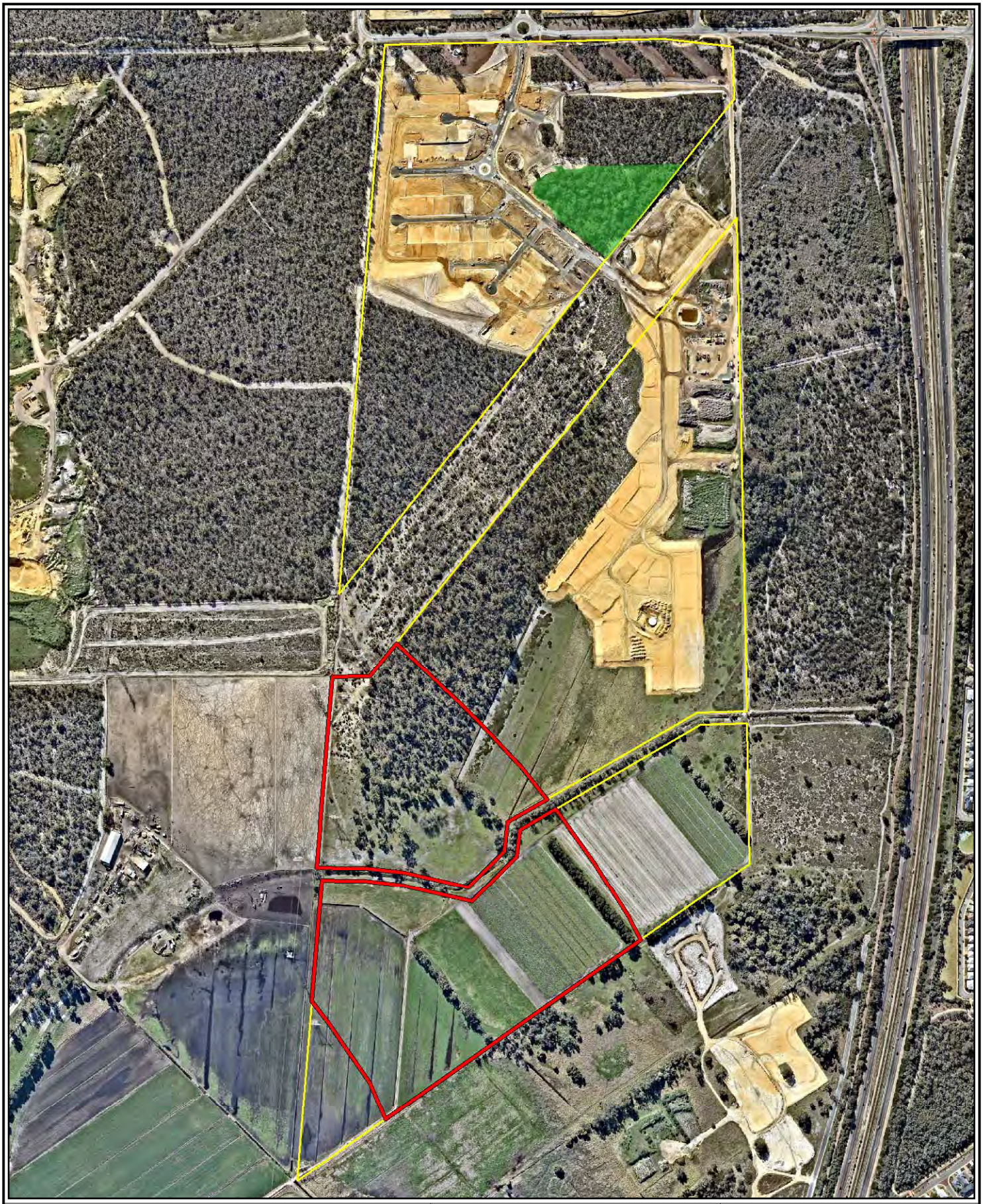
As the proposed clearing of Bassendean Complex – Central and South and Herdsman Complex represents only 0.01% and 0.004% of their current extents respectively, all direct, indirect and cumulative impacts to flora and vegetation are considered minor at a local and regional scale.

Furthermore, given the vegetation within the 154 ha offset site located in Cullalla is likely to contain Banksia Woodlands TEC, it would appear that the EPBC approval conditions set upon the site (EPBC

2014/7126) is expected to have also contributed towards the overall conservation of Banksia Woodlands TEC.

The residual impacts to flora and vegetation will be managed through implementation of the proposed environmental scheme provisions and the following environmental plans:

- Construction Environmental Management Plan
- Landscape Feature and Tree Retention Plan.



Legend:

- The site
- Lot 9000
- Retained vegetation (1.99ha)

Scale 1:8,000 at A4	0 100 200 metres	**Lot 9000 Rowley Road Mandogalup WA 6167**
Coord. Sys. GDA 1994 MGA Zone 50		**RETAINED VEGETATION WITHIN LOT 682**
Job No: 57121		
Client: Qube Property Group		**FIGURE 4.1**
Version: A	Date: 02-Aug-2019	strategen JBS&G
Drawn By: hsullivan	Checked By: HS	

File Name: \\008PMPMR004V001.jbsg.aust\JBS Perth\Projects\1)Open\Qube\57121 Qube TPS Amendment EAR\GIS\Maps\R001_RevA\57121_04_1_RetainedVeg.mxd
Image Reference: www.nearmap.com © - Imagery Date: 16 July 2019

4.3 Key Environmental Factor 2 - Terrestrial fauna

4.3.1 Environmental objective

The EPA's Statement of Environmental Principles, Factors and Objectives (EPA 2018b) identifies the following objective for terrestrial fauna:

- To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.

4.3.2 Policy considerations

Terrestrial fauna surveys that have informed planning for the Proposal have been conducted in accordance with the Technical Guidance - Terrestrial Fauna Surveys for Environmental Impact Assessment (EPA 2016c) and the Environmental Factor Guideline: Terrestrial Fauna (EPA 2016d).

The EPA outlines a number of key considerations for terrestrial fauna within the *Environmental Factor Guideline: Terrestrial Fauna* (EPA 2016d), which are discussed below, where relevant, with relation to the proposed development.

4.3.3 Receiving environment

Conservation significant fauna

Based on searches of the EPBC *Protected Matters Search Tool* and the DBCA's *Naturemap* databases, the desktop assessment identified a total of 11 Threatened, four Priority, and one Internationally Protected fauna species that may potentially occur within the vicinity of the site. Of these, five species were considered likely to occur within the site based on their respective habitat requirements, including two Threatened species; CBC (*Calyptorynchus latirostris*) and FRTBC (*Calyptorhynchus banksii naso*).

A level 1 fauna survey and habitat assessment was undertaken by Emerge Associates (2011) as an update to a previous 2005 zoological survey conducted across the site, which included a black cockatoo habitat assessment (Appendix E). The results of this black cockatoo habitat assessment were then in turn updated by one Senior Ecologist from Strategen JBS&G in July 2019 (Appendix F). Surveying was conducted in accordance with the EPA's *Guidance Statement No. 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia 2016*.

Foraging habitat for FRTBC ranged from Poor within VT3 to Very Poor within Parkland Cleared. For CBC, foraging habitat ranged from Moderate within VT3 to Poor within Parkland cleared (DSWEPaC 2012; Table 3.6). FRTBC were also observed foraging on Jarrah fruit during the site survey.

A total of 52 significant trees (DBH >500mm) were recorded within the site, of which 12 contain hollows of a size and orientation suitable for breeding by black cockatoos (DSWEPaC 2012; Figure 3.5; Appendix F).

No roosting sites for either species of black cockatoo are mapped within the site boundary (WALGA 2019). The nearest confirmed roost is located approximately 2 km east of the site and has counted 5 CBC and no FRTBC between 2010 and 2018.

4.3.4 Potential impacts

The Proposal will result in direct and indirect impacts to terrestrial fauna as result of:

- clearing of 5.4 ha of native vegetation that provides habitat for an array of fauna, of which includes 5.28 ha Black cockatoo foraging habitat which ranges from very poor to moderate quality
- removal of 52 Black cockatoo significant trees, of which 12 contain hollows.

No other conservation significant species are considered likely to be significantly affected by the Proposal.

4.3.5 MWLSP, subdivision design and response to vegetation retention

The proposed areas of vegetation retention within the site have focused on accessibility, usability and ongoing management requirements, and generally align with proposed public open space and the Peel Main Drain. Considerable effort has been made to retain a number of Black cockatoo significant trees (some with hollows) within the central POS which will provide both aesthetic and conservation value to the proposed development. The location of POS (and proposed vegetation retention) has been determined based on drainage requirements, the need to balance cut and fill across the site, accessibility for the catchment and consolidation with the Peel Main Drain. This location also provides a continual linear park network to the retained vegetation north-east in the approved subdivision area along the Drain.

As the site has generally good separation in the northern area, it is intended to utilise this area as a source of cut to fill the lower lying area to the south. Preliminary earthworks levels have been determined based on integration with the adjacent Mandogalup West Structure Plan levels, meeting maximum road grade and services requirements, and keeping retaining walls maximum heights to within the City of Kwinana's standards. Retention of vegetation in this area would result in significant battering or retaining walls sitting well above the adjacent proposed development levels, inhibiting the functionality of the POS. Given the existing disturbance within this vegetation, cattle grazing and weeds, and the isolation of the remnant, it is unlikely it would be viable in the long term as an area for conservation.

It is also worthwhile noting that the conservation POS within the MWLSP and approved subdivision has led to retention of native vegetation for future conservation (Figure 4.1).

4.3.6 EPBC Approval – offsite offset

Following an assessment of impacts to both species of black cockatoo across the entirety of Lot 9000, an EPBC referral was submitted for the proposed development Lot to the Department of Environment and Energy which was subsequently approved on 04 August 2014 (EPBC 2014/7126). Conditions of this approval include the following:

- a limit on the total amount of black cockatoo foraging habitat to be cleared to 38.7 ha
- a requirement to investigate potential breeding trees prior to clearing, if clearing is to be conducted during the breeding season
- annual compliance reporting
- a requirement to provide funding to the (then) Department of Parks and Wildlife for the acquisition of two properties, containing a total area of 188 ha of black cockatoo foraging habitat. These properties are:
    - No less than 154 ha in size at Lot 102 Wannamal Road South, Cullalla (Shire of Gingin)
    - No less than 34 ha in size at Lot 1143 Wye Road, Nannup (Shire of Nannup).

Subsequently, Qube has fulfilled their funding requirements to offset black cockatoo habitat loss and continue to implement the associated management conditions for the proposal area.

4.3.7 Management requirements

The following management measures and proposed environmental scheme provisions have been identified to ensure potential impacts to terrestrial fauna are appropriately managed as development progresses (Table 4.3).

Table 4.3: Management requirements for terrestrial fauna

Parameter	Proposed scheme provisions / Management actions	Timing/responsibility
Fauna	Development and approval of a fauna management plan (FMP) as a condition of subdivision to ensure that impacts to fauna (including black cockatoos) are limited and no individuals are injured or killed during clearing works. The FMP will include site specific measures such as: • Inductions and pre-start meetings to include fauna management requirements • Restrictions on vehicle movements and access to cleared areas • Pre-clearing fauna inspections, as well as trapping and relocation of fauna, if required, • Staged fencing of site	Prior to bulk earthworks and as a condition of subdivision. Developer.
Protection of adjacent remnant vegetation	Development and approval of a Construction Environmental Management Plan (CEMP) as a condition of subdivision to incorporate environmental elements during pre-construction and during construction: • identification of potential threats/impacts and risks associated with construction activities within and adjacent to areas of remnant vegetation (i.e. dieback, fauna and habitat management) • clear demarcation of clearing areas • inductions and pre-start meetings to include fauna management requirements • installation of temporary fencing to prevent unauthorised access • environmental outcomes and performance indicators • management measures and monitoring • contingency response and corrective actions • reporting and review.	Prior to bulk earthworks and as a condition of subdivision. City of Kwinana / developer.
Tree retention	Development of a Landscape Feature and Tree Retention Plan prior to local structure planning, which will include: • location, species, size and structural health of significant trees (>50cm DBH) on site • assessment of the feasibility of tree retention in response to engineering, bushfire and recreational requirements.	Prior to local structure planning. Developer in consultation with the City of Kwinana
	Where possible retention of Black cockatoo habitat trees- with priority to retain trees containing hollows.	Prior to subdivision design. Developer in consultation with the City of Kwinana.

4.3.8 Predicted Outcome

Considering the above, it is expected that all direct, indirect and cumulative impacts to black cockatoos resulting from the proposed development have been offset as a result of the EPBC condition requirements. Furthermore, given the wide distribution range and high mobility of each species. A number of DBCA managed nature reserves are also present within the regional area which provide foraging and nesting habitat (Figure 4.2). On a local scale, potential foraging habitat within the north of Lot 9000 will be retained post-development within Public Open Space areas and road reserves where possible.

The residual impacts to fauna will be managed through implementation of the proposed environmental scheme provisions and the following environmental plans:

- Construction Environmental Management Plan
- Fauna Management Plan
- Landscape Feature and Tree Retention Plan.



Legend:

- The site
- 10km buffer
- Bush Forever site (DOP)

Legislated Lands and Waters (DBCA)

- Crown Freehold - Dept Managed
- Section 5(1)(h) Reserve
- Nature Reserve
- Other Reserves

Scale 1:110,000 at A4

0 1 2
Kilometers

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57121

Client: Qube Property Group

Version: A | Date: 06-Aug-2019

Drawn By: cthatcher | Checked By: HS

Lot 9000 Rowley Road Mandogalup WA 6167

REGIONAL CONSERVATION AREAS

FIGURE 4.2

strategen JBS&G

File Name: W:\Projects\1)Open\Qube\57121 Qube TPS Amendment EAR\GIS\Maps\R001_RevA\57121_04_2_RegionalConservationAreas.mxd
Image Reference: https://services.slip.wa.gov.au:443/public/services/SLIP_Public_Services/Locate/MapServer/WmsServer?request=GetLegendGraphic

5. Other Environmental Issues

5.1 Acid sulfate soils

5.1.1 Potential impacts

Regional Department of Water and Environmental Regulation (DWER) ASS mapping indicates that a significant portion of the site has been mapped as having a High to Moderate (Class 1) ASS disturbance risk within 3 m of the soil surface, while the remainder of the site has been mapped as having a Moderate to Low (Class 2) ASS disturbance risk (Figure 3.2).

5.1.2 Policy considerations

To ensure that the subdivision and development of land containing ASS is planned and undertaken in accordance with DER (2015b) *Treatment and management of soils and water in acid sulfate soil landsapes*.

5.1.3 Management requirements

Management measures have been identified to assist in achieving the ASS management objectives (Table 5.1).

Table 5.1: Management requirements for ASS

Parameter	Proposed scheme provisions / Management actions	Timing / Responsibility
ASS	Confirm if dewatering below the water table or the excavation of more than 100 m3 is required as part of earthworks for future development prior to subdivision.	Prior to subdivision and earthworks commencing within the proposal. Developer.
	Complete an ASS desktop investigation and completion of a self-assessment form to confirm whether ASS investigations are required prior to subdivision.	Prior to subdivision and completion and finalisation precinct earth works plans (cut and fill, infrastructure, drainage services). Developer.
	Development and approval of an ASS Management Plan (if ASS is present, and site works will intersect ASS areas) as a condition of subdivision that includes: • potential environmental impacts—groundwater drawdown, disruption to existing bore users, vegetation stress, reduction in water quality, noise and air impacts; • earthwork strategy—soil extraction methods, stockpile management, soil treatment/neutralisation, calculated liming rate and disposal techniques • dewatering strategy—procedure and control measures, treatment and disposal options, contingency measures if acidification of groundwater occurs • monitoring program—soil, groundwater, vegetation, noise and air.	Prior to bulk earthworks commencing onsite and as a condition of subdivision (Subdivision). Developer.

5.1.4 Predicted outcomes

Through the implementation of the management recommendations outlined in Table 5.1, the quality of land and soils can be managed during construction.

5.2 Potential Contamination and future land uses

5.2.1 Potential impacts

As described previously, currently there are no registered contaminated sites within or near the proposal area. Historical aerial photography visually indicates that market gardening has occurred on the site since prior to 1953. The common contaminate type associated with market gardening

operations can include metals, organochlorine pesticides, organophosphate pesticides, carbamates, total petroleum hydrocarbons and monocyclic aromatic hydrocarbons (DER 2014).

5.2.2 Policy considerations

To ensure that the subdivision and development of land is planned and undertaken in accordance with DER (2014a*) Assessment and management of contaminated sites*.

5.2.3 Management requirements

Management measures have been identified to assist in achieving the management objectives for contaminated sites (Table 5.2).

Table 5.2: Management requirements for potential contamination

Parameter	Proposed scheme provisions / Management actions	Timing / Responsibility
Potential contamination	Prior to commencement of subdivision works, investigation for soil and groundwater contamination is to be carried to determine if remediation is required. If required, remediation, including validation of remediation, of any contamination identified shall be completed prior to the issuing of titles to the satisfaction of the WAPC on advice from DWER, to ensure that the lots created are suitable for the proposed use. Investigations and remediation are required to be carried out in compliance with the CS Act and current DWER Contaminated sites guidelines.	Prior to subdivision. Developer.

5.2.4 Predicted environmental outcomes

Further investigations will confirm if further detailed site investigations are required to support future residential development and identify appropriate management controls are in place before subdivision commences.

5.2.5 Secondary approval requirements

Sites where potential contamination exists will be managed through the land use planning process in accordance with the *Contaminated Sites Act 2003* (CS Act). The CS Act specifies that to clear any conditions relating to the assessment and management of contaminated sites requires the approval of resulting investigations by a Western Australian accredited contaminated sites auditor. Approval to commence residential development will be required under the CS Act and prior to subdivision.

5.3 Hydrology

As part of future planning and development requirements, additional hydrological engineering investigations will be undertaken to enable preparation of an LWMS and UWMP. The LWMS and UWMP will be prepared for the site in accordance with the Mandogalup development cell DWMS, SPP 2.9 and Better Urban Water Management Guidelines, outlining the necessary management measures to be implemented to ensure that pre-development hydrological flow regimes are maintained, and water quality is protected by reducing export of phosphorous and nitrogen to surface or groundwater.

5.3.1 Potential impacts

Surface water

While the site's pre-development and post-development surface water flows are to coincide in accordance with the WAPC (2008) *Better Urban Water Management Guidelines*, the estimated surface water volumes are expected to increase through urbanisation within the precinct.

Groundwater

Residential development of the site will potentially increase recharge of rainfall into groundwater through increased surface area of residential roofs, driveways, car parks and roads. Also, the

creation of residential gardens and POS areas may lead to a minor increase in the amount of nitrates and phosphates being discharged into the Groundwater.

5.3.2 Policy considerations

The key principles and objectives for sustainable water management for the residential development is provided in the following:

- *Liveable Neighbourhoods Edition 4* (WAPC 2009)
- *Water Resources Statement of Planning Policy 2.9* (WAPC 2004)
- *Stormwater Management Manual for WA* (Department of Water 2007)
- *Decision Making Process for Stormwater in Western Australia* (Decision Process, DWER 2017)
- *Better Urban Water Management* (WAPC 2008)
- *Interim: Developing a Local Water Management Strategy* (DoW 2008)
- *Mandogalup District Water Management Strategy* (JDA 2011).

The Peel Main Drain has been identified as a significant surface water feature passing between the site, running in a north-east to south-west direction. The *Jandakot drainage and water management plan: Peel main drain catchment* (DoW 2009), outlines specific management provisions for land development within the Peel main drain catchment area, including that which states that extensive modification of existing waterways is generally not supported. Modifications may be proposed however that ensure the ability of streamlines to safely contain flow, which include revegetation and the maintenance and upgrade of drainage infrastructure. The majority of land along the banks of the Peel main drain is proposed to be set aside as POS/Drainage, with native vegetation being planted within these areas where possible.

5.3.3 Management requirements

Management measures have been identified to assist in achieving the hydrology management objectives (Table 5.3).

Table 5.3: Management measures for hydrology

Parameter	Proposed scheme provisions / Management actions	Timing/ Responsibility
Groundwater and surface water	Development of Local Water Management Strategy as part of local structure planning to • provide a stormwater management framework to support future residential development for the proposal area • incorporate appropriate best management practices into the drainage systems	As part of local structure planning. Developed in consultation with DWER
	Development and approval of Urban Water Management Plan/s as a condition of subdivision: • water management outcomes and performance indicators • risk assessment and management measures • monitoring • contingency response and corrective action • report and review.	Prior to development commencing and as a condition of subdivision. Developed in consultation with the City of Kwinana.

5.3.4 Predicted Outcome

Considering the above, it is not expected that the proposed development of the site will result in significant direct, indirect, or cumulative impacts to hydrology within the site. Potential impacts to hydrology will be addressed at subsequent planning and development stages through preparation of a LWMS and UWMP and mitigated through the implementation of best practice urban water management.

5.4 Mosquitoes and midges

5.4.1 Potential impacts

The risk of mosquitoes breeding within the site is expected to be low because there are no permanent wetlands/water bodies on the site and future development will be designed to prevent standing water occurring for periods of greater than 96 hours. However due to the prevalence of low-lying dampland wetlands within the City of Kwinana including the Mandogalup area, and the medium risk of mosquito and midge habitat developing in low-lying areas near and within the Peel Main Drain there is a potential public health risk posed by mosquitoes and nuisance levels and impact upon amenity from midges.

5.4.2 Policy considerations

The following Department of Health (DoH) guidelines will be used to guide future management of mosquitoes and midges:

- *A guide to developing management for Local Government – Part A Template and guidance notes*
- *A guide to developing management for Local Government – Part B Case study examples*.

5.4.3 Management requirements

Management measures have been identified to assist in achieving the mosquito and midge management objectives (Table 5.4).

Table 5.4: Management measures for mosquitoes and midges

Parameter	Proposed scheme provisions / Management actions	Timing/ Responsibility
Mosquitoes and midges	Development of a Mosquito and Midge Management Plan as a condition of subdivision, which will include: • a strategy of implementation of physical controls to eliminate risk of breeding on the site at project design • determine an appropriate monitoring program and remedial actions for mosquito control in accordance with the City of Kwinana's specifications (Coordinator Environmental Health and Waste Services, 2018 pers comm) • a public education strategy to ensure that residents implement personal preventative measures that reduce the risk of being bitten.	Prior to development commencing and as a condition of subdivision. Developed in consultation with the City of Kwinana.

Additionally, there are specific requirements set out within the *Better Urban Water Management Guidelines* for managing stormwater infiltration rates to prevent mosquito breeding. These requirements will be addressed with preparation of the UWMP at subsequent stages of planning.

5.4.4 Predicted outcome

Considering the above, it is not expected that the proposed development will result in significant public health risks posed by mosquitoes and nuisance levels and impact upon amenity from midges. Implementation of the above management measures will prevent mosquitoes and midges adversely affecting the health and welfare of future residents.

5.5 Bushfire management

As a result of the bushfire prone status of the site, a Bushfire Management Plan (BMP) is required to accompany the scheme amendment application to address the following requirements of *State Planning Policy 3.7 Planning in Bushfire prone areas* (SPP 3.7), namely, Policy measure 6.3:

- a bushfire hazard level (BHL) assessment or where lot layout is known, a Bushfire Attack Level (BAL) contour assessment to determine the indicative acceptable BAL ratings across the site
- identification of any bushfire hazard issues arising from the above assessment
- assessment against the bushfire protection criteria requirements contained within the Guidelines demonstrating compliance can be achieved in subsequent planning stages.

A BMP has been prepared by Strategen-JBS&G in accordance with *Guidelines for Planning in Bushfire Prone Areas* (the Guidelines) and should be read in conjunction with this EAR.

6. Conclusion

This EAR has assessed the impacts of the proposed development against the EPA's key Environmental Factors applicable to this project and has determined that the site is relatively unconstrained and suitable for urban development based on the assessment of existing environmental conditions.

Whilst FCT 21a is a sub-community of the EPBC listed Banksia Woodlands of the Swan Coastal Plain, the proposed development is not expected to directly or indirectly impact any state listed Threatened or Priority Ecological communities, or any Threatened or Priority flora species. Furthermore, it would appear that the EPBC approval conditions set upon the site (EPBC 2014/7126), which required the acquisition of 154 ha offset site in Cullalla, is expected to have also contributed towards the overall conservation of Banksia Woodlands TEC.

As the proposed clearing of Bassendean Complex – Central and South and Herdsman Complex represents only 0.01% and 0.004% of their current extents respectively, all direct, indirect and cumulative impacts to flora and vegetation are considered minor at a local and regional scale.

All impacts to black cockatoos are expected to have been sufficiently addressed in the EPBC approval conditions set upon the site (EPBC 2014/7126). Implementation of the FMP and CEMP are expected to account for any anticipated impacts to both black cockatoos and fauna not of conservation concern.

Additional hydrological investigations will be undertaken to confirm the depth to groundwater across the site and will inform any resultant management measures, such as requirement for fill to achieve adequate separation to groundwater to allow development of the site to proceed. These hydrological investigations will also inform the preparation of the LWMS and UWMP documents for the site to support the future subdivision application.

As there is a "High to Moderate" risk of disturbing ASS material within 3 m of the soil surface, it is likely that further investigation will be required as a condition of subdivision, in the form of an ASS self-assessment, prior to the commencement of subdivisional works. In the majority of cases, ASS is a management issue and does not represent a physical constraint to development. If required, an acid sulfate soil management plan will be prepared in accordance with the relevant guidelines for management of ASS.

In relation to potential contamination, further investigations will confirm if further detailed site investigations are required to support future residential development and identify appropriate management controls are in place before subdivision commences.

The potential public health risk posed by mosquitoes and midges will be managed through the implementation of a mosquito and midge management plan, which will be prepared as a condition subdivision.

Bushfire risk will be managed through the implementation of the Bushfire Management Plan which is being prepared for the site in accordance with the requirements of State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7), namely Policy Measure 6.3.

7. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only and has been based in part on information obtained from the client and other parties.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

Strategen-JBS&G accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client or amended in any way without prior approval by Strategen-JBS&G, and should not be relied upon by other parties, who should make their own enquires.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, Strategen-JBS&G reserves the right to review the report in the context of the additional information.

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Appendix A Development Concept Plan

N

ROWLEY ROAD

ROWLEY ROAD

FRANKLAND ROAD

BARFIELD ROAD

ROAD

FREEWAY

EPA Area A

EPA Area B

EPA Area C

EPA Area D

HAMMOND ROAD

KWINANA FREEWAY

ANKETELL ROAD

LEGEND

- SUBJECT SITE
- PROPOSED DEVELOPMENT ZONE
- EXISTING URBAN (MELSP + MWLSP)
- EXISTING CADASTRE
- INDICATIVE LAYOUT
- EPA BUFFER BOUNDARY
- EPA SECTION 16e ADVICE BOUNDARY AREA A (AUGUST 2017)
- FUTURE URBAN - BALANCE OF EPA SECTION 16e ADVICE AREA A TO BE REZONED AT A LATER DATE
- MANDOGALUP IMPROVEMENT PLAN 47
- DBNGP EASEMENT
- HIGH VOLTAGE POWERLINE EASEMENT
- PEEL MAIN DRAIN
- PLANNING CONTROL AREAS
- RESIDENTIAL (R30- R60)
- PUBLIC OPEN SPACE/DRAINAGE
- PRIMARY SCHOOL
- INTERIM LOCAL CENTRE
- RAILWAY (MRS)
- OTHER REGIONAL ROADS (FUTURE HAMMOND ROAD)
- FUTURE NEIGHBOURHOOD CONNECTOR

CADASTRAL INFORMATION
SOURCE:
YYMMDD:
DWG REF:
PROJECTION:

AERIAL PHOTOGRAPHY
SOURCE:
YYMMDD:

RD great places

SIZE A3_1:1000

0 metres 10 20 30 40 50

REV	DESCRIPTION	YYMMDD	DRAWN	APPR'D
C	UPDATED LEGEND	190722	HH	AB
B	UPDATED LAYOUT	190712	HH	AB
A	BASE PLAN	190709	HH	AB

REZONING CONCEPT PLAN

Mandogalup

City of Kwinana

REF NO.	DRAW NO.	REV.
QUB MAN	**RD1 172**	**C**

DISCLAIMER: ISSUED FOR DESIGN INTENT ONLY. ALL AREAS AND DIMENSIONS ARE SUBJECT TO DETAIL DESIGN AND SURVEY

Appendix B EPBC 2014/7126

Australian Government
Department of the Environment

Approval

Residential Estate Development, Lot 682 Rowley Road, Mandogalup, Western Australia (EPBC 2014/7126)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Proposed action

person to whom the approval is granted	QUBE Mandogalup Development Pty Ltd
proponent's ACN	111 964 606
proposed action	To clear native vegetation to develop a residential estate at Lot 682 Rowley Road, Mandogalup, Western Australia [See EPBC Act referral 2014/7126].

Approval decision

Controlling Provision	Decision
Listed threatened species and communities (sections 18 & 18A)	Approved

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 31 July 2024.

Decision-maker

name and position	Dr Simon Banks Assistant Secretary West Assessment Branch
signature	Simon Banks
date of decision	04 August 2014

Conditions attached to the approval

1. The **approval holder** must not clear more than 38.7 hectares of **Carnaby's Black-Cockatoo** and **Forest Red-tailed Black-Cockatoo foraging and potential breeding habitat** within the **project area** identified as the 'Proposal Area' at Attachment A.

2. To offset the loss of **Carnaby's Black-Cockatoo** and **Forest Red-tailed Black-Cockatoo foraging habitat and potential breeding habitat**, within twelve months from the date of this approval, the **approval holder** must provide the **Department** with written evidence that funds have been provided to the **DPAW** for the acquisition and management of two environmental **offset properties** that must be:

   I. no less than 154 hectares in size, in the Shire of Gingin, Western Australia; and

   II. no less than 34 hectares in size at Lot 1143, Wye Road, Nannup, Western Australia.

   The written evidence must include a description and map clearly defining the location and boundaries of the **offset properties** and be accompanied with the **offset attributes** and a **shapefile**. The **approval holder** must also inform the **Department** how much of these **offset properties** will remain unattributed to this action for the purpose of supplying offsets for potential future project.

3. To avoid and mitigate impacts to the **Carnaby's Black-Cockatoo** and **Forest Red-tailed Black-Cockatoo**, if **clearing** is to be undertaken during the breeding season (July – November), within 7 days prior to **clearing**, the **approval holder** must investigate **potential breeding trees** within the **project area** to detect the presence of **Carnaby's Black-Cockatoos** or **Forest Red-tailed Black-Cockatoos** using hollows. The investigation must be undertaken by a **suitably qualified and experienced person**.

   If a **Carnaby's Black-Cockatoo** or a **Forest Red-tailed Black-Cockatoo** is detected using a hollow in a tree or trees, the **approval holder** must:

   1. clearly identify the tree or trees with fencing and signage;
   2. not clear the tree or trees; and
   3. undertake measures to avoid the tree or trees from being cut down, felled, removed, killed, destroyed, poisoned, ring-barked, uprooted or burned

   until the hollow/s are no longer being used by the **Carnaby's Black-Cockatoo** or a **Forest Red-tailed Black-Cockatoo** as determined by a **suitably qualified and experienced person**.

4. Within 30 days after the **commencement** of the action, the **approval holder** must advise the **Department** in writing of the actual date of **commencement**.

5. The **approval holder** must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, and make them available upon request to the **Department**. Such records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the **Department's** website. The results of audits may also be publicised through the general media.

6. Within three months of every 12 month anniversary of the **commencement** of the action, the **approval holder** must publish a report on their website addressing compliance with each of the conditions of this approval over the previous 12 months. Documentary evidence providing proof of the date of publication must be provided to the **Department** at the same time as the compliance report is published. The compliance reports must remain on the

website for 12 months from the date of publishing. Potential or actual contraventions of the conditions of the approval must be reported to the **Department** in writing within 2 business days of the **approval holder** becoming aware of the actual or potential contravention. All contraventions must also be included in the compliance reports. Unless otherwise agreed to in writing by the Minister, the **approval holder** must provide a copy of each compliance report to members of the public upon request. Copies must be provided free of charge as soon as reasonably practicable but within no longer than 7 days of the request.

7. Upon the direction of the **Minister**, the **approval holder** must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The independent auditor must be approved by the **Minister** prior to the commencement of the audit. Audit criteria must be agreed to by the **Minister** and the audit report must address the criteria to the satisfaction of the **Minister**.

8. If, at any time after five (5) years from the date of this approval, the **approval holder** has not **commenced** the action, then the **approval holder** must not **commence** the action without the written agreement of the **Minister**.

Definitions

approval holder – the person to whom the approval is granted, or to whom the approval is transferred under section 145B of the *Environment Protection and Biodiversity Conservation Act 1999.*

Carnaby's Black-Cockatoo is the black cockatoo species *Calyptorhynchus latirostris.*

clear or **clearing** - the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ring-barking, uprooting or burning of native vegetation.

commence, commenced or **commencement** - any preparatory works required to be undertaken including clearing (as defined above), the erection of any fences, signage or on-site temporary structures and the use of construction or excavation equipment on-site for the purpose of breaking the ground for buildings, infrastructure or resource extraction.

Department is the Australian Government Department administering the *Environment Protection and Biodiversity Conservation Act 1999.*

DPAW - the Western Australian Department of Parks and Wildlife or the Western Australian Government department responsible for administering the *Conservation and Land Management Act 1984.*

foraging and potential breeding habitat includes *Banksia attenuata, Banksia menziesii, Banksia illicifolia, Banksia littoralis, Xanthorrhoea preissii , Eucalyptus marginata* (Jarrah), *E. gomphocephala* (Tuart) and *Allocasuarina fraseriana* trees.

Forest Red-tailed Black-Cockatoo is the black cockatoo species *Calyptorhynchus banksii naso.*

Minister - the Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* and includes a delegate of the Minister.

Offset attributes - an excel file ('.xls') capturing relevant attributes of the offset area, including the EPBC reference ID number, the physical address of the offset site, coordinates of the boundary points in decimal degrees, the EPBC protected matters that the offset compensates for, any additional EPBC protected matters that are benefiting from the offset, and the size of the offset in hectares.

offset properties - includes an area no less than one hundred and fifty four hectares (154 ha) in size that contains excellent quality foraging habitat for the Carnaby's Black-Cockatoo, located

in the Shire of Gingin, Western Australia, and an area no less than thirty-four hectares (34 ha) in size, within Lot 1143, Wye Road, Nannup, Western Australia (identified as the 'QUBE offset' at Attachment B). These areas have been identified as environmental offset properties to be managed for conservation purposes by the **DPAW** on behalf of the **approval holder**.

potential breeding trees includes mature *Eucalyptus gomphocephala* (Tuart) and *Eucalyptus marginata* (Jarrah) trees with a hollow at least 20 cm in diameter and therefore large enough for a **Carnaby's Black-Cockatoo** or a **Forest Red-tailed Black-Cockatoo** to nest in.

project area - the area at Lot 682 Rowley Road, Mandogalup, Western Australia, identified as the 'Proposal Area' at Attachment A.

shapefile - an ESRI shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes of the offset area, including the shape, *Environment Protection and Biodiversity Conservation Act 1999* reference ID number and *Environment Protection and Biodiversity Conservation Act 1999* protected matters present at the relevant site. Attributes should also be captured in '.xls' format.

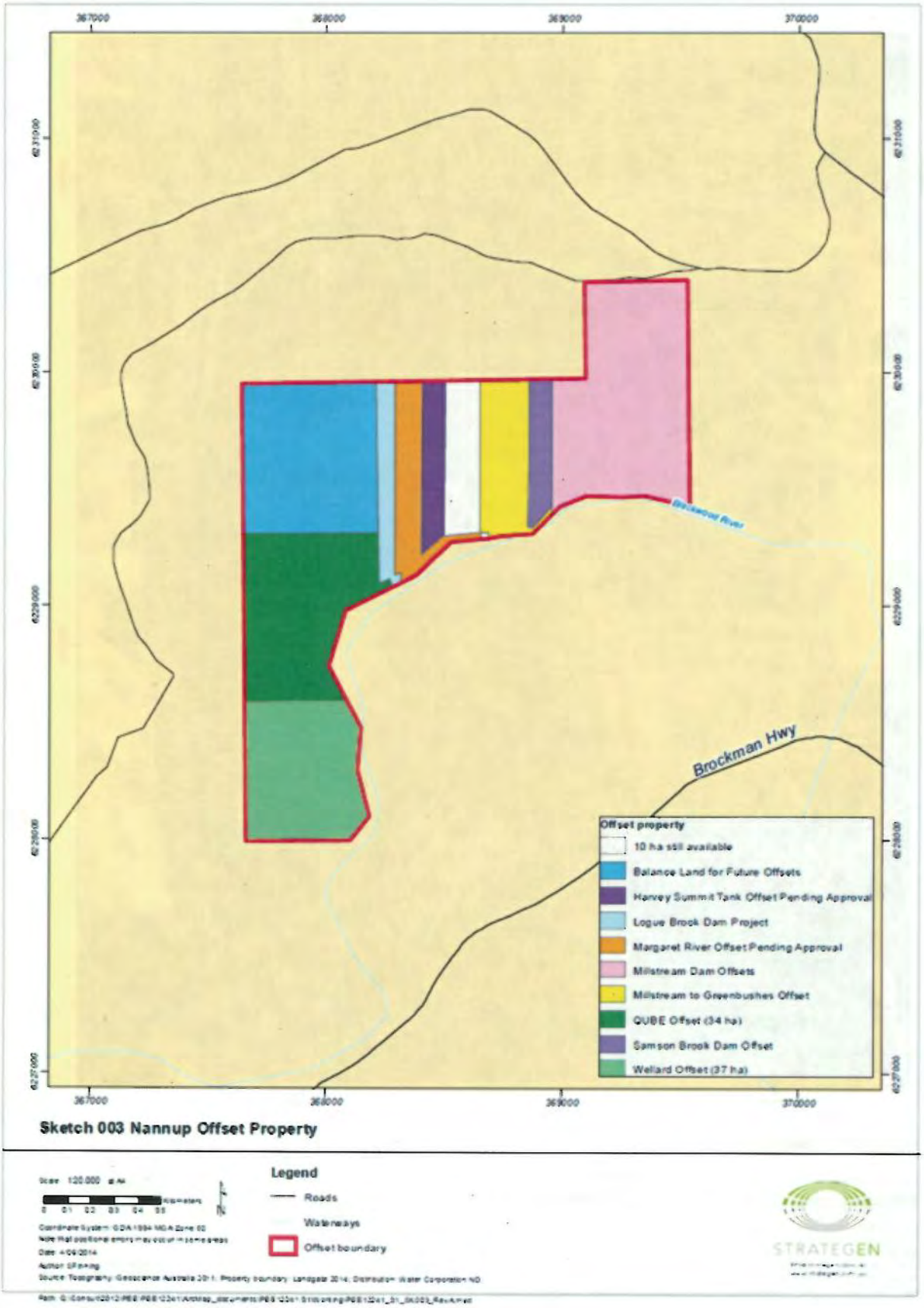
suitably qualified and experienced person - a person with relevant tertiary qualifications with experience surveying for black cockatoos.

Attachment A



Figure 2 Proposal area

Attachment B



Sketch 003 Nannup Offset Property

Appendix C Desktop assessment results (DBCA 2019; DEE 2019)

NatureMap
Mapping Western Australia's biodiversity

NatureMap Species Report

Created By Guest user on 23/07/2019

Conservation Status	Conservation Taxon (T, X, IA, S, P1-P5)
Current Names Only	Yes
Core Datasets Only	Yes
Method	'By Circle'
Centre	115° 50' 53" E,32° 11' 30" S
Buffer	3km
Group By	Kingdom

Kingdom	Species	Records
Animalia	8	108
Fungi	1	1
Plantae	5	16
TOTAL	**14**	**125**

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
Animalia					
1.	24731	*Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black Cockatoo)*		T	
2.	24734	*Calyptorhynchus latirostris (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)*		T	
3.	24092	*Dasyurus geoffroii (Chuditch, Western Quoll)*		T	
4.	48588	*Isoodon fusciventer (Quenda, southwestern brown bandicoot)*		P4	
5.	25147	*Lerista lineata (Perth Slider, Lined Skink)*		P3	
6.	24328	*Oxyura australis (Blue-billed Duck)*		P4	
7.	33992	*Synemon gratiosa (Graceful Sunmoth)*		P4	
8.	24808	*Tringa nebularia (Common Greenshank, greenshank)*		IA	
Fungi					
9.	48332	*Amanita preissii (Cinnamon-ring Lepidella)*		P3	
Plantae					
10.	1596	*Caladenia huegelii (Grand Spider Orchid)*		T	
11.	12938	*Diuris micrantha*		T	
12.	4763	*Dodonaea hackettiana (Hackett's Hopbush)*		P4	
13.	1639	*Drakaea elastica (Glossy-leaved Hammer Orchid)*		T	
14.	8163	*Pithocarpa corymbulosa (Corymbose Pithocarpa)*		P3	

Conservation Codes
T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

[1] For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

Australian Government
Department of the Environment and Energy

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

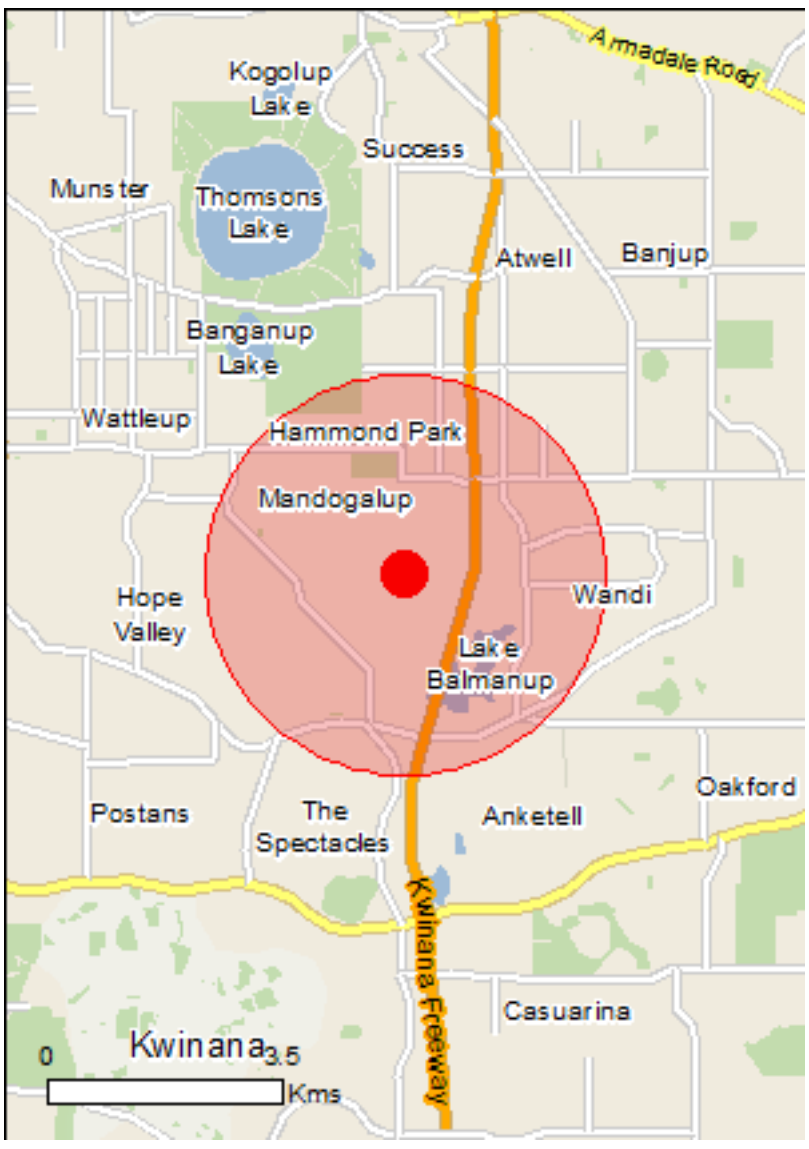
Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about Environment Assessments and the EPBC Act including significance guidelines, forms and application process details.

Report created: 23/07/19 17:55:49

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

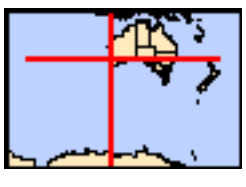
Caveat
Acknowledgements



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates

Buffer: 3.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	2
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	19
Listed Migratory Species:	10

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	16
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	3
Regional Forest Agreements:	None
Invasive Species:	36
Nationally Important Wetlands:	2
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar) [Resource Information]

Name	Proximity
Forrestdale and thomsons lakes	Within 10km of Ramsar
Peel-yalgorup system	30 - 40km upstream

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area
Calyptorhynchus baudinii Baudin's Cockatoo, Long-billed Black-Cockatoo [769]	Endangered	Species or species habitat likely to occur within area
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known to occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Mammals		
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur

Name	Status	Type of Presence
		within area
[Pseudocheirus occidentalis](#) Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area
Other		
[Westralunio carteri](#) Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat likely to occur within area
Plants		
[Andersonia gracilis](#) Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
[Caladenia huegelii](#) King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat known to occur within area
[Diuris micrantha](#) Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat known to occur within area
[Diuris purdiei](#) Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat likely to occur within area
[Drakaea elastica](#) Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat known to occur within area
[Drakaea micrantha](#) Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area
[Eleocharis keigheryi](#) Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area
[Lepidosperma rostratum](#) Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to occur within area

Listed Migratory Species [Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat likely to occur within area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
[Calidris canutus](#) Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species

Name	Threatened	Type of Presence
		habitat known to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species

Name	Threatened	Type of Presence
		habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Harry Waring Marsupial Reserve	WA
Unnamed WA48291	WA
Wandi	WA

Invasive Species	[Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur

Name	Status	Type of Presence
		within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Squirrel [129]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species

Name	Status	Type of Presence
		habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area

Nationally Important Wetlands	[Resource Information]
Name	State
Gibbs Road Swamp System	WA
Spectacles Swamp	WA

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-32.1916 115.84792

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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Appendix D Flora and vegetation survey – Lifting of Urban Deferred Zoning, Mandogalup (Strategen 2018)



intelligent outcomes | respected experience

Lifting of Urban Deferred Zoning - Mandogalup

Flora and Vegetation Survey

FINAL

Prepared for
Satterley Property Group and Qube Property Group
by Strategen

September 2018

strategen
ENVIRONMENTAL

Lifting of Urban Deferred Zoning - Mandogalup

Flora and Vegetation Survey

FINAL

Strategen is a trading name of
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September 2018

Limitations

Scope of services

This report ("the report") has been prepared by Strategen Environmental Consultants Pty Ltd (Strategen) in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

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Environmental conclusions

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

Client: Satterley Property Group and Qube Property Group

Report Version	Revision No.	Purpose	Strategen author/reviewer	Submitted to Client	
				Form	Date
Draft Report	A	Client review	T Sleigh / D Newsome	Electronic	18/09/2018
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Appendix 4 Raw Quadrat Data
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1. Introduction

This report presents the findings of a detailed flora and vegetation survey undertaken for Satterley Property Group and Qube Property Group.

1.1 Background

Satterley Property Group and Qube Property Group are proposing to lodge a request to lift the balance of the Urban Deferred zoning at Mandogalup (Figure 1).

Vegetation and flora surveys and Targeted Priority and Threatened Flora survey have previously been completed by Carndo (2005) and Plantecology Consulting Conservation Act 1999 (EPBC) referral and subsequent approval (EPBC 2014/7126). This information was also submitted to the Environmental Protection Authority (EPA) as part of a lifting of urban deferment request. The EPA requested that a detailed Spring flora and vegetation survey be undertaken to determine the environmental values of remnant native vegetation within the project area.

1.2 Scope

The scope of this flora and vegetation survey was to undertake a desktop assessment and field assessment within the survey area (Figure 1).

The objectives were to:

- conduct a desktop survey for Threatened and Priority flora which have been identified as being present in or around the survey area
- collect and identify the vascular plant species present within the survey area
- search areas of suitable habitat for Threatened and/or Priority flora
- define and map the native vegetation communities present within the survey area
- map vegetation condition within the survey area
- provide recommendations on the local and regional significance of the vegetation communities
- prepare a report summarising the findings.



Figure 1: The survey area

Legend

Survey area

Cadastral boundary

N

Scale 1:7,500 at A4

0 100 200 m

Coordinate System: GDA 1994 MGA Zone 50

Date: 18/09/2018

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Data source: Nearmap: Aerial image, flown 06/2018. Landgate: Cadastre, 11/2017. Client: Satterly Property Group and Qube Property Group. Development layout, 08/2018. Created by: c.thatcher

2. Context

2.1 Legislative context

Flora and fauna in WA is protected formally and informally by various legislative and non-legislative measures, which are as follows:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) – Australian Government
- *Wildlife Conservation Act 1950* (WC Act) – State
- *Environmental Protection Act 1986* (EP Act) – State
- *Biosecurity and Agriculture Management Act 2007* (BAM Act) – State.

Non-legislative measures:

- WA Department of Biodiversity, Conservation and Attractions (DBCA) Priority lists for flora, ecological communities and fauna
- Weeds of National Significance
- Recognition of locally significant populations by the DBCA.

A short description of each is given below. Other definitions, including species conservation categories, are provided in Appendix 1.

2.1.1 EPBC Act

The EPBC Act aims to protect matters of national environmental significance, which are detailed in Appendix 1. Under the EPBC Act, the Commonwealth Department of the Environment and Energy (DEE) lists protected species and Threatened Ecological Communities (TECs) by criteria set out in the Act. Species are conservation significant if they are listed as Threatened (i.e. Critically Endangered, Endangered and Vulnerable) or Migratory.

2.1.2 WC Act

DBCA lists taxa (flora and fauna) under the provisions of the WC Act as protected and are classified as Schedule 1 to Schedule 7 according to their need for protection (see Appendix 1). The WC Act makes it an offence to 'take' threatened species without an appropriate licence. There are financial penalties for contravening the WC Act.

2.1.3 EP Act

Threatened flora, fauna (and significant habitat necessary for the maintenance of indigenous fauna) and (TECs are given special consideration in environmental impact assessments and have special status as Environmentally Sensitive Areas (ESAs) under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*. Exemptions for a clearing permit do not apply in an ESA.

2.1.4 BAM Act

The BAM Act provides for management and control of listed organisms, including introduced flora species (weeds). Species listed as declared pests under the BAM Act are classified under three categories:

- C1 Exclusion: Pests assigned under this category are not established in Western Australia, and control measures are to be taken to prevent them entering and establishing in the State.
- C2 Eradication: Pests assigned under this category are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.

- C3 Management: Pests assigned under this category are established in Western Australia, but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area that is currently free of that pest.

Under the BAM Act, land managers are required to manage populations of declared pests as outlined under the relevant category.

2.2 Environmental setting

2.2.1 Soils and topography

The survey area is located within the Swan Coastal Plain 2 (SWA2 – Swan Coastal Plain subregion) of Western Australia (Mitchell et al. 2002). The Swan Coastal Plain comprises five major geomorphologic systems that lie parallel to the coast, namely (from west to east) the Quindalup Dunes, Spearwood Dunes, Bassendean Dunes, Pinjarra Plain and Ridge Hill Shelf (Churchward & McArthur 1980; Gibson *et al.* 1994). Each major system is composed of further subdivisions in the form of detailed geomorphologic units (Churchward & McArthur 1980; Semeniuk 1990; Gibson *et al.*1994). Beard (1990) describes the Swan Coastal Plain as a low-lying coastal plain, often swampy, with sandhills also containing dissected country rising to the duricrusted Dandaragan plateau on Mesozoic, mainly sandy, yellow soils.

Specifically, the survey area is located on Aeolian Deposits, on Bassendean dunes and can be described as sandy plains with low dunes and occasional swamps (Churchward & McArthur 1980).

2.2.2 Climate

The Mandogalup locality experiences a Mediterranean climate characterised by mild, wet winters and warm to hot, dry summers. The nearest Bureau of Meteorology (BoM) weather station at Medina Research Centre (Station No. 009194) provides average monthly climate statistics for the Mandogalup locality (Figure 2). Average annual rainfall recorded at Medina Research Centre since 1983 is 745.5 mm (BoM 2018). Rainfall may occur at any time of year; however, most occurs in winter in association with cold fronts from the southwest. Highest temperatures occur between January and February, with average monthly maximums ranging from 18°C in July to 31.5°C in February (BoM 2018). Lowest temperatures occur in July and August, with average monthly minimums ranging from 8.2°C in July and August to 17.6°C in February (BoM 2018).

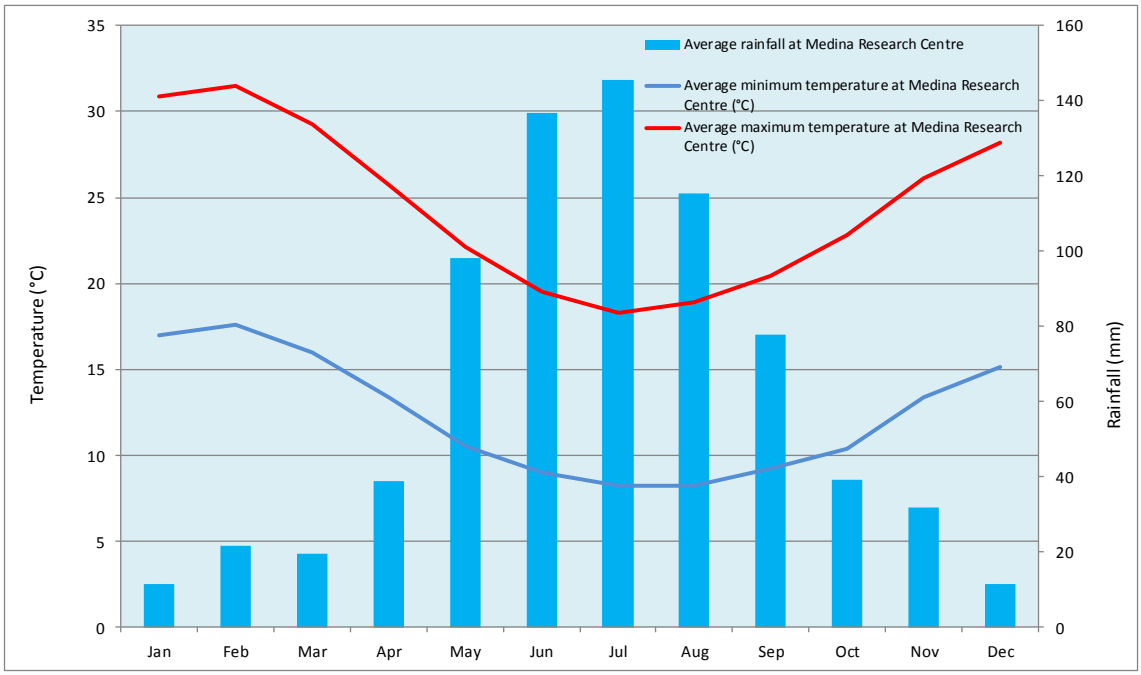

Figure 2: Mean monthly climatic data (temperature and rainfall) for Medina Research Centre

2.2.3 Hydrology

Mapping of the geomorphic wetlands of the Swan Coastal Plain (Figure 3) identifies Mandogalup Swamp South (UFI 6530) occurring within the survey area. This Multiple Use Category wetland is classified as a Dampland. No other wetlands are mapped within the survey area.

The nearest Conservation Category Wetland (CCW) (UFI 12981) is mapped 30 m East of the southern extent of the Project area, separated by the Kwinana Freeway (Figure 3).

2.2.4 Conservation areas

There are no conservation areas located within the survey area. The nearest Bush Forever site, Mandogalup Road Bushland (site no. 268), is located 350 m west of the survey area. The nearest DBCA managed land is located 2 km north of the project area (Figure 3)

2.2.5 Land use

The primary land uses within the Swan Coastal Plain 2 subregion are agriculture, conservation, Unallocated Crown Land and Crown Reserves, urban, rural residential, forestry and infrastructure. Historically, the project area has been utilised for agriculture.

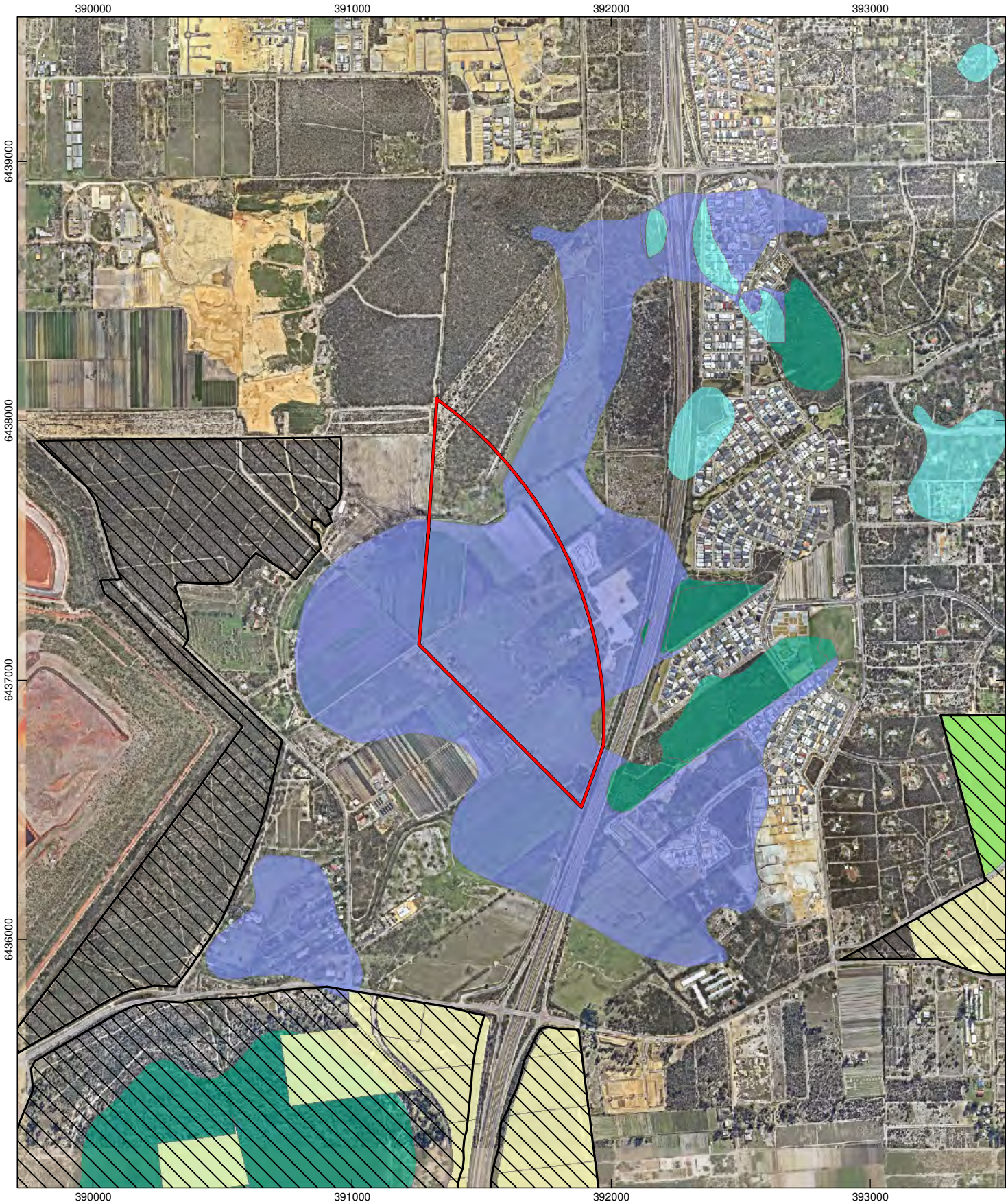

Figure 3: Wetlands and other conservation areas

N

Scale 1:20,000 at A4

0 250 500 m

Coordinate System: GDA 1994 MGA Zone 50

Date: 18/09/2018

Legend

Geomorphic wetlands
- Conservation
- Multiple Use
- Resource Enhancement

Bush Forever areas

Legislated lands and waters (DBCA)
- Crown Freehold - Dept Managed
- Nature Reserve

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2.2.6 Regional vegetation

Beard (1990) Botanical Subdistrict

The survey area occurs within the Drummond Botanical Subdistrict which is characterised by low *Banksia* woodlands on leached sands; *Melaleuca* swamps on poorly-drained depressions; and *Eucalyptus gomphocephala* (Tuart), *Eucalyptus marginata* (Jarrah) and *Corymbia calophylla* (Marri) woodlands on less leached soils (Beard 1990).

IBRA subregion

IBRA describes a system of 85 'biogeographic regions' (bioregions) and 403 subregions covering the entirety of the Australian continent (Thackway & Cresswell 1995). Bioregions are defined on the basis of climate, geology, landforms, vegetation and fauna.

The survey area occurs within the Swan Coastal Plain 2 IBRA subregion which is dominated by *Banksia* or Tuart on sandy soils, *Casuarina obesa* on outwash plains and paperbark (*Melaleuca*) in swampy areas (Mitchell et al. 2002).

Vegetation system association and System 6 mapping

Vegetation occurring within the region was initially mapped at a broad scale (1: 1 000 000) by Beard during the 1970s. This dataset formed the basis of several regional mapping systems, including the biogeographical region dataset (Interim Biogeographic Regionalisation for Australia) for Western Australia (DEE 2018a), physiographic regions defined by Beard (1981), and System 6 Vegetation Complex mapping undertaken by Heddle et al. (1980).

The project area comprises one Beard (1981) vegetation association (Table 1).

Table 1: Beard (1981) vegetation associations within the project area

Vegetation System Association	Description	Percent remaining in IBRA Region
Bassendean 1001	Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina	21.46

Based on regional vegetation complex mapping (Heddle et al. 1980) the project area comprises two vegetation complexes, (Table 2, Figure 4). One complex, Bassendean Complex-Central and South, has less than 30% of the original extent remaining in the IBRA bioregion (GoWA 2018b).

Table 2: Heddle et al. (1980) vegetation complexes within the project area

Vegetation Complex	Description	Percent remaining in IBRA Region
Bassendean Complex-Central and South	Vegetation ranges from woodland of *Eucalyptus marginata* (Jarrah) - *Allocasuarina fraseriana* (Sheoak) - *Banksia* species to low woodland of *Melaleuca* species, and sedgelands on the moister sites. This area includes the transition of *Eucalyptus marginata* (Jarrah) to *Eucalyptus todtiana* (Pricklybark) in the vicinity of Perth.	26.90
Herdsman Complex	Sedgelands and fringing woodland of *Eucalyptus rudis* (Flooded Gum) - *Melaleuca* species.	31.88

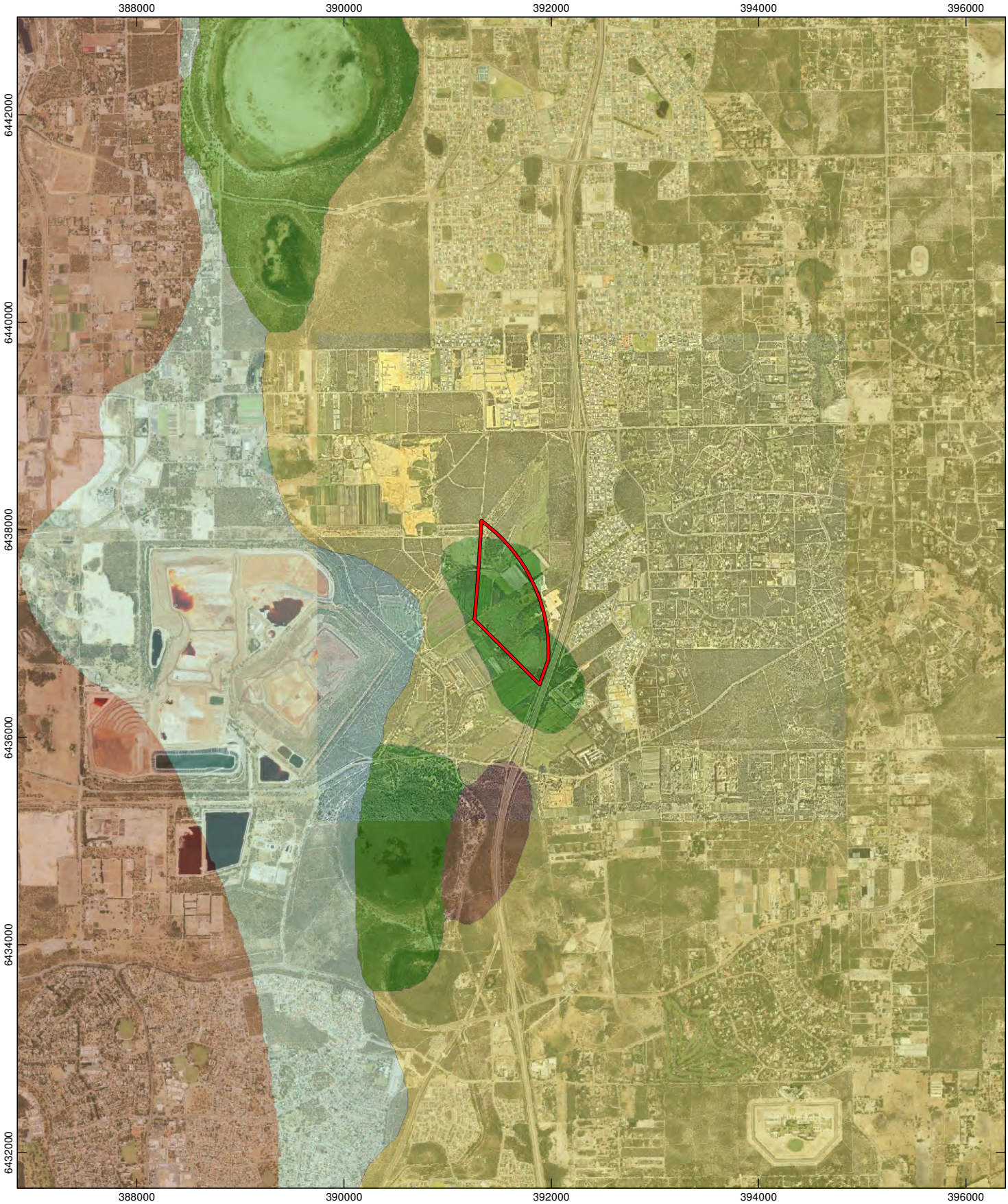

Figure 4: Regional vegetation mapping

N

Scale 1:50,000 at A4

0 500 1,000 m

Coordinate System: GDA 1994 MGA Zone 50

Date: 18/09/2018

Legend

- Survey area

System 6 vegetation

- Bassendean complex - central and south
- Cottesloe complex - central and south
- Herdsman Complex
- Karrakatta complex - central and south

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3. Methods

3.1 Desktop assessment

Database searches were undertaken to generate a list of vascular flora previously recorded within, and nearby the project – with an emphasis on species of conservation significance and introduced species (Table 3). Five database searches were conducted around a central coordinate (50H, 391492 mE, 6437915 mN). Search buffers differed due to the technical capabilities of individual databases as well as ecological features surrounding the project area relevant to different species groups.

Table 3: Database searches conducted for the desktop assessment

Custodian	Database	Taxonomic group	Reference	Buffer (km)
DEE	Protected Matters	Flora, Vegetation	DEE 2018b	5
DBCA	NatureMap	Flora	DBCA 2018b	5
DBCA	Threatened and Priority Ecological Communities	Flora, Vegetation	DBCA 2018c	5
DBCA	Threatened and Priority Flora	Flora	DBCA 2018d	5

Reports that document regional flora and vegetation within the surrounds of the project area were also reviewed prior to the field assessment.

3.2 Field assessment

The field survey was conducted by one Senior Ecologist from Strategen on 3 September 2018 with appropriate qualifications (Table 4). All plants collected were taken under flora collecting permits listed in Table 4, pursuant to WC Act Section 23C and Section 23F

Table 4: Personnel

Name	Role	Flora collection permit
Tristan Sleigh (Lead Ecologist)	Planning, fieldwork, plant identification, data interpretation and report preparation	SL012431

Quadrats were sampled to characterise vegetation types and condition, and ensure appropriate representation of the flora and vegetation present. Indicative site locations were identified prior to commencement of the field survey using aerial photography, topographic maps and existing vegetation maps, to ensure that all broad vegetation types and landforms within the project area would be sampled. A total of eight quadrats were surveyed within the project area.

At each quadrat the following information was recorded:

- GPS co-ordinates (recorded in GDA94 UTM 50H);
- photograph of the vegetation;
- vegetation condition
- brief vegetation description;
- vascular flora taxa present (with average height and total percentage foliage cover of each taxon);
- topography (landform type and aspect)
- soil type and colour
- geology (type, size and cover of any rocks, stones, gravel or outcropping)
- average percentage cover of leaf litter and bare ground; and
- disturbance details including fire history (time since last fire), and physical disturbance including evidence of erosion, grazing and weed invasion.

Any flora taxa observed opportunistically around quadrats or while traversing on foot within the project area were also recorded. For any populations of taxa known to be conservation significant or introduced flora observed, a GPS location and a count of the individuals present, or percentage foliar cover for a given area, were recorded.

Prior to the survey, a list of conservation significant flora with the potential to occur within the project area was compiled. Field personnel familiarised themselves with photographs, reference samples and descriptions of these taxa before conducting the survey and once on the ground actively searched for them around quadrats, while traversing on foot within the project and in known locations or preferred habitat encountered in the field.

All plant specimens collected during the field surveys were identified using appropriate reference material or through comparisons with pressed specimens housed at the Western Australian Herbarium where necessary. Nomenclature of the species recorded is in accordance with Western Australian Herbarium (1998-).

Vegetation condition was recorded at all quadrats, and opportunistically within the project area during the field assessment where required. Vegetation condition was described using the vegetation condition scale for the South West Botanical Province (Keighery 1994; Table 5). Vegetation condition polygon boundaries were developed using this information in conjunction with aerial photography interpretation, and were digitised as for vegetation type mapping polygon boundaries.

Table 5: Vegetation condition scale (Keighery 1994)

Condition rating	Description
Pristine (1)	Pristine or nearly so, no obvious sign of disturbance.
Excellent (2)	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good (3)	Vegetation structure altered obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good (4)	Vegetation structure significantly altered by obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback, grazing.
Degraded (5)	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded (6)	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Vegetation types were delineated using a combination of results site observations and cluster analysis. Aerial photography interpretation and field notes taken during the survey were then used to develop VT mapping polygon boundaries over the project area. These polygon boundaries were then digitised using Geographic Information System (GIS) software.

VT descriptions (though floristic in origin) have been adapted from the National Vegetation Information System (NVIS) Australian Vegetation Attribute Manual Version 6.0 (ESCAVI 2003), a system of describing structural vegetation units (based on dominant taxa). This model follows nationally-agreed guidelines to describe and represent vegetation types, so that comparable and consistent data is produced nation-wide. For the purposes of this report, a VT is considered equivalent to a NVIS sub-association as described in ESCAVI (2003).

To identify possible TECs and PECs in the project area, vegetation quadrats (and subsequently, Vegetation Types) were compared to Floristic Community Types (FCTs) defined by Gibson et al. (1994). An association matrix was prepared using the Bray-Curtis coefficient, resulting in pairwise coefficients of similarities between quadrats (both recorded during the survey and from the SCP dataset). Agglomerative hierarchical clustering, using flexible UPGMA (β=-0.1) was used to generate quadrat classification dendrograms for each quadrat within the project area.

The broad nature of FCTs lead many vegetation types to comprise admixtures and transition zones between FCTs. In addition, the project area was mapped based on extrapolated quadrat data from a single flora assessment, rather than accumulated species data over successive seasons within known vegetation community types as per Gibson et al. (1994). Consequently, assigned FCTs within the project area are inferred and not absolute; i.e. a vegetation code assigned to an FCT is inferred to resemble floristic aspects of that FCT as defined by Gibson et al. (1994).

3.3 Survey limitations and constraints

There are possible limitations and constraints that can impinge on the adequacy of vegetation and flora surveys. The flora and vegetation assessment has been evaluated against a range of potential limitations (Table 6). Based on this evaluation, the assessment has not been subject to limitations or constraints that have affected the thoroughness of the assessment and the conclusions reached.

Table 6: Flora and vegetation survey potential limitations and constraints

Potential limitation	Impact on assessment	Comment
Sources of information and availability of contextual information (i.e. pre-existing background versus new material).	**Not a constraint.**	The survey has been undertaken in the Drummond Botanical Subdistrict on the Swan Coastal Plain which has been well studied and documented with ample literature available (Beard 1990).
Scope (i.e. what life forms, etc., were sampled).	**Not a constraint.**	Number of species recorded, number of quadrats sampled and timing of the survey (i.e. spring) were adequate for this level of survey.
Proportion of flora collected and identified (based on sampling, timing and intensity).	**Not a constraint.**	The proportion of flora surveyed was adequate. All areas of remnant vegetation within the survey area were traversed and flora species were recorded systematically.
Completeness and further work which might be needed (i.e. was the relevant project area fully surveyed).	**Not a constraint.**	The information collected during the survey was sufficient to assess the vegetation that was present during the time of the survey.
Mapping reliability.	**Not a constraint.**	Aerial photography of a suitable scale was used to map the project area. Sites were chosen from these aerials to reflect changes in community structure. Vegetation types were assigned to each site based on topography, soil type and presence/absence and percent foliage cover of vegetation.
Timing, weather, season, cycle.	**Not a constraint.**	Flora and vegetation surveys are normally conducted following winter rainfall in the South-West Province, ideally during spring (EPA 2016). The field assessment was conducted in September (i.e. spring) in fine weather conditions and therefore these factors are not deemed to be constraints for the spring survey.
Disturbances (fire flood, accidental human intervention, etc.).	**Not a constraint.**	The project area and regional surrounds have been subject to disturbance over a significant period of time. Given the wide range of this disturbance, this is not considered to be a limitation within the project area.
Intensity (in retrospect, was the intensity adequate).	**Not a constraint.**	The project area was traversed on foot and all differences in vegetation structure were recorded appropriately.
Resources (i.e. were there adequate resources to complete the survey to the required standard).	**Not a constraint.**	The available resources were adequate to complete the survey.

Potential limitation	Impact on assessment	Comment
Access problems (i.e. ability to access project area).	**Not a constraint.**	The project area was easily traversed on foot enabling adequate access to survey the vegetation within the project area.
Experience levels (e.g. degree of expertise in species identification to taxon level).	**Not a constraint.**	All survey personnel have the appropriate training in sampling and identifying the flora of the region.

4. Results

4.1 Desktop assessment

Threatened and Priority flora

A total of eight flora taxa of conservation significance were identified by the database searches (Table 7; Appendix 2). Of these, four species listed as Threatened under the Wildlife Conservation Act 1950 (WC Act), or the EPBC Act (see Appendix 1 for information on the conservation codes) were identified. The remaining four flora taxa identified are priority listed flora species (Table 7).

The potential for these plants to occur within the project area was assessed based on general habitat requirements and distribution (Table 7). Three Threatened, and one Priority flora species were considered to have the potential to occur within the project area:

- *Caladenia huegelii* (T)
- *Dodonaea hackettiana* (P4)
- *Drakaea elastica* (T)
- *Drakaea micrantha* (T).

Table 7: Threatened and Priority flora potentially occurring within the survey area

Species	Conservation status		Description	Potential to occur
	EPBC Act	WC Act		
Caladenia huegelii	Threatened – Endangered	Threatened	A slender orchid from 30 to 50 cm tall. One or two striking flowers characterised by a greenish-cream lower petal with a maroon tip. Other petals are cream with red or pink suffusions. Habitat for this species occurs within well-drained, deep sandy soils in low mixed *Banksia*, *Allocasuarina* and Jarrah woodlands (Western Australian Herbarium 1998-, DEE 2017b).	**Possible** due to presence of preferred habitat.
Diuris micrantha	Threatened – Vulnerable	Threatened	A slender orchid to 60 cm tall. Yellow flowers with reddish-brown markings measuring 1.3 cm across. Habitat for this species occurs within clay-loam substrates in winter-wet depressions or swamps.	**Unlikely** due to absence of preferred habitat.
Diuris purdiei	Threatened – Endangered	Threatened	A slender orchid to 0.35 m tall. Flowers are yellow and visible from September to October. Habitat for this species is grey-black sand substrates in winter-wet swamps which have high moisture (Western Australian Herbarium 1998-). Diuris purdiei occurs from Perth south to near the Whicher Range, within the Swan (Western Australia) Natural Resource Management Region. It grows on sand to sandy clay soils, in areas subject to winter inundation, and amongst native sedges and dense heath with scattered emergent *Melaleuca preissiana*, *Corymbia calophylla*, *E. marginata* and *Nuytsia floribunda* (DEE 2017b).	**Unlikely** due to absence of preferred habitat.
Dodonaea hackettiana	-	P4	An erect shrub or tree, 100 to 500 cm tall. Flowers are yellow to green/red and occur mainly from July to October. Habitat for this species occurs in sand and outcropping limestone (Western Australian Herbarium 1998-).	**Possible** due to presence of preferred habitat.
Drakaea elastica	Threatened – Endangered	Threatened	A slender orchid to 30 cm tall with a prostrate, round to heart shaped leaf. Singular, bright green, glossy flower. The species grows on bare patches of sand within otherwise dense vegetation in low-lying areas alongside winter-wet swamps, typically in banksia (*Banksia menziesii*, *B. attenuata* and *B. ilicifolia*) woodland or spearwood (*Kunzea glabrescens*) thicket vegetation. *D. elastica* often occurs with other orchid species (DEE 2017b).	**Possible** due to presence of marginal habitat (Banksia woodland).
Drakaea micrantha	Threatened – Vulnerable	Threatened	A tuberous, terrestrial herb which has a diminutive red and yellow flower, 1.2–2.5 cm long, on a stem that grows to 30 cm. Flowering occurs form September to October. Its heart-shaped leaf, about 1.5 cm long, is silvery grey with prominent green veins. Habitat for this species occurs within cleared firebreaks or open sandy patches that have been disturbed, where competition from other plants has been removed (Western Australian Herbarium 1998-, DEE 2017b).	**Possible** due to presence of preferred habitat.

Species	Conservation status		Description	Potential to occur
	EPBC Act	WC Act		
Eleocharis keigheryi	Threatened – Vulnerable	Threatened	A rhizomatous, tufted/clumped perennial herb, reaching a maximum diameter of 40 cm. It has erect, smooth, green stems that are 20–40 cm tall and hollow, supporting cross bars that are 2 mm in diameter. This species grows in small clumps in a substrate of clay or sandy loam. This species is emergent in freshwater creeks, and transient waterbodies such as drainage lines and claypans in water to approximately 15 cm deep. Fringing woodland species and associated species include Swamp Sheoak (*Casuarina obesa*), Flooded Gum (*Eucalyptus rudis*), Red Robin Bush (*Melaleuca lateritia*), Swamp Paperbark (*M. rhaphiophylla*), Common Spike-sedge (*Eleocharis acuta*), *Aponogeton hexatepalus*, Veined Swamp Wallaby Grass (*Amphibromus nervosus*) and herbs such as *Wurmbea*, *Tribonanthes* and *Leptocarpus* spp. (Western Australian Herbarium 1998-, DEE 2017b).	**Unlikely** due to absence of preferred habitat and associated species.
Lepidosperma rostratum	Threatened – Endangered	-	A rhizomatous sedge to 30 cm in diameter. Stems are circular in cross section and flowers are spike-like and up to 4 cm long. Habitat for this species occurs in sandy soils among low heath comprised of *Banksia telmatiaea* and *Calothamnus hirsutus* in winter-wet swamps (Western Australian Herbarium 1998-, DEE 2017b).	**Unlikely** due to absence of preferred habitat and associated species.
Pimelea calcicola	-	P3	An erect to spreading shrub to 1 m tall. Flowers are pink and visible between September to November. Habitat for this species occurs in sand on coastal limestone ridges (Western Australian Herbarium 1998-).	**Unlikely** due to absence of preferred habitat.
Stylidium paludicola	-	P3	Reed-like perennial, herb, 35 to 100 cm tall. Leaves are tufted, linear or subulate or narrowly oblanceolate. Flowers are pink and occur in October to December. Habitat for this species occurs in peaty sand over clay and winter wet areas, often in Marri and Melaleuca woodland or Melaleuca shrubland (Western Australian Herbarium 1998-).	**Unlikely** due to absence of preferred habitat and associated species.

Threatened and Priority Ecological Communities

The Parks and Wildlife Threatened and Priority Ecological Community Database search (DBCA 2018c) identified one TEC within the project area. In addition, one TEC, and three PECs were identified within the 5 km of the project area (Table 8, Figure 5).

Table 8: TECs and PECs identified within and near the project area

Community	Conservation Status		Description
	EPBC Act	WC Act	
Banksia woodlands of the Swan Coastal Plain	Endangered	Various listings; encompasses multiple state-listed TECs and PECs	Banksia dominated woodlands of the Swan Coastal Plain Bioregion
Limestone ridges (SCP 26a)	NA	Endangered	*Melaleuca huegelii - Melaleuca systena* shrublands on limestone ridges
SCP21c	NA	Priority 3	Low lying *Banksia attenuata* woodlands or shrublands
SCP22	NA	Priority 3	*Banksia ilicifolia* woodlands
SCP24	NA	Priority 3	Northern Spearwood shrublands and woodlands

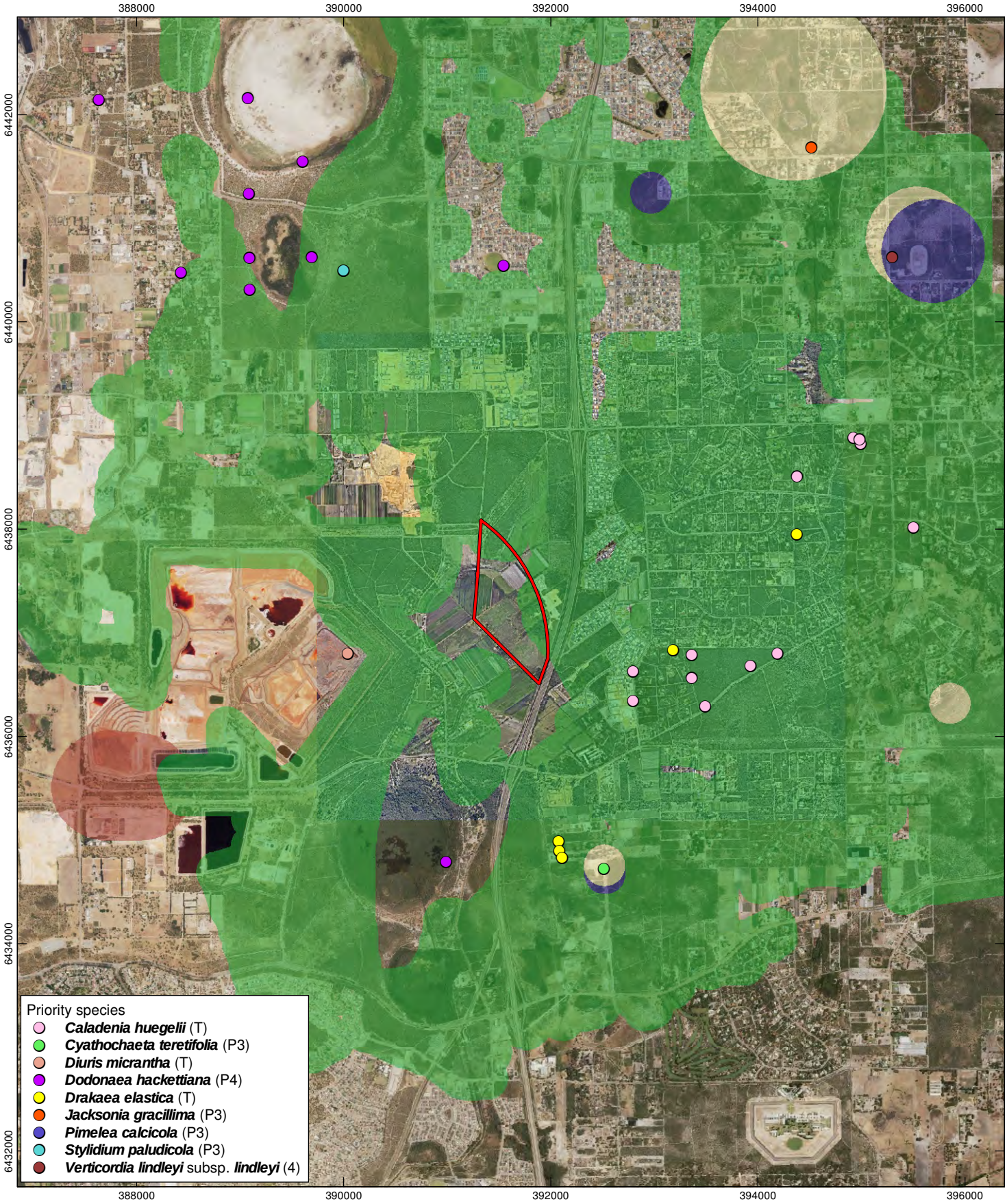

Figure 5: Location of TECs and PECs within 5 km of the survey area

N

Scale 1:50,000 at A4

0 500 1,000 m

Coordinate System: GDA 1994 MGA Zone 50

Date: 18/09/2018

Legend

TEC PEC areas

- Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region
- Banksia ilicifolia woodlands
- Low lying Banksia attenuata woodlands or shrublands
- Melaleuca huegelii - Melaleuca acerosa (currently M. systena) shrublands on limestone ridges (Gibson et al. 1994 type 26a)
- Northern Spearwood shrublands and woodlands

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4.2 Field survey

A total of nine quadrats sites were sampled across the project area. Raw quadrat data is provided in Appendix 4.

4.2.1 Native flora

A total of 40 native vascular plant taxa from 36 plant genera and 20 plant families were recorded from quadrats within the survey area. The majority of taxa were recorded within the Fabaceae (seven taxa) and Myrtaceae (four taxa) families (Appendix 3). The relatively low number of plant genera recorded reflects the disturbed nature of the survey area.

4.2.2 Conservation significant flora

No Threatened flora species as listed under section 178 of the EPBC Act or pursuant to Schedule 1 of the WC Act and as listed by Parks and Wildlife (2015) were recorded within the survey area. No Priority flora species as listed by Western Australian Herbarium (1998-) were recorded within the survey area.

4.2.3 Introduced (exotic) taxa

A total of 18 introduced (exotic) taxa were recorded within the survey area (Appendix 3):

- **Arctotheca calendula*
- **Briza maxima*
- **Carpobrotus edulis*
- **Carthamus lanatus*
- **Conyza bonariensis*
- **Crassula glomerata*
- **Ehrharta longiflora*
- **Euphorbia terracina*
- **Gladiolus caryophyllaceus*
- **Hypochaeris glabra*
- **Lysimachia arvensis*
- **Oxalis pes-caprae*
- **Phytolacca octandra*
- **Poaceae sp.*
- **Romulea rosea* var. *australis*
- **Solanum nigrum*
- **Ursinia anthemoides*
- **Zantedeschia aethiopica*

One of these species (**Zantedeschia aethiopica*) is a Declared Plant species in Western Australia pursuant to section 22 of the *Biosecurity and Agriculture Management Act 2007* (BAM Act) according to the Western Australian Department of Agriculture and Food (DPIRD 2018). Table 9 display the species recorded and their locations within the survey area.

Table 9: Locations of Declared Plant species pursuant to section 22 of the BAM Act recorded within the survey area

Species	GPS location (GDA 94)	
	Easting	Northing
**Zantedeschia aethiopica*	391937	6436968
**Zantedeschia aethiopica*	391942	6436988
**Zantedeschia aethiopica*	391902	6436976
**Zantedeschia aethiopica*	391844	6437027
**Zantedeschia aethiopica*	391876	6437075
**Zantedeschia aethiopica*	391904	6437107

4.2.4 Survey adequacy

A total of nine quadrats were sampled across the project area, with approximately 0.14 sites completed per hectare (0.8 sites per ha in vegetated areas). This was considered adequate for ensuring that at least three flora sites were sampled in all vegetation types large enough and for ensuring that coverage across the site was sufficient.

4.2.5 Vegetation types

Three native vegetation types (VTs) were defined and mapped within the survey area (Figure 6) and are summarised in Table 10. Areas containing vegetation in parkland cleared or highly degraded state have not been counted as unique native VTs but have been included in Table 10 for area calculation purposes. The total area mapped within the survey area was 65.5 ha which includes parkland cleared and fully cleared areas. The dominant native VT within the survey area was VT 1 which can be broadly described as a *Eucalyptus rudis* and *Melaleuca rhaphiophylla* woodland.

Table 10: Vegetation Types

Vegetation Type	Description	Area (ha) within project/survey area	% of survey area	Representative photograph
VT1	*Eucalyptus rudis* and *Melaleuca rhaphiophylla* woodland over *Pteridium esculentum*, **Zantedeschia aethiopica*, **Phytolacca octandra* and **Gomphocarpus fruticosus* low shrubland over introduced grasses and herbs including **Ehrharta calycina*, **Cynodon dactylon* and **Cirsium vulgare*. This VT aligns with the Herdsman Complex.	4.0	6.1	
VT2	*Eucalyptus rudis* and open woodland over *Pteridium esculentum* shrubland over introduced grasses including **Ehrharta calycina and *Avena barbata.* This VT aligns with the Herdsman Complex.	1.5	2.3	

Vegetation Type	Description	Area (ha) within project/survey area	% of survey area	Representative photograph
VT3	*Eucalyptus marginata*, *Banksia attenuata* and *Banksia menziesii* mid to low woodland of over *Xanthorrhoea preissii*, *Acacia pulchella* and *Stirlingia latifolia* mid shrubland over *Hibbertia hypericoides*, *Hypocalymma robustum* and *Tetraria capillaris* low shrubland. This VT aligns with the Bassendean Complex-Central and South.	3.5	5.3	
PC	Parkland cleared areas consisting of *Eucalyptus marginata*, *Banksia attenuata* and *Banksia menziesii* open woodland over **Eragrostis curvula* and **Ehrharta calycina*	2.1	3.3	N/A
C	Historically cleared area containing introduces grasses including **Eragrostis curvul*a and **Ehrharta calycina*	54.3	82.9	N/A
Total		**65.5**	**100**	



Figure 6: Vegetation types

Legend

Survey area

Vegetation type
- Cleared
- PC
- VT1
- VT2
- VT3

N

Scale 1:7,500 at A4

0 100 200 m

Coordinate System: GDA 1994 MGA Zone 50

Date: 18/09/2018

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Vegetation condition

The survey area shows signs of having been degraded for a long period of time. The majority of the survey area has been cleared for agricultural use, with remanet vegetation subject to grazing, weeds and partial clearing as a result. As such, vegetation condition within the survey area ranged from Good to Completely Degraded (Keighery 1994; Figure 7).

Table 11 gives a numerical breakdown of the area occupied by each vegetation condition rating within the survey area.

Table 11: Area (ha) covered by each vegetation condition category within the survey area

Vegetation Condition	Area (ha)	Percentage of the survey area
Good	2.3	3.5
Degraded	1.8	2.8
Completely Degraded	61.4	93.8
Grand Total	**65.5**	**100**

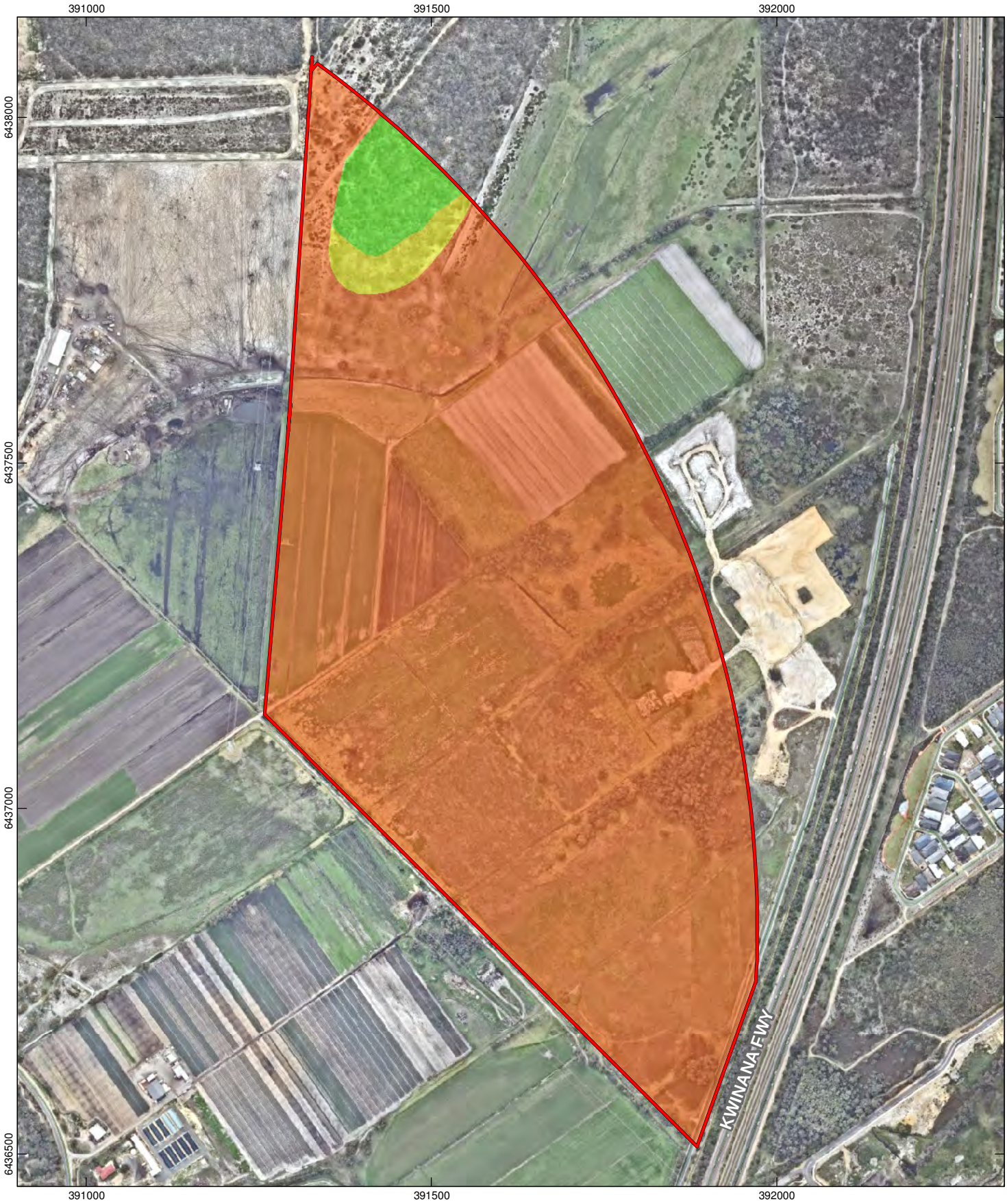

Figure 7: Vegetation condition within the survey area

N

Scale 1:7,500 at A4

0 100 200 m

Coordinate System: GDA 1994 MGA Zone 50

Date: 18/09/2018

Legend

- Survey area

Vegetation condition

- CD
- D
- G

strategen ENVIRONMENTAL

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Data source: Nearmap: Aerial image, flown 06/2018. Landgate: Cadastre, 11/2017. Client: Satterly Property Group and Qube Property Group. Development layout, 08/2018. Created by: c.thatcher

4.2.6 FCT similarity analysis

Remnant vegetation of the southern Swan Coastal Plain was surveyed and mapped by Gibson *et al.* (1994) to provide an understanding of the major floristic types and transitions across the region. The major FCTs were defined by classifying the data collected according to the similarities in species composition between plots. When determining the FCT of a new record, a floristic analysis of species composition provides the most robust method that is consistent with the original classification.

The results for the hierarchical clustering analysis show that the original dendrogram has been disrupted to some extent when analysing each plot (Table 12). Site 2 (VT 3) fuses with some sites from FCTs 23a, 21a and 28. Sites 1 and 3 (VT 3) fuse with some sites from FCTs 5 and 6.

The three nearest neighbours for each site using the Bray-Curtis distance are shown in Table 13. The nearest neighbour assignment for both sites was consistent for both resemblance measures. All sites showed similarities to FCTs 28 and 21a. Given the location of the project area within the Swan Coastal plain and the species composition, FCT 21a is the most likely community type associated with Vegetation Type VT3.

Table 12: Results of hierarchical analysis for plots from the survey area

Site	VT	FCT First fusion	FCT of nearest main group fusion	Likely FCT
Q1	VT3	6	21c	N/A
Q2	VT3	23a, 21a, 28	21a	21a
Q3	VT3	6	21c	N/A

Table 13: Results of Nearest Neighbour analysis using the Bray-Curtis dissimilarity coefficient

Site	VT	Nearest Neighbour (FCT)	2nd Nearest Neighbour (FCT)	3rd Nearest Neighbour (FCT)
Q1	VT3	28	21a	24
Q2	VT3	28	21a	23a
Q3	VT3	28	21a	24

4.2.7 Threatened and Priority Ecological Communities

Site observations and quadrat data collected during the survey indicated that one TEC is potentially represented by vegetation types within the project area. This is:

- *Banksia woodlands of the Swan Coastal Plain* TEC potentially represented by VT3.

The TEC/PEC database search (DBCA 2017c) identified the some of the survey area as comprising *Banksia woodlands of the Swan Coastal Plain* TEC or the associated buffer. Vegetation within the study area was assessed against the key diagnostic criteria for the *Banksia woodlands of the Swan Coastal Plain* TEC (TSSC 2016). One vegetation type within the project area, VT3, was found to meet the diagnostic criteria provided in the approved conservation advice for the *Banksia woodlands of the Swan Coastal Plain* TEC (Table 14).

Table 14: Characteristics of the Banksia woodland within the survey area compared to the key diagnostic criteria as per TSSC (2016)

Key diagnostic criteria (TSSC 2016)	Banksia woodlands within the project area
Location: Occurs in the Swan Coastal Plain or Jarrah Forest IBRA bioregions.	Yes. Banksia woodlands within the project area occur on the Swan Coastal Plain.
Soils and landform: Occurs on: • well drained, low nutrient soils on sandplain landforms, particularly deep Bassendean and Spearwood sands and occasionally on Quindalup sands • sandy colluviums and aeolian sands of the Ridge Hill Shelf, Whicher Scarp and Dandaragan Plateau • transitional substrates and sandflats.	Yes. Banksia woodlands within the project area occur on Bassendean sands.
Structure: Low woodland to forest with: • a distinctive upper sclerophyllous layer of low trees (occasionally large shrubs more than 2 m tall), typically dominated or co-dominated by one or more of the banksia species identified below • emergent trees of medium or tall (>10 m) height. *Eucalyptus* or *Allocasuarina* species may sometimes be present above the banksia canopy • an often highly species-rich understorey.	Yes. VT3 represents a low woodland structure.
Composition: Contains at least one of the following species: • *Banksia attenuata* • *Banksia menziesii* • *Banksia prionotes* • *Banksia ilicifolia.*	Yes. VT3 contains *Banksia attenuata* and/or *Banksia menziesii*.
Condition (Keighery 1994): 'Pristine': no minimum patch size 'Excellent': 0.5 ha 'Very Good': 1 ha 'Good': 2 ha.	Yes. Banksia woodlands within the project area are in Completely Degraded to Good condition. One patch is present in the northern extent of the survey area, with 2.3 ha in Good condition. This patch meets the minimum size for vegetation in Good condition.

5. Discussion

The flora and vegetation assessment of the survey area was conducted during September 2018, which was prime flowering time for the majority of species within the region. The field survey focussed on traversing the entire survey area to delineate vegetation types and is consistent with the requirements of a detailed flora and vegetation survey as specified in *Technical Guidance: Flora and Vegetation surveys for Environmental Impact Assessment* (EPA 2016).

Forty native vascular plant taxa from 36 plant genera and 20 plant families as well as 18 exotic taxa were recorded within the survey area.

The following Threatened and Priority Flora species have the potential to occur within the survey area based on habitat requirements:

- *Caladenia huegelii* (T)
- *Dodonaea hackettiana* (P4)
- *Drakaea elastica* (T)
- *Drakaea micrantha* (T).

No Threatened flora species as listed under section 178 of the EPBC Act or pursuant to Schedule 1 of the WC Act and as listed by Parks and Wildlife (2015) were recorded within the survey area. Additionally, no Priority flora species as listed by Western Australian Herbarium (1998-), including those listed above, were recorded. The priority 4 species *Dodonaea hackettiana*, is unlikely to have been flowering at the time of survey; however, it is a perennial species and would have been visible and identifiable if present. The remaining three conservation significant species would have been identifiable during the time of survey. While a full targeted survey was not conducted, it is unlikely that these species occur within the survey area given the disturbance within the areas of potential habitat.

One broad-scale vegetation association falls within the survey area, Bassendean 1001, of which 21.46% of its pre-European extent remains, as at the most recent assessment in 2017 (Government of Western Australia 2017a). The survey area occurs within the 'Bassendean complex – central and south' and 'Herdsman Complex' Vegetation complexes of which 26.90% and 31.88 % of their pre-European extent remains within the Swan Coastal Plain bioregion respectively (Government of Western Australia 2017b). Three VTs were mapped within the survey area, as well as cleared areas. The survey area was dominated by woodland of *Eucalyptus rudis and Melaleuca rhaphiophylla*.

Vegetation condition within the survey area ranged from Completely Degraded to Good (Keighery 1994), with the majority of vegetation (93%) rated as Completely Degraded. Vegetation rated as good was confined to vegetation mapped as VT3. While this area has been subject to disturbances from livestock grazing and weed invasion, it still retains basic structure. Given the approved clearing of vegetation immediately to the north, and 93% of the vegetation within the survey area is completely degraded, its retention for conservation value is diminished.

Statistical analyses of vegetation data from the survey area determined one broad FCT (FCT21a), was present (VT3). FCT21a is included as one of the FCTs constituting the *Banksia woodlands of the Swan Coastal Plain* TEC, which is listed as Endangered under the EPBC Act. This vegetation type was considered to constitute the *Banksia woodlands of the Swan Coastal Plain* TEC (TSSC 2016), meeting all of the diagnostic characteristics of the TEC (Table 14). As such, areas mapped as VT3 should be considered to be part of the *Banksia woodlands of the Swan Coastal Plain* TEC. This area of vegetation is subject to an EPBC Act approval (2014/7126) and associated offsets package which has been paid in full, upfront. Retention of vegetation, in excellent condition, has already been provided to the north in the approved subdivision area (WAPC 155567). Given this, the environmental impacts of the clearing have been accounted for.

The proposed areas of vegetation retention have focused on accessibility, usability and ongoing management requirements. The area proposed for retention is located in areas that are completely degraded; however, this area retains a number of large trees which provide both aesthetic and conservation value to the proposed development (Appendix 5). This area has been positioned to take into account the cut and fill levels of the previously approved subdivision plan (WAPC 155567). This location also provides a continual linear park network to the retained vegetation north-east in the approved subdivision area.

This retention plan assessed the value of retaining the small area of native vegetation, mapped as V3, for the development. As the approved subdivision plan to the north of the survey area involves cut and fill, the retention of the remnant vegetation would have required a 5 metre retaining wall to be built. Along with restricting usability of the POS, the cut and fill process would likely change the hydrology within the remnant vegetation, potentially reducing water availability. Given the existing disturbance within this vegetation, cattle grazing and weeds, and the isolation of the remnant, it is unlikely it would be valuable as an area for conservation with post development works, even with ongoing management. The retention of this area would therefore be unlikely to have an ecological benefit within the local area.

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Appendix 1
Conservation significant flora and ecological community definitions

Department of Parks and Wildlife

CONSERVATION CODES

For Western Australian Flora and Fauna

Specially protected fauna or flora[1] are species[2] which have been adequately searched for and are deemed to be, in the wild, either rare, at risk of extinction, or otherwise in need of special protection, and have been gazetted as such.

Categories of specially protected fauna and flora are:

T **Threatened species**

Published as Specially Protected under the *Wildlife Conservation Act 1950,* and listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.

Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR **Critically endangered species**

Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN **Endangered species**

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU **Vulnerable species**

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX **Presumed extinct species**

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

IA **Migratory birds protected under an international agreement**

Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD Conservation dependent fauna

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS Other specially protected fauna

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P Priority species

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora or fauna.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

1 Priority 1: Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

2 Priority 2: Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

3 Priority 3: Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

4 Priority 4: Rare, Near Threatened and other species in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

[1] The definition of flora includes algae, fungi and lichens
[2]Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

Department of Environment and Conservation
January 2013

DEFINITIONS, CATEGORIES AND CRITERIA FOR THREATENED AND PRIORITY ECOLOGICAL COMMUNITIES

1. GENERAL DEFINITIONS

Ecological Community
A naturally occurring biological assemblage that occurs in a particular type of habitat.

Note: The scale at which ecological communities are defined will often depend on the level of detail in the information source, therefore no particular scale is specified.

A **threatened ecological community** (TEC) is one which is found to fit into one of the following categories; "presumed totally destroyed", "critically endangered", "endangered" or "vulnerable".

Possible threatened ecological communities that do not meet survey criteria are added to DEC's Priority Ecological Community Lists under Priorities 1, 2 and 3. Ecological Communities that are adequately known, are rare but not threatened, or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

An **assemblage** is a defined group of biological entities.

Habitat is defined as the areas in which an organism and/or assemblage of organisms lives. It includes the abiotic factors (eg. substrate and topography), and the biotic factors.

Occurrence: a discrete example of an ecological community, separated from other examples of the same community by more than 20 metres of a different ecological community, an artificial surface or a totally destroyed community.

By ensuring that every discrete occurrence is recognised and recorded future changes in status can be readily monitored.

Adequately Surveyed is defined as follows:
"An ecological community that has been searched for thoroughly in most likely habitats, by relevant experts."

Community structure is defined as follows:
"The spatial organisation, construction and arrangement of the biological elements comprising a biological assemblage" (eg. *Eucalyptus salmonophloia* woodland over scattered small shrubs over dense herbs; structure in a faunal assemblage could refer to trophic structure, eg. dominance by feeders on detritus as distinct from feeders on live plants).

Definitions of Modification and Destruction of an ecological community:

Modification: "changes to some or all of ecological processes (including abiotic processes such as hydrology), species composition and community structure as a

direct or indirect result of human activities. The level of damage involved could be ameliorated naturally or by human intervention."

Destruction: "modification such that reestablishment of ecological processes, species composition and community structure within the range of variability exhibited by the original community is unlikely within the foreseeable future even with positive human intervention."

Note: Modification and destruction are difficult concepts to quantify, and their application will be determined by scientific judgement. Examples of modification and total destruction are cited below:

Modification of ecological processes: The hydrology of Toolibin Lake has been altered by clearing of the catchment such that death of some of the original flora has occurred due to dependence on fresh water. The system may be bought back to a semblance of the original state by redirecting saline runoff and pumping waters of the rising watertable away to restore the hydrological balance. Total destruction of downstream lakes has occurred due to hydrology being altered to the point that few of the original flora or fauna species are able to tolerate the level of salinity and/or water logging.

Modification of structure: The understorey of a plant community may be altered by weed invasion due to nutrient enrichment by addition of fertiliser. Should the additional nutrients be removed from the system the balance may be restored, and the original plant species better able to compete. Total destruction may occur if additional nutrients continue to be added to the system causing the understorey to be completely replaced by weed species, and death of overstorey species due to inability to tolerate high nutrient levels.

Modification of species composition: Pollution may cause alteration of the invertebrate species present in a freshwater lake. Removal of pollutants may allow the return of the original inhabitant species. Addition of residual highly toxic substances may cause permanent changes to water quality, and total destruction of the community.

Threatening processes are defined as follows:
"Any process or activity that threatens to destroy or significantly modify the ecological community and/or affect the continuing evolutionary processes within any ecological community."

Examples of some of the continuing threatening processes in Western Australia include: general pollution; competition, predation and change induced in ecological communities as a result of introduced animals; competition and displacement of native plants by introduced species; hydrological changes; inappropriate fire regimes; diseases resulting from introduced microorganisms; direct human exploitation and disturbance of ecological communities.

Restoration is defined as returning an ecological community to its pre-disturbance or natural state in terms of abiotic conditions, community structure and species composition.

Rehabilitation is defined as the re-establishment of ecological attributes in a damaged ecological community although the community will remain modified.

2. DEFINITIONS AND CRITERIA FOR PRESUMED TOTALLY DESTROYED, CRITICALLY ENDANGERED, ENDANGERED AND VULNERABLE ECOLOGICAL COMMUNITIES

Presumed Totally Destroyed (PD)
An ecological community that has been adequately searched for but for which no representative occurrences have been located. The community has been found to be totally destroyed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future.

An ecological community will be listed as presumed totally destroyed if there are no recent records of the community being extant **and either** of the following applies (A or B):

A) Records within the last 50 years have not been confirmed despite thorough searches of known or likely habitats **or**

B) All occurrences recorded within the last 50 years have since been destroyed

Critically Endangered (CR)
An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.

An ecological community will be listed as **Critically Endangered** when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future. This will be determined on the basis of the best available information, by it meeting **any one or more of** the following criteria (A, B or C):

A) The estimated geographic range, and/or total area occupied, and/or number of discrete occurrences since European settlement have been reduced by at least 90% **and either or both** of the following apply (i or ii):

i) geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is imminent (within approximately 10 years);

ii) modification throughout its range is continuing such that in the immediate future (within approximately 10 years) the community is unlikely to be capable of being substantially rehabilitated.

B) Current distribution is limited, **and one or more** of the following apply (i, ii or iii):

i) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the immediate future (within approximately 10 years);

ii) there are very few occurrences, each of which is small and/or isolated and extremely vulnerable to known threatening processes;

iii) there may be many occurrences but total area is very small and each occurrence is small and/or isolated and extremely vulnerable to known threatening processes.

C) The ecological community exists only as highly modified occurrences that may be capable of being rehabilitated if such work begins in the immediate future (within approximately 10 years).

Endangered (EN)
An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.

An ecological community will be listed as **Endangered** when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. This will be determined on the basis of the best available information by it meeting **any one or more of** the following criteria (A, B, or C):

A) The geographic range, and/or total area occupied, and/or number of discrete occurrences have been reduced by at least 70% since European settlement **and either or both** of the following apply (i or ii):

i) the estimated geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is likely in the short term future (within approximately 20 years);

ii) modification throughout its range is continuing such that in the short term future (within approximately 20 years) the community is unlikely to be capable of being substantially restored or rehabilitated.

B) Current distribution is limited, **and one or more** of the following apply (i, ii or iii):

i) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the short term future (within approximately 20 years);

ii) there are few occurrences, each of which is small and/or isolated and all or most occurrences are very vulnerable to known threatening processes;

iii) there may be many occurrences but total area is small and all or most occurrences are small and/or isolated and very vulnerable to known threatening processes.

C) The ecological community exists only as very modified occurrences that may be capable of being substantially restored or rehabilitated if such work begins in the short-term future (within approximately 20 years).

Vulnerable (VU)
An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.

An ecological community will be listed as **Vulnerable** when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing a high risk of total destruction or significant modification in the medium (within approximately 50 years) to long-term future. This will be determined on the basis of the best available information by it meeting **any one or more of** the following criteria (A, B or C):

A) The ecological community exists largely as modified occurrences that are likely to be capable of being substantially restored or rehabilitated.

B) The ecological community may already be modified and would be vulnerable to threatening processes, is restricted in area and/or range and/or is only found at a few locations.

C) The ecological community may be still widespread but is believed likely to move into a category of higher threat in the medium to long-term future because of existing or impending threatening processes.

3. DEFINITIONS AND CRITERIA FOR PRIORITY ECOLOGICAL COMMUNITIES

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community List under priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community. Ecological communities that are adequately known, and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

Priority One: Poorly-known ecological communities

Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤ 100ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Priority Two: Poorly-known ecological communities

Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200ha). At least some occurrences are not believed to be under immediate threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Priority Three: Poorly known ecological communities

(i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or:
(ii) communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat (within approximately 10 years), or;
(iii) communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change etc.

Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.

Priority Four: Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.

(i) Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands.

(ii) Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for a higher threat category.

(iii) Ecological communities that have been removed from the list of threatened communities during the past five years.

Priority Five: Conservation Dependent ecological communities

Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Definition of Threatened Ecological Communities -EPBC Act (DEE 2017c)

Critically endangered

An ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).

Endangered

An ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).

Vulnerable

An ecological community is not critically endangered or endangered, but is facing a high risk of extinction in the wild in the medium–term future (indicative timeframe being the next 50 years).

Appendix 2
Desktop assessment results (Parks and Wildlife 2007-)

NatureMap Species Report

Created By Guest user on 28/06/2017

Kingdom Plantae
Conservation Status Conservation Taxon (T, X, IA, S, P1-P5)
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 115° 50' 36" E,32° 11' 05" S
Buffer 3km

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
1.	1596	*Caladenia huegelii (Grand Spider Orchid)*		T	
2.	12938	*Diuris micrantha*		T	
3.	4763	*Dodonaea hackettiana (Hackett's Hopbush)*		P4	
4.	1639	*Drakaea elastica (Glossy-leaved Hammer Orchid)*		T	
5.	5237	*Pimelea calcicola*		P3	
6.	25800	*Stylidium paludicola*		P3	

Conservation Codes
T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

[1] For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

Appendix 3
Vascular plant taxa recorded from quadrats within the survey area

Family	Taxa	
Aizoaceae	*	*Carpobrotus edulis*
Araceae	*	*Zantedeschia aethiopica*
Araliaceae		*Trachymene pilosa*
Asparagaceae		*Chamaescilla corymbosa*
		Lomandra hermaphrodita
		Thysanotus manglesianus
Asteraceae	*	*Arctotheca calendula*
		Carthamus lanatus
		Conyza bonariensis
		Hypochaeris glabra
		Ursinia anthemoides
		Lagenophora huegelii
Casuarinaceae		*Allocasuarina fraseriana*
Crassulaceae	*	*Crassula glomerata*
Cyperaceae		*Schoenus curvifolius*
		Tetraria capillaris
		Tetraria octandra
Dennstaedtiaceae		*Pteridium esculentum*
Dilleniaceae		*Hibbertia hypericoides*
Droseraceae		*Drosera erythrorhiza*
Ericaceae		*Leucopogon propinquus*
		Styphelia tenuiflora
Euphorbiaceae	*	*Euphorbia terracina*
Fabaceae		*Acacia pulchella*
		Bossiaea ornata
		Daviesia sp.
		Gompholobium tomentosum
		Hardenbergia comptoniana
		Hovea pungens
		Isotropis cuneifolia
Geraniaceae		*Erodium cygnorum*
Goodeniaceae		*Dampiera linearis*
		Scaevola repens var. *repens*
Haemodoraceae		*Anigozanthos manglesii* subsp. *manglesii*
		Conostylis serrulata
		Conostylis setigera subsp. *setigera*
Hemerocallidaceae		*Corynotheca micrantha* var. *micrantha*
Iridaceae	*	*Gladiolus caryophyllaceus*
		Romulea rosea var. australis
Myrtaceae		*Eucalyptus marginata*

Family	Taxa	
Myrtaceae		*Eucalyptus rudis* subsp. *rudis*
		Hypocalymma robustum
		Melaleuca rhaphiophylla
Orchidaceae		*Caladenia flava* subsp. *flava*
		Pyrorchis nigricans
Oxalidaceae	*	*Oxalis pes-caprae*
Phyllanthaceae		*Phyllanthus calycinus*
Phytolaccaceae	*	*Phytolacca octandra*
Poaceae	*	*Briza maxima*
		Ehrharta longiflora
		Poaceae sp.
Primulaceae	*	*Lysimachia arvensis*
Proteaceae		*Banksia attenuata*
		Banksia menziesii
		Stirlingia latifolia
Restionaceae		*Desmocladus flexuosus*
Solanaceae	*	*Solanum nigrum*
Xanthorrhoeaceae		*Xanthorrhoea preissii*

Appendix 4
Raw Quadrat Data

Site Q01

GPS Coordinat 51H 391413 mE; 6437848 mN

Landform upper slope of dun

Slope (degrees) 3

Aspect SE

Soil sand; grey

Ground cover: Bare ground (%) 5 Litter (%) 10

Condition Good Fire Age 5



Disturbance weeds; cattle;

Vegetation Description Banksia attenuata and Banksia menziesii woodland

Taxa	Height (m)	% Cover
Banksia attenuata	4	8
Banksia menziesii	4	3
Xanthorrhoea preissii	1	6
Acacia pulchella	1	5
Stirlingia latifolia	1	5
Hovea pungens	0	2
**Ehrharta longiflora*	0	15
Drosera erythrorhiza	0	0
Styphelia tenuiflora	0	0
Desmocladus flexuosus	0	0
Chamaescilla corymbosa	0	1
Conostylis setigera subsp. setigera	0	1
Erodium cygnorum	0	1
Tetraria capillaris	0	0
Hypocalymma robustum	0	3
Hibbertia hypericoides	0	10
**Crassula glomerata*	0	0
**Hypochaeris glabra*	0	2
**Poaceae sp.*	0	10
**Arctotheca calendula*	0	10
**Ursinia anthemoides*	0	10
Daviesia sp.	0	1
Eucalyptus marginata		
Allocasuarina fraseriana		

Site Q02

GPS Coordinat 51H 391446 mE; 6437956 mN

Landform dune crest

Slope (degrees) 3

Aspect SE

Soil sand; grey

Ground cover: Bare ground (%) 5 Litter (%) 10

Condition Good Fire Age 5



Disturbance weeds; cattle;

Vegetation Description Banksia attenuata and Banksia menziesii woodland

Taxa	Height (m)	% Cover
Eucalyptus marginata	10	15
Allocasuarina fraseriana	8	1
Banksia attenuata	4	5
Banksia menziesii	4	5
Acacia pulchella	1	2
Anigozanthos manglesii subsp. manglesii	0	0
Daviesia sp.	0	1
**Ursinia anthemoides*	0	2
Conostylis serrulata	0	1
Caladenia flava subsp. flava	0	0
Thysanotus manglesianus	0	0
Erodium cygnorum	0	5
Scaevola repens var. repens	0	0
Isotropis cuneifolia	0	0
Chamaescilla corymbosa	0	0
Lagenophora huegelii	0	1
Hardenbergia comptoniana	0	2
Corynotheca micrantha var. micrantha	0	0
**Ehrharta longiflora*	0	10
Pyrorchis nigricans	0	0
Desmocladus flexuosus	0	2
Drosera erythrorhiza	0	1
**Briza maxima*	0	15
**Gladiolus caryophyllaceus*	0	0
Dampiera linearis	0	1
**Hypochaeris glabra*	0	5
**Romulea rosea var. australis*	0	2
**Carpobrotus edulis*	0	0
Stirlingia latifolia	0	2
Hibbertia hypericoides	0	10
Hypocalymma robustum	0	3
Tetraria capillaris	0	1
Leucopogon propinquus	0	2
Lomandra hermaphrodita	0	1

Schoenus curvifolius	0	1
Gompholobium tomentosum	0	1
Tetraria octandra	0	2

Site Q03

GPS Coordinat 51H 391496 mE; 6437885 mN

Landform slope

Slope (degrees) 5

Aspect SE

Soil sand; grey

Ground cover: Bare ground (%) 5 Litter (%) 20

Condition Good Fire Age 5



Disturbance weeds; cattle;

Vegetation Description Banksia attenuata and Banksia menziesii woodland

Taxa	Height (m)	% Cover
Eucalyptus marginata	12	15
Drosera erythrorhiza	8	0
Allocasuarina fraseriana	8	7
Banksia attenuata	5	10
Stirlingia latifolia	1	2
Acacia pulchella	1	5
Xanthorrhoea preissii	1	5
**Lysimachia arvensis*	0	1
Conostylis serrulata	0	1
Trachymene pilosa	0	0
Lagenophora huegelii	0	2
Erodium cygnorum	0	1
**Ehrharta longiflora*	0	25
Caladenia flava subsp. flava	0	0
Bossiaea ornata	0	0
Tetraria capillaris	0	0
Phyllanthus calycinus	0	1
Hovea pungens	0	1
**Gladiolus caryophyllaceus*	0	1
Hibbertia hypericoides	0	8
Anigozanthos manglesii subsp. manglesii	0	0
**Hypochaeris glabra*	0	5
Chamaescilla corymbosa	0	1
**Euphorbia terracina*	0	0
**Romulea rosea var. australis*	0	1
**Ursinia anthemoides*	0	3
**Briza maxima*	0	15
Tetraria octandra	0	5

Site Q04

GPS Coordinat 51H 391937 mE; 6436968 mN

Landform flat

Slope (degrees) nil

Aspect -

Soil sandy loam; brown

Ground cover: Bare ground (%) 0 Litter (%) 10

Condition Completely Degra Fire Age 5

Disturbance weeds

Vegetation Description Eucalyptus rudis woodland



Taxa	Height (m)	% Cover
Eucalyptus rudis subsp. rudis	15	8
**Zantedeschia aethiopica*	1	25
**Briza maxima*	1	10
Pteridium esculentum	1	60
**Oxalis pes-caprae*	0	2

Site Q05

GPS Coordinat 51H 391942 mE; 6436988 mN

Landform flat

Slope (degrees) nil

Aspect -

Soil sandy loam; brown

Ground cover: Bare ground (%) 0 Litter (%) 10

Condition Completely Degra Fire Age 5

Disturbance weeds

Vegetation Description Eucalyptus rudis woodland



Taxa	Height (m)	% Cover
Eucalyptus rudis subsp. rudis	15	2
Pteridium esculentum	1	60
**Zantedeschia aethiopica*	1	25
**Briza maxima*	1	10
**Hypochaeris glabra*	0	1
**Arctotheca calendula*	0	1
**Oxalis pes-caprae*	0	2

Site Q06

GPS Coordinat 51H 391902 mE; 6436976 mN

Landform flat

Slope (degrees) nil

Aspect -

Soil sandy loam; brown

Ground cover: Bare ground (%) 0 Litter (%) 10

Condition Completely Degra Fire Age 5

Disturbance weeds

Vegetation Description Eucalyptus rudis woodland



Taxa	Height (m)	% Cover
Eucalyptus rudis subsp. rudis	15	30
Pteridium esculentum	1	5
**Zantedeschia aethiopica*	1	75
**Briza maxima*	1	2
**Oxalis pes-caprae*	0	2
**Hypochaeris glabra*	0	1
**Arctotheca calendula*	0	1
**Ehrharta longiflora*	0	15
**Carthamus lanatus*	0	1

Site Q07

GPS Coordinat 51H 391844 mE; 6437027 mN

Landform flat

Slope (degrees) nil

Aspect -

Soil sandy loam; brown

Ground cover: Bare ground (%) 0 Litter (%) 10

Condition Completely Degra Fire Age 5

Disturbance weeds

Vegetation Description Eucalyptus rudis woodland



Taxa	Height (m)	% Cover
Eucalyptus rudis subsp. rudis	15	30
Pteridium esculentum	1	30
**Zantedeschia aethiopica*	1	60
**Solanum nigrum*	1	0
**Oxalis pes-caprae*	0	1
**Ehrharta longiflora*	0	1
**Hypochaeris glabra*	0	1

Site Q08

GPS Coordinat 51H 391876 mE; 6437075 mN

Landform flat

Slope (degrees) nil

Aspect -

Soil sandy loam; brown

Ground cover: Bare ground (%) 0 Litter (%) 10

Condition Completely Degra Fire Age 5

Disturbance weeds

Vegetation Description Eucalyptus rudis woodland



Taxa	Height (m)	% Cover
Eucalyptus rudis subsp. rudis	15	30
Melaleuca rhaphiophylla	10	8
**Phytolacca octandra*	1	1
Pteridium esculentum	1	10
**Zantedeschia aethiopica*	1	80
**Oxalis pes-caprae*	0	2

Site Q09

GPS Coordinat 51H 391904 mE; 6437107 mN

Landform flat

Slope (degrees) nil

Aspect -

Soil sandy loam; brown

Ground cover: Bare ground (%) 0 Litter (%) 10

Condition Completely Degra Fire Age 5

Disturbance weeds

Vegetation Description Eucalyptus rudis woodland



Taxa	Height (m)	% Cover
Eucalyptus rudis subsp. rudis	15	15
Melaleuca rhaphiophylla	8	2
**Conyza bonariensis*	1	1
**Zantedeschia aethiopica*	1	35
**Briza maxima*	1	5
Pteridium esculentum	1	45
**Oxalis pes-caprae*	0	10
**Ehrharta longiflora*	0	15

Appendix 5
Landscape Principles Plan



RECREATION NODE WITH PAVED SEATING AREA & SHELTER OVERLOOKING REVEGETATED CREEK.

REGIONAL MAIN DRAIN

THE REGIONAL MAIN DRAIN IS AN IMPORTANT REFERENCE TO THE RURAL/AGRICULTURAL HERITAGE OF THE SITE AND SHOULD BE CELEBRATED IN THE LANDSCAPE. IT FORMS A SIGNIFICANT EAST/ WEST GREEN LINK & RECREATION CORRIDOR, CONNECTING MAJOR OPEN SPACES & INTERSECTING WITH THE MAIN BOULEVARD WHICH FORMS THE NORTH-SOUTH GREEN LINK. MUCH OF THE DRAIN TO BE REVEGETATED WITH NATIVE SPECIES.

EXISTING TREES TO BE RETAINED.

EXISTING AVENUE OF SHEOAKS TO BE RETAINED IN LINEAR PARK, PROVIDING AN IMPORTANT GREEN LINK CONNECTION TO THE EAST/WEST GREEN LINK & THE MAJOR CENTRAL PARK IN THE ESTATE.

COMMUNITY PAVILION WITH SEATING AREAS & PLAYGROUND.

MAJOR CENTRAL PARK WITH LARGE LAWN AREA TO ALLOW FOR ACTIVE INFORMAL PLAY & ACCOMMODATE COMMUNITY ACTIVITIES & EVENTS.

RECREATION NODE WITH PAVED SEATING AREA, SHELTER & JUNIOR PLAY AREA.

APSLEY CENTRAL PARK

LANDSCAPE PRINCIPLES PLAN

SEPTEMBER 2018

JOB NO. 1403301

1:1250 @ A3

SK.101

REV A

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PLAN E

LANDSCAPE ARCHITECTS

414 ROKEBY RD SUBIACO WA 6008

T: (08) 9388 9566 E: mail@plane.com.au



BESPOKE SHADE STRUCTURE
+ PICNIC FACILITIES

REVEGETATED PEEL MAIN
DRAIN WITH RETAINED TREES

NATURE PLAYGROUNDS

BESPOKE SHADE STRUCTURE
+ PICNIC FACILITIES

LOW RETAINING WALL

OPEN TURF AREA

BESPOKE SHADE STRUCTURE
+ PICNIC FACILITIES

NATIVE WETLAND PLANTING
TO DRAINAGE BASIN















MANDOGALUP DEVELOPMENT - PMD

LANDSCAPE CONCEPT PLAN
NOVEMBER 2017

JOB NO. 1403301
1:500 @ A1

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Appendix E Level 1 Fauna Survey and Habitat Assessment – Various Allotments, Mandogalup (Emerge Associates 2011)

LEVEL 1 FAUNA SURVEY AND HABITAT ASSESSMENT

VARIOUS ALLOTMENTS, MANDOGALUP

EP10-018

Prepared for Qube Mandogalup Land Development Company
September 2011

Document Control

VERSION	DATE	AUTHOR		REVIEWER	
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A	May 2011	Gillian Turner	GFT	Jason Hick	JDH
B	July 2011	Gillian Turner	GFT	Jason Hick	JDH
C	August 2011	Jason Hick	GFT	Jason Hick	JDH
Filename	EP10-018--021C JDH FAUNA SURVEY AND HABITAT ASSESSMENT				

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Executive Summary

The Qube Mandogalup Land Development Company Pty Ltd. (QMLDC) owns seven parcels of land within the locality of Mandogalup (see **Figure 1**). These land parcels are Lots 664, 668 and 669 Mandogalup Road, Lot 791 and 663 Norkett Road and Lots 52 and 682 Rowley Road, herein referred to as 'the site'. The site covers an area of approximately 147 ha and comprises mainly cleared land used for market gardening and associated agricultural activities (see **Figure 2**).

The site has been identified as an area for future residential development through State level strategic planning frameworks, and at a local level in the Town of Kwinana's Eastern Residential Intensification Concept (ERIC). The site is zoned 'Urban Deferred' and 'Rural' pursuant to the Metropolitan Region Scheme (MRS), although it is understood that the 'Rural' zoned portions will ultimately be rezoned to either "Urban Deferred' or 'Urban' in the near future.

QMLDC intend to develop these lots for residential purposes, and Emerge Associates (Emerge) were engaged to undertake a Level 1 fauna survey and habitat assessment across the site, with the aim of understanding any significant fauna and fauna habitat values within the site to inform future site planning and development approvals purposes. This survey provides an update to the original level 1 fauna assemblage survey undertaken by zoologist Greg Harewood in 2005.

The level 1 survey was undertaken in accordance with the Environmental Protection Authority's (EPA's) *Guidance Statement No. 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia* (EPA 2004). The survey scope also included the following targeted surveys:

A black cockatoo habitat assessment, inclusive of locating potential habitat trees (trees with a Diameter at Breast Height (DBH) of !" ##!$ $ %&' (!identification and delineation of any potential foraging habitat areas based on vegetation composition and any foraging evidence observed on site.
An assessment of the presence/absence of graceful sun-moth and its habitat within the site in accordance with the Western Australian Department of Environment and Conservation's (DEC's) *Guidelines for the Graceful Sun-Moth (Synemon gratiosa) & Site Habitat Assessments* (Bishop, Williams et al. 2010) and if necessary the delineation of potentially suitable habitat.
Determination of the likely occurrence (or otherwise) of Chuditch (*Dasyurus geoffroii*) within the site based on an assessment of suitable habitat, scats, fur or tracks.

The fauna habitat assessment identified three native plant communities and areas that were 'Parkland Cleared' (cleared land with scattered native tree species). Lot 682 Rowley Road supports two patches of intact woodland. The northern patch is in 'Excellent' to 'Very Good' condition and the southern patch in 'Good' to 'Very Good' condition. Lot 669 Mandogalup Road supports an isolated patch of *Banksia* woodland in 'Degraded' condition. These remnant patches represent the only stands of native vegetation within the site and cover an area of approximately 40.79 ha. Of this, 37.76 ha is considered sufficiently intact enough to potentially retain its structure and condition in the longer term with management, although 10.32 ha of this is fragmented, isolated and already been subject to degrading influences and would require a significantly higher degree of intervention to maintain any biodiversity values. 3.03 ha (of the total 40.79 ha) is significantly degraded to the extent that it is unlikely to remain viable in the medium to longer term, even with significant management intervention.

The culmination of this fauna assessment was the compilation of a list of fauna species that were either observed during the site visits or were noted as potentially occurring within the site based on the habitat types present. A total of 54 fauna species were observed (or positively identified from scats, tracks, skeletons or calls) within the site during both the 2005 and 2010/2011 surveys.

A total of 37 fauna species with conservation significance were identified as occurring or potentially occurring within the site. These are listed pursuant to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the Western Australian *Wildlife Conservation Act 1950* (WC Act) and the China-Australia, Japan-Australia and Republic of Korea-Australia Migratory Birds Agreements (CAMBA/JAMBA/ROKAMBA) or other State or local based frameworks.

Following the fauna assessment, those conservation significant species that were deemed potentially relevant for the site were:

carnaby's black cockatoo (*Calyptorhynchus latirostris*) (Endangered EPBC Act, S1 WC Act).
forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Vulnerable EPBC Act, S1 WC Act)
graceful sun-moth (*Synemon gratiosa*) (Endangered EPBC Act, S1 WC Act)
rainbow bee-eater (*Merops ornatus*) (S3 WC Act, JAMBA)
fork-tailed swift (*Apus pacificus*) (S3 WC Act, JAMBA/CAMBA/ROKAMBA)
white-bellied sea eagle (*Haliaeetus leucogaster*) (S3 WC Act, CAMBA)
great egret (*Ardea alba*) (S3 WC Act, JAMBA/CAMBA)
cattle egret (*Ardea Ibis*) (S3 WC Act, JAMBA/CAMBA)
peregrine falcon (*Falco perigrinus*) (S4 WC Act).

The two species of black cockatoo were considered to be the most significant fauna species actively or potentially occurring within the site. The chuditch (*Dasyurus geoffroii*) red-tailed phascogale (*Phascogale calura*) and quokka (*Setonix brachyurus*), while identified from the Department of Sustainability, Environment, Population and Communities (DSEWPC) database, were excluded from the fauna inventory list due to lack of suitable habitat within the site and no evidence of these species utilising the site during the reconnaissance survey. The rainbow bee-eater, great egret, cattle egret, peregrine falcon, fork-tailed swift and white-bellied sea eagle are all considered to potentially use the site on occasion, usually part of a much larger home range, but it is highly unlikely they would rely on the site for their ongoing occurrence in the wider local area.

Potential habitat for the graceful sun moth was mapped as part of the targeted survey. The potential habitat areas were the intact *Banksia* woodland communities across the site, and in particular the areas in 'Excellent' to 'Very Good' condition within the northern portion of Lot 682. No *Lomandra* species were recorded within the *Eucalyptus rudis* and *Melaleuca preissiana* woodland. No graceful sun moths were observed within the site during the surveys, and one moth was observed along the boundary of Lot 682 Rowley Road, although it is considered likely that this individual originated from similar remnant vegetation to the west of the site, also in 'Excellent' condition. While based on the broadly known habitat preferences for this species, potential habitat does exist within the site, following the extensive survey effort and the survey results it can be concluded that the site does not support a population of this species.

Based on recently released carnaby's black cockatoo habitat mapping published by the Department of Planning (in collaboration with the Department of Environment and Conservation), the site is identified as supporting foraging habitat (based on its broad vegetation community type), although no nesting or roosting sites are located within the site. The closest known nesting site is located a significant distance east on the Darling Scarp, and the nearest known roost site is located about 3 km east at Wandi.

Evidence of the carnaby's black cockatoo and the forest red-tailed black cockatoo included actual sightings and foraging evidence (chewed jarrah, marri, and sheoak fruits and *Banksia* cones). The habitat assessment identified 231 trees with a DBH of greater than or equal to 500 mm, of which 17 contained large hollows (>12 cm) that appeared big enough and oriented favorably to possibly allow entry to a black cockatoo. None of these hollows showed any evidence of current or past use by black cockatoos, and there are no known records of either species nesting in this part of the Swan Coastal Plain. The known nesting sites on the Swan Coastal Plain occur in tuart trees, and are significantly distanced both north and south from the site.

All three plant communities within the site contain known black cockatoo foraging plant species. No foraging evidence was recorded within the areas of 'Degraded' *Banksia* woodland within the south of the site. Based on the percentage covers of each identified foraging species within each plant community, the two *Banksia* communities had greater cover values for the known foraging species. Therefore the areas of *Banksia* woodland are considered to provide the greatest carrying capacity for foraging black cockatoos within the site.

Therefore, arising from the findings of this fauna survey and habitat assessment, the most significant areas for actual or potential fauna habitat is the remnant vegetation within the northern portion of the site, in 'Excellent' and 'Very Good' condition (see **Figure 7**). This covers an area of approximately 24.7 ha is and also proximal to other large areas of remnant vegetation to the north, west and southwest of this area. The central eastern portion of this area has been excluded given it is more low lying and supports a different vegetation community of which the key cockatoo foraging species are less dominant.

This area provides the core known and potential foraging habitat for both conservation significant black cockatoo species. While other areas within the site do support remnant vegetation that contains black cockatoo foraging habitat and potential nesting habitat, these areas are currently more degraded and fragmented and therefore less easily retained in a single conservation area (i.e. within public open space or other reservation) given the long term presence of a power transmission easement. The remnant vegetation in the southern extents of Lot 682 (10.32 ha on the southern side of the power transmission easement) has a much lower area to perimeter ratio, and already shows signs of pressure compared to the larger more intact areas to the north.

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Appendix B
Fauna Inventory

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Appendix D
Targetted black cockatoo survey data

Appendix E
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Introduction

Project background

The Qube Mandogalup Land Development Company Pty Ltd. (QMLDC) owns seven parcels of land within the locality of Mandogalup. These land parcels are:

Lots 664, 668 and 669 Mandogalup Road.
Lots 791 and 663 Norkett Road.
Lots 52 and 682 Rowley Road.

The land parcels, referred to herein as 'the site', are generally located to the west of Kwinana Freeway, east of Mandogalup Road and between Rowley Road in the north and Anketell Road in the south (see **Figure 1**). Under the Metropolitan Region Scheme (MRS), Lots 52 and 682 Rowley Road are zoned 'Urban Deferred', while the remaining lots are zoned as 'Rural'. State and local level strategic planning frameworks, including the Town of Kwinana's Eastern Residential Intensification Concept (ERIC), intend for the progression of all areas identified within the site to an 'Urban' zoning and ultimately development for residential and associated community purposes.

QMLDC intend to develop these lots for residential purposes and to facilitate the progression of broad level structure planning and subsequent development approvals for the site, QMLDC appointed Emerge Associates (Emerge) to undertake a Level 1 fauna survey and habitat assessment across the site.

The site covers an area of approximately 147 hectares (ha) and comprises area of cleared land that has been used for market gardening and associated agricultural activities (see **Figure 2**). Lot 682 Rowley Road supports two patches of *Banksia* woodland, while Lot 669 Mandogalup Road supports an isolated *Banksia* woodland patch in a 'Degraded' condition (Cardno BSD 2005). These remnant patches represent the only stands of native vegetation within the site and cover an area of approximately 40.79 ha. The fauna survey investigations have primarily focused, but not been limited to, these remnant vegetation/bushland patches.

1.1 Purpose of this assessment

The purpose of this assessment was to investigate and document the fauna and fauna habitat values of the site, determine whether the site supported significant fauna or fauna habitat values, with the ultimate aim of facilitating the progression of structure planning for the site. This survey provides an update to the level 1 fauna assemblage survey undertaken by zoologist Greg Harewood across the site in 2005. The original 2005 survey report has been provided as **Appendix A**.

1.2 Assessment methodology

This assessment has been structured around the methodology provided by the Environmental Protection Authority (EPA) in their *Guidance Statement No. 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia* (Environmental Protection Authority 2004) to undertake a level 1 fauna assemblage survey.

The methodology for undertaking a level 1 survey as defined within *Guidance Statement No. 56* is to:

a) Undertake a desktop assessment.

b) Complete a reconnaissance field survey.

The purpose of the desktop assessment is to compile a list of fauna species that are known or likely to occur within the site based on a search of all relevant literature, data and spatially based information. In addition, information should also be gathered on the site and the habitat values of the site (usually at the locality scale).

The purpose of the reconnaissance field survey is to:

Verify the accuracy of the background assessment.
Further delineate and characterise the fauna and faunal assemblages present in the site.
Identify potential impacts on fauna that may result from the development of the site.

In addition to the level 1 fauna assemblage survey as described within *Guidance Statement No. 56* (Environmental Protection Authority 2004), this survey also included the following targeted assessments:

A black cockatoo habitat assessment, inclusive of locating potential habitat trees (trees with a Diameter at Breast Height (DBH) of !"#0 mm) and foraging habitat areas based on both observed foraging evidence and from the species composition of remnant vegetation.
An assessment of the presence/absence of graceful sun-moth and its habitat within the site in accordance with the Western Australian Department of Environment and Conservation's (DEC's) *Guidelines for the Graceful Sun-Moth (Synemon gratiosa) & Site Habitat Assessments* (Bishop, Williams et al. 2010).
Determination of the likely presence/absence of Chuditch (*Dasyurus geoffroii*) within the site based on an assessment of suitable habitat, scats, fur or tracks.

1.3 Assessment limitations

The assessment reported on here is based on a desktop assessment and a reconnaissance field survey that included opportunistic fauna observations made across two survey periods (in 2005 and 2010). No repeat seasonal sampling or trapping has been conducted. The conclusions presented are based upon field data collected over the above specified period of time and are therefore indicative of the environmental condition of the site at the time of preparing the report.

Fauna species are indicated as potentially present based on there being suitable (quality and extent) habitat within the site (or immediately adjacent). With respect to opportunistic observations, the possibility exists that certain species may not have been detected during field investigations due to:

Seasonal inactivity during field survey.
Species present within micro habitats not surveyed.
Cryptic species able to avoid detection.
Transient wide-ranging species not present during survey period.

In recognition of the above survey limitations a precautionary approach was adopted for this assessment. Any fauna species that would possibly occur within the site (or immediately adjacent) as identified through databases, publications, discussions with local experts/residents and the habitat knowledge of the author, has been assumed to potentially occur.

During the black cockatoo habitat survey, trees with hollows were recorded (i.e. habitat trees). It should be noted that identifying hollows suitable for fauna species from ground level has limitations. Generally the full characteristics of any hollow seen are not fully evident (e.g. internal dimensions). It is also difficult to locate all hollows as some are not observable from ground level.

Notwithstanding the above, the methodology adopted has involved more than one visit to the site and a scope of work that is more comprehensive than a standard level 1 fauna survey. It is suggested that the survey is more than adequate to understand the fauna and fauna habitat values of the site and be used to inform structure planning and approval process, particularly for the key species of concern.

2 Desktop Assessment

This desktop assessment provides information on potential and known fauna and fauna habitat that occurs or potentially occurs within and adjacent to the site based on a search of all relevant literature, data and spatially based information. This section has been divided into information on:

fauna habitat and its conservation significance
fauna species and their conservation significance.

2.1 Fauna Habitat

2.1.1 Vegetation

At a regional scale, vegetation complex mapping of the Swan Coastal Plain undertaken by Heddle, Loneragan et al. (1980), which is based on soil and geomorphology (and water availability) patterns, indicates that the remnant vegetation within the site is likely to represent the Bassendean vegetation complex. The Bassendean vegetation complex is described as:

*Woodland of Eucalyptus marginata – Allocasuarina fraseriana – Banksia spp. to low woodland of Melaleuca spp. and sedgelands on the moister sites (*Heddle, Loneragan et al. 1980).

At a local scale, plant community mapping has been undertaken across the site (including some adjoining lots) by Cardno BSD in 2005. This survey identified two plant communities present within the site, these being a *Banksia* spp. woodland community within Lot 682 Rowley Road and a *Melaleuca/Eucalyptus rudis* woodland community in lots 668 and 669. The remaining lots were not recorded as containing intact native plant communities, but instead consisted of cleared agricultural land.

The *Banksia* spp. woodland within the northern portion of Lot 682 Rowley Road was observed to be in 'Excellent' condition, while the southern portion of Lot 682 was in a 'Good' to 'Very Good' condition. The *Melaleuca/Eucalyptus rudis* woodland within lots 668 and 669 Mandogalup Road was recorded to be in a 'Degraded' condition. The vegetation condition scale used was that of Keighery (1994).

2.1.2 Biodiversity linkages

In an increasingly fragmented landscape biodiversity linkages or corridors can be very important mechanisms to help maintain viable populations of plants and animals between bush land fragments by maintaining connectivity. A biodiversity linkage can be described as a linear landscape element that connects two or more patches of natural habitat and functions to facilitate movement (Soule and Gilpin, cited in Hilty et al. 2006).

A network of proposed Regional Ecological Linkages have been identified for the Perth Metropolitan Region based on work undertaken as part of:

Bush Forever (Vol. 2) (Government of Western Australia 2000)
Perth Greenways Report (Alan Tingay and Associates 1998)
System 6 Report (CALM 1983).

A Regional Ecological Linkage has been generally identified within the Mandogalup area, between Thompson Lake Reserve in the north to the Spectacles in the south. The identified linkage generally extends from Bush Forever Site No. 391 (BF 391): *Thompson Lake Nature Reserve and Adjacent Bushland,* through BF 392: *Harry Waring Marsupial Reserve, Wattleup* and Frankland Park (not a Bush Forever site but vested with the local government), into the remnant vegetation in the north-west corner of the site and further south along the western boundary of the site (in adjacent bushland) and south to BF 268 and BF 269 (see **Figure 6)**.

The key mechanism to implement and achieve these linkages is generally through local government local biodiversity strategies. The Town of Kwinana does not have a local biodiversity strategy, and it would not appear that any intentions to accommodate the linkage are evident in the plan prepared for ERIC. Notwithstanding this any remnant vegetation within the site along the northern and southern boundaries could assist with achieving local biodiversity connectively, but this would need to be addressed at a wider local level rather than just at a site level.

Remnant vegetation situated immediately to the west of the site would appear to be more continuously directly connected with Frankland Park and BF 268 and BF 269, and therefore the remnant vegetation within the site would not appear to be critical for the linkage, but rather supplement it. There also appear to be opportunities to improve the direct connectivity of the linkage outside of the site.

2.2 Fauna Species

2.2.1 Fauna Inventory

A fauna inventory of all the potential fauna (mainly vertebrate species) occurring within the site has been compiled and provides an update to the original 2005 survey list. This was achieved by undertaking searches of the DEC's Threatened Fauna and 'Naturemap' database (joint DEC, Western Australian Museum (WAM) and Birds Australia data) and the Department of Sustainability, Environment, Water, Population and Communities (DSEWPAC) 'Protected Matters Search Tool' database, published and unpublished reports and specialist books detailing fauna of the general area.

Fauna survey reports have been undertaken in nearby areas in the past, though not all are publically available and could not be referenced. The most significant of those available have been used as the primary reference material for compiling the fauna inventory. Those reports referred to included, but were not limited to:

ENV Australia (2010). Cape Peron Fauna Assessment. Perth, unpublished report for Strategen Environmental Consultants.

Harewood, G. (2009). Fauna Survey (Level 2) East Rockingham WWTP Site and Pipeline Corridors. Unpublished report for ERM Australia Pty Ltd.

How R.A., Harvey M.S., Dell J. and Waldock J. (1996). Ground Fauna of Urban Bushland Remnants in Perth. Report N93/04 to the Australian Heritage Commission (Woodman Point Results).

Both the database searches and the reports refer to species that would not occur within the site due to a lack of suitable habitat (extent and/or quality) present within the site or species that would be well outside of their natural ranges. This was taken into consideration when compiling the total fauna inventory. This fauna inventory list is provided as **Appendix B**.

2.2.2 Fauna of conservation significance

Some Western Australian fauna species have been identified under state, federal and international policies, agreements and laws to be of specific conservation significance. The term 'conservation significance' has been used in this report to refer to species that are listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the Western Australian *Wildlife Conservation Act 1950* (WC Act), the Japan-Australia Migratory Birds Agreement (JAMBA), the China-Australia Migratory Birds Agreement (CAMBA), the Republic of Korea-Australia Migratory Birds Agreement (ROKAMBA), Bush Forever Decreaser Species (which includes bird habitat specialists) and species that are considered to be of local significance. These are described further below.

2.2.2.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act is the Australian Government's legal framework to protect threatened fauna species of national and international importance. Threatened fauna may be listed in any one of the categories provided in **Table 1**, and as defined in Section 179 of the EPBC Act.

A search was undertaken of the DSEWPAC's database using the 'Protected Matters Search Tool' within a 6 km radius from the site. A total of six fauna species were identified from this search and are considered to be Matters of National Environmental Significance (MNES) pursuant to the EPBC Act. These species were:

carnaby's black cockatoo (*Calyptorhynchus latirostris*) - Engangered
graceful sun-moth (*Synemon gratiosa*) - Endangered
red-tailed phascogale - (*Phascogale calura*) - Endangered
chuditch (*Dasyurus geoffroii*) - Vulnerable
forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) - Vulnerable
quokka (*Setonix brachyurus*) - Vulnerable.

The EPBC Act also lists migratory species, and a number of migratory species were identified from the DSEWPC search, however these species have been addressed separately in **Section 2.2.2.3** below.

2.2.2.2 Western Australian Wildlife Conservation Act 1950

All fauna in Western Australia is protected under Section 14 of the *Wildlife Conservation Act 1950* (WC Act). In particular, and in order to acknowledge conservation significant fauna, the WC Act lists species that are acknowledged to be under some threat of extinction. These lists are confirmed through formal notices, which are lists of significant species subject to protection under the WC Act (i.e. the *Wildlife Conservation (Specially Protected Fauna) Notice 2010(2)*). The WC Act acknowledges the level of threat or vulnerability according to four levels of 'schedules' (see **Table 2**).

Of the species identified as part of the fauna inventory, the following are scheduled fauna under the WC Act:

forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) S1
carnaby's black cockatoo (*Calyptorhynchus latirostris*) - S1
graceful sun-moth (*Synemon gratiosa*) - S1
chuditch (*Dasyurus geoffroii*) - S1
red-tailed phascogale (*Phascogale calura*) - S1
quokka (*Setonix brachyurus*) - S1

great egret (*Ardea alba*) - S3
cattle egret (*Ardea ibis*) - S3
white-bellied sea-eagle (*Haliaeetus leucogaster*) - S3
peregrine falcon (*Falco peregrinus*) - S4
fork-tailed swift (*Apus pacificus)* - S3
rainbow bee-eater (*Merops ornatus*) - S3

*Table 1: Conservation categories of the EPBC Act and their criteria (*species which are deemed to be a "Matter of National Environmental Significance" pursuant to the EPBC Act)*

CONSERVATION CATEGORY	CRITERIA FOR INCLUSION IN CONSERVATION CATEGORY
Extinct	(a) there is no reasonable doubt that the last member of the species has died.
*Extinct in the wild	(a) it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or (b) it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
*Critically Endangered	(a) it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
*Endangered	(a) it is not critically endangered; and (b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
*Vulnerable	(a) it is not critically endangered or endangered; and (b) it is facing a high risk of extinction in the wild in the medium term future, as determined in accordance with the prescribed criteria.
Conservation Dependent	(a) the species is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or (b) the following subparagraphs are satisfied: (i) the species is a species of fish; (ii) the species is the focus of a plan of management that provides for management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long term survival in nature are maximised; (iii) the plan of management is in force under a law of the Commonwealth or of a State or Territory; (iv) cessation of the plan of management would adversely affect the conservation status of the specie

Table 2: Western Australian WC Act threatened fauna categories

SCHEDULE	CODE	DESCRIPTION
Schedule 1	S1	Fauna which is rare or likely to become extinct
Schedule 2	S2	Fauna which is presumed extinct
Schedule 3	S3	Birds which are subject to an agreement between the governments of Australia and Japan (JAMBA) relating to the protection of migratory birds and birds in danger of extinction
Schedule 4	S4	Fauna that is otherwise in need to special protection

2.2.2.3 Japan-Australia, China-Australia and Republic of Korea-Australia Migratory Birds Agreement

The Japan-Australia, China-Australia and Republic of Korea-Australia Migratory Bird Agreement (JAMBA/CAMBA/ROKAMBA) are bilateral agreements between the aforementioned governments for the protection of migratory bird species and their habitats.

The three agreements list terrestrial, water and shorebird species which migrate between Australia and Japan/China/Korea. Both agreements require the parties to:

protect migratory birds from take or trade except under limited circumstances
protect and conserve habitats
exchange information
build cooperative relationships.

The JAMBA agreement also includes specific provisions for cooperation on conservation of threatened birds. All migratory bird species listed in the annexes to these agreements are protected as MNES under the EPBC Act 1999. JAMBA, CAMBA and ROKAMBA species that appear on the fauna inventory list are indicated within **Appendix B**.

2.2.2.4 Bush Forever Decreaser Species

A number of bird species have been listed as significant on the Swan Coastal portion of the Perth Metropolitan Region (Government of Western Australia 2000). The bird species are often referred to as Bush Forever Decreaser species and are listed in three categories which are:

Habitat specialists with reduced distribution on the Swan Coastal Plain.
Wide ranging species with reduced populations on the Swan Coastal Plain.
Extinct species in the Perth region.

The presence of Bush Forever Decreaser species should be taken into consideration when determining the fauna values. Bush Forever Decreaser species are indicated as such within the fauna inventory list within **Appendix B**.

2.2.2.5 Local conservation significance

The local (sub-regional) significance of the study area has been determined by applying site specific criteria which are:

Fauna species and/or habitat present that is poorly represented in the general study area.
Fauna habitat within the general study area supporting species of conservation or other significance.
Fauna habitat in better condition that other similar locations in general subject area.

The Department of Environment and Conservation (DEC) produces a supplementary list of Priority fauna species. These species are not considered threatened under the WC Act, but due to lack of knowledge or where species are poorly represented in secure conservation reserves some concern for their long term survival exists. The five classification levels are shown in **Table 3**, and the list of species is provided in **Appendix B**.

Table 3: DEC Priority Fauna Categories

CATEGORY	CODE	DESCRIPTION
Priority 1	P1	Taxa with few, poorly known populations on threatened lands.
Priority 2	P2	Taxa with few, poorly known populations on conservation lands.
Priority 3	P3	Taxa with several, poorly known populations, some on conservation lands
Priority 4	P4	Taxa in need of monitoring (not currently threatened or in need of special protection, but could be if present circumstances change)
Priority 5	P5	Taxa in need of monitoring (not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years)

3 Reconnaissance Field Survey

3.1 Methods

3.1.1 Habitat assessment

A detailed habitat assessment was carried out by two environmental scientists from Emerge on the 10 December 2010 with the aim of confirming plant community mapping undertaken by Cardno BSD in 2005. The site was traversed on-foot and each plant community mapped within the site in 2005 was revisited. The revised vegetation community and condition mapping is shown in **Figure 3** and **Figure 4** respectively.

3.1.2 Reconnaissance survey

The reconnaissance fauna survey was undertaken on the 14 December 2010 and the 17 January 2011 by zoologist Greg Harewood and an environmental scientist from Emerge. Survey traverses were conducted on foot and in total covered approximately15 lineal kilometers. This supplemented a reconnaissance survey also undertaken by Greg Harewood in 2005.

3.1.3 Black cockatoo habitat assessment

A targeted black cockatoo habitat assessment was carried out during the site reconnaissance survey. All trees within the site were assessed for the potential to contain or develop suitable hollows for black cockatoos. For the purposes of this study a potential cockatoo hollow has been defined as:

Generally any tree which is alive or dead that contains one or more visible hollows (cavities within the trunk or branches) suitable for occupation by any of the three black cockatoo species for the purpose of nesting/breeding. Hollows that had an entrance greater than about 12cm in diameter and would allow the entry of a cockatoo (white tailed or red-tailed) into a suitably orientated and sized branch/trunk, were recorded as a "potential nest hollow".

Target tree species included tuart (*Eucalyptus gomphocephala*), marri (*Corymbia calophylla*) and jarrah (*Eucalyptus marginata*) and any other suitable tree species of a suitable size that may be present. Peppermint (*Agonis flexuosa*), *Banksia* spp., sheoak (*Casuarina* spp., *Allocasuarina* spp.) and *Melaleuca* spp., were not assessed as they typically do not develop hollows that are used by black cockatoos.

The locations of identified potential habitat trees were recorded using a handheld Global Positioning System (GPS) unit. In addition, details including the number, type and size of hollows observed and an assessment of their likelihood of representing an existing or potential black cockatoo nest hollow were noted.

Specific observations of foraging and roosting evidence were made during the survey, with the location and nature of the evidence observed (if any) recorded. The diet of black cockatoos includes the fruits, seeds, flowers, nectar and grubs from a range of plant species. Foraging habitat can therefore be regarded as any area of vegetation containing plant species that one or more of the black cockatoos normally feed upon. Roosting sites represent trees where, at night, black cockatoos aggregate in groups to rest. Roosting sites are generally within groves of large, tall trees.

3.1.4 Graceful sun-moth survey

A graceful sun-moth survey was undertaken across the site in 2011 in accordance with DEC guidelines (Bishop, Williams et al. 2010). The survey methodology consisted of two parts:

- A detailed Lomandra density survey.
- Graceful sun-moth survey using the results of the *Lomandra* density survey.

The *Lomandra* density survey was conducted between the 25 and 28 of January 2011 with the aim of mapping and quantifying potential graceful sun-moth habitat.

Graceful sun-moth surveys were undertaken between February and March 2011. Six repeat surveys were carried out on the 24 February and 3, 10, 15, 25 and 31 of March. The full graceful sun-moth report (Emerge Associates 2011) is contained within **Appendix C**.

3.1.5 Taxonomy and Nomenclature

Taxonomy and nomenclature for fauna species used in this report is generally taken from the DEC's WA Fauna Census Database which is assumed to follow Aplin and Smith (2001) for amphibians and reptiles, How et al. (2001) for mammals and Johnstone (2001) for birds.

Common names are taken from the Western Australia Museum (WAM) when specified, though where common names are not provided they have been acquired from other publications. Sources include Van Dyck & Strahan (2008), Bush et al (2010), Bush et al (2007), Wilson and Swan (2008), Bush et al (2002), Tyler et al. (2000), Christidis and Boles (1994) and Glauret (1961). Not all common names are generally accepted.

3.2 Results

3.2.1 Habitat assessment

The habitat assessment generally confirmed previous plant community mapping undertaken by Cardno BSD in 2005 for the site. A number of refinements were made to the original mapping, with the vegetation on Lot 669 Mandogalup Road in the south of the site being determined as *Banksia attenuata* woodland rather than *Melaleuca preissiana-Eucalyptus rudis* woodlands (see **Plate 1)**. A few *Eucalyptus rudis* and *Melaleuca preissiana* species were present on the fringes of this degraded *Banksia* woodland, however the main plant community was *Banksia* woodland.

In the northern *Banksia* woodland community (Lot 682 Rowley Road), an additional two plant communities have been delineated, which includes a forest of low-lying *Banksia attenuata* and *Banksia illicifolia* over a sedgeland of *Dasypogon bromeliifolius* and *Lyginia barbata* and a *Eucalyptus rudis* and *Melaleuca preissiana* woodland. The low lying forest of banksia is a transitional community between the *Banksia attenuata* woodland on the drier upper sandy slopes and the *Melaleuca preissiana* and *Eucalyptus rudis* woodland that was identified in the depression. The plant communities and their fauna habitat potential are described below and shown on **Figure 3**.

- ***Parkland cleared (approximately 22 ha, see Plate 2***) – Cleared farmland with scattered native trees over introduced grasses and broadleaf species. Some areas of the cleared pasture are inundated during winter and provide foraging habitat for birds of prey, waterbird species and breeding grounds for frogs. Scattered trees include tuart, jarrah and flooded gum and while limited

in number, provide foraging and breeding opportunities for fauna. Generally speaking the fauna habitat values of these areas is low.

- **Banksia low woodland** (**approximately 33 ha, Plate 3**) – Low Banksia attenuata woodlands with emergent Eucalyptus marginata over heath of Hibbertia hypericoides, Stirlingia latifolia and Xanthorrhoea preissii. The amount of leave litter varies considerably from area to area and ranges from non-existent to dense. The best quality and most expansive Banksia low woodland occurs within the northern portion of Lot 682 Rowley Road and is in 'Excellent' condition. In 2005 evidence of Quenda and a sighting of the Western brush wallaby was made here. Significant sized fallen logs are rare, however hollows are relatively common in the eucalypt species with some significant sized hollows present. The Banksia species are likely to be used as a food source for the black cockatoo species that pass through the area. The greatest density of Lomandra hermaphrodita was mapped to occur within the Banksia low woodland, which is known as potential habitat for the graceful sun-moth. Despite a thorough survey during the graceful sun moth survey, that specifically targeted this area, there were no moths observed except for at the western boundary of the site in this area
- ***Banksia low forest (approximately 5 ha, see Plate 4)*** – Low *Banksia attenuata, Banksia illicifolia* and *Banksia menziesii* forest over heath of *Dasypogon bromeliifolius, Lyginia barbata* and *Schoenus* sp. This *Banksia* community has the same fauna habitat properties as the *Banksia* low woodland community described above.
- ***Eucalyptus rudis and Melaleuca preissiana woodland (approximately 3 ha, Plate 5)*** – Woodland of *Eucalyptus rudis* over *Melaleuca preissiana* and *Banksia littoralis* over *Astartea scoparia, Juncus pallidus*, **Carpobrotus edulis, *Zantedeschia aethiopica* and **Arctotheca calendula*. This community type, while being disturbed by some invasive groundcover weeds, provides a dense cover that could provide potential habitat for some fauna species that require refuge from predators, such as Quenda (a Quenda was observed in 2011 in this community while the graceful sun-moth survey was being undertaken). No *Lomandra hermaphrodita* or any sightings of graceful sun-moth were made in this community type.

The remainder of the site retains no native vegetation and has been delineated as 'No native species' on the plant community map shown in **Figure 3**. This covers approximately 73 ha of the site and is likely to provide very limited foraging habitat for birds of prey, waterbird species and breeding grounds for frogs. In addition Lot 52 was not fully surveyed and contains approximately 12 ha that has been cleared/slashed for the power transmission easement.

The remnant patches of native vegetation outlined above represent the only stands of native vegetation within the site and cover an area of approximately 40.79 ha. Of this, 37.76 ha is considered sufficiently intact enough to potentially retain its structure and condition in the longer term with management, although 10.32 ha of this is fragmented, isolated and already subject to some degrading influences and would require a significantly higher degree of management intervention. 3.03 ha (of the total 40.79 ha) is significantly degraded to the extent that it is unlikely to remain viable in the medium to longer term, even with significant management intervention.



Plate 1: Degraded Banksia attenuata woodland on Lot 669 Mandogalup Road in the south of the site that was previously mapped as Melaleuca preissiana-Eucalyptus rudis woodland. A number of scattered Eucalyptus rudis and Melaleuca preissiana trees were observed on the fringes of the Banksia woodland.



Plate 2: Parkland Cleared areas which consisting mainly of cleared paddocks with some scattered native tree species.



Plate 3: Banksia attenuata low woodland in an 'Excellent' condition over low heath of Hibbertia hypericoides, Xanthorrhoea preissii and Stirlingia latifolia.



Plate 4: Banksia attenuata, Banksia menziesii and Banksia illicifolia low forest over sedgeland of Dasypogon bromeliifolius, Lyginia barbata and Schoenus sp. in an 'Excellent' to 'Very Good' Condition.



*Plate 5: Woodland of Eucalyptus rudis over Melaleuca preissiana and Banksia littoralis over Astartea scoparia, Juncus pallida over *Carpobrotus edulis and *Zantedeschia aethiopica in a 'Very Good' condition.*

3.2.2 Reconnaissance survey

The results of the reconnaissance fauna survey (from both the 2005 and 2010 observations) are summarised below in **Table 4** and listed in the fauna inventory (see **Appendix B)**. A total of 57 fauna species were observed (or positively identified from scats, tracks, skeletons or calls) within the site during both reconnaissance surveys.

Table 4: Summary of potential and observed fauna species as listed in Appendix B.

GROUP	TOTAL NO. POTENTIAL SPECIES	TOTAL NO. OBSERVED SPECIES
Amphibians	9	3
Reptiles	37	1
Birds	96 (six are introduced species)	48 (two are introduced species)
Mammals	22 (six are introduced species)	5 (one is an introduced species)

3.2.3 Black Cockatoo Habitat Assessment

The black cockatoo habitat assessment identified a total of 231 trees within the site with a DBH of greater than 500 mm (**Figure 4**). Ninety nine (43%) of the trees did not contain hollows of any size. One hundred and fifteen (50%) of the trees contained one or more "small" hollows (<12 cm entrance size or >12 cm entrance in a small branch/trunk) which were considered not suitable for black cockatoos to use for nesting purposes. Seventeen (7%) trees contained hollows with larger entrances (>12 cm) that appeared large enough and orientated favorably to possibly allow the entry of a black cockatoo into a suitably sized branch/trunk. None of the trees containing large hollows showed any evidence of current or past use by black cockatoos.

Thirty six (16%) of all the trees with a DBH greater than 500 mm were dead. Details on the potential breeding habitat trees can be found in **Appendix D**.

As shown in **Figure 5**, these trees occurred across all three plant communities and within 'Parkland cleared' areas.

Evidence of two black cockatoo species foraging within the site was observed, associated with Carnaby's black cockatoo and the forest red-tailed black cockatoo. Evidence was in the form of chewed jarrah, tuart and sheoak fruits and chewed *Banksia* cones. The locations of these observations are shown in **Figure 6** with details provided in **Appendix D**. No foraging evidence was observed within the 'Degraded' *Banksia* woodland within the south of the site. The areas of most concentrated black cockatoo foraging evidence coincides with the *Banksia* woodland communities.

All three plant communities within Lot 682 Rowley Road have documented black cockatoo foraging species. Based on the percentage covers of each species within each plant community, the two *Banksia* communities had greater cover values of identified foraging species.

No black cockatoo roosting trees were identified within the site during the survey period. A recent cockatoo roost survey carried out by the DEC within the defined "Swan Region" (DEC 2010), which includes the Perth metropolitan area did not locate any roosts within or in the immediate vicinity of either of the inlet corridor study areas. The closest roost site listed within the report is located about 3 km east of the site at Wandi (Roost Code: DEC11 – 63 Carnaby's roosting - DEC 2010). The closest breeding sites do not occur on the Swan Coastal Plain but in the forest along the Darling Scarp.

3.2.4 Graceful sun-moth survey

Three species of *Lomandra* were recorded in the *Lomandra* density survey, *Lomandra caespitosa, Lomandra hermaphrodita* and *Lomandra maritima*, that latter two of these species being the only known habitat species for the graceful sun-moth (Bishop, Williams et al. 2010). The two *Lomandra* species were recorded at 52 of the 104 quadrats surveyed (see **Figure 3** of **Appendix C**). *Lomandra hermaphrodita* was more prolific across the site (recorded in 51 quadrats), whilst *Lomandra maritima* was recorded in seven quadrats. Both species were recorded in low numbers (1 - 16 plants), with *Lomandra hermaphrodita* having an average number of plants per quadrat of 3.8 (± 3.2) and *Lomandra maritima* having an average cover of 0.5% (± 0.5%).

No graceful sun-moth were found within the site across all six visits, however one moth was observed on the western boundary of the site that adjoins another area of similar remnant vegetation. This moth was recorded on the western firebreak of Lot 682 Rowley Road, and was observed to fly from the fire break into bush land on the adjacent land holding (10 Rowley Road). The graceful sun-moth survey report has been attached as **Appendix C**.

3.2.5 Fauna of Conservation Significance

The fauna inventory identified 37 species of conservation significance that could potentially occur within the site (see **Appendix B**). Not all species listed in the database and literature searches have been included within the fauna inventory, due to lack of suitable habitat. Of the species identified as potentially occurring within the site, three are listed pursuant to the EPBC Act, eight are listed under the WC Act, four are JAMBA/CAMBA/ROKAMBA migratory bird species, 28 are Bush Forever Decreaser species and four are DEC Priority Fauna (note that some of these species are listed under multiple levels of the significance framework). Information on potential conservation significant species is provided in **Appendix E**.

Carnaby's black cockatoo (*Calyptorhynchus latirostris*) (Endangered, S1): Foraging evidence attributed to this species was found during the survey (chewed tuart fruits, jarrah fruits and *Banksia* cones). The three plant communities and the areas that are 'Parkland Cleared' contain black cockatoo foraging species including tuart, jarrah and *Banksia,* however the 'Degraded' *Banksia* woodland and "Parkland cleared' areas in the south of the site did not show any evidence of foraging. Larger trees (! 500 mm DBH) are considered by the DSEWPAC as potential breeding habitat, although this is more prevalent in areas of surrounding woodland rather than isolated paddock trees. No evidence of actual breeding in any of the larger hollows observed was found, and the species is not known to nest in this part of the Swan Coastal Plain. There are no known roosts within the site and the closest identified/known roost site is located approximately 3 km east at Wandi.

Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Vulnerable, S1): Foraging evidence attributed to this species was found during the site survey (chewed jarrah and sheoak fruits). The three plant communities and the areas of 'Parkland Cleared' contain black cockatoo foraging species including jarrah and sheoak, however the 'Degraded' *Banksia* woodland and 'Parkland Cleared' areas in the south of the site did not record any evidence of foraging. Larger trees (!" ##!$ $! DBH) are considered by the DSEWPC as potential breeding habitat, although no evidence of actual breeding in the larger hollows observed was found and the species is not known to nest on the Swan Coastal Plain.

Graceful sun-moth (*Synemon gratiosa*) (Endangered, S1): The *Lomandra* density survey identified potential graceful sun-moth habitat within the *Banksia* woodland communities within Lot 682 Rowley Road. No *Lomandra* species were recorded within the *Eucalyptus rudis* and *Melaleuca preissiana* woodland. No graceful sun moth were recorded within the site over the six surveys, however one graceful sun-moth was recorded along the western firebreak of Lot 682 Rowley Road. The *Banksia* woodland community present within Lot 682 would provide potential habitat for the sun-moth, however considering the intensity of the survey, it is considered that the site does not support a population of the graceful sun-moth.

Rainbow bee-eater (*Merops ornatus*) (S3, JAMBA): This species was observed during the field survey foraging in open areas adjacent to the *Banksia* woodland within the north of the site. This species may also roost overnight in the site at times. It possibly breeds in some sections of the site though population levels would not be significant as it usually breeds in pairs, rarely in small colonies.

Fork-tailed Swift (*Apus pacificus*) (S3 JAMBA/CAMBA/ROKAMBA): This species is potentially an occasional summer visitor to the site, but it is entirely aerial and largely independent of terrestrial habitat.

White-bellied Sea Eagle (*Haliaeetus leucogaster*) (S3 CAMBA): This species potentially utilises some sections of the site as part of a much larger home range.

Great Egret (*Ardea alba*) (S3 JAMBA/CAMBA): The Great Egret is likely to commonly visit the area in low numbers, particularly in winter when the pasture areas are flooded.

Cattle Egret (*Ardea Ibis*) (S3 JAMBA/CAMBA): This species is likely to infrequently visit the area in low numbers, particularly in winter when pastures are flooded.

Peregrine Falcon (*Falco perigrinus*) (S4): This species potentially utilises some sections of the site as part of a much larger home range.

Quenda (*Isoodon obesulus fusciventer*) (P5): A dead Quenda was found in bushland just west of the current site during the 2005 survey (Harewood 2005) along with numerous diggings. One Quenda was observed during the graceful sun-moth survey by an environmental scientist from Emerge near the *Eucalyptus rudis* and *Melaleuca preissiana* woodland. Quenda are likely to utilise those sections of the site with the densest groundcover.

Western brush wallaby (*Macropus irma*) (P4): A Western brush wallaby was observed within the current site boundary during the 2005 survey (Harewood 2005). Current status in the area is however difficult to determine. This species typically only occurs in low densities so its capacity to persist in small, fragmented bush remnants is limited. It has been listed as a potential species, but may be locally extinct.

Perth Lined Lerista (*Lerista lineata*) (P3): Records of this species at the Spectacles suggest it may be present within the *Banksia* woodland within the site.

Black-striped Snake (*Neelaps calonotos*) (P3): Given the presence of suitable good quality habitat, it is likely to be present within the site.

A total of 28 Bush Forever Decreaser species were identified as potentially occurring within the site (**Appendix B**). Fifteen of these species were observed during the reconnaissance survey, these were:

broad-tailed thornbill (*Acanthiza apicalis*)
yellow-rumped thornbill (*Acanthiza chrysorrhoa*)
western thornbill (*Acanthiza inornata*)
grey shrike-thrush (*Colluricincla harmonica*)
splendid fairy-wren (*Malurus splendens*)
golden whistler (*Pachycephala pectoralis*)
scarlet robin (*Petroica multicolor*)
common bronzewing (*Phaps chalcoptera*)
weebill (*Smicrornis brevirostris*)
brown goshawk (*Accipiter fasciatus*)
wedge-tailed eagle (*Aquila audax*)
whistling kite (*Haliastur sphenurus*)
new holland honeyeater (*Phylidonyris novaehollandiae*)
carnaby's black cockatoo (*Calyptorhynchus latirostris*)
forest red-tailed black-cockatoo (*Calyptorhynchus banksii naso*).

The chuditch, red-tailed phascogale and quokka were all identified on the DESWPAC database search but were not included within the fauna inventory list. This was because these species are not considered to occur within the site as no evidence of this species was observed, and no suitable habitat (due to the size of the remnant and lack of dense understorey) exists within the site.

4 Discussion

As a consequence of the extensive clearing within the site (only 40.79 ha of the total 147.69 ha site area retains native vegetation) and the surrounding local area, the diversity of fauna species has been significantly reduced from pre-clearing levels. Habitat alteration/degradation as a result of clearing, altered fire regimes and predation by introduced predators is likely to have had an effect on fauna species diversity in the areas of this site that retain remnant vegetation.

Notwithstanding this, the results of the fauna assessment indicate that the site potentially hosts a range of fauna species. A total of 57 fauna species were observed (or positively identified from scats, tracks, skeletons or calls) within the site during both the 2005 and 2010/2011 surveys. .The site was also found to provide suitable habitat for a number of conservation significant species..

The desktop assessment and reconnaissance survey identified 37 species of conservation significance that use or potentially use the site. The most significant species, and those that are most relevant for the planning process, are species that are listed pursuant to the EPBC Act, WC Act and CAMBA/JAMBA/ROKAMBA agreements. These species are:

- carnaby's black cockatoo (*Calyptorhynchus latirostris*) (Endangered, S1)
- forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Vulnerable S1)
- graceful sun-moth (*Synemon gratiosa*) (Endangered, S1)
- rainbow bee-eater (*Merops ornatus*) (S3, JAMBA/CAMBA)
- great egret (*Ardea alba*) (S3, JAMBA/CAMBA)
- cattle egret (*Ardea Ibis*) (S3, JAMBA/CAMBA)
- peregrine falcon (*Falco perigrinus*) (S4)
- fork-tailed swift (*Apus pacificus*) (S3, JAMBA/CAMBA/ROKAMBA)
- white-bellied sea eagle (*Haliaeetus leucogaster*) (S3, CAMBA).

The chuditch (*Dasyurus geoffroii*), red-tailed phascogale (*Phascogale calura*), and quokka (*Setonix brachyurus*), while identified as part of the initial DSEWPAC database search were excluded from the fauna inventory due to lack of suitable habitat within the site and no evidence of these species utilising the site during the reconnaissance survey.

Of the species of conservation significance listed above, only the two species of black cockatoo are considered to regularly utilise the site for foraging and potential habitat. The rainbow bee-eater, great egret, cattle egret, peregrine falcon, fork-tailed swift and white-bellied sea eagle are all considered to potentially use the site on occasion, usually part of a much larger home range, but it is unlikely they rely on the site for their ongoing presence in the wider local area.

In regards to the graceful sun-moth, potential habitat was identified during the targeted survey within the *Banksia* woodland communities in 'Excellent' to 'Very Good' condition within the northern portion of Lot 682 Rowley Road. No *Lomandra* species were recorded within the *Eucalyptus rudis* and *Melaleuca preissiana* woodland. There were no graceful sun moths identified within the site during the six surveys, however one moth was observed along the western boundary of Lot 682 Rowley Road. It is therefore concluded that while potential habitat for this species exists, the site does not support a population of this species. The site was extensively surveyed over numerous visits and the identified moth was therefore likely to have originated from the bush land to the west of the site which also appears to support suitable potential habitat in 'Excellent' condition.

Evidence of the carnaby's black cockatoo and the forest red-tailed black cockatoo included sightings and foraging evidence. The habitat assessment identified 231 trees with a DBH of greater than or equal to 500 mm, of which 17 contained large hollows (>12 cm) that appeared big enough and oriented favorably to possibly allow entry to a black cockatoo, although none of these hollows showed any evidence of current or past use by black cockatoos. The closest roost site listed as part of the DEC cockatoo roost (DEC 2010) is located about 3 km east of the site at Wandi, and neither species are known to nest on this part of the Swan Coastal Plain.

All three plant communities identified within the site contain documented black cockatoo foraging species. No foraging evidence was recorded within the areas of 'Degraded' *Banksia* woodland within the south of the site. Based on the percentage covers of each species within each plant community, the two *Banksia* communities had greater cover values of identified cockatoo foraging species. Therefore the areas of *Banksia* woodland are considered to provide the greatest carrying capacity for foraging black cockatoos within the site.

Therefore, based on the results of the fauna and fauna habit assessment it is considered that the northern *Banksia* woodland communities, that are in 'Excellent' to 'Very Good' condition represent the most significant area of fauna habitat within the site and provide the core habitat area for the two species of black cockatoo within the site. This area is shown on **Figure 7**.

While this area also supports vegetation that could be considered suitable habitat for the graceful sun-moth species, a population of this species was not encountered following a comprehensive and targeted survey. While the black cockatoos are not known to breed in this area, this area also contains potential nesting trees which would be more likely to persist in the longer term compared to single paddock trees or trees in degraded woodland stands.

While other areas within the site do support remnant vegetation that contains black cockatoo foraging habitat and potential nesting habitat, these areas are currently degraded and isolated, and therefore less easily retained in a single conservation area (i.e. within public open space or other reservation) given the long term presence of the power transmission easement. The remnant vegetation in the southern extents of Lot 682 (10.32 ha on the southern side of the power transmission easement) has a much lower area to perimeter ratio, and already shows signs of pressure compared to the larger more intact areas to the north.

5 Conclusions and Recommendations

The level 1 fauna survey and habitat assessment identified a variety of fauna species and fauna habitats within the Mandogalup site

The fauna survey generated a total fauna inventory for the site, which consisted of both observed and potentially occurring species. A total of 57 of these were observed, or positively identified from scats, tracks, skeletons or calls, within the site during both the 2005 and 2010/2011 surveys.

From the total fauna inventory, 37 species were identified as having conservation significance at either National, State or Local levels. After detailed consideration of the potential habitat within the site and existing site conditions, it was concluded that the most significant fauna/fauna habitat value within the site is associated with the carnaby's black cockatoo (*Calyptorhynchus latirostris*) (Endangered EPBC Act, S1 WC Act) and the forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Vulnerable EPBC Act, S1 WC Act). Potential habitat for the graceful sun-moth was identified within the site, however there were no graceful sun moth recorded within the site and therefore it was concluded to be unlikely that the site supports a population of this species.

Foraging evidence for the two species of black cockatoo was identified across Lot 682 Rowley Road and given its structure and species composition all of the remnant vegetation across the site can be considered to provide some form of foraging habitat (although quite limited in some areas compared to other areas) for the two species of black cockatoo. This is approximately 40.79 ha of remnant vegetation, mostly across Lot 682.

Of this potential foraging habitat, it is recommended that the northern *Banksia* woodland communities that are in 'Excellent' to 'Very Good' condition provides the most valuable and intact potential foraging habitat for both black cockatoo species. This has been delineated on **Figure 7** and covers an area of approximately 24.7 ha. This area is considered to be relatively intact and therefore likely to retain its values in the longer term with routine and reasonable levels of ongoing management. All other areas are either significantly degraded or would require a significant management intervention to maintain foraging values in the long term.

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FIGURES

Figure 1: Location plan

Figure 2: The site and surrounding areas

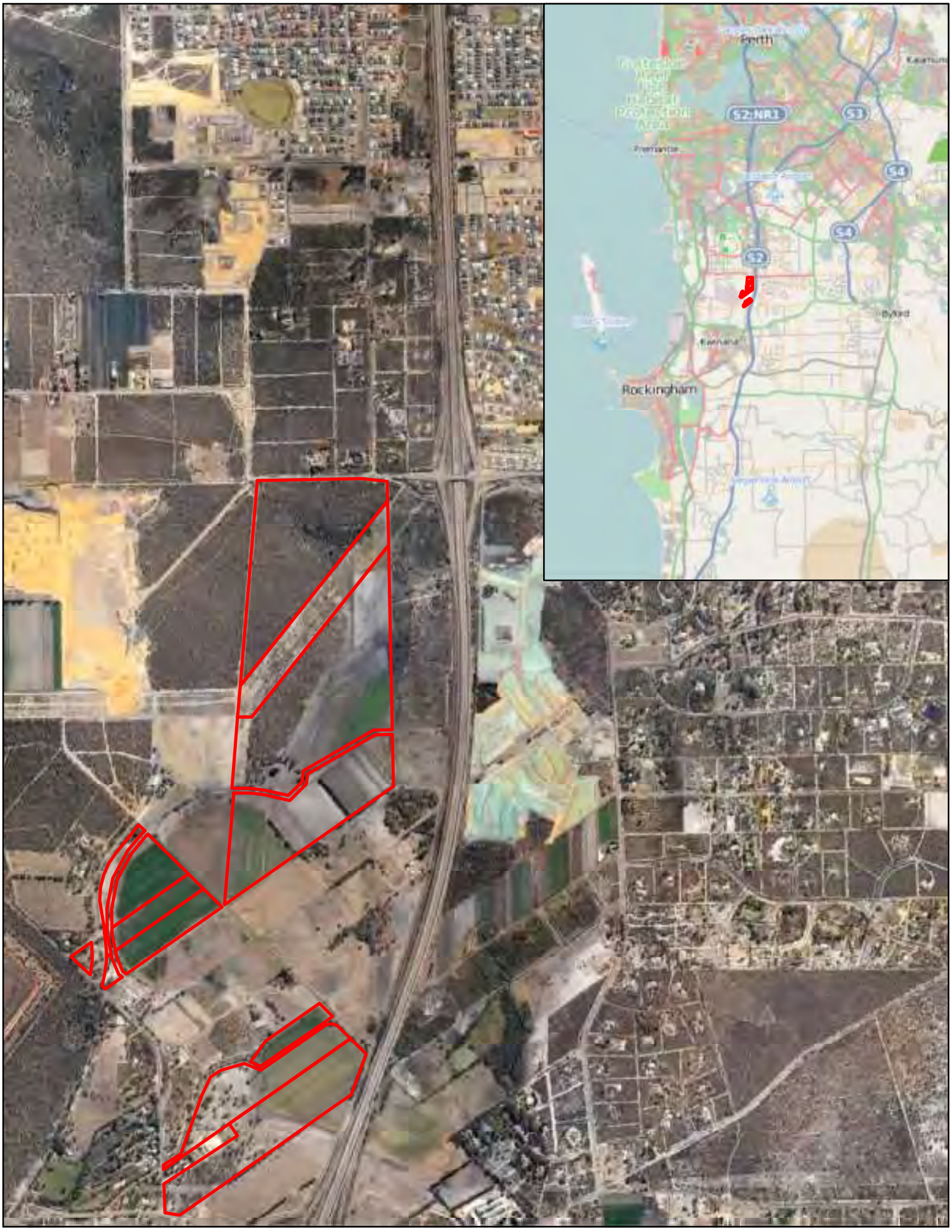
Figure 3: Plant community mapping

Figure 4: Plant community condition mapping

Figure 5: Potential black cockatoo breeding habitat trees

Figure 6: Locations of black cockatoo foraging evidence

Figure 7: Significant habitat areas



Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Level 1 Fauna Survey

Title:
Figure 1: Location Plan

Metres
0 150 300 600

Legend
Site boundary

19/09/11 :Date
1:20,000@A4 :Scale
EP10-18(01)--F13a :Plan Number
JDH :Checked
JDH :Approved

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Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Level 1 Fauna Survey

Title:
Figure 2: Site Location

Metres
0 100 200 400

Legend
Site boundary

19/09/11 :Date
1:13,000@A4 :Scale
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JDH :Checked
JDH :Approved

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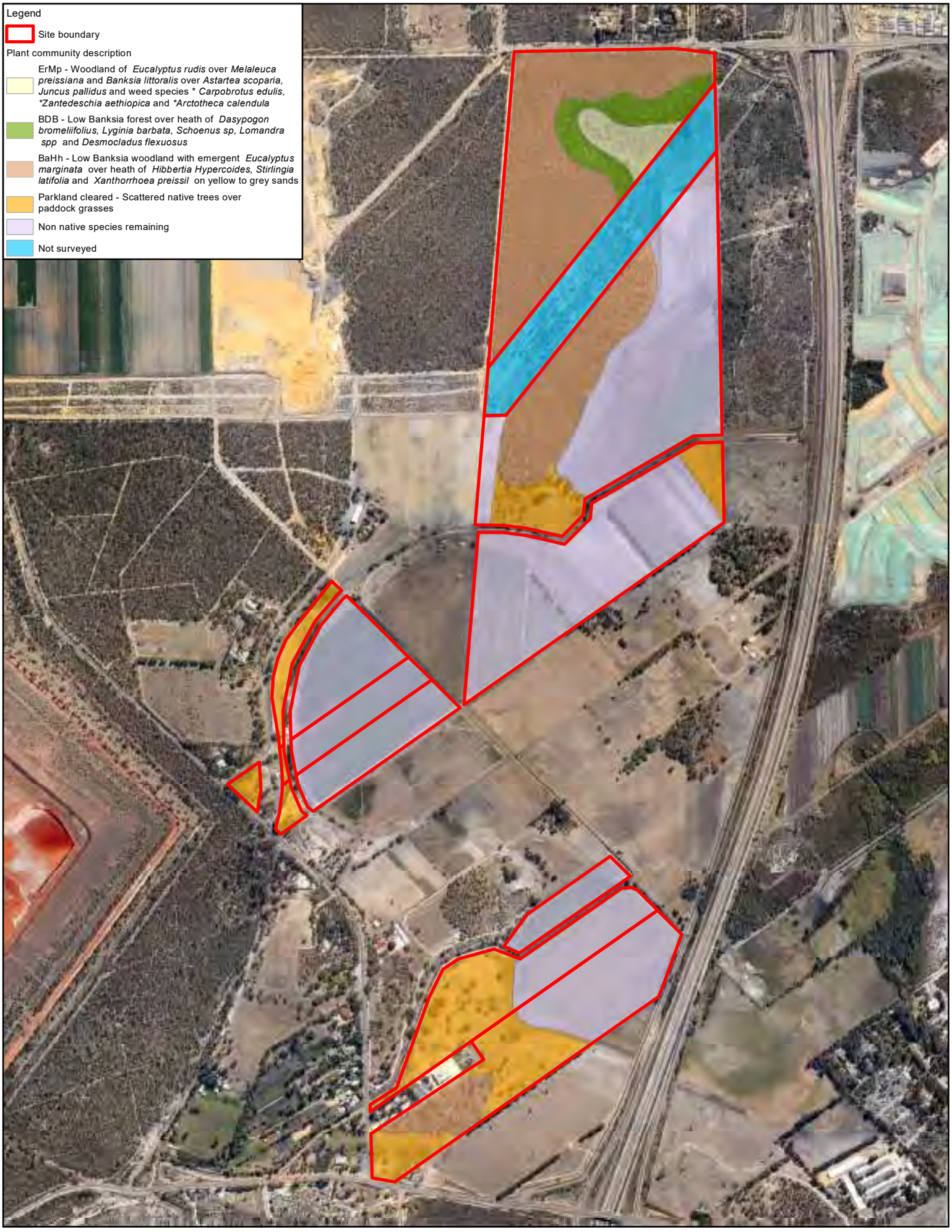

Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Level 1 Fauna Survey

Title:
Figure 3: Plant Community Mapping

Metres
0 100 200 400

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JDH :Checked
JDH :Approved

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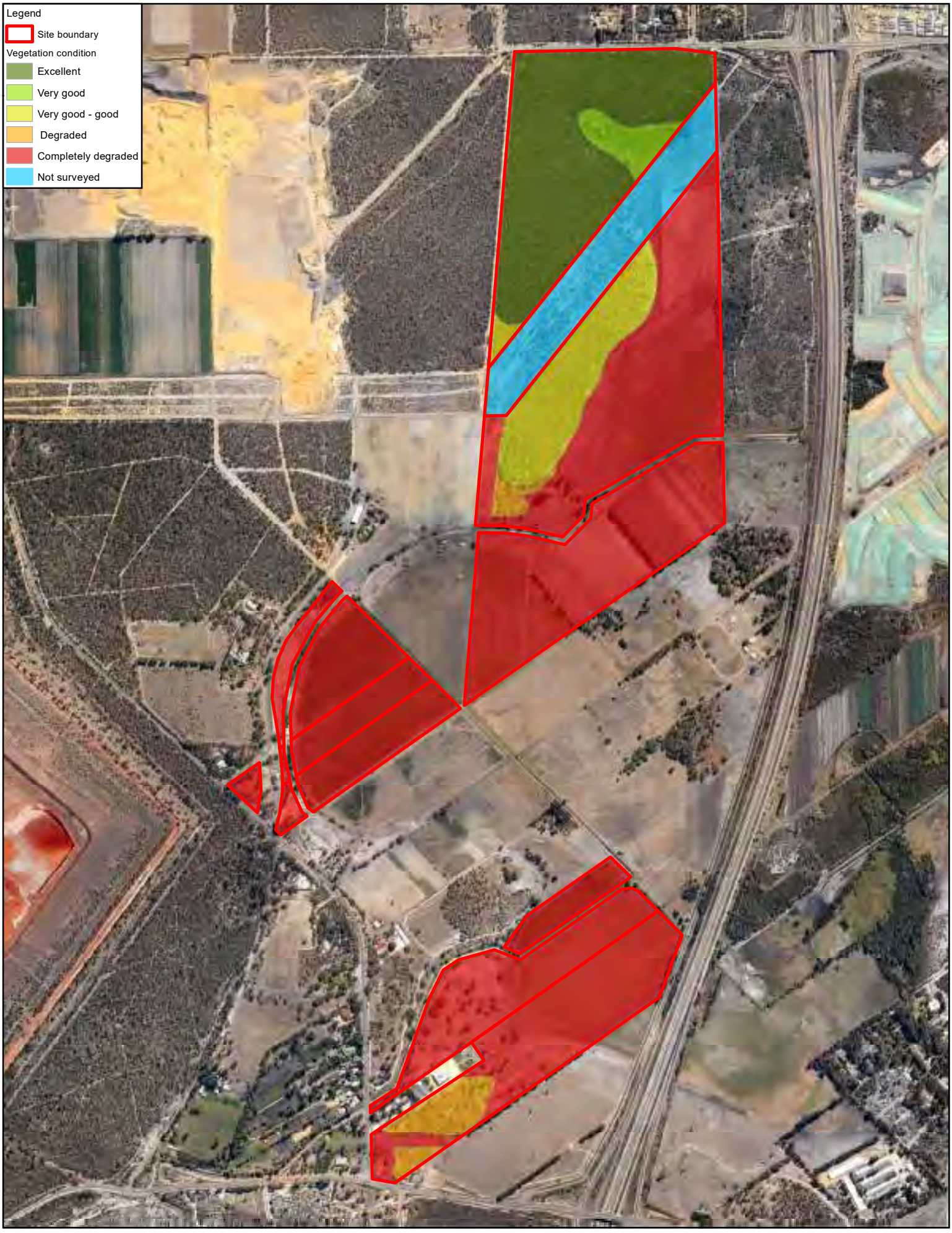

Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Level 1 Fauna Survey

Title:
Figure 4: Vegetation Condition

Metres
0 100 200 400

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EP10-18(01)--F19_QA :Plan Number
JDH :Checked
JDH :Approved

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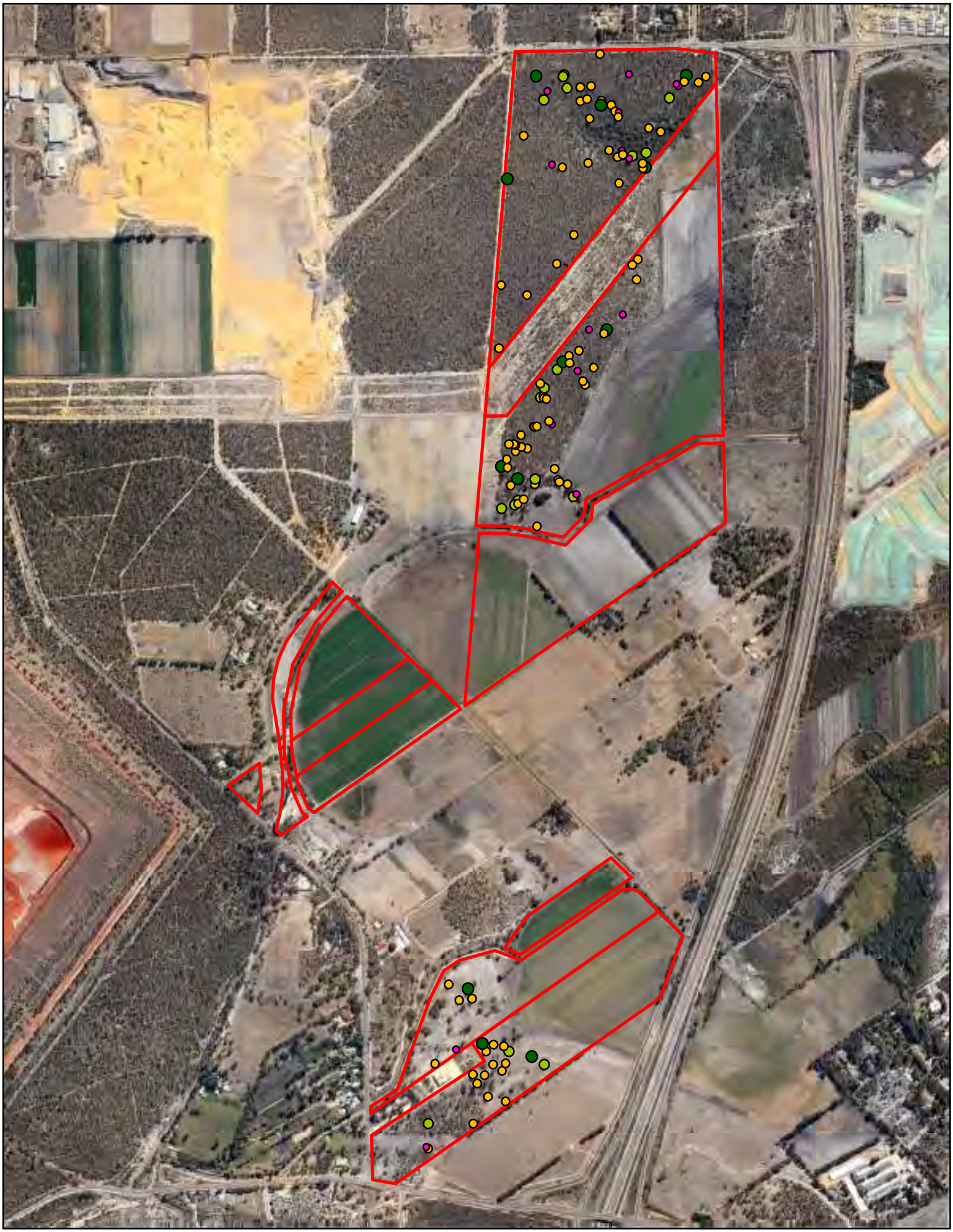

Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Level 1 Fauna Survey

Title:
Figure 5: Potential Black Cockatoo Breeding Habitat Trees

Metres
0 100 200 400

Legend
Site boundary
Mandogalup tree hollow size
<5
5-10
10-20
20+

19/09/11 :Date
1:13,000@A4 :Scale
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Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Level 1 Fauna Survey

Title:
Figure 6: Black Cockatoo Foraging Evidence

Metres
0 100 200 400

Legend
Site boundary
Survey data evidence
Banksia Cones
Jarrah Seeds
Sheoak Seeds
Tuart Seeds

19/09/11 :Date
1:13,000@A4 :Scale
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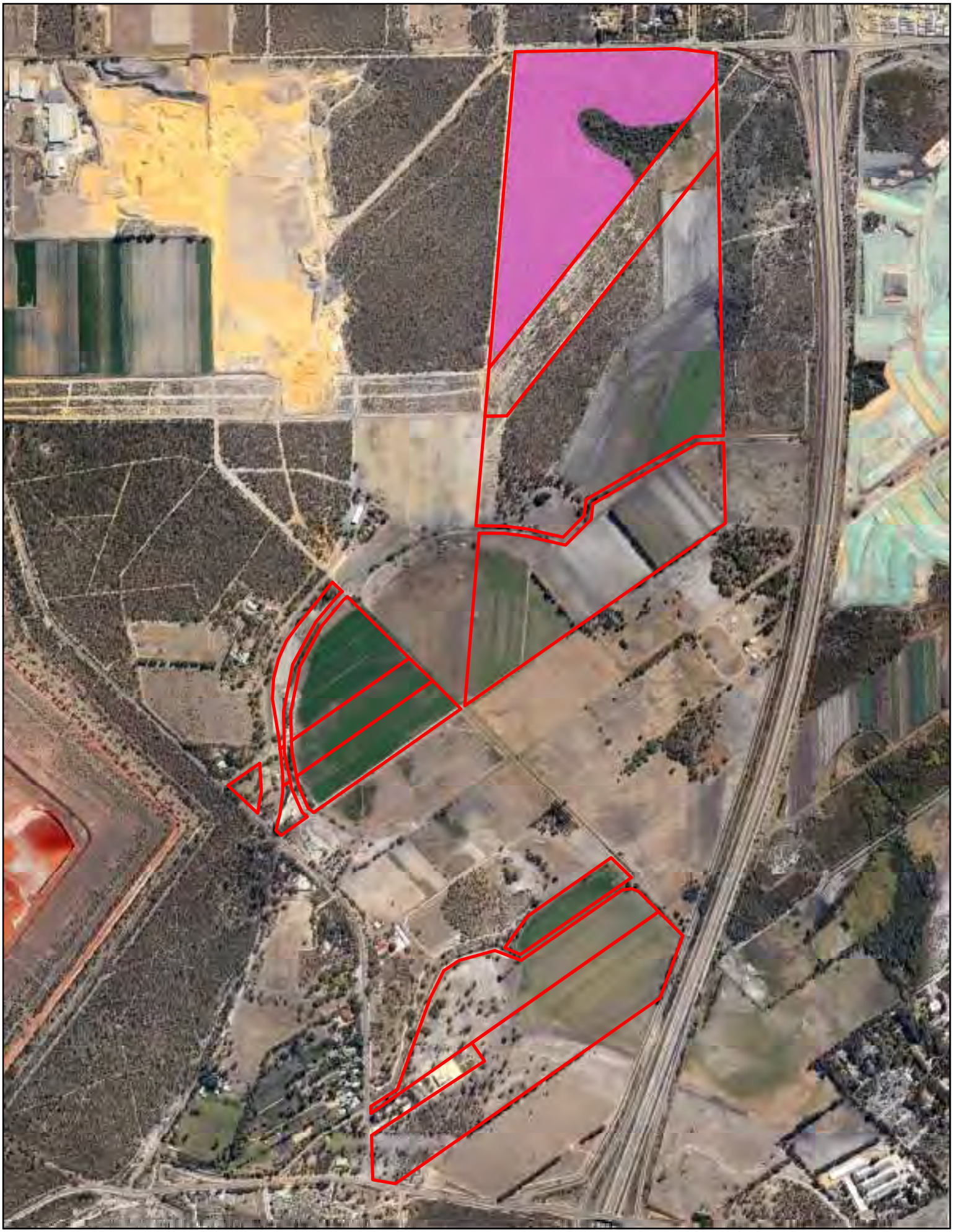

Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Level 1 Fauna Survey

Title:
Figure 7: Core Fauna Habitat Area

Metres
0 100 200 400

Legend
Site boundary
Core fauna habitat area

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APPENDIX A

LEVEL 1 FAUNA SURVEY 2005

FAUNA ASSESSMENT

MANDOGALUP

OCTOBER 2005

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STATEMENT OF LIMITATIONS

Scope of Services

This fauna assessment report ("the report") has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Greg Harewood ("the Author"). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints.

Reliance on Data

In preparing the report, the Author has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise stated in the report, the Author has not verified the accuracy of completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. The Author will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to the Author.

Environmental Conclusions

In accordance with the scope of services, the Author has relied upon the data and has conducted environmental field monitoring and/or testing in the preparation of the report. The nature and extent of monitoring and/or testing conducted is described in the report.

The conclusions are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of preparing the report. Also it should be recognised that site conditions, can change with time.

Within the limitations imposed by the scope of services, the field assessment and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.



Report for Benefit of Client

The report has been prepared for the benefit of the Client and no other party. The Author assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of the Author or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own enquiries and obtain independent advice in relation to such matters.

Other Limitations

The Author will not be liable to update or revise the report to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.

The scope of services did not include any assessment of the title to or ownership of the properties, buildings and structures referred to in the report nor the application or interpretation of laws in the jurisdiction in which those properties, buildings and structures are located.



1. INTRODUCTION

This report has been prepared in response to an invitation from Cardno BSD Pty Ltd to carry out a Level 1 (EPA 2004) fauna assemblage survey over an area of land at Mandogalup.

The study site is centred about 27 km south of Perth in Kwinana at approximately 32° 11' 39" S and 115° 50' 52" E (Figures 1). The fauna assessment was limited to the area as indicated in Figure 2. The study area totals about 350 hectares.

The assessment was carried out with reference to guidance and position statements published by the WA Environmental Protection Authority on fauna surveys and environmental protection (EPA 2002; EPA 2004). The minimum requirements for a Level 1 fauna assemblage survey as defined in these documents are:

Background research or 'desktop' study

The purpose is to gather background information on the target area (usually at the locality scale). This involves a search of all sources for literature, data and map-based information.

Reconnaissance survey

The purposes are: i) to verify the accuracy of the background study; ii) to further delineate and characterise the fauna and faunal assemblages present in the target area; and iii) to identify potential impacts. This involves a target area visit by suitably qualified personnel to undertake selective, low intensity sampling of the fauna and faunal assemblages, and to provide habitat descriptions and habitat maps of the project area.

2. METHODOLOGY

2.1 FAUNA HABITAT ASSESSMENT

A habitat assessment was carried out specifically targeting the likely habitats of listed (under the relevant Federal and State Acts) threatened vertebrate species potentially occurring in the general area. The aim of the habitat assessment was to determine if it was likely that any of the threatened species would be utilising the area.

The initial phase of the assessment involved the review of available information on the habitats of the threatened species possibly occurring in the region. During the field survey the habitat at the site was assessed to determine its potential to be hosting any of the listed threatened species in addition to aiding



in the compilation of a potential fauna list based on available habitats and opportunistic observations.

2.2 FAUNA INVENTORY

2.2.1 Opportunistic Fauna Survey

During the course of the reconnaissance field work non-systematic opportunistic observations of fauna species were made and recorded. Secondary evidence of fauna such as tracks, diggings and scats were also noted. Some active searching was undertaken in specific areas with the aim of locating the more elusive frog and reptile species that may inhabit the site. Invertebrate fauna species were not recorded.

2.2.2 Potential Fauna

A list of all vertebrate fauna potentially occurring within the study area was compiled from searches done on the WA Museum Database, the Department of Conservation and Land Managements Threatened Fauna Database, Department of the Environment and Heritage Departments Commonwealth Environment Protection and Biodiversity Conservation Database, Birds Australia's 'birdata", published and unpublished reports and specialist books detailing fauna of the general area. Species observed during field work have also been included. The results of the habitat assessment also provided information on the potential fauna assemblage.

Taxonomy and nomenclature for fauna species used in this report generally follow Aplin and Smith (2001) for amphibians and reptiles, How *et al*. (2001) for mammals and Johnstone (2001) for birds. Some names, including common names recommended for national and international use by Christidis and Boles (1994) for birds, are also used. Common names for reptiles and amphibians come from a variety of sources and are not necessarily generally accepted. Sources include Tyler *et al.* (2000) and Glauret (1961).

2.2.3 Fauna of Conservation Significance

The conservation status of fauna species in Western Australia is assessed under the federal *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the state administered *Western Australian Wildlife Conservation Act 1950 (*WAWC Act*)*.



Under the EPBC Act threatened fauna may be listed in any one of the following categories as defined in Section 179 of the Act:

- Extinct;
- *Extinct in the wild;
- *Critically endangered;
- *Endangered;
- *Vulnerable; and
- Conservation dependent.

*Only species in those categories marked with an asterix are matters of national environmental significance under the EPBC Act.

The WAWC Act uses a set of schedules (see Table 1) in addition to utilising the categories defined by the EPBC Act.

Table 1: Western Australian Threatened Fauna Categories

Category	Code	Description
Schedule 1	S1	Fauna which is rare or likely to become extinct
Schedule 2	S2	Fauna which is presumed extinct
Schedule 3	S3	Birds which are subject to an agreement between the governments of Australia and Japan (JAMBA) relating to the protection of migratory birds and birds in danger of extinction
Schedule 4	S4	Fauna that is otherwise in need of special protection

In Western Australia, the Department of Conservation and Land Management (CALM) also produce a supplementary list of priority fauna. The species listed are not considered threatened under the WAWC Act, but due to lack of knowledge or where species are poorly represented in secure conservation reserves some concern for there long term survival exists. The five classifications levels are shown in Table 2.



Table 2: CALM Priority Fauna Categories

Category	Code	Description
Priority 1	P1	Taxa with few, poorly know populations on threatened lands.
Priority 2	P2	Taxa with few, poorly known populations on conservation lands.
Priority 3	P3	Taxa with several, poorly known populations, some on conservation lands.
Priority 4	P4	Taxa in need of monitoring (Not currently threatened or in need of special protection, but could be if present circumstances change)
Priority 5	P5	Taxa in need of monitoring (Not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years)

The EPBC Act also requires the compilation of a list of migratory species that are recognized under international treaties including the Japan Australia Migratory Bird Agreement (JAMBA), the China Australia Migratory Bird Agreement (CAMBA) and the Bonn Convention (The Convention on the conservation of Migratory Species of Wild Animals). Species listed under JAMBA are also protected under Schedule 3 of the WAWC Act.

The conservation status of all the vertebrate fauna species listed as occurring or possibly occurring in the vicinity of the study area have been assessed using the most recent lists published in accordance with the above-mentioned Acts and CALM's priority fauna list and are indicated in the fauna listings of this report.

It should be noted that there are currently discrepancies between the Western Australian and Commonwealth threatened species lists. In an attempt to address this issue CALM and the Commonwealth Department of Environment and Heritage (DEH) have initiated an "alignment of lists" project where CALM provides advice on threatened species to the DEH so specific species can be assessed under the EPBC Act and the DEH database updated. This project is still in progress and subsequent changes in the DEH database may result in variations to the listings and classifications used for the project reported on here.

2.2.4 Other Species of Significance

A number of other species not listed in official lists can also be considered of regional conservation significance. These include species that have a restricted range, those that occur in breeding colonies and those at the limit of their range.



While not classified as rare, threatened or vulnerable under any State or Commonwealth legislation, a number of bird species have been listed as of significance on the Swan Coastal portion of the Perth Metropolitan Region (Bush Forever - Government of Western Australia 1998 and 2000). The bird species are often referred to as Bush Forever Decreaser Species. The two categories used for birds within the Bush Forever documents are:

Habitat specialists with reduced distribution on the Swan Coastal Plain (code Bh)

Wide ranging Species with reduced population's on the Swan Coastal Plain. (code Bp)

If present the species listed should be taken into consideration when determining an areas fauan value to ensure actions are taken that will aid in their continued existence in the region. Bush forever decreaser species are indicated as such within the species list.

2.3 LOCAL CONSERVATION SIGNIFICANCE OF THE STUDY AREA

The local (sub-regional) significance of the study area has been determined by applying site specific criteria such as:

Fauna species and/or habitat present that is poorly represented in the general study area;

Fauna habitat within the general study area supporting species of conservation or other significance;

Fauna habitat in better condition than other similar locations in general study area.

2.4 VALUE OF THE STUDY AREA AS A WILDLIFE CORRIDOR

Corridors of native vegetation can be very important for the dispersal of species in otherwise cleared landscapes. Any areas of remnant vegetation making up part of the linkage is therefore of great value by facilitating the movement of species that cannot utilise cleared land.

During the field survey and by examination of plans and air photos of the study area, the value of the site as a corridor allowing movement between any reserves, conservation areas or other significant areas of remnant bush was assessed.



3. LIMITATIONS OF THE STUDY

The fauna assessment has been limited to a desktop analysis aimed at providing a list of expected species and a daytime site visit primarily aimed at habitat assessment and opportunistic fauna observations. No fauna trapping or seasonal sampling has been conducted. The survey has been designed and carried out to conform with a Level 1 survey as defined in EPA Guidance statement No. 56 (EPA 2004).

In recognition of survey limitations a precautionary approach has been adopted for this assessment. Any species that would potentially occur within the study area as identified through ecological databases, publications and the habitat knowledge of the Author has been assumed to potentially occur in the study area.

4. SURVEY EFFORT

The reconnaissance survey of the study site was carried out on the 7th September 2005 between 9:00am and 5:00pm. Survey traverses were conducted on foot and in total covered about 16km.

5. RESULTS

5.1 FAUNA HABITAT ASSESSMENT

The project area is situated on the extreme western margin of the central part of the Swan Coastal Plain. The Swan Coastal Plain Bioregion (SWA) was classified as part of the Interim Biogeographical Regionalisation for Australia and is in broad terms described as a:

"Low lying coastal plain mainly covered with Woodlands. It is dominated by Banksia or Tuart on sandy soils, *Allocasuarina obesa* on outwash plains, and paperbark in swampy areas. In the east, the plain rises to duricrusted Mesozoic sediments dominated by Jarrah Woodland. Warm Mediterranean. Three phases of marine sand dune development provide relief. The outwash plains, once dominated by *A. obesa* – Marri Woodlands and Melaleuca shrublands, are extensive only in the south." (Thackway and Cresswell, 1996; IBRA, 2000).

The site lies over the eastern margin of the Spearwood Dunes System which consists of dune ridges/slopes and flat to gently undulating sandplains made up of deep silicious yellow brown sand. In the central and north eastern areas of the study site extensive areas of former swamps that have been artificially drained are present and consist of uniform loamy and peaty sands. The balance of the area is a broad poorly drained sandplain composed of deep grey silicious sands (part of the Bassendean Dune System).



Over two thirds of the study site has been cleared of native vegetation. Mapping by Heddle *et al* (1980) shows that prior to disturbance the higher areas would have consisted primarily of a Woodland of *Eucalyptus marginata* and Banksia sp. with low woodlands of *Melaleuca* sp. and sedgelands in moister sites (Bassendean Complex - Central and South). The lower lying areas would have consisted of sedgelands with fringing woodlands of *E. rudis* and *Melaleuca* sp. (Herdsman Complex). A small area in the south west section of the study site would have been predominately an open forest of *E. gomphocephala – E. Marginata*, *Corymbia calophylla* and/or a woodland of *E marginata* and *Banksia* sp. (Karrakatta Complex - Central and South).

5.1.1 Habitats within the Mandogalup Study Area

The extent of the broadly defined fauna habitats within the study area are shown in Figure 3 with a description of each given below. More detail on the composition of each bush remnant can be found within the flora report.

1. **Cleared with Scattered Trees:** Cleared farmland with a mixture of introduced pasture grasses, clovers, weeds and degraded sedgelands. Some areas of the cleared pasture are inundated during winter and provide foraging habitat for birds of prey, waterbird species and breeding grounds for frogs. This area also contains scattered trees of various species (*Eucalyptus* sp, *Melaleuca* sp. and exotics). While scattered and limited in number, the remaining trees provide roosting, foraging and breeding opportunities for fauna.

2. **Artificial Drains –** A number of artificial drains traverse the study area. They do not have any significant fringing vegetation. The drains provide refuge and foraging opportunities for a variety of fauna species and breeding sites for frogs.

3. **Banksia Woodland:** Low woodlands of *Banksia attenuata* make up the majority of the remnant vegetation at Mandogalup and are typically confined to the drier upper sandy slopes and ridges. Associated tree species vary with emergent *Eucalyptus marginata* being present in the northern areas, while in the south west corner *E. gomphocephala* (Tuart) is dominant. The amount of grown cover, understorey and leaf litter varies considerably from area to area and ranges from non-existent to dense. The best quality and most expansive areas exist in the north west corner of the study area. Evidence of Quenda's (*Isoodon obesulus fusciventer*) and a sighting of the Western Brush Wallaby (*Macropus irma*) were found here. Significant sized fallen logs are very rare. Hollows are relatively common within the Eucalypts with some significant sized hollows being present. The *Banksia* species are likely to be utilised as a food source for White-tailed Balck Cockatoos that pass through the area.



4. **Flooded Gum Woodland :** Flooded gums (*E.rudis*) are typically found in the lower lying areas, forming a fringe around areas subject to inundation. Melaleuca species replace the Flooded Gum in areas subject to more lengthy periods of inundation (these are shown as Melaleuca & Flooded Gum Woodland in Figure 2). As with other areas of the study site the amount of grown cover, understorey and leaf litter varies considerably from area to area and ranges from non-existent to dense. These areas have been subject to considerable historical disturbance with the most common ground cover observed being introduced species (various grass species and Arum Lily's). Despite its weed status the dense ground cover provides potential habitat for some fauna species that require refuge from predators such as Quenda's. Hollows within the Flooded Gums were not common

5. **Melaleuca Woodland:** Several small areas of paperbark woodland occur within the study area (in some cases grouped with Flooded Gum in Figure 2). The vegetation provides important roosting and refuge habitat for waterbirds, owls, raptors and in breeding grounds for frogs. The extent of inundated areas with the paperbark was limited to the two areas of Melaleuca and Flooded Gum along the eastern boundary of the study area. Other areas were dry at the time of the survey. In the more dense occurrences of Paperbark it could be classified as a Closed Woodland/Forest.

6. **Melaleuca Shrubland**: A generally dense Melaleuca shrubland is present in the north east of the study site. The composition changes to the south with shrub density reducing and Banksia species becoming more prevalent.

5.2 FAUNA INVENTORY

5.2.1 Opportunistic Fauna Surveys

The results of the opportunistic fauna survey are summarised in Table 4 and listed in Appendix A. A total of 45 fauna species were observed (or positively identified from scats, tracks, skeletons or calls) within the study area during the reconnaissance survey. Nine bush forever decreaser bird species were observed.

5.2.2 Potential Fauna

Table 4 summarises the numbers of potential species based on vertebrate class. A complete list of terrestrial vertebrate fauna possibly inhabiting or frequently the study area is held in Appendix A.

Details on specially protected and priority species expected and/or listed as potentially occurring in the general area are given in the section 5.2.3.

Not all species listed as potentially occurring within the study area (based on searches of the EPBC Act's Threatened Fauna and Migratory species lists,



CALM's Threatened Fauna Database and various publications) are shown in the expected listing in Appendix A. Some species have been excluded from this list based largely on the lack of suitable habitat within the study area.

Table 4: Summary of Potential Fauna Species (As listed in Appendix A)

Group	Total number of potential species	Number of specially protected species	Number of priority /migratory species	Number of species observed
Amphibians	9	0	0	3
Reptiles	31	0	2	1
Birds	108[C]	3	5	37[A]
Mammals	21[C]	0	3	4[A]

Note: some species fall into more than one category of protection, A= includes one introduced species B= includes two introduced species, C= includes five introduced species

5.2.3 Fauna of Conservation Significance

A search of EPBC Act's Threatened Fauna list, CALM's Threatened Fauna Database and Priority List and scientific publications identified 13 specially protected, priority or migratory fauna species as potentially occurring in the general study area. A brief account of these species with details on their distribution and habitat preference are given below.

Perth Lined Lerista *Lerisita lineata*

Status and Distribution: Listed as Priority 3 by CALM. Found in the lower west coast from Perth to Mandurah. It has also been found at Busselton, Rottnest Island and Garden Island (Storr *et al*, 1999) and at the Spectacles, just south of the study site (Government of Western Australia 2000b).

Habitat: This small species of skink inhabits white sands (Storr *et al*, 1999) under areas of shrubs and heath where it inhabits loose soil and leaf litter at the base of shrubs.(Nevill 2005).

Likely presence in study area: Records of this species at Spectacles suggest it may be present within Banksia woodland at Mandogalup.

Black-striped Snake *Neelaps calonotos*



Status and Distribution: Listed as Priority 3 by CALM. Found in the lower west coast from Lancelin to Mandurah. It is locally abundant but is under threat due to land clearing (Storr *et al*, 1999).

Habitat: This species of snake favours sandy soils supporting heath and banksia/eucalypt woodland (Nevill 2005).

Likely presence in study area: Given the presence of suitable good quality habitat it is likely to be present in the study area.

Great Egret *Ardea alba*

Status and Distribution: This species of egret is listed as migratory under the *EPBC Act (1999)* and under international agreements to which Australia is a signatory. The Great Egret is common and very widespread in any suitable permanent or temporary habitat (Morcombe, 2003).

Habitat: Wetlands, flooded pasture, dams, estuarine mudflats, mangroves and reefs (Morcombe, 2003).

Likely presence in study area: Likely to commonly visit the area in low numbers, particularly in winter when areas of pasture are flooded.

Cattle Egret *Ardea ibis*

Status and Distribution: This species of egret is listed as migratory under the *EPBC Act 1999* and under international agreements to which Australia is a signatory. The Cattle Egret is common in the north sections of its range but is an irregular visitor to the better watered parts of the state (Johnstone and Storr 1998). The population is expanding (Morcombe, 2003).

Habitat: Moist pastures with tall grasses, shallow open wetlands and margins, mudflats (Morcombe, 2003).

Likely presence in study area: Potentially an infrequent visitor to the general area. This species was not recorded in the project area during the most recent Birds Australia Atlas survey (Barrett, 2003) and there are also no W.A. Museum records in the region.

White-bellied Sea Eagle *Haliaeetus leucogaster*

Status and Distribution: This species is listed as migratory under the *EPBC Act (1999)* and under international agreements to which Australia is a signatory. White-bellied sea eagles are common in coastal and near coastal areas of Australia and are also found in New Guinea, Indonesia, China, southeast Asia and India.



Habitat: They nest and forage mainly near the coast but will also live near large rivers and lakes inland, often moving on a seasonal basis. White-bellied Sea-Eagles build a large stick nest, which is used for many seasons in succession.

Likely presence in study area: The species may occasionally fly over the study site but is unlikely to specifically target the area for foraging or nesting.

Peregrine Falcon *Falco perigrinus*

Status and Distribution: This species is listed as Schedule 3 under the *WAWC Act 1950*. Individuals of this species are uncommon/rare but wide ranging across Australia. Moderately common at higher levels of the Stirling Range, uncommon in hilly, north west Kimberley, Hamersley and Darling Ranges; rare or scarce elsewhere (Johnstone and Storr 1998).

Habitat: Diverse from rainforest to arid shrublands, from coastal heath to alpine (Morcombe, 2003). Mainly about cliffs along coasts, rivers and ranges and about wooded watercourses and lakes (Johnstone and Storr 1998). The species utilises the ledges, cliff faces and large hollows/broken spouts of trees for nesting. It will also occasionally use the abandoned nests of other birds of prey.

Likely presence in study area: The species potentially utilises some sections of the study area as part of a much larger home range. No evidence of this species nesting within the study area was found.

Carnaby's Black- Cockatoo *Calyptorhynchus latirostris*

Status and Distribution: Carnaby's Black Cockatoo is listed as Scheduled 1 under the *WAWC Act (1950)* and as Endangered under the *EPBC Act (1999)*. Confined to the south-west of Western Australia, north to the lower Murchison River and east to Nabawa, Wilroy, Waddi Forest, Nugadong, Manmanning, Durokoppin, Noongar (Moorine Rock), Lake Cronin, Ravensthorpe Range, head of Oldfield River, 20 km ESE of Condingup and Cape Arid; also casual on Rottnest Island (Johnstone and Storr 1998).

Habitat: Forests, woodlands, heathlands, farms; feeds on banksia, hakeas, dryandras and Marri. Breeding occurs in winter/spring mainly in eastern forest and wheatbelt where they can find mature hollow bearing trees to nest in (Morcombe, 2003).

Likely presence in study area: This species is likely to visit the area during non breeding season as suitable foraging and roosting habitat exists. Unlikely to breed in the area.

Baudin's Black- Cockatoo *Calyptorhynchus baudinii*

Status and Distribution: Listed as Scheduled 1 under the *WC Act (1950)* and as Endangered under the *EPBC Act (1999)*. Confined to the south-west of Western Australia, north to Gidgegannup, east to Mt Helena, Wandering, Quindanning, Kojonup, Frankland and King River and west to the eastern strip of the Swan Coastal Plain including West Midland, Byford, Nth Dandalup, Yarloop, Wokalup and Bunbury. (Johnstone and Storr 1998).

Habitat: Mainly eucalypt forests where it feeds primarily on the Marri seeds, (Morcombe, 2003), banksia, hakeas and *Erodium* sp. Also strips bark from trees in search of beetle larvae (Johnstone and Storr 1998).

Likely presence in study area: This species is likely to visit the area during non breeding season as suitable foraging and roosting habitat exists. Unlikely to breed in the area.

Fork-tailed Swift *Apus pacificus*

Status and Distribution: The Fork-tailed Swift is listed as migratory under the *EPBC Act 1999* and under international agreements to which Australia is a signatory. It is a summer migrant (Oct-Apr) to Australia (Morcombe, 2003).

Habitat: Low to very high airspace over varied habitat from rainforest to semi desert (Morcombe, 2003).

Likely presence in study area: It is potentially to be an occasional summer visitor to the study area but is entirely aerial and largely independent of terrestrial habitats.

Rainbow Bee-eater *Merops ornatus*

Status and Distribution: This species is listed as migratory under the *EPBC Act (1999)* and under international agreements to which Australia is a signatory. The Rainbow Bee-eater is a common summer migrant to southern Australia but in the north they are resident (Morcombe, 2003).

Habitat: Open Country, of woodlands, open forest, semi arid scrub, grasslands, clearings in heavier forest, farmlands (Morcombe, 2003). Breeds underground in areas of suitable soft soil firm enough to support tunnel building.

Likely presence in study area: A potential visitor to the general area. Potentially breeds in general area.



Southern Brush-tailed Phascogale *Phascogale tapoatafa tapoatafa*

Status and Distribution: Listed as Priority 4 by CALM. Present range is believed to have been reduced to approximately 50 per cent of its former range. Now known from Perth and south to Albany, west of Albany Highway. Occurs at low densities in the northern Jarrah forest. Highest densities occur in the Perup/Kingston area, Collie River valley, and near Margaret River and Busselton (CALM information pamphlet). Records are less common from wetter forests.

Habitat: This subspecies has been observed in dry sclerophyll forests and open woodlands that contain hollow-bearing trees but a sparse ground cover. A nocturnal carnivore relying on tree hollows as nest sites. The home range for a female Brush-tailed Phascogale is estimated at between 20 and 70 ha, whilst that for males is given as twice that of females. In addition, they tend to utilise a large number (approximately 20) of different nest sites throughout their range (Soderquist, 1995).

Likely presence in study area: Potentially present as suitable hollows exist in Eucalypts founds across the study site though there appears to be no recent records from adjacent bushland areas that have been subject to more detailed surveys (i.e. Spectacles, Thomsons Lake NR)

Quenda *Isoodon obesulus fusciventer*

Status and Distribution: Listed as Priority 5 by CALM. Widely distributed in the south west from near Cervantes north of Perth to east of Esperance, patchy distribution through the Jarrah and Karri forest and on the Swan Coastal Plain, and inland as far as Hyden. Has been translocated to Julimar State Forest, Hills Forest Mundaring, Tutanning Nature Reserve, Boyagin Nature Reserve, Dongolocking Nature Reserve, Leschenault Conservation Park, and Karakamia and Paruna Sanctuaries (CALM information pamphlet) and most recently Nambung National Park (CALM pers. coms.)

Habitat: Dense scrubby, often swampy, vegetation with dense cover up to one metre high, often feeds in adjacent forest and woodland that is burnt on a regular basis and in areas of pasture and cropland lying close to dense cover. Populations inhabiting Jarrah and Wandoo forests are usually associated with watercourses. Quendas will thrive in more open habitat subject to exotic predator control (CALM information pamphlet).

Likely presence in study area: A dead male Quenda was found in the far north west corner of the study site. Diggings of this species were found to be relatively common throughout the vegetated north west corner of the study site. May also be present in the other smaller pockets of remnant vegetation in the study area.



Brush Wallaby *Macropus irma*

Status and Distribution: Listed as Priority 4 by CALM. The Western Brush Wallaby is distributed across the south-west of Western Australia from north of Kalbarri to Cape Arid. Known populations exist in adjacent bushland areas (Government of Western Australia 2000b).

Habitat: The species optimum habitat is open forest or woodland, particularly favouring open, seasonally wet flats with low grasses and open scrubby thickets. It is also found in some areas of mallee and heathland, and is uncommon in karri forest (CALM information pamphlet).

Likely presence in study area: A single individual was sighted by K. DelFante (Botanist) during the course of field work. This species is likely to be present in small numbers, moving between adjacent bushland areas.

5.2.4 Other Species of Significance

Thirty three species of birds potentially frequent or occur in the study area that are noted as Bush Forever Decreaser Species in the Perth metropoltan region (nine species were sighted during surveys see Appendix A). Decreaser species are a significant issue in biodiversity conservation in the Perth section of the Coastal Plain as there have been marked reductions in range and population levels of many sedentary bird species as a consequence of disturbance and land clearing (Dell & Hyder-Griffiths, 2002). It can be expected that with increasing pressures on land use, populations and the ranges of some fauan species will further decline unless preventative measures are implemented.

5.3 LOCAL CONSERVATION SIGNIFICANCE OF THE STUDY AREA

The majority of the study site is cleared and as a consequence the diversity of fauna species present prior to disturbance has been reduced. Habitat degradation as a result of partial clearing, altered fire regimes and predation by introduced predators is also likely to have had an effect on species diversity in other areas of the study site, in particular the smaller bush remnants. A number of existing nature reserves and bush forever sites are present within close proximity to the study site and it can be expected that the habitats and fauna species present in the study site are well represented in these areas.

Despite the considerable disturbance of the majority of the area the results of the fauna assessment indicate that the study site potentially hosts a range of fauna species, some of which are of special conservation significance. The site was also found to provide suitable habitat for a number of bird species that have reduced populations and distributions in more developed areas of the Perth section of the Swan Coastal Plain. Because of these factors the remnant bushland, in particular the more extensive areas of banksia woodland in the north of the study site must be considered of local significance.



5.4 VALUE OF THE STUDY AREA AS A WILDLIFE CORRIDOR

Linkage with adjacent bushland areas is a natural attribute of high priority in the assessment of any sites significance. Within the Beeliar Regional Park Draft Management Plan (CALM 2000) and Bush Forever Volume 1 document (Figure 6 - Government of Western Australia 2000a) the Mandogalup area was specifically identified as part of a Greenway corridor between the Thompsons Lake Nature Reserve and the Spectacles.

The identified linkage extends from the Spectacles in the south, along the western boundary of the study site (in adjacent bushland), into the remnant bushland in the north west corner of the study area and into Frankland Park.

Within the Beeliar Regional Park Draft Management Plan it is stated that it is important to maintain and improve Greenway corridors and other links between and within Beeliar Regional Park to adjoin areas of ecological significance. This is necessary to help maintain the diversity and vigour of the Park's ecological systems and to help integrate the Park within the broader urban and industrial landscapes.

Where possible, greenway concepts should be incorporated into future planning proposals as part of the development of best practice planning and design solutions (Government of Western Australia 2000a).

6. FAUNAL VALUES

The Mandogalup study site contains a variety of fauna habitats and a number of fauna species of conservation significance were identified as utilising or potentially utilising the site. Sections of the site form part of an identified Greenway corridor.

Any proposed development of the site may require the clearing of remnant vegetation and consequently the loss or degradation of potential fauna habitat. The impact on specific fauna species will vary depending on population densities and the quantity and quality of potential foraging and breeding sites, both within the area of impact and adjacent areas. Development of the site also has the potential to restrict the movement of some fauna species as the area forms part of an identified ecological linkage and wildlife corridor.

Future planning proposals for the Mandogalup site should aim to retain as much of the existing remnant vegetation as possible with particular emphasis on maintaining and enhancing linkages between areas of remnant vegetation both within the site and adjoining areas.



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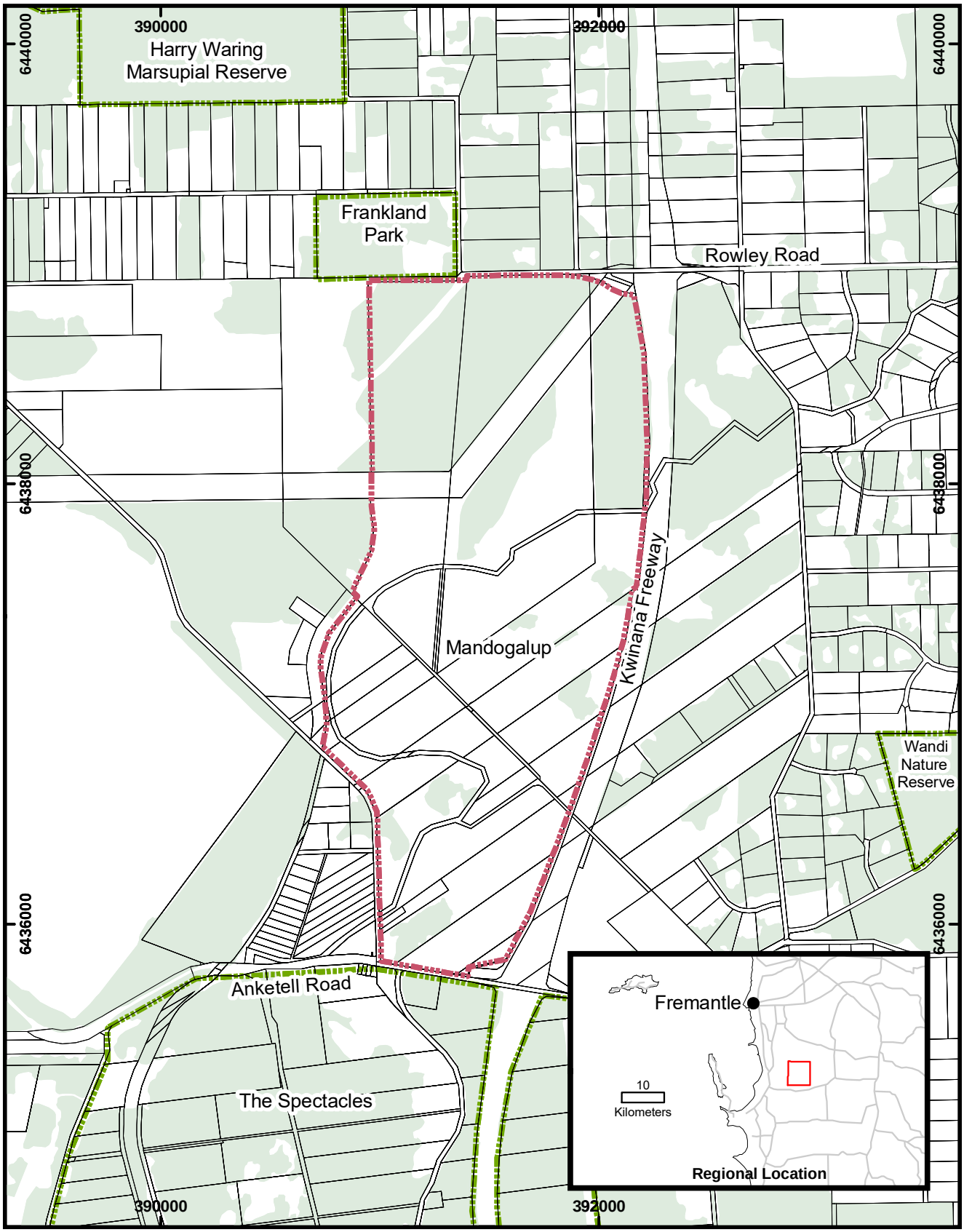
FIGURES



Legend

- Mandogalup Study Site
- Cadastral Boundaries
- Reserve Boundaries
- Remnant Native Vegegtation

0 500 1,000
Meters

MGA Zone 50



DRAWN: G Harewood

DATE : Oct 2005

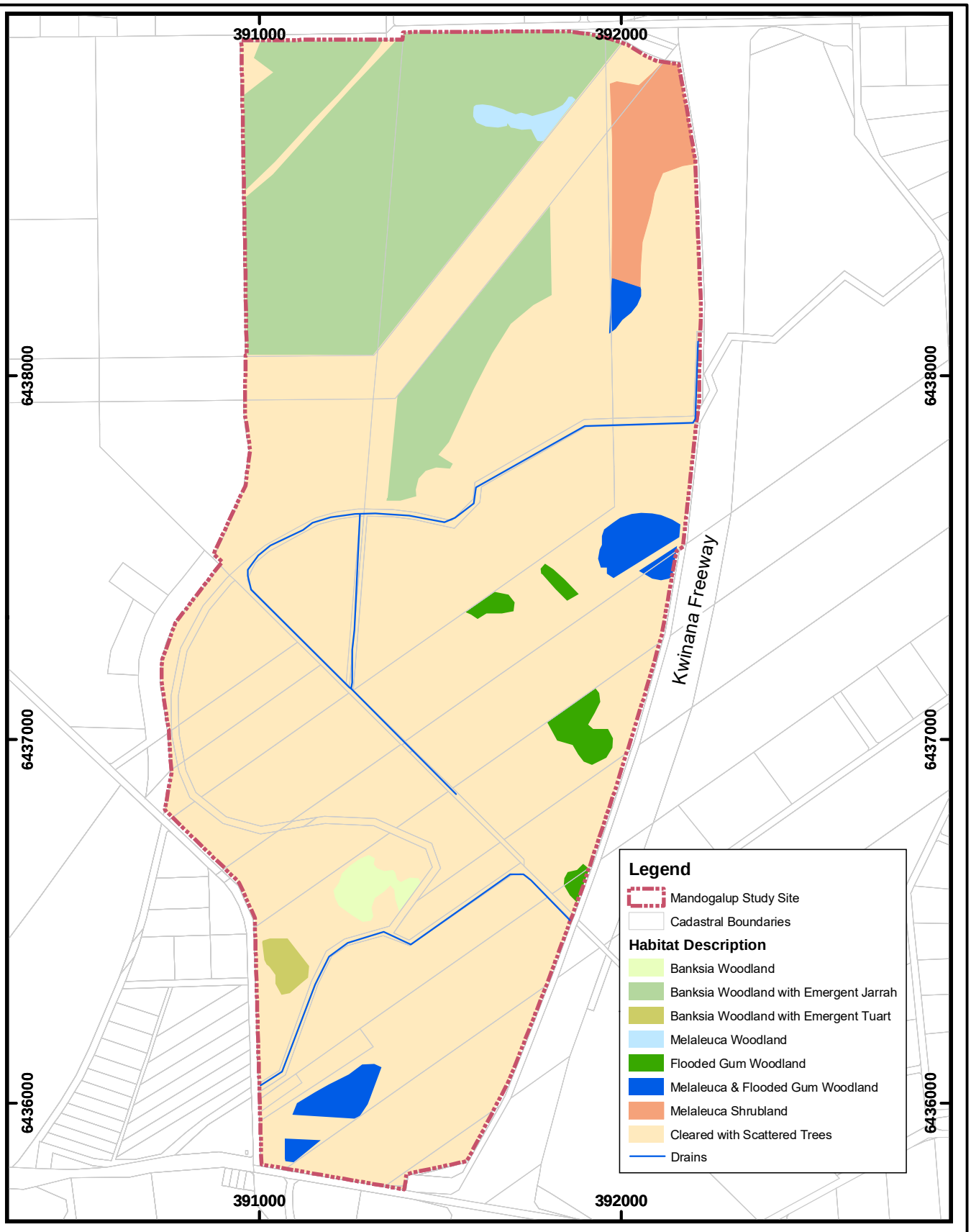
SCALE: 1: 25 000

REF :

Mandogalup
Fuana Assessment

Site Location

Figure: 1



0 500 1,000
Meters

MGA Zone 50

Fauna Assessment

Mandogalup
Fuana Assessment

Fauna Habitats

DRAWN: G Harewood

DATE : Oct 2005

SCALE: 1: 15 000

REF :

Figure: 2

APPENIDIX A

POTENTIAL FAUNA SPECIES LIST

Fauna Potentially in Study Area

Mandogalup

Compiled by Greg Harewood - September 2005

Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Amphibians			
Myobatrachidae Ground or Burrowing Frogs			
Crinia georgiana	Quacking Frog		+
Crinia glauerti	Glauert`s Froglet		+
Crinia insignifera	Squelching Froglet		+
Heleioporus eyrei	Moaning Frog		
Limnodynastes dorsalis	Banjo Frog		
Myobatrachus gouldii	Turtle Frog		
Pseudophryne guentheri	Güenther`s Toadlet		
Hylidae Tree Frogs			
Litoria adelaidensis	Slender Tree Frog		
Litoria moorei	Motorbike Frog		
Reptiles			
Gekkonidae Geckoes			
Phyllodactylus marmoratus	Marbled Gecko		
Pygopodidae Legless Lizards			
Aprasia repens	Sandplain Worm Lizard		
Delma fraseri	Fraser's Scale-footed Lizard		
Delma grayii	Gray's Legless Lizard		
Lialis burtonis	Common Snake Lizard		
Pygopus lepidopodus	Common Scaleyfoot		

* =Introduced, WAWC Act Status - S1 to S4, EPBC Act Status - EN = Endangered, VU = Vulnerable, EX = Extinct, CALM Priority Status - P1 to P5, Int. Agmts - CA = CAMBA, JA = JAMBA, Bush Forever Decreaser Species - Bh = habitat specialists, Bp = wide ranging species, Be = extinct in Perth Coastal Plain Region.

Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Scincidae Skinks			
Acritoscincus trilineatum	Swamp Skink		
Cryptoblepharus plagiocephalus	Fence Skink		
Ctenotus australis	Western Limestone Ctenotus		
Ctenotus fallens	West Coast Ctenotus		
Ctenotus impar	South-western Odd-striped Ctenotus		
Ctenotus labillardieri	Red-legged Skink		
Egernia kingii	King's Skink		
Egernia luctuosa	Mourning Skink		
Egernia napoleonis	Salmon-bellied Skink		
Hemiergis quadrilineata	Two-toed Earless Skink		
Lerista elegans	West Coast Four-toed Lerista		
Lerista lineata	Perth Lined Lerista	P3	
Lerista praepedita	Worm Lerista		
Menetia greyii	Dwarf Skink		
Morethia lineoocellata	Western Pale-faced Morethia		
Morethia obscura	Dusky Morethia		
Tiliqua rugosa	Bobtail		+
Typhlopidae Blind Snakes			
Ramphotyphlops australis	Southern Blind Snake		
Elapidae Elapid Snakes			
Elapognathus coronatus	Crowned Snake		
Neelaps calonotos	Black-striped Snake	P3	
Notechis scutatus	Tiger Snake		
Parasuta gouldii	Gould`s Snake		
Parasuta nigriceps	Black-backed Snake		
Pseudonaja affinis	Dugite		
Simoselaps bertholdi	Jan`s Banded Snake		

Birds

Phasianidae Quails, Pheasants			
Coturnix pectoralis	Stubble Quail		+

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Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Anatidae Geese, Swans, Ducks			
Anas gracilis	Grey Teal		
Anas platyrhynchos	Mallard		
Anas rhynchotis	Australasian Shoveler	Bh	
Anas superciliosa	Pacific Black Duck		+
Aythya australis	Hardhead	Bh	
Biziura lobata	Musk Duck	Bh	
Chenonetta jubata	Australian Wood Duck		+
Cygnus atratus	Black Swan		
Malacorhynchus membranaceus	Pink-eared Duck	Bh	
Oxyura australis	Blue-billed Duck	Bh	
Tadorna tadornoides	Australian Shelduck		+
Anhingidae Darters			
Anhinga melanogaster	Darter		+
Phalacrocoracidae Cormorants			
Phalacrocorax melanoleucos	Little Pied Cormorant		
Phalacrocorax sulcirostris	Little Black Cormorant		
Ardeidae Herons, Egrets, Bitterns			
Ardea alba	Great Egret	Migratory CA JA	
Ardea ibis	Cattle Egret	Migratory CA JA	
Egretta garzetta	Little Egret		
Egretta novaehollandiae	White-faced Heron		
Nycticorax caledonicus	Rufous Night Heron	Bp	
Threskiornithidae Iibises, Spoonbills			
Platalea flavipes	Yellow-billed Spoonbill		
Platalea regia	Royal Spoonbill		
Threskiornis molucca	Australian White Ibis		+
Threskiornis spinicollis	Straw-necked Ibis		

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Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Accipitridae Kites, Goshawks, Eagles, Harriers			
Accipiter cirrocephalus	Collared Sparrowhawk	Bp	
Accipiter fasciatus	Brown Goshawk	Bp	
Aquila audax	Wedge-tailed Eagle	Bp	
Aquila morphnoides	Little Eagle	Bp	
Circus approximans	Swamp Harrier		
Circus assimilis	Spotted Harrier		
Elanus caeruleus	Black-shouldered Kite		+
Haliaeetus leucogaster	White-bellied Sea-Eagle	Migratory CA	
Haliastur sphenurus	Whistling Kite	Bp	
Hamirostra isura	Square-tailed Kite	Bp	
Falconidae Falcons			
Falco berigora	Brown Falcon	Bp	
Falco cenchroides	Australian Kestrel		+
Falco longipennis	Australian Hobby		
Falco peregrinus	Peregrine Falcon	S4 Bp	
Turnicidae Button-quails			
Turnix varia	Painted Button-quail	Bp	
Columbidae Pigeons, Doves			
*Columba livia**	Domestic Pigeon		
Ocyphaps lophotes	Crested Pigeon		+
Phaps chalcoptera	Common Bronzewing	Bh	+
*Streptopelia chinensis**	Spotted Turtle Dove		
*Streptopelia senegalensis**	Laughing Turtle-Dove		+
Cacatuidae Cockatoos, Corellas			
Cacatua sanguinea	Little Corella		
*Cacatua tenuirostris**	Eastern Long-billed Corella		
Calyptorhynchus baudinii	Baudin`s Cockatoo	S1 EN Bp	
Calyptorhynchus latirostris	Carnaby`s Cockatoo	S1 EN Bp	
Eolophus roseicapilla	Galah		+

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Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Psittacidae Parrots			
Neophema elegans	Elegant Parrot		+
Platycercus spurius	Red-capped Parrot		+
Platycercus zonarius	Twenty-eight Parrot		+
Polytelis anthopeplus	Regent Parrot		+
Trichoglossus haematodus	Rainbow Lorikeet		
Cuculidae Parasitic Cuckoos			
Cacomantis flabelliformis	Fan-tailed Cuckoo		
Chrysococcyx basalis	Horsfield`s Bronze Cuckoo		
Chrysococcyx lucidus	Shining Bronze Cuckoo		
Cuculus pallidus	Pallid Cuckoo		
Strigidae Hawk Owls			
Ninox novaeseelandiae	Boobook Owl		
Tytonidae Barn Owls			
Tyto alba	Barn Owl		
Podargidae Frogmouths			
Podargus strigoides	Tawny Frogmouth		
Apodidae Swifts, Swiftlets			
Apus pacificus	Fork-tailed Swift	Migratory CA JA	
Halcyonidae Tree Kingfishers			
*Dacelo novaeguineae**	Laughing Kookaburra		+
Todiramphus sanctus	Sacred Kingfisher		
Meropidae Bee-eaters			
Merops ornatus	Rainbow Bee-eater	Migratory JA	
Maluridae Fairy Wrens, GrassWrens			
Malurus splendens	Splendid Fairy-wren	Bh	+

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Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Pardalotidae Pardalotes, Bristlebirds, Scrubwrens, Gerygones, Thornbills			
Acanthiza apicalis	Broad-tailed Thornbill	Bh	+
Acanthiza chrysorrhoa	Yellow-rumped Thornbill	Bh	+
Acanthiza inornata	Western Thornbill	Bh	+
Gerygone fusca	Western Gerygone		+
Pardalotus punctatus	Spotted Pardalote		
Pardalotus striatus	Striated Pardalote		+
Sericornis frontalis	White-browed Scrubwren	Bh	
Smicrornis brevirostris	Weebill	Bh	+
Meliphagidae Honeyeaters, Chats			
Acanthorhynchus superciliosus	Western Spinebill		+
Anthochaera carunculata	Red Wattlebird		+
Anthochaera lunulata	Western Little Wattlebird	Bp	
Epthianura albifrons	White-fronted Chat		
Lichenostomus virescens	Singing Honeyeater		+
Lichmera indistincta	Brown Honeyeater		
Melithreptus lunatus	White-naped Honeyeater	Bp	
Phylidonyris melanops	Tawny-crowned Honeyeater	Bp	
Phylidonyris nigra	White-cheeked Honeyeater	Bp	
Phylidonyris novaehollandiae	New Holland Honeyeater	Bp	+
Petroicidae Australian Robins			
Petroica cucullata	Hooded Robin	Bh	
Petroica goodenovii	Red-capped Robin		
Petroica multicolor	Scarlet Robin	Bh	+
Neosittidae Sitellas			
Daphoenositta chrysoptera	Varied Sittella	Bh	
Pachycephalidae Crested Shrike-tit, Crested Bellbird, Shrike Thrushes, Whistlers			
Colluricincla harmonica	Grey Shrike-thrush	Bh	
Pachycephala pectoralis	Golden Whistler	Bh	+
Pachycephala rufiventris	Rufous Whistler		

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Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Dicruridae Monarchs, Magpie Lark, Flycatchers, Fantails, Drongo			
Grallina cyanoleuca	Magpie-lark		+
Rhipidura fuliginosa	Grey Fantail		+
Rhipidura leucophrys	Willie Wagtail		+
Campephagidae Cuckoo-shrikes, Trillers			
Coracina novaehollandiae	Black-faced Cuckoo-shrike		
Lalage sueurii	White-winged Triller		
Artamidae Woodswallows, Butcherbirds, Currawongs			
Artamus cinereus	Black-faced Woodswallow	Bp	
Artamus cyanopterus	Dusky Woodswallow	Bp	
Cracticus tibicen	Australian Magpie		+
Cracticus torquatus	Grey Butcherbird		+
Corvidae Ravens, Crows			
Corvus coronoides	Australian Raven		+
Motacillidae Old World Pipits, Wagtails			
Anthus novaeseelandiae	Australian Pipit		
Dicaeidae Flowerpeckers			
Dicaeum hirundinaceum	Mistletoebird		
Hirundinidae Swallows, Martins			
Cheramoeca leucosternus	White-backed Swallow		
Hirundo neoxena	Welcome Swallow		
Hirundo nigricans	Tree Martin		
Sylviidae Old World Warblers			
Cincloramphus cruralis	Brown Songlark		
Zosteropidae White-eyes			
Zosterops lateralis	Grey-breasted White-eye		+

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Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Mammals			
Dasyuridae Carnivorous Marsupials			
Phascogale tapoatafa tapoatafa	Southern Brush-tailed Phascogale	P3	
Peramelidae Bandicoots			
Isoodon obesulus fusciventer	Southern Brown Bandicoot	P5	+
Phalangeridae Brushtail Possums, Cuscuses			
Trichosurus vulpecula	Common Brushtail Possum		
Burramyidae Pygmy Possums			
Cercartetus concinnus	Western Pygmy-possum		
Tarsipedidae Honey Possum			
Tarsipes rostratus	Honey Possum		
Macropodidae Kangaroos, Wallabies			
Macropus fuliginosus	Western Grey Kangaroo		+
Macropus irma	Western Brush Wallaby	P4	+
Molossidae Freetail Bats			
Mormopterus planiceps	Western Freetail Bat		
Tadarida australis	White-striped Freetail-bat		
Vespertilionidae Ordinary Bats			
Chalinolobus gouldii	Gould`s Wattled Bat		
Chalinolobus morio	Chocolate Wattled Bat		
Nyctophilus geoffroyi	Lesser Long-eared Bat		
Nyctophilus gouldi	Gould`s Long-eared Bat		
Nyctophilus timoriensis major	Greater Long-eared Bat		
Vespadelus regulus	Southern Forest Bat		
Muridae Rats, Mice			
*Mus musculus**	House Mouse		
Rattus fuscipes	Western Bush Rat		
*Rattus rattus**	Black Rat		

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Class **Family** *Species*	Common Name	Conservation Status	Sighted Sept 05
Canidae Dogs, Foxes			
*Vulpes vulpes**	Red Fox		
Felidae Cats			
*Felis catus**	Cat		
Leporidae Rabbits, Hares			
*Oryctolagus cuniculus**	Rabbit		+

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APPENDIX B

FAUNA INVENTORY

Fauna Observed or Potentially in Region of Study Area

Mandogalup, W.A.

Approximate centroid = 32.195226°S 115.848675°E

Emerge Associates (2011) - this report and Harewood, G (2005) Fauna Survey (Level 1) Mandogalup. Unpublished report for Cardno BSD,

Compiled by Greg Harewood - April 2011

Harewood, G. (2009) Fauna Survey (Level 2) East Rockingham WWTP Site Pipeline Corridors. Unpublished report for ERM.

Recorded (Sighted/Heard/Signs/Captured) = X

ENV Australia (2010). Cape Peron Fauna Assessment. Unpublished report for Strategen.

How R.A., Harvey M.S., Dell J. and Waldock J. (1996) Ground Fauna of Urban Bushland Remnants in Perth. Report N93/04 to the Australian Heritage Commission (Woodman Point Results).

DEC (2011). NatureMap Database search. “By Circle” 115° 50' 47" E, 33° 11' 49" S – Mandogalup Area (plus 6km buffer). 9th April 2011.

Class **Family** *Species*	Common Name	Conservation Status	Emerge '11 Harewood '05 Mandogalup	Harewood '09 ERWWTP	ENV '10 Point Peron	How et al '96 Woodman Pt	DEC '11 NatureMap
Amphibia							
Myobatrachidae Ground or Burrowing Frogs							
Crinia georgiana	Quacking Frog	LC	X				
Crinia glauerti	Clicking Frog	LC	X		X		X
Crinia insignifera	Squelching Froglet	LC	X				
Heleioporus eyrei	Moaning Frog	LC			X		X
Limnodynastes dorsalis	Western Banjo Frog	LC			X	X	X
Myobatrachus gouldii	Turtle Frog	LC					X
Pseudophryne guentheri	Crawling Toadlet	LC					

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Hylidae Tree or Water-Holding Frogs							
Litoria adelaidensis	Slender Tree Frog	LC			X		X
Litoria moorei	Motorbike Frog	LC			X		
Reptilia							
Diplodactylidae Geckoes							
Strophurus spinigerus	Soft Spiny-tailed Gecko			X	X		
Gekkonidae Geckoes							
Christinus marmoratus	Marbled Gecko			X	X		X
Pygopodidae Legless Lizards							
Aprasia repens	Sandplain Worm Lizard				X	X	
Delma fraseri	Fraser's Legless Lizard			X			X
Delma grayii	Side-barred Delma				X		
Lialis burtonis	Burton's Legless Lizard			X	X	X	
Pygopus lepidopodus	Common Scaly Foot						X

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Agamidae Dragon Lizards							
Ctenophorus adelaidensis	Western Heath Dragon			X	X		X
Pogona minor	Western Bearded Dragon			X	X		X
Varanidae Monitor's or Goanna's							
Varanus gouldii	Gould's Sand Monitor						
Varanus tristis	Racehorse Monitor			X		X	

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Scincidae Skinks							
Acritoscincus trilineatum	Southwestern Cool Skink				X		
Cryptoblepharus buchananii	Fence Skink			X	X	X	
Ctenotus australis	Western Ctenotus			X			X
Ctenotus fallens	West Coast Ctenotus			X	X	X	
Ctenotus impar	Odd-striped Ctenotus						
Egernia kingii	King's Skink						
Egernia napoleonis	Salmon-bellied Skink						X
Hemiergis quadrilineata	Two-toed Mulch Skink			X	X	X	X
Lerista elegans	West Coast Four-toed Lerista			X	X		X
Lerista lineata	Perth Lined Lerista	P3			X	X	X
Lerista praepedita	Western Worm Lizard						
Menetia greyii	Dwarf Skink			X	X	X	X
Morethia lineoocellata	West Coast Pale-flecked Morethia			X	X		X
Morethia obscura	Shrubland Pale-flecked Morethia			X			

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Tiliqua occipitalis	Western Bluetongue			X			
Tiliqua rugosa	Bobtail		X	X	X	X	X
Typhlopidae Blind Snakes							
Ramphotyphlops australis	Southern Blind Snake				X		X
Elapidae Elapid Snakes							
Brachyurophis semifasciata	Southern Half-girdled Snake						X
Demansia psammophis reticulata	Yellow-faced Whipsnake						X
Elapognathus coronatus	Crowned Snake						
Neelaps calonotos	Black-striped Snake	P3					X
Notechis scutatus	Tiger Snake						X
Parasuta gouldii	Gould's Hooded Snake						X
Parasuta nigriceps	Black-backed Snake						
Pseudonaja affinis	Dugite			X	X		X
Simoselaps bertholdi	Jan's Banded Snake						X

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Aves							
Phasianidae Quails, Pheasants							
Coturnix pectoralis	Stubble Quail	LC	X				X
Anatidae Geese, Swans, Ducks							
Anas gracilis	Grey Teal	LC			X		X
Anas superciliosa	Pacific Black Duck	LC	X		X		X
Chenonetta jubata	Australian Wood Duck	LC	X				X
Tadorna tadornoides	Australian Shelduck	LC	X				X
Ardeidae Herons, Egrets, Bitterns							
Ardea alba	Great Egret	S3 Mi CA JA			X		
Ardea ibis	Cattle Egret	S3 Mig CA JA					
Ardea novaehollandiae	White-faced Heron	LC			X		
Ardea pacifica	White-necked Heron	LC					X

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Threskiornithidae Ibises, Spoonbills							
Threskiornis molucca	Australian White Ibis	LC	X		X		X
Threskiornis spinicollis	Straw-necked Ibis	LC	X				X
Accipitridae Kites, Goshawks, Eagles, Harriers							
Accipiter cirrocephalus	Collared Sparrowhawk	Bp LC		X			X
Accipiter fasciatus	Brown Goshawk	Bp LC	X	X		X	X
Aquila audax	Wedge-tailed Eagle	Bp LC	X				X
Aquila morphnoides	Little Eagle	Bp LC		X		X	
Circus approximans	Swamp Harrier	LC			X		X
Circus assimilis	Spotted Harrier	LC					
Elanus caeruleus	Black-shouldered Kite	LC	X	X	X		
Haliaeetus leucogaster	White-bellied Sea-Eagle	S3 Mig CA LC					X
Haliastur sphenurus	Whistling Kite	Bp LC	X	X	X		X
Hamirostra isura	Square-tailed Kite	Bp LC					

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Falconidae Falcons							
Falco berigora	Brown Falcon	Bp LC					X
Falco cenchroides	Australian Kestrel	LC	X	X	X		X
Falco longipennis	Australian Hobby	LC	X	X	X		X
Falco peregrinus	Peregrine Falcon	S4 Bp LC		X			X
Turnicidae Button-quails							
Turnix varia	Painted Button-quail	Bp LC					X
Charadriidae Lapwings, Plovers, Dotterels							
Vanellus tricolor	Banded Lapwing	LC					X

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Columbidae Pigeons, Doves							
Columba livia	Domestic Pigeon	Introduced			X		X
Ocyphaps lophotes	Crested Pigeon	LC	X				X
Phaps chalcoptera	Common Bronzewing	Bh LC	X	X		X	X
Streptopelia chinensis	Spotted Turtle-Dove	Introduced					X
Streptopelia senegalensis	Laughing Turtle-Dove	Introduced	X	X	X		X

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Psittacidae Parrots							
Cacatua roseicapilla	Galah	LC	X	X	X	X	
Cacatua sanguinea	Little Corella	LC	X				X
Cacatua tenuirostris	Eastern Long-billed Corella	Introduced			X		
Calyptorhynchus banksii naso	Forest Red-tailed Black-Cockatoo	S1 VU VU Be LC	X				X
Calyptorhynchus latirostris	Carnaby's Black Cockatoo	S1 EN Bp EN A2bcd+3bcd	X	X			X
Glossopsitta porphyrocephala	Purple-crowned Lorikeet	LC					
Neophema elegans	Elegant Parrot	LC	X				X
Platycercus icterotis icterotis	Western Rosella (western ssp)	Bp LC			X		X
Platycercus spurius	Red-capped Parrot	LC	X	X		X	
Platycercus zonarius	Australian Ringneck Parrot	LC	X	X	X	X	X
Polytelis anthopeplus	Regent Parrot	LC	X				X
Trichoglossus haematodus	Rainbow Lorikeet	Introduced					X

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Cuculidae Parasitic Cuckoos							
Cacomantis flabelliformis	Fan-tailed Cuckoo	LC				X	X
Chrysococcyx basalis	Horsfield's Bronze Cuckoo	LC		X		X	
Chrysococcyx lucidus	Shining Bronze Cuckoo	LC				X	
Cuculus pallidus	Pallid Cuckoo	LC					X
Strigidae Hawk Owls							
Ninox novaeseelandiae	Boobook Owl	LC					X
Tytonidae Barn Owls							
Tyto alba	Barn Owl	LC		X			X
Podargidae Frogmouths							
Podargus strigoides	Tawny Frogmouth	LC					X
Caprimulgidae Nightjars							
Eurostopodus argus	Spotted Nightjar	LC					

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Aegothelidae Owlet-nightjars							
Aegotheles cristatus	Australian Owlet-nightjar	LC					
Apodidae Swifts, Swiftlets							
Apus pacificus	Fork-tailed Swift	S3 Mig CA JA RK LC					
Halcyonidae Tree Kingfishers							
Dacelo novaeguineae	Laughing Kookaburra	Introduced	X	X	X	X	X
Todiramphus sanctus	Sacred Kingfisher	LC				X	X
Meropidae Bee-eaters							
Merops ornatus	Rainbow Bee-eater	S3 Mig JA LC	X	X	X	X	X
Maluridae Fairy Wrens, GrassWrens							
Malurus splendens	Splendid Fairy-wren	Bh LC	X	X	X	X	X

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Acanthizidae Thornbills, Geryones, Fieldwrens & Whitefaces							
Acanthiza apicalis	Broad-tailed Thornbill	Bh LC	X	X	X	X	X
Acanthiza chrysorrhoa	Yellow-rumped Thornbill	Bh LC	X			X	X
Acanthiza inornata	Western Thornbill	Bh LC	X	X	X		X
Gerygone fusca	Western Gerygone	LC	X	X	X	X	X
Sericornis frontalis	White-browed Scrubwren	Bh LC		X	X	X	X
Smicrornis brevirostris	Weebill	Bh LC	X	X	X	X	X
Pardalotidae Pardalotes							
Pardalotus punctatus	Spotted Pardalote	LC					X
Pardalotus striatus	Striated Pardalote	LC	X	X	X	X	X

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Meliphagidae Honeyeaters, Chats							
Acanthorhynchus superciliosus	Western Spinebill	LC	X				X
Anthochaera carunculata	Red Wattlebird	LC	X	X	X	X	X
Anthochaera lunulata	Western Little Wattlebird	Bp LC					X
Lichenostomus virescens	Singing Honeyeater	LC	X	X	X	X	X
Lichmera indistincta	Brown Honeyeater	LC		X	X	X	X
Phylidonyris nigra	White-cheeked Honeyeater	Bp LC			X		
Phylidonyris novaehollandiae	New Holland Honeyeater	Bp LC	X	X	X		X
Petroicidae Australian Robins							
Petroica goodenovii	Red-capped Robin	LC					X
Petroica multicolor	Scarlet Robin	Bh LC	X	X			
Neosittidae Sitellas							
Daphoenositta chrysoptera	Varied Sittella	Bh LC		X			X

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Pachycephalidae Crested Shrike-tit, Crested Bellbird, Shrike Thrushes, Whistlers							
Colluricincla harmonica	Grey Shrike-thrush	Bh LC	X	X		X	X
Pachycephala pectoralis	Golden Whistler	Bh LC	X			X	X
Pachycephala rufiventris	Rufous Whistler	LC		X	X	X	X
Dicruridae Monarchs, Magpie Lark, Flycatchers, Fantails, Drongo							
Grallina cyanoleuca	Magpie-lark	LC	X	X	X	X	X
Rhipidura fuliginosa	Grey Fantail	LC	X	X	X	X	
Rhipidura leucophrys	Willie Wagtail	LC	X	X	X	X	X
Campephagidae Cuckoo-shrikes, Trillers							
Coracina novaehollandiae	Black-faced Cuckoo-shrike	LC		X		X	X
Lalage tricolor	White-winged Triller	LC					
Artamidae Woodswallows, Butcherbirds, Currawongs							
Artamus cinereus	Black-faced Woodswallow	Bp LC			X		X
Artamus cyanopterus	Dusky Woodswallow	Bp LC					X

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Cracticidae Currawongs, Magpies & Butcherbirds							
Cracticus tibicen	Australian Magpie	LC	X	X	X	X	X
Cracticus torquatus	Grey Butcherbird	LC	X	X	X	X	X
Corvidae Ravens, Crows							
Corvus coronoides	Australian Raven	LC	X	X	X	X	X
Motacillidae Old World Pipits, Wagtails							
Anthus australis	Australian Pipit	LC		X			
Dicaeidae Flowerpeckers							
Dicaeum hirundinaceum	Mistletoebird	LC					
Hirundinidae Swallows, Martins							
Hirundo neoxena	Welcome Swallow	LC		X	X	X	X
Hirundo nigricans	Tree Martin	LC		X		X	

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Sylviidae Old World Warblers							
Cincloramphus cruralis	Brown Songlark	LC					
Cincloramphus mathewsi	Rufous Songlark	LC					
Zosteropidae White-eyes							
Zosterops lateralis	Grey-breasted White-eye	LC	X	X	X	X	X
Mammalia							
Tachyglossidae Echidnas							
Tachyglossus aculeatus	Echidna	LR/LC					
Peramelidae Bandicoots							
Isoodon obesulus fusciventer	Southern Brown Bandicoot	P5 LC	X	X		X	X
Phalangeridae Brushtail Possums, Cuscuses							
Trichosurus vulpecula vulpecula	Common Brushtail Possum	LR/LC					
Burramyidae Pygmy Possums							
Cercartetus concinnus	Western Pygmy-possum	LR/LC					

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Tarsipedidae Honey Possum							
Tarsipes rostratus	Honey Possum, Noolbenger	LR/LC					X
Macropodidae Kangaroos, Wallabies							
Macropus fuliginosus	Western Grey Kangaroo	LR/LC	X	X			
Macropus irma	Western Brush Wallaby	P4 LR/NT	X				X
Molossidae Freetail Bats							
Mormopterus planiceps	Southern Freetail-bat	LR/LC		X			
Tadarida australis	White-striped Freetail-bat	LR/LC			X		

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Vespertilionidae Ordinary Bats							
Chalinolobus gouldii	Gould's Wattled Bat	LR/LC		X	X		
Chalinolobus morio	Chocolate Wattled Bat	LR/LC					
Nyctophilus geoffroyi	Lesser Long-eared Bat	LR/LC					
Nyctophilus gouldi	Gould's Long-eared Bat	LR/LC					
Nyctophilus timoriensis	Greater Long-eared Bat	LR/LC		X			
Vespadelus regulus	Southern Forest Bat	LR/LC		X			
Muridae Rats, Mice							
Mus musculus	House Mouse	Introduced		X	X	X	X
Rattus fuscipes	Western Bush Rat	LR/LC			X		X
Rattus rattus	Black Rat	Introduced		X		X	X
Canidae Dogs, Foxes							
Canis lupus familiaris	Dog	Introduced		X			
Vulpes vulpes	Red Fox	Introduced		X	X	X	

WC Act Status - S1 to S4, EPBC Act Status - EN = Endangered, VU = Vulnerable, EX = Extinct, DEC Priority Status - P1 to P5, Int. Agmts - CA = CAMBA, JA = JAMBA, RK = ROKAMBA, Bush Forever Decreaser Species - Bh = habitat specialists, Bp = wide ranging species, Be = extinct in Perth Coastal Plain Region. IUCN Red List Category Definitions LC = Least Concern - see Appendix A and www.iucnredlist.org/info/categories_criteria2001#categories for others.

Class **Family** *Species*	Common Name	Conservation Status	Emerge '11 Harewood '05 Mandogalup	Harewood '09 ERWWTP	ENV '10 Point Peron	How et al '96 Woodman Pt	DEC '11 NatureMap
Felidae Cats							
Felis catus	Cat	Introduced		X		X	X
Leporidae Rabbits, Hares							
Oryctolagus cuniculus	Rabbit	Introduced	X	X	X	X	

WC Act Status - S1 to S4, EPBC Act Status - EN = Endangered, VU = Vulnerable, EX = Extinct, DEC Priority Status - P1 to P5, Int. Agmts - CA = CAMBA, JA = JAMBA, RK = ROKAMBA, Bush Forever Decreaser Species - Bh = habitat specialists, Bp = wide ranging species, Be = extinct in Perth Coastal Plain Region. IUCN Red List Category Definitions LC = Least Concern - see Appendix A and www.iucnredlist.org/info/categories_criteria2001#categories for others.

APPENDIX C

GRACEFUL SUN-MOTH SURVEY REPORT

GRACEFUL SUN-MOTH SURVEY

VARIOUS ALLOTMENTS, MANDOGALUP

Project Number EP10-018

Prepared for Qube Mandogalup Land Development Company Pty Ltd.
September 2011

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Executive Summary

Emerge Associates (Emerge) was commissioned by Qube Mandogalup Land Development Company Pty Ltd. (QMLDC) to undertake a graceful sun-moth (*Synemon gratiosa*) survey across seven parcels of land (Lots 664, 668 and 669 Mandogalup Road, Lot 791 and 663 Norkett Road and Lots 52 and 682 Rowley Road) within the locality of Mandogalup (herein referred to as 'the site', see **Figure 1** and **Figure 2**).

The site is proposed for future residential development, and currently comprises land that has been used for market gardening and other agricultural activities with areas to the north (Lot 682 Rowley Road) supporting areas of reasonably intact remnant bush land. There is also a patch of degraded bush land in the southern most portion of the site (Lot 669 Mandogalup Road). The graceful sun-moth survey was undertaken only in the remaining bush land areas, which comprise a total area of approximately 39 ha across the site.

The graceful sun-moth is listed as 'Endangered' pursuant to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and declared as 'fauna that is rare or is likely to become extinct' under the Western Australian *Wildlife Conservation Act 1950* (WC Act). Therefore its presence (or otherwise) on the site is relevant to state environmental and development approvals processes as well as assessing the need for a referral pursuant to the EPBC Act.

The scope of this work was to undertake a graceful sun-moth survey in accordance with the Western Australian Department of Environment and Conservation's (DEC's) *Guidelines for the Graceful Sun-Moth (Synemon gratiosa) & Site Habitat Assessments* (Bishop *et al.* 2010). Emerge have specifically undertaken this work in accordance with these guidelines so that the presence (or otherwise) of this species is rigorously and technically surveyed and documented.

The graceful sun-moth survey (as outlined within the DEC guidelines) consists of two parts:

- A detailed *Lomandra* density survey, which should ideally be conducted prior to the graceful sun-moth survey to help determine an appropriate moth survey transect route.
- A graceful sun-moth survey using the results of the *Lomandra* density survey.

A *Lomandra* density survey was completed to determine the likely distribution of the graceful sun-moth across the site. A total of 104, two metre by two metre quadrats were sampled for *Lomandra* spp. densities.

Lomandra hermaphrodita and *Lomandra maritima* were recorded at 52 of the 104 quadrats surveyed. *Lomandra hermaphrodita* was more prolific across the site, being recorded in 51 quadrats, whilst *Lomandra maritima* was recorded in seven quadrats. Both species were recorded in low numbers (one - 16 plants), with *Lomandra hermaphrodita* having an average number of plants per quadrat of 3.8 (± 3.2) and *Lomandra maritima* having an average cover of 0.5% (± 0.5%).

The vegetation condition predominately associated with *Lomandra* occurrences was "Excellent" however both *Lomandra* species were also recorded in "Very Good", "Good" and "Degraded" vegetation conditions.

The graceful sun-moth surveys were undertaken in February and March 2011. Six repeat surveys of the site were carried out (due to the presence of *Banksia* woodland habitat in accordance with the DEC guidelines) on 24th February and 3rd, 10th, 15th, 25th and 31st March 2011, between 10am and 3pm and were at least 4 days apart. Windy (wind speeds of greater than 18km/h) periods were avoided.

Three transects totaling approximately 6 km in length (0.75, 3.7 and 1.6 km) were traversed across the site. Transect paths were chosen primarily within areas of remnant vegetation, and concentrated in areas of high *Lomandra* density and graceful sun-moth known preferred habitats (such as firebreaks, hills and ridgelines).

One graceful sun-moth was recorded on the boundary of the site during one of the six surveys, resulting on one positive identification for the entire survey. This moth was recorded on the boundary (within the western firebreak) of Lot 682 Rowley Road, and was observed to fly into neighbouring bush land (10 Rowley Road), which would also appear to be suitable graceful sun-moth habitat. Since there were no graceful sun-moth encountered within the site it is unlikely that the site could be would be considered to support a population of graceful sun-moth. Given this, it is recommended that the development of the site does not have the potential to pose a significant impact to the graceful sun-moth.

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1 Introduction

1.1 Project Background

Emerge Associates (Emerge) was commissioned by Qube Mandogalup Land Development Company Pty Ltd. (QMLDC) to undertake a graceful sun-moth (*Synemon gratiosa*) survey across seven parcels of land (Lots 664, 668 and 669 Mandogalup Road, Lot 791 and 663 Norkett Road and Lots 52 and 682 Rowley Road) within the locality of Mandogalup (herein referred to as 'the site'). The site is located approximately 46.5 kilometers south-west of the Perth Central Business District (CBD), Western Australia, and is shown in **Figure 1**.

The site is situated within the local government area of the Town of Kwinana, and is bounded by the Kwinana Freeway to the east, Mandogalup Road to the west, Rowley Road to the north and Anketell Road to the south (see **Figure 2**).

The site is proposed for future residential development, and currently comprises land that has been used for market gardening and other agricultural activities and the areas to the north (Lot 682 Rowley Road) supports areas of intact remnant bush land. There is also a patch of degraded bush land in the southern most portion of the site (Lot 669 Mandogalup Road). The graceful sun-moth survey was targeted in these remaining bush land areas, which comprise a total area of approximately 39 ha across the site.

1.2 Scope of Work

The scope of this work was to undertake a graceful sun-moth survey in accordance with the Western Australian Department of Environment and Conservation's (DEC's) *Guidelines for the Graceful Sun-Moth (Synemon gratiosa) & Site Habitat Assessments* (Bishop *et al.* 2010). Emerge have specifically undertaken this work in accordance with these guidelines so that the presence (or otherwise) of this species is rigorously and technically surveyed and documented.

The graceful sun-moth survey (as outlined within the DEC guidelines) consists of two parts:

- A detailed *Lomandra* density survey, which should ideally be conducted prior to the graceful sun-moth survey to help determine an appropriate transect route.
- A graceful sun-moth survey using the results of the *Lomandra* density survey.

This report documents the outcomes of both the *Lomandra* density survey and the graceful sun-moth survey within a single document. The report details *Lomandra* spp. density, graceful sun-moth presence/absence determined from the survey and provides advice with regards to the likely level of impact significance developing the site could have on the graceful sun-moth.

2 Background

2.0 Climate

The area is characterised by a dry Mediterranean climate with hot dry summers and cool wet winters. Long term climatic averages indicate the site is located in an area of moderate to high rainfall, receiving 762 mm on average (data for Medina Research Centre, the nearest current reporting station (Bureau of Meteorology 2011) with the majority of rainfall received between June and August. The region receives rainfall on an average of 90 days annually.

Mean maximum temperatures range from 18.2°C in July to 31.4°C in February. Mean minimum temperatures range from 8.3°C in August to 17.4°C in February.

2.1 Vegetation

The site lies within the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) region (Thackway and Cresswell 1995). The Swan Coastal Plain IBRA region is broadly compatible with the Swan Coastal Plain (Drummond Botanical Subdistrict) Phytogeographical Subregion as described by Beard (1990). This region is characterised by *Banksia* low woodland on leached sands with *Melaleuca* swamps where ill-drained, woodland of tuart (*Eucalyptus gomphocephala*), jarrah (*Eucalyptus marginata*) and marri (*Corymbia calophylla*) on less leached soils.

Heddle *et al.* (1980) mapped vegetation complexes of the Swan Coastal Plain based on soil and geomorphology (and water availability) patterns. The distribution of these vegetation complexes are largely related to the main geomorphic entities (the dune systems and Pinjarra Plain) but is also influenced by the north-south latitudinal changes. The site occurs mainly within the Bassendean vegetation complex. The Bassendean vegetation complex is described as Woodland of *Eucalyptus marginata – Allocasuarina fraseriana – Banksia* spp. to low woodland of *Melaleuca* spp. and sedgelands on the moister sites (Heddle *et al.* 1980).

At a local scale, a flora and vegetation survey was conducted within the site by Cardno BSD in 2005 (Cardno BSD 2005) with a follow-up survey by Emerge in 2011 as part of a fauna habitat assessment (Emerge Associates 2011). These surveys determined that remnant vegetation within the site was largely 'Degraded' but there were areas of vegetation in "Very Good" and "Excellent" condition. The southernmost portion of remnant vegetation (Lot 669) has been grazed and was determined to be in "Degraded" condition.

> ***Banksia* low woodland** – Low *Banksia attenuata* woodlands with emergent *Eucalyptus marginata* over heath of *Hibbertia hypericoides*, *Stirlingia latifolia* and *Xanthorrhoea preissii* (Lots 669 and 682).
>
> ***Banksia* low forest** – Low *Banksia attenuata*, *Banksia ilicifolia* and *Banksia menziesii* forest over heath of *Dasypogon bromeliifolius*, *Lyginia barbata* and *Schoenus* sp. (Lot 682).
>
> ***Eucalyptus rudis* and *Melaleuca preissiana* woodland** – Woodland of *Eucalyptus rudis* over *Melaleuca preissiana* and *Banksia littoralis* over *Astartea scoparia*, *Juncus pallidus*, **Carpobrotus edulis*, **Zantedeschia aethiopica* and **Arctotheca calendula* (Lot 682).

Remnant plant communities within the site are described below and shown on **Figure 3.** Vegetation condition for the site is shown on **Figure 4**.

2.2 Graceful Sun-Moth

2.2.1 Distribution

At present there is limited knowledge relating to the population distribution of the graceful sun-moth. Prior to 2009, the species was thought to be confined to a small number of *Banksia* woodland bush reserves in the northern suburbs of Perth, of which none were in formal conservation reserves (Bishop *et al.* 2010). Targeted survey work undertaken between February and April of 2010, led by the DEC and supported by industry, has resulted in an extended known range of the graceful sun-moth, with the number of known populations increasing from 10 to 49 (Bishop *et al.* 2010). This new range extends from Jurien Bay in the north to Binningup in the south (Bishop *et al.* 2010).

The graceful sun-moth is currently only known from two vegetation types;

- *Banksia* woodland/woolly bush on deep sands, in the northern suburbs of Perth on the Swan Coastal Plain. In this vegetation type the graceful sun-moth breeds on *Lomandra hermaphrodita* (Bishop *et al.* 2010).
- Open coastal areas of herbland, heathland and shrubland on Quindalup soils. In this vegetation type the graceful sun-moth breeds on *Lomandra maritima* (Bishop *et al.* 2010).

After the 2010 survey effort it is clear that the graceful sun-moth is more numerous or dense in the coastal dune habitat, and that the coastal dunes appear to be the preferred and core habitat of this species (Bishop *et al.* 2010).

2.2.2 Taxonomy and Appearance

The graceful sun-moth is one of approximately 30 sun-moth species (family Castniidae) found in Western Australia. The moth is characterised by black-brown forewings with light grey markings and bright orange hind wings with some darker grey bands; see **Plate 1**. The extent of this orange colouration is quite variable and often dulls as the moth ages (DEC 2011). Their wingspan ranges between 25-30 mm and the female is generally slightly larger than the male (**Plate 1a**). Graceful sun-moth are generally inconspicuous when settled (**Plate 1b)**, displaying only the dark forewings, however the orange hind wings are clearly visible when flying making this species easily recognizable during surveys.

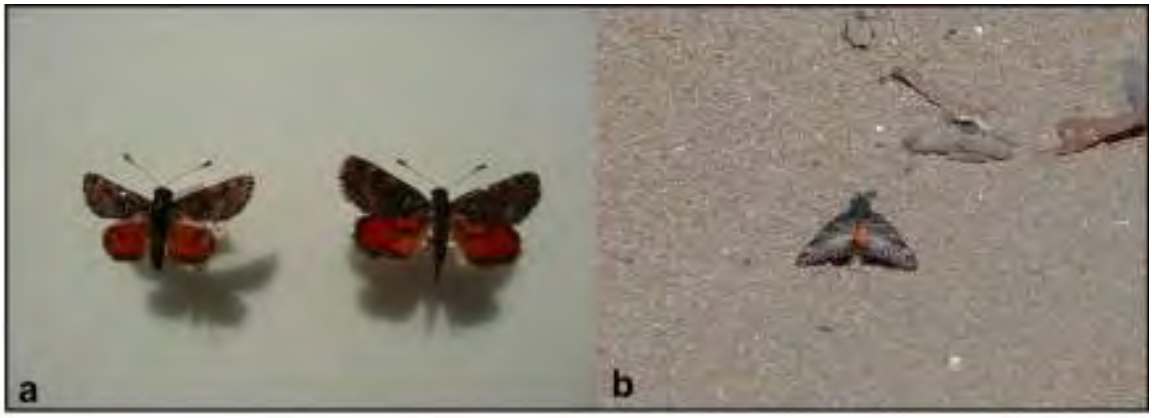

Plate 1: The graceful sun-moth; a) preserved male (left) and female (right) specimens[1]; b) as seen in the field.
[1]Photograph courtesy of Greg Harewood

2.2.3 Life cycle

At present the exact life cycle of the graceful sun-moth is not well known and is assumed to be between 1-3 years (Bishop *et al.* 2010; DEC 2011). Their eggs are laid at the base of plants of either *Lomandra maritima* or *Lomandra hermaphrodita*, the known food source for the larvae of the graceful sun-moth. The larvae then either live entirely within or alongside the underground part of the host plant until adulthood, feeding on the underground culms, roots or rhizomes. It is thought that larvae take between one or two years to reach maturity, however this is still largely unknown. Males of the species first appear as moths in late February, followed by the females in early March. Throughout March and early April mating occurs after which the females lay their eggs. By early April all adult moths have died off, after a brief two to ten day lifespan.

The flight time during which the moths are detectable seems to vary somewhat between years; this is likely due to climatic conditions. Bishop *et al.* (2010) also notes that flight behaviour can also vary with latitude and proximity to the coast.

2.2.4 Behaviour

The graceful sun-moth is distinctively diurnal (active during the day), preferring sunny conditions and are usually most active in the hottest part of the day (between 10am to 3pm). They are thought to be more mobile when there is little to no wind and typically do not fly more than a few metres above the ground.

Male graceful sun-moth are very territorial and prefer open areas such as tracks, firebreaks, hilltops and ridges, with territories approximately 20 square metres in extent (Bishop *et al.* 2010) . Females are not as active as males and prefer less open areas. Male graceful sun-moth are sedentary, but the extent to which females disperse is unknown. It is believed that females disperse less than 1 km from their colony of birth and are unlikely to cross unsuitable habitat (DSEWPC 2009).

2.2.5 Conservation status

The graceful sun-moth is listed as ‘Endangered’ pursuant to the Commonwealth EPBC Act and is also declared as ‘fauna that is rare or is likely to become extinct’ under the Western Australian WC Act. The DEC is currently undertaking a conservation project to better understand the graceful sun-moth on the

Swan Coastal Plain, including the 2010 survey program mentioned above and including the current 2011 survey effort, to which this survey will contribute.

2.3 Lomandra

Lomandra hermaphrodita and *Lomandra maritima* are currently the only known food source for graceful sun-moth larvae (Bishop *et al.* 2010).

2.3.1 Distribution

Both *Lomandra maritima* and *Lomandra hermaphrodita* are endemic to Western Australia. *Lomandra maritima* is known to occur between Carnarvon and Bunbury and grows only in coastal regions within sandy soils, being particularly common on the foredune (Western Australian Herbarium 2011). *Lomandra hermaphrodita* is known to occur from Geraldton to Albany and has a more widespread distribution, growing on sandy soils on the coastal plain and lateritic soils throughout the Darling Range of Western Australia.

2.3.2 Taxonomy and Morphology

Lomandra hermaphrodita and *Lomandra maritima* are two closely related and morphologically similar species of the *Lomandra* “mat-rushes” within the family Asparagaceae. *Lomandra* species are broadly described as grass-like perennial herbs, with an Australia wide distribution. Species within the genus comes in a variety of forms, but predominantly have long strap-like leaves. Generally *Lomandra* species are dioecious, with male and female flowers occurring on different plants. *Lomandra maritima* grows in clumps to 0.3 metres wide and 0.2 metres high, flowering from August to November (Western Australian Herbarium 2011). *Lomandra hermaphrodita* grows in clumps to 0.2 metres wide and 0.2 metres high and flowers from April to June (Western Australian Herbarium 2011). Both species are shown in **Plate 2**.



Plate 2: Lomandra hermaphrodita[1] *(top) and maritima*[2] *(below).*
[1] Image courtesy of Bishop *et al.* (2010)
[2] Image courtesy of FloraBase (Western Australian Herbarium 2011)

3 Methodology

3.0 Lomandra survey

A *Lomandra* density survey was completed to help determine the likely distribution of the graceful sun-moth across the site. The survey was conducted by two environmental scientists from Emerge on the 25th and 28th of January 2011, in accordance with DEC guidelines (Bishop *et al.* 2010).

A total of 104, two metre by two metre quadrats were sampled for *Lomandra* spp. density, with the number of quadrats determined according to the area (in ha) of the site and the corresponding minimum number values provided in **Table 1** (Bishop *et al.* 2010).

*Table 1: Number of Lomandra quadrats required per site area (*Bishop *et al.* 2010*)*

SITE AREA (HA)	MINIMUM NUMBER OF QUADRATS
10	30
20	50
50	100
100	150
200	240
300	320

Quadrats were positioned based on a 50 metre grid system, with quadrats located along these gridlines, and particularly concentrated along ridgelines and within plant communities known to contain *Lomandra* spp. The location of all quadrats was recorded in the field with a hand-held Global Positioning System (GPS).

Data was collected at each quadrat using the standardised forms provided by Bishop *et al.* (Bishop *et al.* 2010) with the following being collected:

- Site Details (site name, quadrat number, observers, quadrat location, date).
- Environmental Data (slope, aspect, bare-ground, soil type and colour, position in landscape).
- Biological Data (vegetation structure and condition, *Lomandra* spp. and density).

The vegetation condition was rated according to Keighery (1994), a vegetation condition scale commonly used in the Perth Metropolitan region. The categories are shown below in **Table 2**.

Table 2: Vegetation condition scale (Keighery 1994)

VEGETATION CONDITION	DEFINITION
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	Vegetation structure altered obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

3.1 Graceful Sun-Moth Survey

The graceful sun-moth surveys were undertaken by three environmental scientists from Emerge in February and March 2011. Six repeat surveys of the site were carried out (due to the *Banksia* woodland habitat) on 24th February and 3rd, 10th, 15th, 25th and 31st March 2011, between 10am and 3pm and were at least 4 days apart. Windy (wind speed of greater than 18 km/h) periods were avoided. Climatic conditions on these days are shown in **Table 3.**

Three transects totaling approximately 6 km in length (0.75, 3.7 and 1.6 km) were traversed across the site. Transect paths were chosen primarily within areas of remnant vegetation, and concentrated in areas of high *Lomandra* density and graceful sun-moth known preferred habitats (such as firebreaks, hills and ridgelines). **Figure 6** shows the transect routes. A minimum transect route length of 4.9 km was calculated using the following formula from the DEC guidelines (Bishop *et al.* 2010):

$$\text{Transect length in km} = 0.7\left(\sqrt{\text{site area (ha)}}\right)$$

Transects were walked by teams of two, with at least one member of each team having undertaken the DEC graceful sun-moth survey training. Any graceful sun-moth/s observed over the area five metres either side of the transect, and five metres ahead were recorded on the standardised data sheets provided by Bishop *et al.* (2010) with a hand-held GPS providing an accurate record of the location. Any graceful sun-moth observed outside of this corridor, or detected at the site during other activities, were recorded as an 'incidental' observation.

The "standard details" for transects were recorded as outlined in Appendix 1 of the Survey Guidelines document (Bishop *et al.* 2010) and are presented in **Appendix A**.

Table 3: Climatic conditions on graceful sun-moths survey days.

DATE	MAXIMUM TEMPERATURE (°C)	MINIMUM TEMPERATURE (°C)	WIND SPEED RANGE (KM/HR)
24th February 2011	36.8	23.8	0 - 5
3rd March 2011	35.7	19.9	5 - 10
10th March 2011	32.0	15.5	0 - 5
15th March 2011	36.3	22.8	5 - 15
25th March 2011	35.2	20.4	0 - 5
31st March 2011	32.5	18.6	0 - 5

Note: Temperature observations from Medina Research Centre (Bureau of Meteorology 2011). Wind observations measured using an anemometer on site.

4 Results

4.0 Lomandra

4.0.1 *Lomandra* density

Three species of *Lomandra* were recorded during the density survey, *Lomandra caespitosa, Lomandra hermaphrodita* and *Lomandra maritima*. Only the latter two of these species are known habitat species for the graceful sun-moth (Bishop *et al.* 2010).

These two *Lomandra* species were recorded at 52 of the 104 quadrats surveyed, as shown in **Figure 5**. *Lomandra hermaphrodita* was more prolific across the site, being recorded in 51 quadrats, whilst *Lomandra maritima* was recorded in seven quadrats. Both species were recorded in low numbers (1 - 16 plants), with *Lomandra hermaphrodita* having an average number of plants per quadrat of 3.8 (± 3.2) and *Lomandra maritima* having an average cover of 0.5% (± 0.5%).

During the survey, light grey sand overlying yellow sand was observed to be the soil type most closely associated with occurrences of the two *Lomandra* species. The vegetation condition predominately associated with *Lomandra hermaphrodita occurrences* was "Excellent" however both *Lomandra* species were also recorded in "Very Good", "Good" and "Degraded" vegetation conditions. The raw data collected as a part of the *Lomandra* density survey is presented in **Appendix B**.

4.1 Graceful Sun-Moth

4.1.1 Number of moths observed

One graceful sun-moth was observed within the site from all six survey visits. This moth was recorded on the boundary (western firebreak) of Lot 682 Rowley Road, and was observed to fly into neighbouring bushland (10 Rowley Road), which also appeared to be similar vegetation conditions as within Lot 682. **Table 4** summarises the results of the six surveys carried out over the site. The transect routes and the single graceful sun-moth observation is shown in **Figure 6.** Additional details on each survey and the specimens observed are provided in **Appendix C**.

Table 4: Summary of graceful sun-moth survey results

SURVEY NUMBER	SURVEY DATE	NUMBER OF GRACEFUL SUN-MOTH OBSERVED	
		LOT 682	LOT 669
1	24/02/2011	0	0
2	03/03/2011	1	0
3	10/03/2011	0	0
4	15/03/2011	0	0
5	25/03/2011	0	0
6	31/03/2011	0	0
Total		1	0

5 Discussion

In 1997, the graceful sun-moth was listed as threatened fauna under the WC Act. It was then assessed and found to meet IUCN (International Union for Conservation of Nature) 'Endangered' criteria, based on the extent of its occurrence, area of known habitat and the fragmentation of habitat area. The graceful sun-moth was also listed as 'Endangered' under the EPBC Act in 2009 (Bishop *et al.* 2010). As the graceful sun-moth is a comparatively recent addition to Australia's threatened fauna at both Federal and State levels, there is still limited knowledge with regards to its occurrence, lifecycle and behavior and therefore its initial listing as threatened fauna was based on sparse information available at the time.

The purpose of the recent broad scale survey effort (March 2010 and 2011) undertaken by the DEC and assisted by industry was to gain a better understanding of the distribution of graceful sun-moth and the likely habitat of this species. The 2010 studies found the species to range well beyond its previously known distribution (*Banksia* woodland of the Swan region) into the coastal parts of the northern south- west of Western Australia and the southern Midwest regions where *Lomandra maritima* is found. It appears that this coastal habitat is the preferred habitat of the species and that the relative contribution of the *Banksia* woodland habitat to the total population and area of occupied habitat is small (Bishop *et al.* 2010).

The number of known graceful sun-moth populations was less than ten in 2009 and none of these populations were in secure conservation reserves. This number increased significantly to 49 populations after one survey season in 2010. Of the 49 sites recorded, 26 of these sites are under some form of conservation reserve (such as Bush Forever); however 17 of these sites have development proposals over them. Many of the sites proposed for development occur within coastal dune populations in the Alkimos-Yanchep and Lake Clifton-Yalgorup areas, and contain some of the largest populations of graceful sun-moth.

As part of this survey, no graceful sun-moth were recorded within the site and one moth was recorded on the boundary of Lot 682 Rowley Road, within *Banksia* woodland habitat. Within the wider local area, several other locations were surveyed as part of the 2010 survey effort, which include:

- Jandakot Regional Park (9 km to the north) - three moths
- Samson (14 km to the north-west) – one moth
- Anketell Road (2 km to the east) – two moths
- Roe Highway extension, Cockburn (10 km to the north) – six moths

The graceful sun-moth observations in the above areas are also contained within *Banksia* woodland habitats in which the graceful sun-moth subsists mainly on *Lomandra hermaphrodita*. As mentioned above, in comparison to the *Lomandra maritima* coastal dune habitat, the *Banksia* woodland habitat has generally been found to support smaller populations of the moth, as illustrated by the numbers recorded from the surveyed land parcels listed above. As a result of these small population sizes, the number of surveys required to adequately survey for graceful sun-moth in *Banksia* woodland was increased in 2010 from four to six (Bishop et al. 2010).

The results of the 2011 surveys are forthcoming, thus it is difficult to draw conclusions with regards to the observations made during this graceful sun-moth survey in comparison to broader population trends. The results so far suggest that the species is much more widespread than previously known, and the newly identified populations within the coastal dune habitat reduce the amount of fragmentation compared to the understanding prior to 2009.

The DEC will be considering the outcomes of the 2011 survey effort and other research findings and will review the conservation status of the graceful sun-moth. The DEC currently have the view that if it is demonstrated that other areas of occupied coastal dune habitat exist, it is probable that the graceful sun-moth would not meet the criteria for 'Endangered'. Any proposed changes to the status will be presented to, and reviewed by the Western Australian Threatened Species Scientific Committee for approval by the Minister for Environment. Any approved changes to the conservation status will then be referred to the Commonwealth Threatened Species Scientific Committee for a review of the listing under the EPBC Act (Bishop *et al.* 2010).

As part of their conservation advice, the DEC is of the view that impact on some populations of the graceful sun-moth will not cause extinction of the species. However, until such a time as the conservation status of the species is assessed and 'Significant Impact Guidelines' are prepared by the DEC, they advise that the "primary objective for decision makers should be *in situ* retention and protection of as much known habitat as possible, in the best condition and arrangement as possible" (DEC 2011).

Since there were no graceful sun-moth observed within the site, and one moth observed on the site's boundary following six separate surveys within the site, it is unlikely that the site supports a population of graceful sun-moth.

6 Conclusions and recommendations

The 2011 survey for the graceful sun-moth across Lots 664, 668 and 669 Mandogalup Road, Lot 791 and 663 Norkett Road and Lots 52 and 682 Rowley Road, Mandogalup, recorded one sun-moth at the boundary of Lot 682 Rowley Road. Suitable habitat for the sun-moth was recorded across the site with *Banksia* woodland being the dominant plant community observed and *Lomandra hermaphrodita* being recorded at an average density of 3.8 (± 3.2) plants per 2 m x 2 m quadrat sampled.

Information gathered by the DEC over the last two graceful sun-moth survey seasons indicate that the species is much more widespread than previously known, and newly identified populations within the coastal dune habitat reduce the amount of fragmentation compared to the general state of understanding prior to 2009. The DEC currently have the view that if it is demonstrated that other areas of occupied coastal dune habitat exist, it is probable that the graceful sun-moth would not meet the criteria for 'Endangered', and this will be reviewed considering the outcomes of the 2011 survey effort and other research findings. However, until such a time as the conservation status of the species is assessed and 'Significant Impact Guidelines' are prepared by DEC, the DEC advises that the "primary objective for decision makers should be *in situ* retention and protection of as much known habitat as possible, in the best condition and arrangement as possible" (DEC 2011).

It is unlikely that the one moth found at the boundary of the site would be considered to represent a population of graceful sun-moth within the site, considering the current research findings and the recent DEC conservation advice provided.

Therefore based on the findings of this survey, the recent survey effort by the DEC and their conservation advice, it is not considered that the development of the site has the potential to pose a significant impact to the graceful sun-moth.

7 References

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FIGURES

Figure 1 Location plan

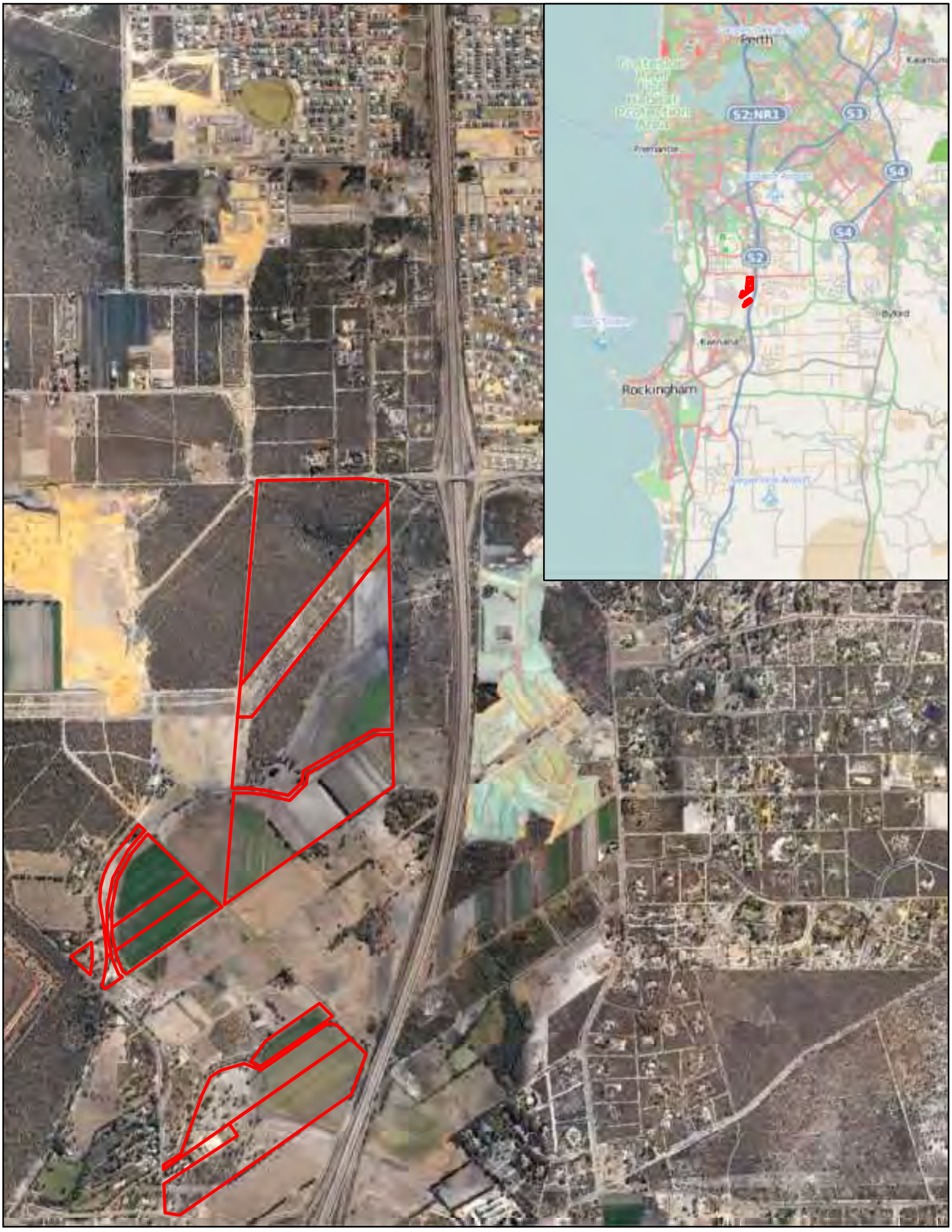
Figure 2 Site plan

Figure 3 Vegetation community mapping

Figure 4 Vegetation condition mapping

Figure 5 *Lomandra* density and plant communities

Figure 6 Graceful sun-moth transect locations



Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Graceful Sun-Moth Survey

Title:
Figure 1: Location Plan

Metres
0 150 300 600

Legend
Site boundary

19/09/11 :Date
1:20,000@A4 :Scale
EP10-18(03)--F07a :Plan Number
JDH :Checked
JDH :Approved

Notes: This drawing is the property of Emerge Associates and shall not be used without permission.

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Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Graceful Sun-Moth Survey

Title:
Figure 2: Site Location

Metres
0 100 200 400

Legend
Site boundary

19/09/11 :Date
1:13,000@A4 :Scale
EP10-18(03)--F08a :Plan Number
JDH :Checked
JDH :Approved

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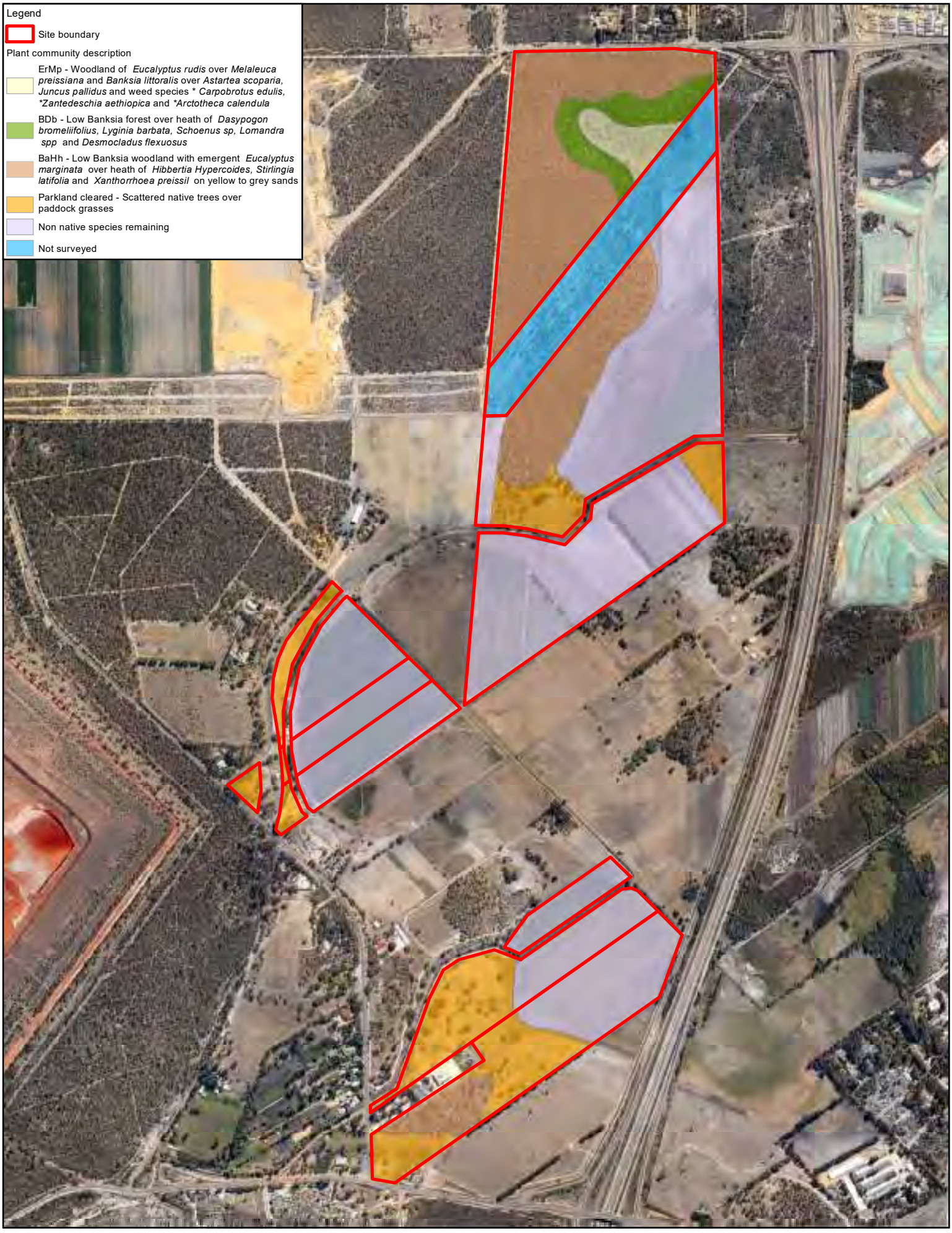

Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Graceful Sun-Moth Survey

Title:
Figure 3: Plant Community Mapping

Metres
0 100 200 400

19/09/11 :Date
1:13,000@A4 :Scale
EP10-18(03)--F11b :Plan Number
JDH :Checked
JDH :Approved

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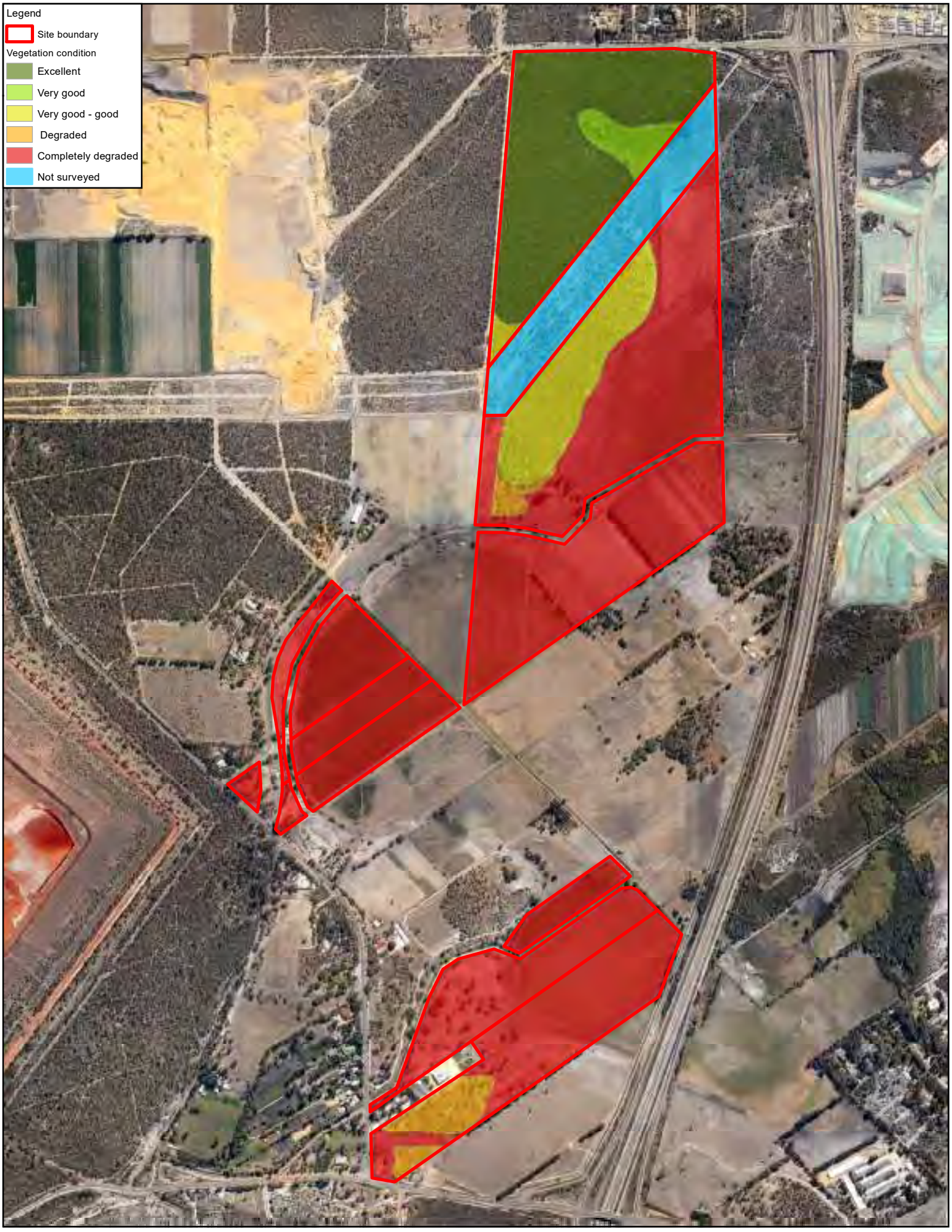

Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Graceful Sun-Moth Survey

Title:
Figure 4: Vegetation Condition

Metres
0 100 200 400

19/09/11 :Date
1:13,000@A4 :Scale
EP10-18(03)--F12b :Plan Number
JDH :Checked
JDH :Approved

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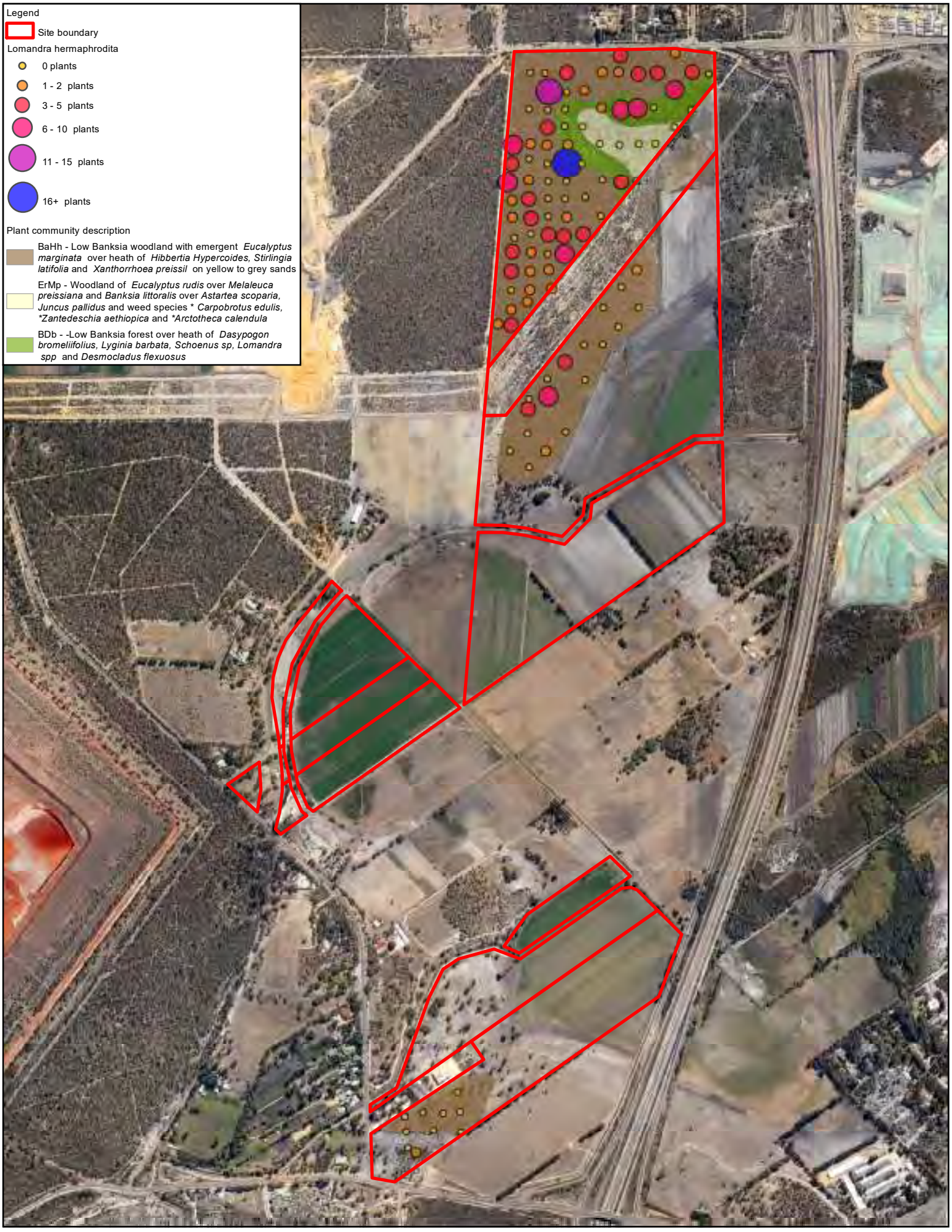


Client:
Qube Mandogalup Land Development Company

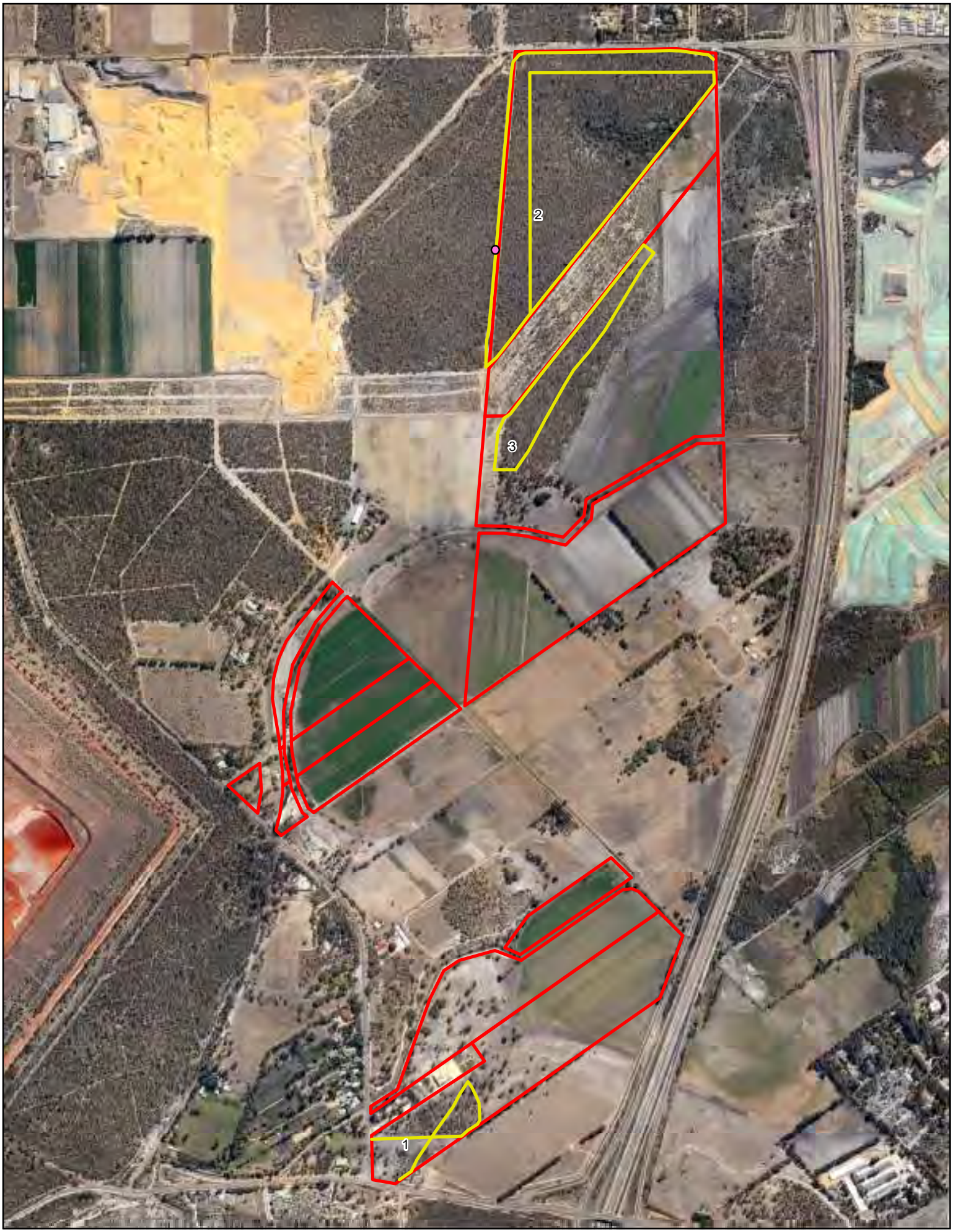
Project:
Mandogalup Graceful Sun-Moth Survey

Title:
Figure 5: Lomandra Density and Plant Communities

Metres
0 100 200 400

19/09/11 :Date
1:13,000@A4 :Scale
EP10-18(03)--F09b :Plan Number
JDH :Checked
JDH :Approved

Notes: This drawing is the property of Emerge Associates and shall not be used without permission.



Client:
Qube Mandogalup Land Development Company

Project:
Mandogalup Graceful Sun-Moth Survey

Title:
Figure 6: Graceful Sun-Moths and Locations

Metres
0 100 200 400

Legend
Site boundary
Graceful sun-moth location
Transect path
2 Transect number

19/09/11 :Date
1:13,000@A4 :Scale
EP10-18(03)--F10b :Plan Number
JDH :Checked
JDH :Approved

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APPENDIX A

STANDARD DETAILS FOR TRANSECTS

Graceful sun-moth data sheet – one sheet per transect

Site name:	
Date:	Start time:
Observers:	End time:
Transect #:	Wind speed (km/hr):
Temperature C°:	Wind direction:

Comments

GSM specimen #	% Cloud	Comments (track / vegetation)	Easting	Northing	Time	Temp C°	Wind Speed

APPENDIX B

LOMANDRA DENSITY SURVEY – RAW DATA

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey
Initials: GT	% Bare ground: 50%	Sub-surface soil: Yellow
Quadrat number: 2BW	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: MS	Time since fire: > 5
Easting: 391439	Northing: 6437796	Veg condition: D - CD

Vegetation description/Comments
Open woodland - *Allocasuarina fraseriana, Eucalyptus marginata, Banksia menziesii* over scattered *Xanthorrhoea preissii* over **Ehrharta calycina*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E-SE	Surface soil: Light grey
Initials: GT	% Bare ground: 50%	Sub-surface soil: Yellow
Quadrat number: 2AV	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: US	Time since fire: >5
Easting: 391386	Northing: 6437840	Veg condition: D

Vegetation description/Comments
Low open woodland - *Banksia menziesii, Banksia attenuata* and emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides, Acanthocarpus preissii, Stirlingia latifolia* and **Ehrharta calycina*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E-SE	Surface soil: light grey
Initials: GT	% Bare ground: 50%	Sub-surface soil: Yellow
Quadrat number: 2CV	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: LS	Time since fire: > 5
Easting: 391485	Northing: 6437840	Veg condition: D-G

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana and Eucalyptus marginata* over *Hibbertia hypericoides, Stirlingia laterfolia and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SE	Surface soil: Light grey
Initials: GT	% Bare ground: 35%	Sub-surface soil: Yellow
Quadrat number: 2BU	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: US	Time since fire: >5
Easting: 391435	Northing: 6437890	Veg condition: D-G

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana and Eucalyptus marginata* over *Hibbertia hypericoides, Stirlingia laterfolia and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey
Initials: GT	% Bare ground: 10%	Sub-surface soil: Yellow
Quadrat number: 2CS	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape:	Time since fire: > 5
Easting: 391493	Northing: 6437993	Veg condition: G

Vegetation description/Comments Woodland - *Banksia attenuata, Banksia menziesii* and *Eucalyptus marginata* over *Xanthorrhoea* preissii, *Acanthocarpus preissii* and *Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	8	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: Grey sand
Initials: GT	% Bare ground: 70	Sub-surface soil: Yellow sand
Quadrat number: 2BS	Slope: N/A	% exposed rock: N/A
Transect number: 2B	Position in landscape: Crest	Time since fire: >5
Easting: 391439	Northing: 6437985	Veg condition: D-G

Vegetation description/Comments Woodland - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* and *Eucalyptus marginata* over *Hibbertia hypericoides, Mesomelaena pseudostygia* and *Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: light grey
Initials: GT	% Bare ground: 15%	Sub-surface soil: Yellow
Quadrat number: 2CR	Slope: N/A	% exposed rock: N/A
Transect number: 2C	Position in landscape: Crest	Time since fire: > 5
Easting: 391490	Northing: 6438040	Veg condition: G

Vegetation description/Comments
Low woodland - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* and*Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Mesomelaena pseudostygia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name:	Job No.

Date: 28/01/2011	Aspect:	Surface soil:
Initials:	% Bare ground:	Sub-surface soil:
Quadrat number:	Slope:	% exposed rock:
Transect number:	Position in landscape:	Time since fire:
Easting:	Northing:	Veg condition:

Vegetation description/Comments

Species	Cover/Count	Comments
L. hermaphrodita		
L.maritima		

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: W	Surface soil: grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: grey sand
Quadrat number:1AC	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 1A	Position in landscape: LS	Time since fire: > 5
Easting: 391098	Northing: 6435949	Veg condition: CD

Vegetation description/Comments
Low woodland - *Allocasuarina fraseriana, Banksia attenuata, Kunzea glabrescens* over *Xanthorrhoea preissii* and *Acacia pulchella*

Species	Cover/Count	Comments
L. hermaphrodita	0	Grazed
L.maritima	0	Grazed

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: w	Surface soil: grey sand
Initials: GT	% Bare ground: 20%	Sub-surface soil: grey sand
Quadrat number: 1BD	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 1B	Position in landscape:	Time since fire: >5
Easting: 391144	Northing: 6436003	Veg condition: D

Vegetation description/Comments
Low woodland - *Banksia menziesii, Kunzea glabrescens, Allocasuarina fraseriana* over *Hibbertia hypericoides* and *Xanthorrhoea preissii* over weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	L. caespitosa (1 plant)
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: W	Surface soil: grey sand
Initials: GT	% Bare ground: 10-15%	Sub-surface soil: grey sand
Quadrat number: 1CD	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 1C	Position in landscape: MS	Time since fire: > 5
Easting: 391200	Northing: 6436000	Veg condition: D

Vegetation description/Comments Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Acacia pulchella*

Species	Cover/Count	Comments
L. hermaphrodita	0	L. caespitosa (2 plants) and heavily grazed
L. maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: W	Surface soil: grey sand
Initials: GT	% Bare ground: 60%	Sub-surface soil: grey sand
Quadrat number: 1DD	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 1D	Position in landscape: MS	Time since fire: >5
Easting: 391248	Northing: 6436005	Veg condition: D

Vegetation description/Comments Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Acacia pulchella*

Species	Cover/Count	Comments
L. hermaphrodita	0	L. caespitosa
L. maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: W	Surface soil: yellow-grey sand
Initials: GT	% Bare ground: 30%	Sub-surface soil: as above
Quadrat number: 1DE	Slope: N/A	% exposed rock: N/A
Transect number: 1D	Position in landscape: MS	Time since fire: > 5
Easting: 391241	Northing: 6436059	Veg condition: D

Vegetation description/Comments
Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Acacia pulchella*

Species	Cover/Count	Comments
L. hermaphrodita	0	*L. caespitosa*
L. maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: W	Surface soil: grey sand
Initials: GT	% Bare ground: 5%	Sub-surface soil: grey sand
Quadrat number: 1DC	Slope: N/A	% exposed rock: N/A
Transect number: 1D	Position in landscape: MS	Time since fire: >5
Easting: 391250	Northing: 6435948	Veg condition: D

Vegetation description/Comments
Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Acacia pulchella*

Species	Cover/Count	Comments
L. hermaphrodita	0	*L. caespitosa present*
L. maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: W	Surface soil:grey sand
Initials: GT	% Bare ground: 60%	Sub-surface soil: grey sand
Quadrat number: Opp	Slope: Very gently inclined	% exposed rock: N/A
Transect number:	Position in landscape: LS	Time since fire: > 5
Easting: 391174	Northing: 6435953	Veg condition: D

Vegetation description/Comments
Scattered *Eucalyptus rudis* over Low woodland - *Banksia attenuata, Allocasuarina fraseriana, Kunzea glabrescens* over *Acacia pulchella* over weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	*L. caespitosa*
L.maritima	0	

Site Name:	Job No.

Date:	Aspect:	Surface soil:
Initials:	% Bare ground:	Sub-surface soil:
Quadrat number:	Slope:	% exposed rock:
Transect number:	Position in landscape:	Time since fire:
Easting:	Northing:	Veg condition:

Vegetation description/Comments

Species	Cover/Count	Comments
L. hermaphrodita		
L.maritima		

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: W	Surface soil: dark grey sand
Initials: GT	% Bare ground: 2%	Sub-surface soil: grey sand
Quadrat number: 1AB	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 1A	Position in landscape: LS	Time since fire: > 5
Easting: 391102	Northing: 6435904	Veg condition: CD

Vegetation description/Comments Low woodland - *Eucalyptus rudis, Kunzea glabrescens, Banksia menziesii* over *Xanthorrhoea preissii* over weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	Understorey completely degraded, weeds.
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: W	Surface soil: grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: grey sand
Quadrat number: Opp	Slope: Very gently inclined	% exposed rock: N/A
Transect number:	Position in landscape: LS	Time since fire: >5
Easting: 391126	Northing: 6435891	Veg condition: D

Vegetation description/Comments Low woodland - *Banksia attenuata, Banksia menziesii, Banksia illicifolia* and K*unzea glabrescens* over *Xanthorrhoea preissii* over weeds

Species	Cover/Count	Comments
L. hermaphrodita	2	Grazed to ground (Leaf litter including twigs approximately 10%)
L.maritima		

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: W/NW	Surface soil: grey sand
Initials: GT	% Bare ground: 50%	Sub-surface soil: grey sand
Quadrat number: 1AD	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 1A	Position in landscape: LS	Time since fire: > 5
Easting: 391094	Northing: 6435992	Veg condition: CD

Vegetation description/Comments Scattered *Eucalyptus rudis* over *Kunzea glabrescens* over weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name:	Job No.

Date:	Aspect:	Surface soil:
Initials:	% Bare ground:	Sub-surface soil:
Quadrat number:	Slope:	% exposed rock:
Transect number:	Position in landscape:	Time since fire:
Easting:	Northing:	Veg condition:

Vegetation description/Comments

Species	Cover/Count	Comments
L. hermaphrodita		
L.maritima		

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: NE	Surface soil: brown-grey sand
Initials: GT	% Bare ground: N/A	Sub-surface soil: grey sand
Quadrat number: 2AE	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: US	Time since fire: > 5
Easting: 391395	Northing: 6438691	Veg condition: E

Vegetation description/Comments
Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii and Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	10	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: NE	Surface soil: yellow-grey sand
Initials: GT	% Bare ground: 20%	Sub-surface soil: yellow-grey
Quadrat number: 2AF	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: US	Time since fire: >5
Easting: 391391	Northing: 6438638	Veg condition: E

Vegetation description/Comments
Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii and Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	3	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: NE	Surface soil: grey sand
Initials: GT	% Bare ground: 60%	Sub-surface soil: yellow sand
Quadrat number: 2AG	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: Crest	Time since fire: > 5
Easting: 391380	Northing: 6438587	Veg condition: E

Vegetation description/Comments
Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii and Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	10	Approximately 2%
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: NW	Surface soil: light grey sand
Initials: GT	% Bare ground: 20%	Sub-surface soil: yellow sand
Quadrat number: 2AH	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: Crest	Time since fire: >5
Easting: 391392	Northing: 6438536	Veg condition: E

Vegetation description/Comments
Low woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoide* s, *Mesomelaena pseudostygia* and *Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	2	Less than 1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: N	Surface soil: light brown-grey
Initials: GT	% Bare ground: 20%	Sub-surface soil: yellow
Quadrat number: 2AI	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: Crest	Time since fire: >5
Easting: 391393	Northing: 6438490	Veg condition: E

Vegetation description/Comments
Low woodland/forest - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Mesomelaena pseudostygia, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	1	Approximately 1%
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: NW	Surface soil: light grey
Initials: GT	% Bare ground: N/A	Sub-surface soil: yellow
Quadrat number: 2AJ	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: Crest	Time since fire: >5
Easting: 391398	Northing: 6438433	Veg condition: E

Vegetation description/Comments
Low woodland/forest - *Banksia attentuata, Banksia menzeissi* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Mesomelaena pseudostygia, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: N/A	Surface soil: light grey
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow
Quadrat number: 2AK	Slope: N/A	% exposed rock: N/A
Transect number: 2A	Position in landscape: Crest	Time since fire: >5
Easting: 391393	Northing: 6438395	Veg condition: E

Vegetation description/Comments
Low woodland/forest - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Mesomelaena pseudostygia, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	4	Approximately 1%
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: SE	Surface soil: light grey
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow
Quadrat number: 2AL	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: US	Time since fire: >5
Easting: 391389	Northing: 6438338	Veg condition: E

Vegetation description/Comments
Low woodland - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Mesomelaena pseudostygia, Xanthorrhoea preissii* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	5	Approximately 1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2AM	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: MS	Time since fire: >5
Easting: 391389	Northing: 6438286	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Stirlingia laterifolia* and *Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: SW	Surface soil: light grey sand
Initials: GT	% Bare ground: 5%	Sub-surface soil: yellow sand
Quadrat number: 2AN	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2A	Position in landscape: LS	Time since fire: >5
Easting: 391390	Northing: 6438233	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata, Allocasuarina fraseriana* and *Xylomelum occidentale* over *Stirlingia laterifolia* and *Patersonia occidentalis*

Species	Cover/Count	Comments
L. hermaphrodita	2	Approximately 1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: N/A	Surface soil: grey sand
Initials: GT	% Bare ground: 30%	Sub-surface soil: yellow sand
Quadrat number: 2AO	Slope: N/A	% exposed rock: N/A
Transect number: 2A	Position in landscape: LS	Time since fire: >5
Easting: 391390	Northing: 6438191	Veg condition: VG

Vegetation description/Comments Open forest - *Eucalyptus marginata* and *Xylomelum occidentale* over *Allocasuarina fraseriana, Banksia attenuata* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Mesomelaena pseudostygia.*

Species	Cover/Count	Comments
L. hermaphrodita	3	Approximately 1%
L.maritima	1%	Collected specimen

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/02/2011	Aspect: SE	Surface soil: light grey
Initials: GT	% Bare ground: 20%	Sub-surface soil: yellow sand
Quadrat number: 2O	Slope: N/A	% exposed rock: N/A
Transect number: 2	Position in landscape: MS-LS	Time since fire: >5
Easting: 391352	Northing: 6438193	Veg condition: VG

Vegetation description/Comments Low open forest 0 *Banksia attenuata, Xylomelum occidentale* and *Allocasuarina fraseriana* over *Hibbertia hypericoides, Mesomelaena pseudostygia, Xanthorrhoea preissii* and **Ehrharta calycina*

Species	Cover/Count	Comments
L. hermaphrodita	1	Approximately 1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: SW	Surface soil: light grey sand
Initials: GT	% Bare ground: 50%	Sub-surface soil: yellow sand
Quadrat number: 2BN	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: LS	Time since fire: >5
Easting: 391435	Northing: 6438254	Veg condition: VG

Vegetation description/Comments
Low open forest with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii* over *Hibbertia hypericoides* and *Mesomelaena pseudostygia*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: GT	% Bare ground: N/A	Sub-surface soil: yellow sand
Quadrat number: 2BM	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: MS	Time since fire: >5
Easting: 391441	Northing: 6438288	Veg condition: E

Vegetation description/Comments
Low open forest with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii* over *Hibbertia hypericoides* and *Mesomelaena pseudostygia*

Species	Cover/Count	Comments
L. hermaphrodita	2	> 1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: SE	Surface soil: white-light grey
Initials: GT	% Bare ground: 60%	Sub-surface soil: yellow
Quadrat number: 2BL	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: MS	Time since fire: >5
Easting: 391442	Northing: 6438338	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: SE	Surface soil: light grey
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow
Quadrat number: 2BK	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: US	Time since fire: >5
Easting: 391445	Northing: 6438393	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	< 1%	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: E-NE	Surface soil: light grey
Initials: GT	% Bare ground: 15%	Sub-surface soil: yellow
Quadrat number: 2BJ	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape:	Time since fire: >5
Easting: 391443	Northing: 6438444	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: E	Surface soil: light grey
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow
Quadrat number: 2BI	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: US	Time since fire: >5
Easting: 391445	Northing: 6438487	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	5	
L.maritima	1%	Sample collected

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: E	Surface soil: light grey
Initials: GT	% Bare ground: 30%	Sub-surface soil: yellow
Quadrat number: 2BH	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape:	Time since fire: >5
Easting: 391438	Northing: 6438540	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	4	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: NE	Surface soil: light grey
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow
Quadrat number: 2BG	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: US	Time since fire: >5
Easting: 391438	Northing: 6438593	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 25/01/2011	Aspect: E	Surface soil: light grey
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow
Quadrat number: 2BF	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: US	Time since fire: >5
Easting: 391439	Northing: 6438653	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	1%	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 25/01/2011	Aspect: NE	Surface soil: light grey
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow
Quadrat number: 2BE	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: US	Time since fire: >5
Easting: 391443	Northing: 6438695	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides and Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	1	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: S	Surface soil: white/grey sand
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow sand
Quadrat number: 2BC	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: MS	Time since fire: >5
Easting: 391439	Northing: 6438790	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Leucopogon sp* .

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: S-SE	Surface soil: white/grey sand
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow sand
Quadrat number: 2CA	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: US	Time since fire: >5
Easting: 391483	Northing: 6438892	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Leucopogon sp* .

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: S	Surface soil: grey sand
Initials: GT	% Bare ground: 25%	Sub-surface soil: yellow sand
Quadrat number: 2CB	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: US	Time since fire:>5
Easting: 391495	Northing: 6438840	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	12	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SE	Surface soil: grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2CC	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: MS	Time since fire: >5
Easting: 391491	Northing: 6438788	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: white/grey sand
Initials: GT	% Bare ground: 70%	Sub-surface soil: yellow sand
Quadrat number: 2CD	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: MS	Time since fire: >5
Easting: 391490	Northing: 6438739	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii, Stirlingia laterifolia* and *Scholtzia involucrata*

Species	Cover/Count	Comments
L. hermaphrodita	3	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: E	Surface soil: grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2CE	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: MS	Time since fire: >5
Easting: 391489	Northing: 6438691	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii, Stirlingia laterifolia* and *Scholtzia involucrata*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: NE	Surface soil: grey sand
Initials: GT	% Bare ground: 0%	Sub-surface soil: yellow sand
Quadrat number: 2CF	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: MS	Time since fire: >5
Easting: 391490	Northing: 6438639	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii, Stirlingia laterifolia* and *Scholtzia involucrata*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: NE	Surface soil: white/grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2CG	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: US	Time since fire: >5
Easting: 391492	Northing: 6438589	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides, Mesomelaena pseudostygia* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: N-NE	Surface soil: grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2CH	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape:	Time since fire: >5
Easting: 391492	Northing: 6438542	Veg condition: E

Vegetation description/Comments Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* over *Allocasuarina humilis, Xanthorrhoea preissii* and *Mesomelaena pseudostygia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: NE	Surface soil: white/grey sand
Initials: GT	% Bare ground: 20%	Sub-surface soil: yellow sand
Quadrat number: 2CI	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape:	Time since fire: >5
Easting: 391491	Northing: 6438492	Veg condition: E

Vegetation description/Comments Low open forest - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides, Mesomelaena pseudostygia* and *Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: N-NE	Surface soil: grey sand
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2CJ	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: US	Time since fire: >5
Easting: 391493	Northing: 6438442	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides, Mesomelaena pseudostygia* and *Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	3	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: NE	Surface soil: grey sand
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow sand
Quadrat number: 2CK	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: MS	Time since fire: >5
Easting: 391491	Northing: 6438389	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* over *Hibbertia hypericoides, Mesomelaena pseudostygia* and *Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: grey sand
Initials: GT	% Bare ground: 5%	Sub-surface soil: yellow sand
Quadrat number: 2CL	Slope: N/A	% exposed rock: N/A
Transect number: 2C	Position in landscape: Flat	Time since fire: >5
Easting: 391494	Northing: 6438342	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Mesomelaena pseudostygia, Dasypogon bromeliifolius* and *Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	1	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: grey sand
Initials: GT	% Bare ground: 30%	Sub-surface soil: yellow sand
Quadrat number: 2CM	Slope: N/A	% exposed rock: N/A
Transect number: 2C	Position in landscape: Flat	Time since fire: >5
Easting: 391502	Northing: 6438291	Veg condition: G

Vegetation description/Comments
Adjacent to firebreak. Low open forest - *Banksia attenuata and Banksia menziesii* over *Hibbertia hypericoides, Scholtzia involucrata* and M*esomelaena pseudostygia*

Species	Cover/Count	Comments
L. hermaphrodita	1	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: grey/brown sand
Initials: GT	% Bare ground: 30%	Sub-surface soil: yellow sand
Quadrat number: 2EJ	Slope: N/A	% exposed rock: N/A
Transect number: 2E	Position in landscape: Flat	Time since fire: >5
Easting: 391590	Northing: 6438444	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii and Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Lyginia barbata*

Species	Cover/Count	Comments
L. hermaphrodita	3	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N-NE	Surface soil: light grey sand
Initials: GT	% Bare ground: 10%	Sub-surface soil: yellow sand
Quadrat number: 2EH	Slope: N/A	% exposed rock: N/A
Transect number: 2E	Position in landscape: N/A	Time since fire: >5
Easting: 391595	Northing: 6438545	Veg condition: E

Vegetation description/Comments
Fox den present.
Low open forest - *Banksia attenuata, Banksia menziesii and Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Lyginia barbata*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: NE	Surface soil: grey sand
Initials: GT	% Bare ground: 25%	Sub-surface soil:
Quadrat number: 2EF	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2E	Position in landscape: LS	Time since fire: >5
Easting: 391585	Northing: 6438639	Veg condition: VG

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia illicifolia, Banksia menziesii* and *Nuytsia floribunda* over *Dasypogon bromeliifolius*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: grey sand
Initials: GT	% Bare ground: 0%	Sub-surface soil:
Quadrat number: 2ED	Slope: N/A	% exposed rock: N/A
Transect number: 2E	Position in landscape: Dep.	Time since fire: >5
Easting: 391588	Northing: 6438742	Veg condition: E-VG

Vegetation description/Comments
Open forest - *Banksia illicifolia* and M*elaleuca preissiana* over *Astartea scoparia* and *Xanthorrhoea preissii* over D*asypogon bromeliifolius*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: S-E	Surface soil: grey sand
Initials: GT	% Bare ground: 15%	Sub-surface soil: yellow sand
Quadrat number: 2EB	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2E	Position in landscape: MS	Time since fire: >5
Easting: 391593	Northing: 6438843	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata and Banksia menziesii* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Macrozamia riedlei*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: S	Surface soil: light grey sand
Initials: GT	% Bare ground: 35%	Sub-surface soil: yellow sand
Quadrat number: 2GAA	Slope: Very gently inclined	% exposed rock: N/A
Transect number: 2G	Position in landscape: US	Time since fire: >5
Easting: 391693	Northing: 6438940	Veg condition: E

Vegetation description/Comments
Low open woodland/forest - *Banksia attenuata and Banksia menziesii* with emergent *Eucalyptus marginata* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Macrozamia riedlei*

Species	Cover/Count	Comments
L. hermaphrodita	4	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: S	Surface soil: light grey sand
Initials: GT	% Bare ground: 15%	Sub-surface soil: yellow sand
Quadrat number: 2GA	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2G	Position in landscape: US	Time since fire: N/A
Easting: 391688	Northing: 6438895	Veg condition: E

Vegetation description/Comments
Low open woodland - *Banksia attenuata and Banksia menziesii* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Macrozamia riedlei*

Species	Cover/Count	Comments
L. hermaphrodita	1	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: S-SE	Surface soil: grey sand
Initials: GT	% Bare ground: 80%	Sub-surface soil:
Quadrat number: 2GC	Slope: Gently inclined	% exposed rock: N/A
Transect number: 2G	Position in landscape: LS	Time since fire: >5
Easting: 391695	Northing: 6438788	Veg condition: E-VG

Vegetation description/Comments
Low open woodland - *Banksia attenuata and Banksia menziesii* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Macrozamia riedlei*

Species	Cover/Count	Comments
L. hermaphrodita	9	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: grey sand
Initials: GT	% Bare ground: 50%	Sub-surface soil:
Quadrat number: 2GE	Slope: N/A	% exposed rock: N/A
Transect number: 2G	Position in landscape: Dep.	Time since fire: >5
Easting: 391690	Northing: 6438691	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia illicifolia, Banksia attenuata, Banksia menziesii, Melaleuca preissiana* and *Allocasuarina fraseriana* over *Astartea scoparia, Adenanthos cygnorum* and *Dasypogon bromeliifolius*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N	Surface soil: light grey sand
Initials: GT	% Bare ground: 5%	Sub-surface soil: yellow sand
Quadrat number: 2GG	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2G	Position in landscape: LS	Time since fire: >5
Easting: 391695	Northing: 6438588	Veg condition: VG

Vegetation description/Comments
Low open forest - B*anksia illicifolia, Banksia menziesii* and *Banksia attenuata* with emergent *Eucalyptus marginata* over dense *Dasypogon bromeliifolius* and sedges.

Species	Cover/Count	Comments
L. hermaphrodita	3	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: N	Surface soil: brown organics
Initials: GT	% Bare ground: 0%	Sub-surface soil: grey sand
Quadrat number: 2IE	Slope: N/A	% exposed rock: N/A
Transect number: 2I	Position in landscape: Dep.	Time since fire: >5
Easting: 391790	Northing: 6438695	Veg condition: VG

Vegetation description/Comments
Open tall forest - *Melaleuca preissiana* and *Eucalyptus marginata* over *Kunzea glabrescens, Astartea scoparia* and *Xanthorrhoea preissii* over D*asypogon bromeliifolius*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: S-SW	Surface soil: light grey sand
Initials: GT	% Bare ground: 50%	Sub-surface soil: yellow sand
Quadrat number: 2IC	Slope: gently inclined	% exposed rock: N/A
Transect number: 2I	Position in landscape: LS	Time since fire: >5
Easting: 391785	Northing: 6438795	Veg condition: VG-E

Vegetation description/Comments
Low open forest - *Banksia illicifolia, Banksia menziesii and Banksia attenuata* over *Xanthorrhoea preissii, Stirlingia laterifolia and Dasypogon bromeliifolius*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: S-SE	Surface soil: light grey sand
Initials: GT	% Bare ground: 50%	Sub-surface soil: yellow sand
Quadrat number: 2IA	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2I	Position in landscape: MS	Time since fire: >5
Easting: 391795	Northing: 6438891	Veg condition: E

Vegetation description/Comments
Low open woodland - B*anksia attenuata, Banksia menziesii and Banksia illicifolia* with emergent *Eucalyptus marginata*

Species	Cover/Count	Comments
L. hermaphrodita	5	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: S-SW	Surface soil: light grey sand
Initials: GT	% Bare ground: 0%	Sub-surface soil: yellow sand
Quadrat number: 2LA	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2L	Position in landscape: MS	Time since fire: >5
Easting: 391938	Northing: 6438889	Veg condition: VG

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Eucalyptus marginata* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Kunzea glabrescens*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: GT	% Bare ground: 0%	Sub-surface soil: yellow sand
Quadrat number: 2DU	Slope: gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: MS	Time since fire: >5
Easting: 391540	Northing: 6437895	Veg condition: G

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Eucalyptus marginata* and *Allocasuarina fraseriana.*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey/brown
Initials: GT	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2CT	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2C	Position in landscape: US	Time since fire: >5
Easting: 391437	Northing: 6437958	Veg condition: G

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Eucalyptus marginata* and *Allocasuarina fraseriana.*

Species	Cover/Count	Comments
L. hermaphrodita	4	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 80%	Sub-surface soil: yellow sand
Quadrat number: 2DQ	Slope: gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391539	Northing: 6438086	Veg condition: G-P

Vegetation description/Comments Low open forest - *Eucalyptus marginata, Banksia attenuata, Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides* over weeds

Species	Cover/Count	Comments
L. hermaphrodita	4	Approximately 1%
L.maritima		

Site Name: Mandogalup	Job No. EP10-018-003

Date:	Aspect:	Surface soil:
Initials:	% Bare ground:	Sub-surface soil:
Quadrat number:	Slope:	% exposed rock:
Transect number:	Position in landscape:	Time since fire:
Easting:	Northing:	Veg condition:

Vegetation description/Comments

Species	Cover/Count	Comments
L. hermaphrodita		
L.maritima		

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 70%	Sub-surface soil: yellow sand
Quadrat number: 2HL	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2H	Position in landscape: MS	Time since fire: >5
Easting: 391738	Northing: 6438342	Veg condition: G

Vegetation description/Comments
Low woodland - *Eucalyptus marginata, Allocasuarina fraseriana, Banksia attenuata, Banksia illicifolia and Banksia menziesii* over *Hibbertia hypericoides, Xanthorrhoea preissii and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	1	< 1%
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 30%	Sub-surface soil: grey sand
Quadrat number: 2HN	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2H	Position in landscape: MS	Time since fire: >5
Easting: 391743	Northing: 6438238	Veg condition: P

Vegetation description/Comments
Low woodland - *Eucalyptus marginata, Banksia attenuata, Banksia illicifolia, Banksia menziesii* over *Xanthorrhoea preissii, Carpobrotus modestus* and weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: NE	Surface soil: light grey sand
Initials: KK	% Bare ground: 80%	Sub-surface soil: yellow sand
Quadrat number: 2GO	Slope: gently inclined	% exposed rock: N/A
Transect number: 2G	Position in landscape: MS	Time since fire: >5
Easting: 391688	Northing: 6438185	Veg condition: P

Vegetation description/Comments
Low woodland - *Eucalyptus marginata, Banksia attenuata, Banksia menziesii, Banksia illicifolia* over *Hibbertia hypericoides, Xanthorrhoea preissii* and weeds.

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 70%	Sub-surface soil: grey sand
Quadrat number: 2GM	Slope: gently inclined	% exposed rock: N/A
Transect number: 2G	Position in landscape: US	Time since fire: >5
Easting: 391695	Northing: 6438295	Veg condition: P

Vegetation description/Comments
Low woodland - *Eucalyptus marginata, Banksia attenuata, Banksia menziesii, Banksia illicifolia* over *Hibbertia hypericoides, Xanthorrhoea preissii* and weeds.

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 20%	Sub-surface soil: yellow sand
Quadrat number: 2FN	Slope: gently inclined	% exposed rock: N/A
Transect number: 2F	Position in landscape: US	Time since fire: >5
Easting: 391646	Northing: 6438238	Veg condition: G

Vegetation description/Comments
Low woodland - *Eucalyptus marginata, Banksia attenuata, Banksia menziesii, Banksia illicifolia* over *Hibbertia hypericoides, Xanthorrhoea preissii* and weeds.

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 10%	Sub-surface soil: yellow sand
Quadrat number: 2FP	Slope: gently inclined	% exposed rock: N/A
Transect number: 2F	Position in landscape: MS	Time since fire: >5
Easting: 391644	Northing: 6438137	Veg condition: G

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2EP	Slope: gently inclined	% exposed rock: N/A
Transect number: 2E	Position in landscape: US	Time since fire: >5
Easting: 391592	Northing: 6438136	Veg condition: G

Vegetation description/Comments
Low woodland - B*anksia attenuata, Banksia menziesii, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 0%	Sub-surface soil: yellow sand
Quadrat number: 2ER	Slope: gently inclined	% exposed rock: N/A
Transect number: 2E	Position in landscape: MS	Time since fire: >5
Easting: 391594	Northing: 6438038	Veg condition: G

Vegetation description/Comments
Low open forest - *Eucalyptus marginata, Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* over *Macrozamia riedlei, Xanthorrhoea preissii, Hibbertia hypericoides, Acacia pulchella* and weeds.

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 20%	Sub-surface soil: yellow sand
Quadrat number: 2BA	Slope: gently inclined	% exposed rock: N/A
Transect number: 2B	Position in landscape: US	Time since fire: >5
Easting: 391442	Northing: 6438893	Veg condition: E

Vegetation description/Comments Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	L. sericea present
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2DA	Slope: gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391543	Northing: 6438893	Veg condition: E

Vegetation description/Comments Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	4	
L.maritima	1%	1 plant, diggings around base

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E-SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2DB	Slope: gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391543	Northing: 6438838	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	1	2 plants

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 70%	Sub-surface soil: yellow sand
Quadrat number: 2DC	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: MS	Time since fire: >5
Easting: 391539	Northing: 6438789	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey sand
Initials: KK	% Bare ground: 30%	Sub-surface soil: dark grey
Quadrat number: 2DD	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: MS	Time since fire: >5
Easting: 391538	Northing: 6438743	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii* over *Xanthorrhoea preissii* and *Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: NE	Surface soil: light grey sand
Initials: KK	% Bare ground: 50%	Sub-surface soil: dark grey
Quadrat number: 2DE	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: MS	Time since fire: >5
Easting: 391547	Northing: 6438692	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia illicifolia, Banksia attenuata, Banksia menziesii* over *Xanthorrhoea preissii* , *Dasypogon bromeliifolius and Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	2	>1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: NW	Surface soil: light grey sand
Initials: KK	% Bare ground: 60%	Sub-surface soil:
Quadrat number: 2DF	Slope: MS	% exposed rock: N/A
Transect number: 2D	Position in landscape: MS	Time since fire: >5
Easting: 391545	Northing: 6438641	Veg condition: E

Vegetation description/Comments
Low woodland - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* over *Stirlingia laterifolia, Hibbertia hypericoides* and *Xanthorrhoea preissii*

Species	Cover/Count	Comments
L. hermaphrodita	16	5% coverage
L.maritima		

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: NE	Surface soil: light grey sand
Initials: KK	% Bare ground: 45%	Sub-surface soil: yellow sand
Quadrat number: 2DG	Slope: gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391542	Northing: 6438589	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana, Banksia illicifolia* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: NE	Surface soil: light grey sand
Initials: KK	% Bare ground: 10%	Sub-surface soil: yellow sand
Quadrat number: 2DH	Slope: gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391539	Northing: 6438540	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana, Banksia illicifolia* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: NE	Surface soil: light grey sand
Initials: KK	% Bare ground: 30%	Sub-surface soil: yellow sand
Quadrat number: 2DI	Slope: gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391544	Northing: 6438490	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana, Banksia illicifolia* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	1	<1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 30%	Sub-surface soil: yellow sand
Quadrat number: 2DJ	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391536	Northing: 6438437	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana, Banksia illicifolia* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	4	1%
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: light grey sand
Initials: KK	% Bare ground: 20%	Sub-surface soil: yellow sand
Quadrat number: 2DK	Slope: N/A	% exposed rock: N/A
Transect number: 2D	Position in landscape: US	Time since fire: >5
Easting: 391538	Northing: 6438388	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana, Banksia illicifolia* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	10	2%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E-NE	Surface soil: yellow/light grey
Initials: KK	% Bare ground: 40%	Sub-surface soil: yellow
Quadrat number: 2FI	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2F	Position in landscape: US	Time since fire: >5
Easting: 391638	Northing: 6438493	Veg condition: E

Vegetation description/Comments
Low woodland - *Banksia menziesii, Banksia attenuata, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N-NW	Surface soil: light grey sand
Initials: KK	% Bare ground: 60%	Sub-surface soil: yellow sand
Quadrat number: 2FG	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2F	Position in landscape: US	Time since fire: >5
Easting: 391642	Northing: 6438593	Veg condition: E

Vegetation description/Comments
Low open forest - B*anksia menziesii, Banksia attenuata, Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: NE	Surface soil: grey sand
Initials: KK	% Bare ground: 0%	Sub-surface soil: grey sand
Quadrat number: 2FE	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2F	Position in landscape: LS	Time since fire: >5
Easting: 391636	Northing: 6438695	Veg condition: E

Vegetation description/Comments
Open forest - *Melaleuca preissiana, Allocasuarina fraseriana* and *Eucalyptus marginata* over *Kunzea glabrescens, Xanthorrhoea preissii* and *Dasypogon bromeliifolius*
Appears to be an area of transition between vegetation communities

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SW	Surface soil: light grey
Initials: KK	% Bare ground: 40%	Sub-surface soil:
Quadrat number: 2FC	Slope: gently inclined	% exposed rock: N/A
Transect number: 2F	Position in landscape: MS	Time since fire: >5
Easting: 391640	Northing: 6438794	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia menziesii, Banksia attenuata, Eucalyptus marginata, Banksia illicifolia* over *Xanthorrhoea preissii, Dasypogon bromeliifolius, Stirlingia laterifolia, Macrozamia riedlei* and *Hibbertia hypericoides*

Species	Cover/Count	Comments
L. hermaphrodita	2	< 1%
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: E	Surface soil: light grey
Initials: KK	% Bare ground: 30%	Sub-surface soil: yellow sand
Quadrat number: 2FA	Slope: gently inclined	% exposed rock: N/A
Transect number: 2F	Position in landscape: US	Time since fire: >5
Easting: 391642	Northing: 6438895	Veg condition: E

Vegetation description/Comments
Low open forest - *Allocasuarina fraseriana, Banksia attenuata and Banksia menziesii* over *Hibbertia hypericoides, Xanthorrhoea preissii* and *Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	2	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SW	Surface soil: light grey
Initials: KK	% Bare ground: 10%	Sub-surface soil:
Quadrat number: 2HA	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2H	Position in landscape: MS	Time since fire: >5
Easting: 391743	Northing: 6438889	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia illicifolia, Banksia menziesii* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	4	1%
L.maritima	0.01%	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: S	Surface soil: light grey sand
Initials: KK	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2HC	Slope: gently inclined	% exposed rock: N/A
Transect number: 2H	Position in landscape: MS	Time since fire: >5
Easting: 391740	Northing: 6438792	Veg condition: E

Vegetation description/Comments
Low open forest - *Banksia attenuata, Banksia illicifolia, Banksia menziesii* and *Allocasuarina fraseriana* with emergent *Eucalyptus marginata* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	6	Digging around base observed
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: grey sand
Initials: KK	% Bare ground: N/A	Sub-surface soil: grey sand
Quadrat number: 2HE	Slope: N/A	% exposed rock: N/A
Transect number: 2H	Position in landscape: MS	Time since fire: >5
Easting: 391744	Northing: 6438693	Veg condition: E

Vegetation description/Comments
Open forest - *Banksia illicifolia, Banksia attenuata, Kunzea glabrescens* over *Dasypogon bromeliifolius* with emergent *Eucalyptus marginata*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: SE	Surface soil: grey sand
Initials: KK	% Bare ground: 30%	Sub-surface soil: grey sand
Quadrat number: 2HG	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2H	Position in landscape: US	Time since fire: >5
Easting: 391738	Northing: 6438591	Veg condition: G

Vegetation description/Comments
Low open forest - *Banksia illicifolia, Banksia attenuata, Eucalyptus marginata, Allocasuarina fraseriana* and *Banksia menziesii* over *Xanthorrhoea preissii, Carpobrotus modesta* and weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: N/A	Surface soil: grey sand
Initials: KK	% Bare ground: 0%	Sub-surface soil: grey sand
Quadrat number: 2JD	Slope: flat	% exposed rock: N/A
Transect number: 2J	Position in landscape: Dep.	Time since fire: >5
Easting: 391843	Northing: 6438741	Veg condition: VG

Vegetation description/Comments
Low open forest - *Melaleuca preissii, Eucalyptus marginata* over *Kunzea glabrescens* and *Dasypogon bromeliifolius*

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 60%	Sub-surface soil: yellow sand
Quadrat number: 2JB	Slope: gently inclined	% exposed rock: N/A
Transect number: 2J	Position in landscape: US	Time since fire: >5
Easting: 391844	Northing: 6438844	Veg condition: VG

Vegetation description/Comments
Low woodland - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* and *Eucalyptus marginata* over *Macrozamia riedlei, Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	6	1% coverage
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SE	Surface soil: light grey sand
Initials: KK	% Bare ground: 20%	Sub-surface soil: yellow sand
Quadrat number: 2J2	Slope: gently inclined	% exposed rock: N/A
Transect number: 2J	Position in landscape: US	Time since fire: >5
Easting: 391845	Northing: 6438946	Veg condition: VG

Vegetation description/Comments
Low woodland - *Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana* and *Eucalyptus marginata* over *Macrozamia riedlei, Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	1	<1% coverage
L.maritima		

Lomandra Density Survey Data Sheet

Site Name: Mandogalup	Job No. EP10-0018-003

Date: 28/01/2011	Aspect: NE-E	Surface soil: light grey sand
Initials: KK	% Bare ground: 40%	Sub-surface soil: yellow sand
Quadrat number: 2KA	Slope: gently inclined	% exposed rock: N/A
Transect number: 2K	Position in landscape: MS	Time since fire: >5
Easting: 391892	Northing: 6438895	Veg condition: VG

Vegetation description/Comments
Low woodland - *Eucalyptus marginata, Banksia menziesii, Banksia attenuata* and *Allocasuarina fraseriana* over *Xanthorrhoea preissii, Hibbertia hypericoides and Stirlingia laterifolia*

Species	Cover/Count	Comments
L. hermaphrodita	3	1% coverage
L.maritima	0	

Site Name: Mandogalup	Job No. EP10-018-003

Date: 28/01/2011	Aspect: SW	Surface soil: grey sand
Initials: KK	% Bare ground: N/A	Sub-surface soil: grey sand
Quadrat number: 2KC	Slope: very gently inclined	% exposed rock: N/A
Transect number: 2K	Position in landscape: LS	Time since fire: >5
Easting: 391889	Northing: 6438788	Veg condition: G

Vegetation description/Comments
Low open forest - *Banksia illicifolia, Banksia attenuata, Allocasuarina fraseriana* over *Kunzea glabrescens, Xanthorrhoea preissii, Dasypogon bromeliifolius* and weeds

Species	Cover/Count	Comments
L. hermaphrodita	0	
L.maritima	0	

APPENDIX C

GRACEFUL SUN-MOTH SURVEY – RAW DATA

Graceful sun-moth data sheet

Site name: Mandogalup			
Date:	24/02/2011	Start time:	10:15
Observers:	KK & GT	End time:	10:50
Transect #:	1	Wind speed (km/hr):	
Temperature:	34	Wind direction:	NE

Comments
Degraded to completely degraded Banksia woodland. Heavily grazed understorey. Wind gusty.
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	24/02/2011	Start time:	11:00
Observers:	KK & GT	End time:	12:00
Transect #:	2	Wind speed (km/hr	occasional gusts
Temperature:	34	Wind direction:	NE

Comments
Walked firebreak around vegetation. Cloud starting to come over although still sunny.
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Graceful sun-moth data sheet

Site name: Mandogalup			
Date:	24/02/2011	Start time:	12:25
Observers:	KK & GT	End time:	13:05
Transect #:	3	Wind speed (km/h	occasional gusts
Temperature:	35	Wind direction:	NW

Comments
Through vegetation, other smaller moths present, heavy cloud cover started to come over but sunny patches. No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	24/02/2011	Start time:	1:15 PM
Observers:	KK & GT	End time:	1:48 PM
Transect #:	4	Wind speed (km/h	occasional gusts
Temperature:	35	Wind direction:	NE

Comments
Through predominately degraded vegetation (Banksia woodland). Heavy cloud cover beginning to come over but sunny patches
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Graceful sun-moth data sheet

Site name: Mandogalup			
Date:	3/03/2011	Start time:	10:03
Observers:	GT &SP	End time:	10:19
Transect #:	1	Wind speed (km/hr	5
Temperature:	27	Wind direction:	SE

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	3/03/2011	Start time:	10:30
Observers:	GT &SP	End time:	11:52
Transect #:	2	Wind speed (km/hr	5-7
Temperature:	28	Wind direction:	SE

Comments

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed
1	0	track - WP 560	391359	6438394	10:51	33	5

Site name: Mandogalup			
Date:	3/03/2011	Start time:	12:05
Observers:	GT &SP	End time:	12:26
Transect #:	3	Wind speed (km/hr	8-10
Temperature:	34	Wind direction:	SE

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Graceful sun-moth data sheet

Site name: Mandogalup			
Date:	10/03/2011	Start time:	10:05
Observers:	GT &SP	End time:	10:19
Transect #:	1	Wind speed (km/h	0
Temperature:	28	Wind direction:	-

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	10/03/2011	Start time:	10:31
Observers:	GT &SP	End time:	11:33
Transect #:	2	Wind speed (km/h	0-5
Temperature:	30-34	Wind direction:	-

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	10/03/2011	Start time:	12:06
Observers:	GT &SP	End time:	12:23
Transect #:	3	Wind speed (km/h	0-5
Temperature:	34	Wind direction:	-

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Graceful sun-moth data sheet

Site name: Mandogalup			
Date:	15/03/2011	Start time:	10:22
Observers:	GT &SP	End time:	10:37
Transect #:	1	Wind speed (km/hr	5 with gusts up to 15
Temperature:	30	Wind direction:	E-SE

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	15/03/2011	Start time:	10:48
Observers:	GT &SP	End time:	11:50
Transect #:	2	Wind speed (km/hr	5 with gusts up to 15
Temperature:	33	Wind direction:	E-SE

Comments
No GSM sighted.
Low Open Banksia Woodland.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	15/03/2011	Start time:	12:04
Observers:	GT &SP	End time:	12:23
Transect #:	3	Wind speed (km/hr	5-10, gust s up to 15
Temperature:	34	Wind direction:	SW

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Graceful sun-moth data sheet

Site name: Mandogalup			
Date:	25/03/2011	Start time:	11:35
Observers:	GT &SP	End time:	11:51
Transect #:	1	Wind speed (km/hr	0-5
Temperature	30	Wind direction:	-

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	25/03/2011	Start time:	9:45
Observers:	GT &SP	End time:	10:45
Transect #:	2	Wind speed (km/hr	0-2
Temperature	27	Wind direction:	-

Comments
No GSM sighted.
Low Open Banksia Woodland.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	25/03/2011	Start time:	10:50
Observers:	GT &SP	End time:	11:09
Transect #:	3	Wind speed (km/hr	0-5
Temperature	27	Wind direction:	-

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Graceful sun-moth data sheet

Site name: Mandogalup			
Date:	31/03/2011	Start time:	9:58
Observers:	GT &SP	End time:	10:11
Transect #:	1	Wind speed (km/hr	5
Temperature:	27	Wind direction:	s-sw

Comments
No GSM sighted.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	31/03/2011	Start time:	10:20
Observers:	GT &SP	End time:	11:24
Transect #:	2	Wind speed (km/hr	5
Temperature:	27	Wind direction:	S-SW

Comments
No GSM sighted. No cloud

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

Site name: Mandogalup			
Date:	31/03/2011	Start time:	11:30
Observers:	GT &SP	End time:	11:57
Transect #:	3	Wind speed (km/hr	5
Temperature:	29	Wind direction:	S-SW

Comments
No GSM sighted. No cloud.

GSM specimen #	% Cloud	Comments (track/vegetated)	Easting	Northing	Time	Temp (C°)	Wind speed

APPENDIX D

TARGETTED BLACK COCKATOO SURVEY DATA

Black Cockatoo Foraging Evidence
Datum - GDA94

Waypoint Number	Zone	mE	mN	Evidence Age	Evidence Type 1	Likely Species	Comments
wpt008	50H	391716	6438653	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt013	50H	391716	6438670	Recent	Sheoak Seeds	FRTBC	
wpt014	50H	391734	6438628	Old	Banksia Cones	Carnaby's	
wpt015	50H	391749	6438603	Recent	Banksia Cones	Carnaby's	
wpt019	50H	391704	6438342	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt022	50H	391744	6438285	Recent	Sheoak Seeds	FRTBC	
wpt023	50H	391741	6438270	Recent	Banksia Cones	Carnaby's	
wpt025	50H	391723	6438240	Recent	Banksia Cones	Carnaby's	
wpt031	50H	391637	6438124	Old	Banksia Cones	Carnaby's	
wpt034	50H	391612	6438050	Recent	Sheoak Seeds	FRTBC	
wpt038	50H	391575	6438045	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt047	50H	391502	6437916	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt077	50H	391425	6437675	Recent	Tuart Seeds	Carnaby's	
wpt081	50H	391370	6437719	Recent	Sheoak Seeds	FRTBC	
wpt086	50H	391393	6437834	Old	Banksia Cones	Carnaby's	
wpt092	50H	391395	6437861	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt094	50H	391391	6437876	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt101	50H	391471	6437989	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt107	50H	391469	6438029	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt111	50H	391549	6438106	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt115	50H	391627	6438223	Recent	Sheoak Seeds	FRTBC	
wpt117	50H	391873	6438884	Recent	Banksia Cones	Carnaby's	
wpt144	50H	391709	6438729	Old	Banksia Cones	Carnaby's	
wpt150	50H	391781	6438789	Old	Banksia Cones	Carnaby's	
wpt168	50H	391408	6438782	Old	Jarrah Seeds	Carnaby's/FRTBC	
wpt171	50H	391491	6438637	Old	Jarrah Seeds	Carnaby's/FRTBC	
wpt180	50H	391573	6438782	Recent	Banksia Cones	Carnaby's	
wpt181	50H	391438	6438686	Recent	Sheoak Seeds	FRTBC	

Waypoint Number	Zone	mE	mN	Evidence Age	Evidence Type 1	Likely Species	Comments
wpt184	50H	391397	6438465	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt185	50H	391361	6438302	Recent	Jarrah Seeds	Carnaby's/FRTBC	
wpt186	50H	391360	6438249	Old	Jarrah Seeds	Carnaby's/FRTBC	

APPENDIX E

DATABASE SEARCHES AND SPECIES DESCRIPTIONS

NatureMap - Mandogalup - Invertebrates

Created By Greg Harewood on 09/04/2011

Kingdom Animalia
Species Group Invertebrates
Method 'By Circle'
Centre 115°50' 47" E,32°11' 49" S
Buffer 6km

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
1.		*Coccinella repanda*			
2.		*Cryptolaemus montrouzieri*			
3.		*Henosepilachna 26-punctata*			
4.		*Mesodina cyanophracta*			
5.		*Metriorrhynchus sp.*			
6.		*Perthida glyphopa*			
7.		*Phoracantha semipunctata*			
8.		*Phyllococerus purpurascens*			
9.	33992	*Synemon gratiosa (Graceful Sunmoth)*		T	

Conservation Codes
T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

[1] For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

NatureMap - Mandogalup - Frogs

Created By Greg Harewood on 09/04/2011

Kingdom Animalia
Species Group Amphibians
Method 'By Circle'
Centre 115°50' 47" E,32°11' 49" S
Buffer 6km

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
1.	25399	*Crinia glauerti (Clicking Frog)*			
2.	25410	*Heleioporus eyrei (Moaning Frog)*			
3.	25415	*Limnodynastes dorsalis (Western Banjo Frog)*			
4.	25378	*Litoria adelaidensis (Slender Tree Frog)*			
5.	25420	*Myobatrachus gouldii (Turtle Frog)*			

Conservation Codes
T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

[1] For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

NatureMap - Mandogalup - Reptiles

Created By Greg Harewood on 09/04/2011

Kingdom Animalia
Species Group Reptiles
Method 'By Circle'
Centre 115°50' 47" E,32°11' 49" S
Buffer 6km

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
1.	25245	*Brachyurophis semifasciata*			
2.	24980	*Christinus marmoratus (Marbled Gecko)*			
3.	30893	*Cryptoblepharus buchananii*			
4.	30899	*Ctenophorus adelaidensis (Southern Heath Dragons)*			
5.	25027	*Ctenotus australis*			
6.	25766	*Delma fraseri*			
7.	25296	*Demansia psammophis subsp. reticulata*			
8.	25100	*Egernia napoleonis*			
9.	25119	*Hemiergis quadrilineata*			
10.	25133	*Lerista elegans*			
11.	25147	*Lerista lineata*		P3	
12.	25184	*Menetia greyii*			
13.	25191	*Morethia lineoocellata*			
14.	25248	*Neelaps bimaculatus (Black-naped Snake)*			
15.	25249	*Neelaps calonotos (Black-striped Snake)*		P3	
16.	25252	*Notechis scutatus (Tiger Snake)*			
17.	25253	*Parasuta gouldii*			
18.	25007	*Pletholax gracilis subsp. gracilis*			
19.	24907	*Pogona minor subsp. minor*			
20.	25511	*Pseudonaja affinis (Dugite)*			
21.	25259	*Pseudonaja affinis subsp. affinis (Dugite)*			
22.	25008	*Pygopus lepidopodus (Common Scaly Foot)*			
23.	25271	*Ramphotyphlops australis*			
24.	25266	*Simoselaps bertholdi (Jan's Banded Snake)*			
25.	25519	*Tiliqua rugosa*			
26.	25207	*Tiliqua rugosa subsp. rugosa*			

Conservation Codes
T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

[1] For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

NatureMap - Mandogalup - Birds

Created By Greg Harewood on 09/04/2011

Kingdom Animalia
Species Group Birds
Method 'By Circle'
Centre 115°50' 47" E,32°11' 49" S
Buffer 6km

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
1.	24260	*Acanthiza apicalis (Broad-tailed Thornbill (Inland Thornbill))*			
2.	24261	*Acanthiza chrysorrhoa (Yellow-rumped Thornbill)*			
3.	24262	*Acanthiza inornata (Western Thornbill)*			
4.	24560	*Acanthorhynchus superciliosus (Western Spinebill)*			
5.	25535	*Accipiter cirrocephalus (Collared Sparrowhawk)*			
6.	25536	*Accipiter fasciatus (Brown Goshawk)*			
7.	25755	*Acrocephalus australis (Australian Reed Warbler)*			
8.	24310	*Anas castanea (Chestnut Teal)*			
9.	24312	*Anas gracilis (Grey Teal)*			
10.	24315	*Anas rhynchotis (Australasian Shoveler)*			
11.	24316	*Anas superciliosa (Pacific Black Duck)*			
12.	-1591	*Anhinga novaehollandiae*			
13.	-1701	*Anser anser*			
14.	-1693	*Anser sp.*			
15.	24561	*Anthochaera carunculata (Red Wattlebird)*			
16.	24562	*Anthochaera lunulata (Western Little Wattlebird)*			
17.	-1612	*Anthus novaeseelandiae*			
18.	24285	*Aquila audax (Wedge-tailed Eagle)*			
19.	-1578	*Ardea modesta*			
20.	24341	*Ardea pacifica (White-necked Heron)*			
21.	25566	*Artamus cinereus (Black-faced Woodswallow)*			
22.	24353	*Artamus cyanopterus (Dusky Woodswallow)*			
23.	24318	*Aythya australis (Hardhead)*			
24.	-1633	*Barnardius zonarius*			
25.	24319	*Biziura lobata (Musk Duck)*			
26.	25716	*Cacatua sanguinea (Little Corella)*			
27.	25598	*Cacomantis flabelliformis (Fan-tailed Cuckoo)*			
28.	-1590	*Cacomantis pallidus*			
29.	24779	*Calidris acuminata (Sharp-tailed Sandpiper)*			
30.	24784	*Calidris ferruginea (Curlew Sandpiper)*			
31.	24788	*Calidris ruficollis (Red-necked Stint)*			
32.	24789	*Calidris subminuta (Long-toed Stint)*			
33.	24731	*Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black-Cockatoo)*		T	
34.	24734	*Calyptorhynchus latirostris (Carnaby's Cockatoo)*		T	
35.	-1700	*Calyptorhynchus sp.*			
36.	-1624	*Chalcites basalis*			
37.	-1581	*Chalcites lucidus*			
38.	24377	*Charadrius ruficapillus (Red-capped Plover)*			
39.	24321	*Chenonetta jubata (Australian Wood Duck (Wood Duck))*			
40.	-1579	*Chlidonias hybrida*			
41.	-1648	*Chlidonias leucopterus*			
42.	-1637	*Chroicocephalus novaehollandiae*			
43.	24288	*Circus approximans (Swamp Harrier)*			
44.	24774	*Cladorhynchus leucocephalus (Banded Stilt)*			
45.	25675	*Colluricincla harmonica (Grey Shrike-thrush)*			
46.	24399	*Columba livia (Domestic Pigeon)*	Y		
47.	25568	*Coracina novaehollandiae (Black-faced Cuckoo-shrike)*			
48.	25592	*Corvus coronoides (Australian Raven)*			
49.	24671	*Coturnix pectoralis (Stubble Quail)*			
50.	25701	*Coturnix ypsilophora (Brown Quail)*			
51.	25595	*Cracticus tibicen (Australian Magpie)*			
52.	25596	*Cracticus torquatus (Grey Butcherbird)*			
53.	24322	*Cygnus atratus (Black Swan)*			

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
54.	30901	*Dacelo novaeguineae (Laughing Kookaburra)*	Y		
55.	25673	*Daphoenositta chrysoptera (Varied Sittella)*			
56.	-1623	*Egretta garzetta*			
57.	-1577	*Egretta novaehollandiae*			
58.	-1600	*Elanus axillaris*			
59.	-1573	*Elseyornis melanops*			
60.	-1569	*Eolophus roseicapillus*			
61.	24567	*Epthianura albifrons (White-fronted Chat)*			
62.	24379	*Erythrogonys cinctus (Red-kneed Dotterel)*			
63.	25621	*Falco berigora (Brown Falcon)*			
64.	25622	*Falco cenchroides (Australian Kestrel)*			
65.	25623	*Falco longipennis (Australian Hobby)*			
66.	25624	*Falco peregrinus (Peregrine Falcon)*		S	
67.	25727	*Fulica atra (Eurasian Coot)*			
68.	25729	*Gallinula tenebrosa (Dusky Moorhen)*			
69.	25730	*Gallirallus philippensis (Buff-banded Rail)*			
70.	25530	*Gerygone fusca (Western Gerygone)*			
71.	24443	*Grallina cyanoleuca (Magpie-lark)*			
72.	24293	*Haliaeetus leucogaster (White-bellied Sea-Eagle)*			
73.	24295	*Haliastur sphenurus (Whistling Kite)*			
74.	-1601	*Hieraaetus morphnoides*			
75.	25734	*Himantopus himantopus (Black-winged Stilt)*			
76.	24491	*Hirundo neoxena (Welcome Swallow)*			
77.	-1632	*Ixobrychus dubius*			
78.	-1641	*Lalage sueurii*			
79.	24581	*Lichenostomus virescens (Singing Honeyeater)*			
80.	25661	*Lichmera indistincta (Brown Honeyeater)*			
81.	25741	*Limosa limosa (Black-tailed Godwit)*			
82.	-1616	*Lophoictinia isura*			
83.	24326	*Malacorhynchus membranaceus (Pink-eared Duck)*			
84.	25654	*Malurus splendens (Splendid Fairy-wren)*			
85.	25758	*Megalurus gramineus (Little Grassbird)*			
86.	-1570	*Melanodryas cucullata*			
87.	-1649	*Melithreptus lunatus*			
88.	24598	*Merops ornatus (Rainbow Bee-eater)*			
89.	-1636	*Microcarbo melanoleucos*			
90.	24738	*Neophema elegans (Elegant Parrot)*			
91.	25748	*Ninox novaeseelandiae (Boobook Owl)*			
92.	25564	*Nycticorax caledonicus (Rufous Night Heron)*			
93.	24407	*Ocyphaps lophotes (Crested Pigeon)*			
94.	24328	*Oxyura australis (Blue-billed Duck)*			
95.	25679	*Pachycephala pectoralis (Golden Whistler)*			
96.	25680	*Pachycephala rufiventris (Rufous Whistler)*			
97.	25681	*Pardalotus punctatus (Spotted Pardalote)*			
98.	25682	*Pardalotus striatus (Striated Pardalote)*			
99.	24648	*Pelecanus conspicillatus (Australian Pelican)*			
100.	-1640	*Petrochelidon nigricans*			
101.	-1650	*Petroica boodang*			
102.	24659	*Petroica goodenovii (Red-capped Robin)*			
103.	25697	*Phalacrocorax carbo (Great Cormorant)*			
104.	24667	*Phalacrocorax sulcirostris (Little Black Cormorant)*			
105.	25699	*Phalacrocorax varius (Pied Cormorant)*			
106.	24409	*Phaps chalcoptera (Common Bronzewing)*			
107.	-1643	*Phylidonyris niger*			
108.	24596	*Phylidonyris novaehollandiae (New Holland Honeyeater)*			
109.	24841	*Platalea flavipes (Yellow-billed Spoonbill)*			
110.	25720	*Platycercus icterotis (Western Rosella)*			
111.	24843	*Plegadis falcinellus (Glossy Ibis)*			
112.	25703	*Podargus strigoides (Tawny Frogmouth)*			
113.	25704	*Podiceps cristatus (Great Crested Grebe)*			
114.	24681	*Poliocephalus poliocephalus (Hoary-headed Grebe)*			
115.	25722	*Polytelis anthopeplus (Regent Parrot)*			
116.	25731	*Porphyrio porphyrio (Purple Swamphen)*			
117.	24769	*Porzana fluminea (Australian Spotted Crake)*			
118.	25732	*Porzana pusilla (Baillon's Crake)*			
119.	24771	*Porzana tabuensis (Spotless Crake)*			
120.	-1580	*Purpureicephalus spurius*			
121.	24776	*Recurvirostra novaehollandiae (Red-necked Avocet)*			
122.	-1654	*Rhipidura albiscapa*			
123.	25614	*Rhipidura leucophrys (Willie Wagtail)*			

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
124.	25534	*Sericornis frontalis (White-browed Scrubwren)*			
125.	30948	*Smicrornis brevirostris (Weebill)*			
126.	24329	*Stictonetta naevosa (Freckled Duck)*			
127.	25597	*Strepera versicolor (Grey Currawong)*			
128.	25589	*Streptopelia chinensis (Spotted Turtle-Dove)*	Y		
129.	25590	*Streptopelia senegalensis (Laughing Turtle-Dove)*	Y		
130.	25705	*Tachybaptus novaehollandiae (Australasian Grebe (Black-throated Grebe))*			
131.	24331	*Tadorna tadornoides (Australian Shelduck (Mountain Duck))*			
132.	-1621	*Thinornis rubricollis*			
133.	24844	*Threskiornis molucca (Australian White Ibis)*			
134.	24845	*Threskiornis spinicollis (Straw-necked Ibis)*			
135.	25549	*Todiramphus sanctus (Sacred Kingfisher)*			
136.	-1617	*Tribonyx ventralis*			
137.	25723	*Trichoglossus haematodus (Rainbow Lorikeet)*			
138.	24808	*Tringa nebularia (Common Greenshank)*			
139.	25761	*Turnix varia (Painted Button-quail)*			
140.	-1626	*Tyto javanica*			
141.	24386	*Vanellus tricolor (Banded Lapwing)*			
142.	25765	*Zosterops lateralis (Grey-breasted White-eye (Silvereye))*			

Conservation Codes
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S - Other specially protected fauna
1 - Priority 1
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NatureMap - Mandogalup - Mammals

Created By Greg Harewood on 09/04/2011

Kingdom Animalia
Species Group Mammals
Method 'By Circle'
Centre 115°50' 47" E,32°11' 49" S
Buffer 6km

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
1.	24189	*Falsistrellus mackenziei (Western False Pipistrelle)*		P4	
2.	24041	*Felis catus (Cat)*	Y		
3.	24215	*Hydromys chrysogaster (Water-rat)*		P4	
4.	25478	*Isoodon obesulus*			
5.	24153	*Isoodon obesulus subsp. fusciventer (Southern Brown Bandicoot, Quenda)*		P5	
6.	24131	*Macropus eugenii subsp. derbianus (Tammar)*		P5	
7.	24133	*Macropus irma (Western Brush Wallaby)*		P4	
8.	24223	*Mus musculus (House Mouse)*	Y		
9.	24146	*Myrmecobius fasciatus (Numbat, Walpurti)*		T	
10.	24099	*Phascogale tapoatafa subsp. tapoatafa (Southern Brush-tailed Phascogale, Wambenger)*			
11.	24243	*Rattus fuscipes (Western Bush Rat)*			
12.	24245	*Rattus rattus (Black Rat)*	Y		
13.	24167	*Tarsipes rostratus (Honey Possum, Noolbenger)*			

Conservation Codes
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1 - Priority 1
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[1] For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

EPBC Act Protected Matters Report: Coordinates

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

You may wish to print this report for reference before moving to other pages or websites.

Information about the EPBC Act including significance guidelines, forms and application process details can be found at http://www.environment.gov.au/epbc/assessmentsapprovals/index.html

Report created: 09/04/11 09:27:30



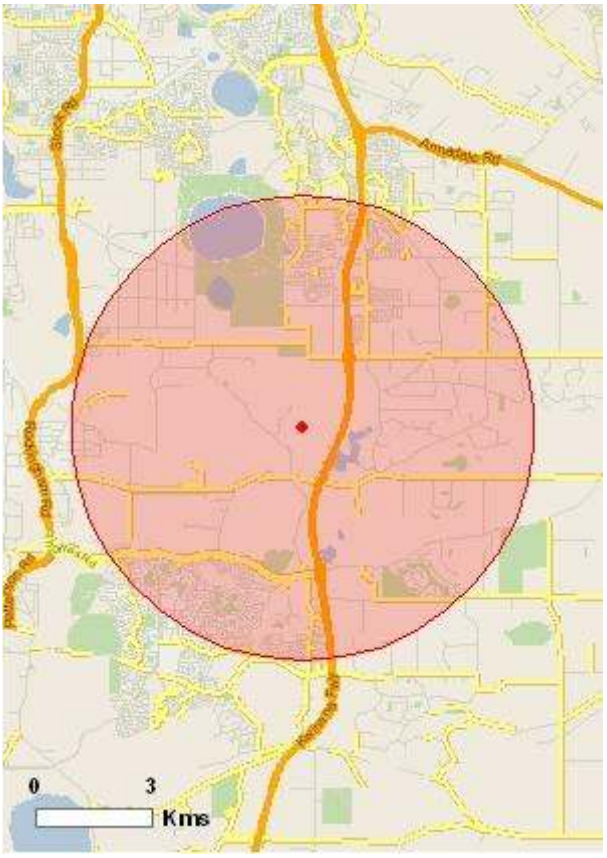
Summary

Details

Matters of NES
Other matters protected by the EPBC Act
Extra Information

Caveat

Acknowledgements



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
Buffer: 6Km

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	2
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communitites:	None
Threatened Species:	13
Migratory Species:	15

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage/index.html

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species. Information on EPBC Act permit requirements and application forms can be found at http://www.environment.gov.au/epbc/permits/index.html.

Commonwealth Lands:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	21

Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	6
State and Territory Reserves:	6
Regional Forest Agreements:	None
Invasive Species:	16
Nationally Important Wetlands:	3

Details

Matters of National Environmental Significance

Wetlands of International Significance (RAMSAR Sites)		**[Resource Information]**
Name	Proximity	
Forrestdale & thomsons lakes	Within Ramsar site	
Peel-yalgorup system	Upstream from Ramsar site	

Threatened Species		**[Resource Information]**
Name	Status	Type of Presence
BIRDS		
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo [67034]	Vulnerable	Species or species habitat may occur within area
Calyptorhynchus latirostris Carnaby's Black-Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat likely to occur within area
INSECTS		
Synemon gratiosa Graceful Sun Moth [66757]	Endangered	Species or species habitat may occur within area
MAMMALS		
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
Phascogale calura Red-tailed Phascogale [316]	Endangered	Species or species habitat may occur within area
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat may occur within area
PLANTS		
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty	Endangered	Species or species habitat likely to occur within area

Spider-orchid [7309]		
Centrolepis caespitosa [6393]	Endangered	Species or species habitat likely to occur within area
Darwinia foetida Muchea Bell [83190]	Critically Endangered	Species or species habitat likely to occur within area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
Drakaea elastica Glossy-leaved Hammer-orchid, Praying Virgin [16753]	Endangered	Species or species habitat likely to occur within area
Lepidosperma rostratum Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to occur within area

Migratory Species [Resource Information]

Name	Status	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]		Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]		Species or species habitat known to occur within area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area

Limosa limosa Black-tailed Godwit [845]	Species or species habitat known to occur within area
Tringa glareola Wood Sandpiper [829]	Species or species habitat known to occur within area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]	Species or species habitat known to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land -

Listed Marine Species [Resource Information]

Name	Status	Type of Presence
Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]		Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]		Species or species habitat known to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area
Calidris subminuta Long-toed Stint [861]		Species or species habitat known to occur within area
Charadrius dubius Little Ringed Plover [896]		Species or species habitat known to occur within area
Charadrius ruficapillus Red-capped Plover [881]		Species or species habitat known to occur within area

Haliaeetus leucogaster White-bellied Sea-Eagle [943]	Species or species habitat likely to occur within area
Himantopus himantopus Black-winged Stilt [870]	Species or species habitat known to occur within area
Limosa lapponica Bar-tailed Godwit [844]	Species or species habitat known to occur within area
Limosa limosa Black-tailed Godwit [845]	Species or species habitat known to occur within area
Merops ornatus Rainbow Bee-eater [670]	Species or species habitat may occur within area
Philomachus pugnax Ruff (Reeve) [850]	Species or species habitat known to occur within area
Recurvirostra novaehollandiae Red-necked Avocet [871]	Species or species habitat known to occur within area
Thinornis rubricollis Hooded Plover [59510]	Species or species habitat known to occur within area
Tringa glareola Wood Sandpiper [829]	Species or species habitat known to occur within area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]	Species or species habitat known to occur within area

Extra Information

Places on the RNE [Resource Information]

Note that not all Indigenous sites may be listed.

Name	Status
Natural	
Gibbs Road Wetland System WA	Indicative Place
Modong Nature Reserve WA	Indicative Place
Beeliar Regional Park and Adjacent Areas WA	Interim List
Reserve 7756 (March 1978 Boundary) WA	Registered
Thomson Lake Reserve WA	Registered
Wandi Nature Reserve WA	Registered

State and Territory Reserves [Resource Information]

Wandi, WA
Thomsons Lake, WA
Modong, WA
Unnamed WA48291, WA
Unnamed WA49561, WA
Harry Waring Marsupial Reserve, WA

Invasive Species [Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Mammals		
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat may occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat may occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat may occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat may occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtiji Willows except Weeping		Species or species habitat may occur within area

Willow, Pussy Willow and
Sterile Pussy Willow [68497]
Salvinia molesta
Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665] Species or species habitat may occur within area

Nationally Important Wetlands **[Resource Information]**

Gibbs Road Swamp System, WA
Spectacles Swamp, WA
Thomsons Lake, WA

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:
- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:
- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:
- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

115.84623 -32.19715

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Department of Environment, Climate Change and Water, New South Wales
-Department of Sustainability and Environment, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment and Natural Resources, South Australia
-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts
-Environmental and Resource Management, Queensland
-Department of Environment and Conservation, Western Australia
-Department of the Environment, Climate Change, Energy and Water
-Birds Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-SA Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Atherton and Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
-State Forests of NSW
-Other groups and individuals

Environment Australia is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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| Australian Government |

Graceful Sun Moth *Synemon gratiosa*

Status and Distribution: Listed as Scheduled 1 under the *WC Act (1950)* and as Endangered under the *EPBC Act (1999)*. It is also ranked as 'Endangered' under IUCN (2001) criteria.

The GSM was, up until recently thought to be confined to a small number of bush reserves in the northern suburbs of Perth. Targeted survey work between February and April 2010 by a number of consultants and the DEC have now extended the known range of the species north to Leeman and south as far as Binningup (Bishop *et al* 2010b).

Previous to this the ten known extant subpopulations of GSM were all located in Perth's northern metropolitan area. Two of these subpopulations are distinct fragments within Warwick Conservation Reserve, and another seven sub-populations occur in *Banksia* woodland in very small areas in Koondoola Bushland, Errina Road Bushland, Marangaroo Bushland, Landsdale Road Bushland, Gumblossom Reserve, Shenton Bushland and Whiteman Park (DEWHA 2009). All of these sites (except Shenton Bushland), are within 4 km of each other. Two other sub-populations occur in coastal heath/shrubland vegetation at Sorrento (DEC 2008) and Ocean Reef (SMEC 2009).

Areas at which the species has recently found are located mainly in coastal locations near Leeman, Jurien Bay, Lancelin, Guilderton, Wilbinga, Rockingham, Yalgorup National Park and Binningup (Bishop *et al* 2010b).

Survey work carried out in 2010 has expanded the previously document area of occupancy of the GSM from 18km^2 to 43 km^2 and the extent of occurrence from 230km^2 to 2015km^2. The area of occupancy is potentially a conservative estimate at this stage and if habitat anticipated to be occupied by GSM is included, the area of occupancy may be as high as 119 km^2 (Bishop *et al* 2010b). Additional surveys planned for 2011 north and south of the known range may also expand the species range

Habitat: The graceful sun-moth is currently only known from two general vegetation types:

> Banksia woodland/woolly bush on deep sands, in the northern suburbs of Perth on the Swan Coastal Plain. In these sites the GSM breeds on *Lomandra hermaphrodita*, which often occurs in low numbers.
>
> Open areas of herbland, heathland and shrubland on Quindalup soils (sand and limestone) close to the coast where it breeds on *Lomandra*

maritima, which is often present in reasonable numbers and may even be a dominant understorey herb. Sites on limestone may have both *Lomandra* species present.

Prior to 2009, the graceful sun-moth had only been recorded in Banksia woodland containing the monocotyledon *Lomandra hermaphrodita* (Asparagaceae). In early 2009 new populations of the graceful sun-moth were located in coastal heathland associated with *Lomandra maritima*, a species closely related to the original host plant *L. hermaphrodita*. *Lomandra maritima* is abundant in coastal vegetation between Binningup and Shark Bay, so the discovery of this new host plant meant it was possible that additional habitat and populations of graceful sun-moth may be found (Bishop *et al* 2010b).

The presence of *Lomandra* species therefore provides a good indication of prospective habitat, however, sufficient numbers and densities of these plants are thought to be necessary to sustain a viable breeding colony of Graceful Sun-Moths (DEWHA 2009).

Natural fragmentation of habitat results from the graceful sun-moth's narrow habitat preference for coastal heathland on secondary coastal sand dunes, where variations in soil and vegetation types produce a mosaic of occupied and unoccupied habitat at small spatial scales. Superimposed upon this natural pattern there has been a substantial loss of habitat through past clearing of native vegetation, exacerbating fragmentation that can restrict sub-populations to small, isolated, relictual habitat remnants (Bishop *et al* 2010b)

Male moths first appear in late February and females in early March. Mating occurs during March and females lay eggs during March and early April, then all adult moths die off. The larvae (caterpillars) take 11 months to fully develop and then emerge as adult moths the following year (Willers, 2009; DEWHA, 2009 cited from WA CALM 2005). The larvae are thought to feed exclusively on *Lomandra* sp. To date the species has been recorded in association with *Lomandra hermaphrodita* and *Lomandra maritima* (DEWHA 2009, SMEC 2009). Hence, the presence of *Lomandra* species provides a good indication of prospective habitat, however, sufficient numbers and densities of these plants are thought to be necessary to sustain a viable breeding colony of Graceful Sun-Moths (DEWHA 2009). The larvae of other species of sun moths, apart from feeding on *Lomandra* spp have also been reported to utilise *Lepidosperma* spp. (Common 1990; Nielsen et al. 1996).

Adult Graceful Sun-Moths emerge during hot weather in bright sunshine. Graceful Sun-Moth males are sedentary, but the extent to which females

disperse is unknown. It is believed that females disperse less than 1 km from their colony of birth and are unlikely to cross unsuitable habitat (DEWHA 2009). Despite being able to fly, most species of butterflies and day-flying moths will not disperse across unsuitable habitat, and do not disperse far during their lifetime (DEWHA 2009). Due to the limited dispersal ability of the Graceful Sun Moth, recolonisation at locally extinct sites is unlikely (TSSC 2008).

Likely presence in study area: Surveys carried by Emerge Associates in March 2011 confirmed the presence of this species within the study area.

Potential impact of development: Potential loss of habitat.

Perth Lined Lerista *Lerista lineata*

Status and Distribution: Listed as Priority 3 by the DEC. Found in the lower west coast from Perth to Leschenault Peninsula. It has also been found at Rottnest Island and Garden Island (Storr *et al* 1999). Recent records from Rockingham (ENV Australia 2010a), and Bibra Lake (Greg Harewood pers. obs.). Also known from the Spectacles reserve (Government of Western Australia 2000b).

Habitat: This small species of skink inhabits white sands (Storr *et al*, 1999) under areas of shrubs and heath where it inhabits loose soil and leaf litter at the base of shrubs (Nevill 2005).

Likely presence in study area: Records of this species at Spectacles and other nearby areas suggest it may be present within the Banksia woodland areas at Mandogalup.

Potential impact of development: Potential loss of habitat.

Jewelled Ctenotus *Ctenotus gemmula*

Status and Distribution: Listed as Priority 3 by DEC. In the west at Cataby and from Wanneroo south to Medina. In the southern interior and along the south coast from Rocky Gully inland to Lake Magenta and east to Toolina Cove (Storr *et al*, 1999). Rarely seen in the Perth Region (Bush *et al* 2010).

Habitat: Prefers pale sandplains supporting either *Banksia* or mallee with heath. Seeks shelter beneath leaf litter, in abandoned stick-ant nest and burrows at the base of trees and shrubs (Bush *et* al 2002).

Likely presence in study area: Status in area difficult to determine, however the lack of recent records in the general area despite several detailed surveys

(Rockingham, East Rockingham, Bibra Lake, Jandakot) suggests that it no longer persists in the southern Perth suburbs. Not listed as a potential species..

Potential impact of development: No impact anticipated as this species is considered unlikely to be present.

Southern Carpet Python *Morelia spilota impricata*

Status and Distribution: The south western population is classified as Priority 4 by the DEC and is also listed in Schedule 4 under the *WC Act*. This subspecies has wide distribution within the south west but is uncommon. Occurs north to Geraldton and Yalgoo and east to Pinjin, Kalgoorlie, Fraser Range and Eyre (Storr *et al*, 2002). Found throughout the Perth region including Garden Island though only persisting in large, undisturbed bushland areas (Bush *et al* 2010)

Habitat: This species has been recorded from semi-arid coastal and inland habitats, Banksia woodland, Eucalypt woodlands, and grasslands. Most often found utilising hollow logs in addition the burrows of other animals for shelter. Often arboreal and will also use tree hollows for refuge.

Likely presence in study area: Status in area difficult to determine. Typically only occurs in low densities and the generally degraded and fragmented nature of bushland in the general area may make it difficult for a population of this species to persist. The lack of recent records in the general area despite several detailed surveys (Rockingham, East Rockingham, Bibra Lake, Jandakot) also suggests that it no longer persists in the general area. Not listed as a potential species.

Potential impact of development: No impact anticipated as this species is not likely to utilise the area.

Black-striped Snake *Neelaps calonotos*

Status and Distribution: Listed as Priority 3 by DEC. Found in the lower west coast from Lancelin to Mandurah. It is locally abundant but is under threat due to land clearing (Storr *et al*, 1999).

Habitat: This species of snake favours sandy soils supporting heath and banksia/eucalypt woodland (Nevill 2005).

Likely presence in study area: Status in area difficult to determine. Listed as a potential species despite a lack of recent records from the general area. Habitat appears suitable.

Potential impact of development: Potential impact of development: Potential loss of habitat.

Great Egret *Ardea alba*

Status and Distribution: This species of egret is listed as Schedule 3 under the *WC Act* and as migratory under the *EPBC Act* and under international agreements to which Australia is a signatory. The Great Egret is common and very widespread in any suitable permanent or temporary habitat (Morcombe, 2003).

Species or species habitat listed as likely to occur in general area within EPBC database search.

Habitat: Wetlands, flooded pasture, dams, estuarine mudflats, mangroves and reefs (Morcombe 2003).

Likely presence in study area: Potentially utilised flooded paddock areas and drains in small numbers during wetter months of the year. This species would not breed on site.

Potential impact of development: Modification/loss of some degraded habitat, but impact will not be significant.

Cattle Egret *Ardea ibis*

Status and Distribution: This species of egret is listed as Schedule 3 under the *WC Act* and as migratory under the *EPBC Act* and under international agreements to which Australia is a signatory. The Cattle Egret is common in the north sections of its range but is an irregular visitor to the better watered parts of the state (Johnstone and Storr 1998). The population is expanding (Morcombe 2003).

Species or species habitat listed as likely to occur in general area within EPBC database search.

Habitat: Moist pastures with tall grasses, shallow open wetlands and margins, mudflats (Morcombe 2003).

Likely presence in study area: Potentially utilised paddock areas and drains in small numbers particularly if cattle present. This species would not breed on site.

Potential impact of development: Modification/loss of some degraded habitat, but impact will not be significant.

Australasian Bittern *Botaurus poiciloptilus*

Status and Distribution: Classified as Schedule 1 under the *WC Act* and as Endangered under the *EPBC Act (1999*. The species is uncommon to rare (Morcombe, 2003), but locally common in wetter parts of south west (Johnstone and Storr 1998). Occurs north to Moora and east to Mt Arid (Johnstone and Storr 1998).

Habitat: Freshwater wetlands, occasionally estuarine; prefers heavy vegetation (Morcombe 2003) such as beds of tall dense *Typha*, *Baumea* and sedges in freshwater swamps (Johnstone and Storr 1998).

Likely presence in study area: There is no suitable habitat for this species in the study area. Not listed as a potential species.

Potential impact of development: No impact anticipated as this species is not likely to utilise the area.

Black Bittern *Ixobrychus flavicollis*

Status and Distribution: Listed as Priority 3 by DEC. Occurs north to Yanchep and Northam and east to Albany (Johnstone and Storr 1998).

Habitat: Freshwater pools, swamps and lagoons, well screened with trees. Shelters in dense waterside vegetation (Johnstone and Storr 1998).

Likely presence in study area: There is no suitable habitat for this species in the study area. Not listed as a potential species.

Potential impact of development: No impact anticipated as this species is not likely to utilise the area.

Little Bittern *Ixobrychus minutus*

Status and Distribution: Listed as Priority 4 by DEC. Occurs north to Moora and east to Two Peoples Bay; accidental or on migration further north and east and on Rottnest Island and central district (Condingup district) (Johnstone and Storr 1998).

Habitat: In south dense beds of Freshwater pools, swamps and lagoons, well screened with trees. Shelters in dense beds of *Typha*, *Baumea* and tall rushes in freshwater swamps around lakes and along rivers (Johnstone and Storr 1998).

Likely presence in study area: There is no suitable habitat for this species in the study area. Not listed as a potential species.

Potential impact of development: No impact anticipated as this species is not likely to utilise the area.

White-bellied Sea Eagle *Haliaeetus leucogaster*

Status and Distribution: This species is listed as Schedule 3 under the *WC Act* and as migratory under the *EPBC Act* and under international agreements to which Australia is a signatory. White-bellied sea eagles are moderately common to common on Kimberley and Pilbara islands, coasts and estuaries, on Bernier, Dorre and Dirk Hartog Is., in Houtman Abrolhos and in the Archipelago of the Recherche; rare to uncommon elsewhere (Johnstone and Storr 1998). Also found in New Guinea, Indonesia, China, southeast Asia and India. Scarce near major coastal cities (Morcombe 2003).

Species or species habitat listed as likely to occur in general area within EPBC database search.

Habitat: This species nest and forages usually near the coast over islands, reefs, headlands, beaches, bays, estuaries, mangroves, but will also live near seasonally flooded inland swamps, lagoons and floodplains, often far inland on large pools of major rivers. Established pairs usually sedentary, immatures dispersive (Morcombe 2003). White-bellied Sea-Eagles build a large stick nest, which is used for many seasons in succession.

Likely presence in study area: May fly over the site occasionally due to proximity to ocean and lakes. Known to nest in coastal forest (recent record from Baldivis). No existing nest sites observed during the field survey.

Potential impact of development: No significant impact on this species anticipated and under normal circumstance it would not utilise the study area for any purpose.

Osprey *Pandion haliaetus*

Status and Distribution: This species is listed as migratory under the *EPBC Act* and under international agreements to which Australia is a signatory. Moderately common to very common in sheltered seas around the north and west coast islands south to 31°S; uncommon to common on mainland coasts, estuaries and large rivers north of tropic, rare to uncommon elsewhere (Johnstone and Storr 1998).

Habitat: Coasts, estuaries, bays, inlets, islands, and surrounding waters, coral atolls, reefs, lagoons, rock cliffs and stacks. Ascends larger rivers (Pizzey & Knight 2007). Construct nests on prominent headland, large trees, communication towers (Simpson and Day 2010).

Likely presence in study area: May fly over the site very occasionally due to proximity to ocean and lakes. Actual study area represents unsuitable habitat. Not listed as a potential species.

Potential impact of development: No impact on this species is anticipated.

Peregrine Falcon *Falco peregrinus*

Status and Distribution: This species is listed as Schedule 4 under the *WC Act*. Individuals of this species are uncommon/rare but wide ranging across Australia. Moderately common at higher levels of the Stirling Range, uncommon in hilly, north west Kimberley, Hamersley and Darling Ranges; rare or scarce elsewhere (Johnstone and Storr 1998).

Habitat: Diverse from rainforest to arid shrublands, from coastal heath to alpine (Morcombe 2003). Mainly about cliffs along coasts, rivers and ranges and about wooded watercourses and lakes (Johnstone and Storr 1998). The species utilises the ledges, cliff faces and large hollows/broken spouts of trees for nesting. It will also occasionally use the abandoned nests of other birds of prey.

Likely presence in study area: This species potentially utilises some sections of the study area as part of a much larger home range. No existing nest sites observed.

Potential impact of development: No significant impact anticipated.

Bush Stone Curlew *Burhinus grallarius*

Status and Distribution: Listed as Priority 4 by DEC. Occurs over much of the western half of the state (and Kimberley) but rare to uncommon in the south of its range due to fox predation (Johnstone and Storr 1998).

Habitat: Lightly wooded country (including partly cleared forests) near daytime shelter e.g. thickets or long grass (Johnstone and Storr 1998).

Likely presence in study area: Records in the DEC database represent historical records. This species is rarely if ever recorded in Perth and viable natural populations would not exist in the area. Can be considered to be regionally extinct. Not listed as a potential species.

Potential impact of any development: No impact on this species will occur.

Migratory Shorebirds

A number of migratory shorebirds are listed as potentially occurring in the general area. Specific species are not discussed.

Status and Distribution: Migratory seabirds are listed under the *EPBC Act 1999* and under international agreements to which Australia is a signatory. All species are either widespread summer migrants to Australia or residents. State and Federal conservation status varies between species.

Habitat: Varies between species but includes beaches and permanent/temporary wetlands varying from billabongs, swamps, lakes, floodplains, sewerage farms, saltwork ponds, estuaries, lagoons, mudflats sandbars, pastures, airfields, sports fields and lawns.

Likely presence in study area: Some nearby lakes maybe used by some of the listed migratory species but the paddock areas and drains within and adjacent to the study area represents very marginal habitat for all migratory shorebirds and the site cannot be regarded as having any significant value to any species. None listed as a potential species.

Potential impact of development: No significant impact on migratory shorebirds will occur as the result of development within the study area.

Hooded Plover *Charadrius rubricollis*

Status and Distribution: Listed as Priority 4 by DEC. In WA coastally west from Israelite Bay north to Jurien Bay and inland salt lakes more than 100km from the coast. In eastern Australia confined to suitable habitat from Jervis Bay (NSW) through Bass Strait and Tasmanian and west to Great Australian Bight in South Australia.

Habitat: Broad sandy ocean beaches and bays, coastal and inland salt lakes (Pizzey & Knight 2006).

Likely presence in study area: No suitable habitat. Not listed as a potential species.

Potential impact of development: No impact on this species is anticipated to occur as the result of the proposal proceeding.

Forest Red-tailed Black Cockatoo *Calyptorhynchus banksii naso*

Status and Distribution: Listed as Scheduled 1 under the *WC Act* and as Vulnerable under the *EPBC Act*. Found in the humid and subhumid south west, mainly hilly interior, north to Gingin and east to Mt Helena, Christmas Tree Well, North Bannister, Mt Saddleback, Rock Gully and the upper King River (Johnstone and Storr 1998).

Habitat: Eucalypt forests, feeds on Marri, Jarrah, Blackbutt, Karri, Sheoak and Snottygobble. The Forest Red-tailed Black Cockatoo nests in the large hollows of Marri, Jarrah and Karri (Johnstone and Kirkby 1999). In Marri, the nest hollows of the Forest Red-tailed Black Cockatoo range from 8-14m above ground, the entrance is 12 – 41cm in diameter and the depth is one to five metres (Johnstone and Storr 1998).

There are few records of breeding in the Forest Red-tailed Black Cockatoo (Johnstone and Storr 1998) but up until recently the main period of breeding was thought to commence in winter/spring with eggs being laid in October and November (Johnstone 1997; Johnstone and Storr 1998). Recent data however indicates that breeding in all months of the year occurs with peaks in spring and autumn–winter (Ron Johnstone pers comms). Incubation period 29 – 31 days. Young fledge at 8 to 9 weeks (Simpson and Day 2004).



Likely presence in study area: Foraging evidence attributed to this species was found during the site survey (chewed Jarrah and Sheoak fruits). Remnant vegetation containing Jarrah and Sheoak within the study area presents potential foraging habitat for this species. Larger trees (>50cm DBH) are considered by the SEWPaC as potential breeding habitat. No evidence of actual breeding in the larger hollows observed was found. This species may also roost on site on occasions.

Potential impact of development: Loss of foraging, breeding and roosting opportunities.

Baudin's Black- Cockatoo *Calyptorhynchus baudinii*

Status and Distribution: Listed as Scheduled 1 under the *WC Act* and as Vulnerable under the *EPBC Act*. Confined to the south-west of Western Australia, north to Gidgegannup, east to Mt Helena, Wandering, Quindanning,

Kojonup, Frankland and King River and west to the eastern strip of the Swan Coastal Plain including West Midland, Byford, Nth Dandalup, Yarloop, Wokalup and Bunbury (Johnstone and Storr 1998). On the southern Swan Coastal Plain this cockatoo is in some areas resident but mainly a migrant moving from the deep south-west to the central and northern Darling Range. Between March and September most flocks move north and are concentrated in the northern parts of the Darling Range. During this period birds forage well out onto the southern Swan Coastal Plain to areas such as Harvey, Myalup, Bunbury, Capel, Dunsborough and Meelup. While generally more common in the Darling Range this species can also be common on parts of the southern Swan Coastal Plain especially in mid-August – September when flocks begin to return to their breeding quarters (Johnstone 2008).

Habitat: Mainly eucalypt forests where it feeds primarily on the Marri seeds, (Morcombe, 2003), Banksia, Hakeas and *Erodium* sp. Also strips bark from trees in search of beetle larvae (Johnstone and Storr 1998). This species of cockatoo nests in large tree hollows, 30–40 cm in diameter and more than 30 cm deep (Saunders 1974).

Baudin's Black-Cockatoo breeds in late winter and spring, from August to November or December (Gould 1972; Johnstone 1997; Saunders 1974; Saunders *et al*. 1985). Eggs laid in October (Johnstone and Storr 1998). Based on observations at currently known nest sites breeding mainly occurs within the October-December period (Ron Johnstone pers comms). Incubation is 28 – 30 days. Young fledge at 8 to 9 weeks (Simpson and Day 2004).

J	F	M	A	M	J	J	A	S	O	N	D

Period in which breeding is most likely to commence
Period in which fledging could extend through

Likely presence in study area: The study area is outside of this species normal range and it is unlikely to frequent the area except on very rare occasions. Not listed as a potential species.

Potential impact of development: No impact on this species will occur as a consequence of the pipeline installation.

Carnaby's Black- Cockatoo *Calyptorhynchus latirostris*

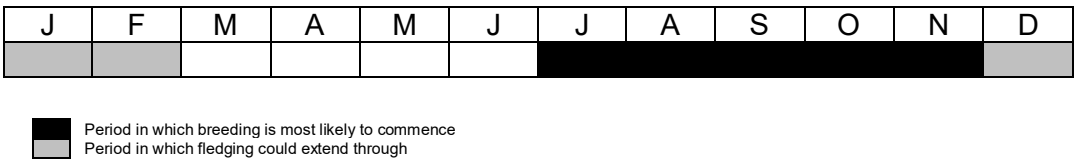
Status and Distribution: Carnaby's Black Cockatoo is listed as Scheduled 1 under the *WC Act* and as Endangered under the *EPBC Act*. Confined to the

south-west of Western Australia, north to the lower Murchison River and east to Nabawa, Wilroy, Waddi Forest, Nugadong, Manmanning, Durokoppin, Noongar (Moorine Rock), Lake Cronin, Ravensthorpe Range, head of Oldfield River, 20 km ESE of Condingup and Cape Arid; also casual on Rottnest Island (Johnstone and Storr 1998).

Habitat: Forests, woodlands, heathlands, farms; feeds on Banksia, Hakeas and Marri. Carnaby's Cockatoo has specific nesting site requirements. Nests are mostly in smoothed-barked eucalypts with the nest hollows ranging from 2.5 to 12m above the ground, an entrance from 23-30cm diameter and a depth of 0.1-2.5m (Johnstone and Storr, 1998).

Breeding occurs in winter/spring mainly in eastern forest and wheatbelt where they can find mature hollow bearing trees to nest in (Morcombe, 2003). Judging from records in the Storr-Johnstone Bird Data Bank, this species is currently expanding its breeding range westward and south into the Jarrah – Marri forest of the Darling Scarp and into the Tuart forests of the Swan Coastal Plain including the region between Mandurah and Bunbury. Carnaby's Black Cockatoo has been known to breed close to the town of Mandurah, as well as at Dawesville, Lake Clifton and Baldivis (pers. comm., Ron Johnstone, WA Museum) and there are small resident populations on the southern Swan Coastal Plain near Mandurah, Lake Clifton and near Bunbury. At each of these sites the birds forage in remnant vegetation and adjacent pine plantations (Johnstone 2008).

Carnaby's Black-Cockatoo lays eggs from July or August to October or November, with most clutches being laid in August and September (Saunders 1986). Birds in inland regions may begin laying up to three weeks earlier than those in coastal areas (Saunders 1977). The female incubates the eggs over a period of 28-29 days. The young depart the nest 10–12 weeks after hatching (Saunders 1977; Smith & Saunders 1986).



Likely presence in study area: Foraging evidence attributed to this species was found during the site survey (chewed Tuart fruits, Jarrah fruits and Banksia cones). Remnant vegetation containing Tuart, Jarrah and Banksia within the study area presents potential foraging habitat for this species. Larger trees

(>50cm DBH) are considered by the SEWPaC as potential breeding habitat. No evidence of actual breeding in the larger hollows observed was found. This species may also roost on site on occasions.

Potential impact of development: Loss of foraging, breeding and roosting opportunities.

Barking Owl *Ninox connivens connivens*

Status and Distribution: Listed as Priority 2 by DEC. Found north to Perth (formerly) and east to Northam, Katanning and nearly to Bremer Bay. Declining in south west (Johnstone and Storr 1998).

Habitat: Dense vegetation, especially forest and thickets of waterside vegetation such as melaleucas (Johnstone and Storr 1998). Roosts in tree hollows.

Likely presence in study area: Status on the site and in the general area difficult to determine. Rarely recorded in the Perth area. Not listed as a potential species.

Potential impact of development: No impact on this species will occur as the site is unlikely to represent significant habitat for this species.

Masked Owl *Tyto novaehollandae novaehollandae*

Status and Distribution: Listed as Priority 3 by DEC. Found north to Yanchep and east to Yealering, Gnowangerup and Albany, casual further north. Locally common in south west but generally uncommon (Johnstone and Storr 1998).

Habitat: Roosts and nests in heavy forest, hunts over open woodlands and farmlands (Morcombe, 2003). Probably breeding in forested deep south west with some autumn–winter wanderings northwards (Johnstone and Storr 1998).

Likely presence in study area: Single DEC record from Henderson and unpublished record from Leda suggests this species is a rare, infrequent visitor to the general area, though it can be difficult to observe and is easily overlooked. Not listed as a potential species.

Potential impact of development: No significant impact on this species is considered likely as it is would only infrequently utilise the general area and would not be specifically attracted to the site.

Fork-tailed Swift *Apus pacificus*

Status and Distribution: The Fork-tailed Swift is listed as Schedule 3 under the *WC Act* an as migratory under the *EPBC Act* and under international agreements to which Australia is a signatory. This species breeds in Siberia and the Himalayas and migrates to Australia in October, returning to the breeding grounds by May or June (Morcombe 2003).

Habitat: Low to very high airspace over varied habitat from rainforest to semi desert (Morcombe 2003).

Likely presence in study area: It is potentially an occasional summer visitor to the study area but is entirely aerial and largely independent of terrestrial habitats.

Potential impact of development: No impact on this species is anticipated.

Rainbow Bee-eater *Merops ornatus*

Status and Distribution: This species is listed as Schedule 3 under the *WC Act* and as migratory under the *EPBC Act* and under international agreements to which Australia is a signatory. The Rainbow Bee-eater is a common summer migrant to southern Australia but in the north they are resident (Morcombe 2003).

Habitat: Open Country, of woodlands, open forest, semi arid scrub, grasslands, clearings in heavier forest, farmlands (Morcombe 2003). Breeds underground in areas of suitable soft soil firm enough to support tunnel building.

Likely presence in study area: Common seasonal visitor to south west. Observed during the field survey foraging in open areas adjacent to Banksia woodland. May also roost overnight in the study area at times. Possibly breeds in some sections of the study area though population levels would not be significant as it usually breeds in pairs, rarely in small colonies (Johnstone and Storr 1998).

Potential impact of development: Despite the potential for breeding no significant impact on this species is anticipated as individuals' present onsite at any one time are unlikely to represent a substantial proportion of the population.

Chuditch *Dasyurus geoffroii*

Status and Distribution: Listed as Scheduled 1 under the *WC Act* and as Vulnerable under the *EPBC Act.* Formerly occurred over nearly 70 per cent of Australia. The Chuditch now has a patchy distribution throughout the Jarrah forest and mixed Karri/Marri/Jarrah forest of southwest Western Australia. Also occurs in very low numbers in the Midwest, Wheatbelt and South Coast Regions

with records from Moora to the north, Yellowdine to the east and south to Hopetoun.

Habitat: Chuditch are known to have occupied a wide range of habitats from woodlands, dry sclerophyll (leafy) forests, riparian vegetation, beaches and deserts. Riparian vegetation appears to support higher densities of Chuditch, possibly because food supply is better or more reliable and better cover is offered by dense vegetation. Chuditch appear to utilise native vegetation along road sides in the wheatbelt (CALM 1994). The estimated home range of a male Chuditch is over 15 km^2 whilst that for females is 3-4 km^2 (Sorena and Soderquist 1995).

Likely presence in study area: Generally considered to be extinct on the Perth section of the Swan Coastal Plain. Occasional records (e.g. Wandi, Pagononi Swamp) are most likely transient individuals from Darling Range forests. Not listed as a potential species

Potential impact of development: No impact on this species is anticipated as it is unlikely to be present.

Red-tailed Phascogale *Phascogale calura*

Status and Distribution: Listed as Scheduled 1 under the Wildlife Conservation Act, 1950 (*WC* Act) and as Endangered under the Environment Protection and Biodiversity Act, 1999 (*EPBC* Act). This species was recorded across much of arid and semi-arid Australia, from western NSW, to central Australia (Tennant Creek), Great Sandy Desert, southwest Western Australia, and parts of southern South Australia. Populations are currently known from several isolated nature reserves in the south-west of Western Australia, from the wheatbelt to the south coast, such as Tutanning, Boyagin, Dryandra, Dongolocking, and Parkeyerring, as well as remnant vegetation on private property. Red-tailed Phascogales have also been recorded on the south coast near Ravensthorpe (DEC information pamphlet).

Habitat: The Red-tailed Phascogale inhabits Wandoo (*Eucalyptus wandoo*) and Sheoak (*Allocasuarina huegeliana*) woodland associations, with populations being most dense in the latter vegetation type. They show a preference for long unburnt habitat with a continuous canopy and tree hollows. (DEC information pamphlet).

Wandoo trees provide excellent nesting sites in the form of hollow logs and limbs, which they line with grass and feathers. Nest sites occur in highly flammable

areas, and may often be in dead sheoaks, skirts of live (or stumps of dead) grass trees (*Xanthorrhoea* spp.) (DEC information pamphlet).

Young are born from mid June to mid August (Kitchener 1981). Weening is completed after about 90 days (Van Dyk and Strahan 2008). Young are independent at about 4 months (Menkhorst and Knight 2001).

J	F	M	A	M	J	J	A	S	O	N	D

Period in which breeding is most likely to commence
Period in which fledging/weening could extend to

Likely presence in study area: The study site is well outside of the currently documented range of this species and the habitat present is unsuitable for this species to persist. Extremely unlikely to be present and may in fact may never have occurred in the area historically (i.e. *EPBC Act* database listing is erroneous).

Potential impact of development: No impact on this species is anticipated.

Southern Brush-tailed Phascogale *Phascogale tapoatafa ssp*

Status and Distribution: Listed as Scheduled 1 under the *WC Act*. Present distribution is believed to have been reduced to approximately 50 per cent of its former range. Now known from Perth and south to Albany, west of Albany Highway. Occurs at low densities in the northern Jarrah forest. Highest densities occur in the Perup/Kingston area, Collie River valley, and near Margaret River and Busselton (DEC information pamphlet). Records are less common from wetter forests.

Habitat: This subspecies has been observed in dry sclerophyll forests and open woodlands that contain hollow-bearing trees but a sparse ground cover. A nocturnal carnivore relying on tree hollows as nest sites. The home range for a female Brush-tailed Phascogale is estimated at between 20 and 70 ha, whilst that for males is given as twice that of females. In addition, they tend to utilise a large number (approximately 20) of different nest sites throughout their range (Soderquist, 1995).

Likely presence in study area: The lack of recent records in the general area despite several detailed surveys (Rockingham, East Rockingham, Bibra Lake, Jandakot) suggests that it no longer persists in the general area. Not listed as a potential species. .

Potential impact of development: No impact on this species is anticipated.

Quenda *Isoodon obesulus fusciventer*

Status and Distribution: Listed as Priority 5 by DEC. Widely distributed in the south west from near Cervantes north of Perth to east of Esperance, patchy distribution through the Jarrah and Karri forest and on the Swan Coastal Plain, and inland as far as Hyden. Has been translocated to Julimar State Forest, Hills Forest Mundaring, Tutanning Nature Reserve, Boyagin Nature Reserve, Dongolocking Nature Reserve, Leschenault Conservation Park, and Karakamia and Paruna Sanctuaries (DEC information pamphlet) and Nambung National Park (DEC pers. coms.)

Habitat: Dense scrubby, often swampy, vegetation with dense cover up to one metre high, often feeds in adjacent forest and woodland that is burnt on a regular basis and in areas of pasture and cropland lying close to dense cover. Populations inhabiting Jarrah and Wandoo forests are usually associated with watercourses. Quendas can thrive in more open habitat subject to exotic predator control (DEC information pamphlet).

Likely presence in study area: A dead Quenda was found in bushland just west of the current study area during the 2005 survey (Harewood 2005) along with numerous digging. While no direct evidence of this species was observed in the more recent assessment it is likely to utilise those sections of the study area with the densest groundcover.

Potential impact of development: Potential for the loss of some habitat.

Western Brush Wallaby *Macropus irma*

Status and Distribution: Listed as Priority 4 by DEC. The Western Brush Wallaby is distributed across the south-west of Western Australia from north of Kalbarri to Cape Arid (DEC information pamphlet).

Habitat: The species optimum habitat is open forest or woodland, particularly favouring open, seasonally wet flats with low grasses and open scrubby thickets. It is also found in some areas of mallee and heathland, and is uncommon in karri forest (DEC information pamphlet).

Likely presence in study area: A Western Brush Wallaby was observed within the current study area boundary during the 2005 survey (Harewood 2005). Current status in the area is however difficult to determine. Typically only occurs

in low densities so its capacity to persist in small, fragmented bush remnants is limited. Listed as a potential species by maybe locally extinct.

Potential impact of development: Loss of potential habitat.

Quokka *Setonix brachyurus*

Status and Distribution: Listed as Scheduled 1 under the *WC Act* and as Vulnerable under the *EPBC Act*. Rare and restricted in south west W.A. from south of Perth to Two Peoples Bay. The distribution of the Quokka includes Rottnest and Bald Islands, and at least 25 known sites on the mainland, including Two Peoples Bay Nature Reserve, Torndirrup National Park, Mt Manypeaks National Park, Walpole-Nornalup National Park, and various swamp areas through the south-west forests from Jarrahdale to Walpole.

Species or species habitat listed as likely to occur in general area within EPBC database search.

Habitat: Mainland populations of this species are currently restricted to densely vegetated coastal heaths, swamps, riverine habitats including tea-tree thickets on sandy soils along creek systems where they are less vulnerable to predation. The species is nocturnal

Likely presence in study area: Locally extinct. Not listed as a potential species

Potential impact of development: No impact on this species will occur as it does not persist in the area.

Western False Pipistrelle *Falsistrellus mackenziei*

Status and Distribution: Listed as Priority 4 by DEC. Listed as vulnerable by the ICUN. Confined to south west W.A. south of Perth and east to the wheat belt. Most records from Karri forests but also recorded in wetter stands of jarrah and tuart and woodlands on the Swan Coastal Plain (Menkhorst and Knight 2001). Range appears to be contracting southwards, presumably due to drying climate. Not recorded north of Collie in recent times (Bob Bullen pers. comm.)

Habitat: This species of bat occurs in high forest and coastal woodlands. It roosts in small colonies in tree hollows and forages at canopy level and in the cathedral-like spaces between trees.

Likely presence in study area: Rarely recorded in this area in recent times. Not listed as a potential species.

Potential impact of development: No impact on this species is anticipated.

Water Rat *Hydromys chrysogaster*

Status and Distribution: Listed as Priority 4 by DEC. The water rat is widely distributed around Australia and its offshore islands, New Guinea and some adjacent islands. It occurs in fresh brackish water habitats in the south-west of Western Australia, but occurs in marine environments along the Pilbara coastline and offshore islands. Previous survey work in the south west suggested this species was relatively common and widespread though difficult to capture (Christensen *et al* 1985, How *et al* 1987).

Habitat: The water rat occupies habitat in the vicinity of permanent water, fresh, brackish or marine. Likely to occur in all major rivers and most of the larger streams as well as bodies of permanent water in the lower south west (Christensen *et al* 1985).

Likely presence in study area: No suitable habitat.

Potential impact of development: No impact on this species is anticipated.

Appendix F Black cockatoo habitat assessment results

Species	Diameter at breast height (cm)	Tree health	Number of hollows	Hollow size and orientation	Other comments
Eucalyptus rudis	60	Stressed	1	Large hollow approx. 50 cm diameter, upright orientation.	
Eucalyptus sp.	60	Dead	1	Hollow approx. 60 cm diameter, upright. Tree partially cut with chainsaw at base.	
Eucalyptus gomphocephala	180	Slightly stressed	1	Large hollow approx. 50 cm diameter, upright orientation.	
Eucalyptus gomphocephala	150	Slightly stressed	2	Both hollows approx. 20-30 cm diameter, upright at 45 degree orientation.	
Eucalyptus sp.	100	Dead	1	Large hollow 70 cm diameter, upright orientation.	
Eucalyptus sp.	150	Dead	1	One large hollow approximately 60cm diameter, upright orientation.	
Eucalyptus sp.	100	Dead	2	Contains at least one hollow over 50 cm diameter, upright orientation. Other smaller hollows may be present in upper branches.	
Eucalyptus marginata	200	Dead	2	Two large hollows 50 – 100 cm diameter, upright orientation.	
Eucalyptus marginata	180	Healthy	1	Large hollow 30 cm diameter, 45 degree orientation.	
Eucalyptus marginata	80	Stressed	1	Potentially contains large hollows over 30 cm diameter, upright orientation.	
Eucalyptus marginata	150	Slightly stressed	2	Potentially contains large hollows over 50 cm diameter, 45 degree angle / upright orientation.	
Eucalyptus marginata	55	Stressed	1	15 cm diameter, upright orientation.	Two Forest Red-tailed Black Cockatoos observed foraging
Eucalyptus marginata	80	Slightly stressed	1	15 cm diameter, upright orientation.	

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APPENDIX B
ENGINEERING SERVICING REPORT

Cossill & Webley
CONSULTING ENGINEERS



APSLEY
TPS Amendment
ENGINEERING REPORT
August 2019

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1. INTRODUCTION

The following report has been prepared by Cossill & Webley Pty Ltd (CW) and summarises the results of a preliminary assessment of the engineering aspects of the proposed urban development over the recently zoned Urban land in the MRS amendment (portion of Lot 9000, Rowley Road, Mandogalup), referred to herein as The Site.

The Site is identified by the red boundary presented below in Figure 1.

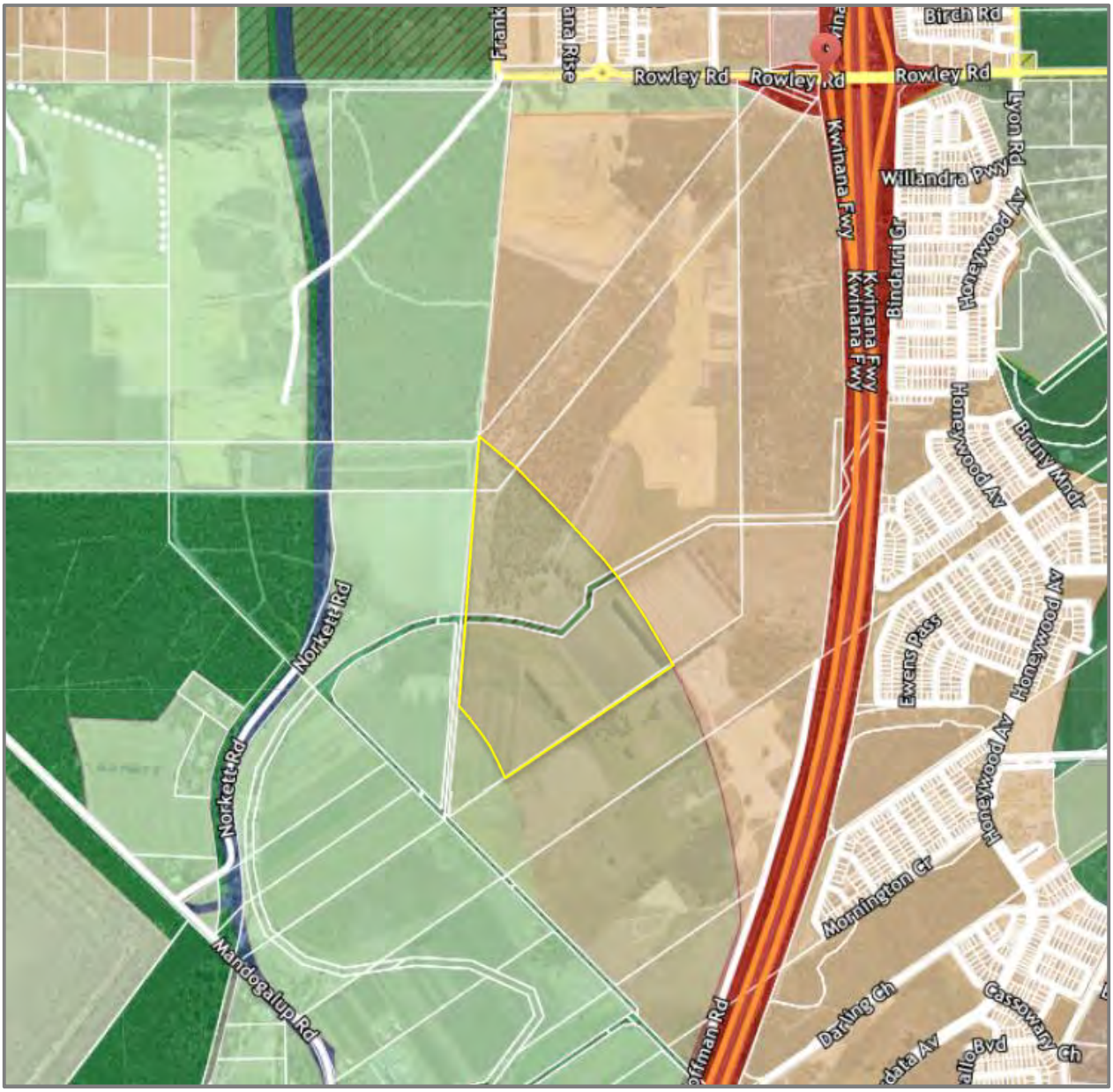


Figure 1 - Site Plan (MNG Access, 2019)

The Site is the extension of the existing Apsley development, and will ultimately be accessed via Rowley Road to the North, Hammond Road to the west and Anketell Road to the south.

The location of the site will require a coordinated approach to development with neighbouring properties, in particular lots to the south, for the connection of sewer services. The nature of service constraints to the property are outlined in respective sections below.

2. SITE DESCRIPTION

The site is approximately 24.55 ha in area and is located within the City of Kwinana. Historically, where development over the land has occurred, it has consisted of a mixture of rural and agricultural uses. The land parcel which is the subject of this report is an extension of the existing Apsley development, and generally consists of cleared land previously used for agricultural purposes with some areas of native vegetation to the north. Due to the nature of the historical use of the landholding, the Site has been predominantly cleared. There is a Western Power easement that at the northern end of the Site, which has been selectively cleared previously, and some regrowth is present within this corridor. A recent aerial photography of the site is presented in Figure 2 below.



Figure 2 – Aerial Photography (MNG Access, 2019

3. GEOLOGY AND LANDFORM

The Geological Survey of Western Australia Perth Metropolitan Region soils maps for Fremantle (part 2033I & 2033IV) indicates that the majority of the Site is generally characterised by Bassendean Sand and Sandy Silt (Refer Figure 3 below). These soil types are well suited to urbanisation.

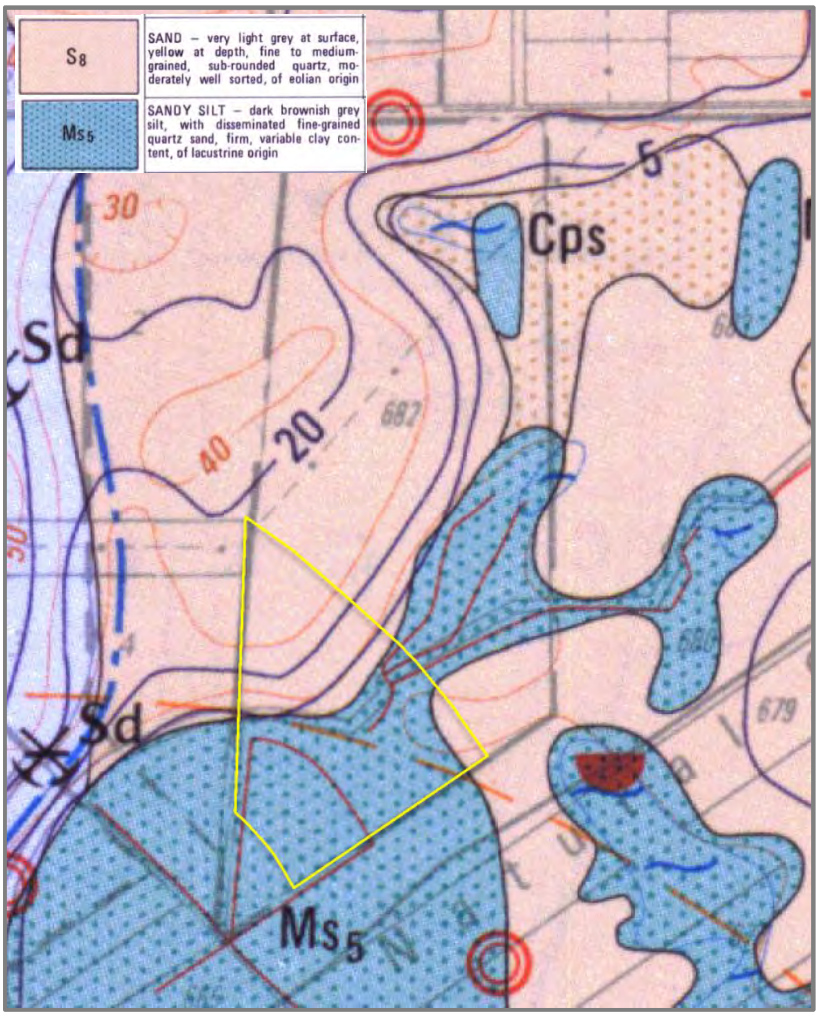


Figure 3 - Geotechnical Information (Geological Survey of WA)

A preliminary site-specific geotechnical investigation has been undertaken by Galt Geotechnics, and generally concurs with the soils maps. The report provides preliminary site classifications, site preparation requirements, advice on the disposal of stormwater runoff and confirms the suitability of the area for urban development. The geotechnical report confirms that the majority of the site will be Class A and Class M under the Australian Standard AS2870 – Residential Slabs and Footings code.

3.1 Existing Topography

Based on aerial contour information obtained from surveyors MNG, the Site is steeply graded in the northern area from a level of RL35m AHD to a low lying area in the south at RL13m AHD as per Figure 4 below.

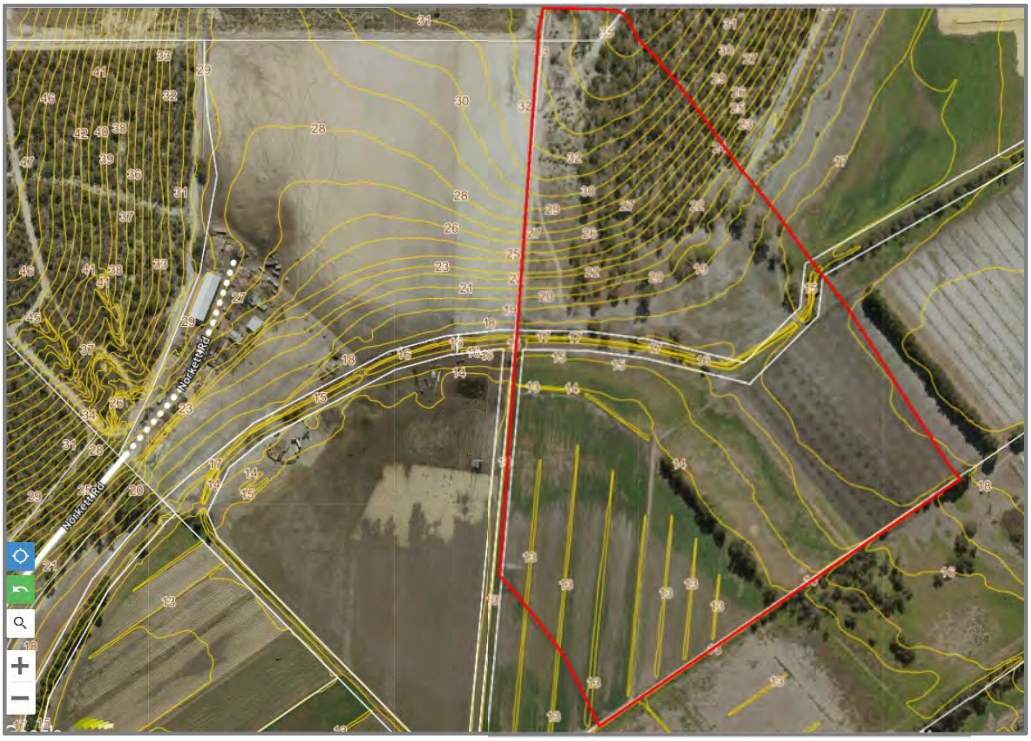


Figure 4 – Existing Topography (MNG Access, 2019)

3.2 Groundwater

The Annual Average Maximum Groundwater Levels (AAMGL) vary from approximately RL 12.5m AHD in the south-west to 18m AHD at the northern extent of the Site. Ensuring there is adequate separation to the prevailing ground water levels and consideration of the drainage design will be factors in the determination of the finished earthworks levels in lower areas of the Site. It is likely that imported fill will be required in the south to provide clearance to groundwater in accordance with the district drainage strategies, and to ensure that the Site can be serviced adequately with sewerage and drainage. Further discussion regarding the prevailing groundwater conditions is included in the Water Management Report prepared by JDA Consultant Hydrologists, which also accompanies this Town Planning Scheme submission.

4. EARTHWORKS CONSIDERATIONS

Siteworks for residential development of the Site will generally comprise the clearing of existing vegetation, earthworks and cut to fill earthworks to provide adequate separation to groundwater in the southern portion of the site.

As the Site has generally good separation in the northern area, it is intended to utilise this area as a source of cut to fill the lower lying area to the south. We have prepared a preliminary earthworks model presented below in Figure 5 which depicts anticipated areas of cut (red) and fill (green).

The dark areas of red in Figure 5 in the northern part of the Site indicate depth of cut in the order of 5 metres. These levels are a function of integrating with the adjacent Mandogalup West Structure Plan levels, meeting maximum road grade and services requirements, and keeping retaining walls maximum heights to within the City of Kwinana's standards. Retention of vegetation in this area would result in significant battering or retaining walls sitting well above the adjacent proposed development levels.



Figure 5: Preliminary Cut and Fill Areas (CW, 2019)

The extent of siteworks will be dictated by the density and nature of development. Increased densities and decreasing lot sizes has led to a current trend to provide fully earthworked level lots which are terraced with retaining walls between lots. This approach provides a number of positive outcomes:

- House building site work costs are reduced,
- Retaining wall layouts are rationalised and designs are consistent with Local Authority specifications,
- It enables lots to be terraced up natural slopes to maintain elevation and views.

However, retention of existing vegetation and topography within the lot areas are limited, particularly at steep areas such in the northern area of the proposed development where road and service grades inhibit the ability to retain vegetation within lots and roads. Existing vegetation within public open spaces and along the Peel Main Drain will be retained wherever possible to provide useable space for the community.

The Site will be designed in accordance with the following objectives:

- Provide adequate separation to groundwater with consideration of expected post-development groundwater rise;
- Provide minimum levels required for drainage and sewer serviceability;
- Provide appropriate siteworks to achieve a Class A site classification;
- Allow roads and earthwork levels to be graded to best follow the existing topography and reflect the natural landscape where possible;
- Maintain suitable interface levels at the periphery of the Site.

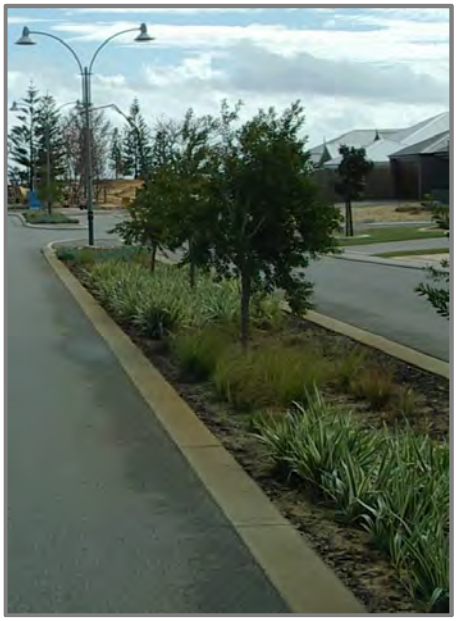
5. DRAINAGE, EARTHWORKS AND GROUNDWATER MANAGEMENT

The landform through the area is generally steep with good separation from the groundwater table in the northern portion of the Site. In the southern area, the land grades become flatter and the groundwater table is much closer to the surface. The Peel Main Drain traverses the Site and grades from the eastern boundary to the west.

A District Water Management Strategy (DWMS) has been prepared by JDA Consultant Hydrologists as part of the rezoning of the land from rural to urban deferred, and the site falls within the area covered by the DWMS. The DWMS notes that drainage catchment areas within the site fall into the catchment of the Peel Main Drain, as determined in the Jandakot District Water Management Plan (DWMP). The DWMS requires stormwater runoff generated from the proposed development of Lot 9000 to be detained and infiltrated on site in POS areas, with compensated flows from larger events to be directed to the Peel Main Drain.

5.1 Stormwater Management

Groundwater recharge will be maximised through the adoption of 'Best Management Practices' that promote the dispersion and infiltration of runoff as close to source as possible. The DWMS proposes the strategic use of flush kerbing, inter-allotment drainage soakwells to infiltrate runoff from building roofs and private open space areas and the disposal of road runoff into infiltration basins within POS areas.



5.2 Water Quality Management

Recharge water quality will be improved through the adoption of 'Best Management Practices' which promote the disposal of runoff via water pollution control facilities (including vegetated swales and basins, detention storages and gross pollutant traps) and the implementation of non-structural source controls (including urban design, street sweeping, community education, low fertiliser landscaping regimes, etc).

Reference should be made to the DWMS prepared by JDA which supports this TPS.

5.3 Stormwater Collection and Disposal

Lot 9000 Rowley Road, Mandogalup has varied ground conditions; some areas have free draining soils with adequate separation to ground water, and other areas where sandy silts are nearer the surface, and infiltration of water may be more difficult.

Drainage from public roads and lanes would be collected via conventional gullies or open swales depending on the nature of the adjacent land uses and the extent of traffic and pedestrian activity.

The drainage collection and conveyance system will be designed to cater for the runoff from storms up to a 20% AEP.

A series of interconnected detention basins would be designed to store runoff to the pre-development peak flow rates for the 20%, 10% & 1% AEP events in accordance with the DWMS. In all cases roads and POS would be designed to cater for the surface overflow for more severe storms with building pad levels set at least 300 millimetres above the 1% AEP flood level in roadways and 500 millimetres above the 1% AEP flood level for storage detention basins.

The dispersion of stormwater disposal throughout the site will maximise the area of recharge down through the soil profile to the shallow aquifer, thereby maximising the potential for nutrient stripping and water quality improvements. This is proposed to be achieved by locating the detention basins across the Site at strategically located POS areas. It is also proposed that where detention basins are located adjacent natural low points, that the pre-development flow regime be maintained to these areas. This would be achieved by treatment of the collected stormwater within the basins and bio-retention areas within dedicated POS, and allowing flows for larger events (maintained at pre-development levels) to enter the natural low point within the easement.

In areas where infiltration is not possible, the attenuation of runoff in detention basins will minimise flooding in the receiving water bodies downstream. The basins will also assist nutrient removal in conjunction with other measures such as suitable vegetation planting and the use of modified soils with high phosphorous retention capacity.

The Peel Main Drain which traverses the site will also play a role in stormwater collection and disposal. The DWMS proposes that pre-development flow rates from the site continue to be discharged to the drain after detention and treatment in adjacent POS areas.

5.4 Groundwater Control

Where groundwater is near the existing natural surface, subsoil drainage will be installed to control levels to pre-development conditions, with imported fill being brought in to provide sufficient separation to the phreatic surface.

Subsoil drainage will also be installed where necessary below public open space areas to ensure they can dry out appropriately following storm events.

Subsoil drainage will discharge to the Peel Main Drain to control groundwater rise across the proposed development.

6. WATER RETICULATION

The Site is located within the current boundary of the Water Corporation's Water Supply Scheme and overall planning for the scheme has made provision for residential development over the subject land.

Current Water Corporation planning indicates the Site will ultimately be serviced by extension of an existing 610mm distribution main in Hammond Road that currently terminates north of the intersection with Russell Road. This extension is a Water Corporation capital project, and would be extended south as demand requires.

7. SEWERAGE RETICULATION

The Site forms part of the Water Corporation's Thompson's Lake waste water reticulation system and preliminary planning has been undertaken to develop strategies for providing deep sewerage to all proposed urban land within the subject area.

The Water Corporation has recently approved the preliminary sewer design proposed for this area, which is included in Appendix A for reference. This strategy confirms the Site will be serviced via a proposed Type 180 pump station south of the subject area. Installation of this pump station and associated pressure main will be a Water Corporation funded item, which will in installed to suit development timeframes.

8. POWER

Western Power has confirmed there is existing capacity in the surrounding network to service development of the Site.

There are a number of overhead power lines that traverse the Site as presented overleaf in Figure 6. These lines are protected via an easement in favour of Western Power, and preclude building development within the easement. Some battering, drainage and public open space facilities are likely to be supported within this easement, based on previous discussions with Western Power, and supporting EPR/LFI investigations for the northern section of these overhead lines.

Some parts of the Western Power easement may be used for drainage storage, road crossing, parking and public open space, consistent with the existing easement north of the Site. Western Power has supported these uses as part of the current Apsley development off Rowley Road.

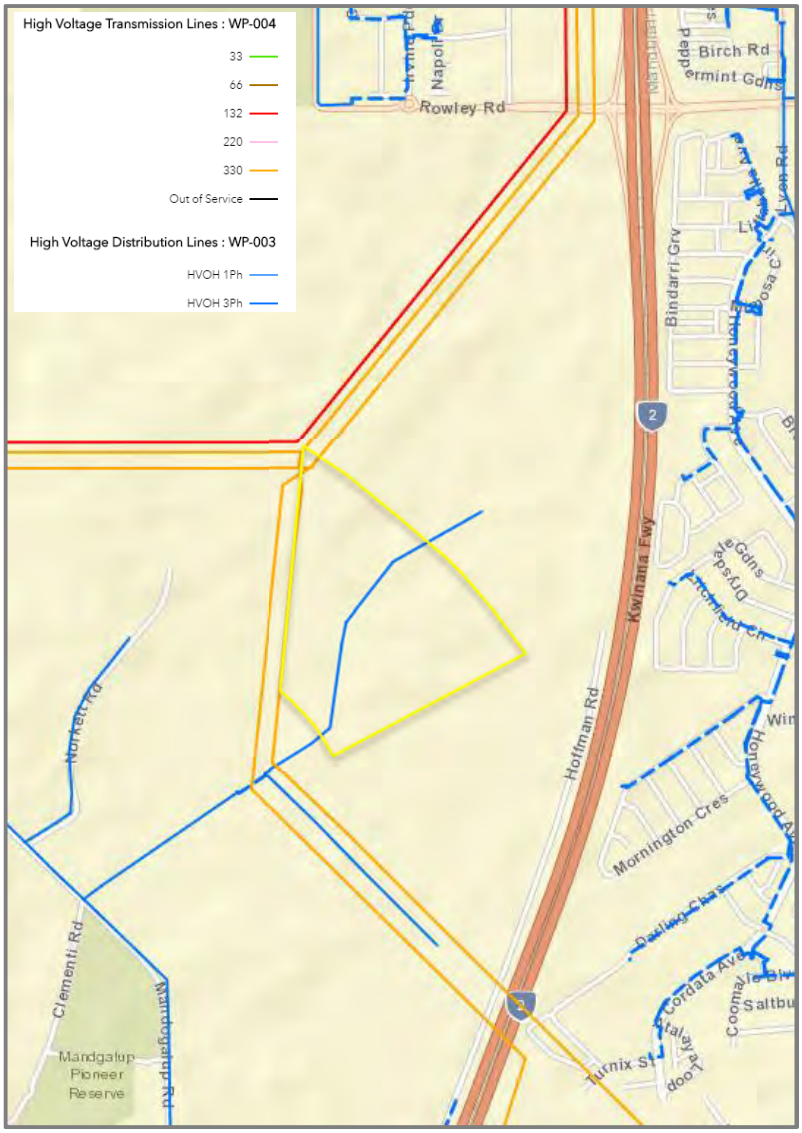


Figure 6 - HV Infrastructure and Network Capacity (Western Power 2017)

All power to the proposed development will be underground and fed from transformers located strategically within the Site.

9. GAS SUPPLY

ATCO Gas has advised the Site can be supplied with reticulated gas via an extension of their existing network in Rowley Road through the proposed development. No off-site infrastructure upgrades are required.

10. TELECOMMUNICATIONS

It is proposed to extend the existing NBN network from the Apsley development to service the Site with telecommunications. No off-site infrastructure upgrades are required.

11. ROADWORKS & FOOTPATHS

Transcore has prepared a Transport Impact Assessment to accompany the Town Planning Scheme Amendment document, which outlines the proposed internal road hierarchy and distribution of traffic from the development to the surrounding external road network.

Development of this subject area will be an extension of the existing Apsley development to the north and east, and all internal roads will be constructed in accordance with the City of Kwinana and Liveable Neighbourhoods requirements to match the existing network. Roadworks will generally consist of kerbed and asphalted pavements. Minimum recommended carriageway widths will be determined in accordance with Liveable Neighbourhoods and the City of Kwinana requirements.

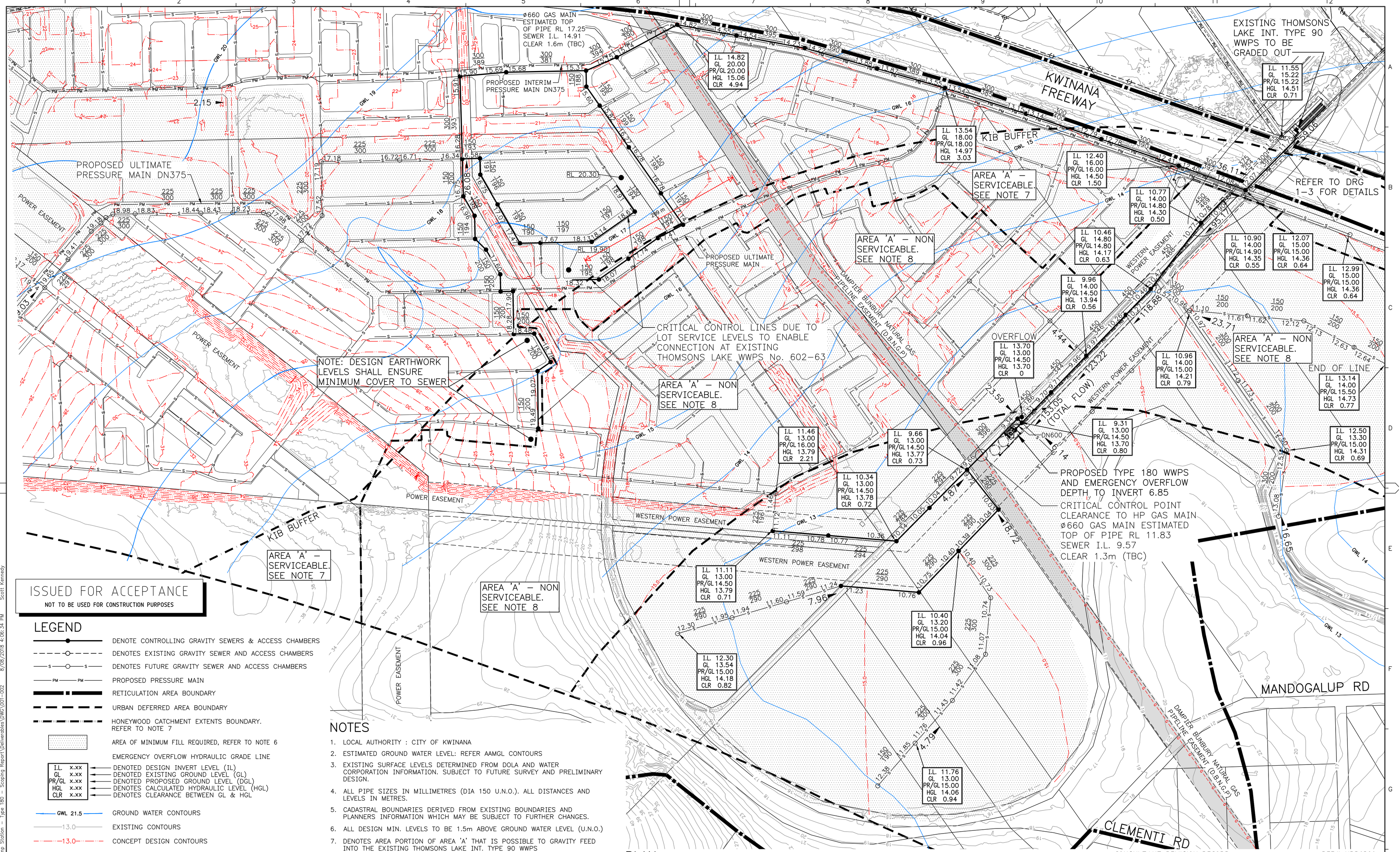
Main access to the Site will ultimately be via Rowley Road to the north, proposed Hammond Road to the west and ultimately Anketell Road to the south.

In all cases the road cross-sections will be designed to cater for utility services, street trees and parking embayments on standard verge alignments.

12. CONCLUSION

Lot 9000 Rowley Road, Mandogalup has planned strategies for water supply, sewerage and other public utility services. All services are available or can be extended to service the proposed urban area readily. Co-ordination and co-operation with adjoining landowners will be required to extend these services to the Site, and to provide access from Rowley Road.

APPENDIX A – Preliminary Sewer Strategy



ISSUED FOR ACCEPTANCE

NOT TO BE USED FOR CONSTRUCTION PURPOSES

LEGEND

- DENOTE CONTROLLING GRAVITY SEWERS & ACCESS CHAMBERS
- DENOTES EXISTING GRAVITY SEWER AND ACCESS CHAMBERS
- DENOTES FUTURE GRAVITY SEWER AND ACCESS CHAMBERS
- PROPOSED PRESSURE MAIN
- RETICULATION AREA BOUNDARY
- URBAN DEFERRED AREA BOUNDARY
- HONEYWOOD CATCHMENT EXTENTS BOUNDARY. REFER TO NOTE 7
- AREA OF MINIMUM FILL REQUIRED, REFER TO NOTE 6
- EMERGENCY OVERFLOW HYDRAULIC GRADE LINE
- I.L. x.xx — DENOTED DESIGN INVERT LEVEL (IL)
- GL x.xx — DENOTED EXISTING GROUND LEVEL (GL)
- PR/GL x.xx — DENOTED PROPOSED GROUND LEVEL (DGL)
- HGL x.xx — DENOTES CALCULATED HYDRAULIC LEVEL (HGL)
- CLR x.xx — DENOTES CLEARANCE BETWEEN GL & HGL
- GWL 21.5 — GROUND WATER CONTOURS
- 13.0 — EXISTING CONTOURS
- 13.0 — CONCEPT DESIGN CONTOURS
- DAMPIER BUNBURY NATURAL GAS PIPELINE (D.B.N.G.P) AND EASEMENT
- KIB – REVISED KWINANA INDUSTRIAL (INCLUDING AIR QUALITY) BUFFER (AS OF 21 SEPTEMBER 2010)
- RL 20.00 — MINIMUM PAD RL TO ENABLE SEWER SERVICE

NOTES

1. LOCAL AUTHORITY : CITY OF KWINANA
2. ESTIMATED GROUND WATER LEVEL: REFER AAMGL CONTOURS
3. EXISTING SURFACE LEVELS DETERMINED FROM DOLA AND WATER CORPORATION INFORMATION. SUBJECT TO FUTURE SURVEY AND PRELIMINARY DESIGN.
4. ALL PIPE SIZES IN MILLIMETRES (DIA 150 U.N.O.). ALL DISTANCES AND LEVELS IN METRES.
5. CADASTRAL BOUNDARIES DERIVED FROM EXISTING BOUNDARIES AND PLANNERS INFORMATION WHICH MAY BE SUBJECT TO FURTHER CHANGES.
6. ALL DESIGN MIN. LEVELS TO BE 1.5m ABOVE GROUND WATER LEVEL (U.N.O.)
7. DENOTES AREA PORTION OF AREA 'A' THAT IS POSSIBLE TO GRAVITY FEED INTO THE EXISTING THOMSONS LAKE INT. TYPE 90 WWPS
8. DENOTES AREAS WEST OF BOUNDARY THAT CANNOT GRAVITATE TO EXISTING THOMSONS LAKE INT. TYPE 90 WWPS ARE SUBJECT TO CONSTRUCTION OF TYPE 180 WWPS OR ALTERNATIVE DESIGNS.

PLAN
SCALE 1:3000

1 — 30 0 30 60 90 120 150 180 210m
(SCALE 1:3000 – A1 SHEET)

REFERENCE DRAWINGS

CATCHMENT PLAN – DESIGN DATA AND FLOWS –1–1

CONSULTANT REVISION RECORD — REF# URB0380

No	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT
A8	08/08/18	SAK	SAK	PA	PA	AMENDED TO SUIT WC COMMENTS
A7	15/05/18	RR	RR	PA	PA	NEW BOUNDARIES ADDED. SEWER LEVELS REVISED TO SUIT GAS PICKUP
A6	30/01/18	RR	RR	PA	PA	PIPE SIZES AND HGL UPDATED AS PER WC COMMENTS

ISSUE	DATE	GRID	REVISION	DRN	REC	APPD

SURVEY BOOKS: NONE

VERTICAL DATUM AHD
COORDINATE SYS MGA94–50
DES REF

DES CALC P.ALEBAKIS
DES CHD O.OMELCHUK
DRN R.DE JONG
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APPROVED – CONSULTANT PROJECT DIRECTOR

WATER CORPORATION

METROPOLITAN WASTEWATER – TBC
THOMSONS LAKE WASTEWATER PUMP STATION J
CATCHMENT PLAN
CONTROL SEWER LEVELS AND HGL PLAN

FILE – PROJECT –

PLAN CS02787–1–2 CAD ISSUE A

ORIGINAL SHEET SIZE A1 MF

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PROJECTS\URB0380 – MANDOGALUP PUMP STATION – TYPE 180 – SCOPING REPORT\DELIVERABLES\DWG\001-002 REV A2 30/11/2016

C:\Projects\URB0380 – Mandogalup Pump Station – Type 180 – Scoping Report\Deliverables\DWG\001-002 8/08/2018 4:06:34 PM Scott Kennedy

566

810

APPENDIX C
TRANSPORT IMPACT ASSESSMENT

Apsley - Town Planning Scheme Amendment - Residential Development

Transport Impact Assessment

PREPARED FOR:
Qube Property Group

August 2019

Document history and status

Author	Revision	Approved by	Date approved	Revision type
M Rasouli	r01	R White	19/07/2019	Draft
R White	r01a	B Bordbar	29/07/2019	Draft
M Rasouli	r01b	M Rasouli	14/08/2019	Draft
M Rasouli	r01c	M Rasouli	27/08/2019	Final

File name: t19.019mr01c

Author: Mohammad Rasouli

Project manager: Mohammad Rasouli

Client: Qube Property Group

Project: Apsley - Town Planning Scheme Amendment - Residential Development

Document revision: r01c

Project number: t19.019

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1.0 Introduction and Background

Transcore prepared a Transport Impact Assessment (TIA) report (t14.039.mr.r01d) in November 2017 on behalf of Qube Property Group for the proposed Mandogalup West Local Structure Plan (MWLSP).

Transcore was the traffic engineer for the Mandogalup East Local Structure Plan (MELSP) and had previously prepared a revised TIA report for MELSP in November 2017. At the time of preparation of the MWLSP TIA report Transcore reviewed both LSPs for consistency in terms of access points, connectivity, road hierarchy and road reserves.

The Metropolitan Region Scheme (MRS) has recently been amended to rezone land in Mandogalup from the Urban Deferred to the Urban zone, as shown in **Figure 1.**

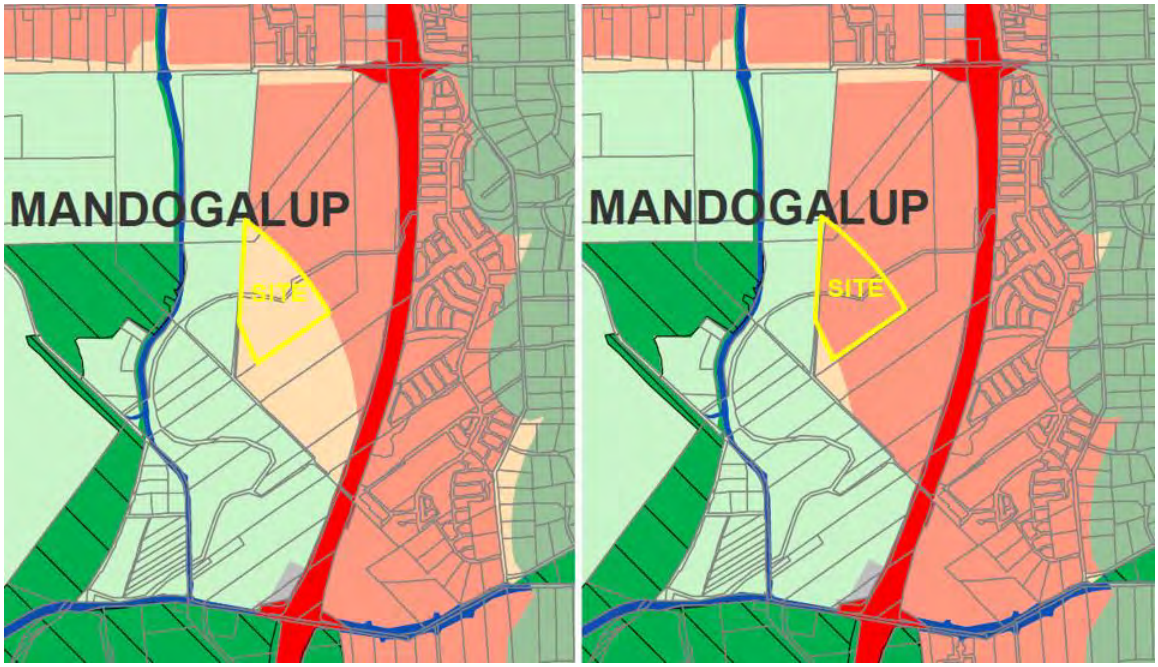


Figure 1: Land rezoned from Urban Deferred to Urban in the MRS

The proposed MWLSP and MELSP areas are located on the western side of the Kwinana Freeway and south of Rowley Road, as shown in **Figure 2.** The subject site is located to the south of the LSP areas.

It is now proposed to rezone this land for urban development in the City of Kwinana's Town Planning Scheme as well.

The purpose of this TIA is to assess the traffic impact of the proposed rezoning. This TIA relates specifically to the land owned by Qube Property Group that is marked as the Site on **Figure 1** and **Figure 2**. The balance of the rezoned urban land is owned

by Satterley Property Group and is subject to a separate but concurrent TPS amendment.



Figure 2: Location of the Subject Site

2.0 Proposed Rezoning

The preliminary concept plan for the proposed rezoning area is shown in **Figure 3**.

Adjoining the site to the south-west is Mandogalup Improvement Plan Area 47. The Indicative Structure Plan has been designed to accommodate residential use with a suitable interface created by the road network, public open space/drainage and the powerline easement.

It is expected that the first stages of development of the proposed rezoning area would start in 2025 and be fully developed by 2029. The preliminary concept plan for the proposed rezoning area shows two connections to the existing Mandogalup Road (future Hammond Road).

The proposed southern connection to the existing Mandogalup Road would be located about 150m to the north of Anketell Road in the form of a priority controlled T-intersection. The second connection would be located further north through the Qube landholding and would form a priority controlled T-intersection with the existing Mandogalup Road and a 4-way intersection with the future Hammond Road.

However, prior to future connections westwards to Mandogalup Road and the future Hammond Road, the site would initially be provided access to the north through the MWLSP area to Rowley Road and to the south via Hoffman Road to Anketell Road.

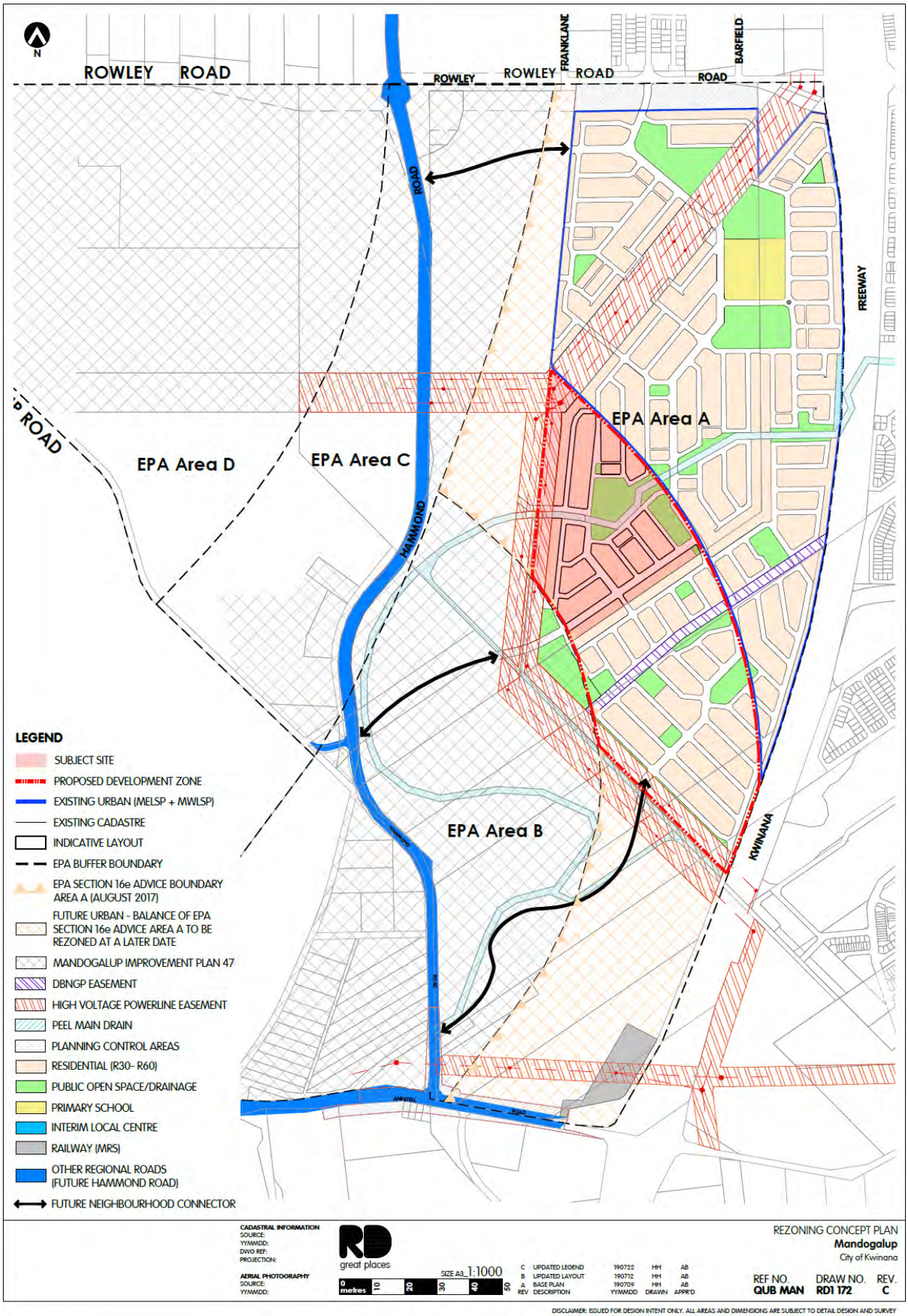


Figure 3: Proposed rezoning (ultimate road network)

3.0 Existing Situation

3.1 Existing Land Use

The site currently is rural vacant land. Adjacent land to the east, west and south are also vacant land.

3.2 Existing Road Network

The existing road network and its classification in the Main Roads WA functional road hierarchy is illustrated in **Figure 4**



Figure 4: Existing road hierarchy

3.3 Existing Traffic Volumes

Existing average weekday traffic (AWT) volumes on surrounding roads have been obtained from Main Roads WA and are illustrated in **Figure 5**.

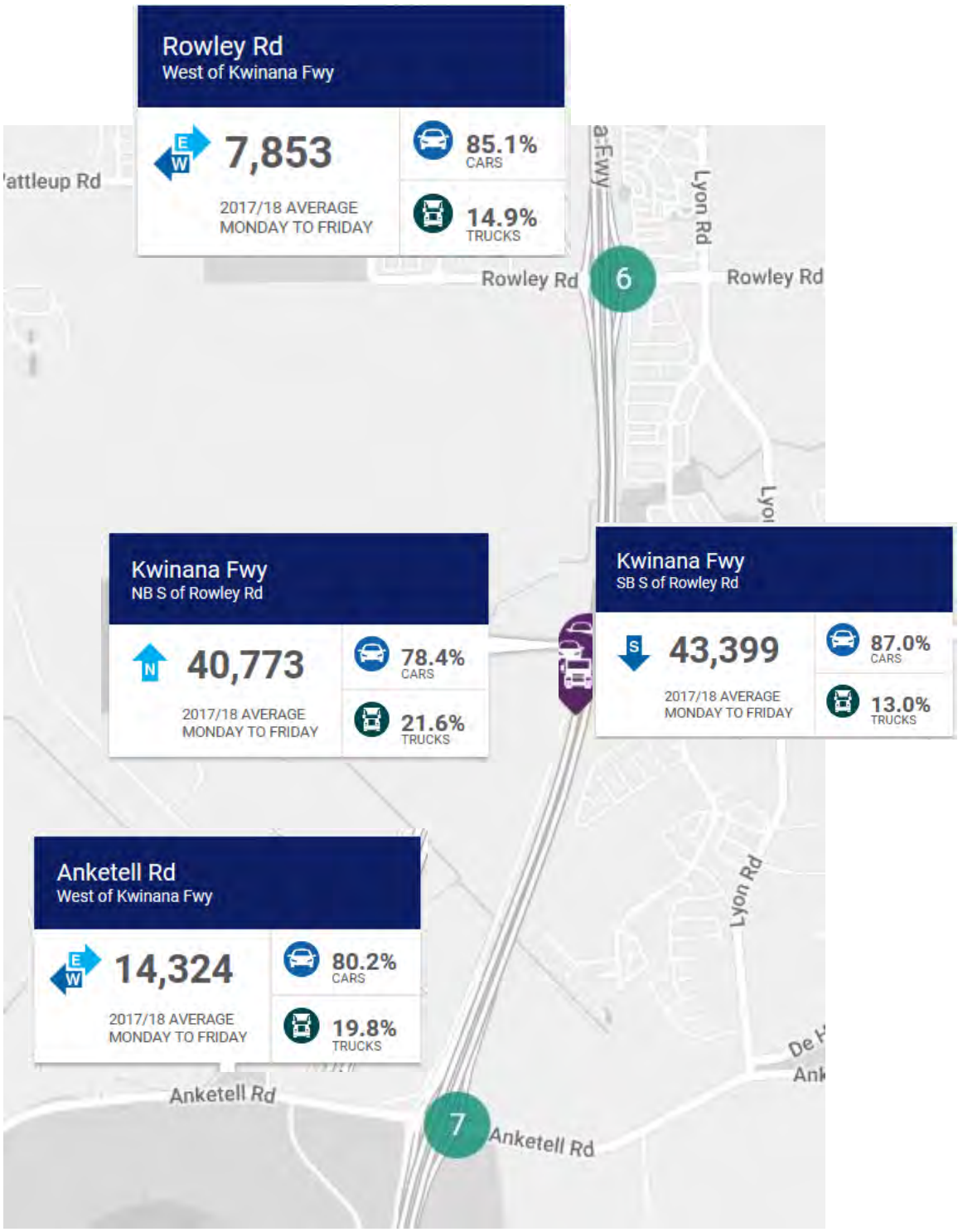


Figure 5: Existing traffic volumes

Rowley Road is classified as a District Distributor A Road in the Main Roads WA Functional Road Hierarchy and is currently constructed as a rural standard single carriageway road. Rowley Road provides an east-west connection between South Western Highway (via Eleventh Road in Armadale), Tonkin Highway, Kwinana Freeway and Rockingham Road in Wattleup (via Wattleup Road). Rowley Road has

been identified as a primary freight route to the Naval Base / Kwinana Beach industrial areas.

Anketell Road is classified as a District Distributor A Road in the Main Roads WA Functional Road Hierarchy and is constructed as a single carriageway road. The existing posted speed limit on Anketell Road (about 150m west of the Hoffman Road intersection) is 80km/h for westbound and 70km/h for eastbound directions.

Anketell Road has been identified as an alternative freight route to the Naval Base / Kwinana Beach industrial areas. Liaison with Department of Planning, Lands & Heritage and Main Roads WA indicates that ultimately a dual divided carriageway standard is planned for Anketell Road.

Hoffman Road is a local access road constructed as a 6.2m wide sealed rural road which runs parallel to the Kwinana Freeway. Hoffman Road connects to Anketell Road in the south and extends north to the southern portion of the MELSP area and terminates there. The intersection of Hoffman Road and Anketell Road is in the form of a basic T-intersection without any turn lanes on Anketell Road. There are no traffic counts available on Hoffman Road, but the current traffic volumes are expected to be very low.

Kwinana Freeway is classified as a Primary Distributor and is reserved as a Primary Regional Road in the MRS. It is currently constructed as four-lane divided carriageway in this area and has a posted speed limit of 100km/h. The closest freeway interchanges are at Rowley Road and at Anketell Road.

3.4 Public Transport

Currently, there are no bus routes servicing the subject site. The closest existing bus route to the MWLSP and the proposed rezoning area is Bus Route No. 527 which traverses through the new developments to the east of the Kwinana Freeway.

Bus routes 525 and 526 are located about 2km to the north of the MWLSP area and terminate north of Gaebler Road, as shown in **Figure 6**. Both of these bus routes are located outside the 400m walking distance to the subject site.

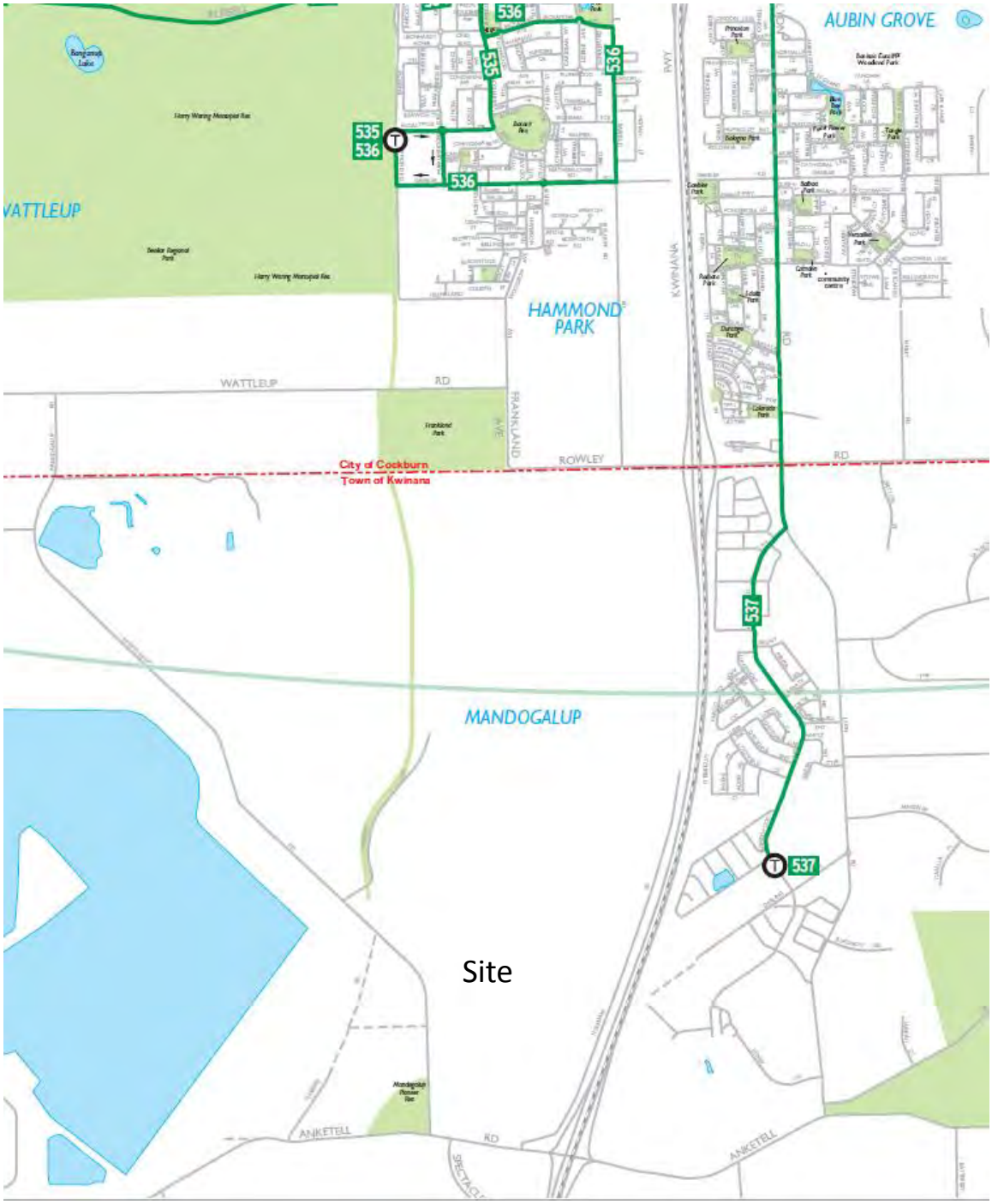


Figure 6: Existing Bus Routes

3.5 Pedestrian and Cyclist Facilities

Currently, there is a 3m Principal Shared Path (PSP) along Kwinana Freeway. The PSP continues north and south along Kwinana Freeway through existing underpasses (under Rowley Road and Anketell Road) immediately west of the Freeway. There is an existing shared path along the south side of Rowley Road which connects to the existing PSP. This shared path terminates immediately east of Barfield Road.

The Department of Transport's Perth Bike Map series (see **Figure 7**) also shows the existing PSP along Kwinana Freeway in the vicinity of the MWLSP and the proposed rezoning area. According to this plan Rowley Road and Barfield Road are considered to be part of the Perth Bicycle Network (PBN) and are nominated as continuous signed routes.



Figure 7: Bike Map

3.6 Changes to the Surrounding Road Network

There are proposed interim and ultimate road network changes in the locality as shown in **Figure 8.**

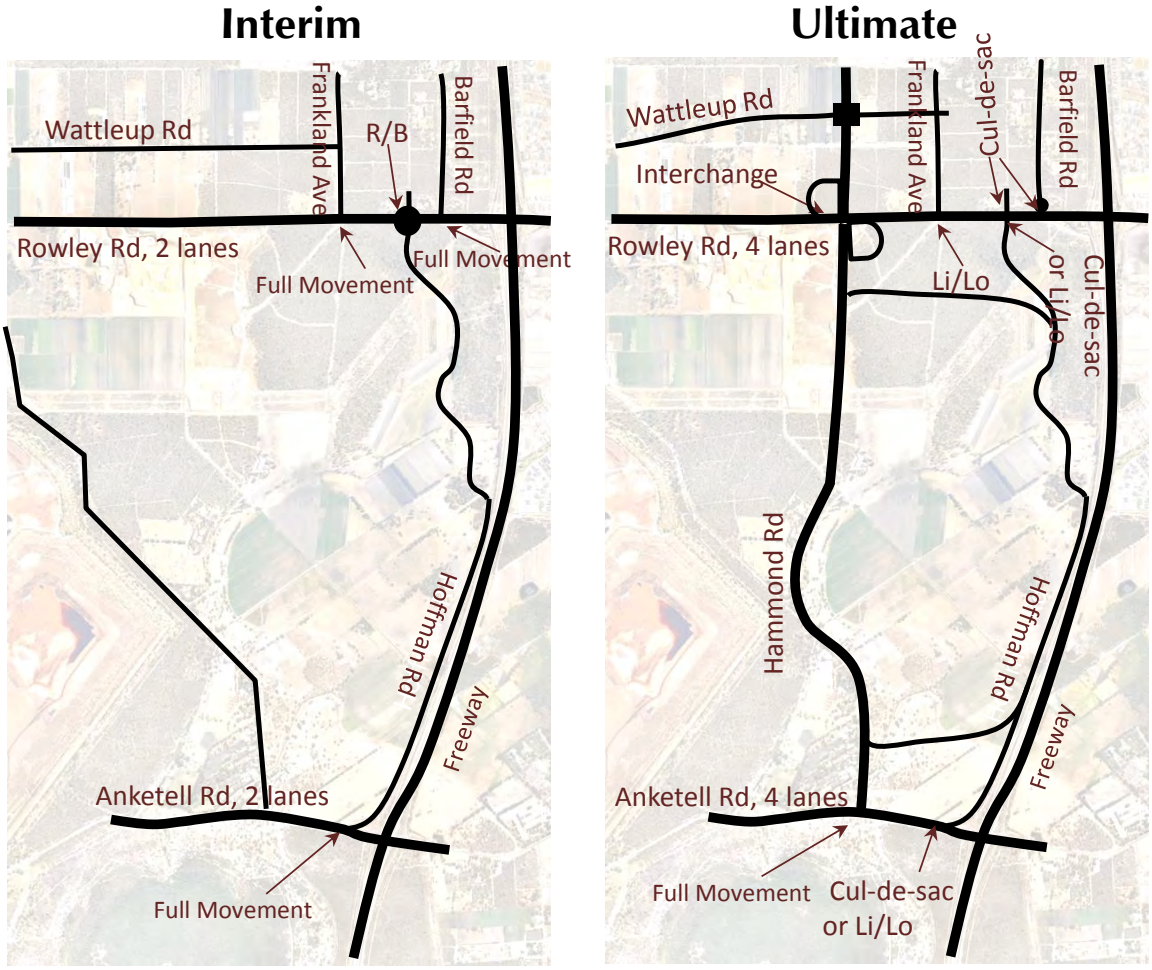


Figure 8: Interim and Ultimate changes to the road network

In June 2015 the Minister for Planning approved the declaration of two Planning Control Areas (PCA) over Rowley Road and Anketell Road west of the Kwinana Freeway.

- PCA 111 is for the protection of the proposed road freight transport access corridor along Anketell Road between the Kwinana Freeway and Rockingham Road.
- PCA 112 is for the protection of the proposed road and rail freight transport access corridor of Rowley Road, between Kwinana Freeway and the coast.

Future road network planning for this part of the Metropolitan area includes the extension of Rowley Road to Rockingham Road. According to the information obtained from Main Roads WA, ultimately Rowley Road is planned to be constructed to four lanes divided standard. Similarly, Anketell Road is planned to be constructed to four lanes divided standard.

The planned intersection arrangements along Rowley Road to the west of the Kwinana Freeway for the ultimate situation are discussed and agreed with Main Roads WA and are as follows (relevant Main Roads WA drawings are also provided in **Appendix A**):

- Barfield Road to be terminated to the north of Rowley Road with no connection on Rowley Road;
- The existing roundabout intersection between Barfield Road and Frankland Avenue would be removed ultimately, and the connection from the north would be closed off. The connection from the south would operate as left in/left out or cul-de-sac.
- The Frankland Avenue intersection would be downgraded to a left in/ left out intersection;
- Hammond Road would be extended towards the south forming a four-way, grade-separated intersection with Rowley Road and a T-intersection with Anketell Road;
- Mandogalup LSPs would connect to Hammond Road;
- Existing Hoffman Road intersection with Anketell Road will be converted to left in/left out or cul-de-sac;
- Hoffman Road south of the LSPs would be realigned towards the west to connect to Hammond Road extension; and,
- Wattleup Road would be realigned further north with a signalised intersection on Hammond Road.

It is expected that the proposed rezoning area would be fully developed by 2029. Therefore, the proposed road network in the interim scenario in **Figure 8** is expected to be in place after full development of the proposed rezoning area.

At this time (in the interim), it is anticipated that Rowley Road extension would be constructed as two lanes standard. The existing roundabout intersection between Barfield Road and Frankland Avenue provides connectivity for the proposed developments to the north and south of Rowley Road. This roundabout is expected to be removed or downgraded to left in/ left out intersection in the ultimate scenario and when Rowley Road is duplicated and Hammond Road is extended.

Anketell Road is expected to operate as two lanes in the interim scenario. The existing intersection of Hoffman Road/ Anketell Road would remain as full movement before Anketell Road is duplicated.

3.7 Public Transport Network Planning

According to the information obtained from the Public Transport Authority (PTA), it is anticipated that the area to the west of the Kwinana Freeway would be served by future Bus Routes 535 and 536. These new routes are likely to commence in the near future (subject to the progress of developments and availability of funding) and operate out of Aubin Grove Station. These routes would eventually connect Hammond Park to Mandogalup. **Figure 9** illustrates the proposed bus routes 535 and 536 in this area.



Figure 9: Future Bus Routes in the Vicinity of the subject site

4.0 Proposed Transport Network

4.1 Road Hierarchy

The proposed hierarchy of roads within the rezoning area was established through transport modelling undertaken for both LSPs and is illustrated in **Figure 10.** The proposed road hierarchy was based on traffic projections and the road classification of the WAPC Liveable Neighbourhoods guidelines (2007).

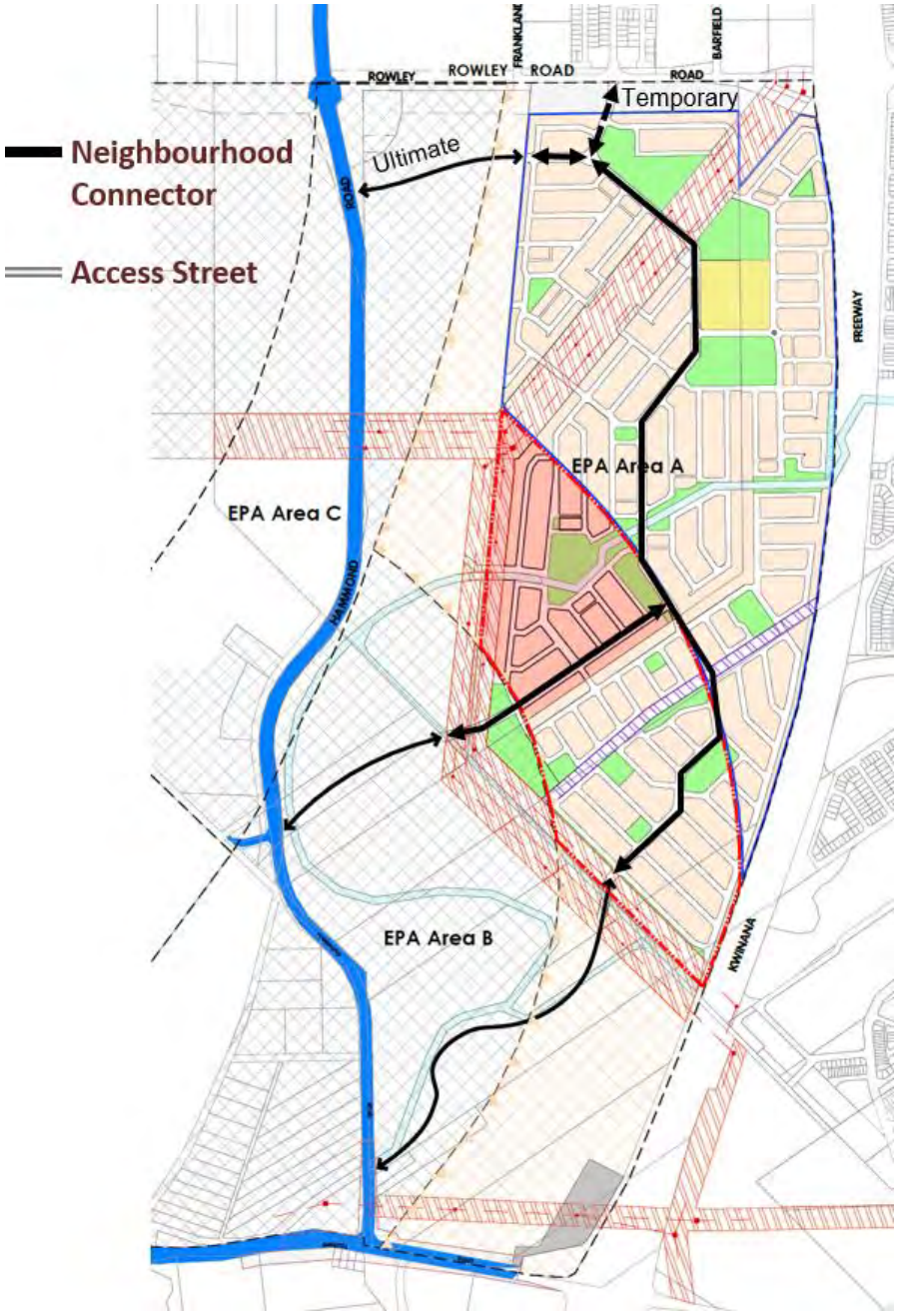


Figure 10: Proposed Road Hierarchy (ultimate road network)

Some key characteristics of the relevant road classifications have been summarised in **Table 1**. These are generally based on Liveable Neighbourhoods (LN) guidelines.

Table 1: Key Characteristics for the Proposed LSP Road Classifications

Road Classification	Indicative upper volume (vpd)	Indicative road reserve width (m)
Neighbourhood Connector A	7,000	24.4m
Access Street (typical)	3,000	15.4m

It should be noted that the outlined reservation widths are indicative only and are subject to further adjustment in consultation with the Department of Planning, Lands and Heritage (DPLH) and City of Kwinana during the detailed subdivision design process. It is anticipated that the typical road cross sections agreed with the City for the approved MWLSP and MELSP will continue to form the basis for local road network development in this TPS Amendment area too.

Neighbourhood Connectors

The proposed connections to existing Mandogalup Road or future Hammond Road are expected to carry more than 3,000vpd and therefore are classified as neighbourhood connector A roads. Two neighbourhood connector cross sections that have been agreed in MWLSP are illustrated in Figure 11.

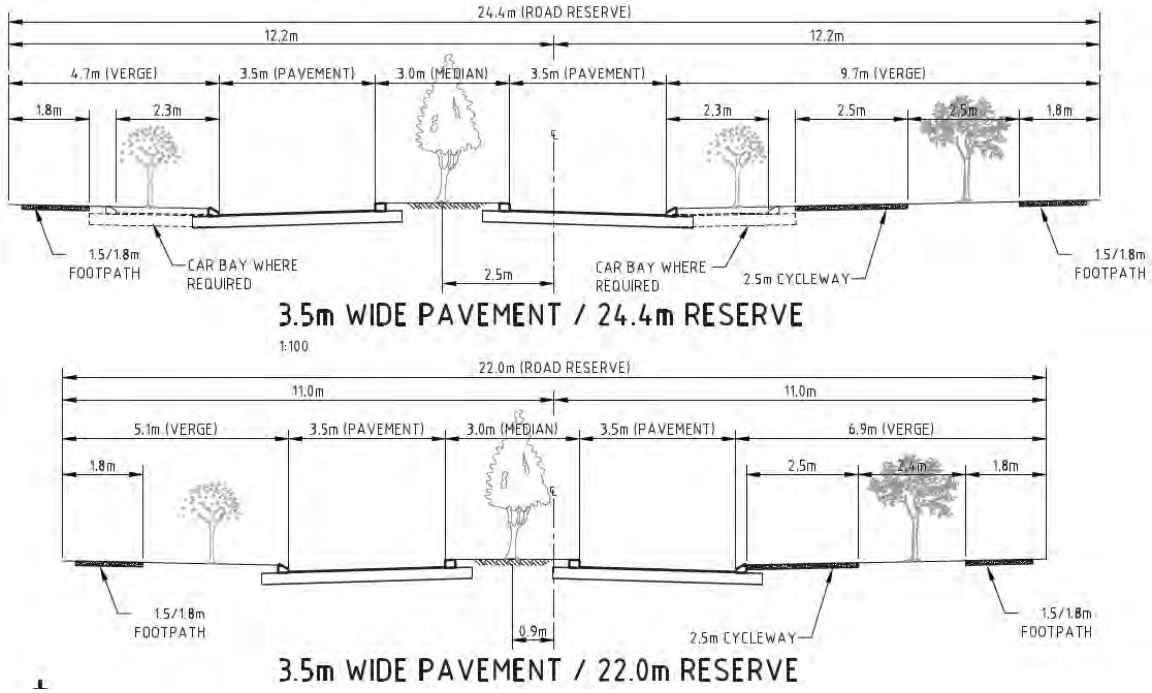
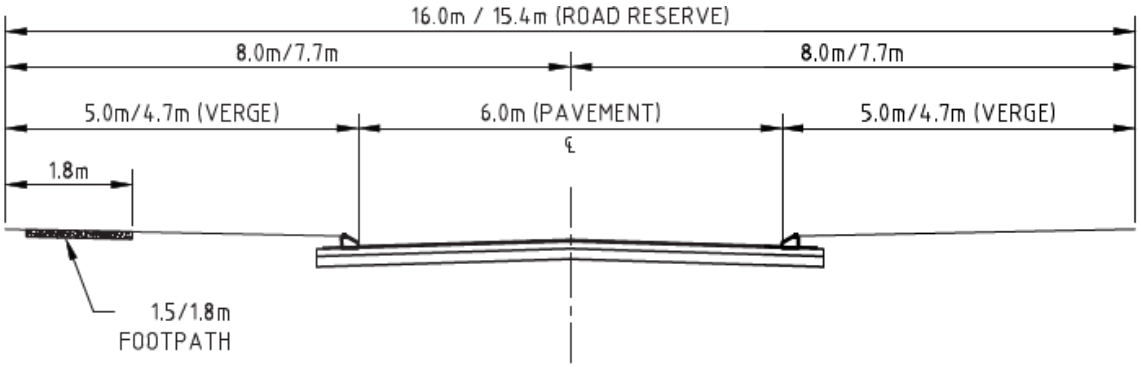


Figure 11: Examples of Neighbourhood Connector cross sections

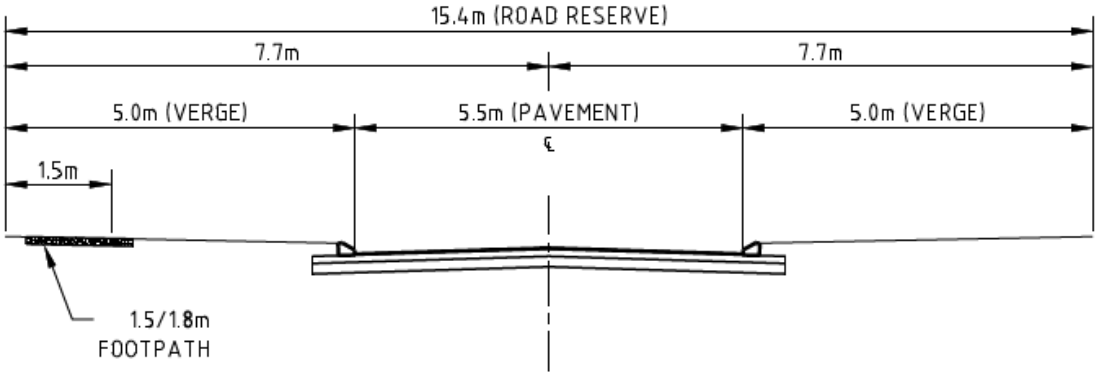
Access Streets

The majority of the proposed rezoning internal roads are classified as Access Streets. The typical Access Street cross section entails 4.7m verges on both sides, with

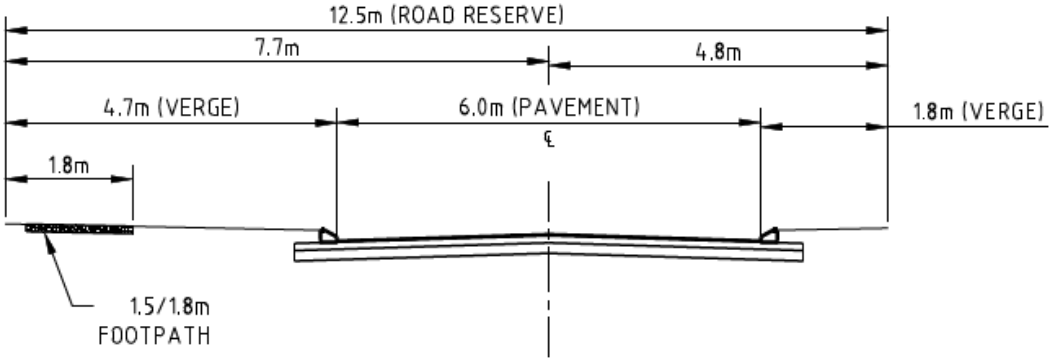
embayed parking provided in the verges as appropriate, such as for visitor parking for rear loading lots. The proposed cross section of the Access Streets should be consistent with the agreed cross sections of Access Streets within the approved MWLSP and MELSP. Three Access Street cross sections that have been agreed in MWLSP are illustrated in



6.0m WIDE PAVEMENT / 16.0m / 15.4m RESERVE



5.5m WIDE PAVEMENT / 15.4m RESERVE



6.0m WIDE PAVEMENT / 12.5m RESERVE

Figure 12: Examples of Access Street cross sections

4.2 Public Transport

According to the information obtained from the Public Transport Authority (PTA), it is anticipated that the area to the west of Kwinana Freeway would be served by future bus routes 535 and 536 as outlined in Section 3.7 of this report.

It is most likely that route 536 would serve the Mandogalup LSP areas including the proposed rezoning area in future as it operates closest to the Kwinana Freeway on the western side. PTA intention is to run bus route 536 along the north-south spine road within the Mandogalup LSP areas to the south of Rowley Road while maintaining a distance of approximately 500-600m away from the Kwinana Freeway alignment.

The proposed bus route is most likely to traverse southbound on Barfield Road from Hammond Park and then across Rowley Road traversing along the north-south spine road, as shown in **Figure 13** . When Barfield Road intersection is terminated, then this bus route is likely to be rerouted to other north-south links such as Hammond Road.

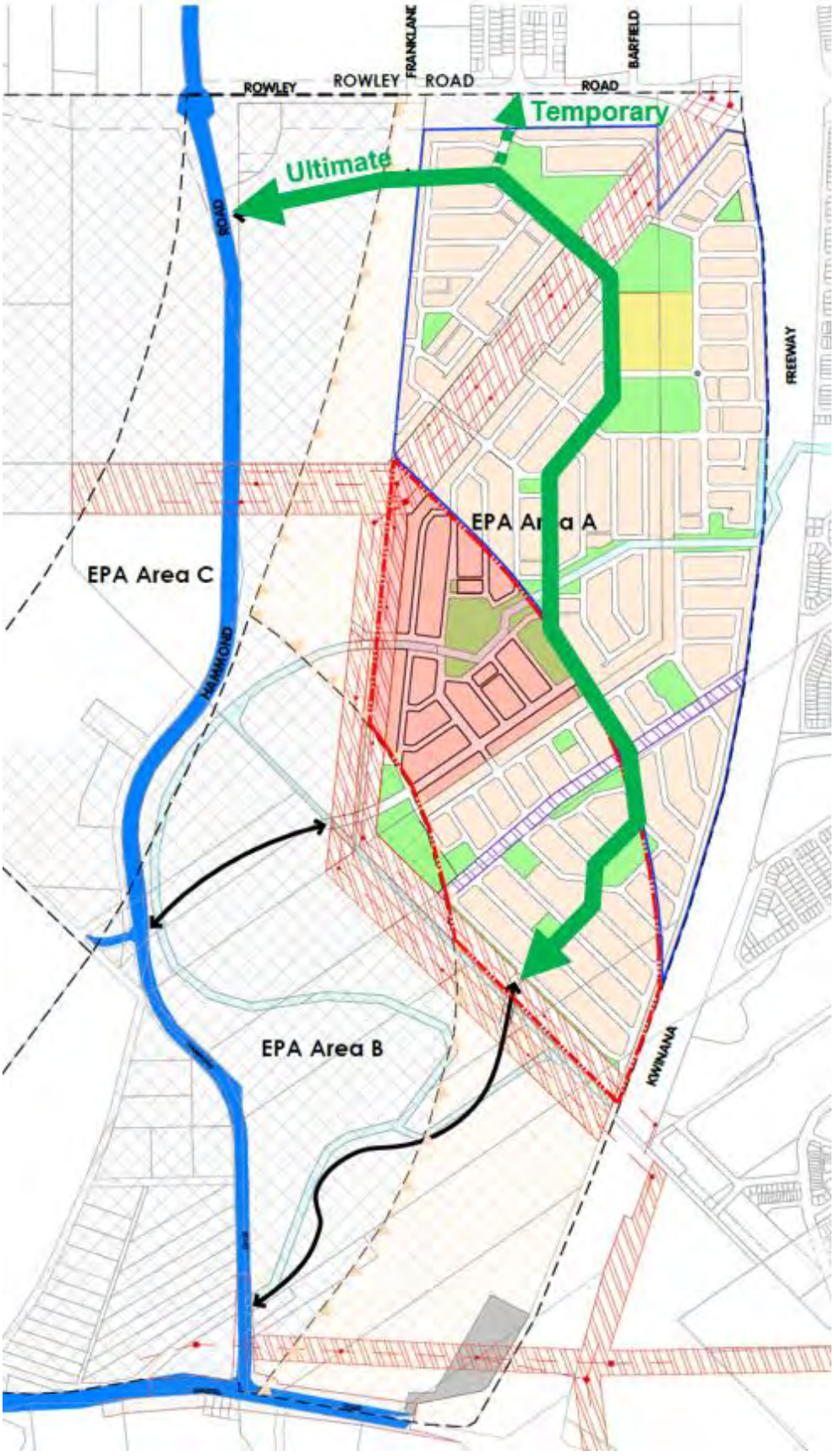


Figure 13: Potential future bus route

4.3 Pedestrian and Cyclist Facilities

The neighbourhood connector roads in this precinct are planned with 2.5m designated cycleways in the verge on one side of the road, as shown in the cross sections at **Figure 11**.

Figure 14 outlines the network of cyclepaths for the proposed rezoning area and connections to the cycle network on the surrounding regional roads.

In accordance with the LN guidelines, footpaths will also be provided on at least one side of all roads in the rezoning area.

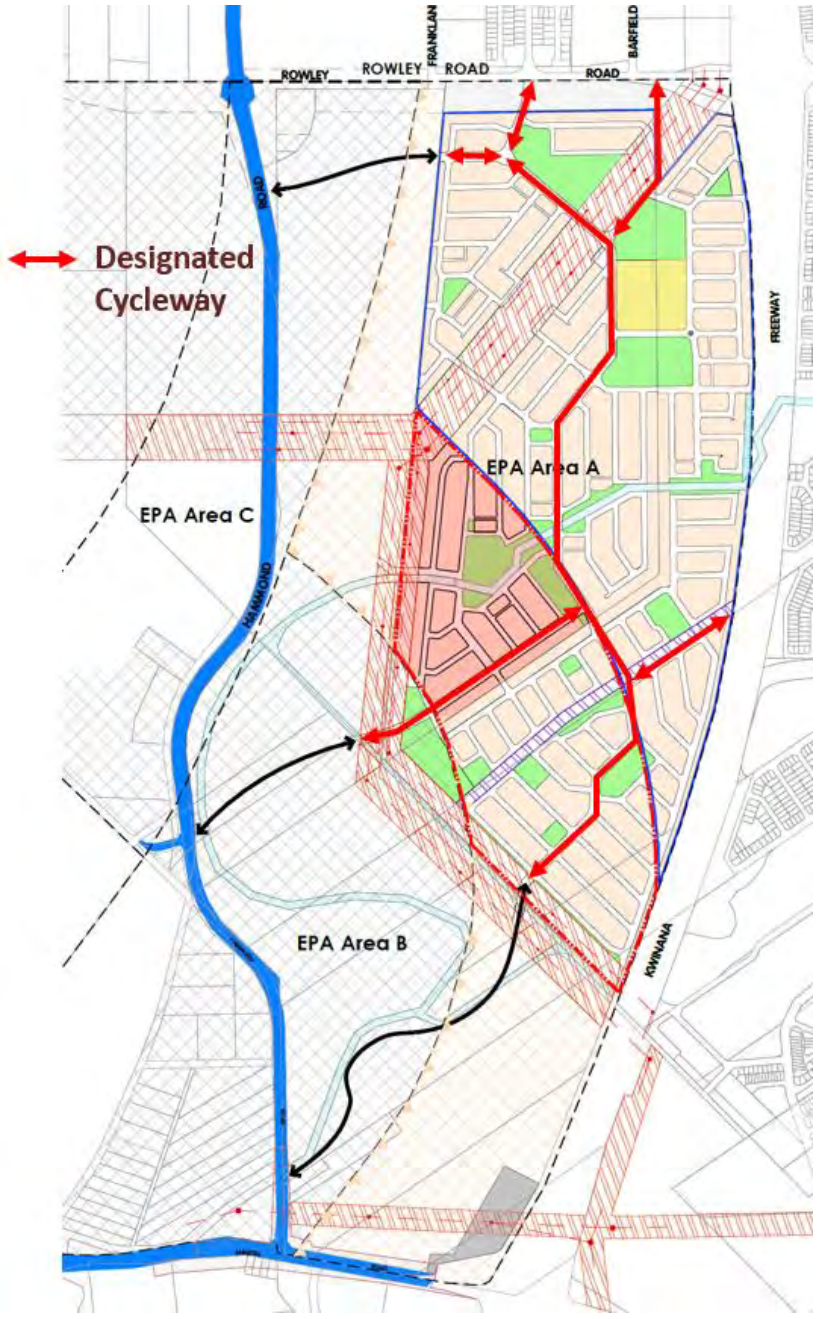


Figure 14: Proposed Cycleway Network

4.4 Integration with Surrounding Area

The WAPC is investigating the best possible future use of this land. The road network of the rezoning area is proposed to connect to the neighbouring landholdings at a number of locations to improve permeability and facilitate connection to surrounding regional roads.

5.0 Analysis of the Transport Network

5.1 Assessment Period

The assessment year that has been adopted for this analysis is 2029, with the assumption of full development of MWLSP, MELSP and proposed rezoning area.

5.2 Traffic generation and distribution

It is our understanding that there is some uncertainty regarding long-term planning for the proposed rezoning area in terms of land uses. The WAPC is investigating the best possible future use of this land including residential, consistent with the endorsed Jandakot Structure Plan. In order to provide a robust assessment, it is assumed that the site would be developed for residential dwellings as this is likely to be the highest traffic generating scenario during the AM and PM road network peak hours.

The daily traffic generation rate used for this transport assessment is 8 vehicle trips per day (vpd) per dwelling, which corresponds to peak hour trip generation rates of 0.8vph per dwelling recommended in the Western Australian Planning Commission (WAPC) *Transport Impact Assessment Guidelines* (2016).

The proposed rezoning is expected to accommodate approximately 668 residential dwellings which would generate about 5,350vpd.

The overall Mandogalup LSPs are anticipated to accommodate approximately 2,186 dwellings including 607 dwellings for MELSP, 911 dwellings for MWLSP, 275 dwellings for the proposed rezoning area and 393 dwellings for the area subject to concurrent TPS rezoning. Therefore, the total trip generation of the residential dwellings of the LSPs and TPS rezoning areas are approximately 17,500vpd.

It is expected that about 20% of the total residential trips would be internal to the LSP area and about 80% of the trips (14,000vpd) would be distributed to the external road network. The potential external road network connections are expected to be the existing roundabout intersection on Rowley Road, and the intersection of Hoffman Road/ Anketell Road (refer **Figure 8**, Interim road network).

The transport modelling and analysis undertaken indicates that about 8,000vpd of the total 14,000vpd external trips would be distributed to the existing roundabout intersection on Rowley Road and the balance of traffic (6,000vpd) would be distributed to the intersection of Hoffman Road/ Anketell Road.

The distribution of traffic to and from the proposed LSPs and the rezoning area for year 2029 has been evaluated by considering the existing traffic pattern at the existing roundabout intersection of Rowley Road and the existing intersection of

Mandogalup Road/ Anketell Road as well as the available access and egress routes to and from the site.

5.3 Traffic Flow Forecasts

The existing traffic volumes for Anketell Road and Rowley Road were established by analysing the Main Roads WA traffic counts on these roads. The existing turning counts at the roundabout intersection of Rowley Road were manually recorded by Transcore in 2018. **Figure 15** and **Figure 16** illustrate the existing traffic counts at the intersections.

The total post development traffic for the assessment year of 2029 includes the existing background traffic plus the development traffic. For year 2029 a 2% annual traffic growth was applied to the background traffic.

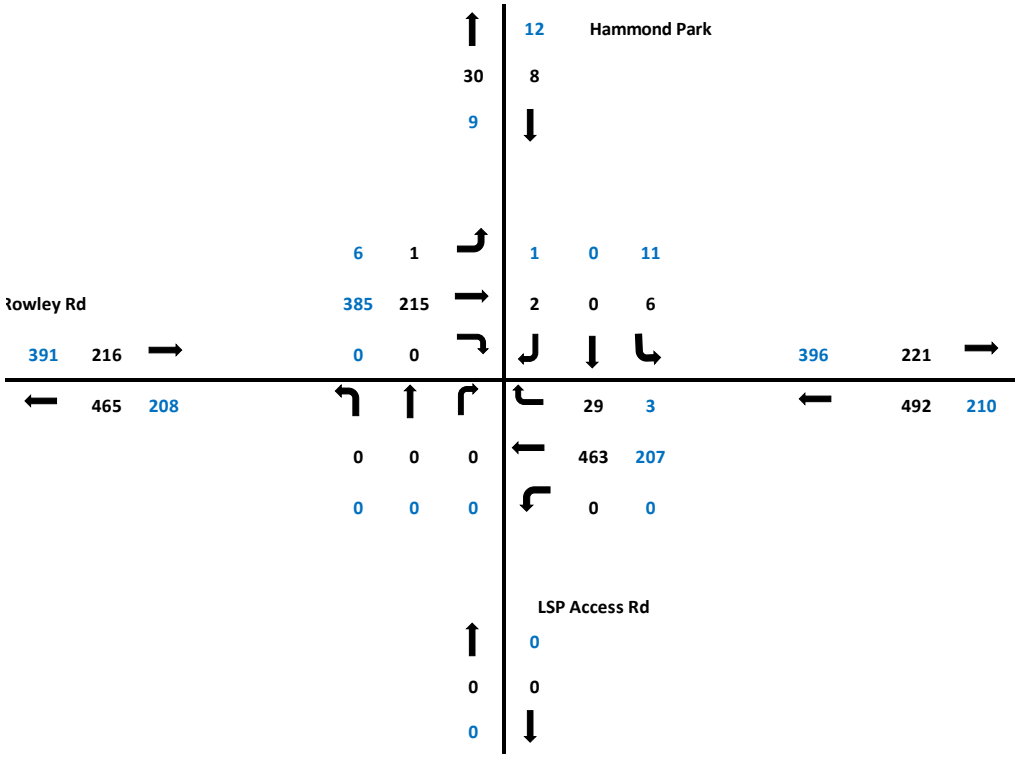


Figure 15: Existing traffic counts at Rowley Road roundabout intersection AM and PM peak hours

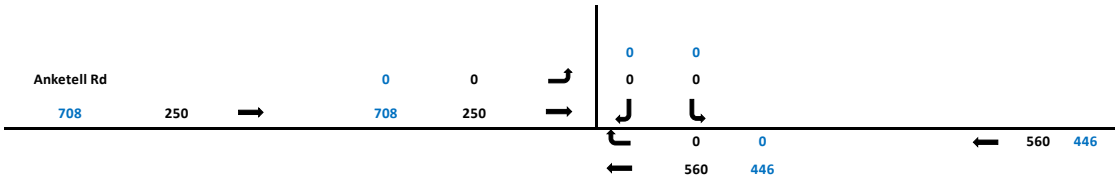


Figure 16: Existing traffic counts at Hoffman Road/ Anketell Road intersection AM and PM peak hours

Figure 17 and **Figure 18** illustrate the total weekday AM and PM peak hour traffic projections in 2029.

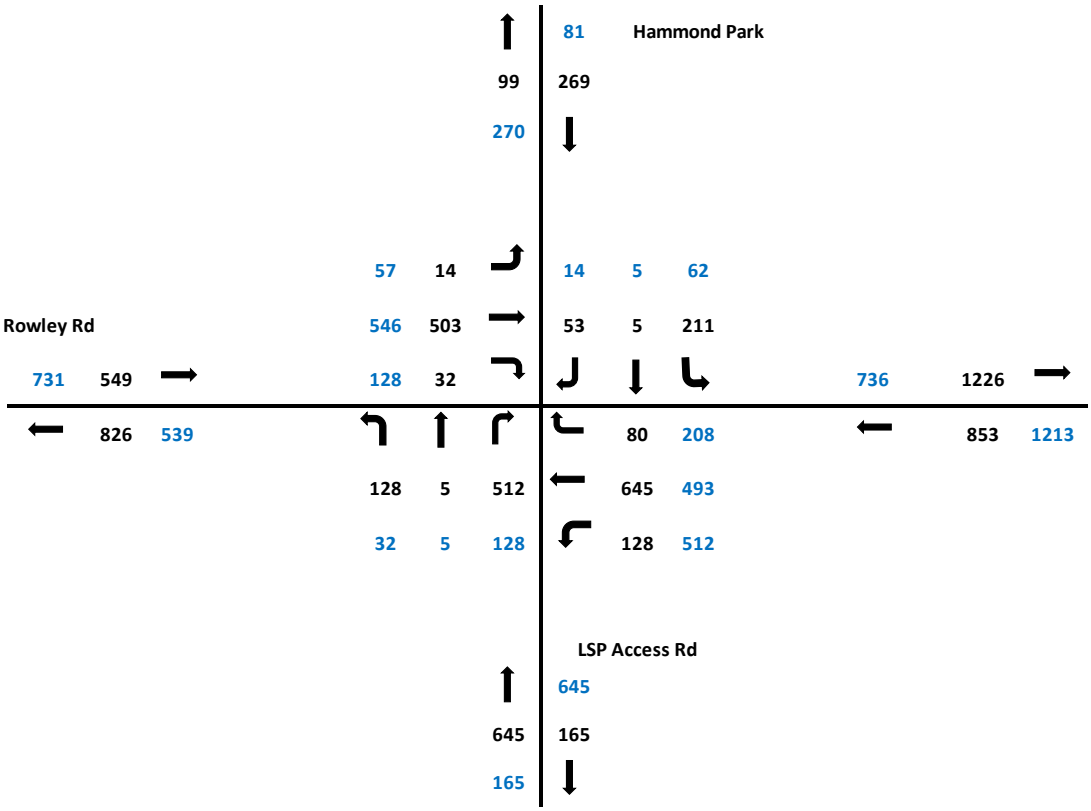


Figure 17: Total (2029) traffic – Weekday AM and PM peak hours

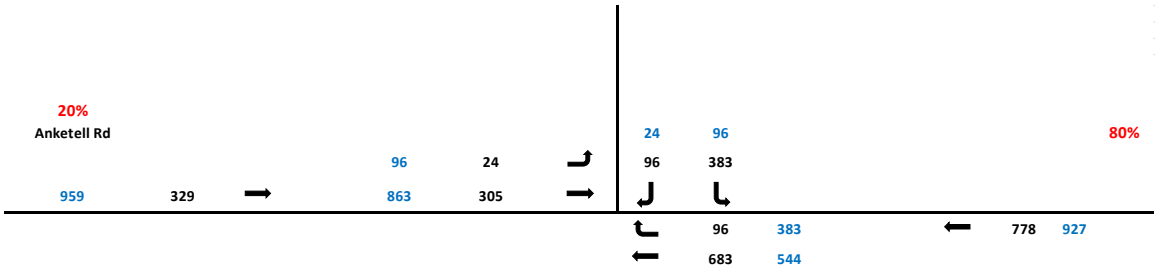


Figure 18: Total (2029) traffic – Weekday AM and PM peak hours

5.4 Roads and Intersections

The proposed road network to accommodate the proposed rezoning traffic volumes has been detailed in section 5 of this report, including the details of the proposed road hierarchy in section 5.1. **Figure 19** details the proposed intersection controls at Mandogalup Road/ future Hammond Road. .

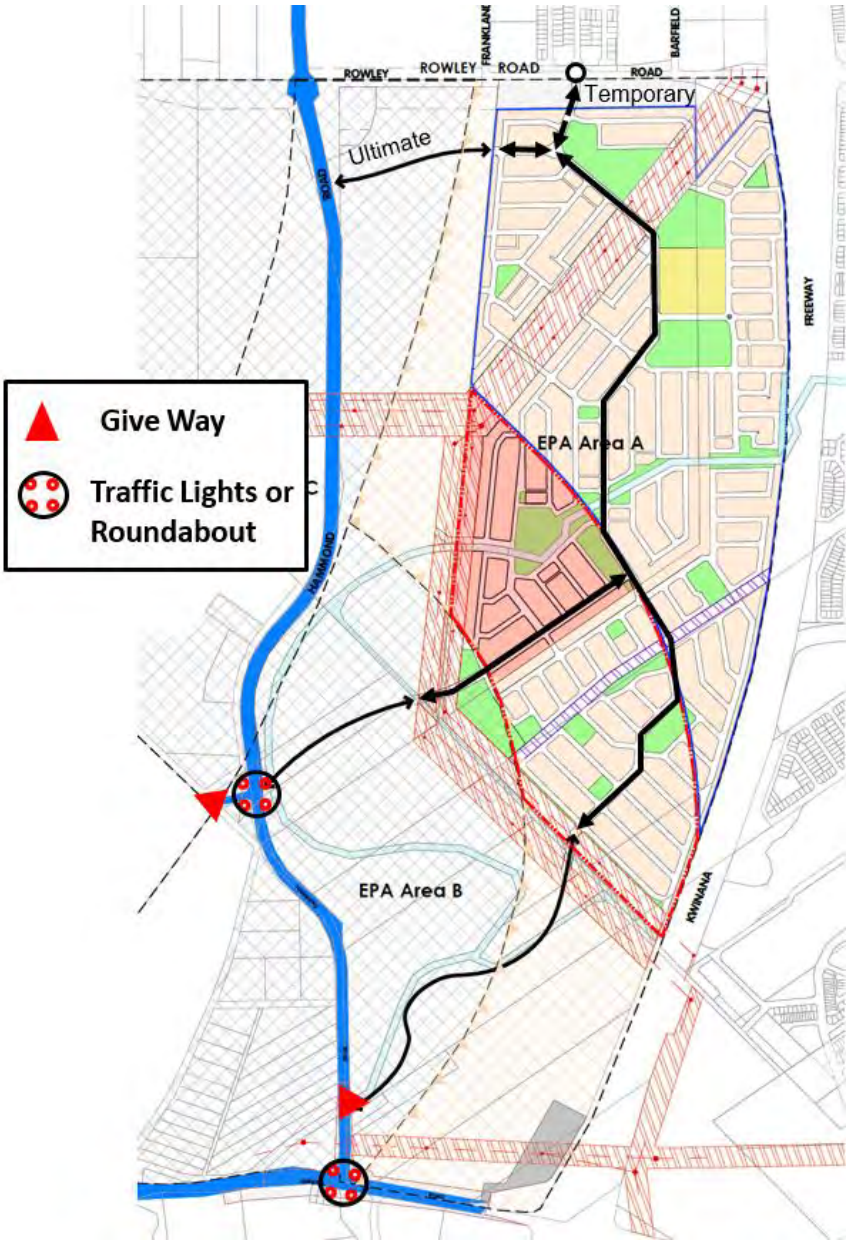


Figure 19: Intersection Treatments

The intersection of Mandogalup Road (future Hammond Road)/ Anketell Road is proposed to operate as traffic signals or roundabout in future. The proposed rezoning area road connections to the existing Mandogalup Road are proposed to operate as priority controlled T-intersections with appropriate turn lanes. The northern connection of the proposed rezoning area to Hammond Road will form a 4-way intersection at this location which is proposed to operate as a roundabout or traffic signals.

5.5 Intersection Analysis

The operation of the intersection of Hoffman Road/Anketell Road and the existing roundabout intersection on Rowley Road was analysed in SIDRA for the weekday AM and PM peak hours in 2029.

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

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

The results of the SIDRA analysis are attached in **Appendix B** and briefly discussed in the following paragraphs. The intersection layout modelled in SIDRA is shown in **Figure 20**.

SIDRA analysis also was undertaken for the existing roundabout intersection on Rowley Road to assess its operation in 2029. The proposed Rowley Road roundabout layout is also shown in **Figure 21**.

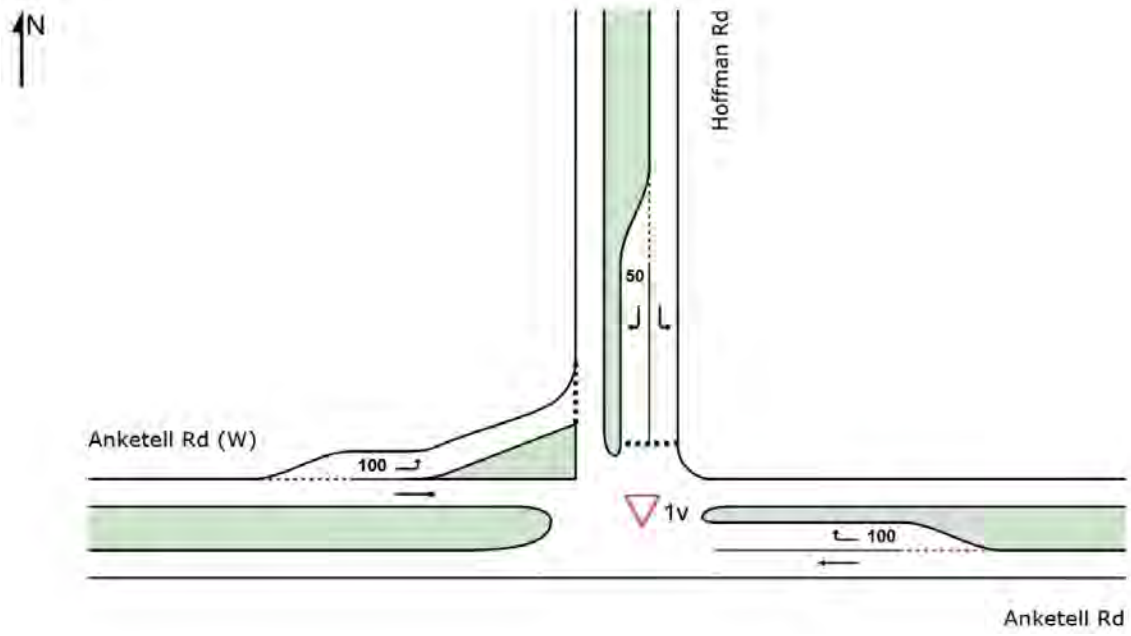


Figure 20: Anketell Road/ Hoffman Road intersection– SIDRA Layout

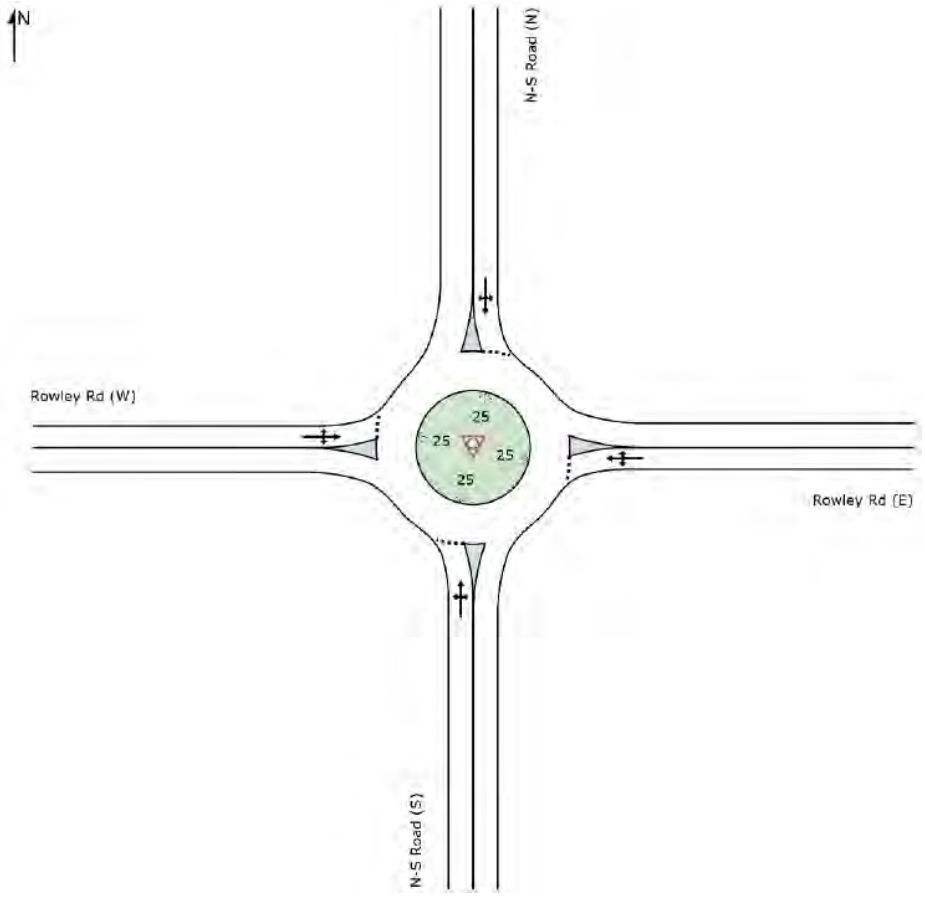


Figure 21: Roundabout intersection on Rowley Road, SIDRA Layout

Intersection of Anketell Road / Hoffman Road

The SIDRA analysis results indicate that the intersection of Anketell Road / Hoffman Road would operate satisfactorily in 2029 except that delays may become significant during the PM peak hour for the right turn movement out from Hoffman Road. However, this right turn out would initially operate satisfactorily until the traffic demand increases toward full development in 2029.

It is therefore proposed that the intersection of Anketell Road / Hoffman Road would operate as full movement during the first stages of the rezoning and the traffic operation of the right turn movements out from Hoffman Road into Anketell Road be monitored in future and if needs be the right turn movement out of Hoffman Road be banned to avoid excessive delay for this movements in the PM peak hours.

It should be noted that the number of right turn movements out of Hoffman Road is not significant (about 24 vehicles) during the PM peak hour and they would be able to turn left at the roundabout intersection on Rowley Road as an alternative route to travel towards the west.

Roundabout Intersection on Rowley Road

The SIDRA analysis results indicate that the existing roundabout intersection on Rowley Road will operate satisfactorily at an overall LoS B in 2029 during the AM and PM peak hours.

5.6 Access to Frontage Properties

The WAPC *Liveable Neighbourhoods* policy requires that "Development along integrator B and neighbourhood connector streets with ultimate vehicle volumes over 5000 vehicles per day should be designed either so vehicles entering the street can do so travelling forward, or are provided with alternative forms of vehicle access. Wider lots with paired driveways and protected reversing areas in the parking lane may be used on streets with up to 7000 vehicles per day."

All of the roads within the proposed rezoning area are expected to carry less than 5,000vpd, so no restriction on vehicular access is required.

5.7 Pedestrian / Cycle Networks

The proposed network of cycleways is described in section 4.3 of this transport assessment and footpaths will be provided on at least one side of all roads. This network of cycleways and paths will provide an excellent level of accessibility and permeability for pedestrians and cyclists within the proposed rezoning area and adjoining LSP areas.

5.8 Access to Public Transport

At this stage of the planning process the details of the bus route planning and the location of bus stops are not known. However, in these circumstances the WAPC *Transport Assessment Guidelines for Developments* (2006) suggest that it is desirable for at least 90 per cent of dwellings to be within 400m straight line distance of a bus route. The potential future bus route proposed along the main north-south road would service the majority of the lots within the proposed rezoning area.

6.0 Conclusions

The Metropolitan Region Scheme (MRS) has recently been amended to rezone land in Mandogalup from the Urban Deferred to the Urban zone. It is now proposed to rezone this land for urban development in the City of Kwinana's Town Planning Scheme as well. This TIA is to support the proposed rezoning of the portion of that rezoned land that is owned by Qube Property Group (the rezoning area) but also takes into consideration the adjoining area (owned by Satterley Property Group) that is subject to a separate but concurrent TPS amendment.

The proposed rezoning area is expected to accommodate approximately 275 residential dwellings which would generate about 2,200vpd and the adjoining area subject to concurrent TPS rezoning approximately 393 dwellings generating approximately 3,150vpd.

It is expected that the first stages of development of the proposed rezoning area would start in 2025 and be fully developed by 2029. At this time the proposed road network in the interim scenario in **Figure 8** is expected to be in place after full development of the proposed rezoning area, which assumes that:

- The existing roundabout intersection between Barfield Road and Frankland Avenue provides connectivity for the proposed developments to the north and south of Rowley Road.
- Anketell Road and Rowley Road are expected to operate as two lanes.
- The existing intersection of Hoffman Road/ Anketell Road would remain as full movement before Anketell Road is duplicated.

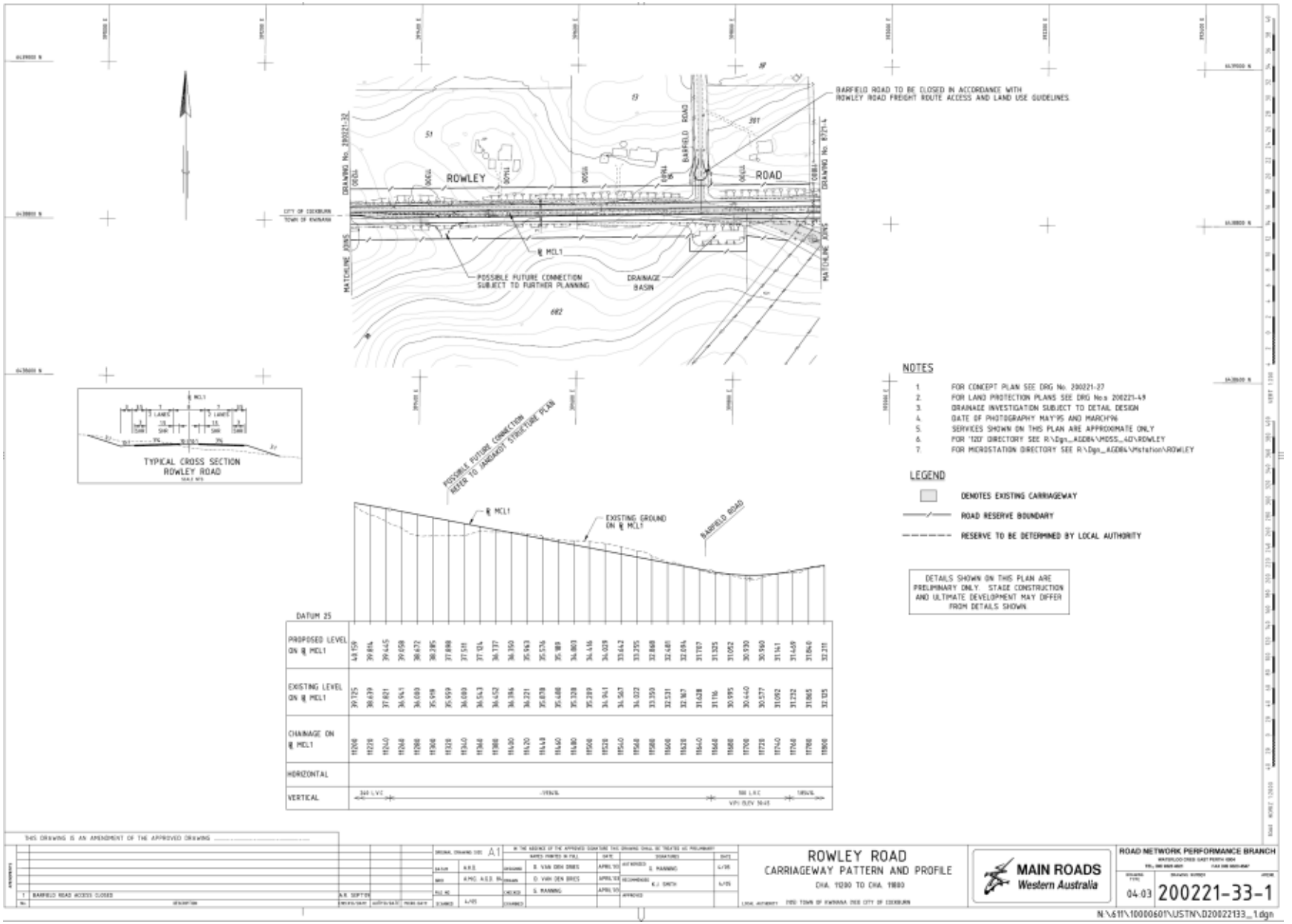
Transport modelling and analysis undertaken indicates that the existing intersection of Hoffman Road/ Anketell Road would need to be upgraded to include appropriate turn lanes on Anketell Road. SIDRA modelling and analysis indicate that the proposed upgraded intersection (as shown in Figure 20) would be able to accommodate the future traffic projection in 2029.

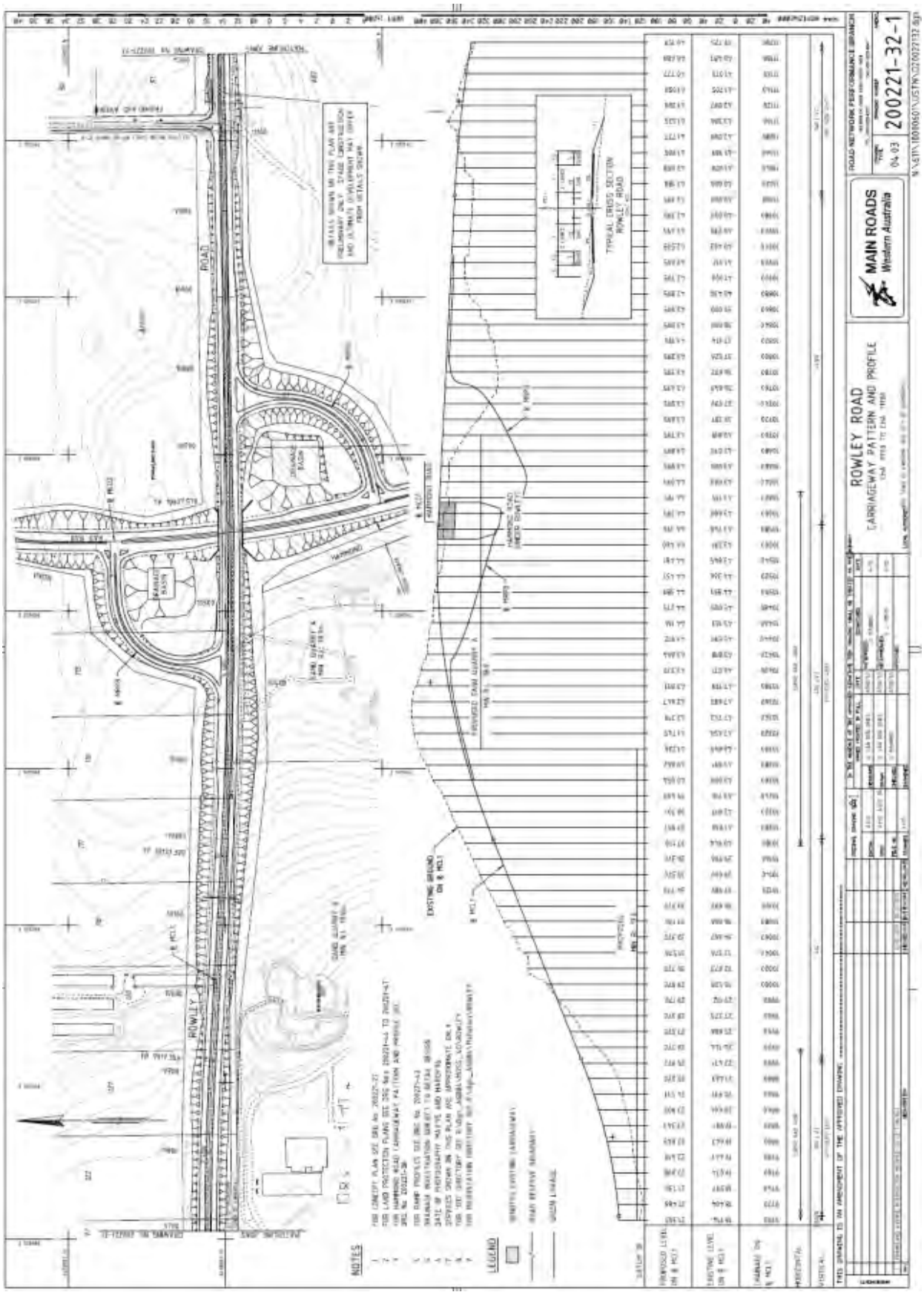
The SIDRA analysis results indicate that the existing roundabout intersection on Rowley Road will operate satisfactorily at an overall LoS B in 2029 during the AM and PM peak hours.

The proposed rezoning would not change the road hierarchy and standard of the proposed road network for the approved MELSP and MWLSP areas.

Appendix A

ROWLEY ROAD ACCESS ARRANGEMENTS
(MAIN ROADS WA DESIGNS)


BARFIELD ROAD TO BE CLOSED IN ACCORDANCE WITH ROWLEY ROAD FREIGHT ROUTE ACCESS AND LAND USE GUIDELINES
ROWLEY ROAD
BARFIELD ROAD
DRAWING No. 200221-32
DRAWING No. 8721-4
CITY OF COCKBURN
TOWN OF KWINANA
MATCHLINE JOINS
℄ MCL1
POSSIBLE FUTURE CONNECTION SUBJECT TO FURTHER PLANNING
DRAINAGE BASIN
TYPICAL CROSS SECTION ROWLEY ROAD
POSSIBLE FUTURE CONNECTION REFER TO JANDAKOT STRUCTURE PLAN
EXISTING GROUND ON ℄ MCL1
DATUM 25
PROPOSED LEVEL ON ℄ MCL1
EXISTING LEVEL ON ℄ MCL1
CHAINAGE ON ℄ MCL1
HORIZONTAL
VERTICAL
NOTES
1. FOR CONCEPT PLAN SEE DRG No. 200221-27
2. FOR LAND PROTECTION PLANS SEE DRG Nos 200221-49
3. DRAINAGE INVESTIGATION SUBJECT TO DETAIL DESIGN
4. DATE OF PHOTOGRAPHY MAY'95 AND MARCH'96
5. SERVICES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY
6. FOR '12D' DIRECTORY SEE R:\Dgn_AGD84\MOSS_4D\ROWLEY
7. FOR MICROSTATION DIRECTORY SEE R:\Dgn_AGD84\Mstation\ROWLEY
LEGEND
DENOTES EXISTING CARRIAGEWAY
ROAD RESERVE BOUNDARY
RESERVE TO BE DETERMINED BY LOCAL AUTHORITY
DETAILS SHOWN ON THIS PLAN ARE PRELIMINARY ONLY. STAGE CONSTRUCTION AND ULTIMATE DEVELOPMENT MAY DIFFER FROM DETAILS SHOWN
THIS DRAWING IS AN AMENDMENT OF THE APPROVED DRAWING
1 BARFIELD ROAD ACCESS CLOSED
ROWLEY ROAD
CARRIAGEWAY PATTERN AND PROFILE
CHA. 11280 TO CHA. 11880
MAIN ROADS Western Australia
ROAD NETWORK PERFORMANCE BRANCH
04-03
200221-33-1
N:\611\10000601\USTN\D20022133_1.dgn


ROWLEY ROAD
CARRIAGEWAY PATTERN AND PROFILE
MAIN ROADS
Western Australia
200221-32-1
TYPICAL CROSS SECTION ROWLEY ROAD
NOTES
LEGEND

Appendix B

INTERSECTION ANALYSIS

MOVEMENT SUMMARY

Site: 1v [Anketell Rd - Hoffman Rd - Interim - AM]

Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Anketell Rd (E)												
5	T1	683	19.0	0.460	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.7
6	R2	96	3.6	0.078	8.3	LOS A	0.3	2.6	0.44	0.66	0.44	57.1
Approach		779	17.1	0.460	1.1	NA	0.3	2.6	0.05	0.08	0.05	76.0
North: Hoffman Rd												
7	L2	383	4.1	0.342	7.5	LOS A	1.7	13.5	0.49	0.71	0.52	55.7
9	R2	96	3.6	0.591	41.4	LOS E	2.4	19.0	0.94	1.10	1.42	36.8
Approach		479	4.0	0.591	14.3	LOS B	2.4	19.0	0.58	0.79	0.70	50.5
West: Anketell Rd (W)												
10	L2	24	3.6	0.016	7.6	LOS A	0.1	0.5	0.19	0.57	0.19	58.6
11	T1	305	24.0	0.213	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach		329	22.5	0.213	0.6	LOS A	0.1	0.5	0.01	0.04	0.01	77.8
All Vehicles		1587	14.3	0.591	5.0	NA	2.4	19.0	0.21	0.29	0.24	66.2

MOVEMENT SUMMARY

Site: 1v [Anketell Rd - Hoffman Rd - Interim - PM]

Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Anketell Rd (E)												
5	T1	544	19.0	0.367	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
6	R2	383	3.6	0.916	42.8	LOS E	10.4	80.2	0.97	1.63	3.78	37.2
Approach		927	12.6	0.916	17.7	NA	10.4	80.2	0.40	0.67	1.56	54.2
North: Hoffman Rd												
7	L2	96	4.1	0.247	15.1	LOS C	0.9	6.9	0.80	0.94	0.89	50.0
9	R2	24	3.6	0.974	379.7	LOS F	3.7	29.0	1.00	1.18	1.81	8.3
Approach		120	4.0	0.974	88.0	LOS F	3.7	29.0	0.84	0.99	1.08	25.0
West: Anketell Rd (W)												
10	L2	96	3.6	0.087	8.9	LOS A	0.3	2.6	0.43	0.67	0.43	57.6
11	T1	863	24.0	0.604	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	79.4
Approach		959	21.9	0.604	1.0	LOS A	0.3	2.6	0.04	0.07	0.04	76.5
All Vehicles		2006	16.6	0.974	14.0	NA	10.4	80.2	0.26	0.40	0.81	58.2

MOVEMENT SUMMARY

Site: [Rowley Rd - (1 Lane) - AM -

Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: N-S Road (S)												
1	L2	128	4.7	0.822	20.9	LOS C	13.3	101.0	1.00	1.34	1.83	45.0
2	T1	5	0.0	0.822	20.7	LOS C	13.3	101.0	1.00	1.34	1.83	43.7
3	R2	502	2.0	0.822	26.0	LOS C	13.3	101.0	1.00	1.34	1.83	46.1
Approach		635	2.5	0.822	25.0	LOS C	13.3	101.0	1.00	1.34	1.83	45.9
East: Rowley Rd (E)												
4	L2	128	2.1	0.581	6.2	LOS A	5.9	50.2	0.46	0.52	0.46	58.5
5	T1	569	16.0	0.581	7.1	LOS A	5.9	50.2	0.46	0.52	0.46	61.6
6	R2	80	1.9	0.581	12.0	LOS B	5.9	50.2	0.46	0.52	0.46	60.4
Approach		777	12.3	0.581	7.5	LOS A	5.9	50.2	0.46	0.52	0.46	60.9
North: N-S Road (N)												
7	L2	211	3.8	0.517	16.9	LOS B	4.7	36.6	0.99	1.10	1.26	49.1
8	T1	5	0.0	0.517	16.7	LOS B	4.7	36.6	0.99	1.10	1.26	47.3
9	R2	53	3.8	0.517	22.2	LOS C	4.7	36.6	0.99	1.10	1.26	49.9
Approach		269	3.7	0.517	17.9	LOS B	4.7	36.6	0.99	1.10	1.26	49.2
West: Rowley Rd (W)												
10	L2	14	7.1	0.736	16.3	LOS B	9.2	83.6	1.00	1.13	1.42	51.4
11	T1	468	17.5	0.736	17.7	LOS B	9.2	83.6	1.00	1.13	1.42	53.7
12	R2	32	2.1	0.736	21.8	LOS C	9.2	83.6	1.00	1.13	1.42	53.0
Approach		514	16.3	0.736	17.9	LOS B	9.2	83.6	1.00	1.13	1.42	53.6
All Vehicles		2195	9.3	0.822	16.3	LOS B	13.3	101.0	0.81	0.97	1.18	52.7

MOVEMENT SUMMARY

Site: 1 [Rowley Rd - (1 Lane) - PM

Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: N-S Road (S)												
1	L2	31	3.2	0.245	7.7	LOS A	1.7	13.4	0.84	0.84	0.84	53.6
2	T1	5	0.0	0.245	7.7	LOS A	1.7	13.4	0.84	0.84	0.84	51.4
3	R2	128	3.9	0.245	13.1	LOS B	1.7	13.4	0.84	0.84	0.84	54.4
Approach		164	3.7	0.245	11.9	LOS B	1.7	13.4	0.84	0.84	0.84	54.1
East: Rowley Rd (E)												
4	L2	512	3.9	0.921	11.5	LOS B	24.5	202.1	1.00	0.71	1.14	55.0
5	T1	459	16.1	0.921	12.7	LOS B	24.5	202.1	1.00	0.71	1.14	57.8
6	R2	208	3.8	0.921	17.3	LOS B	24.5	202.1	1.00	0.71	1.14	56.6
Approach		1179	8.7	0.921	13.0	LOS B	24.5	202.1	1.00	0.71	1.14	56.3
North: N-S Road (N)												
7	L2	62	3.2	0.121	8.0	LOS A	0.8	6.1	0.79	0.77	0.79	55.9
8	T1	5	0.0	0.121	8.0	LOS A	0.8	6.1	0.79	0.77	0.79	53.4
9	R2	14	7.1	0.121	13.5	LOS B	0.8	6.1	0.79	0.77	0.79	55.8
Approach		81	3.7	0.121	9.0	LOS A	0.8	6.1	0.79	0.77	0.79	55.7
West: Rowley Rd (W)												
10	L2	57	3.5	0.691	10.5	LOS B	8.0	70.6	0.85	0.86	1.01	55.6
11	T1	483	17.6	0.691	11.8	LOS B	8.0	70.6	0.85	0.86	1.01	58.0
12	R2	128	3.9	0.691	16.3	LOS B	8.0	70.6	0.85	0.86	1.01	57.2
Approach		668	13.8	0.691	12.5	LOS B	8.0	70.6	0.85	0.86	1.01	57.7
All Vehicles		2092	9.7	0.921	12.6	LOS B	24.5	202.1	0.93	0.77	1.06	56.6

APPENDIX D
BUSHFIRE MANAGEMENT PLAN

FPA AUSTRALIA | Fire Protection Association Australia | Life. Property. Environment.

BPAD Bushfire Planning & Design

Bushfire Management Plan Coversheet

This Coversheet and accompanying Bushfire Management Plan has been prepared and issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme.

Bushfire Management Plan and Site Details

Site Address / Plan Reference: Part Lot 9000, part Lot 52 and part Lot 3

Suburb: Mandogalup **State:** WA **P/code:** 6167

Local government area: City of Kwinana

Description of the planning proposal: Local Planning Scheme amendment

BMP Plan / Reference Number: 57088 **Version:** Rev 0 **Date of Issue:** 02/08/2019

Client / Business Name: QUBE Property Group

Reason for referral to DFES	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?	☐	☑
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the BPC elements)?	☐	☑
Is the proposal any of the following special development types (see SPP 3.7 for definitions)?		
Unavoidable development (in BAL-40 or BAL-FZ)	☐	☑
Strategic planning proposal (including rezoning applications)	☑	☐
Minor development (in BAL-40 or BAL-FZ)	☐	☑
High risk land-use	☐	☑
Vulnerable land-use	☐	☑

If the development is a special development type as listed above, explain why the proposal is considered to be one of the above listed classifications (E.g. considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?
Considered a strategic planning proposal as the Bushfire Management Plan is adressing a Local Planning Scheme amendment.

Note: The decision maker (e.g. local government or the WAPC) should only refer the proposal to DFES for comment if one (or more) of the above answers are ticked "Yes".

BPAD Accredited Practitioner Details and Declaration

Name	Accreditation Level	Accreditation No.	Accreditation Expiry
Linden Wears	Level 3	19809	July 2020
Company		**Contact No.**	
Strategen-JBS&G		9380 3100	

I declare that the information provided within this bushfire management plan is to the best of my knowledge true and correct

Signature of Practitioner **Date** 02/08/2019

Local Planning Scheme Amendment for a portion of land in Mandogalup

Bushfire Management Plan

Prepared for
QUBE Property Group
by Strategen-JBS&G

August 2019

BPAD Bushfire Planning & Design Accredited Practitioner Level 2

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Local Planning Scheme Amendment for a portion of land in Mandogalup

Bushfire Management Plan

Strategen-JBS&G is a trading name of
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Document control

Client: QUBE Property Group

Report Version	Revision No.	Purpose	Strategen-JBS&G author/ reviewer and accreditation details	Submitted to Client	
				Form	Date
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Filename: 57088 R01 Mandogalup BMP LPS Amendment (Rev 0) - 2 August 2019

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1. Proposal details

Roberts Day, on behalf of QUBE Property Group, is proposing to lodge an application to rezone land in Mandogalup from 'Rural A' to 'Development' under the City of Kwinana Local Planning Scheme No. 2 (LPS2). The Concept Plan for the proposed development is provided in Figure 1. A similar rezoning proposal is being prepared across the adjacent east Satterley site. Both QUBE and Satterley rezoning proposals, although being lodged separately, are intended to be assessed concurrently as per agency advice.

The project area is located west of Kwinana Freeway and Satterley's Mandogalup East site, north of Anketell Road and south of Rowley Road and comprises the following lots (refer to Figure 2):

- Part Lot 9000
- Part Lot 52
- Part Lot 3 (Peel Main Drain).

The project area is bordered to the north by 'Urban' zoned land, also owned by the proponent and subject to future residential development as part of Apsley Estate. The project area is bordered to the east by Satterley's Mandogalup site subject to the Mandogalup East Local Structure Plan (MELSP). Land to the south and west is currently zoned 'Rural' under the MRS and 'Rural A' under LPS2. Bush Forever site 268 is located to the west of the project area.

The project area is partially situated within a designated bushfire prone area according to the DFES State Map of Bush Fire Prone Areas (DFES 2017; refer to Plate 1), which triggers bushfire planning requirements under Policy Measure 6.2 and 6.3 of *State Planning Policy 3.7 Planning in Bushfire Prone Areas* (SPP 3.7; WAPC 2015). This Bushfire Management Plan (BMP) has been prepared in accordance with Section 5.2.4 of *Guidelines for Planning in Bushfire Prone Areas* (the Guidelines; WAPC 2017), which requires local planning scheme amendments to be accompanied by a BMP that includes the results of a strategic level Bushfire Hazard Level (BHL) assessment.



Plate 1: DFES Map of bushfire prone areas (2019)

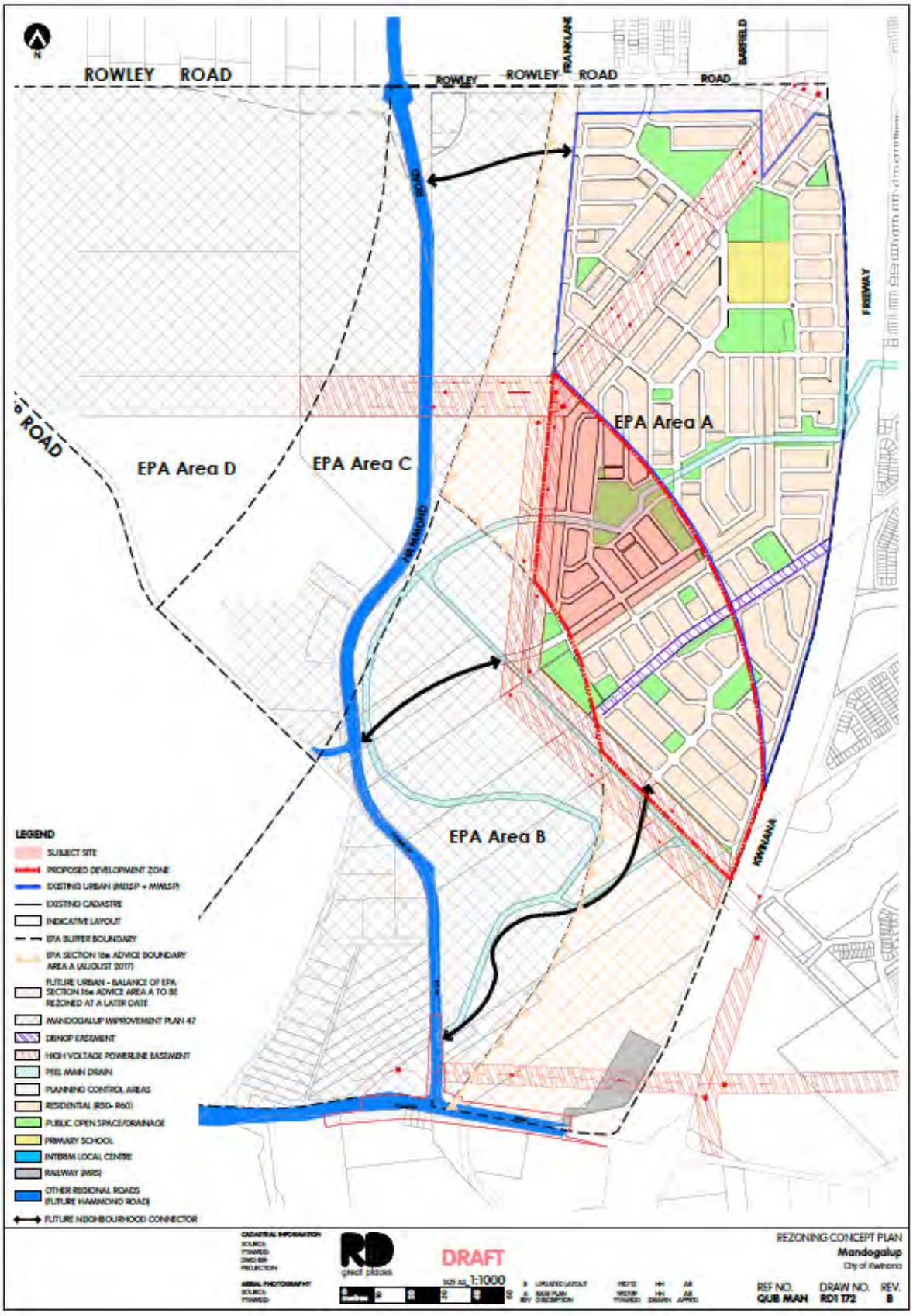
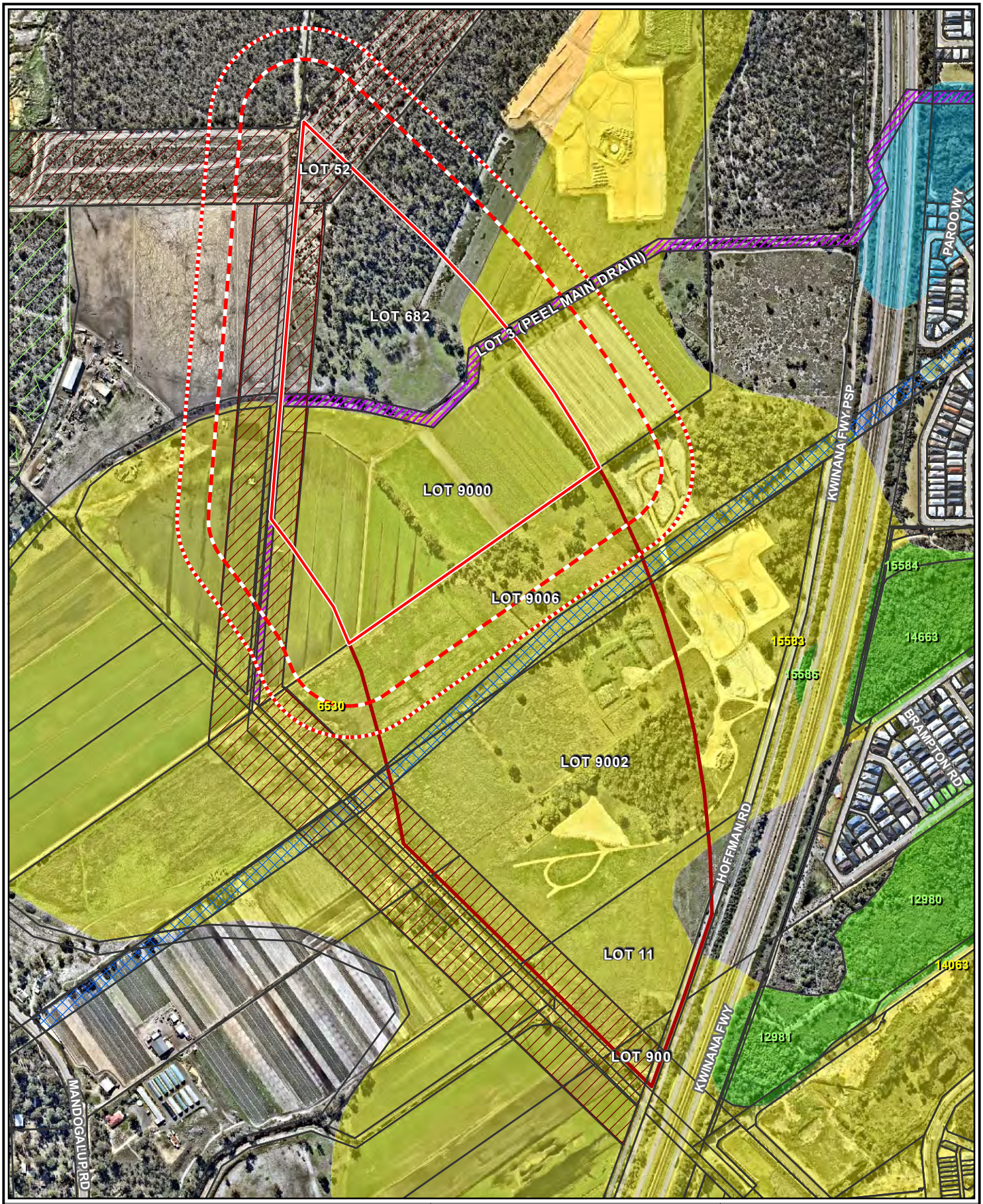


Figure 1: Rezoning concept plan



Legend:

- Project area
- 100m assessment area
- 150m assessment area
- Cadastral boundary
- Western Power easement
- Peel Main Drain
- Bush Forever site (DOP)
- DBNGP easement
- Proposed development zone
- Roads

Geomorphic Wetlands (DBCA)

- Conservation
- Resource Enhancement
- Multiple Use

Scale 1:8,000 at A4

0 100 200

metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57088

Client: QUBE Property Group

Version: A | Date: 02-Aug-2019

Drawn By: hsullivan | Checked By: CT

Mandogalup

SITE OVERVIEW

FIGURE 2

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File Name: W:\Projects\1)Open\Qube\57088 BMP Mandogalup TPS amendment\GIS\Maps\R001_RevA\57088_02_SiteOverview.mxd
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2. Environmental considerations

2.1 Native vegetation – modification and clearing

The project area has been largely cleared for agricultural and horticultural purposes. A significant area of remnant banksia woodland vegetation exists within the northwest of the project area.

A search of publicly available environmental data concluded that:

- the majority of the project area contains a mapped Multiple Use Wetland (MUW) (refer to Figure 2)
- a small portion in the north of the project area is mapped as being an Environmentally Sensitive Area
- the Banksia Woodland EPBC listed Threatened Ecological Community (TEC) is mapped as being likely to occur within the project area
- the project area contains mapped confirmed roosting areas for the EPBC listed Carnaby's Black Cockatoo as well as potential feeding areas
- Bush Forever site 268 is situated approximately 400 m west of the project area (refer to Figure 2).

Future development within the project area is expected to require the removal of native vegetation to accommodate future residential development and associated urban infrastructure. The extent of native vegetation to be retained within the project area will be determined at future planning stages through the allocation of Public Open Space (POS). It is expected that some native vegetation will be retained within the POS and drainage areas.

2.2 Revegetation / Landscape Plans

The Rezoning Concept Plan (refer to Figure 1) makes provisions for future POS and drainage areas within the project area.

The post-development vegetation classification and BHL assessment assumes that Peel Main Drain, Western Power easement and Dampier to Bunbury Natural Gas Pipeline (DBNGP) will comprise low threat vegetation in accordance with Clause 2.2.3.2 (f) of *AS 3959—2018 Construction of Buildings in Bushfire-Prone Areas* (AS 3959; SA 2018) and the standards for Asset Protection Zones (APZs) detailed in Schedule 1 of the Guidelines (refer to Appendix 1). A Landscape Plan is required to be prepared at future planning stages to demonstrate that these areas and all applicable areas of POS will comprise low threat vegetation.

It is expected that some POS and drainage areas will contain classifiable vegetation on completion of development. This will need to be accounted for in a Landscape Plan and an updated BMP for the relevant stage of development. As a precautionary measure, the post-development BHL assessment assumes that the POS and drainage areas will constitute an Extreme bushfire hazard level, based on Class D Scrub vegetation.

3. Bushfire assessment results

3.1 Assessment inputs

3.1.1 Vegetation classification

Strategen-JBS&G (formerly Strategen) assessed classified vegetation and exclusions within 150 m of the project area through on-ground verification on 13 April 2018 in accordance with *AS 3959—2018 Construction of Buildings in Bushfire-Prone Areas* (AS 3959; SA 2018) and the *Visual Guide for Bushfire Risk Management* in *Western Australia* (DoP, 2016). Georeferenced site photos are contained in Appendix 2.

Figure 3 illustrates the existing (pre-development) vegetation classifications within the project area. Figure 4 shows the anticipated post-development vegetation classifications following completion of construction works and implementation of POS and drainage, Peel Main Drain and various low threat landscaping throughout the project area.

Pre-development classification

A summary of the assessed pre-development classified vegetation is as follows (refer to Figure 3):

- Class B Woodland vegetation occurs:
  - in fragmented patches throughout the project area in the form of windbreaks and remnant/ planted clusters
  - within the northern portion of the project area as part of a large area of banksia woodland extending further to the northwest
  - to the north and northwest of the project area within Lot 2 Rowley Road and a portion of Lot 9000
  - the north-eastern portion of Lot 9006, northeast of the project area.
- Class D Scrub occurs:
  - along a portion of Peel Main Drain within the project area
  - within a portion of Lot 52 (overhead high voltage powerline easement), adjacent to the northeast corner of the project area.
- Class G Grassland (grass greater than 100 mm in height) occurs:
  - across a large proportion of the project area, including areas of Open Woodland with a grassland understorey
  - across the majority of rural land immediately south, west and east of the project area.

The City of Kwinana Fire Breaks Notice 2017/18 (refer to Appendix 3) does not specify requirements for the maintenance of grassland in a low threat state (below 100 mm) on land that is greater than 3001 m^2. Therefore, a precautionary approach has been adopted to classify all grassland within and adjacent to the project area as Class G Grassland.

A summary of the assessed pre-development exclusions are as follows (refer to Figure 3):

- Clause 2.2.3.2 (e) occurs within:
  - the permanently non-vegetated sandy paddock within and adjacent to the north-western portion of the project area
- no areas excluded in accordance with Clause 2.2.3.2 (f) were identified within the project area or the 150 m wide assessment area.

A non-vegetated cleared area exists to the southeast of the project area; however, as maintenance of grassland in a low threat state is not enforceable under the Fire Breaks Notice, a precautionary approach has been taken to classify this area as Class G Grassland.

Post-development classification

A summary of the potential post-development classified vegetation within the project area are as follows (refer to Figure 4):

- Class D Scrub has the potential occur within the majority of POS and drainage areas.

A precautionary approach has been adopted in the classification of POS and drainage areas. The actual classifications are to be determined at future planning stages on preparation of a detailed Landscape Plan.

The post-development vegetation classification and BHL assessment assumes that Peel Main Drain, Western Power powerline easement and DBNGP will be modified to and maintained in a low threat state in accordance with AS 3959 Clauses 2.2.3.2 (e) and (f) and Schedule 1 of the Guidelines (see Appendix 1).

A summary of the expected post-development exclusions within the project area are as follows (refer to Figure 4):

- Clause 2.2.3.2 (e) will occur throughout the project area and will include all permanently non-vegetated areas such as roads, footpaths, building footprints, carparks, hardstand areas and private driveways
- Clause 2.2.3.2 (f) will occur within Peel Main Drain, Western Power easement and DBNGP, which will comprise low threat landscaping
- Clause 2.2.3.2 (f) will occur within future residential lots, which will comprise maintained lawns and cultivated gardens.

The post-development vegetation classification and BHL assessment has been prepared on the basis of the balance land to the north and south (i.e. land within the MELSP and MWLSP areas, as well as Satterley's land within the adjacent 'Development' zone proposed to the south) being fully modified to and maintained in a low threat state in accordance with AS 3959 Clause 2.2.3.2 (e) and (f). This is in accordance with the BMPs previously prepared by Strategen-JBS&G to accompany the now approved MELSP and MWLSP applications (Strategen, 2017a, b). Strategen-JBS&G understands that development of the MELSP and MWLSP areas will occur prior to development of the project area as part of development staging from north to south.

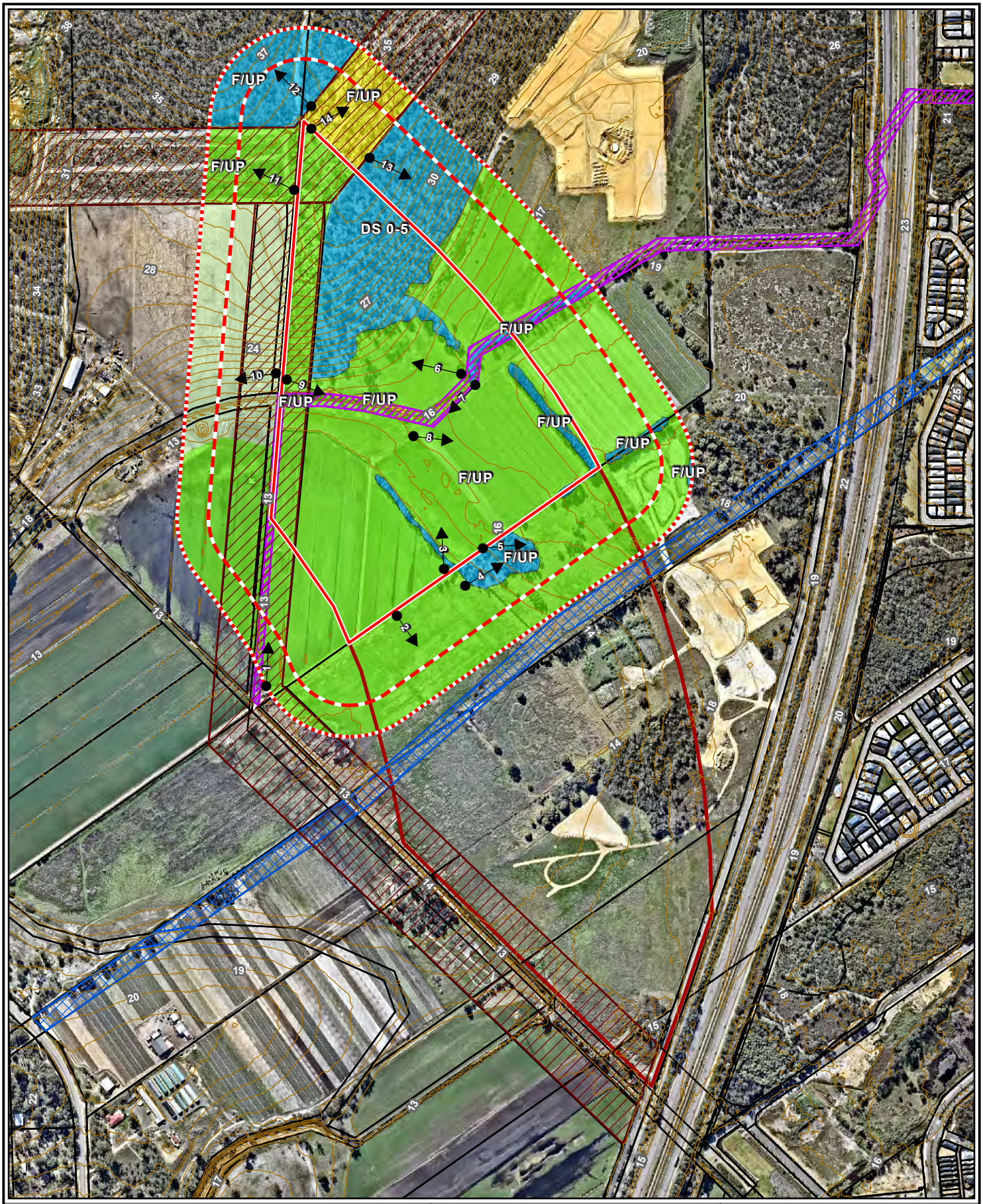
The post-development vegetation classifications for the remainder of land within the 150 m assessment area are expected to remain the same as for the pre-development classifications. If external vegetation is altered prior to future planning stages, the change in vegetation conditions is to be captured through a future BHL assessment or BAL contour map assessment.

On completion of development, maintenance of all land within the project area and MELSP and MWLSP areas in a low threat state will be enforceable under the City of Kwinana Fire Breaks Notice (refer to Appendix 3), which requires that all land with an area of 3000 m^2 or less is to have all flammable material such as long dry grass, weeds, etc. slashed, mowed or trimmed down by other means to a height no greater than 50 mm across the entire property.

3.1.2 Effective slope

Strategen-JBS&G assessed effective slope under classified vegetation through on-ground verification on 13 April 2018 in accordance with AS 3959. Results are depicted in Figure 3

Site observations indicate that the southern portion of project area and surrounding land is predominantly flat, with terrain inclining very gradually from 13 m AHD in the west to 18 m AHD in the east. The land inclines in a south to north direction in the northern portion of the project area with Class B Woodland, Class D Scrub and Class G Grassland vegetation external to the northern portion of the site being upslope in relation to the future development areas.



Legend:

- Project area
- 100m assessment area
- 150m assessment area
- Cadastral boundary
- Western Power easement
- Peel Main Drain
- DBNGP easement
- Proposed development zone
- Photo point and direction
- Surface elevation (mAHD)
- Roads

Vegetation classification

- Class B Woodland
- Class D Scrub
- Class G Grassland
- Excluded under Clauses 2.2.3.2 (e) & (f)

Scale 1:8,000 at A4 (0 100 200 metres)		**Mandogalup**
Coord. Sys. GDA 1994 MGA Zone 50		**PRE-DEVELOPMENT VEGETATION CLASSIFICATION AND EFFECTIVE SLOPE**
Job No: 57088		
Client: QUBE Property Group		**FIGURE 3**
Version: A	Date: 30-Jul-2019	strategen JBS&G
Drawn By: hsullivan	Checked By: CT	

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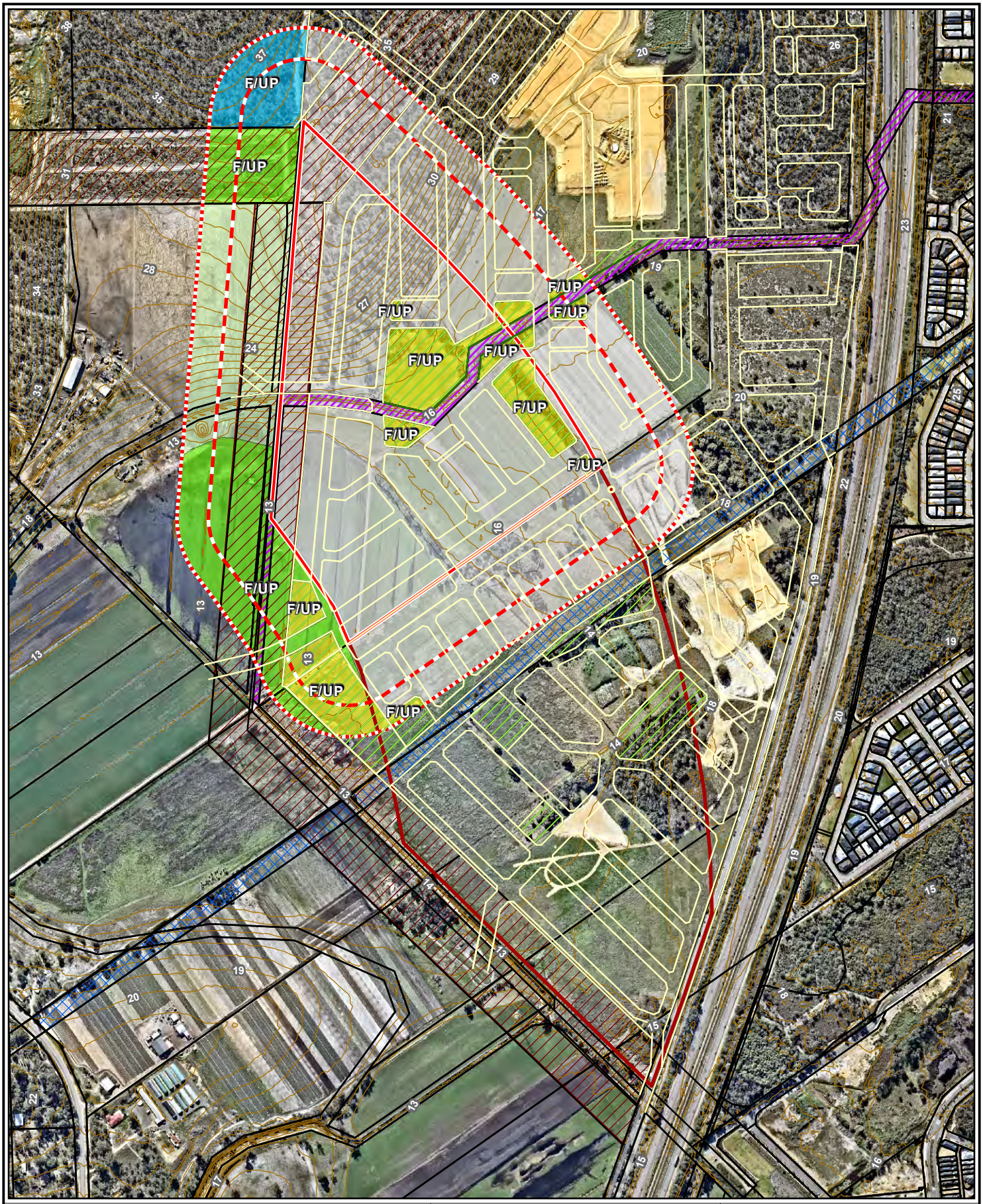
Image Reference: www.nearmap.com© - Imagery Date: 16 July 2019



Legend:

- Project area
- 100m assessment area
- 150m assessment area
- Cadastral boundary
- Western Power easement
- Peel Main Drain
- DBNGP easement
- POS/drainage
- Proposed development zone
- Indicative development layout
- Surface elevation (mAHD)
- Roads

Vegetation classification

- Class B Woodland
- Class D Scrub
- Class G Grassland
- Excluded under Clauses 2.2.3.2. (e) & (f)
- Area to be modified to low threat state

Scale 1:8,000 at A4 — 0 100 200 metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57088

Client: QUBE Property Group

Version: A | Date: 30-Jul-2019

Drawn By: hsullivan | Checked By: CT

Mandogalup

POST-DEVELOPMENT VEGETATION CLASSIFICATION AND EFFECTIVE SLOPE

FIGURE 4

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Image Reference: www.nearmap.com© - Imagery Date: 16 July 2019

3.2 Assessment outputs

3.2.1 Bushfire Hazard Level (BHL) assessment

Pre-development

Strategen-JBS&G has mapped the pre-development bushfire hazard levels within the project area and the 150 m wide assessment area. The bushfire hazard levels have been assessed on the basis of the vegetation discussed in Section 3.1.1 (i.e. the current pre-development extent of vegetation within and surrounding the project area).

A summary of results is provided below and depicted in Figure 5:

- all Class B Woodland has been assigned a bushfire hazard level of Extreme
- All Class D Scrub has been assigned a bushfire hazard level of Extreme
- all Class G Grassland has been assigned a bushfire hazard level of Moderate
- in accordance with the bushfire hazard level assessment methodology detailed in Appendix 2 of the Guidelines, vegetation that has a Low bushfire hazard level but is within 100 m of Extreme or Moderate bushfire hazard level vegetation has been assigned a Moderate bushfire hazard level
- all remaining areas have been assigned a bushfire hazard level of Low.

The pre-development BHL assessment shows that based on the existing vegetation, the project area contains land with Moderate and Extreme bushfire hazard levels.

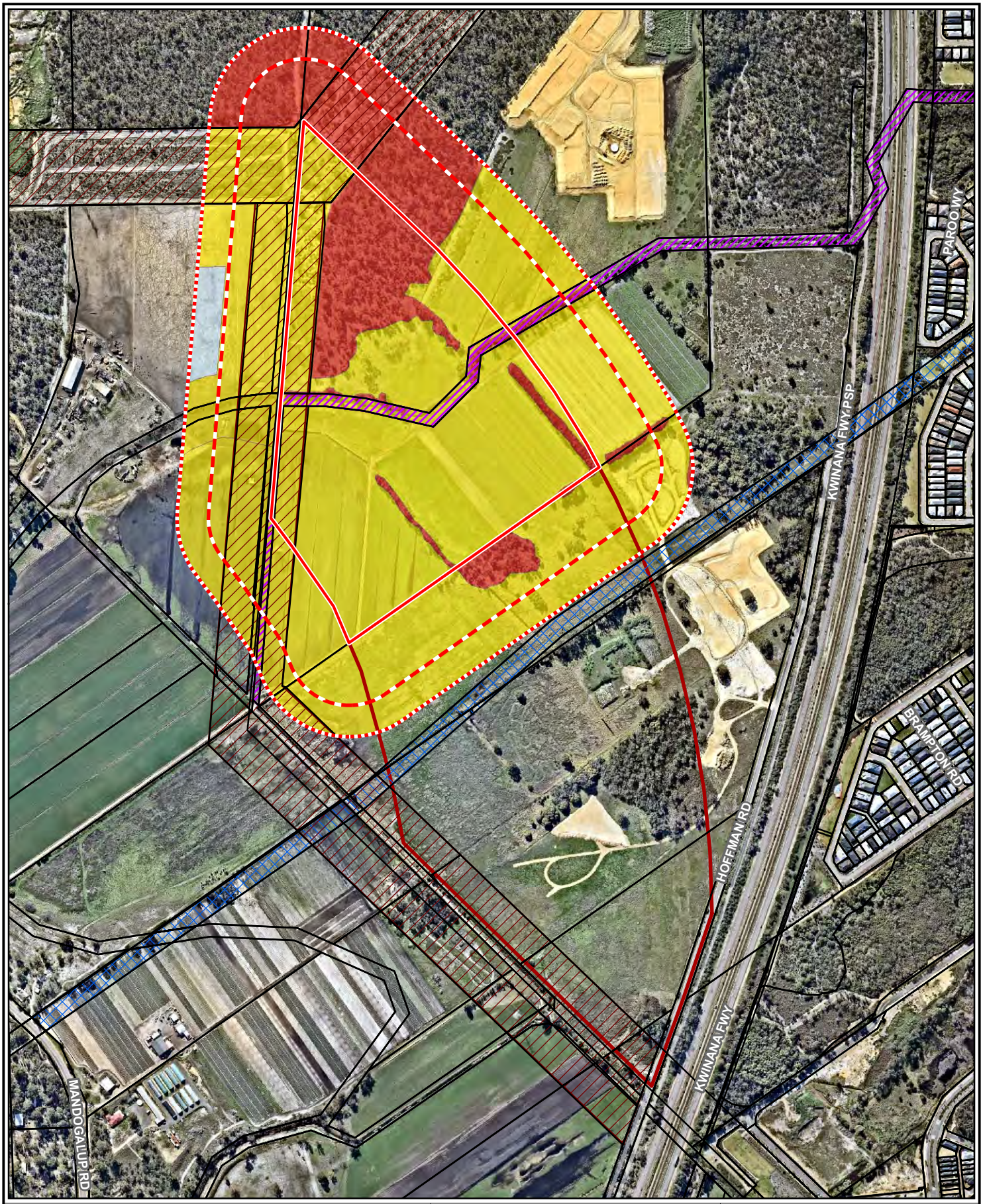
Post-development

Strategen-JBS&G has mapped the post-development bushfire hazard levels to demonstrate that the future bushfire hazard levels will be acceptable for future development to occur within the project area. The bushfire hazard levels have been assigned on the basis of the vegetation discussed in Section 3.1.1 and the future expected vegetation within and surrounding the project area.

A summary of results is provided below and depicted in Figure 6:

- all Class B Woodland has been assigned a bushfire hazard level of Extreme
- all Class D Scrub has been assigned a bushfire hazard level of Extreme
- all Class G Grassland has been assigned a bushfire hazard level of Moderate
- in accordance with the bushfire hazard level assessment methodology detailed in Appendix 2 of the Guidelines, vegetation that has a Low bushfire hazard level but is within 100 m of Extreme or Moderate bushfire hazard level vegetation has been assigned a Moderate bushfire hazard level
- all remaining areas have been assigned a bushfire hazard level of Low.

The post-development BHL assessment demonstrates that, all future habitable development will be located on land with either a Low or Moderate bushfire hazard level. As stated in Section 3.1.1, Extreme bushfire hazard levels have been applied precautionarily to POS and drainage areas and no future development would be located on land with an Extreme bushfire hazard level.



Legend:

- Project area
- 100m assessment area
- 150m assessment area
- Cadastral boundary
- Western Power easement
- Peel Main Drain
- DBNGP easement
- Proposed development zone
- Roads

Bushfire hazard level

- Extreme
- Moderate
- Low

Scale 1:8,000 at A4 — 0 100 200 metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57088

Client: QUBE Property Group

Version: A | Date: 29-Jul-2019

Drawn By: hsullivan | Checked By: CT

Mandogalup

PRE-DEVELOPMENT BUSHFIRE HAZARD LEVELS

FIGURE 5

strategen JBS&G

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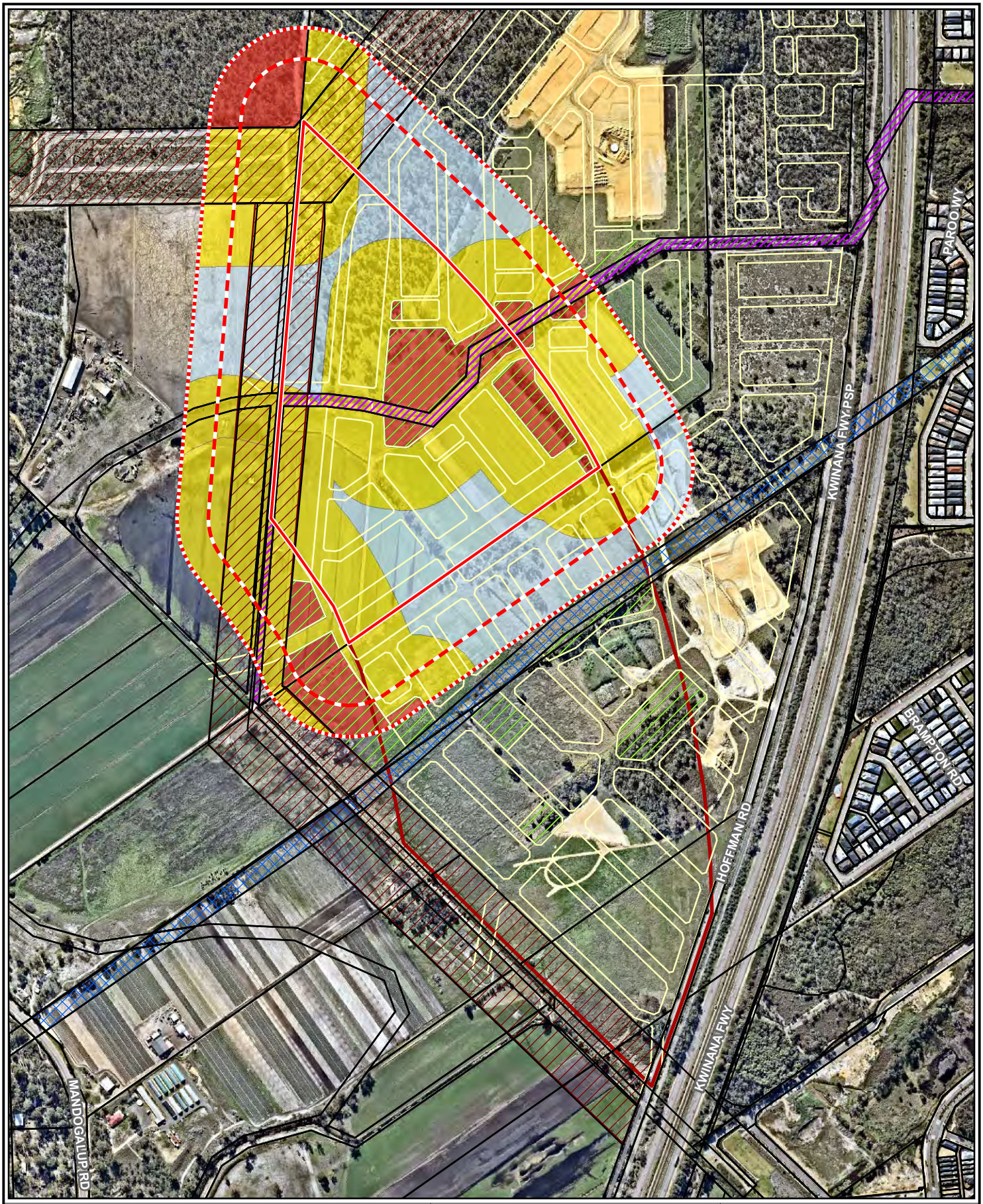

Legend:

- Project area
- 100m assessment area
- 150m assessment area
- Cadastral boundary
- Western Power easement
- Peel Main Drain
- DBNGP easement
- Indicative development layout
- POS/drainage
- Proposed development zone
- Roads

Bushfire hazard level

- Extreme
- Moderate
- Low

Scale 1:8,000 at A4

0 100 200

metres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 57088

Client: QUBE Property Group

Version: A | Date: 30-Jul-2019

Drawn By: hsullivan | Checked By: CT

Mandogalup

POST-DEVELOPMENT BUSHFIRE HAZARD LEVELS

FIGURE 6

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4. Identification of bushfire hazard issues

4.1.1 Bushfire context

The bushfire risk to proposed development within the project area should be viewed in relation to the post-development vegetation extent, particularly with regards to development of the MELSP and MWLSP areas, which will occur prior to development of the project area in accordance with proposed staging plans from north to south. Clearing and development of these Structure Plan areas will result in negligible bushfire risk to the project area from the north. Development of the site is also expected to be undertaken concurrently with the adjacent Satterley site within the proposed 'Development' zone to the south.

In addition to clearing within the MELSP and MWLSP areas, an EPBC referral has been submitted by others to clear vegetation within Lot 2 and Lot 10 Rowley Road, situated directly northwest of the project area. Strategen-JBS&G understands that both Commonwealth and State approvals will be required to remove this vegetation; however, it is probable that, if approved, clearing will occur prior to development within the project area, removing all potential bushfire impacts from the northwest.

In the event that vegetation within Lot 2 and 10 Rowley Road is not removed prior to development occurring within the project area, Strategen-JBS&G considers that this vegetation would pose the greatest bushfire threat to the site. This land is occupied by a predominant banksia woodland fuel profile on undulating to flat terrain and poses a potential fire run of up to 1.3 km, which has the potential to result in significant bushfire behaviour, particularly under worst case bushfire weather conditions (i.e. extreme and catastrophic fire dangers exhibiting very high temperatures, low relative humidity and very strong winds from the northern quadrant). The existing powerline easement located at the proposed development interface in the northwest will provide a 120 m wide low fuel buffer to the adjacent bushfire hazards, which is expected to significantly limit the potential radiant heat impact on proposed development from this scenario.

Land directly to the north is currently used for agricultural purposes and is approved for future residential development. Land directly adjacent to the southern boundary of the project area is predominantly rural land comprising crops and grassland. There remains a minor risk of bushfire impact from vegetation to the west of Kwinana Freeway. However, the vegetation is restricted to a relatively short fire run.

4.1.2 Bushfire hazard issues

Examination of strategic development design in accordance with the Concept Plan and existing and post-development bushfire hazard levels has identified the following bushfire hazard issues to be considered at future planning stages:

1. Future residential lots in the north and northwest of the project area have a direct interface with the portion of the Western Power powerline easement transecting the northern and western boundaries of the project area. Existing vegetation within the easement corridor includes Class D Scrub (upslope) and Class G Grassland (flat/ upslope and downslope >0 to 5 degrees). The post-development BHL assessment has assumed that on completion of development, the easement will comprise low threat, managed vegetation. The mechanism for maintenance of the land in a low threat state is to be determined at future planning stages and may require the development of a Landscape Plan to outline responsibilities for maintenance of the land in a low threat state in perpetuity.
2. In the event that vegetation within the Western Power powerline easement is not reduced to and maintained in a low threat state as part of the development, future planning stages are to consider the inclusion of perimeter roads adjacent to the easement of the project area to provide a low threat buffer sufficient for abutting residential lots to achieve a rating of BAL-29 or lower. Habitable building setbacks could also be employed as a strategy if perimeter roads are not of a sufficient width to achieve BAL-29 or lower, or they are not deemed to be appropriate.

3. All other external boundary interfaces are either located adjacent to future low threat urban development within the MELSP, MELSP and proposed 'Development Zone' areas directly north and southeast of the project area, or will be addressed through the provision of perimeter roads, fire service access routes, low threat POS or habitable development setbacks. Future stages of planning are to ensure that sufficient separation exists for future habitable development to achieve BAL-29 or less at the interface with external vegetation.
4. As the project area contains areas of bushfire prone vegetation, including Class G Grassland, Class D Scrub and Class B Woodland, staged construction at the subdivision stage of planning is to consider the BAL impacts from adjacent future stages that have not yet been developed. Low threat buffers may need to be implemented around the current stage of development to ensure there is no residual impact from vegetation that has not yet been cleared or landscaped to achieve a low threat state.
5. The Concept Plan includes the provision of Public Open Space (POS) and drainage areas throughout the project area as well as Peel Main Drain and DBNGP corridors. The post-development BHL assessment has assumed that Peel Main Drain and DBNGP will be implemented and maintained as low threat in accordance with Clause 2.2.3.2 (f) of AS 3959 and Schedule 1 of the Guidelines (refer to Appendix 1). A Landscape Plan is to be prepared at future planning stages to demonstrate that Peel Main Drain, DBNGP and any applicable areas of POS will comprise low threat vegetation.
6. It is expected that some POS and drainage areas will contain classifiable vegetation on completion of development. This will need to be accounted for with the preparation of a Landscape Plan and updated BMP for the relevant stage of development. As a precautionary measure, the post-development vegetation classification and BHL assessment assumes that all POS and drainage areas will comprise Class D Scrub, which constitutes an Extreme bushfire hazard level. Strategen-JBS&G acknowledges that the vegetation classifications and resulting bushfire hazard levels are likely to be lower than those assigned in the post-development BHL assessment, however, a conservative approach has been taken at this higher level of planning to inform future development stages of the potential impacts of classifiable vegetation within the POS. A Landscape Plan will be required at future planning stages to specify areas where classifiable vegetation is retained or introduced or modified/managed to a low threat state.
7. The Concept Plan includes direct interfaces of future residential lots with POS and drainage areas, including Peel Main Drain and DPNGP. In the event that classified vegetation is retained or introduced within these areas, future stages of planning are to ensure that sufficient separation exists for future habitable development to achieve BAL-29 or lower.
8. The BHL assessment has been prepared on the basis of the MELSP and MELSP areas directly north of the site being developed prior to the project area. Due to the proposed staging plan from north to south, it is considered unlikely that development of the project area would commence prior to completion of urban development to the north; however, if this was to occur, future planning stages would need to consider the BAL impacts from undeveloped land adjacent to the northern boundary of the project area.
9. Development of the project area is also reliant on development within the MELSP and MELSP areas occurring first to ensure the project area is provided with two access routes to two different destinations. On completion of development, access will be achieved from Hoffman Road in the southeast and from Rowley Road in the north. During staging of construction, two access routes are to be provided at all times.

Strategen-JBS&G considers the bushfire hazards within and adjacent to the project area and the associated bushfire risks are readily manageable through standard management responses outlined in the Guidelines and AS 3959 and the strategic level bushfire management strategies outlined in this BMP. These responses will be factored in to proposed development early in the planning process to ensure a suitable, compliant and effective bushfire management outcome is achieved for protection of future life and property assets.

5. Assessment against the bushfire protection criteria

5.1 Compliance table

In response to the requirements of SPP 3.7 and the Guidelines, strategic level bushfire management measures have been devised to demonstrate how the bushfire protection criteria will be met at subsequent stages of the planning process.

Table 1: Compliance table

Bushfire protection criteria	Method of compliance Acceptable solutions	Proposed bushfire management strategies
Element 1: Location	A1.1 Development location	The post-development BHL assessment (Figure 6) identifies that on completion of development, all developable land will comprise either a low or moderate bushfire hazard level.
Element 2: Siting and design	A2.1 Asset Protection Zone	APZs sufficient to achieve BAL-29 or lower are to be implemented for all lots subject to a BAL above BAL-LOW. The required APZs are to be identified at future planning stages based on future subdivision/ development design and following a BAL contour assessment. APZs are to be implemented and maintained in accordance with Schedule 1 of the Guidelines (Appendix 1) and the City's Firebreak and Fuel Load Notice (see Appendix 3).
Element 3: Vehicular access	A3.1 Two access routes.	On completion of development (including Satterley's portion of the proposed 'Development' zone), the site will be provided with access to the southeast via Hoffman Road and to the north through future urban development to Rowley Road. Hoffman Road connects with Anketell Road approximately 850 m south of the project area and provides access to the east and west as well as access to Kwinana Freeway. Rowley Road is located approximately 1.3 km north of the project area and provides access to the east, north and west as well as access to Kwinana Freeway. Staging of development is to ensure that at least two publicly available access routes are provided to two different destinations at all times for all stages.
	A3.2 Public road	Public roads constructed within the project area are to comply with A3.2 (see Table 2 for technical requirements).
	A3.3 Cul-de-sac (including a dead-end-road)	N/A. The Concept Plan does not include any cul-de-sacs or dead-end roads. Cul-de-sacs are to be avoided in bushfire prone areas.
	A3.4 Battle-axe	N/A. The Concept Plan does not include any battle-axe lots. Battle-axe access should be avoided in bushfire prone areas.
	A3.5 Private driveway longer than 50 m	Where future habitable development in an area above BAL-LOW is sited more than 50 m from a public road, the private driveway is to comply with the requirements of A3.5 (see Table 2). This is to be addressed at the development application stage of planning. It is not anticipated that any of the residential lots would be of a size that would require habitable buildings to be located more than 50 m from a public road.
	A3.6 Emergency access way	Temporary EAWs may be required to provide through access to a public road during staged development (see Table 2 for technical details). Based on the conceptual development design, the development is not considered to require any permanent EAWs.

Bushfire protection criteria	Method of compliance Acceptable solutions	Proposed bushfire management strategies
	A3.7 Fire service access routes (perimeter roads)	FSARs may be required to provide firefighter access to the perimeter of the site where public roads are not proposed (see Table 2 for technical details). Temporary FSARs may be required during staging of development to provide firefighter access to and around the perimeter of undeveloped portions of the project area.
	A3.8 Firebreak width	Each stage of development is required to comply with the requirements of the City of Kwinana Fire Breaks Notice as amended (refer to Appendix 3). Firebreaks are to be installed for balance lots greater than 3,001 m^2 in area. On completion of the development, the residential lots will be less than 3,001 m^2 in area and comprise cultivated gardens and maintained lawns. Therefore, firebreaks would not be required for these lots. POS areas larger than 3,001 m^2 will require 3 m wide firebreaks. Public roads bordering the perimeter of the POS areas would provide sufficient and permanent firebreaks. In accordance with the City of Kwinana Firebreak Notice, maintained and living lawns are acceptable in conjunction with or in lieu of mineral earth firebreaks.
Element 4: Water	A4.1 Reticulated areas	Future development is to be provided with a reticulated supply compliant with Water Corporation DS-63 requirements.
	A4.2 Non-reticulated areas	N/A
	A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively)	N/A

Table 2: Vehicular access technical requirements

Technical requirement	Public road	Cul-de-sac	Battle-axe legs and private driveways longer than 50 m	Emergency access ways	Fire service access routes
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

Source: WAPC 2017

6. Responsibilities for implementation and management of the bushfire measures

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. Aside from the preparation of future BMPs to accompany future subdivision and development applications where appropriate, there are no further items to implement, enforce or review at this strategic stage of the planning process.

Future BMPs prepared for subsequent subdivision and development applications are to meet the relevant commitments outlined in this strategic level BMP, address the relevant requirements of SPP 3.7 (i.e. Policy Measures 6.4 and 6.5 respectively) and demonstrate in detail how the proposed development will incorporate the relevant acceptable solutions to meet the performance requirements of the Guidelines. Future BMPs are to include the following detailed information:

- proposed lot layout, including POS and drainage areas
- detailed landscaping design in regards to POS, drainage, Peel Main Drain, Western Power easement and DBNGP corridor
- post development classified vegetation extent and effective slope
- BAL contour map demonstrating that proposed development areas will achieve BAL–29 or lower
- width and alignment of compliant APZs
- confirmation of how bushfire management will be addressed during development staging
- proposed approach to fuel management or AS 3959 application in response to on-site POS or easements (if and where required)
- vehicular access provisions, including demonstration that a minimum of two access routes will be achieved for each stage of development in accordance with acceptable solution A3.1
- water supply provisions with regards to reticulated water
- future requirements for any future vulnerable land uses, such as provision of a Bushfire Emergency Evacuation Plan
- provisions for notification on Title for any future lots with a rating of BAL–12.5 or greater as a condition of subdivision
- compliance requirements with the current City annual firebreak notice
- requirements for BMP and BAL compliance as conditions of subdivision
- acceptable solutions assessment against the bushfire protection criteria
- proposed implementation and audit program outlining all measures requiring implementation and the appropriate timing and responsibilities for implementation.

On the basis of the information contained in this BMP, Strategen-JBS&G considers the bushfire hazards within and adjacent to the project area and the associated bushfire risk is readily manageable through standard management responses outlined in the Guidelines and AS 3959. Strategen-JBS&G considers that on implementation of the proposed management measures, the project area will be able to be developed with a manageable level of bushfire risk whilst maintaining full compliance with the Guidelines and AS 3959.

7. References

Office of Bushfire Risk Management. (OBRM) 2018, *Map of Bushfire Prone Areas 2017*. Office of Bushfire Risk Management, Perth.

Standards Australia (SA) 2018, *Australian Standard AS 3959–2018 Construction of Buildings in Bushfire-prone Areas*, Standards Australia, Sydney.

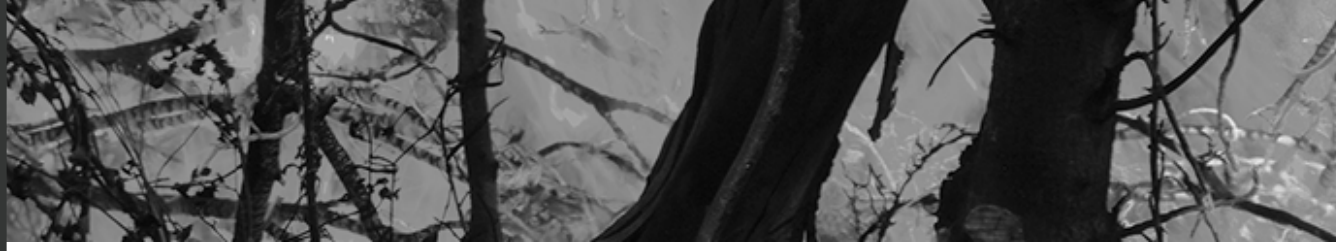
Strategen (2017a). *Bushfire Management Plan – Lot 682 Rowley Road, Mandogalup*, Strategen, Perth.

Strategen (2017b). *Bushfire Management Plan – Mandogalup East Local Structure Plan*, Strategen, Perth.

Western Australian Planning Commission (WAPC) 2015, *State Planning Policy 3.7 Planning in Bushfire-Prone Areas*, Western Australian Planning Commission, Perth.

Western Australian Planning Commission (WAPC) 2017, *Guidelines for Planning in Bushfire-Prone Areas*, Western Australian Planning Commission, Perth.

Appendix 1
Asset Protection Zone standards
(Schedule 1 of the Guidelines)

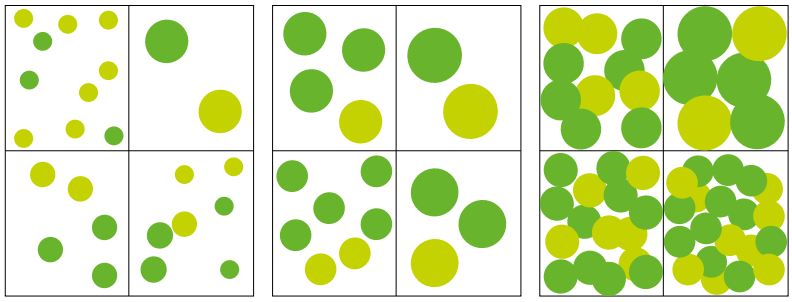


ELEMENT 2: SITING AND DESIGN OF DEVELOPMENT

SCHEDULE 1: STANDARDS FOR ASSET PROTECTION ZONES

- **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 16: Tree canopy cover – ranging from 15 to 70 per cent at maturity



- **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^2 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.

Appendix 2
Georeferenced site photos



Photo 1: Crops located adjacent to western project area boundary. Vegetation has been classified as Class G Grassland as a precautionary measure.



Photo 2: Class G Grassland within western portion of project area.



Photo 3: Row of trees within project area classified as Class B woodland. Vegetation comprises Eucalypts to 10 m in height with a grassy understorey.



Photo 4: Class B Woodland within project area. Vegetation comprises stand of Eucalypts to 10 m in height with a grassy understorey.



Photo 5: Class B Woodland within project area. Vegetation comprises stand of Eucalypts to 10 m in height with a grassy understorey.



Photo 6: Class G Grassland within project area.



Photo 7: Class B Woodland within project area. Vegetation comprises row of Eucalypts to 10 m in height with a grassy understorey.



Photo 8: Class G Grassland within northeast of project area



Photo 9: Class G Grassland (foreground) within northwest of project area



Photo 10: Non-vegetated sandy area within northwest of project area. Excluded in accordance with AS 3959 Clause 2.2.3.2 (e).



Photo 11: Class G Grassland to northwest of project area.



Photo 12: Class B Woodland (banksia woodland) to north of project area.



Photo 13: Class B Woodland (banksia woodland) within northern region of project area.



Photo 14: Class G Grassland within northern region of project area.

Appendix 3
City of Kwinana Fire Breaks Notice
2018/19

Firebreak Variations

If the owner or occupier considers it **impractical to install a firebreak or comply with this notice for any reason**, you are required to apply to the City of Kwinana in writing by **30 October 2018 to obtain approval to install firebreaks in an alternative position.** If the variation is not approved, the owner or occupier must comply with this Notice in its entirety.

Previously approved firebreak variations do not need to be reapplied for unless circumstances have changed, or you have been advised in writing by the Local Government of any changes.

Additional Works

Regardless of land size and location, the City of Kwinana or its Bush Fire Control Officers may require owners and/or occupiers to undertake additional work on your property to improve access, and/or undertake further works to reduce a hazard that may be conducive to preventing the outbreak and/or the spread or extension of a fire.

Burning of Garden Refuse

PROHIBITED BURNING PERIODS ONLY

During the declared Prohibited Burning Period, owners and/or occupiers must not undertake any bush or garden refuse burning activities

RESTRICTED BURNING PERIODS ONLY

During the declared Restricted Burning Period only, owners and/or occupiers may:

- Apply for a permit to burn the bush for bush fire risk mitigation purposes, by following the conditions imposed on a permit to burn as issued by a Bush Fire Control Officer.
- In areas zoned rural by the Metropolitan Region Scheme you may undertake burning of leaves, tree branches, and other dry vegetation in piles no larger than 1.0m³ in size, without a permit to burn, subject to the following conditions:
  - No Flammable Matter (other than that being burned) is to be within five (5) metres of the fire at any time while the fire is burning;
  - The fire is lit between 6pm and 11pm and is completely extinguished before midnight on the same day;
  - At least one person is present at the site of the fire at all times until it is completely extinguished.
  - When the fire is no longer required, the person ensures that the fire is completely extinguished by the application of water or earth.

UNRESTRICTED BURN PERIODS ONLY

During the Unrestricted Burning Time, owners and/or occupiers in areas zoned rural under the Metropolitan Region Scheme may burn garden refuse and set fire to bush on their land without a permit. Burning of the bush must be undertaken in accordance with all relevant State legislation and Local Government Local Laws.

NO BURNING IN AREA DEFINED AS URBAN AREAS

Pursuant to section, 24G (2) of the *Bush Fires Act 1954*, no garden refuse burning is to be undertaken in areas defined as "Urban" under the Metropolitan Region Scheme without **written approval** of Local Government.

For information regarding dates for the Unrestricted, Restricted and Prohibited periods please contact the City of Kwinana City Assist office on 9439 0400 or view the City's website, **www.kwinana.wa.gov.au**.

PENALTIES

Failing to comply with this Fire Notice may result in a penalty of up to $5,000.

A person in default of the requirements of this Notice is also liable, whether prosecuted or not, to pay the costs of performing the work directed by the City of Kwinana or its Bush Fire Control Officer.

Any owner and/or occupier who engages a contractor to undertake works on their behalf is responsible to ensure that the works completed meet the requirements of this Notice.

Maria Cooke,
Acting Chief Executive Officer

City of Kwinana

BUSH FIRES ACT 1954

Fire Notice
City of Kwinana



Pursuant to the powers contained in section 33 of the *Bush Fires Act 1954* (as amended), all property owners and/or occupiers of land within the City of Kwinana are hereby served first and final notice and are required to comply with the requirements set out in this notice in its entirety.

All land and buildings shall be maintained for such duration and in such positions/dimensions and specifications as required by this notice or as approved in writing by the City of Kwinana or its Bush Fire Control Officers. The works outlined in this notice must be completed before the dates listed in this notice and must be maintained throughout as required by this notice.

Definitions

"ASSET PROTECTION ZONE" means an area with a radius of twenty (20) metres measured from the external perimeter of the building/s or as stated in your approved Bushfire Attack Level (BAL) assessment, within the boundaries of the lot on which the building/s is situated. Fuel loads in this zone shall be reduced and maintained to two (2) tonnes per hectare or less.

"BUSH FIRE CONTROL OFFICER" means an Officer appointed by the City of Kwinana to exercise the powers and duties of a Bush Fire Control Officer appointed under s38(1) of the Bush Fires Act 1954.

"BUSH FIRE" means a fire or potential fire, however caused, and includes a fire in a building.

"DEAD END" means a track, firebreak, road or access way that terminates without any means of escape or ability to turn around safely.

"EMERGENCY ACCESS WAYS" are for Emergency Services vehicles only and are not to be considered as an escape route unless declared as such by the Incident Controller during an emergency.

"FIREBREAK" means a strip of land that has been cleared of all trees, bushes, grasses and any other object or thing or vegetation material leaving clear bare mineral earth. This includes the trimming back of all overhanging trees, bushes, shrubs and any other object or thing over the firebreak area.

"FLAMMABLE" means any bush, plant, tree, grass, vegetation, object, thing or material that may or is likely to catch fire and burn.

"TRAFFICABLE" means to be able to travel from one point to another in a fire vehicle on a firm and stable surface, unhindered without any obstruction that may endanger resources. The firebreak must not terminate without provision for egress to a safe place or a cleared turn around area of not less than a twenty one (21) metre radius (prior written approval may be required from the local government if trees are to be removed).

"VERTICAL AXIS" means a continuous vertical uninterrupted line at a right angle to the horizontal line of the firebreak.

Land area – 3,001m² or greater

The works outlined in this section must be completed before 1 December 2018 and continually maintained until 30 April 2019.

Owners and/or occupiers of land that is 3,001m² or greater are required to:

- Construct clear bare mineral earth firebreaks three (3) metres wide inside and along all boundaries of land in a continuous form, or within ten (10) metres of boundaries adjacent to roads, rail and drain reserves and all public open space reserves, with all overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum width of four (4) metres and a vertical axis height of four (4) metres;
- Around all sides of the buildings on the property on the land construct clear bare mineral earth firebreaks three (3) metres wide around all buildings in a continuous form, or within twenty (20) metres of buildings, with all overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum width of four (4) metres and a vertical axis height of four (4) metres;
- On all driveways and access ways to houses, sheds and buildings, maintain clear bare mineral earth surface to a trafficable standard three (3) metres wide in a continuous form, with all overhanging branches, trees, limbs etc. to be trimmed back from over all driveways and access ways to houses, sheds and buildings to a minimum width of four (4) metres and a vertical axis height of four (4) metres;
- On any land surrounding any place where, wood or timber piles, hay stacks, tyres, vehicles, flammable liquids, chemicals and gas products are kept on the land, construct clear bare mineral earth firebreaks three (3) metres wide in a continuous form, with all overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum width of four (4) metres and a vertical axis height of four (4) metres;
- Construct these firebreaks in a manner so that there are no "Dead Ends," with all corners or change in directions wide enough for a heavy-duty fire or emergency services vehicle, to be able to turn the corner without the vehicle being obstructed in any way; and
- Maintain an asset protect zone around all buildings, infrastructure and fixed assets on the property.



Land area – 3,000m² or less

The works outlined in this section must be maintained all year round and owners and/or occupiers are required to;

- Have all matter such as long grass, weeds, etc. slashed, mowed or trimmed down by other means to a height no greater than 50mm across the entire property.
- All overhanging branches, trees, limbs etc. to be trimmed back from over any building area to a minimum width of two (2) metres from the walls and to a vertical axis height of four (4) metres surrounding any building.
- Maintain an asset protect zone around all buildings, infrastructure and fixed assets on the property.



APPENDIX E
HYDROLOGICAL TECHNICAL NOTE

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JDA Ref: J6662b

31 July 2019

APSLEY ESTATE, MANDOGALUP
EPA AREA A – TOWN PLANNING SCHEME AMENDMENT

HYDROLOGICAL NOTE TO SUPPORT REZONING – URBAN DEFERRED TO URBAN

Prepared for: QUBE Property Group Pty Ltd

This Technical Note has been prepared to support a Town Planning Scheme Amendment for part Lot 682 Rowley Road, Mandogalup from Urban Deferred to Urban.

1. BACKGROUND

Lot 682 Rowley Rd, Mandogalup is located within the City of Kwinana, approximately 22 km south of Perth. Part of Lot 682 is located within the Revised Kwinana Industrial (including Air Quality) Buffer and adjacent to the southern side of the Apsley residential estate (Figure 1) and it is this area that is now subject to the Town Planning Scheme (TPS) Amendment.

Water management for the area at the district planning level is presented in the *Mandogalup District Water Management Strategy* (DWMS) (JDA, 2011), commensurate with the *Better Urban Water Management* (WAPC, 2008) framework.

The subject site was previously included in the DWMS Concept Plan as being residential land use, and it is now proposed to rezone it from Urban Deferred to Urban through a TPS Amendment.

The Rezoning Concept Plan by Roberts Day (2019) (Attachment 1) confirms urban residential land use within the TPS Amendment Area, which includes mixed density lots, roads, POS etc. This site will also form the southern extension of the Apsley Estate.

This Hydrological Note reviews the suitability of the approved DWMS in light of changes to the structure plan.

2. DISTRICT WATER MANAGEMENT STRATEGY (JDA, 2011)

In 2011, JDA prepared the *Mandogalup District Water Management Strategy* (DWMS) on behalf of QUBE Property Group and Satterley Property Group for the Mandogalup development cell. The DWMS covered a total of 365 ha which includes the TPS Amendment Area (Figure 1). The DWMS was approved by both the City of Kwinana and the Department of Water (now Department of Water and Environmental Regulation; DWER).

The DWMS outlines key drainage infrastructure including Mandogalup Swamp and the Peel Main Drain. Mandogalup Swamp is a highly modified wetland currently used for intensive horticulture and acts as a regional flood storage area. The Peel Main Drain traverses the site and is the main stormwater conveyance system for the DWMS catchment area (Figure 2).

Key aspects of the surface water management strategy are to ensure existing surface water flow paths, levels, peak flow rates and storage requirements for the site are commensurate with modelling presented in the overarching Jandakot Drainage and Water Management Plan (DWMP) (DoW, 2009). Surface water quality targets are to be achieved through adopting a treatment train approach by implementing best management practices of water sensitive urban design.

The groundwater management strategy is to ensure protection of infrastructure from flooding and inundation by high groundwater levels, protection of groundwater dependent ecosystems, and minimising and managing changes in groundwater level after development. This is achieved through a combination of controlled groundwater levels and importation of clean sand fill.

The key principles and objectives of the DWMS were prepared in accordance with the following documents:

- Better Urban Water Management (WAPC, 2008).
- Jandakot Structure Plan (WAPC, 2007).
- Jandakot Drainage and Water Management Plan (DoW, 2009).
- Liveable Neighbourhoods Edition 4 (WAPC & DPI, 2007).
- Water Quality Improvement Plan for the Rivers and Estuary of the Peel-Harvey System – Phosphorus Management (EPA, 2008).
- State Planning Policy 2.1: Peel-Harvey coastal plan catchment (1992)
- Environmental Protection (Peel-Harvey coastal catchment) Policy (EPP, 1992).
- Peel-Harvey Coastal Catchment: Water Sensitive Urban Design Technical Guidelines (PDC, 2006).
- State Planning Policy No. 2.3: Jandakot Groundwater Protection Policy (WAPC, 1999).

These documents are still currently relevant and therefore no updates to the DWMS key principles and objectives are required.

3. TOWN PLANNING SCHEME AMENDMENT

The Rezoning Concept Plan by Roberts Day (Attachment 1) for the TPS Amendment was compared to the concept plan in the DWMS (Figure 3). A summary and comparison of land uses is presented in Table 1.

Table 1: Land Use Comparison

Land Use	DWMS	TPS Amendment	Difference
Lots	11.52	11.15	-0.37
POS	7.11	6.96	-0.15
Roads	5.27	5.79	0.52
Total	23.90	23.90	

The TPS Amendment concept plan results in a 3% decrease in lot area, 2% decrease in POS area and 10% increase in road area.

As stormwater modelling reported in the DWMS is appropriate for the high-level drainage strategy required at DWMS stage, these land use area changes are considered insignificant in relation to the 365 ha DWMS area.

No updates to the modelling presented in the DWMS are required for the minor changes in land use area associated with the TPS Amendment application.

At the next stage of local structure planning, flood modelling will be refined with more detailed delineation of catchments and will be conducted in accordance to the updated Australian Rainfall and Runoff (2019) and presented in a Local Water Management Strategy.

4. GROUNDWATER MONITORING REVIEW

Extensive pre-development monitoring has been performed across the site between 2004 to 2009, with five P-series bores installed in 2018 to provide additional data. These bores have been monitored in conjunction with local DWER bores. Groundwater bore details are summarised in Table 2 and shown on Figure 4.

Monitoring results from 2004 to 2009 are summarised in the DWMS (JDA, 2011), results from 2007 to 2009 in the *Mandogalup Pre-Development Hydrological Monitoring report* (JDA, 2010) and results from the P-series will be reported in future Better Urban Water Management Plans for the northern portion of Apsley Estate.

No further pre-development groundwater monitoring is required to support the TPS Amendment application.

Table 2: Mandogalup Groundwater Monitoring Bore Details

Bore	MGA94 Coordinates		Top of Casing (m AHD)	GW Level	GW Quality*	Monitoring Period
	Easting	Northing				
JDA Bores						
D1	391871	6438875	27.50	✓	✓	2004 - 2009
D2(s)	391964	6438425	22.11	✓	✓	2004 - 2009
D2(d)	391964	6438424	22.04	✓	✓	2004 - 2009
D3	391342	6437726	26.38	✓	✓	2004 - 2009
D4(s)	391973	6437637	20.06	✓	✓	2004 - 2009
D4(d)	391971	6437636	20.07	✓	✓	2004 - 2009
D5(s)	391267	6437341	13.77	✓	✓	2004 - 2009
D5(d)	391267	6437342	13.81	✓	✓	2004 - 2009
D6(s)	390954	6437416	14.03	✓	✓	2004 - 2009
D6(d)	390955	6437417	14.01	✓	✓	2004 - 2009
D7(s)	390829	6436906	13.78	✓	✓	2004 - 2009
D7(d)	390828	6436906	13.81	✓	✓	2004 - 2009
D8(s)	391837	6436441	14.12	✓	✓	2004 - 2009
D8(d)	391838	6436443	14.18	✓	✓	2004 - 2009
D9(s)	391417	6436082	21.68	✓	✓	2004 - 2009
D9(d)	391413	6436088	21.65	✓	✓	2004 - 2009
D10(s)	391172	6436139	19.66	✓	✓	2004 - 2009
D10(d)	391171	6436142	19.63	✓	✓	2004 - 2009
11	392155	6438840	24.67	✓	✓	2004 - 2009
12	392064	6438431	24.02	✓	✓	2004 - 2009
14	319687	6437406	16.98	✓	✓	2004 - 2009
16	392025	6437114	18.47	✓	✓	2004 - 2009
17	391527	6436880	14.66	✓	✓	2004 - 2009
P01	391669	6437778	17.190	✓	✓	2018 - 2019
P02	391913	6438212	20.831	✓	✓	2018 – 2019
P03	391453	6438031	36.590	✓	✓	2018 – 2019
P04	391941	6437915	20.242	✓	✓	2018 – 2019
P05	391674	6438017	19.883	✓	✓	2018 – 2019
DoW Bores						
JE12C	391650	6438966	37.08	✓	EC	2004 - 2009
JM41	390745	6437278	19.68	✓	EC	2004 - 2009
JM42	393325	6437618	25.80	✓	EC	2004 - 2009
JM49	393968	6439019	26.67	✓	EC	2004 - 2009
T140(O)	390984	6435919	16.465	✓	EC	2004 - 2009

*Comprising EC, pH, nutrients (TN, TKN, NOx_N, NH4_N, TP, FRP) unless otherwise noted

5. SURFACE WATER MONITORING REVIEW

The Peel Main Drain (PMD) is the main stormwater conveyance system for the DWMS catchment area. The PMD flows through Mandogalup Swamp to the south of the TPS Amendment Area before flowing on into the Spectacles Wetland south of Anketell Rd (Figure 2). The PMD outlets at the Serpentine River and into the Peel Harvey Estuary.

Water levels in the PMD were monitored by data logger supplemented by visual estimation of flows by JDA (2010) from April 2007 to March 2009 at 3 sites (Figure 2). Water quality in the PMD was sampled by JDA (2010) between April 2007 and March 2009 when the PMD was flowing. Results from this monitoring program were reported in the *QUBE Land (Mandogalup West) LWMS* (JDA, 2018a) and *Apsley, Mandogalup: Stages 1, 4, 8-13 & 16 UWMP* (JDA, 2018b).

Additional monitoring was undertaken starting October 2018 on request from DWER and the City of Kwinana. Results from this monitoring will be reported in future Better Urban Water Management Plans for the northern portion of Apsley Estate.

No further pre-development surface water monitoring is required to support the TPS Amendment application.

6. CONCLUSION

The key documents and criteria used to guide the DWMS (JDA, 2011), and therefore the principles and objectives outlined in the DMWS, are still currently valid. The DWMS (JDA, 2011) is therefore considered sufficient to support the TPS Amendment application and does not require updating.

Refinement of modelling during the LWMS stage will be performed to take into account changes to the concept plan and ensuring consistency with ARR 2019.

Comprehensive groundwater and surface water monitoring has been undertaken within the vicinity of the site and no further monitoring is required.

If you have any queries, please do not hesitate to contact Matthew Yan or Hilary Chin.

Yours sincerely,

JDA CONSULTANT HYDROLOGISTS

DISCLAIMER

This document is published in accordance with and subject to an agreement between JDA Consultant Hydrologists ("JDA") and the client for whom it has been prepared ("Client"), and is restricted to those issues that have been raised by the Client in its engagement of JDA. It has been prepared using the skill and care ordinarily exercised by Consultant Hydrologists in the preparation of such documents.

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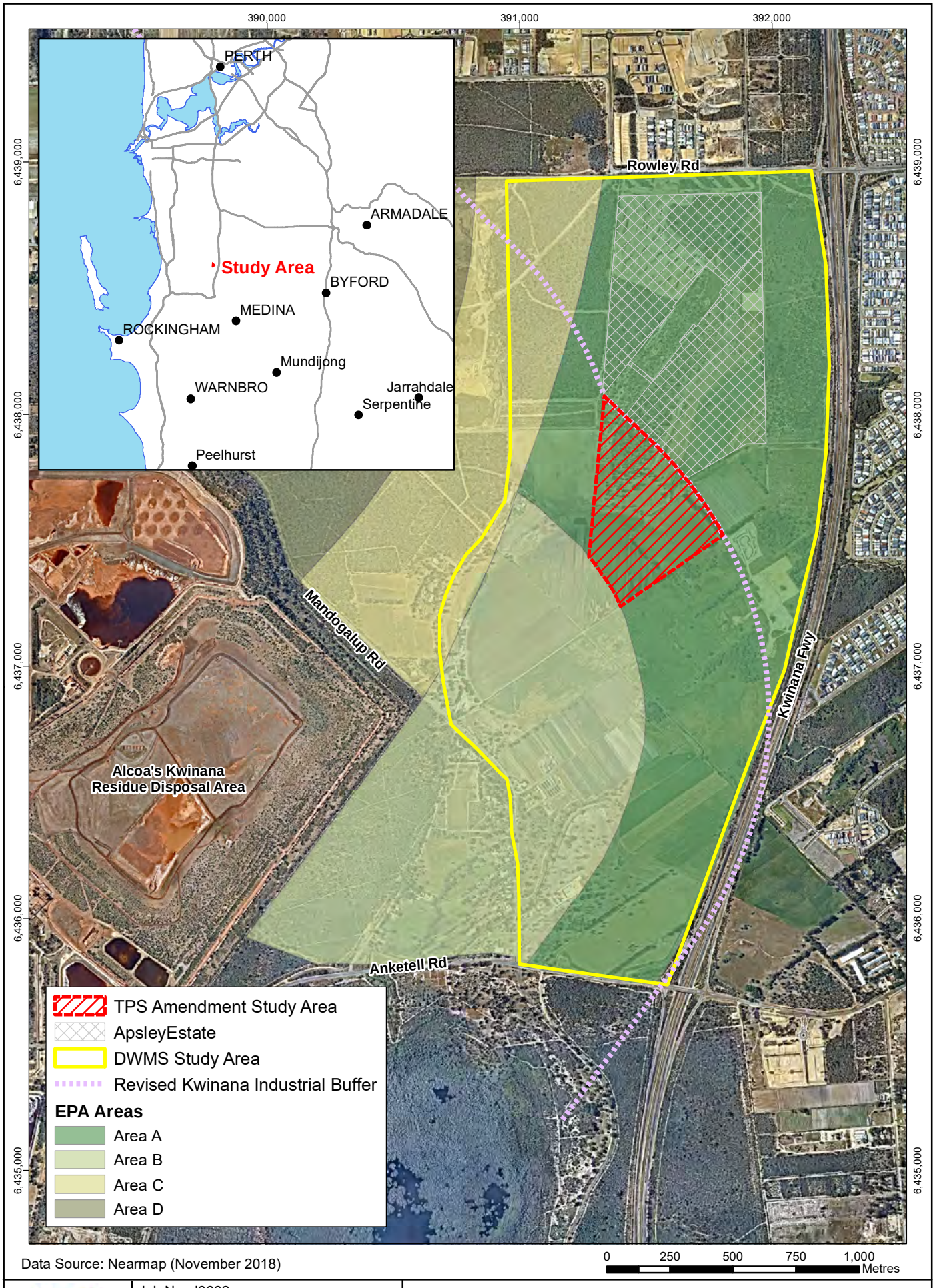
Figures



Data Source: Nearmap (November 2018)

JDA

Job No. J6662
Scale 1:20,000 @A4
Coordinate System: GDA 94, Zone 50
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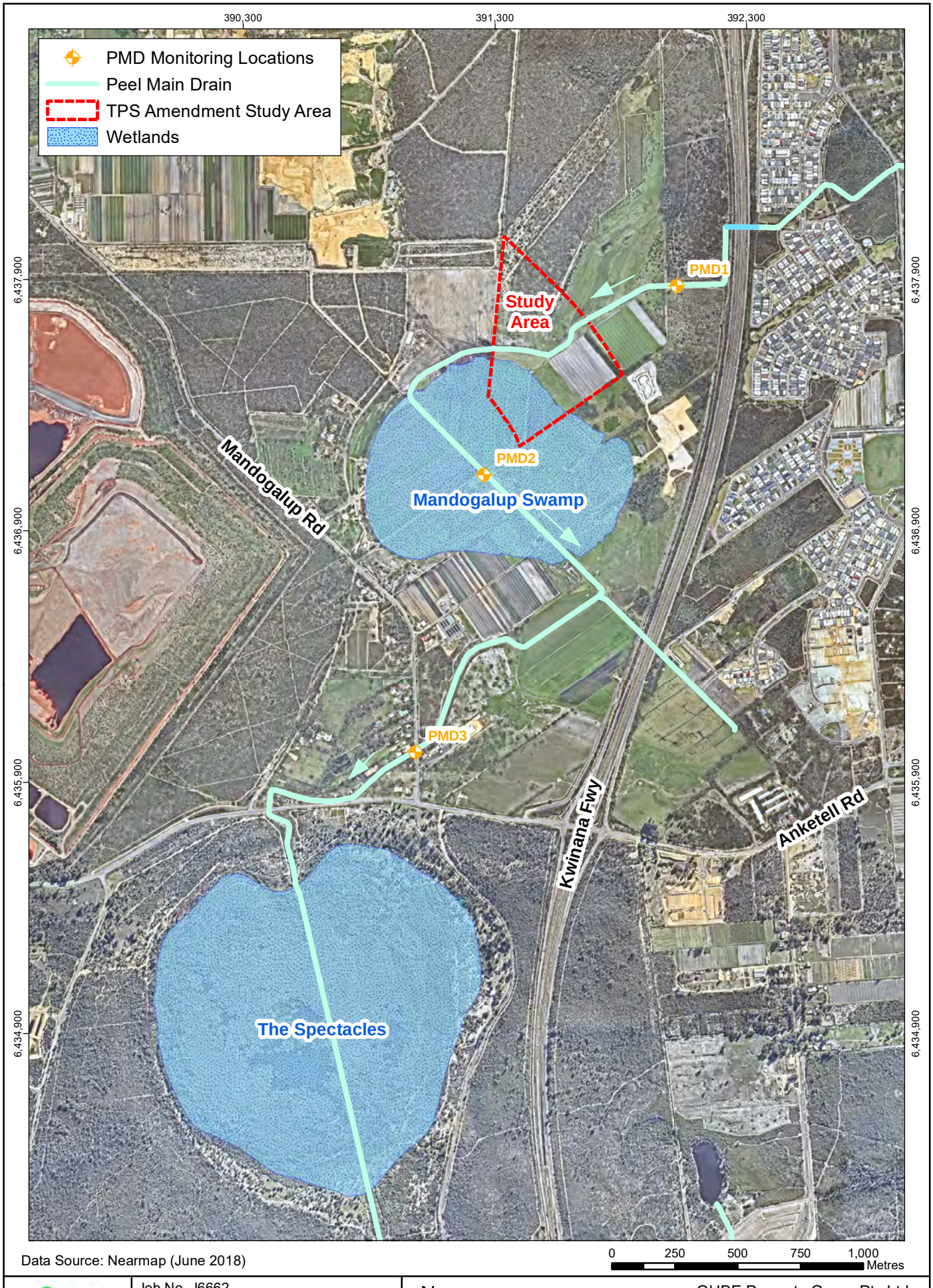
N

Qube Property Group Pty Ltd
Apsley Mandogalup: Hydrological Note

Figure 1: Location



Data Source: Nearmap (June 2018)

JDA

Job No. J6662
Scale 1:20,000 @A4
Coordinate System: GDA 94, Zone 50
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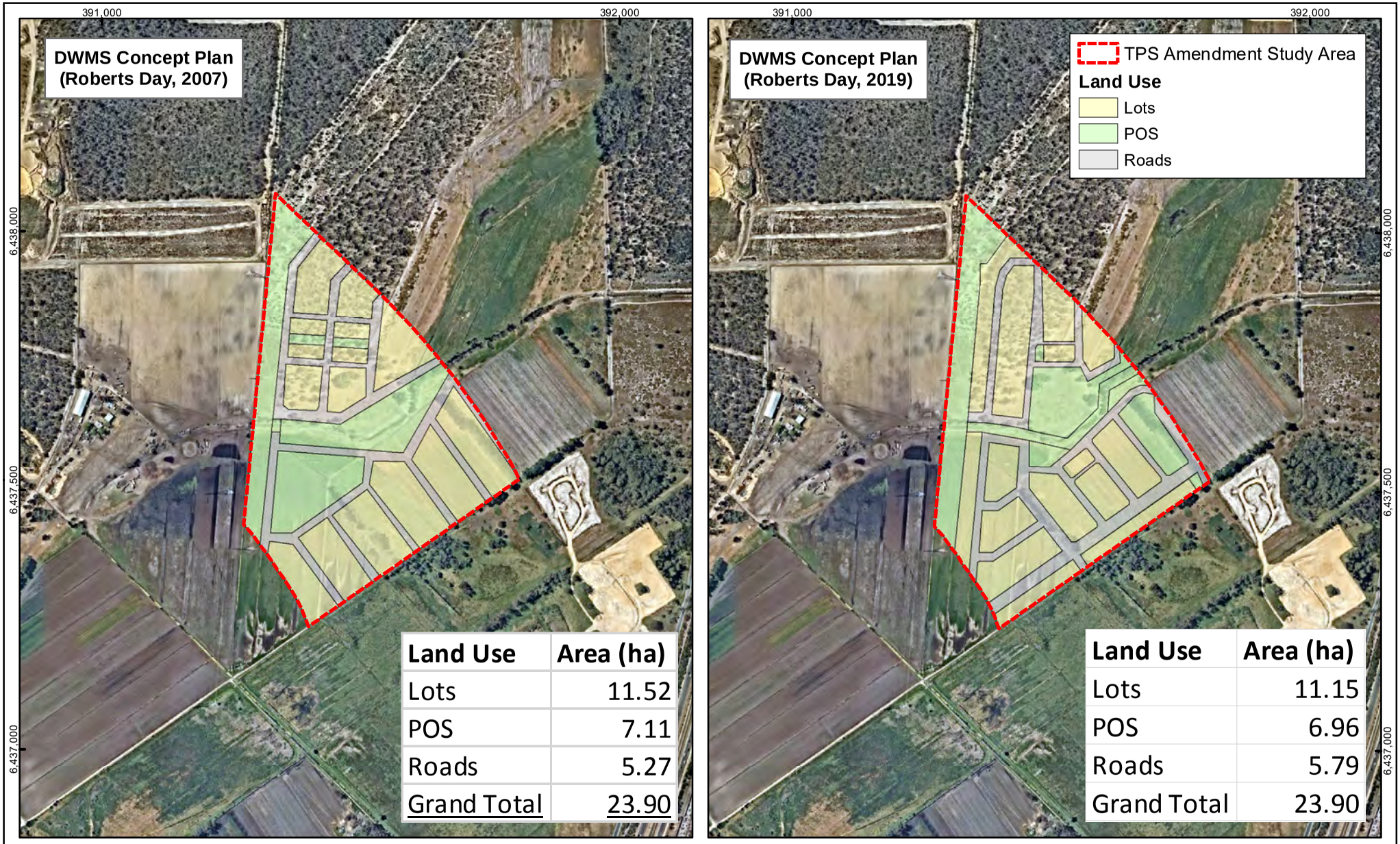
N

QUBE Property Group Pty Ltd
Apsley Mandogalup: Hydrological Note

Figure 2: Surface Water Features and Monitoring Sites



Land Use	Area (ha)
Lots	11.52
POS	7.11
Roads	5.27
Grand Total	23.90

Land Use	Area (ha)
Lots	11.15
POS	6.96
Roads	5.79
Grand Total	23.90

Data Source: Nearmap (November 2018)

Coordinate System: GDA 94, Zone 50

JDA

Job No. J6662
Scale: 1:10,000 @A4

0 100 200 300 400 Metres

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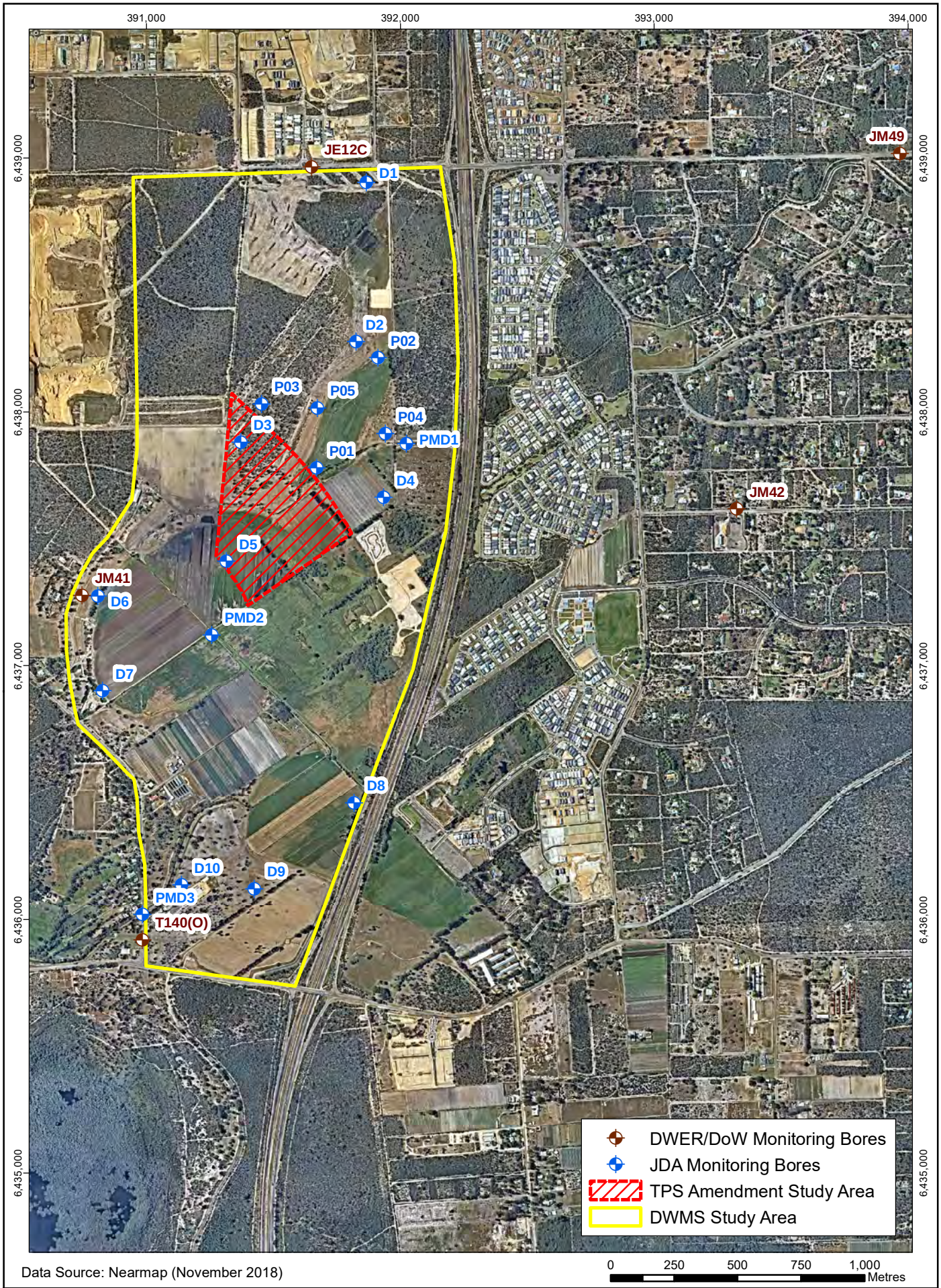
N

Qube Property Group Pty Ltd
Apsley Mandogalup: Hydrological Note
Figure 3: Concept Plan Comparison



Data Source: Nearmap (November 2018)

Job No. J6662
Scale 1:20,000 @A4
Coordinate System: GDA 94, Zone 50
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N

Qube Property Group Pty Ltd
Apsley Mandogalup: Hydrological Note

Figure 4: Monitoring Bores

Attachments

N

ROWLEY ROAD

ROWLEY ROAD

FRANKLAND ROAD

BARFIELD ROAD

FREEWAY

ROAD

ROAD

EPA Area A

EPA Area B

EPA Area C

EPA Area D

HAMMOND ROAD

HAMMOND ROAD

KWINANA

ANKETELL ROAD

LEGEND

- SUBJECT SITE
- PROPOSED DEVELOPMENT ZONE
- EXISTING URBAN (MELSP + MWLSP)
- EXISTING CADASTRE
- INDICATIVE LAYOUT
- EPA BUFFER BOUNDARY
- EPA SECTION 16e ADVICE BOUNDARY AREA A (AUGUST 2017)
- FUTURE URBAN - BALANCE OF EPA SECTION 16e ADVICE AREA A TO BE REZONED AT A LATER DATE
- MANDOGALUP IMPROVEMENT PLAN 47
- DBNGP EASEMENT
- HIGH VOLTAGE POWERLINE EASEMENT
- PEEL MAIN DRAIN
- PLANNING CONTROL AREAS
- RESIDENTIAL (R30- R60)
- PUBLIC OPEN SPACE/DRAINAGE
- PRIMARY SCHOOL
- INTERIM LOCAL CENTRE
- RAILWAY (MRS)
- OTHER REGIONAL ROADS (FUTURE HAMMOND ROAD)
- FUTURE NEIGHBOURHOOD CONNECTOR

CADASTRAL INFORMATION
SOURCE:
YYMMDD:
DWG REF:
PROJECTION:

AERIAL PHOTOGRAPHY
SOURCE:
YYMMDD:

great places

DRAFT

SIZE A3_1:1000

0 metres 10 20 30 40 50

REV	DESCRIPTION	YYMMDD	DRAWN	APPR'D
B	UPDATED LAYOUT	190712	HH	AB
A	BASE PLAN	190709	HH	AB

REZONING CONCEPT PLAN
Mandogalup
City of Kwinana

REF NO.	DRAW NO.	REV.
QUB MAN	**RD1 172**	**B**

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APPENDIX F
TRANSPORTATION NOISE ASSESSMENT

Lloyd George Acoustics
PO Box 717
Hillarys WA 6923
T: 9401 7770
www.lgacoustics.com.au

Transportation Noise Assessment

Proposed Rezoning, Mandogalup (Apsley Estate) to Support Local Planning Scheme Amendment

Reference: 19075084-01b.docx

Prepared for:
Qube

Association of Australasian Acoustical Consultants

Report: 19075084-01b.docx

Lloyd George Acoustics Pty Ltd

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M:	0439 032 844	0400 414 197	0412 611 330	0439 987 455	0457 095 555

This report has been prepared in accordance with the scope of services described in the contract or agreement between Lloyd George Acoustics Pty Ltd and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client, and Lloyd George Acoustics Pty Ltd accepts no responsibility for its use by other parties.

Date:	Rev	Description	Prepared By	Verified
23-Jul-19	0	Issued to Client	Terry George	Matt Moyle
23-Jul-19	A	Update to Fig 1-2 & 1-3. No other changes	Terry George	-
1-Aug-19	B	Client comments	Terry George	-

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3.2 Traffic Data 5

3.3 Ground Attenuation 6

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Appendices

A Terminology

1 INTRODUCTION

Apsley Estate by Qube Property is a future subdivision located in the suburb of Mandogalup, west of the Kwinana Freeway and south of Rowley Road - refer *Figure 1-1* for locality. Between the Qube site and Kwinana Freeway is land being developed by Satterley Property Group.



Figure 1-1 Apsley Estate Site Location

The approved Qube subdivision plan is shown in *Figure 1-2*. It can be seen that the subdivision plan circles an area to the southwest, which is currently zoned as Urban. This report considers the road traffic noise impacts to the recently zoned Urban area, shaded in *Figure 1-3*, to support the Local Planning Scheme Amendment from Rural to Development.

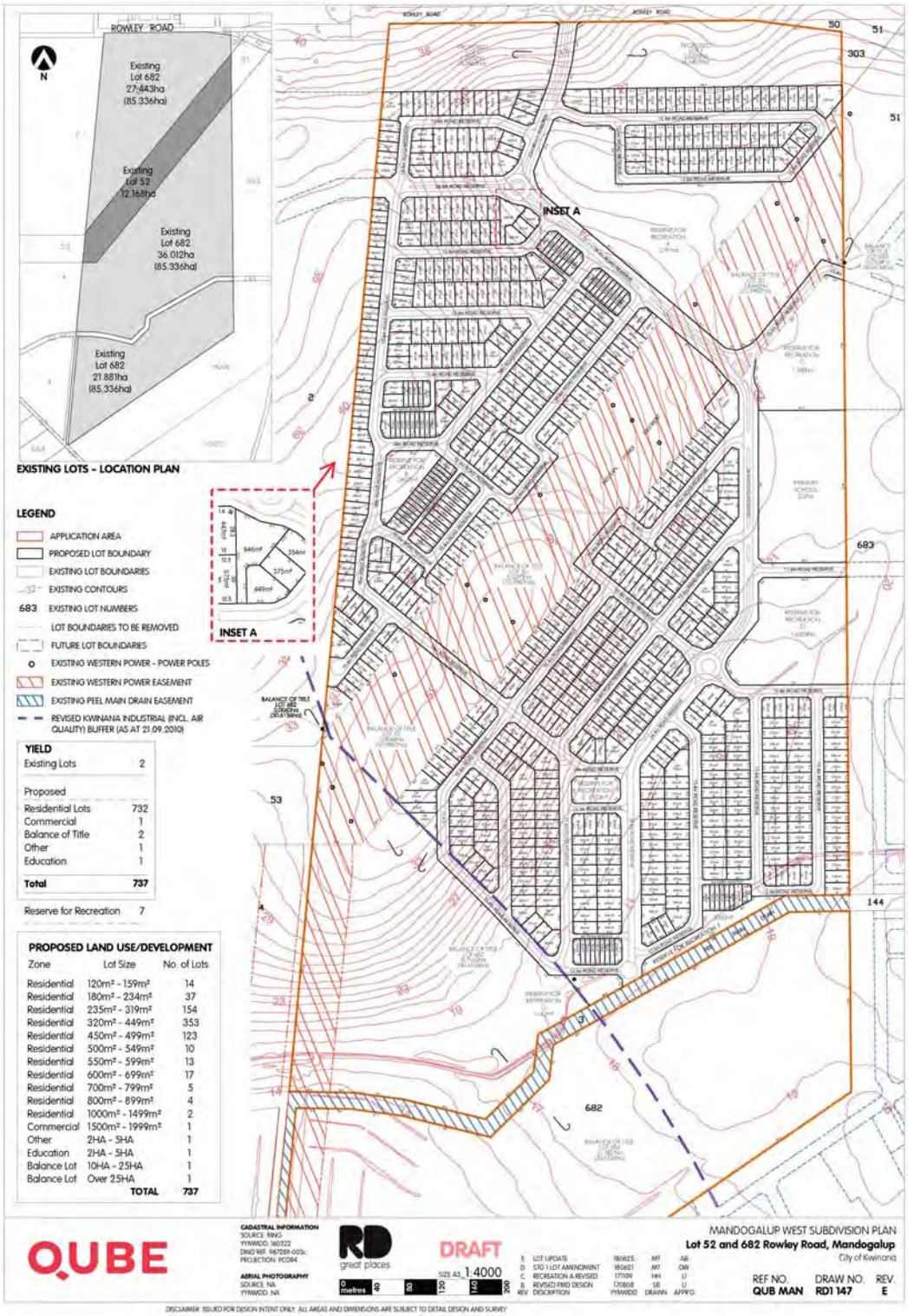


Figure 1-2 Apsley Estate Concept Plan

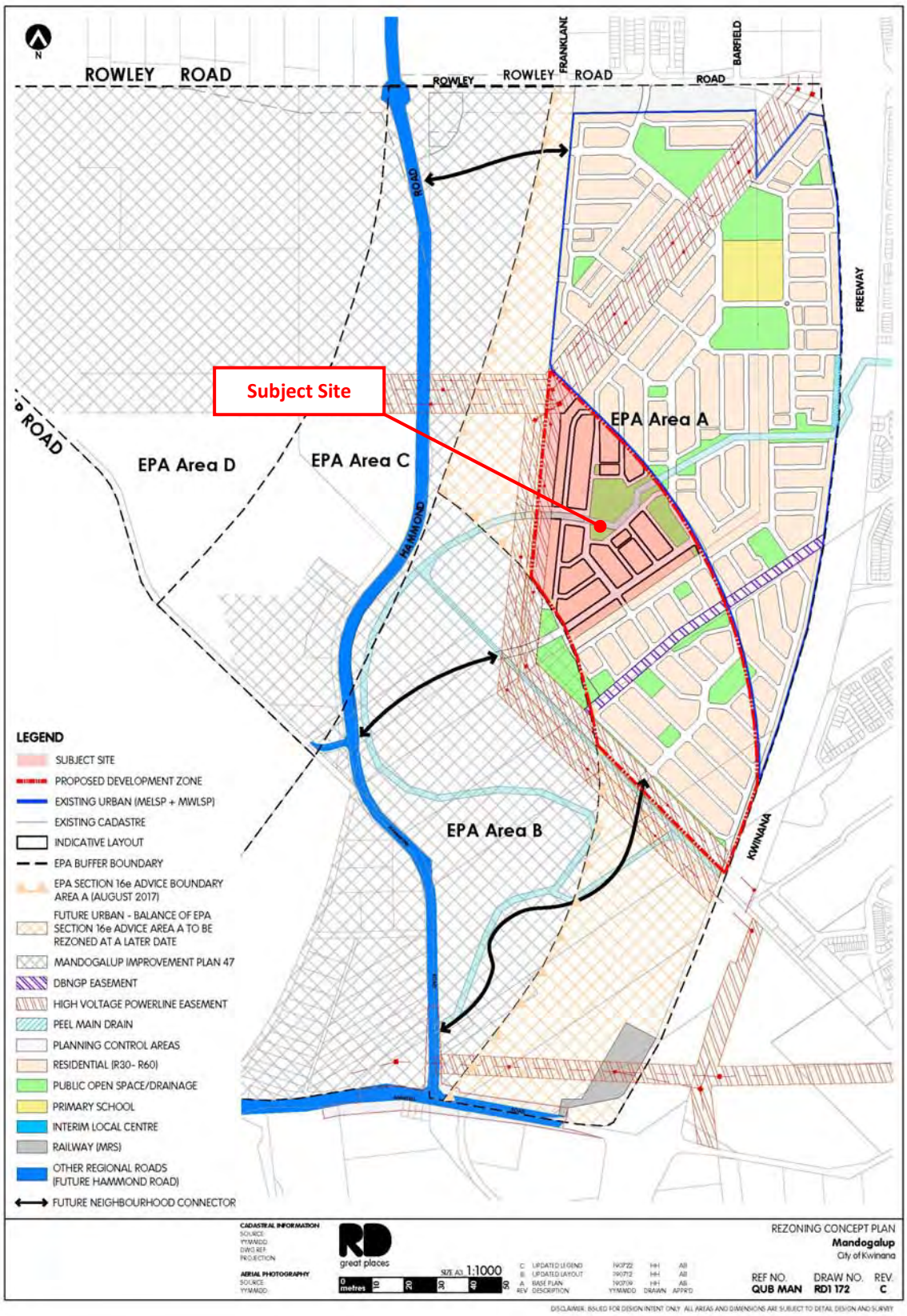


Figure 1-3 Apsley Estate Subject Area

Appendix A contains a description of some of the terminology used throughout this report.

2 CRITERIA

The criteria relevant to this assessment is the *State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning* (hereafter referred to as the Policy) produced by the Western Australian Planning Commission (WAPC). The objectives in the Policy are to:

- Protect people from unreasonable levels of transport noise by establishing a standardised set of criteria to be used in the assessment of proposals;
- Protect major transport corridors and freight operations from incompatible urban encroachment;
- Encourage best practice design and construction standards for new development proposals and new or redevelopment transport infrastructure proposals;
- Facilitate the development and operation of an efficient freight network; and
- Facilitate the strategic co-location of freight handling facilities.

The Policy's outdoor noise criteria are shown in *Table 2-1*. These criteria apply at any point 1-metre from a habitable façade of a noise sensitive premises and in one outdoor living area.

Table 2-1 Outdoor Noise Criteria

Period	Target	Limit
Day (6am to 10pm)	55 dB $L_{Aeq(Day)}$	60 dB $L_{Aeq(Day)}$
Night (10pm to 6am)	50 dB $L_{Aeq(Night)}$	55 dB $L_{Aeq(Night)}$

Note: The 5 dB difference between the target and limit is referred to as the margin.

In the application of these outdoor noise criteria to new noise sensitive developments, the objectives of this Policy is to achieve -

- acceptable indoor noise levels in noise-sensitive areas (e.g. bedrooms and living rooms of houses); and
- a 'reasonable' degree of acoustic amenity in at least one outdoor living area on each residential lot.

If a noise sensitive development takes place in an area where outdoor noise levels will meet the *target*, no further measures are required under this Policy.

In areas where the *target* is exceeded, customised noise mitigation measures should be implemented with a view to achieving the *target* in at least one outdoor living area on each residential lot, or if this is not practicable, within the *margin*. Where indoor spaces are planned to be facing outdoor areas that are above the *target*, mitigation measures should be implemented to achieve acceptable indoor noise levels in those spaces.

For residential buildings, "acceptable indoor noise levels" are taken to be 40 dB $L_{Aeq(Day)}$ in living areas and 35 dB $L_{Aeq(Night)}$ in bedrooms.

3 METHODOLOGY

In November 2017, Lloyd George Acoustics completed a road traffic noise impact assessment to the approved Apsley Estate subdivision (*Transportation Noise Assessment, Mandogalup Subdivision*; Reference: 14113004-01d). This current report therefore uses the same methodology, with any updated information discussed below.

3.1 Ground Topography

To ensure the latest information was used in the model, the finished levels for the Qube site were requested and obtained from Cossill and Webley (email dated 15 July 2019). The same was also requested from Peritas, being the Satterley engineers. The information provided is dated May 2016 and aligns with what was already in the previous noise model. It was confirmed by Satterley that this is the most recent data for their landholdings.

3.2 Traffic Data

The previous model for the approved subdivision, utilised 2031 forecast traffic volumes, as these were the latest available from Main Roads WA at that time. The model has now been updated to consider 2041 traffic volumes, as these are now the latest forecast year available from Main Roads WA. In addition to the 2041 volumes, a validation plot was also provided (Clare Yu, Traffic Modelling Analyst, Reference: #41247, dated 12 July 2019) allowing the modelled traffic volumes to be calibrated as shown in *Table 3-1*.

Table 3-1 2016 Traffic Volume Calibration – Kwinana Freeway

Section	MRWA Model		MRWA Observed		Difference	
	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound
South of Rowley Road	37,600	39,200	47,500	49,700	9,900	10,500

It can be seen from *Table 3-1* that the Main Roads WA model is under-predicting traffic volumes. As such, the modelled 2041 traffic volumes have been adjusted by the identified difference as shown in *Table 3-2*.

Table 3-2 2041 Traffic Volumes – Kwinana Freeway

Section	MRWA Model		Difference from Validation Plot		2041 Calibrated	
	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound
South of Rowley Road	75,800	76,300	9,900	10,500	85,700 (9%)	86,800 (9%)

Note: (9%) refers to the Main Roads WA percentage heavy vehicles used in the model.

3.3 Ground Attenuation

Ground absorption values vary from 0 to 1, with 0 representing hard, reflective surfaces such as water or bitumen and 1 representing absorptive surfaces such as grass. The ground attenuation has been assumed to be 0.2 (20%) within the road reserve, and 0.6 (60%) elsewhere across the study area, except for public open spaces, which are set to 1.00 (100%).

3.4 Parameter Conversion

The CoRTN algorithms used in the *SoundPLAN* modelling package were originally developed to calculate the $L_{A10,18hour}$ noise level. However, the WAPC Policy uses the parameters $L_{Aeq(Day)}$ and $L_{Aeq(Night)}$ (refer *Table 2.1*). Therefore an adjustment needs to be made to the predicted $L_{A10,18hour}$ noise level to enable the noise modelling results to be compared to the allowable $L_{Aeq(Day)}$ and $L_{Aeq(Night)}$ traffic noise criteria. The relationship between these parameters varies depending on the composition of traffic on the road (the volumes during each time period and the percentage of heavy vehicles).

As part of the study for the Satterley land to the east, ATP Consulting Engineers undertook noise measurements on the site (*Road & Railway Noise Assessment, Mandogalup East Local Structure Plan, Mandogalup*; ATP140414-R-TNIA-04, November 2016). As part of the earlier work, the ATP study was shared between parties to ensure consistency. An extract from the ATP report is shown in *Figure 3-1*, resulting in the $L_{Aeq(Day)}$ being 1 dB less than the $L_{A10,18hour}$ and the $L_{Aeq(Night)}$ being 7 dB less than the $L_{Aeq(Day)}$. Therefore, these differences have been applied in this current study. Given the $L_{Aeq(Day)}$ is at least 5 dB more than the $L_{Aeq(Night)}$, the $L_{Aeq(Day)}$ parameter will determine compliance or otherwise.

Date	$L_{A10(18\text{-}hour)}$* dB(A)	$L_{Aeq(16\text{-}hour)}$* dB(A)	$L_{Aeq(8\text{-}hour)}$* dB(A)
8 July 2013 (Monday)	63	62	56
9 July 2013 (Tuesday)	64	63	55
10 July 2013 (Wednesday)	63	62	55
11 July 2013 (Thursday)	63	62	54
12 July 2013 (Friday)	63	61	55
Average	**63**	**62**	**55**

**Free-field*

Figure 3-1 Extract from ATP Report (Kwinana Freeway)

4 RESULTS

The results of the 2041 road traffic noise modelling are provided in *Figure 4-1* by way of a noise contour plot. Note that this includes a 4-metre high wall along the boundary of the Satterley subdivision, as recommended by ATP Consulting Engineers, as part of their noise study with Satterley Property Group. It also includes future residential dwellings as part of the Qube and Satterley subdivisions, since these also provide attenuation between the road and subject site.

5 ASSESSMENT

The objectives of the criteria are for noise at all houses to be no more than the *limit* and preferably no more than the *target*. Where the *target* is achieved, no further controls are required. Where the *target* is exceeded, further controls are necessary.

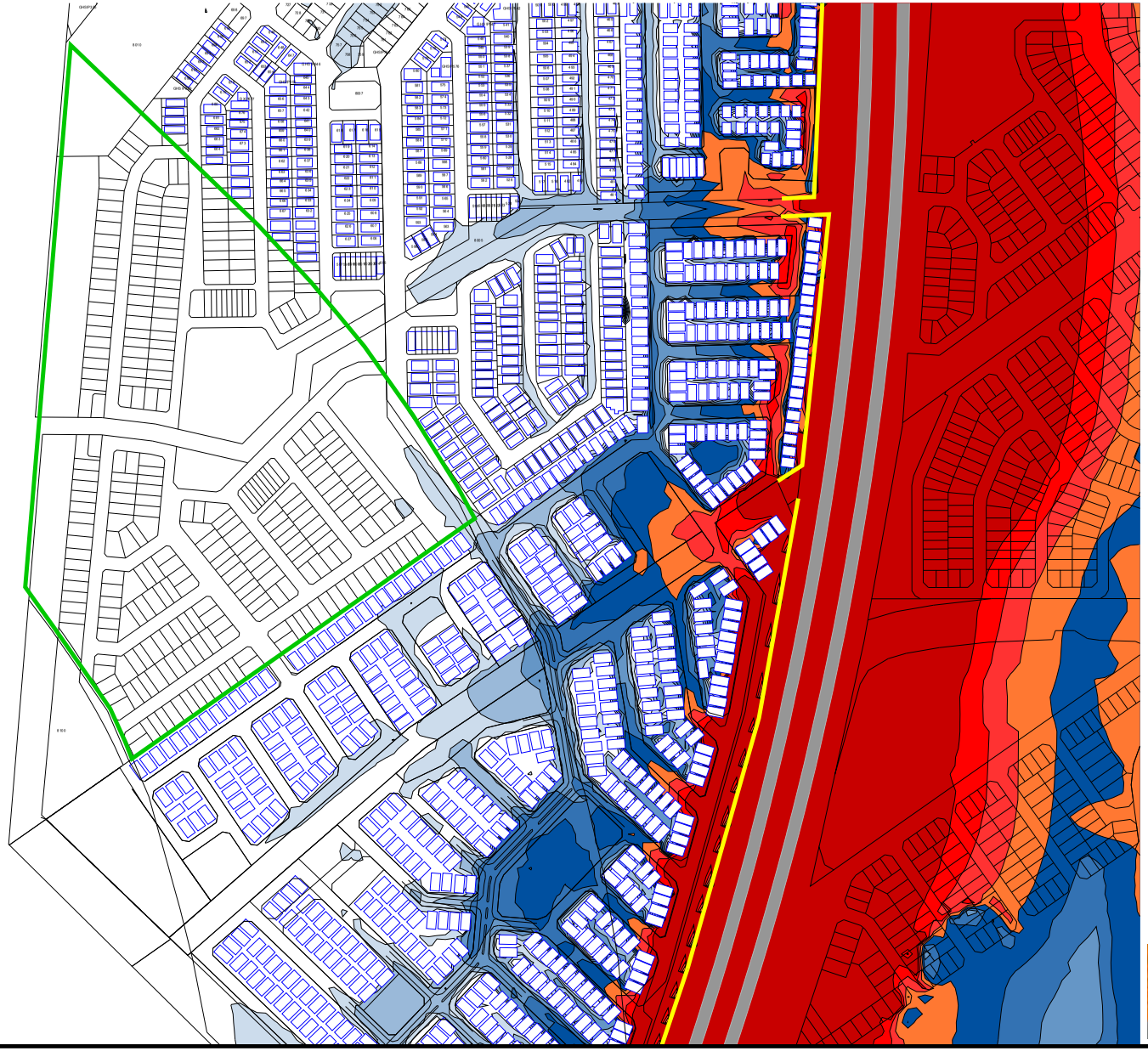
The results of *Figure 4-1* indicate that noise levels at the subject site (recently zoned Urban in April 2019) within the Qube site are below the *target*. As such, compliance is achieved with *State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning* and no further noise controls necessary to support the Local Planning Scheme Amendment from Rural to Development.

Mandogalup Residential Subdivision: Apsley Urban Deferred Zone

$L_{Aeq(Day)}$ Noise Level Contours - Future 2041

Includes 4m High Noise Wall Along Kwinana Freeway and Satterley Subdivision Buildings

Figure 4-1



Noise levels

$L_{Aeq,day}$ dB

	< 55
55 <=	< 56
56 <=	< 57
57 <=	< 58
58 <=	< 59
59 <=	< 60
60 <=	< 61
61 <=	< 62
62 <=	< 63
63 <=	

N

Signs and symbols

- Road Lanes
- Building
- Subject Site
- Wall by Satterley's

18 July 2019

Length Scale 1:7500

0 37.5 75 150 225 300 m

Lloyd George Acoustics
by Terry George
terry@lgacoustics.com.au
(08) 9401 7770

Appendix A

Terminology

The following is an explanation of the terminology used throughout this report.

Decibel (dB)
The decibel is the unit that describes the sound pressure and sound power levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

A-Weighting
An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as L_A dB.

L_1
An L_1 level is the noise level which is exceeded for 1 per cent of the measurement period and is considered to represent the average of the maximum noise levels measured.

L_{10}
An L_{10} level is the noise level which is exceeded for 10 per cent of the measurement period and is considered to represent the "*intrusive*" noise level.

L_{90}
An L_{90} level is the noise level which is exceeded for 90 per cent of the measurement period and is considered to represent the "*background*" noise level.

L_{eq}
The L_{eq} level represents the average noise energy during a measurement period.

$L_{A10,18hour}$
The $L_{A10,18\ hour}$ level is the arithmetic average of the hourly L_{A10} levels between 6.00 am and midnight. The *CoRTN* algorithms were developed to calculate this parameter.

$L_{Aeq,24hour}$
The $L_{Aeq,24\ hour}$ level is the logarithmic average of the hourly L_{Aeq} levels for a full day (from midnight to midnight).

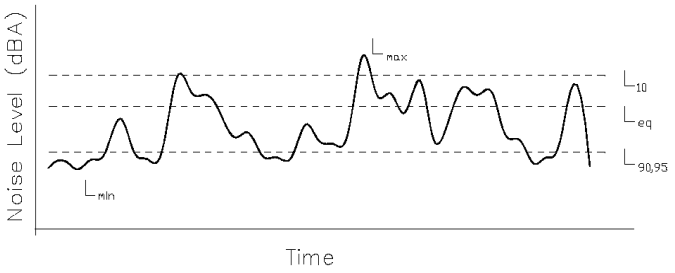
$L_{Aeq,8hour}$ / $L_{Aeq\ (Night)}$
The $L_{Aeq\ (Night)}$ level is the logarithmic average of the hourly L_{Aeq} levels from 10.00 pm to 6.00 am on the same day.

$L_{Aeq,16hour}$ / $L_{Aeq\ (Day)}$
The $L_{Aeq\ (Day)}$ level is the logarithmic average of the hourly L_{Aeq} levels from 6.00 am to 10.00 pm on the same day. This value is typically 1-3 dB less than the $L_{A10,18hour}$.

Satisfactory Design Sound Level
The level of noise that has been found to be acceptable by most people for the environment in question and also to be not intrusive.

Maximum Design Sound Level
The level of noise above which most people occupying the space start to become dissatisfied with the level of noise.

Chart of Noise Level Descriptors



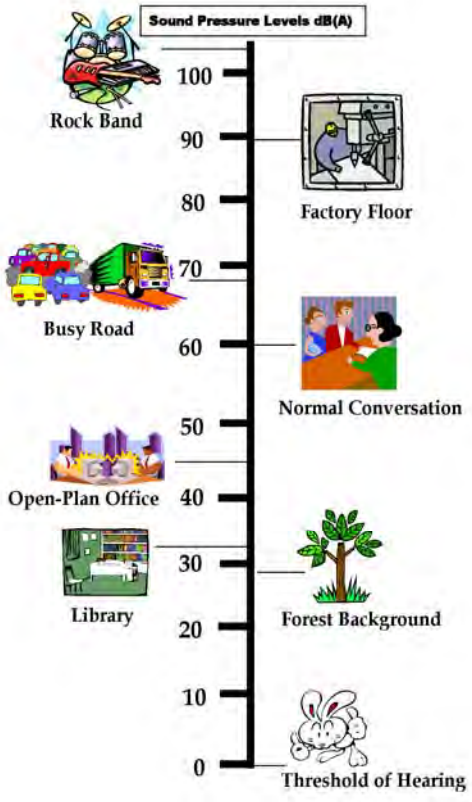
Austroads Vehicle Class

AUSTROADS Vehicle Classification System

Level 1 Length (indicative) Type	Level 2 Axles and Axle Groups Axles	Groups	Level 3 Vehicle Type Typical Description	AUSTROADS Classification Class	Parameters	Typical Configuration
			LIGHT VEHICLES			
Short up to 5.5m		1 or 2	Short Sedan, Wagon, 4WD, Utility, Light Van, Bicycle, Motorcycle, etc	1	d(1) ≤ 3.2m and axles = 2	
	3, 4 or 5	3	Short - Towing Trailer, Caravan, Boat, etc	2	groups = 3 d(1) ≥ 2.1m, d(1) ≤ 3.2m, d(2) ≥ 2.1m and axles = 3, 4 or 5	
			HEAVY VEHICLES			
Medium 5.5m to 14.5m	2	2	Two Axle Truck or Bus	3	d(1) > 3.2m and axles = 2	
	3	2	Three Axle Truck or Bus	4	axles = 3 and groups = 2	
	> 3	2	Four Axle Truck	5	axles > 3 and groups = 2	
Long 11.5m to 19.0m	3	3	Three Axle Articulated Three axle articulated vehicle, or Rigid vehicle and trailer	6	d(1) > 3.2m, axles = 3 and groups = 3	
	4	> 2	Four Axle Articulated Four axle articulated vehicle, or Rigid vehicle and trailer	7	d(2) < 2.1m or d(1) < 2.1m or d(1) > 3.2m axles = 4 and groups > 2	
	5	> 2	Five Axle Articulated Five axle articulated vehicle, or Rigid vehicle and trailer	8	d(2) < 2.1m or d(1) < 2.1m or d(1) > 3.2m axles = 5 and groups > 2	
	> 6	> 2	Six Axle Articulated Six axle articulated vehicle, or Rigid vehicle and trailer	9	axles = 6 and groups > 2 or axles = 6 and groups = 3	
Medium Combination 17.5m to 36.5m	> 6	4	B Double B Double, or Heavy truck and trailer	10	groups = 4 and axles > 6	
	> 6	5 or 6	Double Road Train Double road train, or Medium articulated vehicle and one dog trailer (M.A.D.)	11	groups = 5 or 6 and axles > 6	
Large Combination Over 33.0m	> 6	> 6	Triple Road Train Triple road train, or Heavy truck and three trailers	12	groups > 6 and axles > 6	

Definitions: Group: Axle group, where adjacent axles are less than 2.1m apart. Groups: Number of axle groups. Axles: Number of axles (maximum axle spacing of 10.0m). d(1): Distance between first and second axle. d(2): Distance between second and third axle.

Typical Noise Levels



APPENDIX G
CERTIFICATE OF TITLE

WESTERN AUSTRALIA

REGISTER NUMBER	
9000/DP416063	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
N/A	**N/A**

VOLUME **2969** FOLIO **180**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

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

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 9000 ON DEPOSITED PLAN 416063

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

GRETA WHITE PTY LTD OF CARE OF FRANCIS A JONES 154 HIGH STREET FREMANTLE WA 6160
IN 1/12 SHARE
JJ WHITE PTY LTD OF 67 MANDOGALUP ROAD MANDOGALUP WA 6167
IN 1/12 SHARE
QUBE MANDOGALUP DEVELOPMENT PTY LTD OF SUITE 3 LEVEL 1 437 ROBERTS ROAD SUBIACO WA 6008
IN 10/12 SHARE
AS TENANTS IN COMMON

(AF O172403) REGISTERED 18/7/2019

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

1. *C010720 EASEMENT TO STATE ENERGY COMMISSION OF WA FOR ELECTRICITY TRANSMISSION WORKS PURPOSES - SEE DEPOSITED PLAN 416063 REGISTERED 20/10/1980.
2. *N225349 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA REGISTERED 13/1/2016.
3. *EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR SEWERAGE PURPOSES TO WATER CORPORATION - SEE DEPOSITED PLAN 416063
4. *O172410 EASEMENT TO CITY OF KWINANA FOR PUBLIC ACCESS PURPOSES - SEE DEPOSITED PLAN 416063 REGISTERED 18/7/2019.
5. *O172412 CAVEAT BY WANDI ANKETELL HOLDINGS PTY LTD LODGED 18/7/2019.

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: DP416063
PREVIOUS TITLE: 2892-458

END OF PAGE 1 - CONTINUED OVER

LANDGATE COPY OF ORIGINAL NOT TO SCALE 24/07/2019 03:19 PM Request number: 59632006

Landgate
www.landgate.wa.gov.au

REGISTER NUMBER: 9000/DP416063 VOLUME/FOLIO: 2969-180 PAGE 2

PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AUTHORITY: CITY OF KWINANA

NOTE 1: M098732 DEPOSITED PLAN 74076 LODGED (INTEREST ONLY)
NOTE 2: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING M225349

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17.4 Request to amend Local Planning Scheme No. 2 to rezone portions of Lots 11, 9002, 9006 and 9033 Hoffman Road, Mandogalup from 'Rural A' to 'Development'

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

The City of Kwinana (City) has received a request from the owners of Lots 11, 9002, 9006 and 9033 Hoffman Road, Mandogalup (Satterley Property Group), seeking that Council progress an amendment to rezone Lots 11, 9002, 9006 and 9033 Hoffman Road, Mandogalup from 'Rural A' to 'Development' under Section 75 of the *Planning and Development Act 2005* (PD Act). The request made by the landowners is that Council progress the Local Planning Scheme No 2 (LPS2) Amendment itself and do so as a 'basic' scheme amendment under the *Planning and Development (Local Planning Schemes) Regulations 2015* (PD Regulations).

Should Council choose to progress such an amendment, the 'Development' zone would allow the subject area to be subdivided and developed once a local structure plan has been adopted in accordance with the process set out in the PD Regulations.

Council has previously provided advice and recommendations in relation to the subject area and these matters are described in this report:

- Mandogalup East Local Structure Plan
  (Adopted by Western Australian Planning Commission - March, 2018)
- Mandogalup West Local Structure Plan
  (Adopted by Western Australian Planning Commission - March, 2018)
- Metropolitan Region Scheme Lifting of Urban Deferment
  (Council provided comments to Western Australian Planning Commission – June, 2018)
- Local Planning Policy 12 – Mandogalup Future Development
  (Adopted by Council - June, 2018)
- Draft Improvement Plan 47
  (Council provided comments to Western Australian Planning Commission – August, 2018)
- Peer Review of the Mandogalup Dust Assessment
  (Council provided comments to Western Australian Planning Commission – June, 2019)

City Officers are of the view that the Amendment is not a 'basic' amendment and should be considered as a 'Complex' amendment under the PD Regulations. A complex amendment should be supported by considerable and comprehensive supporting documentation. This is not the case with this request where no details are provided to support the amendment.

It is also considered that an amendment is premature and Council should not progress an amendment until Improvement Plan 47 (IP47) has proceeded to a point where options for medium to long term structure planning for the Mandogalup locality are known and have been carefully considered by the City and State Government. Proceeding with an amendment ahead of an integrated structure plan for the Mandogalup locality is likely to result in poor planning outcomes.

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

In this respect, representatives of the Western Australian Planning Commission (WAPC) have advised City Officers that the technical studies for the Improvement Plan for IP47 are underway and that community workshops are anticipated for March 2020. Further, land use planning options are likely to be released in June 2020.

Therefore, it is recommended that the request to amend Local Planning Scheme No. 2 not be undertaken until such time as the wider planning implications for the Mandogalup area are known.

OFFICER RECOMMENDATION:

That Council determine the following in respect to the request to amend Local Planning Scheme No. 2 (LPS2) to rezone portions of Lots 11, 9002, 9006 and 9033 Hoffman Road (the subject lots), Mandogalup from 'Rural A' to 'Development':

1. That it does not to proceed with a scheme amendment pursuant to the regulations of the *Planning and Development (Local Planning Scheme) Regulations 2015* (PD Regulations) for the following reasons:-

    a) That piecemeal rezoning of land in the Mandogalup locality is not appropriate until there is clarity and certainty with medium to long term land uses and planning outcomes in the Mandogalup locality;

    b) Following the approval of an amendment for the subject lots, a proposed local structure plan for the subject area could be lodged with the City pursuant to the PD Regulations ahead of the consideration of structure plan options for Improvement Plan 47; and

    c) That an amendment should not be advertised until medium to long term structure planning for the Mandogalup locality has been carefully considered by the City and State Government in an integrated manner, including Improvement Plan 47. In this respect, representatives of the Western Australian Planning Commission (WAPC) have advised that the technical planning reports have already commenced for the Improvement Plan 47 area and that following community consultation in February 2020, land use planning options for the locality will be made available by June 2020.

2. Advise the WAPC that, pursuant to Regulation 35(2) of the *Planning and Development (Local Planning Scheme) Regulations 2015,* the amendment to LPS2 is complex for the following reasons:

    a) It is an amendment that is not addressed by any local planning strategy; and,
    b) It is an amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality

3 Provide a copy of Council's resolution to the Western Australian Planning Commission within 21 days of the resolution.

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

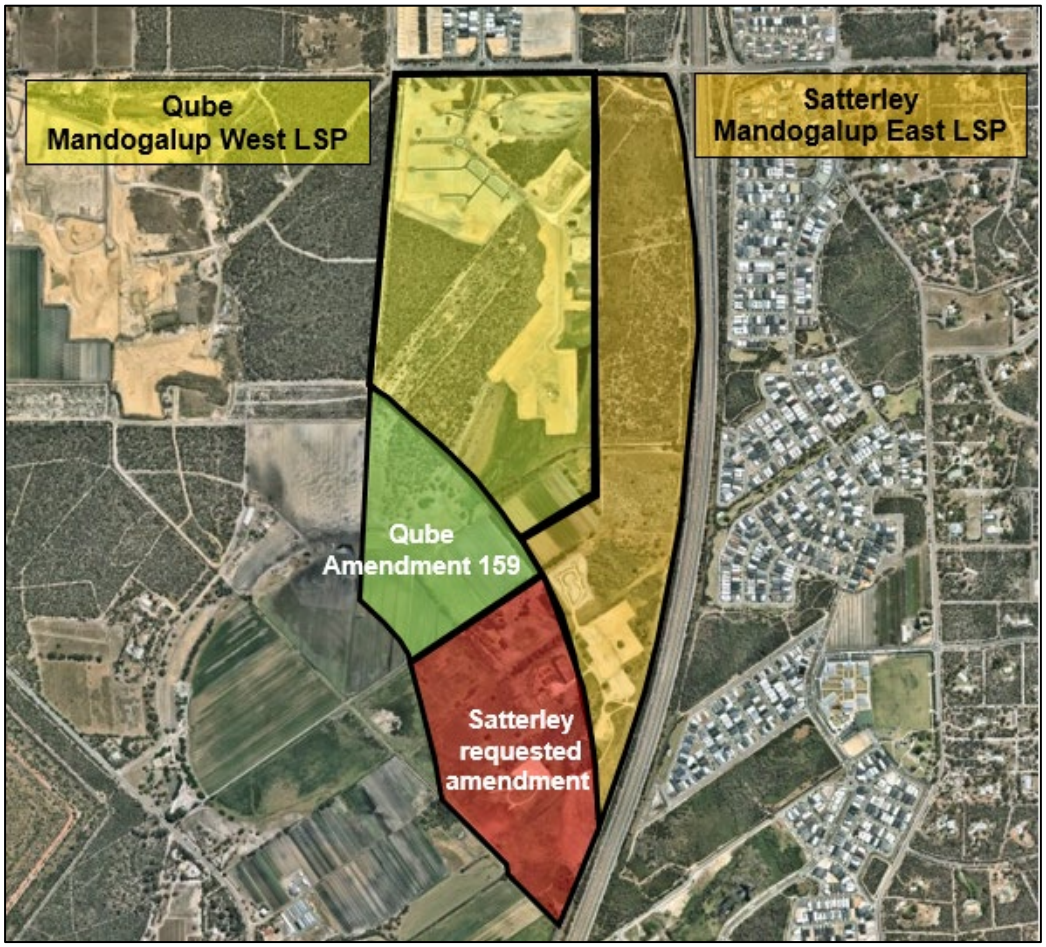
PROPOSAL:

A request from the owners of Lots 11, 9002, 9006 and 9033 Hoffman Road, Mandogalup (Satterley Property Group) has been received, seeking that Council progress an amendment to rezone Lots 11, 9002, 9006 and 9033 Hoffman Road, Mandogalup from 'Rural A' to 'Development' under Section 75 of the *Planning and Development Act 2005* (PD Act).

The subject land is located within the Mandogalup Urban Cell, encompasses approximately 32.5 hectares and is situated south of Rowley, north of Anketell Road and west of the Kwinana Freeway. The subject land is located to the south-west of the existing Satterley Group Mandogalup East Local Structure Plan area and south of the Qube Mandogalup East Local Structure Plan, as shown in red below (Figure 1).

By amending the land to 'Development' under Local Planning Scheme 2 (LPS2) a local structure plan can be lodged, following which subdivision and development may proceed.

Figure 1: Locality map



BACKGROUND:

The request to initiate an amendment to rezone portions of Lots 11, 9002, 9006 and 9033 Hoffman Road, Mandogalup from 'Rural A' to 'Development' comes in the wake of a complex history of buffer reviews, strategic planning and scheme amendments spanning approximately 20 years. Recent events and State and Council decisions leading to the request for the amendment are summarised below:

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Jandakot Structure Plan and draft Eastern Residential Intensification Concept

The Mandogalup Urban Cell was identified in the Jandakot Structure Plan (JSP), which was prepared by the WAPC in 2001 and adopted in 2007. The City prepared a more detailed plan titled the Eastern Residential Intensification Concept (ERIC) (2005), based on the broad land uses identified in the JSP. The JSP and ERIC plans identified potential residential areas and air quality buffers in the Mandogalup Urban Cell.

In December 2009, the then Minister for Planning approved the rezoning of an area of land within Mandogalup from 'Rural' to 'Urban Deferred' under the MRS, based on ERIC.

In March 2014, the then Minister for Planning determined to lift the 'Urban Deferred' zoning and apply an 'Urban' zoning to much of the land situated outside the then 1.5 kilometre air quality buffer established by the WAPC. This 'Urban' zoned land is the subject of the Mandogalup West and Mandogalup East Local Structure Plans (Figure 4) which have been adopted by the WAPC.

A portion of land within the 1.5km buffer remained as 'Urban Deferred', and it is this land that is the subject of the proposed amendment.

EPA advice to Minister for Environment - Potential health and amenity impacts

In June 2017, the EPA provided advice to the Minister for Environment on the potential health and amenity impacts of dust in determining the size of a buffer in the Mandogalup area (referred to as the EPA's buffer report). The EPA's advice divided Mandogalup into four areas (A, B, C and D) based on air quality (Figure 2).

The proposed amendment is situated within Area A which is described by the EPA as being located "sufficiently far away from the Alcoa Residue Disposal Area (RDA), and outside the predominant wind field that generates dust from the RDA, that there is negligible health risk or likelihood of unreasonable amenity impacts in this area from RDA dust".

The EPA also advised the Minister for Environment of potential non-compliances of the revised National Environmental Protection Measures (NEPM) air quality standards in the north and north-east Mandogalup area (Areas C and D), near RDA.

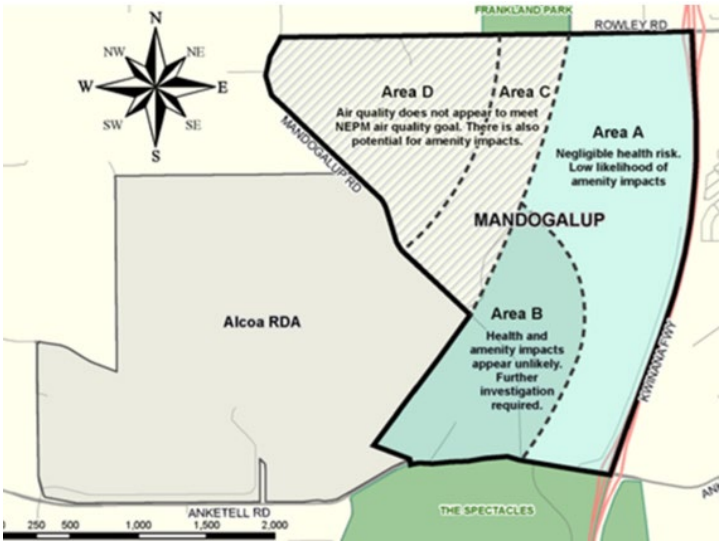


Figure 2: EPA's advice – air quality areas

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

The EPA requested that DWER carry out investigations in Area B to assess health and amenity impacts in the Mandogalup area and assess corrective actions for non-compliance with the NEPM.

Local Planning Policy 12 - Mandogalup Future Development (LPP12)
LPP12 sets out Council's position with respect to land uses and key principles for planning across the entire Mandogalup Urban Cell (including the area the subject of IP47). It provides guidance to landowners, developers and decision makers to ensure that future development, zoning and structure planning in Mandogalup occurs in a manner consistent with orderly and proper planning of the locality.

Council prepared LPP12 because there was limited guidance from the State Government for strategic planning in the Mandogalup Urban Cell. The State Government did not resolve to prepare IP47 until May 2018 and did not publish the South Metropolitan Peel Sub-regional Framework until May 2018. LPP12 was advertised in November 2017 and adopted by the City in June 2018.

LPP12 identifies the western part of the amendment area as a 'Transition' area and the balance of the amendment area as 'Residential' (Figure 3). The 'Transition' area is intended to provide a suitable interface between the residential area and potential industrial land uses (as identified in the South Metropolitan Peel Sub-regional Framework) where residential and light industrial uses may be provided for on the same 5,000m^2 lot.

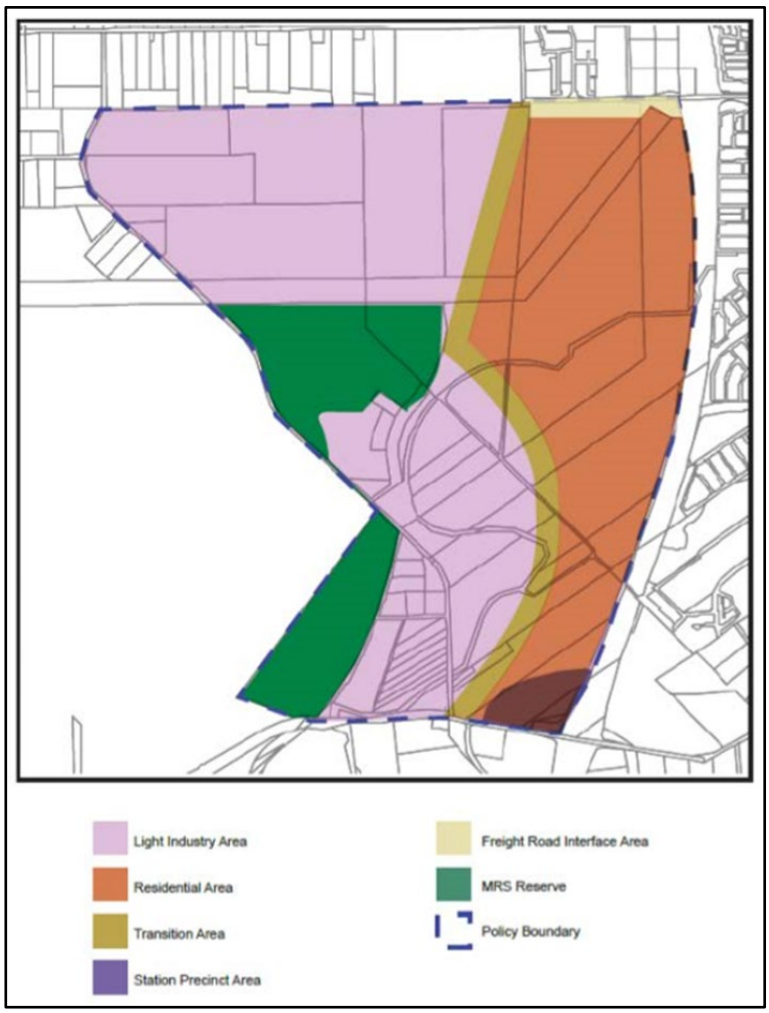


Figure 3: Local Planning Policy 12 – Mandogalup Future Development

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Mandogalup West and Mandogalup East Local Structure Plans

The WAPC adopted the Mandogalup West Local Structure Plan (MWLSP) on 22 March 2018 and the Mandogalup East Local Structure Plan (MELSP) on the 28 March 2018. A consolidated plan of both the MWLSP and MELSP is shown below (Figure 4).

If an amendment is adopted, it will extend the 'Development' zone on Satterley's landholding and require the adopted MELSP to be amended before subdivision and development can proceed.

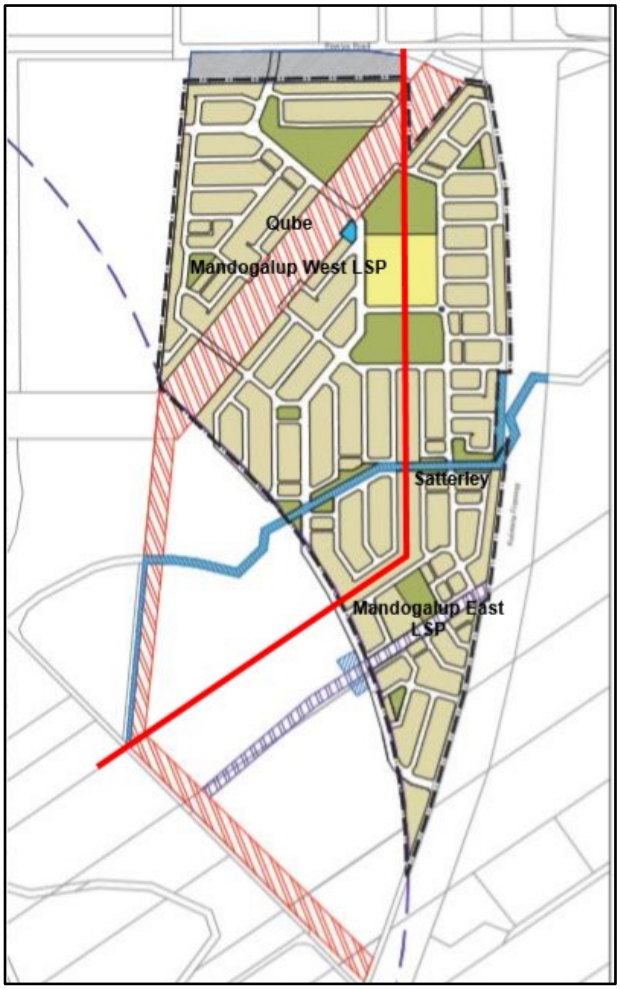


Figure 4: Consolidated plan of Mandogalup West and Mandogalup East LSPs

Improvement Plan 47 (IP47)

In May 2018 the WAPC resolved to prepare IP47 (at the same time that the City was preparing LPP12). The WAPC adopted IP47 in November 2018 which removed statutory planning control for this area from the City, and placed it under the control of the WAPC. The boundary of IP47 is shown in Figure 5.

The purpose of draft IP47 is stated as follows:-

a) Enable the WAPC to undertake all necessary steps to advance the planning and development within the plan area as provided for under Part 8 of the PD Act;
b) Establish the strategic planning and development intent within the subject area;
c) Provide for a strategic planning framework endorsed by the WAPC, Minister for Planning and the Governor;
d) Authorise the preparation of an improvement scheme;

e) Provide the objectives of the improvement scheme; and
f) Provide guidance to the preparation of statutory plans, statutory referral documentation and policy instruments.

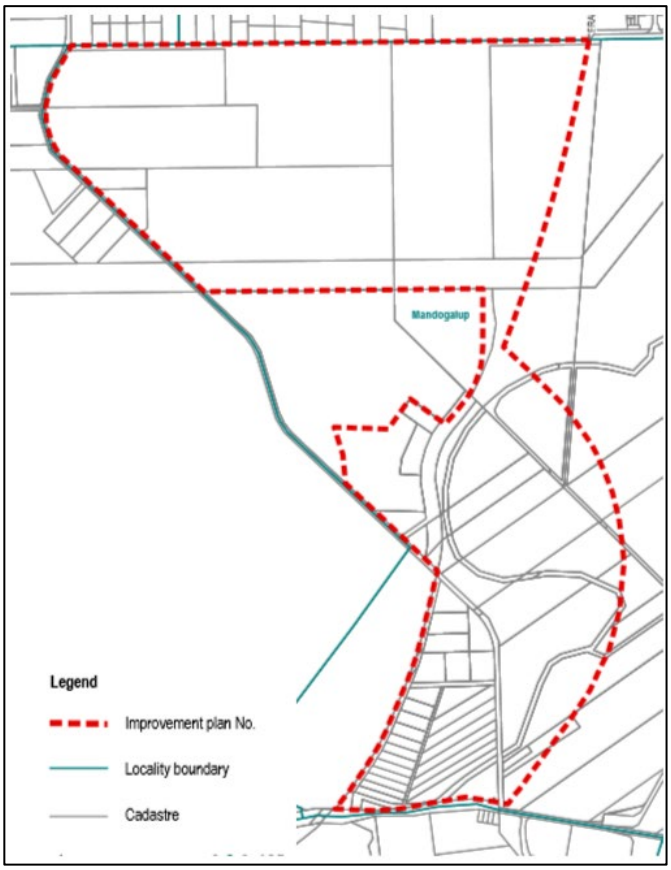


Figure 5: Boundary of Improvement Plan 47

IP47 authorises the making of an Improvement Scheme, by resolution of the WAPC and approval of the Minister for Planning. Preparing the Improvement Scheme will require detailed technical investigations, including assessment of future land use options, examination of area characteristics/capability and identification of strategies to mitigate any significant health and amenity impacts such as transition land uses. This work will feed into the preparation of a structure plan and, ultimately, preparation of the Improvement Scheme documentation. The Department of Planning Lands and Heritage has advised that it intends to present a number of planning scenarios for consideration in mid-2020.

The WAPC advised that landowners within Area A (situated to the east of IP47), will be able to progress development opportunities in line with any approved structure plans. In areas not yet subject to structure plan approvals, consideration during the preparation of any plan will need to have due regard to the lands interface with the proposed Improvement Plan area. If landowners wish to seek a change in zoning for the land, this will require the preparation of a re-zoning submission to both the MRS and LPS2, for consideration by the City and the WAPC.

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Council advised the WAPC, in August 2018, that in order to ensure optimal planning outcomes for the Mandogalup area, future rezoning of land under both the MRS and LPS2 should be accompanied by structure planning which addresses the regional planning context, and provide a holistic and cohesive approach to planning across Area A and IP47.

Metropolitan Region Scheme Lifting of Urban Deferment
In November 2018, the WAPC resolved to transfer land from the 'Urban Deferred' zone to the 'Urban' zone under the MRS, known as 'lifting; the urban deferred zone (Figure 6).

The EPA and Council advised the WAPC that they did not support a concurrent amendment to LPS2 to reflect the 'Urban' zoning in the MRS. The EPA did not support the concurrent rezoning to LPS2 to a 'Development' zone, and expects that a separate LPS amendment will be referred to the EPA for environmental consideration.

The City also advised the WAPC that the MRS amendment and concurrent local amendment for Area A should be based on a more holistic and integrated approach to planning for Mandogalup following the planning for the Improvement Plan and Improvement Scheme, the results of additional dust monitoring and allow for structure planning to take place over the whole of Area A rather than portions.

On this basis, the WAPC did not support the concurrent amendment of LPS2 which has resulted in the landowners requesting the adoption of the proposed amendment.

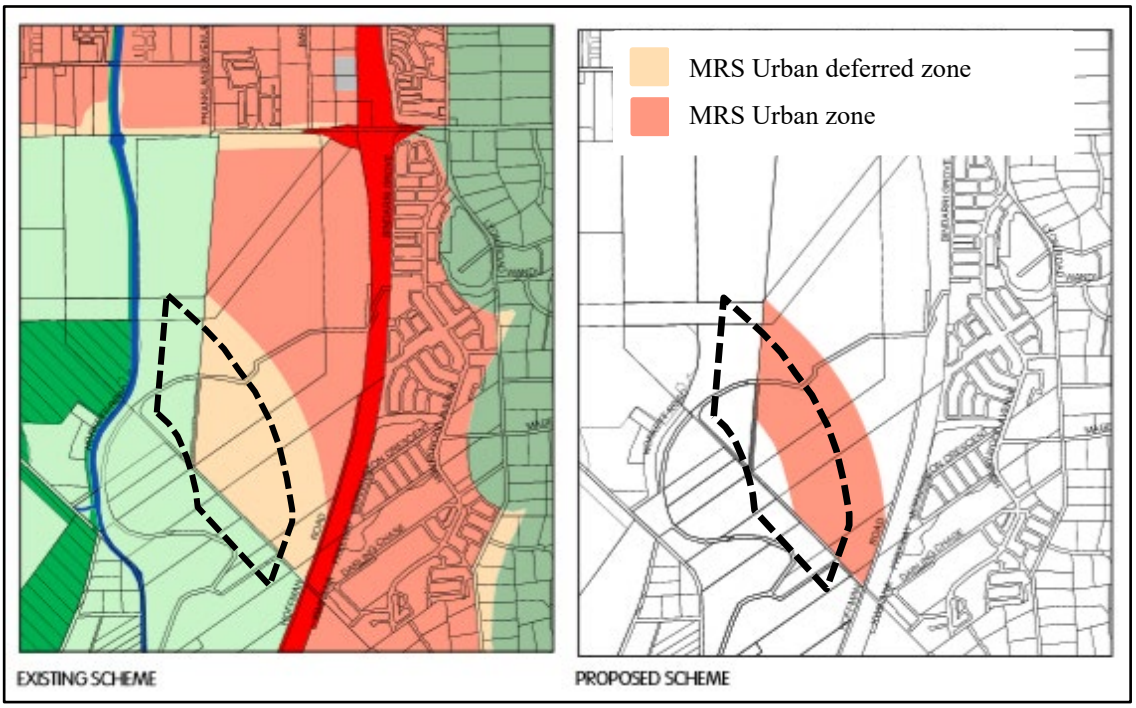


Figure 6: Area transferred from 'Urban Deferred' to 'Urban' under the MRS

Mapping dust plumes at Mandogalup

The Minister for Environment, in response to the EPA buffer report (June, 2017), requested the Department of Water and Environmental Regulation (DWER) to carry out further investigation into air quality in the Mandogalup area.

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

In January 2019, DWER issued a report titled, 'Mapping dust plumes at Mandogalup using a LiDAR, Report of air quality monitoring conducted between 1 December 2017 and 31 March 2018' (DWER dust study).

The DWER dust study found contributions to dust levels in Mandogalup from a variety of sources and land uses. There appeared to be general compliance with the *Environmental Protection (Kwinana) (Atmospheric Waste) Regulations* and the National Environmental Protection (Ambient Air Quality) Measures.

The City appointed Talis Consultants to conduct a peer review of the DWER dust study (the peer review) to ensure that the approach and findings could provide the advice necessary to inform land use planning in the area.

The peer review found that the DWER dust study did not address all of the requirements of the EPA's advice to the Minister for Environment to determine health and amenity impacts, or corrective actions to manage non-compliances with air quality standards. The peer review identified limitations with the study and concluded that the DWER dust study on its own, is not appropriate to assess health and amenity impacts.

The peer review concluded that the DWER dust study is best suited to determining the sources of dust impacts and plume movements, but needed to include the direct measurement of particulate matter (PM2.5) dust particles over a longer duration with changes to monitoring locations at the Central and Norkett Road sites, in order for the assessment and its findings to be effectively utilised.

At the Ordinary Council Meeting on 12 June 2019, Council authorised the CEO to write to the:

a) Minister for Planning advising of the peer review findings and the need to maintain the current buffers for urban development in the Mandogalup area until the health and amenity impacts have been further and more comprehensively assessed; and
b) Advising the WAPC of the peer review findings and requesting the deferment of any consideration of the appropriateness of land uses within IP47 until such time as additional studies are undertaken to assess the health and amenity impacts in Mandogalup.

City Officers acknowledge that the proposed amendment is situated outside of the IP47 area and Council's recommendation to defer consideration of land uses pending additional studies does not apply to the area the subject of the amendment.

DISCUSSION:

The request by the landowner for the City to rezone LPS2 (Attachment A) from 'Rural A' to 'Development' over the subject land as a basic amendment is not supported. City Officers take the view that such an amendment over the subject land should be considered as a complex amendment. This is for the following reasons:-

a. It is a proposed amendment that is not addressed by any local planning strategy; and

b. It is a proposed amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality.

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Even in the event that the amendment is regarded as a basic amendment, City Officers take the view that the proposal was not accompanied by the documentation necessary to convey the intent and reasons for a scheme amendment, pursuant to Regulation 35(3) of the PD Regulations.

Consideration of this matter by Council should take account of the provisions of the *Planning and Development Act 2005 (*the Act*).* The area is now zoned 'Urban' under the MRS but retains a 'Rural' zone under LPS2. As the Act requires a local government to resolve to amend its local planning scheme so it is consistent with the region planning scheme within 90 days of the region planning scheme having effect. The 90 day period has elapsed and as such the City should take the steps necessary to bring its local planning scheme into conformity with the MRS.

However, should Council progress such an amendment, the 'Development' zone would trigger a local structure plan for adoption in accordance with the process set out in the PD Regulations, and subsequent subdivision and development. It is likely that this structure plan would occur closely following the rezoning process.

Council has previously determined as part of planning decisions for this locality (ie; the MRS rezoning of this and adjacent properties and on providing advice to the WAPC on IP47), that its preference is that planning decisions in Mandogalup are made in a holistic manner taking account of planning across the whole cell and Council's Local Planning Policy.

In this respect, representatives of the WAPC have advised City Officers that the technical planning reports have already commenced for the Improvement Plan 47 area and that following community consultation in February 2020, land use planning options for the locality will be made available by June 2020. In this regard, the planning for IP47 will be significantly progressed by mid-2020 and it is difficult to argue that planning decision making for all of Mandogalup will be not be enhanced with the benefit of deeper knowledge about land uses and transport across IP47.

City Officers are of the view that an amendment is premature and should not progress until IP47 has been progressed to a point where options for medium to long term structure planning for the wider Mandogalup locality have been carefully considered by the City and State Government.

LEGAL/POLICY IMPLICATIONS:

For the purpose of Councillors considering a financial or impartiality interest only, the proponent/owner is Wandi Anketell Holdings Pty Ltd (Satterely Property Group).

Acts and Regulations

- *Planning and Development Act 2005*
- *Planning and Development (Local Planning Schemes) Regulations 2015*
- *Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999*
- *Improvement Plan 47 - Mandogalup (WAPC, 2018)*

Schemes

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

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

State Government Policies

- Guidance for the Assessment of Environmental Factors No. 3 – Separation Distances between Industrial and Sensitive Land Uses (EPA, 2005)
- South Metropolitan Peel Sub-regional Planning Framework (WAPC, 2018)
- Jandakot Drainage and Water Management Plan - Peel Main Drain Catchment
- Liveable Neighbourhoods 2009
- State Planning Policy 3.0 – Urban Growth and Settlement (WAPC)

Local Planning Policies

- Community Infrastructure Plan 2018
- Local Planning Policy No. 12 – Mandogalup Future Development

Reports

- Parliamentary Standing Committee on Environment and Public Affairs (Report 31) (November, 2012)
- Review of the Kwinana Air Quality Buffer report (August, 2002)
- Review of the Kwinana Air Quality Buffer – Position Paper (November, 2008)
- Kwinana Air Quality Review: Options and Recommendations for a Revised Buffer for Areas 5 and 9 (September, 2010)
- EPA advice to the Minister for Environment - Consideration of potential health and amenity impacts of dust in determining the size of a buffer for urban development in the Mandogalup area (EPA buffer study) (June, 2017)
- Mapping dust plumes at Mandogalup using a LiDAR, Report of air quality monitoring conducted between 1 December 2017 and 31 March 2018 (Department of Water and Environmental Regulation) (DWER dust study) (January , 2019)

Section 124(3) of the *Planning and Development Act 2005* requires a local government to resolve to amend its local planning scheme so it is consistent with the region planning scheme within 90 days of the region planning scheme having effect.

The *Planning and Development (Local Planning Scheme) Regulations 2015* specify three different types of Scheme amendments, being basic, standard and complex.

A basic amendment is identified under the PD Regulations as any of the following:

(a) an amendment to correct an administrative error;
(b) an amendment to the scheme so that it is consistent with the model provisions in Schedule 1 or with another provision of the local planning scheme;
(c) an amendment to the scheme text to delete provisions that have been superseded by the deemed provisions in Schedule 2;
(d) an amendment to the scheme so that it is consistent with any other Act that applies to the scheme or the scheme area;
(e) an amendment to the scheme so that it is consistent with a State planning policy;
(f) an amendment to the scheme map to include a boundary to show the land covered by an improvement scheme or a planning control area;

(g) an amendment to the scheme map that is consistent with a structure plan, activity centre plan or local development plan that has been approved under the scheme for the land to which the amendment relates if the scheme currently includes zones of all the types that are outlined in the plan;
(h) an amendment that results from a consolidation of the scheme in accordance with section 92(1) of the Act;
(i) an amendment to the scheme so that it is consistent with a region planning scheme that applies to the scheme area if the amendment will have minimal effect on the scheme or landowners in the scheme area;

A complex amendment is identified under the PD Regulations as any of the following:

a) an amendment that is not consistent with a local planning strategy for the scheme that has been endorsed by the WAPC;
b) an amendment that is not addressed by any local planning strategy;
c) an amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality;
d) an amendment made to comply with an order made by the Minister under Section 76 or 77A of the Act; and
e) an amendment to identify or amend a development contribution area or to prepare or amend a development contribution plan.

The proponent is of the view that an amendment to rezone 'Rural A' to 'Development', as they have requested, can be a basic amendment. However, City Officers are of the view that the proposed amendment is complex as it satisfies criterion a) and c) above.

FINANCIAL/BUDGET IMPLICATIONS:

There are no financial implication arising from the recommendation of the report.

ASSET MANAGEMENT IMPLICATIONS:

There are no financial implications arising from the recommendation of the report.

ENVIRONMENTAL IMPLICATIONS:

There are no environmental implications arising from the recommendation of the report.

STRATEGIC/SOCIAL IMPLICATIONS:

The officer recommendation seeks to support the achievement of the following outcome and objective detailed in the Strategic Community Plan.

Plan	Outcome	Objective
Strategic Community 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.

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

COMMUNITY ENGAGEMENT:

City Officers are of the view that the proposed amendment should be considered as a complex amendment, not a basic amendment, and, that community consultation as per the PD Regulations for a complex amendment should occur.

PUBLIC HEALTH IMPLICATIONS:

There are no public health implications arising from the recommendation of the report.

RISK IMPLICATIONS:

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

Risk Event	Future development of the Mandogalup area does not comply with Council's policies and fails to achieve an integrated land use outcome.
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	City Officers are of the view that the request is insufficient to be determined as a scheme amendment and that should an amendment be proposed it would be considered a complex amendment as it satisfies the following criterion set out in Section 34 of the PD Act: a) It is an amendment that is not addressed by any local planning strategy; and b) An amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality. The PD Act requires complex amendments to be referred to the WAPC to determine if any modifications are required before being advertised by the City.

17.4 REQUEST TO AMEND LOCAL PLANNING SCHEME NO. 2 TO REZONE PORTIONS OF LOTS 11, 9002, 9006 AND 9033 HOFFMAN ROAD, MANDOGALUP FROM 'RURAL A' TO 'DEVELOPMENT'

Response to risk treatment required/in place	Once the land is zoned 'Development' under LPS2, the landowners will be required to prepare a local structure plan before the City will recommend subdivision or approve the use or development of land.
Rating (after treatment)	Moderate

COUNCIL DECISION

034

MOVED CR P FEASEY **SECONDED CR D WOOD**

That Council determine the following in respect to the request to amend Local Planning Scheme No. 2 (LPS2) to rezone portions of Lots 11, 9002, 9006 and 9033 Hoffman Road (the subject lots), Mandogalup from 'Rural A' to 'Development':

1. That it does not to proceed with a scheme amendment pursuant to the regulations of the *Planning and Development (Local Planning Scheme) Regulations 2015* (PD Regulations) for the following reasons:-

a) That piecemeal rezoning of land in the Mandogalup locality is not appropriate until there is clarity and certainty with medium to long term land uses and planning outcomes in the Mandogalup locality;

b) Following the approval of an amendment for the subject lots, a proposed local structure plan for the subject area could be lodged with the City pursuant to the PD Regulations ahead of the consideration of structure plan options for Improvement Plan 47; and

c) That an amendment should not be advertised until medium to long term structure planning for the Mandogalup locality has been carefully considered by the City and State Government in an integrated manner, including Improvement Plan 47. In this respect, representatives of the Western Australian Planning Commission (WAPC) have advised that the technical planning reports have already commenced for the Improvement Plan 47 area and that following community consultation in February 2020, land use planning options for the locality will be made available by June 2020.

2. Advise the WAPC that, pursuant to Regulation 35(2) of the *Planning and Development (Local Planning Scheme) Regulations 2015,* the amendment to LPS2 is complex for the following reasons:

a) It is an amendment that is not addressed by any local planning strategy; and,
b) It is an amendment relating to development that is of a scale, or will have an impact, that is significant relative to development in the locality

3 Provide a copy of Council's resolution to the Western Australian Planning Commission within 21 days of the resolution.

CARRIED
6/1

Attachment A

ROWE GROUP DESIGN

Level 3
369 Newcastle Street
Northbridge 6003
Western Australia

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info@rowegroup.com.au
rowegroup.com.au

Job Ref: 7282A
16 July 2019

City of Kwinana
PO Box 21
Kwinana WA 6966

Attention: Maria Cooke

Dear Maria

Proposed Amendment to City of Kwinana Local Planning Scheme No.2 Various Allotments – Hoffman Road, Mandogalup

We refer to our telephone discussion of 27 June, our subsequent meeting at the City's offices on Friday 5 July, and our telephone discussion of 9 July 2019. Rowe Group act on behalf of Wandi Anketell Holdings Pty Ltd and project manager Satterley Property Group.

This correspondence forms a request for the initiation of an amendment to the zoning of various allotments on Hoffman Road, Mandogalup so as to include the land within the 'Development' Zone of Local Planning Scheme No.2 (LPS2). We attach a plan outlining the requested zoning change.

While we represent Satterley Property Group, the area pertains to all of the land within the Metropolitan Region Scheme (MRS) 'Urban' area and incorporates the properties (listed from north to south) in Table 1 (the subject land).

Justification for Amendment Proposal

The Western Australian Planning Commission (WAPC) resolved to transfer the land the subject of this Scheme Amendment request from the 'Urban Deferred' zone to the 'Urban' zone on 21 November 2018 under MRS Amendment 1350/27. Plan number 4.1648 attached refers.

There are several planning processes required to be undertaken prior to the implementation of development on the subject land. These processes include the amendment of the zoning of the land under the provisions of LPS2 to 'Development' zone. The amendment will bring LPS2 into conformity with the 'Urban' zoning under the MRS and provide the legal basis for future adoption of a Local Structure Plan(s).

Table 1: Lots the Subject of Scheme Amendment Request

LOT	PLAN	VOLUME	FOLIO	LANDOWNER
Pt Lot 52	P009780	2929	542	Greta White P/L; Jj White P/L; Qube Mandogalup Development P/L
Pt Lot 682	P003475	2892	458	Greta White P/L; Jj White P/L; Qube Mandogalup Development P/L
Pt Lot 3	D006205	LR3002	140	State of Western Australia (Vacant Crown Land)
Pt Lot 9006	P070124	2769	846	Wandi Anketell Holdings P/L
Pt Lot 9002	P069132	2758	177	Wandi Anketell Holdings P/L
Pt Lot 11	P076538	2809	569	Santo Galati Rando Annunziata Galati Rando
Lot 9000	P031293	2525	87	Wandi Anketell Holdings P/L

The WAPC's advice on MRS Amendment 1350/27 confirmed it did not support the concurrent amendment of the subject land to 'Development' zone under section 126(3) of the *Planning and Development Act 2005* (PD Act), as the *"...Environmental Protection Authority seeks to consider a separate Local Planning Scheme amendment for the site."* It is noted, however, that the City of Kwinana previously approved the concurrent rezoning of the 'Stage 1' Mandogalup area which rezoned the land to the 'Development' zone concurrent with the lifting of the 'Urban Deferred' zoning under the MRS. It is considered that the current situation (as applicable to the subject land) is no different to the circumstances of the previous rezoning request and in fact, is clearer following the release of the EPA report. Notwithstanding, in accordance with this resolution of the WAPC and the PD Act requirements, we make this request for initiation of the scheme amendment.

We note that the City of Kwinana has previously considered its *Local Planning Policy 12 Mandogalup Future Development* for reference on land use planning in the Mandogalup area. The City also recently considered a *Peer Review of Mandogalup Dust Assessment* (OCM 12 June 2019, Item 14.2). Notwithstanding these, the WAPC and subsequently the Minister has established the Mandogalup Improvement Plan No.47 (MIP47) Area. The MIP47 will review land use planning in the MIP47 area to consider land use options and transition requirements. The MIP47 recognises the presence of 'Urban' land adjoining. In this context, there is no impediment to the initiation of the requested local planning scheme amendment.

In this regard, we are aware that the City of Kwinana has formed the view that the process of rezoning under LPS2 and identifying the appropriate land use cannot be undertaken until such time as WAPC IP47 is sufficiently advanced. It should be noted that our Client does not agree with this position. We note that the rezoning of the land to the 'Development' zone and subsequent preparation of a Local Structure Plan can occur concurrently with preparation and finalisation of IP47.

Further, the subject land has been rezoned 'Urban' under the MRS. The intended use of the subject land is clear and shall therefore be for urban purposes. The land use proposed for the area within IP47 will therefore need to take into consideration the current approved land use zoning of the subject land under the MRS (being 'Urban').

If the IP47 land is identified for urban residential, then there is no "interface" to be considered. In the event that another land use such as light industry or industry is identified (which would be opposed by our Client), the detailed land use planning for IP47 should include graduated land use to ensure there is no adverse effect on the land zoned urban. In brief, any transition zone should be accommodated within the IP47 area. There is, therefore, no need to consider a transition zone or any other interface issue within the subject land. In conclusion there is no justification for deferring the rezoning under LPS2 until IP47 is progressed.

We also note that the City is required to initiate an amendment to LPS2 under the provisions of Part 9 section 124(2) of the PD Act. This section sets out the specific requirements that a local planning scheme must be consistent with a Region Planning Scheme and further requires that a Local Government is to resolve to amend its Town Planning Scheme so that it is consistent with the MRS within ninety (90) days of the Region Scheme Amendment having affect. It would appear that the City is currently in breach of this requirement. We note refusal to initiate the rezoning could only be interpreted as unreasonably delaying development of the land without any planning justification.

The 'Development' zone requires that a Local Structure Plan is prepared and adopted prior to subdivision and/or development of the land. This allows the City an opportunity to ensure that the future development is consistent with the intended future form of development within the locality and that there is an opportunity to provide for the integration of land use within the surrounding area.

Finally, as per Part 5 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (the 'Regulations'), there are several amendment types, being basic, standard and complex. These are defined in Part 5, Division 1, Regulation 34. We note that Regulation 35 (2) requires the local government to specify in its resolution to prepare or adopt an amendment, what type of amendment it is, as well as the explanation for forming that opinion.

In this regard, the proposed amendment is considered to be a 'basic' amendment, under the provisions of the Regulations due to the primary purpose of the amendment being to bring LPS2 in line with the MRS zoning.

We trust that the above request can be accommodated by the City and look forward to working with City staff in the context of the future scheme amendment and structure plan processes.

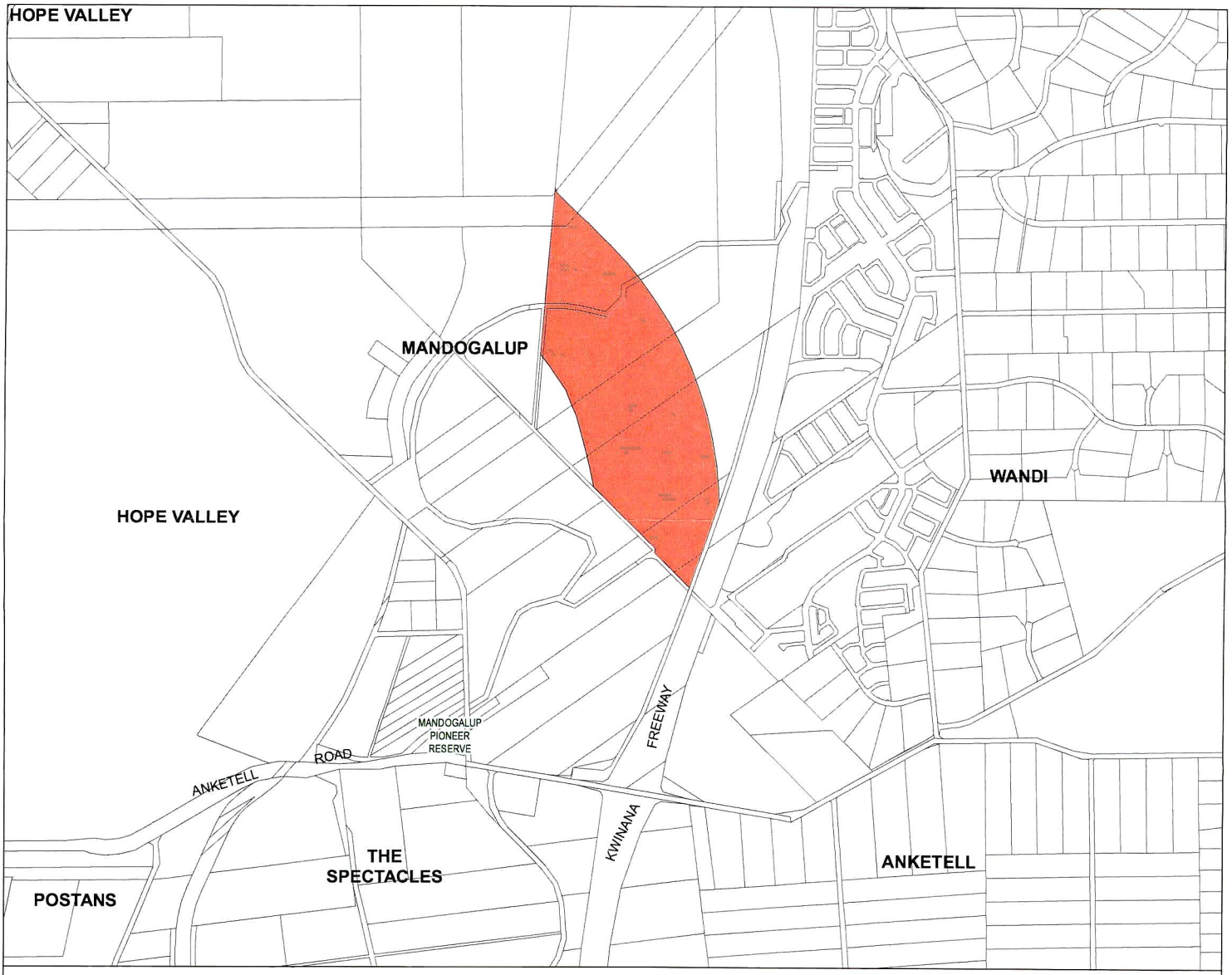
Yours faithfully,

Rod Dixon
Rowe Group

cc. Mr John Hirdman – Satterley Property Group
Mr Ray Stokes – Satterley Property Group

Attachment One

MRS Amendment 1350/27 – Plan Number 4.1648



Signed for and on behalf of the
Western Australian Planning Commission

_____

An officer duly authorised by the Commission
pursuant to section 24 of the
Planning and Development Act 2005
for that purpose in the presence of :

_____
Witness

_____
Date

_____
Approved - Minister for Planning

_____
Date

Metropolitan Region Scheme

Clause 27 - Transfer of land
from urban deferred zone to urban zone

Amendment No. 1350/27

Legend

Excluded from urban deferred and included in urban zone

N

0 0.25 0.5 0.75 1
kilometres

Western Australian Planning Commission

Program Manager: A. Muscara

Geospatial Officer: A. Power

Examined: J. Ballarotta

Revised:

Version No. 2

Date: WAPC/272.9.2 -
21 November 2018

File number: 812/02/26/0017P V

Plan reference:
MRS 1:25000 sheet 24

Oracle reference no: 2957

Plan Number **4.1648**

Created on date: Thursday, 22 November 2018
Document Name: MRS_2957_v2_APlan4_1648
Produced by Data Analytics, Department of Planning, Lands and Heritage, Perth WA
Base information supplied by Western Australian Land Information Authority SLIP 1096-2018-1

CITY OF KWINANA

18 JUL 2019

Officer: _____

No: _____

Location of the proposed amendment

Attachment B



17.5 Kwinana City Centre Master Plan – Final adoption

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

The City adopted the current City Centre Master Plan and Design Guidelines in 2009. The document is now in need of an update to reflect recent development approvals and current planning practice. The City appointed Hames Sharley Architects to review the document and develop a revised Master Plan.

The revised Master Plan sets out an updated vision, in line with the Strategic Community Plan and refines its area of application to be in line with Local Planning Scheme 3. The Master Plan structure has been re-grouped and updated to more logically address planning issues facing the City Centre. The design guidance and development controls have also been updated to promote a vibrant, mixed use centre by providing a range of uses to be developed within identified precincts and sets out objectives to improve the network of key links throughout the City Centre, with a focus on pedestrian movement.

Council adopted the revised Master Plan at its meeting held 27 March 2019 for community consultation. Following community consultation, submissions and workshop outcomes raised a number of issues. The main considerations emphasised the importance of Calista Oval and its role within the City Centre, raised the need for a more diverse mix of land uses - particularly the inclusion of residential development across the City Centre, the importance of pedestrian connectivity and safety and traffic movement. The Master Plan has now been updated to address key considerations raised through the consultation process.

It is recommended that Council adopt the updated Master Plan.

OFFICER RECOMMENDATION:

That Council take the following action in respect to the Kwinana City Centre Master Plan;

1. Adopt the Master Plan as detailed in Attachment A as the Town Centre Strategy Plan adopted under Part 2, Clause 2.1.1 of the City of Kwinana Local Planning Scheme No 3 (LPS3); and

2. Advises, via public notification, the adoption of the City Centre Master Plan under LPS3.

DISCUSSION:

Background

Current Master Plan

In 2009, the City adopted the current Kwinana Town Centre Master Plan and Design Guidelines.

17.5 KWINANA CITY CENTRE MASTER PLAN – FINAL ADOPTION

The current Master Plan contains an overall Concept Plan (Figure 1 below) with development principles for identified routes, connections between the precincts, connections to surrounding neighbourhoods, ideas for improving retail and educational uses, environmental considerations and long term development opportunities.

The current Master Plan also splits the City Centre into three large Precincts, being an Education precinct, Civic Marketplace and Challenger Neighbourhood (Figure 2). Each precinct has its own specific requirements relating to the structure, land use, building form, street design and other urban design qualities.



Figure 1: Current Master Plan - Concept Plan



Figure 2: Current Master Plan - Precincts

The current Master Plan then provides further guidelines for building design and landscape design throughout the overall Concept Plan area.

Relationship to Local Planning Scheme 3

The current Master Plan is given weight through Local Planning Scheme No. 3 (LPS3), which provides the statutory mechanism to apply the Master Plan and its associated Design Guidelines in the assessment of development applications.

LPS3 sets out development controls for the City Centre area by using zones with associated land use permissibility and its own development standards.

As both the current Master Plan and LPS3 address land use and built form requirements for development in different ways, there is conflict between how these documents apply to development.

Previous Council decision

Given the above, plus the substantial development which has been undertaken since its adoption in 2009, Council resolved to revise and advertise the current Master Plan.

The City engaged Hames Sharley Architects to undertake a revision of the document and to focus on number of key areas:

- Alignment of the vision with the City's current Strategic Community Plan;
- Update to reflect recent developments;
- Resolve issues and inconsistencies between the current Master Plan and LPS3; and
- Ensure the vision for the City Centre considers changes to State government policy.

Revised Advertised Master Plan

Document structure

The revised advertised Master Plan was reformatted to address current planning requirements and terminology.

Current 2009 Master Plan	Revised advertised Master Plan
Introduction	Introduction
Town Centre Development Framework	Strategic Context
	Master Plan Vision
Urban Design Guidelines	Urban Structure
Building Guidelines	Built Form
Landscape Guidelines	Public Realm

Figure 3: Comparison of the current 2009 and revised advertised Master Plan document layouts

The document still maintained an overarching chapter setting out the broad design principles and objectives for the Master Plan area. However, the revised advertised Master Plan split the 'Town Centre Development Framework' into a 'Strategic Context' and a 'Master Plan Vision' which made a clearer distinction between the background information and the future vision for the City Centre.

There are also three subsequent chapters, being Urban Structure, Built Form and Public Realm, which provide further detail on how the broad principles and objectives can be applied and realised. Further discussion on these sections is contained below.

Area of application

The revised advertised Master Plan refocused its area of application to directly reflect the area to which LPS3 applies. This is bound by Gilmore Avenue, Sulphur Road, Meares Avenue and Challenger Avenue. The revised advertised version acknowledged the importance of adjoining areas, being Calista Oval, Banksia Aged Care Facility and residential property to the east of Meares Avenue but did not include those areas for the purpose of advertising.

This change brought the area of application of the Master Plan into alignment with LPS3, which resolves one of the major issues of inconsistency between the two key operative documents.

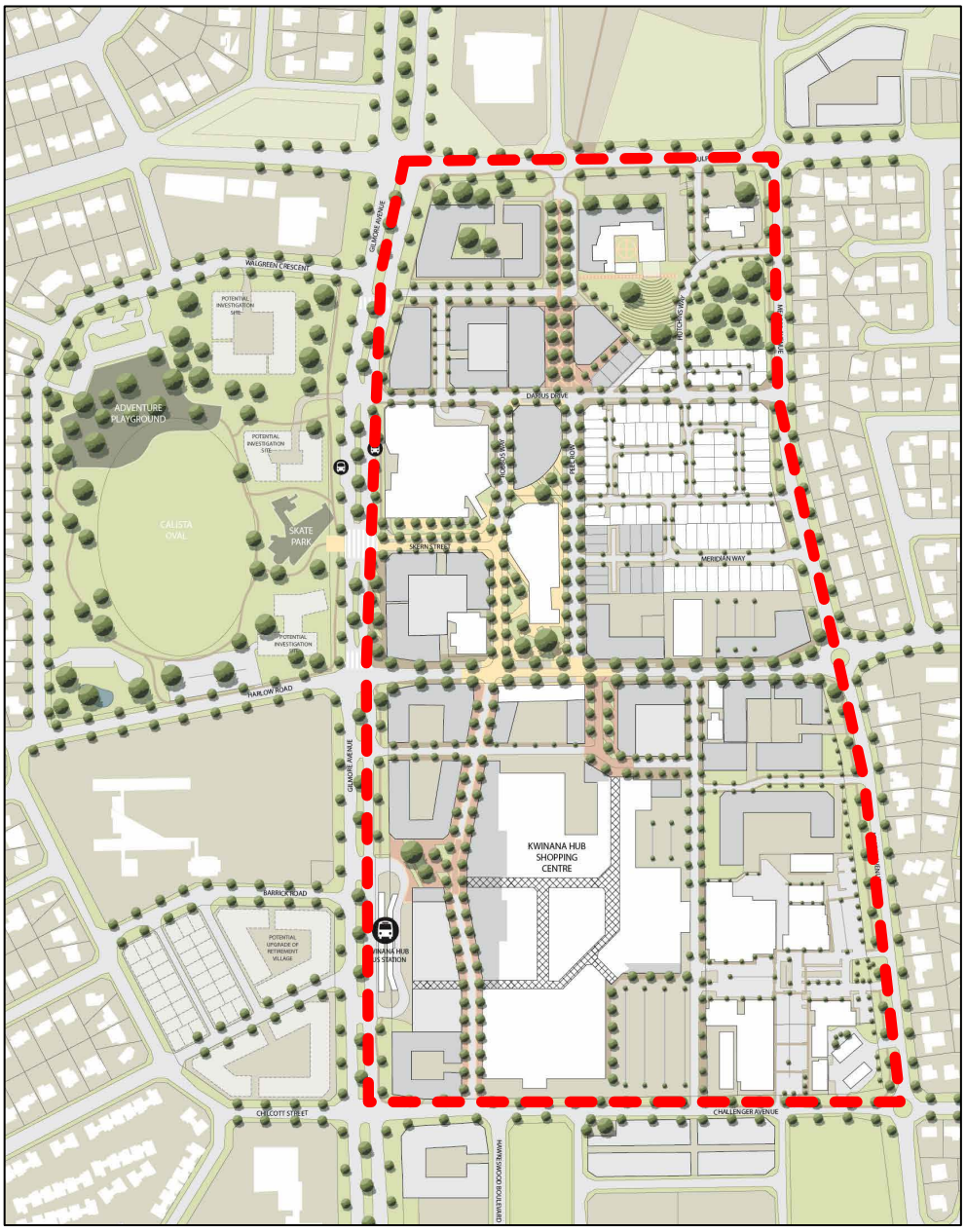


Figure 4: Revised advertised Master Plan - Area of application

Precincts & Character Areas

With the extent of the Master Plan area being changed, the previous Education Precinct and Challenger Neighbourhood precincts were no longer included.

Now focusing on the City Centre area, the revised advertised Master Plan sets out three new character area precincts, being Civic, Main Street and Retail.

17.5 KWINANA CITY CENTRE MASTER PLAN – FINAL ADOPTION

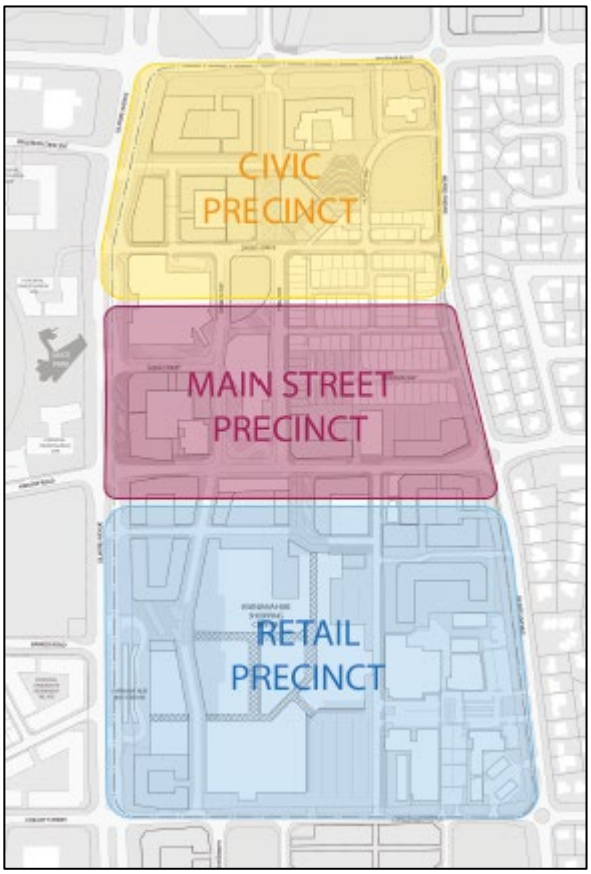


Figure 5: Revised Advertised Master Plan Character area precincts

The Civic Precinct is described as being located north of the City Centre between Sulphur Road and Darius Drive, characterised by buildings set within a landscaped park setting. The precinct lends itself to a variety of civic uses and office space with public areas for ceremony and celebration. New residential development will create a lively and active precinct accommodating a range of housing choice.

The Main Street Precinct is described as a bustling retail and commercial centre supporting a high level of pedestrian activity, slow moving traffic and rich mix of uses fronting the Main Street. Comfortable, wide, sheltered footpaths and public spaces of contemporary design will provide a setting for people to linger, shop, gather in the evening and for special events, local markets and festivals. The public realm will be characterised by significant tree planting to enhance to landscape qualities that are valued in Kwinana

The Retail Precinct is described as a key activity place, with the shopping centre to become an integrated and connected part of the City Centre where people can move easily between the internal mall environment, the street and out to the precincts beyond. Service areas will be designed to be clear and clean, using crime prevention through environmental design (CPTED) principles. Buildings will minimise the visual impact of blank walls and large scale facades.

<u>Urban Structure</u>

The revised advertised Master Plan, throughout the Urban Structure chapter, identified a series of attractors and the key links between them by assessing the public spaces, view corridors and transport (including parking) links.

The major attractors are identified as the Marketplace, Bus Station, Calista Oval and City Square with the key links forming the basis for classifying routes for different development types based on their function, as vehicular streets or pedestrian off-streets, and hierarchy, being Primary or Secondary movement links.

Primary streets maintain vehicular movement, but should be built as 'high streets'. Primary off-street routes should be developed as strong pedestrian environments. Secondary routes should still provide an attractive façade but allow permeable movement throughout the City Centre.

Built Form

The Built Form chapter, within the revised advertised Master Plan, contains land use, building height, active frontage, façade treatment and building orientation provisions.

The land use provisions are based on an overlay which categorises the area into Mixed Use, Commercial, Retail and Residential diversity areas, and seeks to encourage sustainable urban development within the City Centre with a mix of retail and commercial uses alongside more intensive living options, such as apartments and townhouses.

Building height provisions seek to encourage medium-high rise buildings along Main Streets, with a graduation of height to respond to low rise surrounding residential areas. Landmark sites are identified with a potential for increased height where it can be demonstrated there would be no adverse impact on surrounding development.

Provisions related to active frontages, façade treatments and building orientation are all based around 'Main Street' design principles. This includes nil front setbacks to Primary Streets, active street frontages required at ground level, continuous shop frontages, minimised vehicle access points and parking lots being located away from pedestrian areas and buildings above three storeys being setback from street boundaries.

Public Realm

The revised advertised Master Plan includes a Public Realm chapter which relates to elements that form the area from the building frontage that extends into the public space at ground level, including public spaces, landscaping, signage, street furniture and public art. It also considers the opportunity to integrate Water Sensitive Urban Design.

This chapter is seeking to define the private vs the public realm and ensure that the interface between the two is clearly defined, but provides for quality spaces throughout the City Centre regardless of which realm the space falls. It does so by setting out provisions for social spaces, shading, seating and street furniture, private space, safety, quality materials, signage, public art and water management.

Consultation

Engagement Activities

On 27 March 2019, Council adopted the revised advertised Master Plan for the purpose of community consultation.

17.5 KWINANA CITY CENTRE MASTER PLAN – FINAL ADOPTION

Consultation ran from 20 May 2019 to 1 July 2019 and included:

- Letters to 297 owners/occupiers within the City Centre Master Plan area and those immediately adjacent to the centre;
- Referrals to 10 government agencies and utility providers;
- Information displays placed in the City Administration Building, Kwinana Recquatic and Darius Wells Library and Resource Centre;
- A public notice published in newspapers circulating the area;
- A public notice placed on the City's website;
- Publication of a media release; and
- Two community workshop sessions held by City Officers (daytime and evening sessions) to present and explain the draft Master Plan to interested parties.

A total of 12 formal submissions were received and 14 participants attended the workshops. See Attachment B for the Summary of submissions which includes all comments and the outcomes from the workshops, alongside officer comments and recommendations.

Key points raised in submissions and workshops

The key points raised in the submissions were:

1. Provide Calista Oval Activities: Group-walking for the elderly, Kids sports, BBQs and seating;
2. Improve view corridors and gateways;
3. Increase provisions for cycling and safety;
4. Enhance primary pedestrian views/links to landmarks (particularly south-eastern entry);
5. 50kmh speed limit for all roads within and surrounding the City Centre;
6. Public transport links to be improved;
7. Manage parking;
8. Ensure bushfire risk is assessed;
9. Consider residential uses and greater building heights (particularly on the Kwinana Marketplace site);
10. Reinforce active interface (particularly along Challenger Avenue); and,
11. A query about the need for and location of Community Square.

Updated Master Plan

The recommendations to the 11 key points raised through consultation are being implemented in an updated Master Plan in the following manner:

1. Calista Oval
   Raised, in particular at the community workshops, was the view that Calista Oval with the existing Adventure Park and Skate Park, is a significant attractor and pedestrian movement to and from this important location is not adequately catered for, particularly the link across Gilmore Avenue to the City Centre.

As a result, stronger pedestrian connections were identified as important with a view that genuinely linking the oval and uses to the City Centre would be beneficial. In response, the Calista Oval Precinct has been added to the 'Character Precinct Areas' with key attributes and design guidance to preserve the natural bushland setting added to the Master Plan (Figure 6).

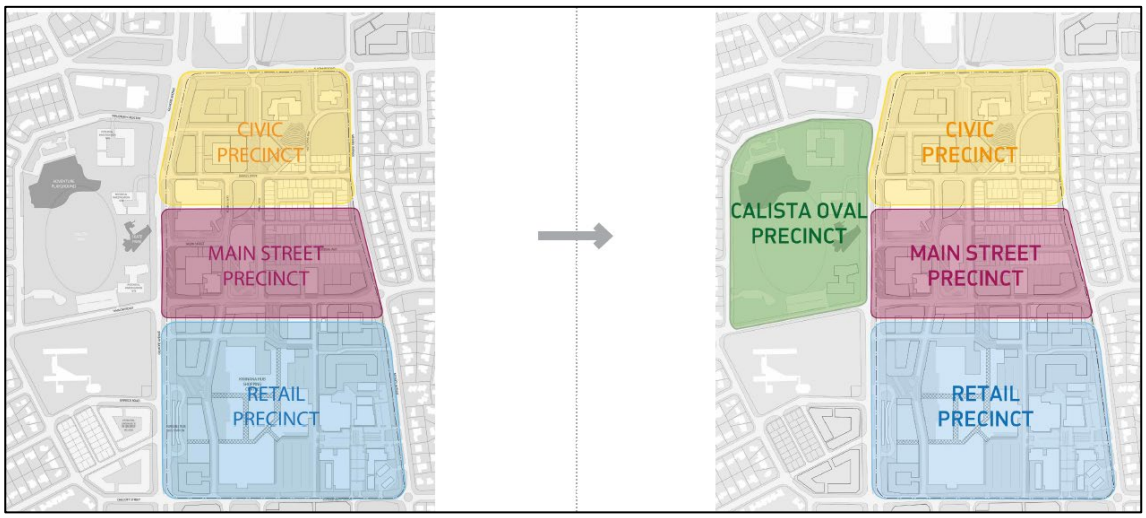


Figure 6: Revised advertised Master Plan & updated Master Plan character area precincts

2. View corridors and gateways
Key pedestrian routes will be strengthened by further alignment with key gateway treatments. Pedestrian desire lines across to Calista Oval and other major attractors will be improved with the incorporation of appropriate safety measures and gateway treatments that reinforce users they are entering a shared space or pedestrian friendly environment (Figure 7).

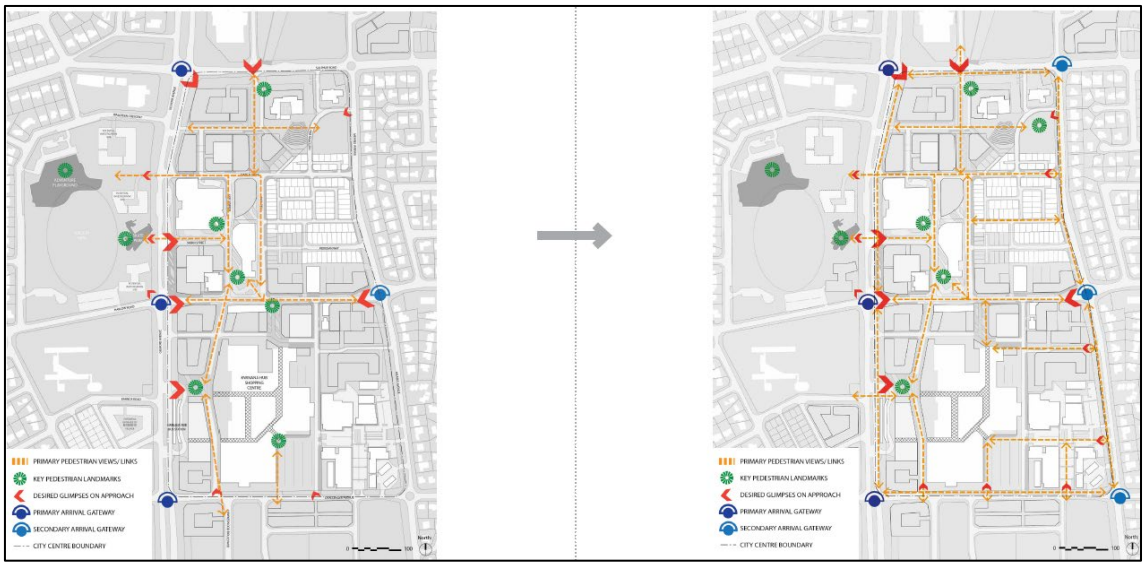


Figure 7: Revised advertised Master Plan & updated Master Plan view corridors

3. Cycling and safety
Issues raised regarding provision of cycle facilities will be addressed by incorporating the proposed cycle routes, as set out in the adopted City of Kwinana Bike and Walk Plan and adding to the 'Active Transport' section of the Master Plan (Figure 8). It is noted that attributes for 'Bicycle Facilities' are included which gives guidance to how to support active transport trips.

4. Pedestrian views/links
Specific mention was made regarding additional south-eastern and north-eastern pedestrian links and view lines and their connection to the surrounding suburbs. Particular note has been made within the 'Active Transport' section of the Master Plan, with reference to Primary and Secondary pedestrian links penetrating into the nearby neighbourhoods (Figure 8).

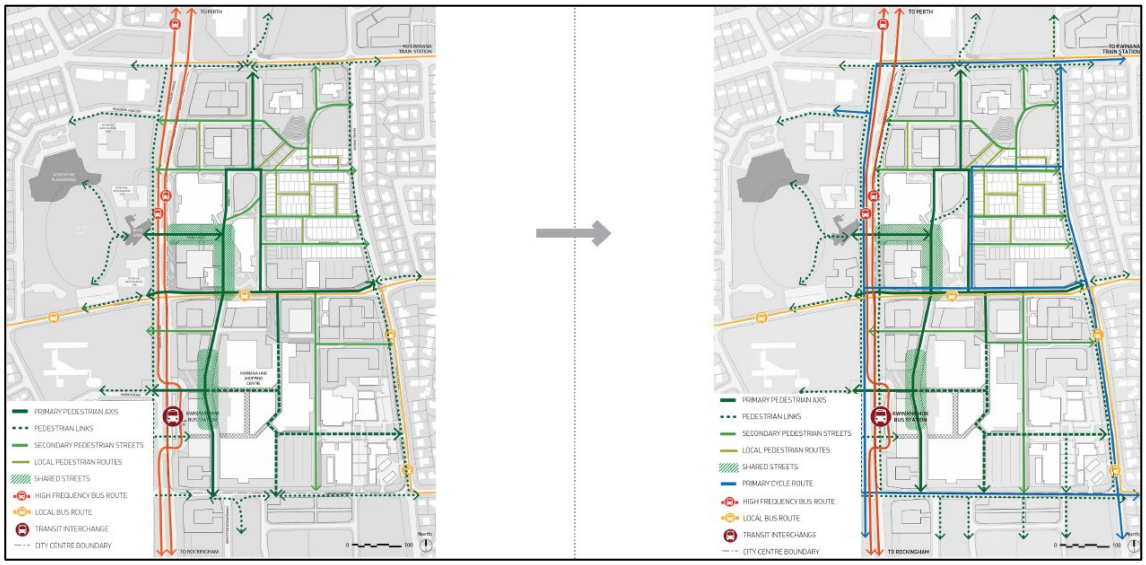


Figure 8: Revised advertised Master Plan and updated Master Plan Active transport

5. 50kmh speed limit for all roads within and surrounding the City Centre
To further reinforce the importance for pedestrian connections within, throughout and beyond the City Centre it is necessary to demote the private vehicle as the primary mode of transport within the City Centre and encourage a pedestrian friendly environment.

In order to begin that transition, the Master Plan has been updated to include a recommended 50km speed within the 'Street hierarchy' section and this should be pursued with Main Roads for Gilmore Ave. Other streets should be assessed for appropriate vehicle speeds (Figure 9).

17.5 KWINANA CITY CENTRE MASTER PLAN – FINAL ADOPTION

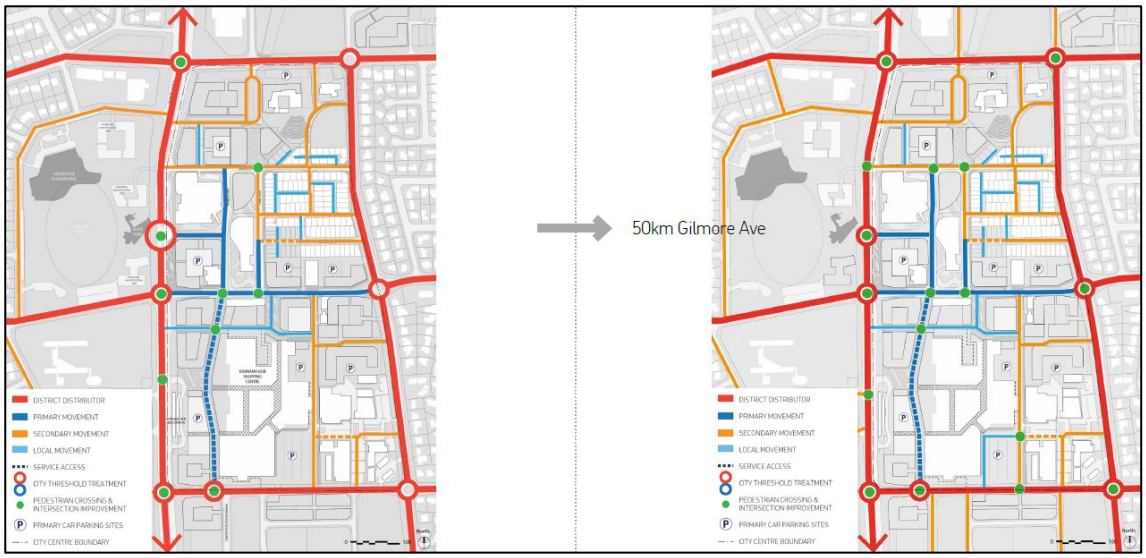


Figure 9: Revised advertised Master Plan and updated Master Plan street hierarchy

6. Public transport links to be improved
The City Centre bus port is linked to the Kwinana and Wellard train stations, however comments have been made regarding the frequency and genuine connectivity between the City Centre and train stations.

It is suggested that the City should review whether a CAT service is viable and to evaluate uptake of demand / supply and associated funding models to ensure its operation is viable.

7. Manage parking
Recommend development of a Parking Management Plan to implement time restricted parking and other parking and private vehicle management measures to reduce parking demand. Promotion of 'active transport' options in line with infrastructure upgrades, as well as engaging with the Kwinana Marketplace, to bring them on board with the Masterplan direction for consolidating at-grade parking into multi-deck structures in the future, are promoted by the Master Plan under the 'Parking' section. (Figure 10).

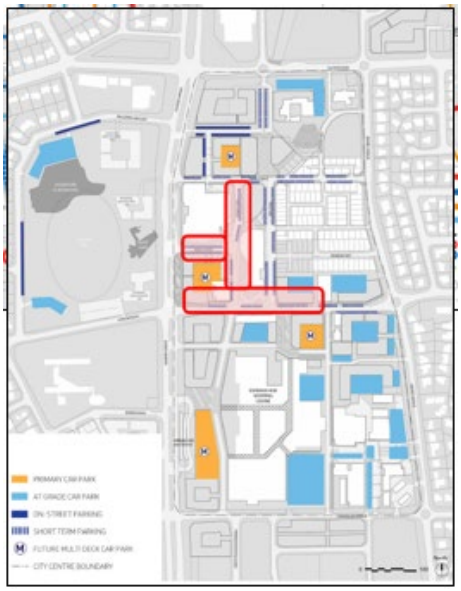


Figure 10: Updated Master Plan recommended parking consolidation

8. Ensure bushfire risk is assessed
   The Master Plan acknowledges the need for bushfire risk to be managed and an 'implementation section' has been added to specify that a BHL assessment will be required for any Development Applications in areas identified as being bushfire prone in accordance with SPP 3.7 and the National Construction Code.

9. Consider residential uses and greater building heights (particularly on the Kwinana Marketplace site)
   The Master Plan encourages a mix of land uses and seeks to incorporate a diversity of retail, commercial and residential (where appropriate) developments within the 'Mix of land uses' section. This is essential in promoting a vibrant and active destination by day and night.

   The Master Plan is seeking to provide the opportunity for new businesses to be established with retail, office and commercial space encouraged at ground floor levels facilitating a vibrant pedestrian environment. It seeks to ensure high levels of functionality and servicing for new commercial development which will assist in encouraging a variety of businesses that will activate the precinct during both daytime and evening hours.

   The Master Plan also facilitates the development of more diverse and intensive living options. Apartments and town-houses provide the opportunity to address a gap in the current market, providing affordable living options in an active and vibrant centre.

   The Master Plan supports multi-storey mixed use developments, where ground floor retail and commercial uses address the street and residential development can be incorporated in the levels above (Figure 11).

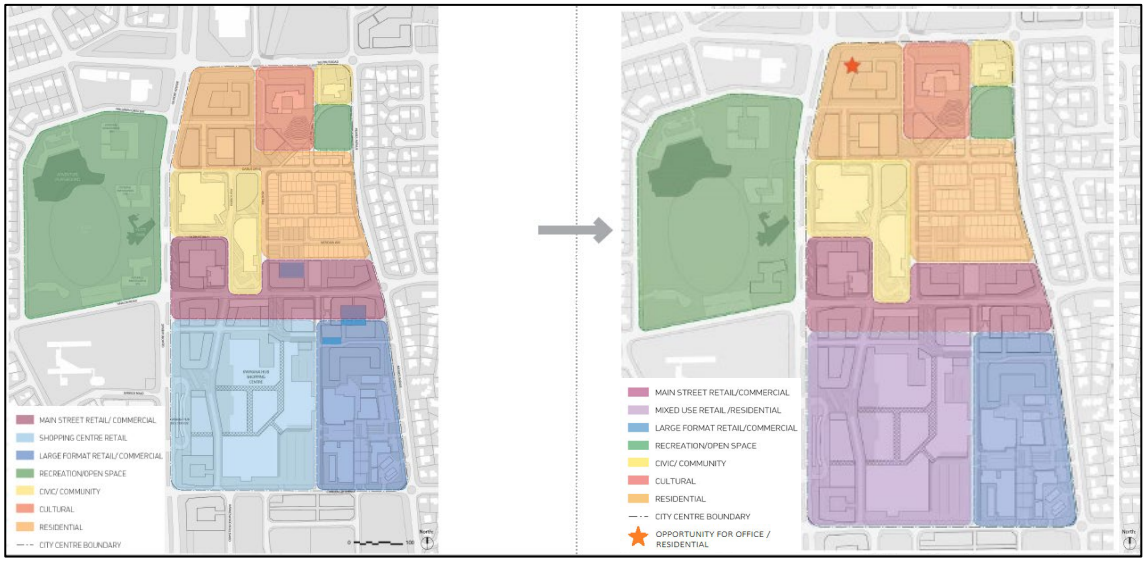


Figure 11: Revised advertised Master Plan and updated Master Plan mix of land uses

The updated Master Plan now also identifies a height range and appropriate height transitions within the City Centre. The updated Master Plan shows the Main Street environment, being Chisham Ave, as an area where medium-to-high rise (3 – 8 storey) buildings are appropriate (shown in blue on Figure 12).

This building height ensures an appropriate scale between building height and street width creating a sense of enclosure and definition to the street, reinforcing street types by capacity and character. It also serves to promote a high standard of design quality that provides a strong architectural character and sense of place.

Medium-to-high rise buildings should address the street and incorporate a variety of setbacks to create a visually appealing and diverse built environment whilst also providing the opportunity to integrate with the public realm at ground level.

Within the Main Street environment (medium-to-high rise, 3-8 storey area), but separate to building height, are landmark and corner sites which are shown as those locations that have a distinctive presence which reflects their position as a link between streets, a vista termination, or entry statement.

At landmark and corner sites, buildings should achieve more prominent massing and architectural treatment, will need to address both frontages to the street and/or the public realm and where buildings terminate vistas, need to ensure they address that vista.

To assist in achieving this outcome, architectural detail is encouraged to distinguish buildings as a point of visual focus. Examples of such detail include additional floor height (not to be mistaken as additional building height), distinctive roof form, articulation of corner wall elements and a variation in materials and colours.

Beyond the Main Street environment a transitional zone is identified and within this transitional zone low-to-medium rise (2-5 storeys) buildings are considered appropriate. The low-to-medium rise buildings, transitioning north and south of the Main Street environment, provides an appropriate response to the scale of the surrounding areas and ensures development integrates with the existing built form of the adjoining neighbourhoods.

The height ranges selected are purposely included as bands of desirable building heights.

Building height	Storeys	Meters
Low	1 – 2	3 – 9
Medium	3 – 5	9 – 18
High	5 – 8	18 – 27

The band of desirable building heights is purposely chosen to allow flexibility for the development industry to respond in a way that will address the City's needs but also be economically viable and therefore more likely to attract investment into the City centre.



Figure 12: Revised advertised Master Plan and updated Master Plan building height and landmark locations

10. Reinforce active interface (particularly along Challenger Avenue)
The Master Plan will be updated to show strengthened pedestrian view lines and safe crossing locations across Challenger Ave and will reinforce the reference to 'semi-active' frontages east and west along Challenger Avenue as shown in the 'Active Frontages' section (Figure 13).

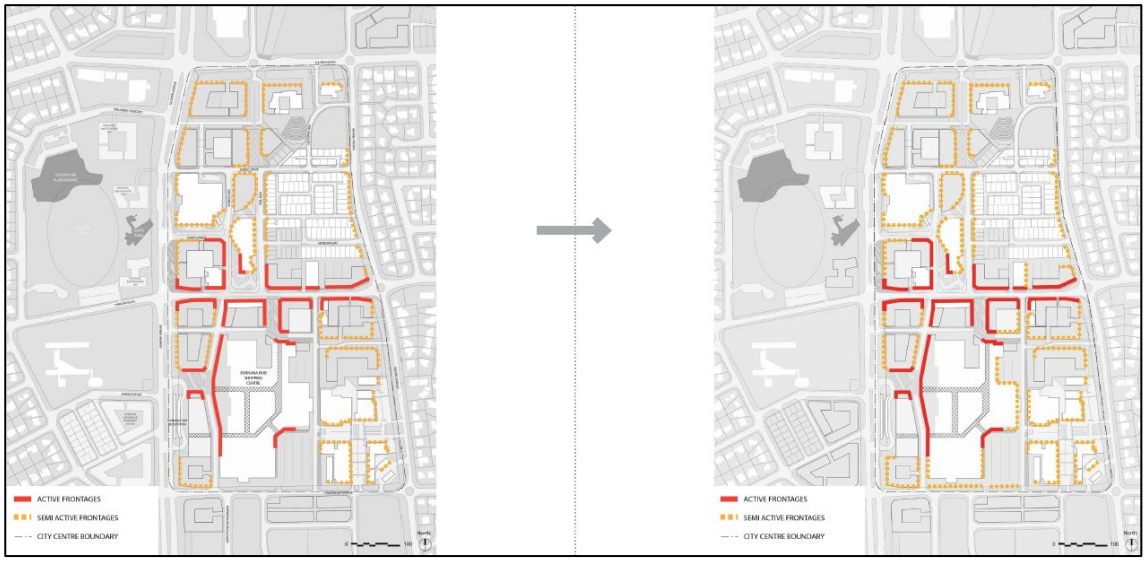


Figure 13: Revised advertised Master Plan and updated Master Plan active frontages

11. Query location of Community Square
The recommendation is that the City continue dialogue with the Kwinana Marketplace to explain its function and importance to the overall operation of the City Centre and how it can also benefit the Marketplace. The importance of pedestrian links between the major public open space locations is also reinforced with greater references within the 'Public Open Space' section of the Master Plan (Figure 14).



Figure 14: Updated Master Plan Public open space

Implementing the updated Master Plan

Currently, the planning framework for the City Centre consists of the Town Centre Master Plan and Design Guidelines and LPS3.

LPS3 is the statutory mechanism by which the Master Plan and Design Guidelines are enforceable by the City and able to be implemented through the Development Application process.

The Master Plan and Design Guidelines are given statutory weight by clause 2.1.1 and 3.1.1.1 of LPS3 which states:

2.1.1 Land use and development shall occur generally in accordance with the Town Centre Strategy Plan adopted by Council (as amended).

3.1.1.1 Building design and layout shall generally accord with the Kwinana Town Centre Design Guidelines adopted by Council (as amended from time to time) and Council shall have regard for the guidelines when assessing development proposals.

The wording of clauses 2.1.1 and 3.1.1.1 refers to a Town Centre Strategy Plan and Town Centre Design Guidelines, however these are now known as the Kwinana City Centre Master Plan. These clauses also allow Council to amend the Kwinana City Centre Master Plan from time to time, so upon adoption of the Master Plan it will automatically have effect under LPS3.

The updated Master Plan will contain some provisions that will be in conflict with LPS3, and it may be necessary that LPS3 be amended to resolve some minor inconsistencies. Any larger amendments have the potential to trigger a requirement by the WAPC for the preparation of an Activity Centre Plan for the City Centre under State Planning Policy 4.2 'Activity Centres for Perth and Peel'.

In this respect, City Officers will be in discussions with the WAPC about a new Local Planning Scheme 4 (LPS4) which is intended to be prepared in conjunction with the adoption of Council's Local Planning Strategy. LPS4 can be drafted so that any inconsistencies are resolved between the scheme and Master Plan documents.

City Officers will investigate these matters further and whether inconsistencies between the updated Master Plan and LPS3 will cause conflict for decision making and will explore the most effective measures for resolving any conflicts.

LEGAL/POLICY IMPLICATIONS:

The relevant legislation applicable to this item includes:

Planning and Development Act 2005
Planning and Development (Local Planning Schemes) Regulations 2015
City of Kwinana Local Planning Scheme No. 3
Kwinana Town Centre Master Plan and Design Guidelines

FINANCIAL/BUDGET IMPLICATIONS:

The preparation and advertising of the Master Plan has been undertaken within the City's existing budget.

ASSET MANAGEMENT IMPLICATIONS:

The City owns a number of landholdings within the Kwinana City Centre. Development of these sites will need to have regard to the Master Plan and in particular parking within the City Centre.

ENVIRONMENTAL IMPLICATIONS:

No direct environmental implications are associated with the proposed updated City Centre Master Plan. The City Centre Master Plan aims to achieve a sustainable City Centre vision that reduces the need for increased vehicular movements.

17.5 KWINANA CITY CENTRE MASTER PLAN – FINAL ADOPTION

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 bustling retail scene	2.3: The City Centre is home to a thriving range of specialty shops, restaurant and family entertainment venues and an active night-life while neighbourhood centres are revitalised.

COMMUNITY ENGAGEMENT

Consultation ran from 20 May 2019 to 1 July 2019 an included:

- Letters to 297 owners/occupiers within the City Centre Master Plan area and those immediately adjacent to the centre;
- Referrals to 10 government agencies and utility providers;
- Information displays placed in the City Administration Building, Kwinana Recquatic and Darius Wells Library and Resource Centre;
- A public notice published in newspapers circulating the area;
- A public notice placed on the City's website;
- Publication of a media release; and
- Two information sessions held by City Officers (daytime and evening sessions) to present and explain the draft Master Plan to interested parties.

A total of 12 formal submissions were received and 14 participants attended the workshops. See Attachment B - Summary of submissions which includes all comments and the outcomes from the workshops, alongside officer comments and recommendations.

PUBLIC HEALTH IMPLICATIONS:

The recommendation/proposal has the potential to help improve the following determinants of health -

- Built Environment –Environmental Quality; Neighbourhood Amenity;
- Socio-economic Factors –Employment; Income; Community Safety

RISK IMPLICATIONS:

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

Risk Event	Limited opportunities for economic development through prescriptive planning framework
Risk Theme	Failure to facilitate a vibrant, sustainable Activity Centre and associated development opportunities.

17.5 KWINANA CITY CENTRE MASTER PLAN – FINAL ADOPTION

Risk Effect/Impact	Financial Reputation Property
Risk Assessment Context	Strategic
Consequence	Moderate
Likelihood	Possible
Rating (before treatment)	Low
Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Implement the proposed revised Master Plan and amend Local Planning Scheme
Rating (after treatment)	Low

COUNCIL DECISION

035

MOVED CR W COOPER **SECONDED CR P FEASEY**

That Council take the following action in respect to the Kwinana City Centre Master Plan;

1. **Adopt the Master Plan as detailed in Attachment A as the Town Centre Strategy Plan adopted under Part 2, Clause 2.1.1 of the City of Kwinana Local Planning Scheme No 3 (LPS3); and**

2. **Advises, via public notification, the adoption of the City Centre Master Plan under LPS3.**

CARRIED
7/0



KWINANA CITY CENTRE MASTER PLAN

MASTER PLAN VISION

Hames Sharley
www.hamessharley.com.au

City of Kwinana

NOVEMBER 2019

DRAFT

Kwinana City Centre Master Plan

November 2019

DRAFT

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Revision Letter	Date	Status	Details	Prepared by	Approved by
1	July 2016	Draft	First Draft	SE	SOS
2	October 2016	Draft	City Revisions	SE	SOS
3	November 2016	Draft	City Revisions	SE	SOS
4	November 2016	Draft	Format Amendments	SOS	JC
5	December 2016	Draft	Plan updates	SOS	JC
6	March 2019	Draft	Final Draft	SOS	JC
7	November 2019	Final	Final Revisions	SOS	NS

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Introduction

The City Centre Master Plan Vision (CCMPV) is the first step by the City of Kwinana (the City) to overhaul the existing Kwinana Town Centre Master Plan and Design Guidelines, 2007. It aims to provide a framework for the future development of the city, reinforcing quality urban design outcomes that will contribute towards a vibrant, diverse and thriving centre.

The quality of the City Centre has a significant impact on the daily lives of those living and working in the area. Quality urban design, when implemented properly, makes a valuable contribution to the local economy, built environment and overall liveability of the area. This document concentrates on aspects of particular importance to the City in the creation of a distinctive place at the heart of the community and underpins Council's commitment to take design matters seriously.

i PURPOSE

As a document to guide the future vision and development of the city centre, the CCMPV will not attempt to cover every issue but concentrates on those aspects which are of particular importance - creating places for people, enabling local businesses to prosper and establishing strong spatial relationships to integrate the city centre with surrounding neighbourhoods.



Figure 1: *Kwinana Town Centre Master Plan, 2007*

ii PLANNING CONTEXT

In 2007, the Kwinana Town Centre Master Plan and Design Guidelines were developed as the framework for the City Centre and surrounding precinct (Figure 1). Given the substantial development that has progressed within the surrounding precincts, and to a lesser degree within the city centre itself, the need for a more contemporary Master Plan Vision was proposed to guide future development of the centre itself.

Figure 2 illustrates the City Centre Master Plan area of focus which takes into consideration opportunities to integrate new development on the edge as the centre grows in the future. The area is bound by Sulphur Road in the north, Gilmore Avenue to the west, Meares Avenue to the east and Challenger Avenue to the south.

The new CCMPV also responds to the WAPC State Planning Policy 4.2 – Activity Centres for Perth and Peel (SPP 4.2), released in 2010. This policy specifies broad planning requirements for activity centre development and renewal, focussing on greater diversity in land use, consolidated retail development, quality urban design and walkability in and around centres and underpins the final outcome for the Master Plan.

Under the SPP 4.2, Kwinana City Centre is designated as a Secondary Centre. Secondary Centres are the second highest order centres below Strategic Metropolitan Centres and Perth Capital City. As illustrated in Figure 3, Kwinana City Centre sits as a smaller scaled Secondary Centre in relation to other centres and the nature of retail offering within these centres.

In line with the City of Kwinana's projected population growth, it is expected that the demand for community facilities, services and residential dwellings will increase significantly. This highlights the importance of providing a city centre that will meet current and future demands of a growing community at a much larger scale than exists today.



Figure 2: *Focus area for the City Centre Master Plan*

1.0 Introduction

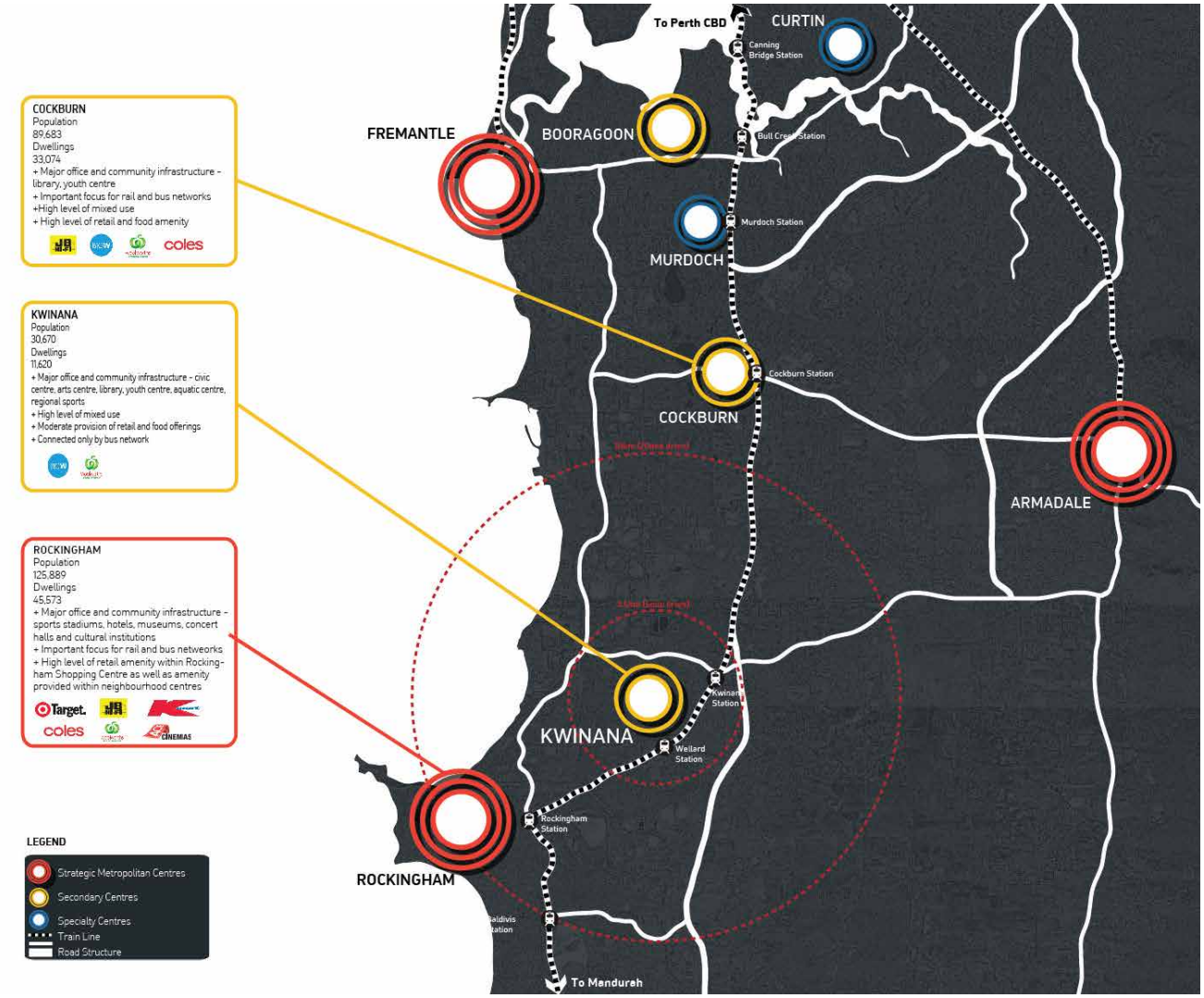


Figure 3: *Activity Centres surrounding Kwinana*

iii RELATIONSHIP TO OTHER PLANNING DOCUMENTS

The Master Plan Vision outlines a development vision and key design principles that will positively contribute to the social and economic vibrancy of Kwinana's City Centre. In this regard, the CCMPV will be used by the City as a supporting document when assessing future development within the City Centre and should be read in conjunction with:

+ Kwinana City Centre, Local Planning Scheme No.3 (LPS)
+ Residential Design Codes

1.0 Introduction

iv DOCUMENT STRUCTURE

The following Master Plan and guidelines should be used by those developing public and private buildings, streetscapes and landscape within the City Centre. Applications will be assessed on merit, understanding that not all developments are a 'one size fits all' in nature.

It is intended that the guidelines will be reviewed periodically to ensure they are relevant and current to service the needs of future development within the City Centre.

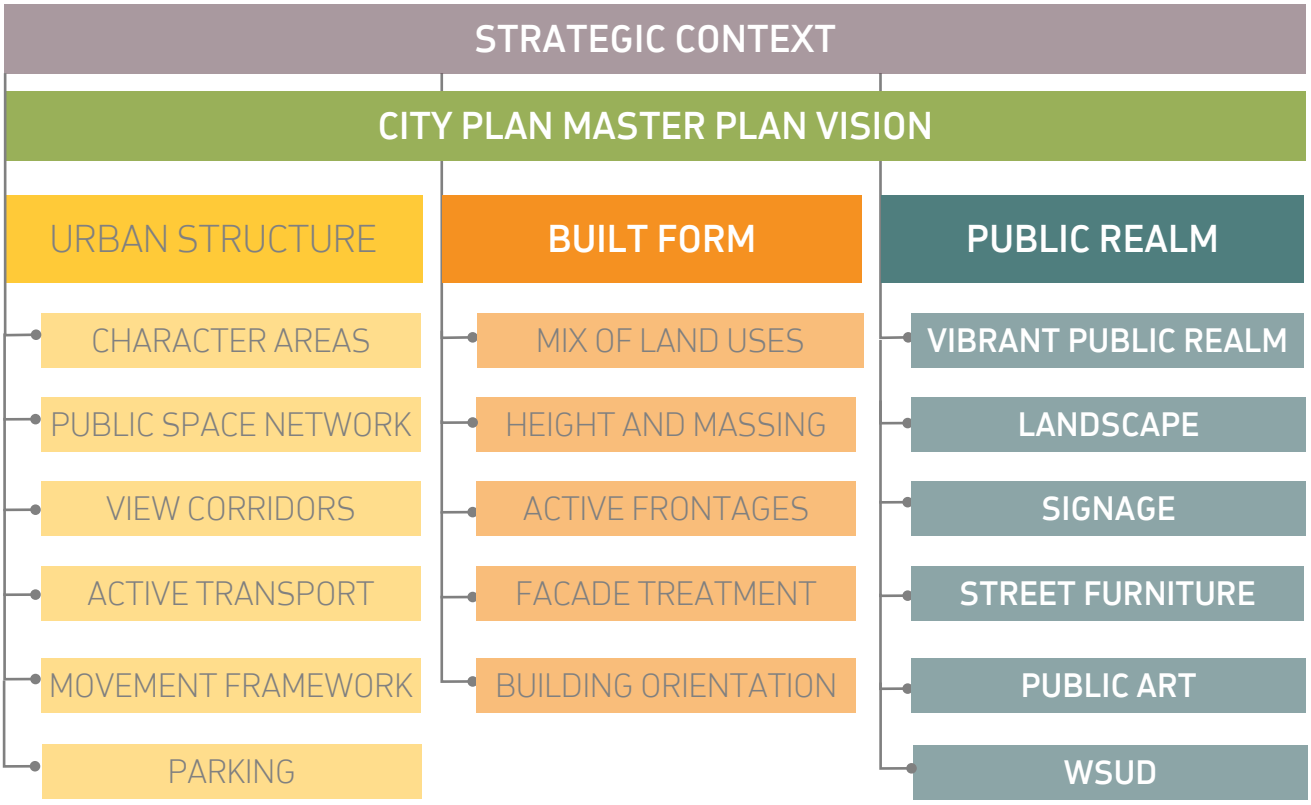
The document has been structured to include the following elements to help guide the overall Master Plan Vision for the City Centre:

Aims: outline the overall design intent or philosophy underpinning the best practice criteria, explaining the desired outcome achieved.

Outcomes: state the spatial areas that directly relate to implementation of each principle.

Attributes: identifies key attributes new development should respond to.

Design Guidance: recommendations and additional measure for which new development can achieve a higher level of design, community interaction and/or architectural character.







1

STRATEGIC CONTEXT

1.0 Strategic Context

1.1 CITY CONNECTIONS

The City is well serviced by the wider movement network (Figure 4). Future planning for connectivity of the City Centre and surrounding centres will need to ensure 'ease-of-movement', particular between the Kwinana City Centre and both Kwinana and Wellard train stations.

The need for a more comprehensive local transport management system, taking into account increased walkability and cycling as alternative active transport modes has been raised in the past. A 'Transport Oriented Trilogy Corridor', previously recommended as part of an integrated transport plan, aims to enhance public transport service between the City Centre and the two stations, combined with increasing densities around these centres.

Gilmore Avenue, identified as a Secondary Distributor, currently operates as a high speed corridor raising increased concerns for pedestrian safety as more activities are being developed within Calista Oval, namely the Skate Park and new children's Adventure Park. Speed restrictions have been implemented between Chisham Avenue and Sulphur Road to enable Gilmore Avenue to evolve from a busy distributor to a key entry boulevard into the City Centre, allowing for safe connections between the City Centre and adjacent activities.

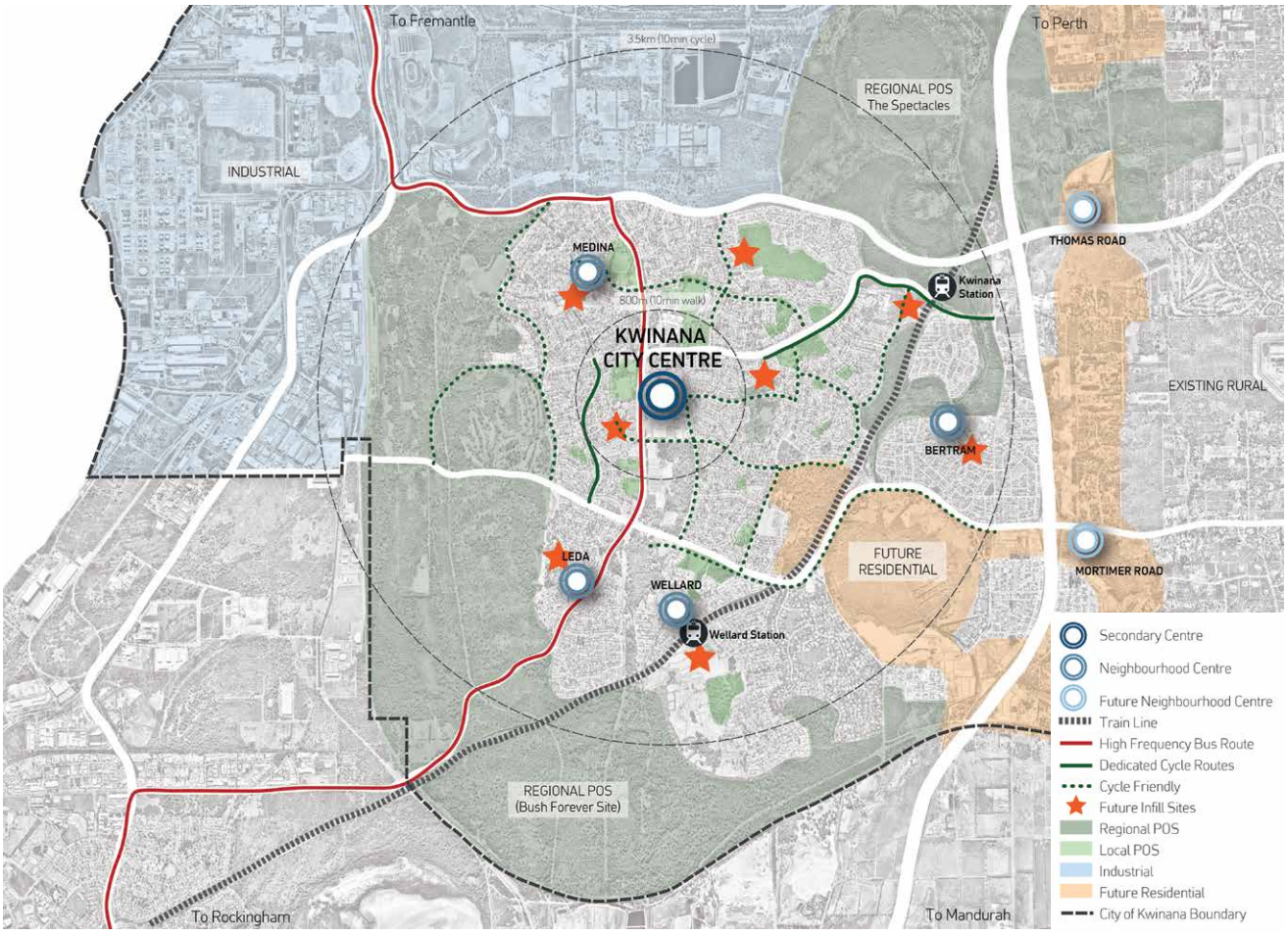


Figure 4: *Wider Movement Network connecting Kwinana City Centre*

1.2 HISTORIC DEVELOPMENT OF THE CITY CENTRE

Figures 5-7 demonstrate how the City Centre has evolved over the last decade. The pattern of development on an 'as needs' basis has resulted in a somewhat fragmented centre, with some land uses not actively integrated into the Centre.

2002-2007

A key anchor at the heart of the City Centre was the The Hub Shopping Centre. This also saw the development of the Recreation Centre and a number of small retail and commercial stores to the east of Chisham Avenue.

2008-2011

Redevelopment of the Gilmore College to the north of the Centre integrated a new pedestrian link defining a new north-south pedestrian corridor. The new library was completed with its forecourt linking the Recreation Centre and Chisham Ave. This also saw the relocation of the Tavern adjacent to the library.

2012-2016

Expansion of The Hub Shopping Centre, renamed Kwinana Marketplace, expanded the building footprint south, as well as providing new buildings fronting Chisham Avenue.

- Within this period of time, a new ALDI supermarket has opened on the northern side of Chisham Avenue, and a Coles supermarket has moved into the Marketplace shopping centre.
- Chisham Avenue has also undergone extensive landscaping to redefine this as the City Centre Main Street. Complemented by new residential development to the north, this has the opportunity to add greater diversity of uses within a revitalised City Centre.



Figure 5: *City Centre Zone, 2007*



Figure 6: *City Centre Zone, 2011*

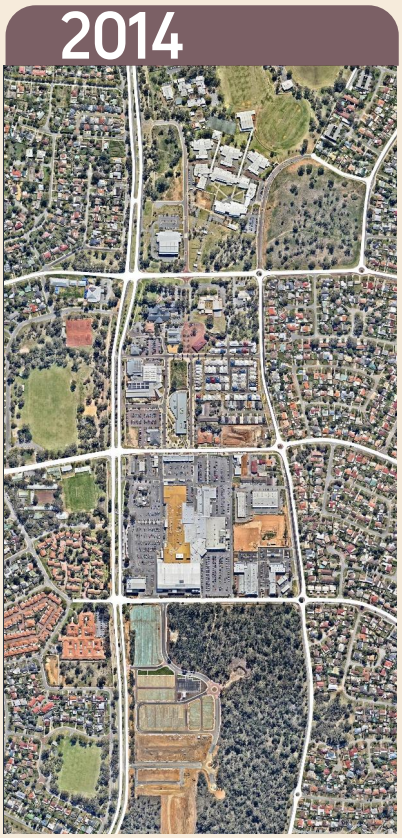


Figure 7: *City Centre Zone, 2014*

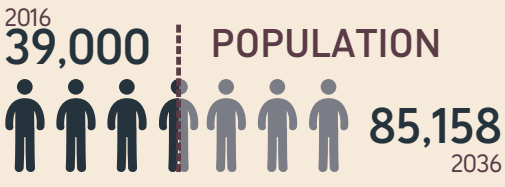
1.3 CHANGING POPULATION AND DEMOGRAPHIC PROFILE

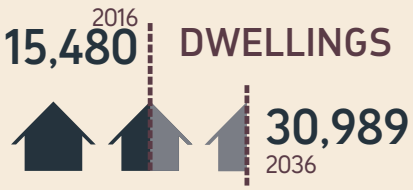
POPULATION GROWTH

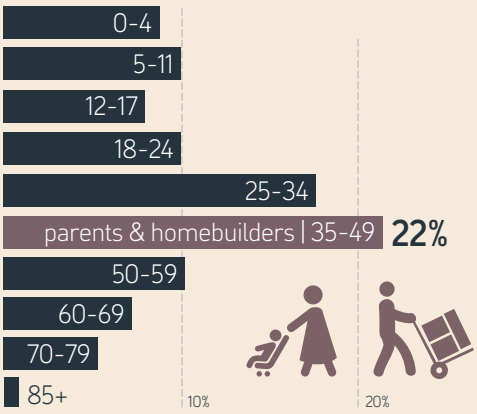
Kwinana is currently the fastest growing local government area in the Perth South-West Metropolitan area and the fourth fastest in Western Australia. Population projections provided by Forecast.id show Kwinana having a population of 85,158 by 2036, representing more than double the population from 2017.

To accommodate this population growth, an increase in dwelling units from 15,480 in 2015 to 30,989 in 2036 will mostly occur in the north and eastern sections of the City, adjacent to the Kwinana Freeway and the Perth-Mandurah Railway. This equates to some 800-1,000 new residential lots being released each year, predominantly as part of quality residential developments undertaken by the State's leading developers - currently including Honeywood (Satterley), Sunrise (AMEX), the Village at Wellard (Peet), Emerald Park (Cedar Woods) and Cassia Glades (Satterley) amongst others.

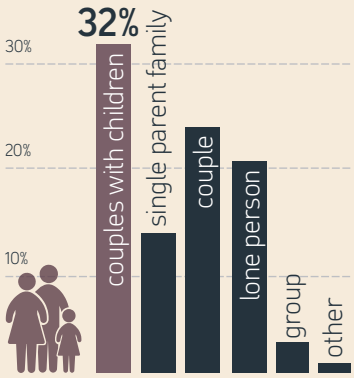
According to the City's 2016 Profile.id, detached houses make up 89% of dwelling structures in Kwinana, reflecting the need for greater urban consolidation and densification, as outlined in *Directions 2031 and Beyond*.







AGE PROFILE



FAMILY STRUCTURE

1.0 Strategic Context

SOCIO-ECONOMIC COMPOSITION

Kwinana has a young population with 67.2% of the population under the age of 40 with a median age of 32. The average house hold size is 2.6, this indicates that the residential environment of Kwinana is of choice for young families. This trend is projected to continue into 2036. On average, 70% of people living in Kwinana own or are purchasing their own home.

TRAVEL TO WORK

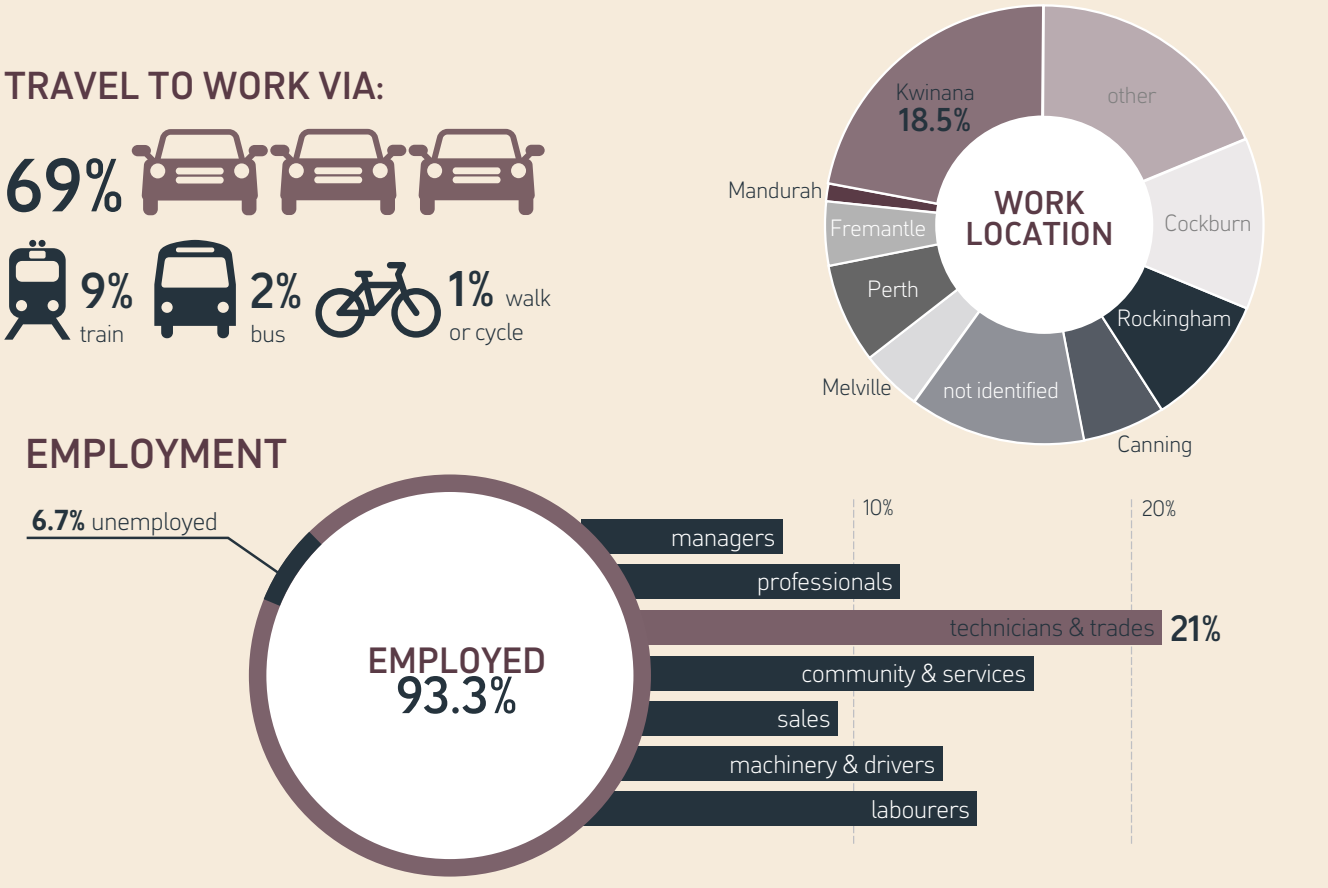
The current mode of travel to work is by car, however, a significant section of the resident labour force (51.5%) work within the south west corridor, suggesting the need to retain a strong public transport focus on employment locations within this sector.

ECONOMY AND INDUSTRY

Unemployment in Kwinana is high at 6.7%, compared to the Perth metropolitan area at 4.8%. Of those in employment, the proportion of local resident labour force sits at 33%, while the remaining 67% work within the greater Perth area (Figure 6).

The dominant work sectors remain in Manufacturing and construction. Emerging sectors are within education and training, public administration and safety, health care and social assistance.

Kwinana has relied heavily on resource intensive industries such as mining, manufacturing and construction. Under represented in both high growth and cluster concentration are financial and insurance services, professional services, administrative and support services, arts and recreation services, retail, wholesale, agriculture, forestry and fisheries, education and training (Draft KLPS, 2015)



1.4 CHALLENGES AND OPPORTUNITIES

Kwinana City Centre is evolving, and whilst it is faced with a number of physical challenges outlined in the table below, this also provides for untapped opportunities (Figure 8) to express the centre as a key destination, offering unrealised commercial returns and a place for the community to come together at its heart.

	CHALLENGES	OPPORTUNITIES
Topography	• Perceived distance walking between area • Physical separation between precincts • Visual separation between areas	• Maintaining active frontages onto public spaces. • Strengthen the distinctive characteristics of each area by responding to the natural terrain
Land Ownership	• Council Administration building at capacity • Limited development opportunity on smaller lots	• Consolidation of Council administration • Collaborative partnerships to integrate land uses
Existing Land Uses	• Lack of night life offering • Limited diversity of land uses within the City Centre • Limited diversity of residential development in the immediate vicinity of the City Centre	• Greater diversity of night time /day time offering • Provide for mixed used development to allow for upper storey residential uses - increasing the range of housing options. • Collaborative partnerships with local businesses to engage with and develop sustainable outcomes for the City Centre
Movement	• Vehicles dominate in City Centre • Width and speed along Gilmore Ave detracts from the City Centre environment • Disconnect between land ownership within the southern area	• Defining a clear movement network hierarchy • Traffic calming Gilmore Ave • Development of an Integrated Transport Strategy
Public Open Space	• Limited passive surveillance onto POS • Lack of integration between POS • Linking facilities across Gilmore Ave • The protection and enhancement of bush land has been identified as a priority in the Strategic Community Plan.	• A balanced approach between development and the protection of the natural environment needs to continue into the future. • Ensure facilities meet the changing needs of the local community • Maintain seamless connections to public open space
Parking	• At-grade car parking dominating the City Centre • Overlap of facilities using closest convenient spaces • Perceived lack of parking	• Short-stay parking primarily located on-street. • Integration of Parking Management Plan and Integrated movement strategy - working collaboratively with the Marketplace
Pedestrian access	• Topography of the City Centre • Lack of passive surveillance along primary pedestrian corridors	• Prioritise safe pedestrian access • Create pleasant walking environments between key destinations • Increase passive surveillance along primary pedestrian corridors

1.0 Strategic Context

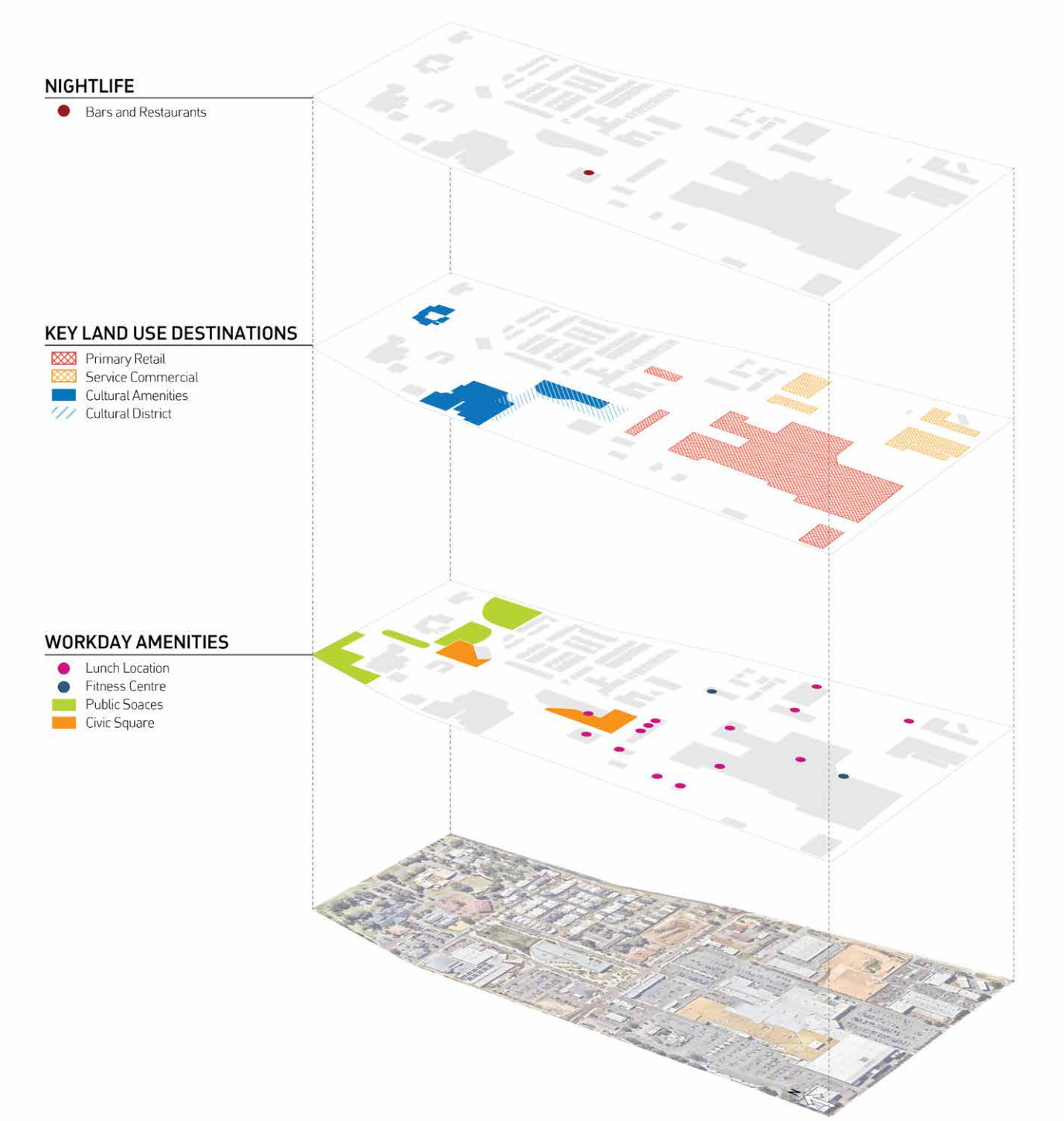


Figure 8: *Analysis of Kwinana City Centre existing context*


Kwinana



2 VISION

2.0 Vision

2.1 VISION

Kwinana's character is reflected in its unique community driven spaces. A number of urban expansion areas continue to regenerate a number of inner and outer city sites, helping to define it as a modern centre.

Within this interplay of elements, the Strategic Community Plan (SCP) sets out the following vision statement for the City:

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

This Master Plan has been prepared to assist in achieving this vision and overarching Strategic Community Planning Objectives under the following four themes:

+ Rich in spirit
+ Alive with opportunities
+ Nature – preserve and enhance
+ Services, facilities and a diverse lifestyle

Within this context, the following aims have driven the revised City Centre Master Plan:

1. **Create a context for people to engage with the place**
2. **Create a context for people to engage with each other**
3. **Create a context for people to celebrate a shared sense of place**

2.2 OBJECTIVES

The follow objectives reflect the intent of this Master Plan to revitalise Kwinana City Centre:

+ Provide a high quality Main Street environment facilitating a pedestrian-orientated environment and public spaces.
+ Create key 'destinations' which promote activity and vibrancy in the City Centre.
+ Reinforce existing civic and retail anchors to link primary pedestrian routes north and south of the City Centre.
+ Encourage a wider variety of uses within the City Centre to facilitate activity outside of business hours.
+ Minimise the impact of vehicle traffic and car parking within the City Centre.
+ Integrate the City Centre with Calista Oval and surrounding developments.
+ Promote a high quality mixed use environment accommodating ground level retail and opportunity for multi-unit residential dwellings above.
+ Redefine Gilmore Avenue as the a gateway boulevard into the City Centre.
+ Reflect Kwinana's unique sense of place identity through the built form and links to natural and cultural landscapes.
+ Integrate peripheral development along Meares Avenue, reinforcing a mix of development within the City Centre.

2.0 Vision

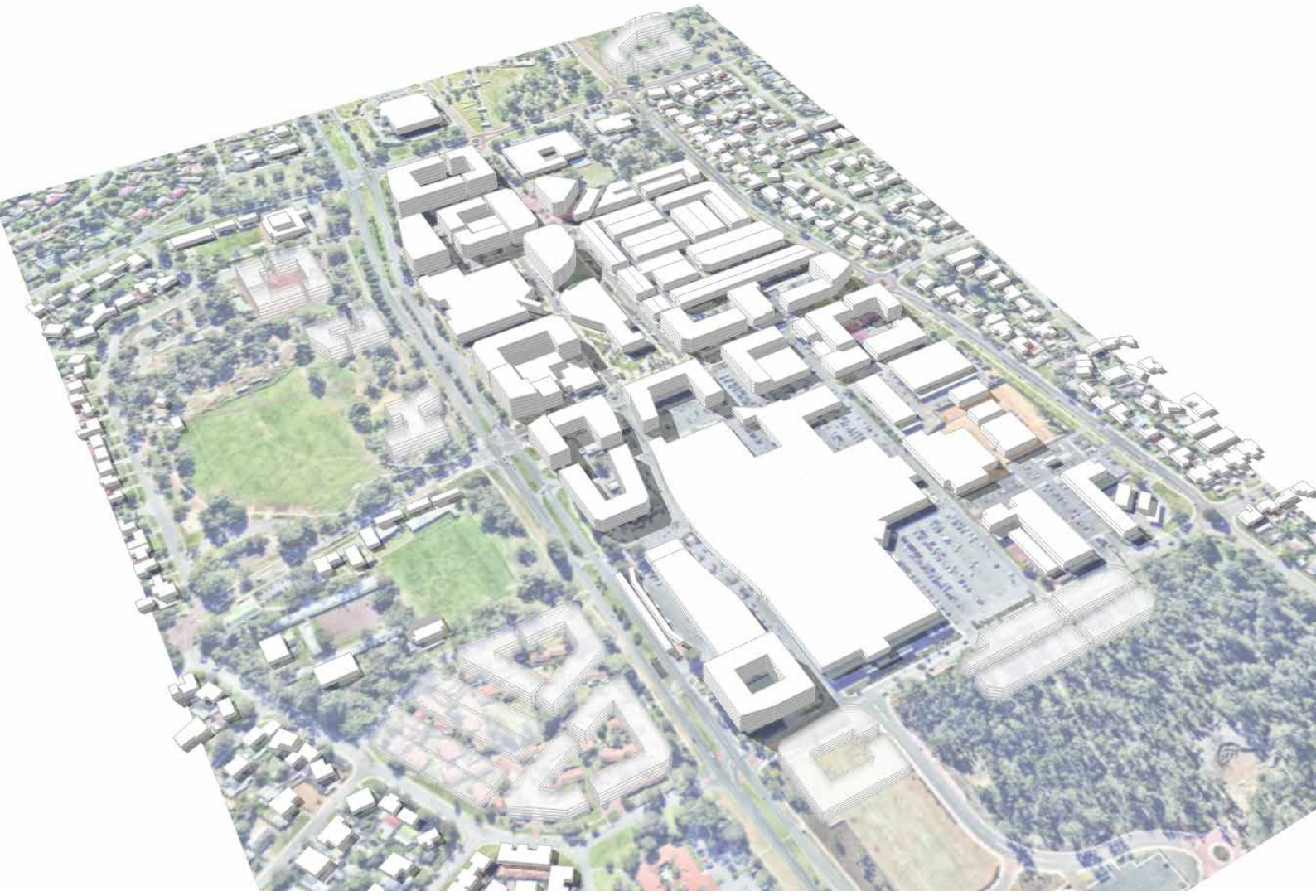


Figure 9: *Indicative model Kwinana City Centre Master Plan*

2.3 MASTER PLAN CONCEPT

The revised concept plan (Figure 10) is based on the outlined aims and design principles. The plan is illustrative only showing the desired layout of streets, public spaces and building footprints, guiding the development of the City Centre over a 30 year period.

Whilst the Master Plan does not seek to restrict creativity, new development within the City Centre will be assessed for their contribution to essential qualities outlined within the twelve development principles and the more detailed design guidelines presented in the following section. These guidelines have been developed to promote a degree of consistency in the quality, form and amenity new buildings contribute to the City Centre.

Key elements of the Master Plan are identified on the following plan (Figure 10). These suggestions contribute to a sustainable centre incorporating a mix of uses within a vibrant public realm.

1. Reinforce a slow speed pedestrian environment and continuous edge to Chisham Avenue Main Street providing visual interest and generous space for alfresco dining and pedestrian movement.
2. Creation of shared use pedestrian environment linking the Civic Square to surrounding destinations.
3. Redefine Gilmore Avenue as a slow speed entry boulevard facilitating safe and convenient access between the city and new activities on Calista Oval.
4. Reinforce legible and attractive north-south and east west primary pedestrian routes connecting uses within the City Centre to public transport, Calista Oval and surrounding residential development.
5. Integrate a diversity of residential dwellings and providing opportunities for residents to enjoy the City Centre location.
6. Development of a secondary Community Square providing a nodal link between the existing Public Transport Interchange and central Civic Square.
7. Introduce short-stay car parking on-street within the heart of the city.
8. Sleeving of longer-stay off-street car parking to the rear of buildings or partially screened from the street – preferably shared between many uses.
9. Tree planting along the primary north-south and east-west pedestrian routes providing canopy coverage and continuous sight lines between nodal links.
10. Promote shared use pedestrian environment to link main entry points between the Kwinana Market Place and the Main Street.
11. Integration of retail uses to the western edge of Kwinana Marketplace Shopping Centre addressing the primary north-south pedestrian route.
12. Bus stop accommodated either side of Gilmore Avenue to facilitate public transport connections north of Chisham Avenue.

2.0 Vision



Figure 10: *Kwinana City Centre Master Plan*





3

URBAN STRUCTURE

3.0 Urban Structure

Aim: Create a context for people to engage with the place

The City Centre Master Plan takes into consideration the broader character areas, the wider public space network linking nodes of activity and key view corridors within the proximity of the Centre. At the wider scale this also addresses primary pedestrian north-south and east-west routes and the hierarchy of street types setting up the urban structure for new development to respond to. Key connections must be reinforced to achieve a revitalised City Centre.

3.1 CHARACTER AREAS

Good design responds and contributes to its context. Context refers to everything that has a bearing on an area and comprises its key natural and built features reflective of precinct character areas expressed in Figure 11. This also includes land uses, social and environmental factors. Understanding the context means understanding inter-relationships between local areas and the wider city that will impact the centre over time.

OUTCOMES

- Provide a cohesive approach to development within precincts.
- Buildings complementing the character and attributes of the locality and landscape themes of the public realm.
- Integrate with adjacent development contributing to a vibrant pedestrian Main Street environment.

ATTRIBUTES	DESIGN GUIDANCE
Civic Precinct	**Civic Precinct**
+ Located north of the City Centre between Sulphur Road and Darius Drive the Precinct is characterized by buildings set within a landscaped park setting. + City's civic administration is featured in a prominent location with associated public areas for ceremony and celebration. + New residential development will create a lively and active precinct accommodating a range of housing choice.	+ Street frontages and public realm treatment should resolve level differences to provide accessible and attractive spaces. + Building form should respond to the topography using level changes to provide under-croft and basement parking below active floor levels. + New development, largely influenced by the surrounding built form, should respond to each other to establish elements of cohesiveness throughout the precinct.
Main Street Precinct	**Main Street Precinct**
+ A bustling retail and commercial centre supporting a high level of pedestrian activity, slow moving traffic and rich mix of uses fronting the Main Street. + Comfortable, wide, sheltered footpaths and public spaces of contemporary design will provide a setting for people to linger, shop, gather in the evening and for special events, local markets and festivals. + The public realm will be characterized by significant tree planting to enhance landscape qualities that are valued in Kwinana	+ New development within this precinct should provide an engaging public space for locals, visitors and workers in the area. + Improved pedestrian connections to the shopping mall and Main Street retail will add to the city's economic vitality. + Residential development is encouraged, particularly at upper levels, to provide a liveable city centre supporting a variety of dwellings to enliven and to engender a sense of ownership of and care for the Centre. + New development should accentuate the edge of the Main Street, reinforcing a distinctive urban wall and sense of enclosure.

3.0 Urban Structure

ATTRIBUTES	DESIGN GUIDANCE
Retail Precinct	**Retail Precinct**
+ The shopping centre as the key activity, will evolve to become an integrated and connected part of the City Centre where people can move easily between the internal mall environment, the street and out to the precincts beyond. + Service areas will be designed to be clear and clean, using CPTED principles. + Buildings will be designed to minimise the visual impact of blank walls and large scale façades.	+ The built edges of the shopping centre are encouraged to provide active frontages along primary pedestrian linkages and building entrances, reaching out beyond the site and precinct to improve walkability to and through the City Centre. + All retail and business development will address public spaces to create a safe, attractive, well landscaped place for people at all times of the day and night.
Calista Oval Precinct	**Calista Oval Precinct**
+ Calista Oval Precinct is a treasured area of natural bush land which has contributed for a long time to the special landscape character of Kwinana.	+ Significant stands of natural vegetation and mature specimen trees should be preserved wherever possible.

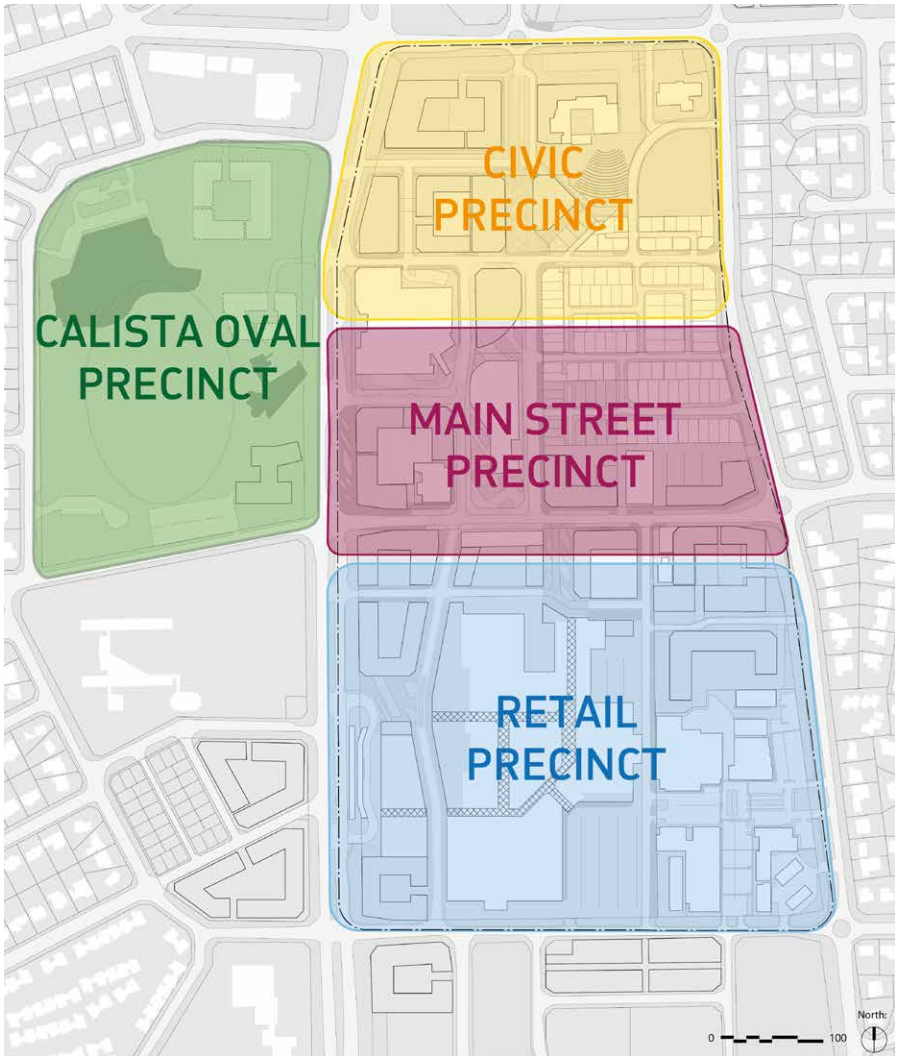


Figure 11: *Precinct Character Areas*

3.2 PUBLIC SPACE NETWORK

Publicly accessible space linking nodes of activity are responsive to the existing pattern and uses within the City Centre and adjoining areas.

Key nodes of activity within the City Centre provide for a variety of spaces, enabling a range of opportunities for the community to come together at the heart of the City. Over time, this network of spaces will build on creating a unique sense of place and identity to the City Centre.

OUTCOMES

Distinctive Places

+ Creation of distinctive places that brings the community together and attracts a broader diversity of users to the City Centre.
+ Ensure that development incorporate plazas, terraces and other public spaces for people to recreate.

Linking Activity Nodes

+ Integrated network of open space accommodating a variety of uses within the City Centre (Figure 13).
+ Defined connections to the surrounding land uses and public spaces.
+ Providing a variety of spaces as attractive venues for active and passive recreation within the City Centre.

Public Spaces

+ Establish Chisham Avenue Main Street as the focal point and prime public space of the City Centre.
+ Ensure buildings provide an integrated response to the adjacent public realm that corresponds to the overall character and sense of place.

ATTRIBUTES	DESIGN GUIDANCE
Distinctive Places	
+ The built form and public realm working together to create places having a distinctive character. + Embrace new and contemporary uses.	+ Providing a variety of pedestrian environments along key pedestrian routes, such as squares, plazas and courtyards, add interest and contribute to a distinctive sense of place. + Integrate public art to reflect a unique sense of place.
Linking Activity Nodes	
+ Define key nodes of activity through the built form and expression of the public realm. + A variety of attractive and functional spaces providing for a range of users within the City Centre.	+ Linking key pedestrian landmark features to ensure clear destinations within the City Centre and surrounds. + Resting spaces provided for within public spaces enabling people to linger.
Public Spaces	
+ High quality pedestrian access adopted throughout the public realm. + Public spaces and parks are within easy walking distance of the City Centre. + A connected network of open spaces, reinforcing linkages to the City Centre and surrounding recreational activities.	+ Create active interfaces between the public realm and adjacent buildings. + Consider the site infrastructure design integrated within the public realm. + Ensure new built form provide a focus on natural passive surveillance.

3.0 Urban Structure

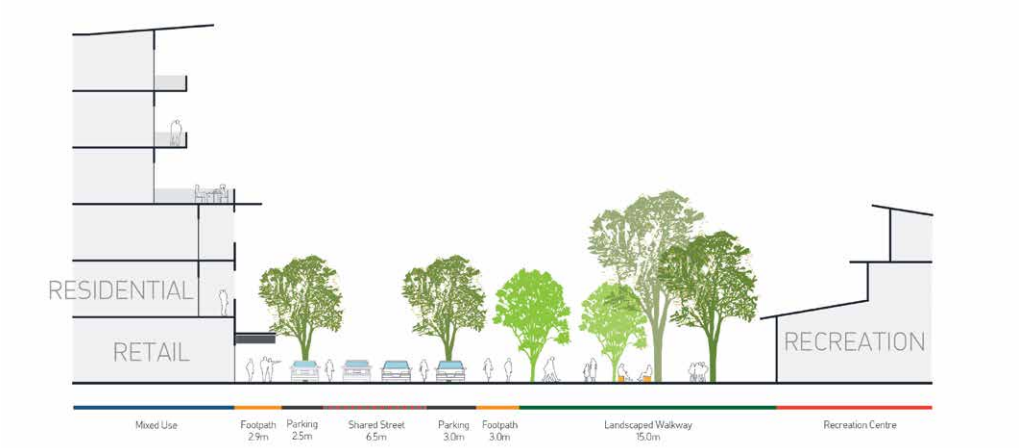
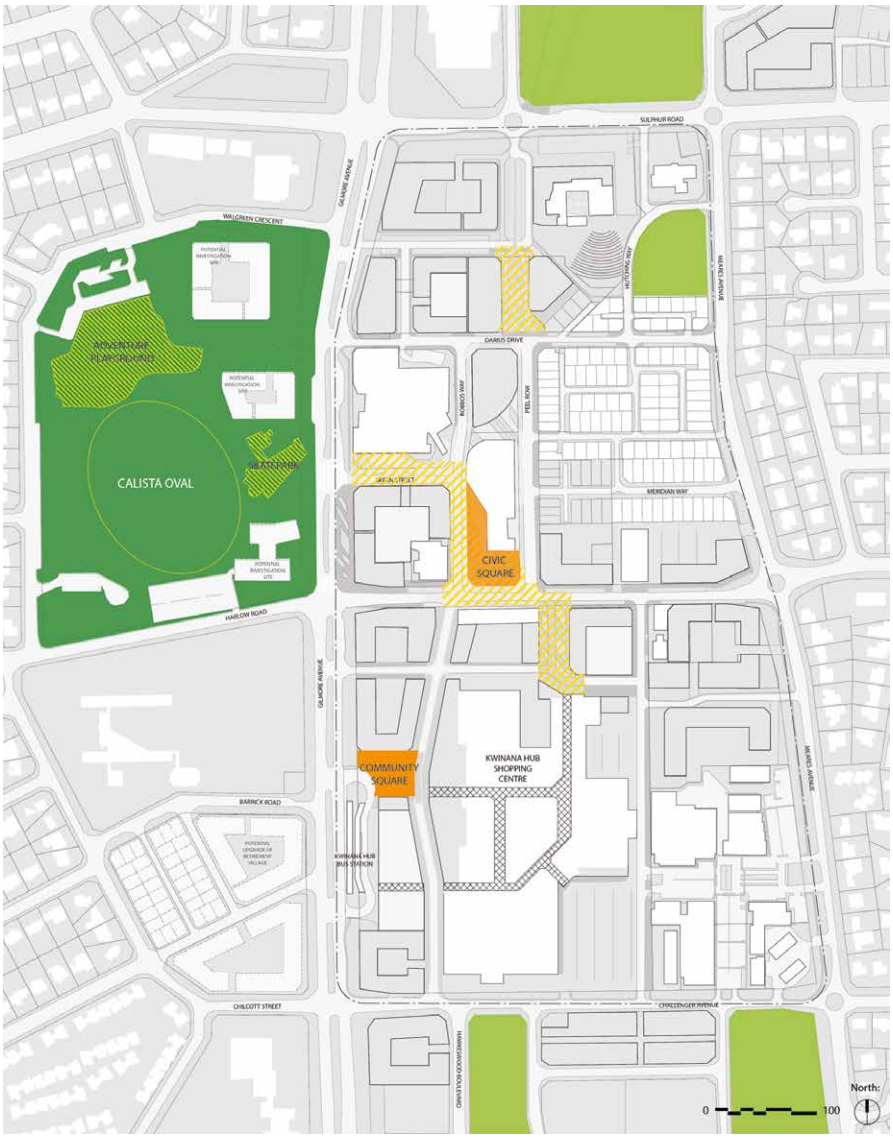


Figure 12: *Western Section, Skerne Street Shared Street environment*



DISTRICT OPEN SPACE
LOCAL OPEN SPACE
CIVIC/ COMMUNITY SQUARE
SHARED SPACE
ADVENTURE PLAYGROUND & SKATEPARK
CITY CENTRE BOUNDARY

Figure 13: *Variety of Public Spaces within and surrounding the City Centre*

3.3 VIEW CORRIDORS

Figure 14 illustrates key view corridors, landmarks and entry statements into the City Centre, providing the opportunity to enhance legible connections into the heart of the City and surrounding activities within Calista Oval.

OUTCOMES

Primary View Corridors

+ Preserve the opportunities for views and vistas through to the surrounding natural landscape, reinforcing the areas distinctive sense of place.
+ Provide legible connections throughout the City Centre, linking nodes of activity.

Landmarks and Key Features

+ Maximise visual linkages with key lines of sight between activity points and buildings to enhance legibility.

Gateway Statements

+ Defined thresholds into the City Centre.

ATTRIBUTES	DESIGN GUIDANCE
View Corridor	
+ New development reinforces important views and the relationship between the building and adjacent public space.	+ Building design should maximise views from living spaces, balconies and terraces to the public realm and future open space. + Maintaining walkable distances between blocks (<100m) creates the opportunity to link visual sight lines.
Landmarks and Key Features	
+ Buildings on key intersecting corners have an increase in height to enhance legible wayfinding and visual connections through the City Centre.	+ Consistent scale and massing creates a strong sense of urban enclosure as well as framing and reinforcing sight lines to landmark buildings and key features. + A dynamic sequence of spaces, providing opportunity for moments of projection and recession, the juxtaposition between built and natural elements all add the activation and interest of spaces.
Gateway Statements	
+ Reinforce the significance of Gilmore Avenue as the major approach and gateway to the City Centre.	+ Enclosing spaces through landscaped edges or built form of consistent scale and massing creates the opportunity to define thresholds into the City Centre.

3.0 Urban Structure



Example: Northern view from the central pedestrian route linking view corridors



Example: Opportunity to link nodal points within the city centre

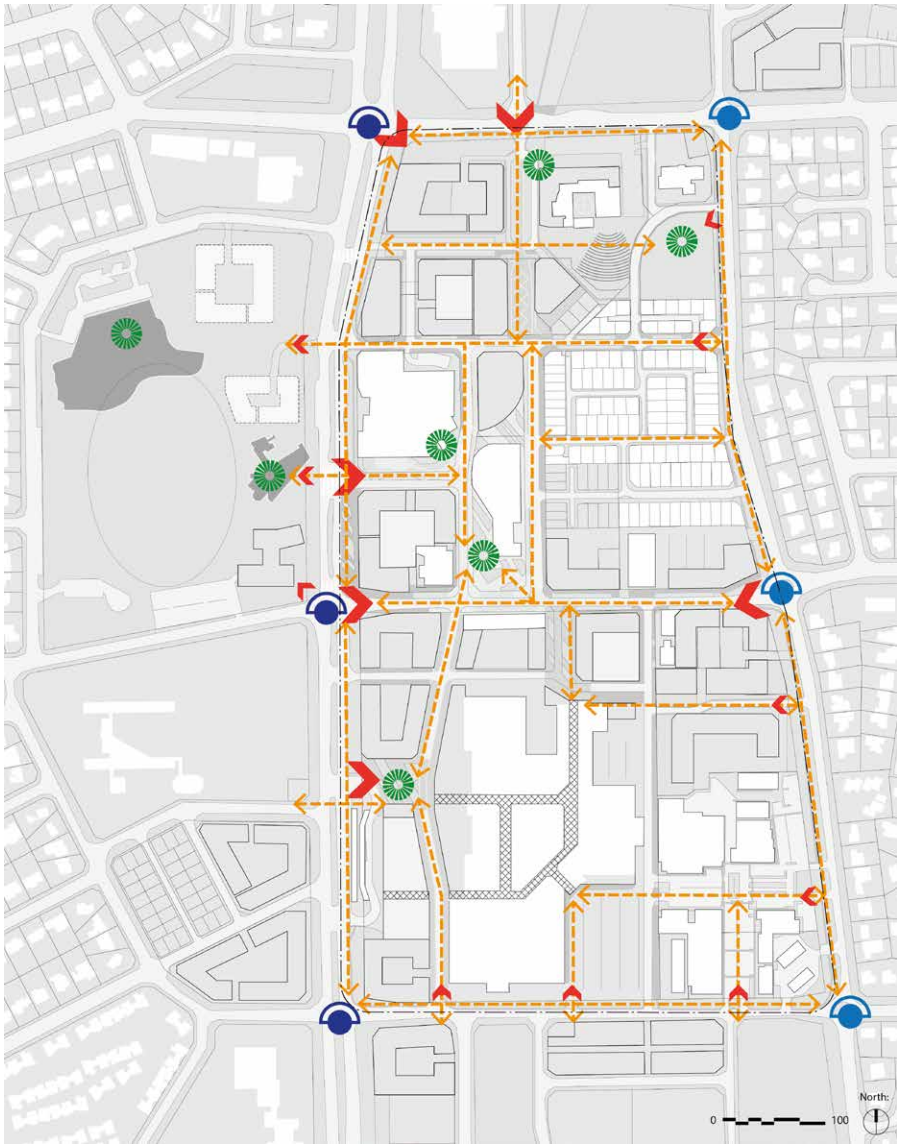


Figure 14: *View Corridors and Gateways*

3.4 ACTIVE TRANSPORT

Promoting active transport through clearly defined pedestrian, cycle and public transit networks (Figure 15) enables greater integration of the city environment with the surrounding residential neighbourhoods. This provides the opportunity for city users to spend time and explore the city environments and in turn contribute to city life. The City adopted the Bike and Walk Plan in 2018. In this regard, future cycle provisions should refer to the Bike and Walk Plan.

OUTCOMES

Primary Pedestrian Routes

+ Defined north-south pedestrian route integrating with east-west connections through the City Centre.
+ Integrate 'shared streets' within the City Centre to reinforce pedestrian priority environments.

Secondary Pedestrian Routes

+ Providing permeable connections through the City Centre.

Cycle Network

+ Promote active transport as a viable mode of transport linking the City Centre to clearly defined cycle routes and key destinations.
+ Ensure bicycle parking and end of trip facilities are provided for both public and private use.

Public Transport and Cycle Routes

+ Reinforce safe and legible connections to the public transport interchange adjacent to the Marketplace Shopping Centre.
+ Provide new bus stops north of the City Centre, linking new activities east and west of Gilmore Avenue.

ATTRIBUTES	DESIGN GUIDANCE
Primary Pedestrian Routes	
+ Reinforced primary pedestrian links as shown in Figure 16 + Pedestrian friendly road geometry including tight radii on corners, crossovers aligned with pedestrian movement and narrowing of carriageways. + Ground level frontages on primary pedestrian links incorporating a mix of land uses and design measures to ensure passive surveillance contributing to a safe, active and diverse public realm. + Provide safe and regular pedestrian crossings. + Generous uncluttered footpaths with sufficient space for alfresco seating and easy pedestrian movement.	+ Continuous and visually permeable shop fronts reinforcing the 'main street' environment contributes to both the streetscape and sense of activity. + Providing wide pedestrian crossings at key intersections to assist safe pedestrian connections. + Providing regular seating, cycle racks, bins protected from the sun, rain and wind will improve comfort and encourage street activity. + Weather protection along buildings fronting primary pedestrian corridors enables seamless pedestrian connections throughout the seasons.
Secondary Pedestrian Routes	
+ Pathways providing permeable pedestrian connections through the City Centre, linking through to surrounding activities.	+ Legible way-finding through the city centre can improve access to parking areas and local facilities + Roads and paths are safe for adults and children to walk or ride.
Bicycle Facilities	
+ Adequate supply of bicycle parking bays enabling greater choice of movement through the City Centre. + Bicycle parking and storage functions incorporated into the building design.	+ Buildings that include any non-residential development should include end of trip facilities to support active transport modes. + Ensure cycle parking spaces are integrated within the streetscape, within easy access, and clear view of adjacent uses to facilitate passive surveillance.

3.0 Urban Structure

ATTRIBUTES	DESIGN GUIDANCE
Public Transport	**Public Transport**
+ Provide high quality bus stops within the City Centre, integrated with the streetscape design and easily accessible to pedestrians. + Legible pedestrian connections linking the public transport interchange with provision for shelter, seating and access to cafes.	+ Provide safe, attractive and direct pedestrian and cycle access from large format buildings to public transport nodes and the surrounding area. + Pedestrian connections are reinforced to the public transport interchange with provision of shelter, seating and adjacent cafes providing passive surveillance over this area.

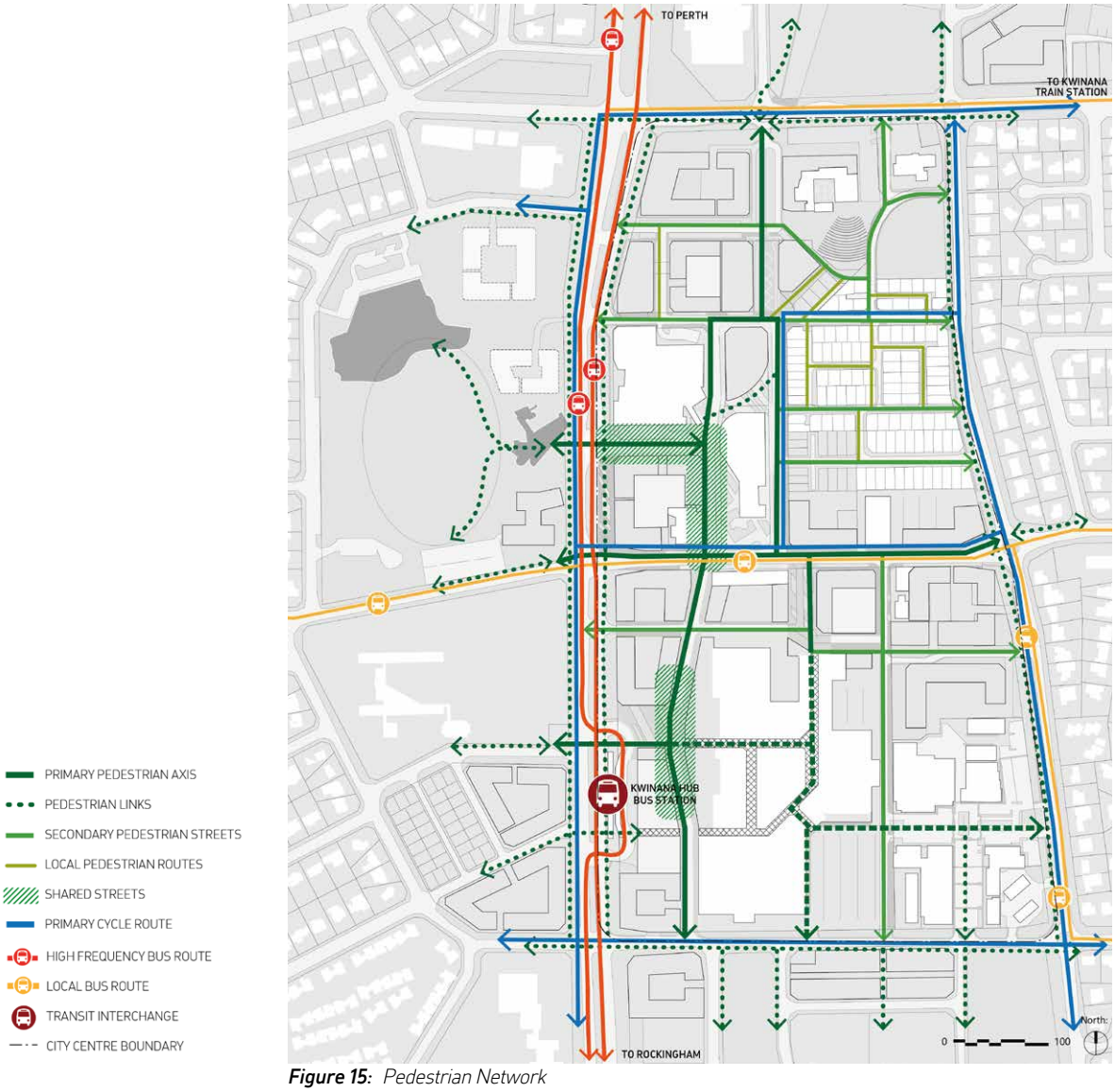


Figure 15: *Pedestrian Network*

3.5 MOVEMENT FRAMEWORK

Streets are the foundation of a great city centre and taking a people-centred approach promotes vibrancy, enriching everyday life for all residents and visitors. The Master Plan provides guidance for the desired character of streets and of the public realm.

Buildings responding to the street hierarchy (Figure 17) provide the opportunity to reinforce the street wall along primary streets, clearly defining spaces within the City Centre and enhancing the overall character of Kwinana.

OUTCOMES

Entry Boulevards

+ Representing the city's identity and civic pride, these streets are the highest priority due to the provision of a range of transport options for street users, as well as their importance to the City's overall entry function (Figure 16).

Primary Streets

+ Appropriate building height and street widths to create a sense of enclosure and definition to street, reinforcing street types by capacity and character.
+ An appropriate balance between vehicle and pedestrian movement, providing safety for pedestrians and accessibility for vehicles.

Secondary Streets

+ Create a human scaled environment which encourages social interaction, walking and active modes of transport.

ATTRIBUTES	DESIGN GUIDANCE
Entry Boulevards	
+ Reinforce a built edge onto Gilmore Avenue – supporting a slow speed environment between Chisham Avenue and Sulphur Road. + Prioritise pedestrian access across Gilmore Avenue at the key intersections of Sulphur Road, Chisham Avenue and Skerne Street.	+ Provide clearly defined, safe and convenient connections to the public transport network and cycle and pedestrian corridors
Primary Streets	
+ Traffic is slowed within the Main Street Precinct providing for defined pedestrian crossings and tree planting to create a sense of enclosure to the street. + New buildings should maintain or reinstate a street wall along primary streets.	+ Ground level façades providing variation and interest at a human scale along its length encourage people to linger longer. + Weather protection for pedestrians should be provided along primary pedestrian routes in the form of awnings, verandas or first floor balconies. + Vehicle entrance points and services areas integrated into the overall building design minimises the visual impact on the pedestrian environment and street vitality.
Secondary Streets	
+ Enable permeable vehicle access through the City Centre, distributing traffic onto the outer ring route. + Provide clear sight lines for passive surveillance and to frame significant views.	+ Passive surveillance along secondary streets can be provided by orientating windows and building openings onto the street and public spaces.

3.0 Urban Structure



Figure 16: *Northern Section Gilmore Avenue - reinforcing a street edge*

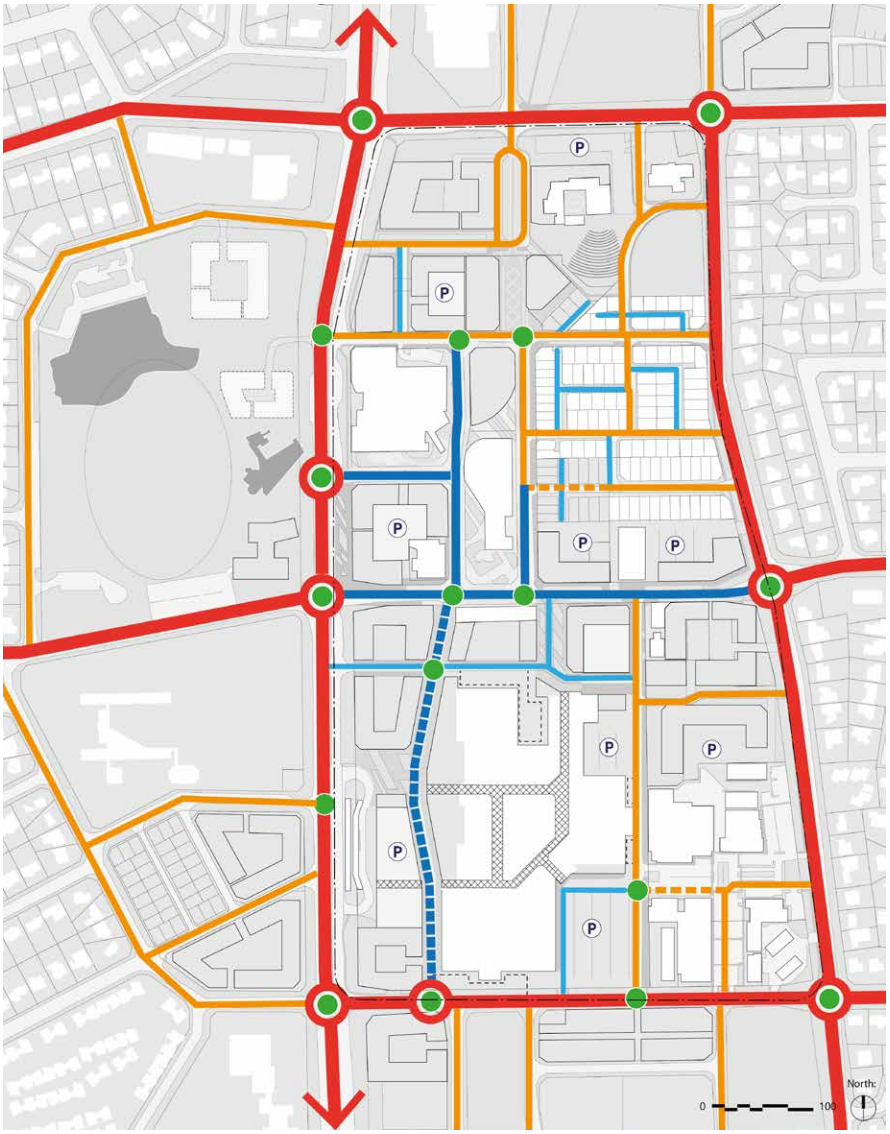


Figure 17: *Street Hierarchy*

3.6 PARKING

Good design of car parking is essential to both functionality and good visual quality throughout the City Centre. Realignment of on-street car parking integrated within a newly landscaped environment is designed to improve the pedestrian experience and maintain convenient access to the local shops and facilities.

To balance the future car parking needs within the City Centre, Figure 18 illustrates an approach to manage the integration of car parking with future development opportunities. This aims to provide both efficient and convenient access users within the city environment.

OUTCOMES

On-street Car Parking

+ Ensure on -street vehicle parking and access are appropriately located, maintaining strong pedestrian connectivity, whilst minimising adverse visual impacts on the streetscape.
+ Management of on-street short term car parking to provide convenient and efficient access to city centre facilities and services.

Off-street Car Parking

+ Minimise the adverse visual impact of car parking structures by sleeving ground level parking with active land uses and attractive facade treatment.
+ Integrate parking within new development to enable activation of street frontages.

ATTRIBUTES	DESIGN GUIDANCE
On-street Car Parking	
+ On- street car parking that is time managed providing the opportunity for a more accessible core to the City Centre	+ At-grade car parking should not dominate primary street frontage or the public realm + On-street car parking should address safe and convenient locations within areas identified (Figure 18).
Off-street Car Parking	
+ Provide safe, legible, well lit access to car parking at the rear of developments to maintain strong pedestrian connectivity. + Vehicle entry points and service areas integrated with the overall building design minimize visual detraction from the pedestrian environment and street vitality.	+ Locate and arrange customer parking areas to the rear of the building, or below or above ground. + Legible way-finding through the City Centre can improve access to parking areas and local facilities + Vehicle crossovers minimized and shared where possible creates the opportunity to define primary pedestrian routes.

3.0 Urban Structure





Example: Bassendean Shopping Village Main Carpark, Bassendean





Example: Shared Space Street - Bayview Terrace, Claremont Quarter

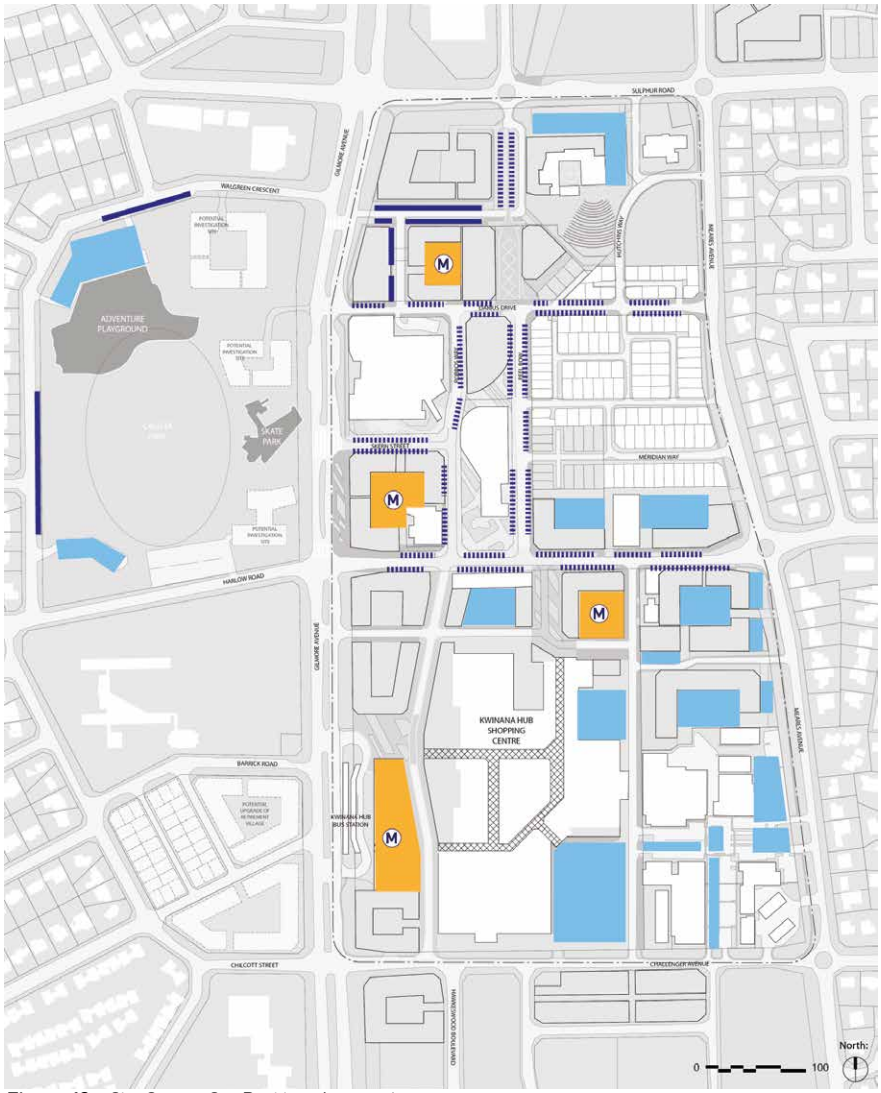


Figure 18: *City Centre Car Parking Approach*


Darius Wel
Library & Resource Centre



4

BUILT FORM

4.0 Built Form

Aim: Create a context for people to engage with the place

At the streetscape scale, this outlines the surrounding mix of uses, desirable height and scale of buildings within the City Centre, as well as the key location of active frontages that proposed new development should address. This also outlines the treatment of façades and building orientation appropriate for enclosing spaces and providing protection from the sun and prevailing winds, as well as acoustic and visual privacy for residential uses within mixed use buildings.

4.1 MIX OF LAND USES

To encourage sustainable urban development within the City Centre a diversity of retail and commercial uses must be embraced (Figure 19). This is essential in promoting a vibrant and active destination by day and night set within a high quality public realm. The City Centre Master Plan also facilitates the development of more diverse and intensive living options. Apartments and town-houses provide the opportunity to address a gap in the current market, providing affordable living options in an active and vibrant centre. The character sought by the following outcomes are derived from existing examples of prominent mixed use city centres.

OUTCOMES

Mixed Use

+ Diversity of 'vertical' activities (multi-storey mixed use development) – adding to the sense of vitality and richness of place.
+ Diversity of 'horizontal' activities at ground level adding interest and a sense of vitality to the place.
+ Accommodating a mix of uses servicing daily needs, creating focal points and desirable attractors along key routes.

Commercial Use

+ Provide the opportunity for new businesses to be established with retail, office and commercial space encouraged at ground floor levels facilitating a vibrant pedestrian environment.
+ Encourage a variety of businesses that will activate the precinct during both daytime and evening hours.
+ Ensure high levels of functionality and servicing for new commercial development.

Residential Diversity

+ A range and variety of dwelling types to cater for a growing population and income levels.
+ Support residential living within the City Centre both around the edges, and in the upper levels of buildings.
+ Ensure high levels of residential amenity whilst also providing appropriate measures of visual and acoustic privacy.

ATTRIBUTES	DESIGN GUIDANCE
Mixed Use	
+ Integrate a mix of uses, providing for ground floor retail and commercial uses addressing the street and permanent residential in the levels above.	+ Incorporate 'vertical' (multi-storey mixed use development) and 'horizontal' mix of uses (traditional stand-alone buildings clustered together but with different and complementary purposes). + Incorporate a range of dwelling types within 'mixed use' buildings. + A Bushfire Hazard Level (BHL) assessment will be required for any Development Applications in areas identified (specifically along Challenger Avenue) as being bushfire prone in accordance with SPP 3.7 and the National Construction Code.

ATTRIBUTES	DESIGN GUIDANCE
Commercial and Retail	
+ Ground floor levels incorporating a mix of retail and commercial uses (e.g. shops, restaurants, consulting rooms, offices), recreation and/or entertainment uses that address the public realm. + Ground floor retail and commercial floor space providing major pedestrian entries directly from the street.	+ Desirable land uses at ground floor are located in accordance with Figure 19. *Opportunity for residential/office uses presents at Sulphur/Gilmore Rds. + Create synergies between activities during the day and night within the Main Street environment + Building design to consider flexible and adaptable ground floor uses over time, providing generous ground level ceiling heights between 3.3m and 4m.
Residential Diversity	
+ Medium-to-high density residential development providing for a greater diversity of household within the City Centre. + Providing a clear distinction between the private and public space for residential uses at ground floor level + Allowing for passive surveillance and interaction with the street through window and balcony orientations.	+ Residential developments should provide a range of dwelling sizes and types providing a variety of housing types and affordability options. + Consider adaptable building design, such as buildings with floor plan dimensions and ceiling heights suitable for residential and commercial uses.

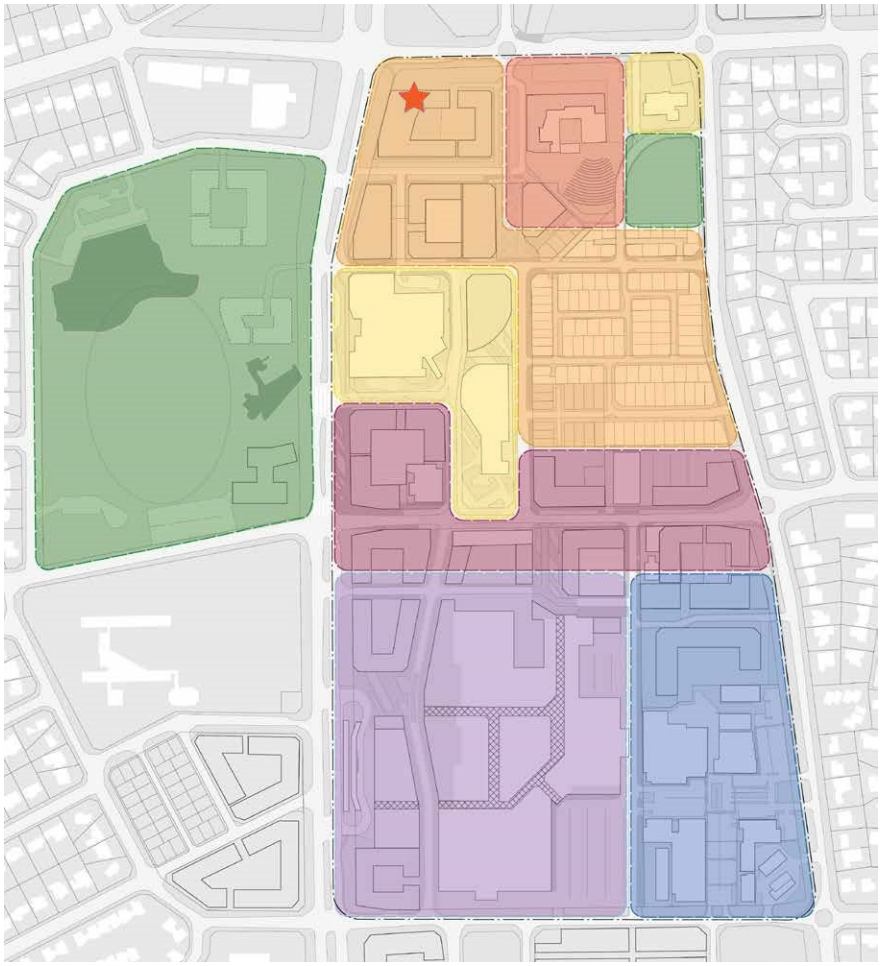


Figure 19: *Overlay of Land Uses within the city centre*

4.2 HEIGHT AND MASSING

Built form, height and massing all influence the 'look and feel' of the neighbourhood, as well as the quality, amenity and usability of internal and external spaces. The building envelope, site coverage, solar access and orientation are also considered for new development within the City Centre to consider.

OUTCOMES

Building Height and Scale

- Ensures an appropriate building height to street width ratio creating a sense of enclosure and definition to street, reinforcing street types by capacity and character.
- Promotes a high standard of design quality that provides a strong architectural character and sense of place

Human Scale

- A variety of setbacks create a visually appealing and diverse built environment whilst also providing the opportunity to integrate the public realm.

Corner Sites

- Corner buildings that have a distinctive presence, reflects their position as a link between streets, a vista termination, or entry statement.

ATTRIBUTES	DESIGN GUIDANCE
Building Height and Scale	
+ Desirable building heights are illustrated in Figure 21. Low-to-medium rise buildings are indicative of 2 to 5 storeys (9m-18m). Medium-to-high rise buildings are indicative of 3 to 8 storeys (12m-27m). + Greater variation of building heights within the Main Street Precinct and on key corner sites promotes interest and articulation of the built form within the city centre.	+ Medium-to-high rise built form fronting the Main Street environment should make efficient use of space and provide for generous landscaping and pedestrian pathways. + Provide appropriate response to the scale of low-to-medium rise buildings transitioning north and south of the Main Street environment. + Incorporate smaller retail and community activities along the perimeter walls of large streets and the internal malls of the Kwinana Marketplace.
Human Scale	
+ Any floor level above podium height (12 metres) is setback a minimum of 3 metres from the property boundary. + An increased podium height of up to 3 metres is permitted for corner buildings.	+ Medium-to-high rise buildings with consistent setbacks reinforce the public realm. + Minimal setbacks at the front and sides of non-residential developments provides the opportunity to define the street edges. + Limit expansive blank walls or reduce the impact by architectural treatment.
Corner Sites	
+ Achieve more prominent massing and architectural treatment on corners and other important sites (Figure 21). + Corner buildings address both frontages to the street and/or the public realm. + Buildings that terminate vistas ensure they address that vista.	+ Architectural detail is encouraged to distinguish corner buildings as a point of visual focus. Examples of such special treatment include; Additional floor height; distinctive roof form; articulation of corner wall elements and a variation in materials and colours. + Landmark sites identified as iconic should not adversely impact surrounding development.

4.0 Built Form

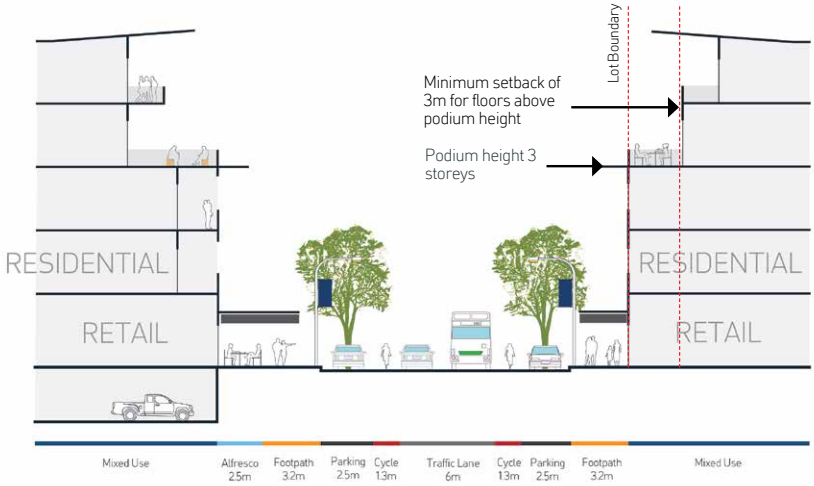


Figure 20: *West Facing Street Section - Chisham Avenue Main Street*

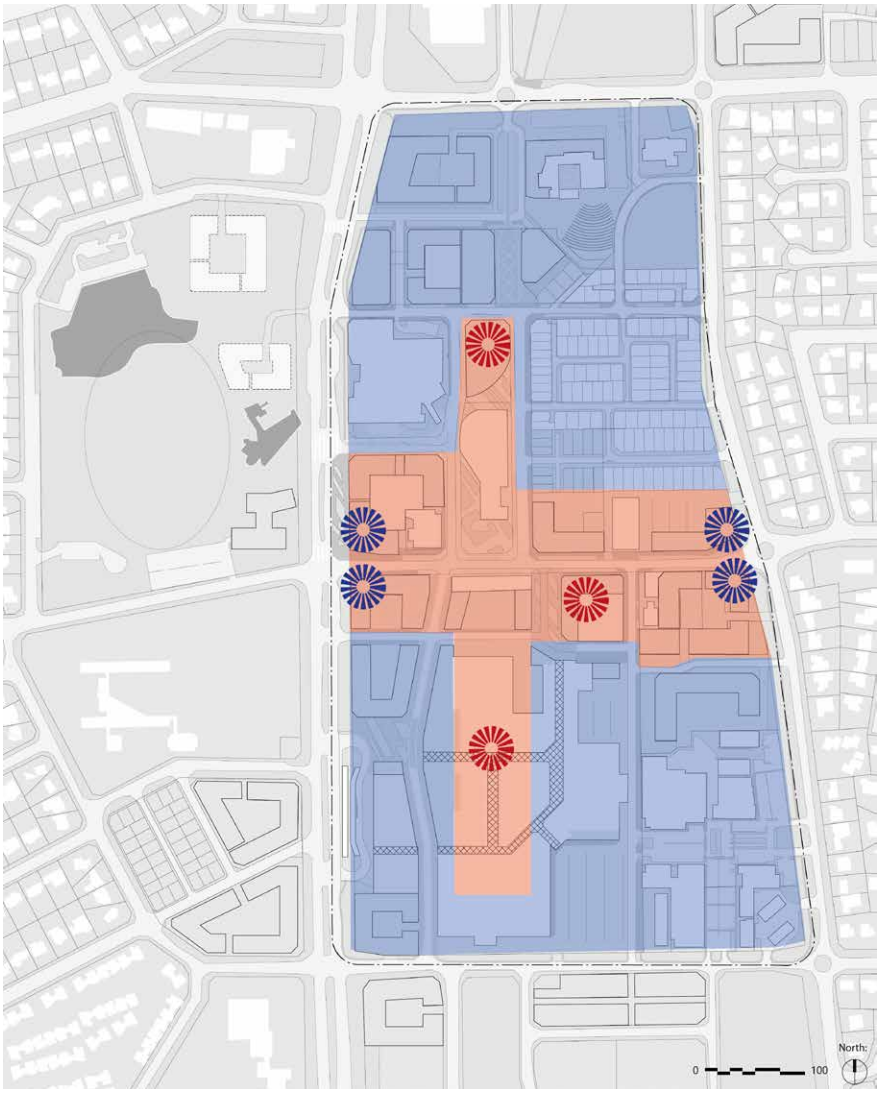


Figure 21: *Desirable location of building height fronting the Main Street and at key corner sites*

4.3 ACTIVE FRONTAGES

Consideration of building design, the orientation and location of street level activity and visual connections between internal areas of buildings and the adjacent public realm, all contribute to a sense of liveliness, creating interest and attractive public places.

OUTCOMES

Active Frontages

+ Making frontages 'active', adding interest, life and vitality to the public realm adds to the social interaction of the City Centre.
+ Building frontages contribute to the character and positive identity of the City by defining the street level experience and how people feel and interact with their environment.
+ Encourage appropriate streetscape activation and active participation by the public.

Semi-Active Frontages

+ Frontages defined as 'semi-active' includes commercial and residential frontages that do not directly open to the street, however, provide the opportunity for passive surveillance through the direction of windows and openings.

ATTRIBUTES	DESIGN GUIDANCE
Active Frontages	
+ Active frontages (Figure 22) addressing the public domain to enhance the interaction with the street. + Long lengths of blank walls and infrastructure elements (substations etc) adjacent to primary pedestrian links and public open spaces are avoided. + Clear sight lines along footpaths connecting primary pedestrian routes creating active and passive pedestrian zones.	Active building frontages should: + address primary pedestrian corridors; + provide active, transparent shop frontages onto the street and public spaces to allow the public to see and be seen; + provide frequent doors and windows, with few blank walls; + have narrow frontage buildings, giving vertical rhythm to the street scene; + articulate high quality materials and refined details; + provide strong visual connection between internal spaces; and the adjacent public realm.
Semi-active Frontages	
+ Semi-active frontages addressing the public domain should contribute to an attractive public realm.	Semi-active building frontages should: + enable passive surveillance through the direction of windows and building openings onto all other streets and public spaces; + have few blind or passive façades; + provide some depth and modelling in the building facade; and + accommodate good quality materials and refined details.

4.0 Built Form



Example: Activation of street level facades



Example: Activation of pedestrian laneways linking spaces

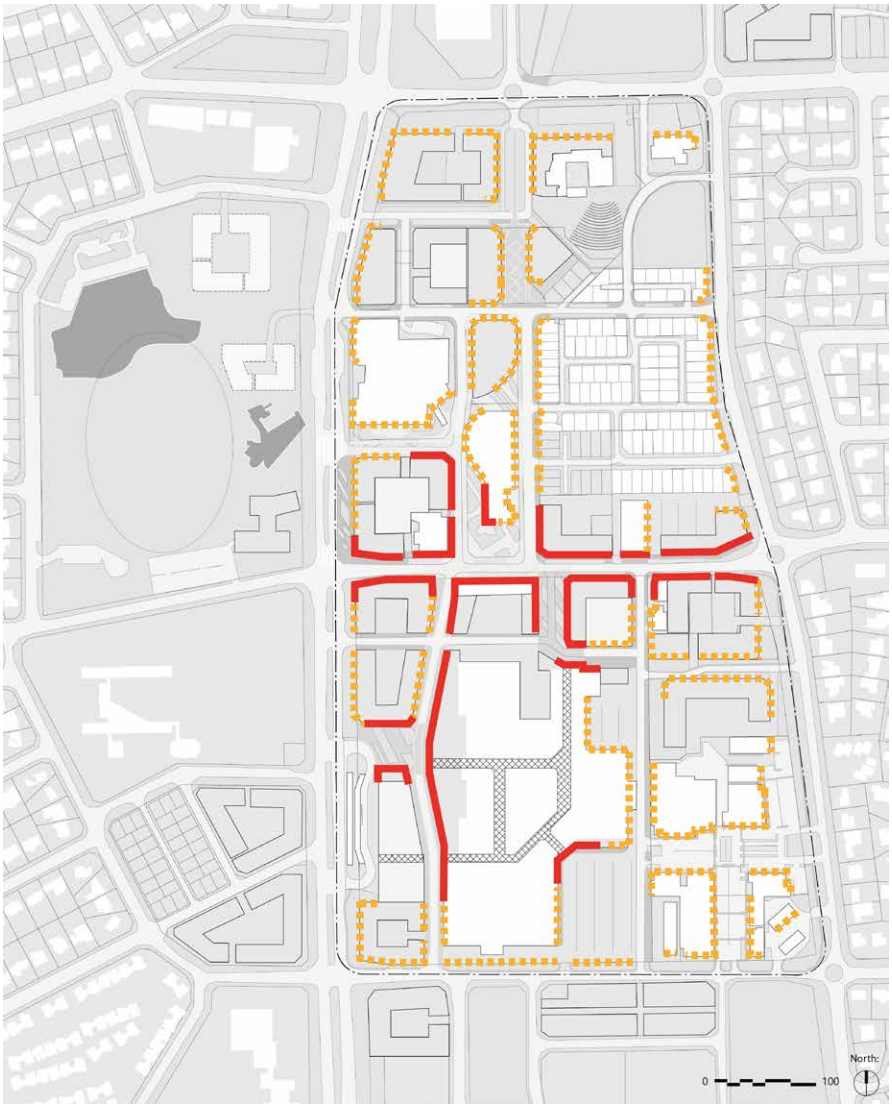


Figure 22: *Active Frontages to Primary Pedestrian Routes*

4.4 FACADE TREATMENT

The architectural quality of building façades enabling a continuous frontage of activity is beneficial in creating the atmosphere required for a 'Main Street'. If gaps between buildings are too large, the street enclosure is compromised and the intimacy of the environment is lost. To achieve this, buildings require the appropriate composition of elements and textures allowing pedestrians to intuitively understand the intended purpose and function of each building.

Clear glazing at ground level plays an important role in creating a visually interesting pedestrian environment. For cafés and restaurants, it gives passers-by a sense of the activity and atmosphere within.

OUTCOMES

Building Façades

+ Ensure individual buildings contribute to pedestrian friendly streets, providing a sense of activity and community at ground level.

Articulation of Vertical Form

+ Vertical and horizontal articulation helps to break up the mass of buildings and creates a human scale that connects and grounds it in the streetscape.

Building Entrances

+ Provide building entrances that are clearly defined and legible within the public realm.

ATTRIBUTES	DESIGN GUIDANCE
Building Façades	
+ Building façades are of a high architectural quality, appropriate to the 'main street' location enhancing the overall character and sense of place within the City Centre. + A high level of fine grain design should be articulated at ground level, to establish a human scale and ensure a positive pedestrian experience.	+ Incorporate surface modelling, colour or texture into the building's external walls fronting the streets and public places. + Materials and colours should be well considered, creating interest and complement the public realm. + Generous floor to ceiling heights of ground floor tenancies provides for a diversity of uses over time (Figure 23).
Articulation of Vertical Form	
+ Elements such as individual floor levels, balconies and outdoor spaces create an interesting and complex urban environment.	+ A higher degree of articulation in surfaces above street level, using awnings, balconies and/or the articulation of internal floor levels, vertical divisions of mass and roof spaces help express its contextual relationship within the City Centre. + Vertical articulation is encouraged for taller structures, to assist in grounding the building within the streetscape. + A variety of materials and articulated forms to break up overall building mass is recommended.
Building Entrances	
+ Pedestrian and vehicle entry points separated and well defined. + Commercial and residential entries separated and well defined. + Where long ramps are required to any public street frontage, they are provided wholly or partially in the building rather than externally to reduce their visual impact and assist in achieving a strong built edge to the street boundary.	+ Locate pedestrian entrances in prominent and convenient locations and on direct pedestrian paths. + Lighting, signage, materials and landscape elements should be utilized to highlight building function and entrances. + Provide pedestrian environments with access to sun, shade and shelter.

4.0 Built Form



Example: Facade treatment to corner building



Example - Alfresco area under awnings activating frontages



Examples: Layering of activity to supermarket frontage



Figure 23: *Active Frontage - Southern Facade Chisham Avenue*

4.5 BUILDING ORIENTATION

New building designs within the City Centre should create comfortable internal and external environments for its occupants by offering protection from the sun and prevailing winds as well as providing a high standard of acoustic and visual privacy for residential uses.

OUTCOMES

Solar Access and Ventilation

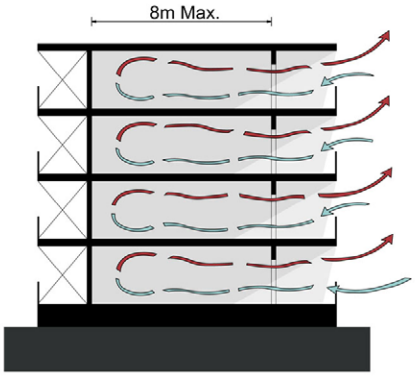
+ Encourage building designs with envelopes that provide access to good airflow, taking advantage of breezes for passive cooling and natural ventilation in summer.
+ Integrates innovative design, technology and material into the design of buildings to establish high standards of energy efficiency and sustainability of new buildings.

Acoustic and Visual Privacy

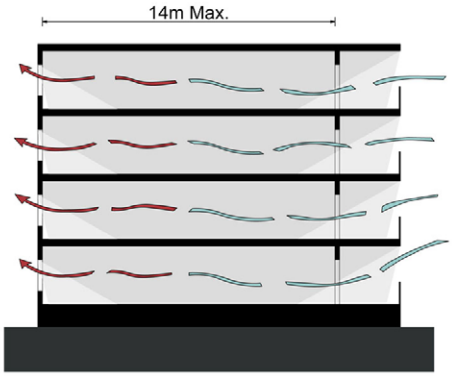
+ Use of construction materials and techniques that reduce noise transmission between buildings. Sound insulation is particularly relevant to the conditions experienced within a mixed-use environment.
+ Service doors and other utilitarian features should be located away from street frontages and treated to reduce their visual impact.

ATTRIBUTES	DESIGN GUIDANCE
Solar Access and Ventilation	
+ Building designs that capitalise on solar access for building occupants, neighbouring sites and the public realm. + Reduced overall carbon/greenhouse gas emissions and running cost from heating and cooling derived from non-renewable energy.	+ Building design should maximise northern facing aspects. + Particular attention should be given to the principles of passive solar design to ensure natural cross ventilation to all habitable rooms and as many non-habitable rooms. + Selection and location of thermal mass materials should be considered to contribute to the efficiency of a buildings performance. + Deciduous trees should be located on the northern side of buildings to provide shade in summer and allow sun in winter.
Acoustic and Visual Privacy	
+ Appropriate noise and odour reduction between uses to limit conflict, particularly at the interface between retail and residential uses. + The visible impact of roof top plant rooms and lift machinery rooms are minimised from the public realm.	+ Ensure privacy where needed. + Plant equipment should be enclosed and acoustically treated to ensure acceptable noise levels are achievable. + Plant and machinery rooms should be designed or screened in an appropriate manner to ensure they contribute to the visual quality of the development.

4.0 Built Form



Example - Cross-ventilation within single aspect apartment



Example - Cross-ventilation through dual aspect apartment



Example: Integration of adaptable solar screenings within building structures



Example - Screening of Services


Kwinana



5

PUBLIC REALM

5.0 Interface with the Public Realm

Aim: Creates a context for people to engage with each other

The public realm is integral to creating an attractive environment focused on the needs of people who use the city – workers, residents, students and visitors, connecting people and places as well as facilitating a greater diversity of activities.

The public realm relates to the area from the building frontage that extends into the public space at ground level, including elements and activities in public spaces such as outdoor dining, landscaping, signage and street furniture. This also considers the opportunity to integrate Water Sensitive Urban Design (WSUD).

5.1 VIBRANT PUBLIC REALM

Mixed-use buildings cater for a variety of functions and activities within the city centre. Well-designed buildings that create opportunities for ground level social spaces addressing the location of awnings and overall safety and security enabling pedestrians to 'read' visual cues for navigating the city environment as well as providing a comfortable experience essential for establishing vibrant and activated public realm.

Improving the perception of safety through the built environment is a key consideration in the development of public spaces.. Crime Prevention through Environmental Design (CPTED) principles should be applied in the design of public spaces, providing a response to improving the safety of the urban environment.

OUTCOMES

Social Spaces

+ High quality pedestrian spaces adopted throughout the public realm.

Overhangs and Shading

+ Provide a variety of verandas, balcony and awning types to facilitate a high-level of pedestrian environment.

Private Spaces

+ Provide an appropriate balance between the requirement for privacy and optimisation of the views through to the public realm.
+ Access to functional and usable private open space for all residential dwellings that is suitable for the purpose relaxation and entertainment.

Safety and Surveillance

+ Encourage passive surveillance of the public realm and pedestrian links, through active street frontages and the location of balconies and major openings.

ATTRIBUTES	DESIGN GUIDANCE
Social Spaces	
+ Clearly define private public realm. + Continuity of materials, finishes, landscape elements between the public and private realms used to diffuse the boundary between the two.	+ Provide areas within the public realm that concentrate various activities. + Ensure an active interface to adjacent land uses. + Allow for flexibility and adaptability of spaces. + Provide comfortable, safe and aesthetically stimulating spaces.
Awnings and Weather Shelter	
+ Weather protection and awnings projecting a minimum horizontal distance of 2.4m over the adjacent footpath. + Awnings providing a consistent clearance height of 2.7 metres from the footpath (Figure 23).	+ Awnings with large overhangs should be provided over significant openings on the north, east and west, and to shade outdoor areas. + Screens and awnings should inform the architecture in both form and materiality.

5.0 Interface with the Public Realm

ATTRIBUTES	DESIGN GUIDANCE
Private Spaces	
+ Upper level dwellings with generous balconies to provide attractive and functional private open space + Functional design of private spaces, i.e. restricting air-conditioning or other service equipment impacting the comfortable use of the balcony area.	+ Overlooking between balconies and adjoining residences should be carefully considered and privacy screening provided where necessary. + The location of Private Open Space (including courtyards and gardens) should consider adjacent (proposed) built form, wind, solar penetration and overlooking.
Safety and Security	
+ Buildings addressing the street/or public realm in a manner that promotes variety and visual interest. + Passive surveillance of streets provided by frequent overlooking of ground and upper floor windows, terraces and balconies.	+ Design and development contributing to the public realm should have due consideration for Crime Prevention Through Environmental Design (CPTED) principles, and more particularly the City's adopted Local Policy: Designing Out Crime.



Example: High quality public space enabling city users to gather





Example: Shared street creating pedestrian priority spaces



Example: Lighting of building frontages

5.2 LANDSCAPE

The design of streetscape and landscaped areas such as parks, civic squares, shared streets, outdoor dining spaces and pathways, includes consideration of materials, micro-climate, planting, as well as the physical and social benefits these bring to the community's well-being.

Together, these elements contribute to a distinctive place that supports the sense of identity and community ownership, resulting in safe and well used spaces, as well as providing a valuable contribution to the form, articulation and function of the City Centre environments.

OUTCOMES

Streets as Open Space

+ High quality landscaped environments adding to the City Centre unique sense of place and identity.

Spaces between

+ Creating opportunity for a variety of uses within the City Centre providing for attractive and comfortable environments.

Materials

+ Ensure materials contribute positively to the main street environment and quality of the public realm.

ATTRIBUTES	DESIGN GUIDANCE
Streets as Open Space	
+ Primary pedestrian streets contribute to the City's distinctive sense of place (Figure 24).	+ Legible and continuous connections to existing open space and recreational social infrastructure will encourage users to explore the city environments and engage in surrounding activities. + Provide regular tree planting along the median and footpath with good canopy coverage to mitigate urban heat, improve biodiversity and provide pedestrian shade.
Spaces Between	
+ Linking spaces between buildings for users to inhabit and connect with the wider city.	+ Include spaces between blocks for tree planting, landscaping, pedestrian movement and amenity. + Creating a variety of spaces linking the wider public realm. + Plant trees clear of foliage between 600mm and 2400mm in height to allow clear sightlines and eliminate opportunities for concealment. + Avoid landscaping that block views into and out of a building or across the overall site.
Materials	
+ Utilise cohesive, high quality materiality to define the transition into the 'main street' and central heart of the City. + Reflect a contemporary character appropriate for the City Centre environments.	+ Fine grain design of the ground plane which effectively uses materials and colour to add interest and a layer of richness to the city centre is encouraged. + Materials and colours should be responsive to the environment and enhance passive solar design. + Durable materials and anti graffiti treatment should be considered within the retail environment.

5.0 Interface with the Public Realm



Example: Streetscapes defining city centre environments



Example: Landscaping enabling defined areas of alfresco dining and pedestrian access



Figure 24: *Northern Section Robbos Place - Primary pedestrian street*

5.3 SIGNAGE

Signage is an important component for navigation and business operation throughout the City Centre. However, an excess of signage can impinge on visual amenity. The form and type of signage needs to be carefully managed so this does not overwhelm the visual quality of the public realm.

The use of wayfinding signage helps to connect visitors and locals with public transport, retail areas, historical walks and local facilities, creating better connected communities and encouraging more active and sustainable modes of transport.

OUTCOMES

Main Street Signage

+ Ensure signage is integrated into building design and improves the overall appearance and legibility for residents and visitors.
+ Provide appropriate exposure for local businesses, activities and services.

Large Format Retail Signage

+ Signage is compatible with existing or preferred future character of the area.

Wayfinding

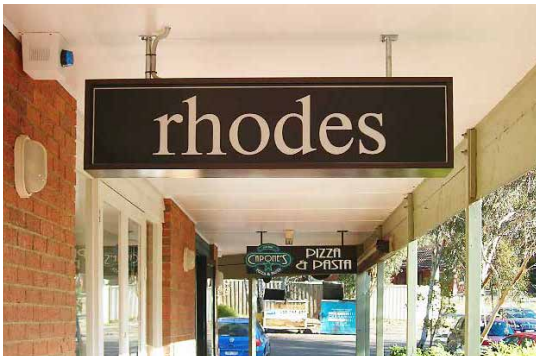
+ Provide a legible set of wayfinding signage for users to easily navigate the city centre environment and links to surrounding activities.

Lighting

+ Provide appropriate levels of lighting for both the private and public realm for safety, security and aesthetic impact.

ATTRIBUTES	DESIGN GUIDANCE
Main Street Signage	
+ Of a scale and design character that complements the pedestrian experience and highlight focal points within the city centre environment. + Reflect the architectural composition of the building it serves, without obscuring any of the building's architectural features. + Signage should be graphically and artistically interesting and integrated with the architectural form of the building and precinct character.	+ Signage under awnings should provide a minimum clearance of 2.5m from the footpath (figure 25). + Signage for tenancies above ground level should be a minimum of 1m above the awning line. + Creative typography, colours and form help create signage that can quickly become a recognisable landmark. + Use signage that is compatible with the existing or preferred future character of the area. + Co-ordinated with the placement of other public realm elements such as trees and lighting. + Signage should not impede on glazing. Active, transparent shop frontages should be maintained allowing the public to see and be seen.
Large Format Retail Signage	
+ Ensure building design include defined spaces to accommodate signs that respect building scale, architectural features, signage uniformity and established streetcape design objectives. + Consolidating the number of signs through better location and integration. + Restrict temporary and portable signs. + Prohibit billboards, revolving signs and roof signs on private property.	+ For each vehicle entrance to a site, signage should be consolidated for multiple tenancies onto a single plinth to reduce visual clutter (Figure 26). + Ensure that corporate and advertising signage is consistent with the surrounding urban context in terms of scale, format, materials, colours, illumination, legibility and that it is designed to minimise visual clutter through the integration into the overall building form of the development. + Avoid painting buildings to form large, visually intrusive corporate sign. + Signage should not impede on glazing. Active, transparent shop frontages should be maintained allowing the public to see and be seen.

ATTRIBUTES	DESIGN GUIDANCE
Wayfinding	
+ Wayfinding signage that is integrated within streetscapes, designed as a co-ordinated set of elements contributing to the distinctive character of the City Centre. + Increase permeability for walking and cycling through the City Centre as well as improved community wellbeing. + Increase retail profitability with more foot traffic and the retention of visitors	+ Wayfinding signage should easily and clearly navigate users through the City Centre environment, linking key facilities and activities within the City Centre and surrounding areas, such as the Adventure Park and Skate Park within Calista Oval.
Lighting	
+ Strategically located to highlight focal points and primary pedestrian routes within the City Centre. + Concealed under verandah roof overhangs or otherwise shielded to minimise glare. + Outdoor lighting directed downward with reduced light spill above the horizontal plane	+ Lighting should highlight the key features of buildings and landscapes. + Lighting should be used as a method of pedestrian way-finding through secure routes.



Example: Main Street signage at the pedestrian scale



Example: Large format retail signage integrated with the building

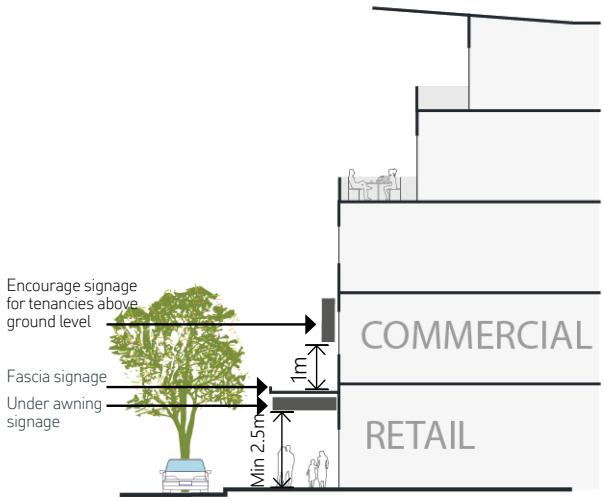


Figure 25: *Main Street signage*

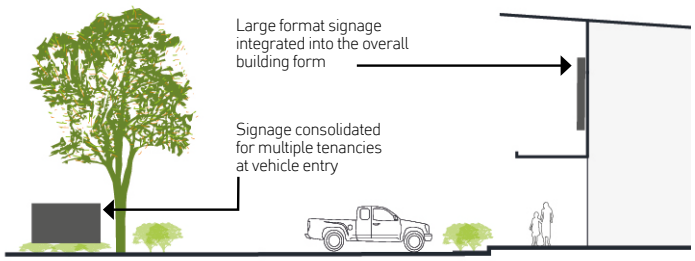


Figure 26: *Large format retail signage*

5.4 STREET FURNITURE

Street furniture contributes to the character and identity of the City Centre. Delivery of a consistent suite of street elements need to support the look and feel and point of difference, whilst also considering a number of factors including comfort, accessibility and materials that are robust, durable and sympathetic to the city context.

Seating provides a valuable resting place, particularly for elderly people and those with mobility difficulties. Comfortable, well-arranged seating also helps to encourage community interaction and public life within the City Centre.



Example: Custom designed streetscape furniture elements defining pedestrian areas



Example: Street furniture adding to comfort of outdoor spaces

OUTCOMES

Seating

- Seating location and orientation helping to define passive and active pedestrian zones.
- Enable users to linger within public open spaces with provision of appropriate street furniture.

Street Furniture

- Consistent installation of street furniture offset and aligned to match other public realm elements such as trees and lighting.

ATTRIBUTES	DESIGN GUIDANCE
Seating	
+ Seating location assist with guiding pedestrian circulation instead of obstructing pathways. + Seat bases are connected to a continuous accessible path of travel + Seats are positioned, where possible, with respect to sun exposure, shade, trees and shelter. + Seating installed at a minimum 0.5m offset from the edge of a pathway for safe clearance.	+ Provide a variety of seating arrangements for people to socialise within public spaces. + Encourage community interaction through provision of seating, lighting, shade and shelter to provide comfort and prolong activity on the street. + Include elements such as steps creating opportunity for people to sit in public spaces with good access to views, sun and people watching. + Seats are provided at regular intervals along identified pedestrian routes.
Street Furniture	
+ Provide a consistent palette of furniture for the public realm that creates unity of the City Centre as a whole. + Services and other furniture elements such as wayfinding signage and bike racks are grouped to create nodes of activity	+ Allow for bespoke design items (designer, artist) supporting place identity. + Ensure materials are robust and design details are of a high quality to ensure minimal maintenance and whole life of costs.

5.5 PUBLIC ART

The successful integration of art into public spaces and buildings will assist in fostering a unique sense of character and identity for the City Centre.



Example: Temporary art



Example: Public art within entry landscape

OUTCOMES

Public Art

- Enhance the urban environment through the integration of public art in public spaces and buildings.
- Improve legibility by introducing public art which assists in making streets, open spaces and buildings more identifiable.
- Create adaptable spaces within the public realm to facilitate temporary and interchangeable forms of art. This could include opportunities to integrate public art on façades, within community squares, wide junctions and temporary parklets located along primary pedestrian routes.
- Establish a sense of shared ownership and accessibility of public spaces.

ATTRIBUTES	DESIGN GUIDANCE
Public Art	
+ Public art integrated into the design of buildings and public realm becomes a key contributor to making distinctive and memorable places.	+ Public art should enhance and contribute to the City Centre identity and unique sense of place. + Integrate public art as a memorable part of experiencing the City Centre, both for the first time and repeat visitors. + Ensure public art is relevant to the site reflecting the area's unique character, history and contemporary use. + Buildings are encouraged to respond to local landmarks, public artwork, landscape and street trees to improve legibility of the public realm.

5.6 WATER SENSITIVE URBAN DESIGN (WSUD)

Water Sensitive Urban Design principles integrated with the landscape design should be integrated within new developments to manage stormwater run-off from driveways, open space and parking.

OUTCOMES

Water Sensitive Urban Design

+ Provide a range of stormwater management options for development, including landscape alternatives.
+ Promote use of green infrastructure to improve pedestrian comfort and well-being, and to reduce the urban heat effect.
+ Improve storm water quality entering waterways through the integration of WSUD.
+ Minimise the impacts of storm water on site and the environment.
+ Improve the micro-climate and enhance visual amenity through reduced hard surfacing.



Example - Rain gardens within streetscapes



Example - Trellis planting integrated within building structures

ATTRIBUTES	DESIGN GUIDANCE
Water Sensitive Urban Design	
+ WSUD integrated through medians, tree pits and under pavement to mitigate stormwater impact . + Ensure plant and tree species are suitable for the climate and the location.	+ Stormwater should be treated on site before being discharged to receiving waters. + Maximise the percentage of pervious surfaces to allow percolation of stormwater into the ground, such as within swales and planting. + Consider the integration of green roofs and green/living walls to capture, detain and treat rainwater before it enters the drainage system. + Incorporate permeable pavement systems in upgraded roads and car parking. + Reduce the consumption of potable water through the installation of waterwise fixtures and fittings.

SCHEDULE OF SUBMISSIONS
Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
1	**Mary Buczolich**	**SUPPORT WITH COMMENTS** • Benches scattered throughout for all to use with trees/canopies. • Make environment safe with walking police and cross communication between the Police and Youth. • Police on horses – great therapy for aggressive youths – Aboriginal kids in particular enjoy interaction with living animals, etc. • Have more restaurants that serve veggies (other than chips). • Interactive activities throughout the City – i.e. gap filers such as the ones in Christchurch while waiting for stop lights to activate, dance and floor paths, etc. • Midland Café a great idea – run by volunteers and people living with disabilities. • Regularly held blue light disco. • Tree lined streets – organise bean bag and tunnel ball or other community games and to encourage participation from all backgrounds. • Safe communications.	All of these comments are noted. Some relate to design based issues and have been addressed below whilst others relate to the wider issues such as safety and activities. In this instance, these wider concerns have been referred to the City's Place Management Team, in particular, the Kwinana Central Management Area for its consideration and action. • Section 5.1 Vibrant Public Realm - Attribute for 'Awnings and Weather Protection' provides design guidance for attractive streetscape environments. • Section 5.1 Vibrant Public Realm - Attribute for 'Safety and Security' provides design guidance for passive surveillance of spaces which will assist in promoting a safe environment. • Section 4.1 Mix of Land Uses - Attribute for 'Mixed Use' and 'Commercial and Retail Uses' provides for a mix of land use types, which allows for a wider variety of restaurants. • Section 5.1 Vibrant Public Realm - Attribute for 'Social Spaces' provides design guidance for flexible and adaptable spaces. • Section 5.1 Vibrant Public Realm - Attributes for 'Social Spaces', 'Awnings and Weather Protection' provides design guidance for attractive streetscape environments. • Section 5.2 Landscape - Attributes for 'Streets as Open Space', 'Spaces Between' and 'Materials' + Section 5.3 Signage, Section 5.4 Street Furniture and Section 5.5 Public Art all provide design guidance for attractive landscape design outcomes.
2	**Peter Stevenson,** 66-39 Bright Road, Calista,	**SUPPORT WITH COMMENTS**	All of these comments are noted. Some relate to design based issues and have been addressed below whilst others relate to the wider issues such as safety and activities. In this instance, these wider concerns have been

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Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
	WA 6167	Willing to support the project personally. • top 3 priorities to make Kwinana City Centre even better – - Shade trees with benches under - Night markets and entertainment - Registered street buskers only in open arcade • Other activities like to have – - Family entertainment - Police presence for safer environment - Counselling and legal advice services • Activities around the oval – - Group-walking for the elderly - Kids sports - BBQs and seating • Vision for the Kwinana City Centre Master Plan - Vibrant Centre for young and old - Night and Weekend markets - Clean environment • Movement Network - Walking – Close off Chisham Ave for traffic from Gilmore Ave to Peel Row, and turn into an arcade for pedestrians - Cycling – Separate cyclists from pedestrians - Driving – 50kmh speed limit for all roads within and surrounding the City Centre • Ideas for enhancing experience walking around the City Centre - Safety - Shade trees - Market stalls	referred to the City's Place Management Team, in particular, the Kwinana Central Management Area for its consideration and action. • Section 5.1 Vibrant Public Realm - Attributes for 'Social Spaces', 'Awnings and Weather Protection' provides design guidance for attractive streetscape environments. • Section 5.2 Landscape - Attributes for 'Streets as Open Space', 'Spaces Between' and 'Materials' + Section 5.3 Signage, Section 5.4 Street Furniture and Section 5.5 Public Art all provide design guidance for attractive landscape design outcomes. • Section 4.1 Mix of Land Uses - Attribute for 'Mixed Use' an 'Commercial and Retail Uses' provides design guidance for a mix of land use types, as well as for creating synergies between day and night time activities within the Main Street environment. • Section 5.1 Vibrant Public Realm - Attribute for 'Safety and Security' provides design guidance for passive surveillance of spaces which will assist in promoting a safe environment. • Section 5.2 Landscape - Attributes for 'Streets as Open Space', 'Spaces Between' and 'Materials' + Section 5.3 Signage, Section 5.4 Street Furniture and Section 5.5 Public Art all provide design guidance for attractive landscape design outcomes. • Master Plan will be updated - Section 3.1 Character Areas add 'Calista Oval Precinct' and identifying key attributes and design guidance for any future development or activation of the 'Calista Oval Precinct'. • Master Plan will be updated - Section 3.4 Active Transport / 3.5 Movement Framework - review pedestrian desire lines across to Calista Oval and implement appropriate safety measures for pedestrians crossing north of Skerne Street.

SCHEDULE OF SUBMISSIONS
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NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
			• Pedestrian Mall for Chisham Avenue – not support as Chisham Ave is a key transit link and retail frontage. • Recommend 50km speed reduction: - Reduce the speed along Gilmore Avenue between Sulphur Road and Chisham Avenue to 50km - will enable safe connections to Calista Oval, as well as defining the City Centre as a key destination. - Gilmore Avenue, defined as a secondary distributor accommodating dual carriageways within a 70m road reserve, accommodates between 10,000 and 15,000 vehicles per day. As the main corridor into the City Centre, its width, speed and volume of traffic creates a major barrier separating the Centre and Calista Park. • Section 3.4 Active Transport – Attribute for 'Bicycle Facilities' gives guidance to support cycle trips. • Master Plan to be updated – Add the cycle routes from the adopted City of Kwinana Bike and Walk Plan. • Section 5.1 Vibrant Public Realm - Attribute for 'Safety and Security' provides design guidance for passive surveillance of spaces which will assist in promoting a safe environment. • Section 5.2 Landscape - Attributes for 'Streets as Open Space', 'Spaces Between' and 'Materials' + Section 5.3 Signage, Section 5.4 Street Furniture and Section 5.5 Public Art all provide design guidance for attractive landscape design outcomes.
3	**Department of Transport**	**NO OBJECTION** No comments.	Noted.

SCHEDULE OF SUBMISSIONS
Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
4	**Water Corporation**	**COMMENTS** • Water and wastewater servicing currently provided is based on the densities and development layouts proposed in the 2007 City Centre Master Plan. Water Corporation requires proposed population projections and densities for the area to enable a review for servicing.	Noted.
5	**Main Roads**	**NO OBJECTION** • Commented that Gilmore Road is designated as an "Other Regional Road" under MRS, which is under the control of the Department of Planning, Lands and Heritage (DPLH). Therefore, contact DPLH. • No objection to the Master Plan, as it is not adjacent to, nor will it impact, any roads under Main Roads control. • Requested for a copy of the City's final determination on the Master Plan.	Noted. • Recommend a strategic review of speed on Gilmore Avenue with the DPLH to identify key criteria for possible change.
6	**Department of Fire and Emergency Services**	**COMMENTS** Advises to undertake – • A BHL assessment at the Master Plan stage; • An Opportunities and Constraints assessment addressing issues related to location, siting and design, vehicular access, and water; and • Development of a Bushfire Protection Criteria Matrix providing a qualitative assessment of the development proposed.	• Whilst a portion of the city centre (adjacent to Challenger Avenue) is identified as being bushfire prone a BHL Assessment is not required at the master plan stage. • Master Plan to be updated - Include an 'implementation section' which specifies that: - A BHL assessment will be required for any Development Applications in areas identified as being bushfire prone in accordance with SPP 3.7 and the National Construction Code.

SCHEDULE OF SUBMISSIONS
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NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
7	**Department of Water and Environmental Regulation**	**COMMENTS** Advises that – • Design and construct as per *Better Urban Water Management* (WAPC, 2008) incorporating water sensitive urban design principles; • Retain existing native vegetation within POS, streetscapes, road reserves, multiple use corridors and landscape areas; and • Groundwater in the master-planned area is currently over allocated resulting no resource being available for new applications. Therefore, any non-potable water requirements need to be sourced from elsewhere	Noted. • Section 5.6 Water Sensitive Urban Design Attribute for range of stormwater management options, green infrastructure, and micro-climate design principles already in place.
8	**RPS Australia East Pty Ltd on behalf of SCA Property Group (owners of Kwinana Marketplace)**	**SUPPORT WITH COMMENTS** General support for the Master Plan Vision. Commented that - • Community Square - Identifying a specific location i.e. an area of existing car park for a Community Square without consulting with, or compensation of SCA Property Group, the owner; • Location of Residential Uses and Building Heights on Kwinana Marketplace site – Provide opportunity to undertake residential development above the shopping centre and allow for associated increased building heights up to eight storey across the whole Kwinana Marketplace site, rather than limiting residential development to upper levels only along the frontage to Chisham Avenue. This would enable a	Noted. • Kwinana Marketplace to location of the ‘Community Square’ and explanation location providing a key link between the Transit Hub and Shopping Centre. • Mater Plan to be updated - Section 4.1 to reference opportunity for mixed use residential use above the shopping centre while maintaining active ground level retail. • Section 4.2 has been amended to note desirable building heights and transitioning height across the City Centre. This is currently stated as ‘medium to high rise buildings’ within the Main Street environment transitioning to ‘low-medium rise’ north and south of Main Street. • Master Plan to be updated – Section 4.2 add a height range to provide greater clarity.

SCHEDULE OF SUBMISSIONS
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NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
		viable mixed-use retail / commercial / residential developments; • Need improved flexibility in the Mix of Land Uses, including parking areas and land use boundaries in the Master Plan rather than prescriptive division of land uses.	• Master Plan to be updated - Review Figure 19 which may be too prescriptive of land uses – consider stating this as the 'preferred mix of uses' across the site.
9	**CLE Town Planning + Design on behalf of the Department of Communities**	**COMMENTS** • Proposed Light Industrial Zone - delete any reference to this land being 'light industrial', as this would interfere with the retail core of the City Centre and Cassia Glades residential development to the South of Challenger Avenue; • Interface along Challenger Avenue - draft Master Plan be amended to reinforce the interface along Challenger Avenue to create an aesthetic, safe and function transition between the Town Centre and Cassia Glades. • Concerned about the Master Plan outcomes proposed and the Figures shown in the document do not match with respect to 'view corridors and gateways' from the Town Centre to and through Cassia Glades.	• Master Plan has been amended deleting reference to light industrial and referring to this area as large format retail and commercial. • Section 3.4 Active Transport Figure 15 illustrates pedestrian crossing points Section 3.5 Movement Framework illustrates key threshold treatment across • Section 4.3 Active Frontages - Semi-active frontages are illustrated on Figure 22 • Agree with the issue of loading areas limiting development space for active interface with Challenger Ave. However, recommend strengthening reference to 'semi-active' frontages east and west along Challenger Ave at key nodal connections across the avenue. • Pedestrian view lines to be strengthened and aligned with key gateway treatments in Figure 15 and Figure 17.
10	**Rowe Group on behalf of Santavae (Kwinana) Pty Ltd, the landowner of Lot 3 (No. 46) Meares Avenue**	**COMMENTS** • Fig 14 – does not show primary pedestrian view/link from the key pedestrian landmark at the south eastern entry through the Retail Precinct towards other key pedestrian landmark. This means ensuring an	• Master Plan updated - Additional south eastern + north eastern pedestrian landmark links/view lines to Figure 14.

SCHEDULE OF SUBMISSIONS
Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
		east/west connection through Lot 3 (No. 46) Meares Avenue with the adjoining land to the west. • Suggested to make reference in the Master Plan commentary that the built form will evolve over time to accommodate some of the increased demand in higher order retail activities. • All retail activities should be contained in the street block comprising Gilmore Avenue, Challenger Avenue, Meares Avenue and Chisham Avenue (the Retail Precinct).	• Noted – The Master Plan is a visionary guiding document and it is anticipated that built form will evolve over time to accommodate increased demand for retail and changes to retail product.. • Not agree. Whilst the Master Plan identifies the street block comprising Gilmore Avenue, Challenger Avenue, Meares Avenue and Chisham Avenue as being a Retail Precinct and identified for retail and commercial uses, retail uses are also promoted in the Main Street Precinct. For example, Chisham Avenue acts as a Main Street environment and main street retail activity on both sides of the street is encouraged.
	Workshop dated 5 June 2019 outcomes	**COMMENTS** *Which links in the City Centre do you think should be improved for:* - Walking – Most people walk east-west direction; Limited activity generating North-South movement Walking past the east of the shopping centre/near fast food is very busy; Create a pathway/park-openness linking pub and dome to Calista Oval - Cycling – Nowhere to lock bikes - Driving – City is a car-focussed town is the general view; No CAT / Shuttle available *What would enhance your experience walking around the City Centre?* - Lighting satisfactory - Chisham street doesn't look like a Main Street - Chisham Avenue creates confusion – more of a car focussed street rather than a shared space	All of these comments from the Workshops are noted. Some relate to design based issues and have been addressed below whilst others relate to the wider issues such as safety and promotion of activities. In this instance, these wider concerns have been referred to the City's Place Management Team, in particular, the Kwinana Central Management Area for its consideration and action. • Strengthening east west connections – Figure 17 to add in pedestrian crossing and intersection improvement along eastern edge. • Section 3.4 Active Transport – Attribute for 'Bicycle Facilities' giving guidance to support trips. • Recommend 50km speed reduction. • Recommend strategic review of CAT service to evaluate uptake of demand / supply and associated funding.

SCHEDULE OF SUBMISSIONS
Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
		- lack of built form along Chisham Avenue - Presence of TAB created social issues – people too concerned to walk past *What parking management measures could be improved in the City Centre?* - Carpark behind tavern – allows all movement - Queried about if the parking was removed from Chisham Avenue? - If closing carparks – strategies for business retention *What are your top 3 priorities to make Kwinana City Centre even better?* - Soften the line of sight on Gilmore/Chisham - Safer access to Calista Oval - Festivals like Mandurah - Big block of apartments on the Chisham/Gilmore will block entry into Chisham - Improve catchment to make the City Centre work better - Work with/reach out to the local business to make something happen *What other sort of activities would you like to see in the City Centre?* - Outdoor cinema - night time/restaurant friendly environment - More festivals – like food/wine or other *Would you like to see more activity around the (Calista) oval?* - Stronger connections from adventure playground to City Centre near pub/car park - Winter wonderland on Calista Oval	• Section 5.1 Vibrant Public Realm - Attribute for 'Safety and Security' provides design guidance for passive surveillance of spaces. • Section 5.2 Landscape - Attributes for 'Streets as Open Space', 'Spaces Between' and 'Materials' + Section 5.3 Signage, Section 5.4 Street Furniture and Section 5.5 Public Art all provide design guidance for attractive landscape design outcomes • Recommend development of a Parking Management Plan to implement time restricted parking and other means to reduce parking demand such as promotion of 'active transport' options in line with infrastructure upgrades, as well as engaging with key stakeholders to bring them on board with the Master Plan direction for consolidating at-grade parking into multi-deck structures in the future. • Additional activities / festivals to be considered and flagged as potential future project for the City's Place Making team. • Section 4.1 Mix of Land Uses - Attribute for 'Mixed Use' and 'Commercial and Retail Uses' provides design guidance for appropriate integration of vertical and horizontal mix of use, as well as for creating synergies between day and night time activities within the Main Street environment. • Master Plan updated - Section 3.1 Character Areas –add 'Calista Oval Precinct' identifying key attributes / activities (and design guidance for any future development. Strengthen retention of trees wherever possible). • Additional activities / festivals to be considered and flagged as potential future project for the City's Place Making team. • Noted. The City owned lot on the corner of Chisham / Gilmore (Lot 904) should not be used for long term parking and this entire locality (as per draft Master Plan) has higher order built form benefits.

SCHEDULE OF SUBMISSIONS
Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
		- The buildings on Calista Oval proposed would affect the trees *Describe your Vision for the City Centre Master Plan* - Beneficial to using the City lot for parking - Don't leave corner on Chisham/Gilmore Ave as a vacant block … use it.	
	Workshop dated 10 June 2019 outcomes	**COMMENTS** *Which links in the City Centre do you think should be improved for:* <u>Walking</u> – - Facilitate walking to the Retirement village; - suggested overpass over Gilmore Road or slowing traffic on road; difficult for School children and to get across; - connect footpaths all the way around the retirement village; - Use vegetation/walking friendly environments - Better linkages with key attractors/people generators <u>Cycling and Driving</u> – - Need proper signage or direction prompting safe driving - People can walk a little way – provide more blue bay - Current access to Shopping Centre is good - No clear access way for pedestrians - Interface of Challenger/Marketplace is unappealing and lacks quality pedestrian connection/link	All of these comments from the Workshops are noted. Some relate to design based issues and have been addressed below whilst others relate to the wider issues such as safety and promotion of activities. In this instance, these wider concerns have been referred to the City's Place Management Team, in particular, the Kwinana Central Management Area for its consideration and action. • Support better pedestrian links to retirement village and associated residential areas. • Recommend 50km speed reduction and improved pedestrian links east-west across Gilmore Avenue. • Recommend development of a Parking Management Plan to implement time restricted parking and other means to reduce parking demand such as promotion of 'active transport' options in line with infrastructure upgrades, as well as engaging with key stakeholders to bring them on board with the Masterplan direction for consolidating at-grade parking into multi-deck structures in the future. • Section 4.1 Mix of Land Uses - Attribute for 'Mixed Use' an 'Commercial and Retail Uses' provides design guidance for appropriate integration of vertical and horizontal mix of use, as well as for creating synergies between day and night time activities within the Main Street environment.

SCHEDULE OF SUBMISSIONS
Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
		- No dogleg pedestrian crossings – these are confusing and unsafe - No quality pedestrian/building use link from Civic to the rest of the City Centre - Not safe to walk from Shopping Centre carpark to access Recquatic/Library *What would enhance your experience walking around the City Centre?* - Legibility/interface of South of City Centre – night time activation/economy - Safety/Inviting place, family restaurants, more to do/activities for teens/young adults to reduce crime particularly in school holidays, night time market/main street closure for an event - Wellness expo/food expo/events in main street - Would like real, proper restaurants - Coffee shop around Calista Oval would be nice - Avenue of trees need to make more comfortable and more inviting - Be brave and innovative and quality design *What parking management measures could be improved in the City Centre?* - Parking at Koorliny not large enough - Filthy car park at Shopping Centre - Parking in 'Main Street' precinct is not good - Overflow parking at Recquatic - Shopping Centre carpark is sufficient *What are your top 3 priorities to make Kwinana City Centre even better?* - Small business/markets in City Centre - Twilight markets, program of activity/interesting lighting/colour, food trucks, restaurants	• Additional activities / festivals to be considered and flagged as potential future project for the City's Place Making team. • Section 5.1 Vibrant Public Realm - Attribute for 'Safety and Security' provides design guidance for passive surveillance of spaces. • Section 5.2 Landscape - Attributes for 'Streets as Open Space', 'Spaces Between' and 'Materials' + Section 5.3 Signage, Section 5.4 Street Furniture and Section 5.5 Public Art all provide design guidance for attractive landscape design outcomes. • Master Plan updated - Section 3.1 Character Areas – Add 'Calista Oval Precinct' identifying key attributes / activities (and design guidance for future development. Strengthen retention of trees wherever possible).

SCHEDULE OF SUBMISSIONS
Kwinana City Centre Master Plan

NO.	NAME / ADDRESS (where applicable)	SUBMISSION	RESPONSE / RECOMMENDATION
		What other sort of activities would you like to see in the City Centre? - More residential – not the 'old' Kwinana flats with their problems - Apartments would be quite tricky – getting the market right - Micro business – people to start up business *Would you like to see more activity around the (Calista) oval?* - Safety, outdoor lighting, Christmas - Park runs - Activity, but need places to sit – transport - Night time activity – Outdoor cinema – Food/Eatery - Tables and chairs in park and brass band - Amphitheatre at Koorliny for better use *Describe your Vision for the City Centre Master Plan* - Sit in a café on main street under umbrella and be safe - Vibrant and active during day/night – activity and safety are related – Family friendly place - Dog park, Community key, Outdoor café, City to enable spontaneous activity to take place, Café with outdoors feel but also offers games/supportive, etc. / gold course – hire bikes/signs/microbrewery - Use your car parks – performances - Stage/local art/community groups/choir - Young leadership for arts/drama – place to perform in front of peers	

17.6 Amended Development Assessment Panel Application – General Industry – Waste to Energy Plant, Brick Plant and associated Office/Training Building and Infrastructure

DECLARATION OF INTEREST:

Mayor Carol Adams declared an impartiality interest due to the applicant recently hosting a working lunch for the Australian Leaders Forum, which she attended.

SUMMARY:

An amended Development Assessment Panel (DAP) application has been received for a Waste to Energy Plant, and associated Office/Training Building and Infrastructure (refer Attachment A). The original application was approved by the Metro South-West JDAP on 7 December 2015, and has been substantially commenced. This amendment to the original application is being made under regulation 17 of the *Planning and Development (Development Assessment Panels) Regulations, 2011* (Planning Regulations 2011), and is known as a Form 2.

The application seeks to amend the following aspects of the approved development:

- Moving the process building 4m to the east to provide a clear 6 metre wide route around the perimeter of the building for Department of Fire and Emergency Services (DFES) emergency vehicles;
- Reducing the bulk of the process building by approximately 11.7% by reducing the height of the easternmost section from 56.9 metres to 28.5 metres with several smaller alterations;
- Removing the brick plant located to the northern side of the process building and placing air-cooled condensers in this location. The brick plant no longer forms part of this development;
- Modifying the 87.3 metre high chimney stack from a triangular shape with colourbond sheeting to a square shape with aluminium panels which are designed to reduce wind turbulence. The design of the stack will incorporate feature aluminium panels in a square shape with the integration of LED lighting strips into the structural frame, which enhances the structure's landmark status;
- Redirecting the flow of internal traffic from anti-clockwise to clockwise to improve the safety of vehicle circulation; and
- Removing 16 car parking spaces abutting the process building noting they still achieve compliance with the number of car parking spaces in accordance with the City of Kwinana's Local Planning Scheme No. 2 (LPS2).

The property is zoned General Industry under LPS2 and Industrial under the Metropolitan Region Scheme (MRS). The proposal requires dual approval under LPS2 and the MRS, meaning that in this instance, both the City of Kwinana and the Western Australian Planning Commission (WAPC) are required to prepare a Responsible Authority Report (RAR) on the matter. Neither the City of Kwinana nor the WAPC have exercised their delegation to determine the amendment application, as the applicant has lodged the proposal with DAP pursuant to regulation 17A of the *Planning Regulations 2011*.

The operations and activities approved on site will not substantially change as a result of the proposed amendments. The application is scheduled to be considered by the DAP at a meeting in late December or early January. City Officers have prepared the attached RAR in accordance with the *Planning Regulations 2011* and it is attached for Council's consideration and determination.

17.6 AMENDED DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – WASTE TO ENERGY PLANT, BRICK PLANT AND ASSOCIATED OFFICE/TRAINING BUILDING AND INFRASTRUCTURE

The City is required to submit the RAR to the DAP Secretariat on 17 December 2019. Should the City not submit this report to the DAP Secretariat within the required timeframe, the Minister for Planning, Lands and Heritage may direct the City to submit any information it has and provide it to the DAP directly.

City Officers are recommending that the amended application be approved subject to conditions, as per the Officer Recommendation included within the RAR. It represents an amendment to the original application submitted in 2015 which was supported by City Officers at that time. City Officers' recommendation was supported by Council at the meeting held on 25 November 2015.

OFFICER RECOMMENDATION:

That Council adopt the recommendations of the Responsible Authority Report as detailed in Attachment A to the Metro South-West Development Assessment Panel for Proposed General Industry – Waste to Energy Plant, associated Office/Training Building and Infrastructure at Lot 9501 Leath Road, Kwinana Beach. The recommendations are to conditionally support the minor amendment to the original application which was previously supported by Council at its meeting held on 25 November 2015 and subsequently issued by the Metro South-West Development Assessment Panel on 7 December 2015.

DISCUSSION:

The proposed amendments are considered relatively minor in the context of the previous approval. The size of the process building will be reduced by approximately 11.7% and the other amendments are limited in their scope, not substantially impacting on the development as previously approved. The proposed amendments are required to improve the operational efficiency and safety of the facility.

The development meets the LPS2 provisions and relevant policies as discussed below.

<u>Car parking</u>

The proposed amendment entails the removal of 16 car parking bays located on the south-eastern side of the process building. The development requires a total of 60 parking bays, with 66 car parking bays being provided in the revised proposal. The proposal meets the car parking requirements under LPS2 and hence the proposed amendments are supported.

<u>Local Planning Policy No. 5 – Development Contribution Towards Public Art (LPP No 5)</u>

In relation to LPP No 5, as the proposal relates to an amendment to an existing approved development under construction, it is not considered it a requirement to enforce the contribution or installation of artwork on site.

Nonetheless, City Officers raised the intent of Council's policy early in discussions with the applicant about the amendment expressing a desire for attractive built form and the potential for art work.

17.6 AMENDED DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – WASTE TO ENERGY PLANT, BRICK PLANT AND ASSOCIATED OFFICE/TRAINING BUILDING AND INFRASTRUCTURE

In response, as part of this application, an 87.3 metre high chimney stack is proposed to incorporate feature aluminium panels in a square shape with the integration of LED lighting strips into the structural frame. The lighting will give the stack a distinctive appearance, and given the height of the stack, it will be visible from a distance, in particular at night. This will reinforce the structure's landmark status and create interest in the City's industrial area.

The applicant is supported in their efforts to improve the visual amenity of the location.

Bushfire

The property is located within a bushfire prone area as per DFES mapping and as such a Bushfire Management Plan (BMP) is required. The original development application was approved prior to the adoption of State Planning Policy 3.7 – Planning in Bushfire Prone Areas Guidelines (SPP 3.7). A BMP was submitted with the amended application and was referred to DFES for review. At the time of writing this report, comments from DFES had not been received. Due to the timeframes associated with preparing and lodging an RAR, this report was required to be prepared without these comments. However, at this stage having regard to the requirements of the policy, a condition has been recommended to the DAP requiring the implementation of the BMP at all times. Further, the RAR will be supplemented with any DFES comments received prior to submitting.

Lighting

The proposed chimney stacks LED lighting strips will be visible from afar particularly at night. The proponent advises, however, that the offsite impacts will be minimal with the form of the lighting being a decorative feature rather than distracting light spill. A condition has been recommended to the DAP requiring that the proposed lighting complies with Australian Standard "AS 4282-1997 - Control of Obtrusive Effects of Outdoor Lighting" at all times to avoid annoyance to the public or affect drivers.

The application was referred to Fremantle Ports who advised that the proposed LED lighting shall be designed so as not interfere with the safe navigation of ships. The proponent has been advised of this requirement and to consult with Fremantle Ports to ensure compliance.

Local Planning Policy 8 - Designing Out Crime (LPP8)

In relation to LPP 8 Designing out Crime, it is considered that given this application is an amendment to an existing approval, the nature and context of the industrial development and given limited access from the public realm, that additional security measures above what exist on site are not necessary. The application is considered satisfactory against LPP8.

LEGAL/POLICY IMPLICATIONS:

For the purpose of Councillors considering a financial or impartiality interest only, the proponent is Planning Solutions (on behalf of Acciona Industrial Australia and Kwinana WTE Project Co Pty Ltd) and the landowner is WA Land Authority (Development WA).

17.6 AMENDED DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – WASTE TO ENERGY PLANT, BRICK PLANT AND ASSOCIATED OFFICE/TRAINING BUILDING AND INFRASTRUCTURE

Legislation

Planning and Development Act 2005
Planning and and Development (Local Planning Schemes) Regulations 2015
Environmental Protection Act 1986 and relevant Regulations
Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992
Environmental Protection (Noise) Regulations 1997
Environmental Protection (Unauthorised Discharges) Regulations 2004
Health (Miscellaneous Provisions) Act 1911 and Regulations

Scheme and Policies

City of Kwinana Local Planning Scheme No. 2
Local Planning Policy No. 11 – Site Requirements and Standards for Development within the Industrial Zones
Local Planning Policy No. 5 – Development Contribution Towards Public Art
Local Planning Policy – Development within Cockburn Sound Catchment
State Planning Policy 4.1 – State Industrial Buffer Policy
State Planning Policy 2.6 – State Coastal Planning Policy and associated Position Statement

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 original proposal was approved for implementation by the Minister for Environment in September 2015. A statement to change the implementation conditions of the proposal was granted by the Minister for Environment on 5 March 2019.

An application to amend the works approval for minor changes that reflect the amendments proposed under this application is currently being reviewed by Department Water Environment Regulation (DWER). The development is required to comply with Environmental Protection Authority conditions and DWER licence conditions at all times.

17.6 AMENDED DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – WASTE TO ENERGY PLANT, BRICK PLANT AND ASSOCIATED OFFICE/TRAINING BUILDING AND INFRASTRUCTURE

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	An energy efficient City	3.3 Promote the use of renewable energy within the City of Kwinana and reduce energy use where possible.

COMMUNITY ENGAGEMENT:

The proposal is a Permitted use under LPS2 and advertising is not required. Notwithstanding this, the original application was advertised due to the scale of the project. The proposed amendments are considered minor and no additional matters were identified that warranted further consultation.

PUBLIC HEALTH IMPLICATIONS

The proposal has the potential to impact negatively on environmental quality and neighbourhood amenity if not well designed and operated using best practice technologies. The development was reviewed in relation to works approval and or/licensing requirements under *Part V of the Environmental Protection Act 1986 (EP Act)* and was approved subject to conditions. The proposed amendment to the development approval requires an amendment to the works approval. The proponent has lodged a works approval amendment application with DWER, which is currently being reviewed. The development is required to comply with EPA conditions and DWER licence conditions at all times.

It is important that the lighting from the chimney stack does not have adverse offsite impacts. The lighting from the chimney stack is required to comply with AS4282-1997 – 'Control of Obtrusive Effects of Outdoor Lighting' at all times so that it does not cause a nuisance to the public and the applicant will need to liaise with Fremantle Ports to address shipping impacts. It is not anticipated however that the lighting of the stack will adversely impact on public health.

RISK IMPLICATIONS:

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

Risk Event	Potential appeal of the DAP's decision or conditions of approval imposed.
Risk Theme	Failure to fulfil statutory regulations or compliance requirements Providing inaccurate advice/ information

17.6 AMENDED DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – WASTE TO ENERGY PLANT, BRICK PLANT AND ASSOCIATED OFFICE/TRAINING BUILDING AND INFRASTRUCTURE

Risk Effect/Impact	Environment 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. • The recommendation on the application is justified on the basis of compliance with LPS2, and the discretion afforded to the DAP to vary these documents. • Liaising with the applicant throughout the application process.
Rating (after treatment)	Low

COUNCIL DECISION

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MOVED CR S LEE **SECONDED CR D WOOD**

That Council adopt the recommendations of the Responsible Authority Report as detailed in Attachment A to the Metro South-West Development Assessment Panel for Proposed General Industry – Waste to Energy Plant, associated Office/Training Building and Infrastructure at Lot 9501 Leath Road, Kwinana Beach. The recommendations are to conditionally support the minor amendment to the original application which was previously supported by Council at its meeting held on 25 November 2015 and subsequently issued by the Metro South-West Development Assessment Panel on 7 December 2015.

CARRIED
7/0

Government of **Western Australia**
Development Assessment Panels

ATTACHMENT A

Form 2 – Responsible Authority Report

(Regulation 17)

Property Location:	Lot 9501 (former Lot 9500) Leath Road, Kwinana Beach
Development Description:	Waste to Energy Plant and Associated Administration/Office/Training Building and Infrastructure
Proposed Amendments:	• Removal of the brick plant and air cooler condensers located in this area; • Process building moved 4m to the east; • Process building height reduced in parts; • Stack moved 4m to the east, and changes in shape and cladding.
DAP Name:	Metro South-West
Applicant:	Planning Solutions (on behalf of Acciona Industrial Australia (contracted to design, build, operate and maintain the facility) and Kwinana WTE Project Co Pty Ltd (development operator))
Owner:	WA Land Authority (Development WA)
Value of Amendment:	$380 million
LG Reference:	DA8428.3
Responsible Authority:	City of Kwinana
Authorising Officer:	Felicitas Dhliwayo – Senior Statutory Planning Officer
DAP File No:	DAP/15/00887
Report Date:	November 2019
Application Received Date:	31 October 2019
Application Process Days:	60 days
Attachment(s):	1: Previous Determination Notice 2: Location Plan 3: Site Plan 4: North Elevation Plan 5: East Elevation Plan 6: South Elevation Plan 7: West Elevation Plan 8: South Night Elevation Plan 9: Responses from Agencies

Officer Recommendation:

That the Metro South-West DAP resolves to:

1. **Accept** that the DAP Application reference DAP/15/00887 as detailed on the DAP Form 2 dated 31 October 2019 is appropriate for consideration in

accordance with regulation 17 of the *Planning and Development (Development Assessment Panels) Regulations 2011*;

2. **Approve** the DAP Application reference DAP/15/00887 as detailed on the DAP Form 2 dated 31 October 2019 and accompanying plans:
    - Layout Location Plan, Drawing No. KW2E-00-PM-LW-IDO-1001
    - North Elevation Plan, Drawing No. KW2E-01-CE-DW-HSH-0100
    - East Elevation Plan, Drawing No. KW2E-01-CE-DW-HSH-0100
    - South Elevation Plan, Drawing No. KW2E-01-CE-DW-HSH-0100
    - West Elevation Plan, Drawing No. KW2E-01-CE-DW-HSH-0100
    - South Night Elevation Plan, Drawing No. KW2E-01-CE-DW-HSH-0100

    in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015* and the provisions of Clause 6.1 of the City of Kwinana Local Planning Scheme No. 2, for the proposed minor amendment to the approved Waste to Energy Plant and Associated Administration/Office/Training Building and Infrastructure at Lot 9501 Leath Road, Kwinana Beach, subject to :

New Conditions

21. Proposed lighting of the chimney stack shall not have a light of such intensity as to cause annoyance to the public or be a traffic hazard and shall comply with Australian Standards "AS4282-1997 - Control of Obtrusive Effects of Outdoor Lighting" at all times. Details to be provided prior to lodgement of a building permit.

22. The Bushfire Management Plan prepared by Bushfire Prone Planning and dated 6 September 2019 (as amended) being implemented to the satisfaction of the City of Kwinana.

Advice Notes

2.10 Due to the site's location near ports and shipping, that there may be maritime regulations that restrict lighting in the area. The applicant is advised to liaise with Fremantle Ports regarding the proposed LED lighting and any potential impacts on the shipping navigation.

All other conditions and requirements detailed on the previous approval dated 7 December 2015 shall remain unless altered by this application.

Reasons

Lighting

The design of the proposed chimney stack will incorporate feature aluminium panels with some LED lighting strips so that it is a unique and decorative feature in keeping with the wider objectives of the City's Local Planning Policy No 5 Developer Contributions towards Public Art (LPP No 5). In this respect, the design of the chimney stack is supported. It is important however that any adverse offsite impacts

from the lights are minimal. The lighting will give the stack a distinctive appearance when seen at night. A condition is recommended to ensure that the proposed lighting complies with Australian Standard (AS) 4282-1997 to avoid annoyance to the public or affect drivers.

Fremantle Ports advised that the proposed LED lighting shall be designed so as not interfere with the safe navigation of ships. The proponent has been advised of this requirement and to consult with Fremantle Ports to ensure compliance with any relevant regulations.

Bushfire

The property is located within a bushfire prone area as per the Department of Fire and Emergency Services (DFES) mapping and as such a Bushfire Management Plan (BMP) is required. The original development application was approved prior to the adoption of State Planning Policy 3.7 – Planning in Bushfire Prone Areas Guidelines (SPP 3.7). A BMP prepared by Bushfire Prone Planning and dated 6 September 2019 was submitted with the amended application and was referred to DFES for review. At the time of writing this report, DFES had not yet provided comments on the plan. Notwithstanding this, a condition has been recommended requiring the applicant comply with its BMP on DFES advice.

Details: outline of development application

Zoning	MRS:	Industrial
	TPS:	General Industry
Use Class:		Office General Industry – Waste to Energy Plant
Strategy Policy:		City of Kwinana Local Planning Policy No. 11 – Site Requirements and Standards for Development within the Industrial Zones; City of Kwinana Local Planning Policy No. 5 – Development Contribution Towards Public Art; and City of Kwinana Local Planning Policy – Development within Cockburn Sound Catchment
Development Scheme:		City of Kwinana Local Planning Scheme No. 2
Lot Size:		4.1223 hectares (proposed lease area)
Existing Land Use:		Office and Site under Construction

Proposal:

The proponent seeks to amend the development approval granted by the Metro South West JDAP for a Waste to Energy Plant, Brick Plant and associated Administration/Office/Training Building and infrastructure (refer Attachments 2-8). The application seeks to amend the following aspects of the approved development;

1. Process building location and perimeter road

- The process building is to be moved east in order to provide a clear 6m wide route around the perimeter of the building for DFES emergency vehicles;
- The direction of vehicle flow around the perimeter of the process building is to be changed from the approved counter-clockwise flow to a clock wise flow; and
- 16 car parking spaces have been removed from the south-eastern side of the process building. The development still meets the required car parking spaces under Local Planning Scheme No. 2 (LPS2).

2. Process Building Size
   - The height of the easternmost portion of the process building has been reduced by 28.4m, from an approved height of 56.9m to a proposed height of 28.5m; and
   - Overall, the volume of the process building is to be reduced by approximately 11.7% to reflect an optimised building design.

3. Location of Air cooled condenser
   - Removal of the brick plant located to the northern side of the process building and placing air-cooled condensers in this location. The brick plant no longer forms part of this development.

4. Stack cladding location and shape
   - The approved 87.3m high chimney stack is to be moved 4m to the east of the process building (in line with the relocated process building). The height of the stack will remain unchanged;
   - The cladding of the stack is to be changed from colourbond sheeting in a triangular shape to incorporate feature aluminium panels in a square shape around the stack to achieve a landmark status and to reduce wind turbulence; and
   - The exoskeletal frame and cladding is designed to be fabricated in modular units with each module having the same dimension and form and will be integral with the tubular segments of the chimney stack.

The proposed amendments are considered minor and do not substantially change the approved development.

Site Description

The subject site is approximately 53 hectares in area with a lease area of 4.1223 hectares to be used for the proposed project. The property was formerly known as Lot 9500 Leath Road before it was subdivided. The subject site is situated on the western side of Rockingham Road, Kwinana Beach. The current lease area (development area) contains an existing two-storey administration building, carpark, and the Golden Girls lunch bar. The eastern portion of the development site has been cleared and earthworking activities have been undertaken. Works on site have substantially commenced, including concrete placement for the various building structures.

The development is contained within the General Industry zone under LPS2.

The site currently contains two other General Industrial uses, being the BASF Chemical Plant to the south and the BGC Concrete Precast Plant to the south east of the development area.

The development site has frontage to Leath Road to the west, and frontage to Canteen Road (a private road within the subject site).

Location Plan



Background:

The Metro South-West DAP at its meeting held on 7 December 2015 approved an application for a General Industry-Waste to Energy Plant, Brick Plant and associated Administration/Office/Training Building and infrastructure (refer Attachment 1). The development has been substantially commenced, including land clearing, earth working and concrete placement for the various building structures.

Development approval was granted for the following;

- Construction of a Waste to Energy Plant, to process 400,000 tonnes per annum (tpa) of residual Municipal Solid Waste (MSW) from the City of Kwinana and other municipalities;

- The construction of a Brick Plant to convert solid residues (bottom ash, fly ash and Air Pollution Control (APC) reaction products) into bricks, pavers and/or construction aggregate for sale as alternative construction products;
- The use of the existing administration building for office and training purposes; and
- The construction of associated roads, fences and car parks.

The property is zoned General Industry under LPS2 and Industrial under the Metropolitan Region Scheme (MRS)

Approval was granted under the City of Kwinana's LPS2 subject to conditions and advice notes. Approval was also granted under the MRS subject to conditions by the WAPC.

Environmental Approval

The Kwinana Waste To Energy Project Company referred a 400,000 tonnes per annum Waste to Energy Plant and Brick making facility to the Environmental Protection Authority (EPA) on 24 September 2012. The EPA undertook a review of the environment and health performance of Waste to Energy technologies and concluded that when a waste to energy plant is well designed and operated using best practice technologies and processes, it can operate within strict emission standards and with acceptable environmental and health impacts to the community.

Subsequently, the proposal was approved for implementation by the Minister for Environment in September 2015. A statement to change the implementation conditions of the proposal was granted by the Minister for Environment on 5 March 2019.

On 31 March 2016 the then Department of Environment Regulation (now Department of Water and Environmental Regulation) (DWER) issued a works approval for the Kwinana Waste to Energy Project under the *Environmental Protection Act 1986* subject to conditions.

In 2017 a number of changes to the approved proposal and works approval were approved by the EPA and DWER. These amendments related primarily to changes to the control equipment used in the processes and to correct administrative errors. In 2018 DWER granted approval to extend the duration of the works approval to 3 April 2023.

An application to amend the works approval for minor changes that reflect the amendments proposed under this application is currently being reviewed by DWER.

Legislation and Policy:

Legislation

- *Planning and Development Act 2005*
- *Planning and Development (Local Planning Schemes) Regulations 2015*
- City of Kwinana Local Planning Scheme No. 2

- *Environmental Protection Act 1986* and relevant Regulations
- *Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992*
- *Environmental Protection (Noise) Regulations 1997*
- *Environmental Protection (Unauthorised Discharges) Regulations 2004*
- *Health (Miscellaneous Provisions) Act 1911 and Regulations*

Local Policies

- Local Planning Policy No. 11 – Site Requirements and Standards for Development within the Industrial Zones
- Local Planning Policy No. 5 – Development Contribution Towards Public Art
- Local Planning Policy – Development within Cockburn Sound Catchment
- Local Planning Policy 8 - Designing Out Crime (LPP8)

State Government Policies

- State Planning Policy 4.1 – State Industrial Buffer Policy
- State Planning Policy 2.6 – State Coastal Planning Policy and associated Position Statement

Consultation:

Public Consultation

The proposal represents a 'P' – Permitted use within the context of the requirements of LPS2 and therefore is not required to be advertised. Regardless of this, given the scale of the project, the original application was advertised to neighbouring property owners. Given the proposed amendments, the amended application was not advertised as no additional matters were identified that warranted further consultation.

Consultation with other Agencies or Consultants

The application was referred to the following agencies;

- Department of Water and Environmental Regulation (DWER)
- APA Group;
- Dampier to Bunbury Natural Gas Pipeline (DBNGP);
- Kwinana Industries Council (KIC);
- Western Power;
- Department of Fire and Emergency Services (DFES); and
- Fremantle Ports.

The following advice was received from the consulted agencies;

Department of Water and Environmental Regulation

DWER confirmed that an application for an amendment to works approval W5911/2015/1 had been lodged and was currently being reviewed. It was further

confirmed that the application and supporting documentation is consistent with the amended development application.

Western Power

Western Power supported the application subject to the proponent being advised to comply with requirements relating to works in close proximity to Western Power's network assets. Similar advice was provided and included on the 2015 development approval. No additional advice has been recommended under this amendment.

Department of Fire and Emergency Services

At the time of writing this report, comments from DFES had not been received. It is anticipated that these comments will be provided prior to lodgement of the RAR and will be included in the report.

Fremantle Ports

Fremantle Ports supported the application subject to consideration of any potential impact of the proposed LED lighting on the chimney stack on the safe navigation of ships. Following further clarification on the requirements by City Officers, Fremantle Ports further noted that the information provided with the application was not sufficient to enable the determination of the impacts of the proposed lighting on shipping navigation. In this regard, the proponent has been advised to liaise with Fremantle Ports regarding the proposed lighting and any impacts on the shipping navigation.

Officer Comments:

The proposed amendments relate to reconfiguring aspects of the development that reduce the bulk of the building and improve safety and legibility of vehicle circulation around the site. The proposed changes do not substantially change the approved development and are therefore supported. The proposed amendments meet the requirements of LPS2 and relevant Policies as discussed below;

Local Planning Scheme No. 2 Implications

The proposed amendments do not result in any variations against LPS2 provisions. The proposal entails the removal of 16 car parking bays located on the south-eastern side of the process building. The development requires a total of 60 parking bays, with 66 car parking bays being provided. The proposal meets the car parking requirements under LPS2 and hence the proposed amendments are supported.

Local Planning Policy No. 5 – Development Contribution Towards Public Art

In relation to LPP No 5, as the proposal relates to an amendment to an existing approved development under construction, it is not considered it a requirement to enforce the contribution or installation of artwork on site.

Nonetheless, City Officers raised the intent of Council's policy early in discussions with the applicant about the amendment to the development approval expressing a desire for attractive built form and the potential for art work.

In response, as part of this application, an 87.3 metre high chimney stack is proposed to incorporate feature aluminium panels in a square shape with the integration of LED lighting strips into the structural frame. The lighting will give the stack a distinctive appearance, and given the height of the stack, it will be visible from a distance, in particular at night. This will reinforce the structure's landmark status and create interest in the City's industrial area.

The applicant is supported in their efforts to improve the visual amenity of the location.

Local Planning Policy 8 - Designing Out Crime (LPP8)

In relation to LPP 8 Designing out Crime, it is considered that given this application is an amendment to an existing approval, the nature and context of the industrial development and, given limited access from the public realm, that additional security measures above what exist on site are not necessary. The application is considered satisfactory against LPP8.

Bushfire Assessment

The property is located within a bushfire prone area as per DFES mapping and as such a BMP was submitted with the amended application. The original development application was approved prior to the adoption of SPP 3.7. The BMP was referred to DFES for review. DFES has advised of its support for the BMP and a condition has been recommended to the DAP requiring the implementation of the BMP at all times.

Lighting

It is important that the lighting of the proposed chimney stacks' LED lighting strips will do not have adverse offsite impacts. The proponent advises that offsite impacts will be minimal with the form of the lighting being a decorative feature rather than distracting light spill. Nonetheless, a condition has been recommended to the DAP requiring that the proposed lighting complies with Australian Standard "AS 4282-1997 - Control of Obtrusive Effects of Outdoor Lighting" at all times.

Comments received from Fremantle Ports are also noted. The proponent has been advised to consult with Fremantle Ports to ensure the proposed LED lighting does not interfere with the safe navigation of ships.

Conclusion:

The application has been assessed against all relevant planning requirements, and any changes proposed to the plans are considered to meet these requirements. The modifications result in the reduction of the building bulk and improve safety and legibility of vehicle circulation in and around the process building. Additional conditions have been recommended to address the proposed changes relating to the design of the chimney stack and address bushfire matters as per current legislation. The development is required to comply with EPA environmental conditions and the

DWER licence conditions at all times. The proposed amendments are considered minor and do not substantially change the development approved, and are therefore supported.

Government of **Western Australia**
Development Assessment Panels

Attachment 1

LG Ref: DA8428
DoP Ref: DAP/15/00887
Enquiries: Development Assessment Panels
Telephone: (08) 6551 9919

Phoenix Energy
PO Box 106
KWINANA WA 6167

Dear Mr Dyson,

Metro South-West JDAP – City of Kwinana – DAP Application DA8428
Lot 9500 Leath Road, Kwinana Beach
Proposed Waste to Energy Plan, Brick Plant and Associated Administration/Office/Training

Thank you for your application and plans submitted to the City of Kwinana on 10 September 2015 for the above development at the abovementioned site.

This application was considered by the Metro South-West Joint Development Assessment Panel at its meeting held on 7 December 2015, where in accordance with the provisions of the Metropolitan Region Scheme and the City of Kwinana Town Planning Scheme No. 2, it was resolved to approve the application as per the attached notice of determination.

Should the applicant not be satisfied by this decision, a DAP Form 2 application may be made to amend or cancel this planning approval in accordance with regulation 17 of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

Please also be advised that there is a right of review by the State Administrative Tribunal in accordance with Part 14 of the *Planning and Development Act 2005*. Such an application must be made within 28 days of the determination, in accordance with the *State Administrative Tribunal Act 2004*.

Should you have any queries with respect to the conditions of approval, please contact Felicitas Dhliwayo at the City of Kwinana on (08) 9439 0200.

Yours sincerely,

Sean O'Connor

DAP Secretariat

17/12/2015

Encl. DAP Determination Notice
Approved plans

Cc: Felicitas Dhliwayo
City of Kwinana

Jason Bouwhuis and Rosa Rigali
Department of Planning

Government of **Western Australia**
Development Assessment Panels

Planning and Development Act 2005

City of Kwinana Town Planning Scheme No. 2

Metropolitan Region Scheme

Metro South-West Joint Development Assessment Panel

Determination on Development Assessment Panel Application for Planning Approval

Location: Lot 9500 Leath Road, Kwinana Beach
Description of proposed Development: Proposed Waste to Energy Plan, Brick Plant and Associated Administration/Office/Training

In accordance with regulation 8 of the *Planning and Development (Development Assessment Panels) Regulations 2011*, the above application for planning approval was **granted** on 7 December 2015, subject to the following:

PART A – CITY OF KWINANA TOWN PLANNING SCHEME NO. 2

Approve DAP Application reference DAP/15/00887 and accompanying plans dated 9 September 2015, PO1 – Revision 1, PO2 – Revision 0, PO3 – Revision 0, PO4 – Revision 0, PO5 – Revision 0, PO6 – Revision 0, PO7 – Revision 0 in accordance with Clause 6.1 of the City of Kwinana Town Planning Scheme No. 2, subject to the following conditions:

Conditions

1. This decision constitutes planning approval only and is valid for a period of two years from the date of approval. If the subject development is not substantially commenced within the two year period, the approval shall lapse and be of no further effect.

2. An area of at least 2,061 square metres (5%) of the lease area to be landscaped and maintained to a high standard thereafter to the satisfaction of the City of Kwinana within 60 days of practical completion of construction.

3. Landscaping areas, vehicle parking spaces and accessways, and all other items and details as shown on the approved development plans shall be installed prior to occupying the proposed development and maintained thereafter to the satisfaction of the City of Kwinana.

4. A detailed Landscaping Plan which outlines the proposed species and densities of plants to be used at the time of planting together with the anticipated height of each plant at maturity, spacing of each species and location of existing vegetation, the use of mature/advanced species between the existing security fence and the road boundary/verge, and the proposed reticulation layout is required to be submitted to the City of Kwinana for approval prior to lodgement of a building permit. The landscaping plan shall be implemented to the satisfaction of the City within 60 days of the practical completion of construction.

5. Stormwater drainage from roofed and paved areas being disposed of on-site or as may otherwise be approved under Environmental Protection Authority (EPA) Licence conditions or approved Stormwater Management Plan to the satisfaction of the City of Kwinana.

6. The applicant shall implement dust control measures for the duration of the Site and Construction Works, and for the ongoing operation of the site to the satisfaction of the City of Kwinana.

7. A schedule of colours, materials and finishes for the buildings shall be submitted to the City of Kwinana for approval prior to the commencement of construction works.

8. Vehicle crossovers shall be constructed to the specifications and satisfaction of the City of Kwinana.

9. The provision of vehicle parking bays as defined on the approved development plans in accordance with AS2890, to be clearly marked on the ground and constructed of bitumen, brick or concrete and drained prior to the occupation to the satisfaction of the City of Kwinana.

10. All trafficable areas are to be sealed and drained as per the City of Kwinana 'Trafficable Areas' Specifications to the satisfaction of the City of Kwinana.

11. All non-trafficable and lay-down areas within the subject lot being sealed and drained to comply with the City of Kwinana non-trafficable and lay-down area specifications.

12. All vegetation cleared as part of the development shall be mulched and re-used throughout the landscaped areas of the development to the satisfaction of the City of Kwinana.

13. On-site effluent disposal systems shall be nutrient retentive to comply with the *Health Act 1911* and Cockburn Sound Management Council requirements.

14. All plant and vehicle wash down facilities shall be connected to an appropriate wastewater treatment system to the satisfaction of the City of Kwinana.

15. The development shall be connected to an adequate potable water supply in accordance with the standards required by the *National Health and Medical Research Council Australian Drinking Water Guidelines* (2004).

16. There shall be no storage of materials in the car park at any time.

17. There shall be no extraction or use of ground water from the property at any time, unless otherwise approved by the Department of Environment and Regulation following chemical testing and an assessment of the risk to site users is undertaken to confirm it is suitability for its intended use.

18. Prior to any soil disturbance occurring on site the proponent shall prepare a site and earthworks management plan addressing potential risks to onsite workers, developers and maintenance personal with respect to possible soil contamination present on site, to the satisfaction of the City of Kwinana on advice of the Department of Environment and Regulation.

19. Within 14 days of commissioning of the Waste to Energy Plant operations, the proponent shall provide to the City of Kwinana, certification from a suitably qualified acoustic consultant that the noise emissions resulting from the operations on the site comply with Environment Protection Act and Regulations. The certification shall demonstrate that the plant complies with *Environmental Protection (Noise) Regulations 1997* from time of commencement of operations through to maximum throughput capacity.

20. 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.

2. Advice to Applicant

2.1 The applicant is advised that planning approval is required from the City of Kwinana for all future development prior to the commencement of works or alteration of land use.

2.2 Construction should not be commenced for the components of the development which require building approval until the applicant has paid the appropriate fees, submitted the appropriate supporting documentation and has been issued with a building permit in accordance with the *Building Act 2011* and *Building Regulations 2012*.

2.3 The applicant should ensure that the proposed development complies with all other relevant legislation, including but not limited to, the *Environmental Protection Act 1986*, *Health Act 1911* and Regulations, *Environmental Protection (Noise) Regulations 1997*, *Dangerous Goods Safety Act 2004* and Regulations, *Contaminated Sites Act 2003* and the *National Construction Code*.

2.4 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.

2.5 Training rooms and public galleries used for educational purposes are required to comply with the *Health (Public Building) Regulations 1992*.

2.6 The proponent should make an application to the City of Kwinana for the installation of effluent treatment and disposal systems.

2.7 Ablutions and sanitary facilities are required to comply with the requirements of the *Health (Sewerage Lighting and Ventilation) Regulations 1971*.

2.8 The proponent is advised that any changes within 8 metres of the transmission line will need to be assessed by Western Power. These changes include, cut or

fill, proposed structures (including fences, walls etc) and landscaping with mature height exceeding two metres from the natural ground level.

2.9 In regards to condition 9, the City of Kwinana Town Planning Scheme No.2 requires a minimum of 60 vehicle parking bays, as such the City of Kwinana may permit a reduction or rearrangement of the approved on site vehicle parking. Any such reduction or rearrangement to car parking areas will require a Form 2 application to be submitted.

PART B – METROPOLITAN REGION SCHEME

Approve DAP Application reference DAP/15/00887 and accompanying plans date stamped 15 September 2015 P01, P04, P05, P06 and P07 in accordance with the Metropolitan Region Scheme, subject to the following conditions and advice note:

1. This decision constitutes planning approval only and is valid for a period of two years from the date of approval. If the subject development is not substantially commenced within the two year period, the approval shall lapse and be of no further effect.

2. The construction of a 2.4 metre high noise wall along the eastern boundary as depicted within the Herring Storer (document reference 17236-2-13202) Environmental Noise Assessment Reference 2504 dated 14 November 2013.

3. All future lighting to be installed shall avoid spill into the northern area void of development.

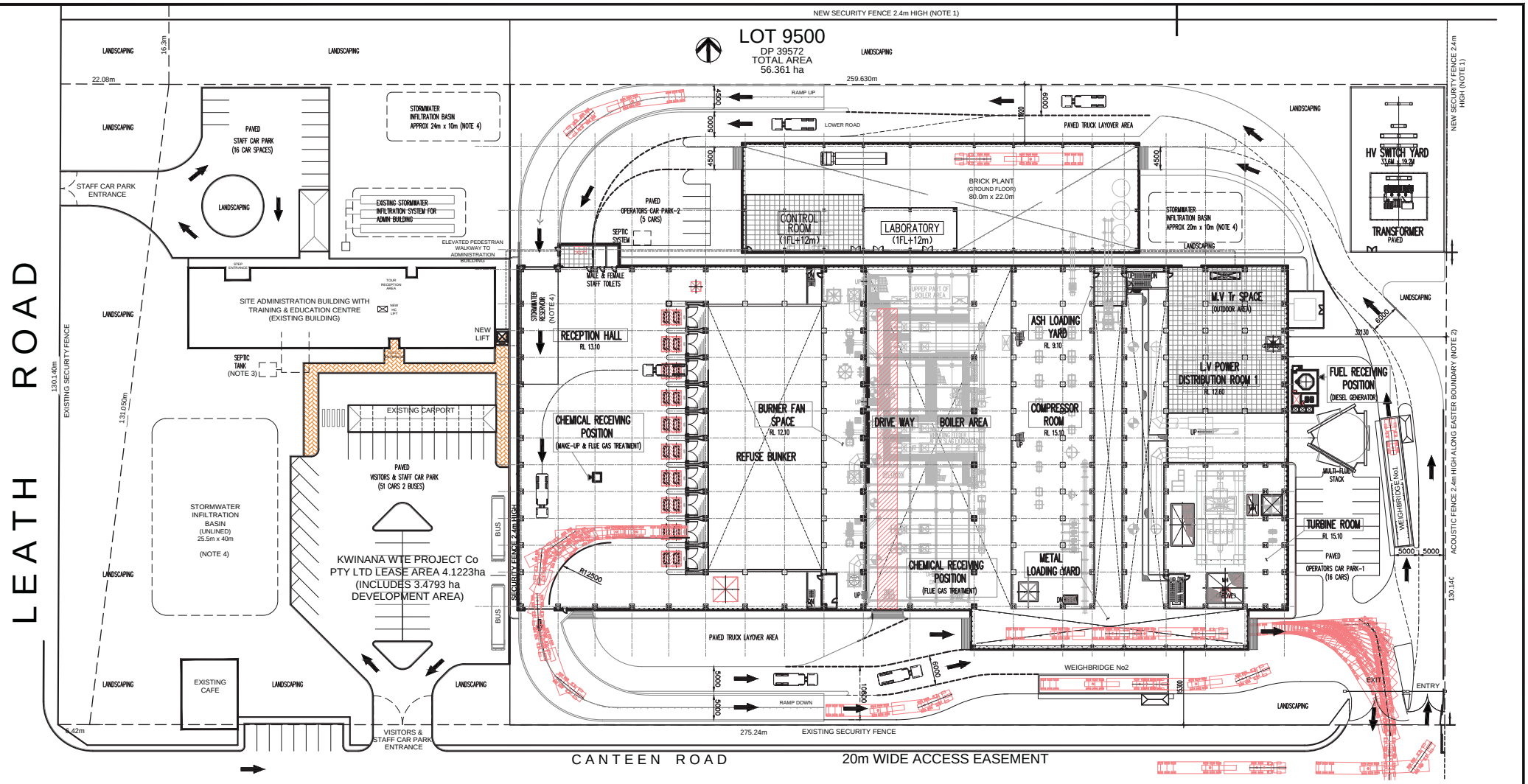
4. New perimeter fencing shall be installed to a height of 2.4 metres along the western, northern and the relevant portion of the eastern boundary for the proposed lease area.

Advice:

1. ATCO Gas Australia has high pressure gas mains in the vicinity of the property. ATCO Gas must be notified of any works within 15 metres of high pressure gas infrastructure before those works begin. Construction, excavation and other activities may be restricted in this zone. No pavements (including crossovers) are to be constructed over the pipeline without consent from ATCO Gas Australia. Various pipeline safety tests may apply. The applicant is advised to contact ATCO on 6163 5000 in this regard. Anyone proposing to carry out construction or excavation works must contact 'Dial Before You Dig' (Ph 1100) to determine the location of buried gas infrastructure.

Where an approval has so lapsed, no development shall be carried out without further approval having first been sought and obtained, unless the applicant has applied and obtained Development Assessment Panel approval to extend the approval term under regulation 17(1)(a) of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

DEVELOPMENT ASSESSMENT PANELS APPROVED 7 DECEMBER 2015



DRAWING NOTES

1. EXISTING FENCE TO BE REPLACED. NEW FENCE TO BE MESH & FRAME SECURITY FENCE WITH GALVANISED CHAIN MESH WITH THREE ROWS OF BARBED WIRE AT TOP. CROSSOVERS TO HAVE SECURITY GATES. VISITOR CAR PARK TO HAVE PEDESTRIAN ACCESS GATE.
2. APPROVED 2.4M ACOUSTIC BARRIER FENCE TO EAST BOUNDARY, FROM GATE TO SWITCHYARD. TO BE MASONRY OR CONCRETE CONSTRUCTION WITH DENSITY OF 24KG/M2 AND NO GAPS.
3. EXISTING SEPTIC SYSTEM TO BE UPGRADED AS PART OF A SEPARATE BUILDING APPROVAL APPLICATION.
4. ON-SITE STORMWATER MANAGEMENT SYSTEM TO BE DESIGNED TO HANDLE 1 IN 20 YR RAIN EVENT. POTENTIAL LOCATIONS FOR INFILTRATION INFRASTRUCTURE ARE SHOWN. USE OF SWALES AND SOAKWELLS FOR ROADWAYS AND CAR PARKS TO BE DETERMINED DURING DETAILED DESIGN.

SITE AREAS (SUBJECT TO SURVEY)

LANDSCAPED AREAS	13,096m²	PROPOSED NEW PLANT BITUMEN ROADWAYS	6,868m²
EXISTING ADMIN BUILDING	995m²	PROPOSED NEW HV SWITCH YARD	669m²
PROPOSED BRICK PLANT	1,799m²	OTHER SEALED AREAS	5,727m²
PROPOSED MAIN PLANT INCL. TIPPING HALL	12,069m²	TOTAL SITE AREA	41,223m²

DO NOT SCALE

REV	DATE	BY	DESCRIPTION	CHK	APP
1	11.09.15		MINOR ANNOTATION AMENDMENT		

DRAWING STATUS:

WSP | PARSONS BRINCKERHOFF
Level 5, 503 Murray Street, Perth, WA 6000, Australia
Tel: +61 8 9426 4900 Fax: +61 8 9481 1279
www.wspgroup.com/asia-pacific

CLIENT: PHOENIX ENERGY

EPC CONTRACTOR: posco E&C

PROJECT: KWINANA WASTE TO ENERGY POWER

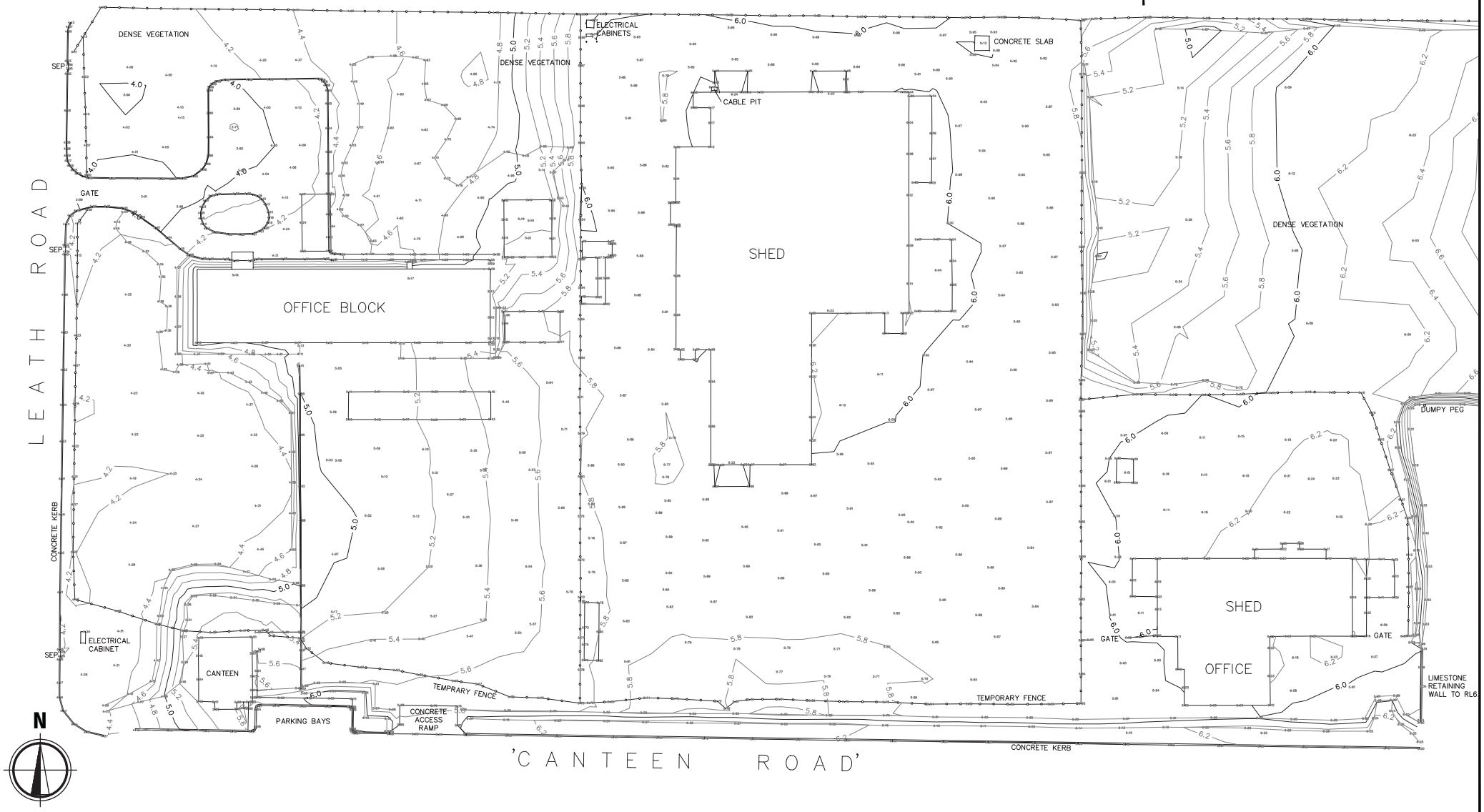
DRAWING TITLE: SITE PLAN

SCALE @ A3:	CHECKED:	APPROVED:
1:800		
PROJECT No:	DRAWN:	DATE:
15064		09/09/2015

DRAWING No: P01 REV: 1

ATTACHMENT 2

DO NOT SCALE



REV	DATE	BY	DESCRIPTION	CHK	APP
P1	07.09.15				

DRAWING STATUS:

WSP | PARSONS BRINCKERHOFF
Level 5, 503 Murray Street, Perth, WA 6000, Australia
Tel: +61 8 9426 4900 Fax: +61 8 9481 1279
www.wspgroup.com/asia-pacific

CLIENT: PHOENIX ENERGY

EPC CONTRACTOR: posco E&C

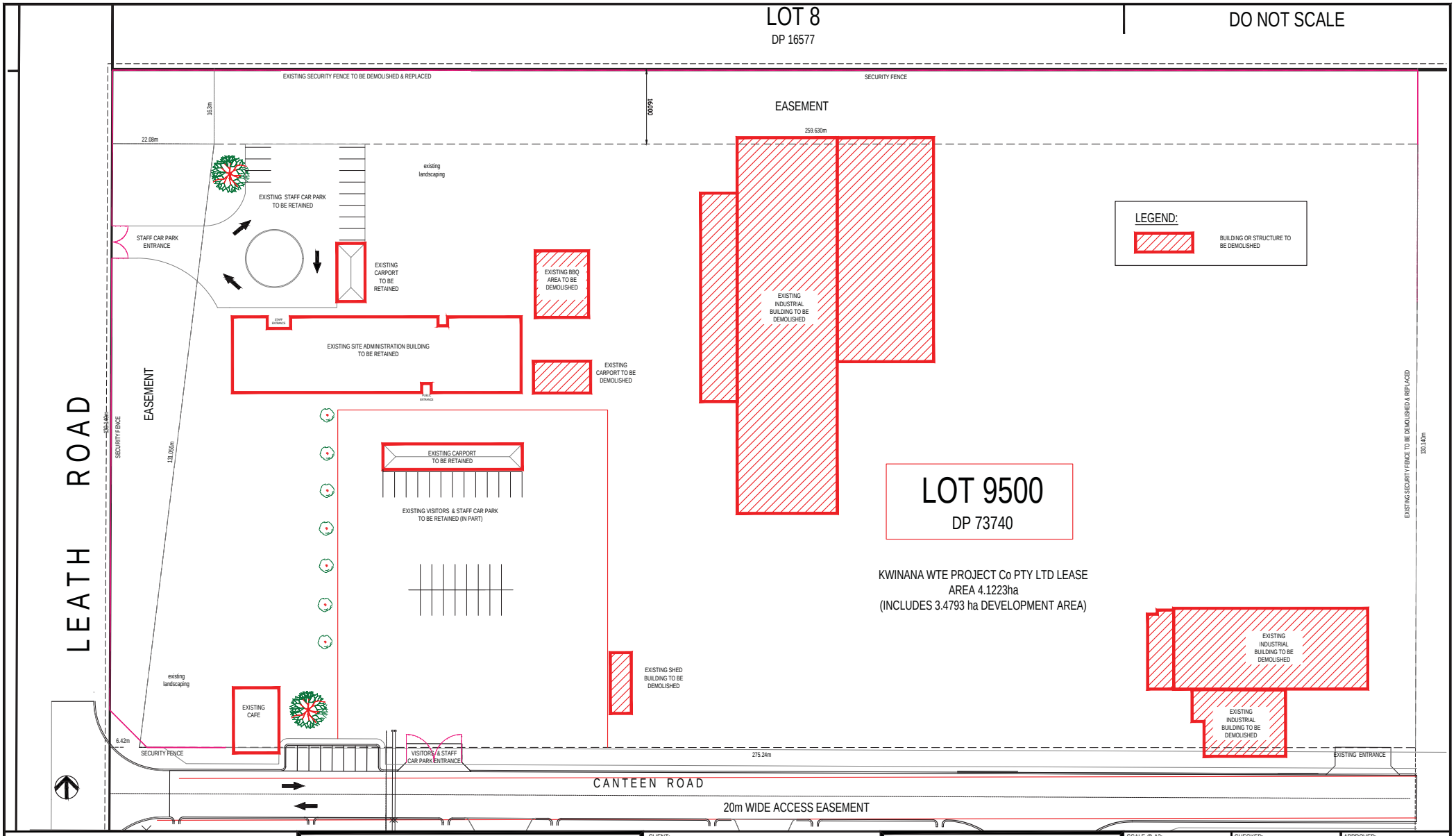
PROJECT: KWINANA WASTE TO ENERGY PROJECT

DRAWING TITLE: SITE SURVEY

SCALE @ A3:	CHECKED:	APPROVED:
1:800		
PROJECT No:	DRAWN:	DATE:
15064		09/09/15

DRAWING No: P02 REV: 0

ATTACHMENT 3



REV	DATE	BY	DESCRIPTION	CHK	APP
P1	07.09.15				

DRAWING STATUS:

WSP | PARSONS BRINCKERHOFF
Level 5, 503 Murray Street, Perth, WA 6000, Australia
Tel: +61 8 9426 4900 Fax: +61 8 9481 1279
www.wspgroup.com/asia-pacific

CLIENT: PHOENIX ENERGY

EPC CONTRACTOR: posco E&C

PROJECT: KWINANA WASTE TO ENERGY PROJECT

DRAWING TITLE: DEMOLITION PLAN

SCALE @ A3:	CHECKED:	APPROVED:
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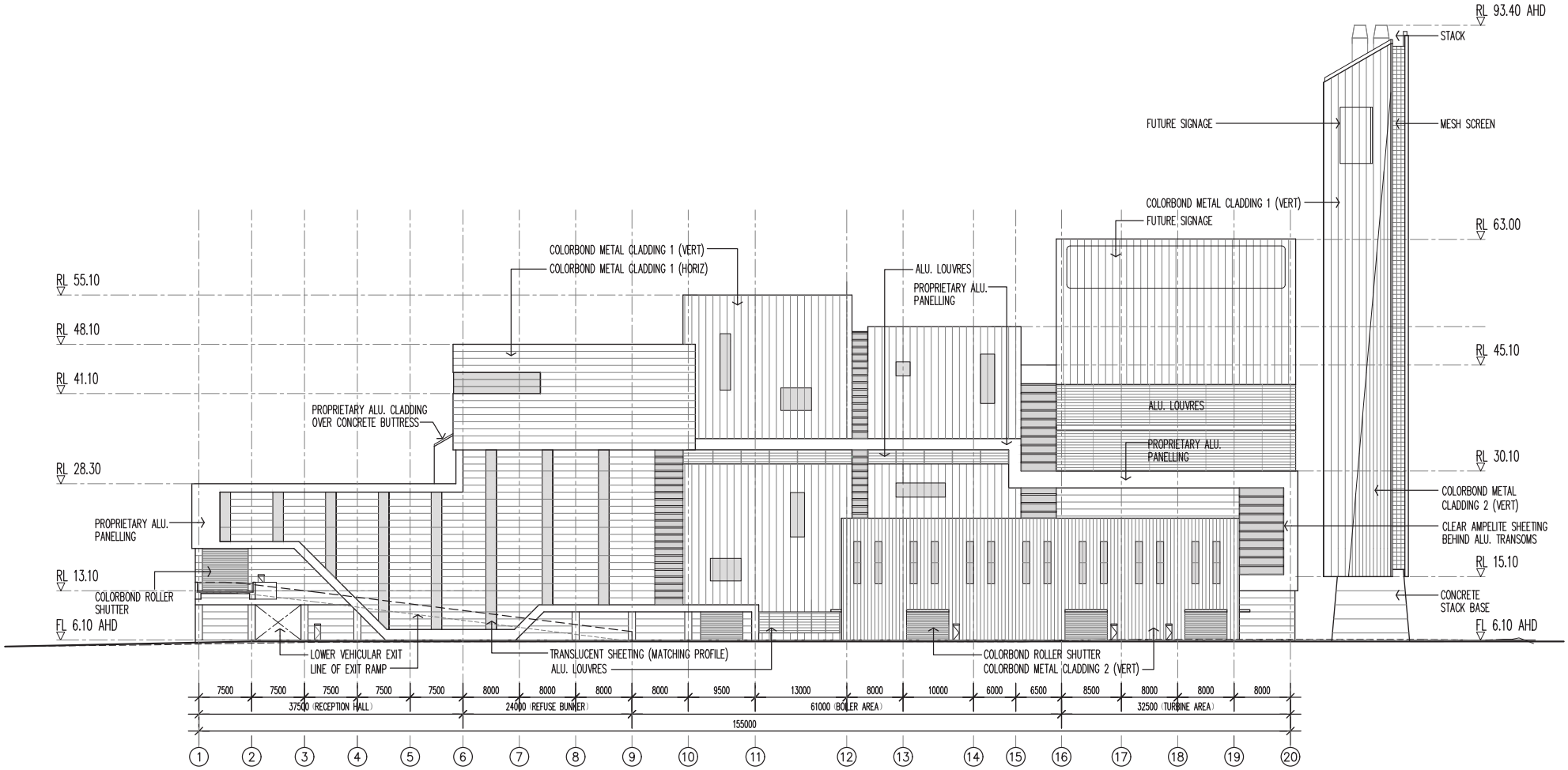
PROJECT No:	DRAWN:	DATE:
15064		9.09.15

DRAWING No: P03 REV: 0

ATTACHMENT 4

DO NOT SCALE



SOUTH ELEVATION
SCALE 1:600

REV	DATE	BY	DESCRIPTION	CHK	APP
P1	07.09.15				

DRAWING STATUS:

WSP | PARSONS BRINCKERHOFF
Level 5, 503 Murray Street, Perth, WA 6000, Australia
Tel: +61 8 9426 4900 Fax: +61 8 9481 1279
www.wspgroup.com/asia-pacific

CLIENT: PHOENIX ENERGY

EPC CONTRACTOR: posco E&C

PROJECT: KWINANA WASTE TO ENERGY PROJECT

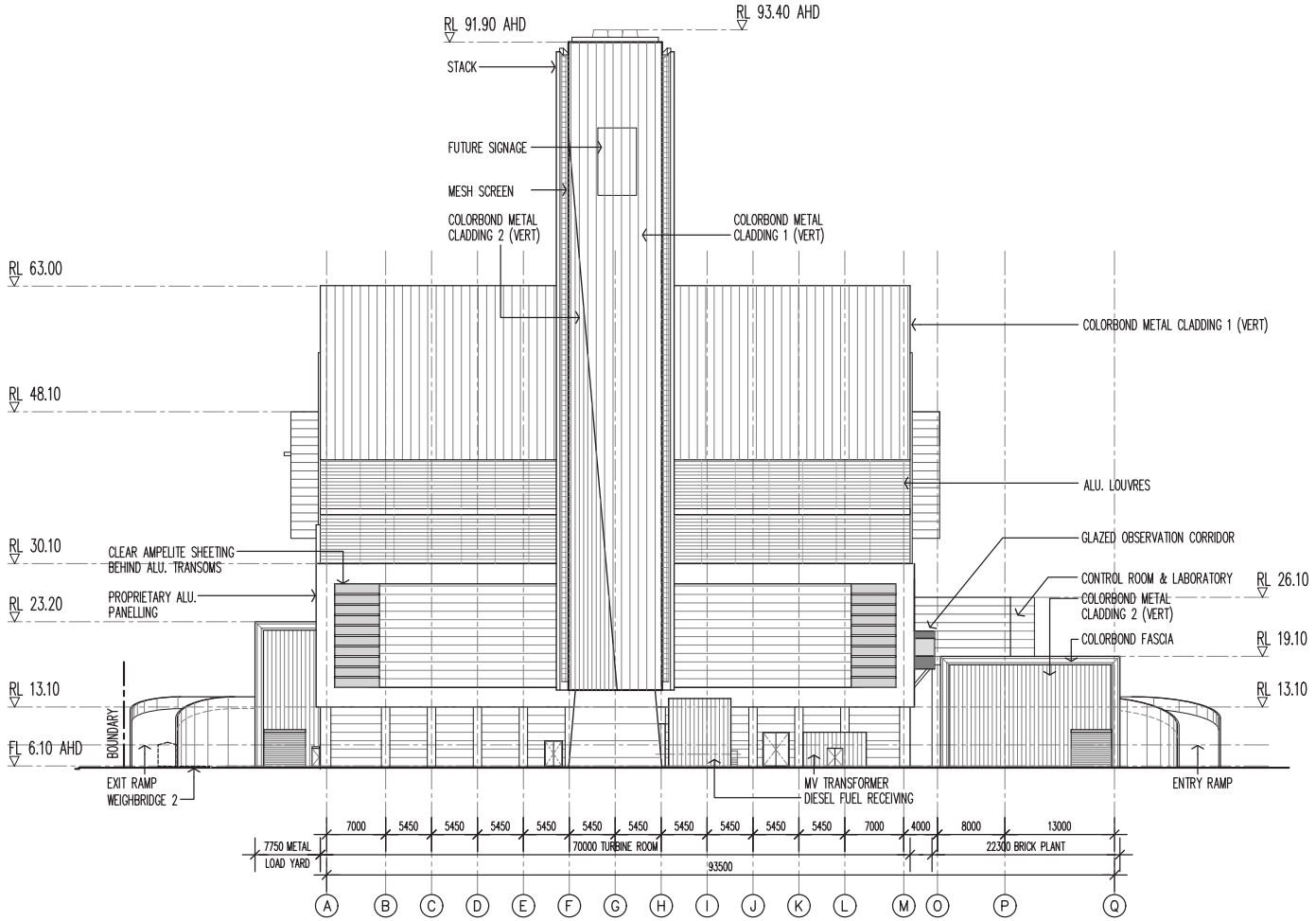
DRAWING TITLE: SOUTH ELEVATION

SCALE @ A3:	CHECKED:	APPROVED:
1:600		
PROJECT No:	DRAWN:	DATE:
15064		09/09/2015

DRAWING No: P04 REV: 0

ATTACHMENT 5

DO NOT SCALE



EAST ELEVATION
SCALE 1:600

REV	DATE	BY	DESCRIPTION	CHK	APP
P1	07.09.15				

DRAWING STATUS: PLANNING

WSP | PARSONS BRINCKERHOFF
Level 5, 503 Murray Street, Perth, WA 6000, Australia
Tel: +61 8 9426 4900 Fax: +61 8 9481 1279
www.wspgroup.com/asia-pacific

CLIENT: PHOENIX ENERGY

EPC CONTRACTOR: posco E&C

PROJECT: KWINANA WASTE TO ENERGY PROJECT

DRAWING TITLE: EAST ELEVATION

SCALE @ A3:	CHECKED:	APPROVED:
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PROJECT No:	DRAWN:	DATE:
15064		90/09/2015

DRAWING No: P05 REV: 0

ATTACHMENT 6

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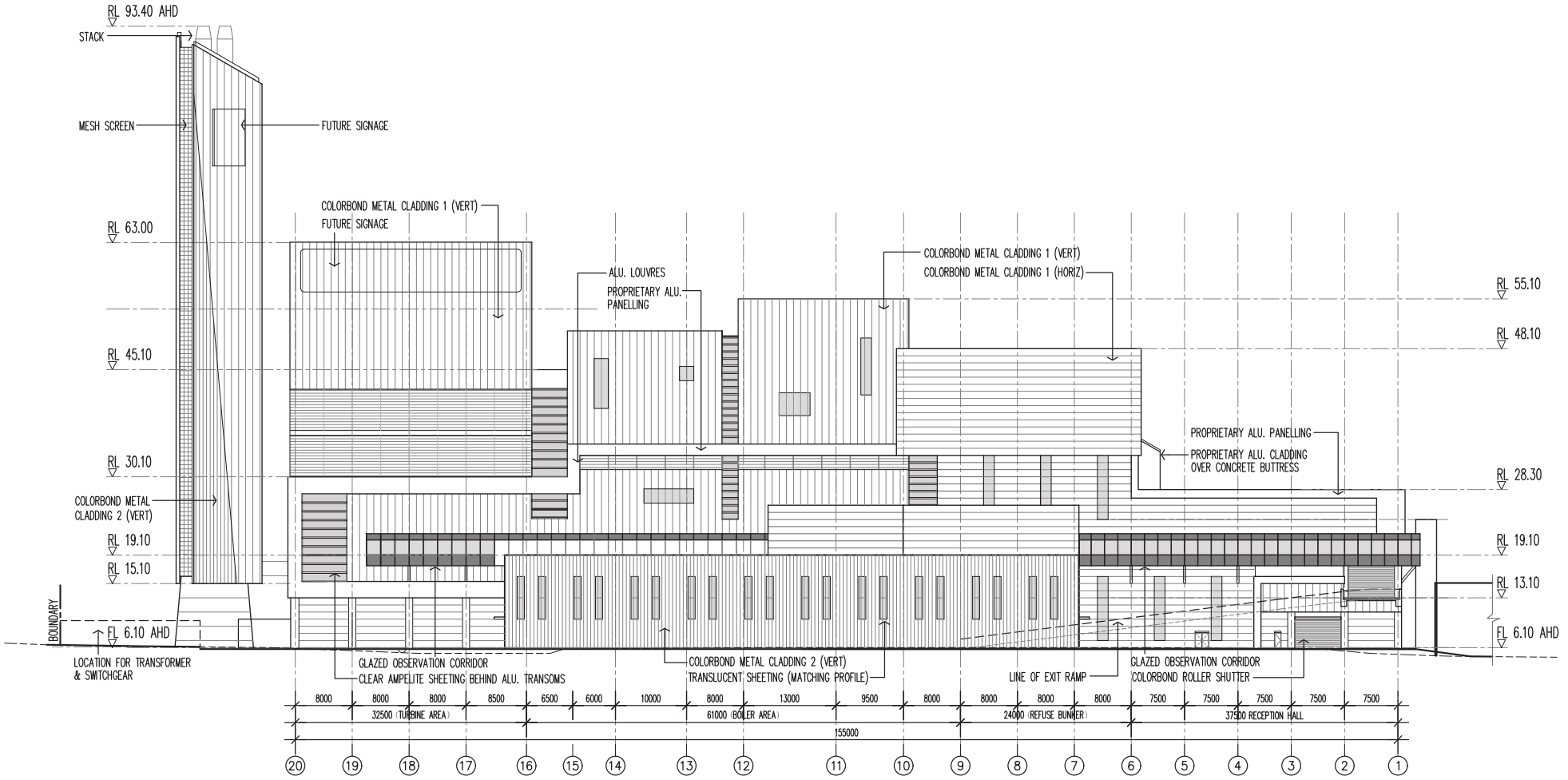


NORTH ELEVATION
SCALE 1:600

REV	DATE	BY	DESCRIPTION	CHK	APP
P1	07.09.15				

DRAWING STATUS: PLANNING

WSP | PARSONS BRINCKERHOFF
Level 5, 503 Murray Street, Perth, WA 6000, Australia
Tel: +61 8 9426 4900 Fax: +61 8 9481 1279
www.wspgroup.com/asia-pacific

CLIENT: PHOENIX ENERGY

EPC CONTRACTOR: posco E&C

PROJECT: KWINANA WASTE TO ENERGY PROJECT

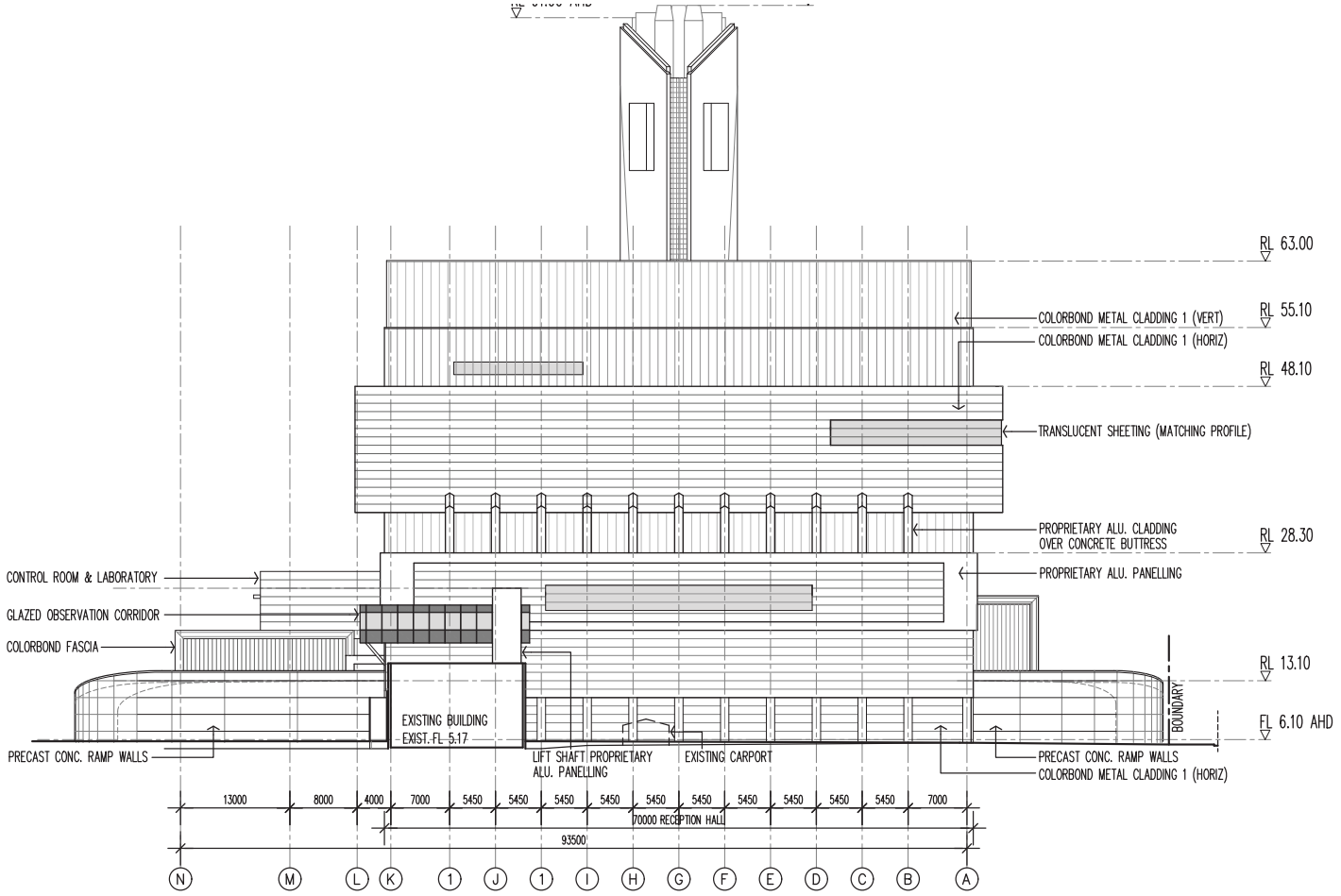
DRAWING TITLE: NORTH ELEVATION

SCALE @ A3:	CHECKED:	APPROVED:
1:600		
PROJECT No:	DRAWN:	DATE:
15064		09/09/ 2015

DRAWING No: P06 REV: 0

ATTACHMENT 7

DO NOT SCALE



WEST ELEVATION
SCALE 1:600

REV	DATE	BY	DESCRIPTION	CHK	APP
P1	07.09.15				

DRAWING STATUS: PLANNING

WSP | PARSONS BRINCKERHOFF
Level 5, 503 Murray Street, Perth, WA 6000, Australia
Tel: +61 8 9426 4900 Fax: +61 8 9481 1279
www.wspgroup.com/asia-pacific

CLIENT: PHOENIX ENERGY

EPC CONTRACTOR: posco E&C

PROJECT: KWINANA WASTE TO ENERGY PROJECT

DRAWING TITLE: WEST ELEVATION

SCALE @ A3:	CHECKED:	APPROVED:
1:600		
PROJECT No:	DRAWN:	DATE:
15064		09/09/2015

DRAWING No: P07 REV: 0

ATTACHMENT 8

Attachment 2



PLANNING SOLUTIONS | PS
URBAN & REGIONAL PLANNING

SCALE	1: 5,000 @ A4
DATE	24 July 2019
FILE	01 190724 6240 Aerial Photograph.dwg
REVISION	1/DR/First Draft/23.07.2019

Scale Bar (m) 0 50

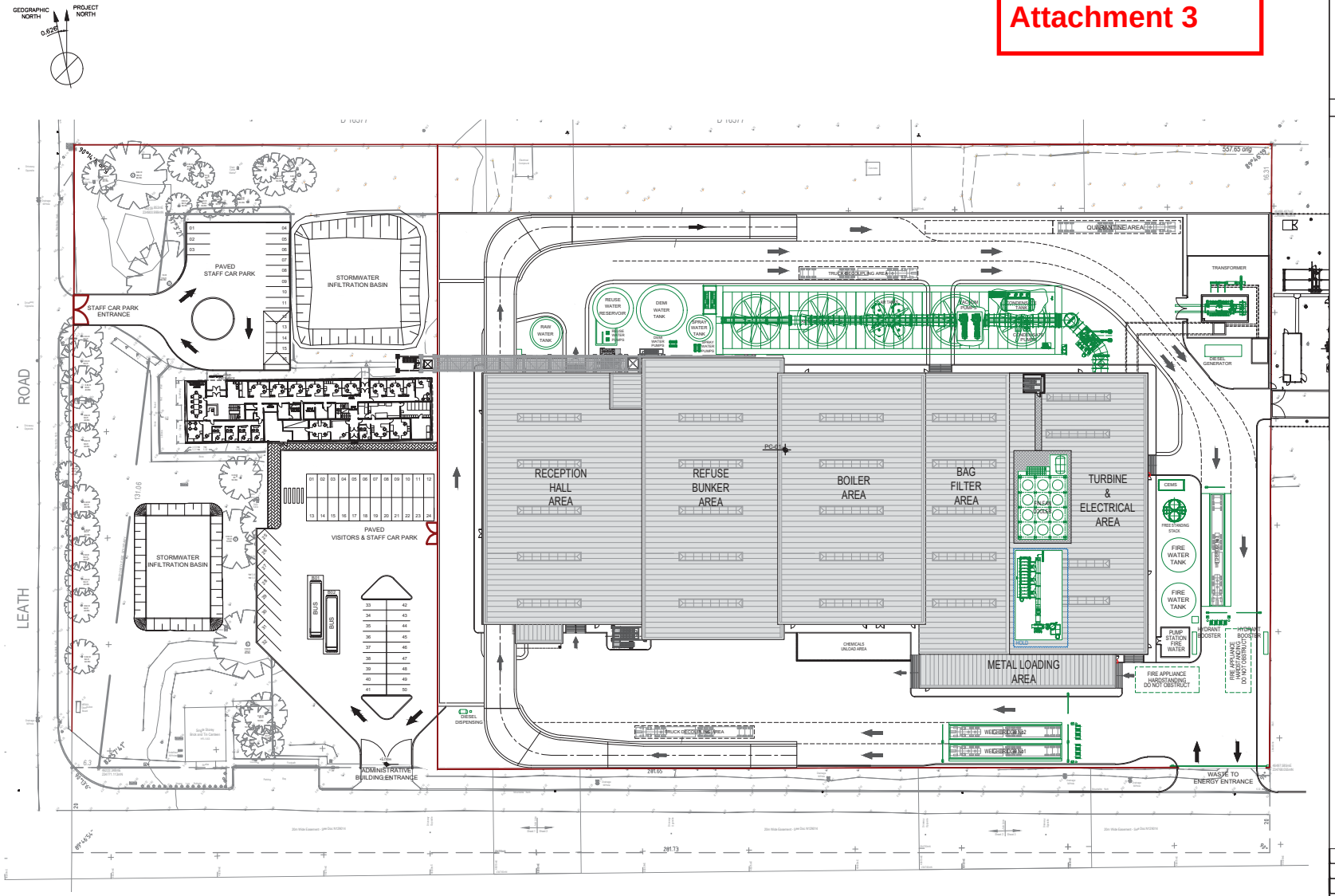
AERIAL PHOTOGRAPH

LOT 9501 LEATH ROAD,
KWINANA BEACH

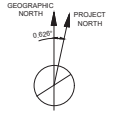
FIGURE 01

DISCLAIMER: THIS DOCUMENT IS AND REMAINS THE PROPERTY OF PLANNING SOLUTIONS AND MAY NOT BE COPIED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PLANNING SOLUTIONS. ALL AREAS, DISTANCES AND ANGLES ARE APPROXIMATE ONLY AND ARE SUBJECT TO SURVEY. BASEPLAN SOURCE: NEARMAPS (16 JULY 2019)

Attachment 3



TOPOGRAPHY REFERENCE POINTS



COORDINATE UTM
PROJECTION PCG94
DATUM - AHD

	PCG94			LOCAL		
VERTEX	EAST	NORTH	ELEV.	EAST	NORTH	ELEV.
PROJECT REFERENCE POINT						
PC-01	46384.545	234843.973	+6.10	+1000	+500	+0.00

GENERAL NOTES

1- ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS IN METERS UNLESS OTHERWISE INDICATED.
2- DISTANCES MUST NOT BE TAKEN BY MEASURING DIRECTLY FROM THE DRAWING.
3- PROJECT LEVEL ±0.00 CORRESPONDS TO TOPOGRAPHIC LEVEL +6.10.
4- REFER TO DOCUMENT KW2E-00-PE-LT-IDO-4002, FOR AREAS IDENTIFICATION AND DETAILS.

REV.	PURPOSE	DATE	DRAWN	CHECKED	APPROVED
05	ISSUED FOR REVIEW	2019/07/31	MEX	NBS	GMG
04	ISSUED FOR REVIEW	2019/07/26	MEX	NBS	GMG
03	ISSUED FOR REVIEW	2019/06/07	MEX	NBS	GMG
02	ISSUED FOR REVIEW	2019/05/24	MEX	NBS	GMG
01	ISSUED FOR REVIEW	2019/01/30	MEX	NBS	GMG
00	FIRST ISSUE	2019/01/17	MEX	NBS	GMG

MODIFICATIONS

OWNER avertas energy

MAIN CONTRACTOR acciona

PROJECT

KWINANA WASTE TO ENERGY PROJECT

FORMAT A1
SCALE A1 - 1:500

DRAWING TITLE GENERAL ARRANGEMENT
LAYOUT
LOCATION

DRAWING Nº KW2E-00-PM-LW-IDO-1001

SUBCONTRACTOR Nº

IDOM

SHEET 1 OF 21

REV. 05

PROPIETARY INFORMATION

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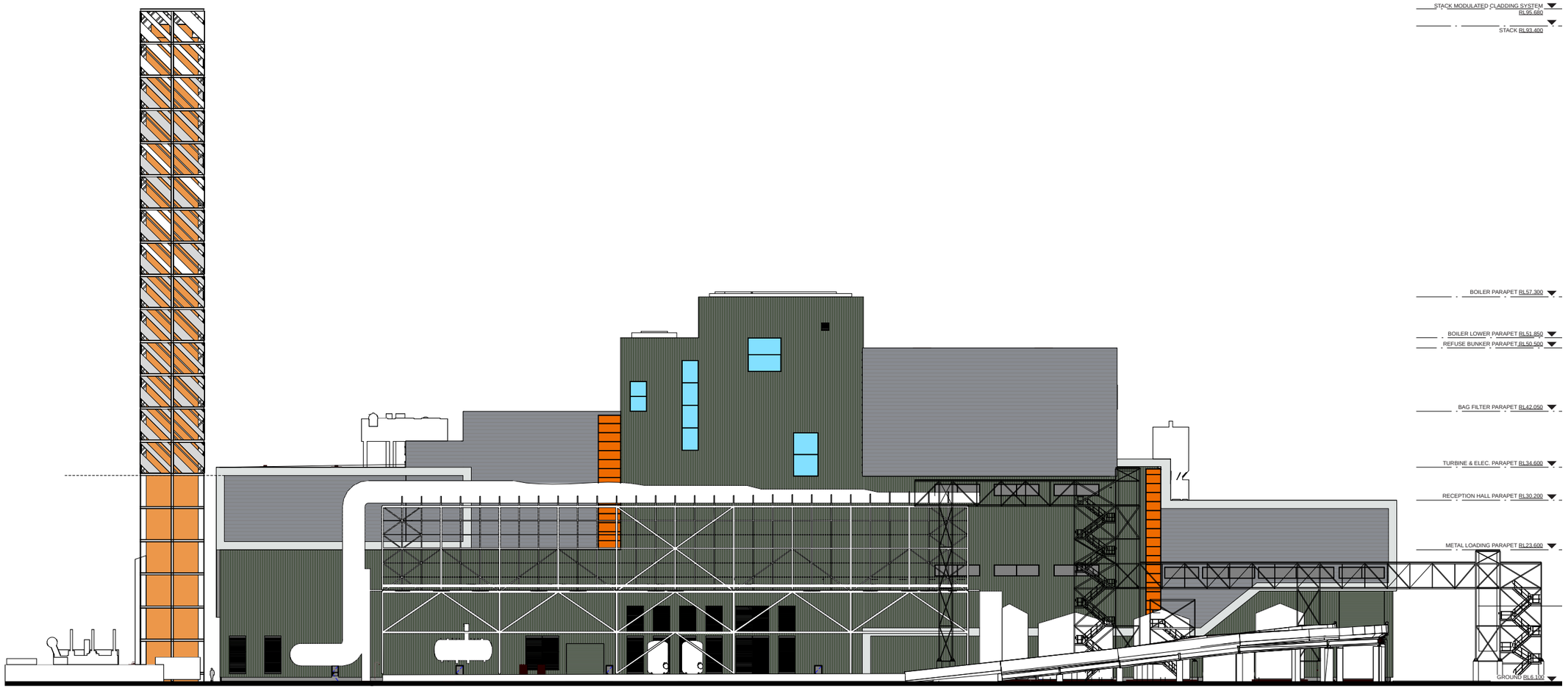
Attachment 4



REV.	PURPOSE	DATE	DRAWN	CHECKED	APPROVED
3	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/25	AH	MD	MD
2	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/03	JL	TL	TL
1	BUILDING MATERIALS FOR CLIENT APPROVAL	2019/09/25	JL	TL	TL

MODIFICATIONS

CLIENT avertas energy

EPC CONTRACTOR acciona

PROJECT

KWINANA WASTE TO ENERGY PROJECT

FORMAT A1	**DRAWING TITLE** ARCHITECTURAL DESIGN **GENERAL FACADES - NORTH ELEVATION**	
SCALE 1:300	**DRAWING N°** KW2E-01-CE-DW-HSH-0100	
	SUBCONTRACTOR N°	**SHEET** 1 **OF** 4 — **REV.** 3

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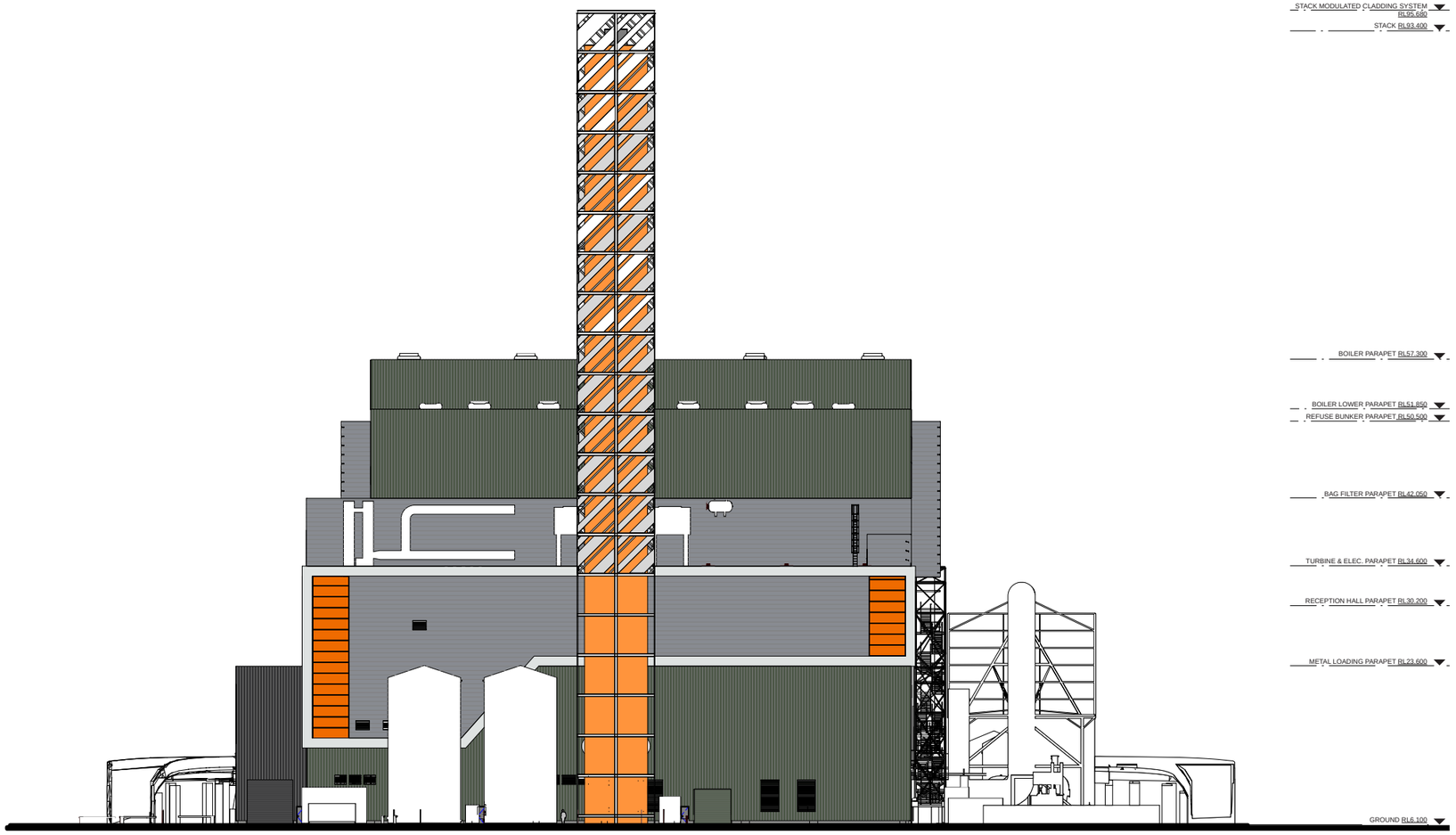
Attachment 5



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REV.	PURPOSE	DATE	DRAWN	CHECKED	APPROVED
3	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/25	AH	MD	MD
2	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/03	JL	TL	TL
1	BUILDING MATERIALS FOR CLIENT APPROVAL	2019/09/25	JL	TL	TL

MODIFICATIONS

CLIENT avertas energy

EPC CONTRACTOR acciona

PROJECT

KWINANA WASTE TO ENERGY PROJECT

FORMAT A1	**DRAWING TITLE** ARCHITECTURAL DESIGN GENERAL FACADES - EAST ELEVATION	
SCALE 1:300	**DRAWING Nº** KW2E-01-CE-DW-HSH-0100	
	SUBCONTRACTOR Nº	SHEET 2 OF 4 / REV. 3

Attachment 6



REV.	PURPOSE	DATE	DRAWN	CHECKED	APPROVED
3	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/25	AH	MD	MD
2	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/03	JL	TL	TL
1	BUILDING MATERIALS FOR CLIENT APPROVAL	2019/09/25	JL	TL	TL

MODIFICATIONS

CLIENT: avertas energy

EPC CONTRACTOR: acciona

PROJECT

KWINANA WASTE TO ENERGY PROJECT

FORMAT: A1

SCALE: 1:300

DRAWING TITLE: ARCHITECTURAL DESIGN
GENERAL FACADES - SOUTH ELEVATION

DRAWING Nº KW2E-01-CE-DW-HSH-0100

SUBCONTRACTOR Nº

SHEET 3 OF 4

REV. 3

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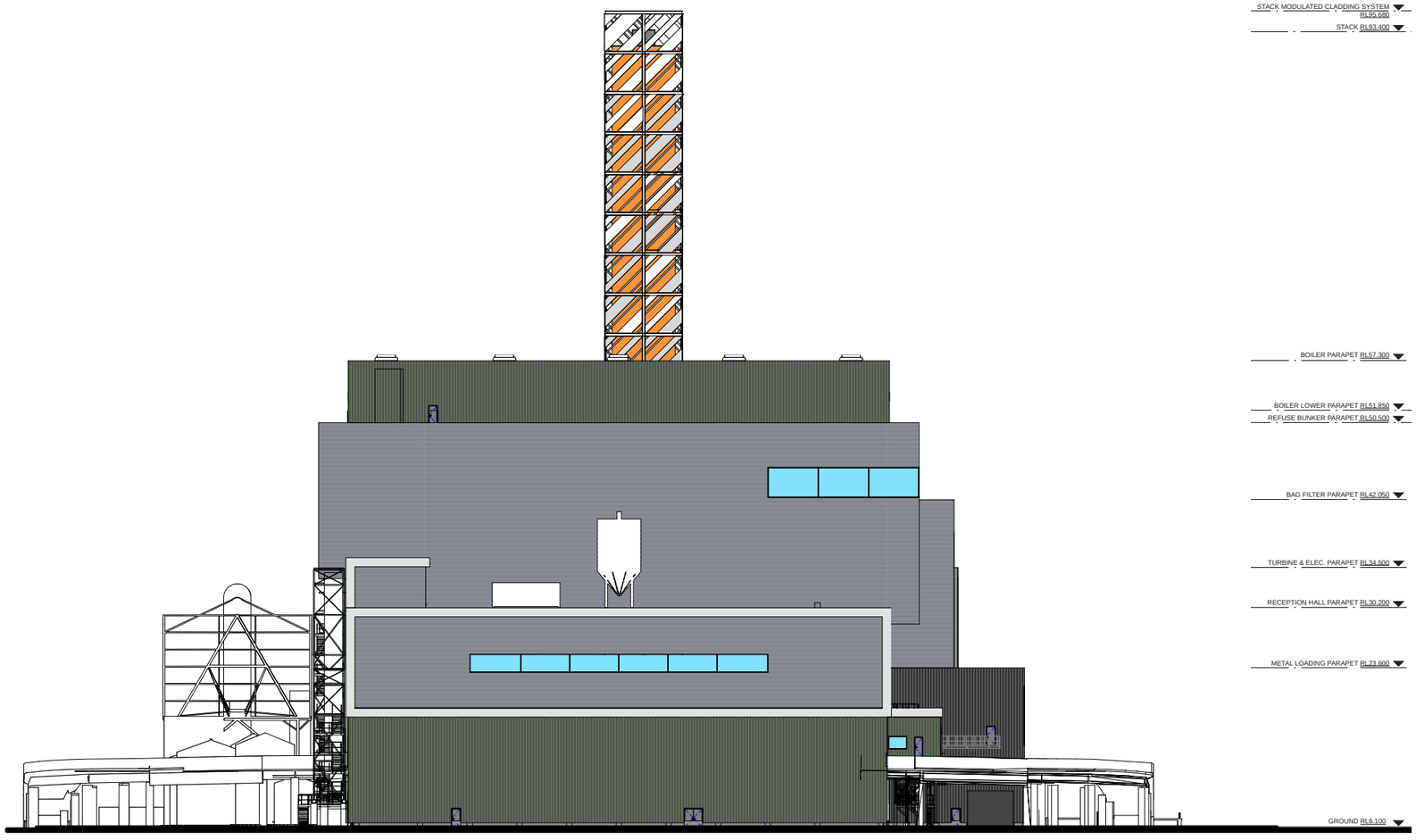
Attachment 7



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REV.	PURPOSE	DATE	DRAWN	CHECKED	APPROVED
3	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/25	AH	MD	MD
2	ISSUE FOR DEVELOPMENT APPLICATION	2019/10/03	JL	TL	TL
1	BUILDING MATERIALS FOR CLIENT APPROVAL	2019/09/25	JL	TL	TL

MODIFICATIONS

CLIENT avertas energy

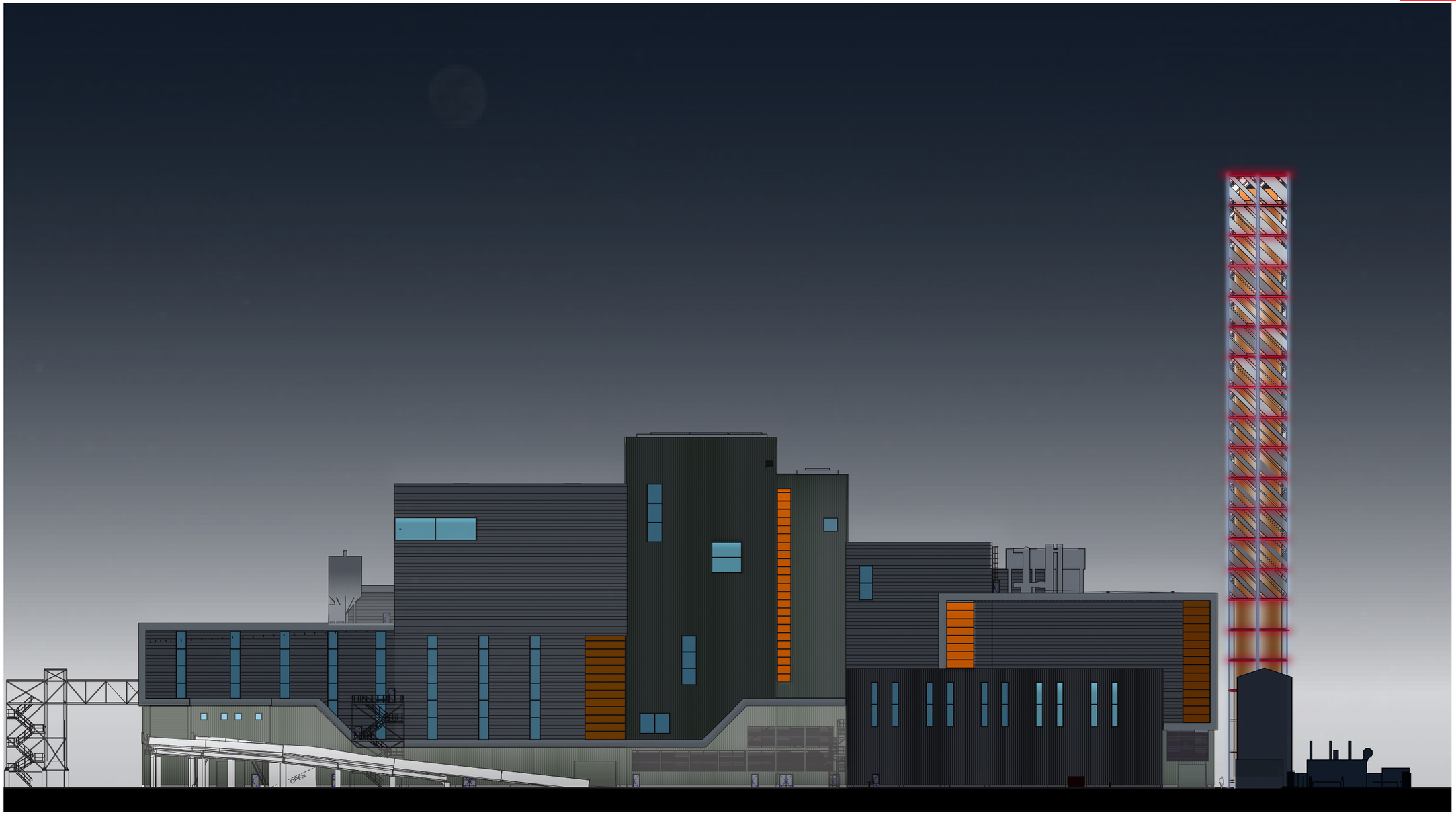
EPC CONTRACTOR acciona

PROJECT

KWINANA WASTE TO ENERGY PROJECT

FORMAT A1	**DRAWING TITLE** ARCHITECTURAL DESIGN **GENERAL FACADES - WEST ELEVATION**	
SCALE 1:300	**DRAWING N°** KW2E-01-CE-DW-HSH-0100	
	SUBCONTRACTOR N°	**SHEET** 4 **OF** 4 — **REV.** 3

Attachment 8



REV.	PURPOSE	DATE	DRAWN	CHECKED	APPROVED
1	NIGHT ELEVATION VIEW FOR CLIENT'S APPROVAL	2019/10/28	PZ	MD	MD

MODIFICATIONS

CLIENT: avertas energy

EPC CONTRACTOR: acciona

PROJECT

KWINANA WASTE TO ENERGY PROJECT

FORMAT	DRAWING TITLE	
A1	ARCHITECTURAL DESIGN GENERAL FACADES - SOUTH ELEVATION	
SCALE 1:300	DRAWING N° KW2E-01-CE-DW-HSH-0100	
	SUBCONTRACTOR N°	SHEET 1 OF 1 / REV. 1

PROPRIETARY INFORMATION

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Government of Western Australia
Department of Water and Environmental Regulation

Attachment 9

Your ref: DA8428.3
Our ref: PA 030413, RF3779-04
Enquiries: Jane Sturgess, Ph 9550 4228

City of Kwinana
PO Box 21
Kwinana WA 6966

Attention: Felicitas Dhliwayo

Dear Felicitas,

Re: Lot 9501 Leath Road, Kwinana Beach – Amendment to Waste to Engery Facility

Thank you for referring the above development application received 30th of October 2019. The Department of Water and Environmental Regulation (DWER) has reviewed the application and wishes to provide the following advice.

Industry Regulation

The provided development application request was reviewed in relation to works approval and/or licensing requirements under Part V of the *Environmental Protection Act 1986* (*EP Act*).

The proposed operations meets the description of 'prescribed premises', under Part V of the *EP Act* for the following categories:

Category	Design or production capacity
52 Electric Power Generation	36MW
60 Incineration	400,000tpa
61(A) Solid Waste Facility	400,000tpa
67 Fuel Burning	400,000tpa

The applicant may be advised that the *Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992*, *Environmental Protection (Noise) Regulations 1997* and *Environmental Protection (Unauthorised Discharges) Regulations* 2004 also apply to the proposed activity.

Kwinana Peel Region
107 Breakwater Parade Mandurah Ocean Marina Mandurah Western Australia 6210
PO Box 332 Mandurah Western Australia 6210
Telephone: 08 9550 4222 Facsimile: 08 9581 4560
www.dwer.wa.gov.au

Kwinana WTE Project Co Pty Ltd lodged an application for an amendment to works approval W5911/2015/1 on 24th September 2019. The application and supporting documentation is consistent with this development application.

If you have any queries relating to the above matter, please contact Jane Sturgess at DWER's Mandurah office on 9550 4228.

Yours sincerely



Brett Dunn
Program Manager – Land Use Planning
Kwinana Peel Region
06 / 11 / 2019

Our Reference: MW059085
Your Reference: DA8428.3

05-Nov-2019

City of Kwinana

Dear Sir/Madam

Lot 9501 Leath Road, Kwinana Beach – Waste Factory

Further to your referral of the above-mentioned development application, Western Power has reviewed the proposal in context of its network assets and provides the following comments and recommendation:

i) A clearance assessment to the Transmission line is required. The customer is to survey the Transmission line and additionally, submit the design drawings to Western Power for an assessment.

ii) Any improvements in proximity of the Transmission line on the Northern boundary, i.e. Fence, should comply with AS/NZS 7000. This includes clearances requirements and induction risks.

iii) The location of all underground cables should be confirmed and identified before any construction or excavation works commence.

iv) The contractor shall comply with WA Occupational Safety & Health Regulation 3.64 for the restriction on working in vicinity of overhead power lines.

v) Any development on the subject site shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict. Proponents should refer to https://westernpower.com.au/safety/360-aware/industry-safety/

vi) It is the landowners responsibility to ensure that the design and construction of any new structure on the land complies with all applicable laws including, without limitation, clearance requirements, of electrical infrastructure. We recommend you engage a suitably qualified independent person (surveyor, architect, engineer) to undertake an assessment of the proposed development to ensure that best methods of construction are utilised and compliance with all applicable laws (including clearance requirements of electrical infrastructure in general and those specified under Occupational Safety and Health Regulations 1996 (WA)).

FIG. 1



Further information regarding easements, network safety and clearance requirements can be found on our website at https://westernpower.com.au/safety/360-aware

Yours Sincerely,

Jamie Champion
Customer Service

FREMANTLE PORTS

Certified System Health & Safety AS 4801 | Certified System Environment ISO 14001 | Certified System Quality ISO 9001

Record: PDE.0736

19 November 2019

By email

Ms Felicitas Dhliwayo
City of Kwinana
PO Box 21
Kwinana WA 6966

Dear Ms Felicitas

DA8428.3 - Amendment - Waste to Energy Facility - Lot 9501 Leath Road, Kwinana Beach - 1546611

Thank you for referring the amendment to the proposed development at Lot 9501 Leath Road, Kwinana Beach for our comment.

Could you please consider any potential impact of lighting on the safe navigation of ships.

Fremantle Ports has no further comment regarding this amendment.

If you would like further information or would like to discuss this further, please contact Marius Minnaar on 9430 3460.

Yours sincerely,

Dean Davidson
Planning Manager

Fremantle Ports: 1 Cliff Street, Fremantle, Western Australia 6160 - Postal Address: PO Box 95 Fremantle WA 6959
Telephone: +61 8 9430 3555 • Facsimile: +61 8 9336 1391 • mail@fremantleports.com.au • Web: www.fremantleports.com.au
ABN 78 187 229 472

Felicitas Dhliwayo

From: Marius Minnaar <Marius.Minnaar@fremantleports.com.au>
Sent: Wednesday, 20 November 2019 5:07 PM
To: Felicitas Dhliwayo
Subject: RE: DA8428.3 - Amendment - Waste to Energy Facility - Lot 9501 Leath Road, Kwinana Beach

Hi Felicitas,

Thank you for your email.

We recognise that the proposed lighting will not project light onto neighbouring properties however, this does not address any impact on the safe navigation of ships. Could we please ask that an ongoing condition be placed on the development that will require any proposed lighting to not interfere with the safe navigation on ships.

From the information provided we can not determine if the proposed lighting will impact shipping navigation.

Regards,
Marius

Marius Minnaar
Stakeholder Engagement Project / Planning Officer

1 Cliff Street | Fremantle WA 6160
Ph +61 8 9430 3460 |
www.fremantleports.com.au | Marius.Minnaar@fremantleports.com.au



From: Felicitas Dhliwayo <Felicitas.Dhliwayo@kwinana.wa.gov.au>
Sent: Tuesday, 19 November 2019 4:24 PM
To: Marius Minnaar <Marius.Minnaar@fremantleports.com.au>
Subject: RE: DA8428.3 - Amendment - Waste to Energy Facility - Lot 9501 Leath Road, Kwinana Beach

Good afternoon Marius

Thank you for your comments and for taking my call this afternoon. As discussed, could you please confirm what the City needs to consider in terms of the proposed lighting and if there are any standards that need to be complied

with. Please note that the application submits that the proposed lighting will be of a decorative nature and will not project light onto neighbouring properties.

The application is to be determined by the Development Assessment Panel and timeframes are very tight, so if you could provide your response as soon as possible that would be greatly appreciated.

Kind Regards,

Felicitas

Felicitas Dhliwayo
Senior Planning Officer

City of Kwinana

P 08 9439 0448
W www.kwinana.wa.gov.au
A Corner Gilmore Ave & Sulphur Rd, Kwinana 6167
P PO Box 21 Kwinana WA 6966



From: Marius Minnaar <Marius.Minnaar@fremantleports.com.au>
Sent: Tuesday, 19 November 2019 4:08 PM
To: Felicitas Dhliwayo <Felicitas.Dhliwayo@kwinana.wa.gov.au>
Subject: DA8428.3 - Amendment - Waste to Energy Facility - Lot 9501 Leath Road, Kwinana Beach

Dear Felicitas,

Please find attached Fremantle Ports' comments regarding the above-mentioned amendment.

Kind regards,

Marius Minnaar
Stakeholder Engagement Project / Planning Officer

1 Cliff Street | Fremantle WA 6160
Ph +61 8 9430 3460 |
www.fremantleports.com.au | Marius.Minnaar@fremantleports.com.au



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17.7 Adoption of Amended Local Development Plan Stage 26 (Formerly known as Stage 26 – 27), The Village at Wellard and Adoption of Local Development Plan Stage 27A The Village at Wellard

DECLARATION OF INTEREST:

Deputy Mayor Peter Feasey declared an impartiality interest due to his supervisor being the Minister for Housing and the item referring to Departments he is responsible for.

SUMMARY:

A request to amend the "Stage 26 - 27, The Village at Wellard" Local Development Plan (LDP) and a request to adopt the draft LDP for "Stage 27A, The Village at Wellard" have been received for the consideration of Council under the City of Kwinana Local Planning Scheme No.2 (LPS2) (Attachments A - F). The amended LDP will remove Stage 27, necessitating the need to adopt a new LDP for Stage 27A. The applicant will lodge a subsequent LDP for the final stage, being Stage 27B, in due course.

The draft LDPs (refer to Attachments C – F) set out design requirements for the development of the lots indicated within the LDP boundary. These requirements apply in addition to those set out in LPS2 and State Planning Policy 7.3 – Residential Design Codes - Volume 1 (R-Codes) and permit certain variations in order to achieve a desired outcome.

Subdivision approval was granted by the Western Australian Planning Commission (WAPC) for Stage 26 and 27 in March 2013 (Reference No: S143621). This approval included a condition requiring the preparation of an LDP for the subject lots. Subsequently the LDP for "Stages 26 – 27, The Village at Wellard" (refer to Attachment H - G) was submitted and adopted by Council at its Ordinary Council Meeting held 14 October 2015. Development of Stage 26 was undertaken, however, Stage 27 was not developed and the subdivision approval expired. As such the approved LDP is to be amended to only address Stage 26 and the following changes have been made to the "Stage 26 – 27, The Village at Wellard" LDP:

- The title has been modified from "Stage 26 - 27, The Village at Wellard" to "Stage 26, The Village at Wellard".
- The LDP has been modified to exclude land within Stage 27 and now relates only to land within Stage 26.
- The provisions have been modified to exclude references to "Stage 27" and to delete specific provisions that related only to lots that are within Stage 27.

All other elements of the LDP remain unchanged and all the changes will not affect landowners as all the properties within Stage 26 have had dwellings constructed on site or are in the ownership of the developer. All land within Stage 27 remains in the ownership of the developer.

With regard to Stage 27, the WAPC approved a new subdivision for this stage on 26 April 2019 (reference no: S154137). The layout of this subdivision has been varied from the previous approval and therefore did not match the layout approved on the "Stage 26 – 27, The Village at Wellard" LDP. A draft LDP, "Stage 27A, The Village at Wellard", has been submitted, which addresses the northern section of the new Stage 27 subdivision.
The draft LDP for Stage 27A is considered against four key local planning policies:

- Local Planning Policy No. 1 – Landscape Feature and Tree Retention (LPP1);
- Local Planning Policy No. 2 – Streetscapes (LPP2);

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

- Local Planning Policy No. 7 – Uniform Fencing (LPP7); and
- Local Planning Policy No. 8 – Designing Out Crime (LPP8).

LPP1 focuses on retention of significant trees and landscape features and in this respect, the clearing of vegetation for this stage was undertaken under a previous subdivision approval issued prior to the adoption of LPP1. City Officers had input into the clearing of vegetation at that time and a number of trees are retained.

LPP2 focuses on improved streetscapes across the City placing an emphasis on trees, landscaping and road design. In this regard, engineering drawings for Stage 27A have been reviewed and approved by the City's Engineering Department. LPP2 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.

LPP7 sets out the minimum requirements for uniform fencing for lots that abut certain categories of road and Public Open Space (POS). As per LPP7, the draft LDP has identified lots that are subject to uniform fencing requirements along the boundary of the POS located to the east of the LDP area.

LPP8 sets out designing out crime considerations for LDPs. The draft LDP responds to the requirements of LPP8 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. In addition, the fencing for properties along the boundary of the POS will be visually permeable to provide passive surveillance.

It is recommended that Council approve the amended and draft LDPs 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, 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:*

1. Approves the amended Local Development Plan for Stage 26-27, The Village at Wellard, Wellard and renames it as Stage 26, The Village at Wellard (as per Attachments C-D); and
2. Approves the Local Development Plan for Stage 27A, The Village at Wellard, Wellard (as per Attachments E-F).

DISCUSSION:

Land Status

Metropolitan Region Scheme:	Urban Zone
Local Planning Scheme No. 2:	Residential R20, R25, R30 & R40

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

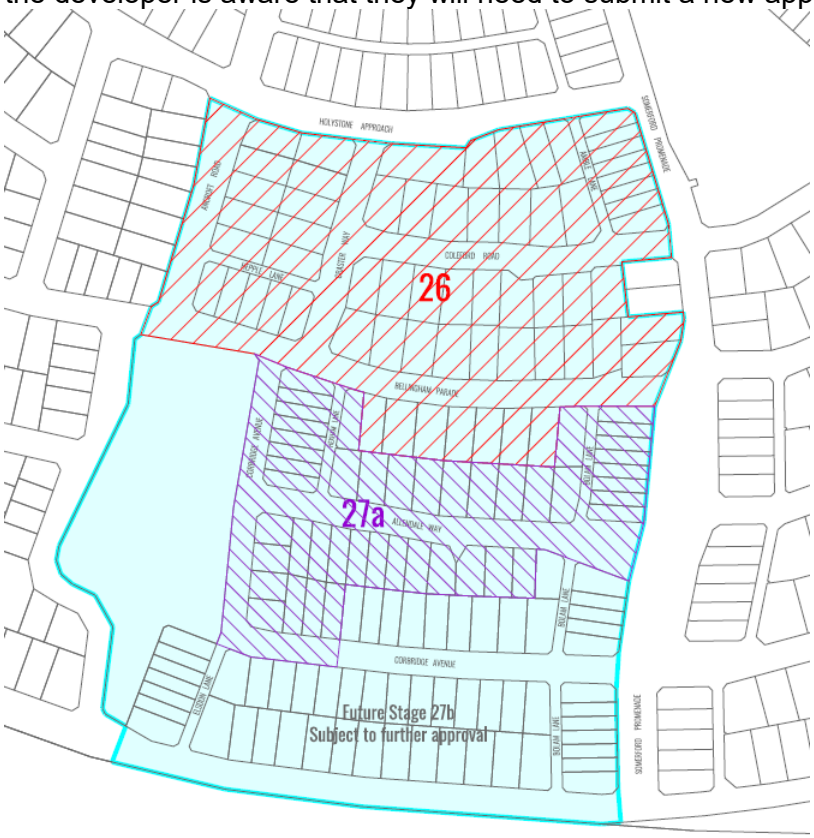
Background

A LDP is a planning tool that allows certain design requirements, either in addition to or in variance to those stipulated under the LPS2 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. These variations are required to help achieve optimal design outcomes for the area covered by a LDP.

The draft LDPs (refer to Attachments C - F) set out design requirements for the development of the lots indicated within the LDP boundary. These requirements apply in addition to those set out in LPS2 and State Planning Policy 7.3 – Residential Design Codes - Volume 1 (R-Codes) and permit certain variations in order to achieve a desired outcome.

Subdivision approval was granted by the Western Australian Planning Commission (WAPC) for Stage 26 and 27 in March 2013 (reference no: S143621). This approval included a condition requiring the preparation of a LDP for the subject lots. Subsequently the LDP for "Stages 26 - 27, The Village at Wellard" (refer to Attachment H -G) was submitted and adopted by Council at its Ordinary Council Meeting held 14 October 2015. Development of Stage 26 was undertaken, however, Stage 27 was not developed and the subdivision approval expired.

The below diagram demonstrates the area affected by the current LDP (Stage 26-27 The Village at Wellard) shaded in blue. As detailed further in this report, there is now proposed to be two LDP's – the amended Stage 26 (shown in red) and new Stage 27a (shown in purple). The remaining lots in the southernmost portion will no longer have an LDP and the developer is aware that they will need to submit a new application in the future.



17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

Planning Assessment of Amended LDP for Stage 26 - 27, The Village at Wellard

The Stage 26-27, The Village at Wellard LDP is to be amended to only reference Stage 26 of the Village at Wellard. The purpose of the amendments is to remove references to Stage 27 from the approved LDP and amend the provisions and title accordingly, as such the following changes have been made to the "Stage 26 – 27, The Village at Wellard" LDP (refer to Attachment H -G):

- The title has been modified from "Stage 26 - 27, The Village at Wellard" to "Stage 26, The Village at Wellard".
- The LDP has been modified to exclude land within Stage 27 and now relates only to land within Stage 26.
- The provisions have been modified to exclude references to "Stage 27" and to delete specific provisions that related only to lots that are within Stage 27. This included the deletion of the 'Special Provisions – Setback Requirements" table.

These amendments are administrative and all other elements of the LDP remain unchanged. Furthermore, no landowners will be affected by the changes, as all properties within Stage 26 have had dwellings built on site or are in the ownership of the developer and all land within Stage 27 is in the ownership of the developer.

Planning Assessment Stage 27A, The Village at Wellard

As detailed above, the "Stage 26 – 27, The Village at Wellard" is to be amended and will be retitled "Stage 26 the Village at Wellard" along with other minor changes. With regard to Stage 27, on 26 April 2019, the WAPC approved a new subdivision for this stage (reference no: S154137). The layout of this subdivision was varied from the previous approval and therefore did not match the layout approved on the "Stage 26 – 27, The Village at Wellard" LDP. A draft LDP, "Stage 27A, The Village at Wellard", has been submitted, which addresses the northern section of the new Stage 27 subdivision.
The draft LDP for, "Stage 27A, The Village at Wellard" is considered against four key local planning policies:

- Local Planning Policy No. 1 – Landscape Feature and Tree Retention (LPP1);
- Local Planning Policy No. 2 – Streetscapes (LPP2);
- Local Planning Policy No. 7 – Uniform Fencing (LPP7); and
- Local Planning Policy No. 8 – Designing Out Crime (LPP8).

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 27A was undertaken prior to the adoption of this policy, under a previous subdivision approval and as a result, a Landscape Feature Plan and Tree Retention Plan was not prepared at that time. The 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, trees have been retained in this stage and are shown on the draft LDP. Trees have also been retained in adjoining stages of this development.

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

Local Planning Policy No. 2 - Streetscapes

As discussed previously, engineering drawings for Stage 27A have been approved by the City's Engineering Department. The engineering drawings comply with LPP2 in terms of road infrastructure, location of footpaths and sufficient road reserve widths to accommodate street trees. The requirement for street trees to be provided as per LPP2 has also been incorporated into the draft Element LDP 8.

In addition, 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.

In respect to building articulation and garage setbacks, LPP2 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 complies with LPP2 as the dwelling facade treatment provision has been incorporated into the LDP for all lots. Compliance with these provisions will ensure that all dwellings constructed within this LDP area will provide the desired design interface with the surrounding streetscape. The draft LDP has incorporated the room ceiling heights as per LPP2 in section 3e.

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.*
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.*

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

Visually permeable and consistent fencing is proposed to be constructed by the developer along the front boundary of the proposed laneway lots within this stage addressing the POS. 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. 7 – Uniform Fencing
LPP7 sets out the minimum requirements for uniform fencing for lots that abut certain categories of road and Public Open Space (POS). As per LPP7, the draft LDP has identified that Lots 2066 to 2073 are subject to uniform fencing requirements along the boundary of the POS. This is a condition of the subdivision approval and the fencing is to be visually permeable to provide passive surveillance of the POS.

Local Planning Policy No. 8 – Designing Out Crime
LPP8 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. 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. The draft LDP contains provisions addressing these policy requirements.

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

Bushfire Management

A Bushfire Management Plan (BMP) has been prepared as part of the Local Structure Plan and subdivision for this stage of the Wellard Village development. Four lots (Lots 2102, 2103, 2104 and 2106) within this stage of development are subject to bushfire construction requirements and as such, have been identified on the draft LDP.

The draft LDP also includes a Bushfire Management section advising of the bushfire prone area, the BMP and highlighting that a BAL assessment will be required prior to construction.

Lot Boundary Setbacks and Open Space

The draft LDP proposes to vary lot boundary setback provisions by permitting walls built to the boundary of greater dimensions than deemed to comply in the R-Codes. Furthermore, all R30 and R40 lots and all lots with a frontage of 11m or less are permitted to have walls on boundaries to both sides of the property as opposed to just one side. Additionally, the open space requirements are permitted to be reduced as part of the draft LDP to 40% for lots coded R25 (from 50%), 35% for lots coded R30 (from 45%) and 30% for lots coded R40 (from 45%), where a compliant outdoor living area of specified dimensions and location is provided. These provisions are similar to those previously approved in the LDP for Stage 26-27 which is proposed to be amended.

In assessing the open space requirement, side setback areas are included in the total area calculated. Often this results in a compliant percentage of open space across the site, however can limit the usable areas of the occupants of the dwelling for active or passive recreation. By linking the reduced open space requirement to the need to have a dedicated area with compliant dimensions for outdoor living, the amenity of the open space is protected for the future resident.

In relation to the ability to have boundary walls to both boundaries, the element of greatest risk is the obstruction of winter sunlight to properties to the south. This is offset by the solar access requirements of the R-Codes which are not replaced by this LDP and which are still required to be adhered to by applicants.

It is noted that there is an LDP approved to the north of this site (LDP Stage 22 The Village at Wellard). Boundary walls are also permitted to both side boundaries, albeit that different provisions are provided depending on the orientation of the lot.

These variations help ensure better use of the site and to provide for more usable outdoor living spaces. These provisions are consistent with previously approved LDPs within The Village at Wellard.

Acoustics

Stage 27a has included requirements for appropriate acoustic treatments for narrow lots within the LDP. These requirements are consistent with the construction standards previously adopted by Council.

The amended Stage 26 LDP does not include these requirements, as development on these sites has occurred, meaning the criteria are now redundant.

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

Conclusion
It is considered that the LDPs 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 LDPs and are supportive on the basis that they are 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 landowner is Department of Communities – Housing 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; and
Planning and Development (Local Planning Schemes) Regulations 2015.

State Planning Policies
State Planning Policy No. 7.3 – R-Codes Volume 1 and 2;
State Planning Policy No. 3.7 – Planning in Bushfire Prone Areas; and
Liveable Neighbourhoods Operational Policy.

Schemes
Metropolitan Region Scheme; and
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. 7 – Uniform Fencing; and
Local Planning Policy No. 8 – Designing Out Crime.

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 draft LDPs encourage the use of passive solar urban design. Additionally the draft LDPs identify trees to be retained within the LDP area and indicate additional street trees that will be required.

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

STRATEGIC/SOCIAL IMPLICATIONS:

This proposals 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 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 Stage 26 LDP has been largely developed and the amendment will not result in significant changes. Additionally, at the time of writing this report Stage 27a remains in the ownership of the developer with no dwellings constructed. The draft LDPs were not advertised as they are not considered to adversely affect any owners or occupiers within the area covered by the plans or an adjoining area.

PUBLIC HEALTH IMPLICATIONS:

The recommendations of this report have the potential to help improve the quality of the built environment and neighbourhood amenity through the retention of trees native to the area.

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

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

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 and R-Codes. Liaising with the applicant throughout the application process.
Rating (after treatment)	Low

Risk Event	Bushfire risk to future landowners.
Risk Theme	Providing inaccurate advice/ insufficient information that may result in human danger or property damage.
Risk Effect/Impact	Reputation Health and Safety
Risk Assessment Context	Strategic
Consequence	Major
Likelihood	Possible
Rating (before treatment)	Moderate
Response to risk treatment required/in place	Providing appropriate information in LDPs in accordance with legislative requirements. Compliance of the proposal with Local Planning Scheme No.2, *Building Act 2011*, Bushfire Guidelines and relevant Policies.
Rating (after treatment)	Low

COUNCIL DECISION

037

MOVED CR M KEARNEY **SECONDED CR S LEE**

That Council, 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:*

1. **Approves the amended Local Development Plan for Stage 26-27, The Village at Wellard, Wellard and renames it as Stage 26, The Village at Wellard (as per Attachments C-D); and**
2. **Approves the Local Development Plan for Stage 27A, The Village at Wellard, Wellard (as per Attachments E-F).**

CARRIED
5/2

17.7 ADOPTION OF AMENDED LOCAL DEVELOPMENT PLAN STAGE 26 (FORMERLY KNOWN AS STAGE 26 – 27), THE VILLAGE AT WELLARD AND ADOPTION OF LOCAL DEVELOPMENT PLAN STAGE 27A THE VILLAGE AT WELLARD

FOR
Mayor Carol Adams
Deputy Mayor Peter Feasey
Councillor Wendy Cooper
Councillor Merv Kearney
Councillor Sandra Lee

AGAINST
Councillor Dennis Wood
Councillor Sherilyn Wood

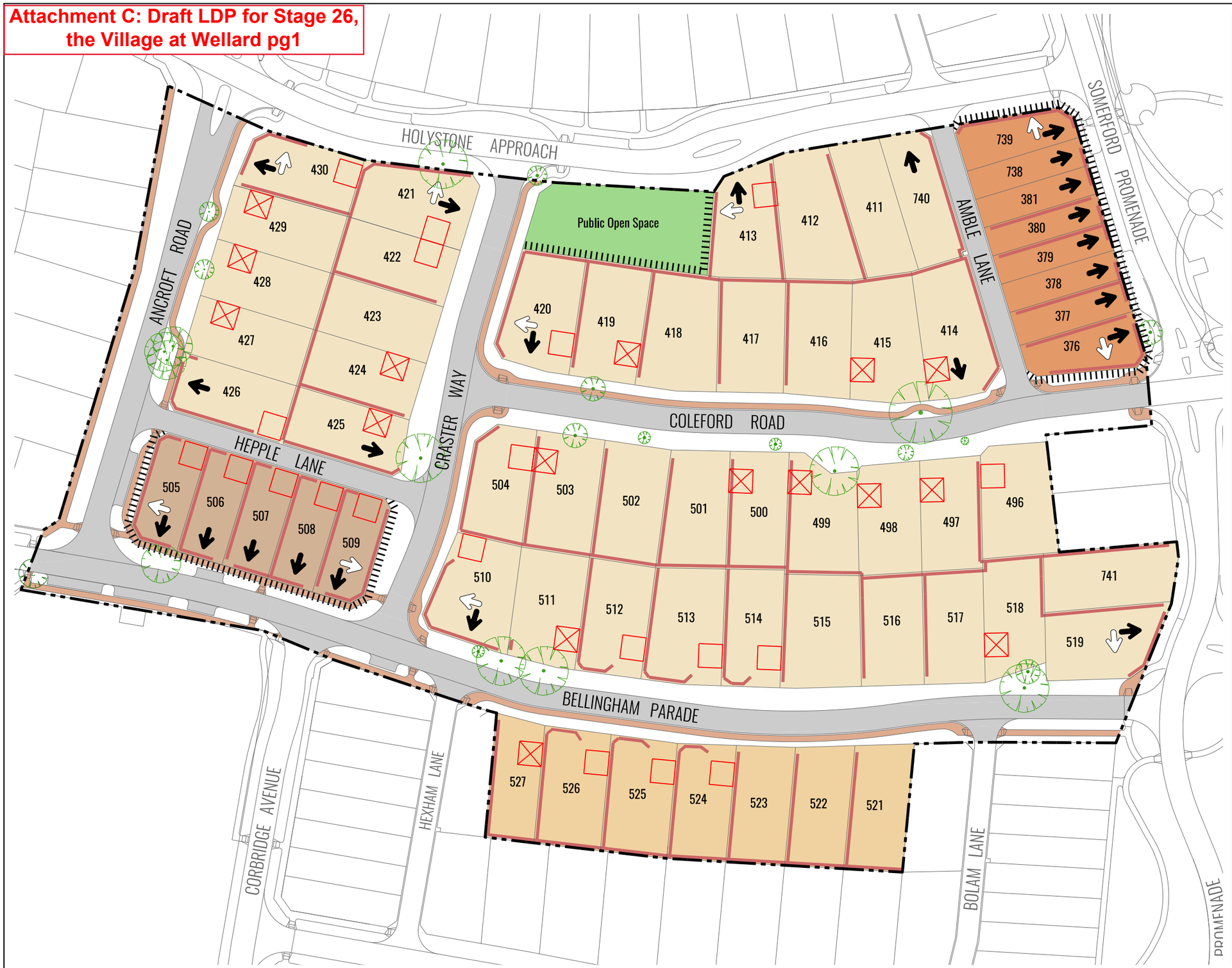
Attachment A: Stage 26, The Village at Wellard Location



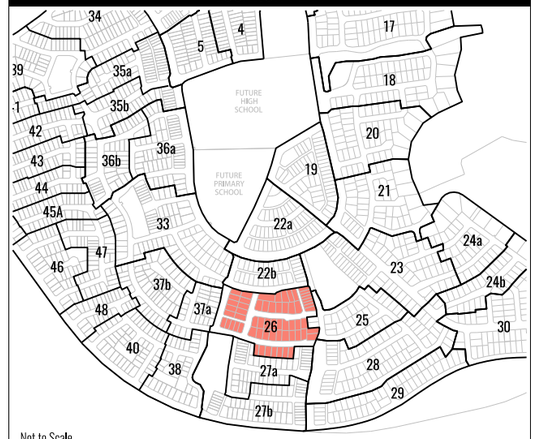
Attachment B: Stage 27A, The Village at Wellard Location



Attachment C: Draft LDP for Stage 26, the Village at Wellard pg1



LOCATION PLAN



Not to Scale

LEGEND

- Local Development Plan Boundary
- R20 Coding
- R25 Coding
- R30 Coding
- R40 Coding
- Primary Dwelling Orientation
- Secondary Dwelling Orientation
- Recommended Garage Location
- Designated Garage Location
- Footpaths
- Retaining Wall
- No Vehicle Access
- Retained Trees

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 260m²) except where variations to the provisions of the Local Development Plan are sought.

LOCAL DEVELOPMENT PLAN

Stage 26, The Village at Wellard *Page 1 of 2*

A PEET Limited and Department of Housing Joint Venture Project

NORTH

Scale: 1:1000 @ A3

0 10 20 30m

PLAN: PACWE-4-024B REVISION: B
DATE: 24/10/2019 DRAWN: JP
PROJECTION: PCG 94 PLANNER: CH
DATUM: AHD CHECK: CH

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Attachment D: Draft LDP for Stage 26, The Village at Wellard pg2

LDP PROVISIONS – VILLAGE AT WELLARD STAGE 26

The provisions addressed below and on the reverse plan relate to Stages 26 within the Village at Wellard Estate, Wellard.

The requirements of the Residential Design Codes apply unless otherwise provided for below.

The following standard represents variations to the Residential Design Codes and constitutes 'Deemed-to-Comply' requirements pursuant to the Codes.

1. R-CODE VARIATIONS

a) Minimum Open Space*:	
R20/R25	40%
R30/R40	35%

2. SETBACK PROVISIONS

	Minimum	Maximum
a) Dwelling		
– Primary Street		
R20/R25	3.0m	5.0m
R30/R40	2.0m	4.0m
– Laneway	Nil	-
– POS	2.0m	4.0m
b) Garage Setbacks		
– Primary Street	4.5m	-
– Laneway	0.5m	1.5m
c) Boundary Walls (Parapets)	For R30/R40 lots boundary walls are permitted to both side boundaries (with the exception of side street boundaries) for: • A maximum of 9m on the northern side boundary. • The length of the southern side boundary.	
d) Secondary Street Setbacks	As per the R-Codes.	

NOTES – MINIMUM OPEN SPACE

* For R20/R25 lots site cover may be increased to 60% subject to the provision of a 30m² outdoor living area.
For R30/R40 lots site cover may be increased to 65% subject to the provision of a 20m² outdoor living area.
In all 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

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 that includes the required major opening shall not be obstructed by visually impermeable fencing.

c) Where possible, dwellings are to be designed to take advantage of northern solar orientation.

d) Dual fronted lots fronting POS shall address both front and rear boundaries and provide an alfresco area fronting the POS with its view not obstructed by visually impermeable fencing.

e) A maximum of 20% of the dwelling facade may be set beyond the maximum Primary Street Setback.

4. VEHICULAR ACCESS and GARAGES/CARPORTS

a) Recommended garage locations apply to lots identified on the Local Development Plan; referencing the side of the lot to which the garage must be located. Recommended garage locations do not prescribe boundary walls.

b) All garages are to have doors to enclose them.

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. INCIDENTAL DEVELOPMENT

a) Outbuildings are to be screened from public view unless constructed from the same materials as the dwelling.

7. FIRE MANAGEMENT

a) All properties are subject to compliance with the approved Fire Management Plan. Dwellings constructed on lots identified as being at risk of bushfire attack under the approved Fire Management Plan or within 100 metres from any bushland, equal to or greater than 1 hectare in area, shall be constructed to the appropriate Bushfire Attack Level (BAL) rating, in accordance with AS3959.

b) This LDP shall be read in conjunction with the approved Fire Management Plan.

c) A proposed reduction to the nominated BAL rating as specified within the Fire Management Plan for any development will require a planning application for consideration. The submission is to include the detailed method for determining bushfire attack level by a suitably qualified consultant – Method 2 from AS3959 supporting the lower rating demonstrating compliance with AS3959, WAPC Guidelines Planning for Bushfire Protection Policy.

8. TREES

a) Trees identified on the Local Development Plan are located within road reserve and are the property of Council. These trees shall not be removed without the prior written consent of Council.

9. NOTIFICATION TO PROSPECTIVE PURCHASES

a) The Developer is required to give prospective purchases a complete copy of all the requirements of this Local Development Plan prior to Offer and Acceptance being made.

LOCAL DEVELOPMENT PLAN

Stage 26, 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-4-024B REVISION: B
DATE: 24/10/2019 DRAWN: JP
PROJECTION: PCG 94 PLANNER: CH
DATUM: AHD CHECK: CH

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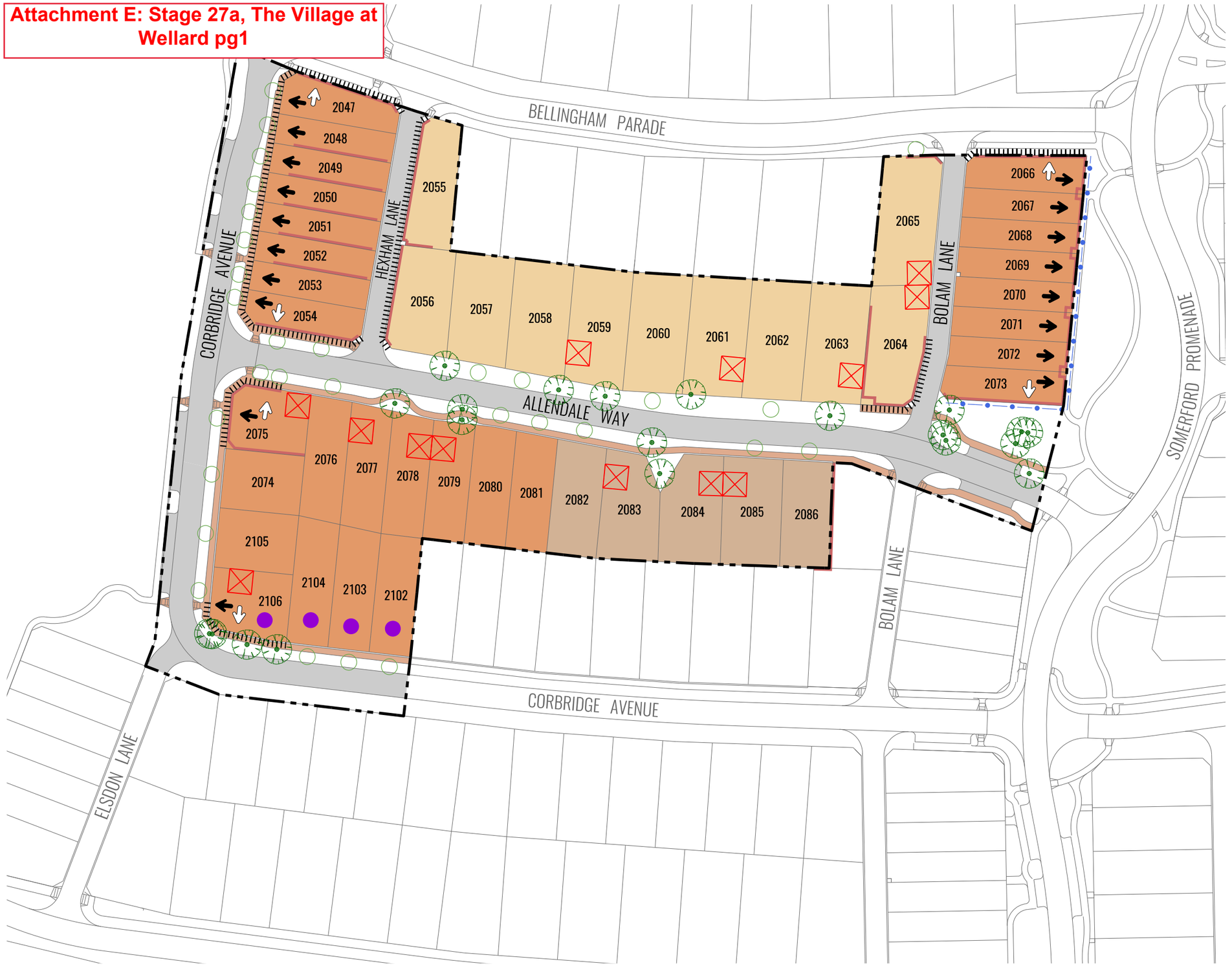
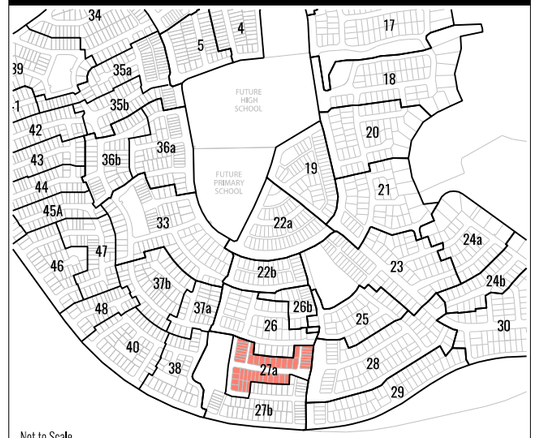
Attachment E: Stage 27a, The Village at Wellard pg1



LOCATION PLAN



Not to Scale

LEGEND

- Local Development Plan Boundary
- R25 Coding
- R30 Coding
- R40 Coding
- Primary Dwelling Orientation
- Secondary Dwelling Orientation
- Recommended Garage Location
- Footpaths
- Retaining Wall
- No Vehicle Access
- Uniform Estate Fencing
- BAL Affected Lots
- 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 260m²) except where variations to the provisions of the Local Development Plan are sought.

LOCAL DEVELOPMENT PLAN

Stage 27A, The Village at Wellard *Page 1 of 2*

A PEET Limited and Department of Housing Joint Venture Project

NORTH

Scale: 1:1000 @ A3

0 10 20 30m

PLAN: PACWE-4-034B REVISION: B
DATE: 24/09/2019 DRAWN: JP
PROJECTION: PCG 94 PLANNER: CH
DATUM: AHD CHECK: CH

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Attachment F: Stage 27a, The Village at Wellard pg1

LDP PROVISIONS – VILLAGE AT WELLARD STAGE 27A

The provisions addressed below and on the reverse plan relate to Stage 27A 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. R30	35%
iii. R40:	30%

2. SETBACK PROVISIONS

	Minimum	Maximum
a) Dwelling:		
i. Primary Street:		
- ***R25:***	3.0m	5.0m
- ***R30 and 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 R30 and R40 lots and lots with a frontage of 11m 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 30m² Outdoor Living Area.
- For R30 and R40 lots, minimum open space may be reduced to 35% and 30%, respectively, subject to the provision of a 20m² 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.

e) For lots where vehicle access is gained solely from a rear laneway, the ceiling height for rooms located on the front elevation shall be a minimum 32 vertical brick courses (2.7m).

f) A 4m^2 store room shall be provided for all single dwellings on lots with a frontage of 7.5m or less in accordance with the requirements of Clause 5.4.4 C4.5 of the *2019 R-Codes - Residential Design Codes Volume 1*.

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, where it adjoins the primary street boundary.

5. UNIFORM ESTATE BOUNDARY FENCING

a) Uniform fencing is required to be provided along the frontage of Lot 2066 – 2073 where the lot boundary abuts Public Open Space, as shown on the Local Development Plan.

b) 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 1.2m behind the primary street setback, for a minimum length of 3m behind the truncation with a habitable room addressing the street.

7. BUSHFIRE MANAGEMENT

a) The land subject to this LDP is within a bushfire prone area, as designated by the Department of Fire and Emergency Services. Those lots identified on this LDP as being subject to a Bushfire Management Plan require a Bushfire Attack Level Assessment prior to construction, in accordance with Australian Standard 3959.

8. STREET TREES

a) In accordance with the City's Streetscape Policy, a minimum of one street tree is required per lot (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.

9. ACOUSTICS

a) The following noise requirements will be met for Lots 2047-2054, and 2066-2073:

BUILDING ELEMENTS	REQUIREMENTS
a) Walls:	• All walls are to be of double brick cavity construction, minimum 90mm thick brick / 50mm cavity / 90mm thick brick. ○ Each brick must be laid with all joints filled solid with mortar; ○ Any alternatives are to satisfy R_W 50 airborne acoustic rating. • For the wall on the zero lot boundary: ○ 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; ○ The inside leaf of brickwork is to be finished with 13mm thick cement render (i.e. not direct stick plasterboard); ○ 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.
b) Windows:	• Windows to be minimum 4mm thick glass in high quality residential grade frame achieving minimum $R_w + C_{tr}$ 23 acoustic rating.
c) Roof/ Ceiling:	• Ceilings to be minimum 10mm thick plasterboard with R 2.0 insulation laid above, between the ceiling joists. • Alternative roof/ceiling construction to achieve minimum R_w 42. • Eaves are to be enclosed with minimum 4mm thick fibre cement sheeting.
d) Mechanical:	• Any fans, air-conditioning or the like must be selected on the basis of quiet operation; • Air-conditioning units are to be: ○ 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 ○ 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).

10. NOTIFICATION TO PROSPECTIVE PURCHASERS

b) 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 27A, 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-4-034B REVISION: B
DATE: 24/09/2019 DRAWN: JP
PROJECTION: PCG 94 PLANNER: CH
DATUM: AHO CHECK: CH

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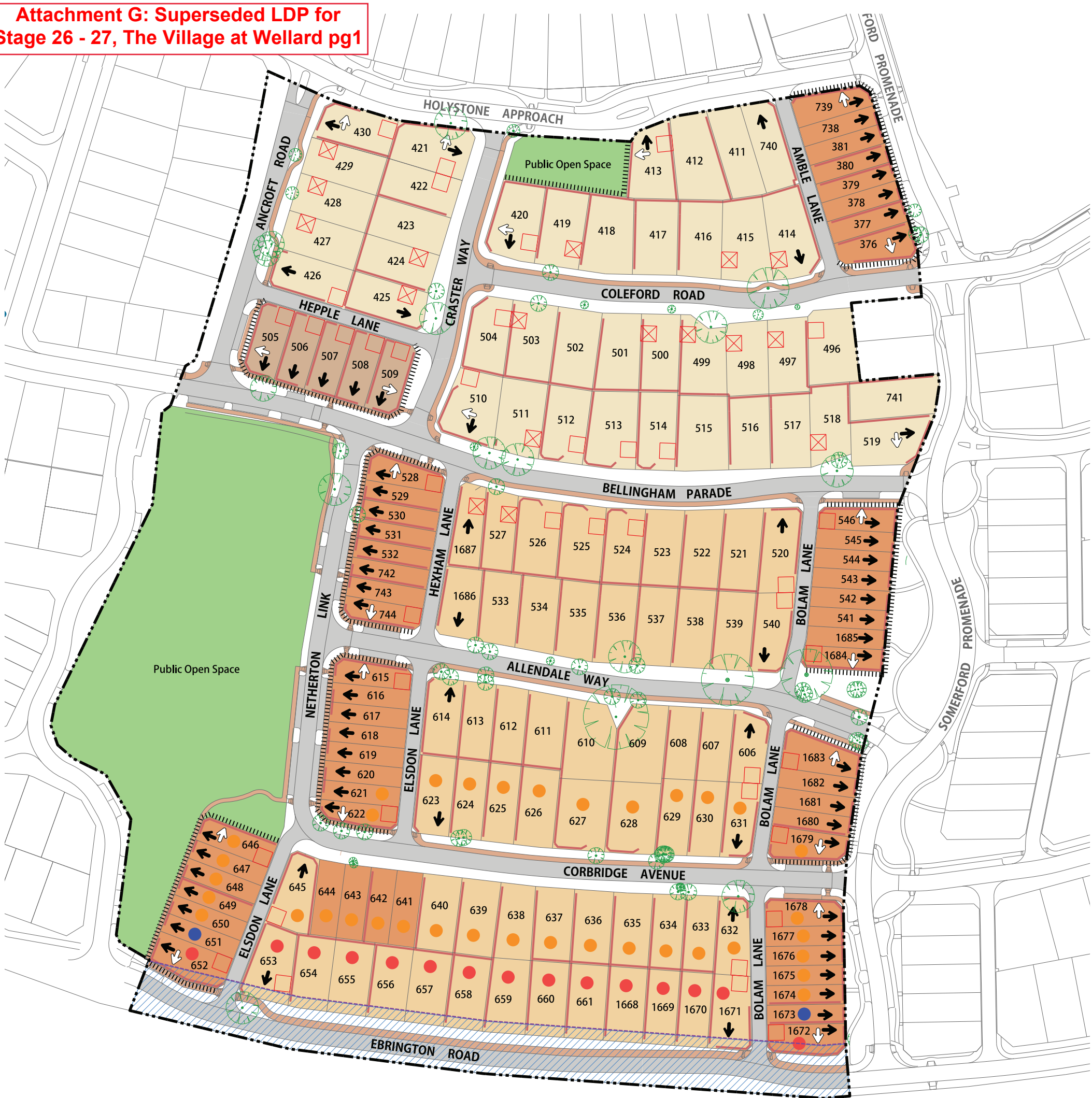
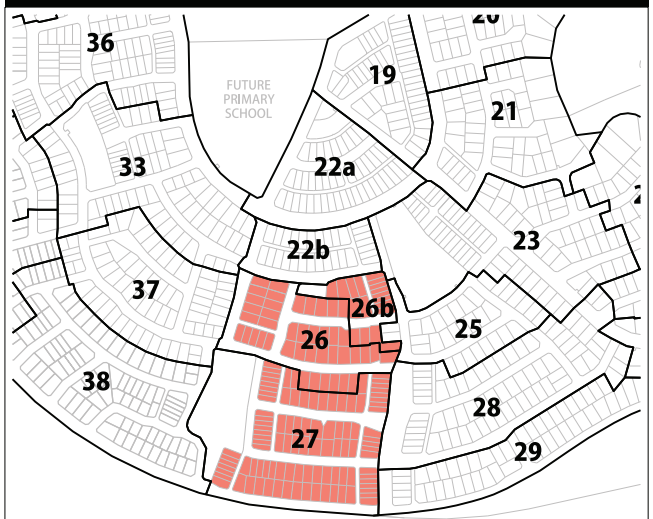
Attachment G: Superseded LDP for Stage 26 - 27, The Village at Wellard pg1



LOCATION PLAN



LEGEND

- Local Development Plan Boundary
- R20 Coding
- R25 Coding
- R30 Coding
- R40 Coding
- Primary Dwelling Orientation
- Secondary Dwelling Orientation
- Retained Trees
- Bushfire Attack Level 12.5
- Bushfire Attack Level 19
- Bushfire Attack Level 29
- No Vehicle Access
- Building Protection Zone
- Recommended Garage Location
- Designated Garage Location
- 4m Building Setback

ENDORSEMENT OF REGISTERED TOWN PLANNER

This Local Development Plan has been adopted by Council and signed by the Principal Planner.

SIGNATURE: _____ DATE: 16/10/2015

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 260m²) except where variations to the provisions of the Local Development Plan are sought.

LOCAL DEVELOPMENT PLAN

Stages 26-27, The Village at Wellard *Page 1 of 2*

A PEET Limited and Department of Housing Joint Venture Project

NORTH

0 15 30 45m

Scale: 1:1500@A3
Date: 12/10/2015
Plan: PACWE-4-025H

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Attachment H: Superseded LDP for Stage 26 - 27, The Village at Wellard pg2

LDP PROVISIONS – VILLAGE AT WELLARD STAGES 26 & 27

The provisions addressed below and on the reserve plan relate to Stages 26 & 27 within the Village at Wellard Estate, Wellard.

The requirements of the Residential Design Codes apply unless otherwise provided for below.

The following standard represents variations to the Residential Design Codes and constitutes 'Deemed-to-Comply' requirements pursuant to the Codes.

1. R-CODE VARIATIONS

a) Minimum Open Space*:	
R20/R25	40%
R30/R40	35%

2. SETBACK PROVISIONS

	Minimum	Maximum
a) Dwelling		
– Primary Street	3.0m#	5.0m
R20/R25	2.0m	4.0m
R30/R40	Nil	-
– Laneway	2.0m	4.0m
– POS		
b) Garage Setbacks		
– Primary Street	4.5m	-
– Laneway	0.5m	1.5m
c) Boundary Walls (Parapets)	For R30/R40 lots boundary walls are permitted to both side boundaries (with the exception of side street boundaries) for: • A maximum of 9m on the northern side boundary. • The length of the southern side boundary.	
d) Secondary Street Setbacks**	As per the R-Codes.	

NOTES – MINIMUM OPEN SPACE

* For R20/R25 lots site cover may be increased to 60% subject to the provision of a 30m² outdoor living area.
For R30/R40 lots site cover may be increased to 65% subject to the provision of a 20m² outdoor living area.
In all instances a minimum dimension of 4m is required with two thirds of this area uncovered and located behind the street setback area.

SPECIAL PROVISIONS – SETBACK REQUIREMENTS

For Lots 653 – 661 and 1668-1671 a minimum 4.0m building setback is required to the lots as noted on the reverse plan and in accordance with the approved Fire Management Plan.

** For Lot 652 and 1672 a minimum 4.0m secondary street setback is required as noted on the reverse plan and in accordance with the approved Fire Management Plan.

3. BUILDING FORM & ORIENTATION

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 that includes the required major opening shall not be obstructed by visually impermeable fencing.

c) Where possible, dwellings are to be designed to take advantage of northern solar orientation.

d) Dual fronted lots fronting POS shall address both front and rear boundaries and provide an alfresco area fronting the POS with its view not obstructed by visually impermeable fencing.

e) A maximum of 20% of the dwelling facade may be set beyond the maximum Primary Street Setback.

4. VEHICULAR ACCESS and GARAGES/CARPORTS

a) Recommended garage locations apply to lots identified on the Local Development Plan; referencing the side of the lot to which the garage must be located. Recommended garage locations do not prescribe boundary walls.

b) All garages are to have doors to enclose them.

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. INCIDENTAL DEVELOPMENT

a) Outbuildings are to be screened from public view unless constructed from the same materials as the dwelling.

7. FIRE MANAGEMENT

a) All properties are subject to compliance with the approved Fire Management Plan. Dwellings constructed on lots identified as being at risk of bushfire attack under the approved Fire Management Plan or within 100 metres from any bushland, equal to or greater than 1 hectare in area, shall be constructed to the appropriate Bushfire Attack Level (BAL) rating, in accordance with AS3959.

b) This LDP shall be read in conjunction with the approved Fire Management Plan.

c) A proposed reduction to the nominated BAL rating as specified within the Fire Management Plan for any development will require a planning application for consideration. The submission is to include the detailed method for determining bushfire attack level by a suitably qualified consultant – Method 2 from AS3959 supporting the lower rating demonstrating compliance with AS3959, WAPC Guidelines Planning for Bushfire Protection Policy.

8. TREES

a) Trees identified on the Local Development Plan are located within road reserve and are the property of Council. These trees shall not be removed without the prior written consent of Council.

9. NOTIFICATION TO PROSPECTIVE PURCHASES

a) The Developer is required to give prospective purchases a complete copy of all the requirements of this Local Development Plan prior to Offer and Acceptance being made.

ENDORSEMENT OF REGISTERED TOWN PLANNER

This Local Development Plan has been adopted by Council and signed by the Principal Planner.

SIGNATURE: _____ DATE: 16/10/2015

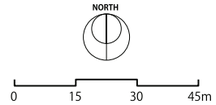
LOCAL DEVELOPMENT PLAN

Stages 26-27, The Village at Wellard *Page 2 of 2*

A PEET Limited and Department of Housing Joint Venture Project

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 260m²) except where variations to the provisions of the Local Development Plan are sought.



Scale: 1:1500@A3
Date: 12/10/2015
Plan: PACWE-4-025H

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17.8 Development Assessment Panel Application – General Industry – Concrete Batching Plant (mobile and fixed), Office and Associated Parking

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

A Development Assessment Panel (DAP) application has been received for a Concrete Batching Plant at No. 61 (Lot 252) Donaldson Road, Kwinana Beach (refer Attachment A). The proposal was previously approved under delegation by both the City of Kwinana and Western Australian Planning Commission (WAPC) in 2018, however as the applicant is seeking an unusual timeframe to commence their development, they have opted to lodge the application as a Form 1 to DAP.

The application proposes two options – either a fixed plant or mobile plant option, depending on how other approvals and projects proceed in future. Due to the project having to obtain a number of external approvals both for this site and a separately located quarry use which will need to commence operations prior to this development being viable, the applicant is seeking a term of five (5) years to commence their approval.

As Council will be aware, the Westport Taskforce has a shortlist of options for port operations in Kwinana and Fremantle. Currently, the highest ranked option on the shortlist involves the extension of Anketell Road, which is likely to pass near to the proposed development site. While City Officers initially had concerns with a request for five (5) years due to the uncertainty attached to Westport, written advice from the Westport Taskforce has confirmed that this site is unlikely to be affected by any future road or rail corridors to an outer harbour and no objections are made to the development (and the request for the 5 year timeframe to commence approval).

The property is zoned General Industry under LPS2 and Industrial under the Metropolitan Region Scheme (MRS). The proposal requires dual approval under LPS2 and the MRS, meaning that in this instance, both the City of Kwinana and the Western Australian Planning Commission (WAPC) are required to prepare a RAR on the matter.

The application is scheduled to be considered by the DAP at a meeting in early January. City Officers have prepared the attached Responsible Authority Report (RAR) in accordance with the *Planning and Development (Development Assessment Panels) Regulations 2011* and it is attached for Council's consideration and determination.

The City is required to submit the RAR to the DAP Secretariat on 7 January 2019. Should the City not submit this report to the DAP Secretariat within the required timeframe, the Minister for Planning, Lands and Heritage may direct the City to submit any information it has and provide it to the DAP directly.

City Officers are recommending that the amended application be approved subject to conditions, as per the Officer Recommendation included within the RAR.

17.8 DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – CONCRETE BATCHING PLANT (MOBILE AND FIXED), OFFICE AND ASSOCIATED PARKING

OFFICER RECOMMENDATION:

That Council adopt the recommendations of the Responsible Authority Report as detailed in Attachment A to the Metro South-West Development Assessment Panel for Proposed General Industry – Concrete Batching Plant (mobile and fixed), Office and Associated Parking. The recommendations are for the approval of the Concrete Batching Plant subject to conditions and advice notes.

DISCUSSION:

The proposed development seeks approval for a fixed or mobile concrete batching plant. The site is currently occupied by a number of ancillary structures, with most of these to be demolished.

The development meets a majority of the provisions of LPS2 and associated planning policies, with some elements requiring further attention through planning conditions as follows:

- Access points and car parking areas will require sealing and draining, as well as further approval from the City's engineers in order to gain safe entry to the existing public street.
- Landscaping is shown to comply, however a condition of approval is recommended to ensure installation on site.
- The applicant will also be required to contribute or install public art in accordance with the City's policy.

The item of greatest significance, is the proposal to have a five (5) year commencement timeframe. The City of Kwinana will generally recommend a period of two (2) years, noting that an applicant has the ability to apply for an extension of this timeframe. However, due to the number of approvals outside of the planning system required for this project to succeed, to provide some certainty for their project, the applicant is requesting the additional time. The reasons provided by the applicant, along with the assurance from Westport Taskforce, mean that it is appropriate to support this timeframe for this project.

LEGAL/POLICY IMPLICATIONS:

For the purpose of Councillors considering a financial or impartiality interest only, the proponent is Planning Solutions acting on behalf of Hy-Tec Industrial and the landowner is WA Land Authority (Development WA).

Legislation
Planning and Development Act 2005
Planning and and Development (Local Planning Schemes) Regulations 2015
Metropolitan Region Scheme
Local Planning Scheme No. 2

Scheme and Policies
City of Kwinana Local Planning Scheme No. 2
Local Planning Policy No. 11 – Site Requirements and Standards for Development within the Industrial Zones
Local Planning Policy No. 5 – Development Contribution Towards Public Art
Local Planning Policy No. 8 – Designing out crime

17.8 DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – CONCRETE BATCHING PLANT (MOBILE AND FIXED), OFFICE AND ASSOCIATED PARKING

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 proposal was referred to Department of Water and Environment Regulation for advice, who have indicated that there are no site contamination issues or significant risks associated with this proposal.

STRATEGIC/SOCIAL IMPLICATIONS:

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

Plan	Outcome	Objective
Strategic Community Plan	A thriving local economy	2.5 Stimulate economic development and encourage diversification

COMMUNITY ENGAGEMENT:

The proposal is a Permitted use under LPS2 and advertising is not required.

PUBLIC HEALTH IMPLICATIONS

The applicant has confirmed that they have received works approval from DWER and will be expected to comply with all requirements of this for the life of the development.

RISK IMPLICATIONS:

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

Risk Event	Potential appeal of the DAP's decision or conditions of approval imposed.
Risk Theme	Failure to fulfil statutory regulations or compliance requirements Providing inaccurate advice/ information

17.8 DEVELOPMENT ASSESSMENT PANEL APPLICATION – GENERAL INDUSTRY – CONCRETE BATCHING PLANT (MOBILE AND FIXED), OFFICE AND ASSOCIATED PARKING

Risk Effect/Impact	Environment 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. • The recommendation on the application is justified on the basis of compliance with LPS2, and the discretion afforded to the DAP to vary these documents. • Liaising with the applicant throughout the application process.
Rating (after treatment)	Low

COUNCIL DECISION

038

MOVED CR D WOOD **SECONDED CR S WOOD**

That Council adopt the recommendations of the Responsible Authority Report as detailed in Attachment A to the Metro South-West Development Assessment Panel for Proposed General Industry – Concrete Batching Plant (mobile and fixed), Office and Associated Parking. The recommendations are for the approval of the Concrete Batching Plant subject to conditions and advice notes.

CARRIED
7/0

ATTACHMENT A

Government of **Western Australia**
Development Assessment Panels

Form 1 – Responsible Authority Report

(Regulation 12)

Property Location:	No. 61 (Lot 252) Donaldson Road, Kwinana Beach
Development Description:	Proposed Concrete Batching Plant (mobile and fixed), Office and Associated Parking
DAP Name:	Metro South-West
Applicant:	Trent Will, Planning Solutions
Owner:	Western Australian Land Authority (t/a Development WA)
Value of Development:	$3.5m
LG Reference:	DA9507
Responsible Authority:	City of Kwinana
Authorising Officer:	Chloe Johnston Coordinator Statutory Planning
DAP File No:	DAP/19/01687
Report Due Date:	7 January 2020
Application Received Date:	22 October 2019
Application Process Days:	90 Days
Attachment(s):	1: Site plan 2: Development plans 3: Westport comment

Officer Recommendation:

That the Metro South-West JDAP resolves to:

1. **Approve** DAP/19/01687and accompanying plans HYT-17-2255-FP-A1 to A7 and HYT-17-2255-MP-A1 to A9 in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015* and the provisions of the City of Kwinana Planning Scheme No. 2, subject to the following conditions:

Conditions

1. This decision constitutes planning approval only and is valid for a period of five (5) years from the date of approval. If the subject development is not substantially commenced within the five (5) year period, the approval shall lapse and be of no further effect.

2. Stormwater drainage from roofed and paved areas being disposed of on-site or as may otherwise be approved under Environmental Protection Authority (EPA) Licence conditions or approved Stormwater Management Plan to the satisfaction of the City of Kwinana.

3. The applicant shall implement dust control measures for the duration of the Site and Construction Works, and for the ongoing operation of the site to the satisfaction of the City of Kwinana.

4. The provision of vehicle parking bays as defined on the approved development plans in accordance with AS2890, to be clearly marked on the ground and

constructed of bitumen, brick or concrete and drained prior to the occupation to the satisfaction of the City of Kwinana.

5. All vehicle parking to be accommodated within the boundaries of the subject lot to the satisfaction of the City of Kwinana.

6. All trafficable areas within the development area are to be sealed and drained as per the City of Kwinana 'Trafficable Areas' Specifications to the satisfaction of the City of Kwinana.

7. All non-trafficable and lay-down areas within the development area being sealed and drained to comply with the City of Kwinana non-trafficable and lay-down area specifications.

8. The crossover and driveway off Leath Road shall be upgraded to an intersection treatment that allows entry of a truck while one is waiting to exit, turning lane correct. Details being provided for approval by the City of Kwinana prior to commencement of works.

9. All plant and vehicle wash down facilities shall be connected to an appropriate wastewater treatment system to the satisfaction of the City of Kwinana.

10. An area of at least 220 square metres (5%) of the development area to be landscaped and maintained to a high standard thereafter to the satisfaction of the City of Kwinana within 60 days of practical completion of construction.

11. A detailed Landscaping Plan which outlines the proposed species and densities of plants to be used at the time of planting together with the anticipated height of each plant at maturity, spacing of each species and location of existing vegetation, and the proposed reticulation layout is required to be submitted to the City of Kwinana for approval prior to commencement of works. The landscaping plan shall be implemented to the satisfaction of the City within 60 days of the practical completion of construction.

12. Landscaping areas, vehicle parking spaces and accessways, and all other items and details as shown on the approved development plans shall be installed prior to occupying the proposed development and maintained thereafter to the satisfaction of the City of Kwinana.

13. On-site effluent disposal systems shall be nutrient retentive to comply with the Health Act 1911 and Cockburn Sound Management Council requirements. Use of conventional septic systems is not permitted.

14. The development shall be connected to an adequate potable water supply in accordance with the standards required by the National Health and Medical Research Council Australian Drinking Water Guidelines (2004).

15. No groundwater may be abstracted from the site without carrying out analysis in accordance with Department of Health guidelines to determine its suitability for use.

16. The applicant shall make a contribution to public art to the sum of $35,000 and comply with the requirements of the City of Kwinana's Local Planning Policy No

5; Development Contribution towards Public Art to the satisfaction of the City of Kwinana.

Advice Notes

i. The applicant is advised that all future development must be submitted to the City of Kwinana prior to the commencement of works or alteration of land use.

ii. Should the applicant be aggrieved by the decision or any condition imposed, then a right of review may be lodged with the State Administrative Tribunal within 28 days of the date of this decision.

iii. Construction should not be commenced for the components of the development which require building approval until the applicant has paid the appropriate fees, submitted the appropriate supporting documentation and has been issued with a building permit in accordance with the Building Act 2011 and Building Regulations 2012.

iv. The applicant should ensure that the proposed development complies with all other relevant legislation, including but not limited to, the Environmental Protection Act 1986, Health (Miscellaneous) Act 1911, Department of Water and Environmental Regulation Licences and Works Permit, Environmental Protection (Noise) Regulations 1997, Environmental Protection (Unauthorised Discharges) Regulations 2004, Sewerage (Lighting, Ventilation & Construction) Regulations 1971, Dangerous Goods Safety Act 2004 and Regulations, Contaminated Sites Act 2003 and the National Construction Code.

v. The proponent should make an application to the City of Kwinana for the installation of effluent treatment and disposal systems.

vi. Ablutions and sanitary facilities are required to comply with the requirements of the Health (Sewerage Lighting and Ventilation) Regulations 1971.

vii. Regarding condition 10, landscaping is required to be provided over the development area (in lieu of the lease area) as the development of the lease area will be undertaken in stages. Additional landscaping will be required at each subsequent stage of the development.

viii. The proponent is advised that under Schedule 1 Part 2 of the Environmental Protection Regulations 1987 (EP Regulations), concrete batching plants are described as Category 77 – Concrete batching or cement products manufacturing: premises on which cement products or concrete area manufactured for use at places or premises other than those premises with a production or design capacity of 100 tonnes or more per year. A works approval shall be obtained from the Department of Water and Environmental Regulation under the Environmental Protection Act 1986 prior to constructing a prescribed premises. It is an offence to cause an emission or discharge, unless a licence or registration (for operation) is held for the premises.

ix. Due to the nature and extent of groundwater contamination, groundwater abstraction is not recommended unless chemical testing and assessment is undertaken to confirm that groundwater is suitable for its intended use.

x. Due to uncertainty in the nature and extent of soil contamination which may be encountered, if any extensive soil disturbance is proposed to be undertaken at the site, a site specific management plan should be developed and implemented to address potential risk to onsite workers, developers and maintenance personnel.

Details: outline of development application

Insert Zoning	MRS:	Industrial
	TPS:	General Industry
Insert Use Class:		General Industry
Insert Development Scheme:		Local Planning Scheme No. 2
Insert Lot Size:		51.62ha
Insert Existing Land Use:		General industry

The City has received an application for a Concrete Batching Plant at No. 61 (Lot 252) Donaldson Road, Kwinana Beach (the 'subject site'). Details of the application are as follows:

- The applicant is seeking approval for a concrete batching plant which provides for either a fixed or mobile option, of which the applicant will develop only one. The applicant has advised that the following activities will take place on site:
    - Raw materials of sand and coarse and fine aggregates are delivered via covered trucks and unloaded into separate storage bays.
    - The raw materials are transferred by front end loaders into hoppers, and conveyors transport the material to covered overhead hoppers.
    - Cement is delivered in sealed tankers and transferred pneumatically into sealed overhead storage silos.
    - The exhaust air from the silo is vented through baghouse dust collector. The materials are then transferred in their correct quantities into concreate agitator trucks located directly below the concrete batch plant load hopper.
    - An annual volume of 100,000m^3 of concrete is expected to be produced from the plant, with a production rate up to 120m^3 per hour.
    - It is expected that between 8-12 workers and 10 visitors will use the site each day.
    - The development is expected to create 13 heavy vehicle trips and 17 light vehicle trips during the peak hour, being a total of 30 vehicle trips per hour during peak periods.
    - The Concrete Batching Plant operates 24 hours per day, seven days a week.
- The lease area is currently occupied by a number of ancillary structures such as gantry cranes and stacks which will be demolished as part of the proposal.
- The land use is classified as General Industry under Local Planning Scheme No. 2 ('the scheme'/LPS2).
- The subject site is zoned General Industry under both LPS2 and the Metropolitan Region Scheme (MRS).
- The subject site also falls within a Clause 32 area under the MRS, requiring that dual approval be sought under both the MRS and LPS2. The City's recommendation will be provided to the WAPC for its consideration in preparing its Responsible Authority Report (RAR).

Background:

The subject site is currently occupied by a number of buildings and structures, including two large industrial sheds. The proposed development is intended to be located in the north western corner of the site (see site plan Attachment 1).

The proposed development has previously been approved by the City and WAPC for a period of two (2) years, expiring in January and February 2020 respectively. Due to the proposal falling within the optional DAP value range (i.e. between $2 and $10 million), the applicant was able to elect for the City and WAPC to determine the application. In this instance, as they are seeking an unusual timeframe to commence their development, they have sought to have the development approved by the DAP.

Legislation and Policy:

Legislation
Planning and Development (Local Planning Schemes) Regulations 2015
Local Planning Scheme No. 2
Metropolitan Region Scheme

Local Policies
LPP 5 – Development Contribution Towards Public Art
LPP 8 – Designing out Crime
LPP11 – Site Requirements and Standard for Development within Industrial Zones

Consultation:

Public Consultation
The proposed land use of General Industry represents a "P" use within the General Industry Zone of LPS2 and therefore is not required to be advertised.

Consultation with other Agencies or Consultants

- *Department of Water and Environment Regulation (DWER)*
  As the subject site is listed under the *Contaminated Sites Act 2003* as being "contaminated – restricted use", the proposal was referred to DWER for review. It had no objection to the proposed development and have not recommended any conditions relating to the contamination. DWER has however included some advice notes in relation to ground water and soil contamination which has been in included in the officer recommendation above.

- *Westport*

The development proposal has been referred to the Westport taskforce where it offered the following comment:

- Westport has no objection to this application as it is contained within known lease boundaries, and is located outside of any road or rail corridors that have been identified as potentially required to service remaining Westport port options in Kwinana.

This comment is included as Attachment 3 of this report.

Planning Assessment:

Local Planning Scheme (LPS2)

The proposal complies with the relevant requirements of LPS2 as follows:

Item	Requirement	Proposal	Compliance
Zoning	Uses permitted in General industry zone	General industry	P
Setbacks	Front – 15m Side – 6m Rear – 9m	>Greater than required	Complies
Landscaping	5% of site	Min of 5% of development site	Complies
Plot ratio	0.8	<0.8	Complies
Site coverage	65%	<65%	Complies
Appearance of buildings	Designed to minimise impact of development on surrounding environment	Simple in form, concrete and colourbond materials proposed	Complies
Car parking	4 for up to the first 200m^2 gross floor area – 4 bays required	13 car bays proposed	Complies
Loading and unloading	Loading area to be provided	Provided	Complies
Term of approval	Two (2) years	Five (5) years	Further assessment required – see officer comment

The proposal meets the requirements of LPS2, noting that they are seeking a greater term of approval which is discussed in the Officer Comment section of the report below.

LPP 5 – Development contribution towards public art

Item	Requirement	Proposal	Compliance
Public Art contribution	1% of development cost	Not indicated	Condition of approval requiring adherence with the policy recommended

LPP8 – Designing Out Crime

Item	Requirement	Proposal	Compliance

Addressing of five principles of crime prevention through environmental design	Statement addressing principles of policy	Brief statement	See Officer comment.

Officer Comments

LPP 11 – Site requirements and standards for development within Industrial Zones

The proposed development is considered to meet the objectives and requirements of LPP 11 as follows:

- The proposal is well set back from the street and its lease boundaries.
- Landscaping is proposed along its only street boundary and a side boundary that does not abut buildings.
- The administration office is located with the staff and visitor parking area, with stairs and a balcony facing this area.
- Windows are provided on the street facing elevation of the administration building, albeit that it is over 50m+ from the public street.
- The administration is freestanding and distinctive from the plant and storage areas.
- Buildings are simple in form, with steel, colorbond and concrete materials proposed.
- A condition requiring on-site effluent disposal systems is recommended.

Westport

The Westport Taskforce has publically released details of potential proposals, include an option for the extension of Anketell Road (listed as the option currently ranked first) which is proposed to pass through just north of the development site–



Figure 1 – 1st Ranked option (Westport) – Westport Beacon; Short List of Options- Department of Transport

While City Officers initially had concerns with a request for five (5) years due to the uncertainty attached to Westport, written advice from the Westport Taskforce has confirmed that this site is unlikely to be affected by any future road or rail corridors to an outer harbour and no objections are made to the development proposal.

Term of approval

The applicant is seeking a five (5) year term of approval for the following reasons:

A five-year extension is sought to allow adequate time for the proponent to acquire a site, obtain planning and environmental approvals and commence works for a proposed aggregate quarry (extractive industry use) on a site outside the Perth metropolitan area that will service the approved concrete batching plant in Kwinana.

Aggregate is a key component of the concrete batching process. A concrete batching plant requires a constant and reliable supply of aggregate in order to function effectively. In this instance, the proposed off-site aggregate quarry is intrinsic to the business plan for the approved concrete batching plant on the subject site, and is necessary to support the approved development.

The proponent is actively making steps to implement the approval having recently purchased land suitable for development of an aggregate quarry. It is anticipated the quarry can commence operation within three to four years subject to planning and environmental approvals, which will allow the approved concrete batching plant to substantially commence within five years. However, without the certainty of having a longer term approval for the concrete batching plant, the quarry could be redundant.

It is also noted that the applicant is proposing two options (fixed and mobile plant) due to the uncertainty associated with the Outer harbour.

In reviewing the request for the 5 year timeframe, it was considered what potential changes there may be to the planning framework. While not all policy changes can be accurately predicted, there are no significant ones expected in the area, with the exception of Westport. At this stage, there remain to be a number of options being investigated by the taskforce in relation to the development of a new Outer harbour in Kwinana. The extension of Anketell Road directly to the north of the subject site is currently ranked as the preferred option in publicised documents to link the port with the existing freight network. Due to the potential for conflict between the proposed development and the potential road and rail corridor, City Officers sought the advice of Westport Taskforce. The Taskforce has advised that it has no objections due to the low risk that this land will be needed for future road or rail reservations.

While it is noted that a five (5) year timeframe to commence development is significant, it is considered that the applicant has provided reasonable justification and evidence this timeframe is needed to assist the project in succeeding. Given the proposed Concrete Batching Plant is not considered to adversely impact the Westport Project, and that it will contribute positive growth and development within the Kwinana Industrial Area, the proposal for a five (5) year timeframe is supported.

Metropolitan Region Scheme (MRS)

The property is located within the Clause 32 area under the MRS. This means that delegation falls with the WAPC to determine the application under the MRS, rather than the local government. For this DAP application, the proposal was forwarded to officers at the WAPC for review, who will then be providing a separate Responsible Authority Report (RAR) to DAP.

Designing Out Crime

In relation to LPP 8 Designing out Crime, the applicant has provided a statement in their documentation advising that the development is considered acceptable against the requirements of this policy. In reviewing the proposal against the policy, it is considered that due to the nature and context of this industrial development and given the limited access from the public realm, that additional security measures above what exist on site are not necessary. The application is considered to be supported against LPP8.

Matters to be considered (the Regulations)

The proposal is supported, subject to conditions, for the following reasons in accordance with clause 67 of the deemed provisions of the Regulations:

- The proposal is consistent with the current zoning and provisions for the area under LPS2, state and local planning policies and the Regulations.
- The General Industry use makes use of an underutilised section of an existing development.
- The site is appropriately designed having regard to traffic access and egress, deliveries and on site car parking. Conditions of approval are recommended to upgrade the access points and circulation space on site to the City's standards.
- There have been no significant environmental or health implications identified that are unlikely to receive approval from the relevant authorities.
- The approval is recommended to be issued for a period of five (5) years only, due to the limited impact the proposal is expected to have on Westport.

- The application is simple in form, proposing steel, colourbond and concrete panels in its construction.
- Sufficient landscaping is proposed on site, particularly around its periphery.
- The development is not expected to result in any undue health or safety risks and is appropriate for the General Industry zone.

Council Recommendation:

Council's recommendation will be included in this report once it has been reviewed.

Conclusion:

An application has been received for a mobile and fixed Concrete Batching Plant, office and associated parking at the subject site. The proposal puts forward two development options (being fixed or mobile plant) as a response to the uncertainty associated with the current Westport investigations, however is also seeking a five year term to their approval due to the timeframes associated with other approvals linked to this development.

As discussed in the report above, while unusual, the option for a five (5) year approval is possible to issue and in this instance, due to support from Westport, it is supported.

Attachment 1



REFERENCE

CADASTRAL BASED ON INFORMATION PROVIDED BY AND WITH THE PERMISSION OF THE WESTERN AUSTRALIAN LAND INFORMATION AUTHORITY TRADING AS LANDGATE (2017)

AERIAL IMAGERY SOURCED FROM NEARMAP. DATED JANUARY 2017.

NOTES

1. COORDINATE SYSTEM: GDA 1994 MGA ZONE 50

0 50 100
1:2,000 METRES

CLIENT
ADELAIDE BRIGHTON PTY LTD

PROJECT
PROPOSED KWINANA BATCHING PLANT

CONSULTANT
Golder Associates

YYYY-MM-DD	2017-10-09
DESIGNED	BJL
PREPARED	JRP
REVIEWED	JEJ
APPROVED	JEJ

TITLE
SITE PLAN

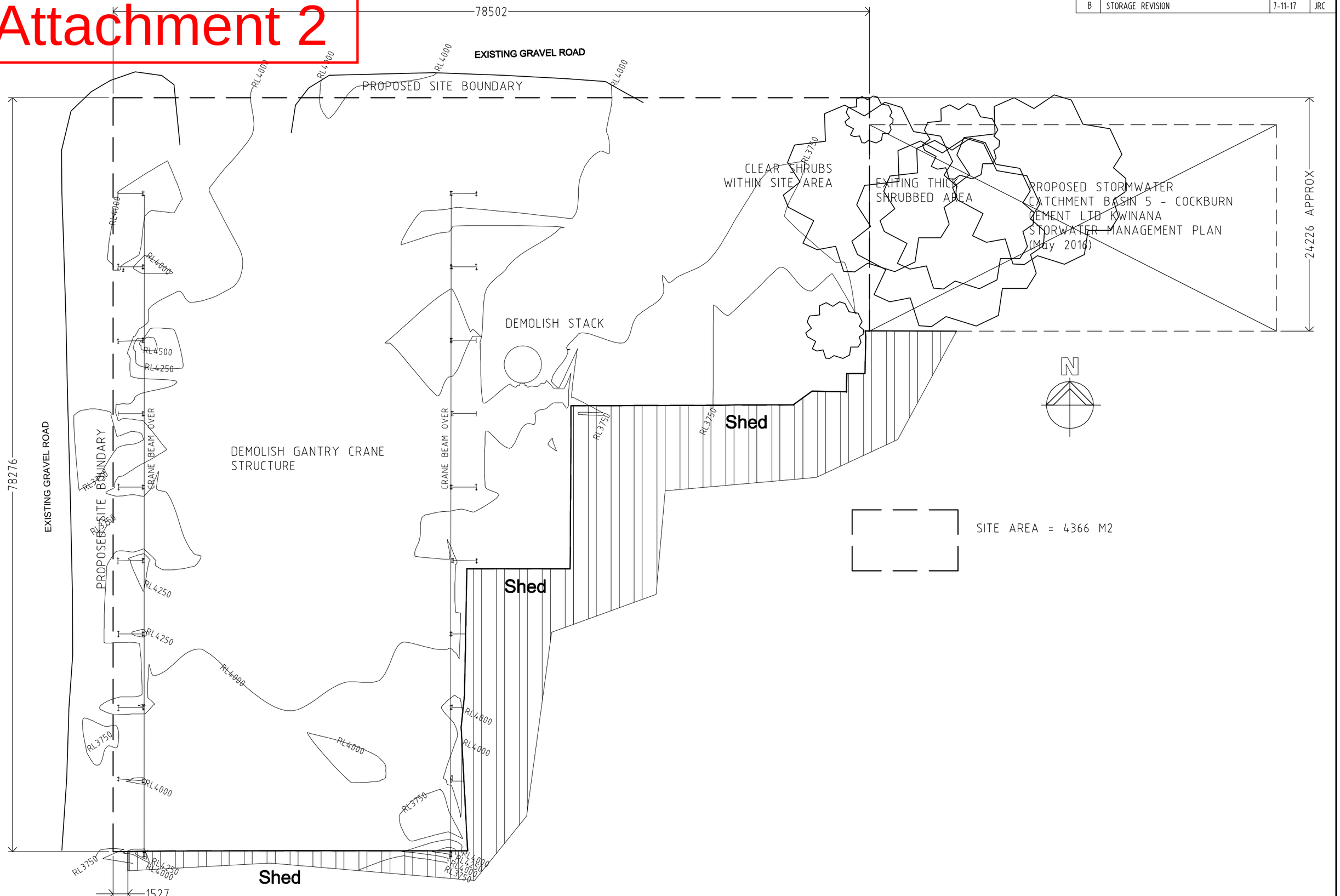
PROJECT NO.	CONTROL	REV.	FIGURE
1670802	001 R	2	**2**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ISO A0
0 25mm

Path: B:\Adelaide_Brighton_Pty_Ltd\Kwinana\99_PROJECTS\1670802_Kwinana\02_PRODUCTION\MXD\001-R-Rev2\1670802-001-R-F002-Rev2.mxd

Attachment 2

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	STORAGE REVISION	7-11-17	JRC



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CLIENT/JOB # HY-TEC	EXISTING SITE PLAN	DWG NO.	REV
PROJECT - KWINANA		HYT-17-2255-FP-A1	B
CAD FILE #			

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	STORAGE REVISION	7-11-17	JRC

N

78502
17698
60804
6134
5500
6000
5500
7750
22320
7600
3000
1200
8832
13500
2675 approx
78276
36268
6404
2500
2500

EXISTING GRAVEL ROAD

AMENITIES OVER CARS UNDER
CAR PARK
SAND & AGGREGATE STORAGE
SAND & AGGREGATE STORAGE
RAMP STAND
BATCH OFFICE
CEMENT BANKER
SILOS & ROAD POINT
WEDGE PIT
ADMIX
STIRRER PIT
1ST FLUSH MIN 6000 Ltrs
AGG & SAND BINS & WEIGH HOPPERS
CRANE BEAM OVER
CRANE BEAM
RETURN CONCRETE & WASHOUT FACILITY
Shed
Shed
TRUCK PARKING

EXITING THICK SHRUBBED AREA

PROPOSED STORMWATER CATCHMENT BASIN 5 - COCKBURN CEMENT LTD KWINANA STORWATER MANAGEMENT PLAN (May 2016)

RL4000
RL4250
RL4500
RL3750

TOTAL SITE AREA = 4366 m2
LANDCAPE AREA = 225.6 m2 = 5.2%

PLANT PRODUCTION CAPACITY
120 m3/hr maximum production rate.
100,000 m3 annual production.

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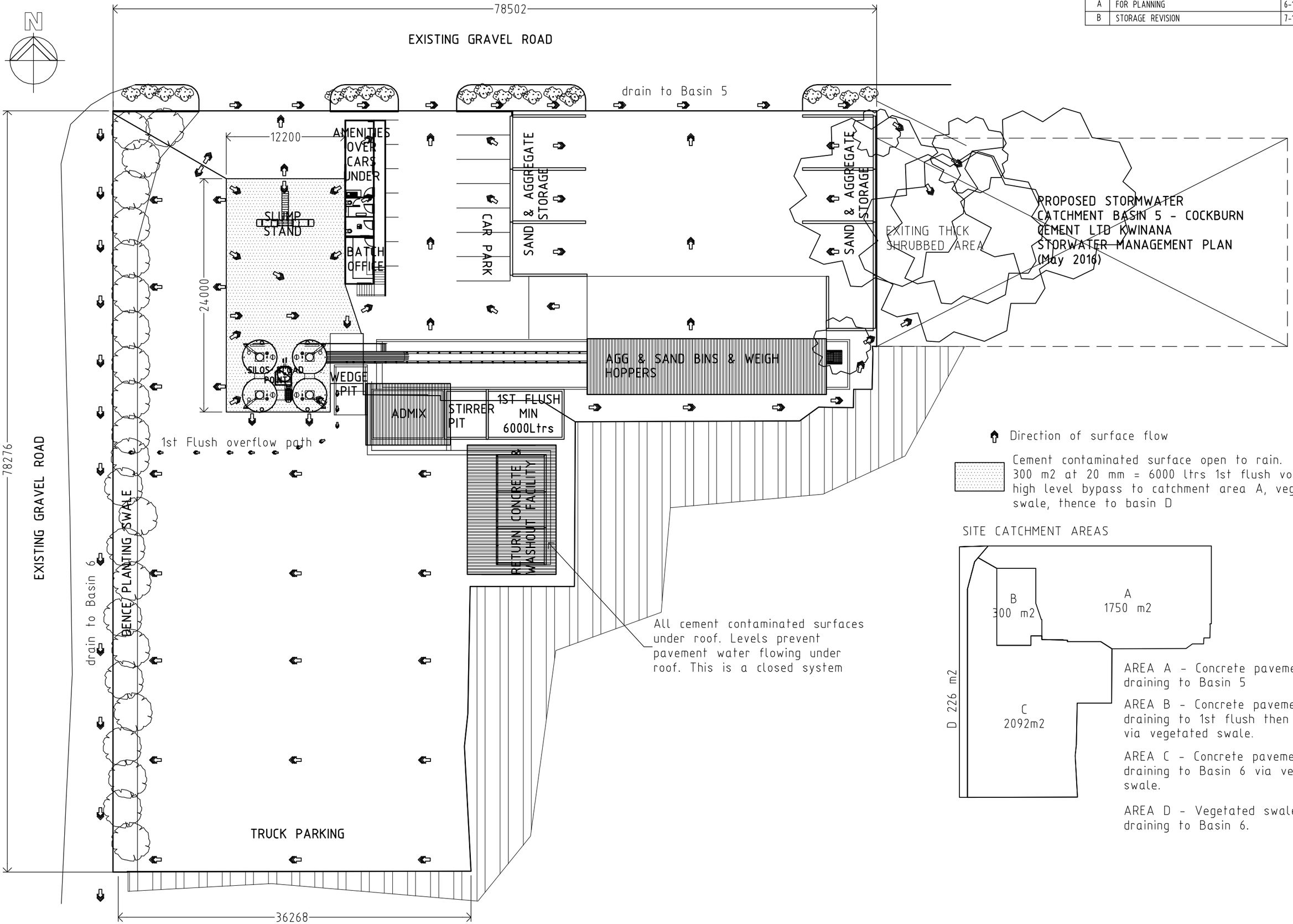
CLIENT/JOB # HY-TEC
PROJECT - KWINANA
CAD FILE #

PROPOSED FIXED PLANT SITE PLAN

DWG NO. HYT-17-2255-FP-A2
REV B

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	STORAGE REVISION	7-11-17	JRC



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CLIENT/JOB # HY-TEC	PROPOSED FIXED PLANT SITE PLAN	DWG NO.	REV
PROJECT - KWINANA	STORMWATER MANAGEMENT OVERVIEW	HYT-17-2255-FP-A3	B
CAD FILE #			

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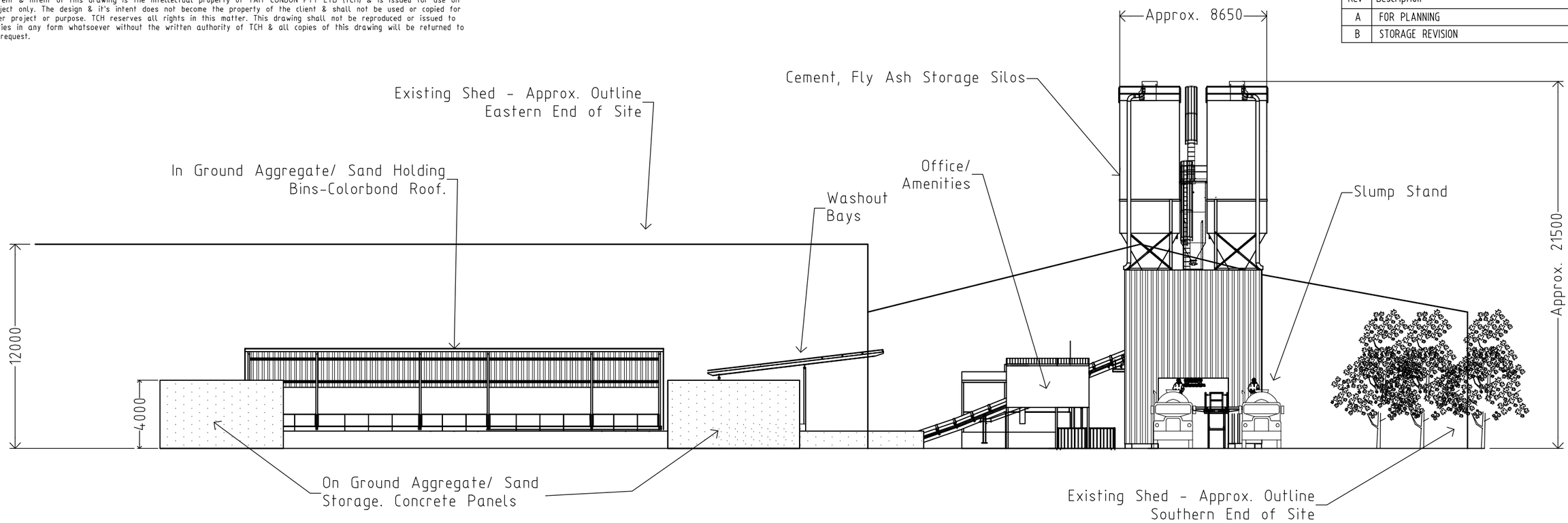
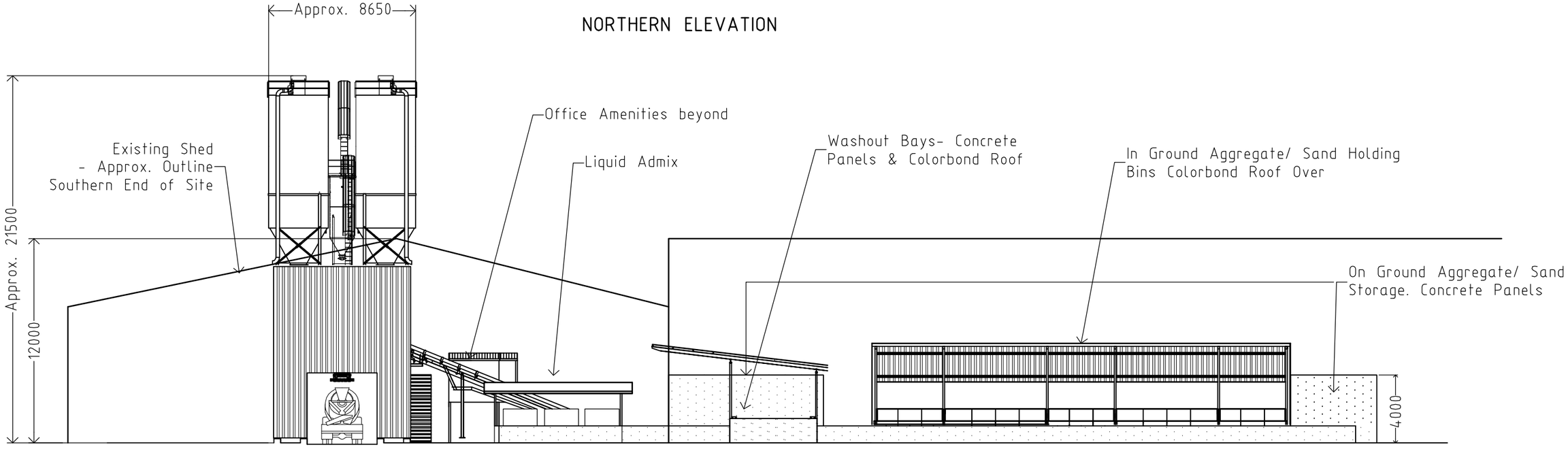
Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	STORAGE REVISION	7-11-17	JRC



NORTHERN ELEVATION



SOUTHERN ELEVATION

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CLIENT/JOB # HY-TEC	PLANT ELEVATIONS	DWG NO.	REV
PROJECT - KWINANA		HYT-17-2255-FP-A4	B
CAD FILE #			

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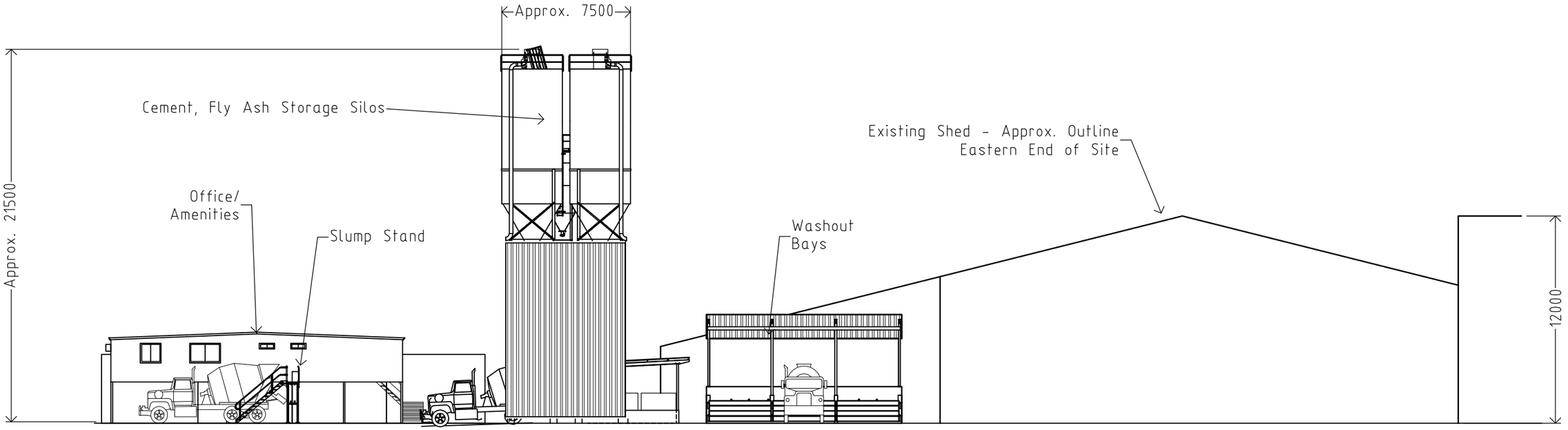
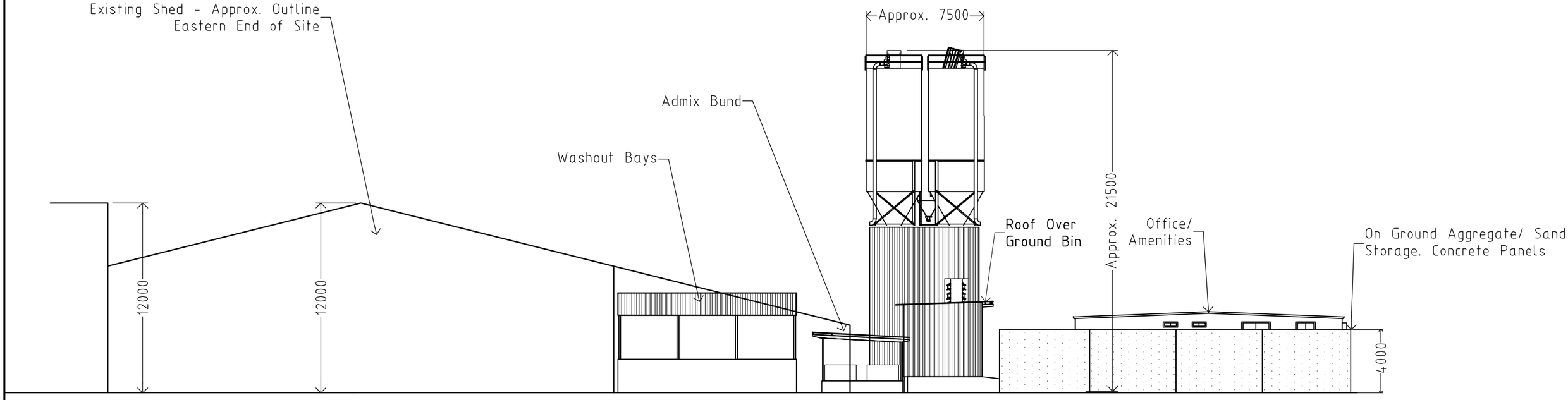
Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	STORAGE REVISION	7-11-17	JRC



WEST ELEVATION



EAST ELEVATION

TCH
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CLIENT/JOB # HY-TEC	PLANT ELEVATIONS	DWG NO.	REV
PROJECT - KWINANA		HYT-17-2255-FP-A5	B
CAD FILE #			

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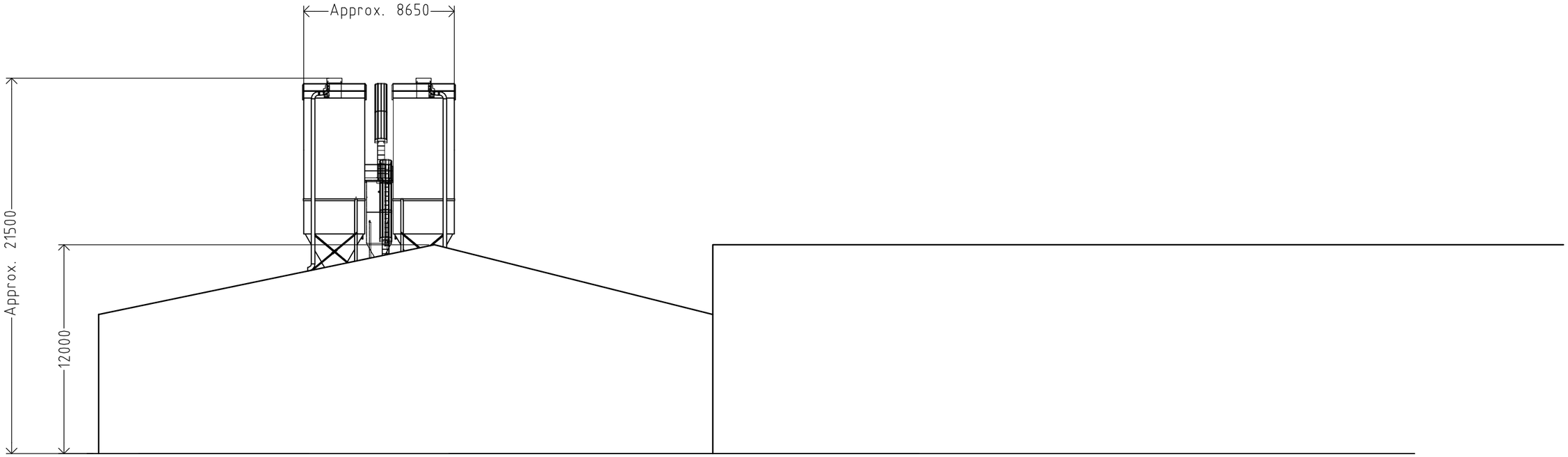
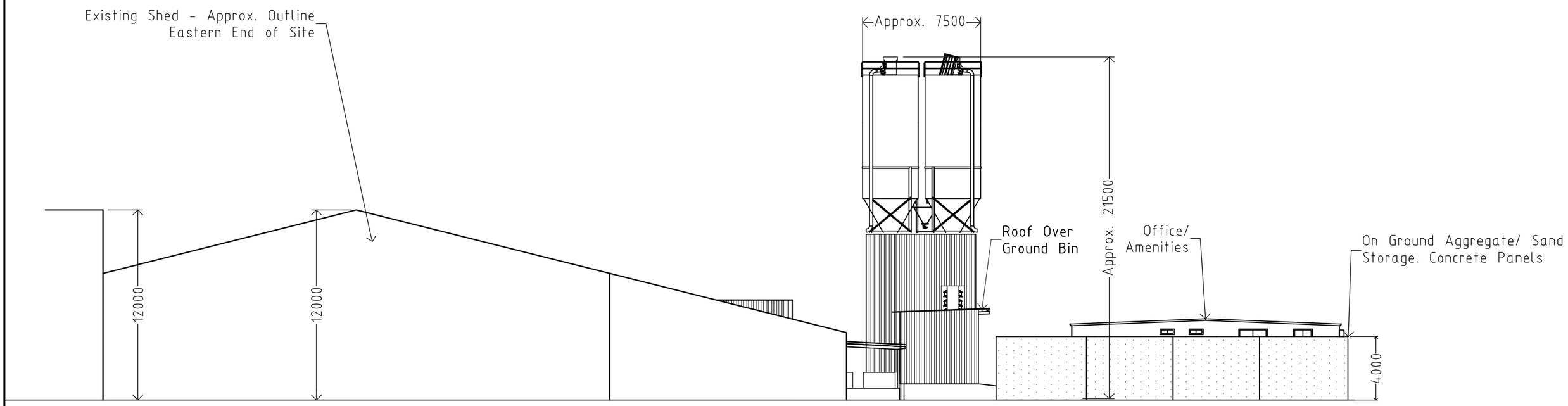
Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	STORAGE REVISION	7-11-17	JRC



SOUTHERN ELEVATION SHOWING EXISTING BUILDINGS IN FOREGROUND



EASTERN ELEVATION SHOWING EXISTING BUILDINGS IN FOREGROUND

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CLIENT/JOB # HY-TEC	PLANT ELEVATIONS	DWG NO.	REV
PROJECT - KWINANA		HYT-17-2255-FP-A6	B
CAD FILE #			

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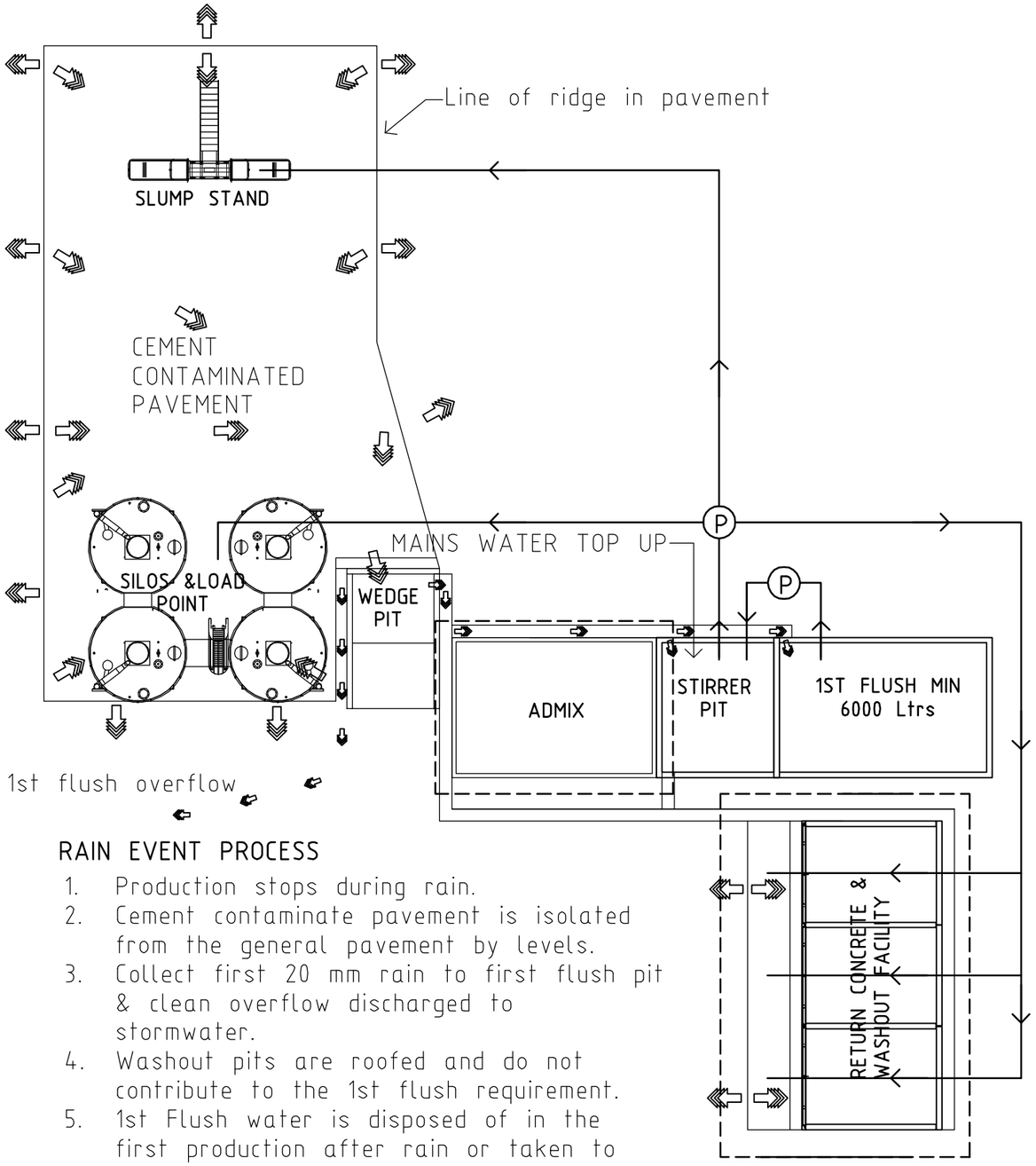
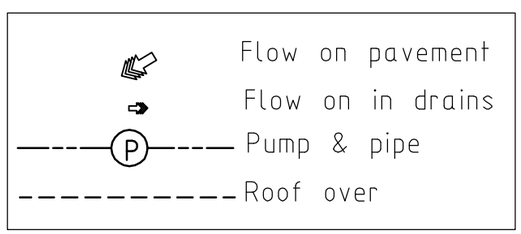
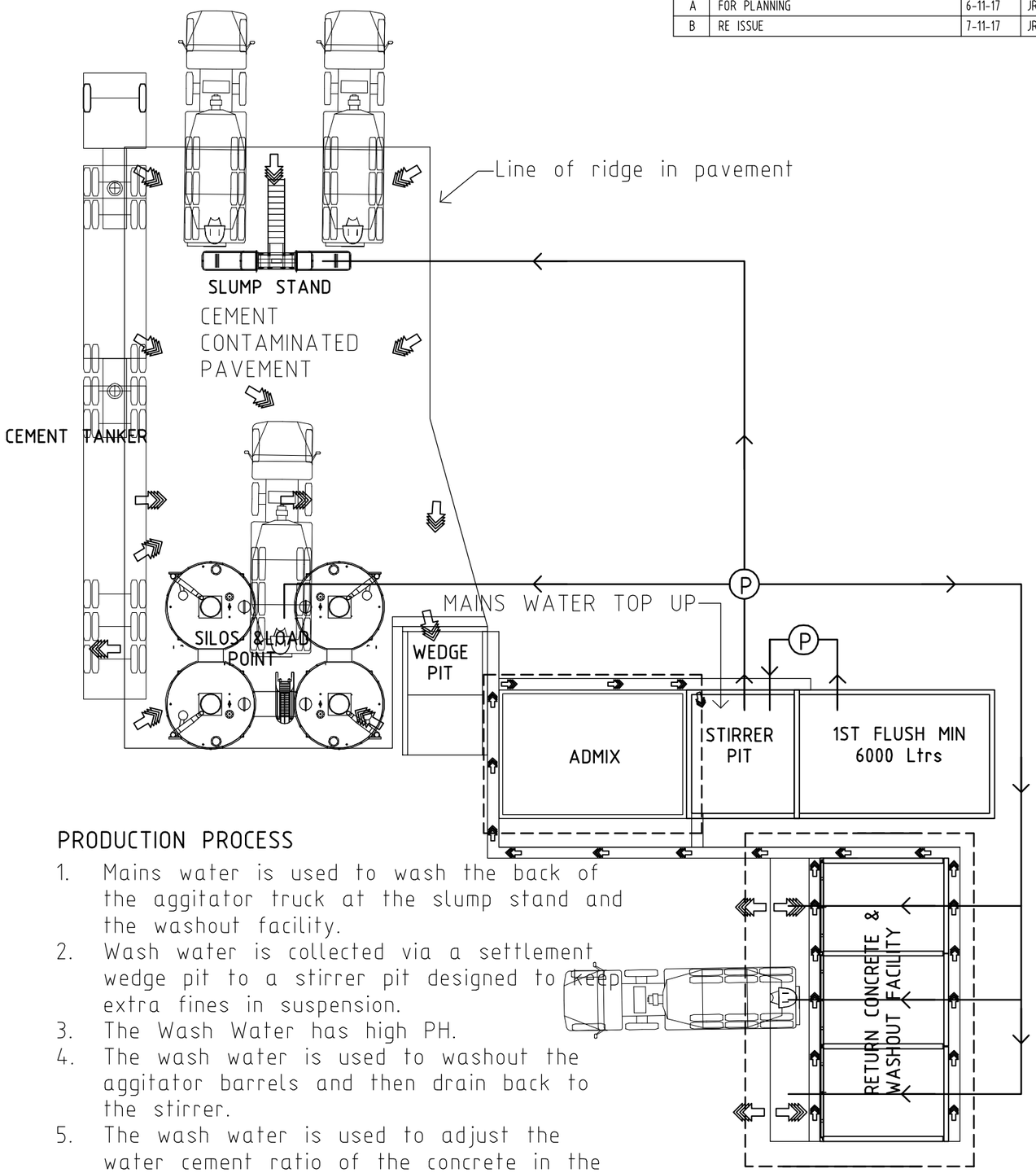
Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	RE ISSUE	7-11-17	JRC



RAIN EVENT PROCESS

1. Production stops during rain.
2. Cement contaminate pavement is isolated from the general pavement by levels.
3. Collect first 20 mm rain to first flush pit & clean overflow discharged to stormwater.
4. Washout pits are roofed and do not contribute to the 1st flush requirement.
5. 1st Flush water is disposed of in the first production after rain or taken to waste.





PRODUCTION PROCESS

1. Mains water is used to wash the back of the aggitator truck at the slump stand and the washout facility.
2. Wash water is collected via a settlement wedge pit to a stirrer pit designed to keep extra fines in suspension.
3. The Wash Water has high PH.
4. The wash water is used to washout the aggitator barrels and then drain back to the stirrer.
5. The wash water is used to adjust the water cement ratio of the concrete in the aggitator at the slump stand and leaves site with the batch.
6. The wash water is used to batch concrete and leaves site with the batch.
7. Generally demand at steps 5 & 6 is greater than the supply from 1. and the stirrer is topped up with mains as required.

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CLIENT/JOB # HY-TEC	STORM AND PRODUCTION WATER MANAGEMENT	DWG NO.	REV
PROJECT - KWINANA	COMMON TO BOTH MOBILE AND FIXED PLANT	HYT-17-2255-FP-A7	B
CAD FILE #			

Attachment 3

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	SILO REVISION	6-11-17	JRC

78502

EXISTING GRAVEL ROAD

PROPOSED SITE BOUNDARY

RL4000

CLEAR SHRUBS WITHIN SITE AREA

RL3750

EXITING THICK SHRUBBED AREA

PROPOSED STORMWATER CATCHMENT BASIN 5 - COCKBURN CEMENT LTD KWINANA STORWATER MANAGEMENT PLAN (May 2016)

24226 APPROX

DEMOLISH STACK

RL4500

RL4250

DEMOLISH GANTRY CRANE STRUCTURE

CRANE BEAM OVER

Shed

N

SITE AREA = 4366 M2

78276

EXISTING GRAVEL ROAD

PROPOSED SITE BOUNDARY

RL4250

RL4000

RL3750

Shed

1527

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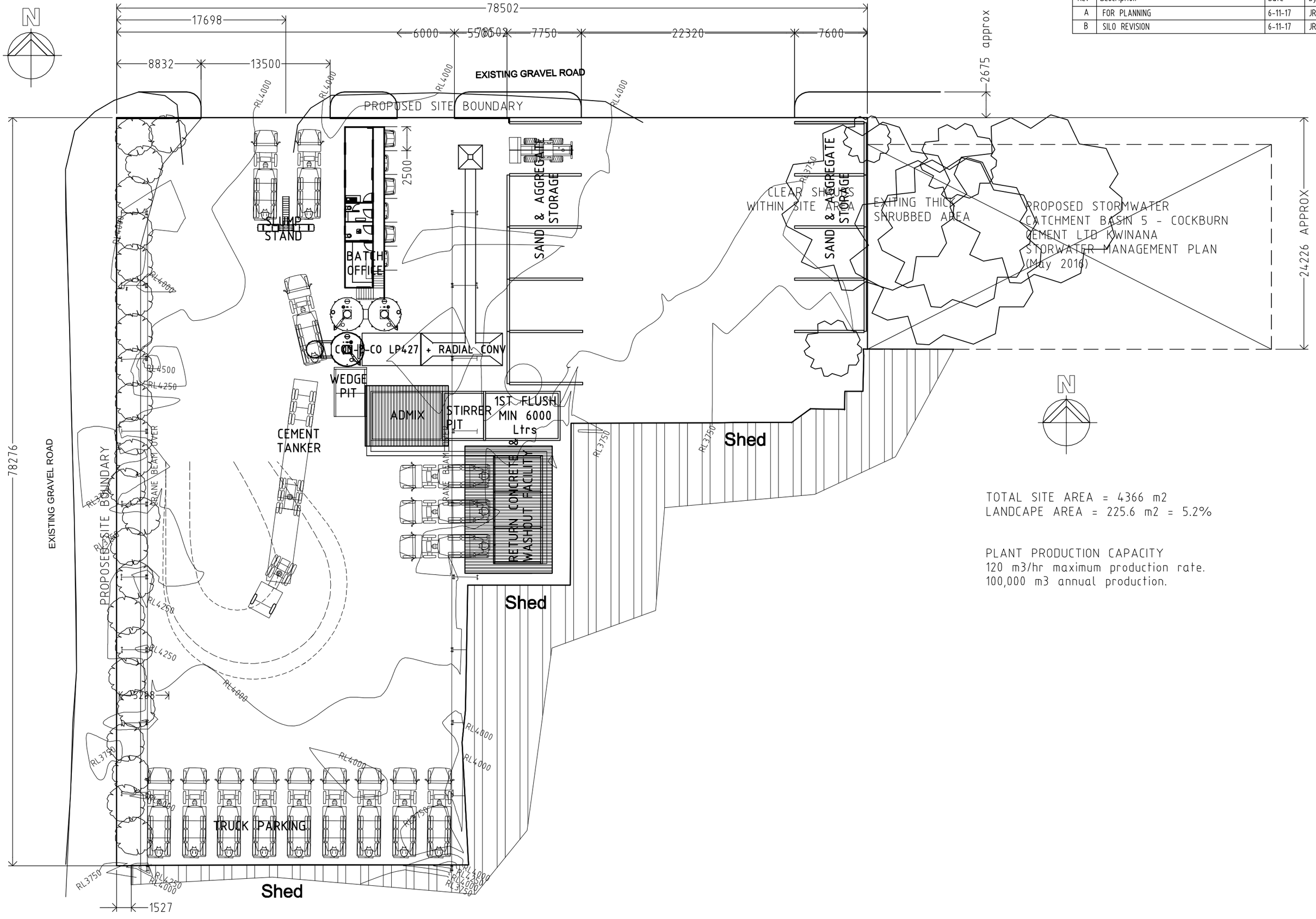
CLIENT/JOB # HY-TEC	EXISTING SITE PLAN	DWG NO.	REV
PROJECT - KWINANA		HYT-17-2255-MP-A1	B
CAD FILE #			

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	SILO REVISION	6-11-17	JRC



TOTAL SITE AREA = 4366 m2
LANDCAPE AREA = 225.6 m2 = 5.2%

PLANT PRODUCTION CAPACITY
120 m3/hr maximum production rate.
100,000 m3 annual production.

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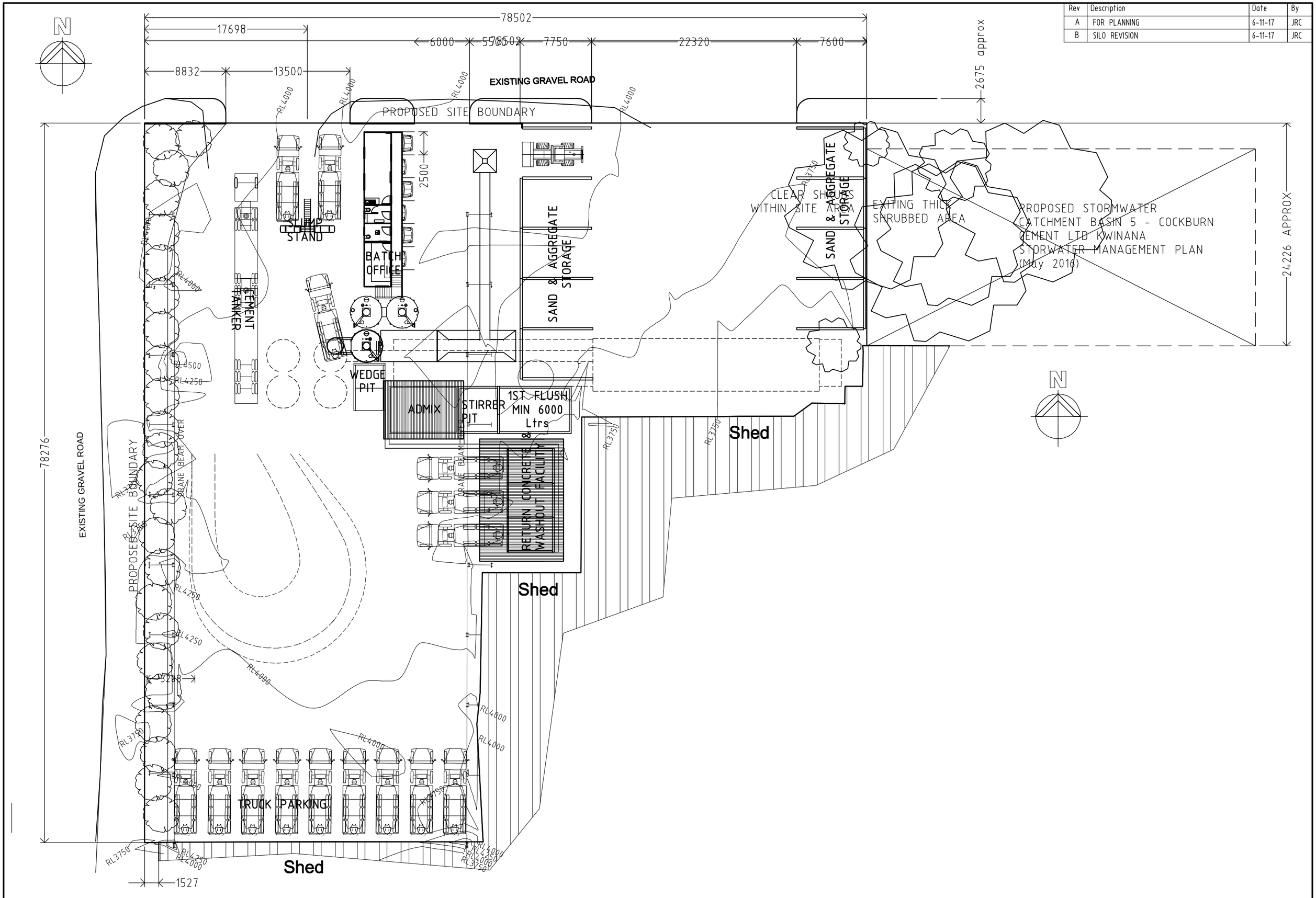
CLIENT/JOB # HY-TEC PROJECT - KWINANA	PROPOSED MOBILE PLANT SITE PLAN	DWG NO.	REV
CAD FILE #		HYT-17-2255-MP-A2	B

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	SILO REVISION	6-11-17	JRC



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CLIENT/JOB # HY-TEC
PROJECT - KWINANA
CAD FILE #

PROPOSED MOBILE PLANT WITH FIXED PLANT OVERLAY

DWG NO. HYT-17-2255-MP-A3
REV B

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	SILO REVISION	6-11-17	JRC

N

78502

17698

6000 5500 7750 22320 7600

8832 13500

2675 approx

EXISTING GRAVEL ROAD

PROPOSED SITE BOUNDARY

RL4000

2500

SLUMP STAND

BATCH OFFICE

SAND & AGGREGATE STORAGE

CEMENT BATCHER

RL3750

CLEAR SHRUBS WITHIN SITE AREA

EXITING THICK SHRUBBED AREA

PROPOSED STORMWATER CATCHMENT BASIN 5 - COCKBURN CEMENT LTD KWINANA STORWATER MANAGEMENT PLAN (May 2016)

24226 APPROX

78276

EXISTING GRAVEL ROAD

PROPOSED SITE BOUNDARY

RL4500

RL4250

CRANE BEAM OVER

WEDGE PIT

ADMIX

STIRRER PIT

1ST FLUSH MIN 6000 Ltrs

RETURN CONCRETE & WASHOUT FACILITY

CRANE BEAM

Shed

RL4258

RL4000

3288

RL3750

TRUCK PARKING

Shed

1527

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PH 02 9972 1207 FAX 02 9972 1227

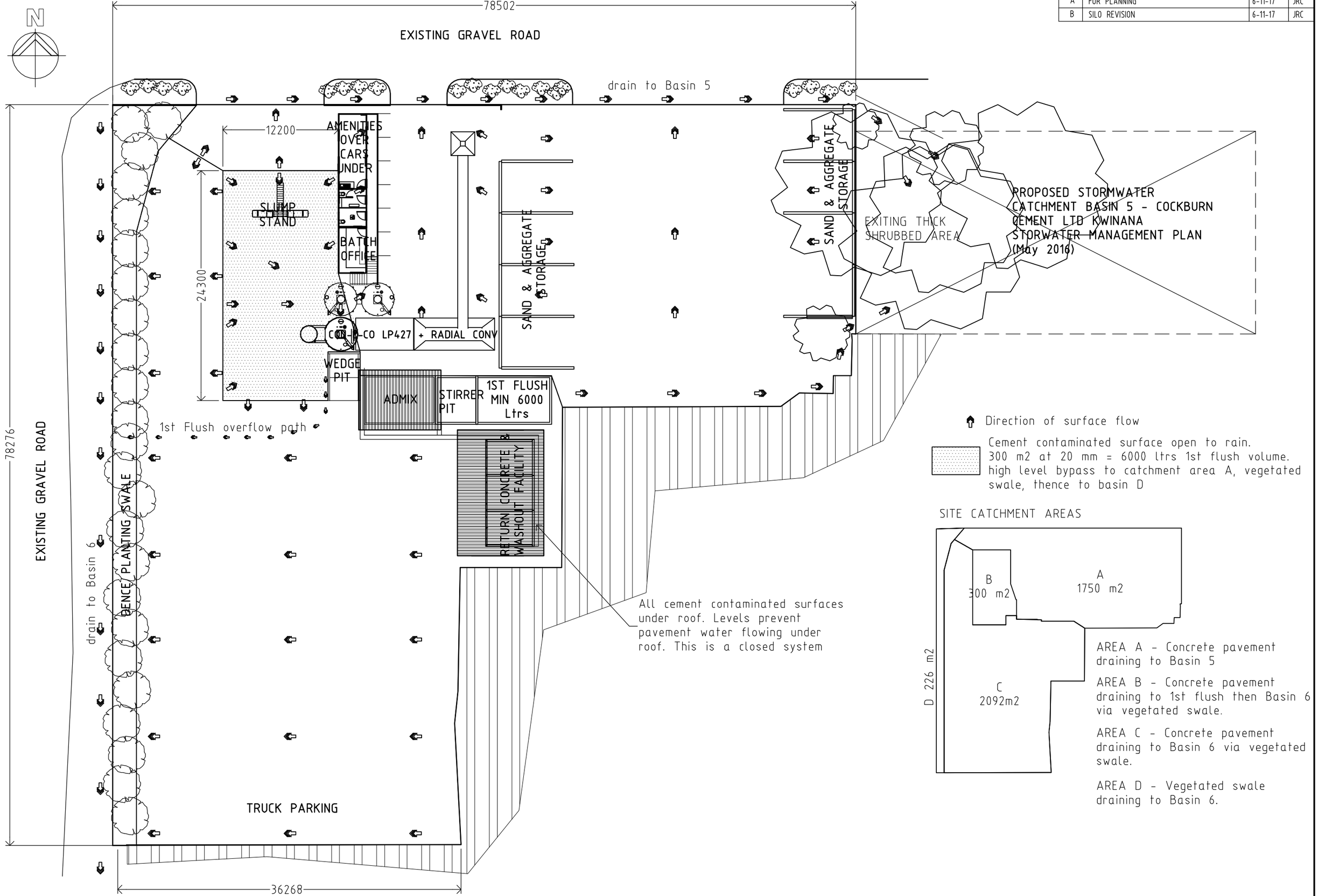
CLIENT/JOB # HY-TEC
PROJECT - KWINANA
CAD FILE #

PROPOSED RELOCATION OF MOBILE PLANT TO BUILD FIXED PLANT

DWG NO. HYT-17-2255-FP-A4

REV B

Rev	Description	Date	By
A	FOR PLANNING	6-11-17	JRC
B	SILO REVISION	6-11-17	JRC



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CLIENT/JOB # HY-TEC	PROPOSED MOBILE PLANT SITE PLAN	DWG NO.	REV
PROJECT - KWINANA	STORMWATER MANAGEMENT OVERVIEW	HYT-17-2255-MP-A5	B
CAD FILE #			

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Rev	Description	Date	By
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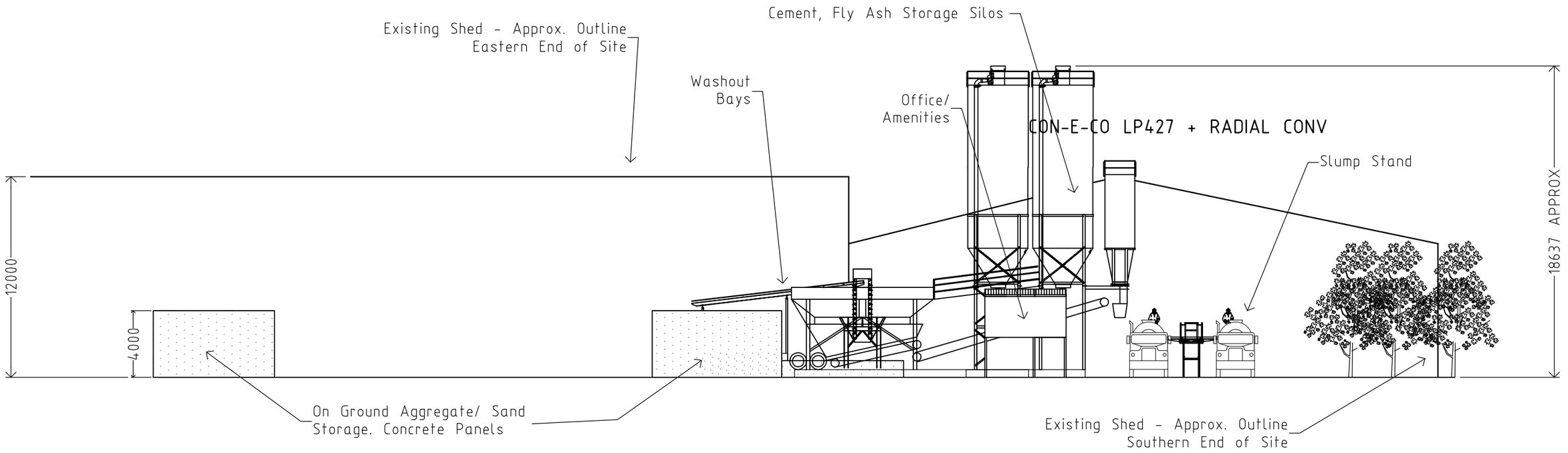
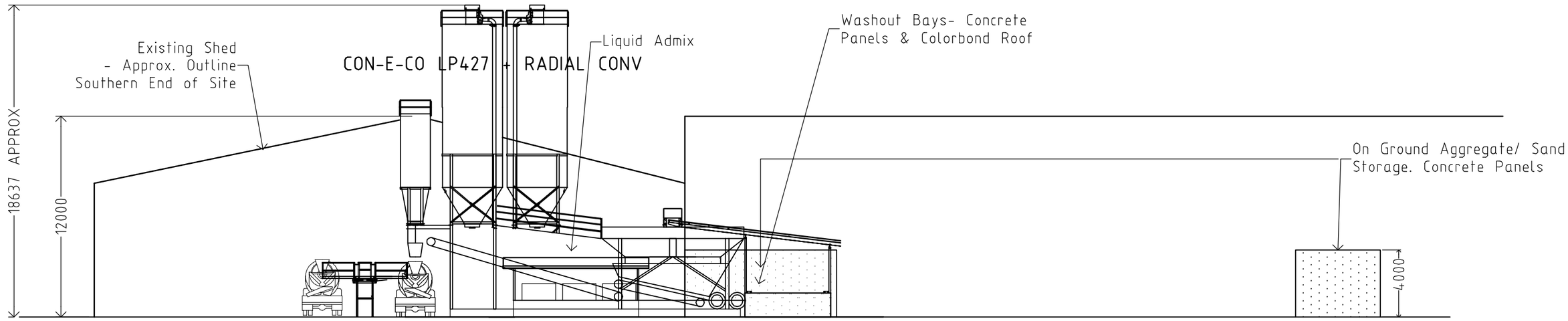
B	SILO REVISION	6-11-17	JRC



NORTHERN ELEVATION



SOUTHERN ELEVATION

TCH ABN 50 067 884 119	TAIT CONDON PTY LTD 57 MIDDLETON RD DEE WHY NSW 2099 PH 02 9972 1207 FAX 02 9972 1227	CLIENT/JOB # HY-TEC PROJECT - KWINANA CAD FILE #	PLANT ELEVATIONS	DWG NO. HYT-17-2255-MP-A6 / REV B

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Rev	Description	Date	By
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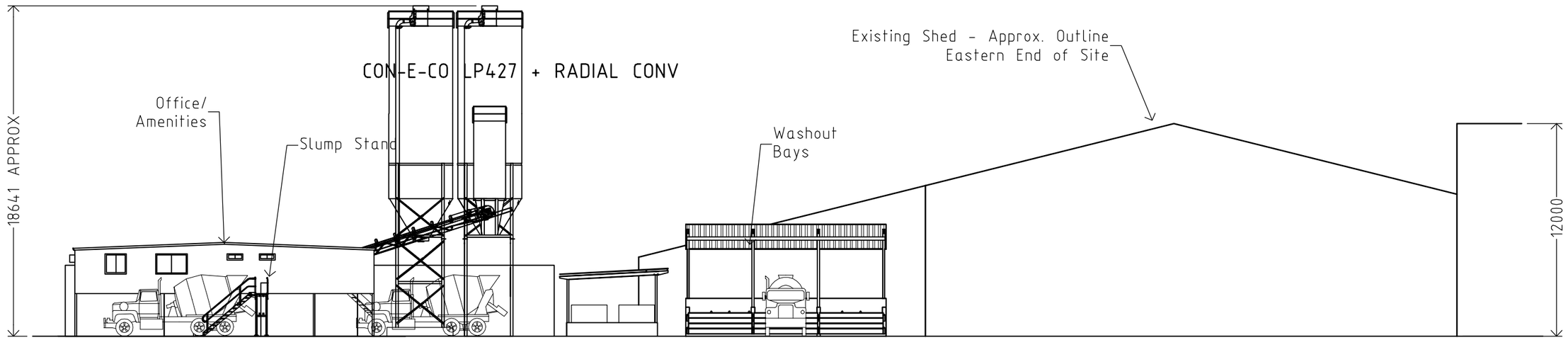
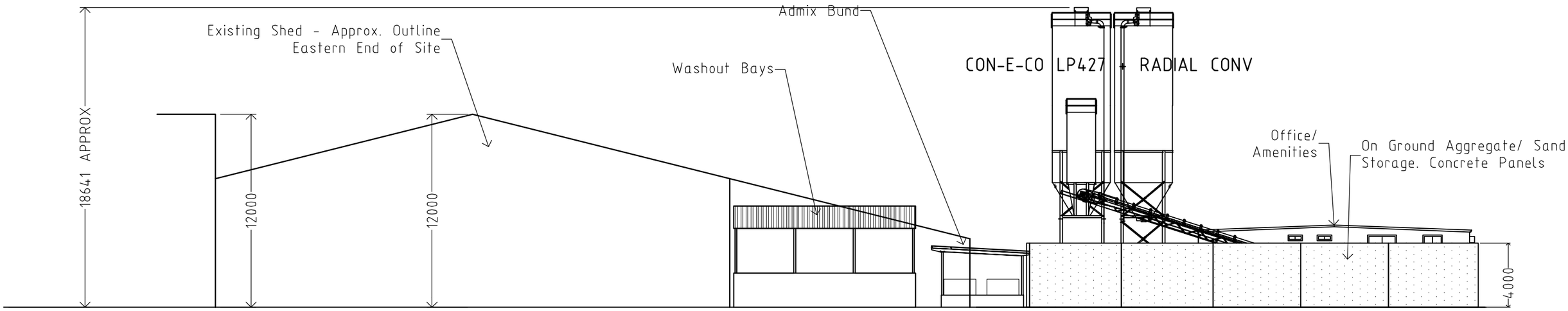


WEST ELEVATION



EAST ELEVATION

TCH
ABN 50 067 884 119
TAIT CONDON PTY LTD
57 MIDDLETON RD DEE WHY NSW 2099
PH 02 9972 1207 FAX 02 9972 1227

CLIENT/JOB # HY-TEC	PLANT ELEVATIONS	DWG NO.	REV
PROJECT - KWINANA		HYT-17-2255-MP-A7	B
CAD FILE #			

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Rev	Description	Date	By
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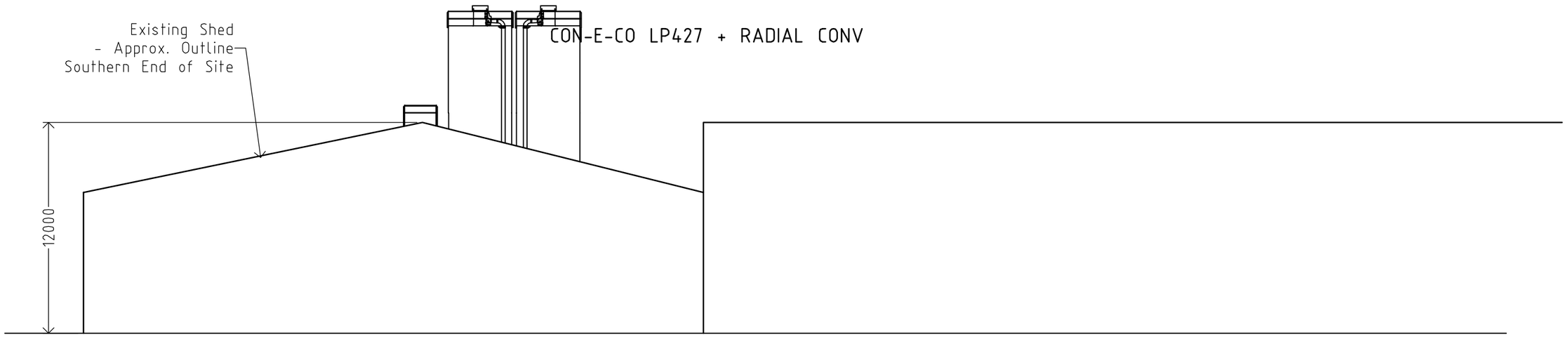
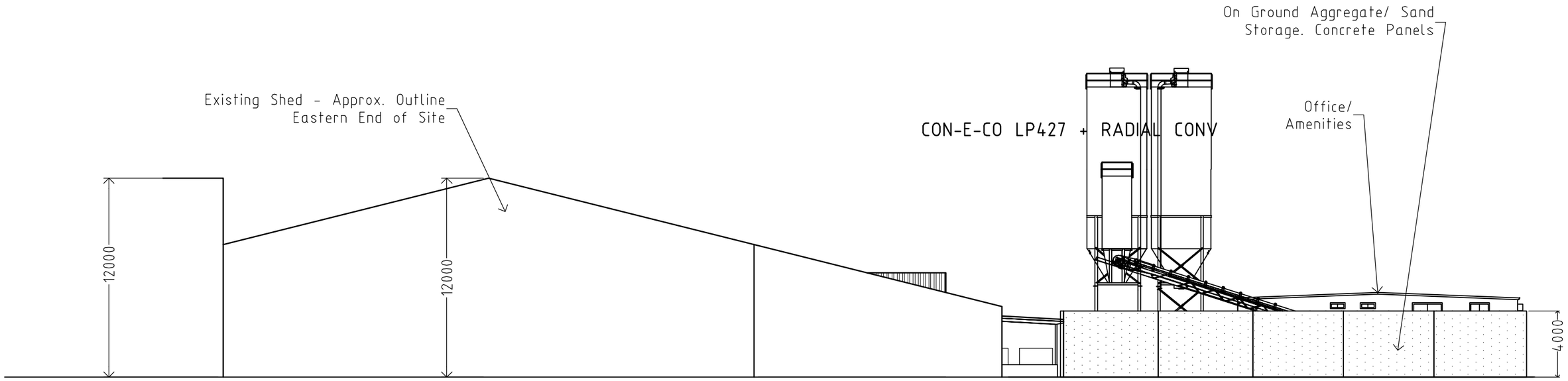
B	SILO REVISION	6-11-17	JRC



SOUTHERN ELEVATION SHOWING EXISTING BUILDINGS IN FOREGROUND



EASTERN ELEVATION SHOWING EXISTING BUILDINGS IN FOREGROUND

TCH
ABN 50 067 884 119
TAIT CONDON PTY LTD
57 MIDDLETON RD DEE WHY NSW 2099
PH 02 9972 1207 FAX 02 9972 1227

CLIENT/JOB # HY-TEC	PLANT ELEVATIONS	DWG NO.	REV
PROJECT - KWINANA		HYT-17-2255-MP-A8	B
CAD FILE #			

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Rev	Description	Date	By
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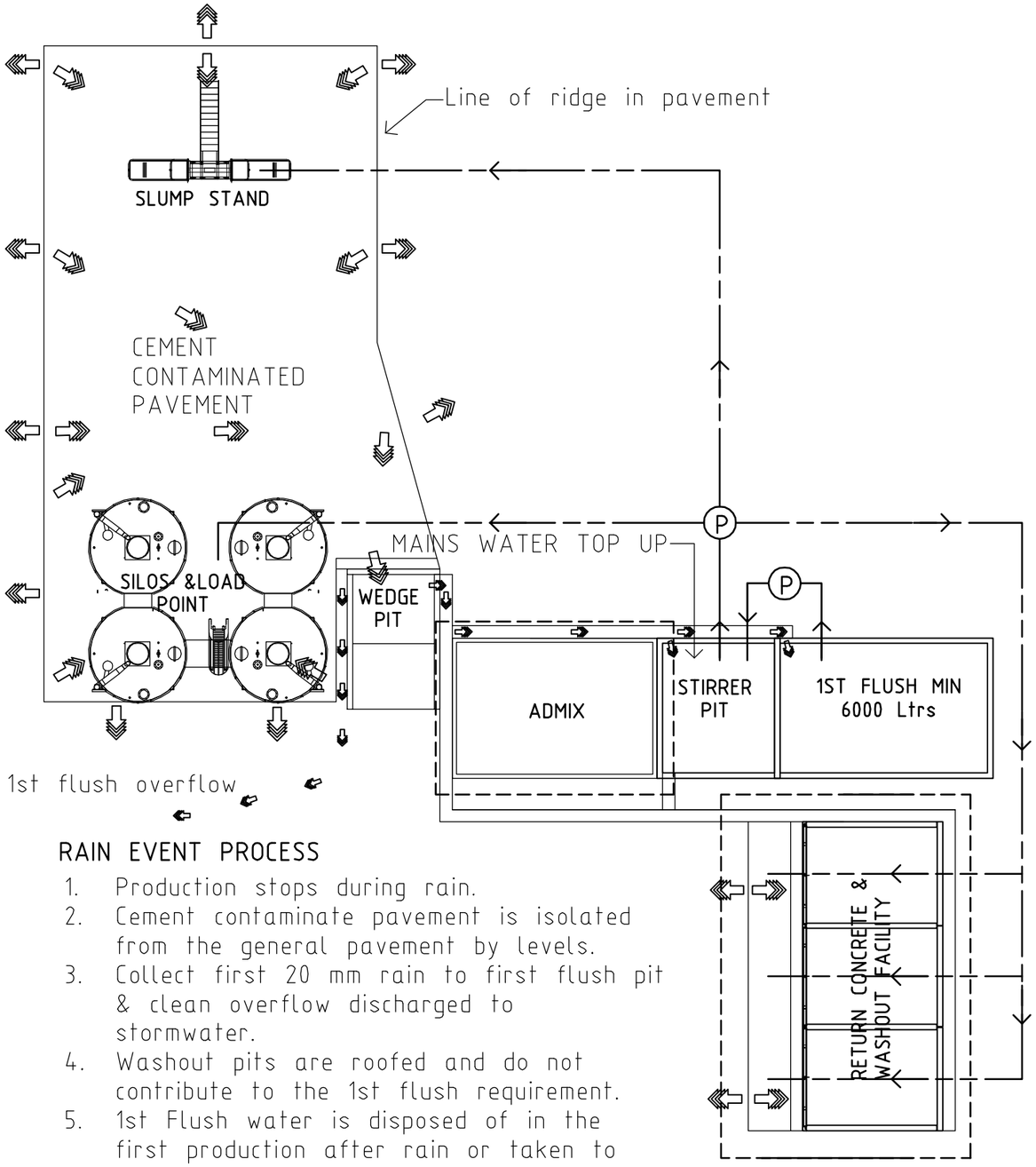
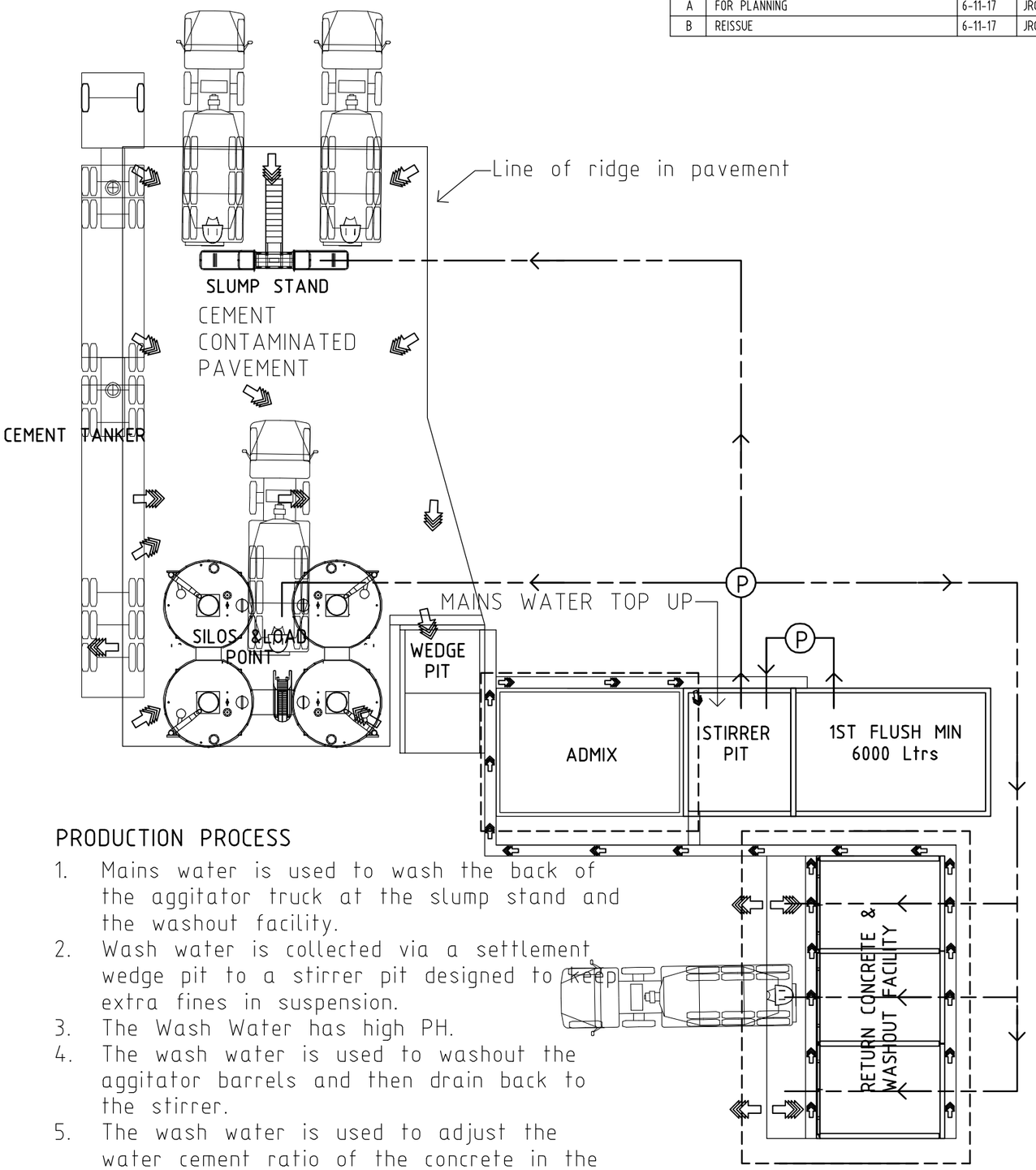
B	REISSUE	6-11-17	JRC



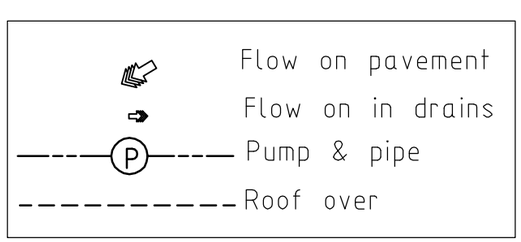
RAIN EVENT PROCESS

1. Production stops during rain.
2. Cement contaminate pavement is isolated from the general pavement by levels.
3. Collect first 20 mm rain to first flush pit & clean overflow discharged to stormwater.
4. Washout pits are roofed and do not contribute to the 1st flush requirement.
5. 1st Flush water is disposed of in the first production after rain or taken to waste.



PRODUCTION PROCESS

1. Mains water is used to wash the back of the aggitator truck at the slump stand and the washout facility.
2. Wash water is collected via a settlement wedge pit to a stirrer pit designed to keep extra fines in suspension.
3. The Wash Water has high PH.
4. The wash water is used to washout the aggitator barrels and then drain back to the stirrer.
5. The wash water is used to adjust the water cement ratio of the concrete in the aggitator at the slump stand and leaves site with the batch.
6. The wash water is used to batch concrete and leaves site with the batch.
7. Generally demand at steps 5 & 6 is greater than the supply from 1. and the stirrer is topped up with mains as required.



TCH
TAIT CONDON PTY LTD
ABN 50 067 884 119
57 MIDDLETON RD DEE WHY NSW 2099
PH 02 9972 1207 FAX 02 9972 1227

CLIENT/JOB # HY-TEC	STORM AND PRODUCTION WATER MANAGEMENT	DWG NO.	REV
PROJECT - KWINANA	COMMON TO BOTH MOBILE AND FIXED PLANT	HYT-17-2255-MP-A9	B
CAD FILE #			

17.9 Adoption of Revised Cost Development Contribution Plan Reports for Development Contribution Areas 3 and 4 (Common/Civil Infrastructure Items)

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

The purpose of this report is for Council to adopt revised Development Contribution Plan reports (DCP Reports) for Development Contribution Areas (DCAs) 3 and 4 (refer Attachment A for DCA map). DCAs 3 and 4 comprise the areas of Casuarina and Anketell, respectively, under Schedule V of the City of Kwinana Local Planning Scheme No. 2 (LPS2).

Council adopted the current DCP Reports for DCAs 3 and 4 at its Ordinary Meeting of 14 August 2019.

In recent months and during discussions with landowners within DCAs 3 and 4, City Officers have become aware that the upgrade of Thomas Road – which is a DCP infrastructure item within both DCAs 3 and 4 - has become a high priority for landowners and developers within these DCAs. The upgrade and associated intersection along Thomas Road is necessary for access into commercial land and future residential estates in Casuarina and Anketell.

Council is requested to change the priorities in the DCP Reports for DCAs 3 and 4 to reflect the more imminent priority nature of the Thomas Road item. This will allow Council to direct payments from DCP contributors (that is, landowners and developers) in DCAs 3 and 4 into the upgrade item.

Main Roads WA are offering to pay $3.3 million toward the Thomas Road upgrade at this time. Again, this makes the Thomas Road project more attractive for priority investment.

It is recommended that Council adopts the revised DCP reports for DCAs 3 and 4, as per the Officer Recommendation.

OFFICER RECOMMENDATION:

That Council adopts the revised Development Contribution Plan reports (as per Attachments B and C) for Development Contribution Areas 3 and 4, which comprises the areas of Casuarina and Anketell under Schedule V of the City of Kwinana Local Planning Scheme No. 2 to bring Thomas Road upgrades to the highest priority listing.

DISCUSSION:

Notwithstanding that a standard annual review and subsequent adoption sought by Council of the DCAs 2-7 CAS and DCP Reports is due by approximately May 2020, the adoption of the revised DCP 3 and 4 Reports is considered important in order to more accurately reflect the current rate of development and enable DCP funds to be directed to the Thomas Road upgrade as a matter of priority.

17.9 ADOPTION OF REVISED COST DEVELOPMENT CONTRIBUTION PLAN REPORTS FOR DEVELOPMENT CONTRIBUTION AREAS 3 AND 4 (COMMON/CIVIL INFRASTRUCTURE ITEMS)

It is quite appropriate for Council to amend the DCP Reports from time to time according to development priorities. A vital function of developer contribution schemes is to facilitate construction of key infrastructure items to enable development. In this case, Thomas Road has emerged as a key priority as its development will help unlock additional investment and road access to the urban areas to the north and south of Thomas Road. In addition, Main Roads WA is offering to pay $3.3 million toward the Thomas Road upgrade at this time. Again, this makes the Thomas Road project more attractive for priority investment.

Currently, each DCP Report for DCAs 3 and 4 has a respective Priority Listing of 3 for the Thomas Road upgrade.

It must be noted that in DCA4, given the Treeby Road infrastructure item has already been completed, this will remain as priority 1, while Thomas Road would be moved from Priority 3 to Priority 2 in DCA4. In DCA3, no DCP works have been completed and thus the Thomas Road item will move to the Priority 1 position.

Imminent and short-term development within DCAs 3 and 4 cannot proceed without the upgrade, however no payment is due to the respective DCP account until the land is developed, creating a challenge in this regard. The reallocation of priorities will address this and allow the existing funds within the DCP 3 and 4 accounts to be allocated to this project. To date, portions of three lots within DCA4 have been developed and thus DCP funds have been received from these landowners, as applicable. No further development of land has occurred within DCA3. In this regard, there is currently $537,753 in the DCA4 DCP account.

LEGAL/POLICY IMPLICATIONS:

Acts and Regulations

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 Planning Policies

State Planning Policy 3.6 Development Contributions for Infrastructure

Local Planning Policies

Local Planning Policy 4: Administration of Development Contributions

The City's LPS2 requires, in the first instance, Council's adoption of the CAS within 90 days of the gazettal of the related DCP Scheme Amendment, and then an annual review of the Cost Apportionment Schedule. Should this review not be undertaken, the City would not be fulfilling its obligations under the Scheme.

17.9 ADOPTION OF REVISED COST DEVELOPMENT CONTRIBUTION PLAN REPORTS FOR DEVELOPMENT CONTRIBUTION AREAS 3 AND 4 (COMMON/CIVIL INFRASTRUCTURE ITEMS)

Clauses 6.16.5.11.6 and 6.16.5.12.3 of LPS2 afford landowners the right to object to a cost contribution or associated land valuation through a process of arbitration, within 28 days after being informed of the cost contribution or land valuation.

FINANCIAL/BUDGET IMPLICATIONS:

It is important that the revised DCP 3 and 4 Reports are adopted. This will ensure that the provision of infrastructure occurs on an equitable, timely and appropriate basis, and gives surety to the City, landowners and developers.

All infrastructure items and funding sources, where known, have been reflected in the City's LTFP.

ASSET MANAGEMENT IMPLICATIONS:

The City will be financially responsible for maintaining roads, road landscaping, POS landscaping and footpaths within DCAs 3 and 4 once the area has been developed and maintained for the required period.

ENVIRONMENTAL IMPLICATIONS:

No environmental implications have been identified as per this report.

STRATEGIC/SOCIAL IMPLICATIONS:

The adoption of the revised DCP 3 and 4 Reports will ensure that the provision of infrastructure occurs on an equitable and appropriate basis for new development areas and is in line with community growth and subsequent need.

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:

The previous Cost Apportionment Schedule (adopted 22 May 2019) was subject to separate review and consultation discussions in conjunction with landowners/developers, both prior to and following gazettal of Amendment 100A for DCAs 2-7.

Once adopted by Council, the revised DCP 3 and 4 Reports will be available on the City's website and all associated informing documents (including land valuation and costings estimates) available upon request.

17.9 ADOPTION OF REVISED COST DEVELOPMENT CONTRIBUTION PLAN REPORTS FOR DEVELOPMENT CONTRIBUTION AREAS 3 AND 4 (COMMON/CIVIL INFRASTRUCTURE ITEMS)

PUBLIC HEALTH IMPLICATIONS:

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

RISK IMPLICATIONS:

Risk Event	Priority Listings of DCP infrastructure items not updated and adopted to reflect contextually significant changes to and opportunities within DCAs
Risk Theme	Statutory obligations not being fulfilled.
Risk Effect/Impact	Service Delivery
Risk Assessment Context	Operational
Consequence	Moderate
Likelihood	Possible
Rating (before treatment)	Moderate
Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Update and adopt DCP Reports as soon as possible after changes have been identified
Rating (after treatment)	Moderate

COUNCIL DECISION

039

MOVED CR W COOPER **SECONDED CR P FEASEY**

That Council adopts the revised Development Contribution Plan reports (as per Attachments B and C) for Development Contribution Areas 3 and 4, which comprises the areas of Casuarina and Anketell under Schedule V of the City of Kwinana Local Planning Scheme No. 2 to bring Thomas Road upgrades to the highest priority listing.

CARRIED
7/0

ATTACHMENT A



ATTACHMENT B

1.0 Development Contribution Plan 3 – Casuarina

The development contribution area is shown on the Local Planning Scheme No. 2 (LPS2) scheme map as Development Contribution Area 3 (DCA3). The area is replicated in Figure 1 below however, should there be any discrepancies between the area shown below and the area of DCA3 shown on the scheme map, the scheme map shall prevail.

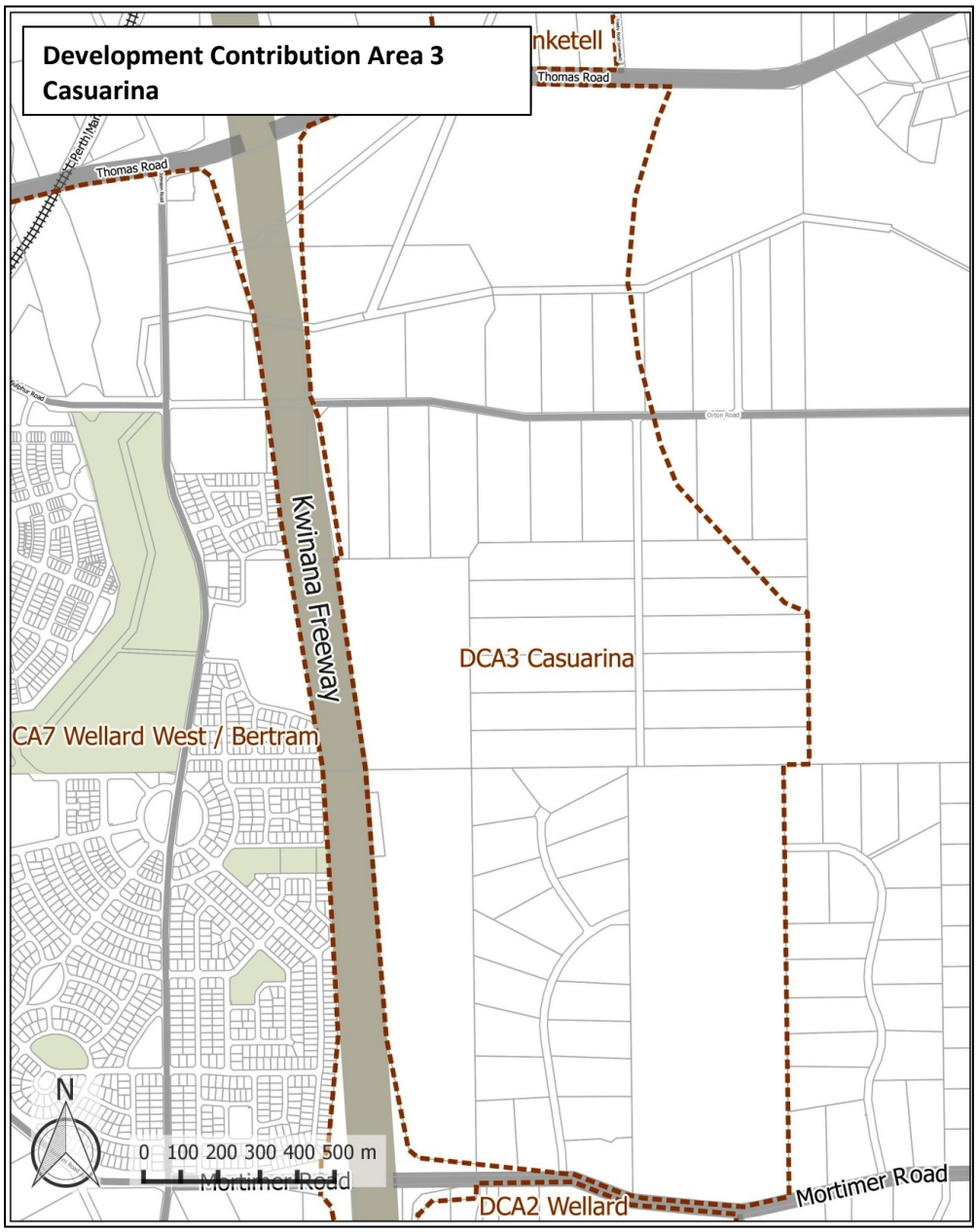


Figure 1: Development Contribution Area 3 – Casuarina

2.0 Purpose

The purpose of this development contribution plan report is to:

a) Enable the application of development contributions for the development of new, and the upgrade of existing infrastructure which is required as a result of increased demand generated in the development contribution area;

b) Provide for the equitable sharing of the costs of infrastructure and administrative items between owners;
c) Ensure that cost contributions are reasonably required as a result of the subdivision and development of land in the development contribution area; and
d) Coordinate the time provision of infrastructure.

This report expands on the LPS2 provisions for DCA3 (see Appendix 1).

3.0 Relevant plans and documents

While preliminary structure planning work has been undertaken for DCA3, nothing has been formally advertised or adopted to date. Therefore the land area within DCA3 (both gross subdivisible area and developable area) is based on estimates. These estimated land areas may change upon adoption of any future structure plan over DCA3, which will therefore effect the cost contributions under the proposed DCP.

Nonetheless, development within DCA3 and the identification of infrastructure items within this plan are guided contextually by the following plans and documents:

- WAPC Jandakot Structure Plan 2007
- City of Kwinana Eastern Residential Intensification Concept 2005 (draft)
- Lifting of Urban Deferment: Casuarina Cell, Jandakot Structure Plan Area, Rowe Group 2012
- Council-adopted Local Structure Plan – Casuarina Cell Northern Precinct and Concept Plan (Aigle Royal Properties Pty Ltd 2018)
- Draft Concept Plan – Casuarina Cell Central Precinct (TBB 2018)
- Local Structure Plan – Anketell South, Lots 1, 2, 3 & 17 Thomas Road & Portion Lot 13 Treeby Road, Anketell (approved May 2014, Rowe Group)
- Local Structure Plan Amendments 1, 2, 3 and 4 – Anketell North (2017/2018)
- Local Structure Plan - Anketell North (approved December 2015, Rowe Group)
- Wellard East Local Structure Plan (last amended April 2014) – prepared by Cardno/Roberts Day for the Sunrise Estate development (Armana P/L)
- Wellard East (Lot 90 and part Lot 378 Millar Road) Local Structure Plan (May 2014) – prepared by Cardno for the Wellard Glen development (DJ MacCormack Property Group)
- Amended Wellard East Local Structure Plan to include Lot 601 Millar Road (prepared by Michael Swift and Associates, 2015)
- Lot 64 Woolcoot Road, Wellard East Local Structure Plan (Rowe Group 2015)
- Lot 59 Mortimer Road Local Structure Plan (Peter D Webb and Associates 2016)
- Part Lot 9001 and Lot 379 Millar Road – Sunrise Estate southern extension (Lorraine Elliott Planning Services on behalf of Armana P/L 2015)

- State Planning Policy 3.6: Development Contributions for Infrastructure, WAPC
- Liveable Neighbourhoods 2009, WAPC
- Development Control Policy 1.7: General Road Planning, WAPC
- Development Control Policy 2.3: Public Open Space in Residential Areas, WAPC

4.0 Period of the Plan

This plan will operate for 10 years from 3 October 2017 to 3 October 2027, in accordance with Local Planning Scheme No. 2.

5.0 Operation of Development Contribution Plan

This plan has been prepared in accordance with *State Planning Policy 3.6: Development Contributions for Infrastructure* and operates in accordance with the provisions of section 6.16.5 Development Contribution Areas of LPS2.

6.0 Application Requirements

Where a subdivision, strata subdivision or development application or an extension of land use is lodged which relates to land to which this plan applies, Council shall take the provisions of the plan into account in making a recommendation on or determining that application, in accordance with Part 6.16.5 of LPS2.

7.0 Compliance with the principles underlying Development Contributions outlined in *SPP3.6: Development Contributions for Infrastructure*

7.1 Need and the nexus

The need for the items of standard infrastructure arises directly from the urban development of the land made possible by the rezoning of the land. The need and nexus will be discussed separately for each item of infrastructure later in this report.

7.2 Transparency

The costs for each infrastructure item are apportioned on a land area basis, taking into account the constraints on the land's development potential and are consistent with the adopted local structure plan for the western portion of the Casuarina North Precinct and current draft local structure plans/concept plans for the remainder of the Casuarina North Precinct and the Casuarina Central Precinct of the DCA, where applicable.

These estimated land areas may change upon adoption of any future structure plan over DCA3, which will therefore effect the cost contributions under the proposed DCP.

The costs for each infrastructure item have been independently reviewed by consultants on behalf of the City. A further break down of the estimated costs is available upon request.

The cost apportionment schedule will be reviewed and updated annually as per the LPS2 provisions. This process will include a review of the infrastructure costs against current industry standards by an independent qualified consultant and will be publically available.

7.3 Equity

The costs of each item of infrastructure are shared by landowners on a land area basis, taking into account limitations of the land affecting development, such as wetland areas, transmission easements, 1:1 drainage areas and the like. The resulting area of land able to be developed is determined with reference to the adopted local structure plan or concept plan in place for the DCA.

7.4 Certainty

It is anticipated that most of the items of infrastructure included in this DCP will be provided by developers within the DCA as part of their subdivision works. Where this will not occur, this DCP report provides an indication of the likely delivery of infrastructure items, however it will largely depend on the level of uptake of development within this and, where applicable, the adjoining DCA.

7.5 Efficiency

Development contributions reflect the initial up-front capital cost, including the two year establishment cost.

7.6 Consistency

Development contributions for this DCA will be applied uniformly across the whole DCA area on a land area basis, where the land has been identified to contribute to the infrastructure item.

7.7 Right of consultation and arbitration

The DCP provisions under LPS2 afford landowners the right to review a Cost Contribution and provide for resolution through arbitration.

7.8 Accountability

The costs for each infrastructure item are to be reviewed annually and the Cost Apportionment Schedule updated accordingly. All documents will be publically available on the City's website following adoption by Council.

As per LPS2, a Statement of Accounts showing all revenue and expenditure for the DCP is to be prepared for each financial year and audited by the City's auditors. The audited statements will be publically available.

8.0 Characteristics of Development Contribution Area

As stated previously, limited local structure planning has occurred within DCA3 and therefore the land areas shown in Table 1 below are estimated and will be subject to change depending on the final configuration of local structure plans for DCA3.

Table 1 presents the key characteristics of DCA3:

Total land area	267.6251 ha
Gross subdivisible area[1]	147.167 ha
Developable area[2]	184.9001 ha

Table 1: Characteristics of future development within DCA3

9.0 Items included in the plan

[1] Gross subdivisible area is defined as per Liveable Neighbourhoods and is the total site area less deductions for non-residential uses such as school sites, commercial land, drainage sites and related land uses and community facilities etc, which also includes EPP Wetlands to be ceded and any restricted Public Open Space (POS) not calculated in a Local Structure Plan contribution.

[2] Developable area is defined as the total site area less areas for schools, community facilities, dedicated drainage reserves, regional open space, Environment Protection Policy areas, transmission and infrastructure corridors, and land for regional roads.

This section of the DCP report identifies the infrastructure and land to be funded by development contributions collected from landowners within DCA3. The land valuation prepared by Colliers International, based on the Static Feasibility model contained within Schedule 8 of the City's LPS2, notes a per/hectare land valuation for DCA3 of $580,000.

9.1 Roads

Figure 2 below indicates the road infrastructure to be coordinated and funded by DCP3.

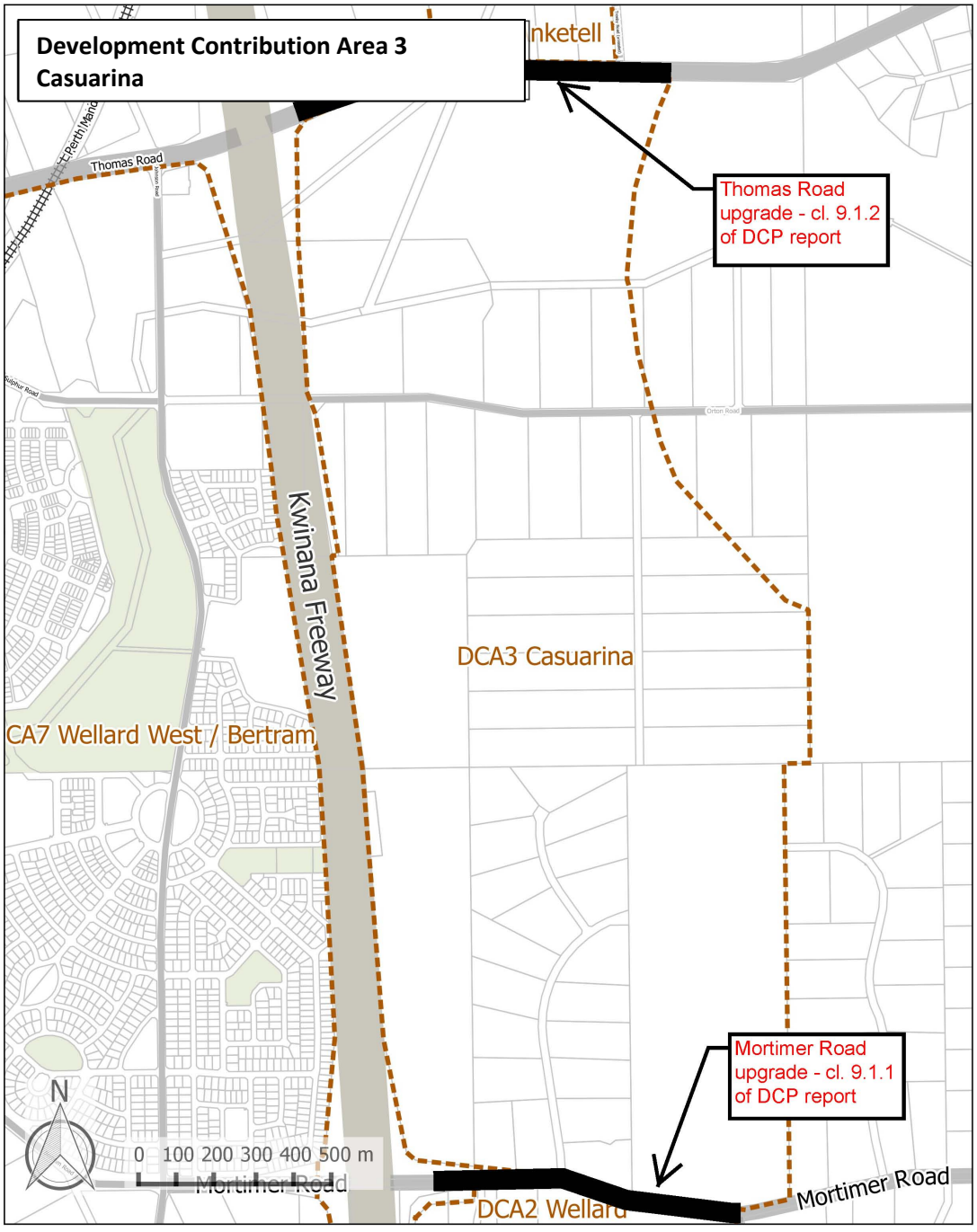


Figure 2: Road infrastructure

9.1.1 Mortimer Road

Mortimer Road is a District Distributor (B) with direct freeway access from both directions and an estimated 2,200 vpd[3]. Mortimer Road is a two lane unkerbed road that operates at a zoned speed of 80kmph.

It is estimated that traffic volumes on Mortimer Road will increase to 3,120 vpd (west of Woolcoot Road) and to 8,450 vpd (west of Wake Way) as a result of additional traffic generated from development within the southern adjoining cell, Development Contribution Area 2 – Wellard East.[4] Furthermore, the development of at least 2,000 dwellings in DCA3, will generate more traffic to Mortimer Road[5]. Due to the significant increase in traffic, there is a need to upgrade Mortimer Road to improve the capacity of the road and to contribute to overall traffic network efficiency.

Whilst under Liveable Neighbourhoods a District Distributor B (Integrator Arterial B) would ordinarily require a 25.2m wide reservation and consist of 2 x 7.5 metre carriageways with on street parking, the upgrades to Mortimer Road will be limited to realignment and reconstruction of the current road to a 7.4m pavement width, as well as the installation of a 2.5m wide dual use path. Additional items include:

- Construction of two roundabouts at the junctions of Woolcoot Road and the Neighbourhood Connector (within DCA2);
- Drainage to both sides of Mortimer Road;
- Street lighting; and
- The undergrounding of power.

The cost contribution for DCA3 towards the Mortimer Road upgrade, including land acquisition (1,361m^2), traffic management, design, construction, landscaping and contingency (20%) is **$2,854,504**. Mortimer Road will also be used by new development within the southern adjoining development cell, DCA 2 – Wellard East, so the costs of the upgrades have been distributed based on a proportionate land area basis; demonstrated in the following table:

Development Contribution Area	Developable Land Area	Proportion	Contribution
2 – Wellard	88.8675ha	32.46%	$1,371,944
3 – Casuarina	***184.9001ha***	***67.54%***	***$2,854,504***
Total	273.7676ha	100%	$3,993,960 (road costs)+ $153,550 (landscaping costs)+$78,938 (land acquisition) = **$4,226,448**

Table 2: Apportionment of Mortimer Road upgrade costs between DCA2 and DCA3

Due to the connectibility provided by the Neighbourhood Connector to Mortimer Road and Mortimer Road's access to the Kwinana Freeway, it is anticipated that Mortimer Road will be used by all new development within DCA3. Therefore development within all of DCA3 will contribute to the Mortimer Road upgrade.

9.1.2 Thomas Road

[3] Wellard East Local Structure Plan August 2011, Appendix D: Traffic Assessment Report, Shawmac, page 11.
[4] Ibid, page 27.
[5] A traffic assessment of the anticipated development of the Casuarina cell has not yet been undertaken, however it is reasonable to estimate additional traffic on Mortimer Road from the Casuarina cell in the magnitude of 1,000 – 5,000 additional vpd based on a similar methodology as that used for the Wellard East LSP Traffic Assessment Report.

Thomas Road is classified as a District Distributor A Road and is constructed as a single carriageway road in the vicinity of DCA3. The current posted speed on Thomas Road in this vicinity is 90km/h. Traffic data from Main Roads WA indicates about 9,600 vpd east of the Kwinana Freeway (2008) and about 16,600 vpd at the bridge over Kwinana Freeway (2007)[6].

The development of at least 2,000 dwellings in DCA3, will generate considerably more traffic to Thomas Road[7]. It is further estimated that traffic volumes on Thomas Road will increase by approximately 4,200 vpd as a result of additional traffic generated from development within DCA4 (700 vpd from Anketell North LPS and 3,500 vpd from Anketell South LSP)[8&9].

Thomas Road is required to be upgraded to an urban standard as approved and required by Main Roads WA for a length of approximately 1,100m – to the Urban boundary near Bombay Boulevard - to join the existing dual carriageway to the west of DCA3. Further details of the Thomas Road upgrade include:

- Construction of a four way roundabout at the junction of the Integrator B from Anketell South and future northern connection from Casuarina;
- Three intersections with Access Streets (left in, left out);
- Drainage;
- Street lighting;
- Undergrounding of power;
- Dual use paths to both sides; and
- Landscaping to medians and swales.

The total cost of the Thomas Road upgrade, including traffic management, design, construction, landscaping and contingency (20%), is estimated to be **$6,607,287.20.**

The costs of the Thomas Road upgrades have been distributed between DCA3 and DCA4 based on a proportionate land area basis, demonstrated in the following table:

Development Contribution Area	Developable Area	Proportion	Contribution
DCA 3 - Casuarina*	***184.9001***	***61.28%***	***$4,048,974.15***
DCA 4 - Anketell	116.83	38.72%	$2,558,313.05
Total	301.7278	100%	$5,904,000 (road costs)+ $703,287 (landscaping costs) = **$6,607,287.20**
**** largely estimated figures as only a partial LSP has been adopted by Council**			

Table 3: Apportionment of Thomas Road upgrade costs between DCA3 and DCA4

9.2 Drainage

Within DCA3, there are four portions of the Peel sub drain system which are generally in an unsuitable state for a residential area. Upgrading of these sub drains is necessary to improve their appearance, safety and to better integrate the sub drains into any adjoining public open space. Due

[6] Anketell (South) Local Structure Plan January 2014, Appendix 10: Traffic Report (Transcore), Oct 2013, page 4.
[7] A traffic assessment of the anticipated development of the Casuarina cell has not yet been undertaken, however it is reasonable to estimate additional traffic on Thomas Road from the Casuarina cell in the magnitude of 5,000 additional vpd based on a similar methodology as that used for the Wellard East LSP Traffic Assessment Report, page 18.
[8] Ibid, page 9.
[9] Anketell (North) Local Structure Plan July 2010, Appendix 5: Traffic Report (Transcore), June 2010, page 10.

to the sub drains crossing various landholdings, the upgrade costs shall be collected as part of the DCP.

The location of the sub drains are shown in Figure 2 below:

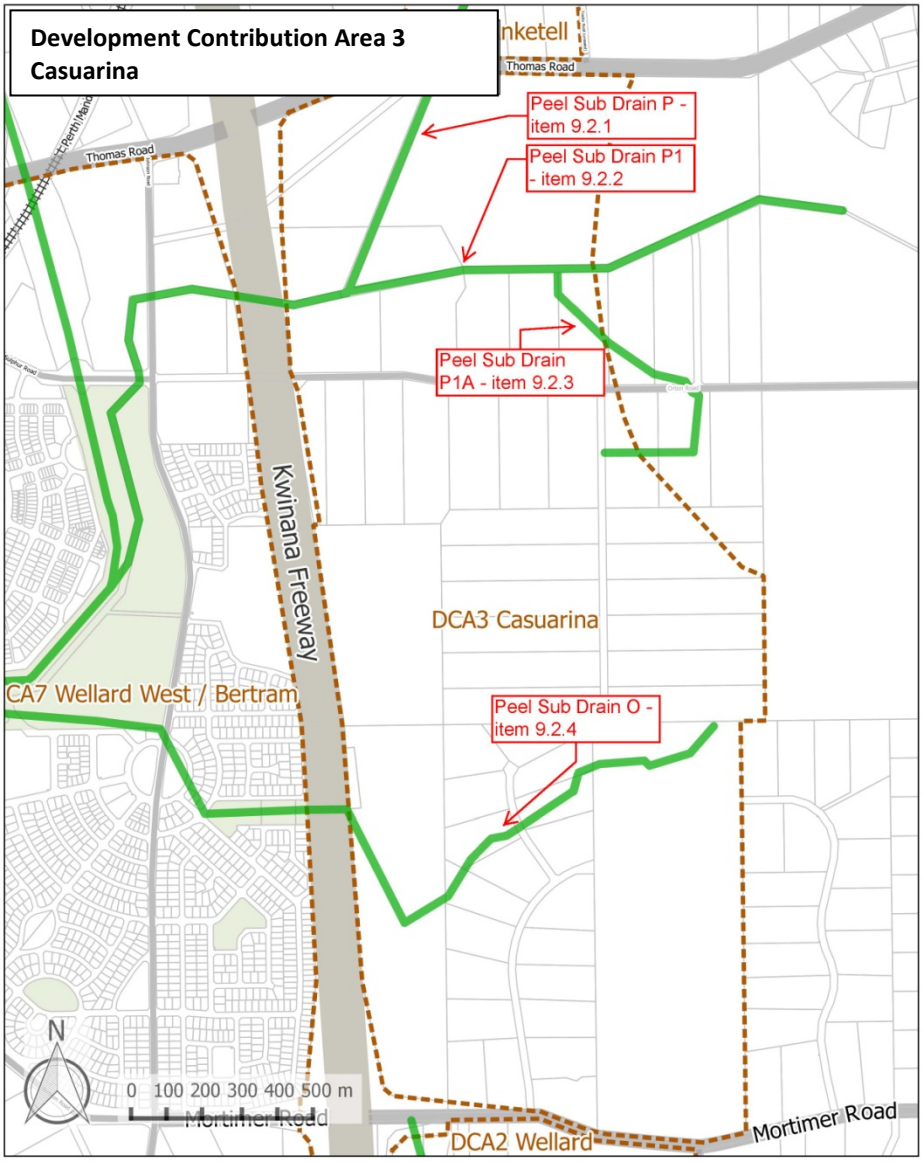


Figure 2: Location of Peel sub drains

While a number of potential treatments for the sub drains had previously been assessed, it was considered that the Living Stream treatment is the most cost-effective and contextually appropriate treatment for areas adjacent to future proposed residential land and POS, with piped sections of the sub-drains considered most appropriate within non-residential areas, including proposed commercial land.

9.2.1 Peel Sub Drain P

Sub Drain P extends 810m through DCA3 and is between 1000 and 1500mm deep. The estimate for the treatment of this sub-drain was originally for a Living Stream, however given the land use surrounding the sub-drain is approved for commercial land, it is more contextually appropriate for

the sub-drain to be piped. The cost to undertake piping works is **$1,040,000**, with the estimate as follows:

Proposed Piping of Portions of Peel Sub P Drain, Casuarina **M16718 31.01.19**					
Opinion of Probable Cost					
Description	**Unit**	**QTY**	**$/unit**	**Cost**	**Ref**
Preliminaries	Item	1	$ 40,000	$ 40,000	
Remove Existing Headwall at Thomas Road incl traffic management	No.	1	$ 15,000	$ 15,000	
Clean out existing open drain	m	810	$ 50	$ 41,000	
Dispose of material/vegetation	Item	1	$ 12,000	$ 12,000	
Grade Invert	m	810	$ 5	$ 5,000	
Supply and Install 900 Dia Class 3 RC RRJ pipe	m	646	$ 494	$ 320,000	
Supply and Install 1500 Dia Class 3 RC RRJ pipe	m	169	$ 1,685	$ 285,000	
Backfill with clean sand and compact for 900 Dia pipe	m3	1390	$ 25	$ 35,000	SIZE 3.0 x 1.0m
Backfill with clean sand and compact for 1500 Dia pipe	m3	665	$ 25	$ 17,000	SIZE 4.8 x 1.3m
Construct manhole structure to connect culverts under Thomas Road	Item	1	$ 15,000	$ 15,000	
Supply and install manhole to suit 900dia pipe	No.	2	$ 5,000	$ 10,000	
Supply and Install manhole to suit 1500dia pipe	No.	1	$ 5,000	$ 5,000	
Supply and install splay bend to 1500 dia pipe	No.	1	$ 1,000	$ 1,000	
Supply and install headwall to suit 1500 dia pipe	No.	1	$ 2,000	$ 2,000	
Connect existing drainage from 45 Orton Road:					
225 dia pipe	Item	1	$ 1,000	$ 1,000	
375 dia pipe	Item	1	$ 1,000	$ 1,000	
450 dia pipe	Item	1	$ 1,000	$ 1,000	
Sub -total				$ 806,000	
Engineering and Surveying				$ 60,000	
Contingency 20%				$ 174,000	
TOTAL				**$ 1,040,000**	**Plus GST**

BPA Engineering - 2019

9.2.2 Peel Sub Drain P1

Sub Drain P1 extends 580m through DCA3 (from the P Sub-Drain to the west to the interface with the Urban/Rural-Water Resource Protection Zones to the east) and is between 1000mm and 1500mm deep. The estimated cost to improve the drain is **$948,311** and comprises two separate components – piping proposed from the P Sub-Drain to the eastern edge of the Powerline Easement (185m) and Living Stream treatment from the eastern edge of the Powerline Easement to the interface with the Urban/Rural-Water Resource Protection Zones to the east (395m). The cost of the Living Stream portion is **$688,311** and includes the 20 metre-wide reserve and includes bulk earthworks, fine grading, rockpitching, tubestock, advanced tree planting and a 10% contingency.

Key matters to note in relation to this drain include the location of the District POS. The LSP for the remaining Casuarina North Precinct is yet to be prepared and/or adopted by Council. This LSP will inform the approach necessary for Sub Drain P1.

The cost to undertake piping works for the western component of the P1 Sub-Drain is **$260,000**, with the estimate as follows:

Proposed Piping of Portions of Peel Sub P1 Drain, Casuarina M16718 31.01.29					
Opinion of Probable Cost					
Description	**Unit**	**QTY**	**$/unit**	**Cost**	**Ref**
Preliminaries	Item	1	$ 15,000	$ 15,000	
				$ -	
Remove existing pipe culvert	No.	1	$ 1,000	$ 1,000	
Clean out existing open drain	m	185	$ 50	$ 10,000	
Dispose of material/vegetation	Item	1	$ 3,000	$ 3,000	
Grade Invert	m	185	$ 5	$ 1,000	
Supply and Install 1200 Dia Class 3 RC RRJ pipe	m	185	$ 739	$ 137,000	
Backfill with clean sand and compact for 1200 Dia pipe	m3	890	$ 25	$ 23,000	SIZE 4.8 x 1.3m
Supply and install headwall to suit 1200 dia pipe	No.	1	$ 1,000	$ 1,000	
Sub -total				$ 191,000	
Engineering and Surveying				$ 25,000	
Contingency 20%				$ 43,200	
TOTAL				**$ 260,000**	**Plus GST**

BPA Engineering - 2019

The cost to undertake the Living Stream treatment for the eastern component of the P1 Sub-Drain is **$688,311**, with the estimate as follows:

Establishment cost per 10 m section	**Rate**	**unit**	**area**	**December 2018 JBA Estimate (200m^2)**
$1.50 per m^2 per annum	$1.50	m2	200	$300.00
Two Year Establishment Cost				**$600.00**
Construction cost per 10 m section <1000mm deep				
	Rate	unit	area	cost
bulk earthworks (cut to spoil, compact and final grade)	$53.00	m3	140	$7,420.00
fine grading	$1.38	m2	200	$276.00
rockpitching	$120.00	m2	10	$1,200.00
Tubestock x 3/m2	$10.50	m2	200	$2,100.00
advanced tree planting (no.)	$350.00	each	3	$1,050.00
10% Contingency				$1,204.60
total construction cost per 10 metres				**$13,250.60**
Total Establishment Cost per 10 m section				**$600.00**
TOTAL COST PER 10 M SECTION				**$13,850.60**
Construction cost per 10 m sections 1000 - 1500mm deep				
	Rate	unit	area	cost

bulk earthworks (cut to spoil, compact and final grade)	$53.00	m3	240	$12,720.00
fine grading	$1.38	m2	200	$276.00
rockpitching	$120.00	m2	20	$2,400.00
tubestock	$10.50	m2	200	$2,100.00
advanced tree planting (no.)	$350.00	m2	3	$1,050.00
10% Contingency				$1,854.60
total construction cost per 10 metres				**$20,400.60**
Total Establishment Cost per 10 m section				**$600.00**
TOTAL COST PER 10 M SECTION				**$21,000.60**

The above cost does not include tip fees or the preparation of a geotechnical report and includes a two year standard establishment cost. The rate per 10 metres is averaged between the two profiles (that is, between the <1000mm deep and 1000 – 1500mm deep), equating to $17,425.60 per 10 lineal metres.

9.2.3 Peel Sub Drain P1A

Sub Drain P1A extends 220m north of Orton Road through the Urban zoned land within DCA3 and is between 1000mm and 1500mm deep. The estimated cost to improve the drain with Living Stream treatment is **$383,363.** This includes the 20 metre-wide reserve and includes bulk earthworks, fine grading, rockpitching, tubestock, advanced tree planting and a 10% contingency.

It should be noted the section south of Orton Road, outside of the Urban zone, will remain open rural drain. At the very end of the drain, where it commences near Landgren Road, will become redundant as it will be Urban zoned land, thus no rural land to drain. North of Orton Road, the section closest to Orton Road remaining in the Rural zoned land can remain open. Thus the only section subject to the Living Stream treatment is the northern section P1A where it meets sub-drain P1.

Additional matters to note in relation to this drain include the location of the District POS. When an LSP for the remaining Casuarina North Precinct indicates this information, then piping this northern section of the P1A Sub-Drain may be a necessary consequence.

Establishment cost per 10 m section	**Rate**	**unit**	**area**	**December 2018 JBA Estimate (200m^2)**
$1.50 per m^2 per annum	$1.50	m2	200	$300.00
Two Year Establishment Cost				**$600.00**
Construction cost per 10 m section <1000mm deep				
	Rate	unit	area	cost
bulk earthworks (cut to spoil, compact and final grade)	$53.00	m3	140	$7,420.00
fine grading	$1.38	m2	200	$276.00
rockpitching	$120.00	m2	10	$1,200.00
Tubestock x 3/m2	$10.50	m2	200	$2,100.00

advanced tree planting (no.)	$350.00	each	3	$1,050.00
10% Contingency				$1,204.60
total construction cost per 10 metres				**$13,250.60**
Total Establishment Cost per 10 m section				**$600.00**
TOTAL COST PER 10 M SECTION				**$13,850.60**
Construction cost per 10 m sections 1000 - 1500mm deep				
	Rate	unit	area	cost
bulk earthworks (cut to spoil, compact and final grade)	$53.00	m3	240	$12,720.00
fine grading	$1.38	m2	200	$276.00
rockpitching	$120.00	m2	20	$2,400.00
tubestock	$10.50	m2	200	$2,100.00
advanced tree planting (no.)	$350.00	m2	3	$1,050.00
10% Contingency				$1,854.60
total construction cost per 10 metres				**$20,400.60**
Total Establishment Cost per 10 m section				**$600.00**
TOTAL COST PER 10 M SECTION				**$21,000.60**

The above cost does not include tip fees or the preparation of a geotechnical report and includes a two year standard establishment cost. The rate per 10 metres is averaged between the two profiles (that is, between the <1000mm deep and 1000 – 1500mm deep), equating to $17,425.60 per 10 lineal metres.

9.2.4 Peel Sub Drain O

Sub Drain O extends 500m through DCA3 and is approximately 1000mm deep. The estimated cost to improve the drain with Living Stream treatment is **$871,280**. This includes the 20 metre-wide reserve and includes bulk earthworks, fine grading, rockpitching, tubestock, advanced tree planting and a 10% contingency.

Establishment cost per 10 m section	**Rate**	**unit**	**area**	**December 2018 JBA Estimate (200m^2)**
$1.50 per m^2 per annum	$1.50	m2	200	$300.00
Two Year Establishment Cost				**$600.00**
Construction cost per 10 m section <1000mm deep				
	Rate	unit	area	cost
bulk earthworks (cut to spoil, compact and final grade)	$53.00	m3	140	$7,420.00
fine grading	$1.38	m2	200	$276.00
rockpitching	$120.00	m2	10	$1,200.00

Tubestock x 3/m2	$10.50	m2	200	$2,100.00
advanced tree planting (no.)	$350.00	each	3	$1,050.00
10% Contingency				$1,204.60
total construction cost per 10 metres				**$13,250.60**
Total Establishment Cost per 10 m section				**$600.00**
TOTAL COST PER 10 M SECTION				**$13,850.60**
Construction cost per 10 m sections 1000 - 1500mm deep				
	Rate	unit	area	cost
bulk earthworks (cut to spoil, compact and final grade)	$53.00	m3	240	$12,720.00
fine grading	$1.38	m2	200	$276.00
rockpitching	$120.00	m2	20	$2,400.00
tubestock	$10.50	m2	200	$2,100.00
advanced tree planting (no.)	$350.00	m2	3	$1,050.00
10% Contingency				$1,854.60
total construction cost per 10 metres				**$20,400.60**
Total Establishment Cost per 10 m section				**$600.00**
TOTAL COST PER 10 M SECTION				**$21,000.60**

The above cost does not include tip fees or the preparation of a geotechnical report and includes a two year standard establishment cost. The rate per 10 metres is averaged between the two profiles (that is, between the <1000mm deep and 1000 – 1500mm deep), equating to $17,425.60 per 10 lineal metres.

9.3 Public Open Space

Land acquisition and improvement costs for the provision of POS will be collected and coordinated within DCA3 as the future Local Structure Plan will seek to consolidate POS for at least 1 local sports ground (4.6ha), as per the City's CIP 2018. It must be noted that the total POS required excludes the 3ha portion of District POS, for which all DCAs are liable. Costs will be apportioned on a pro rata gross subdivisible area basis for all landowners within DCA3.

The estimated costs for the POS (provision of 10% of the GSA = 14.7168ha) is **$8,535,744 + $17,679,292 = $26,215,036**, based upon:

Land acquisition: $580,000 per hectare[10]
Standard improvement costs (including establishment costs for 2 years): $1,201,300 per hectare[11]

[10] Colliers International land valuation March 2019
[11] As per CoK improvement POS cost schedules and comprises an average rate across Local Parks and Neighbourhood Parks, which encompass differing rates

POS is likely to be comprised of both Local and Neighbourhood Parks. **Local Parks** are those less than 1 hectare in area, with a rate for improvements and two years' establishment of $132.3 per m^2. **Neighbourhood Parks** are greater than 1 hectare in area, with a per m^2 rate for improvements and two years' establishment of $103.85 per m^2. These rates have been independently verified by a landscape architecture firm.

The improvement costs associated with POS include earthworks, drainage, turfing, reticulation, lighting, fencing, basic furniture and establishment costs for two years.

9.4 District Sporting Ground

The City's CIP 2018 identifies the need for a District Sporting Ground to service Districts A and B as defined in the CIP 2018. DCA3 is located within District B.

The land acquisition and land improvement costs for this facility are to be shared across development within Districts A and B (DCAs 2-7) on a pro rata gross subdivisible area basis. The costs of buildings on the site will be administered and collected under the City's community contribution development contribution plans (DCAs 8-15). The improvement costs associated with DCAs 2-7 include earthworks, drainage, turfing, reticulation, lighting, fencing, basic furniture and establishment costs for two years.

The costs for DCA3 for the District Sporting Ground are estimated at **$418,475.59** with the proportionate sharing of costs over DCAs 2-7 shown below:

Cost Schedule for District Sporting Ground - DCAs 2 - 7

Development Contribution Area	Total site area (ha)	Deductions for GSA	GSA	District Sporting Ground for DCA
DCA 2 - Wellard	136.389	47.522	88.868	$252,698.49
DCA 3 - Casuarina	***267.63***	***120.46***	***147.17***	***$418,475.59***
DCA 4 - Anketell	150.854	41.263	109.591	$311,625.51
DCA 5 - Wandi	188.630	59.579	129.052	$366,963.56
DCA 6 - Mandogalup	110.925	20.360	90.565	$257,525.41
DCA 7 - Wellard West/ Bertram	508.044	101.087	406.957	$1,157,199.44
Total	**1,362.47**	**390.27**	**972.20**	**$2,764,488** (land acquisition 3ha @$580,000 plus basic land improvements at $1,024,488)

Table 4: Cost schedule for District Sporting Ground

9.5 Community Facilities

The City's CIP 2018 includes three community facilities to be provided within the Wandi District Centre however as the Wandi District Centre will likely be zoned commercial, there may not be a ready 'trigger' for land for these facilities to be provided through the standard POS processes (as is the case for community facilities within residential subdivision). Consequently it does seem prudent that land for these facilities be provided through development contribution plans.

The three community facilities to be located within the Wandi District Centre are:

Local Community Centre

- conceptual land requirement as a stand-alone facility of 0.5ha
- serves the future population of Wandi and Anketell North only

District Youth Centre

- Conceptual land requirement as a stand alone facility of 0.7ha
- Serves the population of District A only (Wandi, Anketell North and Mandogalup)

Branch Library (serves Districts A and B)

- Conceptual land requirement as a stand alone facility of 0.8ha
- Serves the population of Districts A and B (Wandi, Anketell North, Mandogalup, Anketell South, Casuarina, Wellard East and Wellard West / Bertram)

The City has explored the opportunity to provide the local community centre and branch library on a combined site, potentially within a two storey building. Conceptual designs for the Wandi District Centre have included a 'main street' from Anketell Road through to Cordata Avenue (southern extension of Honeywood Ave). The main street would have retail and entertainment uses at ground level and a two storey community facility building along this street could be an excellent attractor and focus for the area. The additional benefit is that there is a reduced cost to the applicable DCPs for the land acquisition component.

Whilst the City is in the process of engaging an architectural firm to design the local community centre and branch library combined facility, conceptual drawings for the facility indicate the buildings and parking could be built on approximately 1.61ha of land. The area within the power line easements could potentially be used for car parking, although this will require more detailed design and consultation with Western Power.

As mentioned above, the three facilities serve different purposes and have three different catchments. The cost apportionment for the land acquisition therefore needs to reflect the different catchments in order to satisfy the need and nexus relationship. The recommended way to apportion these costs is demonstrated in the table below:

Facility	**Land component as a stand alone facility**	**Proposed combined facility proportion of land component**
Local community centre	0.5ha	0.35ha
District Youth Centre	0.7ha	0.7ha
Branch Library (serves Districts A and B)	0.8ha	0.56ha
Total	**2.0ha**	**1.61ha**

The City's most recent land valuation within Wandi valued land at $1.26 million per hectare. Applying this rate indicates the total value of land (1.61ha) to be acquired is approximately $2,028,600.

DCA3 will proportionately contribute towards the Branch Library component of the combined community facility, as follows:

Branch Library (serves Districts A and B)

Development Contribution Area	Total site area (ha)	Deductions for GSA	GSA	Branch Library for DCA
DCA 2 - Wellard	136.389	47.522	88.868	$64,498.04
DCA 3 - Casuarina*	***267.63***	***120.46***	***147.17***	***$106,810.51***
DCA 4 - Anketell	150.854	41.263	109.591	$79,538.40
DCA 5 - Wandi	188.630	59.579	129.052	$93,662.73
DCA 6 - Mandogalup	110.925	20.360	90.565	$65,730.05
DCA 7 - Wellard West/ Bertram	508.044	101.087	406.957	$295,360.27
Total	1,362.47	390.27	972.20	**$705,600**
** **largely estimated figures as only a partial LSP has been adopted by Council**				

9.6 Administrative costs

Administrative costs included in the DCP area generally consist of:

- Land valuations and advice
- Administrative expenses
- General legal expenses
- Preparation of management tools

Administrative costs will be charged at a flat rate of **2%** of the total infrastructure costs for the DCP.

10.0 Development contribution

Development contributions will be apportioned on a land area basis – either Developable area or Gross Subdivisible Area. This allows for a simple, predictable method of apportioning costs which reduces the administrative burden on the DCP and enables the City to accurately advise prospective developers of the DCP costs.

Gross subdivisible area is defined as per Liveable Neighbourhoods, Western Australian Planning Commission.

Developable area is defined as the total site area less areas for schools, community facilities, dedicated drainage reserves, regional open space, Environmental Protection Policy areas, transmission and infrastructure corridors, and land for regional roads.

11.0 Priority and timing of infrastructure delivery

Due to the fragmented land ownership of DCA3 it is difficult to accurately predict the delivery of infrastructure within the cell. Nonetheless, the Table 5 estimates the timing of development.

Priority	Infrastructure item	Anticipated timing	Comment
1	Thomas Road	1-5 years	May be provided in part during subdivision of lots adjoining Thomas Road, in conjunction with Main Roads WA.
2	Public Open Space	1-8 years	Will be provided during subdivisional works.

3	Peel Sub Drains	1-8 years	May be provided by developers with POS adjoining the sub drains during subdivisional works
4	District Sporting Ground (land component – acquisition and basic improvements)	5-8 years	Required prior to and to tie-in with the City's Community Infrastructure Plan Capital Expenditure Schedule (2018). Community infrastructure construction currently scheduled for 2028-2030.
5	Community Facilities (land component – acquisition and basic improvements)	5-8 years	Required prior to and to tie-in with the City's Community Infrastructure Plan Capital Expenditure Plan (2018). Community infrastructure construction currently scheduled for 2029-2031.
6	Mortimer Road	6-8 years	Is likely to be provided during subdivision works, in conjunction with the City.

Table 5: Estimated timing of infrastructure delivery

12.0 Payment of contributions

12.1 Payment of contributions

The landowners' liability for cost contributions will arise in accordance with clause 6.16.5.13 of LPS2 and Local Planning Policy 4: Administration of Development Contributions.

The Cost Apportionment Schedule will determine the cost of each infrastructure item as follows:

Total estimate/actual cost of infrastructure item **less** any payments made from developers in the DCA area **less** any interest earned for the DCA area where there are surplus funds and interest has been earned **=** total liability of undeveloped lots payable

The **total liability of undeveloped lots payable for each infrastructure item** will then be divided by the total gross subdivisible area or developable area (depending on the basis of the infrastructure calculation) to calculate a per hectare rate for the infrastructure item.

The landowner's liability for cost contributions is calculated based on the total gross subdivisible area or developable area (whichever is applicable) multiplied by the per hectare rate for the total liability of undeveloped lots payable for each infrastructure item.

12.2 Pre-funded infrastructure works

LPS2 allows for development contributions to be paid for in the form of works in kind provided that the contribution is provided in accordance with the Priority of Works, at the standard and costs, pre-approved by the City of Kwinana. This provision allows the dedication of land, construction of capital works or other service in lieu of a monetary contribution for future urban development. Refer to the City's Local Planning Policy 4: Administration of Development Contributions for the procedures and required information.

It must be noted that all "works in kind" to be undertaken by the landowner/developer that relate to an infrastructure item within the DCP will only be accepted on the proviso that the City has

approved the scope, cost estimate and detail of the works in accordance with Clause 6.16.5.14.1(c) of LPS2 prior to the works occurring and has entered into a Letter of Agreement with the relevant landowner/developer. Any reimbursement of DCP funds will occur in line with section 12.3.4 of this DCP Report.

12.3 Other Matters

12.3.1 Grant Funding

Generally, DCP infrastructure items do not attract grant funding. As part of the formulation of the liability of road infrastructure, developers are liable for costs based on the traffic they generate and only to an urban standard. All other liability falls with the City and the City is responsible for this share of the infrastructure works. Therefore, in the event that the grant funds relate to works carried out over and above the developer contribution requirements, the developer will not benefit from this. The developer will not receive a reduction in liability. The City's contribution for constructing the road infrastructure over and above the urban standard will be reduced based on any grants received.

Such circumstances would be demonstrated via traffic modelling and the like, whereby existing and external users of a particular road may necessitate the need for a higher order road, but the need and nexus of proposed users within the respective DCA would justify the need for an urban standard, lower order road.

Where the City receives a grant for DCP infrastructure where the developer is liable to contribute to the works, the developer will receive a reduced liability for that DCP infrastructure item when the grant has been formally approved and the CAS has been adjusted accordingly as undertaken on an annual basis.

12.3.2 CPI for Infrastructure Constructed within DCA

As a result of the CAS being reviewed annually, there is no requirement to include CPI in any infrastructure items that have not been constructed. The cost of the infrastructure works is reviewed annually which would factor in any price increases or decreases of all future works and the amount required to be collected will be applied across the remaining lots to be developed.

For works already constructed, no CPI will be applied to any infrastructure works that a developer has carried out as an in-kind contribution, as the development company generally ceases to operate once development has occurred.

12.3.3 Interest

a) *Interest applied across the DCA infrastructure items*

   Interest earned as part of funds in the DCA area is to be applied across all of the infrastructure items based on a pro rata amount paid towards each infrastructure item. The interest applied will be the actual interest earned for that period for the DCA area.

b) *Interest applied to an infrastructure item where there are insufficient funds in the DCA to refund the developer who has carried out the works in kind*

If there are insufficient funds in the DCA to refund the developer as a result of being approved credits for any works carried out, interest will only commence being calculated once the next Cost Apportionment Schedule review has been undertaken and approved by Council. A Cost Apportionment Schedule is reviewed annually and therefore once both the City of Kwinana and the Developer agree on the credit provided and determine whether there are sufficient funds to refund the developer, will interest commence calculating. Interest will be calculated and credited to the developer using the Reserve Bank of Australia Cash Rate Target monthly average rate, which is the volume-weighted average interbank overnight interest rate on a per annum basis, and commence after Council has reviewed the Cost Apportionment Schedule for credits claimed after the previous Cost Apportionment Schedule approved by Council and the latest Cost Apportionment Schedule approved by Council. Interest will be calculated monthly using the previous month's released monthly average rate divided by 12 months and multiplied by the amount outstanding to the developer (the amount due to be refunded to the developer). The interest calculated will be included in the cost of the relevant infrastructure item and updated in the CAS annually for the remaining developers in the DCA area to contribute to. The developer that is due the refund will not receive the interest calculated until such time as there is sufficient funds in the DCA account.

12.3.4 Reimbursement of DCP funds

Any reimbursement of DCP funds to the relevant landowner – in respect of agreements entered into between the City and the landowner for payment of cost contributions and the adjustment of final cost contributions thereof, or reimbursement to the landowner for approved DCP works undertaken – will only occur if sufficient funds are available within the relevant DCP account.

Once a DCP has been gazetted, the accompanying cost apportionment schedule adopted and all legal agreements for the particular DCP reconciled, then no further reimbursement(s) of DCP funds shall occur until all stages of the development are completed in instances where a particular development comprises several stages.

In addition, no interest earned on funds to be reimbursed shall apply to individual claims for reimbursement once the DCP has been finalised, the accompanying cost apportionment schedule adopted and all legal agreements for the particular DCP reconciled. Instead, all interest earned within the individual DCP account will serve to reduce the total cost contribution liability for the respective DCA as a whole.

12.3.5 Claims on Actuals

The costing attributable to a particular DCP item is comprised of either an estimate (where works for the item have not commenced or claims on actuals have not been received, and are reviewed and updated annually by independent, professional technical experts) and/or an actual amount for the approved works that have been undertaken.

Prior to works proposed to be undertaken on any approved infrastructure item as per this DCP, all plans and cost estimates are firstly to be approved by the relevant City Officer(s). A Deed of Agreement or Exchange Letter may first be required to be entered into between the City and the landowner(s) for this purpose.

To assist in the timely preparation of the annual cost apportionment schedule review by the City, all claims on actuals for approved works undertaken for DCP items must be received by the City by the

end of December in any calendar year for inclusion as actuals against costings of the relevant DCP item.

Claims on actuals are required to be presented with the following information:

- A coversheet summary of the approved works undertaken for the relevant item;
- An itemised spreadsheet of claims relevant to the works undertaken detailing specific costs (GST exclusive) vis a vis works undertaken and the dates on which the works were undertaken; and
- Copies of the invoices relevant to the works undertaken.

It must be noted that the costing of actuals, if greater than the City's estimate for the particular item of infrastructure, will only be credited or reimbursed to the extent of the City's estimate as included in the CAS.

12.3.6 Two Year Establishment Cost

A two-year establishment period is applicable to all landscaping works for DCP items, including landscaping to roads, POS areas and Living Streams in the context of Sub-drains.

Similar to claims on actuals, actuals attributable to the two year establishment period are to be provided to the City annually by the end of December in any calendar year, in order to be included in the ensuing annual update of the CAS.

Further, and similarly to claims on actuals, actuals attributable to two year establishment costs are to be presented with the following information:

- A coversheet summary of the two years' establishment costs incurred to date;
- An itemised spreadsheet of claims relevant to the two years' establishment detailing specific costs (GST exclusive), establishment works undertaken and the date on which the specific establishment work was undertaken; and
- Copies of the invoices relevant to the works undertaken.

13.0 Review

The DCP will be reviewed when considered appropriate, though not exceeding a period of five years from the date of gazettal of Amendment 100A to Local Planning Scheme No. 2, having regard to the rate of subsequent development in the catchment areas since the last review and the degree of development potential still existing.

The estimated infrastructure costs contained in the Infrastructure Cost Contribution Schedule will be reviewed at least annually to reflect changes in funding and revenue sources.

Appendix 1 – Development Contribution Plan 3 as per LPS2

	DEVELOPMENT CONTRIBUTION PLAN 3
Reference No.	DCP3
Area Name:	Development Contribution Area 3 - Casuarina – Standard Infrastructure
Relationship to other planning instruments:	The development contribution plan generally aligns with the district and/or local structure plans prepared for the development contribution area.
Infrastructure and administrative items to be funded:	**1. Roads** 1.1 Mortimer Road – 100% of the full cost of design, realignment, construction and land acquisition of Mortimer Road to a single carriageway urban standard between Kwinana Freeway to Woolcoot Road. Includes full earthworks, carriageway, drainage, landscaping, undergrounding of power and all treatments (including intersections, roundabouts, lighting, kerbing and footpaths). Costs will be shared between Owners in Development Contribution Area 2 and Development Contribution Area 3 on a pro rata developable area basis. 1.2 Thomas Road – 100% of the full cost of design, construction of Thomas Road to an urban standard as approved and required by Main Roads WA between Kwinana Freeway and the boundary of the Urban zone near Bombay Boulevard. Includes full earthworks, carriageway, drainage, landscaping, undergrounding of power and all treatments (including intersections, lighting, kerbing and footpaths). Costs will be shared between Owners in Development Contribution Area 3 and Development Contribution Area 4 on a pro rata developable area basis
	2. Drainage – Peel Sub Drains (as identified by the Water Corporation's "Jandakot Drainage and Water Management Plan 2009") 2.1 Peel Sub P Drain – 100% of the cost of the upgrade of the Sub P Drain to an appropriate urban standard. 2.2 Peel Sub P1 Drain – 100% of the cost of the upgrade of the Sub P1 Drain to an appropriate urban standard and piping under the district open space as per the structure plan. 2.3 Peel Sub P1A Drain - 100% of the cost of the upgrade of the Sub P1A Drain to an appropriate urban standard. 2.4 Peel Sub O Drain - 100% of the cost of the upgrade of the Sub O Drain to an appropriate urban standard.
	3. Public open space 3.1 100% of the land acquisition costs to acquire public open space in accordance with the structure plan or public open space strategy prepared for the development contribution area, including land for community purposes.

	3.2 100% of the costs to improve the public open space to an appropriate standard for use in accordance with the structure plan prepared for the development contribution area. 3.3 Only creditable public open space as per Liveable Neighbourhoods forms part of items 3.1 and 3.2.
	4. District Sporting Ground 4.1 Costs associated with the acquisition, site works and basic servicing of land for a District Sporting Ground to be located within Casuarina as per the City of Kwinana Community Infrastructure Plan 2011-2031 as revised. Costs will be shared between Owners in Development Contribution Areas 2-7 inclusive.
	5. Community Facilities 5.1 Costs associated with the acquisition of land for a Branch Library (serves Districts A and B) as part of a combined community facility to be located within the Wandi District Centre as per the City of Kwinana Community Infrastructure Plan 2011-2031 as revised. Costs will be shared between Owners in Development Contribution Areas 2-7 inclusive.
	1. Administration costs 1.1 Administration costs associated with administering the development contribution plan.
Method for calculating contributions:	Contributions for item 1 on a pro rata developable area basis. *Developable area* is defined as the total site area less areas for schools, community facilities, dedicated drainage reserves, regional open space, Conservation Category Wetland Areas, transmission and infrastructure corridors, and land for regional roads. <u>*Infrastructure Item per hectare calculation for Developable Area*</u> Infrastructure Item per hectare calculation = Cost of infrastructure item for DCA / (divide) total Developable Area for the total DCA area (ha) <u>*Contributions based on pro rata Developable Area*</u> Developable Area (ha) of land parcel = Total Site Area (ha) of land parcel - (minus/subtract) Deductions for Developable Area (ha) <u>*Cost Contribution for Developable Area*</u> Cost Contribution = Developable Area (ha) of land parcel x infrastructure item per hectare calculation Contributions for items 2, 3, 4 and 5 will be calculated on a pro rata gross subdivisible area basis. *Gross subdivisible area* is defined as per *Liveable Neighbourhoods* (Western Australian Planning Commission).

	Infrastructure Item per hectare calculation for Gross Subdivisible Area Infrastructure Item per hectare calculation = Cost of infrastructure item for DCA /(divide) total GSA for the total DCA area (ha) *Contributions based on pro rata Gross Subdivisible Area* Gross Subdivisible Area (GSA) (ha) of land parcel = Total Site Area (ha) - (minus/subtract) Deductions for Gross Subdivisible Area (ha) *Cost Contribution for Gross Subdivisible Area* Cost Contribution = GSA (ha) of land parcel x infrastructure item per hectare calculation *Cost Contribution for Administration Costs* Contributions for item 6 are applicable across all infrastructure items and will be apportioned to each landholding based on 2% of the total infrastructure item costs for that DCP area. Cost Contribution = Sum of the total Capital Infrastructure Costs for the Development Contribution Area x 2% ***Total Contribution*** **Total Contribution = Cost Contribution Infrastructure items calculated using Gross Subdivisible Area + (plus) Cost Contribution Infrastructure items calculated using Developable Area + (plus) Cost Contribution for Administration Costs**
Period of operation:	10 years from the date of gazettal.
Priority and timing:	The development contribution plan report to be prepared as per clause 6.16.5.10.1 will outline the priority and timing of the infrastructure items nominated in the development contribution plan. Generally the priority and timing of the infrastructure items will be determined by the rate of development growth within the development contribution area and will be reviewed when considered appropriate.
Review process:	The plan will be reviewed when considered appropriate, though not exceeding a period of five years duration, having regard to the rate of subsequent development in the catchment areas since the last review and the degree of development potential still existing. The estimated infrastructure costs contained in the Infrastructure Cost Contribution Schedule will be reviewed at least annually to reflect changes in funding and revenue sources.

ATTACHMENT C

1.0 Development Contribution Plan 4 – Anketell

The development contribution area is show on the Local Planning Scheme No. 2 (LPS2) scheme map as Development Contribution Area 4 (DCA4). The area is replicated in Figure 1 below however, should there be any discrepancies between the area shown below and the area of DCA4 shown on the scheme map, the scheme map shall prevail. DCA4 comprises of two sub areas – referred to as Anketell North and Anketell South.

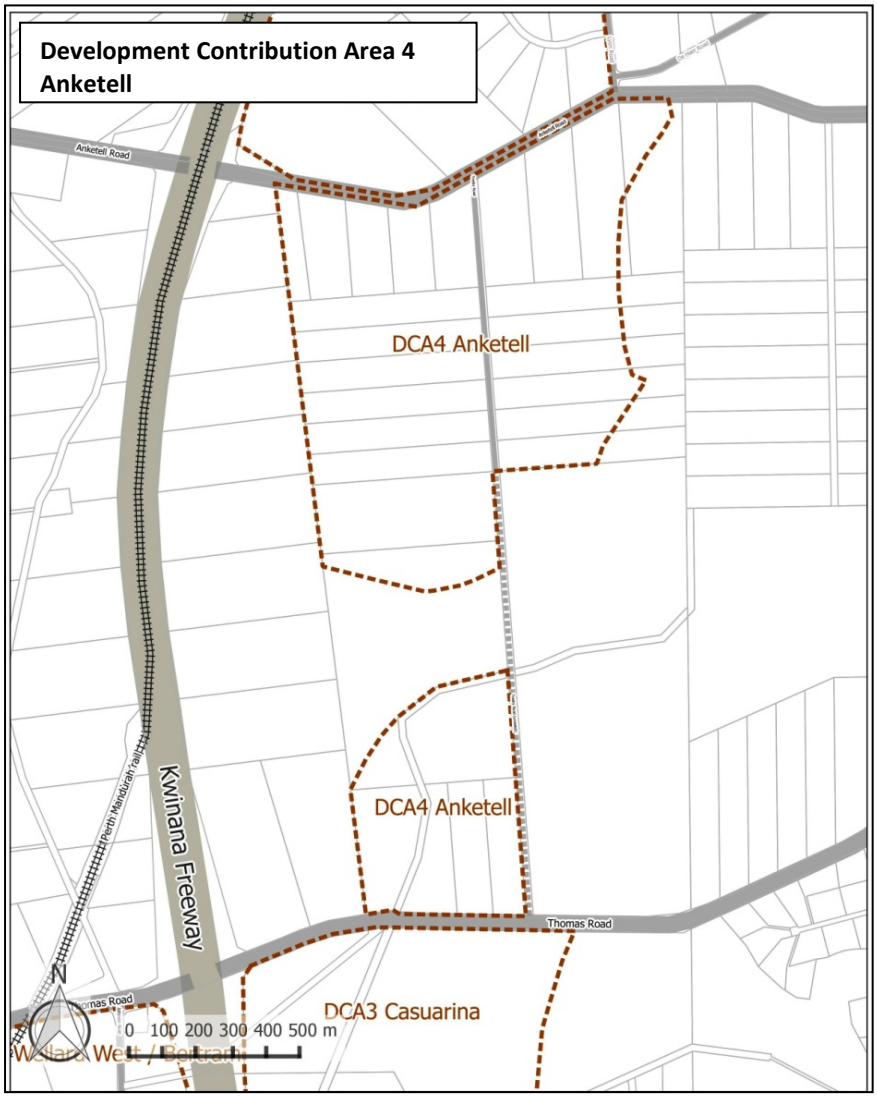


Figure 1: Development Contribution Area 4 - Anketell

2.0 Purpose

The purpose of this development contribution plan report is to:

a) Enable the application of development contributions for the development of new, and the upgrade of existing infrastructure which is required as a result of increased demand generated in the development contribution area;
b) Provide for the equitable sharing of the costs of infrastructure and administrative items between owners;

c) Ensure that cost contributions are reasonably required as a result of the subdivision and development of land in the development contribution area; and
d) Coordinate the time provision of infrastructure.

This report expands on the LPS2 provisions for DCA4 (see Appendix 1).

3.0 Relevant plans and documents

Development within DCA4 and the identification of infrastructure items within this plan are guided by the following plans and documents:

- WAPC Jandakot Structure Plan 2007
- Local Structure Plan – Anketell South, Lots 1, 2, 3 & 17 Thomas Road & Portion Lot 13 Treeby Road, Anketell (approved May 2014, Rowe Group)
- Local Structure Plan Amendments 1, 2, 3 and 4 – Anketell North (2017/2018)
- Local Structure Plan - Anketell North (approved December 2015, Rowe Group)
- Local Structure Plan – Wandi North (approved January 2015)
- Local Structure Plan – Lot 12 Honeywood Ave Wandi (also referred to as Lot 677), Oct 2014
- Local Structure Plan – Wandi South (approved May 2014)
- Draft Wandi District Centre concept plan (February 2014)
- Lifting of Urban Deferment: Casuarina Cell, Jandakot Structure Plan Area, Rowe Group 2012
- Council-adopted Local Structure Plan – Casuarina Cell Northern Precinct and Concept Plan (Aigle Royal Properties Pty Ltd 2018)
- Draft Local Structure Plan – Casuarina Cell Central Precinct (TBB 2018)

- State Planning Policy 3.6: Development Contributions for Infrastructure, WAPC
- Liveable Neighbourhoods 2009, WAPC
- Development Control Policy 1.7: General Road Planning, WAPC
- Development Control Policy 2.3: Public Open Space in Residential Areas, WAPC

4.0 Period of the Plan

This plan will operate for 10 years from 3 October 2017 to 3 October 2027, in accordance with Local Planning Scheme No. 2.

5.0 Operation of Development Contribution Plan

This plan has been prepared in accordance with *State Planning Policy 3.6: Development Contributions for Infrastructure* and operates in accordance with the provisions of section 6.16.5 Development Contribution Areas of LPS2.

6.0 Application Requirements

Where a subdivision, strata subdivision or development application or an extension of land use is lodged which relates to land to which this plan applies, Council shall take the provisions of the plan into account in making a recommendation on or determining that application, in accordance with Part 6.16.5 of LPS2.

7.0 Compliance with the principles underlying Development Contributions outlined in *SPP3.6: Development Contributions for Infrastructure*

7.1 Need and the nexus

The need for the items of standard infrastructure arises directly from the urban development of the land made possible by the rezoning of the land. The need and nexus will be discussed separately for each item of infrastructure later in this report.

7.2 Transparency

The costs for each infrastructure item are apportioned on a land area basis, taking into account the constraints on the land's development potential. These figures are consistent with the adopted local structure plans for the DCA.

The costs for each infrastructure item have been independently reviewed by consultants on behalf of the City or provided as actual costs incurred by developers where that item of infrastructure has been provided as part of development. A further break down of the estimated costs is available upon request.

The cost apportionment schedule will be reviewed and updated annually as per the LPS2 provisions. This process will include a review of the infrastructure costs against current industry standards by an independent qualified consultant and will be publically available following Council adoption.

7.3 Equity

The costs of each item of infrastructure are shared by landowners on a land area basis, taking into account limitations of the land affecting development, such as wetland areas, transmission easements, 1:1 drainage areas and the like. The resulting area of land able to be developed is determined with reference to the adopted local structure plan or concept plan in place for the DCA.

7.4 Certainty

It is anticipated that most of the items of infrastructure included in this DCP will be provided by developers within the DCA as part of their subdivision works. Where this will not occur, this DCP Report provides an indication of the likely delivery of infrastructure items, however it will largely depend on the level of uptake of development within this and, where applicable, the adjoining DCA.

7.5 Efficiency

Development contributions reflect the initial up-front capital cost, including the two year establishment cost.

7.6 Consistency

Development contributions for this DCA will be applied uniformly across the whole DCA area on a land area basis, where the land has been identified to contribute to the infrastructure item.

7.7 Right of consultation and arbitration

The DCP provisions under LPS2 afford landowners the right to review a Cost Contribution and provide for resolution through arbitration.

7.8 Accountability

The costs for each infrastructure item are to be reviewed annually and the Cost Apportionment Schedule updated accordingly. All documents will be publically available on the City's website.

As per LPS2, a Statement of Accounts showing all revenue and expenditure for the DCP is to be prepared for each financial year and audited by the City's auditors. The audited statements will be publically available.

8.0 Characteristics of Development Contribution Area

Table 1 below presents the key characteristics of DCA4:

Total land area	150.8539 ha (115.6566 ha north + 35.1973 ha south)
Gross subdivisible area[1]	109.5906 ha (82.3833 ha north + 27.2073 ha south)
Developable area[2]	116.8277 ha (87.5594 ha north + 29.2683 ha south)

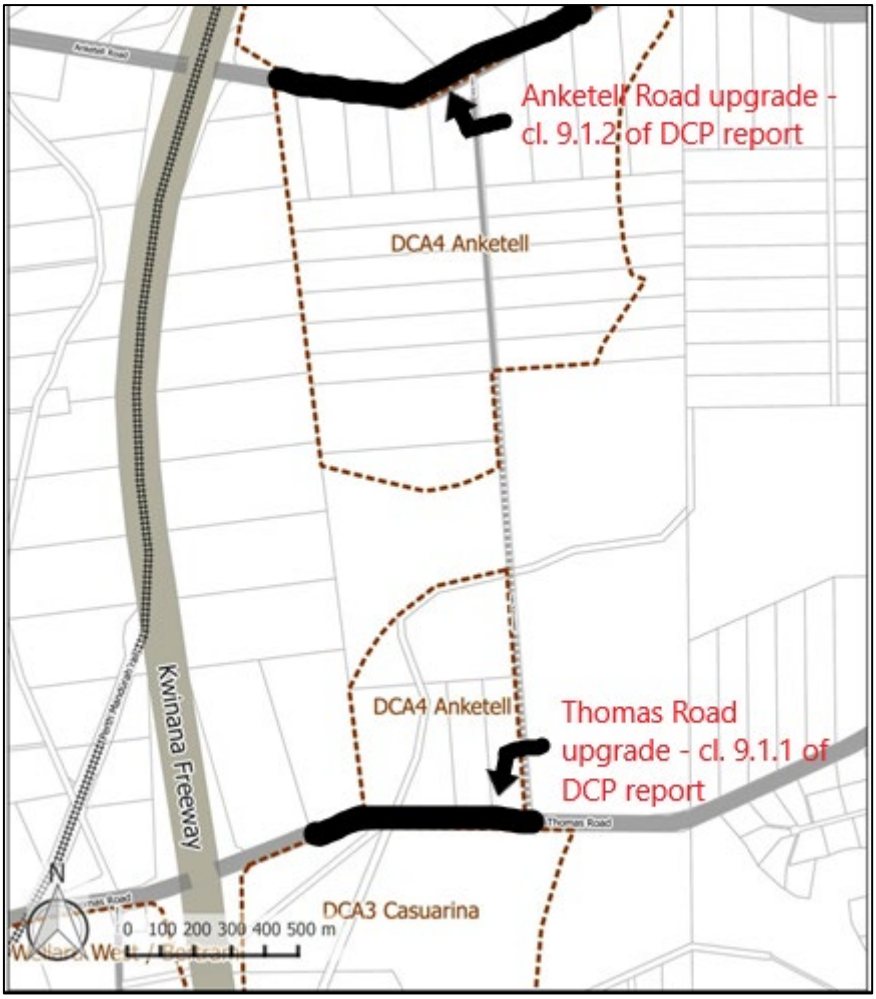
Table 1: Characteristics of future development within DCA4

9.0 Items included in the plan

This section of the DCP report identifies the infrastructure and land to be funded by development contributions collected from landowners within DCA4. The land valuation prepared by Colliers International as at March 2019, based on the Static Feasibility model contained within Schedule 8 of the City's LPS2, notes a per/hectare land valuation for DCA4 of $800,000.

[1] Gross subdivisible area is defined as per Liveable Neighbourhoods and is the total site area less deductions for non-residential uses such as school sites, drainage sites, retail and related land uses and community facilities etc, which also includes Conservation Category Wetlands (CCW) to be ceded and any restricted Public Open Space (POS) not calculated in a Local Structure Plan contribution.

[2] Developable area is defined as the total site area less areas for schools, community facilities, dedicated drainage reserves, regional open space, CCW areas, transmission and infrastructure corridors, and land for regional roads.



9.1 Roads

9.1.1 Thomas Road

Thomas Road is classified as a District Distributor A Road and is constructed as a single carriageway road along the southern boundary of DCA4 (being a dual carriageway immediately west of DCA4). The current posted speed on Thomas Road in this vicinity is 90km/h. The traffic data from Main Roads WA indicates about 9,600 vpd east of the Kwinana Freeway (2008) and about 16,600 vpd at the bridge over Kwinana Freeway (2007)[3].

It is estimated that traffic volumes on Thomas Road will increase by approximately 4,200 vpd as a result of additional traffic generated from development within DCA4 (700 vpd from Anketell North LPS and 3,500 vpd from Anketell South LSP)[4&5]. Furthermore, the development of at least 2,000 dwellings in DCA3, will generate considerably more traffic to Thomas Road[6].

Thomas Road is required to be upgraded to an urban standard as approved and required by Main Roads WA dual for a length of approximately 1,100m – to the Urban boundary near Bombay

[3] Anketell (South) Local Structure Plan January 2014, Appendix 10: Traffic Report (Transcore), Oct 2013, page 4.
[4] Ibid, page 9.
[5] Anketell (North) Local Structure Plan July 2010, Appendix 5: Traffic Report (Transcore), June 2010, page 10.
[6] A traffic assessment of the anticipated development of the Casuarina cell has not yet been undertaken, however it is reasonable to estimate additional traffic on Thomas Road from the Casuarina cell in the magnitude of 5,000 additional vpd based on a similar methodology as that used for the Wellard East LSP Traffic Assessment Report, page 18.

Boulevard - to join the existing dual carriageway to the west of DCA4. Further details of the Thomas Road upgrade include:

- Construction of a four way roundabout at the junction of the Integrator B from Anketell South and future northern connection from Casuarina;
- Three intersections with Access Streets (left in, left out);
- Drainage;
- Street lighting;
- Undergrounding of power;
- Dual use paths to both sides; and
- Landscaping to medians and swales.

The total cost of the Thomas Road upgrade, including traffic management, design, construction, landscaping and contingency (20%), is estimated to be **$6,607,287.20.**

The costs of the Thomas Road upgrades have been distributed between DCA3 and DCA 4 based on a proportionate land area basis, demonstrated in the following table:

Development Contribution Area	Developable Area	Proportion	Contribution
DCA 3 - Casuarina**	184.9001	61.28%	$4,048,974.15
DCA 4 - Anketell	***116.83***	***38.72%***	***$2,558,313.05***
Total	301.7278	100%	$5,904,000 (road costs)+ $703,287 (landscaping costs) = **$6,607,287.20**
**** largely estimated figures as only a partial LSP has been adopted by Council**			

Table 2: Apportionment of Thomas Road upgrade costs between DCA3 and DCA4

9.1.2 Anketell Road

Anketell Road is classified as a District Distributor A Road and is currently constructed as a single carriageway road to a rural standard. The traffic data from Main Roads WA indicates 3,682 vpd east of the Kwinana Freeway (2008). Anketell Road has been identified as a strategic freight route to the Naval Base / Kwinana Beach industrial areas. In the event that Anketell Road is classified as a primary freight route, local intersections will require upgrading.

It is estimated that traffic volumes on Anketell Road will increase by about 4,300vpd as a result of additional traffic generated from development within DCA4 (4,000 vpd from Anketell North LSP and 300 vpd from Anketell South LSP)[7&8]. In addition, it is estimated an additional 5,500 vpd movements will result from development of the northern adjoining Wandi South cell, bringing the total additional movements on Anketell Road to about 9,800 vpd[9].

To improve the capacity and contribute to overall traffic network efficiency, Anketell Road is to be upgraded to a single carriageway urban standard westwards from Treeby Road, including reconstruction and realignment, treatment of intersections, kerbing, undergrounding of power, lighting, construction of a 2.5m wide dual use path, drainage and landscaping.

[7] Ibid, page 10.
[8] Anketell (South) Local Structure Plan, Appendix 10: Traffic Report (Transcore), Oct 2013, page 9.
[9] Wandi South LSP, July 2010, Appendix 2: Traffic Report (Transcore), July 2010, page 11.

The total cost of the Anketell Road upgrade, including land acquisition, traffic management, design, construction, landscaping and contingency (20%), is estimated to be **$6,769,727.80.**

Anketell Road will also be used by new development within the northern adjoining development cell, DCA5 - Wandi, so the costs of the upgrades have been distributed based on a proportionate land area basis, demonstrated in the following table:

Development Contribution Area	Developable Area	Proportion	Contribution
4 – Anketell	***116.83ha***	***47.52%***	***$3,216,889.32***
5 – Wandi	129.03ha	52.48%	$3,552,838.48
Total	245.86ha	100%	$6,300,165 (road costs) and $469,563 (landscaping) = **$6,769,727.80**

Table 3: Apportionment of Anketell Road upgrade costs between DCA4 and DCA5

9.1.3 Treeby Road

The northern portion of Treeby Road is a local road and provides local access to the existing residential developments in the area. Treeby Road intersects with Anketell Road to the north in the form of a priority T-intersection. The southern portion of Treeby Road is currently unconstructed and therefore there is no connection to Thomas Road. The existing traffic volumes on this road are not available, however this volume is not significant as it is related to the existing low density residential developments.[10]

To provide accessibility between the southern and northern parts of Anketell Road, Treeby Road is required to be constructed and upgraded to a Neighbourhood Connector standard. The new internal connector will provide for most north-south movement within DCA4 and therefore the demand for improvements to Treeby Road is limited to new development that abuts Treeby Road. Improvements for these sections of road will be the responsibility of developers of the land abutting Treeby Road and, whilst these improvements may not be undertaken at the same time, they will be achieved through standard conditions of subdivision approval.

The section of Treeby Road between the northern and southern developable areas of DCA4 that won't be upgraded by conditions of subdivision is included in the development contribution plan. This length of road is approximately 300m long and was constructed by the developer of Lot 13 Treeby Road to a Neighbourhood Connector standard. The cost for this item – which is based on the actual costings incurred by the developer for the construction of this portion of Treeby Road and confirmed by the City - will be apportioned to all development within DCA4.

The actual cost for this item is **$759,761**, which includes road construction costs, land acquisition and landscaping.

9.2 Public Open Space (including community purpose sites) – Anketell North local structure plan area

Land acquisition and improvement costs for the provision of POS as per the adopted Anketell North Local Structure Plan will be coordinated by the development contribution plan. Costs will be

[10] Anketell (North) Local Structure Plan July 2010, Appendix 5: Traffic Report (Transcore), page 4.

apportioned on a pro rata gross subdivisible area basis for landowners within the Anketell North Local Structure Plan area **only**.

The estimated cost for the POS (as per the approved LSP at 11.17ha) is **$8,937,280 + $9,628,965 = $18,566,245** based upon:

Land acquisition: $800,000 per hectare[11]
Standard improvement costs (including establishment costs for 2 years): $862,038 per hectare[12]

POS areas are comprised of both Local and Neighbourhood Parks. **Local Parks** are those less than 1 hectare in area, with rate for improvements and two years' establishment of $132.30 per m^2. **Neighbourhood Parks** are greater than 1 hectare in area, with a rate for improvements and two years' establishment of $103.85 per m^2. The **Local Playing Field**, comprising approximately 5 hectares, has a per m^2 rate of $61.40, including improvements and two years' establishment. This reduced rate when compared to the Parks is largely due to expansive areas of turfing as opposed to condensed areas of landscaping and furniture. These rates have been independently verified by a landscape architecture firm.

The improvement costs associated with POS include earthworks, drainage, turfing, reticulation, lighting, fencing, basic furniture and establishment costs for two years.

9.3 District Sporting Ground

The City's CIP 2018 identifies the need for a District Sporting Ground to service Districts A and B as defined in the CIP 2018. DCA4 is located within District B.

The land acquisition and land improvement costs for this facility are to be shared across development within Districts A and B (DCAs 2-7) on a pro rata gross subdivisible area basis. The costs of buildings on the site will be administered and collected under the City's community contribution development contribution plans (DCAs 8-15).

The costs for DCA4 for the District Sporting Ground are estimated at **$311,625.51** with the proportionate sharing of costs over DCAs 2-7 shown below:

Cost Schedule for District Sporting Ground - DCAs 2 - 7

Development Contribution Area	Total site area (ha)	Deductions for GSA	GSA	District Sporting Ground for DCA
DCA 2 - Wellard	136.389	47.522	88.868	$252,698.49
DCA 3 - Casuarina**	267.63	120.46	147.17	$418,475.59
DCA 4 - Anketell	***150.854***	***41.263***	***109.591***	***$311,625.51***
DCA 5 - Wandi	188.630	59.579	129.052	$366,963.56
DCA 6 - Mandogalup	110.925	20.360	90.565	$257,525.41
DCA 7 - Wellard West/ Bertram	508.044	101.087	406.957	$1,157,199.44

[11] Colliers International land valuation November 2017
[12] As per CoK improvement POS cost schedules and comprises an average rate across Local Parks and Neighbourhood Parks, which encompass differing rates

Total	**1,362.47**	**390.27**	**972.20**	**$2,764,488** (land acquisition 3ha @$580,000 plus basic land improvements at $1,024,488)

Table 4: Cost schedule for District Sporting Ground

9.4 Community Facilities

The City's CIP 2018 includes three community facilities to be provided within the Wandi District Centre however as the Wandi District Centre will likely be zoned commercial, there may not be a ready 'trigger' for land for these facilities to be provided through the standard POS processes (as is the case for community facilities within residential subdivision). Consequently it does seem prudent that land for these facilities be provided through development contribution plans.

The three community facilities to be located within the Wandi District Centre are:

Local Community Centre

- conceptual land requirement as a stand-alone facility of 0.5ha
- serves the future population of Wandi and Anketell North only

District Youth Centre

- Conceptual land requirement as a stand alone facility of 0.7ha
- Serves the population of District A only (Wandi, Anketell North and Mandogalup)

Branch Library (serves Districts A and B)

- Conceptual land requirement as a stand alone facility of 0.8ha
- Serves the population of Districts A and B (Wandi, Anketell North, Mandogalup, Anketell South, Casuarina, Wellard East and Wellard West / Bertram)

The City has explored the opportunity to provide the local community centre and branch library on a combined site, potentially within a two storey building. Conceptual designs for the Wandi District Centre have included a 'main street' from Anketell Road through to Cordata Avenue (southern extension of Honeywood Ave). The main street would have retail and entertainment uses at ground level and a two storey community facility building along this street could be an excellent attractor and focus for the area. The additional benefit is that there is a reduced cost to the applicable DCPs for the land acquisition component.

Whilst the City is in the process of engaging an architectural firm to design the combined facility, conceptual drawings for the facility indicate the buildings and parking could be built on approximately 1.61ha of land. The area within the power line easements could potentially be used for car parking, although this will require more detailed design and consultation with Western Power.

As mentioned above, the three facilities serve different purposes and have three different catchments. The cost apportionment for the land acquisition therefore needs to reflect the different catchments in order to satisfy the need and nexus relationship. The recommended way to apportion these costs is demonstrated in the table below:

Facility	Land component as a stand alone facility	Proposed combined facility proportion of land component
Local community centre	0.5ha	0.35ha
District Youth Centre	0.7ha	0.7ha
Branch Library (serves Districts A and B)	0.8ha	0.56ha
Total	**2.0ha**	**1.61ha**

The City's most recent land valuation within Wandi valued land at $1.26 million per hectare. Applying this rate indicates the total value of land (1.61ha) to be acquired is approximately $2,028,600.

The following tables indicate the cost contribution per gross subdivisible area for DCA4 affected by the applicable land acquisition component for the community facilities:

Local Community Centre

Development Contribution Area	Total site area (ha)	Deductions for GSA	GSA	Local Community Centre for DCA
DCA 4 – Anketell (North portion only)	***115.657***	***33.2733***	***82.383***	***$171,830.87***
DCA 5 - Wandi	188.630	59.579	129.052	$269,169.13
Total	304.29	92.85	211.43	**$441,000**

District Youth Centre

Development Contribution Area	Total site area (ha)	Deductions for GSA	GSA	District Youth Centre for DCA
DCA 4 – Anketell (North portion only)	***115.657***	***33.273***	***82.383***	***$240,603.00***
DCA 5 - Wandi	188.630	59.579	129.052	$376,899.10
DCA 6 - Mandogalup	110.925	20.360	90.565	$264,497.91
Total	415.21	113.21	302.00	**$882,000**

Branch Library (serves Districts A and B)

Development Contribution Area	Total site area (ha)	Deductions for GSA	GSA	Branch Library for DCA
DCA 2 - Wellard	136.389	47.522	88.868	$64,498.04
DCA 3 - Casuarina**	267.63	120.46	147.17	$106,810.51
DCA 4 - Anketell	***150.854***	***41.263***	***109.591***	***$79,538.40***
DCA 5 - Wandi	188.630	59.579	129.052	$93,662.73
DCA 6 - Mandogalup	110.925	20.360	90.565	$65,730.05
DCA 7 - Wellard West/ Bertram	508.044	101.087	406.957	$295,360.27
Total	1,362.47	390.27	972.20	**$705,600**
** **largely estimated figures as only a partial LSP has been adopted by Council**				

9.5 Administrative costs

Administrative costs included in the DCP area generally consist of:

- Land valuations and advice
- Administrative expenses
- General legal expenses
- Preparation of management tools

Administrative costs will be charged at a flat rate of **2%** of the total infrastructure costs for the DCP based on developable area.

10.0 Development contribution

Development contributions will be apportioned on a land area basis – either Developable area or Gross Subdivisible Area. This allows for a simple, predictable method of apportioning costs which reduces the administrative burden on the DCP and enables the City to accurately advise prospective developers of the DCP costs.

Gross subdivisible area is defined as per Liveable Neighbourhoods, Western Australian Planning Commission.

Developable area is defined as the total site area less areas for schools, community facilities, dedicated drainage reserves, regional open space, Environmental Protection Policy areas, transmission and infrastructure corridors, and land for regional roads.

11.0 Priority and timing of infrastructure delivery

Due to the fragmented land ownership of DCA4 and varying rates of development it is difficult to accurately predict the delivery of infrastructure within the cell. Nonetheless, the Table 5 estimates the timing of development and has been used in the City's Long Term Financial Planning.

Priority	Infrastructure item	Anticipated timing	Comment
1	Treeby Road	Completed	Has been constructed as part of subdivision works for Lot 13 Treeby Road.
2	Thomas Road	1-5 years	. May be provided in part during subdivision of lots adjoining Thomas Road, in conjunction with Main Roads WA.
3	Public Open Space (Anketell North)	1-8 years	Is likely to be provided during subdivision works
4	Anketell Road	2-5 years	May be provided in part during subdivision of lots adjoining Anketell Road and during development of the Wandi District Centre, in conjunction with Main Roads WA.

5	District Sporting Ground (land component – acquisition and basic improvements)	5-8 years	Required prior to and to tie-in with the City's Community Infrastructure Plan Capital Expenditure Schedule (2018). Community infrastructure construction currently scheduled for 2028-2030.
6	Community Facilities (land component – acquisition and basic improvements)	5-8 years	Required prior to and to tie-in with the City's Community Infrastructure Plan Capital Expenditure Plan (2018). Community infrastructure construction currently scheduled for 2029-2031.

Table 5: Estimated timing of infrastructure delivery

12.0 Payment of contributions

12.1 Payment of contributions

The landowners' liability for cost contributions will arise in accordance with clause 6.16.5.13 of LPS2 and Local Planning Policy 4: Administration of Development Contributions.

The Cost Apportionment Schedule will determine the cost of each infrastructure item as follows:

Total estimate/actual cost of infrastructure item **less** any payments made from developers in the DCA area **less** any interest earned for the DCA area where there are surplus funds and interest has been earned **=** total liability of undeveloped lots payable

The **total liability of undeveloped lots payable for each infrastructure item** will then be divided by the total gross subdivisible area or developable area (depending on the basis of the infrastructure calculation) to calculate a per hectare rate for the infrastructure item.

The landowner's liability for cost contributions is calculated based on the total gross subdivisible area or developable area (whichever is applicable) multiplied by the per hectare rate for the total liability of undeveloped lots payable for each infrastructure item.

12.2 Pre-funded infrastructure works

LPS2 allows for development contributions to be paid for in the form of works in kind provided that the contribution is provided in accordance with the Priority of Works, at the standard and costs, as pre approved by the City of Kwinana. This provision allows the dedication of land, construction of capital works or other service in lieu of a monetary contribution for future urban development. Refer to the City's Local Planning Policy 4: Administration of Development Contributions for the procedures and required information.

It must be noted that all "works in kind" to be undertaken by the landowner/developer that relate to an infrastructure item within the DCP will only be accepted on the proviso that the City has approved the scope, cost estimate and detail of the works in accordance with Clause 6.16.5.14.1(c) of LPS2 prior to the works occurring and has entered into a Letter of Agreement with the relevant

landowner/developer. Any reimbursement of DCP funds will occur in line with section 12.3.4 of this DCP Report.

12.3 Other Matters

12.3.1 Grant Funding

Generally, DCP infrastructure items do not attract grant funding. As part of the formulation of the liability of road infrastructure, developers are liable for costs based on the traffic they generate and only to an urban standard. All other liability falls with the City and the City is responsible for this share of the infrastructure works. Therefore, in the event that the grant funds received relate to works carried out over and above the developer contribution requirements, the developer will not benefit from this. The developer will not receive a reduction in liability. The City's contribution for constructing the road infrastructure over and above the urban standard will be reduced based on any grants received.

Such circumstances would be demonstrated via traffic modelling and the like, whereby existing and external users of a particular road may necessitate the need for a higher order road, but the need and nexus of proposed users within the respective DCA would justify the need for an urban standard, lower order road.

Where the City receives a grant for DCP infrastructure where the developer is liable to contribute to the works, the developer will receive a reduced liability for that DCP infrastructure item when the grant has been formally approved and the CAS has been adjusted accordingly as undertaken on an annual basis.

12.3.2 CPI for Infrastructure Constructed within DCA

As a result of the CAS being reviewed annually, there is no requirement to include CPI in any infrastructure items that have not been constructed. The cost of the infrastructure works is reviewed annually which would factor in any price increases or decreases of all future works and the amount required to be collected will be applied across the remaining lots to be developed.

For works already constructed, no CPI will be applied to any infrastructure works that a developer has carried out as an in-kind contribution, as t the development company generally ceases to operate once development has occurred.

12.3.3 Interest

a) *Interest applied across the DCA infrastructure items*

   Interest earned as part of funds in the DCA area is to be applied across all of the infrastructure items based on a pro rata amount paid towards each infrastructure item. The interest applied will be the actual interest earned for that period for the DCA area.

b) *Interest applied to an infrastructure item where there are insufficient funds in the DCA to refund the developer who has carried out the works in kind*

   If there are insufficient funds in the DCA to refund the developer as a result of being approved credits for any works carried out, interest will only commence being calculated once the next Cost Apportionment Schedule review has been undertaken and approved by

Council. A Cost Apportionment Schedule is reviewed annually and therefore once both the City of Kwinana and the Developer agree on the credit provided and determine whether there are sufficient funds to refund the developer, will interest commence calculating. Interest will be calculated and credited to the developer using the Reserve Bank of Australia Cash Rate Target monthly average rate, which is the volume-weighted average interbank overnight interest rate on a per annum basis, and commence after Council has reviewed the Cost Apportionment Schedule for credits claimed after the previous Cost Apportionment Schedule approved by Council and the latest Cost Apportionment Schedule approved by Council. Interest will be calculated monthly using the previous month's released monthly average rate divided by 12 months and multiplied by the amount outstanding to the developer (the amount due to be refunded to the developer). The interest calculated will be included in the cost of the relevant infrastructure item and updated in the CAS annually for the remaining developers in the DCA area to contribute to. The developer that is due the refund will not receive the interest calculated until such time as there is sufficient funds in the DCA account.

12.3.4 Reimbursement of DCP funds

Any reimbursement of DCP funds to the relevant landowner – in respect of agreements entered into between the City and the landowner for payment of cost contributions and the adjustment of final cost contributions thereof, or reimbursement to the landowner for approved DCP works undertaken – will only occur if sufficient funds are available within the relevant DCP account.

Once a DCP has been gazetted, the accompanying cost apportionment schedule adopted and all legal agreements for the particular DCP reconciled, then no further reimbursement(s) of DCP funds shall occur until all stages of the development are completed in instances where a particular development comprises several stages.

In addition, no interest earned on funds to be reimbursed shall apply to individual claims for reimbursement once the DCP has been finalised, the accompanying cost apportionment schedule adopted and all legal agreements for the particular DCP reconciled. Instead, all interest earned within the individual DCP account will serve to reduce the total cost contribution liability for the respective DCA as a whole.

12.3.5 Claims on Actuals

The costing attributable to a particular DCP item is comprised of either an estimate (where works for the item have not commenced or claims on actuals have not been received, and are reviewed and updated annually by independent, professional technical experts) and/or an actual amount for the approved works that have been undertaken.

Prior to works proposed to be undertaken on any approved infrastructure item as per this DCP, all plans and cost estimates are firstly to be approved by the relevant City Officer(s). A Deed of Agreement or Exchange Letter may first be required to be entered into between the City and the landowner(s) for this purpose.

To assist in the timely preparation of the annual cost apportionment schedule review by the City, all claims on actuals for approved works undertaken for DCP items must be received by the City by the end of December in any calendar year for inclusion as actuals against costings of the relevant DCP item.

Claims on actuals are required to be presented with the following information:

- A coversheet summary of the approved works undertaken for the relevant item;
- An itemised spreadsheet of claims relevant to the works undertaken detailing specific costs (GST exclusive) vis a vis works undertaken and the dates on which the works were undertaken; and
- Copies of the invoices relevant to the works undertaken.

It must be noted that the costing of actuals, if greater than the City's estimate for the particular item of infrastructure, will only be credited or reimbursed to the extent of the City's as included in the CAS.

12.3.6 Two Year Establishment Cost

A two-year establishment period is applicable to all landscaping works for DCP items, including landscaping to roads, POS areas and Living Streams in the context of Sub-drains.

Similar to claims on actuals, actuals attributable to the two year establishment period are to be provided to the City annually by the end of December in any calendar year, in order to be included in the ensuing annual update of the CAS.

Further, and similarly to claims on actuals, actuals attributable to two year establishment costs are to be presented with the following information:

- A coversheet summary of the two years' establishment costs incurred to date;
- An itemised spreadsheet of claims relevant to the two years' establishment detailing specific costs (GST exclusive), establishment works undertaken and the date on which the specific establishment work was undertaken; and
- Copies of the invoices relevant to the works undertaken.

13.0 Review

This DCP will be reviewed five years from the date of gazettal of Amendment 100A to Local Planning Scheme No. 2, or earlier should the City consider it appropriate having regard to the rate of development in the area and the degree of development potential still existing.

The estimated infrastructure costs as shown in the cost apportionment schedule will be reviewed at least annually to reflect changes in funding and revenue sources.

Appendix 1 – Development Contribution Plan 4 as per LPS2

	DEVELOPMENT CONTRIBUTION PLAN 4
Reference No.	DCP4
Area Name:	Development Contribution Area 4 - Anketell – Standard Infrastructure
Relationship to other planning instruments:	The development contribution plan generally aligns with the district and/or local structure plans prepared for the development contribution area.
Infrastructure and administrative items to be funded:	**1. Roads** 1.1 Thomas Road – 100% of the full cost of design, construction of Thomas Road to an urban standard as approved and required by Main Roads WA between Kwinana Freeway and the boundary of the Urban zone near Bombay Boulevard. Includes full earthworks, carriageway, drainage, landscaping, undergrounding of power and all treatments (including intersections, lighting, kerbing and footpaths). Costs will be shared between Owners in Development Contribution Area 3 and Development Contribution Area 4 on a pro rata developable area basis. 1.2 Anketell Road – 100% of the full cost of design, realignment, construction of Anketell Road to a single carriageway urban standard between Kwinana Freeway and Lyon Road. Includes full earthworks, carriageway, drainage, landscaping, undergrounding of power, and all treatments (including intersections, lighting, kerbing and footpaths). Costs will be shared between Owners in Development Contribution Area 4 and Development Contribution Area 5 on a pro rata developable area basis. 1.3 Internal collector road (Treeby Road) – 100% of the full cost of design, construction and land acquisition of Treeby Road across the Bush Forever Site 270 between the southern and northern portions of Development Contribution Area 4, to a single carriageway urban standard. Includes full earthworks, carriageway, drainage, kerbing, footpaths, lighting, landscaping, intersections and undergrounding of power.
	2. Public open space 2.1 100% of the land acquisition costs to acquire public open space in accordance with the approved structure plan prepared for the northern portion of the development contribution area (between Anketell Road and Bush Forever site 270), including land for community purposes. 2.2 100% of the costs to improve the public open space to an appropriate standard for use in accordance with the structure plan prepared for the northern portion of the development contribution area (between Anketell Road and Bush Forever site 270). 2.3 Only creditable public open space as per Liveable Neighbourhoods forms part of items 2.1 and 2.2.

	3. District Sporting Ground 3.1 Costs associated with the acquisition, site works and basic servicing of land for a District Sporting Ground to be located within Casuarina as per the City of Kwinana Community Infrastructure Plan 2011-2031. Costs will be shared between Owners in Development Contribution Areas 2-7 inclusive.
	4. Community Facilities 4.1 Costs associated with the acquisition of land for a Branch Library (serves Districts A and B) as part of a combined community facility to be located within the Wandi District Centre as per the City of Kwinana Community Infrastructure Plan 2011-2031 as revised. Costs will be shared between Owners in Development Contribution Areas 2-7 inclusive. 4.2 Costs associated with the acquisition of land for a District Youth Centre as part of a combined community facility to be located within the Wandi District Centre as per the City of Kwinana Community Infrastructure Plan 2011-2031 as revised. Costs will be shared between Owners in Development Contribution Areas 4 (northern portion only), 5 and 6. 4.3 Costs associated with the acquisition of land for a Local Community Centre as part of a combined community facility to be located within the Wandi District Centre as per the City of Kwinana Community Infrastructure Plan 2011-2031 as revised. Costs will be shared between Owners in Development Contribution Areas 4 (northern portion only) and 5.
	5. Administration costs 5.1 Administration costs associated with administering the development contribution plan.
Method for calculating contributions:	Contributions for items 1.1 and 1.2 will be calculated on a pro rata developable area basis. *Developable area* is defined as the total site area less areas for schools, community facilities, dedicated drainage reserves, regional open space, Conservation Category Wetland Areas, transmission and infrastructure corridors, and land for regional roads. *Infrastructure Item per hectare calculation for Developable Area* Infrastructure Item per hectare calculation = Cost of infrastructure item for DCA / (divide) total Developable Area for the total DCA area (ha) *Contributions based on pro rata Developable Area* Developable Area (ha) of land parcel = Total Site Area (ha) of land parcel - (minus/subtract) Deductions for Developable Area (ha) *Cost Contribution for Developable Area* Cost Contribution = Developable Area (ha) of land parcel x infrastructure item per hectare calculation

	Contributions for item 1.3, 3 and 4.1 will be calculated on a pro-rata gross subdivisible area basis. Contributions for items 2, 4.2 and 4.3 will be calculated on a pro rata gross subdivisible area basis for landholdings in the northern portion of the Development Contribution Area (between Anketell Road and Bush Forever site 270). *Gross subdivisible area* is defined as per *Liveable Neighbourhoods* (Western Australian Planning Commission). *Infrastructure Item per hectare calculation for Gross Subdivisible Area* Infrastructure Item per hectare calculation = Cost of infrastructure item for DCA /(divide) total GSA for the total DCA area (ha) *Contributions based on pro rata Gross Subdivisible Area* Gross Subdivisible Area (GSA) (ha) of land parcel = Total Site Area (ha) - (minus/subtract) Deductions for Gross Subdivisible Area (ha) *Cost Contribution for Gross Subdivisible Area* Cost Contribution = GSA (ha) of land parcel x infrastructure item per hectare calculation *Cost Contribution for Administration Costs* Contributions for item 5 are applicable across all infrastructure items and will be apportioned to each landholding based on 2% of the total infrastructure item costs for that DCP area. Cost Contribution = Sum of the total Capital Infrastructure Costs for the Development Contribution Area x 2% ***Total Contribution*** **Total Contribution = Cost Contribution Infrastructure items calculated using Gross Subdivisible Area + (plus) Cost Contribution Infrastructure items calculated using Developable Area + (plus) Cost Contribution for Administration Costs**
Period of operation:	10 years from the date of gazettal.
Priority and timing:	The development contribution plan report to be prepared as per clause 6.16.5.10.1 will outline the priority and timing of the infrastructure items nominated in the development contribution plan. Generally the priority and timing of the infrastructure items will be determined by the rate of development growth within the development contribution area and will be reviewed when considered appropriate.
Review process:	The plan will be reviewed when considered appropriate, though not exceeding a period of five years duration, having regard to the rate of subsequent development in the catchment areas since the last review and the degree of development potential still existing. The estimated infrastructure costs contained in the Infrastructure Cost Contribution Schedule will be reviewed at least annually to reflect changes in funding and revenue sources.

18 Reports – Civic Leadership

18.1 Adoption of the 20 year Long Term Financial Plan 2020/21 to 2039/2040

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 12 December 2018, Council adopted the 2019 – 2039 Long Term Financial Plan with the intention of reviewing annually. The Plan incorporates the "Kwinana 2030" Strategic Community Plan 2019 – 2030 which was adopted at the Ordinary Meeting held on 26 June 2019. 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 2020/21 to 2039/2040 detailed in Attachment A.

DISCUSSION:

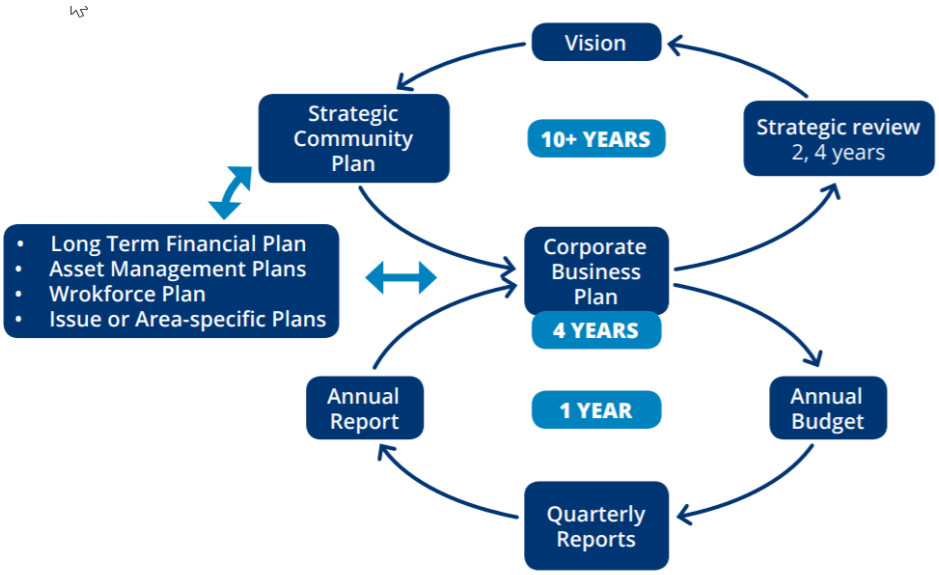
In 2016, the Department of Local Government and Communities (now called Department of Local Government, Sports and Cultural Industries) introduced the Integrated Planning Framework which outlines strategic documents that local governments must have in place. The City of Kwinana's Long Term Financial Plan is a twenty year plan that uses the 2019/2020 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 held from September 2019 to November 2019. 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.

18.1 ADOPTION OF THE 20 YEAR LONG TERM FINANCIAL PLAN 2020/21 TO 2039/2040

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 equal to or below 3.5% and these include:

- 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 CPI per annum 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 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.
- Rescheduling of major projects including the upgrade to Koorliny Arts Centre by five years and Community Infrastructure projects by three years to reduce the burden of loan funding and subsequent operating expenses of these new facilities.

The Annual Budget will be developed on the basis of the Long-Term Financial Plan. Therefore, it is expected that Year 1 of the attached report will be used as a guide for the 2020/2021 budget, however Council may review and amend assumptions in the Long Term Financial Plan when considering the next financial year's budget.

The next review of the Long Term Financial Plan will take place in December 2020.

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:

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.

18.1 ADOPTION OF THE 20 YEAR LONG TERM FINANCIAL PLAN 2020/21 TO 2039/2040

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 services to meet 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 2019/2020 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.

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

18.1 ADOPTION OF THE 20 YEAR LONG TERM FINANCIAL PLAN 2020/21 TO 2039/2040

COMMUNITY ENGAGEMENT:

The community engagement occurred as part of the adoption of the Strategic Community Plan in 2017, and was reviewed again in 2019. The Corporate Business Plan was reviewed in 2019 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;
- 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

18.1 ADOPTION OF THE 20 YEAR LONG TERM FINANCIAL PLAN 2020/21 TO 2039/2040

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

040

MOVED CR P FEASEY **SECONDED CR S WOOD**

That Council adopt the 20 Year Long Term Financial Plan 2020/21 to 2039/2040 detailed in Attachment A.

CARRIED
7/0

ATTACHMENT A

City of Kwinana

20 Year Long Term Financial Plan

2020/2021 to 2039/2040

December 2019



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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 2021 to 2040 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 2020 to 2039 and was adopted by Council at the Ordinary Council Meeting held on 12 December 2018.

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	• New, upgrade and renewal capital expenditure over the 20 years of the *Plan* - $454m
Loan Borrowings	• 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.

Rates % Increases	• Assumed at the higher of 2.5% or forecast CPI
	  ○ 2.5% up to 2024
	  ○ 3.0% in 2025
	  ○ 3.5% from 2026 onwards
	• Rates growth average increase of 2.71% per annum

Fees and Charges % Increases	• Fees and charges increase on average by 3.23% per annum
Operating Expenses	• Cash operating expenses including new expenditure (excludes depreciation and loss on sale of assets) increase on average by 3.58% per annum • New operating costs (relating to increases in service levels or new services) over the 20 years of the *Plan* - $89m • Additional Workforce Plan costs required over the 20 years of the *Plan* - $85m

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 1.75% in 2019/2020. It is projected to increase to 2.25% in 2020/2021 and then to 2.5% in 2021/2022 and 2022/2023. From 2023/2024 onwards the City has made its own assumptions:
  - 3.00% 2023/2024.
  - 3.50% from 2024/2025.

  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 $49.5 million, which is gradually depleted to fund capital projects over the first 14 years of the *Plan.* New loan borrowings are required to fund capital projects between the 2021 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 $86 million.

Key Changes since the Previous Long Term Financial Plan

The *previous Plan* for the period 2020 to 2039 was adopted by Council in December 2019. The key changes in the current update are:

- The *Plan* projects an average rate increase of the higher of 2.5% or CPI, on the base rates with a growth in the rates base of an average 2.71% per annum. The previous *Plan* forecast rate increases of 3.5% per annum.
- Assumption of a 2% staff vacancy rate to reduce the surplus in employment savings each year. To mitigate risk, an Employment Contingency Reserve will be created with the first year's savings.
- Rescheduling the upgrade of the Koorliny Arts Centre out by five years and Community Infrastructure Projects out by three years resulting in savings in loan funding, staffing and operating expenses.

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 2018)	43,511
Distance between Perth CBD and the Kwinana City Centre	39km
Rateable properties (Budget 2019/2020)	18,265
Public open spaces (November 2018)	159

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 it 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, and continued as planned in 2019/2020. The strategy proposes harmonisation of the following categories by 2023/24:

Current Rating Category 2018/2019	Proposed Rating Category by 2023/24
Gross Rental Value (GRV)	
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
Unimproved Value (UV)	
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; and
5. Must be to fund capital expenditure.

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 annually, 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 —*

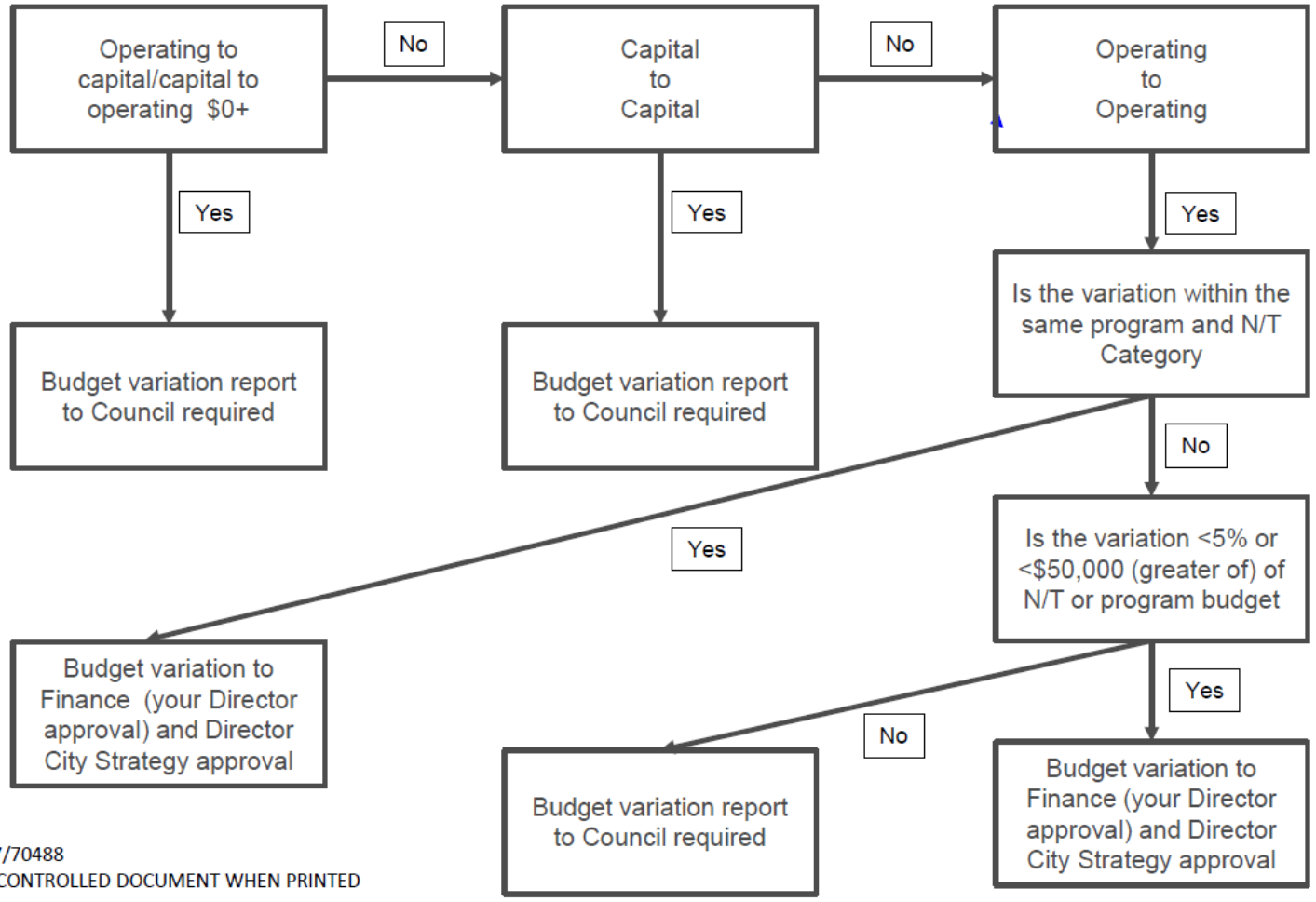
  (a) is incurred in a financial year before the adoption of the annual budget by the local government; or

  (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



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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 2019/2020 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	• 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.
Population and Regional Growth	• 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). • 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.
Property Growth	• .id forecast predict that the City will consist of 30,989 dwellings by 2036, with growth rates being based on an average of 2.71% per annum for the *Plan.* • Increases in dwellings is used to forecast additional rates revenue.
Consumer Price Index (CPI)	• For the year to June 2019, CPI for Perth increased 1.6%. • The Department of Treasury have provided forecast data to 2022/2023. Perth CPI is forecast by the Department of Treasury to grow at 1.75% in 2019/2020, and is projected to increase to 2.25% in 2020/2021, then to 2.50% for 2021/2022 and 2022/2023. • From 2023/2024 onwards the City has made its own assumptions: ○ 3% in 2023/2024. ○ 3.5% from 2024/2025. The increase is based on historical trends and the need to build in prudent cost projections. • 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.

Assumptions – Operating Income and Operating Expenses

Factor	Details
Baseline and Budget 2020/2021	The baseline for the *Plan* is the adopted Annual Budget for 2019/2020 adjusted for any one off income or expenditure items. Year one of the *Plan* will inform the Annual Budget 2020/2021.
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.
Operating Income	

Rates	• Annual increases assumed at the higher of 2.5% or forecast CPI
	  ○ 2.5% up to 2024
	  ○ 3.0% in 2025
	  ○ 3.5% from 2026 onwards
	• Changes in valuations have not been factored into the calculation of rates.

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.
Operating Expenses	

Employee Costs	• Superannuation Guarantee costs are projected to increase from 9.50% to 12.00% in 2025/26 with the following staged increases:
	  ○ 2021/22 – 10%
	  ○ 2022/23 – 10.5%
	  ○ 2023/24 – 11%
	  ○ 2024/25 – 11.5%
	  ○ 2025/26 – 12%
	• 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 *Plan* that the average additional Superannuation contribution by the City is 2.5% of Salaries and Wages.
	• Remaining Employment Costs are projected to increase by the greater of 1.50% or CPI for the remainder of the *Plan.*
	• 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 *Plan* was 1.38%. This rate (1.38%) is applied to Salaries and Wages for the whole of the *Plan.*
	• Assuming a 2% staff vacancy rate for the life of the *Plan* to reduce the surplus in employment savings each year. To mitigate risk, and Employment Contingency Reserve will be created with the savings made in the first year.

Materials and Contracts	Materials and Contracts are increased in line with CPI expectations.

Utility Charges	• WALGA reports the increase in cost for electricity and street lighting as 5.8% for 2018/19. This increase has been applied to the first year of the plan with subsequent increases equal to CPI for the remainder of the plan years.
Depreciation	• 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. • The *Plan* assumes that depreciation will increase in line with the costs of replacement so an escalation factor of CPI has been used.
Interest Expenses	Refer to the information provided in 'Assumptions – Funding'.
Insurance Expenses	• Insurance expenses are assumed to increase by CPI.
Other Expenditure	Other Expenditure has been increased in line with CPI expectations.

Assumptions – Funding

<table>
<tr><th>Factor</th><th>Details</th></tr>
<tr><td>Interest percentage on Loans</td><td>WATC (West Australian Treasury Corporation) were consulted and provided forecasts to 2029/2030. For five, ten and fifteen year fixed term loans, the following assumptions are included in the Plan:
<table>
<tr><th>Year</th><th>5 Year Fixed Loan</th><th>10 Year Fixed Loan</th><th>15 Year Fixed Loan</th></tr>
<tr><td>2020/21</td><td>1.55%</td><td>1.94%</td><td>2.38%</td></tr>
<tr><td>2021/22</td><td>1.74%</td><td>2.14%</td><td>2.56%</td></tr>
<tr><td>2022/23</td><td>2.17%</td><td>2.57%</td><td>2.96%</td></tr>
<tr><td>2023/24</td><td>2.60%</td><td>3.00%</td><td>3.35%</td></tr>
<tr><td>2024/25</td><td>3.03%</td><td>3.43%</td><td>3.74%</td></tr>
<tr><td>2025/26</td><td>3.46%</td><td>3.86%</td><td>4.14%</td></tr>
<tr><td>2026/27</td><td>3.89%</td><td>4.30%</td><td>4.53%</td></tr>
<tr><td>2027/28</td><td>4.32%</td><td>4.73%</td><td>4.92%</td></tr>
<tr><td>2028/29</td><td>4.75%</td><td>5.16%</td><td>5.31%</td></tr>
<tr><td>2029/30+</td><td>5.19%</td><td>5.59%</td><td>5.71%</td></tr>
</table></td></tr>
<tr><td>Repayment Terms of Loans</td><td>All new borrowings are based on 10 year fixed term principal and interest loans.</td></tr>
<tr><td>Interest Earnings from Investments</td><td>Based on historical information and to ensure the City maintains a conservative approach to funding, investments are assumed to earn interest at a rate equal to 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.</td></tr>
<tr><td>Operating Grants, Subsidies and Contributions</td><td>Unless it has been identified as part of the Plan, operating grants, subsidies and contributions are expected to continue and have been escalated in-line with CPI.</td></tr>
<tr><td>Non-Operating Grants, Subsidies and Contributions</td><td>• Based on expectations of subdivisions within the DCA areas.
• 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.</td></tr>
<tr><td>Reserves</td><td>• The Employment Contingency Reserve has been created with the savings from an assumed 2% staff vacancy rate in the first year. This Reserve is to be established to ensure that adequate funds are available to finance employee costs.
• 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 2040 these funds have been reimbursed to the Employee Leave Reserve.
• To assist in funding, the renewal and replacement of Assets, the interest on the Employee Leave and Refuse Reserves for</td></tr>
</table>

	the life of the plan has been allocated to the Asset Management Reserve. • $3,785,141 was transferred from the Refuse Reserve to the Asset Management Reserve in 2019. In the years 2040 these funds have been reimbursed to the Refuse Reserve. • Transfers to the Asset Management Reserve occur in surplus years to cover the funding of capital projects in future years.

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 approach 0% by the end of the *Plan*. The reduction of rate increases, combined with increasing costs sees the City unable to achieve its target based on current assumptions.

This ratio includes non-cash expenses which includes depreciation. 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 2039, 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 Sustainabilty 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 seven years of the *Plan* to 2027, 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 2025 as funds are beginning to be repaid in full, the City's ratio is 3.13 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 increase on the base rates using the higher of 2.5% or CPI 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 2034 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

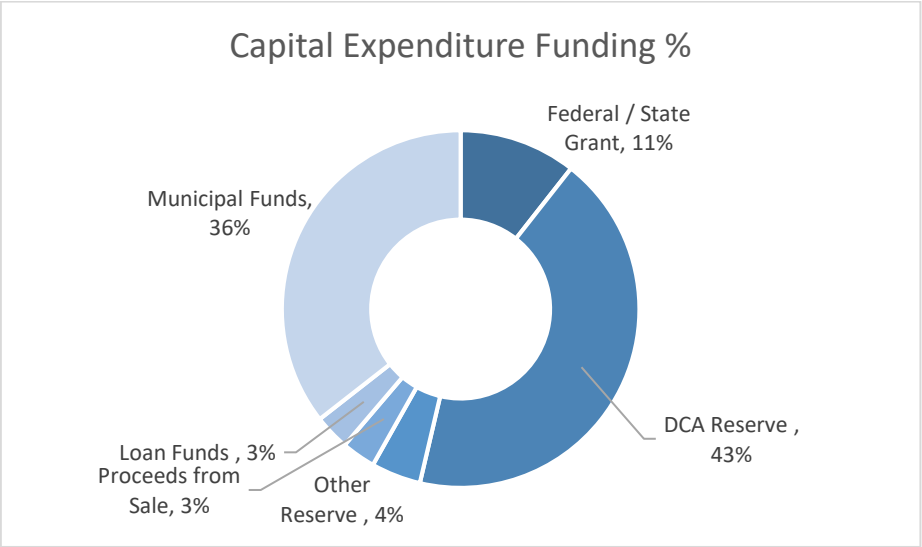
The *Plan* commences with an opening reserve fund cash balance of $49.5 million, which is gradually depleted to fund capital projects over the first 13 years of the *Plan.* The reserve balance is as low as $11.5 million by June 2033. New loan borrowings are required to fund capital projects between the 2021 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 $86 million.

Capital Expenditure Funding

Appendix Six provides a summary of the funding of capital expenditure within the *Plan*.

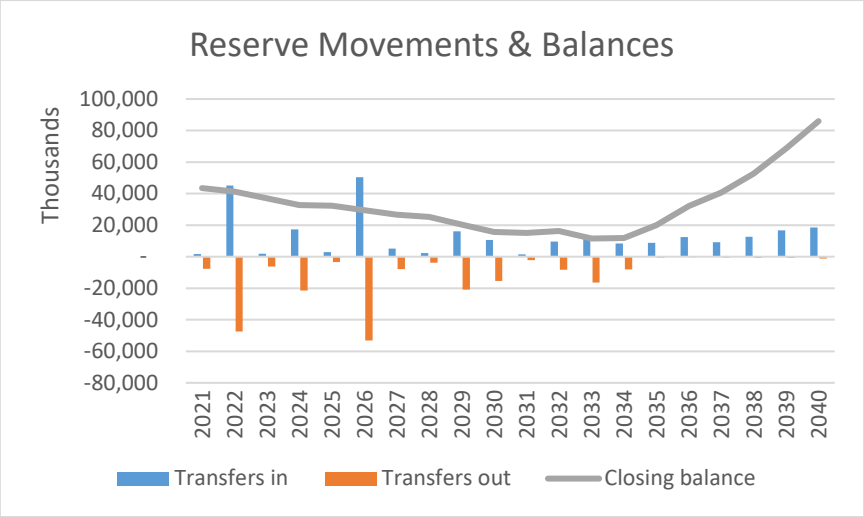
Detailed analysis has been undertaken, year by year, project by project, to evaluate the appropriate method of funding whilst aiming to maintain a conservative rates increases and achieving a balanced budget surplus each year. The below chart summarises the percentage mix of funding for the $454 million 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 2034
- The reserve balance increases steadily from 2033/2034, due to available operating surpluses in the later years.



Loans

There are $14.5 million 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 $14.5 million are detailed in Appendix Seven.

The maximum balance owing is estimated to be $20.2 million at the commencement of the *Plan*. This reduces gradually over the life of the *Plan*, with the final loan being drawn down in 2027. 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 *Plan* 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 *Plan* 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 *Plan* 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 *Plan*, further research and analysis of drivers of core operating income and expenditure is required.
Integration of Developer Contribution Schemes	With the Cost Apportionment Schedules adopted and being reviewed annually, the costing of projects and projection of timing of receipts as well as expenditure should become more defined.
Latitude 32 development	The *Plan* does not yet include projected income from the Latitude 32 commercial development. Although not expected to take off until 2030, the City will endeavour to capture this potential income in future Plans.

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 2.5% 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*.

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

The second scenario considers the rates increases being 1% more than the current estimates. This scenario might be entertained if it is deemed necessary to bring forward a project or introduce a new level of service.

Scenarios	Rates Increase %				Impact on Cash $m		
	2021	2022	2023	2024	1 Year Impact (2021)	4 Year Impact (2024)	20 Year Impact (2040)
Proposed Plan	2.5%	2.5%	2.5%	2.5%			
1% less of an increase	1.5%	1.5%	1.5%	1.5%	($0.4m)	($4.48m)	($163.9m)
1% more of an increase	3.5%	3.5%	3.5%	3.5%	$0.4m	$4.48m	$163.9m

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

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
Opening Funding Surplus (Deficit)	500	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Revenue from operating activities																				
Rates	41,613	43,812	46,092	48,518	51,272	54,410	57,711	61,177	64,800	68,602	72,534	76,658	80,876	85,294	89,720	94,352	97,654	101,072	104,610	108,271
Operating Grants, Subsidies and Contributions	8,286	8,473	8,685	8,902	9,169	9,490	9,822	10,166	10,521	10,890	11,271	11,665	12,074	12,496	12,933	13,386	13,855	14,340	14,841	15,361
Fees and Charges	12,431	12,711	13,029	13,355	13,755	14,237	14,735	15,251	15,784	16,337	16,909	17,500	18,113	18,747	19,403	20,082	20,785	21,512	22,265	23,045
Interest Earnings	2,013	2,026	2,192	2,292	2,365	2,536	2,621	2,692	2,812	2,755	2,596	2,652	2,594	2,581	2,791	3,334	4,084	4,653	5,403	6,374
Other Revenue	746	791	831	951	930	1,051	1,076	1,055	1,109	1,251	1,312	1,301	1,330	1,276	1,370	1,359	1,672	1,601	1,474	1,491
Revenue from operating activities	**65,090**	**67,813**	**70,829**	**74,016**	**77,490**	**81,724**	**85,965**	**90,340**	**95,027**	**99,834**	**104,621**	**109,777**	**114,986**	**120,395**	**126,218**	**132,512**	**138,050**	**143,178**	**148,594**	**154,542**
Expenditure from operating activities																				
Employee Costs	(28,630)	(29,437)	(30,272)	(31,130)	(32,167)	(33,397)	(34,557)	(35,757)	(36,999)	(38,285)	(39,615)	(40,992)	(42,416)	(43,743)	(45,264)	(46,838)	(48,466)	(50,152)	(51,896)	(53,702)
Materials and Contracts	(28,173)	(28,226)	(28,932)	(29,655)	(30,545)	(31,614)	(32,720)	(33,866)	(35,051)	(36,278)	(37,547)	(38,862)	(40,222)	(41,286)	(42,731)	(44,227)	(45,775)	(47,377)	(49,035)	(50,751)
Utility Charges	(2,516)	(2,572)	(2,637)	(2,703)	(2,784)	(2,881)	(2,982)	(3,086)	(3,194)	(3,306)	(3,422)	(3,542)	(3,665)	(3,794)	(3,927)	(4,064)	(4,206)	(4,353)	(4,506)	(4,664)
Depreciation on Non-Current Assets	(14,519)	(14,845)	(15,217)	(15,597)	(16,065)	(16,627)	(17,209)	(17,811)	(18,435)	(19,080)	(19,748)	(20,439)	(21,154)	(21,895)	(22,661)	(23,454)	(24,275)	(25,125)	(26,004)	(26,914)
Interest Expenses	(964)	(944)	(814)	(842)	(780)	(724)	(767)	(738)	(600)	(472)	(388)	(322)	(262)	(206)	(163)	(126)	(99)	(90)	(90)	(90)
Insurance Expenses	(586)	(599)	(614)	(629)	(648)	(671)	(695)	(719)	(744)	(770)	(797)	(825)	(854)	(884)	(915)	(947)	(980)	(1,014)	(1,049)	(1,086)
Other Expenditure	(113)	(115)	(118)	(121)	(125)	(129)	(134)	(138)	(143)	(148)	(153)	(159)	(164)	(95)	(98)	(101)	(105)	(109)	(112)	(116)
Expenditure from operating activities	**(75,501)**	**(76,739)**	**(78,604)**	**(80,678)**	**(83,114)**	**(86,042)**	**(89,064)**	**(92,115)**	**(95,166)**	**(98,338)**	**(101,670)**	**(105,139)**	**(108,739)**	**(111,902)**	**(115,757)**	**(119,756)**	**(123,906)**	**(128,220)**	**(132,693)**	**(137,323)**
Operating activities excluded from budget																				
Add back Depreciation	14,519	14,845	15,217	15,597	16,065	16,627	17,209	17,811	18,435	19,080	19,748	20,439	21,154	21,895	22,661	23,454	24,275	25,125	26,004	26,914
Amount attributable to operating activities	**4,608**	**5,919**	**7,442**	**8,935**	**10,442**	**12,309**	**14,110**	**16,036**	**18,295**	**20,576**	**22,699**	**25,077**	**27,402**	**30,388**	**33,121**	**36,211**	**38,419**	**40,083**	**41,905**	**44,133**
New Operating Proposals																				
New Employment Expenses	(169)	(368)	(479)	(783)	(905)	(869)	(1,684)	(2,672)	(2,766)	(3,846)	(5,129)	(5,308)	(5,494)	(6,361)	(7,281)	(7,536)	(7,800)	(8,073)	(8,355)	(8,648)
New Service/Changes to Services Proposals	(672)	(731)	(1,171)	(1,205)	(1,469)	(1,898)	(2,398)	(3,171)	(3,517)	(4,262)	(5,016)	(5,254)	(5,517)	(6,200)	(7,242)	(7,323)	(7,410)	(8,087)	(7,967)	(8,158)
New Operating Proposals	**(842)**	**(1,099)**	**(1,650)**	**(1,987)**	**(2,373)**	**(2,767)**	**(4,082)**	**(5,843)**	**(6,283)**	**(8,108)**	**(10,145)**	**(10,562)**	**(11,011)**	**(12,560)**	**(14,523)**	**(14,859)**	**(15,209)**	**(16,160)**	**(16,322)**	**(16,805)**
Amount available for capital and other commitments	**3,767**	**4,819**	**5,792**	**6,948**	**8,069**	**9,541**	**10,028**	**10,193**	**12,012**	**12,468**	**12,554**	**14,515**	**16,391**	**17,828**	**18,599**	**21,352**	**23,210**	**23,923**	**25,583**	**27,328**
Investing activities																				
Grants, Subsidies and Contributions	1,701	46,064	12,375	18,365	5,776	48,810	5,381	2,575	14,850	10,922	2,003	7,189	12,409	7,872	1,882	1,948	2,016	2,087	2,160	2,235
Proceeds from Disposal of Assets	867	419	438	637	622	353	580	624	694	755	499	596	924	732	727	830	698	535	1,141	1,279
Land and Buildings	(4,785)	(503)	(3,359)	(5,298)	(1,215)	(7,662)	(8,148)	(4,078)	(16,557)	(14,849)	(1,216)	(8,444)	(15,486)	(9,639)	(2,199)	(1,970)	(1,773)	(1,559)	(1,263)	(1,288)
Plant, Furniture and Equipment	(3,071)	(1,382)	(1,326)	(1,513)	(1,405)	(838)	(1,391)	(1,714)	(1,803)	(1,697)	(1,659)	(1,448)	(2,279)	(1,953)	(1,772)	(1,855)	(1,718)	(1,400)	(2,639)	(3,373)
Infrastructure Assets - Roads	(2,873)	(9,343)	(17,533)	(13,843)	(8,541)	(8,975)	(3,817)	(3,951)	(8,399)	(4,232)	(4,380)	(4,534)	(4,692)	(4,856)	(5,026)	(5,202)	(5,384)	(5,573)	(5,768)	(5,970)
Infrastructure Assets - Parks and Reserves	(588)	(38,968)	(1,761)	(5,588)	(2,036)	(40,556)	(3,733)	(1,080)	(1,973)	(4,982)	(6,033)	(4,140)	(9,460)	(7,572)	(1,859)	(982)	(6,870)	(4,652)	(1,341)	(1,388)
Infrastructure Assets - Footpaths	(51)	(664)	(53)	(944)	(259)	(268)	(277)	(287)	(297)	(308)	(318)	(329)	(341)	(353)	(365)	(378)	(391)	(405)	(747)	(434)
Infrastructure Assets - Drainage	(913)	(260)	(541)	(1,460)	(281)	(3,558)	(302)	(312)	(323)	(334)	(346)	(358)	(371)	(384)	(397)	(411)	(425)	(440)	(456)	(472)
Infrastructure Assets - Street Lighting	(28)	(60)	(61)	(303)	(65)	(67)	(69)	(72)	(74)	(77)	(80)	(82)	(85)	(88)	(91)	(95)	(98)	(101)	(105)	(108)
Infrastructure Assets - Bus Shelters	(37)	(38)	(51)	(53)	(55)	(57)	(60)	(62)	(65)	(68)	(71)	(74)	(116)	(124)	(132)	(140)	(145)	(150)	(155)	(161)
Infrastructure Assets - Car Parks	(305)	(208)	(0)	(219)	(0)	(233)	(0)	(250)	(0)	(267)	(0)	(286)	(297)	(307)	(318)	(329)	(340)	(352)	(364)	(377)
Amount attributable to investing activities	**(10,084)**	**(4,942)**	**(11,873)**	**(10,219)**	**(7,459)**	**(13,052)**	**(11,835)**	**(8,607)**	**(13,948)**	**(15,136)**	**(11,602)**	**(11,911)**	**(19,794)**	**(16,672)**	**(9,552)**	**(8,584)**	**(14,432)**	**(12,011)**	**(9,537)**	**(10,057)**
Financing Activities																				
Proceeds from New Debentures	2,268	2,500	4,015	1,640	1,689	3,115	1,809	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Self-Supporting Loan Principal	17	18	18	19	20	20	21	22	22	23	24	25	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Transfer from Reserves	7,572	47,449	6,246	21,535	3,293	53,177	7,941	3,712	20,907	15,335	2,182	8,308	16,339	8,074	603	295	645	668	677	1,236
Repayment of Debentures	(1,889)	(4,683)	(2,229)	(2,549)	(2,800)	(2,433)	(2,779)	(3,035)	(2,969)	(2,114)	(1,668)	(1,328)	(1,362)	(934)	(776)	(601)	(228)	(0)	(0)	(0)
Transfer to Reserves	(1,651)	(45,161)	(1,970)	(17,374)	(2,811)	(50,368)	(5,185)	(2,284)	(16,024)	(10,577)	(1,490)	(9,609)	(11,574)	(8,294)	(8,874)	(12,462)	(9,196)	(12,581)	(16,723)	(18,508)
Amount attributable to financing activities	**6,317**	**123**	**6,081**	**3,271**	**(610)**	**3,511**	**1,807**	**(1,585)**	**1,936**	**2,668**	**(952)**	**(2,604)**	**3,403**	**(1,155)**	**(9,047)**	**(12,768)**	**(8,778)**	**(11,913)**	**(16,045)**	**(17,271)**
Closing Funding Surplus (Deficit)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix 2
Key Ratios and Indicators

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Operating Surplus Ratio *Target: > 2% with aim to achi*	-20%	-17%	-15%	-13%	-12%	-10%	-9%	-10%	-8%	-7%	-8%	-6%	-5%	-4%	-4%	-2%	-1%	-1%	0%	0%
Asset Sustainability Ratio *Target: 90% - 110%*	28%	27%	27%	31%	31%	39%	43%	30%	34%	49%	52%	42%	45%	33%	37%	32%	54%	41%	31%	34%
Adjusted Asset Sustainability *Target: 90% - 110%*	29%	27%	29%	31%	36%	50%	43%	30%	42%	50%	54%	59%	46%	41%	73%	80%	85%	83%	85%	72%
Debt Service Coverage Ratio *Target: > 3.00 with aim to act*	1.78	1.22	2.71	2.88	3.13	4.13	4.19	4.45	5.29	8.14	11.23	15.39	17.03	26.83	35.46	50.02	117.85	446.37	466.61	491.37
Rates Percentage Increase *Target: < 5%*	2.50%	2.50%	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%
Balanced Cash Budget *Target: Balanced Budget = 0*	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	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
City Engagement		**87**	**63**	**147**	**148**	**198**	**158**	**749**	**1,281**	**1,397**	**1,961**	**2,674**	**2,711**	**2,924**	**3,542**	**4,264**	**4,348**	**4,568**	**4,658**	**4,893**	**4,989**
Community Safety	Public Area Lighting Plan	20																			
Community Services Admin	Additional Data for Community Wellbeing & Library Customer Survey	36		37		39		42		45		48		52		56		60		64	
DCA 10 - Local Community Centre Casuarina/Anketell	New Facility - Net Cost							68	141	146	151	156	161	167	173	179	185	192	198	205	213
DCA 10 - Local Sporting Ground with Clubroom -	New Facility - Net Cost														46	96	100	103	107	110	114
DCA 10 - Local Sporting Ground with Facility Building - Casuarina/Anketell	New Facility - Net Cost										10	21	21	22	23	24	25	26	26	27	28
DCA 10,11,12,13 - District B Community Centre	New Facility - Net Cost														235	487	504	521	540	559	578
DCA 10,11,12,13 - District B Youth Centre	New Facility - Net Cost														188	390	403	417	432	447	463
DCA 12 - Local Sporting Ground with Community Centre / Clubroom - Wellard West	New Facility - Net Cost			40	82	84	87	90	94	97	100	104	107	111	115	119	123	128	132	137	141
DCA 14 - Local Sporting Ground with Facility Building - Wellard Village Primary School	New Facility - Net Cost									10	20	21	21	22	23	24	25	26	26	27	28
DCA 8 - Local Community Centre - Mandogalup	New Facility - Net Cost										75	156	161	167	173	179	185	192	198	205	213
DCA 8 - Local Sporting Ground with Facility Building - Mandogalup	New Facility - Net Cost							9	19	19	10	21	21	22	23	24	25	26	26	27	28
DCA 8,9 - District A Youth Centre	New Facility - Net Cost										164	340	351	364	376	390	403	417	432	447	463
DCA 8,9,10,11,12,13 - Branch Library (serves Districts A & B)	New Facility - Net Cost							275	570	590	610	632	654	677	700	725	750	776	804	832	861
DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A &	New Facility - Net Cost										300	620	642	665	688	712	737	763	789	817	846
DCA 8,9,10,11,12,13 - Hard Court Clubrooms (District A & B)	New Facility - Net Cost													59	122	126	131	135	140	145	150
DCA 9 - Local Community Centre (large Scale) - Wandi	New Facility - Net Cost							185	383	396	410	424	439	454	470	487	504	521	540	559	578
DCA 9 - Local Sporting Ground with Facility Building (Treeby Rd)	New Facility - Net Cost									10	20	21	21	22	23	24	25	26	26	27	28
DCA 9 - Local Sporting Ground with Facility Building (Wandi Highschool Site)	New Facility - Net Cost										10	21	21	22	23	24	25	26	26	27	28
DCA 9 - Local Sports Ground Clubroom - Honeywood	New Facility - Net Cost	31	63	65	66	68	71	73	76	78	81	84	87	90	93	96	100	103	107	110	114
District C Sporting Ground Medina Oval Redevelopment (Not DCA funded)	New Facility - Net Cost														46	96	100	103	107	110	114
Youth Centre	Youth Well Being Survey expenditure			11		11		12		13		14		15		16		17		18	
Youth Centre	Youth Well Being Survey income			(5)		(6)		(6)		(6)		(7)		(7)		(8)		(9)		(9)	
City Infrastructure		**330**	**500**	**762**	**875**	**1,028**	**1,290**	**1,504**	**1,683**	**1,803**	**1,945**	**2,057**	**2,119**	**2,414**	**2,403**	**2,428**	**2,554**	**2,644**	**2,908**	**2,854**	**2,855**
Asset Management	Asset Management Consultants	20	60	144	38	17	52	45	131	19	20	62	54	156	23	24	25	64	238	27	
City Operations	Review and Update of Groundwater Strategy				11					13					15					18	
City Operations	City Operations Service Review	20			22			24			27			30			33			36	
Infrastructure Maintenance	Additional contributed/converted infrastructure assets maintenance expenses	29	41	58	74	94	114	132	143	162	174	183	190	205	217	221	229	237	245	253	262
Infrastructure Management Overheads	Engineering equipment battery replacements (traffic counters)				4		6	4	4	9					6		8	5	5	13	
Parks & Reserve Maintenance	Additional contributed/converted parks and reserves assets maintenance expenses	261	400	560	725	917	1,118	1,299	1,405	1,599	1,724	1,811	1,875	2,024	2,142	2,183	2,260	2,339	2,421	2,505	2,593
City Legal		**103**	**43**	**49**	**50**	**52**	**100**	**61**	**57**	**59**	**62**	**119**	**66**	**75**	**71**	**73**	**141**	**78**	**81**	**93**	**87**
Law, Order & Public Safety	Additional CCTV maintenance costs	15	21	27	27	28	29	30	31	32	33	35	36	37	38	40	41	43	44	46	47
Law, Order & Public Safety	Bush Fire Risk Management Plan Review	31	10	11	11	11	12	12	12	13	13	14	14	15	15	16	16	17	18	18	19
Law, Order & Public Safety	Portable Radios City Assist	5						6						7						9	
Law, Order & Public Safety	Community Emergency Services Risk Management Plan	41					47					55					66				
Law, Order & Public Safety	Infringement and Reporting System Annual Subscription	11	11	12	12	12	13	13	14	14	15	15	16	16	17	17	18	19	19	20	21
City Regulation		**102**	**0**	**0**	**0**	**113**	**58**	**0**	**0**	**0**	**134**	**69**	**0**	**0**	**0**	**159**	**82**	**0**	**0**	**0**	**0**
Mainstream Waste	Waste Management Strategy	51					58					69					82				
Strategic Planning	Additional consultants for Strategic Planning Projects/Scheme Reviews	51				113					134					159					
City Strategy		**51**	**125**	**213**	**131**	**79**	**291**	**84**	**150**	**258**	**160**	**97**	**358**	**104**	**184**	**318**	**197**	**119**	**440**	**128**	**226**
Customer Services	Knowledge Base ongoing maintenance, subscription and training costs		21	21	22	23	23	24	25	26	27	28	29	30	31	32	33	34	35	36	38
Elections	Election Year Expenses		104		109		117		125		134		143		153		164		176		189
Financial Services - Rates	GRV Valuation Year			139			151			168			186			206			229		
Marketing & Communications	Community Perceptions survey to occur every two years	51		53		56		60		65		69		74		79		85		91	
Grand Total		**672**	**731**	**1,171**	**1,205**	**1,469**	**1,898**	**2,398**	**3,171**	**3,517**	**4,262**	**5,016**	**5,254**	**5,517**	**6,200**	**7,242**	**7,323**	**7,410**	**8,087**	**7,967**	**8,158**

Appendix 4
New Workforce Plan Expenses
Note: Figures are 000's

Position	Award Level	FTE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
City Engagement		**44.00**				**80**	**165**	**170**	**853**	**1,583**	**1,638**	**2,544**	**3,511**	**3,634**	**3,761**	**4,475**	**5,233**	**5,417**	**5,606**	**5,802**	**6,005**	**6,216**
Community Services - Community Centres																						
DCA 10 - Local Community Centre Staff	LGO CA 4/1	1.00							42	87	90	94	97	100	104	107	111	115	119	123	127	132
DCA 10 - Local Community Centre Staff	LGO CA 5/1	1.00							46	95	98	102	105	109	113	117	121	125	130	134	139	144
DCA 8 - Local Community Centre Staff	LGO CA 4/1	1.00										47	97	100	104	107	111	115	119	123	127	132
DCA 8 - Local Community Centre Staff	LGO CA 5/1	1.00										51	105	109	113	117	121	125	130	134	139	144
DCA 9 - Local Community Centre (large Scale)	LGO CA 4/1	1.00							42	87	90	94	97	100	104	107	111	115	119	123	127	132
DCA 9 - Local Community Centre (large Scale)	LGO CA 5/1	1.00							46	95	98	102	105	109	113	117	121	125	130	134	139	144
District B Community Centre Staff	LGO CA 4/1	2.00														107	222	230	238	246	255	264
District B Community Centre Staff	LGO CA 5/1	1.00														58	121	125	130	134	139	144
Local Community Centre/Clubroom District B (Wellard West)	LGO CA 4/1	1.00				38	79	81	84	87	90	94	97	100	104	107	111	115	119	123	127	132
Local Community Centre/Clubroom District B (Wellard West)	LGO CA 5/1	1.00				42	86	89	92	95	98	102	105	109	113	117	121	125	130	134	139	144
Community Services - Dry Recreation Centre																						
District A & B Dry Recreation Centre	LGO CA 3/1	5.00										236	487	505	522	540	559	579	599	620	642	664
District A & B Dry Recreation Centre	LGO CA 5/1	3.00										153	316	327	339	351	363	376	389	402	416	431
District A & B Dry Recreation Centre	LGO CA 7/1	1.00										61	126	130	135	140	145	150	155	160	166	172
Community Services - Library																						
District A & B Branch Library	LGO CA 3/1	5.00							212	440	455	471	487	505	522	540	559	579	599	620	642	664
District A & B Branch Library	LGO CA 5/1	4.00							184	380	394	407	422	436	452	468	484	501	518	537	555	575
District A & B Branch Library	LGO CA 6/1	1.00							49	102	106	109	113	117	121	125	130	134	139	144	149	154
Community Services - Youth Development																						
District A - Youth Centre	LGO CA 4/1	1.00										47	97	100	104	107	111	115	119	123	127	132
District A - Youth Centre	LGO CA 5/1	5.00										255	527	546	565	584	605	626	648	671	694	718
District A - Youth Centre	LGO CA 7/1	1.00							55	114	118	122	126	130	135	140	145	150	155	160	166	172
District B Youth Centre	LGO CA 3/1	1.00														54	112	116	120	124	128	133
District B Youth Centre	LGO CA 5/1	5.00														292	605	626	648	671	694	718
District B Youth Centre	LGO CA 7/1	1.00														70	145	150	155	160	166	172
City Infrastructure		**4.00**			**87**	**179**	**184**	**190**	**197**	**306**	**317**	**328**	**452**	**468**	**484**	**501**	**519**	**537**	**556**	**575**	**595**	**616**
Engineering Services																						
Engineering Technical Officer - Design	LGO CA 6/1	1.00								102	106	109	113	117	121	125	130	134	139	144	149	154
Engineering Technical Officer - Design/Projects	LGO CA 6/1	1.00											113	117	121	125	130	134	139	144	149	154
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	154
Engineering Technical Officer - Traffic	LGO CA 6/1	1.00			87	89	92	95	99	102	106	109	113	117	121	125	130	134	139	144	149	154
City Legal		**2.00**		**79**	**81**	**167**	**172**	**178**	**184**	**190**	**197**	**204**	**211**	**218**	**226**	**234**	**242**	**250**	**259**	**268**	**278**	**287**
Essential Services																						
CCTV Maintenance and Enquiry Officer	LGO CA 5/1	1.00				83	86	89	92	95	98	102	105	109	113	117	121	125	130	134	139	144
Compliance Officer	LGO CA 5/1	1.00		79	81	83	86	89	92	95	98	102	105	109	113	117	121	125	130	134	139	144
City Regulation		**1.60**	**54**	**146**	**150**	**153**	**158**	**102**	**106**	**109**	**113**	**117**	**121**	**126**	**130**	**135**	**139**	**144**	**149**	**154**	**160**	**165**
Environmental Health																						
Environmental Health Officer	LGO CA 6/4	1.00		91	93	96	99	102	106	109	113	117	121	126	130	135	139	144	149	154	160	165
Environmental Health Officer - CLAG (Mosquito & Midge Technical Officer - 5Yrs)	LGO CA 6/4	0.60	54	55	56	57	59															0
City Strategy		**1.32**	**96**	**98**	**101**	**103**	**106**	**110**	**114**	**118**	**122**	**126**	**131**	**135**	**140**	**145**	**150**	**155**	**160**	**166**	**172**	**178**
Finance																						
Finance Officer - Rates	LGO CA 4/1	1.00	71	73	75	76	79	81	84	87	90	94	97	100	104	107	111	115	119	123	127	132
Marketing & Communications																						
Digital Communications Officer	LGO CA 5/1	0.32	25	25	26	27	27	28	29	30	31	33	34	35	36	37	39	40	41	43	44	46
Grand Total		**52.92**	**149**	**323**	**419**	**681**	**784**	**750**	**1,453**	**2,306**	**2,387**	**3,319**	**4,426**	**4,581**	**4,741**	**5,489**	**6,283**	**6,503**	**6,731**	**6,966**	**7,210**	**7,463**
Additional Employment Expenses																						
Superannuation			18	40	54	92	110	109	211	334	346	481	642	664	687	796	911	943	976	1,010	1,045	1,082
Workers Compensation			2	4	6	9	11	10	20	32	33	46	61	63	65	76	87	90	93	96	100	103
Total Additional Workforce Plan Costs			**169**	**368**	**479**	**783**	**905**	**869**	**1,684**	**2,672**	**2,766**	**3,846**	**5,129**	**5,308**	**5,494**	**6,361**	**7,281**	**7,536**	**7,800**	**8,073**	**8,355**	**8,648**

Appendix 5
Detailed Capital Expenditure
Note: Figures are 000's and costs are escalated

Project	Description of Works	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Buildings		**4,785**	**503**	**3,359**	**3,416**	**1,215**	**7,662**	**8,148**	**4,078**	**16,557**	**14,849**	**1,216**	**8,444**	**15,486**	**9,639**	**2,199**	**1,970**	**1,773**	**1,559**	**1,263**	**1,288**
Administration Building & Civic Centre Refurbishment		2,268																			
Arts & Cultural Centre Upgrade - Stage 1 of 3	Per Community Infrastructure Plan							121													
Arts & Cultural Centre Upgrade - Stage 2 of 3	Per Community Infrastructure Plan								1,186												
Arts & Cultural Centre Upgrade - Stage 3 of 3	Per Community Infrastructure Plan									1,227											
Building Contingency		102	104	107	109	113	117	121	125	129	134	138	143	148	153	159	164	170	176	182	189
Building Renewals - Per Building Asset Management Plan		263	268	275	282	290	301	311	322	333	345	357	1,365	1,429	1,585	1,921	1,682	1,475	1,251	944	958
Building Upgrades - Calista Oval Tennis Clubrooms	Installation of Modular Universal Accessible Toilet and Renovation of Existing Toilet	137																			
Building Upgrades & Renewal - Smirk Cottage	As per conservation management plan recommendations		52	27																	
DCA 10 - Local Community Centre Casuarina/Anketell	100% DCA Funded					168	1,657	1,715													
DCA 10 - Local Sporting Ground with Clubroom - Casuarina/Anketell												145	1,425	1,475							
DCA 10 - Local Sporting Ground with Facility Building - Casuarina/Anketell									50	492	509										
DCA 10,11,12,13 - District B Community Centre	19% City 81% DCA Funded (25% each DCA)												343	3,368	3,486						
DCA 10,11,12,13 - District B Youth Centre	19% City 81% DCA Funded (25% each DCA)												422	4,154	4,299						
DCA 12 - Local Sporting Ground with Community Centre / Clubroom - Wellard West	3% City 97% DCA Funded			2,871	2,943																
DCA 14 - Local Sporting Ground with Facility Building - Wellard Village Primary School	Per Community Infrastructure Plan							48	475	492											
DCA 8 - Local Community Centre - Mandogalup	100% DCA Funded								187	1,837	1,901										
DCA 8 - Local Sporting Ground with Facility Building - Mandogalup	100% DCA Funded					45	443	459													
DCA 8,9 - District A Youth Centre	1% City 99% DCA Funded (50/50 DCA 8/9)								368	3,620	3,747										
DCA 8,9,10,11,12,13 - Branch Library (serves Districts A & B)	13% City 87% Funded (17% each DCA)					334	3,279	3,394													
DCA 8,9,10,11,12,13 - Dry Recreation Centre (serves Districts A & B)	13% City 87% Funded (17% each DCA)								747	7,348	7,605										
DCA 8,9,10,11,12,13 - Hard Court Clubrooms (District A & B)	12% City 88% Funded (17% each DCA)											472	4,638	4,801							
DCA 9 - Local Community Centre (large Scale) - Wandi	1% City 99% DCA Funded					181	1,778	1,841													
DCA 9 - Local Sporting Ground with Facility Building (Treeby Rd)	28% City 72% DCA Funded							48	475	492											
DCA 9 - Local Sporting Ground with Facility Building (Wandi Highschool)	28% City 72% DCA Funded								50	492	509										
DCA 9 - Local Sports Ground Clubroom - Honeywood	Honeywood Primary School Oval Pavilion 1% City 99% DCA Funded	1,013																			
Family Daycare Building Replacement of Playroom, Kitchenette and Toy Library		661																			
Family Daycare Playground Renewal		143																			
Operations Centre Upgrade	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	0	0	0																	
Unallocated Projects		76	78	80	82	84	87	90	94	97	100	104	107	111	115	119	123	128	132	137	141
Animal Care Facility	Repair and refurbishment to ensure continued safety of City Officers, Members of Public and animals impounded.	85																			
Sloans Cottage	Works to make property safe, accessible and ready for lease by third party entity.	27																			
Darius Wells - Room Conversion	Darius Wells - conversion of small room to office for tenancy	10																			
Bus Shelters		**37**	**38**	**51**	**53**	**55**	**57**	**60**	**62**	**65**	**68**	**71**	**74**	**116**	**124**	**132**	**140**	**145**	**150**	**155**	**161**
Bus Shelters - New		0	12	13	13	14	15	16	17	18	20	21	22	24	25	27	28	29	30	31	32
Bus Shelters - Upgrade		37	26	38	39	41	42	43	45	47	48	50	52	92	98	105	112	116	120	124	128
Bus Shelters Renewal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Car Parks		**305**	**208**	**0**	**219**	**0**	**233**	**0**	**250**	**0**	**267**	**0**	**286**	**297**	**307**	**318**	**329**	**340**	**352**	**364**	**377**
Car Park - New	Wandi Community Centre Car park	305																			
Car Park Renewal per Asset Management Plan		0	208	0	219	0	233	0	250	0	267	0	286	297	307	318	329	340	352	364	377

Appendix 5
Detailed Capital Expenditure
Note: Figures are 000's and costs are escalated

Project	Description of Works	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Computing Infrastructure		**1,452**	**217**	**27**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**465**	**36**	**37**	**38**	**40**	**41**	**43**	**44**	**46**	**47**
City Website Redevelopment	Website Redevelopment											430									
City Website Redevelopment	Website Redevelopment Stage 3 of 3	61																			
Computing Equipment	Various Computing Equipment Purchases as per Manager ICT/City Requirements	25	26	27	27	28	29	30	31	32	33	35	36	37	38	40	41	43	44	46	47
Corporate Business System including Electronic Infringement and Reporting System		1,365	191																		
Drainage		**913**	**260**	**541**	**1,460**	**281**	**3,558**	**302**	**312**	**323**	**334**	**346**	**358**	**371**	**384**	**397**	**411**	**425**	**440**	**456**	**472**
DCA 2 - Peel Sub N2 Drain - Lot 64 Woolcoot Rd				274																	
DCA 3 - Peel Sub O Drain - Casuarina							1,004														
DCA 3 - Peel Sub P Drain - Anketell Sth & Casuarina					1,187																
DCA 3 - Peel Sub P1 Drain - Casuarina							1,165														
DCA 3 - Peel Sub P1A Drain - Casuarina							1,098														
Drainage - New		373																			
Drainage - Upgrade		0	260	267	273	281	291	302	312	323	334	346	358	371	384	397	411	425	440	456	472
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	
Stormwater Management Infrastructure (DCA 1)	100% DCA Funded	540																			
Footpaths		**51**	**664**	**53**	**944**	**259**	**268**	**277**	**287**	**297**	**308**	**318**	**329**	**341**	**353**	**365**	**378**	**391**	**405**	**747**	**434**
Footpath - Upgrade		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Footpaths - New	Gilmore Ave; Thomas to Chisham. DOT 50/50 grant application in progress - 407 Muni 407k grant				890																
Footpaths - New	Parmelia Ave; Sulphur to Tunnicliffe. DOT 50/50 grant application in progress - 294k Muni 294k grant		612																		
Footpaths - New		0		0		203	210	217	225	233	241	249	258	267	276	286	296	306	317	656	340
Footpath - Renewals	Forward works program to be developed in consultation with Operations Team	51	52	53	55	56	58	60	62	65	67	69	72	74	77	79	82	85	88	91	94
Furniture & Equipment		**46**	**21**	**107**	**22**	**23**	**64**	**72**	**100**		**27**	**35**		**119**			**41**		**247**		
Library - self check out station replacement	Replacement of 3 current stations upon reaching end of life			32					37					44					53		
Library - self check out stations for Community Centres		25					29					35					41				
Library - self returns shelves											27										
Public Art Acquisition	Public Art Acquisition to be fully funded by contributions to Public Art	20	21	21	22	23															
Recquatic - Plant and Equipment replacement and installation	Basketball backboard and supports replacement							60											88		
Recquatic - Plant and Equipment replacement and installation	Court divider net						35														
Recquatic - Plant and Equipment replacement and installation	Replacement - pool blankets, buddy, lane ropes, pool cleaner, mats			53					62					74					88		
Recquatic - Plant and Equipment replacement and installation	Score board installation and replacement							12											18		
Land					**1,882**																
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				753																
DCA 4,5 - Local Community Centre Land	39.99% DCA 4, 60.01% DCA 5				471																
DCA 4,5,6 - District Youth Centre Land	28.04% DCA 4, 42.07% DCA 5, 29.89% DCA 6				659																
Motor Vehicles		**872**	**465**	**508**	**987**	**1,131**	**546**	**753**	**878**	**824**	**1,400**	**738**	**764**	**1,288**	**870**	**1,260**	**1,435**	**905**	**845**	**1,257**	**1,926**
Plant Replacement Program - Light Fleet	Light Fleet	872	465	508	987	1,131	546	753	878	824	1,400	738	764	1,288	870	1,260	1,435	905	845	1,257	1,926

Appendix 5
Detailed Capital Expenditure
Note: Figures are 000's and costs are escalated

Project	Description of Works	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Parks & Reserves		**588**	**38,968**	**1,761**	**5,588**	**2,036**	**40,556**	**3,733**	**1,080**	**1,973**	**4,982**	**6,033**	**4,140**	**9,460**	**7,572**	**1,859**	**982**	**6,870**	**4,652**	**1,341**	**1,388**
Bertram Street Tree Planting Program	Bertram Street Tree Planting Program	112	114	117	120	124	128														
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				3,568																
DCA 3 - Casuarina Public Open Space							37,039														
DCA 4 - Anketell North Public Open Space			18,388																		
DCA 6 - Mandogalup Public Open Space			19,783																		
District C Sporting Ground (Medina Oval Extension/Upgrade)	77% City 23% DCA Funded												637	6,267	6,486						
Johnson Road Landscaping (G)	Install landscaping, inclusive of trees, mulch and groundcovers												215								
KIA Street Tree Planting Program (B)	KIA Street Tree Planting Program	76	78	80	82	84	87														
Public Open Space (POS) Upgrades - Parks for People Strategy		163	166	171	175	180	186	193	200	207	214	221	229	297	307	318	329	340	352	364	377
Public Open Space/Parks & Reserves Renewals	Per Draft Asset Management Plan	237	360	549	860	1,376	3,115	3,540	880	1,766	4,768	5,812	3,059	2,897	779	1,542	654	6,530	4,300	977	1,011
Streetscape Upgrade - Challenger Avenue Landscape Upgrade (E)	(Parmelia Ave - Bertram Rd)					271															
Streetscape Upgrade - Sulphur Road (Gilmore to Meares Avenue) (C)	Streetscape Upgrade - Sulphur Road			80																	
Sub Regional Sporting Ground (Thomas Oval/ Kelly Park Extension/Upgrade)	52% City 48% DCA Funded		78	764	783																
Wells Beach Foreshore Upgrade	Subject to a feasibility study, further information will be known and included in the next review of the LTFP	0																			
Plant & Equipment		**702**	**679**	**685**	**477**	**223**	**199**	**535**	**705**	**947**	**237**	**422**	**648**	**835**	**1,045**	**472**	**338**	**771**	**264**	**1,336**	**1,400**
Plant Replacement Program - Plant & Equipment	Heavy Plant and Equipment	702	679	685	477	223	199	535	705	947	237	422	648	835	1,045	472	338	771	264	1,336	1,400
Roads		**2,873**	**9,343**	**17,533**	**13,843**	**8,541**	**8,975**	**3,817**	**3,951**	**8,399**	**4,232**	**4,380**	**4,534**	**4,692**	**4,856**	**5,026**	**5,202**	**5,384**	**5,573**	**5,768**	**5,970**
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					4,977															
DCA 1 - Culvert and road crossing over the Peel Main Drain linking Lots 661 and 670 (Item M)					712																
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%			8,769																	
DCA 1 - Wellard Road Upgrade – Cavendish to Millar Road (Item J) - Remaining Costs	DCA 20.88% (25.79% City 4.91%) 79.12% City			5,013																	
DCA 2 - Sunrise Boulevard Internal Collector Road (a) - Lot 28							394														
DCA 2 - Sunrise Boulevard Internal Collector Road (c) - Lot 440				255																	
DCA 2,3 - Mortimer Road							4,893														
DCA 3,4 - Thomas Road			6,848																		
DCA 4,5 - Anketell Road					7,323																
DCA 5 - Honeywood Avenue Internal Collector Road					2,348																
DCA 6 - Hammond Road Extension										2,188											
DCA 6 - Internal Collector Road										2,122											
General Traffic Management		81	83	85	87	90	93	96	100	103	107	111	115	119	123	127	131	136	141	146	151
Gilmore avenue signalised pedestrian crossing	Black Spot 2/3	315																			
Road Reseal Renewals - MRRG	2/3 Funded MRRG	1,221	1,248	1,280	1,312	1,351	1,398	1,447	1,498	1,550	1,605	1,661	1,719	1,779	1,841	1,906	1,972	2,041	2,113	2,187	2,263
Road Reseal Renewals - RTR	100% Funded	498	518	531	421	433	449	464	481	497	515	533	551	571	591	611	633	655	678	702	726
Roads - Upgrade		0	645	1,600	1,640	1,689	1,748	1,809	1,872	1,938	2,006	2,076	2,149	2,224	2,302	2,382	2,466	2,552	2,641	2,734	2,829
DCA 2 - Sunrise Boulevard Internal Collector Road (b) - Lot 59		351																			
DCA 2 - Millar Road - Timing		294																			
Challenger / Meares Ave TM	Black Spot 2/3	112																			
Street Lighting		**28**	**60**	**61**	**303**	**65**	**67**	**69**	**72**	**74**	**77**	**80**	**82**	**85**	**88**	**91**	**95**	**98**	**101**	**105**	**108**
Street Lighting - New	Challenger Ave				240																
Street Lighting - Upgrade	Reactive work - street light requests during the year	28	29	29	30	31	32	33	34	36	37	38	39	41	42	44	45	47	48	50	52
Street Lighting Renewal per Asset Management Plan		0	31	32	33	34	35	36	37	39	40	42	43	44	46	48	49	51	53	55	57
Grand Total		**12,651**	**51,425**	**24,686**	**29,221**	**13,857**	**62,215**	**17,796**	**11,806**	**29,492**	**26,813**	**14,104**	**19,696**	**33,127**	**25,276**	**12,160**	**11,362**	**17,145**	**14,632**	**12,838**	**13,571**

Appendix 6
Summary Capital Expenditure Funding
Note: Figures are 000's and costs are escalated

Year	Federal / State Grant	DCA Reserve	Other Reserve	Proceeds from Sale	Loan Funds	Municipal Funds	Total Funding
2021	1,569	2,187	4,314	867	2,268	1,447	12,651
2022	1,670	45,044	1,866	419		2,425	51,425
2023	11,527	5,302	391	438	4,015	3,013	24,686
2024	1,963	20,125	842	637	1,640	4,014	29,221
2025	4,652	2,330	377	622	1,689	4,187	13,857
2026	1,381	52,307	263	353	3,115	4,797	62,215
2027	1,429	7,030	296	580	1,809	6,652	17,796
2028	1,479	2,090	1,136	624		6,477	11,806
2029	1,531	17,793	2,439	694		7,034	29,492
2030	1,585	13,095	1,543	755		9,836	26,813
2031	1,640	558	902	499		10,504	14,104
2032	1,697	6,310	1,251	596		9,841	19,696
2033	1,757	13,215	2,394	924		14,837	33,127
2034	1,818	7,798	12	732		14,916	25,276
2035	1,882		330	727		9,222	12,160
2036	1,948		13	830		8,572	11,362
2037	2,016		353	698		14,078	17,145
2038	2,087		366	535		11,645	14,632
2039	2,160		364	1,141		8,845	12,510
2040	2,235		913	1,279		8,773	13,199
Grand Total	**48,026**	**195,186**	**20,363**	**13,949**	**14,535**	**161,114**	**453,174**

Appendix 7
Information on Borrowings

Particulars	2021 Principal Outstanding at Beginning of Year	2021 New Loans	2021 Principal Repayments	2021 Principal Outstanding at End of Year	2021 Interest Repayments	2022 Principal Outstanding at Beginning of Year	2022 New Loans	2022 Principal Repayments	2022 Principal Outstanding at End of Year	2022 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
Loan 99 - Administration Office Renovations	576,328	0	101,531	474,797	38,476	474,797	0	107,976	366,820	31,413
Loan 107 - Administration / Chambers Building Refurbishment	0	2,268,000	0	2,268,000	0	2,268,000	0	199,116	2,068,884	63,007
Education & Welfare										
Loan 96 - Youth Specific Space	95,162	0	29,407	65,755	7,290	65,755	0	31,663	34,092	4,855
Loan 100 - Youth Specific Space	1,270,494	0	134,365	1,136,129	66,273	1,136,129	0	140,713	995,416	59,110
Recreation and Culture										
Loan 94 - Wellard Sports Pavilion	108,836	0	52,710	56,126	6,729	56,126	0	56,126	0	2,841
Loan 95 - Orelia Oval Pavilion	228,388	0	70,577	157,811	17,496	157,811	0	75,991	81,820	11,652
Loan 97 - Orelia Oval Pavilion Extension	1,275,243	0	224,660	1,050,583	85,136	1,050,583	0	238,920	811,663	69,508
Loan 102 - Library & Resource Centre	6,820,176	0	629,004	6,191,172	347,777	6,191,172	0	657,885	5,533,287	315,089
Loan 104 - Recquatic Refurbishment	3,350,000	0	277,849	3,072,151	155,847	3,072,151	0	289,216	2,782,935	142,512
Loan 105 - Bertram Community Centre	1,269,272	0	112,530	1,156,742	48,147	1,156,742	0	116,232	1,040,511	43,760
Loan 106 - Destination Park - Calista	1,321,268	0	102,291	1,218,977	49,749	1,218,977	0	105,528	1,113,449	45,790
Transport										
Loan 98 - Streetscape Beautification	778,044	0	137,067	640,977	51,943	640,977	0	145,768	495,209	42,417
Loan 101 - City Centre Redevelopment	2,500,000	0	0	2,500,000	79,250	2,500,000	0	2,500,000	0	35,094
Loan 108 - City Centre Redevelopment - Refinance Loan 101	0	0	0	0	0	0	2,500,000	0	2,500,000	68,055
New Loans										
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 112A Wellard Road Upgrade – Cavendish to Millar Road	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 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 FY2026	0	0	0	0	0	0	0	0	0	0
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	249,973	0	17,269	232,704	9,869	232,704	0	17,847	214,858	9,169
	19,843,184	**2,268,000**	**1,889,259**	**20,221,926**	**963,982**	**20,221,925**	**2,500,000**	**4,682,982**	**18,038,943**	**944,272**

Appendix 7
Information on Borrowings

Particulars	2023 Principal Outstanding at Beginning of Year	2023 New Loans	2023 Principal Repayments	2023 Principal Outstanding at End of Year	2023 Interest Repayments	2024 Principal Outstanding at Beginning of Year	2024 New Loans	2024 Principal Repayments	2024 Principal Outstanding at End of Year	2024 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
Loan 99 - Administration Office Renovations	366,820	0	114,830	251,990	23,900	251,990	0	122,119	129,871	15,914
Loan 107 - Administration / Chambers Building Refurbishment	2,068,884	0	204,811	1,864,072	57,312	1,864,072	0	210,669	1,653,403	51,454
Education & Welfare										
Loan 96 - Youth Specific Space	34,092	0	34,092	0	2,226	0	0	0	0	0
Loan 100 - Youth Specific Space	995,416	0	147,361	848,054	51,606	848,054	0	154,323	693,731	43,763
Recreation and Culture										
Loan 94 - Wellard Sports Pavilion	0	0	0	0	0	0	0	0	0	0
Loan 95 - Orelia Oval Pavilion	81,820	0	81,820	0	5,344	0	0	0	0	0
Loan 97 - Orelia Oval Pavilion Extension	811,663	0	254,086	557,577	52,883	557,577	0	270,214	287,363	35,214
Loan 102 - Library & Resource Centre	5,533,287	0	688,092	4,845,195	280,877	4,845,195	0	719,686	4,125,509	245,182
Loan 104 - Recquatic Refurbishment	2,782,935	0	301,048	2,481,887	128,629	2,481,887	0	313,364	2,168,523	114,225
Loan 105 - Bertram Community Centre	1,040,511	0	120,055	920,456	39,229	920,456	0	124,005	796,451	34,566
Loan 106 - Destination Park - Calista	1,113,449	0	108,868	1,004,581	41,712	1,004,581	0	112,313	892,268	37,513
Transport										
Loan 98 - Streetscape Beautification	495,209	0	155,021	340,188	32,264	340,188	0	164,861	175,327	21,484
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	90,000	2,500,000	0	0	2,500,000	90,000
New Loans										
Loan 111 - Subregional Sporting Ground Stage 2	0	264,806	0	264,806	0	264,806	0	22,329	242,477	9,593
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	0	1,526,163	0	1,526,163	0	1,526,163	0	128,690	1,397,473	55,289
Loan 112A Wellard Road Upgrade – Cavendish to Millar Road	0	624,347	0	624,347	0	624,347	0	52,647	571,701	22,618
Loan 113 - Major Upgrades - Roads FY2023	0	1,599,605	0	1,599,605	0	1,599,605	0	134,883	1,464,722	57,949
Loan 114 - Major Upgrades - Roads FY2024	0	0	0	0	0	0	1,639,596	0	1,639,596	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 FY2026	0	0	0	0	0	0	0	0	0	0
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	214,858	0	18,444	196,414	8,445	196,414	0	19,062	177,352	7,701
	18,038,942	**4,014,922**	**2,228,529**	**19,825,336**	**814,427**	**19,825,336**	**1,639,596**	**2,549,166**	**18,915,765**	**842,467**

Appendix 7
Information on Borrowings

Particulars	2025 Principal Outstanding at Beginning of Year	2025 New Loans	2025 Principal Repayments	2025 Principal Outstanding at End of Year	2025 Interest Repayments	2026 Principal Outstanding at Beginning of Year	2026 New Loans	2026 Principal Repayments	2026 Principal Outstanding at End of Year	2026 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
Loan 99 - Administration Office Renovations	129,871	0	129,871	0	7,401	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	1,653,403	0	216,695	1,436,708	45,429	1,436,708	0	222,893	1,213,816	39,231
						0				
Education & Welfare						0				
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	693,731	0	161,614	532,117	35,519	532,117	0	169,250	362,867	26,905
						0				
Recreation and Culture						0				
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	287,363	0	287,363	0	16,376	0	0	0	0	0
Loan 102 - Library & Resource Centre	4,125,509	0	752,731	3,372,778	207,680	3,372,778	0	787,292	2,585,485	168,560
Loan 104 - Recquatic Refurbishment	2,168,523	0	326,184	1,842,339	99,144	1,842,339	0	339,528	1,502,812	83,498
Loan 105 - Bertram Community Centre	796,451	0	128,085	668,366	29,717	668,366	0	132,298	536,068	24,728
Loan 106 - Destination Park - Calista	892,268	0	115,867	776,401	33,144	776,401	0	119,534	656,867	28,660
						0				
Transport						0				
Loan 98 - Streetscape Beautification	175,327	0	175,327	0	9,991	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	90,000	2,500,000	0	0	2,500,000	90,000
						0				
New Loans						0				
Loan 111 - Subregional Sporting Ground Stage 2	242,477	0	23,163	219,314	8,759	219,314	0	24,028	195,286	7,894
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	1,397,473	0	133,496	1,263,977	50,483	1,263,977	0	138,481	1,125,495	45,498
Loan 112A Wellard Road Upgrade – Cavendish to Millar Road	571,701	0	54,613	517,088	20,652	517,088	0	56,652	460,436	18,613
Loan 113 - Major Upgrades - Roads FY2023	1,464,722	0	139,920	1,324,802	52,912	1,324,802	0	145,145	1,179,657	47,687
Loan 114 - Major Upgrades - Roads FY2024	1,639,596	0	135,474	1,504,122	66,331	1,504,122	0	141,127	1,362,995	60,678
Loan 117 - Major Upgrades - Roads FY2025	0	1,688,783	0	1,688,783	0	1,688,783	0	136,717	1,552,067	75,468
Loan 118 - Public Open Space Renewals/Replacements FY2026	0	0	0	0	0	0	3,114,974	0	3,114,974	0
Loan 119 - Major Upgrades - Roads FY2026	0	0	0	0	0	0	0	0	0	0
						0				
Self Supporting Loans						0				
Recreation and Culture						0				
Loan 103B - Golf Club Refurbishment	177,352	0	19,700	157,652	6,925	157,652	0	20,359	137,293	6,126
	18,915,765	**1,688,783**	**2,800,101**	**17,804,448**	**780,465**	**17,804,447**	**3,114,974**	**2,433,304**	**18,486,118**	**723,547**

Appendix 7
Information on Borrowings

Particulars	2027 Principal Outstanding at Beginning of Year	2027 New Loans	2027 Principal Repayments	2027 Principal Outstanding at End of Year	2027 Interest Repayments	2028 Principal Outstanding at Beginning of Year	2028 New Loans	2028 Principal Repayments	2028 Principal Outstanding at End of Year	2028 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	1,213,816	0	229,268	984,548	32,856	984,548	0	235,825	748,723	26,299
Education & Welfare										
Loan 96 - Youth Specific Space	0	0	0	0	0	0	0	0	0	0
Loan 100 - Youth Specific Space	362,867	0	177,246	185,621	17,880	185,621	0	185,621	0	8,419
Recreation and Culture										
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	2,585,485	0	823,441	1,762,044	127,632	1,762,044	0	861,250	900,794	84,868
Loan 104 - Recquatic Refurbishment	1,502,812	0	353,418	1,149,394	67,213	1,149,394	0	367,876	781,518	50,267
Loan 105 - Bertram Community Centre	536,068	0	136,651	399,417	19,573	399,417	0	141,146	258,271	14,252
Loan 106 - Destination Park - Calista	656,867	0	123,317	533,550	24,033	533,550	0	127,220	406,330	19,271
Transport										
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	90,000	2,500,000	0	0	2,500,000	90,000
New Loans										
Loan 111 - Subregional Sporting Ground Stage 2	195,286	0	24,925	170,361	6,997	170,361	0	25,856	144,505	6,066
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	1,125,495	0	143,652	981,843	40,327	981,843	0	149,017	832,826	34,962
Loan 112A Wellard Road Upgrade – Cavendish to Millar Road	460,436	0	58,768	401,668	16,497	401,668	0	60,962	340,706	14,303
Loan 113 - Major Upgrades - Roads FY2023	1,179,657	0	150,565	1,029,092	42,267	1,029,092	0	156,188	872,904	36,645
Loan 114 - Major Upgrades - Roads FY2024	1,362,995	0	147,015	1,215,979	54,789	1,215,979	0	153,150	1,062,829	48,655
Loan 117 - Major Upgrades - Roads FY2025	1,552,067	0	143,022	1,409,045	69,162	1,409,045	0	149,618	1,259,426	62,566
Loan 118 - Public Open Space Renewals/Replacements FY2026	3,114,974	0	246,933	2,868,041	152,700	2,868,041	0	259,434	2,608,607	140,199
Loan 119 - Major Upgrades - Roads FY2026	0	1,809,067	0	1,809,067	0	1,809,067	0	140,482	1,668,585	96,351
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	137,293	0	21,041	116,253	5,300	116,253	0	21,745	94,508	4,449
	18,486,118	**1,809,067**	**2,779,262**	**17,515,922**	**767,227**	**17,515,922**	**0**	**3,035,389**	**14,480,533**	**737,572**

Appendix 7
Information on Borrowings

Particulars	2029 Principal Outstanding at Beginning of Year	2029 New Loans	2029 Principal Repayments	2029 Principal Outstanding at End of Year	2029 Interest Repayments	2030 Principal Outstanding at Beginning of Year	2030 New Loans	2030 Principal Repayments	2030 Principal Outstanding at End of Year	2030 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	748,723	0	242,570	506,152	19,554	506,152	0	249,508	256,644	12,616
									0	
Education & Welfare									0	
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
									0	
Recreation and Culture									0	
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	900,794	0	900,794	0	39,950	0	0	0	0	0
Loan 104 - Recquatic Refurbishment	781,518	0	382,926	398,592	32,589	398,592	0	398,592	0	14,215
Loan 105 - Bertram Community Centre	258,271	0	145,790	112,481	8,742	112,481	0	112,481	0	2,826
Loan 106 - Destination Park - Calista	406,330	0	131,246	275,085	14,341	275,085	0	135,399	139,686	9,256
									0	
Transport									0	
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	90,000	2,500,000	0	0	2,500,000	90,000
									0	
New Loans									0	
Loan 111 - Subregional Sporting Ground Stage 2	144,505	0	26,822	117,683	5,101	117,683	0	27,823	89,860	4,099
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	832,826	0	154,581	678,245	29,398	678,245	0	160,354	517,892	23,625
Loan 112A Wellard Road Upgrade – Cavendish to Millar Road	340,706	0	63,239	277,468	12,027	277,468	0	65,600	211,868	9,665
Loan 113 - Major Upgrades - Roads FY2023	872,904	0	162,020	710,884	30,812	710,884	0	168,070	542,814	24,762
Loan 114 - Major Upgrades - Roads FY2024	1,062,829	0	159,540	903,289	42,264	903,289	0	166,197	737,092	35,607
Loan 117 - Major Upgrades - Roads FY2025	1,259,426	0	156,519	1,102,908	55,666	1,102,908	0	163,737	939,170	48,447
Loan 118 - Public Open Space Renewals/Replacements FY2026	2,608,607	0	272,568	2,336,039	127,065	2,336,039	0	286,367	2,049,673	113,267
Loan 119 - Major Upgrades - Roads FY2026	1,668,585	0	148,213	1,520,372	88,619	1,520,372	0	156,371	1,364,001	80,462
Self Supporting Loans										
Recreation and Culture									0	
Loan 103B - Golf Club Refurbishment	94,508	0	22,473	72,035	3,565	72,035	0	23,225	48,809	2,654
	14,480,533	**0**	**2,969,300**	**11,511,233**	**599,693**	**11,511,233**	**0**	**2,113,724**	**9,397,509**	**471,501**

Appendix 7
Information on Borrowings

Particulars	2031 Principal Outstanding at Beginning of Year	2031 New Loans	2031 Principal Repayments	2031 Principal Outstanding at End of Year	2031 Interest Repayments	2032 Principal Outstanding at Beginning of Year	2032 New Loans	2032 Principal Repayments	2032 Principal Outstanding at End of Year	2032 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
Loan 99 - Administration Office Renovations	0	0	0	0	0	0	0	0	0	0
Loan 107 - Administration / Chambers Building Refurbishment	256,644	0	256,644	0	5,479	0	0	0	0	0
Education & Welfare										
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
Recreation and Culture										
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	139,686	0	139,685	0	4,015	0	0	0	0	0
Transport										
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	90,000	2,500,000	0	0	2,500,000	90,000
New Loans										
Loan 111 - Subregional Sporting Ground Stage 2	89,860	0	28,862	60,998	3,060	60,998	0	29,940	31,058	1,983
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	517,892	0	166,342	351,550	17,637	351,550	0	172,553	178,997	11,426
Loan 112A Wellard Road Upgrade – Cavendish to Millar Road	211,868	0	68,050	143,818	7,215	143,818	0	70,591	73,227	4,674
Loan 113 - Major Upgrades - Roads FY2023	542,814	0	174,346	368,468	18,486	368,468	0	180,857	187,611	11,976
Loan 114 - Major Upgrades - Roads FY2024	737,092	0	173,132	563,960	28,673	563,960	0	180,356	383,603	21,448
Loan 117 - Major Upgrades - Roads FY2025	939,170	0	171,289	767,882	40,895	767,882	0	179,189	588,693	32,996
Loan 118 - Public Open Space Renewals/Replacements FY2026	2,049,673	0	300,864	1,748,808	98,769	1,748,808	0	316,095	1,432,713	83,538
Loan 119 - Major Upgrades - Roads FY2026	1,364,001	0	164,977	1,199,024	71,856	1,199,024	0	174,057	1,024,967	62,776
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	48,809	0	24,003	24,807	1,713	24,807	0	24,807	0	739
	9,397,509	**0**	**1,668,194**	**7,729,315**	**387,800**	**7,729,315**	**0**	**1,328,445**	**6,400,870**	**321,555**

Appendix 7
Information on Borrowings

Particulars	2033 Principal Outstanding at Beginning of Year	2033 New Loans	2033 Principal Repayments	2033 Principal Outstanding at End of Year	2033 Interest Repayments	2034 Principal Outstanding at Beginning of Year	2034 New Loans	2034 Principal Repayments	2034 Principal Outstanding at End of Year	2034 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
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
Education & Welfare										
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
Recreation and Culture										
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
Transport										
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	90,000	2,500,000	0	0	2,500,000	90,000
New Loans										
Loan 111 - Subregional Sporting Ground Stage 2	31,058	0	31,058	0	864	0	0	0	0	0
Loan 112 - Wellard Road Upgrade - Bertram Rd to Cavendish Rd	178,997	0	178,997	0	4,982	0	0	0	0	0
Loan 112A Wellard Road Upgrade – Cavendish to Millar Road	73,227	0	73,227	0	2,038	0	0	0	0	0
Loan 113 - Major Upgrades - Roads FY2023	187,611	0	187,610	0	5,222	0	0	0	0	0
Loan 114 - Major Upgrades - Roads FY2024	383,603	0	187,882	195,721	13,923	195,721	0	195,722	0	6,083
Loan 117 - Major Upgrades - Roads FY2025	588,693	0	187,453	401,240	24,732	401,240	0	196,098	205,142	16,086
Loan 118 - Public Open Space Renewals/Replacements FY2026	1,432,713	0	332,098	1,100,616	67,536	1,100,616	0	348,910	751,706	50,723
Loan 119 - Major Upgrades - Roads FY2026	1,024,967	0	183,636	841,331	53,196	841,331	0	193,743	647,588	43,089
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	0	0	0	0	0	0	0	0	0	0
	6,400,870	**0**	**1,361,960**	**5,038,910**	**262,493**	**5,038,908**	**0**	**934,473**	**4,104,436**	**205,982**

Appendix 7
Information on Borrowings

Particulars	2035 Principal Outstanding at Beginning of Year	2035 New Loans	2035 Principal Repayments	2035 Principal Outstanding at End of Year	2035 Interest Repayments	2036 Principal Outstanding at Beginning of Year	2036 New Loans	2036 Principal Repayments	2036 Principal Outstanding at End of Year	2036 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
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
Education & Welfare										
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
Recreation and Culture										
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
Transport										
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	90,000	2,500,000	0	0	2,500,000	90,000
New Loans										
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 112A Wellard Road Upgrade – Cavendish to Millar Road	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 117 - Major Upgrades - Roads FY2025	205,142	0	205,142	0	7,042	0	0	0	0	0
Loan 118 - Public Open Space Renewals/Replacements FY2026	751,706	0	366,574	385,132	33,060	385,132	0	385,131	0	14,502
Loan 119 - Major Upgrades - Roads FY2026	647,588	0	204,406	443,181	32,426	443,181	0	215,656	227,525	21,176
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	0	0	0	0	0	0	0	0	0	0
	4,104,436	**0**	**776,122**	**3,328,314**	**162,528**	**3,328,314**	**0**	**600,788**	**2,727,525**	**125,678**

Appendix 7
Information on Borrowings

Particulars	2037 Principal Outstanding at Beginning of Year	2037 New Loans	2037 Principal Repayments	2037 Principal Outstanding at End of Year	2037 Interest Repayments	2038 Principal Outstanding at Beginning of Year	2038 New Loans	2038 Principal Repayments	2038 Principal Outstanding at End of Year	2038 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
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
Education & Welfare										
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
Recreation and Culture										
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
Transport										
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	90,000	2,500,000	0	0	2,500,000	90,000
New Loans										
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 112A Wellard Road Upgrade – Cavendish to Millar Road	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 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 FY2026	227,525	0	227,525	0	9,307	0	0	0	0	0
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	0	0	0	0	0	0	0	0	0	0
	2,727,525	**0**	**227,525**	**2,500,000**	**99,307**	**2,500,000**	**0**	**0**	**2,500,000**	**90,000**

Appendix 7
Information on Borrowings

Particulars	2039 Principal Outstanding at Beginning of Year	2039 New Loans	2039 Principal Repayments	2039 Principal Outstanding at End of Year	2039 Interest Repayments	2040 Principal Outstanding at Beginning of Year	2040 New Loans	2040 Principal Repayments	2040 Principal Outstanding at End of Year	2040 Interest Repayments
	$	$	$	$	$	$	$	$	$	$
Governance										
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
Education & Welfare										
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
Recreation and Culture										
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
Transport										
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	90,000	2,500,000	0	0	2,500,000	90,000
New Loans										
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 112A Wellard Road Upgrade – Cavendish to Millar Road	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 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 FY2026	0	0	0	0	0	0	0	0	0	0
Self Supporting Loans										
Recreation and Culture										
Loan 103B - Golf Club Refurbishment	0	0	0	0	0	0	0	0	0	0
	2,500,000	**0**	**0**	**2,500,000**	**90,000**	**2,500,000**	**0**	**0**	**2,500,000**	**90,000**

Appendix 8
Information on Reserves

	2021					2022				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	708,014	10,974	10,974	(22,405)	696,583	696,583	12,121	12,121	(19,912)	688,792
Asset Management Reserve	3,713,894	170,669	406,733	(1,829,546)	2,291,080	2,291,080	164,156	164,156	(1,653,976)	801,260
Banksia Park Reserve	51,517	799	799	0	52,316	52,316	910	910	0	53,226
City Infrastructure Reserve	616,957	9,563	9,563	(10,125)	616,394	616,394	10,725	10,725	0	627,120
Community Services & Emergency Relief Reserve	89,197	1,383	1,383	0	90,580	90,580	1,576	1,576	0	92,156
Contiguous Local Authorities Group Reserve	262,962	4,076	14,404	(29,508)	247,858	247,858	4,313	14,873	(30,171)	232,559
Employment Contigency Reserve	0	0	506,286	0	506,286	506,286	8,809	8,809	0	515,095
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	1,172,525	18,174	18,174	(804,741)	385,958	385,958	6,716	6,716	0	392,674
Golf Course Cottage Reserve	29,004	450	450	0	29,454	29,454	512	512	0	29,966
Information Technology Reserve	2,019,549	31,303	31,303	(1,863,086)	187,766	187,766	3,049	3,049	(190,815)	0
Plant & Equipment Replacement Reserve	290,204	4,498	4,498	(284,086)	10,616	10,616	185	185	0	10,801
Public Art Reserve	0	0	20,350	(20,350)	0	0	0	20,808	(20,808)	0
Refuse Reserve	5,686,629	0	0	(153,821)	5,532,808	5,532,808	0	0	(157,282)	5,375,526
Renewable Energy Efficiency Reserve	35,831	555	555	0	36,386	36,386	633	633	0	37,020
Restricted Grants & Contributions Reserve	43,000	0	0	(43,000)	0	0	0	0	0	0
Settlement Agreement Reserve	165,545	2,566	2,566	0	168,111	168,111	2,925	2,925	0	171,036
Workers Compensation Reserve	140,186	2,173	2,173	0	142,359	142,359	2,477	2,477	0	144,836
Sub-Total Municipal Reserves	**16,635,371**	**257,182**	**1,030,209**	**(5,060,668)**	**12,604,912**	**12,604,912**	**219,107**	**250,475**	**(2,072,965)**	**10,782,423**
Developer Contribution Reserves										
DCA 1 - Hard Infrastructure - Bertram	1,468,896	22,768	22,768	(539,817)	951,847	951,847	16,562	16,562	0	968,409
DCA 2 - Hard Infrastructure - Wellard	4,235,751	65,654	65,654	(645,062)	3,656,343	3,656,343	63,620	63,620	0	3,719,963
DCA 3 - Hard Infrastructure - Casuarina	0	0	60,682	(60,682)	0	0	0	4,258,733	(4,258,733)	0
DCA 4 - Hard Infrastructure - Anketell	642,735	9,962	9,962	(34,391)	618,307	618,307	10,759	20,477,604	(21,075,190)	20,721
DCA 5 - Hard Infrastructure - Wandi	809,202	12,543	12,543	(76,791)	744,953	744,953	12,962	12,962	(78,552)	679,363
DCA 6 - Hard Infrastructure - Mandogalup	0	0	35,916	(35,916)	0	0	0	19,819,348	(19,819,348)	0
DCA 7 - Hard Infrastructure - Mandogalup West	24,286	376	376	0	24,662	24,662	429	429	0	25,092
DCA 8 - Soft Infrastructure - Mandogalup	0	0	15,220	(15,220)	0	0	0	18,706	(18,706)	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	10,947,133	169,681	169,681	(1,025,248)	10,091,565	10,091,565	175,593	175,593	(26,495)	10,240,663
DCA 10 - Soft Infrastructure - Casuarina/Anketell	232,230	3,600	3,600	(18,784)	217,046	217,046	3,777	(187,317)	(22,352)	7,376
DCA 11 - Soft Infrastructure - Wellard East	5,724,637	88,732	88,732	(7,981)	5,805,388	5,805,388	101,014	101,014	(11,302)	5,895,100
DCA 12 - Soft Infrastructure - Wellard West	7,313,178	113,354	113,354	(25,795)	7,400,738	7,400,738	128,773	128,773	(29,524)	7,499,986
DCA 13 - Soft Infrastructure - Bertram	291,168	4,513	4,513	(11,477)	284,204	284,204	4,945	4,945	(14,878)	274,271
DCA 14 - Soft Infrastructure - Wellard/Leda	615,711	9,544	9,544	(9,297)	615,958	615,958	10,718	10,718	(12,648)	614,028
DCA 15 - Soft Infrastructure - City Site	511,842	7,934	7,934	(4,942)	514,833	514,833	8,958	8,958	(8,193)	515,598
Sub-Total Developer Contribution Reserves	**32,816,769**	**508,660**	**620,477**	**(2,511,403)**	**30,925,844**	**30,925,844**	**538,110**	**44,910,648**	**(45,375,922)**	**30,460,570**
Total Reserves	**49,452,140**	**765,842**	**1,650,686**	**(7,572,071)**	**43,530,756**	**43,530,756**	**757,217**	**45,161,124**	**(47,448,887)**	**41,242,993**

Appendix 8
Information on Reserves

	2023					2024				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	688,792	14,947	14,947	(20,918)	682,821	682,821	17,753	17,753	(21,963)	678,611
Asset Management Reserve	801,260	168,981	385,402	(283,492)	903,170	903,170	200,924	200,924	(731,782)	372,311
Banksia Park Reserve	53,226	1,155	1,155	0	54,381	54,381	1,414	1,414	0	55,795
City Infrastructure Reserve	627,120	13,608	13,608	(86,132)	554,596	554,596	14,419	14,419	(88,286)	480,730
Community Services & Emergency Relief Reserve	92,156	2,000	2,000	0	94,155	94,155	2,448	2,448	0	96,603
Contiguous Local Authorities Group Reserve	232,559	5,047	15,871	(30,926)	217,504	217,504	5,655	16,750	(31,699)	202,555
Employment Contigency Reserve	515,095	11,178	11,178	0	526,273	526,273	13,683	13,683	0	539,956
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	392,674	8,521	8,521	0	401,195	401,195	10,431	10,431	0	411,626
Golf Course Cottage Reserve	29,966	650	650	0	30,616	30,616	796	796	0	31,412
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	10,801	234	234	0	11,035	11,035	287	287	0	11,322
Public Art Reserve	0	0	21,328	(21,328)	0	0	0	21,861	(21,861)	0
Refuse Reserve	5,375,526	0	0	(161,214)	5,214,312	5,214,312	0	0	(165,244)	5,049,068
Renewable Energy Efficiency Reserve	37,020	803	803	0	37,823	37,823	983	983	0	38,806
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	171,036	3,711	3,711	0	174,748	174,748	4,543	4,543	0	179,291
Workers Compensation Reserve	144,836	3,143	3,143	0	147,979	147,979	3,847	3,847	0	151,826
Sub-Total Municipal Reserves	**10,782,423**	**233,979**	**482,552**	**(604,010)**	**10,660,964**	**10,660,964**	**277,185**	**310,141**	**(1,060,835)**	**9,910,270**
Developer Contribution Reserves										
DCA 1 - Hard Infrastructure - Bertram	968,409	21,014	835,698	(1,743,762)	60,344	60,344	1,569	713,153	(711,584)	61,913
DCA 2 - Hard Infrastructure - Wellard	3,719,963	80,723	80,723	(528,938)	3,271,748	3,271,748	85,065	85,065	(407,438)	2,949,375
DCA 3 - Hard Infrastructure - Casuarina	0	0	63,722	(63,722)	0	0	0	1,995,214	(1,995,214)	0
DCA 4 - Hard Infrastructure - Anketell	20,721	450	36,563	(36,113)	21,171	21,171	550	4,358,873	(4,358,323)	21,721
DCA 5 - Hard Infrastructure - Wandi	679,363	14,742	14,742	(80,638)	613,468	613,468	15,950	6,833,855	(7,391,125)	56,197
DCA 6 - Hard Infrastructure - Mandogalup	0	0	37,715	(37,715)	0	0	0	1,527,074	(1,527,074)	0
DCA 7 - Hard Infrastructure - Mandogalup West	25,092	544	544	0	25,636	25,636	667	827,263	(852,899)	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	46,536	(46,536)	0	0	0	47,725	(47,725)	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	10,240,663	222,222	222,222	(54,532)	10,408,353	10,408,353	270,617	270,617	(55,933)	10,623,038
DCA 10 - Soft Infrastructure - Casuarina/Anketell	7,376	160	50,439	(50,279)	7,536	7,536	196	51,763	(51,567)	7,732
DCA 11 - Soft Infrastructure - Wellard East	5,895,100	127,924	127,924	(38,935)	5,984,089	5,984,089	155,586	155,586	(39,921)	6,099,754
DCA 12 - Soft Infrastructure - Wellard West	7,499,986	162,750	162,750	(2,842,587)	4,820,149	4,820,149	125,324	125,324	(2,913,694)	2,031,779
DCA 13 - Soft Infrastructure - Bertram	274,271	5,952	(216,254)	(42,607)	15,410	15,410	401	44,091	(43,691)	15,811
DCA 14 - Soft Infrastructure - Wellard/Leda	614,028	13,324	13,324	(40,317)	587,035	587,035	15,263	15,263	(41,340)	560,958
DCA 15 - Soft Infrastructure - City Site	515,598	11,188	11,188	(35,744)	491,042	491,042	12,767	12,767	(36,646)	467,163
Sub-Total Developer Contribution Reserves	**30,460,570**	**660,994**	**1,487,837**	**(5,642,425)**	**26,305,982**	**26,305,982**	**683,956**	**17,063,633**	**(20,474,173)**	**22,895,442**
Total Reserves	**41,242,993**	**894,973**	**1,970,389**	**(6,246,436)**	**36,966,946**	**36,966,946**	**961,141**	**17,373,774**	**(21,535,008)**	**32,805,712**

Appendix 8
Information on Reserves

	2025					2026				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	678,611	20,562	20,562	(23,148)	676,025	676,025	23,390	23,390	(24,493)	674,922
Asset Management Reserve	372,311	213,062	895,180	(308,920)	958,571	958,571	257,694	2,067,119	(244,983)	2,780,706
Banksia Park Reserve	55,795	1,691	1,691	0	57,485	57,485	1,742	1,742	0	59,227
City Infrastructure Reserve	480,730	14,566	14,566	(45,168)	450,128	450,128	15,574	15,574	(17,784)	447,918
Community Services & Emergency Relief Reserve	96,603	2,927	2,927	0	99,531	99,531	3,444	3,444	0	102,974
Contiguous Local Authorities Group Reserve	202,555	6,137	17,565	(32,650)	187,470	187,470	6,486	18,314	(33,793)	171,991
Employment Contigency Reserve	539,956	16,361	16,361	0	556,316	556,316	19,249	19,249	0	575,565
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	411,626	12,472	12,472	0	424,098	424,098	14,674	14,674	0	438,772
Golf Course Cottage Reserve	31,412	952	952	0	32,364	32,364	1,120	1,120	0	33,484
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	11,322	343	343	0	11,665	11,665	404	404	0	12,069
Public Art Reserve	0	0	22,517	(22,517)	0	0	0	0	0	0
Refuse Reserve	5,049,068	0	0	(170,202)	4,878,866	4,878,866	0	0	(176,159)	4,702,707
Renewable Energy Efficiency Reserve	38,806	1,176	1,176	0	39,982	39,982	1,383	1,383	0	41,365
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	179,291	5,433	5,433	0	184,724	184,724	6,391	6,391	0	191,115
Workers Compensation Reserve	151,826	4,600	4,600	0	156,427	156,427	5,412	5,412	0	161,839
Sub-Total Municipal Reserves	**9,910,270**	**300,281**	**1,016,344**	**(602,605)**	**10,324,009**	**10,324,009**	**356,964**	**2,178,216**	**(497,211)**	**12,005,013**
Developer Contribution Reserves										
DCA 1 - Hard Infrastructure - Bertram	61,913	1,876	1,585,138	(1,647,052)	0	0	0	0	0	0
DCA 2 - Hard Infrastructure - Wellard	2,949,375	89,366	(1,033,239)	0	1,916,136	1,916,136	66,377	66,377	(1,982,513)	0
DCA 3 - Hard Infrastructure - Casuarina	0	0	67,476	(67,476)	0	0	0	43,680,237	(43,680,237)	0
DCA 4 - Hard Infrastructure - Anketell	21,721	658	38,899	(38,241)	22,379	22,379	774	40,411	(39,637)	23,153
DCA 5 - Hard Infrastructure - Wandi	56,197	1,703	87,091	(85,388)	57,900	57,900	2,003	90,509	(88,506)	59,903
DCA 6 - Hard Infrastructure - Mandogalup	0	0	39,936	(39,936)	0	0	0	41,395	(41,395)	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	108,442	(108,442)	0	0	0	917,397	(917,397)	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	10,623,038	321,878	321,878	(250,878)	10,694,038	10,694,038	370,014	370,014	(2,243,428)	8,820,623
DCA 10 - Soft Infrastructure - Casuarina/Anketell	7,732	234	238,935	(238,701)	7,966	7,966	276	2,163,582	(2,163,306)	8,242
DCA 11 - Soft Infrastructure - Wellard East	6,099,754	184,823	184,823	(58,204)	6,226,373	6,226,373	215,432	215,432	(494,233)	5,947,572
DCA 12 - Soft Infrastructure - Wellard West	2,031,779	61,563	61,563	(78,012)	2,015,330	2,015,330	69,730	69,730	(514,765)	1,570,296
DCA 13 - Soft Infrastructure - Bertram	15,811	479	62,571	(62,092)	16,290	16,290	564	498,827	(498,263)	16,853
DCA 14 - Soft Infrastructure - Wellard/Leda	560,958	16,997	16,997	(10,337)	567,618	567,618	19,640	19,640	(10,715)	576,543
DCA 15 - Soft Infrastructure - City Site	467,163	14,155	14,155	(5,495)	475,823	475,823	16,463	16,463	(5,696)	486,590
Sub-Total Developer Contribution Reserves	**22,895,442**	**693,732**	**1,794,664**	**(2,690,254)**	**21,999,852**	**21,999,852**	**761,274**	**48,190,014**	**(52,680,091)**	**17,509,776**
Total Reserves	**32,805,712**	**994,013**	**2,811,007**	**(3,292,859)**	**32,323,860**	**32,323,860**	**1,118,237**	**50,368,230**	**(53,177,302)**	**29,514,789**

Appendix 8
Information on Reserves

	2027					2028				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	674,922	26,254	26,254	(25,264)	675,913	675,913	29,199	29,199	(26,102)	679,010
Asset Management Reserve	2,780,706	353,748	426,408	(281,160)	2,925,955	2,925,955	391,249	411,725	(971,217)	2,366,463
Banksia Park Reserve	59,227	1,795	1,795	0	61,022	61,022	1,849	1,849	0	62,871
City Infrastructure Reserve	447,918	17,424	17,424	0	465,342	465,342	20,103	20,103	0	485,445
Community Services & Emergency Relief Reserve	102,974	4,006	4,006	0	106,980	106,980	4,622	4,622	0	111,602
Contiguous Local Authorities Group Reserve	171,991	6,690	18,932	(34,975)	155,948	155,948	6,737	19,407	(36,199)	139,155
Employment Contigency Reserve	575,565	22,389	22,389	0	597,954	597,954	25,832	25,832	0	623,786
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	438,772	17,068	17,068	0	455,840	455,840	19,692	19,692	0	475,533
Golf Course Cottage Reserve	33,484	1,303	1,303	0	34,786	34,786	1,503	1,503	0	36,289
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	12,069	469	469	0	12,538	12,538	542	542	0	13,080
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	4,702,707	0	0	(182,324)	4,520,383	4,520,383	0	0	(188,706)	4,331,677
Renewable Energy Efficiency Reserve	41,365	1,609	1,609	0	42,975	42,975	1,857	1,857	0	44,831
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	191,115	7,434	7,434	0	198,549	198,549	8,577	8,577	0	207,127
Workers Compensation Reserve	161,839	6,296	6,296	0	168,135	168,135	7,263	7,263	0	175,398
Sub-Total Municipal Reserves	**12,005,013**	**466,486**	**551,387**	**(523,723)**	**12,032,677**	**12,032,677**	**519,024**	**552,170**	**(1,222,224)**	**11,362,623**
Developer Contribution Reserves										
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	72,379	(72,379)	0	0	0	74,905	(74,905)	0
DCA 4 - Hard Infrastructure - Anketell	23,153	901	41,920	(41,019)	24,054	24,054	1,039	43,490	(42,451)	25,093
DCA 5 - Hard Infrastructure - Wandi	59,903	2,330	93,923	(91,593)	62,234	62,234	2,688	97,479	(94,790)	64,922
DCA 6 - Hard Infrastructure - Mandogalup	0	0	42,838	(42,838)	0	0	0	44,334	(44,334)	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	949,504	(949,504)	0	0	0	491,854	(491,854)	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	8,820,623	343,122	343,122	(2,356,723)	6,807,022	6,807,022	294,063	294,063	(692,396)	6,408,690
DCA 10 - Soft Infrastructure - Casuarina/Anketell	8,242	321	2,239,340	(2,239,019)	8,563	8,563	370	183,430	(183,060)	8,933
DCA 11 - Soft Infrastructure - Wellard East	5,947,572	231,361	231,361	(511,530)	5,667,402	5,667,402	244,832	244,832	(120,372)	5,791,862
DCA 12 - Soft Infrastructure - Wellard West	1,570,296	61,085	61,085	(532,778)	1,098,602	1,098,602	47,460	47,460	(142,362)	1,003,700
DCA 13 - Soft Infrastructure - Bertram	16,853	656	516,356	(515,701)	17,509	17,509	756	125,445	(124,688)	18,265
DCA 14 - Soft Infrastructure - Wellard/Leda	576,543	22,428	22,428	(57,996)	540,974	540,974	23,370	63,004	(472,695)	131,283
DCA 15 - Soft Infrastructure - City Site	486,590	18,928	18,928	(5,895)	499,624	499,624	21,584	21,584	(6,101)	515,107
Sub-Total Developer Contribution Reserves	**17,509,776**	**681,130**	**4,633,184**	**(7,416,975)**	**14,725,984**	**14,725,984**	**636,162**	**1,731,879**	**(2,490,008)**	**13,967,855**
Total Reserves	**29,514,789**	**1,147,616**	**5,184,571**	**(7,940,698)**	**26,758,661**	**26,758,661**	**1,155,187**	**2,284,049**	**(3,712,233)**	**25,330,478**

Appendix 8
Information on Reserves

	2029					2030				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	679,010	32,253	32,253	(26,967)	684,296	684,296	35,515	35,515	(27,862)	691,949
Asset Management Reserve	2,366,463	394,654	1,884,810	(2,439,485)	1,811,788	1,811,788	392,287	556,216	(1,542,578)	825,426
Banksia Park Reserve	62,871	1,905	1,905	0	64,776	64,776	3,362	3,362	0	68,137
City Infrastructure Reserve	485,445	23,059	23,059	0	508,504	508,504	26,391	26,391	0	534,895
Community Services & Emergency Relief Reserve	111,602	5,301	5,301	0	116,903	116,903	6,067	6,067	0	122,970
Contiguous Local Authorities Group Reserve	139,155	6,610	19,723	(37,466)	121,412	121,412	6,301	19,873	(38,778)	102,508
Employment Contigency Reserve	623,786	29,630	29,630	0	653,416	653,416	33,912	33,912	0	687,328
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	475,533	22,588	22,588	0	498,121	498,121	25,852	25,852	0	523,973
Golf Course Cottage Reserve	36,289	1,724	1,724	0	38,013	38,013	1,973	1,973	0	39,986
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	13,080	621	621	0	13,701	13,701	711	711	0	14,412
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	4,331,677	0	0	(195,310)	4,136,367	4,136,367	0	0	(202,146)	3,934,221
Renewable Energy Efficiency Reserve	44,831	2,129	2,129	0	46,961	46,961	2,437	2,437	0	49,398
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	207,127	9,839	9,839	0	216,965	216,965	11,260	11,260	0	228,226
Workers Compensation Reserve	175,398	8,331	8,331	0	183,729	183,729	9,536	9,536	0	193,265
Sub-Total Municipal Reserves	**11,362,623**	**538,643**	**2,041,913**	**(2,699,229)**	**10,705,307**	**10,705,307**	**555,605**	**733,107**	**(1,811,364)**	**9,627,050**
Developer Contribution Reserves										
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	77,520	(77,520)	0	0	0	80,227	(80,227)	0
DCA 4 - Hard Infrastructure - Anketell	25,093	1,192	45,125	(43,933)	26,285	26,285	1,364	46,831	(45,467)	27,649
DCA 5 - Hard Infrastructure - Wandi	64,922	3,084	101,183	(98,099)	68,006	68,006	3,530	105,054	(101,524)	71,535
DCA 6 - Hard Infrastructure - Mandogalup	0	0	4,355,980	(4,355,980)	0.00	0.00	0	47,483	(47,483)	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	4,670,874	(4,670,874)	0	0	0	4,834,353	(4,834,353)	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	6,408,690	304,413	304,413	(3,551,712)	3,161,391	3,161,391	164,076	430,002	(3,309,714)	281,680
DCA 10 - Soft Infrastructure - Casuarina/Anketell	8,933	424	1,596,374	(1,595,950)	9,357	9,357	486	1,652,292	(1,651,806)	9,843
DCA 11 - Soft Infrastructure - Wellard East	5,791,862	275,113	275,113	(1,096,893)	4,970,082	4,970,082	257,947	257,947	(1,135,283)	4,092,746
DCA 12 - Soft Infrastructure - Wellard West	1,003,700	47,676	933,664	(1,119,650)	817,714	817,714	42,439	1,201,274	(1,158,835)	860,153
DCA 13 - Soft Infrastructure - Bertram	18,265	868	1,102,228	(1,101,360)	19,133	19,133	993	1,140,899	(1,139,906)	20,126
DCA 14 - Soft Infrastructure - Wellard/Leda	131,283	6,236	495,475	(489,239)	137,519	137,519	7,137	19,428	(12,291)	144,656
DCA 15 - Soft Infrastructure - City Site	515,107	24,468	24,468	(6,314)	533,261	533,261	27,676	27,676	(6,534)	554,403
Sub-Total Developer Contribution Reserves	**13,967,855**	**663,473**	**13,982,417**	**(18,207,524)**	**9,742,747**	**9,742,747**	**505,649**	**9,843,467**	**(13,523,424)**	**6,062,791**
Total Reserves	**25,330,478**	**1,202,116**	**16,024,329**	**(20,906,753)**	**20,448,055**	**20,448,055**	**1,061,254**	**10,576,574**	**(15,334,788)**	**15,689,841**

Appendix 8
Information on Reserves

	2031					2032				
	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance	Opening Balance	Interest	Transfers In (incl Interest) (+)	Transfers Out (-)	Closing Balance
Reserve	$		$	$	$	$		$	$	$
Municipal Reserves										
Aged Persons Units Reserve	691,949	35,912	35,912	(28,789)	699,072	699,072	36,282	36,282	(29,746)	705,608
Asset Management Reserve	825,426	330,603	629,219	(902,330)	552,314	552,314	305,570	3,629,557	(1,250,995)	2,930,877
Banksia Park Reserve	68,137	3,536	3,536	0	71,674	71,674	3,720	3,720	0	75,394
City Infrastructure Reserve	534,895	27,761	27,761	0	562,656	562,656	29,202	29,202	0	591,858
Community Services & Emergency Relief Reserve	122,970	6,382	6,382	0	129,352	129,352	6,713	6,713	0	136,065
Contiguous Local Authorities Group Reserve	102,508	5,320	19,367	(40,135)	81,740	81,740	4,242	18,781	(41,540)	58,982
Employment Contigency Reserve	687,328	35,672	35,672	0	723,000	723,000	37,524	37,524	0	760,524
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	523,973	27,194	27,194	0	551,167	551,167	28,606	28,606	0	579,773
Golf Course Cottage Reserve	39,986	2,075	2,075	0	42,061	42,061	2,183	2,183	0	44,244
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	14,412	748	748	0	15,160	15,160	787	787	0	15,947
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	3,934,221	0	0	(209,221)	3,724,999	3,724,999	0	0	(216,544)	3,508,455
Renewable Energy Efficiency Reserve	49,398	2,564	2,564	0	51,962	51,962	2,697	2,697	0	54,658
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	228,226	11,845	11,845	0	240,071	240,071	12,460	12,460	0	252,530
Workers Compensation Reserve	193,265	10,030	10,030	0	203,295	203,295	10,551	10,551	0	213,846
Sub-Total Municipal Reserves	**9,627,050**	**499,644**	**812,307**	**(1,180,475)**	**9,258,882**	**9,258,882**	**480,536**	**3,819,062**	**(1,538,825)**	**11,539,119**
Developer Contribution Reserves										
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	83,028	(83,028)	0	0	0	85,927	(85,927)	0
DCA 4 - Hard Infrastructure - Anketell	27,649	1,435	48,489	(47,054)	29,084	29,084	1,509	50,207	(48,697)	30,594
DCA 5 - Hard Infrastructure - Wandi	71,535	3,713	108,781	(105,069)	75,248	75,248	3,905	112,642	(108,737)	79,153
DCA 6 - Hard Infrastructure - Mandogalup	0	0	49,141	(49,141)	0	0	0	50,857	(50,857)	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	87,243	(87,243)	0	0	0	674,613	(674,613)	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	281,680	14,619	112,280	(97,661)	296,299	296,299	15,378	700,773	(685,395)	311,677
DCA 10 - Soft Infrastructure - Casuarina/Anketell	9,843	511	239,894	(239,384)	10,353	10,353	537	2,296,895	(2,296,358)	10,891
DCA 11 - Soft Infrastructure - Wellard East	4,092,746	212,414	212,414	(81,489)	4,223,670	4,223,670	219,208	219,208	(873,901)	3,568,978
DCA 12 - Soft Infrastructure - Wellard West	860,153	44,642	(385,283)	(105,863)	369,007	369,007	19,151	898,277	(899,125)	368,159
DCA 13 - Soft Infrastructure - Bertram	20,126	1,045	72,318	(86,274)	6,170	6,170	320	879,172	(878,852)	6,491
DCA 14 - Soft Infrastructure - Wellard/Leda	144,656	7,508	20,228	(12,720)	152,163	152,163	7,897	107,550	(99,652)	160,061
DCA 15 - Soft Infrastructure - City Site	554,403	28,774	28,774	(6,762)	576,415	576,415	29,916	(286,504)	(67,100)	222,811
Sub-Total Developer Contribution Reserves	**6,062,791**	**314,659**	**677,307**	**(1,001,687)**	**5,738,410**	**5,738,410**	**297,823**	**5,789,618**	**(6,769,215)**	**4,758,814**
Total Reserves	**15,689,841**	**814,303**	**1,489,614**	**(2,182,163)**	**14,997,292**	**14,997,292**	**778,359**	**9,608,680**	**(8,308,040)**	**16,297,932**

Appendix 8
Information on Reserves

	2033					2034				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	705,608	36,621	36,621	(30,737)	711,492	711,492	36,926	36,926	(31,762)	716,657
Asset Management Reserve	2,930,877	417,779	716,395	(2,393,771)	1,253,501	1,253,501	319,091	2,052,063	(11,691)	3,293,872
Banksia Park Reserve	75,394	3,913	3,913	0	79,307	79,307	4,116	4,116	0	83,423
City Infrastructure Reserve	591,858	30,717	30,717	0	622,575	622,575	32,312	32,312	0	654,887
Community Services & Emergency Relief Reserve	136,065	7,062	7,062	0	143,127	143,127	7,428	7,428	0	150,555
Contiguous Local Authorities Group Reserve	58,982	3,061	3,061	0	62,043	62,043	3,220	3,220	0	65,263
Employment Contigency Reserve	760,524	39,471	39,471	0	799,995	799,995	41,520	41,520	0	841,515
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	579,773	30,090	30,090	0	609,863	609,863	31,652	31,652	0	641,515
Golf Course Cottage Reserve	44,244	2,296	2,296	0	46,540	46,540	2,415	2,415	0	48,956
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	15,947	828	828	0	16,775	16,775	871	871	0	17,645
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	3,508,455	0	0	(224,123)	3,284,332	3,284,332	0	0	(231,967)	3,052,365
Renewable Energy Efficiency Reserve	54,658	2,837	2,837	0	57,495	57,495	2,984	2,984	0	60,479
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	252,530	13,106	13,106	0	265,637	265,637	13,787	13,787	0	279,423
Workers Compensation Reserve	213,846	11,099	11,099	0	224,945	224,945	11,675	11,675	0	236,620
Sub-Total Municipal Reserves	**11,539,119**	**598,880**	**897,496**	**(2,648,631)**	**9,787,984**	**9,787,984**	**507,996**	**2,240,968**	**(275,420)**	**11,753,532**
Developer Contribution Reserves										
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	88,927	(88,927)	0	0	0	0	0	0
DCA 4 - Hard Infrastructure - Anketell	30,594	1,590	19,804	(50,398)	0	0	0	0	0	0
DCA 5 - Hard Infrastructure - Wandi	79,153	4,147	33,381	(112,534)	0	0	0	0	0	0
DCA 6 - Hard Infrastructure - Mandogalup	0	0	52,633	(52,633)	0	0	0	0	0	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	698,223	(698,223)	0	0	0	0	0	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	311,677	191	397,705	(709,382)	0	0	0	0	0	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	10,891	566	3,714,481	(3,725,371)	0	0	0	1,576,584	(1,576,584)	0
DCA 11 - Soft Infrastructure - Wellard East	3,568,978	38	38	(2,253,129)	1,315,886	1,315,886	0	260,698	(1,576,584)	0
DCA 12 - Soft Infrastructure - Wellard West	368,159	1,148	2,265,467	(2,279,235)	354,391	354,391	0	1,222,193	(1,576,584)	0
DCA 13 - Soft Infrastructure - Bertram	6,491	267	2,253,194	(2,258,253)	1,431	1,431	0	1,575,153	(1,576,584)	0
DCA 14 - Soft Infrastructure - Wellard/Leda	160,061	4,707	773,796	(864,018)	69,839	69,839	0	810,319	(880,158)	0
DCA 15 - Soft Infrastructure - City Site	222,811	11,564	378,592	(598,194)	3,209	3,209	0	608,426	(611,635)	0
Sub-Total Developer Contribution Reserves	**4,758,814**	**24,218**	**10,676,239**	**(13,690,297)**	**1,744,756**	**1,744,756**	**0**	**6,053,372**	**(7,798,127)**	**0**
Total Reserves	**16,297,932**	**623,099**	**11,573,735**	**(16,338,928)**	**11,532,740**	**11,532,740**	**507,996**	**8,294,340**	**(8,073,548)**	**11,753,532**

Appendix 8
Information on Reserves

	2035					2036				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	716,657	37,195	37,195	(32,822)	721,030	721,030	37,421	37,421	(33,918)	724,533
Asset Management Reserve	3,293,872	412,947	8,676,562	(329,726)	11,640,709	11,640,709	833,688	12,256,176	(12,524)	23,884,361
Banksia Park Reserve	83,423	4,330	4,330	0	87,752	87,752	4,554	4,554	0	92,307
City Infrastructure Reserve	654,887	33,989	33,989	0	688,875	688,875	35,753	35,753	0	724,628
Community Services & Emergency Relief Reserve	150,555	7,814	7,814	0	158,369	158,369	8,219	8,219	0	166,589
Contiguous Local Authorities Group Reserve	65,263	3,387	3,387	0	68,650	68,650	3,563	3,563	0	72,213
Employment Contigency Reserve	841,515	43,675	43,675	0	885,190	885,190	45,941	45,941	0	931,131
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	641,515	33,295	33,295	0	674,810	674,810	35,023	35,023	0	709,832
Golf Course Cottage Reserve	48,956	2,541	2,541	0	51,497	51,497	2,673	2,673	0	54,169
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	17,645	916	916	0	18,561	18,561	963	963	0	19,525
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	3,052,365	0	0	(240,086)	2,812,278	2,812,278	0	0	(248,489)	2,563,789
Renewable Energy Efficiency Reserve	60,479	3,139	3,139	0	63,618	63,618	3,302	3,302	0	66,920
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	279,423	14,502	14,502	0	293,925	293,925	15,255	15,255	0	309,180
Workers Compensation Reserve	236,620	12,281	12,281	0	248,900	248,900	12,918	12,918	0	261,818
Sub-Total Municipal Reserves	**11,753,532**	**610,008**	**8,873,623**	**(602,634)**	**20,024,522**	**20,024,522**	**1,039,273**	**12,461,761**	**(294,931)**	**32,191,351**
Developer Contribution Reserves										
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	0	0	0	0	0	0	0	0
DCA 4 - Hard Infrastructure - Anketell	0	0	0	0	0	0	0	0	0	0
DCA 5 - Hard Infrastructure - Wandi	0	0	0	0	0	0	0	0	0	0
DCA 6 - Hard Infrastructure - Mandogalup	0	0	0	0	0	0	0	0	0	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	0	0	0	0	0	0	0	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	0	0	0	0	0	0	0	0	0	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	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
Sub-Total Developer Contribution Reserves	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Reserves	**11,753,532**	**610,008**	**8,873,623**	**(602,634)**	**20,024,522**	**20,024,522**	**1,039,273**	**12,461,761**	**(294,931)**	**32,191,351**

Appendix 8
Information on Reserves

	2037					2038				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	724,533	37,603	37,603	(35,052)	727,084	727,084	37,736	37,736	(36,225)	728,595
Asset Management Reserve	23,884,361	1,456,237	8,981,713	(353,211)	32,512,863	32,512,863	1,890,708	12,356,884	(365,573)	44,504,174
Banksia Park Reserve	92,307	4,791	4,791	0	97,097	97,097	5,039	5,039	0	102,137
City Infrastructure Reserve	724,628	37,608	37,608	0	762,236	762,236	39,560	39,560	0	801,796
Community Services & Emergency Relief Reserve	166,589	8,646	8,646	0	175,235	175,235	9,095	9,095	0	184,329
Contiguous Local Authorities Group Reserve	72,213	3,748	3,748	0	75,961	75,961	3,942	3,942	0	79,903
Employment Contigency Reserve	931,131	48,326	48,326	0	979,457	979,457	50,834	50,834	0	1,030,291
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	0	0	1,610,357
Family Day Care Reserve	709,832	36,840	36,840	0	746,672	746,672	38,752	38,752	0	785,425
Golf Course Cottage Reserve	54,169	2,811	2,811	0	56,981	56,981	2,957	2,957	0	59,938
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	19,525	1,013	1,013	0	20,538	20,538	1,066	1,066	0	21,604
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	2,563,789	0	0	(257,186)	2,306,602	2,306,602	0	0	(266,188)	2,040,414
Renewable Energy Efficiency Reserve	66,920	3,473	3,473	0	70,393	70,393	3,653	3,653	0	74,046
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	309,180	16,046	16,046	0	325,226	325,226	16,879	16,879	0	342,106
Workers Compensation Reserve	261,818	13,588	13,588	0	275,407	275,407	14,294	14,294	0	289,700
Sub-Total Municipal Reserves	**32,191,351**	**1,670,731**	**9,196,207**	**(645,449)**	**40,742,109**	**40,742,109**	**2,114,515**	**12,580,691**	**(667,986)**	**52,654,814**
Developer Contribution Reserves										
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	0	0	0	0	0	0	0	0
DCA 4 - Hard Infrastructure - Anketell	0	0	0	0	0	0	0	0	0	0
DCA 5 - Hard Infrastructure - Wandi	0	0	0	0	0	0	0	0	0	0
DCA 6 - Hard Infrastructure - Mandogalup	0	0	0	0	0	0	0	0	0	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	0	0	0	0	0	0	0	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	0	0	0	0	0	0	0	0	0	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	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
Sub-Total Developer Contribution Reserves	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Reserves	**32,191,351**	**1,670,731**	**9,196,207**	**(645,449)**	**40,742,109**	**40,742,109**	**2,114,515**	**12,580,691**	**(667,986)**	**52,654,814**

Appendix 8
Information on Reserves

	2039					2040				
Reserve	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $	Opening Balance $	Interest	Transfers In (incl Interest) (+) $	Transfers Out (-) $	Closing Balance $
Municipal Reserves										
Aged Persons Units Reserve	728,595	37,814	37,814	(37,438)	728,971	728,971	37,834	37,834	(38,692)	728,113
Asset Management Reserve	44,504,174	2,499,242	16,489,182	(364,483)	60,628,872	60,628,872	3,321,815	13,679,391	(912,562)	73,395,701
Banksia Park Reserve	102,137	5,301	5,301	0	107,438	107,438	5,576	5,576	0	113,014
City Infrastructure Reserve	801,796	41,613	41,613	0	843,410	843,410	43,773	43,773	0	887,182
Community Services & Emergency Relief Reserve	184,329	9,567	9,567	0	193,896	193,896	10,063	10,063	0	203,959
Contiguous Local Authorities Group Reserve	79,903	4,147	4,147	0	84,050	84,050	4,362	4,362	0	88,412
Employment Contigency Reserve	1,030,291	53,472	53,472	0	1,083,763	1,083,763	56,247	56,247	0	1,140,010
Employee Leave Reserve	1,610,357	0	0	0	1,610,357	1,610,357	0	1,084,677	0	2,695,034
Family Day Care Reserve	785,425	40,764	40,764	0	826,188	826,188	42,879	42,879	0	869,067
Golf Course Cottage Reserve	59,938	3,111	3,111	0	63,049	63,049	3,272	3,272	0	66,321
Information Technology Reserve	0	0	0	0	0	0	0	0	0	0
Plant & Equipment Replacement Reserve	21,604	1,121	1,121	0	22,725	22,725	1,179	1,179	0	23,905
Public Art Reserve	0	0	0	0	0	0	0	0	0	0
Refuse Reserve	2,040,414	0	0	(275,505)	1,764,910	1,764,910	0	3,500,000	(285,147)	4,979,763
Renewable Energy Efficiency Reserve	74,046	3,843	3,843	0	77,889	77,889	4,042	4,042	0	81,932
Restricted Grants & Contributions Reserve	0	0	0	0	0	0	0	0	0	0
Settlement Agreement Reserve	342,106	17,755	17,755	0	359,861	359,861	18,677	18,677	0	378,538
Workers Compensation Reserve	289,700	15,035	15,035	0	304,736	304,736	15,816	15,816	0	320,551
Sub-Total Municipal Reserves	**52,654,814**	**2,732,785**	**16,722,725**	**(677,426)**	**68,700,114**	**68,700,114**	**3,565,536**	**18,507,789**	**(1,236,401)**	**85,971,502**
Developer Contribution Reserves										
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	0	0	0	0	0	0	0	0
DCA 4 - Hard Infrastructure - Anketell	0	0	0	0	0	0	0	0	0	0
DCA 5 - Hard Infrastructure - Wandi	0	0	0	0	0	0	0	0	0	0
DCA 6 - Hard Infrastructure - Mandogalup	0	0	0	0	0	0	0	0	0	0
DCA 7 - Hard Infrastructure - Mandogalup West	0	0	0	0	0	0	0	0	0	0
DCA 8 - Soft Infrastructure - Mandogalup	0	0	0	0	0	0	0	0	0	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	0	0	0	0	0	0	0	0	0	0
DCA 10 - Soft Infrastructure - Casuarina/Anketell	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	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
Sub-Total Developer Contribution Reserves	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Reserves	**52,654,814**	**2,732,785**	**16,722,725**	**(677,426)**	**68,700,114**	**68,700,114**	**3,565,536**	**18,507,789**	**(1,236,401)**	**85,971,502**

Appendix 8
Information on Reserves

Reserve Name	Purpose of the reserve
Aged Persons Units Reserve	was established to provide funds for the capital acquisition and maintenance of the Aged Persons Units, Callistemon Court.
Asset Management Reserve	was established to provide funds for asset management renewal projects of the City's building and infrastructure assets, thereby extending the useful economic life of such assets.
Banksia Park Reserve	has been established to provide funds for the capital acquisition and maintenance of the Banksia Park Retirement Village.
City Infrastructure Reserve	was established to provide funds to creat new City assets or for the major upgrade of City assets to increase the service level provided by the asset.
Community Services & Emergency Relief Reserve	was established 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	was established to provide funds for the prevention and education of Mosquito management.
Employment Contingency Reserve	to be used to ensure that adequate funds are available to finance employee costs.
Employee Leave Reserve	was established for the purpose of ensuring that adequate funds are available to finance employee leave entitlements.
Family Day Care Reserve	provides for the capital acquisitions and maintenance of this facility.
Golf Course Cottage Reserve	was established to provide funds for the maintenance of this building.
Information Technology Reserve	was established to provide funds for the implementation and maintenance of the City's software requirements.
Plant & Equipment Replacement Reserve	is utilised to replace existing fleet, plant and other City assets.
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 Local Planning Policy 5.
Refuse Reserve	was established to provide funds for the costs and subsidy of Waste Management in the City.
Renewable Energy Efficiency Reserve	was established to provide funds for renewable energy and water efficiency initiatives.
Restricted Grants & Contributions Reserve	was established to restrict funds required to complete projects relating to prior financial years.
Settlement Agreement Reserve	was established to provide funds to account for future negotiated settlement agreement payments.
Workers Compensation Reserve	was established 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 the City to pay costs relating to the open claims in the current and future years
DCA 1 - Hard Infrastructure - Bertram	was established 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	was established 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	was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 3 Hard Infrastructure Casaurina.
DCA 4 - Hard Infrastructure - Anketell	was established 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	was established 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	was established 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)	was established 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	was established 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	was established 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	was established 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	was established 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	was established 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	was established 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	was established 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 - Townsite	was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 15 Soft Infrastructure Townsite.

Appendix 9
Assumptions

Inflation Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Multiplier Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Rates	2.50%	2.50%	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%
Grants & Contributions	1.75%	2.25%	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%
Fees and Charges	1.75%	2.25%	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%
Interest Earnings	1.55%	1.74%	2.17%	2.60%	3.03%	3.46%	3.89%	4.32%	4.75%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%
Other Revenue	1.75%	2.25%	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%
Salaries & Wages	1.75%	2.25%	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%
Superannuation	9.50%	10.00%	10.50%	11.00%	11.50%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	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%
Total Superannuation	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	1.75%	2.25%	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%
Workers Compensation Premium	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%
Population	49,596	51,746	53,879	56,096	58,335	60,534	62,902	65,346	67,874	70,374	72,889	75,270	77,471	79,627	81,599	83,469	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
Growth Rate	3.33%	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%
Materials & Contracts	1.75%	2.25%	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%
Utilities	5.80%	2.25%	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%
Interest Rates - Borrowings 5 Year Fixed	1.55%	1.74%	2.17%	2.60%	3.03%	3.46%	3.89%	4.32%	4.75%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%	5.19%
Interest Rates - Borrowings 10 Year Fixed	1.94%	2.14%	2.57%	3.00%	3.43%	3.86%	4.30%	4.73%	5.16%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%
Interest Rates - Borrowings 15 Year Fixed	2.38%	2.56%	2.96%	3.35%	3.74%	4.14%	4.53%	4.92%	5.31%	5.71%	5.71%	5.71%	5.71%	5.71%	5.71%	5.71%	5.71%	5.71%	5.71%	5.71%
Insurance Expenses	1.75%	2.25%	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%

18.2 Budget Variations

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

To amend the 2019/2020 budget to reflect various adjustments to the General Ledger with nil effect to the overall budget as detailed below. Due to the nature of these variations, they fall outside the annual budget review.

OFFICER RECOMMENDATION:

That Council approves the required budget variations to the Adopted Budget for 2019/2020 as follows:

ITEM #	DESCRIPTION	CURRENT BUDGET	INCREASE/ DECREASE	REVISED BUDGET
1	Operating Expense – FESA ESL - Kwinana South - Vehicle Operating Expenses	(22,000)	(3,240)	(25,240)
	Operating Expense – FESA ESL - Kwinana South - Clothing & Accessories	(10,000)	(1,000)	(11,000)
	Operating Expense – FESA ESL - Kwinana South - Maintenance of Plant & Equipment	(5,000)	(3,000)	(8,000)
	Operating Expense – FESA ESL - Kwinana South - Other Goods & Services	(9,000)	(1,000)	(10,000)
	Operating Expense – FESA ESL - Kwinana South - Plant & Equipment Purchases $1,200 - $5,000	Nil	(5,197)	(5,197)
	Operating Expense – FESA ESL - Kwinana South - Utilities, Rates & Taxes	(3,500)	(2,071)	(5,571)
	Operating Expense – FESA ESL – Mandogalup - Vehicle Operating Expenses	(32,000)	(2,240)	(34,240)
	Operating Expense – FESA ESL – Mandogalup - Clothing & Accessories	(10,000)	(1,000)	(11,000)
	Operating Expense – FESA ESL – Mandogalup - Maintenance of Plant & Equipment	(5,000)	(3,000)	(8,000)
	Operating Expense – FESA ESL – Mandogalup - Other Goods & Services	(9,000)	(1,000)	(10,000)

18.2 BUDGET VARIATIONS

	Operating Expense – FESA ESL – Mandogalup - Plant & Equipment Purchases $1,200 - $5,000	Nil	(8,560)	(8,560)
	Operating Expense – FESA ESL – Mandogalup - Utilities, Rates & Taxes	(3,500)	(2,071)	(5,571)
	Operating Revenue - FESA ESL Grant - Government Grant State	163,650	33,379	197,029
2	Reserve Transfer – Operating – Restricted Grants and Contributions	Nil	43,750	43,750
	Operating Revenue - FESA ESL Grant - Government Grant State	197,029	(43,750)	153,279
3	Capital Expense – Building Construction – Bright Futures Family Day Care kitchen	Nil	20,000	20,000
	Reserve Transfer – Capital – Family Day Care Reserve	Nil	(20,000)	(20,000)
4	Capital Expense – Building Construction - Fiona Harris Pavilion Solar Panels	Nil	20,000	20,000
	Reserve Transfer – Capital – Renewable Energy Efficiency Reserve	Nil	(20,000)	(20,000)

NOTE: AN ABSOLUTE MAJORITY OF COUNCIL IS REQUIRED

DISCUSSION:

ITEM #	DESCRIPTION	CURRENT BUDGET	INCREASE/ DECREASE	REVISED BUDGET
1	Operating Expense – FESA ESL - Kwinana South - Vehicle Operating Expenses	(22,000)	(3,240)	(25,240)
	Operating Expense – FESA ESL - Kwinana South - Clothing & Accessories	(10,000)	(1,000)	(11,000)
	Operating Expense – FESA ESL - Kwinana South - Maintenance of Plant & Equipment	(5,000)	(3,000)	(8,000)
	Operating Expense – FESA ESL - Kwinana South - Other Goods & Services	(9,000)	(1,000)	(10,000)
	Operating Expense – FESA ESL - Kwinana South - Plant & Equipment Purchases $1,200 - $5,000	Nil	(5,197)	(5,197)
	Operating Expense – FESA ESL - Kwinana South - Utilities, Rates & Taxes	(3,500)	(2,071)	(5,571)

18.2 BUDGET VARIATIONS

	Operating Expense – FESA ESL – Mandogalup - Vehicle Operating Expenses	(32,000)	(2,240)	(34,240)
	Operating Expense – FESA ESL – Mandogalup - Clothing & Accessories	(10,000)	(1,000)	(11,000)
	Operating Expense – FESA ESL – Mandogalup - Maintenance of Plant & Equipment	(5,000)	(3,000)	(8,000)
	Operating Expense – FESA ESL – Mandogalup - Other Goods & Services	(9,000)	(1,000)	(10,000)
	Operating Expense – FESA ESL – Mandogalup - Plant & Equipment Purchases $1,200 - $5,000	Nil	(8,560)	(8,560)
	Operating Expense – FESA ESL – Mandogalup - Utilities, Rates & Taxes	(3,500)	(2,071)	(5,571)
	Operating Revenue - FESA ESL Grant - Government Grant State	163,650	33,379	197,029

The City successfully appealed and achieved a reassessment and increase of $33,379 to the original grant allocation of the Department of Fire and Emergency Services annual operating grant. A budget variation is required to increase relevant expenditure accounts detailed above to reflect the increase in grant funding.

2	Reserve Transfer – Operating – Restricted Grants and Contributions	Nil	43,750	43,750
	Operating Revenue - FESA ESL Grant - Government Grant State	197,029	(43,750)	153,279

The first quarter payment of the Department of Fire and Emergency grant for 2019/2020 was received in June 2019. This income was recognised in 2018/2019 and was transferred to the Restricted Grants & Contributions Reserve in June. A budget variation is now required to transfer the funds from Reserve to Muni for use in this financial year.

3	Capital Expense – Building Construction – Bright Futures Family Day Care kitchen	Nil	20,000	20,000
	Reserve Transfer – Capital – Family Day Care Reserve	Nil	(20,000)	(20,000)

The Bright Futures Family Day Care kitchen in the playgroup building needs to be replaced due to environmental health requirements. The kitchen is old and cupboards have deteriorated over the years causing a health hazard and is no longer suitable to prepare food. It is proposed that the replacement kitchen is funded from the Family Day Care Reserve.

18.2 BUDGET VARIATIONS

4	Capital Expense – Building Construction - Fiona Harris Pavilion Solar Panels	Nil	20,000	20,000
	Reserve Transfer – Capital – Renewable Energy Efficiency Reserve	Nil	(20,000)	(20,000)

To continue with the City's renewable energy efficiency measures it has been identified that the City would benefit from the Fiona Harris Pavilion having solar panels installed. Installation of the required solar panels and battery system will occur upon review and selection of the most effective system. This project is proposed to be funded from the Renewable Energy Efficiency Reserve.

LEGAL/POLICY IMPLICATIONS:

The *Local Government Act 1995* Part 6 Division 4 s 6.8 (1) requires the local government not to incur expenditure from its municipal fund for an additional purpose except where the expenditure-

(b) is authorised in advance by resolution*

"additional purpose" means a purpose for which no expenditure estimate is included in the local government's annual budget.

*requires an absolute majority of Council.

FINANCIAL/BUDGET IMPLICATIONS:

The financial implications are detailed in this report.

ASSET MANAGEMENT IMPLICATIONS:

The allocation of funds towards the upgrading and purchase of City assets will be included in the City's Asset Management Strategy.

ENVIRONMENTAL IMPLICATIONS:

No environmental implications have been identified as a result of this report or recommendation.

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

18.2 BUDGET VARIATIONS

COMMUNITY ENGAGEMENT:

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

PUBLIC HEALTH IMPLICATIONS

There are no public health implications as a result of this report.

RISK IMPLICATIONS:

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

Risk Event	The City does not manage its finances adequately and allows budget expenditure to exceed allocation and the City then finds itself unable to fund its services that have been approved through the budget process
Risk Theme	Failure to fulfil statutory regulations or compliance Providing inaccurate advice/information
Risk Effect/Impact	Financial Reputation Compliance
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Rare
Rating (before treatment)	Low
Risk Treatment in place	Reduce (mitigate risk)
Response to risk treatment required/in place	Submit budget variation requests to Council as they arise, identifying financial implications and ensuring there is nil effect on the budget adopted
Rating (after treatment)	Low

COUNCIL DECISION

041

MOVED CR P FEASEY **SECONDED CR M KEARNEY**

That Council approves the required budget variations to the Adopted Budget for 2019/2020 as follows:

ITEM #	DESCRIPTION	CURRENT BUDGET	INCREASE/ DECREASE	REVISED BUDGET
1	Operating Expense – FESA ESL - Kwinana South - Vehicle Operating Expenses	(22,000)	(3,240)	(25,240)
	Operating Expense – FESA ESL - Kwinana South - Clothing & Accessories	(10,000)	(1,000)	(11,000)
	Operating Expense – FESA ESL - Kwinana South - Maintenance of Plant & Equipment	(5,000)	(3,000)	(8,000)

18.2 BUDGET VARIATIONS

	Operating Expense – FESA ESL - Kwinana South - Other Goods & Services	**(9,000)**	**(1,000)**	**(10,000)**
	Operating Expense – FESA ESL - Kwinana South - Plant & Equipment Purchases $1,200 - $5,000	**Nil**	**(5,197)**	**(5,197)**
	Operating Expense – FESA ESL - Kwinana South - Utilities, Rates & Taxes	**(3,500)**	**(2,071)**	**(5,571)**
	Operating Expense – FESA ESL – Mandogalup - Vehicle Operating Expenses	**(32,000)**	**(2,240)**	**(34,240)**
	Operating Expense – FESA ESL – Mandogalup - Clothing & Accessories	**(10,000)**	**(1,000)**	**(11,000)**
	Operating Expense – FESA ESL – Mandogalup - Maintenance of Plant & Equipment	**(5,000)**	**(3,000)**	**(8,000)**
	Operating Expense – FESA ESL – Mandogalup - Other Goods & Services	**(9,000)**	**(1,000)**	**(10,000)**
	Operating Expense – FESA ESL – Mandogalup - Plant & Equipment Purchases $1,200 - $5,000	**Nil**	**(8,560)**	**(8,560)**
	Operating Expense – FESA ESL – Mandogalup - Utilities, Rates & Taxes	**(3,500)**	**(2,071)**	**(5,571)**
	Operating Revenue - FESA ESL Grant - Government Grant State	**163,650**	**33,379**	**197,029**
2	**Reserve Transfer – Operating – Restricted Grants and Contributions**	**Nil**	**43,750**	**43,750**
	Operating Revenue - FESA ESL Grant - Government Grant State	**197,029**	**(43,750)**	**153,279**
3	**Capital Expense – Building Construction – Bright Futures Family Day Care kitchen**	**Nil**	**20,000**	**20,000**
	Reserve Transfer – Capital – Family Day Care Reserve	**Nil**	**(20,000)**	**(20,000)**
4	**Capital Expense – Building Construction - Fiona Harris Pavilion Solar Panels**	**Nil**	**20,000**	**20,000**
	Reserve Transfer – Capital – Renewable Energy Efficiency Reserve	**Nil**	**(20,000)**	**(20,000)**

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL
7/0

18.3 Adoption of the City of Kwinana Annual Report (including the full set of Audited Financial Statements) for the year ending 30 June 2019 and acceptance date set for Electors' General Meeting

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

Each year the City is required to hold an Electors' General Meeting to consider matters arising with respect to the previous financial year. In order to set a date for the 2019 Electors' General Meeting, the Council is required to have both received the audit report for the prior period as well as having accepted the Annual Report.

A copy of the draft Annual Report for the year ended 30 June 2019 is attached for consideration.

In addition to acceptance of the Annual Report, approval of Council is sought to set the date of the Electors' General Meeting.

OFFICER RECOMMENDATION:

That Council:

1. Adopt the 2018/19 Annual Report as detailed in Attachments A and B.

2. Advertise the availability of the Annual Report in accordance with Section 5.55 of the *Local Government Act 1995*.

3. In accordance with Section 5.27 of the *Local Government Act 1995*, set the date for the Electors' General Meeting as Wednesday, 29 January 2020 commencing at 6:30pm.

NOTE: ABSOLUTE MAJORITY OF COUNCIL REQUIRED

DISCUSSION:

The Annual Report is in final draft format, with only minor changes to be made if required.

Section 5.27 of the *Local Government Act 1995* requires a general meeting of electors to be held not more than 56 days after the local government accepts the annual report.

If Council adopts the Annual Report, the Electors' General Meeting (EGM) is required to be held not later than 5 February 2020. It is proposed that the EGM be held prior to the Ordinary Council Meeting in January 2020, being 29 January 2020 at 6:30pm.

Upon acceptance of the Annual Report and approval of the EGM date and time, statutory advertising will take place within the district and the final version of the report will be distributed through the Administration Centre and at the City Library. Additionally the Annual Report will be made available for viewing on the night of the Elector's General Meeting and at any time on the City's website.

18.3 ADOPTION OF THE CITY OF KWINANA ANNUAL REPORT (INCLUDING THE FULL SET OF AUDITED FINANCIAL STATEMENTS) FOR THE YEAR ENDING 30 JUNE 2019 AND ACCEPTANCE DATE SET FOR ELECTORS' GENERAL MEETING

LEGAL/POLICY IMPLICATIONS:

Local Government Act 1995

5.121. Register of certain complaints of minor breaches

(1) The complaints officer for each local government is required to maintain a register of complaints which records all complaints that result in action under section 5.110(6)(b) or (c).

(2) The register of complaints is to include, for each recorded complaint —

(a) the name of the Council member about whom the complaint is made; and

(b) the name of the person who makes the complaint; and

(c) a description of the minor breach that the standards panel finds has occurred; and

(d) details of the action taken under section 5.110(6)(b) or (c).

5.27 Electors' general meeting

(1) A general meeting of the electors of a district is to be held once every financial year.

(2) A general meeting is to be held on a day selected by the local government but not more than 56 days after the local government accepts the annual report for the previous financial year.

(3) The matters to be discussed at general electors' meetings are to be those prescribed.

5.53 Annual Reports

(1) The local government is to prepare an annual report for each financial year.

(2) The annual report is to contain —

(a) a report from the mayor or president; and

(b) a report from the CEO; and

[(c), (d) deleted.]

(e) an overview of the plan for the future of the district made in accordance with section 5.56, including major initiatives that are proposed to commence or to continue in the next financial year;

(f) the financial report for the financial year; and

(g) such information as may be prescribed in relation to the payments made to employees; and

(h) the auditor's report for the financial year; and

(ha) a matter on which a report must be made under section 29(2) of the Disability Services Act 1993; and

(hb) details of entries made under section 5.121 during the financial year in the register of complaints, including —

(i) the number of complaints recorded in the register of complaints; and

(ii) how the recorded complaints were dealt with; and

(iii) any other details that the regulations may require; and

(i) such other information as may be prescribed.

18.3 ADOPTION OF THE CITY OF KWINANA ANNUAL REPORT (INCLUDING THE FULL SET OF AUDITED FINANCIAL STATEMENTS) FOR THE YEAR ENDING 30 JUNE 2019 AND ACCEPTANCE DATE SET FOR ELECTORS' GENERAL MEETING

5.54. Acceptance of annual reports

(1) Subject to subsection (2), the annual report for a financial year is to be accepted by the local government no later than 31 December after that financial year.*

** Absolute majority required.*

(2) If the auditor's report is not available in time for the annual report for a financial year to be accepted by 31 December after that financial year, the annual report is to be accepted by the local government no later than 2 months after the auditor's report becomes available.

5.55. Notice of annual reports

(1) The CEO is to give local public notice of the availability of the annual report as soon as practicable after the report has been accepted by the local government.

5.56. Planning for the future

(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.

6.4. Financial report

(1) A local government is to prepare an annual financial report for the preceding financial year and such other financial reports as are prescribed.

(2) The financial report is to —
(a) be prepared and presented in the manner and form prescribed; and
(b) contain the prescribed information.

(3) By 30 September following each financial year or such extended time as the Minister allows, a local government is to submit to its auditor —
(a) the accounts of the local government, balanced up to the last day of the preceding financial year; and
(b) the annual financial report of the local government for the preceding financial year.

<u>Disability Services Act 1993</u>

29. Report about disability access and inclusion plan

(2) A local government or regional local government that has a disability access and inclusion plan must include in its annual report prepared under section 5.53 of the Local Government Act 1995 a report about the implementation of the plan.

18.3 ADOPTION OF THE CITY OF KWINANA ANNUAL REPORT (INCLUDING THE FULL SET OF AUDITED FINANCIAL STATEMENTS) FOR THE YEAR ENDING 30 JUNE 2019 AND ACCEPTANCE DATE SET FOR ELECTORS' GENERAL MEETING

FINANCIAL/BUDGET IMPLICATIONS:

The City has made provision for the Electors' General Meeting in its adopted budget for the 2019/20 financial year. There will be a minimal budget implication for the production of the Annual Report (Part 1 - Community) as only a small print run will be produced. This has been budgeted at approximately $600 with the cost being covered within the 2019/20 Marketing and Communications Budget.

ASSET MANAGEMENT IMPLICATIONS:

No asset management implications have been identified as a result of this report or recommendation.

ENVIRONMENTAL IMPLICATIONS:

There are no environmental implications have been identified as a result of this report or recommendation.

STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective 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

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	Failure to adopt the Annual Report and set the date of the EGM as recommended. I.e. Council chooses to defer the decision to a later date.
Risk Theme	Failure to fulfil statutory regs or compliance requirements

18.3 ADOPTION OF THE CITY OF KWINANA ANNUAL REPORT (INCLUDING THE FULL SET OF AUDITED FINANCIAL STATEMENTS) FOR THE YEAR ENDING 30 JUNE 2019 AND ACCEPTANCE DATE SET FOR ELECTORS' GENERAL MEETING

Risk Effect/Impact	Compliance
Risk Assessment Context	Strategic
Consequence	Minor
Likelihood	Unlikely
Rating (before treatment)	Low
Risk Treatment in place	Prepare Contingent Plans - in event risk occurs
Response to risk treatment required/in place	The holding of an annual Electors' General Meeting (EGM) is required in accordance with the *Local Government Act 1995*. Deferral of the adoption of the Annual Report will delay the holding of the EGM and require the reorganisation of a further meeting, within 56 days following adoption, as prescribed in Section 5.54 of the *Local Government Act 1995*.
Rating (after treatment)	Low

COUNCIL DECISION

042

MOVED CR S LEE **SECONDED CR P FEASEY**

That Council:

1. **Adopt the 2018/19 Annual Report as detailed in Attachments A and B.**

2. **Advertise the availability of the Annual Report in accordance with Section 5.55 of the *Local Government Act 1995*.**

3. **In accordance with Section 5.27 of the *Local Government Act 1995*, set the date for the Electors' General Meeting as Wednesday, 29 January 2020 commencing at 6:30pm.**

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL
7/0

ATTACHMENT A

City of Kwinana

Annual Report 2018/19

(Part 1 – Community)



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Welcome

Mayor's Welcome

Another year has passed in Kwinana and I have been proud to see our City grow from strength to strength.

The environment was a key focus for us during 2018/19 for a variety of reasons. The City was thrust into the international limelight through a photograph of a waste-filled drainage net on social media. The basic, but effective, waste management tool was seen by over 20 million Facebook users around the world, 30,000 of whom shared the post with their friends and family.

This wild success showed us just how important it is for governments at all levels to focus on simple environmental issues, as small actions can have a huge impact on humanity.

Environmental issues are not always lightweight. This year the City tackled an important issue when a local natural area, home to a number of threatened species, was endangered with the introduction of a sand mine. The City strongly opposes this mine because it will have a significant negative impact on our residents, as well as the loss of valuable Banksia Woodlands which are home to precious native flora and fauna. We will continue to work collaboratively with the community on the *Stop Banksia Sand Mines* campaign to try and block construction of this mine.

Throughout 2018/19, the Kwinana Council and the City continued to focus on the delivery of great community events that really make Kwinana 'the place to be'. The *Tianqi Lithium Symphony Spectacular*, held in December 2018, attracted around 7,000 locals to an evening of free rock and popular music.

Younger residents were treated to a day of *Positive Vibes* at the Edge Skatepark in October 2018, with performances by local artists and talented skaters. The chill-out tent proved popular for many, especially those who received free hair braiding or manicures with friends and family.

Despite the threat of rain, more than 4,000 local children and families attended the annual *Alcoa Children's Festival* in March 2019. Held on Calista Oval, the carnival-themed event delighted children, young and old. My personal favourite was the chance to fly high above the treetops on the awesome swing ride enjoyed by thousands on the day.

But of course, having fun in Kwinana can be a daily or weekly event! The City was proud to become the first local council in the country to receive support from Relationships Australia to run '*Neighbour Day Every Day*', a year-round initiative designed to bring neighbours together and foster a sense of community and safety.

Looking into the future, I am excited about what the coming year holds, especially as we edge closer to the reality of an outer harbor here in Kwinana. This development, along with investments in the battery, waste and construction industries, will provide a huge boost for the local economy and create employment opportunities for our residents.

Finally, I want to thank my fellow Councillors for their ongoing support. It's a constant pleasure to work with such a strong and cohesive group of people who all have the common goal of improving our great city.

Carol Adams,

Mayor of Kwinana



CEO's Welcome

During 2018/19, our City continued to deliver a strong and sustainable long-term vision for Kwinana.

Throughout the year, we delivered a variety of major infrastructure projects, including almost $3 million in road renewal and upgrades, footpath and pedestrian crossing upgrades and a significant investment in the upgrade of the Koorliny Arts Centre.

We consulted extensively with our community, seeking input on a variety of issues, including community health issues, disability access and inclusion, planning and asset management.

The City also continued its focus on sustainability, with significant investments in street trees, parks, bush care and coast care.

Kwinana boasts a rich biodiversity that we continue to protect and maintain through diligent conservation and active community participation. This year, we stood in solidarity with local residents against a proposed sand mine, which, if established, could destroy protected flora and fauna in the region.

We have continued to focus on safety and security, as these issues are high priorities for our residents and local businesses. This financial year saw significant investment in community liaison, expansion of CCTV coverage, community education initiatives, illegal dumping control, compliance operations and our 24/7 City Assist service.

The City also ensured that it invested heavily in local leisure activities, including the installation of lighting at Thomas Oval and a variety of grand-scale events for young and old, including the *Alcoa Children's Festival*, *Positive Vibes Youth Festival*, Australia Day celebrations and the 2018 *Tianqi Lithium Symphony Spectacular*.

We have continued to strive for the prosperity of our local industrial, retail and business communities, significantly investing in the support and growth of local businesses and seeking to ensure that our residents have access to a wide range of employment opportunities.

On a personal note, it has been my great pleasure to lead a team of hard-working, dedicated professionals who strive to deliver high-quality services and programs to our community. Over the last financial year these great people brought a variety of accolades to the City for projects in the fields of education, the Arts, community, family day care, ranger services and sustainability.

I am proud of what we achieved over the last year and excited about the bright future that lays ahead for the Kwinana community.

Joanne Abbiss

Chief Executive Officer



Introduction

The City of Kwinana's Annual Report 2018/19 comprises two parts, Part 1 – Community and Part 2 – Annual Financial Report. This Annual Report (Part 1 – Community), together with the Annual Report (Part 2 – Annual Financial Report) complies with the requirements of Section 5.53(1) of the *Local Government Act 1995*.

The Annual Report 2018/19 (Part 2 – Annual Financial Report) is available to download from the City's website at www.kwinana.wa.gov.au or in hard copy, on request, by contacting the City of Kwinana on 9439 0200 or visiting the City of Kwinana Administration Building at the corner of Gilmore Avenue and Sulphur Road, Kwinana.















2018/19 Snapshot

JULY 2018

City Urges Residents to Protest Sand Mine

The City, together with the Casuarina Wellard Progress Association, encouraged residents to protest against the proposed Banksia Road Sand Mines.

AUGUST 2018

City's Drainage Nets Post Goes Viral

A Facebook post about the City's drainage nets went viral with over 2.5 million people around the world reached over a 48-hour period.

SEPTEMBER 2018

Wildflower Walk Celebrates Biodiversity

The International Month of Biodiversity was celebrated through the Wildflower Walk and art reflecting the unique beauty of local wildflowers.

OCTOBER 2018

Grass Just Gets Greener for Adventure Park

The City's Adventure Park received the Green Flag Award at the International Parks and Leisure Congress in Melbourne.

Pioneers Celebrate 50 Years of Memories in Kwinana

The City of Kwinana hosted their inaugural Pioneers Lunch for over 100 locals who have lived in the area for 50 years or more.

NOVEMBER 2018

Small Business Booming in Kwinana

Kwinana's Small Business Lunch showcased the benefits of doing business in Kwinana.

Awards Night Honours Talented Artists

Four local performing and visual artists were recognised at the City's inaugural Arts and Culture Awards.

DECEMBER 2018

City Wins National Sustainability Award

The City was given a Council Collaboration Award for its involvement with the Garage Sale Trail program.

Symphony Spectacular a Huge Success

The Perth Symphony Orchestra returned to perform the biggest and best concert Kwinana has ever seen.













JANUARY 2019

Congratulations Citizen of the Year Winners

The City's Australia Day event again saw many worthy local residents celebrated.

FEBRUARY 2019

City Supports Infrastructure Australia's Report

The City showed support for a report which recognised the need to improve WA's port facilities.

MARCH 2019

Children's Festival a Huge Hit Again

The highly anticipated 2019 *Alcoa Children's Festival* was enjoyed by more than 4,000 residents on 9 March 2019.

Conciliation Plan Unifies City and Aboriginal Community

The City launched its Conciliation Action Plan on Friday, 29 March 2019.

APRIL 2019

Neighbours in Kwinana Strengthen Local Connections

The City launched '*Neighbour Day Every Day*' to encourage residents to strengthen connections.

MAY 2019

Purple Bench Commemorates Domestic Violence Victims

The City unveiled its purple bench in support of Domestic Violence Prevention Month.

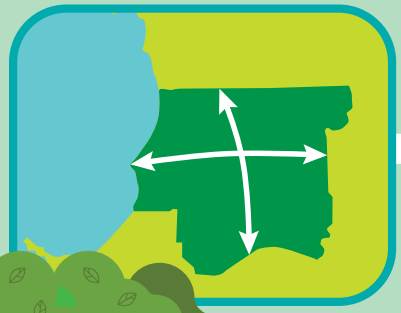
JUNE 2019

Mayor Awarded Top Honour

Mayor Carol Adams OAM was recognised in the 2019 Queens Birthday Honours with an Order of Australia (General Division).

Kwinana at a Glance

Data obtained from ABS 2016 Census, ABS 2018 Estimated Resident Population, Forecast.id population forecast and City of Kwinana.



Land area:
120.01km^2



Residential Dwellings:
12,892



Population:
43,511

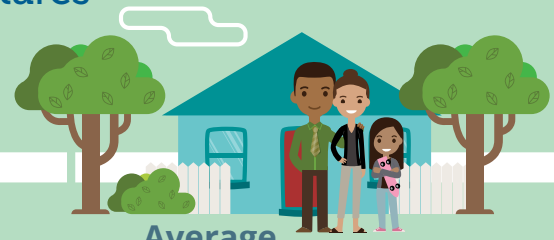
Natural Bushland:
249 hectares

Total length of roads:
458.262km

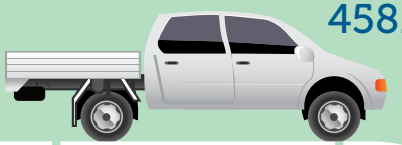


12,507 tonnes of domestic waste collected

3,604 tonnes of domestic recycling collected



Average household size: 2.7



35km from the CBD





Parks (active and passive): 116

Facilities (total):
328



Parks (dryland): 52

City of Kwinana Council

The Council consists of a Mayor, a Deputy Mayor and six Councillors who represent the community across the municipality of the City of Kwinana. The term for each Elected Member is four years. The Mayor and Deputy Mayor are elected by the Council every two years.



Term of office expires 2021

Mayor Carol Adams



Term of office expires 2019

Deputy Mayor Peter Feasey



Term of office expires 2019

Councillor Wendy Cooper



Term of office expires 2021

Councillor Merv Kearney



Term of office expires 2021

Councillor Sandra Lee



Term of office expires 2019

Councillor Sheila Mills



Term of office expires 2021

Councillor Matthew Rowse



Term of office expires 2019

Councillor Dennis Wood

ELECTED MEMBER ATTENDANCE AT COUNCIL MEETINGS 2017/18

Elected Member Council Meeting Attendance Register 2018/19			
Elected Member	Ordinary Council Meetings Attended	Special Council Meetings Attended	Electors General Meeting Attended
Total meetings held	23	1	1
Carol Adams	21	1	1
Peter Feasey	22	1	1
Wendy Cooper	18	1	1
Merv Kearney	20	1	1
Sandra Lee	22	1	1
Sheila Mills	21	1	1
Matthew Rowse	19	1	0
Dennis Wood	23	0	1

City of Kwinana Staff



EMPLOYEES

Full Time Equivalent (FTE) employees as at 30 June 2019:	
Full Time:	209.80
Part-time:	52.60
Casual:	38.34
Total FTE's:	300.74
Total:	375 (head count)

CITY OF KWINANA LEADERSHIP TEAM



Joanne Abbiss
Chief Executive Officer











Michelle Bell Director City Legal	**Maria Cooke** Director City Regulation	**Doug Elkins** Director City Infrastructure	**Casey Mihovilovich** Director City Strategy	**Barbara Powell** Director City Engagement
Iain Mason Manager Contracts **Bruce Mentz** Manager Essential Services	**Vacant** Manager Environment **Darrell Monteiro** Manager Environmental Health **Paul Neilson** Manager Planning and Development **Rodney Molyneux** Manager Building Services	**David Boccuzzi** Manager Works **Reza Najafzadeh** Manager Engineering Services **Ann Nicholas** Manager Asset Management Services	**Natasha Dransfield** Manager Corporate Communications **Kelli Hayward** Manager Finance **Mathew Smith** Manager Information Technology **Sue Wiltshire** Manager Human Resources	**Paul Gravett** Manager Community Engagement **Fiona Grieves** Manager Community Services

City of Kwinana Products and Services

The primary role of Local Government is to provide infrastructure, facilities, governance and community services to support the community. The City of Kwinana offers hundreds of products and services for the benefit of its community, to promote wellbeing and to offer community members a choice and range of options to suit their lifestyle.

The City manages depot works, including:

- footpath, crossover, road, kerb and drainage maintenance;
- maintenance of street furniture, fencing, BBQs, playgrounds and water features;
- rubbish and litter collection and removal of illegal dumping;
- fire control assistance and emergency response to storms, floods, fire; and
- mowing, weed control, turf renovation, irrigation maintenance, landscaping, pruning, weeding, mulching, fertilizing and planting.

The City provides a safety and security program, including:

- local law enforcement (including parking, littering and animal control);
- support emergency services and maintain volunteer fire brigades;
- enforcing off-road vehicle and illegal camping laws;
- community safety and security initiatives; and
- Community Liaison Service.

The City offers community services, including:

- community events, arts, culture and heritage programs;
- community centres;
- community grants and Citizenship ceremonies;
- library and community information services; and
- community engagement programs.

The City provides health and fitness programs, including:

- local parks and public open spaces; and
- health and wellbeing programs including walking trails, sporting club development, Kwinana Recquatic.

The City offers youth support, including:

- youth facilities such as the Zone Youth Space and Edge Skate park;
- LyriK Youth Development Programs; and
- school holiday and term activity programs.

The City manages the local environment, including:

- waste, recycling, green waste and bulk goods collections;
- environmental health investigations;
- advice on food hygiene, control of diseases, public events, food preparation premises, public swimming pools and noise nuisances;
- bushland management including weed control, feral animal control and firebreak maintenance;
- environmental planning and protection, fencing, biodiversity and revegetation; and
- sustainability initiatives including water and energy conservation.

The City provides expertise in planning, building and engineering, including:

- building assessments, site inspections, demolition licenses;
- upkeep of the City's buildings;
- development applications, structural planning assessments, planning policies and town planning schemes;
- roads, pathways, bridges, drainage, landscaping and street lighting; and
- road safety audits, traffic analysis, transport coordination and car parking studies.

The City uses a number of survey and evaluation methods to regularly assess community needs. Results of the City's Community Perception and Wellbeing Survey are used to gauge satisfaction and importance in relation to the products and services that it delivers to the community. The City strives to ensure that it is continually reviewing and providing essential services to meet the needs of its growing community.

To find out more about the range of products and services provided by the City of Kwinana visit **www.kwinana.wa.gov.au/a-z**.

Our Vision

OUR VISION

The City's vision for the future of the Kwinana community is:

"Rich in spirit, alive with opportunities, surrounded by nature – it's all here"

This vision forms the foundation of the *City's Strategic Community Plan 2017-2027*, with each part of the vision represented as a specific community aspiration. To achieve these aspirations, clearly defined community outcomes have been identified. These outcomes further illustrate how the community would like the City of Kwinana to look in ten years' time.

INTEGRATED PLANNING AND REPORTING

The Annual Report (Part 1 – Community) measures our progress against priorities and aspirations that were developed in consultation with the community and documented in the City of Kwinana's long term vision, the *Strategic Community Plan 2017-2027*.

The City's *Corporate Business Plan 2018-2023* provides clarity on the initiatives and services that the City is planning or implementing over the next five years, with emphasis on the delivery of the strategic priorities outlined in our *Strategic Community Plan 2017-2027*.

These two key strategic documents are then underpinned by a number of informing documents including, but not limited to, the Long Term Financial Plan, Asset Management Plans, Workforce Plan and issues or area-specific plans (see figure 1).

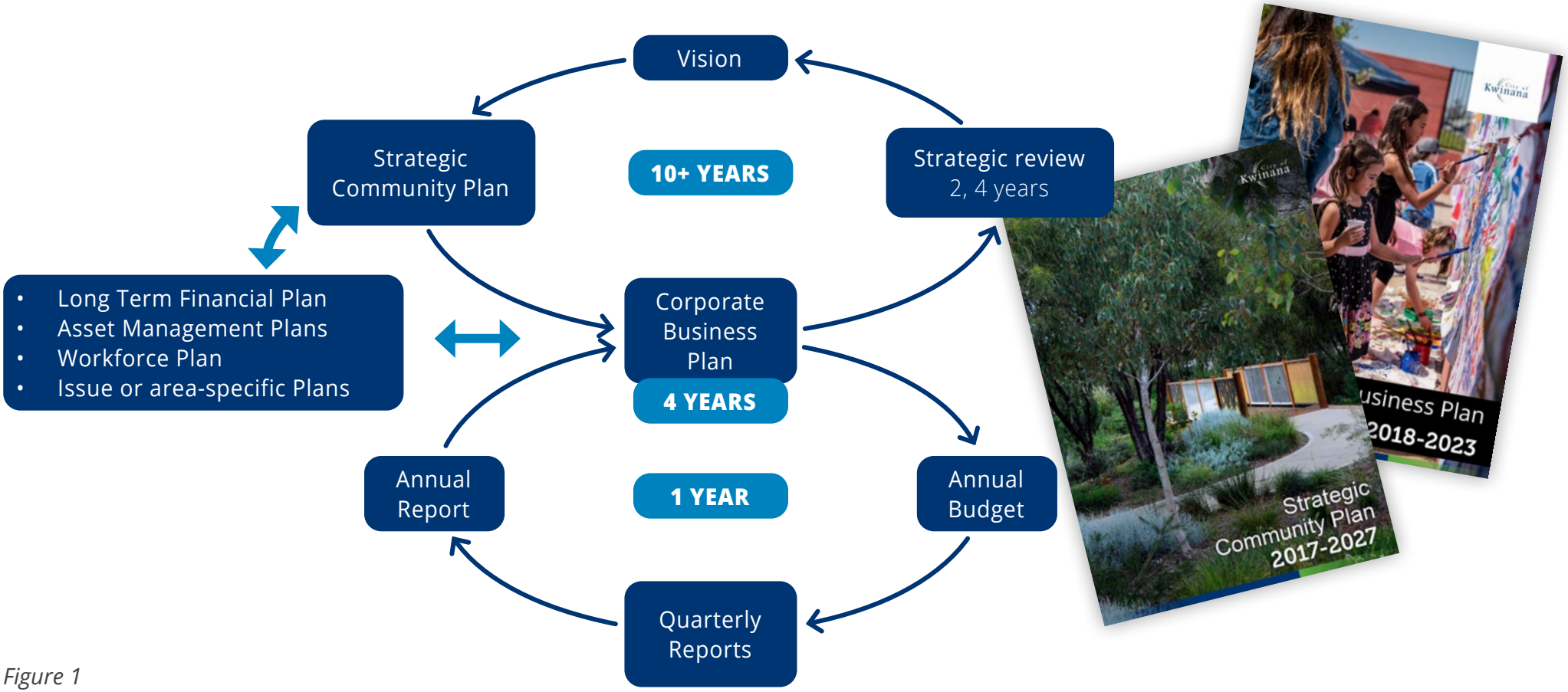


Figure 1

STRATEGIC COMMUNITY PLAN UPDATE

The City adopted an updated version of the *Strategic Community Plan (2019 -2029)* at the Ordinary Council meeting held on 26 June 2019. Changes were approved to keep the strategies that achieve the community's vision up-to-date. No major changes to the community's vision, aspirations or objectives were made.

Key Items of Expenditure

Expenditure for key projects and programs delivered in the 2018/19 year include:

- $2.02m for road renewal and upgrades.
- $212k for footpath upgrades on Rowley Road - Lyon Road to freeway and Adventure Park – Gilmore Avenue.
- $42k for the upgrade of Gilmore Avenue pedestrian crossing, including the supply and installation of fencing.
- $66k for Kwinana Senior Citizens Centre for repairs and the replacement of external cladding, ceilings and gutters/downpipes.
- $137k for the Street Tree Program activities, including tree planting in Bertram and the Kwinana Industrial Area.
- $299k towards the Bushcare and Coastcare Program activities, including weed control, coastal care, feral animal control and firebreak maintenance in Kwinana's reserves.
- $103k for the Parks for People program improvements.
- $220k towards supporting the Community Liaison Service.
- $124k towards Community Grant Funding Programs including Greening Fund and Community Development programs.
- $450k for the City Community Events Series including the annual big concert, Children's Festival, Christmas Lolly Run, Youth Festival and Australia Day.
- $109k towards upgrades to the Koorliny Arts Centre.
- $2.5m towards safety and security initiatives including expansion of CCTV coverage, community education initiatives, illegal dumping control, compliance operations and 24/7 City Assist service.



2018/19 Key Priorities Achieved



Key organisational priorities in the 2018/19 year that were achieved include:

The City continued its lobbying and advocacy activities in relation to a new port. Additionally, it conducted strategic land use, freight and transport planning studies, as well as infrastructure development related to the port (see page 28). The City was represented on a number of work streams as part of the Westport Taskforce, including;

- constraints and opportunities;
- supply chain;
- Ports capability; and
- environment.

The City progressed a number of key strategies and education plans during the year including:

- the *Bike and Walk Plan*, adopted by Council on 5 December 2018;
- the revised *City Centre Master Plan*, adopted by Council for advertising on 27 March 2019;
- *Environmental Education Strategy*, adopted by Council on 12 December 2018;
- A Waste Education Program, adopted by Council on 12 December 2018; and
- *Mosquito and Midge Management Plan*, adopted on 12 December 2018.

The City conducted a detailed review of its emergency management arrangements and compliance with responsibility for emergency management and bush fire control. Joint exercises were held to test and refine its local emergency management arrangements. Relationship-building between the City and its volunteer bush fire brigades continued with the City successfully securing grant funding

for the upgrade of both the Mandogalup and Kwinana South Fire Brigade buildings.

Progression of the City's *Land Optimisation Strategy*, which considers the unique identity of assets and economy of each place, including:

- Adoption of the *Land Asset Optimisation Policy and Strategy* in June 2019; and
- Finalisation of a *Feasibility and Property Strategy for Lot 904, Chisham Avenue*.

Progression of the Development Contributions Plan, which saw the City complete the cost apportionment schedule for Amendment 132 to the City of Kwinana Local Planning Scheme No.2. This sought to amend the boundary of DCA1 to include the Bollard Bulrush area and adjacent areas within Wellard (West) and introduce new items of infrastructure into Development Contribution Area 1. Additionally, Amendment 145 to *Local Planning Scheme No.2 – Review of Development Contribution Plans* was adopted by Council in January 2019.

The review and development of a new Local Planning Strategy for the City was initiated. A number of studies were prepared to inform the City's position in terms of population and housing, biodiversity, employment and economic development, integrated land use and transport and rural land. These discussion papers formed the basis of community engagement which took place in early to mid-2019.

A review of the *City Centre Master Plan* was undertaken, with the revised master plan being adopted by Council in March 2019. The revised plan included a number of key variations to the current plan, including changes to the City Centre Planning Framework, redefining the City Centre, key policy changes, proposed changes to precincts, elements of the proposed master plan, identification of existing activity nodes, development of key links, primary off-street routes, a secondary movements network, built form and car parking.

During 2018/19 the City began implementing the *Tidy Neighbourhoods* initiative which aims to improve the aesthetics of the City. The program was developed by using existing City initiatives as well as introducing new activities to be incrementally rolled out. The initiatives were centered around three key themes:

- Community Engagement – which endeavored to build pride in local communities by continuing to provide various community grant programs, education campaigns, event facilitation and by building new skills within the community.
- Improvement of Local Amenity – by activating and revitalising local activity centres through planning, grants, maintenance and litter and graffiti programs.
- Management of the Environment – by continuing with programs such as revegetation and weed management, feral animal control, illegal dumping and littering compliance, and tree planting programs.



Aspiration Areas

Aspiration 1: Rich in spirit

ASPIRATION STATEMENT:

Kwinana 2030 will be a place where the strong community spirit that has historically existed continues to thrive and develop. The City will be alive with an assortment of community events that encourage civic participation and celebrate our multiculturalism.



The outcomes we aspire to create include:

- a unique identity;
- a City alive with activity;
- a safe and welcoming place;
- services for an active community;
- strong community leaders;
- a community who help each other;
- a vibrant arts culture;
- a sense of place and heritage; and
- accessibility for everyone.

RELATED PLANS (INTERNAL):

Place Plans for City Areas	Multicultural Action Plan
Conciliation Action Plan	Youth Strategy
Events Strategy	Community Safety and Crime Prevention Plan
Welcoming Diversity Strategy	Active Ageing Strategy
Children and Families Policy	Community Development Fund
Every Club Plan	Public Art Masterplan
Active Citizenship Strategy	Disability Access and Inclusion Plan
Heritage Assets	History and Heritage Implementation Plan
Place Based Events Fund	Activate the City's Community Centres and Public Spaces

FAST FACTS:

- The City Assist team received a total of 11,510 calls.
- 336 new dogs and 30 new cats were registered with the City.
- Of the 452 dogs impounded, 147 were reunited with their owners and 77 were rehomed (including rescue groups).
- The City Assist team responded to 647 parking complaints, 240 impounded vehicles, 693 alarms and 50 untidy property complaints.
- Kwinana Recquatic Centre had 303,915 visits, with 99,754 people attending swimming lessons, 11,376 children attending the Crèche and 2,009 children attending vacation care.
- There were 88,514 visitors to the library, with 170,534 items loaned or renewed, 26,164 print jobs undertaken, 31,669 uses of the public PCs and 3,656 participants of library programs.
- The library added 6,607 new physical items to the collection.
- 8,721 youth contacts were made to the City's youth services.
- 41 athletes received funding to the value of $7,950 as part of the City's Representative Sports Travel Assistance Program.
- Thirteen community groups received over $48,000 from the City to host place-based events aimed at enhancing local connections.
- The City supported seniors within the City to offset the cost of security installations within their homes to the value of over $12,000.
- 22 community, sporting, recreation and not-for-profit groups shared over $30,000 from the Kwinana Community Funding program.
- Community facilities were booked for a total of 36,435 hours, with 1,131 of those hours booked at the popular Kwinana Adventure Playground patio.
- Programs and activities offered by the City saw 3,974 attendances at John Wellard Community Centre, 2,554 at William Bertram Community Centre and 2,307 at Darius Wells Library and Resource Centre.

KEY PROJECTS/ACHIEVEMENTS IN 2018/19:

In 2018/19 the City set out again to host a range of crowd-pleasing, show-stopping events including:

- The *Positive Vibes Youth Festival* held in October 2018 at the Edge Skatepark. The event included a mix of skate/scooter/BMX elements, live music and pop-up activities, as well as a chill-out zone. Over 1,200 young people attended the event.
- As the much anticipated follow-up from the 2017 *Act-Belong-Commit Rock Symphony*, the City once again teamed up with the Perth Symphony Orchestra to host the *Tianqi Lithium Symphony Spectacular*. Held on the first Saturday in December, the event was the City's brightest, loudest and most popular event of the year, with around 7,000 people attending.
- The annual Lolly Run saw Santa and his crew of helpers drive every street in Kwinana on Christmas morning to spread cheer and goodwill. 18 volunteer crews distributed approximately 13,000 lolly bags on the day.
- 850 community members attended the Kwinana Adventure Park on January 26 2019 to celebrate Australia Day. Attendees enjoyed a free BBQ breakfast, inflatable waterslides and celebrated the crowning of Kwinana's Community Citizens of the Year. The event also included the City's largest Citizenship Ceremony of the year, welcoming and celebrating the City's newest Australians to our community.
- In March 2019, the *Alcoa Children's Festival* saw Calista Oval transformed into an old-fashioned travelling carnival, complete with a mermaid tank, chair swing, ferris wheel, merry-go-round and sideshow activities.The event was hugely popular, with over 4,000 people enjoying quality time with their family, friends and community.

Along with its premium showcase events, the City also hosted a number of specialty events to celebrate certain groups within the community, including:

- The City's inaugural Pioneers Lunch in October 2018. The City invited local residents who have lived in Kwinana for over 50 continuous years to attend a complimentary lunch at Medina Hall.
- The annual Seniors' Christmas Lunches were very popular, with 150 guests attending three lunches. Attendees were treated to a Christmas luncheon with carols performed by local primary school children.
- In 2018/19, the City of Kwinana gave thirteen different awards to community members excelling in their field of choice. These awards recognised people participating in sports, the arts, volunteering and general leadership.

The City's library and community centres continued to foster a sense of belonging by hosting a wide range of activities that focused on providing lifelong learning opportunities, promoting social inclusion, encouraging skills development, and encouraging a sense of fun.

- The Darius Wells Library and Resource Centre hosted a mini 'wellness expo' which aimed to help participants to *Stress Less in Kwinana*. The event included a marketplace featuring 18 local wellness businesses that attracted approximately 150 people. Attendees were invited to drop in on a number of presentations, including gut health, reflexology, homeopathy, naturopathy and de-stressing via meditation.
- The outdoor movie nights in Chisham Square remained popular, as did the family picnic that accompanied the annual 'turning on of the Christmas lights'.
- A number of Kwinana residents participated in the John Wellard Community Centre's *Singing Ukes*, with the group regularly attracting over 30 participants and receiving a growing demand for performances.
- The Befriend knitting and crocheting group continued to meet, with up to 35 members sharing stories, skills and completing projects at the Darius Wells Library and Resource Centre. Groups such as this allow residents to develop friendships and create opportunities for personal growth, community connectedness and increasing self-esteem.
- The John Wellard Community Centre's technology-based programs were also popular, attracting a not-commonly-reached demographic of young men aged 18 to 30 years.
- Technology was also a theme at the William Bertram Community Centre. In addition to groups participating in art, drama, dance, martial arts classes and social networking and hobby groups, there was a lot of interest and good attendance numbers for the Vex Robotics program for 7 to 12 year olds.

The Library team continued its excellent work in the lifelong learning space, by launching *Learning English Through Storytime*, and continuing its regular *Storytime* sessions which often attract over 30 young children and their parents. Staff also worked to increase the availability of appropriate resources for people with a disability and introduced a range of new modernised and unique services, including:

- The ability for library members to now subscribe to an online service, which allows them to both stream and legally download music from a wide range of artists and genres.
- The installation of two spin bike desks in June 2019, to encourage users to incorporate physical activity into their daily routine, as well as assisting those who may have difficulty sitting still while reading.

Kwinana Youth Services continued to provide a range of valuable services to the community including case management, advocacy, program delivery, outreach and more. The City also collaborated with a number of external agencies including Centrelink, Youth Justice, the Department of Education and Department of Communities to assist in delivering its services and as part of the Youth Intervention and Youth Participation Working Groups.

Kwinana Youth Service also ran a series of programs, including:

- The Dismantle Bike Rescue Program, which worked with ten local youth, teaching them bicycle maintenance skills.
- The *Kadadjiny Bidi* 'Learning Path' program, a six-month program open to Aboriginal and Torres Strait Islander young women aged 15+, who were taught computer skills, graphic design, reading, writing and more.
- Developmental and engagement programs that focussed on bullying, self-image, sexual health, drugs/alcohol, and overall wellbeing.
- The Young Womens Boxing Program, which was co-facilitated by the City, to assist with the social and emotional challenges that arise for female adolescents.
- The Young Boxing Warriors for Boys Program, which focussed on 12 to 13 year olds who were involved in antisocial behaviour.

Additionally, the Zone Youth Space continued to operate a drop-in service, as well as a range of programs including *Beatball*, a popular diversionary basketball program run by the City in conjunction with Nyoongar Wellbeing and Sports and Koya. The City also ran World Cup Wednesday, a soccer program aimed at culturally and linguistically diverse youth, which proved a big success. The Zone also held school holiday programs and events, including Club Rezonate, an under-18s club-style event aimed at educating young people about the dangers of alcohol.

The *Leadership, Youth and Respect in Kwinana* (LyriK) award ceremony was held in June 2019, to celebrate the achievements and positive contributions that young people, aged 10 to 18 years, make to the Kwinana community. There were ten category award winners and the Young Person of the Year Award went to Year 12 Gilmore College student Caliesha Edney.

The City also held the LyriK educational scholarship awards ceremony in December 2018 at the Zone Youth Space, where 16 local youth were given scholarships towards their education for 2019.

Club and local sport improvements featured significantly throughout the 2018/19 year, with the City undertaking the following projects:

- updates to Varris Park in Orelia as part of the Parks for People Program;
- improvements to Kwinana Tennis Club and Bertram Oval; and
- the installation of new lighting at Medina Oval, home to the Kwinana Knights Football Club.



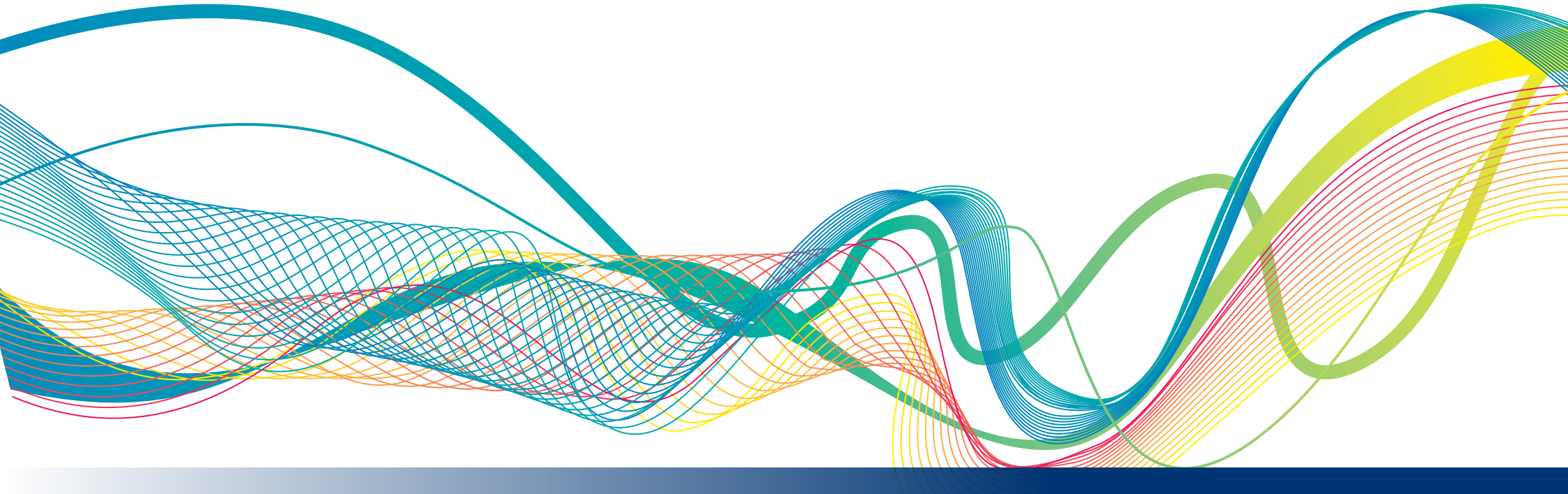
As part of the Department of Local Government, Sport and Cultural Industries Every Club funding ($20,000), the City provided ongoing support to sporting and recreation clubs in Kwinana, by offering upskilling workshops and hosting sporting expos to attract new members.

The City worked hard to enhance positive neighbourhood relationships and foster community spirit through the *Neighbour Day* and *Neighbour Day Every Day* initiatives;

- National Neighbour Day was held on 31 March 2019. The City financially supported eight community groups with over $24,000 to fund events that reached 1,500 people over seven street activities aimed at building community connections, reducing loneliness and enhancing community safety.
- *Neighbour Day Every Day*, also launched on 31 March 2019, was developed by the City to encourage residents to connect with their neighbours on a regular basis. *Neighbour Day Every Day* was the first program of its kind nationally and is endorsed by Relationships Australia, the home of *Neighbour Day*.

Community safety remained a key priority for the City, in line with its Strategic Community Plan, which saw the City, and primarily its City Assist service, implement a number of initiatives throughout the year including:

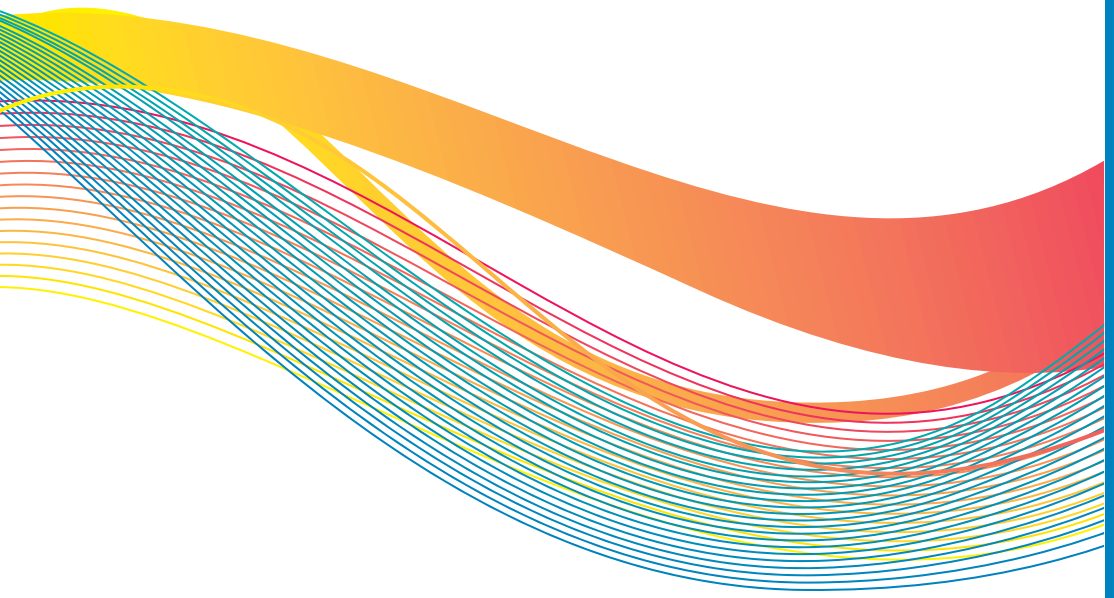
- the refurbishment, replacement and addition of CCTV at the Darius Wells Library and Resource Centre, Recquatic, City Administration Building, Kwinana Adventure Park, William Bertram Community Centre and the City Operations Centre;
- the review of a number of the City Assist team processes, including nuisance barking, dog attack investigations, dog registrations for more than two dogs and abandoned vehicles, resulting in more streamlined and customer-focused processes;
- the introduction of the new *Parking and Parking Facilities Local Law 2018*; and
- the introduction of the City's *Commercial Vehicle Parking Planning Policy*, as well as ongoing education of this policy throughout the community.



City Assist also continued to work with the community to shift its approach from enforcement to education, using the City's various communications channels in an effort to educate people in relation to matters such as responsible dog ownership, traffic management and parking.

During the year, some significant improvements in community safety were introduced in the area of Emergency Services, including:

- a review of the City's Local Emergency Management Arrangements (LEMA's);
- strengthening of the City's relationships with the Volunteer Bush Fire Brigades members and the City's Local Emergency Management Committee (LEMC);
- the hosting of a number of key desktop and practical emergency management exercises; and
- the securing of State funding for the refurbishment of the Volunteer Bush Fire Brigades Kwinana South and Mandogalup facilities.



The City's Community Engagement Officers provided support for all community members who are homeless or at risk of homelessness, including people who are experiencing social disadvantage. They assisted people by linking them to resources and support services. This service, together with the City's Community Liaison Service which patrols public areas in Kwinana, helped the City to engage directly with community members, businesses, services and agencies. They also identified strategies to promote community access to facilities and community services and enhance a sense of community safety in the public domain.

Lastly, the City continued to embrace its unique and diverse community through a range of initiatives including:

- the continued implementation of the City's *Multicultural Action Plan*, which is supported by the Multicultural Advisory Group, to deliver a range of initiatives that promote cultural diversity including *Harmony Week* and the *That Was My Home* project; and
- the Kwinana Conciliation Advisory Group's launch of the City's *Reflect Conciliation Action Plan* in March 2019. The group continue to support, guide and monitor implementation of the Plan as well as provide valued advice to the City on Aboriginal and Torres Strait Islander matters.

The City continued to have a strong focus on improving disability, access and inclusion in Kwinana through the development of a new *Disability Access and Inclusion Plan*. The City continued to facilitate the Disability Access and Inclusion Working Group on a quarterly basis, with the group providing input and feedback as required (see page 41).

AWARDS:

- The City Assist team was awarded runner-up Ranger Team of the Year in October 2018.
- The Recquatic Team received a 100 per cent score on the Royal Lifesaving Safety Assessment.
- At the 2018 Local Government Policy Awards, the City received an award in the Healthy and Safe Food category for the Healthy Lunch Box Initiative.

OUTCOME MEASURES:

Measure	Industry Average (%)	Performance 2017/18 (%)	Performance 2018/19 (%)*
Increase in % of community satisfied with festivals, events and cultural activities	64	64	71
Increase in % of community satisfied with safety and security	54	41	45
Increase in % of community satisfied with services and facilities for youth	50	58	70

*results from the 2018 Community Wellbeing and Perception Survey

KEY PROJECTS TO OCCUR IN 2019/20:

- Installation of CCTV and activation of the shopping precinct in Medina;
- Introduction of digital systems at Kwinana Recquatic for access gates, enrolments and sports competition management;
- Library self-service improvement project;
- Construction of the Honeywood Oval club rooms and cricket facility development;
- Thomas Oval floodlight installation;
- Review and development of the City's *Multicultural Action Plan* and *Innovate Conciliation Action Plan*;
- Implementation of the *Disability Access and Inclusion Plan 2019-2021*;
- Implementation of the *Kwinana Community Safety Plan*; and
- Implementation of the Youth Strategy.



Aspiration 2: Alive with opportunity

ASPIRATION STATEMENT:

In the coming years, the City of Kwinana will be a place alive with opportunities. The continued prosperity of the local industrial, retail and business community will provide a wide range of employment options for residents.

The outcomes we aspire to create include:

- varied job opportunities;
- quality education for all ages;
- a bustling retail scene;
- a powerhouse industrial area;
- a thriving local economy; and
- an innovative approval system.



RELATED PLANS (INTERNAL):

Economic Development Action Plan	Kwinana Outer Harbour Project
Land Optimisation Strategy	Lifelong Learning Strategy
Local Commercial and Activity Centres Strategy	Local Planning Strategy
Integrated Transport Strategy	City Centre Master Plan

FAST FACTS:

- The Kwinana Volunteer Centre facilitated 614 hours volunteered by community members and 643 referrals to 43 agencies.
- 38 new pool and barrier applications were approved.
- Bright Futures Children's Services:
  - An average of 625 children attended the centre each week.
  - 23 families and 54 children enrolled in Moordijt Kulungar play sessions.
  - An average of 96 educators worked with the service each week.

KEY PROJECTS/ACHIEVEMENTS IN 2018/19:

During the 2018/19 financial year the City continued to enhance opportunities for the Kwinana community. Activities ranged from high-level lobbying and advocacy for strategic initiatives with huge economic benefit to the area, to more individualised opportunities, including volunteering and employment (offered through Bright Futures Children's Services) and those related to residents establishing or improving their properties in Kwinana.

Building approvals continued to be a major consideration, with numerous residents liaising with the City each week to achieve their desired home improvements.

The City's building service generated a user-pays alternative solution to meet statutory requirements and fill a gap identified through the building assessment process. They also introduced a process for residents to apply for a staged building permit to commence works where time is critical but the final design or approvals are yet to be obtained.

These improvements provided an opportunity to reduce red tape, enhance customer experiences and improve the efficiency of the City's internal processes.

The City of Kwinana continued to support and encourage local volunteers through Kwinana's Volunteer Centre. The centre supports a number of community groups and not-for-profit organisations and covers a wide variety of positions for volunteers.

Bright Futures Children's Services celebrated their 30th Anniversary in December 2018 and continued to provide a number of opportunities for families and community educators who worked with the service. Over the course of the year, a number of improvements were integrated into the service, including:

- the successful transition to a new in-home care model, introduced by the Department of Education and Training, that removed the funding previously received from the Federal Government. Despite introducing the new model, the service managed to retain educators and attract new business;
- the continued delivery of a much-valued service to the Aboriginal pre-school community, *Moordijt Kulungar Play*;
- partnerships with other support agencies and the City of Kwinana Library, providing valuable avenues to increasing the literacy and language skills of pre-school children in attendance; and
- transition to the new Child Care Subsidy system introduced by the Federal Government in July 2018, which involved all educators moving to electronic reporting of child attendances. All educators now use the new system, along with parents, to sign children in and out of care.

At a strategic level, the City progressed the development of a *Land Asset Optimisation Strategy*, which considers the unique identity, assets and economy of each place and sets out the City's strategy for its freehold land.

The City has acquired numerous land parcels over time and while the majority are held in reserve, vested with the City for uses such as parks or drainage, some land is held in freehold title, which the Council can dispose of at its discretion.

The *Land Asset Optimisation Strategy* identifies the City's land parcels that can be classified into one of five broad categories outlined in the policy including reserves, civic land, commercial land, surplus land and landmark land. The strategy also includes recommendations for retention or disposal.

The *Land Asset Optimisation Strategy* and *Policy* were adopted by Council in June 2019.

Lastly, the City continued to lobby and advocate for the construction of a new port in Kwinana, otherwise known as the 'Outer Harbour'. As part of this lobby, City representatives, including the Mayor and CEO, were actively involved in the Westport project, providing strategic input into the following:

- Westport Stakeholder Reference Group Meetings;
- Westport Workstream Meetings for the constraints and opportunities, supply chain, ports capability and environment streams;
- Westport Local Government Reference Group;
- Westport Community Information Sessions;
- Westport Reports – including the detailed review and advocacy of the City's position;
- Westport MCA1 - including the detailed review and advocacy of the City's position;
- ISCA United Nations Sustainable Development Goals Workshop;
- Research to support the City's position on aspects of the Westport process and to refute the lobbying position of other stakeholders;
- Rockingham Kwinana Chamber Commerce Westport Breakfast;
- Infrastructure Australia South West Group submission; and
- The South West Group City Deal proposal.

Advocating for the Outer Harbour has been about trying to improve job opportunities in the region. To further complement this, the City reviewed the *Local Employment Solutions Council Policy* to identify more ways to continue to grow employment opportunities in the region.

AWARDS:

- Mayor Carol Adams OAM was recognised in the 2019 Queens Birthday Honours with an Order of Australia (General Division).
- Councillor Dennis Wood was recognised for his loyalty and outstanding long service to his local community at the 2018 WA Local Government Convention.
- Bright Futures Children's Services were national finalists in the 2018 Excellence in Family Day Care National Awards.

OUTCOME MEASURES:

Measure	Industry Average (%)	Performance 2017/18 (%)	Performance 2018/19 (%)*
Increase in % of community satisfied with how the City Centre is being developed	52	62	64
Increase in % of community satisfied with economic development	45	43	50
Increase in % of community satisfied with planning and building approvals	46	57	54

*results from the 2018 Community Wellbeing and Perception Survey

KEY PROJECTS TO OCCUR IN 2019/20:

- Continued advocacy for the Kwinana Outer Harbour;
- Completion of the economic development analysis of Kwinana; and
- Continued engagement with the State Government about the City Centre Revitalisation Project.



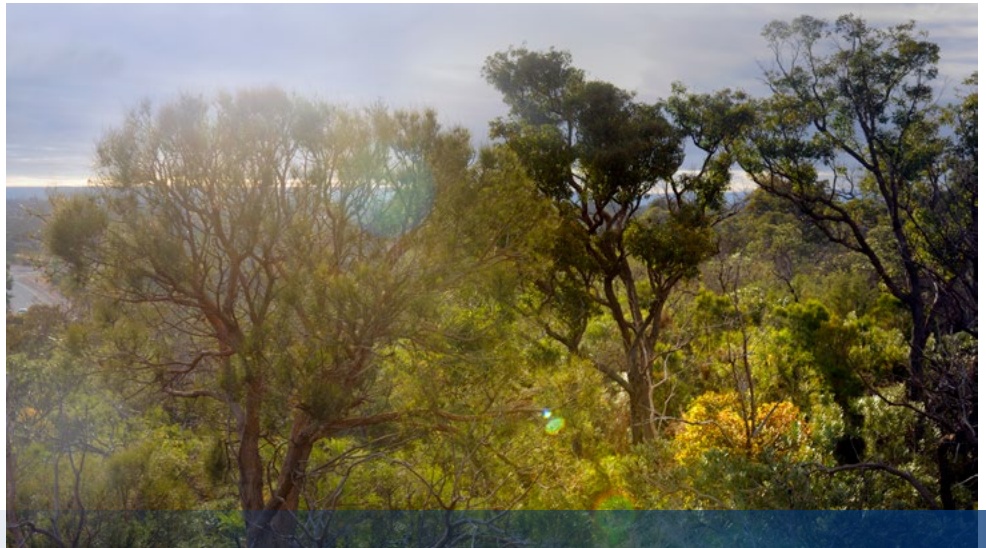
Aspiration 3: Surrounded by nature

ASPIRATION STATEMENT:

In 2030, the City of Kwinana will still be physically surrounded by nature. A practical, affordable and sustainable balance has been achieved between protection and development. The rich biodiversity of the area has been conserved through the identification and preservation of significant natural areas as well as with the active participation of residents in a range of environmental activities.

The outcomes we aspire to create include:

- a beautiful natural environment;
- an energy-efficient City;
- a water-wise City; and
- a City adapted to climate change.



RELATED PLANS (INTERNAL/EXTERNAL):

Local Biodiversity Strategy	Natural Areas Management Plan
Perth Natural Resource Management Swan Region Strategy	Environmental Education Strategy
Kwinana Local Emergency Management Plan	Revolving Energy Fund
Climate Change Mitigation and Adaption Plan	Sustainable Water Management Plan
Ground Water Operating Strategy	Water Conservation Plan
Kwinana Adventure Park Management Plan	Parks Reserves Management Plan

FAST FACTS:

- 1,324kg of waste was removed from the City's two drainage nets.
- 20,000 native seedlings were planted in various natural areas around the City, with approximately 3,000 of these planted as part of the *Coastcare* program.
- The *Coastcare* program saw 140 volunteers contribute 396 hours of their time to the planting of 2659 plants and completion of 207 beach clean-ups.
- Over 2,500 subsidised seedlings were made available to the community.
- 1,237 newly planted street trees were watered in summer and 7,299 were pruned under the City's Powerline Street Tree Pruning program.
- 173 Trees were planted as part of the City's Tree Replacement and Request program.
- The City accepted handover of 11 public open space areas totalling over 16.3 hectares of landscape.

KEY PROJECTS/ACHIEVEMENTS IN 2018/19:

Surrounded by nature is part of the City of Kwinana's identity. Accordingly, the City actively advocated for the environmental protection of a number of key sites including Banksia Road in Wellard, Rowley Road in Mandogalup and Mortimer Road in Casuarina to try and preserve the native and species-rich bushland in these areas.

The City recognised its position at the centre of a significant conflict zone between urban growth and rich biodiversity. However, given the City has areas of important biological diversity, it undertook the following actions:

- worked collaboratively with local community group the Casuarina Wellard Progress Association on the *Stop the Banksia Sand Mine* campaign, in an effort to prevent the destruction of an ecologically unique and diverse piece of bushland; and
- formally raised concerns with the Western Australian Planning Commission about approvals being issued to commence development at Lot 682 in Mandogalup, given the presence of a federally listed threatened ecological community (TEC) *Banksia Woodland on the Swan Coastal Plain*.



The City also progressed a number of environmental initiatives, including the development of strategies and plans and the hosting of community education events, some examples of which are:

- The City prepared a draft Local Biodiversity Strategy, as part of a suite of strategies that informed stage one of the *Local Planning Strategy*.
- The City completed both its *Sustainability Water Management Plan and Climate Change Mitigation and Adaptation Plan* in 2018. These identified a number of initiatives, including:
  - the retrofitting of 17 showers at the Recquatic Centre with low flow showerheads, resulting in a saving of approximately 1,600 litres of water per day; and
  - the installation of solar panels at the John Wellard Community Centre in December 2018, saving 33 tonnes of CO2 per year.
- The City adopted the Environmental Education Strategy 2019-2024 in late 2018.
- The City hosted events and workshops throughout the year, including:
  - the celebration of International Biodiversity Month in September 2018, via the annual Wildflower Walk – a collaboration with local artists – which attracted over 90 attendees;
  - two workshops run by *Switch Your Thinking* at the Darius Wells Library and Resource Centre and the John Wellard Community Centre in 2018. They included *Utilise the edges: Verge Gardening Workshop* and the *Young Re-inventors School Holiday Workshop*;
  - a number of skills-based workshops, including two Plant Identification workshops, a Bush Bird Identification Workshop, the Great Cocky Count and Nightstalk events; and
  - *Beyond the Plastic* – a series of workshops and an exhibition developed in partnership with schools, to generate discussion about the effect of plastics on local ecosystems. Over sixty students were directly involved, and approximately 10,000 people came through the exhibition space.

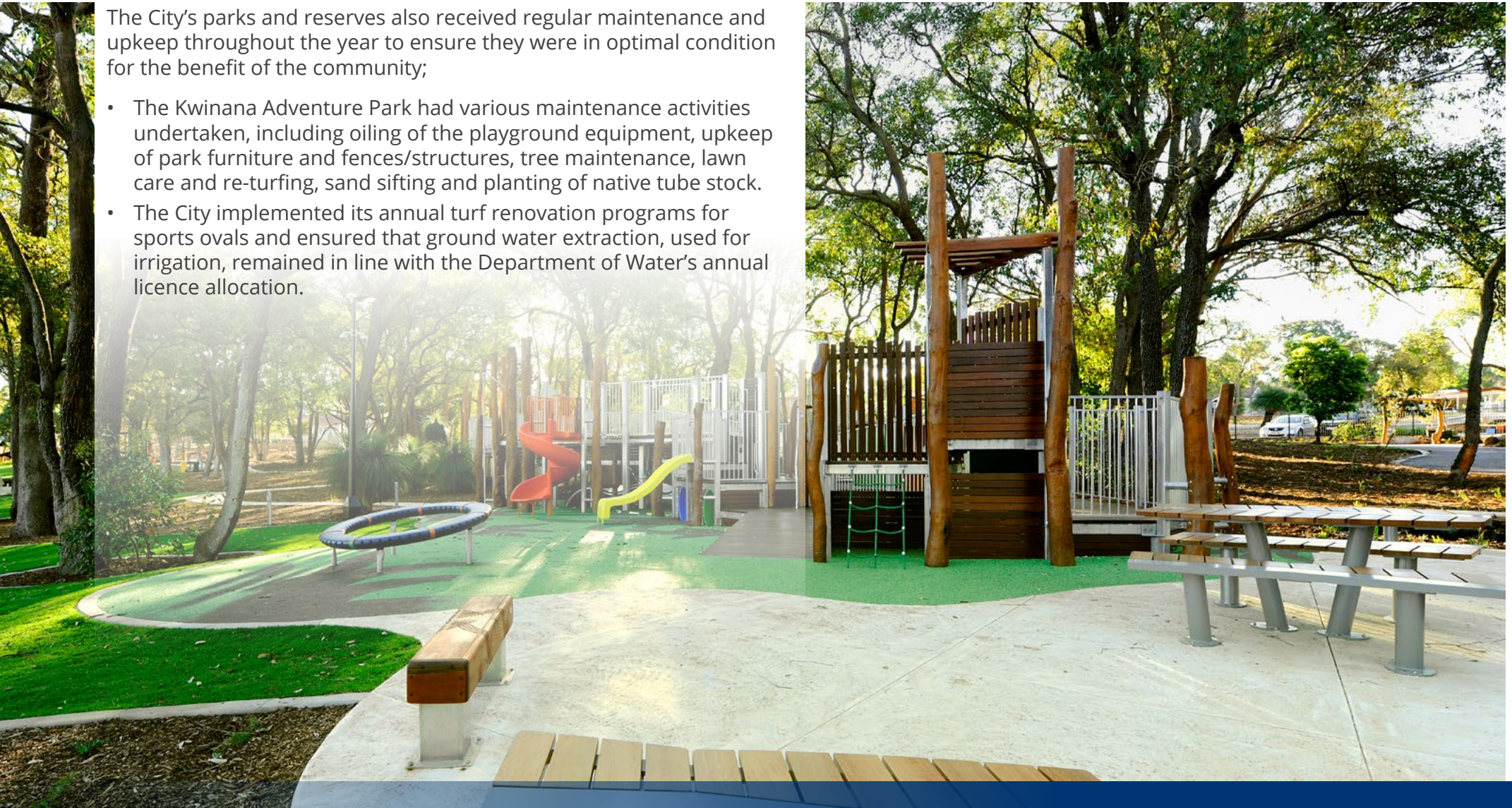
The *Kwinana Coastal Program*, a partnership between Perth NRM and the City of Kwinana, delivered a range of exciting environmental programs through 2018/19. Working in partnership with schools, organisations and volunteers, *Coastcare* facilitated the new 'Adopt-a-Beach' program, as well as beach clean-up, planting and education sessions. These events resulted in hundreds of kilos of debris and litter being removed from local beaches, as well as thousands of plants being planted throughout the year.

The City's parks and reserves also received regular maintenance and upkeep throughout the year to ensure they were in optimal condition for the benefit of the community;

- The Kwinana Adventure Park had various maintenance activities undertaken, including oiling of the playground equipment, upkeep of park furniture and fences/structures, tree maintenance, lawn care and re-turfing, sand sifting and planting of native tube stock.
- The City implemented its annual turf renovation programs for sports ovals and ensured that ground water extraction, used for irrigation, remained in line with the Department of Water's annual licence allocation.

AWARDS:

- The City was awarded a Council Collaboration Award, for its involvements in the nationwide reuse program, Garage Sale Trail.
- The City received Gold Water Wise Council status for the third time.
- The City received the Green Flag Award through Parks and Leisure Australia for the Kwinana Adventure Park Management Plan.



OUTCOME MEASURES:

Measure	Industry Average (%)	Performance 2017/18 (%)	Performance 2018/19(%)
Increase in % of community satisfied with conservation and environmental management	58	57	64
Increase in % of community satisfied with animal and pest control	55	54	59
Increase in % of community satisfied with effort to promote and adopt sustainable practices	56	52	63
Increase in % of community satisfied with management of food, health, noise and pollution issues.	57	53	59
Increase in % of community satisfied with waste service collections.	71	n/a	67

*results from the 2018 Community Wellbeing and Perception Survey

KEY PROJECTS TO OCCUR IN 2019/20:

- Finalise the preparation of the Local Biodiversity Strategy;
- Commence preparation of an Urban Forest Strategy;
- Undertake a review of the City's Weed Management Contract;
- Design and Installation of new Irrigation system at Apex and Rhodes Park;
- Update of the City's Ground Water Operating Strategy;
- Undertake a plant and fleet replacement program; and
- Undertake a fencing replacement program at various locations around the City.



Aspiration 4: It's all here

ASPIRATION STATEMENT:

Kwinana 2030 will see an increasing number of new community and recreation facilities, as well as significant refurbishment of current amenities. These community spaces will be well-planned to meet community needs and constructed to match population growth. They will enable the provision of more services and activities for youth and seniors and have sustainable maintenance and running costs.

The outcomes we aspire to create include:

- great public places;
- well-kept green spaces;
- a well-serviced City;
- a well-planned City;
- a well-maintained City; and
- a connected transport network.

RELATED PLANS (INTERNAL):

Community Infrastructure Plan	Parks and Reserves Assets Management Plan
Strategic Waste Management Plan	Lobbying Strategy
Public Open Space Standards Policy	Parking Strategy
Town Planning Scheme	Landscape Strategy
Public Lighting Asset Management Plan	Integrated Transport Strategy
Bike and Walk Plan	Roads and Transport Assets Management Plan
Buildings Asset Management Plan	Stormwater Drainage Asset Management Plan
Local Housing Strategy	Parks for People Strategy



FAST FACTS:

- 739 onsite food assessments were conducted.
- 3,502 households were audited as part of the bin-tagging program.
- Improvements to the City's printing system resulted in an average of 16,500 less pieces of paper being printed each month.
- Approximately 50,000 emails were detected as spam from the 200,000 to 300,000 emails received by the City each month.
- Improvements from the implementation of the *Strategic IT Plan* led to a saving of approximately $350,000.
- The replacement cost of the City's assets base was valued at over half a billion dollars.
- The City undertook a comprehensive condition audit of 375km of roads, 700km of kerbs and 304km of footpaths during the 2018/19 financial year.
- City of Kwinana staff implemented new waste management practices and reduced office waste by approximately 20kgs per week.
- Over $2.4million was invested in infrastructure projects, including nine road projects ($2,047,188), three drainage projects ($166,100) and two new footpaths ($193,500).

KEY PROJECTS/ACHIEVEMENTS IN 2018/19:

The City continued to plan for and provide great public places for its community by ensuring that these spaces were well maintained and by incorporating the community's voice into its planning for the future. Achievements for the period included:

- three public lighting projects, including installation of new lights at Medina Oval ($233,177), new street lights at McWhirter Promenade ($99,610) and refurbishment of solar street lights at Latitude 32 ($220,225);
- major improvements to local sporting facilities, including the completion of the Bertram Oval Sporting Clubrooms and construction of a storeroom extension at Wellard Oval Pavilion;
- community consultation regarding the desired levels of service in preparation for a comprehensive review of *Asset Management Plans*;
- a continued review of the *Kwinana City Centre Master Plan*, which acts as a guide to the future land use and development within the City Centre, with the City conducting community engagement on the plan, including a number of workshops.
- completion of stage one of the *Local Planning Strategy* (LPS), which forms the strategic basis for the development of a *Local Planning Scheme* – a 'road map' of the future growth directions for the City. The engagement for the *Local Planning Strategy* centred around a number of key studies including the Kwinana Housing Study, Integrated Land Use and Transport Study, Employment and Economic Development Analysis, Local Biodiversity Study and the Rural Lands Study.



Public places are also being further improved through the expansion of the City's high-speed IT network to incorporate facilities, halls and ovals, such as Thomas Kelly Pavillion and Medina Hall. This will allow for the growth of the City's Public WiFi, improve the performance of public computers at community centres and form the backbone of the City's increasing CCTV network.

Providing appropriate policy and documentation is an important function of all local governments, ensuring they can adequately meet the requirements of the community. The 2018/19 year saw the development of a number of strategic documents including:

- environmental health topics, including the *Feral Pigeon Management and Control Approach, Integrated Mosquito and Midge Management Plan* and the *Waste Education Plan*;
- planning policies, including *Local Planning Policy 9: Advertising Signage, Local Planning Policy No. 13: Telecommunications Infrastructure and Communications Equipment*, and *Local Planning Policy No.11: Site Requirements and Standards for Development within the Industrial Zones*.
- *Streetscape Upgrade Strategy 2019-2029*, which outlines the long-term plan to guide the design, development and management of landscaping within the City's streets, to ensure that they are upgraded and maintained to an appropriate standard.
- *Parks Upgrade Strategy 2019-2029*, which replaces the City's *Parks for People Strategy*, which expired in 2018, and combines the aspirations to provide improved public open space with asset management and includes preliminary prioritisations and cost estimates for park upgrades for the next decade.

The City introduced the 'Health in all Policies' system to determine the public health implications of all proposals presented to Council. The system was introduced as a method of evaluating public health implications using various determinants of health including:

- Built Environment – including sanitation, environmental quality, neighbourhood amenity and disease prevention;
- Health Behaviours – smoking, diet and exercise, alcohol use and participation;
- Socio-economic Factors – education, employment, income, family and social support and community safety; and
- Clinical Care – access to care and quality of care.

Improvements to community waste minimisation and recycling rates were achieved through the implementation of a number of waste education programs including:

- a bin-tagging program which saw over 3,502 household audited;
- an active investigation of illegal dumping and littering;
- the promotion of the upcoming *Container Deposit Scheme* at public events;
- worm farm workshops which were rolled out to 143 participants;
- three composting workshops which attracted 117 participants; and
- participation in the nationwide Garage Sale Trail, which saw 56 individual sales events registered in the Kwinana area.

During 2018/19 the City worked diligently to firmly establish a sound and accurate basis for the City's developer contributions schemes, which include a range of sub-regional, district and local community facilities (such as libraries and sporting grounds) and the delivery and improvement of major roads and open space areas.





An effective contribution scheme is essential to ensure this infrastructure is available to the community in the future. Key outcomes that were completed include:

- the final adoption of *Amendment No. 145 to Local Planning Scheme No. 2 – Review of Development Contribution Plans 8 – 15*;
- adoption of *Cost Apportionment Schedule and Development Contribution Plan Report - Development Contribution Area 1 (Common/ Civil Infrastructure Items) – Amendment 132; and*
- annual review and adoption of Updated *Cost Apportionment Schedule and Development Contribution Plan Reports - Development Contribution Areas 2-7 (Common/Civil Infrastructure Items)*.

Lastly, local structure planning was undertaken for many of the newer and larger urban cells within the City. A significant part of this process involved leading planning, in particular with respect to commercial and retail floor space, and working with land developers to achieve the best designs for retail sites and commercial properties and proposals.

AWARDS:

- The Kwinana Adventure Park received the Green Flag Award at the International Parks and Leisure Congress in Melbourne.
- Bright Futures Children's Services was a finalist in the 2018 Excellence in Family Day Care National Awards.

OUTCOME MEASURES:

Measure	Industry Average (%)	Performance 2017/18 (%	Performance 2018/19(%)
Increase in % of community satisfied with community centres, halls and toilets	58	65	67
Increase in % of community satisfied with sport and recreation facilities	65	66	68
Increase in % of community satisfied with playgrounds.	68	65	77
Increase in % of community satisfied with parks and reserves.	68	65	76

*results from the 2018 Community Wellbeing and Perception Survey

KEY PROJECTS TO OCCUR IN 2019/20:

- Complete design of the Honeywood Oval Sports Pavillion;
- Undertake an extension to Kwinana South Volunteer Bush Fire Brigade;
- Undertake an extension to Mandogalup Volunteer Bush Fire Brigade;
- Create an accessible toilet facility at Sloan's Reserve;
- Commence the refurbishment of the Medina Oval Change rooms;
- Undertake a refurbishment of the toilet facilities at Kwinana Tennis Clubrooms;
- Construct a shelter to protect heritage artefacts at Smirk's Cottage;
- Replace the Kwinana Recquatic Centre's stadium roof;
- Complete the City of Kwinana *Public Health Plan*;
- Commence implementation of the Corporate Business System project;
- Progress the *Local Planning Strategy* and the associated sub strategies; and
- Progress the *City Centre Master Plan*.

Future Measures

CITY OUTCOMES

The City has a number of Key Performance Indicators in place that are vital to business improvement.

DLGSC Indicators	Measures	Achieving Benchmarking Standard/ City Target*	Current**
Asset Management Indicators	Asset Consumption Ratio (%)	>50%	79%
	Asset Renewal Funding ratio (%)	Greater than 75%	91%
	Asset Sustainability Ratio (%)	90%	22%
Business Performance	Development Applications assessed within statutory timeframes (%)	100	91
	Local Development Plans assessed within statutory timeframes (%)	100	100
	Subdivision Applications assessed within statutory timeframes (%)	100	92
	Building Approval Certificates processed and issues within 10 days (%)	100	100
	Certified Building Permits processed and issued within 10 days (%)	100	100
	Uncertified Building Permits processed within 25 days (%)	100	100

* The benchmarking standard targets are set by the Department of Local Government, Sport and Cultural Industries
** Current values for Business Performance and Assets are as at 30 June 2019.

Statutory Reporting

Disability Access and Inclusion Plan

Throughout 2018/19 the City continued to actively work to ensure all people living, working and visiting the City had unconditional access to its services and facilities. The City's Access and Inclusion Working Group met on a quarterly basis to provide ongoing advice on access and inclusion issues affecting the community and to ensure the delivery of the City's *Disability Access and Inclusion Plan*. Key areas of focus included access to services and events, access to buildings, access to information, equal level and quality of service, the same opportunity to make complaints and to be consulted and to receive the same employment opportunities. A number of actions identified within the plan were undertaken during 2018/19 including:

- The City's *Tianqi Lithium Symphony Spectacular* event was planned using the Disability Events Checklist, to ensure the needs of people with a disability were considered in the planning of this event. As a result, the City increased its ACROD parking provision and the size of the mobility scooter/ wheelchair viewing area and situated the accessible toilets close to this area.
- Following feedback from a community member, the City's library made adjustments to the layout and presentation of its DVD section. This has allowed people to access DVDs more freely and without physical restriction.
- A new sporting and community facility was built at Bertram Oval. The facility meets the minimum access standards and has allowed people, including those with disability, to use the toilets during sporting and community events.
- The City assisted the Kwinana Tennis Club to make improvements to its facilities, which included the addition of an accessible path with hand railing and new ramp facilities.
- The Kwinana Recquatic added anti-slip matting around the hydro pool and hand rails to both the female and male toilets, increasing safety around the pool and providing access to an ambulant toilet when the disability toilets are occupied.
- The City began planning upgrades to its website to meet accessibility standards. Officers completed 'Writing for the Web' training to improve the quality and accessibility of our current website. All videos produced now include subtitles and website content is being rewritten to allow more ease for screen readers.
- The City recently engaged in public consultation when developing the new *Disability Access and Inclusion Plan 2019-2021*. Consultation was undertaken via a number of different methods, including face-to-face and with assistance provided by the City. The survey was also actively promoted to community members who might not have normally had access to it, which resulted in the City receiving an all-time high number of surveys, with 86 completed surveys, including 386 comments in relation to access and inclusion.
- The City adjusted its official invitation process when arranging interviews with potential employees, by asking how the City can better accommodate the needs of candidates. Initiatives include the provision of Auslan interpreters, providing information in alternative formats and requesting any information on adjustments required to the physical layout of the room.

The City also continued to provide a number of accessible services, including:

- TTY phone service;
- at-home library delivery;
- priority bin service;
- the provision of a community bus to improve community access to events and facilities;
- *Living Longer Living Stronger* program for seniors and people with disability; and
- the SAIL program, one-on-one swimming classes at Recquatic for children with a disability.

The new *Disability Access and Inclusion Plan* was developed and was due to be presented to Council for adoption in July 2019.



Conciliation Action Plan

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. Through 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's statement of intent

In December 2018, the *Conciliation Action Plan* was adopted by Council and endorsed by Reconciliation Australia. Reconciliation Australia sets four outcome areas within the plan: Relationships, Respect, Opportunities and Governance, and Tracking Progress. Actions within the plan have been developed with the Conciliation Advisory Group and align with the outcome areas. City staff and community have continued to work together to achieve positive outcomes, including:

- In March 2019 the City, with support from the Conciliation Advisory Group, launched its *Conciliation Action Plan*. Approximately 80 people attended the event, which included traditional music, dancing and food and provided an opportunity to promote cultural awareness and celebrate endorsement of the plan.
- Staff were actively involved in the collaborative effort to plan NAIDOC events, offering assistance to community groups and service providers to apply for event funding, helping to book venues and providing advice on running events. The City developed a promotional poster and flyers, which were circulated across Kwinana, and assisted in providing a template for the Kwinana NAIDOC Awards.



- Cultural awareness training was delivered to City staff, covering topics such as history, cultural practices and insight into inter-generational trauma experienced by first nation people. Training assisted in raising awareness of cultural differences, developing an understanding of history and promoting acceptance.
- In May 2019, the City held an Aboriginal Community Engagement Session to help identify areas working well, opportunities for improvement and the fostering of greater community involvement, with discussions about community safety, employment and youth. This showed a commitment from the City to work collaboratively, to progress actions within the Plan, and has led to discussions with service providers and staff on how to achieve further outcomes.
- The City maintained a strong working relationship with local Aboriginal people and service providers. The City continued to work with the Conciliation Advisory Group and the wider Aboriginal community to progress actions within the plan, and to develop its next level *Innovate Conciliation Action Plan in 2019-20*.

Reporting Requirements

National Competition Policy

The City of Kwinana has met its obligations in regard to the *National Competition Policy* with no issues being raised with the City.

Local Government Act 1995

This Annual Report (Part 1 – Community), together with the Annual Report (Part 2 – Annual Financial Report), complies with the requirements of section 5.53(1) of the *Local Government Act 1995* to prepare an annual report for each financial year.

Elected Member Conduct

No complaint regarding a City of Kwinana Elected Member's conduct, under Section 5.121 of the *Local Government Act 1995* was recorded in the financial year ending 30 June 2019.

Local Government (Financial Management) Regulation 1996

Under section 6.4 of the *Local Government Act 1995*, a Local Government is to prepare an Annual Financial Report for the preceding financial year and such other financial reports as are prescribed in the *Local Government (Financial Management) Regulations 1996*.

State Records Act 2000

In accordance with the requirements of the *State Records Act 2000* and best practice, the City of Kwinana remains committed to the reliable and systematic management of government records.

Approved by the State Records Commission in 2016, the City's updated *Recordkeeping Plan 2016-2021* describes the City's commitment to good and compliant record keeping procedures. These include monitoring and compliance through record keeping audits, which help to identify the uptake of the records system and any potential areas requiring additional training.

Training is an important component of record keeping for the City and has continued to be provided to all staff to ensure appropriate awareness of record keeping obligations and responsibilities. Induction and training programs were revised, as required, to ensure employees, contractors, elected members and external agencies were also aware of their roles and responsibilities in regard to compliance with the City's *Recordkeeping Plan*.

Freedom of Information Act 1992

In accordance with Section 96(1) of the *Freedom of Information Act 1992*, residents have the legally enforceable right to access records (which are not otherwise exempt) held by state and local government agencies. The following FOI applications were received:

	2018-2019
FOI Requests	4
Access in Full	0
Edited Access	3
Applications withdrawn	0
Access deferred	0
Access refused	1

The City also reviewed and updated the *Information Statement* as required by the *Freedom of Information Act 1992* in August 2016. The *Information Statement* was due to be submitted to the Information Commissioner around August/September 2019.

Public Health Act 2016 and Food Safety Standards

The City has complied with the authorisation requirements for Officers registered under the *Public Health Act 2016*. The City has also provided optional reporting information requested by the Department of Health under the provision of the Act.

The *Food Act 2008* was applied to all food premises within the City based on a risk-assessment approach by way of inspection. In total, the City carried out 793 inspections during the 2018/19 financial year.

Equal Opportunities

The City of Kwinana submitted its *Equal Employment Opportunity (EEO) Plan*, to the EEO Commission in early 2018. The Plan details how the City adheres to the *Equal Opportunity Act 1984* in eliminating discrimination, sexual and racial harassment, and through promotion of equality in the workplace. The City is currently reviewing the plan with the intention of submitting a revised version to the EEO Commission in 2020.

Occupational Health and Safety (OHS)

Our vision to achieve excellence in safety and health management through safe business practices is driven by our staff values; Lead From Where You Stand, Act with Compassion, Make it Fun, Stand Strong, Stand True, Trust and be Trusted and Why Not Yes.

The City also recognises its corporate responsibility under the *Occupational Safety and Health Act 1984* and associated legislation and is fully committed to ensuring that, as far as practicable, it will provide a working environment that is without risk to its employees and others in the City's workplaces.

The City focuses on exceeding its obligations under the Occupational Safety and Health legislation by ensuring its operational activities eliminate or minimise the risk of illness, injury and damage to people, property and the environment.

In consultation with the City's workforce, the City developed the *2019 – 2021 OSH Plan*, which sets out how the City will achieve is safety vision within three key focus areas; People, Property and Business.

In October 2018, the City's parks team was acknowledged by WorkSafe WA for 'best solution to a manual handling issue', which demonstrated our values and commitment to safe business practices.

Review of Local Laws

Section 3.16 of the *Local Government Act 1995* requires that all of the Local Laws of a Local Government must be reviewed within an eight year period after their commencement to determine if they should remain unchanged or be repealed or amended.

A review of several local laws was undertaken during the 2018/19 financial year, with the following Local Laws being progressed to varying levels:

- The *Parking and Parking Facilities Local Law 2018* was finalised in the 2018/19 financial year.
- The *Standing Orders Local Law* was advertised for public submission in the 2018/19 financial year and is due for finalisation in the 2019/20 financial year.
- The *Local Government Property Local Law* was reviewed in the 2018/19 financial year and is due for finalisation in the 2019/20 financial year.

Annual Salaries

The *Local Government Act 1995* requires the Local Government to provide the number of employees who are entitled to an annual salary of $100,000 or more. The figures below are as at 30 June 2019, noting that they include any staff on the Enterprise Agreement who are entitled to an annual salary of $100,000 or more.

Salary Range	No. Employees
$100,000 and $110,000	1
$110,000 and $120,000	5
$120,000 and $130,000	10
$140,000 and $150,000	2
$150,000 and $160,000	3
$190,000 and $200,000	2
$200,000 and $210,000	3
$250,000 and $260,000	1
Total	27



Part 2 – Annual Financial Report

Annual Financial Report 2018/19 is available online at www.kwinana.wa.gov.au





City of Kwinana

ADMINISTRATION

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Printed December 2019

ATTACHMENT B

City of Kwinana

Annual Report 2018/19

(Part 2 – Annual Financial Report)



Introduction

The City of Kwinana's Annual Report 2018/19 comprises of two parts, Part 1 – Community and Part 2 – Annual Financial Report. This Annual Report (Part 2 – Annual Financial Report), together with the Annual Report (Part 1 – Community) complies with the requirements of Section 5.53(1) of the Local Government Act 1995.

The Annual Report 2018/19 (Part 1 – Community) is available to download from the City's website www.kwinana.wa.gov.au or in hard copy on request by contacting the City of Kwinana on 9439 0200 or visiting the City of Kwinana Administration Building, Corner Gilmore Avenue and Sulphur Road, Kwinana.



CITY OF KWINANA

FINANCIAL REPORT

FOR THE YEAR ENDED 30TH JUNE 2019

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COMMUNITY VISION

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

Principal place of business:
Corner Gilmore Avenue and Sulphur Road
Kwinana WA 6167

CITY OF KWINANA
FINANCIAL REPORT
FOR THE YEAR ENDED 30TH JUNE 2019

Local Government Act 1995
Local Government (Financial Management) Regulations 1996

STATEMENT BY CHIEF EXECUTIVE OFFICER

The attached financial report of the City of Kwinana for the financial year ended 30 June 2019 is based on proper accounts and records to present fairly the financial position of the City of Kwinana at 30 June 2019 and the results of the operations for the financial year then ended in accordance with the Local Government Act 1995 and, to the extent that they are not inconsistent with the Act, the Australian Accounting Standards.

Signed on the 25th day of NOVEMBER 2019

Graeme Mackenzie
Chief Executive Officer

CITY OF KWINANA
STATEMENT OF COMPREHENSIVE INCOME
BY NATURE OR TYPE
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	Restated 2018 Actual
		$	$	$
Revenue				
Rates	23(a)	38,074,897	38,101,480	35,057,664
Operating grants, subsidies and contributions	2(a)	8,608,169	7,639,227	8,468,213
Fees and charges	2(a)	11,876,679	11,694,484	12,949,200
Interest earnings	2(a)	2,309,386	2,690,500	3,067,213
Other revenue	2(a)	2,946,617	1,489,872	3,895,968
		63,815,748	61,615,563	63,438,258
Expenses				
Employee costs		(27,064,970)	(28,625,503)	(26,770,022)
Materials and contracts		(24,574,645)	(26,006,186)	(24,786,855)
Utility charges		(2,414,314)	(2,361,417)	(2,333,379)
Depreciation on non-current assets	11(b)	(15,359,581)	(13,672,393)	(14,200,785)
Interest expenses	2(b)	(1,110,457)	(1,111,762)	(1,153,004)
Insurance expenses		(571,974)	(570,108)	(558,909)
Other expenditure		(20,507)	(122,653)	(167,643)
		(71,116,448)	(72,470,022)	(69,970,597)
		(7,300,700)	(10,854,459)	(6,532,339)
Non-operating grants, subsidies and contributions	2(a)	14,907,344	4,285,605	15,409,897
Profit on asset disposals	11(a)	6,178	11,132	12,226
(Loss) on asset disposals	11(a)	(152,265)	(200,172)	(181,971)
Fair value adjustments to financial assets through Profit & Loss - Banksia Park Deferred Management Fee	8	(610,100)	0	(4,648)
Fair value adjustments to financial assets through Profit & Loss - Local Government House Trust	8	122,620	0	0
Share of profit or loss of associates accounted for using the equity method - SMRC	21	61,124	0	0
(Loss) on revaluation of Infrastructure - Street Lights	10(a)	0	0	(9,803)
Reversal of prior year loss on revaluation of Infrastructure - Parks & Ovals	10(a)	0	0	2,762,144
		14,334,901	4,096,565	17,987,845
Net result for the period		**7,034,201**	**(6,757,894)**	**11,455,506**
Other comprehensive income				
Items that will not be reclassified subsequently to profit or loss				
Changes in asset revaluation surplus	12	0	0	57,147,876
Total other comprehensive income for the period		**0**	**0**	**57,147,876**
Total comprehensive income/(loss) for the period		**7,034,201**	**(6,757,894)**	**68,603,382**

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF COMPREHENSIVE INCOME
BY PROGRAM
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	Restated 2018 Actual
		$	$	$
Revenue	2(a)			
Governance		277,380	35,760	512,047
General purpose funding		42,768,055	42,579,130	40,042,948
Law, order, public safety		545,969	330,500	423,460
Health		92,426	153,066	198,151
Education and welfare		9,843,996	7,168,961	10,763,316
Community amenities		5,596,612	5,534,442	6,521,169
Recreation and culture		2,993,510	2,999,817	3,013,006
Transport		307,985	179,611	421,207
Economic services		1,188,472	1,280,762	1,303,720
Other property and services		201,343	1,353,514	239,234
		63,815,748	61,615,563	63,438,258
Expenses	2(b)			
Governance		(2,212,220)	(2,545,436)	(5,255,813)
General purpose funding		(756,875)	(790,130)	(1,200,118)
Law, order, public safety		(3,440,502)	(3,356,460)	(3,158,348)
Health		(997,155)	(944,776)	(1,183,022)
Education and welfare		(11,451,861)	(11,267,355)	(10,889,290)
Community amenities		(9,561,640)	(10,245,967)	(9,473,565)
Recreation and culture		(21,521,585)	(21,262,322)	(18,780,034)
Transport		(14,601,299)	(15,283,330)	(13,325,267)
Economic services		(1,599,830)	(1,861,358)	(1,886,284)
Other property and services		(3,863,024)	(3,801,126)	(3,665,852)
		(70,005,991)	(71,358,260)	(68,817,593)
Finance Costs	2(b)			
Governance		(51,272)	(51,364)	(57,150)
Education and welfare		(91,138)	(91,300)	(94,793)
Recreation and culture		(819,581)	(820,507)	(844,658)
Transport		(148,466)	(148,591)	(156,403)
		(1,110,457)	(1,111,762)	(1,153,004)
		(7,300,700)	(10,854,459)	(6,532,339)

CITY OF KWINANA
STATEMENT OF COMPREHENSIVE INCOME
BY PROGRAM
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	Restated 2018 Actual
		$	$	$
Non-operating grants, subsidies and contributions	2(a)	14,907,344	4,285,605	15,409,897
Profit on disposal of assets	11(a)	6,178	11,132	12,226
(Loss) on disposal of assets	11(a)	(152,265)	(200,172)	(181,971)
Fair value adjustments to financial assets through Profit & Loss - Banksia Park Deferred Management Fee	8	(610,100)	0	(4,648)
Fair value adjustments to financial assets through Profit & Loss - Local Government House Trust	8	122,620	0	0
Share of profit or loss of associates accounted for using the equity method - SMRC	21	61,124	0	0
(Loss) on revaluation of Infrastructure - Street Lights	10(a)	0	0	(9,803)
Reversal of prior year loss on revaluation of Infrastructure - Parks & Ovals	10(a)	0	0	2,762,144
		14,334,901	4,096,565	17,987,845
Net result for the period		**7,034,201**	**(6,757,894)**	**11,455,506**
Other comprehensive income				
Items that will not be reclassified subsequently to profit or loss				
Changes in asset revaluation surplus	12	0	0	57,147,876
Total other comprehensive income for the period		**0**	**0**	**57,147,876**
Total comprehensive income/(loss) for the period		**7,034,201**	**(6,757,894)**	**68,603,382**

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF FINANCIAL POSITION
AS AT 30TH JUNE 2019

	NOTE	2019	2018 Restated *	1 July 2017 Restated *
		$	$	$
CURRENT ASSETS				
Cash and cash equivalents	3	11,888,157	9,367,549	3,382,610
Trade receivables	5	4,541,131	4,729,412	3,937,509
Other financial assets	8	45,662,914	43,892,452	50,761,369
Inventories	6	32,920	34,180	36,203
Other assets	7	656,144	491,927	107,861
TOTAL CURRENT ASSETS		62,781,266	58,515,520	58,225,552
NON-CURRENT ASSETS				
Trade receivables	5	711,755	678,782	599,197
Other financial assets	8	3,468,175	3,923,258	3,888,934
Investments accounted for using the equity method	21	319,244	0	0
Property, plant and equipment	9*	150,793,069	154,855,122	159,163,834
Infrastructure	10	362,312,960	357,614,778	288,754,573
TOTAL NON-CURRENT ASSETS		517,605,203	517,071,940	452,406,538
TOTAL ASSETS		580,386,469	575,587,460	510,632,090
CURRENT LIABILITIES				
Trade and other payables	13*	21,391,450	23,240,753	26,386,486
Borrowings	14	1,451,093	777,133	617,723
Employee related provisions	15	4,902,379	4,627,270	4,522,884
TOTAL CURRENT LIABILITIES		27,744,922	28,645,156	31,527,093
NON-CURRENT LIABILITIES				
Borrowings	14	20,101,305	21,294,278	22,071,411
Employee related provisions	15	469,604	447,068	436,010
TOTAL NON-CURRENT LIABILITIES		20,570,909	21,741,346	22,507,421
TOTAL LIABILITIES		48,315,831	50,386,502	54,034,514
NET ASSETS		532,070,638	525,200,958	456,597,576
EQUITY				
Retained surplus	*	244,608,437	241,396,775	231,669,958
Reserves - cash backed	4	55,730,366	52,072,348	50,343,659
Revaluation surplus	12	231,731,835	231,731,835	174,583,959
TOTAL EQUITY		532,070,638	525,200,958	456,597,576

* See note 29 for details regarding prior year adjustments and impact of change in accounting policy

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	RETAINED SURPLUS	RESERVES CASH BACKED	REVALUATION SURPLUS	TOTAL EQUITY
		$	$	$	$
Balance as at 1 July 2017		**231,669,958**	**50,343,659**	**174,583,959**	**456,597,576**
Comprehensive income					
Net result for the period - Restated		11,455,506	0	0	11,455,506
Other comprehensive income	12	0	0	57,147,876	57,147,876
Total comprehensive income		11,455,506	0	57,147,876	68,603,382
Transfers from/(to) reserves		(1,728,689)	1,728,689	0	0
Balance as at 30 June 2018		**241,396,775**	**52,072,348**	**231,731,835**	**525,200,958**
Initial Application of AASB 9	27 (c)	(164,521)	0	0	(164,521)
Restated total equity at the beginning of the financial year		**241,232,254**	**52,072,348**	**231,731,835**	**525,036,437**
Comprehensive income					
Net result for the period		7,034,201	0	0	7,034,201
Total comprehensive income		7,034,201	0	0	7,034,201
Transfers from/(to) reserves		(3,658,018)	3,658,018	0	0
Balance as at 30 June 2019		**244,608,437**	**55,730,366**	**231,731,835**	**532,070,638**

This statement is to be read in conjunction with the accompanying notes.

CITY OF KWINANA
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual $	2019 Budget $	2018 Actual $
CASH FLOWS FROM OPERATING ACTIVITIES				
Receipts				
Rates		37,773,991	38,305,198	34,142,548
Operating grants, subsidies and contributions		6,390,524	7,453,423	8,106,746
Fees and charges		11,876,679	11,694,484	12,949,200
Interest received		1,884,438	2,690,500	3,067,213
Goods and services tax received		2,835,628	0	2,861,322
Other revenue		2,946,617	1,489,872	3,895,968
		63,707,877	61,633,477	65,022,997
Payments				
Employee costs		(27,141,971)	(28,925,502)	(26,684,529)
Materials and contracts		(25,580,365)	(25,246,302)	(27,821,794)
Utility charges		(2,414,314)	(2,361,417)	(2,333,379)
Interest expenses		(1,111,761)	(1,111,762)	(1,231,824)
Insurance paid		(571,974)	(570,108)	(558,909)
Goods and services tax paid		(531,932)	0	(2,835,644)
Other expenditure		(20,507)	(122,653)	(172,291)
		(57,372,824)	(58,337,744)	(61,638,370)
Net cash provided by (used in) operating activities	16	6,335,053	3,295,733	3,384,627
CASH FLOWS FROM INVESTING ACTIVITIES				
Payments for purchase of property, plant & equipment	9(a)	(2,102,378)	(7,395,250)	(2,237,698)
Payments for construction of infrastructure		(3,982,448)	(7,816,908)	(5,163,939)
Proceeds from/ (payments for) financial assets at amortised cost		(1,819,027)	0	6,814,300
Non-operating grants, subsidies and contributions		4,476,940	4,285,605	3,258,381
Proceeds from self supporting loans	14(b)	16,168	16,168	15,644
Proceeds from sale of property, plant & equipment	11(a)	373,433	423,500	531,347
Net cash provided by (used in) investment activities		(3,037,312)	(10,486,885)	3,218,035
CASH FLOWS FROM FINANCING ACTIVITIES				
Repayment of borrowings	14(b)	(777,133)	(777,133)	(617,723)
Proceeds from new borrowings	14(c)	0	2,268,000	0
Net cash provided by (used In) financing activities		(777,133)	1,490,867	(617,723)
Net increase (decrease) in cash held		2,520,608	(5,700,285)	5,984,939
Cash at beginning of year		9,367,549	55,089,545	3,382,610
Cash and cash equivalents at the end of the year	16	11,888,157	49,389,260	9,367,549

This statement is to be read in conjunction with the accompanying notes.

The budgeted cash and cash equivalents include term deposits that are now classified as financial assets. Refer to Note 3 for the breakdown of total cash, cash equivalents, and all term deposits.

CITY OF KWINANA
RATE SETTING STATEMENT
FOR THE YEAR ENDED 30TH JUNE 2019

	NOTE	2019 Actual	2019 Budget	2018 Actual
		$	$	$
OPERATING ACTIVITIES				
Net current assets at start of financial year - surplus/(deficit)	24 (b)	1,898,805	1,345,947	3,194,697
		1,898,805	1,345,947	3,194,697
Revenue from operating activities (excluding rates)				
Governance		277,380	35,760	518,239
General purpose funding		4,693,158	4,477,650	4,985,284
Law, order, public safety		545,969	330,500	423,460
Health		92,426	153,066	198,151
Education and welfare		9,843,996	7,168,961	10,763,316
Community amenities		5,596,612	5,534,442	6,521,169
Recreation and culture		2,993,510	2,999,818	3,013,006
Transport		307,985	179,611	421,207
Economic services		1,188,472	1,280,762	1,303,720
Other property and services		207,521	1,364,646	245,268
		25,747,029	23,525,216	28,392,820
Expenditure from operating activities				
Governance		(2,299,800)	(2,596,800)	(5,336,852)
General purpose funding		(756,875)	(790,130)	(1,200,118)
Law, order, public safety		(3,478,283)	(3,369,960)	(3,204,357)
Health		(997,155)	(950,887)	(1,183,022)
Education and welfare		(12,153,099)	(11,379,613)	(10,988,731)
Community amenities		(9,564,944)	(10,248,550)	(9,479,501)
Recreation and culture		(22,360,221)	(22,098,138)	(19,625,946)
Transport		(14,752,938)	(15,431,921)	(13,511,758)
Economic services		(1,609,317)	(1,861,358)	(1,886,284)
Other property and services		(3,906,181)	(3,942,836)	(988,306)
		(71,878,813)	(72,670,193)	(67,404,875)
Non-cash amounts excluded from operating activities	24(a)	14,289,865	13,861,433	8,765,697
Amount attributable to operating activities		(29,943,114)	(33,937,598)	(27,051,661)
INVESTING ACTIVITIES				
Non-operating grants, subsidies and contributions	2(a)	14,907,344	4,285,605	15,409,897
Proceeds from disposal of assets	11(a)	373,433	423,500	531,347
Proceeds from self supporting loans	14(b)	16,168	16,168	15,644
Purchase of property, plant and equipment	9(a)	(2,102,378)	(7,395,250)	(2,237,698)
Purchase and construction of infrastructure	10(a)	(14,412,852)	(7,816,908)	(17,315,455)
Amount attributable to investing activities		(1,218,285)	(10,486,885)	(3,596,265)
FINANCING ACTIVITIES				
Repayment of borrowings	14(b)	(777,133)	(777,133)	(617,723)
Proceeds from borrowings	14(c)	0	2,268,000	0
Transfers to reserves (restricted assets)	4	(9,700,454)	(4,667,140)	(9,116,017)
Transfers from reserves (restricted assets)	4	6,042,436	9,499,275	7,387,328
Amount attributable to financing activities		(4,435,151)	6,323,002	(2,346,412)
Surplus/(deficit) before imposition of general rates		(35,596,550)	(38,101,480)	(32,994,338)
Total amount raised from general rates	23	38,074,897	38,101,480	35,057,664
Surplus/(deficit) after imposition of general rates	24(b)	**2,478,347**	**0**	**2,063,326**

This statement is to be read in conjunction with the accompanying notes.

1. BASIS OF PREPARATION

The financial report comprises general purpose financial statements which have been prepared in accordance with Australian Accounting Standards (as they apply to local governments and not-for-profit entities) and Interpretations of the Australian Accounting Standards Board, and the *Local Government Act 1995* and accompanying regulations.

The *Local Government (Financial Management) Regulations 1996* take precedence over Australian Accounting Standards. Regulation 16 prohibits a local government from recognising as assets Crown land that is a public thoroughfare, such as land under roads, and land not owned by but under the control or management of the local government, unless it is a golf course, showground, racecourse or recreational facility of State or regional significance. Consequently, some assets, including land under roads acquired on or after 1 July 2008, have not been recognised in this financial report. This is not in accordance with the requirements of *AASB 1051 Land Under Roads paragraph 15* and *AASB 116 Property, Plant and Equipment paragraph 7.*

Accounting policies which have been adopted in the preparation of this financial report have been consistently applied unless stated otherwise. Except for cash flow and rate setting information, the report has been prepared on the accrual basis and is based on historical costs, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and liabilities.

CRITICAL ACCOUNTING ESTIMATES

The preparation of a financial report in conformity with Australian Accounting Standards requires management to make judgements, estimates and assumptions that effect the application of policies and reported amounts of assets and liabilities, income and expenses.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances; the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

THE LOCAL GOVERNMENT REPORTING ENTITY

All funds through which the City controls resources to carry on its functions have been included in the financial statements forming part of this financial report.

In the process of reporting on the local government as a single unit, all transactions and balances between those funds (for example, loans and transfers between funds) have been eliminated.

All monies held in the Trust Fund are excluded from the financial statements. A separate statement of those monies appears at Note 26 to these financial statements.

2. REVENUE AND EXPENSES

(a) Revenue

Grant Revenue

Grants, subsidies and contributions are included as both operating and non-operating revenues in the Statement of Comprehensive Income:

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Operating grants, subsidies and contributions			
General purpose funding	1,978,780	1,577,588	1,675,627
Law, order, public safety	182,144	165,000	178,449
Health	35,072	11,000	24,028
Education and welfare	5,708,537	5,181,405	5,819,016
Community amenities	42,017	66,000	63,334
Recreation and culture	353,634	458,623	472,817
Transport	307,985	179,611	234,942
	8,608,169	7,639,227	8,468,213
Non-operating grants, subsidies and contributions			
Law, order, public safety	72,000	0	599,260
Education and welfare	0	0	9,650
Community amenities	3,144,657	2,861,616	527,801
Recreation and culture	39,603	213,170	519,860
Transport	11,604,814	1,210,819	13,753,326
Other property and services	46,270	0	0
	14,907,344	4,285,605	15,409,897
Total grants, subsidies and contributions	23,515,513	11,924,832	23,878,110

SIGNIFICANT ACCOUNTING POLICIES

Grants, donations and other contributions

Grants, donations and other contributions are recognised as revenues when the local government obtains control over the assets comprising the contributions.

Where contributions recognised as revenues during the reporting period were obtained on the condition that they be expended in a particular manner or used over a particular period, and those conditions were undischarged as at the reporting date, the nature of and amounts pertaining to those undischarged conditions are disclosed in Note 22. That note also discloses the amount of contributions recognised as revenues in a previous reporting period which were obtained in respect of the local government's operations for the current reporting period.

Grants, donations and other contributions (Continued)

2. REVENUE AND EXPENSES (Continued)

(a) Revenue (Continued)

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Significant revenue			
Non-Operating Grants, Subsidies & Contributions - Contributed Assets	10,430,404	4,285,605	12,151,516
Other revenue			
Reimbursements and recoveries	832,661	304,898	922,993
Other	2,113,956	1,184,974	2,972,975
	2,946,617	1,489,872	3,895,968
Fees and Charges			
Governance	15,966	35,760	39,593
General purpose funding	195,531	158,000	158,726
Law, order, public safety	303,782	148,900	203,977
Health	42,533	134,066	150,217
Education and welfare	1,995,768	1,968,515	1,962,266
Community amenities	5,541,723	5,439,442	6,445,575
Recreation and culture	2,533,678	2,419,610	2,436,356
Transport	0	0	181,818
Economic services	1,147,445	1,212,691	1,207,161
Other property and services	100,253	177,500	163,511
	11,876,679	11,694,484	12,949,200
Interest earnings			
Loans receivable - clubs/institutions	11,167	11,202	11,802
Reserve accounts interest	1,352,653	1,250,000	1,239,050
Rates instalment and penalty interest (refer Note 23(c))	785,940	650,000	750,045
Other interest earnings	159,626	779,298	1,066,316
	2,309,386	2,690,500	3,067,213

(b) Expenses

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Auditors remuneration			
- Audit of the Annual Financial Report	60,000	35,000	28,454
- Other services	22,298	0	7,150
	82,298	35,000	35,604
Interest expenses (finance costs)			
Borrowings (refer Note 14(b))	1,110,457	1,111,762	1,153,004
	1,110,457	1,111,762	1,153,004
Rental charges			
- Operating leases	533,909	491,610	433,083
	533,909	491,610	433,083

SIGNIFICANT ACCOUNTING POLICIES

Interest earnings

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

Interest earnings (Continued)

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes

3. CASH AND CASH EQUIVALENTS

	NOTE	2019 $	2018 $
Cash at bank and on hand		9,752,320	2,624,639
Short-term Term Deposits		2,135,837	6,742,910
Total cash and cash equivalents		11,888,157	9,367,549
Financial assets at amortised cost (Term deposits)	8(a)	45,348,386	43,529,359
Total cash, cash equivalents, and all term deposits		57,236,543	52,896,908
Comprises:			
- Unrestricted cash and cash equivalents		(75,760)	824,560
- Restricted cash and cash equivalents		57,312,303	52,072,348
		57,236,543	52,896,908
The following restrictions have been imposed by regulations or other externally imposed requirements:			
Reserve accounts			
Aged Persons Units Reserve	4	807,624	748,728
Asset Management Reserve	4	762,988	501,595
Asset Replacement Reserve	4	579,628	498,123
Banksia Park Reserve	4	190,418	115,626
City Assist Initiative Reserve	4	0	100,401
CLAG Reserve	4	275,223	265,873
Community Services & Emergency Relief Reserve	4	88,835	84,017
Employee Leave Reserve	4	4,033,993	4,231,590
Family Day Care Reserve	4	1,489,179	1,462,302
Future Community Infrastructure Reserve	4	1,067,201	1,381,900
Golf Course Cottage Reserve	4	28,887	28,033
Information Technology Reserve	4	2,068,659	1,890,703
Infrastructure Reserve	4	348,075	339,968
Refuse Reserve	4	8,844,888	8,736,657
Renewable Energy Efficiency Reserve	4	53,983	0
Restricted Grants & Contributions Reserve	4	3,170,082	1,688,298
Settlement Agreement Reserve	4	164,874	160,000
Workers Compensation Reserve	4	141,443	338,710
Youth Engagement Reserve	4	0	144,650
DCA 1 - Hard Infrastructure - Bertram	4	228,688	1,887,550
DCA 2 - Hard Infrastructure - Wellard	4	2,435,413	1,877,524
DCA 4 - Hard Infrastructure - Anketell	4	533,009	0
DCA 5 - Hard Infrastructure - Wandi	4	1,073,049	1,309,322
DCA 7 - Hard Infrastructure - Mandogalup (west)	4	2,988	11,713
DCA 8 - Soft Infrastructure - Mandogalup	4	471,270	0
DCA 9 - Soft Infrastructure - Wandi/Anketell	4	11,762,971	10,487,573
DCA 10 - Soft Infrastructure - Casuarina/Anketell	4	225,488	227,912
DCA 11 - Soft Infrastructure - Wellard East	4	6,079,450	5,944,904
DCA 12 - Soft Infrastructure - Wellard West	4	7,741,470	6,663,351
DCA 13 - Soft Infrastructure - Bertram	4	283,533	282,230
DCA 14 - Soft Infrastructure - Wellard/Leda	4	614,490	504,779
DCA 15 - Soft Infrastructure - Townsite	4	162,567	158,316
		55,730,366	52,072,348
Other restricted cash and cash equivalents			
Bonds and Deposits held	26	1,581,937	0
Total restricted cash and cash equivalents		57,312,303	52,072,348

SIGNIFICANT ACCOUNTING POLICIES

Cash and cash equivalents

Cash and cash equivalents include cash on hand, cash at bank, deposits available on demand with banks and other short term highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value and bank overdrafts. Bank overdrafts are reported as short term borrowings in current liabilities in the statement of financial position.

Cash and cash equivalents (Continued)

4. RESERVES - CASH BACKED

		2019 Actual Opening Balance	2019 Actual Transfer to	2019 Actual Transfer (from)	2019 Actual Closing Balance	2019 Budget Opening Balance	2019 Budget Transfer to	2019 Budget Transfer (from)	2019 Budget Closing Balance	2018 Actual Opening Balance	2018 Actual Transfer to	2018 Actual Transfer (from)	2018 Actual Closing Balance
		$	$	$	$	$	$	$	$	$	$	$	$
(a)	Aged Persons Units Reserve	748,728	58,896	0	807,624	765,541	308,844	(232,750)	841,635	643,364	315,600	(210,236)	748,728
(b)	Asset Management Reserve	501,595	440,034	(178,641)	762,988	501,595	8,721	(180,000)	330,316	566,868	17,817	(83,090)	501,595
(c)	Asset Replacement Reserve	498,123	315,384	(233,879)	579,628	748,122	263,007	(351,200)	659,929	595,442	17,900	(115,219)	498,123
(d)	Banksia Park Reserve	115,626	74,792	0	190,418	134,175	2,333	(49,738)	86,769	107,840	112,975	(105,189)	115,626
(e)	City Assist Initiative Reserve	100,401	2,571	(102,972)	0	100,401	1,743	(102,144)	0	0	100,401	0	100,401
(f)	CLAG Reserve	265,873	43,284	(33,934)	275,223	263,146	14,575	(20,000)	257,721	239,215	30,882	(4,224)	265,873
(g)	Community Services & Emergency Relief Reserve	84,017	4,818	0	88,835	84,017	1,461	0	85,478	26,059	57,958	0	84,017
(h)	Employee Leave Reserve	4,231,590	102,403	(300,000)	4,033,993	4,119,629	71,623	(300,000)	3,891,252	4,074,338	169,645	(12,393)	4,231,590
(i)	Family Day Care Reserve	1,462,302	36,542	(9,665)	1,489,179	1,479,306	25,719	(805,560)	699,465	1,383,878	78,424	0	1,462,302
(j)	Future Community Infrastructure Reserve	1,381,900	35,718	(350,417)	1,067,201	1,538,389	26,746	(663,284)	901,851	1,568,683	44,291	(231,074)	1,381,900
(k)	Golf Course Cottage Reserve	28,033	854	0	28,887	28,033	487	0	28,520	27,264	769	0	28,033
(l)	Information Technology Reserve	1,890,703	413,040	(235,084)	2,068,659	1,890,703	32,871	(1,416,000)	507,574	0	1,890,703	0	1,890,703
(m)	Infrastructure Reserve	339,968	8,107	0	348,075	339,968	5,911	0	345,879	128,213	211,755	0	339,968
(n)	Rates Strategy Reserve	0	0	0	0	0	0	0	0	819,692	0	(819,692)	0
(o)	Refuse Reserve	8,736,657	194,769	(86,538)	8,844,888	8,698,885	180,697	(83,880)	8,795,702	8,636,810	190,371	(90,524)	8,736,657
(p)	Renewable Energy Efficiency Reserve	0	53,983	0	53,983	0	0	0	0	0	0	0	0
(q)	Restricted Grants & Contributions Reserve	1,688,298	2,788,948	(1,307,164)	3,170,082	1,694,812	0	(1,694,812)	0	2,644,457	1,327,747	(2,283,906)	1,688,298
(r)	Settlement Agreement Reserve	160,000	4,874	0	164,874	160,000	2,782	0	162,782	157,743	2,257	0	160,000
(s)	Workers Compensation Reserve	338,710	7,980	(205,247)	141,443	330,200	5,741	0	335,941	210,503	204,225	(76,018)	338,710
(t)	Youth Engagement Reserve	144,650	4,581	(149,231)	0	130,412	2,264	(132,676)	0	270,000	917	(126,267)	144,650
(u)	DCA 1 - Hard Infrastructure - Bertram	1,887,550	155,260	(1,814,122)	228,688	1,851,461	182,424	(491,817)	1,542,068	1,743,837	216,358	(72,645)	1,887,550
(v)	DCA 2 - Hard Infrastructure - Wellard	1,877,524	697,023	(139,134)	2,435,413	1,772,974	429,946	(2,197,177)	5,743	1,969,898	423,144	(515,518)	1,877,524
(w)	DCA 4 - Hard Infrastructure - Anketell	0	633,006	(99,997)	533,009	0	0	0	0	0	0	0	0
(x)	DCA 5 - Hard Infrastructure - Wandi	1,309,322	32,888	(269,161)	1,073,049	1,286,174	661,998	(454,627)	1,493,545	3,104,086	732,392	(2,527,156)	1,309,322
(y)	DCA 7 - Hard Infrastructure - Mandogalup (west)	11,713	12,205	(20,930)	2,988	11,803	14,077	(159)	25,720	8,567	15,326	(12,180)	11,713
(z)	DCA 8 - Soft Infrastructure - Mandogalup	0	478,973	(7,703)	471,270	0	0	0	0	0	0	0	0
(aa)	DCA 9 - Soft Infrastructure - Wandi/Anketell	10,487,573	1,283,101	(7,703)	11,762,971	10,446,476	576,997	(141,136)	10,882,338	9,928,654	571,099	(12,180)	10,487,573
(ab)	DCA 10 - Soft Infrastructure - Casuarina/Anketell	227,912	5,279	(7,703)	225,488	229,412	246,696	(3,099)	473,009	0	240,092	(12,180)	227,912
(ac)	DCA 11 - Soft Infrastructure - Wellard East	5,944,904	586,940	(452,394)	6,079,450	5,734,336	1,081,744	(77,473)	6,738,607	4,374,577	1,583,546	(13,219)	5,944,904
(ad)	DCA 12 - Soft Infrastructure - Wellard West	6,663,351	1,085,824	(7,705)	7,741,470	6,622,131	355,217	(89,468)	6,887,880	6,297,347	378,184	(12,180)	6,663,351
(ae)	DCA 13 - Soft Infrastructure - Bertram	282,230	9,007	(7,704)	283,533	283,730	8,356	(3,833)	288,252	288,108	6,302	(12,180)	282,230
(af)	DCA 14 - Soft Infrastructure - Wellard/Leda	504,779	117,415	(7,704)	614,490	480,660	130,374	(6,494)	604,540	367,092	149,867	(12,180)	504,779
(ag)	DCA 15 - Soft Infrastructure - Townsite	158,316	11,955	(7,704)	162,567	144,189	23,788	(1,948)	166,029	161,124	25,070	(27,878)	158,316
		52,072,348	9,700,454	(6,042,436)	55,730,366	51,870,680	4,667,140	(9,499,275)	47,038,546	50,343,659	9,116,017	(7,387,328)	52,072,348

All of the reserve accounts are supported by money held in financial institutions and match the amount shown as restricted cash in Note 3 to this financial report.

4. RESERVES - CASH BACKED (Continued)

In accordance with Council resolutions in relation to each reserve account, the purpose for which the reserves are set aside and their anticipated date of use are as follows:

	Name of Reserve	Anticipated date of use	Purpose of the reserve
(a)	Aged Persons Units Reserve	Ongoing	This Reserve was established to provide funds for the capital acquisition and maintenance of the Aged Persons Units, Callistemon Court.
(b)	Asset Management Reserve	Ongoing	This Reserve was established to provide funds for asset management renewal projects of the City's building and infrastructure assets, thereby extending the useful economic life of such assets.
(c)	Asset Replacement Reserve	Ongoing	This Reserve is utilised to replace existing fleet, plant and other City assets.
(d)	Banksia Park Reserve	Ongoing	This Reserve has been established to provide funds for the capital acquisition and maintenance of the Banksia Park Retirement Village.
(e)	City Assist Initiative Reserve	Complete	This Reserve was established to provide funds for infrastructure and other initiatives to enhance the safety and security of the City.
(f)	CLAG Reserve	Ongoing	This Reserve was established to provide funds for the prevention and education of Mosquito management.
(g)	Community Services & Emergency Relief Reserve	Ongoing	This Reserve was established to provide funding to alleviate the effect of any disaster within the City of Kwinana boundaries and to provide funds to develop community services.
(h)	Employee Leave Reserve	Ongoing	This Reserve was established for the purpose of ensuring that adequate funds are available to finance employee leave entitlements.
(i)	Family Day Care Reserve	Ongoing	This Reserve provides for the capital acquisitions and maintenance of this facility.
(j)	Future Community Infrastructure Reserve	Ongoing	This Reserve was established to accumulate the City's contributions for the capital funding of future community infrastructure in accordance with Town Planning Scheme #2.
(k)	Golf Course Cottage Reserve	Ongoing	This Reserve was established to provide funds for the maintenance of this building.
(l)	Information Technology Reserve	Ongoing	This Reserve was established to provide funds for the implementation and maintenance of the City's software requirements.
(m)	Infrastructure Reserve	Ongoing	This Reserve was established 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.
(n)	Rates Strategy Reserve	Complete	This Reserve was established to assist in the future management of the City's rating strategy.
(o)	Refuse Reserve	Ongoing	This Reserve was established to provide funds for the costs and subsidy of Waste Management in the City.
(p)	Renewable Energy Efficiency Reserve	Ongoing	This Reserve was established to provide funds for renewable energy and water efficiency initiatives
(q)	Restricted Grants & Contributions Reserve	Ongoing	This Reserve was established to restrict funds required to complete projects relating to prior financial years.
(r)	Settlement Agreement Reserve	Ongoing	This Reserve was established to provide funds to account for future negotiated settlement agreement payments.
(s)	Workers Compensation Reserve	Ongoing	This Reserve was established 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 the City to pay costs relating to the open claims in the current and future years.
(t)	Youth Engagement Reserve	Complete	This Reserve was established to assist with youth engagement and diversion initiatives.
(u)	DCA 1 - Hard Infrastructure - Bertram	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 1 Hard Infrastructure Bertram.
(v)	DCA 2 - Hard Infrastructure - Wellard	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 2 Hard Infrastructure Wellard.
(w)	DCA 4 - Hard Infrastructure - Anketell	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 4 Hard Infrastructure Anketell.
(x)	DCA 5 - Hard Infrastructure - Wandi	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 5 Hard Infrastructure Wandi.
(y)	DCA 7 - Hard Infrastructure - Mandogalup (west)	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 7 Hard Infrastructure Mandogalup (west).
(z)	DCA 8 - Soft Infrastructure - Mandogalup	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 8 Soft Infrastructure Mandogalup.
(aa)	DCA 9 - Soft Infrastructure - Wandi/Anketell	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 9 Soft Infrastructure Wandi/Anketell.
(ab)	DCA 10 - Soft Infrastructure - Casuarina/Anketell	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 10 Soft Infrastructure Casuarina/Anketell.
(ac)	DCA 11 - Soft Infrastructure - Wellard East	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 11 Soft Infrastructure Wellard East.
(ad)	DCA 12 - Soft Infrastructure - Wellard West	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 12 Soft Infrastructure Wellard West.
(ae)	DCA 13 - Soft Infrastructure - Bertram	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 13 Soft Infrastructure Bertram.
(af)	DCA 14 - Soft Infrastructure - Wellard/Leda	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 14 Soft Infrastructure Wellard/Leda.
(ag)	DCA 15 - Soft Infrastructure - Townsite	Ongoing	This Reserve was established to restrict funds received from Developers for contributions towards future infrastructure costs and administrative costs for DCA 15 Soft Infrastructure Townsite.

5. TRADE RECEIVABLES

	2019	2018
	$	$
Current		
Rates receivable	3,865,054	3,597,121
Sundry receivables	462,500	720,635
GST receivable	312,998	411,656
Allowance for impairment of receivables	(99,421)	0
	4,541,131	4,729,412
Non-current		
Pensioner's rates and ESL deferred	711,755	678,782
	711,755	678,782

SIGNIFICANT ACCOUNTING POLICIES

Trade and other receivables

Trade and other receivables include amounts due from ratepayers for unpaid rates and service charges and other amounts due from third parties for goods sold and services performed in the ordinary course of business.

Trade receivables are recognised at original invoice amount less any allowances for uncollectible amounts (i.e. impairment). The carrying amount of net trade receivables is equivalent to fair value as it is due for settlement within 30 days.

Impairment and risk exposure

Information about the impairment of trade receivables and their exposure to credit risk and interest rate risk can be found in Note 25.

Previous accounting policy: Impairment of trade receivables

In the prior year, the impairment of trade receivables was assessed based on the incurred loss model. Individual receivables which were known to be uncollectible were written off by reducing the carrying amount directly. The other receivables were assessed collectively to determine whether there was objective evidence that an impairment had been incurred but not yet identified. For these receivables the estimated impairment losses were recognised in a separate provision for impairment.

Classification and subsequent measurement

Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets.

Trade receivables are held with the objective to collect the contractual cashflows and therefore measures them subsequently at amortised cost using the effective interest rate method.

Due to the short term nature of current receivables, their carrying amount is considered to be the same as their fair value. Non-current receivables are indexed to inflation, any difference between the face value and fair value is considered immaterial.

6. INVENTORIES

	2019	2018
	$	$
Current		
Stores & Materials	32,920	34,180
	32,920	34,180
The following movements in inventories occurred during the year:		
Carrying amount at 1 July	34,180	34,180
Inventories expensed during the year	(1,260)	0
Carrying amount at 30 June	32,920	34,180

SIGNIFICANT ACCOUNTING POLICIES

General

Inventories are measured at the lower of cost and net realisable value.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

7. OTHER ASSETS

	2019	2018
	$	$
Other current assets		
Prepayments	28,963	467
Accrued Income	627,181	491,460
	656,144	491,927

SIGNIFICANT ACCOUNTING POLICIES

Other current assets

Other non-financial assets include prepayments which represent payments in advance of receipt of goods or services or that part of expenditure made in one accounting period covering a term extending beyond that period.

Other non-financial assets include accrued income which represents income that has been earned but not yet received. Therefore, accrued income is recognised in the accounting period in which it arises.

8. OTHER FINANCIAL ASSETS

	NOTE	2019 $	2018 $
(a) Current assets			
Financial assets at fair value through profit and loss		297,819	346,925
Other financial assets at amortised cost		45,365,095	43,529,359
Other loans and receivables		0	16,168
		45,662,914	43,892,452
Financial assets at fair value through profit and loss			
- Banksia Park Deferred Management Fee		297,819	346,925
		297,819	346,925
Other financial assets at amortised cost			
- Financial assets at amortised cost - term deposits	3	45,348,386	43,529,359
- Financial assets at amortised cost - self supporting loans		16,709	0
		45,365,095	43,529,359
Financial assets previously classified as loans and receivables			
- Self supporting loans		0	16,168
		0	16,168
(b) Non-current assets			
Other financial assets at amortised cost		249,973	0
Financial assets at fair value through profit and loss		3,218,202	3,656,576
Other loans and receivables		0	266,682
		3,468,175	3,923,258
Other financial assets at amortised cost			
- Financial assets at amortised cost - self supporting loans		249,973	0
		249,973	0
Financial assets at fair value through profit and loss			
- Interest in Local Government House Trust		122,620	0
- Banksia Park Deferrred Management Fees Receivable		3,095,582	3,656,576
		3,218,202	3,656,576
Financial assets previously classified as loans and receivables			
- Self supporting loans		0	266,682
		0	266,682
During the year, the following gains/(losses) were recognised in profit and loss:			
Fair value gains/(losses) on equity investments at fair value through profit and loss are recognised in other gains/(losses) and classified as other property and services			
Movement in fair value of Banksia Park DMF Receivable		(610,100)	(4,648)
Investment in Local Government House Trust		122,620	0
		(487,480)	(4,648)

Self supporting loans have the same terms and conditions as the related borrowing disclosed in Note 14(b).

SIGNIFICANT ACCOUNTING POLICIES

Other financial assets at amortised cost

The City classifies financial assets at amortised cost if both of the following criteria are met:

- the asset is held within a business model whose objective is to collect the contractual cashflows, and
- the contractual terms give rise to cash flows that are solely payments of principal and interest.

Term deposits with original maturities of three months or more were classified as cash and cash equivalents in the 2018 financial report. However, they have now been re-classified to financial assets at amortised cost.

Financial assets at fair value through profit and loss

The City classifies the following financial assets at fair value through profit and loss:

- debt investments which do not qualify for measurement at either amortised cost or fair value through other comprehensive income.
- equity investments which the City has not elected to recognise fair value gains and losses through other comprehensive income.

SIGNIFICANT ACCOUNTING POLICIES (Continued)

Impairment and risk

Information regarding impairment and exposure to risk can be found at Note 25.

Previous accounting policy: Loans and receivables

Non-derivative financial assets with fixed or determinable payments that were not quoted in an active market and are solely payments of principal and interest were classified as loans and receivables and are subsequently measured at amortised cost, using the effective interest rate method.

Refer to Note 27 for explanations regarding the change in accounting policy and reclassification of available for sale financial assets to financial assets at fair value through profit and loss.

9. PROPERTY, PLANT AND EQUIPMENT

(a) Movements in Carrying Amounts

Movement in the carrying amounts of each class of property, plant and equipment between the beginning and the end of the current financial year.

	Land - freehold land	Land - vested in and under the control of Council	Total land	Buildings - specialised	Total buildings	Total land and buildings	Furniture and equipment	Plant and equipment	Computer software/ equipment	Total property, plant and equipment
	$	$	$	$	$	$	$	$	$	$
Balance at 1 July 2017 - restated	35,431,000	12,140,000	47,571,000	104,101,016	104,101,016	151,672,016	1,169,416	6,322,402	0	159,163,834
Additions	0	0	0	783,780	783,780	783,780	152,248	1,301,670	0	2,237,698
(Disposals) - restated	0	0	0	0	0	0	(2,254)	(698,838)	0	(701,092)
Depreciation (expense) - restated	0	0	0	(4,641,717)	(4,641,717)	(4,641,717)	(343,217)	(860,384)	0	(5,845,318)
Carrying amount at 30 June 2018 - restated	35,431,000	12,140,000	47,571,000	100,243,079	100,243,079	147,814,079	976,193	6,064,850	0	154,855,122
Comprises:										
Gross carrying amount at 30 June 2018 - restated	35,431,000	12,140,000	47,571,000	104,884,796	104,884,796	152,455,796	4,486,124	8,984,182	0	165,926,102
Accumulated depreciation at 30 June 2018 - restated	0	0	0	(4,641,717)	(4,641,717)	(4,641,717)	(3,509,931)	(2,919,332)	0	(11,070,980)
Carrying amount at 30 June 2018 - restated	35,431,000	12,140,000	47,571,000	100,243,079	100,243,079	147,814,079	976,193	6,064,850	0	154,855,122
Additions	0	0	0	924,854	924,854	924,854	8,149	860,702	308,673	2,102,378
(Disposals)	0	0	0	0	0	0	0	(519,520)	0	(519,520)
Depreciation (expense)	0	0	0	(4,481,581)	(4,481,581)	(4,481,581)	(260,892)	(902,438)	0	(5,644,911)
Carrying amount at 30 June 2019	35,431,000	12,140,000	47,571,000	96,686,352	96,686,352	144,257,352	723,450	5,503,594	308,673	150,793,069
Comprises:										
Gross carrying amount at 30 June 2019	35,431,000	12,140,000	47,571,000	105,809,650	105,809,650	153,380,650	4,488,944	8,984,624	308,673	167,162,891
Accumulated depreciation at 30 June 2019	0	0	0	(9,123,298)	(9,123,298)	(9,123,298)	(3,765,494)	(3,481,030)	0	(16,369,822)
Carrying amount at 30 June 2019	35,431,000	12,140,000	47,571,000	96,686,352	96,686,352	144,257,352	723,450	5,503,594	308,673	150,793,069

9. PROPERTY, PLANT AND EQUIPMENT (Continued)

(b) Fair Value Measurements

Asset Class	Fair Value Hierarchy	Valuation Technique	Basis of Valuation	Date of Last Valuation	Inputs Used
Land and buildings					
Land - freehold land					
- Independent valuation	2	Market approach using recent observable open market values as evidenced by sales transactions of similar property types	Independent registered valuer	June 2017	Price per square metre
- Independent valuation	3	Market approach using recent observable open market values as evidenced by sales transactions of similar property types, adjusted for condition and comparability, at their current use as highest and best use.	Independent registered valuer	June 2017	Price per square metre adjusted for zoning restrictions
Land - vested in and under the control of Council					
- Independent valuation	3	Improvements to land valued using cost approach	Independent registered valuer	June 2017	Improvements to land using construction costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs
Buildings - specialised					
- Independent valuation	3	Cost approach using depreciated replacement costs	Independent registered valuer	June 2017	Construction costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs
Furniture and equipment					
- Independent valuation	3	Cost approach using depreciated replacement cost	Independent registered valuer	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (level 3) inputs
- Management Valuation	3	Cost approach using depreciated replacement cost	Management valuation	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (level 3) inputs
Plant and equipment					
- Independent Valuation	2	Market approach using recent observable market data for similar assets	Independent registered valuer	June 2016	Market price per item
- Independent Valuation	3	Cost approach using depreciated replacement cost	Independent registered valuer	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs
- Management Valuation	3	Cost approach using depreciated replacement cost	Management valuation	June 2016	Purchase costs and current condition (Level 2), residual values and remaining useful life assessments (Level 3) inputs

Level 3 inputs are based on assumptions with regards to future values and patterns of consumption utilising current information. If the basis of these assumptions were varied, they have the potential to result in a significantly higher or lower fair value measurement.

During the period there were no changes in the valuation techniques used by the local government to determine the fair value of property, plant and equipment using either level 2 or level 3 inputs.

10. INFRASTRUCTURE

(a) Movements in Carrying Amounts

Movement in the carrying amounts of each class of infrastructure between the beginning and the end of the current financial year.

	Infrastructure - Roads	Infrastructure - Footpaths	Infrastructure - Drainage	Infrastructure - Car Parks	Infrastructure - Bus Shelters	Infrastructure - Street Lights	Infrastructure - Parks & Ovals	Infrastructure - Other	Total Infrastructure
	$	$	$	$	$	$	$	$	$
Balance at 1 July 2017	182,636,623	34,805,073	49,220,758	1,409,348	740,563	938,221	18,475,827	528,160	288,754,573
Additions	9,718,038	1,919,481	2,720,336	344,631	33,521	26,839	2,455,101	97,508	17,315,455
Revaluation increments / (decrements) transferred to revaluation surplus	54,065,551	1,516,411	(4,711,655)	1,525,181	(79,008)	0	4,869,464	(38,068)	57,147,876
Impairment (losses) / reversals	0	0	0	0	0	(9,803)	2,762,144	0	2,752,341
Depreciation (expense)	(4,918,898)	(1,045,795)	(884,616)	(154,554)	(72,860)	(55,799)	(1,153,434)	(69,511)	(8,355,467)
Carrying amount at 30 June 2018	241,501,314	37,195,170	46,344,823	3,124,606	622,216	899,458	27,409,102	518,089	357,614,778
Comprises:									
Gross carrying amount at 30 June 2018	241,501,314	37,195,170	46,344,823	3,124,606	622,216	899,458	27,409,102	518,089	357,614,778
Carrying amount at 30 June 2018	241,501,314	37,195,170	46,344,823	3,124,606	622,216	899,458	27,409,102	518,089	357,614,778
Additions	5,648,124	1,110,130	2,594,192	6,012	16,554	334,163	4,695,095	8,582	14,412,852
Depreciation (expense)	(6,325,113)	(572,233)	(562,737)	(347,178)	(44,444)	(52,909)	(1,712,257)	(97,799)	(9,714,670)
Carrying amount at 30 June 2019	240,824,325	37,733,067	48,376,278	2,783,440	594,326	1,180,712	30,391,940	428,872	362,312,960
Comprises:									
Gross carrying amount at 30 June 2019	247,149,438	38,305,300	48,939,015	3,130,618	638,770	1,233,621	32,104,197	526,671	372,027,630
Accumulated depreciation at 30 June 2019	(6,325,113)	(572,233)	(562,737)	(347,178)	(44,444)	(52,909)	(1,712,257)	(97,799)	(9,714,670)
Carrying amount at 30 June 2019	240,824,325	37,733,067	48,376,278	2,783,440	594,326	1,180,712	30,391,940	428,872	362,312,960

10. INFRASTRUCTURE (Continued)

(b) Fair Value Measurements

Asset Class	Fair Value Hierarchy	Valuation Technique	Basis of Valuation	Date of Last Valuation	Inputs Used
Infrastructure - Roads	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Footpaths	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Drainage	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Car Parks	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Bus Shelters	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Street Lights	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Parks & Ovals	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)
Infrastructure - Other	3	Cost approach using depreciated replacement cost	Management Valuation	June 2018	Construction costs and current condition, non-depreciable components and remaining useful life assessments (Level 3 inputs)

Level 3 inputs are based on assumptions with regards to future values and patterns of consumption utilising current information. If the basis of these assumptions were varied, they have the potential to result in a significantly higher or lower fair value measurement.

During the period there were no changes in the valuation techniques used to determine the fair value of infrastructure using level 3 inputs.

11. PROPERTY, PLANT AND EQUIPMENT (INCLUDING INFRASTRUCTURE)

SIGNIFICANT ACCOUNTING POLICIES

Fixed assets

Each class of fixed assets within either plant and equipment or infrastructure, is carried at cost or fair value as indicated less, where applicable, any accumulated depreciation and impairment losses.

Initial recognition and measurement between mandatory revaluation dates

All assets are initially recognised at cost where the fair value of the asset at date of acquisition is equal to or above $5,000. All assets are subsequently revalued in accordance with the mandatory measurement framework.

In relation to this initial measurement, cost is determined as the fair value of the assets given as consideration plus costs incidental to the acquisition. For assets acquired at no cost or for nominal consideration, cost is determined as fair value at the date of acquisition. The cost of non-current assets constructed by the City includes the cost of all materials used in construction, direct labour on the project and an appropriate proportion of variable and fixed overheads.

Individual assets acquired between initial recognition and the next revaluation of the asset class in accordance with the mandatory measurement framework, are recognised at cost and disclosed as being at fair value as management believes cost approximates fair value. They are subject to subsequent revaluation at the next anniversary date in accordance with the mandatory measurement framework.

Revaluation

The fair value of fixed assets is determined at least every three years and no more than five years in accordance with the regulatory framework. At the end of each period the valuation is reviewed and where appropriate the fair value is updated to reflect current market conditions. This process is considered to be in accordance with *Local Government (Financial Management) Regulation 17A (2)* which requires property, plant and equipment to be shown at fair value.

Increases in the carrying amount arising on revaluation of assets are credited to a revaluation surplus in equity. Decreases that offset previous increases of the same class of asset are recognised against revaluation surplus directly in equity. All other decreases are recognised in profit or loss.

AUSTRALIAN ACCOUNTING STANDARDS - INCONSISTENCY

Land under control

In accordance with *Local Government (Financial Management) Regulation 16(a)(ii),* the City was required to include as an asset (by 30 June 2013), Crown Land operated by the local government as a golf course, showground, racecourse or other sporting or recreational facility of State or Regional significance.

Upon initial recognition, these assets were recorded at cost in accordance with AASB 116. They were then classified as Land and revalued along with other land in accordance with the other policies detailed in this Note.

Land under roads

In Western Australia, all land under roads is Crown Land, the responsibility for managing which, is vested in the local government.

Effective as at 1 July 2008, Council elected not to recognise any value for land under roads acquired on or before 30 June 2008. This accords with the treatment available in *Australian Accounting Standard AASB 1051 Land Under Roads* and the fact *Local Government (Financial Management) Regulation 16(a)(i) prohibits* local governments from recognising such land as an asset.

In respect of land under roads acquired on or after 1 July 2008, as detailed above, *Local Government (Financial Management) Regulation 16(a)(i)* prohibits local governments from recognising such land as an asset.

Whilst such treatment is inconsistent with the requirements of *AASB 1051, Local Government (Financial Management) Regulation 4(2)* provides, in the event of such an inconsistency, the *Local Government (Financial Management) Regulations* prevail.

Consequently, any land under roads acquired on or after 1 July 2008 is not included as an asset of the City.

11. PROPERTY, PLANT AND EQUIPMENT (INCLUDING INFRASTRUCTURE) (Continued)

(a) Disposals of Assets

	2019 Actual Net Book Value	2019 Actual Sale Proceeds	2019 Actual Profit	2019 Actual Loss	2019 Budget Net Book Value	2019 Budget Sale Proceeds	2019 Budget Profit	2019 Budget Loss	2018 Actual Net Book Value	2018 Actual Sale Proceeds	2018 Actual Profit	2018 Actual Loss
	$	$	$	$	$	$	$	$	$	$	$	$
Furniture and equipment	0	0	0	0	0	0	0	0	2,254	1,062	67	(1,259)
Plant and equipment	519,520	373,433	6,178	(152,265)	612,540	423,500	11,132	(200,172)	698,838	530,285	12,159	(180,712)
	519,520	373,433	6,178	(152,265)	612,540	423,500	11,132	(200,172)	701,092	531,347	12,226	(181,971)

The following assets were disposed of during the year.

Plant and Equipment	2019 Actual Net Book Value	2019 Actual Sale Proceeds	2019 Actual Profit	2019 Actual Loss
	$	$	$	$
Governance				
Subaru Forrester 2.5i	22,860	15,736	0	(7,124)
Mazda CX-5 Maxx Sport	28,967	20,509	0	(8,458)
Toyota Aurion 3.5L V6	21,475	11,645	0	(9,830)
Mazda CX-5 Maxx Sport	14,005	12,555	0	(1,450)
Mazda CX-5 Maxx Sport	29,045	19,600	0	(9,445)
Law, order, public safety				
Hyundai i30 Hatch 2L Auto	21,467	10,509	0	(10,958)
Volkswagon Amarok Utility	26,823	0	0	(26,823)
Community amenities				
Holden Colorado Dual Cab	26,313	23,009	0	(3,304)
Recreation and culture				
Holden Commodore Evoke Wagon VF	18,412	15,736	0	(2,676)
Holden Commodore Evoke Auto V6	23,019	16,191	0	(6,828)
Holden Commodore Evoke Auto V6	21,877	12,327	0	(9,550)
Transport				
Cat Skid Steer Loader	21,685	18,512	0	(3,173)
Economic services				
Holden Colorado Single Cab	18,000	13,236	0	(4,764)
Holden Colorado Single Cab	19,097	14,373	0	(4,724)
Other property and services				
Agrizzi Rota Slasher 72 inch	0	2,273	2,273	0
Massey Ferguson Tractor	49,748	30,000	0	(19,748)
Mitsubishi Tip Truck	30,564	22,176	0	(8,388)
KAP Ride on Mower with Catcher	17,795	6,364	0	(11,431)
Holden Colorado Dual Cab	26,600	23,009	0	(3,591)
Hyundai TQ2 iLoad 3S 2.5L Auto	20,000	20,509	509	0
Hyundai TQ2 iLoad 3S 2.5L Auto	20,000	21,645	1,645	0
Holden Colorado Space Cab	21,934	23,463	1,529	0
Holden Colorado Single Cab	19,834	20,056	222	0
	519,520	373,433	6,178	(152,265)

11. PROPERTY, PLANT AND EQUIPMENT (INCLUDING INFRASTRUCTURE) (Continued)

(b) Depreciation

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Buildings - specialised	4,481,581	3,987,093	4,641,717
Furniture and equipment	260,892	415,005	343,217
Plant and equipment	902,438	906,608	860,384
Infrastructure - Roads	6,325,113	4,923,737	4,918,898
Infrastructure - Footpaths	572,233	1,046,824	1,045,795
Infrastructure - Drainage	562,737	885,486	884,616
Infrastructure - Car Parks	347,178	154,706	154,554
Infrastructure - Bus Shelters	44,444	72,932	72,860
Infrastructure - Street Lights	52,909	55,854	55,799
Infrastructure - Parks & Ovals	1,712,257	1,154,569	1,153,434
Infrastructure - Other	97,799	69,579	69,511
	15,359,581	13,672,393	14,200,785

Revision of useful lives of assets
A review of the City's roads has resulted in the useful life being decreased from 0-120 years down to 0-80 years dependant on the traffic use and structure of the road.

SIGNIFICANT ACCOUNTING POLICIES

Depreciation
The depreciable amount of all fixed assets including buildings but excluding freehold land and vested land, are depreciated on a straight-line basis over the individual asset's useful life from the time the asset is held ready for use. Leasehold improvements are depreciated over the shorter of either the unexpired period of the lease or the estimated useful life of the improvements.

The assets residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the statement of comprehensive income in the period in which they arise.

Depreciation rates
Typical estimated useful lives for the different asset classes for the current and prior years are included in the table below:

Asset Class	Useful life
Buildings	2 to 100 years
Furniture and equipment	
Computer & Audio Visual Equip	2 to 7 years
Office Furniture & Equipment	3 to 15 years
Other Furniture & Equipment	5 to 15 years
Art Works	not depreciated
Plant and equipment	5 to 15 years
Motor Vehicles	3 to 10 years
Other Plant & Equipment	3 to 20 years
Infrastructure	
Roads	0 to 80 years
Footpaths	40 to 80 years
Drainage	80 years
Car Parks	5 to 20 years
Bus Shelters	20 to 25 years
Street Lights	15 to 30 years
Parks & Ovals	10 to 50 years
Other Infrastructure	30 to 40 years

Depreciation (Continued)
When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is treated in one of the following ways:
(a) The gross carrying amount is adjusted in a manner that is consistent with the revaluation of the carrying amount of the asset. For example, the gross carrying amount may be restated by reference to observable market data or it may be restated proportionately to the change in the carrying amount. The accumulated depreciation at the date of the revaluation is adjusted to equal the difference between the gross carrying amount and the carrying amount of the asset after taking into account accumulated impairment losses; or
(b) Eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset.

12. REVALUATION SURPLUS

	2019 Opening Balance	2019 Closing Balance	2018 Opening Balance	2018 Revaluation Increment	2018 Revaluation (Decrement)	Total Movement on Revaluation	2018 Closing Balance
	$	$	$	$	$	$	$
Revaluation surplus - Land - freehold land	78,166,636	78,166,636	78,166,636	0	0	0	78,166,636
Revaluation surplus - Furniture and equipment	199,013	199,013	199,013	0	0	0	199,013
Revaluation surplus - Plant and equipment	1,581,222	1,581,222	1,581,222	0	0	0	1,581,222
Revaluation surplus - Infrastructure - Roads	112,417,177	112,417,177	58,351,626	54,065,551	0	54,065,551	112,417,177
Revaluation surplus - Infrastructure - Footpaths	14,917,826	14,917,826	13,401,415	1,516,411	0	1,516,411	14,917,826
Revaluation surplus - Infrastructure - Drainage	17,185,601	17,185,601	21,897,256	0	(4,711,655)	(4,711,655)	17,185,601
Revaluation surplus - Infrastructure - Car Parks	1,837,027	1,837,027	311,846	1,525,181	0	1,525,181	1,837,027
Revaluation surplus - Infrastructure - Bus Shelters	379,791	379,791	458,799	0	(79,008)	(79,008)	379,791
Revaluation surplus - Infrastructure - Parks & Ovals	4,869,464	4,869,464	0	4,869,464	0	4,869,464	4,869,464
Revaluation surplus - Infrastructure - Other	178,078	178,078	216,146	0	(38,068)	(38,068)	178,078
	231,731,835	231,731,835	174,583,959	61,976,607	(4,828,731)	57,147,876	231,731,835

Movements on revaluation of property, plant and equipment (including infrastructure) are not able to be reliably attributed to a program as the assets were revalued by class as provided for by AASB 116 Aus 40.1.

No assets were revalued this Financial Year. Property, Plant and Equipment will be revalued in the 2020 Financial Year.

13. TRADE AND OTHER PAYABLES

	2019	2018
	$	$
Current		
Sundry creditors	1,826,349	2,686,691
Bonds and Deposits Held (refer Note 26)	1,581,937	0
Accrued salaries and wages	629,954	1,004,600
Accrued Expenses	187,490	291,863
Accrued Interest on long term borrowings	32,295	33,599
Unit Contribution - Banksia Park	17,133,425	19,224,000
	21,391,450	23,240,753

SIGNIFICANT ACCOUNTING POLICIES

Trade and other payables

Trade and other payables represent liabilities for goods and services provided to the City prior to the end of the financial year that are unpaid and arise when the City becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured, are recognised as a current liability and are normally paid within 30 days of recognition.

Trade and other payables (Continued)

Trade and other payables also include the unit contribution payable for the Banksia Park retirement village units. This amount represents non-interest bearing payments made by individuals to the City upon signing a lease agreement to occupy units at the retirement village. The balance is recognised at fair value through profit and loss. Fair value is the amount payable on demand and is measured at the principle amount plus the residents share of any increase/decrease in the market value of the units less deferred management fees calculated in accordance with the lease agreement. As there is no unconditional right to defer the payment beyond 12 months this balance is recognised as a current liability.

14. INFORMATION ON BORROWINGS

(a) Borrowings

	2019	2018
	$	$
Current	1,451,093	777,133
Non-current*	20,101,305	21,294,278
Total	21,552,398	22,071,411

(b) Repayments - Borrowings

Particulars	Loan Number	Institution	Interest Rate	Actual Principal 1 July 2018	30 June 2019 Actual Principal repayments	30 June 2019 Actual Interest repayments	30 June 2019 Actual Principal outstanding	Budget Principal 1 July 2018	30 June 2019 Budget New Loans	30 June 2019 Budget Principal repayments	30 June 2019 Budget Interest repayments	30 June 2019 Budget Principal outstanding	Actual Principal 1 July 2017	30 June 2018 Actual Principal repayments	30 June 2018 Actual Interest repayments	30 June 2018 Actual Principal outstanding
				$	$	$	$	$	$	$	$	$	$	$	$	$
Governance																
Administration Office Renovations	99	WATC	6.35%	761,572	89,773	51,272	671,799	761,573	0	89,773	51,364	671,800	845,986	84,414	57,150	761,572
Administration / Chambers Building Refurbishment	107	WATC	N/A	0	0	0	0	0	2,268,000	0	0	2,268,000	0	0	0	0
Education and welfare																
Youth Specific Space	96	WATC	7.67%	147,840	25,366	11,586	122,474	147,840	0	25,366	11,654	122,474	171,398	23,558	13,543	147,840
Youth Specific Space Stage 2	100	WATC	4.72%	1,521,312	122,515	79,551	1,398,797	1,521,312	0	122,515	79,645	1,398,797	1,521,312	0	81,250	1,521,312
Recreation and culture																
Wellard Sports Pavilion	94	WATC	6.48%	204,825	46,488	13,236	158,337	204,824	0	46,488	13,704	158,336	248,483	43,658	16,363	204,825
Orelia Oval Pavilion	95	WATC	7.67%	354,815	60,877	27,808	293,938	354,815	0	60,878	27,970	293,937	411,355	56,540	32,503	354,815
Orelia Oval Pavilion Stage 2	97	WATC	6.35%	1,685,135	198,641	113,449	1,486,494	1,685,138	0	198,641	113,653	1,486,497	1,871,922	186,787	126,457	1,685,135
Resource & Knowledge Centre	102	WATC	4.59%	7,421,567	0	386,720	7,421,567	7,421,567	0	0	386,720	7,421,567	7,421,567	0	386,720	7,421,567
Recquatic Centre Upgrade	104	WATC	4.09%	3,350,000	0	159,125	3,350,000	3,350,000	0	0	159,125	3,350,000	3,350,000	0	159,126	3,350,000
Bertram Community Centre	105	WATC	3.29%	1,296,840	0	50,827	1,296,840	1,296,840	0	0	50,827	1,296,840	1,296,840	0	50,827	1,296,840
Calista Destination Park	106	WATC	3.16%	1,516,532	96,112	57,249	1,420,420	1,516,532	0	96,112	57,307	1,420,420	1,609,695	93,163	60,860	1,516,532
Transport																
Industrial Area Streetscape	98	WATC	6.35%	1,028,123	121,193	69,217	906,930	1,028,122	0	121,193	69,341	906,929	1,142,082	113,959	77,153	1,028,123
City Centre Redevelopment	101	WATC	2.49%	2,500,000	0	79,250	2,500,000	2,500,000	0	0	79,250	2,500,000	2,500,000	0	79,250	2,500,000
				21,788,561	760,965	1,099,290	21,027,596	21,788,563	2,268,000	760,965	1,100,560	23,295,597	22,390,640	602,079	1,141,202	21,788,561
Self Supporting Loans																
Recreation and culture																
Kwinana Golf Club Refurbishment	103B	WATC	3.35%	282,850	16,168	11,167	266,682	282,849	0	16,168	11,202	266,681	298,494	15,644	11,802	282,850
				282,850	16,168	11,167	266,682	282,849	0	16,168	11,202	266,681	298,494	15,644	11,802	282,850
				22,071,411	777,133	1,110,457	21,294,278	22,071,412	2,268,000	777,133	1,111,762	23,562,278	22,689,134	617,723	1,153,004	22,071,411
Share of SMRC Loan				0			258,120									
				22,071,411			21,552,398									

Self supporting loans are financed by payments from third parties. These are shown in Note 8 as other financial assets at amortised cost.
All other loan repayments were financed by general purpose revenue.

* Non-current portion of borrowings includes $258,120, which represents the City's share of the Southern Metropolitan Regional Council (SMRC) Administration Building loan with the WATC. Due to the balance being immaterial, it has been recognised as at 30 June 2019.

14. INFORMATION ON BORROWINGS (Continued)

(c) New Borrowings - 2018/19

Particulars/Purpose	Institution	Loan Type	Term Years	Interest Rate	Amount Borrowed 2019 Actual	Amount Borrowed 2019 Budget	Amount (Used) 2019 Actual	Amount (Used) 2019 Budget	Total Interest & Charges	Actual Balance Unspent
				%	$	$	$	$	$	$
Loan 107 - Administration / Chambers Building Refurbishment	WATC	Debenture	10	3.52%	0	2,268,000	0	2,268,000	0	0
					0	2,268,000	0	2,268,000	0	0

(d) Undrawn Borrowing Facilities

	2019 $	2018 $
Credit Standby Arrangements		
Bank overdraft limit	0	0
Bank overdraft at balance date	0	0
Credit card limit	100,000	85,000
Credit card balance at balance date	(31,535)	(15,045)
Total amount of credit unused	68,465	69,955
Loan facilities		
Loan facilities - current	1,451,093	777,133
Loan facilities - non-current	20,101,305	21,294,278
Total facilities in use at balance date	21,552,398	22,071,411

SIGNIFICANT ACCOUNTING POLICIES

Financial liabilities

Financial liabilities are recognised at fair value when the City becomes a party to the contractual provisions to the instrument.

Non-derivative financial liabilities (excluding financial guarantees) are subsequently measured at amortised cost. Gains or losses are recognised in profit or loss.

Financial liabilities are derecognised where the related obligations are discharged, cancelled or expired. The difference between the carrying amount of the financial liability extinguished or transferred to another party and the fair value of the consideration paid, including the transfer of non-cash assets or liabilities assumed, is recognised in profit or loss.

Borrowing costs

Borrowing costs are recognised as an expense when incurred except where they are directly attributable to the acquisition, construction or production of a qualifying asset. Where this is the case, they are capitalised as part of the cost of the particular asset until such time as the asset is substantially ready for its intended use or sale.

Risk

Information regarding exposure to risk can be found at Note 25.

15. EMPLOYEE RELATED PROVISIONS

Employee Related Provisions	Provision for Annual Leave	Provision for Long Service Leave	Provision for Other Leave	Total
	$	$	$	$
Opening balance at 1 July 2018				
Current provisions	2,160,304	1,856,610	610,356	4,627,270
Non-current provisions	0	447,068	0	447,068
	2,160,304	2,303,678	610,356	5,074,338
Additional provision	88,485	187,126	22,034	297,645
Balance at 30 June 2019	2,248,789	2,490,804	632,390	5,371,983
Comprises				
Current	2,248,789	2,021,200	632,390	4,902,379
Non-current	0	469,604	0	469,604
	2,248,789	2,490,804	632,390	5,371,983

Amounts are expected to be settled on the following basis:	2019 $	2018 $
Less than 12 months after the reporting date	3,446,078	3,231,609
More than 12 months from reporting date	1,925,905	1,842,729
	5,371,983	5,074,338

Timing of the payment of current leave liabilities is difficult to determine as it is dependent on future decisions of employees. Expected settlement timings are based on information obtained from employees and historical leave trends and assumes no events will occur to impact on these historical trends.

SIGNIFICANT ACCOUNTING POLICIES

Employee benefits

Short-term employee benefits

Provision is made for the City's obligations for short-term employee benefits. Short-term employee benefits are benefits (other than termination benefits) that are expected to be settled wholly before 12 months after the end of the annual reporting period in which the employees render the related service, including wages, salaries and sick leave. Short-term employee benefits are measured at the (undiscounted) amounts expected to be paid when the obligation is settled.

The City's obligations for short-term employee benefits such as wages, salaries and sick leave are recognised as a part of current trade and other payables in the statement of financial position.

Other long-term employee benefits

The City's obligations for employees' annual leave and long service leave entitlements are recognised as provisions in the statement of financial position.

Long-term employee benefits are measured at the present value of the expected future payments to be made to employees. Expected future payments incorporate anticipated future wage and salary levels, durations of service and employee departures and are discounted at 2.5%

Other long-term employee benefits (Continued)

rates determined by reference to market yields at the end of the reporting period on government bonds that have maturity dates that approximate the terms of the obligations. Any remeasurements for changes in assumptions of obligations for other long-term employee benefits are recognised in profit or loss in the periods in which the changes occur.

The City's obligations for long-term employee benefits are presented as non-current provisions in its statement of financial position, except where the City does not have an unconditional right to defer settlement for at least 12 months after the end of the reporting period, in which case the obligations are presented as current provisions.

Provisions

Provisions are recognised when the City has a present legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

Provisions are measured using the best estimate of the amounts required to settle the obligation at the end of the reporting period.

16. NOTES TO THE STATEMENT OF CASH FLOWS

Reconciliation of Cash

For the purposes of the Statement of Cash Flows, cash includes cash and cash equivalents, net of outstanding bank overdrafts. Cash at the end of the reporting period is reconciled to the related items in the Statement of Financial Position as follows:

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Cash and cash equivalents	11,888,157	49,389,260	9,367,549
Reconciliation of Net Cash Provided By Operating Activities to Net Result			
Net result	7,034,201	(6,757,894)	11,455,506
Non-cash flows in Net result:			
Adjustments to fair value of financial assets through profit and loss - Banksia Park DMF Receivable	610,100	0	4,648
Adjustments to fair value of financial assets through profit and loss - Local Government House Trust	(122,620)	0	0
Depreciation	15,359,581	13,672,393	14,200,785
(Profit)/loss on sale of asset	146,087	189,040	169,745
Contributed Assets	(10,430,404)	0	(12,151,516)
Share of profits of associates (SMRC)	(61,124)	0	0
Loss on revaluation of fixed assets	0	0	9,803
Reversal of loss on revaluation of fixed assets	0	0	(2,762,144)
Changes in assets and liabilities:			
(Increase)/decrease in receivables	(9,213)	317,373	(871,487)
(Increase)/decrease in Financial assets	0	0	(384,066)
(Increase)/decrease in inventories	1,260	0	2,023
(Increase)/decrease in other assets	(164,217)	0	0
Increase/(decrease) in payables	(1,849,303)	460,426	(3,145,733)
Increase/(decrease) in provisions	297,645	(300,000)	115,444
Grants contributions for the development of assets	(4,476,940)	(4,285,605)	(3,258,381)
Net cash from operating activities	6,335,053	3,295,733	3,384,627

17. TOTAL ASSETS CLASSIFIED BY FUNCTION AND ACTIVITY

	2019	2018
	$	$
Governance	73,748,984	70,010,999
Law, order, public safety	1,953,715	2,185,717
Health	80,256	93,753
Education and welfare	31,885,016	33,342,265
Community amenities	1,128,260	892,948
Recreation and culture	85,910,119	84,664,247
Transport	330,930,080	329,275,107
Economic services	51,402,122	51,589,540
Other property and services	3,347,917	3,532,884
	580,386,469	575,587,460

18. CONTINGENT LIABILITIES

The City did not have any contingent liabilities as at 30 June 2019.

19. CAPITAL AND LEASING COMMITMENTS

(a) Capital Expenditure Commitments

	2019	2018
	$	$
Contracted for:		
- capital expenditure projects	103,866	209,615
	103,866	209,615
Payable:		
- not later than one year	103,866	209,615
Bertram Oval - Ablution Block	0	181,470
Kwinana Tennis Courts - Fencing	0	24,535
Medina Oval - Carpark	0	3,610
Varris Park Upgrade	81,569	0
Smirks Cottage Tractor Shed Preliminaries	22,297	0
	103,866	209,615

(b) Operating Lease Commitments

Non-cancellable operating leases contracted for but not capitalised in the accounts.

	2019	2018
Payable:	$	$
- not later than one year	438,663	543,070
- later than one year but not later than five years	344,990	746,861
	783,653	1,289,931

SIGNIFICANT ACCOUNTING POLICIES

Leases

Leases of fixed assets where substantially all the risks and benefits incidental to the ownership of the asset, but not legal ownership, are transferred to the City, are classified as finance leases.

Finance leases are capitalised recording an asset and a liability at the lower of the fair value of the leased property or the present value of the minimum lease payments, including any guaranteed residual values. Lease payments are allocated between the reduction of the lease liability and the lease interest expense for the period.

Leases (Continued)

Leased assets are depreciated on a straight line basis over the shorter of their estimated useful lives or the lease term.

Lease payments for operating leases, where substantially all the risks and benefits remain with the lessor, are charged as expenses on a straight line basis over the lease term.

Lease incentives under operating leases are recognised as a liability and amortised on a straight line basis over the life of the lease term.

20. RELATED PARTY TRANSACTIONS

Elected Members Remuneration

The following fees, expenses and allowances were paid to council members and/or the Mayor.	2019 Actual $	2019 Budget $	2018 Actual $
Meeting Fees	273,794	266,594	271,825
Mayor's allowance	88,864	88,864	88,864
Deputy Mayor's allowance	22,216	22,216	22,216
Travelling expenses	2,396	8,600	6,007
Telecommunications allowance	28,000	28,000	27,981
	415,270	414,274	416,893

Key Management Personnel (KMP) Compensation Disclosure

The total of remuneration paid to KMP of the City during the year are as follows:	2019 Actual $	2018 Actual $
Short-term employee benefits	1,343,082	1,203,546
Post-employment benefits	142,026	128,688
Other long-term benefits	31,216	31,216
	1,516,324	1,363,450

Short-term employee benefits
These amounts include all salary, fringe benefits and cash bonuses awarded to KMP except for details in respect to fees and benefits paid to elected members which may be found above.

Post-employment benefits
These amounts are the current-year's estimated cost of providing for the City's superannuation contributions made during the year.

Other long-term benefits
These amounts represent long service benefits accruing during the year.

20. RELATED PARTY TRANSACTIONS (Continued)

Transactions with related parties

Transactions between related parties and the City are on normal commercial terms and conditions, no more favourable than those available to other parties, unless otherwise stated.

No outstanding balances or provisions for doubtful debts or guarantees exist in relation to related parties at year end.

The following transactions occurred with related parties:	2019 Actual $	2018 Actual $
Sale of goods and services	69,384	15,957
Purchase of goods and services	183,964	220,566
Amounts payable to related parties:		
Trade and other payables	0	445

Related Parties

The City's main related parties are as follows:

i. Key management personnel

Any person(s) having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any elected member, are considered key management personnel.

ii. Entities subject to significant influence by the City

An entity that has the power to participate in the financial and operating policy decisions of an entity, but does not have control over those policies, is an entity which holds significant influence. Significant influence may be gained by share ownership, statute or agreement.

21. INVESTMENT IN ASSOCIATES

South Metropolitan Regional Council (SMRC)

The City is a member of the South Metropolitan Regional Council (SMRC), established in 1998 to deliver innovative and responsible waste management solutions for the benefit of the community and environment. The current participants are City of Cockburn (withdrew as at 30 June 2019), Town of East Fremantle, City of Fremantle, City of Melville and City of Kwinana.

The following local governments have previously withdrawn from the regional Council:

City of Canning - June 2010
City of Rockingham - June 2012

The City has held 20% voting rights since the City of Rockingham withdrew membership effective 1 July 2013, representing significant influence in accordance with AASB128 Investments in Associates and Joint Ventures. The City has not previously recognised this interest. However, as the interest is considered immaterial, no prior period adjustment has been made to restate the figures.

The City holds 25% voting rights as at 30 June 2019 after the withrawal of City of Cockburn.

	Note	2019 $
The City's Share of Associate Entity's Net Assets		319,244
Equity Ratio		1.27%
Represented by Share of Associate Entity's Statement of Financial Position		
Current Assets		327,835
Non Current Assets		451,078
Total Assets		778,913
Current Liabilities		198,641
Non-Current Liabilities		261,028
Total Liabilities		459,669
Net Assets		319,244
Net Increase in Share of Associate Entity's Net Assets:		
Net Assets		319,244
Less: City of Kwinana's Share of SMRC Loan Liability	14	(258,120)
		61,124

SIGNIFICANT ACCOUNTING POLICIES

Investment in associates

An associate is an entity over which the City has significant influence. Significant influence is the power to participate in the financial operating policy decisions of that entity but is not control or joint control of those policies. Investments in associates are accounted for in the financial statements by applying the equity method of accounting, whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the City's share of net assets of the associate. In addition, the City's share of the profit or loss of the associate is included in the City's profit or loss.

The carrying amount of the investment includes, where applicable, goodwill relating to the associate. Any discount on acquisition, whereby the City's share of the

SIGNIFICANT ACCOUNTING POLICIES (Continued)

Investment in associates (Continued)

net fair value of the associate exceeds the cost of investment, is recognised in profit or loss in the period in which the investment is acquired.

Profits and losses resulting from transactions between the City and the associate are eliminated to the extent of the City's interest in the associate. When the City's share of losses in an associate equals or exceeds its interest in the associate, the City discontinues recognising its share of further losses unless it has incurred legal or constructive obligations or made payments on behalf of the associate. When the associate subsequently makes profits, the City will resume recognising its share of those profits once its share of the profits equals the share of the losses not recognised.

22. CONDITIONS OVER GRANTS/CONTRIBUTIONS

Grant/Contribution	Opening Balance [1] 1/07/17	Received [2] 2017/18	Expended [3] 2017/18	Closing Balance [1] 30/06/18	Received [2] 2018/19	Expended [3] 2018/19	Closing Balance 30/06/19
	$	$	$	$	$	$	$
Law, order, public safety							
Kwinana South Station Upgrade - Dept of Premier & Cabinet	0	0	0	0	30,000	0	30,000
Mandogalup Station Upgrade - Dept of Premier & Cabinet	0	0	0	0	25,000	0	25,000
FESA ESL Grant	23,923	175,183	(157,485)	41,621	182,144	(180,015)	43,750
Education and welfare							
Connections Your Next Step	1,177	0	(1,177)	0	0	0	0
LYRIK - Youth Incentives Program	0	20,000	0	20,000	20,000	(20,000)	20,000
Community amenities							
BP Coastcare	4,644	0	(4,644)	0	0	0	0
Bushcare Projects	11,039	0	(11,039)	0	0	0	0
Coastcare in the Kwinana Industrial Area	14,774	0	(10,102)	4,672	10,000	(7,011)	7,661
Fauna Survey and Feral Animal Control	11,168	0	(11,168)	0			0
Greening Fund	0	100,000	(685)	99,315		(12,490)	86,825
Street Furniture Maintenance & Bus Shelter Subsidy	8,699	13,108	(21,807)	0			0
Perth Region NRM Support for South Metro Coast	2,336	0	(2,336)	0	5,000	(294)	4,706
SMCC - Challenger Beach Coastal Rehab Project	13,439	16,000	(14,861)	14,578		(14,331)	247
SMCC - Degremont (proAlliance) - Adopt a Beach	7,496	0	(1,861)	5,635		(2,047)	3,588
SMCC - Tronox - Adopt a Beach	0	0	0	0	5,000	(2,554)	2,446
Developer Contributions - DCA 1 - DCA 15	28,243,290	4,341,379	(3,229,495)	29,355,174	5,108,875	(2,849,663)	31,614,386
Recreation and culture							
Beach Emergency Number Signs (BEN Program)	0	4,115	0	4,115	0	(4,115)	0
Medina Oval Lighting	0	150,000	(5,625)	144,375	0	(144,375)	0
Rock Symphony Sponsorship	0	10,000	0	10,000	5,000	(10,000)	5,000
Youth Festival - Lotterywest	0	0	0	0	6,870	0	6,870
Kwinana Tennis Club Cultural Heritage Program	0	0	0	0	3,073	(3,073)	0
Noongar Cultural Heritage Program	1,606	0	(1,606)	0	0	0	0
Wandi Playing Fields - Education Department contr. To goal posts				0	25,500	0	25,500
Silversport - Pilot Seniors Program	4,064	0	(4,064)	0	0	0	0
Transport							
Roads to Recovery 2016/2017 Funding	81,065	645,353	(726,418)	0	0	0	0
Speed Alert Mobile Trailer for Driver Speed Education	26,290	0	(26,290)	0	0	0	0
State Black Spot	1,203	0	(1,203)	0	0	0	0
Total	28,456,213	5,475,138	(4,231,866)	29,699,485	5,426,462	(3,249,968)	31,875,979

For grants and contributions where funds have not been fully expended at 30 June 2019, the balance of the grant has been transferred to the Restricted Grants and Contributions Reserve, relevant Developer Contribution Reserve or remains in net current assets at 30 June surplus. These funds are quarantined as Restricted Cash at year ended 30 June 2019 and will be expended in the 2019/20 year or as determined by the relevant Developer Contribution Scheme.

Notes:
(1) - Grants/contributions recognised as revenue in a previous reporting period which were not expended at the close of the previous reporting period.

(2) - New grants/contributions which were recognised as revenues during the reporting period and which had not yet been fully expended in the manner specified by the contributor.

(3) - Grants/contributions which had been recognised as revenues in a previous reporting period or received in the current reporting period and which were expended in the current reporting period in the manner specified by the contributor.

23. RATING INFORMATION

(a) Rates

RATE TYPE Differential general rate / general rate	Rate in $	Number of Properties	2018/19 Actual Rateable Value	2018/19 Actual Rate Revenue	2018/19 Actual Interim Rates	2018/19 Actual Back Rates	2018/19 Actual Total Revenue	2018/19 Budget Rate Revenue	2018/19 Budget Interim Rate	2018/19 Budget Total Revenue	2017/18 Actual Total Revenue
			$	$	$	$	$	$	$	$	$
Gross rental valuations											
Improved Residential	0.07999	13,747	238,950,796	18,859,093	413,654	11,467	19,284,214	18,859,093	529,676	19,388,769	16,881,680
Vacant Residential	0.16828	376	7,792,630	1,375,819	(55,435)	(3,207)	1,317,177	1,375,819	0	1,375,819	1,309,947
Improved Special Residential	0.07120	815	19,436,231	1,372,308	11,525	(723)	1,383,110	1,372,308	0	1,372,308	1,253,425
Light Industrial and Commercial	0.09043	133	23,230,285	2,118,044	27,193	(2,340)	2,142,897	2,118,044	0	2,118,044	2,081,600
General Industry and Service Commercial	0.08647	319	35,313,111	3,074,926	28,378	(8,387)	3,094,917	3,074,926	0	3,074,926	3,048,910
Large Scale General Industry and Service Commercial	0.08909	47	47,549,186	4,178,852	22,756	37,854	4,239,462	4,178,852	0	4,178,852	4,021,528
Vacant Non Residential	0.10304	35	2,422,880	235,692	30,427	0	266,119	235,692	0	235,692	0
Unimproved valuations											
General Industrial	0.01759	3	121,200,000	2,131,908	0	0	2,131,908	2,131,908	0	2,131,908	2,055,552
Rural	0.00505	143	242,241,000	1,241,497	(3,753)	(630)	1,237,114	1,241,497	0	1,241,497	457,282
Mining	0.00847	25	39,960,000	338,461			338,461	338,461	0	338,461	319,309
Urban/Urban Deferred	0.00000	0	0	0	0	0	0	0	0	0	888,855
Sub-Total		15,643	778,096,119	34,926,600	474,745	34,034	35,435,379	34,926,600	529,676	35,456,276	32,318,088
Minimum payment	**Minimum $**										
Gross rental valuations											
Improved Residential	1,036	1,438	1,658,878	1,481,480	3,991	1,056	1,486,527	1,481,480	0	1,481,480	1,661,240
Vacant Residential	1,036	904	923,572	992,488	(25,891)	452	967,049	992,488	0	992,488	901,155
Improved Special Residential	1,036	4	6,228	3,108	1,036	0	4,144	3,108	0	3,108	6,228
Light Industrial and Commercial	1,348	25	317,800	33,700	2,696	0	36,396	33,700	0	33,700	31,800
General Industry and Service Commercial	1,348	34	47,994	45,832	0	0	45,832	45,832	0	45,832	47,994
Large Scale General Industry and Service Commercial	1,348	0	0	0	0	0	0	2,072	0	2,072	0
Vacant Non Residential	1,036	2	0	2,072	0	0	2,072	0	0	0	0
Unimproved valuations											
General Industrial	1,348	0	923,572	0	0	0	0	0	0	0	0
Rural	1,036	115	1,658,878	66,304	5,572	4,058	75,934	66,304	0	66,304	14,878
Mining	1,348	16	47,994	20,220	1,344	0	21,564	20,220	0	20,220	17,011
Urban/Urban Deferred	0	0	0	0	0	0	0	0	0	0	59,270
Sub-Total		2,538	5,584,916	2,645,204	(11,252)	5,566	2,639,518	2,645,204	0	2,645,204	2,739,576
Total amount raised from general rate		18,181	783,681,035	37,571,804	463,493	39,600	38,074,897	37,571,804	529,676	38,101,480	35,057,664
Discounts/concessions expensed during the year (refer Note 23(b))							(6,477)			(6,243)	(7,302)
							38,068,420			38,095,237	35,050,362

SIGNIFICANT ACCOUNTING POLICIES

Rates

Control over assets acquired from rates is obtained at the commencement of the rating period or, where earlier, upon receipt of the rates.

23. RATING INFORMATION (Continued)

(b) Discounts, Incentives, Concessions, & Write-offs

Rates Discounts

Rate or Fee Discount Granted	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Small Balance Write Off	1,477	1,243	2,302
Rates Incentive Prize	5,000	5,000	5,000
	6,477	6,243	7,302

(c) Interest Charges & Instalments

Instalment Options	Date Due	Instalment Plan Admin Charge	Instalment Plan Interest Rate	Unpaid Rates Interest Rate
		$	%	%
Option One				
Single full payment	07 Sep 2018	$ 0.00	5.50%	11.00%
Option Two				
First instalment	07 Sep 2018	$ 7.70	5.50%	11.00%
Second instalment	21 Jan 2019		5.50%	11.00%
Option Three				
First instalment	07 Sep 2018	$ 23.10	5.50%	11.00%
Second instalment	09 Nov 2018		5.50%	11.00%
Third instalment	21 Jan 2019		5.50%	11.00%
Fourth instalment	25 Mar 2019		5.50%	11.00%
Option Four				
Direct debit option is available on a fortnightly deduction cycle. Instalment plan administration charge is charged annually on a pro-rata basis	28 Jun 2019	$ 6.90	5.50%	11.00%
Option Five				
Direct debit option is available on a weekly deduction cycle. Instalment plan administration charge is charged annually on a pro-rata basis	28 Jun 2019	$ 12.90	5.50%	11.00%

	2019 Actual	2019 Budget	2018 Actual
	$	$	$
Interest on unpaid rates	472,700	370,000	453,321
Interest on instalment plan	294,923	280,000	281,864
Deferred Pensioner Interest	18,317	0	14,860
Charges on instalment plan	164,002	118,000	119,040
	949,942	768,000	869,085

24. RATE SETTING STATEMENT INFORMATION

	Note	2018/19 (30 June 2019 Carried Forward)	2018/19 Budget (30 June 2019 Carried Forward)	2018/19 (1 July 2018 Brought Forward)
		$	$	$
(a) Non-cash amounts excluded from operating activities				
The following non-cash revenue or expenditure has been excluded from amounts attributable to operating activities within the Rate Setting Statement in accordance with *Financial Management Regulation 32.*				
Adjustments to operating activities				
Less: Profit on asset disposals	11(a)	(6,178)	(11,132)	(12,226)
Less: Reversal of prior year loss on revaluation of fixed assets		0	0	(2,762,144)
Movement in pensioner deferred rates (non-current)		(32,973)	0	(79,585)
Movement in Banksia Park deferred management fund receivable		610,100	0	4,648
Movement in Banksia Park valuation of unit contribution		(2,090,575)	0	(2,893,000)
Movement in employee benefit provisions		297,645	0	115,445
Add: Loss on disposal of assets	11(a)	152,265	200,172	181,971
Add: Loss on revaluation of fixed assets	10(a)	0	0	9,803
Add: Depreciation on assets	11(b)	15,359,581	13,672,393	14,200,785
Non cash amounts excluded from operating activities		14,289,865	13,861,433	8,765,697
(b) Surplus/(deficit) after imposition of general rates				
The following current assets and liabilities have been excluded from the net current assets used in the Rate Setting Statement in accordance with *Financial Management Regulation 32* to agree to the surplus/(deficit) after imposition of general rates.				
Adjustments to net current assets				
Less: Reserves - restricted cash	3	(55,730,366)	(47,038,546)	(52,072,348)
Less: Financial assets at amortised cost - self supporting loans	8(a)	(16,709)	(16,709)	(16,168)
Less: Banksia Park DMF Receivable	8(a)	(297,819)	0	(346,925)
Add: Current Borrowings	14(a)	1,451,093	1,643,965	777,133
Add: Current Provisions	15	4,902,379	4,222,885	4,627,270
Add: Banksia Park Unit Contributions	13	17,133,425	0	19,224,000
Add: Allowance for impairment of receivables as at 1 July 2018	27(b)	0	0	(164,521)
Total adjustments to net current assets		(32,557,997)	(41,188,405)	(27,971,559)
Net current assets used in the Rate Setting Statement				
Total current assets		62,781,266	52,836,197	58,515,520
Less: Total current liabilities		(27,744,922)	(11,647,792)	(28,645,156)
Less: Total adjustments to net current assets		(32,557,997)	(41,188,405)	(27,971,559)
Net current assets used in the Rate Setting Statement		2,478,347	0	1,898,805

Difference:

There was a difference of $164,521 between the 1 July 2018 surplus brought forward position used in the 2019 audited financial report and the surplus carried forward position as disclosed in the 2018 audited financial report. This difference relates to the recognition of the allowance for impairment of receivables as at 1 July 2018 due to the application of AASB 9: Financial Instruments.

25. FINANCIAL RISK MANAGEMENT

This note explains the City's exposure to financial risks and how these risks could affect the City's future financial performance.

Risk	Exposure arising from	Measurement	Management
Market risk - interest rate	Long term borrowings at variable rates	Sensitivity analysis	Utilise fixed interest rate borrowings
Credit risk	Cash and cash equivalents, trade receivables, financial assets and	Aging analysis Credit analysis	Diversification of bank deposits, credit limits. Investment policy
Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Availablity of commited credit lines and borrowing facilities

The City does not engage in transactions expressed in foreign currencies and is therefore not subject to foreign currency risk.

Financial risk management is carried out by the finance area under policies approved by the Council. The finance area identifies, evaluates and manages financial risks in close co-operation with the operating divisions. Council have approved the overall risk management policy and provide policies on specific areas such as investment policy.

(a) Interest rate risk

Cash and cash equivalents

The City's main interest rate risk arises from cash and cash equivalents with variable interest rates, which exposes the City to cash flow interest rate risk. Short term overdraft facilities also have variable interest rates however these are repaid within 12 months, reducing the risk level to minimal.

Excess cash and cash equivalents are invested in fixed interest rate term deposits which do not expose the City to cash flow interest rate risk. Cash and cash equivalents required for working capital are held in variable interest rate accounts and non-interest bearing accounts. Carrying amounts of cash and cash equivalents at the 30 June and the weighted average interest rate across all cash and cash equivalents and term deposits held disclosed as financial assets at amortised cost are reflected in the table below.

	Weighted Average Interest Rate	Carrying Amounts	Fixed Interest Rate	Variable Interest Rate	Non Interest Bearing
	%	$	$	$	$
2019					
Cash and cash equivalents	0.99%	11,888,157	2,135,837	9,747,750	4,570
Financial assets at amortised cost - term deposits	2.46%	45,348,386	45,348,386	0	0
2018					
Cash and cash equivalents	0.99%	9,367,549	6,742,910	2,619,989	4,650
Financial assets at amortised cost	2.49%	43,529,359	43,529,359	0	0

Sensitivity

Profit or loss is sensitive to higher/lower interest income from cash and cash equivalents as a result of changes in interest rates.

	2019	2018
	$	$
Impact of a 1% movement in interest rates on profit and loss and equity*	572,365	528,969

* Holding all other variables constant

Borrowings

The City manages interest rate risk by borrowing long term and fixing the interest rate to the situation considered the most advantageous at the time of negotiation. The City does not consider there to be any interest rate risk in relation to borrowings. Details of interest rates applicable to each borrowing may be found at Note 14(b).

25. FINANCIAL RISK MANAGEMENT (Continued)

(b) Credit risk

Trade Receivables

The City's major receivables comprise rates annual charges and user fees and charges. The major risk associated with these receivables is credit risk – the risk that the debts may not be repaid. The City manages this risk by monitoring outstanding debt and employing debt recovery policies. It also encourages ratepayers to pay rates by the due date through incentives.

Credit risk on rates and annual charges is minimised by the ability of the City to recover these debts as a secured charge over the land, that is, the land can be sold to recover the debt. The City is also able to charge interest on overdue rates and annual charges at higher than market rates, which further encourages payment.

The level of outstanding receivables is reported to Council monthly and benchmarks are set and monitored for acceptable collection performance.

The City applies the AASB 9 simplified approach to measuring expected credit losses using a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, rates receivable are separated from other trade receivables due to the difference in payment terms and security for rates receivable.

The expected loss rates are based on the payment profiles of rates and fees and charges over a period of 12 months before 1 July 2018 or 1 July 2019 respectively and the corresponding historical losses experienced within this period. Historical credit loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors such as the ability of ratepayers and residents to settle the receivables. Housing prices and unemployment rates have been identified as the most relevant factor in repayment rates, and accordingly adjustments are made to the expected credit loss rate based on these factors. There are no material receivables that have been subject to a re-negotiation of repayment terms.

No expected credit loss was forecast on 1 July 2018 or 30 June 2019 for rates receivable as penalty interest applies to unpaid rates and properties associated with unpaid rates may be disposed of to recover outstanding amounts.

	Current	More than 1 year past due	Total
30 June 2019			
Rates receivable			
Expected credit loss	0.00%	0.00%	0.00%
Gross carrying amount	0	3,865,054	3,865,054
Loss allowance	0	0	0
01 July 2018			
Rates receivable			
Expected credit loss	0.00%	0.00%	0.00%
Gross carrying amount	0	3,597,121	3,597,121
Loss allowance	0	0	0

The loss allowance as at 30 June 2019 and 1 July 2018 (on adoption of AASB 9) was determined as follows for sundry receivables.

	Current	More than 30 days past due	More than 60 days past due	More than 90 days past due	Total
30 June 2019					
Sundry Receivables					
Expected credit loss	1.2%	3.6%	3.5%	35.9%	
Gross carrying amount	149,773	29,983	15,737	267,007	462,500
Loss allowance	1,812	1,084	558	95,967	99,421
01 July 2018					
Sundry Receivables					
Expected credit loss	0.3%	3.2%	9.7%	38.3%	
Gross carrying amount	93,480	166,496	61,992	398,667	720,635
Loss allowance	310	5,408	6,044	152,759	164,521

25. FINANCIAL RISK MANAGEMENT (Continued)

(c) Liquidity risk

Payables and borrowings

Payables and borrowings are both subject to liquidity risk – that is the risk that insufficient funds may be on hand to meet payment obligations as and when they fall due. The City manages this risk by monitoring its cash flow requirements and liquidity levels and maintaining an adequate cash buffer. Payment terms can be extended and overdraft facilities drawn upon if required and disclosed in Note 14(d).

The contractual undiscounted cash flows of the City's payables and borrowings are set out in the liquidity table below. Balances due within 12 months equal their carrying balances, as the impact of discounting is not significant.

	Due within 1 year	Due between 1 & 5 years	Due after 5 years	Total contractual cash flows	Carrying values
2019	$	$	$	$	$
Payables	5,308,025	8,041,713	8,041,713	21,391,450	21,391,450
Borrowings	2,505,552	13,396,661	10,808,530	26,710,743	21,552,398
	7,813,577	21,438,373	18,850,243	48,102,193	42,943,848
2018					
Payables	5,176,753	9,032,000	9,032,000	23,240,753	23,240,753
Borrowings	1,888,752	13,346,702	13,364,041	28,599,495	22,071,411
	7,065,505	22,378,702	22,396,041	51,840,248	45,312,164

26. TRUST FUNDS

Funds held at balance date which are required to be held in trust and which are not included in the financial statements are as follows:

In previous years, bonds and deposits were held as trust monies. In the current year they are included in Restricted cash at Note 3 and shown as a current liability at Note 13.

	1 July 2018	Amounts Received	Amounts Paid	Reclassification to Restricted Cash	30 June 2019
	$	$	$	$	$
APU Security Bonds	15,481	580	(470)	0	15,591
Contiguous Local Authorities Group (CLAG)	200	3,594	(200)	0	3,594
Public Open Space Cash In Lieu	200,061	4,178	0	0	204,239
Hall Security Bonds	71,653	157,087	(161,236)	(67,504)	0
Footpath & Kerbing Security Deposits	410,680	1,123	(147,040)	(264,763)	0
Sports Forfeiture Security Deposits	200	0	0	(200)	0
Bus Hire Security Deposits	3,000	3,000	(2,500)	(3,500)	0
Demolition Security Deposits	2,351	0	0	(2,351)	0
Miscellaneous Deposits	82,423	3,156	(600)	(84,979)	0
Footpath Construction Bonds	2,000	0	0	(2,000)	0
Land Subdivision Bonds	588,211	69,322	(179,734)	(477,799)	0
Road Maintenance Bonds	293,234	53,165	(269,403)	(76,996)	0
Landscaping Subdivision Bonds	138,786	1,739	(1,196)	(139,329)	0
Mortimer Road - Community Trust	10,421	273	0	(10,694)	0
ATU Landscaping Bonds	2,378	0	0	(2,378)	0
Landscaping Development Bonds	64,477	627	0	(65,104)	0
Subdivision Handrails	15,395	0	0	(15,395)	0
Off Road Vehicles	1,510	0	0	(1,510)	0
DCA Contingency Bonds	265,736	47,240	(89,842)	(223,134)	0
Retention Funds	37,524	30,823	(43,751)	(24,596)	0
City of Kwinana Staff Christmas Saver	0	126,057	(6,352)	(119,705)	0
	2,205,721	501,964	(902,324)	(1,581,937)	223,424

27. INITIAL APPLICATION OF AUSTRALIAN ACCOUNTING STANDARDS

During the current year, the City adopted all of the new and revised Australian Accounting Standards and Interpretations which were compiled, became mandatory and which were applicable to its operations.

Whilst many reflected consequential changes associated with the amendment of existing standards, the only new standard with material application is AASB 9 *Financial Instruments* .

AASB 9 Financial instruments

AASB 9 *Financial Instruments* replaces AASB 139 *Financial Instruments: Recognition and Measurement* for annual reporting periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting.

The City applied AASB 9 retrospectively, with an initial application date of 1 July 2018. The adoption of AASB 9 has resulted in changes in accounting policies and adjustments to the amounts recognised in the financial statements. In accordance with AASB 9.7.2.15, the City has not restated the comparative information which continues to be reported under AASB 139. Differences arising from adoption have been recognised directly in accumulated surplus/(deficit).

The effect of adopting AASB 9 as at 1 July 2018 was, as follows:

	Adjustments	01 July 2018
		$
Assets		
Trade receivables	(a),(b)	(164,521)
Total Assets		(164,521)
Total adjustments to Retained Surplus		
Retained surplus	(a),(b)	(164,521)
		(164,521)

The nature of these adjustments are described below:

(a) Classification and measurement

Under AASB 9, financial assets are subsequently measured at amortised cost, fair value through other comprehensive income (fair value through OCI) or fair value through profit or loss (fair value through P/L). The classification is based on two criteria: the City's business model for managing the assets; and whether the assets' contractual cash flows represent 'solely payments of principal and interest' on the principal amount outstanding.

The assessment of the City's business model was made as of the date of initial application, 1 July 2018. The assessment of whether contractual cash flows on financial assets are solely comprised of principal and interest was made based on the facts and circumstances as at the initial recognition of the assets.

27. INITIAL APPLICATION OF AUSTRALIAN ACCOUNTING STANDARDS (Continued)

The classification and measurement requirements of AASB 9 did not have a significant impact on the City. The following are the changes in the classification of the City's financial assets:
- Trade receivables and Loans and advances (i.e. Other debtors) classified as Loans and receivables as at 30 June 2018 are held to collect contractual cash flows and give rise to cash flows representing solely payments of principal and interest. These are classified and measured as Financial assets at amortised cost beginning 1 July 2018.

In summary, upon the adoption of AASB 9, the City had the following required (or elected) reclassifications as at 1 July 2018:

AASB 139 category	AASB 139 value	AASB 9 category amortised cost	Fair value through OCI	Fair value through P/L
	$	$	$	$
Loans and receivables				
Trade receivables*	4,996,538	4,996,538	0	0
Loans and advances	282,850	282,850	0	0
	5,279,388	5,279,388	0	0

* The change in carrying amount is a result of additional impairment allowance. See the discussion on impairment below.

(b) Impairment

The adoption of AASB 9 has fundamentally changed the City's accounting for impairment losses for financial assets by replacing AASB 139's incurred loss approach with a forward-looking expected credit loss (ECL) approach. AASB 9 requires the City to recognise an allowance for ECLs for all financial assets not held at fair value through P/L. Upon adoption of AASB 9, the City recognised an additional impairment on the City's Trade receivables of $164,521 which resulted in a decrease in retained surplus of $164,521 as at 1 July 2018.

Set out below is the reconciliation of the ending impairment allowances in accordance with AASB 139 to the opening loss allowances determined, in accordance with AASB 9:

	Impairment under AASB 139 as at 30 June 2018	Remeasurement	ECL under AASB 9 as at 01 July 2018
	$	$	$
Loans and receivables under AASB 139 / Financial assets at amortised cost under AASB 9	0	164,521	164,521
	0	164,521	164,521

(c) Impact of changes to Retained Surplus

The impact on the City of the changes as at 1 July 2018 is as follows:

	Adjustments	2018
		$
Retained surplus - 30 June 2018		241,396,775
Adjustment to retained surplus from adoption of AASB 9	(164,521)	(164,521)
Retained surplus - 1 July 2018		241,232,254

28. NEW ACCOUNTING STANDARDS AND INTERPRETATIONS FOR APPLICATION IN FUTURE YEARS

The AASB has issued a number of new and amended Accounting Standards and Interpretations that have mandatory application dates for future reporting periods,some of which are relevant to the City.

This note explains management's assessment of the new and amended pronouncements that are relevant to the City, the impact of the adoption of AASB 15 *Revenue from Contracts with Customers* , AASB 16 *Leases* and AASB 1058 *Income for Not-for-Profit Entities* . These standards are applicable to future reporting periods and have not yet been adopted.

(a) Revenue from Contracts with Customers

The City will adopt AASB 15 Revenue from Contracts with Customers (issued December 2014) on 1 July 2019 resulting in changes in accounting policies. In accordance with the transition provisions AASB 15, the City will adopt the new rules retrospectively with the cumulative effect of initially applying these rules recognised on 1 July 2019. In summary the following adjustments are expected to be made to the amounts recognised in the Statement of Financial Position at the date of initial application (1 July 2019):

	Note	AASB 118 carrying amount 30 June 2019	Reclassification	AASB 15 carrying amount 01 July 2019
		$	$	$
Contract liabilities - current				
Unspent grants, contributions and reimbursements		0	215,781	215,781
Developer contributions		0	8,230,641	8,230,641
Contract liabilities non-current				
Developer contributions		0	23,383,745	23,383,745
Adjustment to retained surplus from adoption of AASB 15	28(d)		(31,830,167)	

(b) Leases

The City will adopt AASB 16 retrospectively from 1 July 2019 as a result of a change in accounting policies. In accordance with the transition provisions of AASB 16, the City has applied this Standard to its leases retrospectively, with the cumulative effect of initially applying AASB16 recognised on 1 July 2019. In applying the AASB 16 under the specific transition provisions chosen, the City will not restate comparatives for prior reporting periods.

On adoption of AASB 16, the City will recognise lease liabilties in relation to leases which had previously been classified as an 'operating lease' applying AASB 117. These lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on 1 July 2019. The weighted average lessee's incremental borrowing rates applied to the lease liabilities on 1 July 2019 is 2.35%.

	Note	2019
		$
Operating lease commitments disclosed as at 30 June 2019		783,653
Lease liability recognised as at 1 July 2019		
Discounted using the City's incremental borrowing rate of 2.35%		230,899
Right-of-use asset recognised at at 1 July 2019		226,133
Adjustment to Retained Earnings 1 July 2019	28(d)	4,766
Low-value leases recognised on a straight-line basis as an expense		544,143

On adoption of AASB 16, the City will recognise a right-of-use asset in relation to a lease which had previously been classified as an 'operating lease' applying AASB 117. This right-of-use asset is to be measured as if AASB 16 had been applied since its commencement date by the carrying amount but discounted using the lessee's incremental borrowing rate as on 1 July 2019. Property, plant and equipment increases by $226,133 on 1 July 2019 and an adjustment of $4,766 to retained earnings.

On adoption of AASB 16 Leases (issued February 2016), for leases which had previously been classified as an 'operating lease' when applying AASB 117, the City is not required to make any adjustments on transition for leases for which the underlying asset is of low value. Assets for which the fair value as at the date of acquisition is under $5,000 are not recognised as an asset in accordance with Financial Management Regulation 17A (5).

In applying AASB 16 for the first time, the City will use the following practical expedient permitted by the standard.
- The exclusion of initial direct costs from the measurement of the right-of-use asset at the date of initial application.

28. NEW ACCOUNTING STANDARDS AND INTERPRETATIONS FOR APPLICATION IN FUTURE YEARS (Continued)

(c) Income For Not-For-Profit Entities

The City will adopt AASB 1058 *Income for Not-for-Profit Entities* (issued December 2016) on 1 July 2019 which will result in changes in accounting policies. In accordance with the transition provisions AASB 1058, the City will adopt the new rules retrospectively with the cumulative effect of initially applying AASB 1058 recognised at 1 July 2019. Comparative information for prior reporting periods shall not be restated in accordance with AASB 1058 transition requirements.

In applying AASB 1058 prospectively with the cumulative effect of initially applying the Standard on 1 July 2019 changes will occur to the following financial statement line items by application of AASB 1058 as compared to AASB 1004 Contributions before the change:

	Note	AASB 1004 carrying amount 30 June 2019	Reclassification	AASB 1058 carrying amount 01 July 2019
		$	$	$
Trade and other payables		21,391,450	904,842	22,296,292
Adjustment to retained surplus from adoption of AASB 1058	28(d)		(904,842)	

Prepaid rates are, until the taxable event for the rates has occurred, refundable at the request of the ratepayer. Therefore the rates received in advance give rise to a financial liability that is within the scope of AASB 9. On 1 July 2019 the prepaid rates will be recognised as a financial asset and a related amount recognised as a financial liability and no income recognised by the City. When the taxable event occurs the financial liability will be extinguished and the City will recognise income for the prepaid rates that have not been refunded.

Assets that were acquired for consideration, that were significantly less than fair value principally to enable the City to further its objectives, may have been measured on initial recognition under other Australian Accounting Standards at a cost that was significantly less than fair value. Such assets are not required to be remeasured at fair value.

Volunteer Services in relation to Volunteer Fire Services will not be recognised in revenue and expenditure as the fair value of the services cannot be reliably estimated.

(d) Impact of changes to Retained Surplus

The impact on the City of the changes as at 1 July 2019 is as follows:

	Note	Adjustments	2019
			$
Retained surplus - 30 June 2019			244,608,437
Adjustment to retained surplus from adoption of AASB 15	28(a)	(31,830,167)	
Adjustment to retained surplus from adoption of AASB 16	28(b)	4,766	
Adjustment to retained surplus from adoption of AASB 1058	28(c)	(904,842)	(32,730,243)
Retained surplus - 01 July 2019			211,878,194

29. EFFECT OF CHANGE IN ACCOUNTING POLICY / CORRECTION OF ERROR

Balances relating to the 2018 comparative period have been amended due to a change in accounting policy and correction of error. These amendments have been adjusted as shown below.

(a) Change in Accounting Policy

On the 26th June 2018 Paragraph 17A (5) was inserted into Local Government (Financial Management) Regulations 1996. The regulation stated an asset is to be excluded from the assets of a local government if the fair value of the asset at the date of acquisition by the local government is under $5,000.

Australian Accounting Standard AASB 108 Accounting Policies, Changes in Accounting Estimates and Errors, required this amendment to the asset values to be treated as a change in accounting policy. The standard requires balances to be adjusted retrospectively, unless it is impracticable to determine the period-specific or cumulative effects of the change.

The City has applied this change retrospectively, adjusting the Financial report balances as at 30 June 2018. Assets with a fair value at the date of acquisition of under $5,000 and purchased prior to 30 June 2018 have been excluded from the assets of the City.

(b) Correction of error

The following adjustments have been made to comparative amounts in the 30 June 2018 Financial Report to bring in to account financial activities that were incorrectly classified in prior years.

Banksia Park Retirement Village Unit Contributions payable have historically been split as current and non-current liabilities dependant on the City's view on timing of lease terminations. Irrespective of the City's expectation that the liability will not be settled within the next 12 months, there is no unconditional right to defer settlement of the liability beyond that period and as such the contributions should be recognised wholly as a current liability in accordance with AASB101 Presentation of Financial Statements.

Financial Assistance Grants paid in the current financial year but relating to the future financial year have been reclassified from restricted to unrestricted cash for the 2018 comparatives.

These changes have resulted in restating each of the affected financial statement line items for the prior periods as follows:

2017 Statement of Financial Position	30 June 17 Original Balance $	Increase/ (Decrease) $	1 July 17 Restated $
Non-Current Assets			
Property, plant and equipment	159,964,117	(800,283)	159,163,834
Current Liabilities			
Current Trade and other payables	4,269,486	22,117,000	26,386,486
Non-Current Liabilities			
Non-Current Payables	22,117,000	(22,117,000)	0
Equity			
Retained Surplus	232,470,241	(800,283)	231,669,958
Financial Ratios			
Current Ratio	1.48	(1.19)	0.29
Debt service cover ratio	1.97	(0.18)	1.79
Operating surplus ratio	(0.10)	(0.01)	(0.11)
Own source revenue coverage ratio	0.79	(0.01)	0.78

29. EFFECT OF CHANGE IN ACCOUNTING POLICY / CORRECTION OF ERROR (Continued)

2018	30 June 18 Original Balance	Increase/ (Decrease)	30 June 18 Restated
Statement of Financial Position	$	$	$
Non-Current Assets			
Property, plant and equipment	155,477,757	(622,635)	154,855,122
Current Liabilities			
Current Trade and other payables	4,016,753	19,224,000	23,240,753
Non-Current Liabilities			
Non-Current Payables	19,224,000	(19,224,000)	0
Equity			
Retained Surplus	241,215,987	180,788	241,396,775
Reserves Cash Backed	52,875,771	(803,423)	52,072,348
Statement of Comprehensive Income			
By Nature or Type			
Expenses - Depreciation on non-current assets	(14,379,553)	178,768	(14,200,785)
Loss on disposal of assets	(180,851)	(1,120)	(181,971)
By program			
Governance	(5,286,761)	30,948	(5,255,813)
General purpose funding	(1,200,118)	0	(1,200,118)
Law, order, public safety	(3,165,065)	6,717	(3,158,348)
Health	(1,185,747)	2,725	(1,183,022)
Education and welfare	(10,907,996)	18,706	(10,889,290)
Community amenities	(9,480,011)	6,446	(9,473,565)
Recreation and culture	(18,851,782)	71,748	(18,780,034)
Transport	(13,325,344)	77	(13,325,267)
Economic services	(1,888,929)	2,645	(1,886,284)
Other property and services	(3,704,608)	38,756	(3,665,852)
(Loss) on asset disposals	(180,851)	(1,120)	(181,971)
Net result for the period	11,277,858	177,648	11,455,506
Total comprehensive income for the period	68,425,734	177,648	68,603,382
Rate Setting Statement			
Expenditure from operating activities			
Governance	(5,366,680)	29,828	(5,336,852)
General purpose funding	(1,200,118)	0	(1,200,118)
Law, order, public safety	(3,211,075)	6,717	(3,204,357)
Health	(1,185,747)	2,725	(1,183,022)
Education and welfare	(11,007,437)	18,706	(10,988,731)
Community amenities	(9,485,946)	6,446	(9,479,501)
Recreation and culture	(19,697,694)	71,748	(19,625,946)
Transport	(13,511,834)	77	(13,511,758)
Economic services	(1,888,929)	2,645	(1,886,284)
Other property and services	(1,027,063)	38,756	(988,306)
	(67,582,523)	177,648	(67,404,875)
Non-cash amounts excluded from operating activities	8,943,345	(177,648)	8,765,697
Transfers to reserves (restricted assets)	(9,919,440)	803,423	(9,116,017)
Surplus/(deficit) after imposition of general rates	1,259,903	803,423	2,063,326

29. EFFECT OF CHANGE IN ACCOUNTING POLICY / CORRECTION OF ERROR (Continued)

2018	30 June 18 Original Balance	Increase/ (Decrease)	30 June 18 Restated
	$	$	$
Note 9 - Property, Plant and Equipment			
Opening Balance as at 1st July 2018	159,964,117	(800,283)	159,163,834
Additions	2,237,698	0	2,237,698
Disposals	(699,972)	(1,120)	(701,092)
Depreciation (expense)	(6,024,086)	178,768	(5,845,318)
Carrying amount at 30 June 2018	155,477,757	(622,635)	154,855,122
Note 11(a) - Disposal of Assets			
Netbook Value	699,972	1,120	701,092
Loss on Disposal	(180,851)	(1,120)	(181,971)
Note 11(b) - Depreciation			
Buildings - specialised	4,643,062	1,345	4,641,717
Furniture and equipment	492,885	149,668	343,217
Plant and equipment	888,139	27,755	860,384
Infrastructure - Roads	4,918,898	0	4,918,898
Infrastructure - Footpaths	1,045,795	0	1,045,795
Infrastructure - Drainage	884,616	0	884,616
Infrastructure - Car Parks	154,554	0	154,554
Infrastructure - Bus Shelters	72,860	0	72,860
Infrastructure - Street Lights	55,799	0	55,799
Infrastructure - Parks & Ovals	1,153,434	0	1,153,434
Infrastructure - Other	69,511	0	69,511
	14,379,553	178,768	14,200,785
Note 16 - Notes to the Statement of Cash Flows			
Net Result	11,277,858	(177,648)	11,455,506
Depreciation	14,379,553	178,768	14,200,785
Profit/(loss) on sale of asset	168,625	(1,120)	169,745
Note 17 - Total Assets Classified by Function and Activity			
Governance	70,100,083	89,084	70,010,999
Law, order, public safety	2,204,801	19,084	2,185,717
Health	99,513	5,760	93,753
Education and welfare	33,416,340	74,075	33,342,265
Community amenities	908,486	15,538	892,948
Recreation and culture	84,968,301	304,054	84,664,247
Transport	329,275,107	0	329,275,107
Economic services	51,599,340	9,800	51,589,540
Other property and services	3,638,124	105,240	3,532,884
	576,210,095	622,635	575,587,460
Note 31 - Financial Ratios			
Current Ratio	1.09	(0.83)	0.26
Operating surplus ratio	(0.08)	0.01	(0.07)
Asset renewal funding ratio *	0.78	0.28	1.06

*The asset renewal funding ratio changed due the discount rate being incorrectly entered as 2.5 rather than 2.5% in the 2018 Financial report.

30. OTHER SIGNIFICANT ACCOUNTING POLICIES

a) Goods and services tax (GST)
Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO).

Receivables and payables are stated inclusive of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with receivables or payables in the statement of financial position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the ATO are presented as operating cash flows.

b) Current and non-current classification
The asset or liability is classified as current if it is expected to be settled within the next 12 months, being the City's operational cycle. In the case of liabilities where the City does not have the unconditional right to defer settlement beyond 12 months, such as vested long service leave, the liability is classified as current even if not expected to be settled within the next 12 months. Inventories held for trading are classified as current or non-current based on the City's intentions to release for sale.

c) Rounding off figures
All figures shown in this annual financial report, other than a rate in the dollar, are rounded to the nearest dollar. Amounts are presented in Australian Dollars.

d) Comparative figures
Where required, comparative figures have been adjusted to conform with changes in presentation for the current financial year.

When the City applies an accounting policy retrospectively, makes a retrospective restatement or reclassifies items in its financial statements that has a material effect on the statement of financial position, an additional (third) statement of financial position as at the beginning of the preceding period in addition to the minimum comparative financial statements is presented.

e) Budget comparative figures
Unless otherwise stated, the budget comparative figures shown in this annual financial report relate to the original budget estimate for the relevant item of disclosure.

f) Superannuation
The City contributes to a number of Superannuation Funds on behalf of employees. All funds to which the City contributes are defined contribution plans.

g) Fair value of assets and liabilities
Fair value is the price that the City would receive to sell the asset or would have to pay to transfer a liability, in an orderly (i.e. unforced) transaction between independent, knowledgeable and willing market participants at the measurement date.

As fair value is a market-based measure, the closest equivalent observable market pricing information is used to determine fair value. Adjustments to market values may be made having regard to the characteristics of the specific asset or liability. The fair values of assets that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data.

To the extent possible, market information is extracted from either the principal market for the asset or liability (i.e. the market with the greatest volume and level of activity for the asset or liability) or, in the absence of such a market, the most advantageous market available to the entity at the end of the reporting period (i.e. the market that maximises the receipts from the sale of the asset after taking into account transaction costs and transport costs).

For non-financial assets, the fair value measurement also takes into account a market participant's ability to use the asset in its highest and best use or to sell it to another market participant that would use the asset in its highest and best use.

h) Fair value hierarchy
AASB 13 requires the disclosure of fair value information by level of the fair value hierarchy, which categorises fair value measurement into one of three possible levels based on the lowest level that an input that is significant to the measurement can be categorised into as follows:

Level 1
Measurements based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2
Measurements based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3
Measurements based on unobservable inputs for the asset or liability.

The fair values of assets and liabilities that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data. If all significant inputs required to measure fair value are observable, the asset or liability is included in Level 2. If one or more significant inputs are not based on observable market data, the asset or liability is included in Level 3.

Valuation techniques
The City selects a valuation technique that is appropriate in the circumstances and for which sufficient data is available to measure fair value. The availability of sufficient and relevant data primarily depends on the specific characteristics of the asset or liability being measured. The valuation techniques selected by the City are consistent with one or more of the following valuation approaches:

Market approach
Valuation techniques that use prices and other relevant information generated by market transactions for identical or similar assets or liabilities.

Income approach
Valuation techniques that convert estimated future cash flows or income and expenses into a single discounted present value.

Cost approach
Valuation techniques that reflect the current replacement cost of the service capacity of an asset.

Each valuation technique requires inputs that reflect the assumptions that buyers and sellers would use when pricing the asset or liability, including assumptions about risks. When selecting a valuation technique, the City gives priority to those techniques that maximise the use of observable inputs and minimise the use of unobservable inputs. Inputs that are developed using market data (such as publicly available information on actual transactions) and reflect the assumptions that buyers and sellers would generally use when pricing the asset or liability are considered observable, whereas inputs for which market data is not available and therefore are developed using the best information available about such assumptions are considered unobservable.

i) Impairment of assets
In accordance with Australian Accounting Standards the City's cash generating non-specialised assets, other than inventories, are assessed at each reporting date to determine whether there is any indication they may be impaired.

Where such an indication exists, an impairment test is carried out on the asset by comparing the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, to the asset's carrying amount.

Any excess of the asset's carrying amount over its recoverable amount is recognised immediately in profit or loss, unless the asset is carried at a revalued amount in accordance with another Standard (e.g. AASB 116) whereby any impairment loss of a revalued asset is treated as a revaluation decrease in accordance with that other Standard.

For non-cash generating specialised assets that are measured under the revaluation model ,such as roads, drains, public buildings and the like, no annual assessment of impairment is required. Rather AASB 116.31 applies and revaluations need only be made with sufficient regulatory to ensure the carrying value does not differ materially from that which would be determined using fair value at the ends of the reporting period.

31. FINANCIAL RATIOS

	2019 Actual	2018 Actual	2017 Actual
Current ratio [1]	0.25	0.26	0.29
Asset consumption ratio	0.79	0.81	0.76
Asset renewal funding ratio [3]	0.91	1.06	1.02
Asset sustainability ratio	0.22	0.24	0.31
Debt service cover ratio [2]	4.55	6.44	1.79
Operating surplus ratio [2]	(0.14)	(0.07)	(0.11)
Own source revenue coverage ratio [2]	0.77	0.78	0.78

The above ratios are calculated as follows:

Current ratio	current assets minus restricted assets / current liabilities minus liabilities associated with restricted assets
Asset consumption ratio	depreciated replacement costs of depreciable assets / current replacement cost of depreciable assets
Asset renewal funding ratio	NPV of planned capital renewal over 10 years / NPV of required capital expenditure over 10 years
Asset sustainability ratio	capital renewal and replacement expenditure / depreciation
Debt service cover ratio	annual operating surplus before interest and depreciation / principal and interest
Operating surplus ratio	operating revenue minus operating expenses / own source operating revenue
Own source revenue coverage ratio	own source operating revenue / operating expense

1. The prior years Current Ratio has been restated due to the reclassification of the Banksia Park Retirement Village Unit Contribution from a Non-Current Liability to a Current Liability. Refer Note 29(b)

   This results in a distortion of the ratio as any future lease termination will be accompanied by a corresponding debtor. The City does not expect the full liability to be realised within the next 12 months.

   The 2018 current ratio is also restated due to the reclassification of Financial Assistance Grants from restricted to unrestricted cash.

2. The prior years Debt Service Cover ratio, Operating Surplus ratio and Own Source Revenue coverage ratio have been restated due to a change in accounting policy resulting from the application of Local Government (Financial Management) Regulation 17A(5).

3. The 2018 Asset Renewal Funding ratio has been restated due to the discount rate being inadvertently entered as 250% rather than 2.5%

Auditor General

INDEPENDENT AUDITOR'S REPORT

To the Councillors of the City of Kwinana

Report on the Audit of the Financial Report

Opinion

I have audited the annual financial report of the City of Kwinana which comprises the Statement of Financial Position as at 30 June 2019, the Statement of Comprehensive Income by Nature or Type, Statement of Comprehensive Income by Program, Statement of Changes in Equity, Statement of Cash Flows and Rate Setting Statement for the year then ended, and notes comprising a summary of significant accounting policies and other explanatory information, and the Statement by the Chief Executive Officer.

In my opinion the annual financial report of the City of Kwinana:

(i) is based on proper accounts and records; and

(ii) fairly represents, in all material respects, the results of the operations of the City for the year ended 30 June 2019 and its financial position at the end of that period in accordance with the *Local Government Act 1995* (the Act) and, to the extent that they are not inconsistent with the Act, Australian Accounting Standards.

Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of my report. I am independent of the City in accordance with the *Auditor General Act 2006* and the relevant ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the annual financial report. I have also fulfilled my other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Emphasis of Matter – Basis of Accounting

I draw attention to Note 1 to the annual financial report, which describes the basis of accounting. The annual financial report has been prepared for the purpose of fulfilling the City's annual financial reporting responsibilities under the Act. Regulation 16 of the Local Government (Financial Management) Regulations 1996 (Regulations), does not allow a local government to recognise some categories of land, including land under roads, as assets in the annual financial report. My opinion is not modified in respect of this matter.

Responsibilities of the Chief Executive Officer and Council for the Financial Report

The Chief Executive Officer (CEO) of the City is responsible for the preparation and fair presentation of the annual financial report in accordance with the requirements of the Act, the Regulations and, to the extent that they are not inconsistent with the Act, Australian Accounting Standards. The CEO is also responsible for such internal control as the CEO determines is necessary to enable the preparation of an annual financial report that is free from material misstatement, whether due to fraud or error.

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In preparing the annual financial report, the CEO is responsible for assessing the City's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the State government has made decisions affecting the continued existence of the City.

The Council is responsible for overseeing the City's financial reporting process.

Auditor's Responsibility for the Audit of the Financial Report

The objectives of my audit are to obtain reasonable assurance about whether the annual financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the annual financial report.

As part of an audit in accordance with Australian Auditing Standards, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the annual financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the CEO.

- Conclude on the appropriateness of the CEO's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the City's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the annual financial report or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report, as we cannot predict future events or conditions that may have an impact.

- Evaluate the overall presentation, structure and content of the annual financial report, including the disclosures, and whether the annual financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Council and the CEO regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Report on Other Legal and Regulatory Requirements

In accordance with the Local Government (Audit) Regulations 1996 I report that:

(i) In my opinion, the following material matters indicate significant adverse trends in the financial position of the City:
    a. The Current Ratio, Asset Sustainability Ratio and the Operating Surplus Ratio have been below the Department of Local Government, Sport and Cultural Industries (DLGSC) standard for the past 3 years.

The financial ratios are reported in Note 31 of the financial report.

(ii) The following material matter indicating non-compliance with Part 6 of the *Local Government Act 1995*, the Local Government (Financial Management) Regulations 1996 or applicable financial controls of any other written law was identified during the course of my audit:
    a. The City's unrestricted cash position as at 30 June 2019 is a negative balance of $75,760 as the City had transferred funds into reserves that exceeded the balance of unrestricted cash that was in the Municipal Fund.

(iii) All required information and explanations were obtained by me.

(iv) All audit procedures were satisfactorily completed.

(v) In my opinion, the asset consumption ratio and the asset renewal funding ratio included in the annual financial report were supported by verifiable information and reasonable assumptions.

Other Matter

The annual financial report of the City for the year ended 30 June 2018 was audited by another auditor who expressed an unmodified opinion on that annual financial report. The financial ratios for 2017 and 2018 in Note 31 of the audited annual financial report were included in the supplementary information and/or audited annual financial report for those years.

Matters Relating to the Electronic Publication of the Audited Financial Report

This auditor's report relates to the annual financial report of the City of Kwinana for the year ended 30 June 2019 included on the City's website. The City's management is responsible for the integrity of the City's website. This audit does not provide assurance on the integrity of the City's website. The auditor's report refers only to the annual financial report described above. It does not provide an opinion on any other information which may have been hyperlinked to/from this annual financial report. If users of the annual financial report are concerned with the inherent risks arising from publication on a website, they are advised to refer to the hard copy of the audited annual financial report to confirm the information contained in this website version of the annual financial report.

CAROLINE SPENCER
AUDITOR GENERAL
FOR WESTERN AUSTRALIA
Perth, Western Australia
29 November 2019



City of Kwinana

ADMINISTRATION

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18.4 Disposition by way of Lease of Unit 23, 40 – 46 Meares Avenue, Kwinana Town Centre. Lease Agreement between the City of Kwinana and the Armadale Community Animal Rescue Group Inc

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

The City of Kwinana is the owner of Unit 23, 40 – 46 Meares Avenue, in the Kwinana Trade Centre, being Lot 23 on Strata Plan 23790, comprised in Certificate of Title Volume 1980 Folio 834 (the Premises). The Armadale Community Animal Rescue Group Inc. (ABN 60 508 682 681) (the Prospective Tenant) has expressed their interest in leasing the Premises.

A lease agreement is considered to be a disposition, and as such, a local government can only dispose of property if it gives local public notice of the proposed disposition, in accordance with Section 3.58(3)(a) of the *Local Government Act 1995 (Act)*.

On 9 October 2019, Council resolved to give local public notice of the proposed disposition of the Premises to the Prospective Tenant, in accordance with Section 3.58(3)(a) and (4) of the *Local Government Act 1995*. The Notice was published in The West Australian newspaper on 12 October 2019 (a copy of the Notice is enclosed at Attachment A). Submissions were invited to be made in writing by 5pm 28 October 2019. No submissions were received in respect of the Notice.

This report seeks Council to resolve that the Chief Executive Officer is authorised on behalf of the City to give disposition by way of lease, to negotiate, finalise and execute the lease of the Premises to the Prospective Tenant.

Section 3.58(4)(c) of the Act requires the market value of a disposition to be ascertained by a valuation carried out no more than 6 months before the proposed disposition. However, section 3.58(4)(c)(ii) of the Act allows the City to declare by resolution that it believes a valuation carried out more than six months before the proposed disposition, is a true indication of the value at the time of the proposed disposition. A valuation was conducted of the Premises on 24 April 2019, a copy of the Valuation Report is contained at Confidential Attachment B.

Accordingly, the Valuation was carried out more than 6 months before any proposed disposition, assuming Council resolve to dispose of the Premises at its 11 December 2019 Ordinary Council Meeting. Whilst the Valuation is dated more than 6 months before the proposed disposition, City Officer's believe that a subsequent valuation would not be materially different from the Valuation obtained on 24 April 2019. Accordingly, City Officers recommend that Council resolve that it believes the Valuation carried out on 24 April 2019 contains a true indication of the current value of the Premises.

18.4 DISPOSITION BY WAY OF LEASE OF UNIT 23, 40 – 46 MEARES AVENUE, KWINANA TOWN CENTRE. LEASE AGREEMENT BETWEEN THE CITY OF KWINANA AND THE ARMADALE COMMUNITY ANIMAL RESCUE GROUP INC

OFFICER RECOMMENDATION:

That Council:

1. Authorise the Chief Executive Officer and Mayor to execute a lease agreement (as identified in Attachment C) and make modifications where the intent of the agreement does not change, in relation to Unit 23, 40 – 46 Meares Avenue, Kwinana Trade Centre, being Lot 23 on Strata Plan 23790, comprised in Certificate of Title Volume 1980 Folio 834 to the Armadale Community Animal Rescue Group Inc.
2. Note that there have been no submissions received during the submission Period;
3. Authorise the valuation undertaken on 24 April 2019, carried out more than 6 months before the proposed disposition, to be a true indication of the value at the time of the proposed disposition; and

NOTE – AN ABSOLUTE MAJORITY OF COUNCIL IS REQUIRED

DISCUSSION:

The Armadale Community Animal Rescue Group Inc. is a registered not-for-profit volunteer organisation dedicated to saving lost, stray, abandoned and surrendered animals. The use of the Premises will be for operating an opportunity shop (**Op Shop**) selling items such as furniture and other household items. The Prospective Tenant does not receive any government funding and mainly relies on the income generated by its Op Shops. They have three other Op Shops in WA, being two in Kelmscott and one in Port Kennedy. All funds raised go directly to providing discounted de-sexing and microchipping of animals for eligible persons. Such eligible persons include those who hold a WA Seniors Card and reside within the eastern suburbs surrounding Armadale and southern boundaries including Rockingham, Kwinana, Mandurah and Baldivis. Funds are also applied to supporting the running of an animal shelter in Armadale.

An initial rent-free period of 3 months will apply, to allow the Prospective Tenant to establish the Op Shop. Rent free periods are common in leasing arrangements and act as incentives to attract long term tenants as well as allowing a secured tenant time to establish their business. This rent-free period amounts to a total of $8,749.99 discount off the market rent, which was determined by the property valuation dated 24 April 2019 (Confidential Attachment B). Accordingly, the total rent for the first year of the lease will be $26,250. The rent for the remainder of the term of the lease will be $35,000 per year (excluding GST). The proposed term of the lease is 3 years with the option to extend for a further 3 years, at which time a fixed rent review of 2.5% will occur. The rent will be reviewed on and from each rent review date, based on CPI review. The outgoings are estimated to be $14,092.36 per annum, payable by equal monthly instalments of $1,174.36.

City Officers have confirmed with the Prospective Tenant that if Council were to lease the Premises to them, the signage on the exterior of the Premises would be “Animal Welfare Op Shop”.

The Prospective Tenant has reviewed and agreed to the terms of the new lease (at Attachment C).

18.4 DISPOSITION BY WAY OF LEASE OF UNIT 23, 40 – 46 MEARES AVENUE, KWINANA TOWN CENTRE. LEASE AGREEMENT BETWEEN THE CITY OF KWINANA AND THE ARMADALE COMMUNITY ANIMAL RESCUE GROUP INC

LEGAL / POLICY IMPLICATIONS:

Local Government Act 1995

Section 3.58 (3) and (4). Disposing of property

(3) A local government can dispose of property other than under subsection (2) if, before agreeing to dispose of the property —
- *(a) it gives local public notice of the proposed disposition —*
  - *(i) describing the property concerned; and*
  - *(ii) giving details of the proposed disposition; and*
  - *(iii) inviting submissions to be made to the local government before a date to be specified in the notice, being a date not less than 2 weeks after the notice is first given; and*
- *(b) it considers any submissions made to it before the date specified in the notice and, if its decision is made by the council or a committee, the decision and the reasons for it are recorded in the minutes of the meeting at which the decision was made.*

(4) The details of a proposed disposition that are required by subsection (3)(a)(ii) include —
- *(a) the names of all other parties concerned; and*
- *(b) the consideration to be received by the local government for the disposition; and*
- *(c) the market value of the disposition —*
  - *(i) as ascertained by a valuation carried out not more than 6 months before the proposed disposition; or*
  - *(ii) as declared by a resolution of the local government on the basis of a valuation carried out more than 6 months before the proposed disposition that the local government believes to be a true indication of the value at the time of the proposed disposition.*

FINANCIAL/BUDGET IMPLICATIONS:

This lease will provide an annual income of $26,250 plus GST for the first year, and $35,000 for every other year. Over three initial years of the lease the total income will be $96,250 plus GST. If the other three options are exercised, a further $105,000 income will be generated. In addition there will be CPI increases to the annual rent.

ASSET MANAGEMENT IMPLICATIONS:

The implications for this report are the ongoing management and administration required by all of the City's leases of property.

ENVIRONMENTAL IMPLICATIONS:

No environmental implications have been identified as a result of this report or recommendation.

18.4 DISPOSITION BY WAY OF LEASE OF UNIT 23, 40 – 46 MEARES AVENUE, KWINANA TOWN CENTRE. LEASE AGREEMENT BETWEEN THE CITY OF KWINANA AND THE ARMADALE COMMUNITY ANIMAL RESCUE GROUP INC

STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective as detailed in the Corporate Business Plan.

Plan	Outcome	Objective
Corporate Business Plan	Business performance	5.6 Maximise the value of the City's property assets

COMMUNITY ENGAGEMENT:

As a result of leasing the Premises to the Proposed Tenant, there will be various and continued positive community engagement implications.

PUBLIC HEALTH IMPLICATIONS

No public health implications have been identified as a result of this report or recommendation.

RISK IMPLICATIONS:

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

Risk Event	That Council does not support disposition by way of lease of Unit 23, 40 – 46 Meares Avenue, Kwinana City Centre to Armadale Community Animal Rescue Group Inc., If Council resolve not to support disposition by way of lease, as per Section 3.58 of the *Local Government Act 1995*, the disposition cannot proceed.
Risk Theme	Ineffective management of facilities/venues/events
Risk Effect/Impact	Financial
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Unlikely
Rating (before treatment)	Low
Risk Treatment in place	Avoid
Response to risk treatment required/in place	This report is to authorise the Chief Executive Officer on behalf of the City of Kwinana to give disposition by way of lease of Unit 23, 40 – 46 Meares Avenue, Kwinana City Centre
Rating (after treatment)	Low

18.4 DISPOSITION BY WAY OF LEASE OF UNIT 23, 40 – 46 MEARES AVENUE, KWINANA TOWN CENTRE. LEASE AGREEMENT BETWEEN THE CITY OF KWINANA AND THE ARMADALE COMMUNITY ANIMAL RESCUE GROUP INC

COUNCIL DECISION

043

MOVED CR S WOOD **SECONDED CR W COOPER**

That Council:

1. **Authorise the Chief Executive Officer and Mayor to execute a lease agreement (as identified in Attachment C) and make modifications where the intent of the agreement does not change, in relation to Unit 23, 40 – 46 Meares Avenue, Kwinana Trade Centre, being Lot 23 on Strata Plan 23790, comprised in Certificate of Title Volume 1980 Folio 834 to the Armadale Community Animal Rescue Group Inc.**
2. **Note that there have been no submissions received during the submission Period;**
3. **Authorise the valuation undertaken on 24 April 2019, carried out more than 6 months before the proposed disposition, to be a true indication of the value at the time of the proposed disposition; and**

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL 7/0

ATTACHMENT A

NOTICE OF DISPOSAL OF PROPERTY BY WAY OF LEASE

Unit 23, 40-46 Meares Avenue, Kwinana

In accordance with Section 3.58 of the *Local Government Act 1995*, the City of Kwinana hereby advertises its intention to dispose of the following property by way of lease;

Address:	Unit 23, 40-46 Meares Avenue, Kwinana
Parcel Identifier:	Lot 23 on Strata Plan 23790, comprised in Certificate of Title Volume 1980 Folio 834
Lessee:	Armadale Community Animal Rescue Group Inc ABN 60 508 682 681
Market Rent Valuation:	$35,000 p.a (exclusive of GST)
Proposed Rent:	Year 1: $26,250,000 p.a (exclusive of GST) (with 3 month rent free period applied to establish the business) Year 2: $35,000 p.a (exclusive of GST) Year 3: $35,000 p.a (exclusive of GST)
Valuer:	Griffin Valuation Advisory Lv 1, Suite 6, 14 Jersey Street Jolimont WA 6014
Date of Valuation:	24 April 2019

For further information contact City Legal on (08) 9439 0278.

Submissions are required to be made in **writing** to PO Box 21, Kwinana, WA 6966, addressed to the **Acting Chief Executive Officer** and to be received no later than 5pm, 28 October 2019.

BARBARA POWELL
ACTING CHIEF EXECUTIVE OFFICER

ATTACHMENT C

Lease

Unit 23, 40 Meares Avenue, Kwinana

City of Kwinana (ABN 13 890 277 321)

Armadale Community Animal Rescue Group Inc (ABN 60 508 682 681)

FORM 4

Commercial Tenancy (Retail Shops) Agreements Act 1985

Section 6A

[r. 9]

TENANT GUIDE

FOR NEW RETAIL SHOP LEASES FROM 1 JANUARY 2013

This guide is intended to assist you, as a tenant, to understand some of your legal rights and obligations in relation to a retail shop lease under the *Commercial Tenancy (Retail Shops) Agreements Act 1985* (the ***Act***). This guide does not replace financial, legal or business advice.

The Act and the regulations are available from the State Law Publisher at www.slp.wa.gov.au.

WHAT IS A RETAIL SHOP LEASE?

Entering into a lease for a retail shop means that you (the ***tenant*** or ***lessee***) are entering into a legally binding contract with the landlord (or ***lessor***). The lease agreement sets out your rights and obligations in relation to the use of the retail shop.

A lease cannot override the requirements of the Act.

The Act regulates some of the provisions which may be contained in your lease agreement, including the following:

- rent reviews
- options to renew a lease
- terminating a lease
- operating expenses (or outgoings)
- trading hours.

Which leases are covered by the Act?

The Act generally applies to leases for premises with a lettable area of 1 000 m^2 or less:

- that are used for carrying on a business and that are in a retail shopping centre
- that are not in a retail shopping centre, but that are used (or predominantly used) for the sale of goods by retail
- that are used for conducting a 'specified business' — specified businesses include, drycleaning, hairdressing, beauty therapy, shoe repair and video or DVD stores (a list of all specified businesses is available from the Department of Commerce at www.commerce.wa.gov.au).

There are some retail shops with a lettable area greater than 1 000 m^2 that are also covered by the Act — a list of these premises can be obtained from the Department of Commerce at www.commerce.wa.gov.au.

The Act generally does not apply to leases to publicly listed companies.

(***See section 3(1) of the Act, definition of retail shop lease.***)

When is the lease "entered into"?

A lease is usually entered into when both parties have signed it. However, a lease is still valid even if the lease document hasn't been signed by the parties if:

- the tenant takes possession of the shop premises; or
- the tenant starts paying rent.

(***See section 3(4) of the Act.***)

What you should do:

- ***if necessary, seek advice as to whether your lease is covered by the Act***
- ***establish the area of the retail shop under the lease and have this verified if necessary.***

INFORMATION YOU SHOULD HAVE BEFORE ENTERING INTO A LEASE

Before entering into a lease you should do the following:

- carefully read this ***tenant guide***
- carefully read the ***disclosure statement*** provided by the landlord or the landlord's agent
- carefully read any written ***lease document (including any assignments, extensions or deeds of variation)***
- obtain ***independent financial, legal and business advice***.

Rent, the term of the lease, options, outgoings and related costs are open to negotiation with the landlord. Make sure that you understand these, and all other aspects of the lease, before signing it. To avoid disputes at a later stage, you should make sure that all agreements that you have made are in writing and that the lease documents are consistent with any representations made by the landlord or the landlord's agents.

What you should do before signing or entering into a lease:

- ***seek independent legal and business advice before entering into a lease***
- ***make sure you understand the lease and your rights, liabilities and obligations before signing it***
- ***seek advice from financial experts to ensure you understand the costs of running the business.***

Tenant Guide to be located in lease

A new retail shop lease must include this tenant guide at the front of the lease.

If the landlord does not give you a tenant guide, you may have the right to do either or both of the following:

- terminate (end) the lease at any time up to 60 days after the lease was entered into (after this time you may apply to the State Administrative Tribunal for an order to terminate the lease)
- apply to the State Administrative Tribunal for an order for compensation for any monetary loss suffered by you.

(***See section 6A of the Act.***)

Disclosure statement to be given to you by landlord

At least 7 days before a lease is entered into the landlord must give you a disclosure statement. The disclosure statement sets out important facts about the retail shop and the lease. A copy of this tenant guide, the form of lease and annual estimates of expenditure in relation to operating expenses should be attached to the disclosure statement.

If the landlord does not give you a disclosure statement or gives you a disclosure statement that is incomplete or contains incorrect information you may have the right to do either or both of the following:

- terminate (end) the lease at any time up to 6 months after the lease was entered into
- apply to the State Administrative Tribunal for an order for compensation for any monetary loss you have suffered.

The disclosure statement should be in a prescribed form (this form is Form 1 of Schedule 2 to the *Commercial Tenancy (Retail Shops) Agreements Regulations 1985* and is available from the Department of Commerce at www.commerce.wa.gov.au). It is important to read the statement carefully and make sure it includes all verbal and written agreements, promises or commitments made during negotiations with the landlord or the landlord's agent (for example, any representations about customer traffic).

The disclosure statement should also contain details about the following:

- the landlord's property, such as the total lettable area, tenancy mix and services provided
- the shop premises, such as location, area and services provided
- key terms and conditions of the lease such as rent, term of the lease, options to extend the term and rent review
- permitted use of the premises
- your contribution to the landlord's expenses (operating expenses)
- any additional charges payable by you, such as shop fitout or contributions to marketing and sinking funds.

By signing the disclosure statement you are acknowledging that you understand the basis for the retail shop lease with the landlord. If you do not understand or agree with anything in the disclosure statement you should advise the landlord immediately.

It is vital that you are satisfied that the disclosure statement sets out all relevant information regarding the retail shop and (where applicable) the shopping centre building and property. If necessary, you should check details by making relevant enquiries and by seeking appropriate independent legal or expert advice.

(***See section 6 of the Act.***)

> ***What you should do:***
>
> - ***make sure that you understand the disclosure statement before signing it and ensure it includes any agreements you reached during negotiations and any promises made to you by the landlord or their agent.***

Disclosure by the tenant

The landlord may ask for details of your retailing experience and financial capacity to establish and trade profitably and professionally. Any information provided to the landlord by you must also be correct and contain no misleading information.

PERMITTED USE OF THE RETAIL SHOP

The permitted use clause in a lease is very important as it sets out the type of business that you can run from the premises. You should ensure that the description of permitted use is broad enough to cover the type of business that you want to operate and, if anticipated, to allow you to expand the business.

The kind of things to consider about permitted use include:

- for a hairdresser, does the permitted use include providing beauty treatments?
- for a takeaway shop, can the type of food be changed?
- your future plans for the business.

You should also check that any local government approvals are in place for the type of business that you plan to operate. Avoid potential disputes by getting the approvals you need in writing.

A permitted use clause in a lease does not mean that you have the exclusive right to carry on a particular type of business in a shopping centre. Exclusivity is a separate issue that needs to be agreed separately with the landlord and included in the lease agreement.

What you should do:

- ***make sure the lease and the landlord's disclosure statement describe the shop's permitted use and that this description is broad enough so you can expand or sell the business***
- ***check that local government approvals are in place for the business you plan to conduct — get the approvals in writing***
- ***confirm whether or not you have an exclusive right to carry on your particular type of business.***

TERM OF THE RETAIL SHOP LEASE

The term of a lease is the length of time for which you can rent the shop. The lease must set out the lease term and may also include one or more options to renew or extend the term.

The length of the term of the lease is critical because it should be long enough to enable you to recover your investment, make a profit and sell the business, if you wish.

Minimum of 5 years

In most cases, the Act gives a tenant who is entering into a new lease a right to a minimum 5 year lease term. The 5 year term can be a combination of the initial term and options to extend the lease (for example, an initial term of 2 years and an option to renew of 3 years). The initial term does not need to be 5 years.

If the lease does not provide for options to extend the lease to a 5 year term, you have a legal right to do so (often called a "statutory option"). You can exercise this option by giving the landlord written notice in the standard form at least 30 days prior to the expiry of the term of the lease (the standard form is Form 3 of Schedule 2 to the *Commercial Tenancy (Retail Shops) Agreements Regulations 1985* and is available from the Department of Commerce at www.commerce.wa.gov.au). Although the Act allows you to extend the lease to a 5 year term, you do not need to extend the lease for the whole of this period if you choose not to.

The right to a 5 year term will only apply to retail shop leases with a term of more than 6 months (this includes any lease where the tenant has been continuously in possession of the premises for more than 6 months).

(***See section 13 of the Act.***)

The term can be longer or shorter than 5 years

Even though the Act gives tenants a right to a minimum 5 year term, you can negotiate a term that is longer than 5 years (for example, a 10 year term, or a 5 year initial term with 2 options to renew for a further 5 years each).

In some circumstances, you may agree to a term shorter than 5 years, but this must be your decision and needs to be approved by the State Administrative Tribunal.

(***See section 13(7b) of the Act.***)

Exercising an option to renew

It is important that you exercise an option to renew a lease in the way set out in the lease (you may need to let the landlord know in writing and within certain timeframes). If you do not exercise an option to renew properly the landlord may not be obliged to renew the lease.

The Act requires the landlord to give you written notice of the expiry date for any options to renew (the date on which the option to renew is no longer valid). You must receive this notice between 6 and 12 months before the expiry date. If the landlord fails to give you notice the option expiry date may be extended.

(***See section 13C of the Act.***)

At the end of the lease term

At the end of the term of the lease and the use of any options to renew the lease, the landlord does not have to renew the lease and you will have no further rights to occupy the premises. In some instances the landlord may allow you to continue to occupy the premises on a month to month basis.

Within 12 months before the end of the lease term you can make a written request to the landlord asking whether the landlord intends to renew the lease. The landlord must reply to such a request in writing within 30 days.

(***See section 13B of the Act.***)

What you should do:

- ***seek advice as to the appropriate lease term for your business***
- ***don't assume that you will get a new lease at the end of the lease term — you need to make sure that the term of your lease is appropriate for your business structure***
- ***seek advice as to the landlord's intentions at the end of the lease term as early as possible so that you can plan accordingly.***

Does the lease include redevelopment or relocation clauses?

Many leases include a clause allowing a landlord to terminate a lease before the end of the agreed lease term if the premises are to be redeveloped. In some instances the landlord may offer to relocate a tenant to alternative premises.

For the initial 5 years of a lease term, a redevelopment or relocation clause may only be included in a lease if:

- it is in the prescribed form (see item 2 of Schedule 1 to the *Commercial Tenancy (Retail Shops) Agreements Regulations 1985* and is available from the Department of Commerce at www.commerce.wa.gov.au); or
- it has been approved by the State Administrative Tribunal (if the parties have agreed to a provision that is different to the prescribed form).

If 5 years of the term have already expired, then the clause must be in accordance with the provisions of the Act — which sets out requirements in relation to notice, offer of alternative premises, payment of the tenant's reasonable costs and payment of compensation.

(***See section 14A of the Act.***)

What you should do:

- ***carefully look at any redevelopment or relocation clause in the lease and consider:***
  - ***what commitment is the landlord giving about relocation of the shop – will the new location and rental be comparable to the current premises?***
  - ***what compensation is the landlord offering you if your trade is affected?***
  - ***what effect will it have on your business?***
- ***seek independent financial, legal and business advice on the clause.***

RENT

Rent is usually the largest ongoing payment required under a lease. The Act does not regulate what the rent should be. However, the Act includes some rules relating to rent based on turnover and review of rental.

Types of rent

The initial rent for a shop is a matter for negotiation between the landlord and the tenant. Rental for retail shops can vary considerably depending on the location, the size of the shop, the term of the lease and the type of business.

Some common methods of determining rent are:

- net rent — an agreed base rent plus a contribution to the landlord's operating expenses or outgoings
- gross rent — an all inclusive payment for all the shop's occupancy costs
- semi-gross rent — an amount charged for rental inclusive of some outgoings (for example, the tenant may pay the semi-gross rent plus its proportion of rates and taxes)
- turnover rent or percentage rent — a component of rent that is determined as a percentage of the tenant's turnover during a specified period.

What you should do:

- ***seek expert advice as to the basis for determining rent that best suits your business operations***
- ***pay your rent on time — if you don't pay your rent, the landlord may be able to end your lease.***

Rent based on turnover

Some leases base rent (or a part of the rent) on a percentage of the turnover of the tenant's business.

If you have agreed to a rent based on turnover, then:

- the lease must set out an agreed formula
- your agreement must be formalised in writing on the prescribed form before the lease is entered into (the prescribed form is Form 2 of Schedule 2 to the *Commercial Tenancy (Retail Shops) Agreements Regulations 1985* and is available from the Department of Commerce at www.commerce.wa.gov.au).

The Act also recognises the confidentiality of turnover figures to a retail business and limits the use of this information.

(***See section 7 of the Act.***)

The landlord cannot require you to provide turnover figures unless your rent is to be based on turnover.

(See section 8 of the Act.)

RENT REVIEW

Most leases will state that the rent will be reviewed at regular intervals.

At each review time the lease must set out a single basis on which the rent is to be reviewed, this can include:

- the market rent
- an increase by reference to the Consumer Price Index (CPI)
- a set percentage increase
- an agreed formula or combination, for example, CPI + 2%.

The types of review may vary over the life of the lease (the lease may state that reviews are to alternate between CPI and market review). However, the lease cannot give the landlord the right to choose the greatest return from a range of rent types at any one review (for example, the lease cannot state that the increase is to be CPI or 5% whichever is higher).

The lease may specify only one method of review at a time.

Market rent

The Act provides that market rent is the rent obtainable for the retail shop in a free and open market if it were vacant and to be let on similar terms.

The market rent is not to take into account:

- the goodwill of the business
- any stock, fixtures or fittings that are not the property of the landlord
- any structural improvements paid for or carried out by the current tenant.

Market rent review

If your lease specifies a market rent review, the Act provides that both parties can initiate the market rent review process and if the parties cannot agree on the rental:

- appoint a licensed valuer (agreed to by both parties) to determine the new rental; or
- request that the Small Business Commissioner appoint a valuer to determine the rental; or
- each appoint a valuer to determine the rental.

A landlord is required under the Act to provide a valuer with certain information in relation to retail shops in a shopping centre or in the same building in order to assist the valuer to decide the market rent. A valuer must keep this information confidential.

A disagreement regarding the new rent may be referred to the Small Business Commissioner for mediation or to the State Administrative Tribunal for determination. Until the new rent is agreed, the current rent continues to apply. Once the higher or lower rent is agreed, adjustments will be backdated to the review date.

No "ratchet" clauses

Any provision in a lease about a market review that seeks to prevent the rent from rising or falling above or below a certain level is void. The lease must allow the rent to rise or fall to a level supported by market evidence, for example, a clause cannot stop the rent from decreasing on a market review.

(***See section 11 of the Act.***)

What you should do:

- ***make sure that you understand how your rent is to be calculated and what other payments may be required***
- ***consider whether your business can sustain the current rent, rent increases and operating expenses over the term of the lease.***

CONTRIBUTION TO THE LANDLORD'S OPERATING EXPENSES OR OUTGOINGS

You may be required to contribute to a proportion of the landlord's expenses. The landlord's expenses are described in the Act as operating expenses. Leases can also refer to them as "outgoings or variable outgoings".

Operating expenses are the costs of operating, repairing or maintaining the landlord's premises including any building common areas. Typically these costs include the rates and taxes, cleaning, air conditioning, security, insurances and other valid expenses of running the property.

Details about the operating expenses and their payment are to be set out in the lease and the disclosure statement.

No capital expenses or management fees

The landlord cannot recover the following from you as an operating expense:

- management fees
- capital expenditures in relation to a retail shopping centre (for example, asset replacement)

Operating expenses are not to exceed the "relevant proportion"

Your contributions to operating expenses are negotiable. The Act provides that a tenant cannot be required to contribute more than the "relevant proportion" in relation to an operating expense. Nothing prevents you from negotiating with the landlord to pay less than the relevant proportion.

The relevant proportion is calculated by comparing the lettable area of your shop to the total lettable area of the shopping centre or the group of premises to which the expense relates.

$$relevant\ proportion = \frac{lettable\ area\ of\ shop}{total\ lettable\ area}$$

Referable expenses

In certain circumstances an operating expense may be incurred in relation to only some of the businesses in a centre or group of premises, for example, specialised cleaning used by only a few tenants. This is called a "referable expense" and can be allocated using the total lettable area of only the shops to which the referable expense relates.

What you should do:

- ***make sure that you understand the operating expenses before signing the lease***
- ***budget to meet the operating expenses payments.***

Landlord to provide estimates and statements for operating expenses

In order to recover operating expenses from you, the landlord must provide you with:

- an annual estimate of expenditure for each operating expense
- an audited operating expenses statement for each accounting period detailing all expenditure by the landlord (this statement must be given within 3 months after the end of the accounting period).

(***See section 12 of the Act.***)

SINKING FUNDS

If your shop is in a shopping centre and you have agreed to contribute to a fund for major repair and maintenance works, your contributions are protected under the Act. These funds are subject to accounting and audit provisions and should not be spent by the landlord on anything other than the purpose for which they are collected. These costs may be in addition to operating expenses charged under the lease.

Capital works must be paid for by the landlord and would include such works as the construction of extensions to the shopping centre and the replacement of major plant and equipment.

(***See section 12A of the Act.***)

OTHER FUNDS AND RESERVES

The landlord is also required to properly account for the administration, expenditure and auditing of any other funds or reserves that you have agreed to contribute to for specific purposes such as for marketing or promotion. These costs may be in addition to operating expenses charged under the lease.

(***See section 12B of the Act.***)

FITOUT AND REFURBISHMENT

Tenants are usually responsible for the costs of installing fixtures and fittings in the shop (the ***fitout***). There may be a standard of construction required for fitouts. You may also be responsible for some or all of the landlord's costs of preparing the shop for the fitout.

Fitout requirements must be detailed in the disclosure statement.

A provision in a lease requiring a tenant to contribute to the cost of any of the landlord's finishes, fixtures, fittings, equipment or services will be void unless the disclosure statement notifies the tenant about the effect of the provision.

(***See section 12(3A) of the Act.***)

The Act provides that a clause about refurbishment or refitting will be void unless it provides the tenant with enough detail about the required refurbishment or refitting as is necessary to indicate the nature, timing and extent of work required.

(***See section 14C of the Act.***)

What you should do:

- ***ensure that you understand your obligations with regards to the fitout of the premises***
- ***if possible, obtain or prepare a condition report prior to entering into the lease so that you have evidence of its condition***
- ***ensure you have a sufficient fitout budget as some fitout costs (for example cost of moving plumbing) are often overlooked***
- ***discuss variations of standard fitout with the landlord — as this could cost you extra.***

LEGAL FEES

The Act prohibits the landlord from claiming legal or other expenses from you relating to:

- the negotiation, preparation or execution of the lease (or any renewal or extension of the lease)
- obtaining the consent of a mortgagee to the lease
- the landlord's compliance with the Act.

However, if you assign your lease or sub-let the premises, the landlord may claim from you any reasonable legal or other expenses incurred in connection with the assignment or sub-letting.

(***See section 14B of the Act.***)

TRADING HOURS

The trading hours for your shop may be affected by a number of matters.

Retail trading hours legislation in Western Australia sets out those hours that retailers may open (this can vary depending on the type of business you operate).

If your retail shop is located inside a shopping centre then for practical reasons the opening and closing times for the centre (***core hours***) may be different to the trading hours permitted by law. This should be set out in the disclosure statement by the landlord.

When do you have to open your shop?

A clause in a lease which requires you to open your premises at specified hours or for specified times is void under the Act. For example, you cannot be required to open your shop for the core hours for a centre. You can choose which hours to open your shop.

If you believe that your lease has not been renewed because you did not open at certain times you can apply to the State Administrative Tribunal for compensation.

(***See section 12C of the Act.***)

What you should do:

- ***if your premises are in a shopping centre you should check that the core hours are suitable for your business***
- ***find out whether you can open your shop at any times outside of the core hours and find out about what costs are involved***
- ***remember that the lease can't require you to open your shop for specified hours or during specified times.***

Standard trading hours and operating expenses

The Act also sets out "standard trading hours" which are used only for the purposes of allocating operating expenses.

For the purposes of allocation of operating expenses "standard trading hours" are:

- 8.00 a.m. to 6.00 p.m. Monday, Tuesday, Wednesday and Friday
- 8.00 a.m. to 9.00 p.m. Thursday
- 8.00 a.m. to 5.00 p.m. Saturday.

The Act provides that if you do not open outside standard trading hours, then you cannot be charged operating expenses related to the extended hours (for example, additional security costs).

If, however, you do open outside the standard trading hours, you may be required to pay operating expenses related to the extended hours. These expenses should be calculated based on the lettable area of those shops which were open during the extended hours.

If you are closed for a period during the standard trading hours (for example, if you do not open your shop until 10 a.m.), you may still be charged operating expenses for the time that you are closed, that is, between 8.00 a.m. and 10.00 a.m..

(***See section 12(1)(c) of the Act.***)

Retail trading hours law may allow you to open at times outside of the standard trading hours (for example, Sunday trading) - however:

- ***you can't be forced to open your business***
- ***you are not required to make a contribution to operating expenses relating to non-standard hours if you choose not to open during those times.***

VOID CLAUSES

The lease agreement and any other verbal or written agreements cannot include clauses that are contrary to any provision in the Act.

In addition, the Act specifically precludes the lease or any other agreement from containing clauses that:

- require a tenant to pay key money, which is any money or other benefit in addition to rent paid to the landlord or others for the right to lease retail shop premises (***See section 9 of the Act.***)

- prevent the tenant disclosing the rent it has agreed to third parties, such as other retail tenants or their valuers (***See section 11(2a) of the Act.***)
- require the tenant to contribute to any fund that applies moneys to capital expenditure in a shopping centre, such as new building works (***See section 12(2) of the Act.***)
- require a tenant to open for specified hours or during specified times (***See section 12C of the Act.***)
- prevent a tenant from joining a tenant's association or similar body (***See section 12D of the Act.***)
- require a tenant to provide turnover figures to the landlord, unless the tenant has agreed to pay rent based on turnover (***See section 8 of the Act.***).

A clause in a lease that is contrary to the provisions of the Act is void and has no effect.

DISRUPTIONS — COMPENSATION BY THE LANDLORD

The Act states that, if your shop is in a shopping centre, you are entitled to seek reasonable compensation from the landlord if the landlord:

- inhibits or prevents your, or customer, access to the shop premises
- disrupts trading conditions, causing loss of profits to your business
- does not properly repair, maintain or clean the shopping centre premises or common areas.

You will only be entitled to compensation from the landlord if you have given the landlord notice in writing to rectify the problem and the landlord has not done so.

If you cannot agree the amount of compensation with the landlord, you can make an application to the State Administrative Tribunal for a decision as to the amount payable.

In most cases, before making an application to the State Administrative Tribunal you must attempt to resolve the matter through the Small Business Commissioner's dispute resolution processes.

(***See section 14 of the Act.***)

UNCONSCIONABLE CONDUCT AND MISLEADING AND DECEPTIVE CONDUCT

The Act provides that neither the landlord nor the tenant can engage in conduct that is:

- unconscionable (conduct that is so harsh, oppressive or unreasonable that it goes against good conscience)
- misleading or deceptive.

The State Administrative Tribunal can hear a claim for unconscionable conduct or misleading and deceptive conduct and may make an order for payment of compensation or another appropriate order (such as an order to vary a lease or an order that a party stop doing something).

In most cases, before making an application to the State Administrative Tribunal you must attempt to resolve the matter through the Small Business Commissioner's dispute resolution processes.

(***See Part IIA of the Act.***)

ASSIGNMENT AND SUB-LEASING

During the term of the lease, your circumstances may change and you may want to sell your business and assign your lease or sub-let all or part of the premises.

Your responsibilities if you assign your lease

If you assign your lease the new tenant "takes over" and assumes all your rights and responsibilities including rent and any other obligations under the lease from the date of assignment.

Although the Act gives you a right to assign your lease, the landlord may withhold consent on reasonable grounds. Examples of reasonable grounds include:

- if the landlord believes that the new tenant would not be able to meet their financial obligations; or
- if the proposed use of the premises is contrary to the use permitted in the lease.

You will need to write to the landlord seeking consent for assignment of the lease. If the landlord doesn't reply within 28 days, you are entitled to assume the landlord has consented to the assignment.

You may have to pay the landlord's reasonable expenses for assessing a prospective tenant to take over your lease.

Your responsibilities if you sub-lease your shop

If you sub-let all or part of your premises you effectively become the landlord and the person you sub-let to is your tenant. Sub-leasing means that you will still be responsible under the lease to your landlord (for example, you may be liable for the rent if the sub-lessee does not pay).

You will also have obligations to the person you sub-let to, for example, you will need to provide a tenant guide and disclosure statement to your sub-tenant.

Your lease may include restrictions on sub-leasing. You should check your lease and seek advice as to its requirements on sub-leasing.

You may need to write to the landlord seeking consent to sub-lease. If the landlord doesn't reply within 28 days, you are entitled to assume the landlord has consented to the sub-lease.

(***See section 10 of the Act.***)

What you should do:

- ***seek independent legal advice as to the requirements of the Act and your obligations on assignment or sub-leasing.***

DEFAULT OR BREACH OF LEASE

Most leases allow the landlord to terminate (or end) the lease on a breach or default by the tenant (for example, failure to pay rent). You should ensure that you understand the procedures set out in the lease in relation to default. For example, in many instances, your obligation to pay future rent will continue even after a lease has been terminated.

DISPUTES BETWEEN THE TENANT AND LANDLORD

State Administrative Tribunal

If you are unable to resolve a dispute with your landlord over any aspect of your retail shop lease the Act allows the State Administrative Tribunal to deal with these disputes.

Either you or the landlord may initiate this action with the Tribunal by making an application and paying the appropriate fee. The Tribunal generally deals with matters through an initial directions hearing, a mediation process or in a hearing.

(***See section 16 of the Act.***)

Small Business Commissioner

In most cases, before making an application to the State Administrative Tribunal you must attempt to resolve the matter through the Small Business Commissioner's dispute resolution processes.

(***See Part III of the Act and regulation 10.***)

Advice about a dispute can be obtained from lawyers with property experience, the Small Business Development Corporation, industry sources, tenant advocates and retail representative groups.

KEEP RECORDS

You should make sure that you keep records of all agreements, undertakings, correspondence (including emails) and other communications with the landlord. Where possible you should confirm things in writing.

Make sure that you diarise important dates in relation to your lease.

If you need to make a claim in the Tribunal you will need to provide appropriate evidence to support your claim.

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Details

Parties

City of Kwinana

of PO Box 21, Kwinana, Western Australia 6966
(**Lessor**)

Armadale Community Animal Rescue Group Inc.

of 251 Railway Avenue, Armadale, Western Australia 6112
(**Lessee)**

Background

A The Lessor is registered as the proprietor of the Land.

B The Lessor has agreed to lease and the Lessee has agreed to take a lease of the Premises upon the terms and conditions contained in this Deed.

Agreed terms

1. Definitions

In this Lease, unless otherwise required by the context or subject matter:

Amounts Payable means the Rent and any other money payable by the Lessee under this Lease;

Authorised Person means:

(a) an agent, employee, licensee or invitee of the Lessor; and

(b) any person visiting the Premises with the express or implied consent of any person mentioned in paragraph (a);

Authority includes any governmental or public authority of any kind;

Building means the building in which the Premises are situated and includes any modifications, extensions or alterations to the Building and the Lessor's Property;

CEO means the Chief Executive Officer for the time being of the Lessor or any person appointed, authorised or delegated by the Chief Executive Officer to perform any of her or his functions;

Commencement Date means the date of commencement of the Term specified in **Item 4** of the Schedule;

Common Areas means all those parts of the Building not leased to any lessee and intended for use by the lessees of the Building and their respective customers in common with each other including all parking areas roads walkways malls corridors passageways stairways elevators toilets and washrooms in on or about the Building and where the Premises comprises a lot on a strata plan, the common property shown on that strata plan;

CPI means the Consumer Price Index (All Groups) Perth number published from time to time by the Australian Bureau of Statistics;

Encumbrance means a mortgage, charge, lien, pledge, easement, restrictive covenant, writ, warrant or caveat and the claim stated in the caveat;

Exclusive Areas means the Premises at set out in **Item 1(b)** of the Schedule that the Lessee has an exclusive right to use;

Further Term means each further term specified in **Item 3** of the Schedule;

Good Repair means good and substantial Lesseeable repair and in clean, good working order and condition;

Interest Rate means the rate at the time the payment falls due being 2% greater than the Lessor's general overdraft rate on borrowings from its bankers on amounts not exceeding $100,000.00;

Land means the land described at **Item 1(a)** of the Schedule;

Lease means this deed as supplemented, amended or varied from time to time;

Lessee's Agents includes:

(a) the sublessees, employees, agents, contractors, invitees and licensees of the Lessee; and

(b) any person on the Premises by the authority of a person specified in paragraph (a);

Lessee's Covenants means the covenants, agreements and obligations set out or implied in this Lease or imposed by law to be performed and observed by any person other than the Lessor;

Lessee's Employees means each of the Lessee's employees, contractors and agents and those persons over whom the Lessee exercises control at the Premises and includes the employees and sub-contractors of the Lessee's agents and contractors;

Lessor includes:

(a) in the case of a person, that person's executors, administrators and assigns; and

(b) in any other case, the Lessor's successors and assigns;

Lessor's Property means the plant, equipment, fixtures, fittings and any other Lessor's property in the Premises;

Lessor's Covenants means the covenants, agreements and obligations set out or implied in this Lease, or imposed by law to be observed and performed by the Lessor;

Notice means each notice, demand, consent or authority given or made to any person under this Lease;

Outgoings has the meaning set out in **clause 5.2** in this Lease;

Outgoings Contribution means the contribution set out in **Item 7** of the Schedule;

Party means the Lessor or the Lessee according to the context;

Premises means the premises described at **Item 1(b)** of the Schedule;

Rent means the rent specified in **Item 5** of the Schedule;

Schedule means the Schedule to this Lease;

Services means all gas, electricity, telephone, water, sewerage, fire prevention, ventilation, air conditioning, hydraulic, elevator and security services and all other services or systems provided in the Building or available for the Lessee's use whether provided by the Lessor or any Authority;

Term means the term of years specified in **Item 2** of the Schedule and any Further Term;

Termination means expiry by effluxion of time or sooner determination of the Term or any period of holding over;

2. Interpretation

In this Lease, unless expressed to the contrary:

(a) words importing:

(i) the singular includes the plural and vice versa; and

(ii) a gender or genders include each other gender;

(b) if a word or phrase is assigned a particular meaning, other grammatical forms of that word or phrase have a corresponding meaning;

(c) a reference to:

(i) a natural person includes a body corporate or local government;

(ii) a body corporate or local government includes a natural person;

(iii) a professional body includes a successor to or substitute for that body;

(iv) a Party includes its legal personal representatives, successors and assigns and if a Party comprises two or more persons, the legal personal representatives, successors and assigns of each of those persons;

(v) a statute, includes an ordinance, code, regulation, award, town planning scheme, regulation, local law, by-law, requisition, order or other statutory instruments made under any of them and a reference to any of them, whether or not by name, includes any amendments to, re-enactments of or replacements of any of them from time to time in force;

(vi) a right includes a benefit, remedy, discretion, authority or power;

(vii) an obligation includes a warranty or representation and a reference to a failure to observe or perform an obligation includes a breach of warranty or representation;

(viii) this Lease or provisions of this Lease or any other deed, agreement, instrument or contract includes a reference to:

(ix) both express and implied provisions; and

(x) that other deed, agreement, instrument or contract as varied, supplemented, replaced or amended;

(xi) writing includes any mode of representing or reproducing words in tangible and permanently visible form and includes facsimile transmissions;

(xii) any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them; and

(xiii) a subparagraph, paragraph, subclause, clause, Item, Schedule or Annexure is a reference to, respectively, a subparagraph, paragraph, subclause, clause, Item, Schedule or Annexure of this Lease;

(d) the covenants and obligations on the part of the Lessee not to do or omit to do any act or thing include:

(i) covenants not to permit that act or thing to be done or omitted to be done by a Lessee's Agent; and

(ii) a covenant to take all reasonable steps to ensure that that act or thing is not done or omitted to be done;

(e) the meaning of general words or phrases is not limited by specific examples introduced by 'including', 'for example' or similar expressions; and

(f) if a Party comprises two or more persons, the covenants and agreements on their part bind them and must be observed and performed by them jointly and each of them severally, and may be enforced against any one or more of them.

3. Grant of lease

The Lessor leases to the Lessee the Premises for the Term subject to:

(a) all Encumbrances;

(b) the payment of the Amounts Payable; and

(c) the performance and observance of the Lessee's Covenants.

4. Quiet enjoyment

Except as provided in the Lease, for so long as the Lessor is registered as the proprietor in fee simple in the Land, and subject to the performance and observance of the Lessee's Covenants the Lessee may quietly hold and enjoy the Premises during the Term without any interruption or disturbance from the Lessor or persons lawfully claiming through or under the Lessor.

5. Rent and other payments

The Lessee covenants with the Lessor:

5.1 Rent

To pay to the Lessor the Rent in the manner set out at **Item 5** of the Schedule on and from the Commencement Date clear of any deductions.

5.2 Outgoings

To pay to the Lessor or to such person as the Lessor may from time to time direct punctually all the following outgoings or charges, assessed or incurred in respect of the Premises:

(a) local government rates, specified area rates, taxes, service, strata titles levy and other charges and including charges for rubbish and garbage removal;

(b) water, drainage and sewerage rates, charges for disposal of stormwater, meter rent and excess water charges;

(c) telephone, electricity, gas and other power and light charges including but not limited to meter rents and the cost of installation of any meter, wiring, internet connections or telephone connection;

(d) land tax and metropolitan regional improvement tax on a single ownership basis;

(e) premiums, excess and other costs arising from the insurance obtained by the Lessor pursuant to **clause 8.2**. For the avoidance of doubt, the parties agree:

(i) that if such premium or cost does not include a separate assessment or identification of the Premises or the Land, the Lessee must pay a proportionate part of such premium or cost determined by the Lessor acting reasonably; and

(ii) such insurance will include insurance for the full replacement value of buildings; and

(iii) any other consumption charge or cost, statutory impost or other obligation incurred or payable by reason of the Lessee's use and occupation of the Premises.

If the Premises are not separately charged or assessed the Lessee will pay to the Lessor a proportionate part of any charges or assessments referred to in clause 0 being the proportion that the Premises bears to the total area of the land or premises included in the charge or assessment.

5.3 Interest

Without affecting the rights, power and remedies of the Lessor under this Lease, to pay to the Lessor interest on demand on any Amounts Payable which are unpaid for 7 days computed from the due date for payment until payment is made and any interest payable under this paragraph will be charged at the Interest Rate.

5.4 Costs

(1) To pay to the Lessor all costs, legal fees, disbursements and payments incurred by or for which the Lessor is liable in connection with or incidental to:

(a) the Amounts Payable or obtaining or attempting to obtain payment of the Amounts Payable under this Lease;

(b) any breach of covenant by the Lessee or the Lessee's Agents;

(c) the preparation and service of a notice under Section 81 of the *Property Law Act 1969* requiring the Lessee to remedy a breach even though forfeiture for the breach may be avoided in a manner other than by relief granted by a Court;

(d) any work done at the Lessee's request; and

(e) any action or proceedings arising out of or incidental to any matters referred to in this **clause 5.4** or any matter arising out of this Lease.

5.5 Accrual of amounts payable

Amounts Payable accrue on a daily basis.

6. Rent Review

6.1 Rent to be Reviewed

The Rent will be reviewed on and from each Rent Review Date to determine the Rent to be paid by the Lessee until the next Rent Review Date.

6.2 Methods of Review

The review will be either based on CPI or a Fixed Percentage Review. The basis for each rent review is as identified for each Rent Review Date in **Item 6** of the Schedule.

6.3 CPI Review

A rent review based on CPI will increase the amount of Rent payable during the immediately preceding period by the percentage of any increase in CPI having regard to the quarterly CPI published immediately prior to the later of the Commencement Date or the last Rent Review Date as the case may be and the quarterly CPI published immediately prior to the relevant Rent Review Date. If there is a decrease in CPI having regard to the relevant CPI publications the Rent payable from the relevant Rent Review Date will be the same as the Rent payable during the immediately preceding period. Should the CPI be discontinued or suspended at any time or its method of

computation substantially altered, the parties shall endeavour to agree upon the substitution of the CPI with an equivalent index, or failing agreement by the parties, the substitution shall be made by a Valuer appointed in accordance with **clause** Error! Reference source not found.**.**

6.4 Lessor's right to review

The Lessor may institute a rent review notwithstanding the Rent Review Date has passed and the Lessor did not institute a rent review on or prior to that Rent Review Date, and in which case the Rent agreed or determined shall date back to and be payable from the Rent Review Date for which such review is made.

7. Outgoings and Services

7.1 Outgoings

(a) The Lessee must pay to the Lessor the Outgoings Contribution with the first payment due on the Commencement Date.

(b) With effect from each Rent Review Date, the Outgoings Contribution shall be reviewed in accordance with the following formula:

ROC = OC x EC / OC

Where:

"**ROC**" = the annual Outgoings Contribution as reviewed;

"**OC**" = the annual Outgoings Contribution payable immediately before the relevant Outgoings Review Date; and

"**EC**" = the estimated cost of the Outgoings for the year commencing on the relevant Outgoings Review Date.

(c) The Lessor may not earlier than three (3) months before an Outgoings Review Date give the Lessee a notice setting out the amount of the reviewed Outgoings Contribution which shall be payable from the Outgoings Review Date ("Outgoings Review Notice"), except that the failure of the Lessor to give such a notice before the Outgoings Review Date does not preclude the Lessor from giving such a notice in respect of that Outgoings Review Date at any later time.

7.2 Rates and Taxes

(a) The Lessee must pay to the Lessor , when due, all Rates and Taxes assessed or imposed by any Relevant Authority or other service provider in respect of the Leased Premises.

(b) Except in the case of manifest error, a statement issued by the Lessor under **clause 7.2(a)** will be prima facie evidence of the matters stated in that statement.

(c) If the year or other period in respect of which any particular Rates and Taxes is payable does not coincide with the Lease year, the amount the Lessee is to pay in the first year and last year of the Lease will be adjusted proportionally.

7.3 Services separately assessed

The Lessee must pay to the Lessor or, if demand is made by a service provider, or other Relevant Authority, to that Relevant Authority, all amounts separately charged or assessed in respect of the Leased Premises or the Lessee for or in connection with Services to or for the benefit of the Leased

Premises or the Lessee, and the cost of installation of any meter, wiring or other device necessitated by the use of the Services.

7.4 Bulk supplies of Services

(a) If the Lessor supplies any Services to the Leased Premises the Lessee must on demand pay to the Lessor the amount which the Lessee would have been charged by the original service provider, or other Relevant Authority if the Services had been supplied to the Lessee directly together with an administrative charge of no more than twenty per cent (20%) of the amount charged by the original service provider, or other Relevant Authority.

(b) The Lessee must observe and comply with any conditions of supply of Services by the Lessor, or where no conditions of supply are imposed by the Lessor, observe and comply with the conditions of supply of Services imposed by the Relevant Authority.

(c) If any Service is not provided by the Lessor, the Lessee is responsible to make the Lessee's own arrangements at the Lessee's own cost for the supply of the Service to the Leased Premises.

8. Insurance

8.1 Insurance required

The Lessee must effect and maintain with insurers approved by the Lessor (noting the Lessor's and the Lessee's respective rights and interest in the Premises) for the time being:

(a) adequate public liability insurance for a sum not less than the sum set out at **Schedule 1Item 9**of the Schedule in respect of any one claim or such greater amount as the Lessor may from time to time reasonably require;

(b) insurance against all risks as the Lessor may require, of all plate glass windows, doors and display show cases forming part of or within the Premises for a sum which is not less than its full insurable value;

(c) insurance to cover the Lessee's fixtures, fittings, equipment and stock against loss or damage by fire, fusion, smoke, lightning, flood, storm, tempest, earthquake, sprinkler leakage, water damage and other usual risks against which a Lessee can and does ordinarily insure in their full replacement value, and loss from theft or burglary;

(d) employers' indemnity insurance including workers' compensation insurance in respect of all employees of the Lessee employed in, about or on the Premises; and

(e) any other policy of insurance which the Lessor may reasonably require or specify from time to time.

8.2 Building Insurance to be effected by Lessor

The Lessor shall effect and keep effected insurance to the full insurable value on a replacement or reinstatement value basis of the Premises against damage arising from fire, tempest, storm, earthquake, explosion, aircraft, or other aerial device including items dropped from any device, riot, commotion, flood, lightning, act of God, fusion, smoke, rainwater, leakage, impact by vehicle, machinery breakdown and malicious acts or omissions and other standard insurable risks and the Lessee will reimburse the Lessor for any premiums, excess or other costs arising therefrom.

8.3 Details and receipts

In respect of the insurances required by **clause 8.1** the Lessee must:

(a) on the Lessor's request, upon renewal of any insurance policy immediately forward to the Lessor copies of Certificates of Currency and details of the insurances as held by the Lessee;

(b) on the Lessor's request, promptly pay all premiums and produce to the Lessor each policy or certificate of currency and each receipt for premiums or certificate of currency issued by the insurers; and

(c) notify the Lessor immediately:

(i) when an event occurs which gives rise or might give rise to a claim under or which could prejudice a policy of insurance; or

(ii) when a policy of insurance is cancelled.

8.4 Payment of excess on insurance

The Lessee AGREES with the Lessor that it shall be responsible to pay any excess payable in connection with the insurances referred to in **clause 8.1** and **clause 8.2**.

8.5 Not to invalidate

The Lessee must not do or omit to do any act or thing or bring or keep anything on the Premises which might:

(a) render any insurance effected under **clause 8.1** and **clause 8.2** on the Premises, or any adjoining premises, void or voidable; or

(b) cause the rate of a premium to be increased for the Premises or any adjoining premises (except insofar as an approved development may lead to an increased premium).

8.6 Report

Each Party must report to the other promptly in writing and in an emergency verbally:

(a) any damage to the Premises of which they are or might be aware; and

(b) any circumstances of which they are aware and which are likely to be a danger or cause any damage or danger to the Premises or to any person in or on the Premises.

8.7 Settlement of claim

The Lessor may, but the Lessee may not without prior written consent of the Lessor, settle or compromise any claims under any policy of insurance required by **clause 8.1** and **clause 8.2**.

8.8 Lessor as attorney

The Lessee irrevocably appoints the Lessor as the Lessee's attorney during the Term:

(a) in respect to all matters and questions which may arise in relation to any insurances required by **clause 8.1** and **clause 8.2**;

(b) with full power to demand, sue for and recover and receive from any insurance company or society or person liable to pay the insurance money as are payable for the risks covered by the insurances required by **clause 8.1** and **clause 8.2**;

(c) to give good and effectual receipts and discharges for the insurance; and

(d) to settle, adjust, arbitrate and compromise all claims and demands and generally to exercise all powers of absolute owner.

9. Indemnity

9.1 Lessee responsibilities

(1) The Lessee is subject to the same responsibilities relating to persons and property to which the Lessee would be subject if during the Term the Lessee were the owner and occupier of the freehold of the Premises.

(2) The Lessee is responsible and liable for all acts or omissions of the Lessee's Agents on the Premises and for any breach by them of any covenants or terms in this Lease required to be performed or complied with by the Lessee.

9.2 Indemnity

(1) The Lessee indemnifies, and shall keep indemnified, the Lessor from and against all actions, claims, costs, proceedings, suits and demands whatsoever which may at any time be incurred or suffered by the Lessor, or brought, maintained or made against the Lessor, in respect of:

(a) any loss whatsoever (including loss of use);

(b) injury or damage of, or to, any kind of property or thing; and

(c) the death of, or injury suffered by, any person,

caused by, contributed to, or arising out of, or in connection with, whether directly or indirectly:

(d) the use or occupation of the Premises by the Lessee or the Lessee's Agents;

(e) any work carried out by or on behalf of the Lessee on the Premises;

(f) the Lessee's activities, operations or business on, or other use of any kind of, the Premises;

(g) the presence of any Contamination, Pollution or Environmental Harm in on or under the Premises or adjoining land caused or contributed to by the act, neglect or omission of the Lessee or the Lessee's Agents;

(h) any default by the Lessee in the due and punctual performance, observance and compliance with any of the Lessee's covenants or obligations under this Lease; or

(i) an act or omission of the Lessee.

9.3 Obligations Continuing

The obligations of the Lessee under this clause:

(a) are unaffected by the obligation of the Lessee to take out insurance, and the obligations of the Lessee to indemnify are paramount, however if insurance money is received by the Lessor for any of the obligations set out in this clause then the Lessee's obligations under **clause 9.2** will be reduced by the extent of such payment;

(b) continue after the expiration or earlier determination of this Lease in respect of any act, deed, matter or thing occurring or arising as a result of an event which occurs before the expiration or earlier determination of this Lease.

9.4 No indemnity for Lessor's negligence

The parties agree that nothing in this clause shall require the Lessee to indemnify the Lessor, its officers, servants, or agents against any loss, damage, expense, action or claim arising out of a negligent or wrongful act or omission of the Lessor, or its servants, agents, contractors or invitees.

9.5 Release

(1) The Lessee:

(a) agrees to occupy and use the Premises at the risk of the Lessee; and

(b) releases to the full extent permitted by law, the Lessor from:

(i) any liability which may arise in respect of any accident or damage to property, the death of any person, injury to any person, or illness suffered by any person, occurring on the Premises or arising from the Lessee's use or occupation of the Premises by;

(ii) loss of or damage to the Premises or personal property of the Lessee; and

(iii) all claims, actions, loss, damage, liability, costs and expenses arising from or connected with (directly or indirectly) the presence of any Contamination, Pollution or Environmental Harm in, on or under the Premises or surrounding area,

except to the extent that such loss or damage arises out of a negligent or wrongful act or omission of the Lessor, or its servants, agents, contractors or invitees.

(2) The release by the Lessee continues after the expiration or earlier determination of this Lease in respect of any act, deed, matter or thing occurring or arising as a result of an event which occurs before the expiration or earlier determination of this Lease.

10. Limit of Lessor's liability

10.1 No liability for loss on Premises

The Lessor will not be liable for loss, damage or injury to any person or property in or about the Premises however occurring.

10.2 Limit on liability for breach of Lessor's covenants

(1) The Lessor is only liable for breaches of the Lessor's Covenants set out in this Lease which occur while the Lessor is registered as the proprietor in fee simple in the Premises.

(2) The Lessor will not be liable for any failure to perform and observe any of the Lessor's Covenants due to any cause beyond the Lessor's control.

11. Maintenance, repair and cleaning

11.1 Generally

(1) The Lessee agrees during the Term and for so long as the Lessee remains in possession or occupation of the Premises to maintain, replace, repair, clean and keep the Premises (which for the avoidance of doubt includes the Lessor's fixtures and fittings and any accessories) in good repair having regard to the age of the Premises at the Commencement Date provided that this subclause shall not impose on the Lessee any obligation:

(a) to carry out maintenance, repairs or replacement that are necessary as a result of reasonable fair wear and tear; or

(b) to undertake any structural maintenance, replacement or repair,

except when such maintenance, repair or replacement is necessary because of any act or omission of or on the part of the Lessee or the Lessee's Agents (including its use of the Premises).

(2) In discharging the obligations imposed on the Lessee under this subclause, the Lessee shall where maintaining, replacing, repairing or cleaning:

(a) any electrical fittings and fixtures;

(b) any plumbing;

(c) any air-conditioning fittings and fixtures; and

(d) any gas fittings and fixtures,

in or on the Premises use only licensed trades persons, or such trades persons as may be approved by the Lessor and notified to the Lessee, which approval shall not be unreasonably withheld.

(3) The Lessee must take such reasonable action as is necessary to:

(a) prevent, if it has occurred as a result of the Lessee's use of the Premises; and

(b) rectify or otherwise ameliorate,

the effects of erosion, drift or movement of sand, soil, dust or water on or from the Premises.

11.2 Cleaning

The Lessee must at all times keep the Premises and Common Areas clean, tidy, unobstructed and free from dirt and rubbish.

11.3 Repair

Unless such damage is the Lessor's responsibility pursuant to the terms of the Lease, the Lessee must promptly repair at its own expense to the satisfaction of the Lessor, any damage to the Premises, regardless of how the damage is caused and replace any of the Lessor's fixtures and fittings which are or which become damaged.

11.4 Responsibility for Securing the Premises

The Lessee must ensure the Premises, including Lessor's and Lessee's fixtures and fittings, are appropriately secured at all times.

11.5 Lessor's Fixtures and Fittings

The Lessee covenants and agrees that the Lessor's Fixtures and Fittings will remain the property of the Lessor and must not be removed from the Premises at any time.

11.6 Damage to Common Areas

The Lessee must make good any breakage defect or damage to the Common Areas or to any other part of the Centre or any appurtenance or equipment therein caused by want of care misuse or abuse on the part of the Lessee or the Lessee's servants agents contractors or sub-contractors sub-tenants or other persons claiming through or under the Lessee or by any breach of this Lease by the Lessee.

11.7 Pest control

The Lessee must keep the Premises free of any pests and vermin and the cost of extermination will be borne by the Lessee.

11.8 Painting

(1) The Lessee must on or before each repainting date as stated in Item 10 of the Schedule paint with at least 2 coats of paint those parts of the Premises usually painted internally, unless otherwise agreed by the Lessor in writing.

(2) All painting carried out on the Premises must be carried out by a registered painting contractor and the registered painting contractor or other person engaged by the Lessee to paint the Premises must:

(a) do so in a proper manner using good quality materials;

(b) have the colour and quality of the materials approved in writing by the Lessor before the work commences;

(c) comply will all reasonable directions given or requests made by the Lessor; and

(d) be finished in a proper and workmanlike manner.

11.9 Responsibility for securing the Premises

(1) Securing Premises

The Lessee must ensure the Premises, including Lessor's and Lessee's fixtures and fittings, are appropriately secured at all times.

(2) Installation of security systems

Subject to prior written approval from the Lessor, the Lessee may install a security system to the Premises, provided the Lessee:

(a) pays for all costs associated with the installation and ongoing monitoring of the security system; and

(b) provides the Lessor with access keys or alarm codes.

(3) Acknowledgement of state of repair of Premises

The Lessee acknowledges that it has inspected the structure of the Premises internally and externally prior to the execution of this Lease and enters into the Lease with full knowledge of the structural state and state of repair of the Premises.

12. Use

12.1 Restrictions on use

(1) Generally

The Lessee must not and must not suffer or permit a person to:

(a) use the Premises or any part of it for any purpose other than the Permitted Purpose; or

(b) use the Premises for any purpose which is not permitted under any local or town planning scheme, local laws, acts, statutes or any law relating to health.

(2) No offensive or illegal acts

The Lessee must not and must not suffer or permit a person to do or carry out on the Premises any harmful, offensive or illegal act, matter or thing.

(3) No nuisance

The Lessee must not and must not suffer or permit a person to do or carry out on the Premises any thing which causes a nuisance, damage or disturbance to the Lessor or to owners or occupiers of adjoining properties.

(4) No dangerous substances

The Lessee must not and must not suffer or permit a person to store any dangerous compound or substance on or in the Premises, otherwise than in accordance with the following provisions:

(a) any such storage must comply with all relevant statutory provisions;

(b) all applications for the approval or renewal of any licence necessary for such storage must be first referred to the Lessor;

(c) the Lessor may within its absolute discretion refuse to allow the storage of any particular dangerous compound or substance on the Premises; and

(d) upon the request of the Lessor, the Lessee will provide a list of all dangerous compounds or substances stored on the Premises.

(5) No harm or stress

The Lessee must not and must not suffer or permit a person to do any act or thing which might result in excessive stress or harm to any part of the Premises.

(6) No signs

The Lessee must not and must not suffer or permit a person to display from or affix any signs, notices or advertisements on the Premises without the prior written consent of the Lessor.

(7) No smoking

The Lessee must not suffer or permit a person to smoke inside any building or other enclosed area on the Premises.

(8) Consumption of alcohol

The Lessee must not suffer or permit a person to use or allow the Premises to be used for the consumption of alcohol without first obtaining the written consent of the Lessor.

(9) Sale of Alcohol

The Lessee will not sell or supply liquor from the Premises or allow liquor to be sold or supplied from the Premises without the prior written consent of the Lessor and then only in accordance with the provisions of the *Liquor Control Act 1988*, *Health (Food and Pet Meat) Repeal Regulations 2009*, *Liquor Licensing Regulations 1989* and any other relevant written laws that may be in force from time to time.

(10) Removal of rubbish

The Lessee must keep the Premises free from dirt and rubbish and to store and keep all trade waste and garbage in proper receptacles.

(11) No pollution

The Lessee must do all things necessary to prevent pollution or contamination of the Premises by garbage, refuse, waste matter, oil and other pollutants.

12.2 No warranty

The Lessor gives no warranty:

(a) as to the use to which the Premises may be put; or

(b) that the Lessor will issue any consents, approvals, authorities, permits or licences required by the Lessee under any statute for its use of the Premises.

12.3 Lessee to Observe Copyright

In the event that the Lessee or any person sub-leasing, hiring, or in temporary occupation of the Premises provides, contracts for, or arranges for the performance, exhibition or display of any music or work of art the copyright of which is not vested in the Lessee or that person, the Lessee shall ensure that all obligations in regard to payment of copyright or licensing fees with the owner or licensor of the copyright are met before any such performance, exhibition or display is held.

12.4 Premises Subject to Restriction

The Lessee accepts the Premises for the Term subject to any existing prohibition or restriction on the use of the Premises.

12.5 Indemnity for Costs

The Lessee indemnifies the Lessor against any claims or demands for all costs, on a solicitor client basis, reasonably incurred by the Lessor by reason of any claim in relation to any matters set out in this **clause 12**.

13. Alterations

13.1 Restriction

(1) The Lessee must not without prior written consent:

(a) from the Lessor;

(i) from any other person from whom consent is required under this Lease; or

(ii) as required under statute in force from time to time, including but not limited to the planning approval of the Lessee under a local planning scheme of the Lessee;

(b) make or allow to be made any alteration, addition or improvements to or demolish any part of the Premises; or

(c) subject to the performance of the Lessee's obligations in **clause 11**, remove any flora or fauna, alter or cut down any flora, or sell, remove or otherwise dispose of any flora, sand, gravel, timber or other materials from the Premises.

13.2 Consent

(1) If the Lessor and any other person whose consent is required under this Lease or at law consents to any matter referred to in **clause 13.1** the Lessor may:

(a) consent subject to conditions; and

(i) require that work be carried out in accordance with plans and specifications approved by the Lessor or any other person giving consent; and

(ii) require that any alteration be carried out to the satisfaction of the Lessor under the supervision of an engineer or other consultant; and

(b) if the Lessor consents to any matter referred to in **clause 13.1**:

(i) the Lessor gives no warranty that the Lessor will issue any consents, approvals, authorities, permits or policies under any statute for such matters; and

(ii) the Lessee must apply for and obtain all such consent approvals, authorities, permits or policies as are required at law before undertaking any alterations, additions, improvements or demolitions.

13.3 Cost of Works

All works undertaken under this **clause 13** will be carried out at the Lessee's expense.

13.4 Conditions

If any of the consents given by the Lessor or other persons whose consent is required under this Lease or at law require other works to be done by the Lessee as a condition of giving consent, then the Lessee must at the option of the Lessor either:

(a) carry out those other works at the Lessee's expense; or

(b) permit the Lessor to carry out those other works at the Lessee's expense,

in accordance with the Lessor's requirements.

14. Lessor's right of entry

14.1 Entry on Reasonable Notice

The Lessee must permit entry by the Lessor or any Authorised Person onto the Premises without notice in the case of an emergency, and otherwise upon reasonable notice:

(a) (i) at all reasonable times;

(ii) with or without workmen and others; and

(iii) with or without plant, equipment, machinery and materials;

(b) for each of the following purposes:

(i) to inspect the state of repair of the Premises and to ensure compliance with the terms of this Lease;

(ii) to carry out any survey or works which the Lessor considers necessary, however the Lessor will not be liable to the Lessee for any compensation for such survey or

works provided they are carried out in a manner which causes as little inconvenience as is reasonably possible to the Lessee;

(iii) to comply with the Lessor's Covenants or to comply with any notice or order of any authority in respect of the Premises for which the Lessor is liable; and

(iv) to do all matters or things to rectify any breach by the Lessee of any term of this Lease but the Lessor is under no obligation to rectify any breach and any rectification under this **clause 1.1(b)(iv)** is without prejudice to the Lessor's other rights, remedies or powers under this Lease.

14.2 Costs of Rectifying Breach

All costs and expenses incurred by the Lessor as a result of any breach referred to at **clause 14.1(b)(iv)** together with any interest payable on such sums will be a debt due to the Lessor and payable to the Lessor by the Lessee on demand.

15. Statutory obligations and notices

15.1 Comply with Statutes

The Lessee must:

(a) comply promptly with all statutes and local laws from time to time in force relating to the Premises;

(b) apply for, obtain and maintain in force all consents, approvals, authorities, licences and permits required under any statute for the use of the Premises specified at **clause 12**;

(c) ensure that all obligations in regard to payment for copyright or licensing fees are paid to the appropriate person for all performances, exhibitions or displays held on the Premises; and

(d) comply promptly with all orders, notices, requisitions or directions of any competent authority relating to the Premises or to the business the Lessee carries on at the Premises.

15.2 Indemnity if Lessee Fails to Comply

The Lessee indemnifies the Lessor against:

(a) failing to perform, discharge or execute any of the items referred to in **clause 15.1**; and

(b) any claims, demands, costs or other payments of or incidental to any of the items referred to in **clause 15.1**.

16. Report to Lessor

The Lessee must immediately report to the Lessor:

(a) any act of vandalism or any incident which occurs on or near the Premises which involves or is likely to involve a breach of the peace or become the subject of a report or complaint to the police and of which the Lessee is aware or should be aware;

(b) any occurrence or circumstances in or near the Premises of which it becomes aware, which might reasonably be expected to cause, in or on the Premises, pollution of the environment; and

(c) all notices, orders and summonses received by the Lessee and which affect the Premises and immediately deliver them to the Lessor.

17. Default

17.1 Events of Default

A default occurs if:

(a) any Amounts Payable remain unpaid for 14 days after a Notice has been given to the Lessee that an amount is outstanding;

(b) the Lessee is in breach of any of the Lessee's Covenants for 28 days after a Notice has been given to the Lessee to rectify the breach or to pay compensation in money;

(c) the business conducted at the

(d) Premises is wound up whether voluntarily or otherwise;

(e) the Lessee passes a special resolution under the *Associations Incorporation Act 2015* altering its rules of association in a way that makes its objects or purposes inconsistent with the use permitted by this Lease;

(f) a mortgagee takes possession of the property of the Lessee under this Lease;

(g) any execution or similar process is made against the Premises on the Lessee's property;

(h) the Premises are vacated, or otherwise not used, in the Lessor's reasonable opinion, for the Permitted Purpose for six month period; or

(i) a person other than the Lessee or a permitted sublessee or assignee is in occupation or possession of the Premises or in receipt of a rent and profits.

17.2 Forfeiture

On the occurrence of any of the events of default specified in **clause 17.1** the Lessor may:

(a) without notice or demand at any time enter the Premises and on re-entry the Term will immediately determine;

(b) by notice to the Lessee determine this Lease and from the date of giving such notice this Lease will be absolutely determined; and

(c) by notice to the Lessee elect to convert the unexpired portion of the Term into a tenancy from month to month when this Lease will be determined as from the giving of the notice and until the tenancy is determined the Lessee will hold the Premises from the Lessor as a Lessee from month to month under **clause 18,**

but without affecting the right of action or other remedy which the Lessor has in respect of any other breach by the Lessee of the Lessee's Covenants or releasing the Lessee from liability in respect of the Lessee's Covenants.

17.3 Lessor may remedy breach

If the Lessee:

(a) fails or neglects to pay the Amounts Payable by the Lessee under this Lease; or

(b) does or fails to do anything which constitutes a breach of the Lessee's Covenants,

then, after the Lessor has given to the Lessee notice of the breach and the Lessee has failed to rectify the breach within a reasonable time, the Lessor may without affecting any right, remedy or power arising from that default pay the money due or do or cease the doing of the breach as if it were the Lessee and the Lessee must pay to the Lessor on demand the Lessor's cost and expenses of remedying each breach or default.

17.4 Acceptance of Amount Payable By Lessor

Demand for or acceptance of the Amounts Payable by the Lessor after an event of default has occurred will not affect the exercise by the Lessor of the rights and powers conferred on the Lessor by the terms of the Lease or at law and will not operate as an election by the Lessor to exercise or not to exercise any right or power.

17.5 Essential Terms

Each of the Lessee's Covenants in **clauses 5** (Rent and Other Payments), **6** (Insurance), **9** (Indemnity), **11** (Maintenance, Repair and Cleaning), **12** (Use), **24** (Assignment, Subletting and Charging) and **29** (Goods and Services Tax), is an essential term of this Lease but this clause **17.5** does not mean or imply that there are no other essential terms in this Lease.

17.6 Breach of Essential Terms

If the Lessee breaches an essential term of this Lease then, in addition to any other remedy or entitlement of the Lessor:

(a) the Lessee must compensate the Lessor for the loss or damage suffered by reason of the breach of that essential term;

(b) the Lessor will be entitled to recover damages against the Lessee in respect of the breach of an essential term; and

(c) the Lessee covenants with the Lessor that if the Term is determined:

(i) for breach of an essential term or the acceptance by the Lessor of a repudiation of this Lease by the Lessee; or

(ii) following the failure by the Lessee to comply with any notice given to the Lessee to remedy any default,

the Lessee must pay to the Lessor on demand the total of the Amounts Payable under this Lease which would have been payable by the Lessee for the unexpired balance of the Term as if the Term had expired by effluxion of time together with the losses incurred or reasonably expected to be incurred by the Lessor as a result of the early determination including but not limited to the costs of re-letting or attempting to re-let the Premises;

(d) the Lessee agrees that the covenant set out in this **clause 17.6(c)** will survive termination or any deemed surrender at law of the estate granted by this Lease;

(e) the Lessee may deduct from the amounts referred to at **clause 17.6(c)** the Rent and other money which the Lessor reasonably expects to obtain by re-letting the Premises between the date of Termination and the date on which the Term would have expired by effluxion of time; and

(f) the Lessor must take reasonable steps to mitigate its losses and endeavour to re-let the Premises at a reasonable rent and on reasonable terms but the Lessor is not required to offer

or accept rent or terms which are the same or similar to the rent or terms contained or implied in this Lease.

18. Damage or destruction of Premises

18.1 Abatement of Rent

If the Premises are at any time during the Term, without neglect or default of the Lessee, destroyed or damaged by fire or other risk covered by insurance so as to render the same unfit for the occupation and use of the Lessee, then the Rent or a proportionate part thereof (according to the nature and extent of the damage) shall abate until the Premises have been rebuilt or made fit for the occupation and use of the Lessee, and in case of any dispute arising under this provision the same will be referred to arbitration under the provisions of the *Commercial Arbitration Act 2012* and the full Rent must be paid without any deduction or abatement until the date of the arbitrator's award whereupon the Lessor will refund to the Lessee any Rent which according to the aware appears to have been overpaid.

18.2 Total Damage or Destruction

If the premises are at any time during the Term destroyed or damaged to an extent as to be wholly unfit for the occupation and use of the Lessee either party may be notice in writing to the other of them given within sixty (60) days after the event elect to cancel and terminate this lease. The term will terminate upon such notice being given and the Lessee must vacate the premises and surrender the same to the Lessor, but such termination will be without prejudice however to the liability of the Lessee under this Lease up to the date of termination.

19. Option to renew

If the Lessee at least one month, but not earlier than 12 months, prior to the date for commencement of the Further Term gives the Lessor a Notice to grant the Further Term and:

(a) all consents and approvals required by the terms of this Lease or at law have been obtained; and

(b) there is no subsisting default by the Lessee at the date of service of the Notice in:

(i) the payment of Amounts Payable; or

(ii) the performance or observance of the Lessee's Covenants,

the Lessor shall grant to the Lessee a lease for the Further Term at the Rent and on terms and conditions similar to this Lease other than this **clause 19** in respect of any Further Term previously taken or the subject of the present exercise and on such other terms and conditions as the Lessor may consider appropriate.

20. Holding over

If the Lessee remains in possession of the Premises after the expiry of the Term with the consent of the Lessor, the Lessee will be a monthly Lessee of the Lessor at a rent equivalent to one hundred and twenty percent of the Rent for the period immediately preceding expiry of the Term and otherwise on the same terms and conditions of this Lease provided that all consents required under this Lease or at law have been obtained to the Lessee being in possession of the Premises as a monthly Lessee.

21. Restore premises

Prior to Termination, the Lessee at the Lessee's expense must restore the Premises to a condition consistent with the observance and performance by the Lessee of the Lessee's Covenants under this Lease fair wear and tear excepted.

22. Yield up the premises

22.1 Peacefully surrender

On Termination the Lessee must:

(a) peacefully surrender and yield up to the Lessor the Premises in a condition consistent with the observance and performance of the Lessee's Covenants under this Lease;

(b) surrender to the Lessor all keys and security access devices and combination for locks providing an access to or within the Premises held by the Lessee whether or not provided by the Lessor.

22.2 Clause 22.1 to survive termination

The Lessee's obligation under **clause 22.1** will survive termination.

23. Removal of property from Premises

23.1 Remove property prior to termination

Prior to Termination, unless otherwise mutually agreed between the parties, the Lessee must remove from the Premises all property of the Lessee which is not a fixture other than air-conditioning plant and fire equipment, security alarms and security systems and other fixtures and fittings which in the opinion of the Lessor form an integral part of the Premises and promptly make good, to the satisfaction of the Lessor, any damage caused by the removal.

23.2 Lessor can remove property on re-entry

On re-entry the Lessor will have the right to remove from the Premises any property of the Lessee and the Lessee indemnifies the Lessor against all damage caused by the removal of and the cost of storing that property.

24. Assignment, Subletting and Charging

24.1 No assignment or sub-letting without consent

The Lessee must not assign the leasehold estate in the Premises nor Sub-let, part with possession, or dispose of the Premises or any part of the Premises without the prior written consent of the Lessor and any other persons whose consent is required under the terms of this Lease or at law.

24.2 Lessor's Consent to Assignment and Sub-letting

Provided all parties whose consent is required, under this Lease or at law, to an assignment or Sub-letting, give their consent and any assignment or sublease is for a purpose consistent with the use of the Premises permitted by this Lease then the Lessor may not unreasonably withhold its consent to the assignment or Sub-letting of the leasehold estate created by this Lease if:

(a) the proposed assignee or sublessee is a respectable and responsible person of good financial standing capable of continuing the permitted use for non-profit making community purposes;

(b) all Amounts Payable due and payable have been paid and there is no existing unremedied breach, whether notified to the Lessee or not, of any of the Lessee's Covenants;

(c) the Lessee procures the execution by:

(i) the proposed assignee of a deed of assignment; or

(ii) the proposed sublessee of a deed of sublease,

to which the Lessor is a party and which deed is prepared and completed by the Lessor's solicitors; and

(d) the assignment contains a covenant by the assignee or sublessee with the Lessor to pay all Amounts Payable and to perform and observe all the Lessee's Covenants.

24.3 Consents of Assignee Supplementary

The covenants and agreements on the part of any assignee will be supplementary to the Lessee's Covenants and will not release the assigning lessee from the Lessee's Covenants.

24.4 Property Law Act 1969

Sections 80 and 82 of the *Property Law Act 1969* are excluded.

24.5 Costs for assignment and sub-letting

If the Lessee wishes to assign or sub-let the leasehold estate created by this Lease the Lessee must pay all reasonable professional and other costs, charges and expenses, incurred by the Lessor or other person whose consent is required under this Lease, of and incidental to:

(a) the enquiries made by or on behalf of the Lessor as to the respectability, responsibility and financial standing of each proposed assignee or sublessee;

(b) any consents required under this Lease or at law; and

(c) all other matters relating to the proposed assignment or sub-letting,

whether or not the assignment or Sub-letting proceeds.

24.6 No mortgage or charge

The Lessee must not mortgage nor charge the Premises.

25. Disputes

25.1 Referral of Dispute: Phase 1

Except as otherwise provided any dispute arising out of this Lease is to be referred in the first instance in writing to the Lessor's Representative as nominated in writing by the Lessor from time to time (**the Lessor's Representative**) who shall convene a meeting within 10 days of receipt of such notice from the Lessee or such other period of time as is agreed to by the parties between the Lessor's Representative and an officer of the Lessee for the purpose of resolving the dispute (**the Original Meeting**).

25.2 Referral of Dispute: Phase 2

In the event the dispute is not resolved in accordance with **clause 25.1** of this Lease then the dispute shall be referred in writing to the CEO of the Lessor who shall convene a meeting within 10 days of the Original Meeting or such other date as is agreed to by the parties between the CEO and the Lessee for the purpose of resolving the dispute.

25.3 Appointment of Arbitrator: Phase 3

In the event the dispute is not resolved in accordance with **clause 25.2** of this Lease then the dispute shall be determined by a single arbitrator under the provisions of the *Commercial Arbitration Act 2012* (as amended from time to time) and the Lessor and the Lessee may each be represented by a legal practitioner.

25.4 Payment of Amounts Payable to Date of Award

The Lessee must pay the Amounts Payable without deduction to the date of the award of the Arbitrator or the date of an agreement between the Parties whichever event is the earlier, and if any money paid by the Lessee is not required to be paid within the terms of the award of the Arbitrator or by agreement between the Lessor and the Lessee then the Lessor will refund to the Lessee the monies paid

26. Prior notice of proposal to change rules

If applicable, the Lessee agrees that it will not change its rules of association under the *Associations Incorporation Act 2015* without notifying the Lessor of its intention to make such a change prior to consideration of the required special resolution.

27. Provision of information

The Lessee agrees to provide to the Lessor:

(a) a copy of the Lessee's audited annual statement of accounts for each year;

(b) advice of any changes in its office holders during the Term; and

(c) any information reasonably required by the Lessor.

28. Caveat

28.1 No absolute caveat

The Lessee nor any person on behalf of the Lessee will, without the prior written consent of the Lessor, lodge any absolute caveat at Landgate against the Certificate of Title for the Land, to protect the interests of the Lessee under this Lease.

28.2 CEO & Lessor as attorney

In consideration of the Lessor having granted this Lease to the Lessee, the Lessee irrevocably appoints the Lessor and the CEO of the Lessor jointly and severally:

(a) for the Term of this Lease;

(b) for any holding over under this Lease; and

(c) for a period of 6 months after Termination,

to be the agent and attorney of the Lessee in its name and on its behalf to sign and lodge at Landgate:

(d) a withdrawal of any absolute caveat lodged by or on behalf of the Lessee;

(e) a withdrawal of any caveat lodged by or on behalf of the Lessee and not withdrawn on Termination; and

(f) a surrender of the estate granted by this Lease,

and the costs of withdrawing any caveat or surrendering this Lease (including the Lessor's solicitor's costs and registration fees) will be borne by the Lessee.

28.3 Ratification

The Lessee undertakes to ratify all the acts performed by or caused to be performed by the Lessor, its agent or attorney under this clause.

28.4 Indemnity

The Lessee indemnifies the Lessor against:

(a) any loss arising directly from any act done under this clause. and

(b) all costs and expenses incurred in connection with the performance of any act by the attorney on behalf of the Lessee under this clause.

29. Goods and Services Tax

29.1 Definitions

The following definitions apply for the purpose of this clause:

(a) **Act** means the Commonwealth's *A New Tax System (Goods and Services Tax) Act 1999* and associated Acts and subsidiary legislation;

(b) **Consideration** means the Amounts Payable or any other money payable to the Lessor under this Lease, but does not include the amount of the GST which may apply to the Amounts Payable or other money payable under the Act;

(c) **GST** means a tax under the Act levied on a Supply including but not limited to the Amounts Payable or other money payable to the Lessor for goods or services or property or any other thing under this Lease; and

(d) **Supply** means a good or service or any other thing supplied by the Lessor under this Lease and includes but is not limited to a grant of a right to possession of the Premises.

29.2 Lessee to pay GST

The Consideration will be increased by the amount of the GST, if any, which the Lessor is required under the Act to pay on any Supply made under this Lease.

The Lessee must pay any increase referred to at **clause 29.2** whether it is the Lessee or any other person who takes the benefit of any Supply.

The Lessee must pay the amount of the GST to the Lessor at the same time and in the same manner as the Lessee is required to pay the Consideration under this Lease.

29.3 Consideration in Kind

If consideration in kind is accepted by the Lessor for any Supply made under this Lease, the GST amount payable to the Lessor under **clause 29.2** in respect of the consideration in kind will be calculated by using the prevailing market value of the consideration in kind as determined by the Lessor.

29.4 No Contribution from Lessor

If the Lessee is required under this Lease to make any payment of money or give other consideration to a third party for outgoings, goods, services and benefits of any kind, the Lessee is not entitled to any contribution from the Lessor for any GST payable by it to any person.

29.5 Statement of GST paid is Conclusive

A written statement given to the Lessee by the Lessor of the amount of the GST that the Lessor pays or is liable to pay or account for is conclusive as between the Parties except in the case of an obvious error.

29.6 Tax Invoices

For each payment by the Lessee under this clause the Lessor agrees to promptly deliver to the Lessee, as required under the Act, tax invoices and adjustment notes in a form which complies with the Act, so as to enable the Lessee to claim input tax credits or decreasing adjustments for Supplies.

29.7 Reciprocity

If the Lessee furnishes any Supplies to the Lessor under this Lease, then the requirements set out in this clause with respect to the Lessee will apply to the Lessor with the necessary changes.

30. No Fetter

Notwithstanding any other provision of this Lease, the Parties acknowledge that the Lessor is a local government established by the *Local Government Act 1995,* and in that capacity, the Lessor may be obliged to determine applications for consents, approvals, authorities, licences and permits having regard to any Written Law governing such applications including matters required to be taken into consideration and formal processes to be undertaken, and the Lessor shall not be taken to be in default under this Lease by performing its statutory obligations or exercising its statutory discretions, nor shall any provision of this Lease fetter the Lessor in performing its statutory obligations or exercising any discretion.

31. Additional Terms Covenants and Conditions

Each of the terms, covenants and conditions (if any) specified in **Schedule 1Item 12** of the Schedule are part of this Lease and are binding on the Lessor and the Lessee as if incorporated into the body of this Lease.

32. Commercial Tenancy Act

If at any time and for so long as the *Commercial Tenancy (Retail Shops) Agreements Act 1985* applies to this Lease and a provision of that Act conflicts with a provision of this Lease, then each conflicting provision of this Lease is deemed to be amended to the extent necessary to comply with that Act.

33. Acts by agents

All acts and things which the Lessor is required to do under this Lease may be done by the Lessor, the CEO, an officer or the agent, solicitor, contractor or employee of the Lessor.

34. Governing law

This Lease is governed by and is to be interpreted in accordance with the laws of Western Australia and, where applicable, the laws of the Commonwealth of Australia.

35. Statutory powers

The powers conferred on the Lessor by or under any statutes for the time being in force are, except to the extent that they are inconsistent with the terms and provisions expressed in this Lease, in addition to the powers conferred on the Lessor in this Lease.

36. Notice

36.1 Form of delivery

A notice, consent, approval or other communication (each a Notice) under this Lease must be in writing and may be given or made:

(a) by delivery to the Party personally;

(b) by addressing it to the Party and leaving it at or posting it by registered post to the address of the Party appearing in this Lease or any other address nominated by a Party by Notice to the other; or

(c) by electronic mail to the Party's email address as appearing in this Lease or any other address nominated by a Party by Notice to the other.

36.2 Service of notice

A Notice to a Party is deemed to be given or made:

(a) if by personal delivery, when delivered;

(b) if by leaving the Notice at an address specified in **Item 11** at the time of leaving the Notice, provided the Notice is left during normal business hours;

(c) if by post to an address specified in **Item 11**, on the second business day following the date of posting of the Notice; and

(d) if sent by electronic mail and the send does not received a message from its internet service provider or the recipient's mail server indicating that is has not be successfully transmitted, on the day of sending if a Business Day, otherwise on the next Business Day.

36.3 Signing of notice

A Notice to a Party may be signed:

(a) if given by an individual, by the person giving the Notice;

(b) if given by a corporation, by a director, secretary or manager of that corporation;

(c) if given by a local government, by the CEO;

(d) if given by an association incorporated under the *Associations Incorporation Act 2015*, by any person authorised to do so by the board or committee of management of the association; or

(e) by a solicitor or other agent of the individual, corporation, local government or association giving the Notice.

37. Severance

If any part of this Lease is or becomes void or unenforceable, that part is or will be severed from this Lease to the intent that all parts that are not or do not become void or unenforceable remain in full force and effect and are unaffected by that severance.

38. Variation

This Lease may be varied only by deed executed by the parties subject to such consents as are required by this Lease or at law.

39. Moratorium

The provisions of a statute which would but for this clause extend or postpone the date of payment of money, reduce the rate of interest or abrogate, nullify, postpone or otherwise affect the terms of this Lease do not, to the fullest extent permitted by law, apply to limit the terms of this Lease.

40. Further assurance

The Parties must execute and do all acts and things necessary or desirable to implement and give full effect to the terms of this Lease.

41. Payment of money

Any Amounts Payable to the Lessor under this Lease must be paid to the Lessor at the address of the Lessor referred to in the Lease or as otherwise directed by the Lessor by Notice from time to time.

42. Waiver

42.1 No general waiver

Failure to exercise or delay in exercising any right, power or privilege in this Lease by a Party does not operate as a waiver of that right, power or privilege.

42.2 Partial exercise of right power or privilege

A single or partial exercise of any right, power or privilege does not preclude any other or further exercise of that right, power or privilege or the exercise of any other right, power or privilege.

Schedule

Item 1 Land and Premises

(a) Land

Lot 23 on Strata Plan 23790 being the whole of the land comprised in Certificate of Title Volume 1980 Folio 834.

(b) Premises

The whole of the Land together with all buildings, structures, alterations, additions and improvements on the Land or erected on the Land during the Term.

Item 2 Term

3 years commencing on 12 December 2019 and expiring on 11 December 2022.

Item 3 Further Term

3 years commencing on 12 December 2022 and expiring on 11 December date 2024.

Item 4 Commencement Date

12 December 2019.

Item 5 Rent

$35,000 per annum plus GST payable in advance by equal monthly instalments of $2,916.67. The Lessee is entitled to a Rent Free Period for the first three months under **Item 12.1** of this Schedule.

Item 6 Rent Review

Manner in which Rent is to be reviewed:

Rent Review Date	**Manner of Review**
12 December 2020	CPI Review
12 December 2021	CPI Review

If the Lease is extended for the Further Term

Rent Review Date	**Manner of Review**
12 December 2022	2.5% fixed increase
12 December 2023	CPI Review
12 December 2024	CPI Review

Item 7 Outgoings Contribution

From the Commencement Date until the 1st Outgoings Review Date, the Outgoings Contributions are $14,092.36 per annum plus GST payable in advance by equal monthly instalments of $1,174.36 with the first payment due on the Commencement Date.

Item 8 Permitted purpose

Retail purposes to support animal welfare causes and uses reasonably ancillary thereto.

Item 9 Public liability insurance

Twenty million dollars ($20,000,000.00).

Item 10 Repainting Dates

On or before the end of the Term, unless otherwise advised by the Lessor in writing.

Item 11 Notice Details

Lessor
The City of Kwinana (ABN 13 890 277 321)
Address: PO Box 21 Kwinana WA 6966
Email: city.legal@kwinana.wa.gov.au

Lessee
Armadale Community Animal Rescue Group Inc.
Address: 251 Railway Avenue, Armadale, Western Australia 6112
Email: acarg@iinet.net.au

Item 12 Additional terms and covenants

12.1 Rent Free Period

Notwithstanding anything to the contrary herein contained or implied the Lessee the Lessee shall not be obliged to pay Rent for the initial first three months of the initial Term of this Lease (being from 12 December 2019 – 11 March 2020). Nothing herein contained or implied relieves the Lessee from its obligation to pay Outgoings or other moneys (save and except for Rent) in respect of such period. If the initial Term is extended or renewed, this **Item 12.1** shall not apply to any lease for the extended or renewed period.

12.2 Licence to Use Car Parking Bays

The Lessor grants to the Lessee a licence to use 2 car parking bays of the car park on the Land as from time to time are nominated by the Lessor (and initially the 2 car parking bays directly in front of the shop door opening of the Premises (**Car Parking Space**) together with the right for the Lessee and its duly authorised employees and visitors in common with all others authorised by the Lessor and in exercise of the licence in this clause, to enter and leave the car park by its entrances and exits and subject to the following terms conditions and restrictions:

(i) this Licence shall commence on the Commencement Date and shall be co-terminus with the Term to the intent that:

(a) if the Lessee extends the Term, this Licence automatically shall be extended for the same period; and

(b) upon the expiration or sooner determination of the Term, this Licence forthwith shall determine without the need for any notice or other action by the Lessor or the Lessee.

(ii) The Lessee agrees with the Lessor that:

(a) the Lessee shall use the Car Parking Space for the purpose only of parking of motor vehicles owned or used by the Lessee or the Lessee's employees and visitors;

(b) the Lessee shall not use or permit to be used the Car Parking Space for any purpose other than for the parking of motor vehicles and shall comply with and cause to be complied with the provisions of all Statutes for the time being in force affecting the same and all by-laws and regulations thereunder;

(c) the Lessee shall not store or keep on or permit to be stored or kept on the Car Parking Space or in any motor vehicle thereon any petrol or other inflammable fuel except that which is contained in petrol or other fuel feed tanks or lines forming a permanent part of a motor vehicle and shall not knowingly permit the spillage or leakage of oil grease or petrol onto any part of the Car Parking Space or the Land from any motor vehicle owned or used by the Lessee or any of the Lessee's employees and visitors;

(d) the Lessee shall not leave or permit to be left at any time any motor vehicle upon the Car Parking Space with its engine running;

(e) unless otherwise agreed in writing by the Lessor, the Lessee shall ensure that no motor vehicle parked in the Car Parking Space remains for a continuous period longer than 20 hours and the Lessee shall ensure that any motor vehicle parked on the Car Parking Space for longer than 20 hours shall be removed promptly;

(f) the Lessee shall keep and maintain the Car Parking Space free of rubbish and debris and in a clean tidy and hygienic condition;

(g) the licence hereby granted is personal to the Lessee and the Lessee shall not assign or attempt to assign its benefit or any part of it except with the prior written consent of the Lessor if the Lease is assigned or sub-let;

(h) the Lessee shall indemnify the Lessor from and against all actions claims demands suits losses costs and expenses whatsoever and by whomsoever made or occasioned by or as a result of:

(A) any damage from any cause that any motor vehicle owned or used by the Lessee or by any of the Lessee's employees and visitors or any other person lawfully authorised by the Lessee in that behalf may at any time sustain while upon the Car Parking Space or the Land;

(B) any loss resulting from the theft of any motor vehicle (or any of its parts, equipment or contents) owned or used by the Lessee or any of the Lessee's employees and visitors or any other person lawfully authorised by the Lessee in that behalf while upon the Car Parking Space or the Land;

(C) any injuries which the Lessee or any of the Lessee's employees and visitors or any other person lawfully authorised by the Lessee in that behalf may at any time sustain whilst in about or upon the Car Parking Space or the Land.

(i) The grant of this Licence shall not in any way create in favour of the Lessee any tenancy or any rights in the nature of a tenancy or any rights to the exclusive occupation of the Car Parking Space or any part of the Land, and

the Lessee's rights are limited to a height of 3 metres above the surface of the Car Parking Space.

(j) Notwithstanding anything to the contrary in this licence, in the event of default by the Lessee in the observance or compliance with any of the obligations imposed on the Lessee in this licence the Lessor may immediately determine this Licence by notice in writing to the Lessee and this licence shall determine upon service of such notice on the Lessee.

12.3 Liquor licence

The Lessee agrees that if a licence or permit is granted under the *Liquor Control Act 1988* for the Premises it must:

(i) comply with any requirements attaching to the licence or permit at its cost and where any alteration is required to the Premises **clause 13** shall apply;

(ii) comply with the requirements of the Harm Minimisation Policy (as amended from time to time) of the Department of Racing, Gaming & Liquor, which will require, without limitation the following:

(a) the development and implementation of a House Management Policy and Code of Conduct (as defined by the Harm Minimisation Policy) for the Premises, and such policies must be displayed in a prominent position on the Premises at all times; and

(b) the development and implementation of a Management Plan (as defined by the Harm Minimisation Policy) for the Premises.

(iii) provide a copy of the licence or permit (as well as a copy of any document referred to in the licence or permit, including without limitation a copy of the House Management Policy, Code of Conduct and Management Plan (as defined by the Harm Minimisation Policy) to the Lessor as soon as practicable after the date of grant; and

(iv) indemnify and keep indemnified the Lessor from and against any breach of the Liquor Control Act 1988, Liquor Control Regulations 1989 or the licence or permit or any conditions imposed thereupon for which it may be liable as the owner of the Premises.

12.4 Minimise nuisance to neighbours

(i) The Lessee must take all reasonable action to minimise and prevent disruption, nuisance and disturbance to surrounding residential premises, particularly during and following social events held at the Premises.

(ii) The Lessee must comply with all reasonable conditions and directions that may be imposed by the Lessor from time to time in relation to the minimisation and prevention of disruption, nuisance and disturbance to surrounding residential premises.

12.5 Right to terminate upon notice

Notwithstanding any other provision of this Lease, the Parties agree that either party may terminate this Lease for any reason upon six months written notice to the other party. If this Lease is terminated in accordance with this clause, **clause 21** and **22** will apply.

12.6 Use of Premises in Emergency

Notwithstanding any other provision in this Lease, in the event of a circumstance that calls for immediate emergency response, including flooding or a bushfire event, the Landlord may require the use of the whole or part of the Premises for that purpose and the Tenant agrees to surrender use of the whole or part of the Premises for that purpose. If such an emergency occurs and the Landlord enters into possession of the whole or part of the Premises, the Landlord agrees to suspend payment of the Rent and Outgoings Charges (or part thereof dependent on whether the Landlord requires use of the whole or only a part of the Premises) for the duration of the emergency.

12.7 Damage to Lessor's Fixtures

(i) The Lessee acknowledges and agrees that the Lessor's Fixtures do not include any software. All software must be supplied by the Lessee at the Lessee's cost.

(ii) The Lessee agrees to (at the Lessee's cost):

(a) maintain the Lessor's Fixtures in a good condition and where necessary, repair or replace any of the Lessor's Fixtures to the satisfaction of the Lessor, except in respect of fair wear and tear;

(b) return to the Lessor any of the Lessor's Fixtures which have been damaged and cannot be repaired; and

(c) provide the Lessor with written notice of any Lessor's Fixtures which are replaced by the Lessee at the Lessee's cost; and

(d) leave all Lessor's Fixtures which have not been replaced in the Leased Premises at the expiration of the Term (or the Further Term as the case may be).

(iii) For the avoidance of doubt, any Lessor's Fixture which has been replaced by the Lessee at the Lessee's cost will vest in the Lessor unless the Lessor or Lessee provides otherwise in writing to the Lessor.

Signing page

EXECUTED 2019

THE COMMON SEAL of **CITY OF KWINANA** is affixed in the presence of:

Mayor	(Print Full Name)
Chief Executive Officer	(Print Full Name)

THE COMMON SEAL of **ARMADALE COMMUNITY ANIMAL RESCUE GROUP INC** was hereunto affixed pursuant to the constitution of the Lessee in the presence of each of the undersigned each of whom hereby declares by the execution of this document that he or she holds the office in the Lessee indicated under his or her name:

Office Holder Sign	Office Holder Sign
Name:	Name:
Address:	Address:
Office Held:	Office Held:

18.5 Disposition by way of Lease, Suites 1 & 6 Parmelia House, Kwinana, Lease Agreements between the City of Kwinana and Nyoongar Wellbeing and Sports Aboriginal Corporation

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

The City of Kwinana (the City) is the owner of the land situated at Suite 1 & 6 Parmelia House, more particularly described as part of Lot 3 on Deposited Plan 34151 being part of the land comprised in Certificate of Title Volume 2615 Folio 984 (the Premises), being a total of 47.26sqm.

This report seeks Council to resolve that the Chief Executive Officer is authorised on behalf of the City to give disposition by way of lease, to negotiate, finalise and execute the lease of the Premises to the Nyoongar Wellbeing and Sports Aboriginal Corporation (ABN 51 051 399 025) (the Proposed Tenant). A plan of the offices that the Proposed Tenant will occupy, are at Attachment A.

The Proposed Tenant is a not-for-profit organisation, the objects of which are charitable, cultural, educational or of a similar nature. As such, the disposition of the Premises is not required to be advertised in accordance with section 3.58 of the *Local Government Act 1995*, as the lease to the Proposed Tenant is an exempt disposition under section 30 (2)(b)(i) of the *Local Government (Functions and General) Regulations 1996.*

However, the City advertised the Premises at:
www.kwinana.wa.gov.au/our-council/Pages/Properties-For-Lease

OFFICER RECOMMENDATION:

That Council authorise the Chief Executive Officer and Mayor to execute a lease agreement (as identified in Attachments B), and make modifications where the intent of the agreement does not change, in relation to Suites 1 and 6 Parmelia House, more particularly described as part of Lot 3 on Deposited Plan 34151 being part of the land comprised in Certificate of Title Volume 2615 Folio 984, to Nyoongar Wellbeing and Sports Aboriginal Corporation.

NOTE – AN ABSOLUTE MAJORITY OF COUNCIL IS REQUIRED

DISCUSSION:

Section 3.58(4)(c) of the *Local Government Act 1995 (Act)* requires the market value of a disposition to be ascertained by a valuation carried out not more than 6 months before the proposed disposition.

18.5 DISPOSITION BY WAY OF LEASE, SUITES 1 & 6 PARMELIA HOUSE, KWINANA, LEASE AGREEMENTS BETWEEN THE CITY OF KWINANA AND NYOONGAR WELLBEING AND SPORTS ABORIGINAL CORPORATION

McGees Property provided the City with a valuation report on 11 October 2019 (at Confidential Attachment B). The market rental value of the Premises to be leased by the Proposed Tenant is $7,500, excluding GST.

The City's Leasing of Community Facilities Policy (the Policy) provides for the circumstances in which an organisation is entitled to a discounted market rent. The assessment of eligibility to the discount of the market rental valuation, was determined in consultation with senior officers of the City Legal team and the Director of City Engagement by evaluating the services provided by the Non-Government Agencies in Kwinana against the criteria outlined within the Policy. Accordingly, the rent for the Premises is proposed to be $4,875 excluding GST per annum, and has been determined by applying a 35% discount to the valuation amount, as set out in the Policy.

The outgoings for the Premises are estimated to be $3,252.47 per annum. The proposed term of the lease agreement is for 3 years with the option to extend for a further 3 years, at which time a fixed rent increase of 2.5% will occur. It was determined that a fixed rent increase is more cost effective than the City conducting a market review of the rent at its cost, which would not necessarily guarantee a rent increase.

The Proposed Tenant has reviewed and agreed to the terms of the new leases (at Attachment C).

LEGAL/POLICY IMPLICATIONS:

Section 3.58 (3) and (4) of the *Local Government Act 1995 states:*

(3) A local government can dispose of property other than under subsection (2) if, before agreeing to dispose of the property —

(a) it gives local public notice of the proposed disposition —

(i) describing the property concerned; and

(ii) giving details of the proposed disposition; and

(iii) inviting submissions to be made to the local government before a date to be specified in the notice, being a date not less than 2 weeks after the notice is first given;

and

(b) it considers any submissions made to it before the date specified in the notice and, if its decision is made by the council or a committee, the decision and the reasons for it are recorded in the minutes of the meeting at which the decision was made.

(4) The details of a proposed disposition that are required by subsection (3)(a)(ii) include —

(a) the names of all other parties concerned; and

(b) the consideration to be received by the local government for the disposition; and

(c) the market value of the disposition —

(i) as ascertained by a valuation carried out not more than 6 months before the proposed disposition; or

18.5 DISPOSITION BY WAY OF LEASE, SUITES 1 & 6 PARMELIA HOUSE, KWINANA, LEASE AGREEMENTS BETWEEN THE CITY OF KWINANA AND NYOONGAR WELLBEING AND SPORTS ABORIGINAL CORPORATION

(ii) as declared by a resolution of the local government on the basis of a valuation carried out more than 6 months before the proposed disposition that the local government believes to be a true indication of the value at the time of the proposed disposition.

Section 30 of the *Local Government (Functions and General) Regulations 1996* states:

(1) A disposition that is described in this regulation as an exempt disposition is excluded from the application of section 3.58 of the Act.

(2) A disposition of land is an exempt disposition if —
- *(a) the land is disposed of to an owner of adjoining land (in this paragraph called the transferee) and —*
  - *(i) its market value is less than $5 000; and*
  - *(ii) the local government does not consider that ownership of the land would be of significant benefit to anyone other than the transferee; or*
- *(b) the land is disposed of to a body, whether incorporated or not —*
  - *(i) the objects of which are of a charitable, benevolent, religious, cultural, educational, recreational, sporting or other like nature; and (ii) the members of which are not entitled or permitted to receive any pecuniary profit from the body's transactions; or*
- *(c) the land is disposed of to —*
  - *(i) the Crown in right of the State or the Commonwealth; or*
  - *(ii) a department, agency, or instrumentality of the Crown in right of the State or the Commonwealth; or*
  - *(iii) another local government or a regional local government; or*
- *(d) it is the leasing of land to an employee of the local government for use as the employee's residence; or*
- *(e) it is the leasing of land for a period of less than 2 years during all or any of which time the lease does not give the lessee the exclusive use of the land; or*
- *(f) it is the leasing of land to a person registered under the Health Practitioner Regulation National Law (Western Australia) in the medical profession to be used for carrying on his or her medical practice; or*
- *(g) it is the leasing of residential property to a person.*

(2a) A disposition of property is an exempt disposition if the property is disposed of within 6 months after it has been —
- *(a) put out to the highest bidder at public auction, in accordance with section 3.58(2)(a) of the Act, but either no bid is made or any bid made does not reach a reserve price fixed by the local government; or*
- *(b) the subject of a public tender process called by the local government, in accordance with section 3.58(2)(b) of the Act, but either no tender is received or any tender received is unacceptable; or*
- *(c) the subject of Statewide public notice under section 3.59(4) of the Act, and if the business plan referred to in that notice described the property concerned and gave details of the proposed disposition including —*
  - *(i) the names of all other parties concerned; and*
  - *(ii) the consideration to be received by the local government for the disposition; and*
  - *(iii) the market value of the disposition as ascertained by a valuation carried out not more than 12 months before the proposed disposition.*

18.5 DISPOSITION BY WAY OF LEASE, SUITES 1 & 6 PARMELIA HOUSE, KWINANA, LEASE AGREEMENTS BETWEEN THE CITY OF KWINANA AND NYOONGAR WELLBEING AND SPORTS ABORIGINAL CORPORATION

(2b) Details (see section 3.58(4) of the Act) of a disposition of property under subregulation (2a) must be made available for public inspection for at least 12 months from the initial auction or tender, as the case requires.

(3) A disposition of property other than land is an exempt disposition if —
(a) its market value is less than $20 000; or
(b) the entire consideration received by the local government for the disposition is used to purchase other property, and where the total consideration for the other property is not more, or worth more, than $75 000.

FINANCIAL/BUDGET IMPLICATIONS:

This lease will provide an annual income of $4,875 plus GST. The total income before the discount would be $7,500 plus GST. In addition there will be CPI increases to the annual rent.

ASSET MANAGEMENT IMPLICATIONS:

The implications for this report are the ongoing management and administration required by all of the City's leases of property.

ENVIRONMENTAL IMPLICATIONS:

No environmental implications have been identified as a result of this report or recommendation.

STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective as detailed in the Corporate Business Plan.

Plan	Outcome	Objective
Corporate Business Plan	Business performance	5.6 Maximise the value of the City's property assets

COMMUNITY ENGAGEMENT:

As a result of leasing the Premises to the Proposed Tenant, there will be various and continued positive community engagement implications.

PUBLIC HEALTH IMPLICATIONS

The Proposed Tenant provides sporting, health education and wellbeing services to the community. As a result of leasing the Premises to the Proposed Tenant, there will be various and continued positive public health implications as a result of this report.

18.5 DISPOSITION BY WAY OF LEASE, SUITES 1 & 6 PARMELIA HOUSE, KWINANA, LEASE AGREEMENTS BETWEEN THE CITY OF KWINANA AND NYOONGAR WELLBEING AND SPORTS ABORIGINAL CORPORATION

RISK IMPLICATIONS:

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

Risk Event	That Council does not support disposition by way of lease of the office spaces in Suites 1 and 6 Parmelia House, more particularly described as part of Lot 3 on Deposited Plan 34151 being part of the land comprised in Certificate of Title Volume 2615 Folio 984, to Nyoongar Wellbeing and Sports Aboriginal Corporation. If Council resolve not to support disposition by way of lease, as per Section 3.58 of the *Local Government Act 1995*, the disposition cannot proceed.
Risk Theme	Ineffective management of facilities/venues/events and failure to fulfil statutory regulation requirements
Risk Effect/Impact	Financial
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Unlikely
Rating (before treatment)	Low
Risk Treatment in place	Avoid
Response to risk treatment required/in place	This report is to authorise the Chief Executive Officer on behalf of the City of Kwinana to give disposition by way of lease, Suites 1 and 6 Parmelia House, more particularly described as part of Lot 3 on Deposited Plan 34151 being part of the land comprised in Certificate of Title Volume 2615 Folio 984, to Nyoongar Wellbeing and Sports Aboriginal Corporation.
Rating (after treatment)	Low

COUNCIL DECISION

044

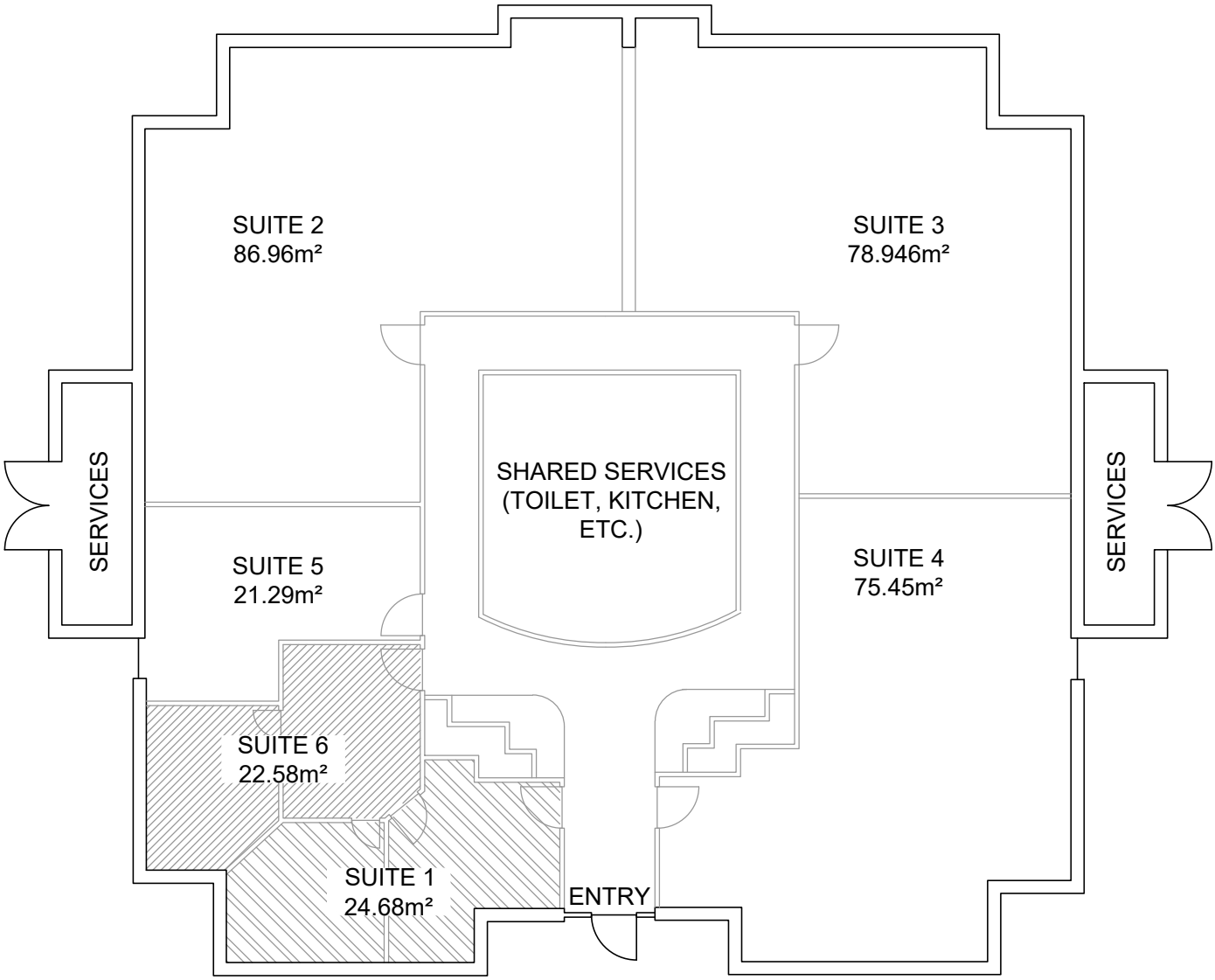
MOVED CR S LEE **SECONDED CR W COOPER**

That Council authorise the Chief Executive Officer and Mayor to execute a lease agreement (as identified in Attachments B), and make modifications where the intent of the agreement does not change, in relation to Suites 1 and 6 Parmelia House, more particularly described as part of Lot 3 on Deposited Plan 34151 being part of the land comprised in Certificate of Title Volume 2615 Folio 984, to Nyoongar Wellbeing and Sports Aboriginal Corporation.

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL
7/0

ATTACHMENT A

PARMELIA HOUSE



ATTACHMENT C

Lease

Part Lot 3, 10 Hutchins Way, Suites 1 & 6, Parmelia House Kwinana

City of Kwinana (ABN 13 890 277 321)

Nyoongar Wellbeing and Sports Aboriginal Corporation (ABN 51 051 399 025)

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Details

Parties

City of Kwinana

of PO Box 21, Kwinana, Western Australia 6966
(**Lessor**)

Nyoongar Wellbeing and Sports Aboriginal Corporation

of 23-25 Moore Street, East Perth Western Australia 6004
(**Lessee)**

Background

A The Lessor is registered as the proprietor of the Land.

B The Lessor has agreed to lease and the Lessee has agreed to take a lease of the Premises upon the terms and conditions contained in this Deed.

Agreed terms

1. Definitions

In this Lease, unless otherwise required by the context or subject matter:

Amounts Payable means the Rent and any other money payable by the Lessee under this Lease;

Authorised Person means:

(a) an agent, employee, licensee or invitee of the Lessor; and

(b) any person visiting the Premises with the express or implied consent of any person mentioned in paragraph (a);

Authority includes any governmental or public authority of any kind;

Building means the building in which the Premises are situated and includes any modifications, extensions or alterations to the Building and the Lessor's Property;

CEO means the Chief Executive Officer for the time being of the Lessor or any person appointed, authorised or delegated by the Chief Executive Officer to perform any of her or his functions;

Commencement Date means the date of commencement of the Term specified in **Item 4** of the Schedule;

Common Areas means those parts of the Land and Building that are set aside or designated for the use of the occupiers of the Building or members of the public generally in common with each other and the Lessor;

CPI means the Consumer Price Index (All Groups) Perth number published from time to time by the Australian Bureau of Statistics;

Encumbrance means a mortgage, charge, lien, pledge, easement, restrictive covenant, writ, warrant or caveat and the claim stated in the caveat;

Further Term means each further term specified in **Item 3** of the Schedule;

Good Repair means good and substantial Lesseeable repair and in clean, good working order and condition;

Interest Rate means the rate at the time the payment falls due being 2% greater than the Lessor's general overdraft rate on borrowings from its bankers on amounts not exceeding $100,000.00;

Land means the land described at **Item 1(a)** of the Schedule;

Lease means this deed as supplemented, amended or varied from time to time;

Lessee's Agents includes:

(i) the sublessees, employees, agents, contractors, invitees and licensees of the Lessee; and

(ii) any person on the Premises by the authority of a person specified in paragraph (a);

Lessee's Covenants means the covenants, agreements and obligations set out or implied in this Lease or imposed by law to be performed and observed by any person other than the Lessor;

Lessee's Employees means each of the Lessee's employees, contractors and agents and those persons over whom the Lessee exercises control at the Premises and includes the employees and sub-contractors of the Lessee's agents and contractors;

Lessor includes:

(a) in the case of a person, that person's executors, administrators and assigns; and

(b) in any other case, the Lessor's successors and assigns;

Lessor's Property means the plant, equipment, fixtures, fittings and any other Lessor's property in the Premises;

Lessor's Covenants means the covenants, agreements and obligations set out or implied in this Lease, or imposed by law to be observed and performed by the Lessor;

Notice means each notice, demand, consent or authority given or made to any person under this Lease;

Outgoings has the meaning set out in **clause 5.2** in this Lease;

Outgoings Contribution means the contribution set out in **Item 7** of the Schedule;

Party means the Lessor or the Lessee according to the context;

Premises means the premises described at **Item 1(b)** of the Schedule;

Rent means the rent specified in **Item 5** of the Schedule;

Schedule means the Schedule to this Lease;

Services means all gas, electricity, telephone, water, sewerage, fire prevention, ventilation, air conditioning, hydraulic, elevator and security services and all other services or systems provided in the Building or available for the Lessee's use whether provided by the Lessor or any Authority;

Term means the term of years specified in **Item 2** of the Schedule and any Further Term;

Termination means expiry by effluxion of time or sooner determination of the Term or any period of holding over;

2. Interpretation

In this Lease, unless expressed to the contrary:

(a) words importing:

  (i) the singular includes the plural and vice versa; and

  (ii) a gender or genders include each other gender;

(b) if a word or phrase is assigned a particular meaning, other grammatical forms of that word or phrase have a corresponding meaning;

(c) a reference to:

(i) a natural person includes a body corporate or local government;

(ii) a body corporate or local government includes a natural person;

(iii) a professional body includes a successor to or substitute for that body;

(iv) a Party includes its legal personal representatives, successors and assigns and if a Party comprises two or more persons, the legal personal representatives, successors and assigns of each of those persons;

(v) a statute, includes an ordinance, code, regulation, award, town planning scheme, regulation, local law, by-law, requisition, order or other statutory instruments made under any of them and a reference to any of them, whether or not by name, includes any amendments to, re-enactments of or replacements of any of them from time to time in force;

(vi) a right includes a benefit, remedy, discretion, authority or power;

(vii) an obligation includes a warranty or representation and a reference to a failure to observe or perform an obligation includes a breach of warranty or representation;

(viii) this Lease or provisions of this Lease or any other deed, agreement, instrument or contract includes a reference to:

(ix) both express and implied provisions; and

(x) that other deed, agreement, instrument or contract as varied, supplemented, replaced or amended;

(xi) writing includes any mode of representing or reproducing words in tangible and permanently visible form and includes facsimile transmissions;

(xii) any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them; and

(xiii) a subparagraph, paragraph, subclause, clause, Item, Schedule or Annexure is a reference to, respectively, a subparagraph, paragraph, subclause, clause, Item, Schedule or Annexure of this Lease;

(d) the covenants and obligations on the part of the Lessee not to do or omit to do any act or thing include:

(i) covenants not to permit that act or thing to be done or omitted to be done by a Lessee's Agent; and

(ii) a covenant to take all reasonable steps to ensure that that act or thing is not done or omitted to be done;

(e) the meaning of general words or phrases is not limited by specific examples introduced by 'including', 'for example' or similar expressions; and

(f) if a Party comprises two or more persons, the covenants and agreements on their part bind them and must be observed and performed by them jointly and each of them severally, and may be enforced against any one or more of them.

3. Grant of lease

The Lessor leases to the Lessee the Premises for the Term subject to:

(a) all Encumbrances;

(b) the payment of the Amounts Payable; and

(c) the performance and observance of the Lessee's Covenants.

4. Quiet enjoyment

Except as provided in the Lease, for so long as the Lessor is registered as the proprietor in fee simple in the Land, and subject to the performance and observance of the Lessee's Covenants the Lessee may quietly hold and enjoy the Premises during the Term without any interruption or disturbance from the Lessor or persons lawfully claiming through or under the Lessor.

5. Rent and other payments

The Lessee covenants with the Lessor:

5.1 Rent

To pay to the Lessor the Rent in the manner set out at **Item 5** of the Schedule on and from the Commencement Date clear of any deductions.

5.2 Outgoings

(1) To pay to the Lessor or to such person as the Lessor may from time to time direct punctually all the following outgoings or charges, assessed or incurred in respect of the Premises:

(a) local government rates, specified area rates, taxes, service and other charges and including charges for rubbish and garbage removal;

(b) water, drainage and sewerage rates, charges for disposal of stormwater, meter rent and excess water charges;

(c) telephone, electricity, gas and other power and light charges including but not limited to meter rents and the cost of installation of any meter, wiring, internet connections or telephone connection;

(d) land tax and metropolitan regional improvement tax on a single ownership basis;

(e) premiums, excess and other costs arising from the insurance obtained by the Lessor pursuant to **clause 8.2**. For the avoidance of doubt, the parties agree:

(i) that if such premium or cost does not include a separate assessment or identification of the Premises or the Land, the Lessee must pay a proportionate part of such premium or cost determined by the Lessor acting reasonably; and

(ii) such insurance will include insurance for the full replacement value of buildings; and

(iii) any other consumption charge or cost, statutory impost or other obligation incurred or payable by reason of the Lessee's use and occupation of the Premises.

(2) If the Premises are not separately charged or assessed the Lessee will pay to the Lessor a proportionate part of any charges or assessments referred to in **clause 5.2(1)** being the proportion that the Premises bears to the total area of the land or premises included in the charge or assessment.

5.3 Interest

Without affecting the rights, power and remedies of the Lessor under this Lease, to pay to the Lessor interest on demand on any Amounts Payable which are unpaid for 7 days computed from the due date for payment until payment is made and any interest payable under this paragraph will be charged at the Interest Rate.

5.4 Costs

(1) To pay to the Lessor on demand:

(a) all duty, fines and penalties payable under the *Duties Act* 2008 and other statutory duties or taxes payable on or in connection with this Lease;

(b) all registration fees in connection with this Lease; and

(c) all legal costs of and incidental to the instructions for the preparation, execution and stamping of this Lease and all copies.

(2) To pay to the Lessor all costs, legal fees, disbursements and payments incurred by or for which the Lessor is liable in connection with or incidental to:

(a) the Amounts Payable or obtaining or attempting to obtain payment of the Amounts Payable under this Lease;

(b) any breach of covenant by the Lessee or the Lessee's Agents;

(c) the preparation and service of a notice under Section 81 of the *Property Law Act 1969* requiring the Lessee to remedy a breach even though forfeiture for the breach may be avoided in a manner other than by relief granted by a Court;

(d) any work done at the Lessee's request; and

(e) any action or proceedings arising out of or incidental to any matters referred to in this **clause 5.4** or any matter arising out of this Lease.

5.5 Accrual of amounts payable

Amounts Payable accrue on a daily basis.

6. Rent Review

6.1 Rent to be Reviewed

The Rent will be reviewed on and from each Rent Review Date to determine the Rent to be paid by the Lessee until the next Rent Review Date.

6.2 Methods of Review

The review will be either based on CPI or a Fixed Percentage Review. The basis for each rent review is as identified for each Rent Review Date in **Item 6** of the Schedule.

6.3 CPI Review

A rent review based on CPI will increase the amount of Rent payable during the immediately preceding period by the percentage of any increase in CPI having regard to the quarterly CPI published immediately prior to the later of the Commencement Date or the last Rent Review Date as the case may be and the quarterly CPI published immediately prior to the relevant Rent Review Date. If there is a decrease in CPI having regard to the relevant CPI publications the Rent payable from the relevant Rent Review Date will be the same as the Rent payable during the immediately preceding period. Should the CPI be discontinued or suspended at any time or its method of computation substantially altered, the parties shall endeavour to agree upon the substitution of the CPI with an equivalent index, or failing agreement by the parties, the substitution shall be made by a Valuer appointed in accordance with **clause** Error! Reference source not found.**.**

6.4 Rent will not decrease

Notwithstanding the provisions in this clause, the Rent payable from any Rent Review based on CPI Review will not be less than the Rent payable in the period immediately preceding such Rent Review Date.

6.5 Lessor's right to review

The Lessor may institute a rent review notwithstanding the Rent Review Date has passed and the Lessor did not institute a rent review on or prior to that Rent Review Date, and in which case the Rent agreed or determined shall date back to and be payable from the Rent Review Date for which such review is made.

7. Outgoings and Services

7.1 Outgoings

(a) The Lessee must pay to the Lessor the Outgoings Contribution with the first payment due on the Commencement Date.

(b) With effect from each Rent Review Date, the Outgoings Contribution shall be reviewed in accordance with the following formula:

ROC = OC x EC / OC

Where:

"**ROC**" = the annual Outgoings Contribution as reviewed;

"**OC**" = the annual Outgoings Contribution payable immediately before the relevant Outgoings Review Date; and

"**EC**" = the estimated cost of the Outgoings for the year commencing on the relevant Outgoings Review Date.

(c) The Lessor may not earlier than three (3) months before an Outgoings Review Date give the Lessee a notice setting out the amount of the reviewed Outgoings Contribution which shall be payable from the Outgoings Review Date ("Outgoings Review Notice"), except that the failure of the Lessor to give such a notice before the Outgoings Review Date does not preclude the Lessor from giving such a notice in respect of that Outgoings Review Date at any later time.

7.2 Rates and Taxes

(a) The Lessee must pay to the Lessor , when due, all Rates and Taxes assessed or imposed by any Relevant Authority or other service provider in respect of the Leased Premises.

(b) Except in the case of manifest error, a statement issued by the Lessor under clause 7.2(a) will be prima facie evidence of the matters stated in that statement.

(c) If the year or other period in respect of which any particular Rates and Taxes is payable does not coincide with the Lease year, the amount the Lessee is to pay in the first year and last year of the Lease will be adjusted proportionally.

7.3 Services separately assessed

The Lessee must pay to the Lessor or, if demand is made by a service provider, or other Relevant Authority, to that Relevant Authority, all amounts separately charged or assessed in respect of the Leased Premises or the Lessee for or in connection with Services to or for the benefit of the Leased Premises or the Lessee, and the cost of installation of any meter, wiring or other device necessitated by the use of the Services.

7.4 Bulk supplies of Services

(a) If the Lessor supplies any Services to the Leased Premises the Lessee must on demand pay to the Lessor the amount which the Lessee would have been charged by the original service provider, or other Relevant Authority if the Services had been supplied to the Lessee directly together with an administrative charge of no more than twenty per cent (20%) of the amount charged by the original service provider, or other Relevant Authority.

(b) The Lessee must observe and comply with any conditions of supply of Services by the Lessor, or where no conditions of supply are imposed by the Lessor, observe and comply with the conditions of supply of Services imposed by the Relevant Authority.

(c) If any Service is not provided by the Lessor, the Lessee is responsible to make the Lessee's own arrangements at the Lessee’s own cost for the supply of the Service to the Leased Premises.

8. Insurance

8.1 Insurance required

The Lessee must effect and maintain with insurers approved by the Lessor (noting the Lessor’s and the Lessee’s respective rights and interest in the Premises) for the time being:

(a) adequate public liability insurance for a sum not less than the sum set out at **Item 8** of the Schedule in respect of any one claim or such greater amount as the Lessor may from time to time reasonably require;

(b) insurance against all risks as the Lessor may require, of all plate glass windows, doors and display show cases forming part of or within the Premises for a sum which is not less than its full insurable value;

(c) insurance to cover the Lessee’s fixtures, fittings, equipment and stock against loss or damage by fire, fusion, smoke, lightning, flood, storm, tempest, earthquake, sprinkler leakage, water damage and other usual risks against which a Lessee can and does ordinarily insure in their full replacement value, and loss from theft or burglary;

(d) employers' indemnity insurance including workers' compensation insurance in respect of all employees of the Lessee employed in, about or on the Premises; and

(e) any other policy of insurance which the Lessor may reasonably require or specify from time to time.

8.2 Building Insurance to be effected by Lessor

The Lessor shall effect and keep effected insurance to the full insurable value on a replacement or reinstatement value basis of the Premises against damage arising from fire, tempest, storm, earthquake, explosion, aircraft, or other aerial device including items dropped from any device, riot, commotion, flood, lightning, act of God, fusion, smoke, rainwater, leakage, impact by vehicle, machinery breakdown and malicious acts or omissions and other standard insurable risks and the Lessee will reimburse the Lessor for any premiums, excess or other costs arising therefrom.

8.3 Details and receipts

In respect of the insurances required by **clause 8.1** the Lessee must:

(a) on the Lessor's request, upon renewal of any insurance policy immediately forward to the Lessor copies of Certificates of Currency and details of the insurances as held by the Lessee;

(b) on the Lessor's request, promptly pay all premiums and produce to the Lessor each policy or certificate of currency and each receipt for premiums or certificate of currency issued by the insurers; and

(c) notify the Lessor immediately:

(i) when an event occurs which gives rise or might give rise to a claim under or which could prejudice a policy of insurance; or

(ii) when a policy of insurance is cancelled.

8.4 Payment of excess on insurance

The Lessee AGREES with the Lessor that it shall be responsible to pay any excess payable in connection with the insurances referred to in **clause 8.1** and **clause 8.2**.

8.5 Not to invalidate

The Lessee must not do or omit to do any act or thing or bring or keep anything on the Premises which might:

(a) render any insurance effected under **clause 8.1** and **clause 8.2** on the Premises, or any adjoining premises, void or voidable; or

(b) cause the rate of a premium to be increased for the Premises or any adjoining premises (except insofar as an approved development may lead to an increased premium).

8.6 Report

Each Party must report to the other promptly in writing and in an emergency verbally:

(a) any damage to the Premises of which they are or might be aware; and

(b) any circumstances of which they are aware and which are likely to be a danger or cause any damage or danger to the Premises or to any person in or on the Premises.

8.7 Settlement of claim

The Lessor may, but the Lessee may not without prior written consent of the Lessor, settle or compromise any claims under any policy of insurance required by **clause 8.1** and **clause 8.2**.

8.8 Lessor as attorney

The Lessee irrevocably appoints the Lessor as the Lessee's attorney during the Term:

(a) in respect to all matters and questions which may arise in relation to any insurances required by **clause 8.1** and **clause 8.2**;

(b) with full power to demand, sue for and recover and receive from any insurance company or society or person liable to pay the insurance money as are payable for the risks covered by the insurances required by **clause 8.1** and **clause 8.2**;

(c) to give good and effectual receipts and discharges for the insurance; and

(d) to settle, adjust, arbitrate and compromise all claims and demands and generally to exercise all powers of absolute owner.

9. Indemnity

9.1 Lessee responsibilities

(1) The Lessee is subject to the same responsibilities relating to persons and property to which the Lessee would be subject if during the Term the Lessee were the owner and occupier of the freehold of the Premises.

(2) The Lessee is responsible and liable for all acts or omissions of the Lessee's Agents on the Premises and for any breach by them of any covenants or terms in this Lease required to be performed or complied with by the Lessee.

9.2 Indemnity

(1) The Lessee indemnifies, and shall keep indemnified, the Lessor from and against all actions, claims, costs, proceedings, suits and demands whatsoever which may at any time be incurred or suffered by the Lessor, or brought, maintained or made against the Lessor, in respect of:

(a) any loss whatsoever (including loss of use);

(b) injury or damage of, or to, any kind of property or thing; and

(c) the death of, or injury suffered by, any person,

caused by, contributed to, or arising out of, or in connection with, whether directly or indirectly:

(d) the use or occupation of the Premises by the Lessee or the Lessee's Agents;

(e) any work carried out by or on behalf of the Lessee on the Premises;

(f) the Lessee's activities, operations or business on, or other use of any kind of, the Premises;

(g) the presence of any Contamination, Pollution or Environmental Harm in on or under the Premises or adjoining land caused or contributed to by the act, neglect or omission of the Lessee or the Lessee's Agents;

(h) any default by the Lessee in the due and punctual performance, observance and compliance with any of the Lessee's covenants or obligations under this Lease; or

(i) an act or omission of the Lessee.

9.3 Obligations Continuing

The obligations of the Lessee under this clause:

(a) are unaffected by the obligation of the Lessee to take out insurance, and the obligations of the Lessee to indemnify are paramount, however if insurance money is received by the Lessor for any of the obligations set out in this clause then the Lessee's obligations under **clause 9.2** will be reduced by the extent of such payment;

(b) continue after the expiration or earlier determination of this Lease in respect of any act, deed, matter or thing occurring or arising as a result of an event which occurs before the expiration or earlier determination of this Lease.

9.4 No indemnity for Lessor's negligence

The parties agree that nothing in this clause shall require the Lessee to indemnify the Lessor, its officers, servants, or agents against any loss, damage, expense, action or claim arising out of a negligent or wrongful act or omission of the Lessor, or its servants, agents, contractors or invitees.

9.5 Release

(1) The Lessee:

(a) agrees to occupy and use the Premises at the risk of the Lessee; and

(b) releases to the full extent permitted by law, the Lessor from:

(i) any liability which may arise in respect of any accident or damage to property, the death of any person, injury to any person, or illness suffered by any person, occurring on the Premises or arising from the Lessee's use or occupation of the Premises by;

(ii) loss of or damage to the Premises or personal property of the Lessee; and

(iii) all claims, actions, loss, damage, liability, costs and expenses arising from or connected with (directly or indirectly) the presence of any Contamination, Pollution or Environmental Harm in, on or under the Premises or surrounding area,

except to the extent that such loss or damage arises out of a negligent or wrongful act or omission of the Lessor, or its servants, agents, contractors or invitees.

(2) The release by the Lessee continues after the expiration or earlier determination of this Lease in respect of any act, deed, matter or thing occurring or arising as a result of an event which occurs before the expiration or earlier determination of this Lease.

10. Limit of Lessor's liability

10.1 No liability for loss on Premises

The Lessor will not be liable for loss, damage or injury to any person or property in or about the Premises however occurring.

10.2 Limit on liability for breach of Lessor's covenants

(1) The Lessor is only liable for breaches of the Lessor's Covenants set out in this Lease which occur while the Lessor is registered as the proprietor in fee simple in the Premises.

(2) The Lessor will not be liable for any failure to perform and observe any of the Lessor's Covenants due to any cause beyond the Lessor's control.

11. Maintenance, repair and cleaning

11.1 Generally

(1) The Lessee agrees during the Term and for so long as the Lessee remains in possession or occupation of the Premises to maintain, replace, repair, clean and keep the Premises (which for the avoidance of doubt includes the Lessor's fixtures and fittings and any accessories) in good repair having regard to the age of the Premises at the Commencement Date provided that this subclause shall not impose on the Lessee any obligation:

(a) to carry out maintenance, repairs or replacement that are necessary as a result of reasonable fair wear and tear; or

(b) to undertake any structural maintenance, replacement or repair,

except when such maintenance, repair or replacement is necessary because of any act or omission of or on the part of the Lessee or the Lessee's Agents (including its use of the Premises).

(2) In discharging the obligations imposed on the Lessee under this subclause, the Lessee shall where maintaining, replacing, repairing or cleaning:

(a) any electrical fittings and fixtures;

(b) any plumbing;

(c) any air-conditioning fittings and fixtures; and

(d) any gas fittings and fixtures,

in or on the Premises use only licensed trades persons, or such trades persons as may be approved by the Lessor and notified to the Lessee, which approval shall not be unreasonably withheld.

(3) The Lessee must take such reasonable action as is necessary to:

(a) prevent, if it has occurred as a result of the Lessee's use of the Premises; and

(b) rectify or otherwise ameliorate,

the effects of erosion, drift or movement of sand, soil, dust or water on or from the Premises.

11.2 Cleaning

The Lessee must at all times keep the Premises clean, tidy, unobstructed and free from dirt and rubbish.

11.3 Repair

Unless such damage is the Lessor's responsibility pursuant to the terms of the Lease, the Lessee must promptly repair at its own expense to the satisfaction of the Lessor, any damage to the Premises, regardless of how the damage is caused and replace any of the Lessor's fixtures and fittings which are or which become damaged.

11.4 Responsibility for Securing the Premises

The Lessee must ensure the Premises, including Lessor's and Lessee's fixtures and fittings, are appropriately secured at all times.

11.5 Lessor's Fixtures and Fittings

The Lessee covenants and agrees that the Lessor's Fixtures and Fittings will remain the property of the Lessor and must not be removed from the Premises at any time.

11.6 Pest control

The Lessee must keep the Premises free of any pests and vermin and the cost of extermination will be borne by the Lessee.

11.7 Painting

(1) The Lessee must on or before each repainting date as stated in **Item 10** of the Schedule paint with at least 2 coats of paint those parts of the Premises usually painted internally, unless otherwise agreed by the Lessor in writing.

(2) All painting carried out on the Premises must be carried out by a registered painting contractor and the registered painting contractor or other person engaged by the Lessee to paint the Premises must:

(a) do so in a proper manner using good quality materials;

(b) have the colour and quality of the materials approved in writing by the Lessor before the work commences;

(c) comply will all reasonable directions given or requests made by the Lessor; and

(d) be finished in a proper and workmanlike manner.

12. Use

12.1 Restrictions on use

(1) Generally

The Lessee must not and must not suffer or permit a person to:

(a) use the Premises or any part of it for any purpose other than the Permitted Purpose; or

(b) use the Premises for any purpose which is not permitted under any local or town planning scheme, local laws, acts, statutes or any law relating to health.

(2) No offensive or illegal acts

The Lessee must not and must not suffer or permit a person to do or carry out on the Premises any harmful, offensive or illegal act, matter or thing.

(3) No nuisance

The Lessee must not and must not suffer or permit a person to do or carry out on the Premises any thing which causes a nuisance, damage or disturbance to the Lessor or to owners or occupiers of adjoining properties.

(4) No dangerous substances

The Lessee must not and must not suffer or permit a person to store any dangerous compound or substance on or in the Premises, otherwise than in accordance with the following provisions:

(a) any such storage must comply with all relevant statutory provisions;

(b) all applications for the approval or renewal of any licence necessary for such storage must be first referred to the Lessor;

(c) the Lessor may within its absolute discretion refuse to allow the storage of any particular dangerous compound or substance on the Premises; and

(d) upon the request of the Lessor, the Lessee will provide a list of all dangerous compounds or substances stored on the Premises.

(5) No harm or stress

The Lessee must not and must not suffer or permit a person to do any act or thing which might result in excessive stress or harm to any part of the Premises.

(6) No signs

The Lessee must not and must not suffer or permit a person to display from or affix any signs, notices or advertisements on the Premises without the prior written consent of the Lessor.

(7) No smoking

The Lessee must not suffer or permit a person to smoke inside any building or other enclosed area on the Premises.

(8) Consumption of alcohol

The Lessee must not suffer or permit a person to use or allow the Premises to be used for the consumption of alcohol without first obtaining the written consent of the Lessor.

(9) Sale of Alcohol

The Lessee will not sell or supply liquor from the Premises or allow liquor to be sold or supplied from the Premises without the prior written consent of the Lessor and then only in accordance with the provisions of the *Liquor Control Act 1988*, *Health (Food and Pet Meat) Repeal Regulations 2009*, *Liquor Licensing Regulations 1989* and any other relevant written laws that may be in force from time to time.

(10) Removal of rubbish

The Lessee must keep the Premises free from dirt and rubbish and to store and keep all trade waste and garbage in proper receptacles.

(11) No pollution

The Lessee must do all things necessary to prevent pollution or contamination of the Premises by garbage, refuse, waste matter, oil and other pollutants.

12.2 No warranty

The Lessor gives no warranty:

(a) as to the use to which the Premises may be put; or

(b) that the Lessor will issue any consents, approvals, authorities, permits or licences required by the Lessee under any statute for its use of the Premises.

12.3 Lessee to Observe Copyright

In the event that the Lessee or any person sub-leasing, hiring, or in temporary occupation of the Premises provides, contracts for, or arranges for the performance, exhibition or display of any music or work of art the copyright of which is not vested in the Lessee or that person, the Lessee shall ensure that all obligations in regard to payment of copyright or licensing fees with the owner or licensor of the copyright are met before any such performance, exhibition or display is held.

12.4 Premises Subject to Restriction

The Lessee accepts the Premises for the Term subject to any existing prohibition or restriction on the use of the Premises.

12.5 Indemnity for Costs

The Lessee indemnifies the Lessor against any claims or demands for all costs, on a solicitor client basis, reasonably incurred by the Lessor by reason of any claim in relation to any matters set out in this **clause 12**.

13. Alterations

13.1 Restriction

(1) The Lessee must not without prior written consent:

(i) (a) from the Lessor;

(b) from any other person from whom consent is required under this Lease; or

(c) as required under statute in force from time to time, including but not limited to the planning approval of the Lessee under a local planning scheme of the Lessee;

(ii) make or allow to be made any alteration, addition or improvements to or demolish any part of the Premises; or

(iii) subject to the performance of the Lessee's obligations in clause 11, remove any flora or fauna, alter or cut down any flora, or sell, remove or otherwise dispose of any flora, sand, gravel, timber or other materials from the Premises.

13.2 Consent

(1) If the Lessor and any other person whose consent is required under this Lease or at law consents to any matter referred to in **clause 13.1** the Lessor may:

(a) consent subject to conditions; and

(i) require that work be carried out in accordance with plans and specifications approved by the Lessor or any other person giving consent; and

(ii) require that any alteration be carried out to the satisfaction of the Lessor under the supervision of an engineer or other consultant; and

(b) if the Lessor consents to any matter referred to in **clause 13.1**:

(i) the Lessor gives no warranty that the Lessor will issue any consents, approvals, authorities, permits or policies under any statute for such matters; and

(ii) the Lessee must apply for and obtain all such consent approvals, authorities, permits or policies as are required at law before undertaking any alterations, additions, improvements or demolitions.

13.3 Cost of Works

All works undertaken under this **clause 13** will be carried out at the Lessee's expense.

13.4 Conditions

If any of the consents given by the Lessor or other persons whose consent is required under this Lease or at law require other works to be done by the Lessee as a condition of giving consent, then the Lessee must at the option of the Lessor either:

(a) carry out those other works at the Lessee's expense; or

(b) permit the Lessor to carry out those other works at the Lessee's expense,

in accordance with the Lessor's requirements.

14. Lessor's right of entry

14.1 Entry on Reasonable Notice

The Lessee must permit entry by the Lessor or any Authorised Person onto the Premises without notice in the case of an emergency, and otherwise upon reasonable notice:

(a) at all reasonable times;

(b) with or without workmen and others; and

(c) with or without plant, equipment, machinery and materials;

for each of the following purposes:

(d) to inspect the state of repair of the Premises and to ensure compliance with the terms of this Lease;

(e) to carry out any survey or works which the Lessor considers necessary, however the Lessor will not be liable to the Lessee for any compensation for such survey or works provided they are carried out in a manner which causes as little inconvenience as is reasonably possible to the Lessee;

(f) to comply with the Lessor's Covenants or to comply with any notice or order of any authority in respect of the Premises for which the Lessor is liable; and

(g) to do all matters or things to rectify any breach by the Lessee of any term of this Lease but the Lessor is under no obligation to rectify any breach and any rectification under this clause is without prejudice to the Lessor's other rights, remedies or powers under this Lease.

14.2 Costs of Rectifying Breach

All costs and expenses incurred by the Lessor as a result of any breach referred to at **clause 1.1(g)** together with any interest payable on such sums will be a debt due to the Lessor and payable to the Lessor by the Lessee on demand.

15. Statutory obligations and notices

15.1 Comply with Statutes

The Lessee must:

(a) comply promptly with all statutes and local laws from time to time in force relating to the Premises;

(b) apply for, obtain and maintain in force all consents, approvals, authorities, licences and permits required under any statute for the use of the Premises specified at **clause 12**;

(c) ensure that all obligations in regard to payment for copyright or licensing fees are paid to the appropriate person for all performances, exhibitions or displays held on the Premises; and

(d) comply promptly with all orders, notices, requisitions or directions of any competent authority relating to the Premises or to the business the Lessee carries on at the Premises.

15.2 Indemnity if Lessee Fails to Comply

The Lessee indemnifies the Lessor against:

(a) failing to perform, discharge or execute any of the items referred to in **clause 15.1**; and

(b) any claims, demands, costs or other payments of or incidental to any of the items referred to in **clause 15.1**.

16. Report to Lessor

The Lessee must immediately report to the Lessor:

(a) any act of vandalism or any incident which occurs on or near the Premises which involves or is likely to involve a breach of the peace or become the subject of a report or complaint to the police and of which the Lessee is aware or should be aware;

(b) any occurrence or circumstances in or near the Premises of which it becomes aware, which might reasonably be expected to cause, in or on the Premises, pollution of the environment; and

(c) all notices, orders and summonses received by the Lessee and which affect the Premises and immediately deliver them to the Lessor.

17. Default

17.1 Events of Default

A default occurs if:

(a) any Amounts Payable remain unpaid for 14 days after a Notice has been given to the Lessee that an amount is outstanding;

(b) the Lessee is in breach of any of the Lessee's Covenants for 28 days after a Notice has been given to the Lessee to rectify the breach or to pay compensation in money;

(c) the business conducted at the

(d) Premises is wound up whether voluntarily or otherwise;

(e) the Lessee passes a special resolution under the *Associations Incorporation Act 2015* altering its rules of association in a way that makes its objects or purposes inconsistent with the use permitted by this Lease;

(f) a mortgagee takes possession of the property of the Lessee under this Lease;

(g) any execution or similar process is made against the Premises on the Lessee's property;

(h) the Premises are vacated, or otherwise not used, in the Lessor's reasonable opinion, for the Permitted Purpose for six month period; or

(i) a person other than the Lessee or a permitted sublessee or assignee is in occupation or possession of the Premises or in receipt of a rent and profits.

17.2 Forfeiture

On the occurrence of any of the events of default specified in **clause 17.1** the Lessor may:

(a) without notice or demand at any time enter the Premises and on re-entry the Term will immediately determine;

(b) by notice to the Lessee determine this Lease and from the date of giving such notice this Lease will be absolutely determined; and

(c) by notice to the Lessee elect to convert the unexpired portion of the Term into a tenancy from month to month when this Lease will be determined as from the giving of the notice and until the tenancy is determined the Lessee will hold the Premises from the Lessor as a Lessee from month to month under **clause 18,**

but without affecting the right of action or other remedy which the Lessor has in respect of any other breach by the Lessee of the Lessee's Covenants or releasing the Lessee from liability in respect of the Lessee's Covenants.

17.3 Lessor may remedy breach

If the Lessee:

(a) fails or neglects to pay the Amounts Payable by the Lessee under this Lease; or

(b) does or fails to do anything which constitutes a breach of the Lessee's Covenants,

then, after the Lessor has given to the Lessee notice of the breach and the Lessee has failed to rectify the breach within a reasonable time, the Lessor may without affecting any right, remedy or power arising from that default pay the money due or do or cease the doing of the breach as if it were the Lessee and the Lessee must pay to the Lessor on demand the Lessor's cost and expenses of remedying each breach or default.

17.4 Acceptance of Amount Payable By Lessor

Demand for or acceptance of the Amounts Payable by the Lessor after an event of default has occurred will not affect the exercise by the Lessor of the rights and powers conferred on the Lessor by the terms of the Lease or at law and will not operate as an election by the Lessor to exercise or not to exercise any right or power.

17.5 Essential Terms

Each of the Lessee's Covenants in **clauses 5** (Rent and Other Payments), **8** (Insurance), **9** (Indemnity), **11** (Maintenance, Repair and Cleaning), **12** (Use), **24** (Assignment, Subletting and Charging) and **29** (Goods and Services Tax), is an essential term of this Lease but this clause **17.5** does not mean or imply that there are no other essential terms in this Lease.

17.6 Breach of Essential Terms

If the Lessee breaches an essential term of this Lease then, in addition to any other remedy or entitlement of the Lessor:

(a) the Lessee must compensate the Lessor for the loss or damage suffered by reason of the breach of that essential term;

(b) the Lessor will be entitled to recover damages against the Lessee in respect of the breach of an essential term; and

(c) the Lessee covenants with the Lessor that if the Term is determined:

(i) for breach of an essential term or the acceptance by the Lessor of a repudiation of this Lease by the Lessee; or

(ii) following the failure by the Lessee to comply with any notice given to the Lessee to remedy any default,

the Lessee must pay to the Lessor on demand the total of the Amounts Payable under this Lease which would have been payable by the Lessee for the unexpired balance of the Term as if the Term had expired by effluxion of time together with the losses incurred or reasonably expected to be incurred by the Lessor as a result of the early determination including but not limited to the costs of re-letting or attempting to re-let the Premises;

(d) the Lessee agrees that the covenant set out in this **clause 1.1(c)** will survive termination or any deemed surrender at law of the estate granted by this Lease;

(e) the Lessee may deduct from the amounts referred to at **clause 1.1(c)** the Rent and other money which the Lessor reasonably expects to obtain by re-letting the Premises between the date of Termination and the date on which the Term would have expired by effluxion of time; and

(f) the Lessor must take reasonable steps to mitigate its losses and endeavour to re-let the Premises at a reasonable rent and on reasonable terms but the Lessor is not required to offer or accept rent or terms which are the same or similar to the rent or terms contained or implied in this Lease.

18. Damage or destruction of Premises

18.1 Abatement of Rent

If the Premises are at any time during the Term, without neglect or default of the Lessee, destroyed or damaged by fire or other risk covered by insurance so as to render the same unfit for the occupation and use of the Lessee, then the Rent or a proportionate part thereof (according to the nature and extent of the damage) shall abate until the Premises have been rebuilt or made fit for the occupation and use of the Lessee, and in case of any dispute arising under this provision the same will be referred to arbitration under the provisions of the *Commercial Arbitration Act 2012* and the full Rent must be paid without any deduction or abatement until the date of the arbitrator's award whereupon the Lessor will refund to the Lessee any Rent which according to the aware appears to have been overpaid.

18.2 Total Damage or Destruction

If the premises are at any time during the Term destroyed or damaged to an extent as to be wholly unfit for the occupation and use of the Lessee either party may be notice in writing to the other of them given within sixty (60) days after the event elect to cancel and terminate this lease. The term will terminate upon such notice being given and the Lessee must vacate the premises and surrender the same to the Lessor, but such termination will be without prejudice however to the liability of the Lessee under this Lease up to the date of termination.

19. Option to renew

If the Lessee at least one month, but not earlier than 12 months, prior to the date for commencement of the Further Term gives the Lessor a Notice to grant the Further Term and:

(a) all consents and approvals required by the terms of this Lease or at law have been obtained; and

(b) there is no subsisting default by the Lessee at the date of service of the Notice in:

  (a) the payment of Amounts Payable; or

  (b) the performance or observance of the Lessee's Covenants,

the Lessor shall grant to the Lessee a lease for the Further Term at the Rent and on terms and conditions similar to this Lease other than this **clause 19** in respect of any Further Term previously taken or the subject of the present exercise and on such other terms and conditions as the Lessor may consider appropriate.

20. Holding over

If the Lessee remains in possession of the Premises after the expiry of the Term with the consent of the Lessor, the Lessee will be a monthly Lessee of the Lessor at a rent equivalent to one hundred and twenty percent of the Rent for the period immediately preceding expiry of the Term and otherwise on the same terms and conditions of this Lease provided that all consents required under this Lease or at law have been obtained to the Lessee being in possession of the Premises as a monthly Lessee.

21. Restore premises

Prior to Termination, the Lessee at the Lessee's expense must restore the Premises to a condition consistent with the observance and performance by the Lessee of the Lessee's Covenants under this Lease fair wear and tear excepted.

22. Yield up the premises

22.1 Peacefully surrender

On Termination the Lessee must:

(a) peacefully surrender and yield up to the Lessor the Premises in a condition consistent with the observance and performance of the Lessee's Covenants under this Lease;

(b) surrender to the Lessor all keys and security access devices and combination for locks providing an access to or within the Premises held by the Lessee whether or not provided by the Lessor.

22.2 Clause 22.1 to survive termination

The Lessee's obligation under **clause 22.1** will survive termination.

23. Removal of property from Premises

23.1 Remove property prior to termination

Prior to Termination, unless otherwise mutually agreed between the parties, the Lessee must remove from the Premises all property of the Lessee which is not a fixture other than air-conditioning plant and fire equipment, security alarms and security systems and other fixtures and fittings which in the opinion of the Lessor form an integral part of the Premises and promptly make good, to the satisfaction of the Lessor, any damage caused by the removal.

23.2 Lessor can remove property on re-entry

On re-entry the Lessor will have the right to remove from the Premises any property of the Lessee and the Lessee indemnifies the Lessor against all damage caused by the removal of and the cost of storing that property.

24. Assignment, Subletting and Charging

24.1 No assignment or sub-letting without consent

The Lessee must not assign the leasehold estate in the Premises nor Sub-let, part with possession, or dispose of the Premises or any part of the Premises without the prior written consent of the Lessor and any other persons whose consent is required under the terms of this Lease or at law.

24.2 Lessor's Consent to Assignment and Sub-letting

Provided all parties whose consent is required, under this Lease or at law, to an assignment or Sub-letting, give their consent and any assignment or sublease is for a purpose consistent with the use of the Premises permitted by this Lease then the Lessor may not unreasonably withhold its consent to the assignment or Sub-letting of the leasehold estate created by this Lease if:

(a) the proposed assignee or sublessee is a respectable and responsible person of good financial standing capable of continuing the permitted use for non-profit making community purposes;

(b) all Amounts Payable due and payable have been paid and there is no existing unremedied breach, whether notified to the Lessee or not, of any of the Lessee's Covenants;

(c) the Lessee procures the execution by:

(a) the proposed assignee of a deed of assignment; or

(b) the proposed sublessee of a deed of sublease,

to which the Lessor is a party and which deed is prepared and completed by the Lessor's solicitors; and

(d) the assignment contains a covenant by the assignee or sublessee with the Lessor to pay all Amounts Payable and to perform and observe all the Lessee's Covenants.

24.3 Consents of Assignee Supplementary

The covenants and agreements on the part of any assignee will be supplementary to the Lessee's Covenants and will not release the assigning lessee from the Lessee's Covenants.

24.4 Property Law Act 1969

Sections 80 and 82 of the *Property Law Act 1969* are excluded.

24.5 Costs for assignment and sub-letting

If the Lessee wishes to assign or sub-let the leasehold estate created by this Lease the Lessee must pay all reasonable professional and other costs, charges and expenses, incurred by the Lessor or other person whose consent is required under this Lease, of and incidental to:

(a) the enquiries made by or on behalf of the Lessor as to the respectability, responsibility and financial standing of each proposed assignee or sublessee;

(b) any consents required under this Lease or at law; and

(c) all other matters relating to the proposed assignment or sub-letting,

whether or not the assignment or Sub-letting proceeds.

24.6 No mortgage or charge

The Lessee must not mortgage nor charge the Premises.

25. Disputes

25.1 Referral of Dispute: Phase 1

Except as otherwise provided any dispute arising out of this Lease is to be referred in the first instance in writing to the Lessor's Representative as nominated in writing by the Lessor from time to time (**the Lessor's Representative**) who shall convene a meeting within 10 days of receipt of such notice from the Lessee or such other period of time as is agreed to by the parties between the Lessor's Representative and an officer of the Lessee for the purpose of resolving the dispute (**the Original Meeting**).

25.2 Referral of Dispute: Phase 2

In the event the dispute is not resolved in accordance with **clause 25.1** of this Lease then the dispute shall be referred in writing to the CEO of the Lessor who shall convene a meeting within 10 days of the Original Meeting or such other date as is agreed to by the parties between the CEO and the Lessee for the purpose of resolving the dispute.

25.3 Appointment of Arbitrator: Phase 3

In the event the dispute is not resolved in accordance with **clause 25.2** of this Lease then the dispute shall be determined by a single arbitrator under the provisions of the *Commercial Arbitration Act 2012* (as amended from time to time) and the Lessor and the Lessee may each be represented by a legal practitioner.

25.4 Payment of Amounts Payable to Date of Award

The Lessee must pay the Amounts Payable without deduction to the date of the award of the Arbitrator or the date of an agreement between the Parties whichever event is the earlier, and if any money paid by the Lessee is not required to be paid within the terms of the award of the Arbitrator or by agreement between the Lessor and the Lessee then the Lessor will refund to the Lessee the monies paid

26. Prior notice of proposal to change rules

If applicable, the Lessee agrees that it will not change its rules of association under the *Associations Incorporations Act 2015* without notifying the Lessor of its intention to make such a change prior to consideration of the required special resolution.

27. Provision of information

The Lessee agrees to provide to the Lessor:

(a) a copy of the Lessee's audited annual statement of accounts for each year;

(b) advice of any changes in its office holders during the Term; and

(c) any information reasonably required by the Lessor.

28. Caveat

28.1 No absolute caveat

The Lessee nor any person on behalf of the Lessee will, without the prior written consent of the Lessor, lodge any absolute caveat at Landgate against the Certificate of Title for the Land, to protect the interests of the Lessee under this Lease.

28.2 CEO & Lessor as attorney

In consideration of the Lessor having granted this Lease to the Lessee, the Lessee irrevocably appoints the Lessor and the CEO of the Lessor jointly and severally:

(a) for the Term of this Lease;

(b) for any holding over under this Lease; and

(c) for a period of 6 months after Termination,

to be the agent and attorney of the Lessee in its name and on its behalf to sign and lodge at Landgate:

(d) a withdrawal of any absolute caveat lodged by or on behalf of the Lessee;

(e) a withdrawal of any caveat lodged by or on behalf of the Lessee and not withdrawn on Termination; and

(f) a surrender of the estate granted by this Lease,

and the costs of withdrawing any caveat or surrendering this Lease (including the Lessor's solicitor's costs and registration fees) will be borne by the Lessee.

28.3 Ratification

The Lessee undertakes to ratify all the acts performed by or caused to be performed by the Lessor, its agent or attorney under this clause.

28.4 Indemnity

The Lessee indemnifies the Lessor against:

(a) any loss arising directly from any act done under this clause. and

(b) all costs and expenses incurred in connection with the performance of any act by the attorney on behalf of the Lessee under this clause.

29. Goods and Services Tax

29.1 Definitions

The following definitions apply for the purpose of this clause:

(a) **Act** means the Commonwealth's *A New Tax System (Goods and Services Tax) Act 1999* and associated Acts and subsidiary legislation;

(b) **Consideration** means the Amounts Payable or any other money payable to the Lessor under this Lease, but does not include the amount of the GST which may apply to the Amounts Payable or other money payable under the Act;

(c) **GST** means a tax under the Act levied on a Supply including but not limited to the Amounts Payable or other money payable to the Lessor for goods or services or property or any other thing under this Lease; and

(d) **Supply** means a good or service or any other thing supplied by the Lessor under this Lease and includes but is not limited to a grant of a right to possession of the Premises.

29.2 Lessee to pay GST

(1) The Consideration will be increased by the amount of the GST, if any, which the Lessor is required under the Act to pay on any Supply made under this Lease.

(2) The Lessee must pay any increase referred to at **clause 29.2(1)** whether it is the Lessee or any other person who takes the benefit of any Supply.

(3) The Lessee must pay the amount of the GST to the Lessor at the same time and in the same manner as the Lessee is required to pay the Consideration under this Lease.

29.3 Consideration in Kind

If consideration in kind is accepted by the Lessor for any Supply made under this Lease, the GST amount payable to the Lessor under **clause 29.2(2)** in respect of the consideration in kind will be calculated by using the prevailing market value of the consideration in kind as determined by the Lessor.

29.4 No Contribution from Lessor

If the Lessee is required under this Lease to make any payment of money or give other consideration to a third party for outgoings, goods, services and benefits of any kind, the Lessee is not entitled to any contribution from the Lessor for any GST payable by it to any person.

29.5 Statement of GST paid is Conclusive

A written statement given to the Lessee by the Lessor of the amount of the GST that the Lessor pays or is liable to pay or account for is conclusive as between the Parties except in the case of an obvious error.

29.6 Tax Invoices

For each payment by the Lessee under this clause the Lessor agrees to promptly deliver to the Lessee, as required under the Act, tax invoices and adjustment notes in a form which complies with the Act, so as to enable the Lessee to claim input tax credits or decreasing adjustments for Supplies.

29.7 Reciprocity

If the Lessee furnishes any Supplies to the Lessor under this Lease, then the requirements set out in this clause with respect to the Lessee will apply to the Lessor with the necessary changes.

30. No Fetter

Notwithstanding any other provision of this Lease, the Parties acknowledge that the Lessor is a local government established by the *Local Government Act 1995,* and in that capacity, the Lessor may be obliged to determine applications for consents, approvals, authorities, licences and permits having regard to any Written Law governing such applications including matters required to be taken into consideration and formal processes to be undertaken, and the Lessor shall not be taken to be in default under this Lease by performing its statutory obligations or exercising its statutory discretions, nor shall any provision of this Lease fetter the Lessor in performing its statutory obligations or exercising any discretion.

31. Additional Terms Covenants and Conditions

Each of the terms, covenants and conditions (if any) specified in **Schedule 1Item 12** of the Schedule are part of this Lease and are binding on the Lessor and the Lessee as if incorporated into the body of this Lease.

32. Commercial Tenancy Act

If at any time and for so long as the *Commercial Tenancy (Retail Shops) Agreements Act 1985* applies to this Lease and a provision of that Act conflicts with a provision of this Lease, then each conflicting provision of this Lease is deemed to be amended to the extent necessary to comply with that Act.

33. Acts by agents

All acts and things which the Lessor is required to do under this Lease may be done by the Lessor, the CEO, an officer or the agent, solicitor, contractor or employee of the Lessor.

34. Governing law

This Lease is governed by and is to be interpreted in accordance with the laws of Western Australia and, where applicable, the laws of the Commonwealth of Australia.

35. Statutory powers

The powers conferred on the Lessor by or under any statutes for the time being in force are, except to the extent that they are inconsistent with the terms and provisions expressed in this Lease, in addition to the powers conferred on the Lessor in this Lease.

36. Notice

36.1 Form of delivery

A notice, consent, approval or other communication (each a Notice) under this Lease must be in writing and may be given or made:

(a) by delivery to the Party personally;

(b) by addressing it to the Party and leaving it at or posting it by registered post to the address of the Party appearing in this Lease or any other address nominated by a Party by Notice to the other; or

(c) by electronic mail to the Party's email address as appearing in this Lease or any other address nominated by a Party by Notice to the other.

36.2 Service of notice

A Notice to a Party is deemed to be given or made:

(a) if by personal delivery, when delivered;

(b) if by leaving the Notice at an address specified in **Schedule 1Item 11** at the time of leaving the Notice, provided the Notice is left during normal business hours;

(c) if by post to an address specified in **Item 11**, on the second business day following the date of posting of the Notice; and

(d) if sent by electronic mail and the send does not received a message from its internet service provider or the recipient's mail server indicating that is has not be successfully transmitted, on the day of sending if a Business Day, otherwise on the next Business Day.

36.3 Signing of notice

A Notice to a Party may be signed:

(a) if given by an individual, by the person giving the Notice;

(b) if given by a corporation, by a director, secretary or manager of that corporation;

(c) if given by a local government, by the CEO;

(d) if given by an association incorporated under the *Associations Incorporation Act 2015*, by any person authorised to do so by the board or committee of management of the association; or

(e) by a solicitor or other agent of the individual, corporation, local government or association giving the Notice.

37. Severance

If any part of this Lease is or becomes void or unenforceable, that part is or will be severed from this Lease to the intent that all parts that are not or do not become void or unenforceable remain in full force and effect and are unaffected by that severance.

38. Variation

This Lease may be varied only by deed executed by the parties subject to such consents as are required by this Lease or at law.

39. Moratorium

The provisions of a statute which would but for this clause extend or postpone the date of payment of money, reduce the rate of interest or abrogate, nullify, postpone or otherwise affect the terms of this Lease do not, to the fullest extent permitted by law, apply to limit the terms of this Lease.

40. Further assurance

The Parties must execute and do all acts and things necessary or desirable to implement and give full effect to the terms of this Lease.

41. Payment of money

Any Amounts Payable to the Lessor under this Lease must be paid to the Lessor at the address of the Lessor referred to in the Lease or as otherwise directed by the Lessor by Notice from time to time.

42. Waiver

42.1 No general waiver

Failure to exercise or delay in exercising any right, power or privilege in this Lease by a Party does not operate as a waiver of that right, power or privilege.

42.2 Partial exercise of right power or privilege

A single or partial exercise of any right, power or privilege does not preclude any other or further exercise of that right, power or privilege or the exercise of any other right, power or privilege.

Schedule

Item 1 Land and Premises

(a) Land

Lot 3 on Deposited Plan 34151 being the whole of the land comprised in Certificate of Title Volume 2615 Folio 984

(b) Premises

The part of the Land and Building comprising:

(i) Suites 1 & 6, being approximately 47.26 square metres which for identification purposes is depicted in **Annexure 1** including all buildings, structures, alterations, additions and improvements on that part of the Land, or erected on that part of the Land during the Term; and

(ii) The Common Areas, which for identification purposes is labelled "Shared Services" in **Annexure 1.**

Item 2 Term

3 years commencing on 12 December 2019 and expiring on 11 December 2019.

Item 3 Further Term

3 years commencing on 12 December 2022 and expiring on 11 December 2025.

Item 4 Commencement Date

12 December 2019

Item 5 Rent

$4875 per annum plus GST payable in advance by equal monthly instalments of $406.25.

Item 6 Rent Review

Manner in which Rent is to be reviewed:

Rent Review Date	**Manner of Review**
12 December 2020	CPI Review
12 December 2021	CPI Review

If the Lease is extended for the Further Term

Rent Review Date	**Manner of Review**
12 December 2022	2.5% Fixed Increase
12 December 2023	CPI Review
12 December 2024	CPI Review

Item 7 Specified Outgoings

From the Commencement Date until the 1st Outgoings Review Date, the Specified Outgoings are $3252.47 per annum plus GST payable in advance by equal monthly instalments of $271.04 with the first payment due on the Commencement Date.

Item 8 Permitted purpose

Program delivery space for aboriginal community engagement and program management and uses reasonably ancillary thereto.

Item 9 Public liability insurance

Twenty million dollars ($20,000,000.00).

Item 10 Repainting Dates

On or before the end of the Term, unless otherwise advised by the Lessor in writing.

Item 11 Notice Details

Lessor
The City of Kwinana (ABN 13 890 277 321)
Address: PO Box 21, Kwinana WA 6966
Email: city.legal@kwinana.wa.gov.au

Lessee
Nyoongar Wellbeing and Sports Aboriginal Corporation (ABN 51 051 399 025)
Address: PO Box 8123, Perth Business Centre WA 6984
Email: admin@nyoongarsports.com.au

Item 12 Additional terms and covenants

12.1 Liquor licence

The Lessee agrees that if a licence or permit is granted under the *Liquor Control Act 1988* for the Premises it must:

(i) comply with any requirements attaching to the licence or permit at its cost and where any alteration is required to the Premises clause 13 shall apply;

(ii) comply with the requirements of the Harm Minimisation Policy (as amended from time to time) of the Department of Racing, Gaming & Liquor, which will require, without limitation the following:

(a) the development and implementation of a House Management Policy and Code of Conduct (as defined by the Harm Minimisation Policy) for the Premises, and such policies must be displayed in a prominent position on the Premises at all times; and

(b) the development and implementation of a Management Plan (as defined by the Harm Minimisation Policy) for the Premises.

(iii) provide a copy of the licence or permit (as well as a copy of any document referred to in the licence or permit, including without limitation a copy of the House Management Policy, Code of Conduct and Management Plan (as defined by the Harm Minimisation Policy) to the Lessor as soon as practicable after the date of grant; and

(iv) indemnify and keep indemnified the Lessor from and against any breach of the *Liquor Control Act 1988, Liquor Control Regulations 1989* or the licence or permit or any conditions imposed thereupon for which it may be liable as the owner of the Premises.

12.2 Licence to Use Car Parking Bays

The Lessor grants to the Lessee a licence to use 2 car parking bays of the car park on the Land as from time to time are nominated by the Lessor (and initially the 2 car parking bays directly in front of the shop door opening of the Premises (**Car Parking Space**) together with the right for the Lessee and its duly authorised employees and visitors in common with all others authorised by the Lessor and in exercise of the licence in this clause, to enter and leave the car park by its entrances and exits and subject to the following terms conditions and restrictions:

(i) this Licence shall commence on the Commencement Date and shall be co-terminus with the Term to the intent that:

(a) if the Lessee extends the Term, this Licence automatically shall be extended for the same period; and

(b) upon the expiration or sooner determination of the Term, this Licence forthwith shall determine without the need for any notice or other action by the Lessor or the Lessee.

(ii) The Lessee agrees with the Lessor that:

(a) the Lessee shall use the Car Parking Space for the purpose only of parking of motor vehicles owned or used by the Lessee or the Lessee's employees and visitors;

(b) the Lessee shall not use or permit to be used the Car Parking Space for any purpose other than for the parking of motor vehicles and shall comply with and cause to be complied with the provisions of all Statutes for the time being in force affecting the same and all by-laws and regulations thereunder;

(c) the Lessee shall not store or keep on or permit to be stored or kept on the Car Parking Space or in any motor vehicle thereon any petrol or other inflammable fuel except that which is contained in petrol or other fuel feed tanks or lines forming a permanent part of a motor vehicle and shall not knowingly permit the spillage or leakage of oil grease or petrol onto any part of the Car Parking Space or the Land from any motor vehicle owned or used by the Lessee or any of the Lessee's employees and visitors;

(d) the Lessee shall not leave or permit to be left at any time any motor vehicle upon the Car Parking Space with its engine running;

(e) unless otherwise agreed in writing by the Lessor, the Lessee shall ensure that no motor vehicle parked in the Car Parking Space remains for a continuous period longer than 20 hours and the Lessee shall ensure that any motor vehicle

parked on the Car Parking Space for longer than 20 hours shall be removed promptly;

(f) the Lessee shall keep and maintain the Car Parking Space free of rubbish and debris and in a clean tidy and hygienic condition;

(g) the licence hereby granted is personal to the Lessee and the Lessee shall not assign or attempt to assign its benefit or any part of it except with the prior written consent of the Lessor if the Lease is assigned or sub-let;

(h) the Lessee shall indemnify the Lessor from and against all actions claims demands suits losses costs and expenses whatsoever and by whomsoever made or occasioned by or as a result of:

(A) any damage from any cause that any motor vehicle owned or used by the Lessee or by any of the Lessee's employees and visitors or any other person lawfully authorised by the Lessee in that behalf may at any time sustain while upon the Car Parking Space or the Land;

(B) any loss resulting from the theft of any motor vehicle (or any of its parts, equipment or contents) owned or used by the Lessee or any of the Lessee's employees and visitors or any other person lawfully authorised by the Lessee in that behalf while upon the Car Parking Space or the Land;

(C) any injuries which the Lessee or any of the Lessee's employees and visitors or any other person lawfully authorised by the Lessee in that behalf may at any time sustain whilst in about or upon the Car Parking Space or the Land.

(i) The grant of this Licence shall not in any way create in favour of the Lessee any tenancy or any rights in the nature of a tenancy or any rights to the exclusive occupation of the Car Parking Space or any part of the Land, and the Lessee’s rights are limited to a height of 3 metres above the surface of the Car Parking Space.

(j) Notwithstanding anything to the contrary in this licence, in the event of default by the Lessee in the observance or compliance with any of the obligations imposed on the Lessee in this licence the Lessor may immediately determine this Licence by notice in writing to the Lessee and this licence shall determine upon service of such notice on the Lessee.

12.3 Minimise nuisance to neighbours

(i) The Lessee must take all reasonable action to minimise and prevent disruption, nuisance and disturbance to surrounding residential premises, particularly during and following social events held at the Premises.

(ii) The Lessee must comply with all reasonable conditions and directions that may be imposed by the Lessor from time to time in relation to the minimisation and prevention of disruption, nuisance and disturbance to surrounding residential premises.

12.4 Right to terminate upon notice

Notwithstanding any other provision of this Lease, the Parties agree that either party may terminate this Lease for any reason upon six months written notice to the other party. If this Lease is terminated in accordance with this clause, **clause 21** and **22** will apply.

12.5 Use of Premises in Emergency

Notwithstanding any other provision in this Lease, in the event of a circumstance that calls for immediate emergency response, including flooding or a bushfire event, the Landlord may require the use of the whole or part of the Premises for that purpose and the Tenant agrees to surrender use of the whole or part of the Premises for that purpose. If such an emergency occurs and the Landlord enters into possession of the whole or part of the Premises, the Landlord agrees to suspend payment of the Rent and Outgoings Charges (or part thereof dependent on whether the Landlord requires use of the whole or only a part of the Premises) for the duration of the emergency.

12.6 After-hours access to the Leased Premises

(i) Should the Lessee access the Leased Premises outside the Normal Hours, the Lessee shall be responsible for the security of the Building for the time any Authorised Person is inside the Building.

(ii) The Lessee must not permit any third party to have access to the keys, access cards or other security devices for the Leased Premises or the Building.

(iii) The Lessee shall pay to the Lessor on demand on a full indemnity basis any amounts payable by the Lessor arising from the Lessee's improper use of the keys, access cards or other security devices for the Leased Premises or the Building.

12.7 Damage to Lessor's Fixtures

(i) The Lessee acknowledges and agrees that the Lessor's Fixtures do not include any software. All software must be supplied by the Lessee at the Lessee's cost.

(ii) The Lessee agrees to (at the Lessee's cost):

(a) maintain the Lessor's Fixtures in a good condition and where necessary, repair or replace any of the Lessor's Fixtures to the satisfaction of the Lessor, except in respect of fair wear and tear;

(b) return to the Lessor any of the Lessor's Fixtures which have been damaged and cannot be repaired; and

(c) provide the Lessor with written notice of any Lessor's Fixtures which are replaced by the Lessee at the Lessee's cost; and

(d) leave all Lessor's Fixtures which have not been replaced in the Leased Premises at the expiration of the Term (or the Further Term as the case may be).

(iii) For the avoidance of doubt, any Lessor's Fixture which has been replaced by the Lessee at the Lessee's cost will vest in the Lessor unless the Lessor or Lessee provides otherwise in writing to the Lessor.

12.8 Termination

(i) Notwithstanding any other clause in this Lease, the parties agree that the Lessor may (in its absolute discretion) permit the Lessee to terminate the Lease upon the Lessee giving the Lessor ninety (90) days prior written notice.

(ii) The Lessor will not unreasonably withhold consent if the Lessee satisfies the Lessor that:

(a) the funding the Lessee receives from a Relevant Authority has ceased; and

(b) it is no longer financially viable for the Lessee to continue operating from the Leased Premises.

(iii) Notwithstanding any other provision of this Lease, the Parties AGREE that either party may terminate this Lease for any reason upon six months written notice to the other party. If this Lease is terminated in accordance with this clause, **clause 21** and **22** will apply.

Signing page

EXECUTED 2019

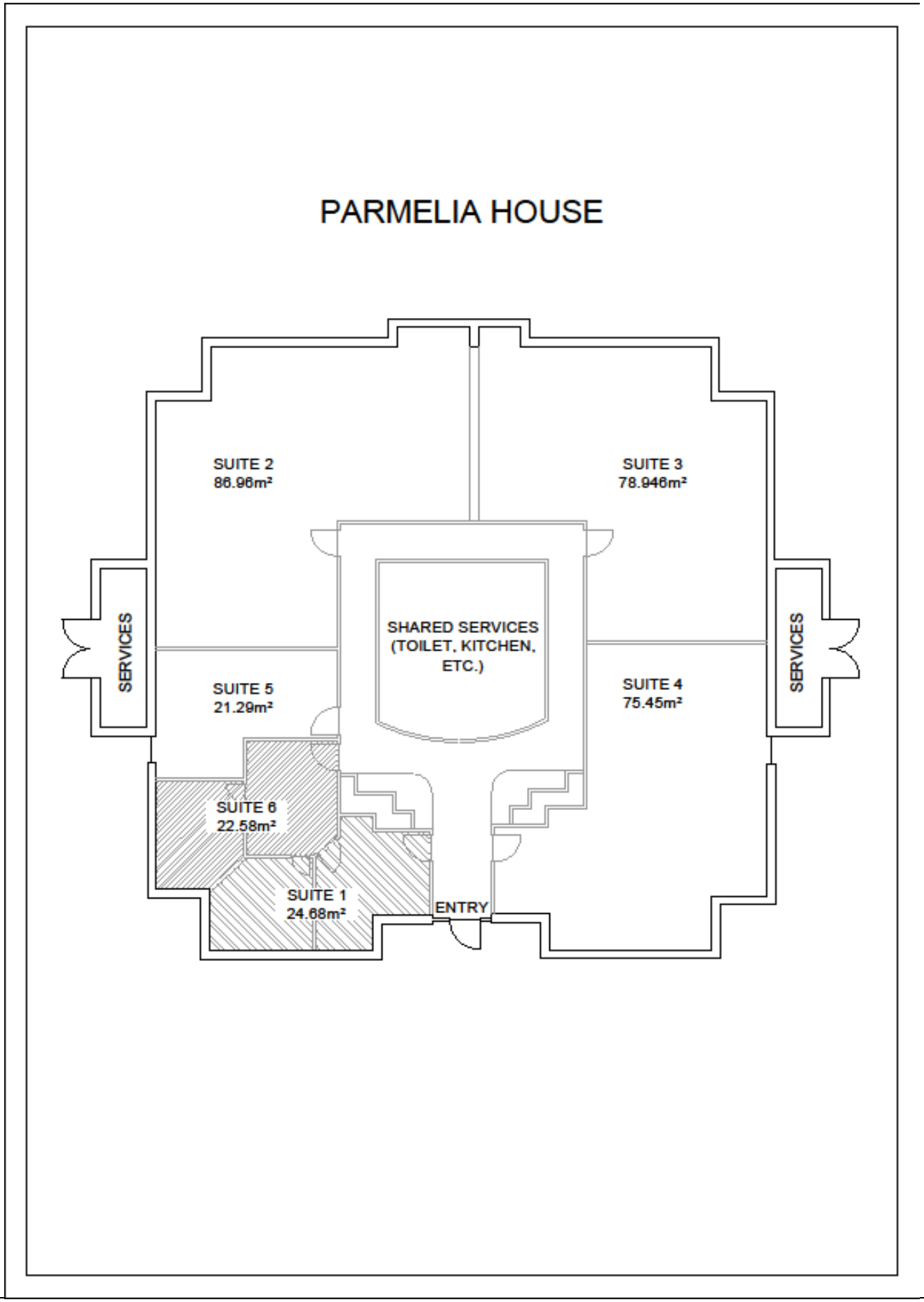
THE COMMON SEAL of **CITY OF KWINANA** is affixed in the presence of:

Mayor	(Print Full Name)
Chief Executive Officer	(Print Full Name)

SIGNED by **NYOONGAR WELLBEING AND SPORTS ABORIGINAL CORPORATION:**

Office Holder Sign	Office Holder Sign
Name:	Name:
Address:	Address:
Office Held:	Office Held:

Annexure 1 – Sketch of Premises



18.6 Review of Charitable Rate Exemption Policy

DECLARATION OF INTEREST:

Deputy Mayor Peter Feasey declared an impartiality interest due to his supervisor being the Minister for Housing and the item referring to Departments he is responsible for.

SUMMARY:

Legal advice was sought from McLeods Barristers and Solicitors regarding a query to the effective date applied to a rates exemption granted to Access Housing Australia. As a result, it is recommended that the City's Charitable Rate Exemption Policy be updated to reflect the advice from our legal counsel.

OFFICER RECOMMENDATION:

That Council:

1. Adopt the changes to section 5.2.3 of Council Policy Charitable Rate Exemptions, amending the effective date to apply a rate exemption to be from the later date of when the land was used exclusively for charitable purposes or from 1 July of the current financial year, as detailed in Attachment A;
2. Approve the adjustments to the rate accounts in order to reflect the effective date of 1 July 2018 as detailed in Confidential Attachment B.

DISCUSSION:

Access Housing Australia (AHA) were recently granted an exemption on a number of their properties at the 8 May 2019 Ordinary Council Meeting as per the City's current policy. The adjustment to their accounts was applied to be effective from the date of Council granting the exemption 8 May 2019.

AHA disputed the effective date used for the adjustment and believed it should be effective from the 1 July 2018 and not 8 May 2019. Council officers considered this carefully and sought legal advice from McLeods Barristers and Solicitors.

The advice in its entirety is contained within Confidential Attachment C but can be summarised as follows:

a) AHA's original application for rates exemption/objection to the rate record was lodged within time, given that it preceded the issuance of a rates notice for the 18/19 financial year;
b) There may be grounds to oppose an application for review commenced by AHA, given the delay since Council's decision on the rates exemption application, however the State Administrative Tribunal (SAT) may still accept such a review application if AHA could provide some reasonable cause for the delay;
c) If an application for review was commenced and allowed by the SAT, then it would be expected that the SAT would uphold the application and apply the exemption to the entire financial year in respect of which it was made on the basis that the land did not constitute 'rateable land' for the entirety of that financial year (which the City appears to accept); and

d) Whilst an objection to the rates record may only be made by an owner of land or their agent (or attorney) as the City has determined the application it would appear to have impliedly accepted AHA was authorised by the owner of the land to bring the application.

Upon reviewing this advice, it is recommended that the Charitable Rate Exemption Policy be amended as contained in Attachment A and the relevant rate accounts be adjusted in order to reflect the effective date of 1 July 2018 as detailed in Confidential Attachment B.

LEGAL/POLICY IMPLICATIONS:

For the purpose of Councillors considering a financial or impartiality interest only, the proponent/owner is Access Housing.

Local Government Act 1995 section 6.26 states:

6.26. Rateable land

(1) Except as provided in this section all land within a district is rateable land.

(2) The following land is not rateable land —

(a) land which is the property of the Crown and —

(i) is being used or held for a public purpose; or

(ii) is unoccupied, except —

(I) where any person is, under paragraph (e) of the definition of owner in section 1.4, the owner of the land other than by reason of that person being the holder of a prospecting licence held under the Mining Act 1978 in respect of land the area of which does not exceed 10 ha or a miscellaneous licence held under that Act; or

(II) where and to the extent and manner in which a person mentioned in paragraph (f) of the definition of owner in section 1.4 occupies or makes use of the land;

and

(b) land in the district of a local government while it is owned by the local government and is used for the purposes of that local government other than for purposes of a trading undertaking (as that term is defined in and for the purpose of section 3.59) of the local government; and

(c) land in a district while it is owned by a regional local government and is used for the purposes of that regional local government other than for the purposes of a trading undertaking (as that term is defined in and for the purpose of section 3.59) of the regional local government; and

(d) land used or held exclusively by a religious body as a place of public worship or in relation to that worship, a place of residence of a minister of religion, a convent, nunnery or monastery, or occupied exclusively by a religious brotherhood or sisterhood; and

(e) land used exclusively by a religious body as a school for the religious instruction of children; and

(f) land used exclusively as a non-government school within the meaning of the School Education Act 1999; and

(g) land used exclusively for charitable purposes; and

(h) land vested in trustees for agricultural or horticultural show purposes; and

(i) land owned by Co-operative Bulk Handling Limited or leased from the Crown or a statutory authority (within the meaning of that term in the Financial Management Act 2006) by that co-operative and used solely for the storage of grain where that co-operative has agreed in writing to make a contribution to the local government; and

(j) land which is exempt from rates under any other written law; and
(k) land which is declared by the Minister to be exempt from rates.

(3) If Co-operative Bulk Handling Limited and the relevant local government cannot reach an agreement under subsection (2)(i) either that co-operative or the local government may refer the matter to the Minister for determination of the terms of the agreement and the decision of the Minister is final.

(4) The Minister may from time to time, under subsection (2)(k), declare that any land or part of any land is exempt from rates and by subsequent declaration cancel or vary the declaration.

(5) Notice of any declaration made under subsection (4) is to be published in the Gazette.

(6) Land does not cease to be used exclusively for a purpose mentioned in subsection (2) merely because it is used occasionally for another purpose which is of a charitable, benevolent, religious or public nature.

FINANCIAL/BUDGET IMPLICATIONS:

The adjustment required to be made to a number of properties is detailed in Confidential Attachment B and this amount is proposed to be funded from the Interim Rates budget.

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.

STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective detailed in the Corporate Business Plan.

Plan	Outcome	Objective
Corporate Business Plan	Business Performance	5.4 Ensure the financial sustainability of the City of Kwinana into the future

COMMUNITY ENGAGEMENT:

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

PUBLIC HEALTH IMPLICATIONS

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

18.6 REVIEW OF CHARITABLE RATE EXEMPTION POLICY

RISK IMPLICATIONS:

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

Risk Event	Applicant may apply to the State Administrative Tribunal for rate exemption
Risk Theme	Failure to fulfil statutory regulations or compliance requirements
Risk Effect/Impact	Financial Reputation Compliance
Risk Assessment Context	Operational
Consequence	Minor
Likelihood	Unlikely
Rating (before treatment)	Low
Risk Treatment in place	Reduce - mitigate risk
Response to risk treatment required/in place	Review every application on its own merit against adopted policy and legislative requirements for exemption
Rating (after treatment)	Low

COUNCIL DECISION

045

MOVED CR P FEASEY **SECONDED CR S WOOD**

That Council:

1. **Adopt the changes to section 5.2.3 of Council Policy Charitable Rate Exemptions, amending the effective date to apply a rate exemption to be from the later date of when the land was used exclusively for charitable purposes or from 1 July of the current financial year, as detailed in Attachment A;**
2. **Approve the adjustments to the rate accounts in order to reflect the effective date of 1 July 2018 as detailed in Confidential Attachment B.**

CARRIED
7/0

ATTACHMENT A

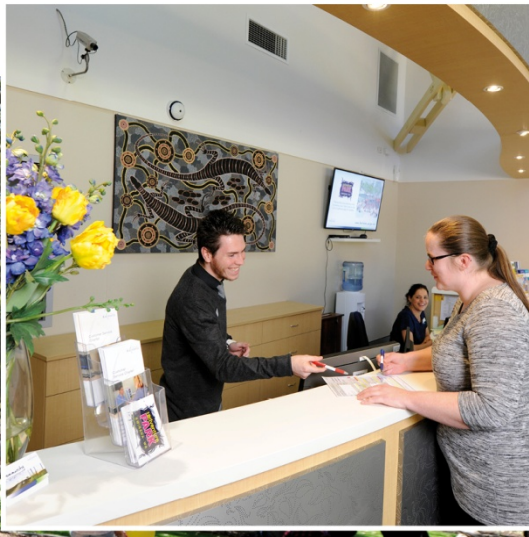
City of Kwinana



Council Policy

Charitable Rate Exemptions







Council Policy

Charitable Rate Exemptions | D12/63019[v6]

1. Title

Charitable Rate Exemptions

2. Purpose

This policy defines how an applicant is to apply for a charitable rate exemption and the requirement for their status to be reviewed every two years.

3. Scope

This policy is applicable to local organisations and ratepayers within the City of Kwinana who are eligible for a charitable rate exemption.

4. Definitions

Charity has the meaning given to it by the *Charities Act 2013* (Commonwealth);
Charitable purpose has the meaning given to it by the *Charities Act 2013* (Commonwealth); and
Disqualifying purpose means –

(a) The purpose of engaging in, or promoting, activities that are unlawful or contrary to public policy; or
(b) The purpose of promoting or opposing a political party or a candidate for political office.

Note: Activities are not contrary to public policy merely because they are contrary to government policy.

5. Policy Statement

Council is committed to adhering to the *Local Government Act 1995* and providing guidance to applicants who apply for an exemption of local government rates based on their use of land for charitable purposes.

5.1 Land Used Exclusively for Charitable Purposes

The land use for which the charitable organisation is applying for an exemption under section 6.26(2)(g) of the *Local Government Act 1995* must be for the exclusive use for charitable purposes as defined in section 12 of the *Charities Act 2013* and these include:

(a) the purpose of advancing health;
(b) the purpose of advancing education;
(c) the purpose of advancing social or public welfare;
(d) the purpose of advancing religion;
(e) the purpose of advancing culture;
(f) the purpose of promoting reconciliation, mutual respect and tolerance between groups of individuals that are in Australia;
(g) the purpose of promoting or protecting human rights;
(h) the purpose of advancing the security or safety of Australia or the Australian public;
(i) the purpose of preventing or relieving the suffering of animals;
(j) the purpose of advancing the natural environment; or
(k) any other purpose beneficial to the general public that may reasonably be regarded as analogous to, or within the spirit of, any of the purposes mentioned in paragraphs (a) to (j); and

Must not be a disqualifying purpose under the meaning given by section 11 of the *Charities Act 2013*.

5.2 Application for Rate Exemption

5.2.1 To be considered by the City for approval, each application for a charitable rate exemption under section 6.26(2)(g) of the *Local Government Act 1995* must be made in writing by completing an Application for Rate Exemption form.

5.2.2 Applications will be submitted to Council for approval.

5.2.3 The exemption will be applied from the later date of when the land was used exclusively for charitable purposes or from1 July of the current financial year.

5.3 Review of Policy

All exemptions will be reviewed every two years and confirmation from the charitable organisation that the above purposes still apply will be required to continue receiving the exemption.

6. Financial/Budget Implications

Land rates will not be charged on successful rates exemption applicants under this policy and will therefore decrease rates revenue accordingly.

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

Plan	Objective	Strategy
Corporate Business Plan 2019-2024	5.4 Ensure the financial sustainability of the City of Kwinana into the future	5.4.6 Review land uses and their rating categories to ensure fair and equitable rating within the City

10. Occupational Safety and Health (OSH) Implications

There are no specific OSH implications associated with this Policy.

11. Risk Assessment

A risk assessment conducted as part of the Policy review has indicated that the risk to the City by not applying a charitable rate exemption to a property is low.

12. References

Name of Policy	Charitable Rate Exemptions
Date of Adoption and resolution No	11/07/2012 #163
Review dates and resolution No #	12/04/2017 #468 28/08/2019 #533 Xx/xx/2019 #xxx
Next review date due	28/08/2021
Legal Authority	*Local Government Act 1995* Section 2.7 – The Role of Council; and

	Section 6.26(2)(g) - Rateable Land *Charities Act 2013* (Commonwealth)
Directorate	City Business
Department	Finance
Related documents	**Acts/Regulations** *Local Government Act 1995* *Charities Act 2013 (Commonwealth)* **Plans/Strategies** Corporate Business Plan 2019-2024 **Policies** Nil **Work Instructions** Nil **Other documents** D16/24232 Application for Rate Exemption Form

Note: Changes to References may be made without the need to take the Policy to Council for review.

18.7 Adoption of the City of Kwinana Asset Management Strategy 2019 - 2022

DECLARATION OF INTEREST:

There were no declarations of interest declared.

SUMMARY:

This report seeks Council adoption of the City of Kwinana Asset Management Strategy 2019-2022 (Attachment A).

The Asset Management Strategy is part of the asset management suite of documents, and essentially provides a summary of asset management plans and the future outlook for assets. It is recommended that Council adopt the Asset Management Strategy.

OFFICER RECOMMENDATION:

That Council adopt the Asset Management Strategy 2019 - 2022, as detailed in Attachment A.

DISCUSSION:

The City reviewed and adopted its Asset Management Policy on 14 February 2018, the last adoption of the Asset Management Strategy (Strategy) was 9 February 2011, with a desktop review being undertaken in 2014. Both the Policy and Strategy documents ensure the City progresses along a structured and planned path in the management of the City's assets. Significant progress has been achieved in the area of asset management since the first adoption of the Strategy, however, there are still a large number of improvements to be made, and many opportunities to refine asset plans and data collection, in order to make better decisions for achieving fit-for-purpose assets at the lowest possible whole-of-life cost. It is a requirement of the Strategy that it be reviewed and presented to Council for adoption on a three yearly basis.

The Strategy defines the current status of the City's assets and the projected impact current funding levels will have on the asset classes. In particular, the Strategy notes that the current planned investment in asset renewal is significantly below what is required to maintain levels of service, and there will be a consequent decline in community satisfaction over time. Also noted in the Strategy is the long-term financial consequence of underfunding asset renewals, with the whole-of-life cost of asset ownership increasing, and future generations being required to not only pay for the current generation's enjoyment, but also meet the consequent increased whole-of-life costs.

Classes of assets covered by this version of the Strategy are:

- Roads and Transport;
- Buildings,
- Public Open Space,
- Drainage.

Future revisions of the Strategy will include Public Lighting.

18.7 ADOPTION OF THE CITY OF KWINANA ASSET MANAGEMENT STRATEGY 2019 - 2022

LEGAL/POLICY IMPLICATIONS:

No legal/policy implications have been identified as a result of this report or recommendation.

FINANCIAL/BUDGET IMPLICATIONS:

The Strategy identifies a significant underfunding in asset management over the life of the Long Term Financial Plan. Addressing the funding shortfall should be considered a priority of future interations of the Long Term Financial Plan, including a review of service levels to the community.

ASSET MANAGEMENT IMPLICATIONS:

The Strategy is a part of the overall system of asset management within the City. Regular review of the Strategy will ensure the City is progressing in a planned and structured way with regard to asset management.

ENVIRONMENTAL IMPLICATIONS:

No environmental implications have been identified as a result of this report or recommendation.

STRATEGIC/SOCIAL IMPLICATIONS:

This proposal will support the achievement of the following outcome and objective 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
	Assets	5.18 Minimise the life cycle cost of assets

COMMUNITY ENGAGEMENT:

The City has completed a level of service survey with the community, to guide future reviews of its asset management plans, and to provide background for future discussions about levels of service.

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	Insufficient funding to maintain assets
Risk Theme	Inadequate asset sustainability practices
Risk Effect/Impact	Property
Risk Assessment Context	Operational
Consequence	Catastrophic
Likelihood	Likely
Rating (before treatment)	Extreme
Risk Treatment in place	Prepare Contingent Plans - in the event a risk occurs
Response to risk treatment required/in place	Prioritisation of asset renewal projects and accurate planning of works. Consider appropriate contingency in budget estimation phase
Rating (after treatment)	High

COUNCIL DECISION

046

MOVED CR D WOOD **SECONDED CR M KEARNEY**

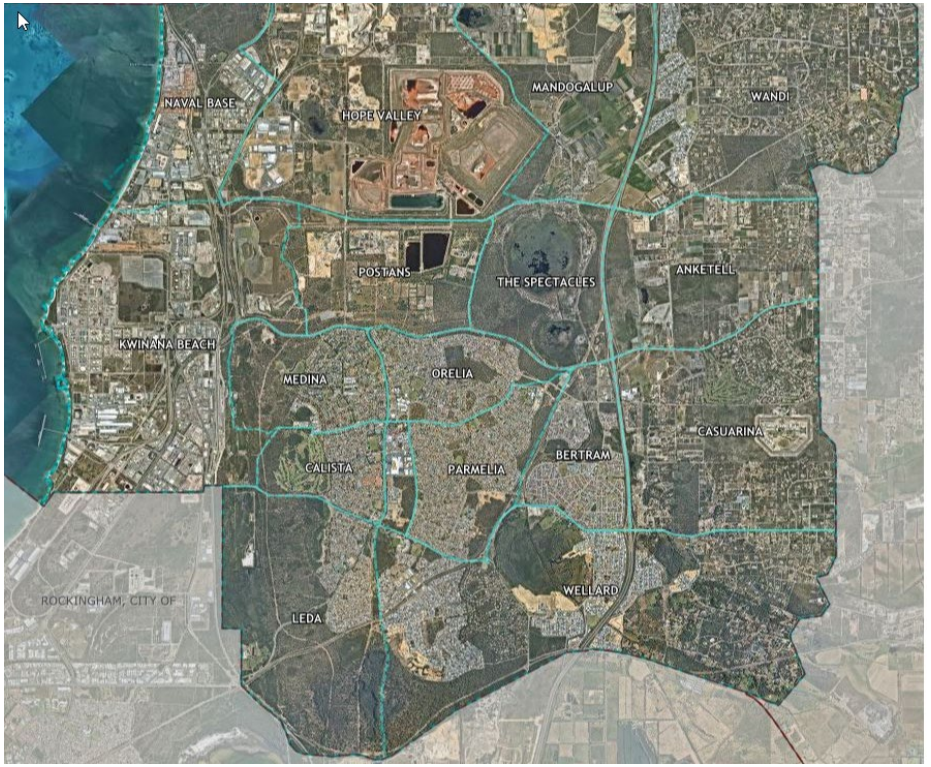
That Council adopt the Asset Management Strategy 2019 - 2022, as detailed in Attachment A.

CARRIED
7/0

ATTACHMENT A

City of Kwinana

ASSET MANAGEMENT STRATEGY



2019 - 2022

Document Control	

Rev No	Date	Revision Details	Author	Reviewer	Approver
1	19 November 2019	For approval	A Nicholas	D Elkins	D Elkins

Executive Summary

Asset management is one of the core business activities of local government, and the City of Kwinana's Strategic Community Plan 2019 - 2029 is founded on, amongst many other things, a plan to develop Asset Management for the benefit of the City and its community. The City recognises that asset management planning is an organisational responsibility and requires the commitment of senior management within the City for it to succeed.

This Asset Management Strategy, feeds into the City's Corporate Business Plan, to provide clear direction in the form of objectives and strategies. These objectives and strategies are reviewed annually, with progress being detailed in the City's Annual Report.

The City's infrastructure assets represent a significant investment over many generations. Millions of dollars are spent annually managing and maintaining the City's infrastructure, and it is imperative that the City utilise the best management skills and practices to ensure related services are delivered economically and sustainably.

In the past, the City has increased community levels of service, through investment in the creation of new infrastructure, without recognising the long-term life-cycle costs associated with the ongoing operation, maintenance and renewal of the infrastructure.

Improving the management of infrastructure can bring major benefits by ensuring that resources are used in the most cost effective manner, and the assets supporting services are managed in a way that guarantees maximum performance for the lowest practical whole-of-life cost.

The City of Kwinana is responsible for the management of assets valued at more than $640 million. These assets play an integral part in delivering the services provided by the City for the community.

The range of infrastructure assets, and the services provided from these assets, is shown below:

Table 1: Assets used for providing Services

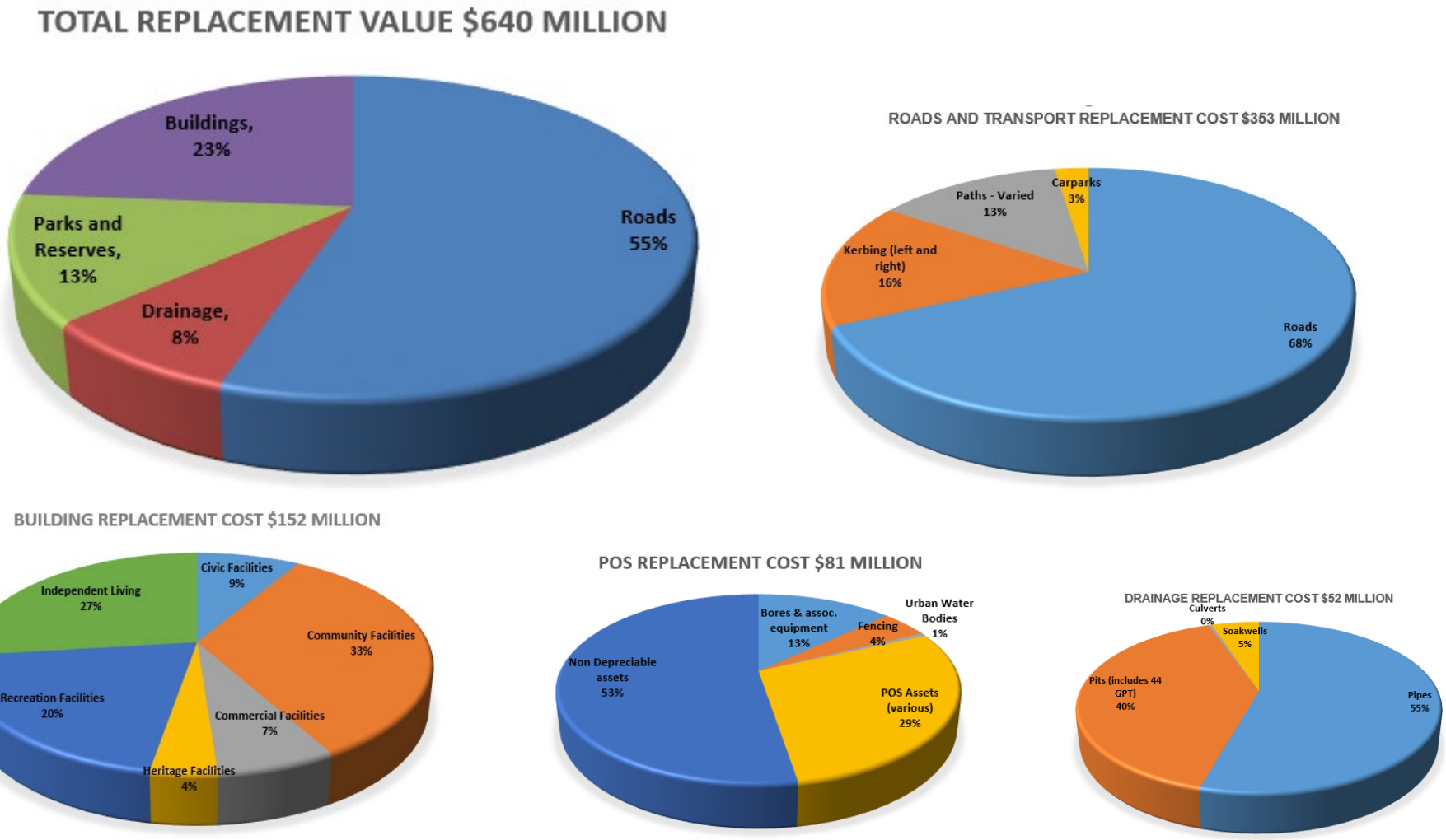
Asset Class	Description/Services Provided
Roads and Transport	Roads, shared paths, carparks, embayment parking
Stormwater Drainage	Underground pipe and pit network, open channels, detention basins
Parks and Reserves	Artwork, recreational facilities, lighting, irrigation, retaining/feature walls, fencing
Buildings	Civic, community, commercial, heritage, recreational and independent living buildings

The current (2018) financial status of the City's assets is summarised in the table below:

Table 2: Financial Status of City Assets

Asset Class	Replacement Cost ($000)	Depreciable Amount ($000)	Depreciated Replacement Cost ($000)	Depreciation Expense ($000)
Roads and Transport	353,881	244,732	254,218	8,247
Drainage	52,813	52,813	45,179	536
Parks and Reserves	38,675	38,675	10,397	1,727
Parks and Reserves **Non Depreciable Assets**	42,910	0	0	0
Buildings	151,948	151,948	101,236	4,490
Total	640,227	488,168	411,030	15,000

Figure 1: Asset Replacement Values



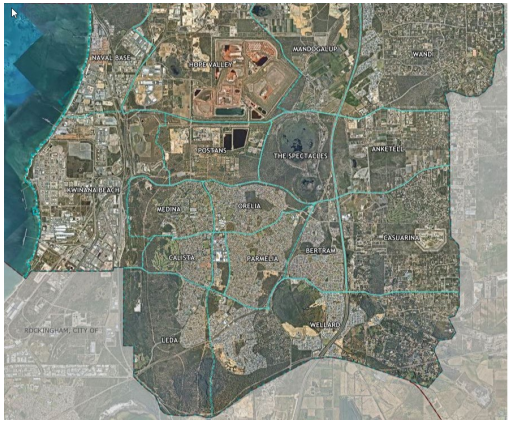
1. Our Assets

Roads and Transport

The roads and transport infrastructure network is the City's largest asset class and consist of:

- Roads – 447 km;
- Shared paths – 300 km;
- Car parks – 56,438m^2; and
- Embayment Parking – 40,009m^2.

Ten year Forward Works Programs have been developed to maintain regular maintenance and renewal of roads and footpaths. The data used to populate the ten year program is based on the last survey condition reports. The prioritising of the network is based on Council's Road Pavement Rehabilitation Strategy.



Buildings

The building portfolio is the City's second largest asset class with:

- Civic Facilities – 3;
- Community Facilities – 19;
- Commercial Facilities – 9;
- Heritage Facilities – 4;
- Independent Living Units – 234 and
- Recreation Facilities – 12.

A ten year forward works program, which is updated annually, has been developed for the City's building portfolio. The work proposed for each building is based on inspections, annual audits, risk and condition assessments. Annual audits are carried out in-house, with specialised services (e.g. air conditioning) being called upon as required.



Parks and Reserves

The parks and reserves asset class is possibly the most diverse, with assets across 1,713 sites, covering 511 hectares. Public open space takes the following forms:

- Sports spaces;
- Recreation spaces;
- Nature/bushland spaces; and
- Streetscapes.

A ten year forward works program, which is updated annually, has been developed for the City's public open spaces. The work proposed for each is based on inspections, annual audits, condition and risk assessments.



Drainage

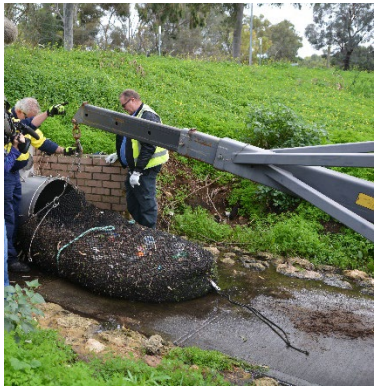
Drainage is made up of a network of pipes, pits and sumps. The majority of these assets are buried, and the service they provide significantly contributes to the health of the community.

The Stormwater drainage depreciable assets comprise of:

- 191.72 km of pipes;
- 8,341 pit units;
- 194 culvert units;
- 137 storage chamber units;
- 44 Gross Pollutant Trap (GPT) units; and
- 29 fenced drainage sumps.

Stormwater drainage assets are normally long life assets. There is no current renewal program for these assets. New and upgrades of stormwater assets have been prioritised for inclusion in annual construction programs. Minor renewal requirements, such as drainage nets, will be managed on an ad hoc basis as part of the normal budget processes.

Even though there is no current renewal program for drainage assets, the assets are being used, and will ultimately need replacement. The consumption of the asset will ideally be recognised through an asset reserve, to ensure funds are available to replace each drainage asset at the end of life.



2. Where are we now

This asset management strategy identifies the projected operations, maintenance and capital renewal expenditure required to provide an agreed level of service to the community over a 20 year period (ten years of detail). This provides input into 20 year financial and funding plans aimed at providing the required services in a sustainable manner. These projected expenditures have been compared to budget allocations for the 20 year planning period, to identify any funding shortfall.

Roads and Transport

The projected 20 year average cost is $10.1m per year. The estimated available 20 year average Long Term Financial Plan (LTFP) budget is $3.4m per year, which is 34% of the cost to provide the service. This is a funding shortfall of $6.7m on average per year.

Buildings

The projected 20 year average cost is $8.6m. The estimated available 20 year average LTFP budget is $4.4m which is 51% of the cost to provide the service. This is a funding shortfall of $4.2m on average per year.

Parks and Reserves Infrastructure

The projected 20 year average cost is $7.4m. The estimated available 20 year average LTFP budget is $6.4m which is 86% of the cost to provide the service. This is a funding shortfall of $1.05m on average per year.

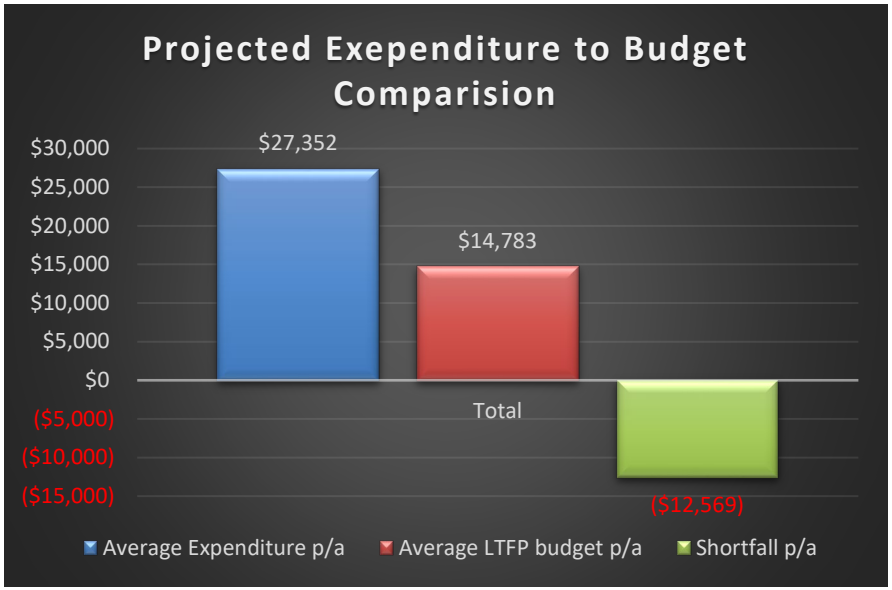
Stormwater Drainage

The projected 20 year average is $1.1m. The estimated available 20 year average LTFP budget is $527,000 which is 48% of the cost to provide the service. This is a funding shortfall of $598,000 on average per year.

Total Asset Summary

The projected 20 year average operations, maintenance and capital renewal expenditure cost is $27m. The estimated available 20 year average Long Term Financial Plan budget is $14.7m, which is 46% of the cost to provide the service. This is a funding shortfall of $12.5m on average per year.

- ***Projected 20 year average cost = average operations and maintenance expenditure plus depreciation expense***
- ***Estimated available 20 year average LTFP budget = average operations and maintenance plus capital renewal***



The projected expenditure to budget comparison highlights the difference between the LTFP allocation and the average cost of providing the service over the long term. The budget being less than the projected expenditure indicates that the LTFP allocation will need to be increased or cuts in services made in the future. It also suggests a need to carefully consider all new asset creation projects and proposed increases in services.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing, to achieve sustainable asset management in the long term.

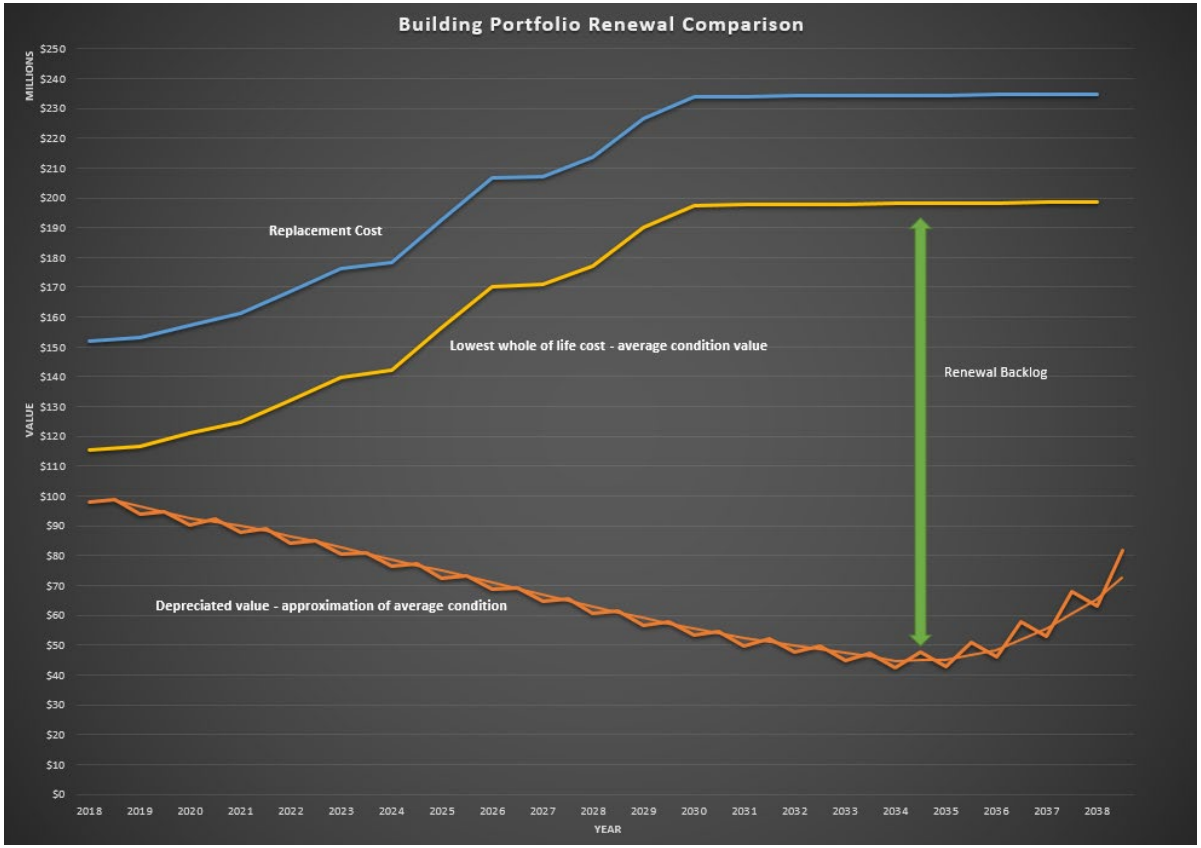
Infrastructure Scorecard

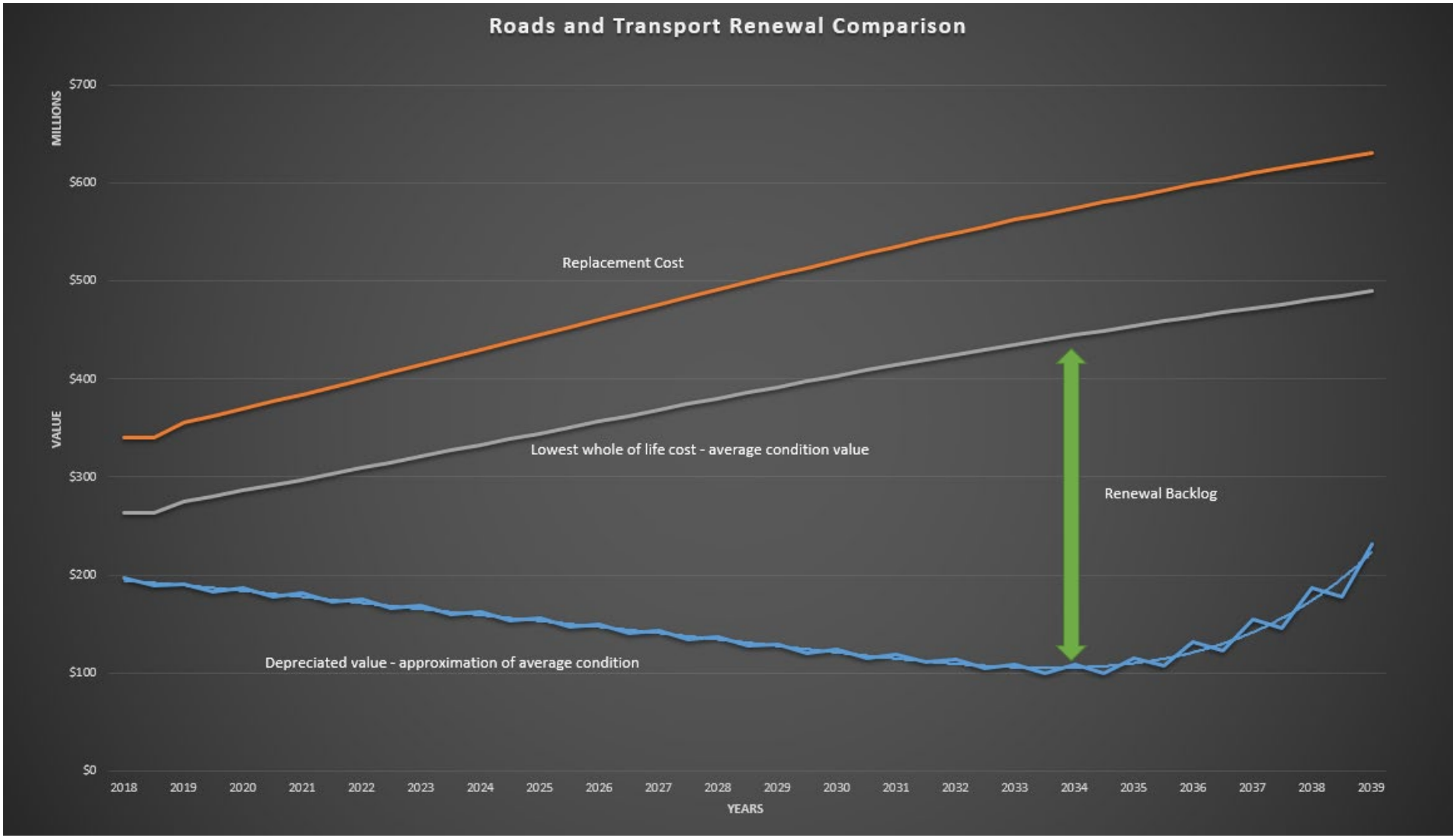
The Asset Sustainability Ratio shows current performance is at 22%, which is 68% below the required range of 90% to 100%. This is due to the City's proportion of expenditure on existing capital assets being insufficient when compared to the annual consumption of assets. As a consequence, the City is in effect asking future generations to fund the lifestyle of the current generation.

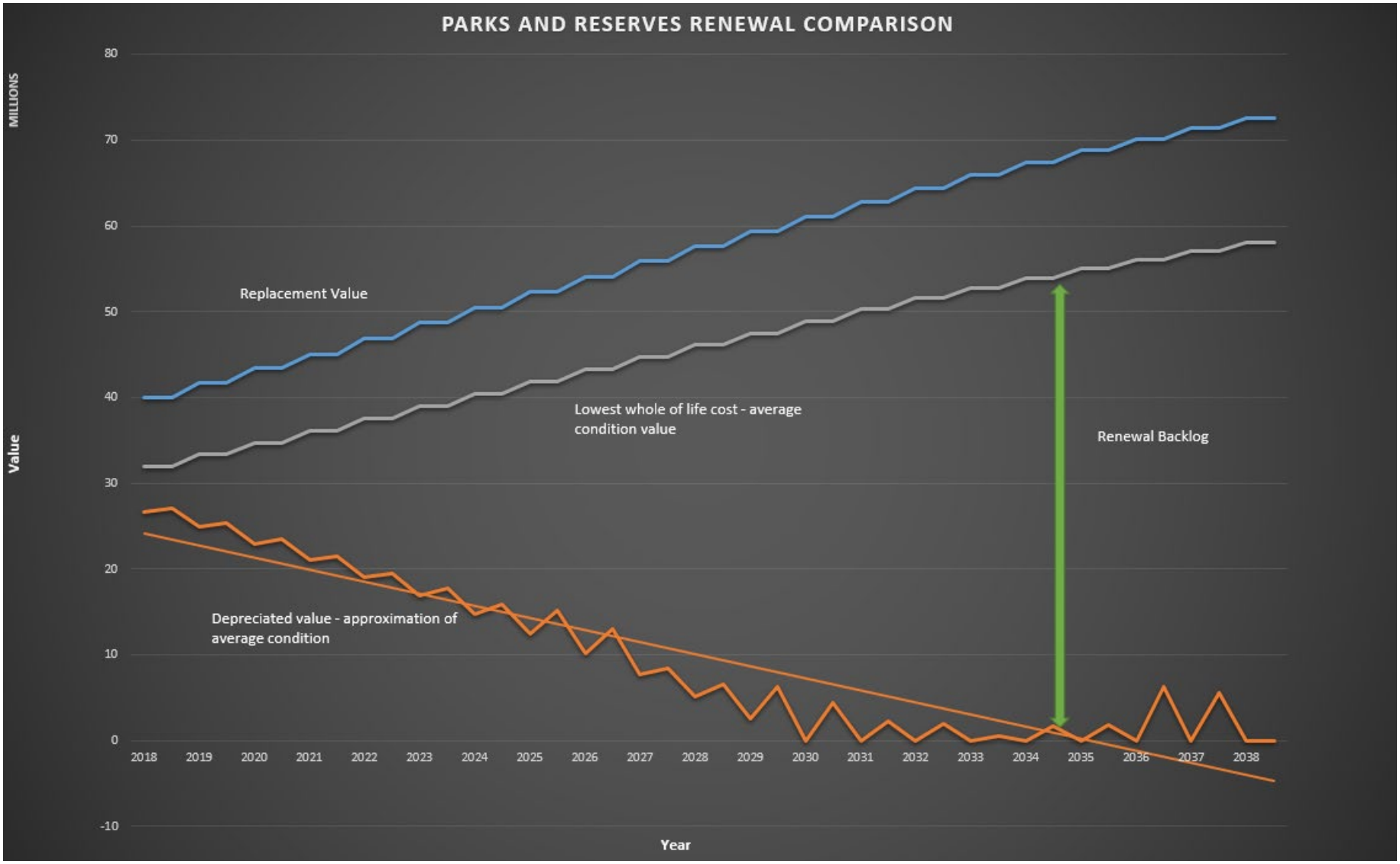
Ratio	Formula	DLG Min Standard	18 / 19
Asset Sustainability	Capital renewal and replacement expenditure / Depreciation	0.9 - 1.1	0.22
Asset Consumption	Depreciated replacement costs of depreciable assets / Current replacement cost of depreciable assets	0.6 – 0.75	0.79
Asset Renewal Funding	NPV of planned capital renewal over 10 years / NPV of required capital expenditure over 10 years	0.95	0.91

NVP = Net Present Value

The following graphs indicate the projected decline in asset condition and value, and the increasing renewal backlog under the current funding scenario. It is not possible to model the increased costs related to delayed renewal works, so the graphs overstate the condition of the asset (i.e. the backlog of investment will be greater than depicted on the graph. Latter years in the Long Term Financial Plan start to address the renewal gap.




Roads and Transport Renewal Comparison
MILLIONS
$700
$600
$500
$400
$300
$200
$100
$0
VALUE
Replacement Cost
Lowest whole of life cost - average condition value
Renewal Backlog
Depreciated value - approximation of average condition
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
YEARS


PARKS AND RESERVES RENEWAL COMPARISON
MILLIONS
Value
80
70
60
50
40
30
20
10
0
-10
Replacement Value
Lowest whole of life cost - average condition value
Renewal Backlog
Depreciated value - approximation of average condition
2018
2019
2020
2021
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2023
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2035
2036
2037
2038
Year

3. Where are we heading?

The biggest financial challenge facing the City is the cost of renewing its asset infrastructure. By growth percentage, the City of Kwinana remains the fastest growing local government in Perth's south-west metropolitan area, and is the second fastest growth area in Western Australia.

Due to the unprecedented growth of the City, a large portion of the City's roads, buildings and public open space assets were constructed within the last ten to 15 years. Major renewal of these assets will all fall due at the same time. If sufficient capital funds are not set aside to cater for these renewals, the condition and functionality of the assets will deteriorate, and the lack of sufficient funding will have a detrimental impact on the City's financial sustainability.

As the City's assets are consumed (and not renewed through lack of investment), more investment in asset maintenance will be required to ensure that the current level of service is delivered to the community. Ultimately, however, if the lack of renewal expenditure is not addressed, some assets will fail in the future. The City can also expect increased community dissatisfaction with asset condition, and there will be a rising short-term and long-term cost of managing assets.

The growing problem of underfunding assets includes the backlog of asset renewal from underfunding of previous years, and is an issue that can only be addressed over the longer term.

Moving forward, in order to provide services from infrastructure assets in a sustainable manner, it is envisaged that an increase in renewal funding allocations will be prioritised in future iterations of the Long Term Financial Plan.

4. Initiatives and Improvements

The Asset Management Strategy proposes the following initiatives and improvements to enable the asset management objectives to be achieved.

Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
1	Long Term Financial Plan	Review and update LTFP for all asset classes annually	Manager Finance / Manager Asset Management Services	Annually	Staff time
2	Asset Management Strategy	Adoption of the Asset Management Strategy	Elected Members	Dec 2019	
3		Review Asset Management Strategy 3 yearly	Manager Asset Management Services	Dec 2022	Staff time
4	Asset Management Plans	Adoption of asset management plans	Elected Members	Mar 2020	
5		Review asset management plans 3 yearly	Asset Management Team	Mar 2022	Staff time
6	Levels of Service	Consultation with the community to review Levels of Service (LoS) and determine the wider community willingness to pay for continued LoS or improved LoS.	Asset Management Team	Jun 2019	Staff time

Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
7		Review Parks and Reserves LoS identifying whole of life costings for Regional, District, Neighbourhood and Local parks.	Technical Officer Public Open Space Assets, Landscape Architects, Coordinator Facility Maintenance	19/20 – 20/21	Staff time
8		Determine LoS per building hierarchy	Technical Officer Building Assets	20/21	Staff time
9		Disability Access and Inclusion Plan (DAIP) accessibility – identify number of fully accessible playgrounds as part of the Playground Upgrade Strategy.	Landscape Architects	19/20	Staff time
10	Data and Systems	Implementation of asset component of corporate business system (CBS);	Asset Management Team	20/21	Staff time
11		New CBS - Financials to allow for capture of operational, maintenance and renewal costs for asset reporting for POS and Civil assets.	Manager Finance	20/21	Staff time

Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
12		Financial systems to allow for capture of data between planned, reactive and specific maintenance.	Assets/Finance/Operations	20/21	Staff time
13		Identify playgrounds adjacent to roads and assess priority for fencing. Make provision in annual budget as per forward works program.	Technical Officer Public Open Space Assets		Staff time
14		Condition assessment to be undertaken of fencing network.	Technical Officer Public Open Space Assets,/external	19/20	$12,000
15		Breakdown adventure park assets at component level, condition rate	Technical Officer Public Open Space Assets/external	19/20	$5,000
16		Medina Green infield irrigation – investigate areas which required irrigation. Area subject to redevelopment.	Coordinator Technical Operations	19/20	Staff time
17		Review Natural Areas Management Plan to include hard infrastructure assets in next revision of the Parks & Reserves asset management plan	Wetlands Officer – Environment	Ongoing	Staff time
18		Undertake a review of in-field pipes / irrigated areas to ensure that they align.	Technical Officer Parks	20/21	Staff time

Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
19		Undertake a review of streetscapes and complete data gap.	Technical Officer Parks	20/21	Staff time
20		Revaluation of Parks and Reserves assets - breakdown of Urban Water Body components for the purposes of the revaluation.	Technical Officer Public Open Space Assets,	22/23	Staff time
21		Chisham Oval Bore Hole – at risk of collapse. Investigate alternate use of this site, as half of site owned by the State.	Technical Officer Public Open Space Assets,/ CTO	19/20	Staff time
22		Develop a Lighting Asset Management Plan	Technical Officer Civil Assets	Nov 2019	Staff time

18.8 Accounts for payment for the month ended 30 November 2019

DECLARATION OF INTEREST:

Mayor Carol Adams declared an impartiality interest as her sister is an employee of the City and received a refund from the City of Kwinana Christmas Club Fund that staff had been paying.

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 2019, as required by the *Local Government (Financial Management) Regulations 1996.*

OFFICER RECOMMENDATION:

That Council:

1. Accepts the list of accounts, totalling $5,590,435.42, paid under delegated authority in accordance with Regulation 13(1) of the *Local Government (Financial Management) Regulations 1996* for the period ended 30 November 2019, as contained within Attachment A.

2. Accepts the detailed transaction listing of credit card expenditure paid for the period ended 30 November 2019, 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.

Payment Type	**Amount ($)**
Automatic Payment Deductions	$ 43,173.10
Cheque Payments #200987 to #200990	$ 1,036.05
EFT Payments #3958 to #3970	$ 4,237,464.71
Payroll Payments 3/11/19 and 17/11/19, Interim Payroll Payments 03/11/19 and 17/11/19	$ 1,308,761.56
Total Attachment A	**$ 5,590,435.42**

Contained within Attachment B is a detailed transaction listing of credit card expenditure paid for the period ended 30 November 2019. This amount is included within the total payments, listed above.

18.8 ACCOUNTS FOR PAYMENT FOR THE MONTH ENDED 30 NOVEMBER 2019

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.

18.8 ACCOUNTS FOR PAYMENT FOR THE MONTH ENDED 30 NOVEMBER 2019

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

18.8 ACCOUNTS FOR PAYMENT FOR THE MONTH ENDED 30 NOVEMBER 2019

COUNCIL DECISION

047

MOVED CR P FEASEY **SECONDED CR S LEE**

That Council:

1. **Accepts the list of accounts, totalling $5,590,435.42, paid under delegated authority in accordance with Regulation 13(1) of the *Local Government (Financial Management) Regulations 1996* for the period ended 30 November 2019, as contained within Attachment A.**

2. **Accepts the detailed transaction listing of credit card expenditure paid for the period ended 30 November 2019, as contained within Attachment B.**

CARRIED
7/0

ATTACHMENT A

Cheque Listing

Payments made between

01/11/2019 to 30/11/2019

City of Kwinana

Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
Automatic Deductions								
37231	01/11/2019	Go Go On-Hold Pty Ltd	198.00	INV	01/11/2019	00037231	On hold phone message system November 2019	198.00
1799547	21/11/2019	Caltex Australia Petroleum Pty Ltd	8,890.10	INV	21/11/2019	0301799547	Fleet Fuel 011019 to 311019	8,890.10
51119	06/11/2019	Commonwealth Bank	461.96	INV	06/11/2019	051119A	Credit Card Functions Officer to 051119	461.96
51119	06/11/2019	Commonwealth Bank	41.51	INV	06/11/2019	051119B	Credit Card Director City Legal to 051119	41.51
51119	06/11/2019	Commonwealth Bank	728.00	INV	06/11/2019	051119C	Credit Card Executive Assistant to 051119	728.00
51119	06/11/2019	Commonwealth Bank	48.11	INV	06/11/2019	051119D	Credit Card Director City Regulation to 051119	48.11
51119	06/11/2019	Commonwealth Bank	3,046.79	INV	06/11/2019	051119E	Credit Card Manager Corporate Communications to 051119	3,046.79
51119	06/11/2019	Commonwealth Bank	474.44	INV	06/11/2019	051119F	Credit Card Director City Infrastructure to 051119	474.44
51119	06/11/2019	Commonwealth Bank	256.92	INV	06/11/2019	051119G	Credit Card Director City Engagement to 051119	256.92
51119	06/11/2019	Commonwealth Bank	4,544.26	INV	06/11/2019	051119H	Credit Card Manager Human Resources to 051119	4,544.26
10841554	21/11/2019	BP Australia Pty Ltd	18,825.90	INV	21/11/2019	10841554	Fleet Fuel 011019 to 311019	18,825.90
201119	20/11/2019	iinet Technologies Pty Ltd	589.93	INV	20/11/2019	115224981	Monthly internet charges various locations Nov 19	589.93
24911037	01/11/2019	Fines Enforcement Registry	560.00	INV	01/11/2019	24911037	Lodgement fee for registering unpaid infringements	560.00
24977540	13/11/2019	Fines Enforcement Registry	630.00	INV	13/11/2019	24977540	Lodgement fee for registering unpaid infringements	630.00
24992887	15/11/2019	Fines Enforcement Registry	1,190.00	INV	15/11/2019	24992887	Lodgement fee for registering unpaid infringements	1,190.00
25044492	27/11/2019	Fines Enforcement Registry	210.00	INV	27/11/2019	25044492	Lodgement fee for registering unpaid infringements	210.00
291119	29/11/2019	Toyota Financial Services	1,194.07	INV	29/11/2019	723115	Fleet Management agreement November 2019	1,194.07
48	21/11/2019	Wright Express Australia Pty Ltd	1,183.13	INV	21/11/2019	48	Fleet Fuel 011019 to 311019	1,183.13
0	04/11/2019	TPG Internet Pty Ltd	49.99	INV	04/11/2019	I218410212	Kwinana South Station internet connection	49.99
0	04/11/2019	TPG Internet Pty Ltd	49.99	INV	04/11/2019	I218411505	Mandogalup Station internet connection	49.99
		Total Automatic Deductions	**-43,173.10**					

Cheque Listing

Payments made between

01/11/2019 to 30/11/2019

City of Kwinana

Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
Cheques								
200987	06/11/2019	City Of Kwinana - Pay Cash	39.80	INV	06/11/2019	04/11/19-Library	Petty cash recoup to 311019 Library	39.80
200988	14/11/2019	City Of Kwinana - Pay Cash	63.00	INV	12/11/2019	04/11/19-ComCnte	Petty cash recoup to 041119 Community Centres	63.00
200989	20/11/2019	City Of Kwinana - Pay Cash	531.80	INV	19/11/2019	12/11/19-Libray	Petty cash recoup to 121119 Library	99.05
				INV	19/11/2019	30/10/19-FDC	Petty cash recoup to 041119 Bright Futures	413.35
				INV	19/11/2019	15/11/19-Library	Petty cash recoup to 181119 Library	19.40
200990	27/11/2019	City Of Kwinana - Pay Cash	401.45	INV	27/11/2019	27/11/2019-Admin	Petty cash recoup to 271119 Admin	401.45
		Total Cheques	**-1,036.05**					
EFT								
3958	06/11/2019	EFT TRANSFER: - 06/11/2019	25,453.85					
3958.568-01		Bright Futures In Home Care - Payro	25,453.85	INV	06/11/2019	211019 to 031119	IHC Payroll 211019 to 031119	25,453.85
3959	07/11/2019	EFT TRANSFER: - 07/11/2019	512,548.24					
3959.10275-01		Zanzara	431.00	INV	05/11/2019	February202019	Mosquito traps	431.00
3959.10373-01		Green Willows Industrial Cleaning a	200.00	INV	06/11/2019	33	Clubhouse and office cleaning	200.00
3959.1046-01		OCE Australia Ltd	159.68	INV	04/11/2019	1485162	Monthly Charges ColorWave 550 Scanner October 19	159.68
3959.10506-01		Shred-X Pty Ltd	60.72	INV	06/11/2019	01344251	Exchange and destroy secure document bins	60.72
3959.10525-01		Spiritual Development Centre	200.00	RFD	05/11/2019	1116625	Refund bond hall hire 040719	200.00
3959.10849-01		Margaret Rodriguez	230.50	INV	06/11/2019	5thNovember2019	Dog application fee refund	230.50
3959.10916-01		Alison Bannister Career Coaching	545.50	INV	05/11/2019	CWDW002	Workshop Contemporary Job Searching 291019	545.50
3959.11049-01		QTM Pty Ltd	8,898.15	INV	05/11/2019	INV-4099	Traffic management Wellard Road 091019	2,760.64
				INV	06/11/2019	INV-4101	Traffic management De Haer Road 031019	1,689.70
				INV	06/11/2019	INV-4100	Traffic management various locations	1,665.90
				INV	06/11/2019	INV-4098	Traffic management Mandogalup Road 101019	2,781.91
3959.11199-01		Applied Graphics WA	156.14	INV	06/11/2019	543	3 x A1 poster print with matt lamination	156.14
3959.11284-01		PTE Group	18,978.00	INV	06/11/2019	INV-7779	Custom Beavertail plant trailer	18,978.00
3959.11288-01		Emerge Associates	3,850.00	INV	04/11/2019	8827	Professional service Boomerang Quarry Peer	3,850.00

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3959.11300-01		Strategic DCP Consulting	2,509.83	INV	31/10/2019	007	Consulting Services	2,509.83
3959.1130-01		Port Printing Works	327.80	INV	05/11/2019	INV045220	Kwinana Recquatic birthday party invitations	270.60
				INV	05/11/2019	INV045575	Kwinana Recquatic November Challenge DL flyers	57.20
3959.11366-01		Outback Handyman	495.00	INV	06/11/2019	2395	Replace store room door U46 Callistemon Court	495.00
3959.11406-01		Leaf Bean Machine Pty Ltd	300.48	INV	31/10/2019	00069679	Coffee beans for Cafe Splash Recquatic	300.48
3959.1159-01		SoundPack Solutions Pty Ltd	275.55	INV	04/11/2019	INV-12343	Library items	275.55
3959.11598-01		Perth Timber Floors	17,050.00	INV	05/11/2019	142	Floor installation Medina Hall	17,050.00
3959.11666-01		JBS & G Australia Pty Ltd	550.00	INV	04/11/2019	77105	Professional services	550.00
3959.11726-01		Lianne Maree Harvey	46.00	INV	31/10/2019	7.1	Rates refund	46.00
3959.11730-01		Aquatic Leisure Technologies T/As	166.65	INV	05/11/2019	Refund	Refund of overpaid invoice	166.65
3959.11731-01		Sally Howes	115.20	INV	05/11/2019	24thoctober2019	Refund of swim school fees	115.20
3959.11733-01		Pinkalkumar Dineshbhai Amin	1,000.00	RFD	05/11/2019	1515735	Refund bond hall hire 031119	1,000.00
3959.11734-01		Rathi Jayabalan	100.00	RFD	05/11/2019	1477829	Refund bond Pato hire 021119	100.00
3959.11735-01		Jessica Henson	100.00	RFD	05/11/2019	1505055	Refund bond Patio hire 021119	100.00
3959.11736-01		Kiran Inam	100.00	RFD	05/11/2019	1542197	Refund bond Patio hire 021119	100.00
3959.11737-01		Cara Lee Fijolek	100.00	RFD	05/11/2019	1544963	Refund bond Patio hire 240919	100.00
3959.11738-01		Motorcyclists Advocating Child	1,000.00	RFD	05/11/2019	1551271	Refund bond Patio hire 031119	1,000.00
3959.11739-01		Lord of the Nations Christian Churc	300.00	RFD	05/11/2019	1097582	Refund bond hall hire 030317	300.00
3959.11740-01		Kindy Dance Time	300.00	RFD	06/11/2019	1075011	Refund bond hall hire 060217	300.00
3959.11741-01		Willem Barend De Klerk	68.85	INV	06/11/2019	28thOctober2019	Reimbursement of fuel 1GWO590	68.85
3959.1227-01		Rockingham Holden	60,606.68	INV	04/11/2019	50207	Holden Colorado KWN2133	60,420.04
				INV	04/11/2019	39607	Luggage mat for Holden Trailblazer 1GIL601	186.64
3959.1265-01		Sai Global Ltd	677.83	INV	05/11/2019	SAIG1IS-990453	Licence renewal	677.83
3959.1357-01		Sportsworld Of WA	1,020.25	INV	06/11/2019	137898	Assorted goggles for Proshop	1,020.25
3959.1423-01		Telstra	37,239.04	INV	05/11/2019	1170168000Oct19	Usage to 161019 corporate phone account	37,239.04
3959.1455-01		Returned Services League Of Austral	89.00	INV	05/11/2019	56	Wreath for Remembrance Day 081019	89.00
3959.1474-01		Toll Transport Pty Ltd	111.46	INV	05/11/2019	1054441	Toll service to 241019	111.46

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3959.1516-01		Trisley's Hydraulic Services Pty Lt	3,581.16	INV	31/10/2019	80203357	Bi monthly service pool treatment plant Recquatic	776.16
				INV	31/10/2019	80203350	Install sample line boost pumps Recquatic	2,805.00
3959.1517-01		Trophy Specialists	115.00	INV	04/11/2019	0013110	Name plates	115.00
3959.1572-01		Western Australian Local Government	578.00	INV	04/11/2019	I3079668	Accounts Payable for Local Government course	578.00
3959.1592-01		Water Corporation of Western Austra	1,263.24	INV	31/10/2019	9000357641Oct19	25U Orelia Oval	977.09
				INV	31/10/2019	9000364614Oct19	1U Sandringham Park water fountain	2.52
				INV	31/10/2019	9000356366Oct19	22U Bright Futures	238.31
				INV	05/11/2019	9000345691Oct19	18U Waste Stream	45.32
3959.1669-01		Zipform Pty Ltd	2,574.55	INV	05/11/2019	192941	Cat & dog registration renewals	2,574.55
3959.1762-01		Officeworks BusinessDirect	124.00	INV	05/11/2019	45170890	Items for Mandogalup Fire Brigade	124.00
3959.1830-01		Biffa Bins	1,085.00	INV	06/11/2019	0859384	Skip bin for Callistemon Court	1,085.00
3959.19-01		Absolute Painting Services	3,080.00	INV	06/11/2019	INV-1158	Repaint internal of U40 Callistemon Court	1,452.00
				INV	06/11/2019	INV-1156	Painting services Banksia Park U61	1,628.00
3959.2048-01		Palm Lakes Gardens & Landscape Serv	1,078.00	INV	06/11/2019	5349	Reticulation maintenance Banksia Park	143.00
				INV	06/11/2019	2579	Repair brick paving & bollard The Strand	275.00
				INV	05/11/2019	3648	Repair brick paving Incubator Pimlico Park	660.00
3959.2097-01		Beaver Tree Services Aust Pty Ltd	19,849.50	INV	05/11/2019	70609	Weekly vegetation maintenance Parmelia	10,395.00
				INV	05/11/2019	70607	Tree removal Mortimer Road	759.00
				INV	05/11/2019	70608	Tree works Kwinana Adventure Park	7,040.00
				INV	05/11/2019	70546	General vegetation clearance Johnson Road	946.00
				INV	05/11/2019	70547	General vegetation clearance Marri Park Drive	709.50
3959.2125-01		Synergy	132,679.63	INV	05/11/2019	412205870Oct19	0U Oakley Hollow	81.05
				INV	05/11/2019	925767370Oct19	642U Gilmore Ave retic	277.09
				INV	05/11/2019	882732750Oct19	0U Harrison way	104.95
				INV	05/11/2019	332324250Oct19	18U Hewison Park BBQ	63.69
				INV	05/11/2019	856518550Nov19	Decorative lighting	2,593.18
				INV	05/11/2019	792417950Nov19	Street lighting	112,117.83
				INV	05/11/2019	169027380Oct19	0U Entry statement lighting Johnson/Gemstone	108.52
				INV	05/11/2019	685078510Oct19	30U Gawler way	115.04

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				INV	05/11/2019	700373810Oct19	138U Rutherford Park	148.49
				INV	05/11/2019	185126570Oct19	105U Borthwick Park retic	139.35
				INV	04/11/2019	219451200Oct19	105U Sulphur Rd bore pump	134.01
				INV	04/11/2019	098975100Oct19	274U Sandringham Park	267.29
				INV	04/11/2019	157165580Oct19	511U Thomas Oval Pavilion lights	244.64
				INV	04/11/2019	285940430Oct19	982U Rhodes Park	328.82
				INV	04/11/2019	192738060Oct19	0U Price Parkway landscape floodlights	104.95
				INV	04/11/2019	223615720Oct19	1039U Banksia Park Clubhouse	397.90
				INV	04/11/2019	165493420Oct19	151U Smirks Museum	144.98
				INV	04/11/2019	766868640Oct19	514U Smirks Cottage	245.47
				INV	04/11/2019	219451580Oct19	199U Price Parkway bore pump	161.82
				INV	04/11/2019	219451010Oct19	263U Millbrook Ave bore pump	177.76
				INV	04/11/2019	023172940Oct19	191U Bertram Park POS	159.61
				INV	04/11/2019	221037310Oct19	1611U Thomas Oval Pavilion	549.14
				INV	04/11/2019	224882670Oct19	725U Little Rascals	303.88
				INV	04/11/2019	334678810Nov19	0U Shop 23/40 Meares Ave supply charges	579.61
				INV	04/11/2019	652922630Oct19	245U Model railways changerooms	171.01
				INV	04/11/2019	168917550Oct19	1264U Wells Park toilets	383.98
				INV	04/11/2019	845563650Oct19	8U Apex Park BBQ	107.16
				INV	04/11/2019	191359550Oct19	871U Ridley Park	300.20
				INV	31/10/2019	331026880Oct19	79U Daybreak Park bore	144.62
				INV	31/10/2019	461218120Oct19	74U Nye Way retic	214.95
				INV	31/10/2019	113658350Oct19	75U Hennessy Park	131.04
				INV	31/10/2019	516172020Oct19	395U Bore pump 2 near Thomas Road	255.70
				INV	31/10/2019	543072120Oct19	325U Bore pump 2 near Thomas Road	250.58
				INV	31/10/2019	765774910Oct19	1261U Bright Futures	457.59
				INV	31/10/2019	861503150Oct19	1382U Medina Oval	403.70
				INV	31/10/2019	382919470Oct19	97U Medina Centre Reserve	137.14
				INV	31/10/2019	526240500Oct19	346U Thomas Road pump 2	251.60
				INV	31/10/2019	832505320Oct19	387U Ascot Park	213.86
				INV	31/10/2019	566336000Oct19	0U Fire pump Millar Road	103.18
				INV	31/10/2019	450583710Oct19	1053U Bertram Oval	183.54
				INV	31/10/2019	169026580Oct19	658U Johnson Road/Gemstone Parade bore	290.66
				INV	31/10/2019	312758410Oct19	115U Epidote Park/Emerald Park	140.35
				INV	31/10/2019	187992920Oct19	173U Bertram Road retic	71.02
				INV	31/10/2019	272150100Oct19	223U Prince Regent Gate Reserve	149.20

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				INV	31/10/2019	256732610Oct19	598U Hoyle Road Park	275.83
				INV	31/10/2019	819683070Oct19	1381U Harley Way carpark lighting	492.58
				INV	31/10/2019	316580380Oct19	3210U Medina Oval lighting	998.89
				INV	31/10/2019	921049150Oct19	9465U Medina Hall	2,730.41
				INV	31/10/2019	330244930Oct19	10U Callistemon Court U65	66.95
				INV	31/10/2019	130957780Oct19	445U Banksia Park/Callistemon Court	192.32
				INV	31/10/2019	884861450Oct19	5023U Callistemon Court	1,511.84
				INV	31/10/2019	277773560Oct19	3707U Banksia Park	1,136.47
				INV	31/10/2019	282690350Oct19	4536U Casuarina/Wellard Fire Station/Hall/bore	1,364.19
3959.218-01		Bob Jane T-Mart Kwinana	1,355.00	INV	31/10/2019	144082	Supply and install tyres 1GJC832	1,355.00
3959.2219-01		The Distributors Perth	128.15	INV	31/10/2019	534079	Items for Cafe Splash Recquatic	128.15
3959.2224-01		Prestige Catering & Event Hire	1,854.90	INV	05/11/2019	INV-0390	Catering 281019	349.80
				INV	06/11/2019	INV-0410	Catering 011119	1,089.80
				INV	06/11/2019	INV-0413	Catering 041119	415.30
3959.2247-01		Rankine Mosquito Management	3,580.50	INV	05/11/2019	KWI-01-04	Mosquito monitoring program October 2019	3,580.50
3959.2339-01		ZircoData Pty Ltd	660.63	INV	04/11/2019	ZDW0096817	Offsite storage pick up and retrieval October 19	660.63
3959.248-01		Bunnings Building Supplies	107.39	INV	04/11/2019	2163/01627631	Hardware items for William Bertram Centre	31.86
				INV	06/11/2019	2163/01131323	Garden sprayer	75.53
3959.2507-01		Ixom Operations Pty Ltd	1,646.69	INV	05/11/2019	6171862	Supply of Chlorine gas Recquatic	1,513.02
				INV	06/11/2019	6173103	Chlorine gas for Recquatic	133.67
3959.2652-01		Modern Teaching Aids Pty Ltd	104.23	INV	04/11/2019	43800531	Items for school holiday program Library	104.23
3959.2698-01		Wilson Security Pty Ltd	873.90	INV	06/11/2019	W00249718	Mobile security Callistemon Court October 19	873.90
3959.2852-01		Downer EDI Works Pty Ltd	83.20	INV	05/11/2019	6007638	.55 tonne asphalt	83.20
3959.302-01		Chadson Engineering	403.15	INV	05/11/2019	A0084621	Pool test and calibration Recquatic	403.15
3959.3105-01		Poly Pipe Traders	1,346.82	INV	05/11/2019	00100363	Reticulation parts	964.40
				INV	05/11/2019	00100649	Reticulation parts	59.50
				INV	05/11/2019	00100647	Reticulation parts	22.92
				INV	05/11/2019	0100555	Reticulation parts	300.00
3959.3130-01		Craig Treeby	360.00	INV	06/11/2019	5thNovember2019	Fire Control Officer first 50% phone & internet allowance 2019/2020	360.00

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3959.335-01		City of Rockingham	60,283.92	INV	05/11/2019	108263	Tip fees to 151019	60,283.92
3959.3359-01		J Corp Pty Ltd	264.00	INV	04/11/2019	16thOctober19	Refund verge material usage VP2019/169	264.00
3959.339-01		Civica Pty Ltd	1,005.84	INV	05/11/2019	M/LA013363	SMS gateway annual fee	1,005.84
3959.3452-01		Western Maze Pty Ltd	499.71	INV	06/11/2019	00000303	Collection of go back for hard waste collection	499.71
3959.358-01		Coastline Mowers	16.00	INV	05/11/2019	21628#5	Oil for chainsaw	16.00
3959.3686-01		KAJ Installations & Services	643.00	INV	06/11/2019	00005842	Banksia Park U61 supply & program remote controls	575.00
				INV	06/11/2019	00005841	Supply garage door transmitter Callistemon Court	68.00
3959.407-01		Winc Australia Pty Ltd	339.94	INV	06/11/2019	9028759394	Stationery Bright Futures	242.15
				INV	06/11/2019	9028759768	Stationery Bright Futures	62.85
				INV	04/11/2019	9029045156	Stationery Admin	34.94
3959.4112-01		Cleverpatch Pty Ltd	103.32	INV	04/11/2019	347547	Library items	103.32
3959.4245-01		ED Property Services	2,640.00	INV	06/11/2019	00001356	Repair eaves and downpipes Banksia Park U37 & 38	660.00
				INV	06/11/2019	00001355	Repair walls Banksia Park U61	792.00
				INV	06/11/2019	00001354	Repairs to walls Callistemon Court U7	33.00
				INV	06/11/2019	00001353	Replace rear gate and fence panel U65 Callistemon	1,155.00
3959.4256-01		Rockingham Skylights	175.00	INV	06/11/2019	12167	Install new skylights Callistemon Court U42	175.00
3959.4719-01		Complete Office Supplies Pty Ltd	973.37	INV	06/11/2019	08737130	Stationery Depot	25.82
				INV	06/11/2019	08735755	Stationery Recquatic	396.41
				INV	04/11/2019	08721165	Stationery Library	59.59
				INV	31/10/2019	08721166	Stationery Darius Wells	491.55
3959.4861-01		Big W	46.60	INV	04/11/2019	176618	Seeds for Seed Saver event	46.60
3959.4995-01		LGISWA	257.30	INV	06/11/2019	5thNovember2019	Payment of property adjustment during 2018-2019	257.30
3959.5061-01		Department of Planning -DAP	5,844.00	INV	06/11/2019	DAP/19/01687	JDAP Application DAP/19/01687	5,603.00
				INV	06/11/2019	DAP/15/00887	JDAP Application DAP/15/00887	241.00
3959.5520-01		Master Lock Service	1,003.00	INV	06/11/2019	00006398	Rekey of locks	385.00
				INV	06/11/2019	00006397	Repairs to window latch Callistemon Court U55	138.00
				INV	04/11/2019	00006403	Key supplies	360.00

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				INV	05/11/2019	00006390	Supply keys	120.00
3959.5743-01		Programmed Maintenance Services Ltd	1,622.50	INV	06/11/2019	SINV565985	Broad leaf spray Banksia Park & Callistemon Court	1,622.50
3959.5776-01		Eddie Mouna	360.00	INV	06/11/2019	5thNovember2019	Fire Control Officer first 50% phone & internet allowance 2019/2020	360.00
3959.5823-01		Accord Security Pty Ltd	9,423.77	INV	06/11/2019	00024015	Security service period ending 290919 Skate Park	721.60
				INV	06/11/2019	00024014	Security service period ending 290919 Darius Wells	4,053.93
				INV	05/11/2019	00024076	Security service period ending 271019 Darius Wells	3,823.24
				INV	06/11/2019	00024128	Cash collection for banking services October 19	825.00
3959.6018-01		ALSCO Pty Ltd	72.69	INV	05/11/2019	CPER1986080	Linen for catering	72.69
3959.6050-01		HiTech Sports Pty Ltd	1,537.80	INV	06/11/2019	2713	Annual maintenance of equipment in sports hall	1,537.80
3959.6267-01		Woolworths Group Limited	787.61	INV	06/11/2019	3739008	Insect repellent for Environment staff	60.00
				INV	06/11/2019	3784603	Items for staff farewell	100.00
				INV	06/11/2019	3739012	Supplies for Cafe Splash	88.25
				INV	06/11/2019	3784642	Items for Mooditj Kulungars	83.65
				INV	05/11/2019	3784636	Items for Drop In event Zone	60.43
				INV	05/11/2019	3784650	Items for Drop In event Zone	37.42
				INV	05/11/2019	3784647	Items for Zone	7.17
				INV	05/11/2019	3739002	Items for Cafe Recquatic	40.59
				INV	05/11/2019	3784641	Items for Cafe Recquatic	57.00
				INV	31/10/2019	3739001	Items for Recquatic	40.00
				INV	31/10/2019	3784639	Cafe splash items Recquatic	18.50
				INV	04/11/2019	3739003	Items for Depot	104.57
				INV	04/11/2019	3784626	Items for Worm Farm Workshop 221019	7.19
				INV	04/11/2019	3784625	Cafe items Recquatic	69.10
				INV	04/11/2019	3784645	Cafe items Recquatic	13.74
3959.6289-01		Clockwork Print	1,848.00	INV	05/11/2019	INV-0060440	2.4m wall tension wall for adult sports finals	1,848.00
3959.6370-01		Elexacom	13,317.85	INV	05/11/2019	27825	Repair street lights Silversmith & Wellard Road	2,322.01
				INV	04/11/2019	27820	Replace light Callistemon Court U29	987.14
				INV	05/11/2019	27804	Install power points Koorliny Arts Centre	3,190.54

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				INV	04/11/2019	27814	Service power board Depot	118.64
				INV	04/11/2019	27813	Repair damaged power point Depot	311.84
				INV	05/11/2019	27806	Install PA system Depot	5,067.12
				INV	05/11/2019	27818	Test emergency & exit lights Fiona Harris Pavilion	395.45
				INV	05/11/2019	27809	Test emergency & exit lights Smirk Cottage	144.07
				INV	05/11/2019	27810	6 monthly testing Smirks Cottage	48.02
				INV	05/11/2019	27817	Test emergency and exit lights Rotary Club	276.82
				INV	05/11/2019	27812	Test emergency & exit lights Wellard Pavilion	168.07
				INV	05/11/2019	27811	6 monthly testing Wells Park toilets	48.02
				INV	05/11/2019	27808	Test emergency and exit lights Bertram Oval	144.07
				INV	05/11/2019	27807	6 monthly testing Bertram Oval Club	96.04
3959.6457-01		Total Green Recycling	1,181.40	INV	06/11/2019	INV6661	E-waste recycling	561.00
				INV	06/11/2019	INV6682	Collection of batteries and globes	297.00
				INV	06/11/2019	INV6674	Collection of batteries and globes	323.40
3959.664-01		StrataGreen	143.20	INV	05/11/2019	115782	Weeding equipment	53.70
				INV	05/11/2019	113506	Weeding equipment	89.50
3959.6668-01		Rachel Vanessa Elkins	87.47	INV	04/11/2019	31October19	Reimbursement of promotional clothing	87.47
3959.7052-01		Roger Cook	356.38	INV	06/11/2019	4thNovember2019	Refund of hire fees	56.38
				RFD	05/11/2019	1542581	Refund bond hall hire 181019	300.00
3959.7315-01		Foxtel Cable Television Pty Ltd	810.00	INV	05/11/2019	343763682	Subscription September to November 19	810.00
3959.7343-01		Brayden Kelly	80.00	RFD	05/11/2019	1535714	Refund candidate nomination fee	80.00
3959.7388-01		Morris Jacobs	265.00	INV	06/11/2019	5-05/11/19	Facilitate Tuesday art 051119	265.00
3959.762-01		Blackwood & Sons Ltd	79.70	INV	05/11/2019	KW9826UJ	Spray paint	79.70
3959.7751-01		Adtech Holdings Pty Ltd	249.00	INV	05/11/2019	64367	Repairs of iPhones	249.00
3959.7780-01		Moore Stephens (WA) Pty Ltd	550.00	INV	04/11/2019	314248	Deferred pensioner rates for the year ended 300619	550.00
3959.795-01		K Mart	200.00	INV	06/11/2019	212416	Assorted items for Bright Futures	200.00
3959.8224-01		Axiis Contracting	41,851.17	INV	04/11/2019	4896	Install concrete footpath Christmas Ave	5,034.76
				INV	04/11/2019	4895	Install concrete footpath Clark Way	3,246.98
				INV	04/11/2019	4844	Install concrete footpath Clark Way	33,569.43
3959.8714-01		Warwick McKim Carter	102.65	INV	04/11/2019	30thOctober2019	Reimbursement of expenses from conference	102.65

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3959.8756-01		Ohura Consulting	1,157.75	INV	06/11/2019	INV-0013	Consultancy services stage 4	1,157.75
3959.8899-01		Majestic Plumbing	2,609.61	INV	06/11/2019	234255	Banksia Park U27 replace HWS	2,049.41
				INV	06/11/2019	234970	Plumbing works Banksia Park U25 and U26	176.26
				INV	06/11/2019	234972	Replace toilet cistern U29 Banksia Park	383.94
3959.9030-01		Air Liquide Australia	63.26	INV	06/11/2019	WA9702	Hire of medical oxygen Recquatic	63.26
3959.903-01		Lo-Go Appointments	3,147.98	INV	06/11/2019	00420887	Temp staff week ending 191019	3,147.98
3959.9044-01		TenderLink	201.30	INV	06/11/2019	AU-297493	Tenderlink services October 19	201.30
3959.9074-01		Natsales Advertising Pty Ltd	577.50	INV	06/11/2019	00342442	21 x bin panels for various locations	577.50
3959.934-01		Mandogalup Volunteer Fire Brigade	3,000.00	INV	06/11/2019	5thNovember2019	Annual donation to brigade 2019/2020	3,000.00
3959.9453-01		NBN Co Limited	13,994.70	INV	06/11/2019	300068129	Wellard Road detailed design	13,994.70
3959.9764-01		Datacom Systems (AU) Pty Ltd - WA	1,903.00	INV	05/11/2019	INV0014200	Monthly Saas fee sphere website October 19	1,903.00
3960	07/11/2019	EFT TRANSFER: - 07/11/2019	236,528.43					
3960.153-01		Australian Taxation Office	223,790.00	INV	03/11/2019	PY01-10-Australi	Payroll Deduction - PAYG Tax Withheld	223,790.00
3960.2853-01		Maxxia Pty Ltd	3,972.93	INV	03/11/2019	PY01-10-Maxxia P	Payroll Deduction	1,938.28
				INV	03/11/2019	PY01-10-Maxxia P	Payroll Deduction	2,034.65
3960.3376-01		Health Insurance Fund of WA (HIF)	1,115.50	INV	03/11/2019	PY01-10-Health I	Payroll Deduction	1,115.50
3960.3719-01		City of Kwinana - Xmas fund	7,650.00	INV	03/11/2019	PY01-10-TOK Chri	Payroll Deduction	7,650.00
3961	07/11/2019	EFT TRANSFER: - 07/11/2019	106,332.60					
3961.565-01		Bright Futures Family Day Care - Pa	106,332.60	INV	07/11/2019	211019 to 03111	FDC Payroll 211019 to 031119	106,332.60
3962	15/11/2019	EFT TRANSFER: - 15/11/2019	1,465,062.12					
3962.10373-01		Green Willows Industrial Cleaning a	200.00	INV	13/11/2019	34	Clubhouse and office cleaning	200.00
3962.10461-01		The People Catalyst Pty Ltd	6,930.00	INV	12/11/2019	1141	Team building resilience training session 180919	1,155.00
				INV	12/11/2019	1139	Debrief session and wellbeing checks 290819	1,980.00
				INV	12/11/2019	1142	Mediation and outcome statement 180919	880.00
				INV	12/11/2019	1140	Debrief and wellbeing check sessions 060919-120919	2,915.00
3962.10507-01		David Wills and Associates	4,070.00	INV	12/11/2019	00030068	Consultancy Engineering services	4,070.00
3962.10649-01		Alex Krsnik	6,891.06	INV	12/11/2019	SQ190027	Green waste collection Tuart Ridge Parmelia	110.00

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				INV	12/11/2019	SQ190029	Slash verge and walkways Colchester & Corfe Mews	407.00
				INV	12/11/2019	SQ190030	Slash and spray behind Bright Futures Day Care	495.00
				INV	12/11/2019	SQ0190031	Prune & clean up between Chilcott and Barrick Road	825.00
				INV	12/11/2019	SQ190032	Prune weed and litter removal at various locations	1,078.00
				INV	12/11/2019	SQ190033	Landscape maintenance Hope Valley Road	700.70
				INV	12/11/2019	SQ190034	City Centre litter collection October 2019	3,154.36
				INV	12/11/2019	SQ190028	Green waste pick up Parmelia Avenue	121.00
3962.10668-01		Gregs Cinemas	790.00	INV	12/11/2019	IV00000000182	Equipment for cinema event at Darius Wells 220219	790.00
3962.10670-01		Wheelie Clean	596.20	INV	13/11/2019	5823	Bin cleaning Darius Wells	349.25
				INV	13/11/2019	5824	Bin cleaning Administration	246.95
3962.10707-01		Raylene Indich	175.00	INV	12/11/2019	4thNovember2019	Sporting grant for basketball competition	175.00
3962.1072-01		Paint Industries	907.50	INV	12/11/2019	60957	Graffiti remover	907.50
3962.11049-01		QTM Pty Ltd	9,839.19	INV	12/11/2019	INV-4405	Traffic management plan for Patterson Road	841.04
				INV	12/11/2019	INV-4148	Traffic management crew for Runnymede Gate	1,189.94
				INV	13/11/2019	INV-4477	Traffic management Perham Crescent	7,808.21
3962.11174-01		David Anthony Carroll	553.77	INV	13/11/2019	1stNovember2019	Rates refund	553.77
3962.11243-01		GPC Asia Pacific Pty Ltd	828.49	INV	12/11/2019	1380007877	Recoil thread kits	244.20
				INV	12/11/2019	1380007746	Tyre inflator for workshop servicing requirements	122.55
				INV	12/11/2019	1380007662	Equipment for workshop servicing requirements	276.10
				INV	12/11/2019	1380007744	Service filters for KWN2061	185.64
3962.11299-01		Expo Signage and Digital Pty Ltd	204.00	INV	12/11/2019	502754	Supply and deliver 20 x wire corflute grass spikes	204.00
3962.11300-01		Strategic DCP Consulting	6,105.01	INV	11/11/2019	008	Consulting services	6,105.01
3962.11338-01		Holden Sheppard	350.00	INV	12/11/2019	19022	Author talk 211019 Library	350.00
3962.11472-01		Perth Materials Blowing	3,685.00	INV	12/11/2019	222	Installation of 81m3 softfall pine bark	3,685.00
3962.11478-01		Turf Care WA Pty Ltd	69,898.40	INV	12/11/2019	100338	Renovation works of various sportsgrounds	69,898.40
3962.11598-01		Perth Timber Floors	9,502.50	INV	12/11/2019	152	Floor installation Medina Hall	9,502.50

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3962.11703-01		City of Busselton	4,295.84	INV	11/11/2019	19025	2019 YACtivate conference reimbursement	4,295.84
3962.11722-01		Street Fusion	1,875.00	INV	12/11/2019	27	Catering 051119	1,875.00
3962.11729-01		Mama Dojo	899.00	INV	12/11/2019	2050	Workshop engagement 241019 Library	899.00
3962.11742-01		Summit Rural (WA) Pty Ltd	782.93	INV	07/11/2019	7.3	Rates refund	782.93
3962.11744-01		Maniax	200.00	INV	11/11/2019	MKPB-081119	Deposit event booking for 061219	200.00
3962.11746-01		Vanessa Lennane	250.00	INV	12/11/2019	4thNovember19	Sporting grant for gymnastics competition	250.00
3962.11747-01		Sussan Hanlon	78.68	INV	12/11/2019	5thNovember2019	Refund swimming school lessons	78.68
3962.11748-01		Aron Holbrook	90.37	INV	12/11/2019	7thNovember2019	Items for workshop and parking for meetings	90.37
3962.11749-01		Sound Business Equipment	67.90	INV	12/11/2019	A8970	Stamps	67.90
3962.11750-01		Wuzhi Zhou	73.50	INV	12/11/2019	11thNovember19	Refund for printing Library	73.50
3962.11751-01		Fortunato Villas Jr	650.00	RFD	12/11/2019	1506307	Refund bond hall hire 110719	650.00
3962.11752-01		Michelle Sultan	200.00	RFD	12/11/2019	1569876	Refund bond hall hire 011119	200.00
3962.11753-01		Jordyn Beavan	100.00	RFD	13/11/2019	1506644	Refund bond Patio hire 091119	100.00
3962.11754-01		Swetaben Virangkumar Vyas	100.00	RFD	12/11/2019	1527221	Refund bond Patio hire 101119	100.00
3962.11755-01		Parth Pandya	100.00	RFD	12/11/2019	1527358	Refund bond Patio hire 290819	100.00
3962.11756-01		Tui Seuga	100.00	RFD	12/11/2019	1527558	Refund bond Patio hire 300819	100.00
3962.11757-01		Leonida Castaneda Magdaong	1,000.00	RFD	12/11/2019	1535709	Refund bond hall hire 110919	1,000.00
3962.11758-01		Kaelee Edwards	100.00	RFD	12/11/2019	1553344	Refund bond Patio hire 061119	100.00
3962.11759-01		Bernadette Engle	100.00	RFD	12/11/2019	1553344	Refund bond Patio hire 101119	100.00
3962.11760-01		Small Business Development Corporat	200.00	RFD	12/11/2019	1553347	Refund bond hall hire 111019	200.00
3962.11761-01		The Owner of SP 72028	200.00	RFD	12/11/2019	1560597	Refund bond hall hire 061119	200.00
3962.11762-01		Caryn Alyssa Michie	100.00	RFD	12/11/2019	1554073	Refund bond Patio hire 251019	100.00
3962.11763-01		DK Bevco Pty Ltd ATF Liquor Unlimit	149.00	INV	14/11/2019	Refund	Reclassification of food business	149.00
3962.11764-01		Iaian William Wallace	154.00	INV	12/11/2019	Refund	Difference of incorrect annual licence fee 19/20	154.00
3962.11765-01		Family Tree (WA) Pty Ltd T/As The	154.00	INV	12/11/2019	Refund	Difference of incorrect annual license fee 19/20	154.00
3962.11769-01		Abins Mathews	115.20	INV	13/11/2019	19thOctober19	Refund of swim school	115.20

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3962.11770-01		Ana Freda Wilson	50.00	INV	13/11/2019	1035169	Refund 360L recycle bin upgrade fee	50.00
3962.11772-01		John Logan	3,266.36	INV	14/11/2019	12thNovember2019	Community event funding program 2019	3,266.36
3962.1178-01		Holcim (Australia) Pty Ltd	1,298.33	INV	12/11/2019	9406622367	14mm concrete for Upwey Street Wellard	381.70
				INV	12/11/2019	9406612482	10mm wattle exposed concrete for Gemstone Pde	555.50
				INV	12/11/2019	9406615059	14mm concrete for Calista Avenue	361.13
3962.1187-01		Red Sand Supplies Pty Ltd	390.50	INV	13/11/2019	00012363	Concrete tipping Perham Crescent footpath	390.50
3962.1227-01		Rockingham Holden	60,443.40	INV	11/11/2019	50209	New Holden Colorado KWN2132	60,443.40
3962.1249-01		Royal Life Saving Society	2,464.00	INV	11/11/2019	107669	Lifeguard requalification 191019	2,464.00
3962.1276-01		Satellite Security Services	354.50	INV	11/11/2019	IV006854	Wellard Pavilion isolate zone 8 alarm	50.00
				INV	11/11/2019	IV006706	The Zone replace alarm battery	139.50
				INV	11/11/2019	IV006705	Depot replace alarm battery	165.00
3962.134-01		Australia Post	1,167.50	INV	11/11/2019	1009030684	Agency commission fees period ending 311019	1,167.50
3962.1343-01		Southern Metropolitan Regional Coun	39,427.30	INV	13/11/2019	14291	Annual contributions 2nd quarter 2019/20	39,427.30
3962.1393-01		Sunny Sign Company Pty Ltd	262.35	INV	12/11/2019	421180	Dog signs	113.85
				INV	12/11/2019	421134	Signs	148.50
3962.1423-01		Telstra	11,187.41	INV	13/11/2019	9385375010Nov19	Internet and data to 181119	2,491.62
				INV	11/11/2019	1355246271Oct19	Mobile/devices charges October 2019	8,695.79
3962.1474-01		Toll Transport Pty Ltd	39.60	INV	12/11/2019	1055162	Courier services 301019	39.60
3962.1485-01		T-Quip	470.10	INV	11/11/2019	87802#7	Supply tension pulleys for ride on mower	293.10
				INV	11/11/2019	87717#5	Supply parts for ride on mower	177.00
3962.1528-01		Twights Plumbing Pty Ltd	6,804.70	INV	13/11/2019	G1972	Reticulation service Banksia Park U10	1,932.20
				INV	13/11/2019	G2002	Service kitchen sink Banksia Park U65	253.00
				INV	13/11/2019	G2046	Reticulation repairs Callistemon Court U18-31	4,619.50
3962.1569-01		WA Hino Sales & Service	150,146.35	INV	11/11/2019	F3240	New Hino truck 1GWY489	150,146.35
3962.1589-01		Waste Stream Management Pty Ltd	10,164.00	INV	11/11/2019	00424347	Tipping fees October19	10,164.00
3962.1592-01		Water Corporation of Western Austra	320.08	INV	11/11/2019	9000334597Nov19	Feilman Building service charges	320.08
3962.1614-01		Westbooks	145.87	INV	13/11/2019	310286	Library items	131.08
				INV	13/11/2019	310285	Library items	14.79

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3962.1707-01		Public Transport Authority of Weste	14,956.50	INV	12/11/2019	1642	Bus shelter contribution Gilmore Avenue	14,956.50
3962.1726-01		Kyocera Document Solutions Australi	4,109.71	INV	13/11/2019	2852453273	Copy cost City Leadership Team October 19	122.64
				INV	13/11/2019	2852453278	Copy cost Zone staff October 19	56.93
				INV	13/11/2019	2852453283	Copy cost Depot Admin October 19	84.53
				INV	13/11/2019	2852453288	Copy cost Admin Records October 19	552.89
				INV	13/11/2019	2852453293	Copy cost Banksia Park October 19	55.28
				INV	13/11/2019	2852453298	Copy cost Recquatic Counter October 19	12.63
				INV	13/11/2019	2852453274	Copy cost Incubator October 19	135.34
				INV	13/11/2019	2852453279	Copy cost Admin Planning October 19	635.59
				INV	13/11/2019	2852453284	Copy cost Recquatic October 19	322.35
				INV	13/11/2019	2852453289	Copy cost John Wellard Centre October 19	126.55
				INV	13/11/2019	2852453294	Copy cost John Wellard Centre October 19	113.58
				INV	13/11/2019	2852453275	Copy cost Community Centre October 19	72.69
				INV	13/11/2019	2852453280	Copy cost Admin Governance October 19	765.15
				INV	13/11/2019	2852453285	Copy cost Library Public October 19	76.24
				INV	13/11/2019	2852453290	Copy cost Bertram Community Centre October 19	52.07
				INV	13/11/2019	2852453295	Copy cost William Bertram Centre October 19	38.83
				INV	13/11/2019	2852453276	Copy cost Library staff October 19	142.34
				INV	13/11/2019	2852453281	Copy cost Admin Finance October19	233.93
				INV	13/11/2019	2852453286	Copy cost Admin CSO October19	76.95
				INV	13/11/2019	2852453291	Copy cost Darius downstairs reception October 19	15.10
				INV	13/11/2019	2852453296	Copy cost Darius Creche October 19	100.31
				INV	13/11/2019	2852453277	Copy cost Zone multimedia room October 19	19.50
				INV	13/11/2019	2852453282	Copy cost Bright Futures October 19	128.91
				INV	13/11/2019	2852453287	Copy cost Depot demountable October 19	123.09
				INV	13/11/2019	2852453292	Copy cost Zone downstairs reception October 19	32.27
				INV	13/11/2019	2852453297	Copy cost Depot mechanics October 19	14.02
3962.1762-01		Officeworks BusinessDirect	667.52	INV	11/11/2019	45078192	Purchase of miscellaneous items for Mandogalup Fire Station	667.52
3962.1767-01		Construction Training Fund	9,886.34	INV	11/11/2019	6thNovember2019	CTF levy for October 2019	9,886.34
3962.1825-01		Greenacres Turf Group	839.00	INV	12/11/2019	00056849	55m2 village green kikuyu for Peace Park	839.00

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3962.188-01		Beaurepaires Tyres Kwinana	2,324.56	INV	11/11/2019	U548353799	Supply and installation of 4 new tyres KWN1761	2,324.56
3962.19-01		Absolute Painting Services	165.00	INV	13/11/2019	INV-1175	Painting repairs Callistemon Court U65	165.00
3962.1937-01		Coles Group & Myer	8,040.00	INV	11/11/2019	CGC844376	Gift cards x 268	8,040.00
3962.1960-01		Frank Konecny Community Centre Inc.	4,609.00	INV	13/11/2019	12thNovember2019	Community Event Funding Program 2019	4,609.00
3962.2121-01		Suez	336,028.85	INV	13/11/2019	164802	Commercial recycle October 19	150,920.63
				INV	13/11/2019	34475135	Mixed waste October 19	183,335.02
				INV	13/11/2019	34515871	General dry waste October 19	1,773.20
3962.2125-01		Synergy	643.08	INV	11/11/2019	334820750Nov19	0U 24/40 Meares Ave supply charges	643.08
3962.2301-01		Good Reading Magazine P/L	995.00	INV	12/11/2019	00017244	1 year subscription to Good Reading Online	995.00
3962.248-01		Bunnings Building Supplies	884.79	INV	11/11/2019	2163/01628454	Boy Scouts gutter guard	103.84
				INV	11/11/2019	2163/01586933	Recquatic push plates	99.26
				INV	11/11/2019	2163/01002805	Recquatic hardware supplies	326.30
				INV	11/11/2019	2163/01630444	Medina Oval paint hardware supplies	80.32
				INV	11/11/2019	2163/01585440	Sloans Cottage guttering supplies	99.56
				INV	11/11/2019	2163/01586722	Wells Park toilets lock hardware	29.90
				INV	13/11/2019	2163/01633293	Hardware items	145.61
3962.2546-01		Sigma Chemicals	930.60	INV	13/11/2019	454760	Pool chemicals Recquatic	930.60
3962.2565-01		Ausco Modular Pty Ltd	1,471.80	INV	11/11/2019	7197905	Demountable hire November 2019	1,471.80
3962.2646-01		Neverfail Springwater	54.60	INV	12/11/2019	291105	Bottled water	54.60
3962.2833-01		Anketell Stock Feed	149.00	INV	12/11/2019	Refund	Reclassification of food business	149.00
3962.2937-01		Bolinda Publishing Pty Ltd	257.22	INV	13/11/2019	174376	Library items	128.61
				INV	13/11/2019	173542	Library items	128.61
3962.3212-01		Marketforce Pty Ltd	495.40	INV	13/11/2019	30338	Advertising 161019	495.40
3962.3314-01		Carroll & Richardson Flagworld Pty	94.70	INV	11/11/2019	78597	Administration building 12 flagpole clips	94.70
3962.3452-01		Western Maze Pty Ltd	105.09	INV	13/11/2019	00000334	E-waste collection	105.09
3962.357-01		BullAnt Security Pty	1,184.00	INV	13/11/2019	10193242	Keys and padlocks	1,064.00
				INV	11/11/2019	10193244	The Zone keys cut	120.00
3962.358-01		Coastline Mowers	315.00	INV	11/11/2019	21626#5	Bearings & seals	315.00
3962.3632-01		Eclipse Soils Pty Ltd	330.00	INV	11/11/2019	KWIN01043739	Topsoils at Perham Crescent	330.00

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3962.3977-01		MRP Osborne Park-General Pest/Termi	5,820.07	INV	13/11/2019	86095	Pest control Darius Wells	197.00
				INV	13/11/2019	86096	Pest control The Zone	217.00
				INV	13/11/2019	86069	Pest control Department of Housing building	187.00
				INV	13/11/2019	86068	Pest control The Zone	432.00
				INV	13/11/2019	86057	Pest control Depot	255.00
				INV	13/11/2019	86067	Pest control Darius Wells	217.00
				INV	13/11/2019	86066	Pest control John Wellard Centre	412.00
				INV	13/11/2019	86065	Pest control Wheatfield/Taskers Cottage	581.00
				INV	13/11/2019	86064	Pest control Sloan Cottage	708.37
				INV	13/11/2019	86063	Pest control Thomas Kelly Pavilion	295.00
				INV	13/11/2019	86062	Pest control Out of School Care	128.54
				INV	13/11/2019	86061	Pest control Leda Hall	283.25
				INV	13/11/2019	86060	Pest control Smirks Cottage	366.71
				INV	13/11/2019	86059	Pest control Senior Citizens Centre	352.94
				INV	13/11/2019	86058	Pest control Rotary Club	105.06
				INV	13/11/2019	86056	Pest control Calista Tennis Club	111.24
				INV	13/11/2019	86055	Pest control Administration	724.79
				INV	13/11/2019	86054	Pest control Margaret Feilman Centre	246.17
3962.407-01		Winc Australia Pty Ltd	581.53	INV	13/11/2019	9029199788	Stationery Darius Wells	483.96
				INV	11/11/2019	9029178497	Stationery Admin	45.80
				INV	11/11/2019	9029165504	Stationery Admin	17.60
				INV	12/11/2019	9029175990	Stationery Admin	23.54
				INV	12/11/2019	9029209573	Stationery Admin	10.63
3962.4125-01		LD Total	114,216.93	INV	12/11/2019	101914	Broadleaf spraying at Daybreak Park	269.46
				INV	12/11/2019	101820	20m3 bark mulch Wellard Village October 19	2,964.50
				INV	12/11/2019	102035	Landscape maintenance services Oct 19 various	7,332.08
				INV	12/11/2019	102020	Landscape maintenance services Oct 19 various	2,050.55
				INV	12/11/2019	102018	Landscape maintenance services Oct 19 various	1,131.08
				INV	12/11/2019	102022	Landscape maintenance services Oct 19 various	4,745.32
				INV	12/11/2019	102031	Landscape maintenance services Oct 19 various	688.48
				INV	12/11/2019	102029	Landscape maintenance services Oct 19 various	2,813.78

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Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
				INV	12/11/2019	102037	Landscape maintenance services Oct 19 various	352.15
				INV	12/11/2019	102024	Landscape maintenance services Oct 19 various	1,441.10
				INV	12/11/2019	102033	Landscape maintenance services Oct 19 various	371.26
				INV	12/11/2019	102027	Landscape maintenance services Oct 19 various	232.86
				INV	12/11/2019	102036	Landscape maintenance services Oct 19 various	31,185.47
				INV	12/11/2019	102021	Landscape maintenance services Oct 19 various	6,733.10
				INV	12/11/2019	102019	Landscape maintenance services Oct 19 various	5,078.39
				INV	12/11/2019	102023	Landscape maintenance services Oct 19 various	15,981.61
				INV	12/11/2019	102032	Landscape maintenance services Oct 19 various	2,587.54
				INV	12/11/2019	102030	Landscape maintenance services Oct 19 various	9,370.17
				INV	12/11/2019	102038	Landscape maintenance services Oct 19 various	1,986.75
				INV	12/11/2019	102025	Landscape maintenance services Oct 19 various	5,461.12
				INV	12/11/2019	102034	Landscape maintenance services Oct 19 various	989.38
				INV	12/11/2019	102028	Landscape maintenance services Oct 19 various	817.84
				INV	12/11/2019	102026	Landscape maintenance services Oct 19 various	2,755.48
				INV	12/11/2019	101902	Additional irrigation repair work Darton Loop POS	187.55
				INV	12/11/2019	101782	Additional Irrigation repair works Honeywood Rise	465.76
				INV	12/11/2019	101779	Additional irrigation repair work Emerald/Gemstone	411.84
				INV	12/11/2019	101781	Additional irrigation repair works various	1,197.98
				INV	12/11/2019	101777	Additional irrigation repair work Providence	648.09
				INV	12/11/2019	101903	Additional Irrigation repair work Daybreak Park	155.07
				INV	12/11/2019	101778	Additional irrigation repair work Whistling Grove	198.56

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Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
				INV	12/11/2019	101780	Additional irrigation repair work various	3,612.61
3962.4245-01		ED Property Services	1,540.00	INV	13/11/2019	00001358	Various works on Callistemon Court U42	1,540.00
3962.4350-01		T J Depiazzi & Sons	5,475.69	INV	12/11/2019	103159	Supply and Deliver 90m3 of softfall pine chips	5,475.69
3962.4382-01		Stonehenge Ceramics	3,345.50	INV	13/11/2019	D0571	Repair bathroom tiles Callistemon Court U42	3,345.50
3962.4692-01		Elliotts Irrigation Pty Ltd	279.40	INV	12/11/2019	B15539	Service iron filter Sunrise Estate	279.40
3962.4719-01		Complete Office Supplies Pty Ltd	165.63	INV	13/11/2019	08748393	Stationery Library	165.63
3962.4763-01		Bengineering Transport Equipment Pt	605.00	INV	12/11/2019	00002547	Supply and fit ski bar on cab for beacons	605.00
3962.4800-01		Web In A Box	270.00	INV	11/11/2019	51701	Web hosting registration	270.00
3962.483-01		Landgate	78.60	INV	11/11/2019	965542	Title searches October 19	78.60
3962.4861-01		Big W	134.50	INV	11/11/2019	176626	Storage containers and tablecloths for workshops	50.00
				INV	12/11/2019	176629	Animal food for pound	79.50
				INV	12/11/2019	176628	Potting mix for the Grow it Local stall	5.00
3962.5035-01		Quell Cleen	185.00	INV	13/11/2019	00052167	Vacate clean Callistemon Court U65	185.00
3962.537-01		Educational Art Supplies Co	64.96	INV	12/11/2019	3478891	Assorted arts and crafts supplies Recquatic	64.96
3962.5520-01		Master Lock Service	260.00	INV	11/11/2019	00006419	Thomas Kelly Pavilion repair service duct	130.00
				INV	13/11/2019	00006422	Supply new code keys Callistemon Court U70	130.00
3962.5581-01		Totally Workwear Rockingham	167.35	INV	12/11/2019	RK51312	Uniforms City Assist	167.35
3962.5670-01		Tracey Jane Gooden	101.74	INV	12/11/2019	30thOctober2019	Reimbursement of purchases for The Zone	101.74
3962.572-01		Fire & Emergency Services, Dept of	266,202.32	INV	12/11/2019	4thNovember2019	ESL Collections for October 2019 Option A	266,202.32
3962.583-01		Flexi Staff Pty Ltd	3,360.73	INV	12/11/2019	212343	Temp staff week ending 201019	1,492.43
				INV	12/11/2019	212574	Temp staff week ending 271019	1,868.30
3962.5841-01		Mandurah Volkswagen	1,074.93	INV	13/11/2019	VWCSM19585	Service KWN2061	577.45
				INV	13/11/2019	5069M	Parts	497.48
3962.5908-01		Rockypest Pest Management	4,950.00	INV	13/11/2019	INV-00028480	Termite inspection Callistemon Court	4,950.00
3962.598-01		Forpark Australia Pty Ltd	1,808.40	INV	11/11/2019	44562	Playground equipment various locations	1,808.40
3962.5996-01		CMS Engineering Pty Ltd	18,349.10	INV	11/11/2019	34378	City Operations Depot investigate ant infestation	762.30
				INV	11/11/2019	34379	Darius Wells Library repair exhaust fan	1,361.80
				INV	11/11/2019	34309	Margaret Feilman Centre AC replacement	16,225.00

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3962.6115-01		Imagesource Digital Solutions	5,833.30	INV	12/11/2019	449062	Summer Symphony Concert fence mesh	1,161.60
				INV	11/11/2019	448824	Summer Symphony Concert sign	316.80
				INV	11/11/2019	448821	Summer Symphony Concert banners	1,302.40
				INV	11/11/2019	448810	Summer Symphony Concert posters	434.50
				INV	11/11/2019	448813	Summer Symphony Concert signs	51.70
				INV	11/11/2019	448814	Summer Symphony Concert roster signs	577.50
				INV	11/11/2019	448861	Summer Symphony Concert postcards	1,860.10
				INV	11/11/2019	448885	Summer Symphony Concert stall signs	128.70
3962.6267-01		Woolworths Group Limited	745.73	INV	12/11/2019	3739033	Refreshments for Switch Your Thinking workshop	6.54
				INV	12/11/2019	3739036	Items for workshops	15.49
				INV	12/11/2019	40797573	Items for Admin	106.43
				INV	12/11/2019	40917661	Items for Admin	106.32
				INV	12/11/2019	40692505	Items for Admin	257.99
				INV	12/11/2019	3739024	Items for Depot	130.61
				INV	12/11/2019	3739023	Sausage sizzle supplies for Depot	94.40
				INV	12/11/2019	3784649	Office items for Callistemon Court	27.95
3962.6370-01		Elexacom	19,258.19	INV	13/11/2019	27901	Repair exhaust fan Callistemon Court U5	155.38
				INV	13/11/2019	27902	Electrical service Banksia Park Clubhouse	125.72
				INV	13/11/2019	27904	Electrical service Banksia Park U18	287.12
				INV	12/11/2019	27826	Repairs to various street lights on Wellard Road	3,303.32
				INV	13/11/2019	27907	Service and repair carpark lights	4,744.76
				INV	13/11/2019	27899	Investigate lights Recquatic	79.09
				INV	11/11/2019	27853	Girl Guides Hall electrical testing	144.07
				INV	11/11/2019	27852	Thomas Kelly Pavilion electrical testing	158.18
				INV	11/11/2019	27823	The Zone PA system investigation/repairs	539.32
				INV	11/11/2019	27821	Hewison Park installation of power supply to site	9,721.23
3962.6566-01		Isentia Pty Limited	1,254.00	INV	12/11/2019	MN0781423	Media monitoring for November 19	1,254.00
3962.664-01		StrataGreen	2,153.87	INV	12/11/2019	115628	Weeding equipment	1,623.88
				INV	12/11/2019	115703	Envirosoak liquid soil wetter x 3	529.99
3962.665-01		Gregs Glass	180.00	INV	13/11/2019	8254-19	Replace patio sliding door Callistemon Court U34	180.00

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3962.6700-01		Sprayking WA Pty Ltd	1,876.46	INV	12/11/2019	00001775	Treatment of weeds at Daintree Park drainage	451.96
				INV	12/11/2019	00001774	Drainage spraying in Orelia and Medina	1,424.50
3962.6735-01		BSI Group ANZ Pty Ltd	6,593.40	INV	12/11/2019	95373366	Continuing assessment external audit	6,593.40
3962.6736-01		Alyka Pty Ltd	31,342.58	INV	11/11/2019	INV-25444	Deposit for new website project	31,342.58
3962.694-01		Heatley Sales Pty Ltd	9,321.86	INV	11/11/2019	C901892	Assorted uniforms for Depot	369.11
				INV	11/11/2019	C901900	Assorted uniforms for Depot	82.50
				INV	11/11/2019	C901898	Assorted uniforms for Depot	215.44
				INV	12/11/2019	C903038	Assorted uniforms for Depot	474.77
				INV	12/11/2019	C901891	Assorted uniforms for Depot	386.22
				INV	12/11/2019	C903043	Assorted uniforms for Depot	368.34
				INV	12/11/2019	C903052	Assorted uniforms for Depot	898.59
				INV	12/11/2019	C901888	Assorted uniforms for Depot	380.33
				INV	12/11/2019	C901897	Assorted uniforms for Depot	428.18
				INV	12/11/2019	C902073	Assorted uniforms for Depot	453.48
				INV	12/11/2019	C902078	Assorted uniforms for Depot	568.00
				INV	12/11/2019	C902065	Assorted uniforms for Depot	366.36
				INV	12/11/2019	C902081	Assorted uniforms for Depot	366.36
				INV	12/11/2019	C902077	Assorted uniforms for Depot	402.66
				INV	12/11/2019	C901890	Assorted uniforms for Depot	366.36
				INV	12/11/2019	C901889	Assorted uniforms for Depot	453.48
				INV	12/11/2019	C902085	Assorted uniforms for Depot	402.66
				INV	12/11/2019	C901887	Assorted uniforms for Depot	222.04
				INV	12/11/2019	C901896	Assorted uniforms for Depot	417.18
				INV	12/11/2019	C902083	Assorted uniforms for Depot	453.48
				INV	12/11/2019	C902069	Assorted uniforms for Depot	428.46
				INV	12/11/2019	C902086	Assorted uniforms for Depot	381.98
				INV	12/11/2019	C902067	Assorted uniforms for Depot	435.88
3962.708-01		Kevin Robert Howard	262.60	INV	13/11/2019	7thNovember19	Reimbursement of items for farewell event	262.60
3962.7357-01		Mobile Laser Quest	460.00	INV	12/11/2019	1993	School holiday program 300120 Recquatic	460.00
3962.7574-01		Premier Photo Booths	699.00	INV	12/11/2019	INV-1972	Deposit for Christmas function 131219	699.00
3962.7575-01		Pickles Auctions	99.00	INV	12/11/2019	DI000154477	Collection of vehicle 1ERF057 050819	99.00
3962.7604-01		Tanya Halliday	128.82	INV	12/11/2019	31stOctober19	Refund of items for The Zone clients	128.82

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3962.762-01		Blackwood & Sons Ltd	602.59	INV	12/11/2019	KW3250UP	Consumable items for Depot	602.59
3962.7625-01		Flex Industries Pty Ltd	733.45	INV	12/11/2019	2062016	Repair tailgate lock to 1ERM600	733.45
3962.7689-01		VARIDESK	522.50	INV	13/11/2019	IVC-2-1327330	Office chairs x 2	522.50
3962.7696-01		Allied Pumps Pty Ltd	2,286.58	INV	11/11/2019	82847	Service of pumps Wandi Community Centre	2,286.58
3962.7809-01		Frontline Fire and Rescue Equipment	25.69	INV	12/11/2019	65347	Hydrant plate	25.69
3962.7812-01		Starbucks Flooring	462.00	INV	11/11/2019	INV-000627	Carpet services Business Incubator	462.00
3962.8099-01		Total Tools Rockingham	54.95	INV	11/11/2019	83236	Kwinana Tennis Club nozzle for water pressure	54.95
3962.8215-01		Bungaree Primary School	500.00	INV	13/11/2019	4062	Donation for Vision Garden upgrade	500.00
3962.8224-01		Axiis Contracting	51,546.42	INV	13/11/2019	4894	Construct footpath Perham Crescent	51,546.42
3962.8290-01		Leda Education Support Centre	200.00	RFD	12/11/2019	1544913	Refund bond hall hire 051119	200.00
3962.8325-01		Envirosweep	2,498.38	INV	12/11/2019	73005	Footpath sweeping Thomas Rd and Gilmore Ave	2,498.38
3962.8522-01		Trevor John Wachmer	15.75	INV	12/11/2019	8thNovember19	Reimbursement of HR licence	15.75
3962.8713-01		Saferight Pty Ltd	498.00	INV	11/11/2019	155487	Confined Space Entry Training	498.00
3962.8899-01		Majestic Plumbing	11,572.04	INV	13/11/2019	235043	Service laundry trough Callistemon Court U53	1,859.24
				INV	13/11/2019	235040	Repair laundry and shower Callistemon Court U65	2,713.54
				INV	13/11/2019	235041	Service hot water system Banksia Park U54	1,931.40
				INV	13/11/2019	235044	Replace hot water system Callistemon Court U42	1,769.68
				INV	13/11/2019	234977	John Wellard backflow device testing	352.00
				INV	11/11/2019	235012	Recquatic repair to toilets/leak in ceiling	704.20
				INV	11/11/2019	234968	Medina Oval toilets repairs due to vandalism	737.28
				INV	11/11/2019	234969	Sloans public toilets repairs	253.26
				INV	11/11/2019	234971	Darius Wells clear blocked toilets	99.13
				INV	11/11/2019	234973	Bertram Oval club facility unblock toilet	166.93
				INV	11/11/2019	234975	Thomas Oval Pavilion test back flow device	220.00
				INV	11/11/2019	234976	Recquatic test backflow device	220.00
				INV	11/11/2019	234974	City Operations Depot repair urn	220.26
				INV	13/11/2019	235042	Service toilet	325.12
3962.8996-01		Fridgair Industries Pty Ltd	496.30	INV	11/11/2019	33780	Administration bar fridge repairs	496.30

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3962.8998-01		McLeods	1,913.25	INV	12/11/2019	110871	Legal fees matter No 44976	1,913.25
3962.9013-01		Department of Mines, Industry	16,141.19	INV	11/11/2019	October19	Building services levy October 2019	16,141.19
3962.9019-01		Kearns Garden Supplies	266.12	INV	13/11/2019	53-31/10/19	Hardware items for Callistemon Court October 19	142.87
				INV	13/11/2019	54-31/10/2019	Hardware items Banksia Park October 19	123.25
3962.903-01		Lo-Go Appointments	3,258.10	INV	12/11/2019	00420886	Temp staff week ending 191019	1,629.05
				INV	12/11/2019	00420926	Temp staff week ending 261019	1,629.05
3962.9041-01		Planning Institute of Australia Pty	330.00	INV	11/11/2019	ED191027	Advertising for Senior Environmental Planner	330.00
3962.905-01		Local Government Professionals	910.00	INV	11/11/2019	12,564	Workshop Report Writing for Local Government	910.00
3962.9076-01		Charles Service Company	16,811.07	INV	11/11/2019	00032130	Cleaning various locations October 2019	9,216.46
				INV	11/11/2019	00032114	Cleaning consumables various locations Sept 2019	5,310.50
				INV	11/11/2019	00032199	Cleaning consumables various locations Oct 2019	2,284.11
3962.9121-01		Rebound Arena	400.00	INV	12/11/2019	30619805-78563	School holiday program 280120 Recquatic	400.00
3962.9572-01		Aaron Thomas	650.00	INV	11/11/2019	126	Open Mic event 311019	650.00
3962.9592-01		Parties Kids Remember	580.00	INV	12/11/2019	57994	Event booking for 091119	580.00
3962.9676-01		Sifting Sands	1,415.70	INV	12/11/2019	INV-1134	Sand cleaning services at various parks	1,415.70
3962.9833-01		Supreme Shades Pty Ltd	29,405.20	INV	12/11/2019	00010604	Install shade sails Koorliny Community Arts Centre	29,405.20
3962.9899-01		Creative Minds	120.00	INV	11/11/2019	6thNovember19	School holiday program Oct 19 John Wellard Centre	120.00
3963	19/11/2019	EFT TRANSFER: - 19/11/2019	258,207.11					
3963.10152-01		SuperChoice	258,207.11	INV	19/11/2019	Superadj-Nov19	Superannuation October - adjustment	390.81
				INV	31/10/2019	October2019-01	Superannuation-October2019-01	178,597.77
				INV	31/10/2019	October2019-03	Superannuation-October2019-03	7,922.06
				INV	31/10/2019	October2019-06	Superannuation-October2019-06	2,519.24
				INV	31/10/2019	October2019-07	Superannuation-October2019-07	3,099.01
				INV	31/10/2019	October2019-13	Superannuation-October2019-13	1,816.78
				INV	31/10/2019	October2019-14	Superannuation-October2019-14	8,251.65
				INV	31/10/2019	October2019-16	Superannuation-October2019-16	1,213.81
				INV	31/10/2019	October2019-17	Superannuation-October2019-17	19,362.30
				INV	31/10/2019	October2019-18	Superannuation-October2019-18	2,136.58

Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
				INV	31/10/2019	October2019-21	Superannuation-October2019-21	963.51
				INV	31/10/2019	October2019-22	Superannuation-October2019-22	392.86
				INV	31/10/2019	October2019-24	Superannuation-October2019-24	970.42
				INV	31/10/2019	October2019-28	Superannuation-October2019-28	132.16
				INV	31/10/2019	October2019-30	Superannuation-October2019-30	1,079.34
				INV	31/10/2019	October2019-41	Superannuation-October2019-41	59.31
				INV	31/10/2019	October2019-43	Superannuation-October2019-43	222.00
				INV	31/10/2019	October2019-46	Superannuation-October2019-46	1,466.64
				INV	31/10/2019	October2019-48	Superannuation-October2019-48	1,027.96
				INV	31/10/2019	October2019-50	Superannuation-October2019-50	1,691.05
				INV	31/10/2019	October2019-54	Superannuation-October2019-54	1,490.78
				INV	31/10/2019	October2019-55	Superannuation-October2019-55	2,693.78
				INV	31/10/2019	October2019-56	Superannuation-October2019-56	1,048.34
				INV	31/10/2019	October2019-58	Superannuation-October2019-58	950.89
				INV	31/10/2019	October2019-59	Superannuation-October2019-59	2,127.74
				INV	31/10/2019	October2019-60	Superannuation-October2019-60	1,157.05
				INV	31/10/2019	October2019-63	Superannuation-October2019-63	316.38
				INV	31/10/2019	October2019-64	Superannuation-October2019-64	765.26
				INV	31/10/2019	October2019-65	Superannuation-October2019-65	650.59
				INV	31/10/2019	October2019-66	Superannuation-October2019-66	461.27
				INV	31/10/2019	October2019-70	Superannuation-October2019-70	739.82
				INV	31/10/2019	October2019-72	Superannuation-October2019-72	1,012.62
				INV	31/10/2019	October2019-73	Superannuation-October2019-73	1,387.20
				INV	31/10/2019	October2019-75	Superannuation-October2019-75	155.99
				INV	31/10/2019	October2019-79	Superannuation-October2019-79	1,164.45
				INV	31/10/2019	October2019-80	Superannuation-October2019-80	1,797.32
				INV	31/10/2019	October2019-81	Superannuation-October2019-81	558.30
				INV	31/10/2019	October2019-83	Superannuation-October2019-83	423.02
				INV	31/10/2019	October2019-84	Superannuation-October2019-84	203.28
				INV	31/10/2019	October2019-85	Superannuation-October2019-85	680.98
				INV	31/10/2019	October2019-86	Superannuation-October2019-86	521.39
				INV	31/10/2019	October2019-88	Superannuation-October2019-88	1,639.51
				INV	31/10/2019	October2019-89	Superannuation-October2019-89	682.90
				INV	31/10/2019	October2019-90	Superannuation-October2019-90	490.72
				INV	31/10/2019	October2019-91	Superannuation-October2019-91	230.90
				INV	31/10/2019	October2019B*-01	Superannuation-October2019B*-01	1,541.37

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Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
3964	20/11/2019	EFT TRANSFER: - 20/11/2019	103,585.24					
3964.565-01		Bright Futures Family Day Care - Pa	103,585.24	INV	20/11/2019	041119 to 171119	FDC Payroll 041119 to 171119	103,585.24
3965	20/11/2019	EFT TRANSFER: - 20/11/2019	22,319.44					
3965.568-01		Bright Futures In Home Care - Payro	22,319.44	INV	20/11/2019	041119 to 171119	IHC Payroll 041119 to 171119	22,319.44
3966	21/11/2019	EFT TRANSFER: - 21/11/2019	508,948.77					
3966.10483-01		Q2 Online	6,600.00	INV	19/11/2019	1119-001	Word and PDF training 030919	6,600.00
3966.10508-01		FE Technologies Pty Ltd	462.00	INV	19/11/2019	1007630	Tags	462.00
3966.10583-01		Green Services	2,180.00	INV	19/11/2019	1309	Compost workshop 101119	2,180.00
3966.1059-01		Vodafone Messaging	176.00	INV	19/11/2019	11246358	Pager network access fee November 2019	176.00
3966.10653-01		Stacey Janine Hobbins	416.50	INV	20/11/2019	18thNovember2019	Reimburse Finance Team milestone event 10 x staff	416.50
3966.10741-01		Taise Luz Miranda Raumati	100.00	RFD	19/11/2019	1542197	Refund bond Patio hire 171119	100.00
3966.10780-01		Janet June Ford	139.00	RFD	20/11/2019	1428556	Refund bond Patio hire 211219	100.00
				INV	20/11/2019	20thNovember19	Refund cancelled Patio hire	39.00
3966.11007-01		Australian School & Club Fundraisin	300.00	INV	19/11/2019	00029386	Colour powder 10kg 2x Green 2x Red	300.00
3966.11020-01		Kambarang Services	2,200.00	INV	19/11/2019	INV-080819	Facilitate training 080819	2,200.00
3966.11049-01		QTM Pty Ltd	3,056.29	INV	19/11/2019	INV-3724	Traffic management plan Perham Crescent Leda	362.85
				INV	19/11/2019	INV-4476	Traffic management Gilmore Avenue 161119-171119	1,237.52
				INV	18/11/2019	INV-4102	Additional traffic management Pace Road path repair	1,455.92
3966.11204-01		ATC Work Smart	187.00	INV	19/11/2019	GT15635	School based trainee fortnight ending 191019	93.50
				INV	19/11/2019	GT15570	School based trainee fortnight ending 021119	93.50
3966.11243-01		GPC Asia Pacific Pty Ltd	3,089.68	INV	19/11/2019	1380007645	Oil and air filters	90.82
				INV	19/11/2019	1380007633	Cabin filter	30.94
				INV	19/11/2019	1380007739	Air and fuel filters	112.87
				INV	19/11/2019	1380007670	Air filter	41.17
				INV	19/11/2019	1380007740	Filters	71.70
				INV	19/11/2019	1380007644	Cabin filter	30.94
				INV	19/11/2019	1380007669	Air and fuel filters	94.83
				INV	19/11/2019	1380007742	Oil filter	18.04
				INV	19/11/2019	1380007657	Cabin filter	30.94

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				INV	19/11/2019	1380007672	Ryco service kit	163.90
				INV	19/11/2019	1380007671	Filters 4WD kit	100.10
				INV	19/11/2019	1380007666	Assorted filters	99.75
				INV	19/11/2019	1380007667	Assorted filters	80.25
				INV	19/11/2019	1380007741	Oil filter	18.04
				INV	19/11/2019	1380007683	Assorted filters	132.57
				INV	19/11/2019	1380007661	Assorted filters	143.81
				INV	19/11/2019	1380007660	Assorted filters	143.81
				INV	19/11/2019	1380007628	Assorted filters	143.81
				INV	19/11/2019	1380007743	Air filters	91.31
				INV	19/11/2019	1380007632	Oil filter	25.03
				INV	19/11/2019	1380007631	Assorted filters	96.25
				INV	19/11/2019	1380007627	Assorted filters	143.81
				INV	19/11/2019	1380007630	Air and oil filters	42.34
				INV	19/11/2019	1380007629	Assorted filters	143.81
				INV	19/11/2019	1380007625	Assorted filters	112.87
				INV	19/11/2019	1380007623	Oil filters	72.16
				INV	19/11/2019	1380007619	Assorted filters	185.64
				INV	19/11/2019	1380007646	Assorted filters	81.41
				INV	19/11/2019	1380007673	Assorted filters	119.35
				INV	19/11/2019	1380007653	Filter kit	84.19
				INV	19/11/2019	1380007654	Assorted filters	106.65
				INV	19/11/2019	1380007680	Assorted filters	201.28
				INV	19/11/2019	1380007668	Assorted filters	35.29
3966.1130-01		Port Printing Works	35.20	INV	20/11/2019	INV046232	Business cards	35.20
3966.11354-01		Triple Six IT	150.00	INV	19/11/2019	000667	BeeBot Robotics workshop	150.00
3966.11369-01		Paterson Personal Styling	375.00	INV	20/11/2019	0008	Facilitate Personal Styling workshop 141119	375.00
3966.11407-01		Palassis Architects	10,533.60	INV	19/11/2019	INV-0128	Sloan and Smirk Cottage conservation strategy	10,533.60
3966.11420-01		Kleenheat	5,923.70	INV	14/11/2019	2983373	Gas charges various locations	5,923.70
3966.1142-01		Sonic Health Plus	198.00	INV	20/11/2019	1928477	Pre-employment medical assessments	198.00
3966.11709-01		i2C Design & Management	39,380.00	INV	19/11/2019	00009503	Community Infrastructure Concept Plan	39,380.00
3966.11725-01		Kheiharna Scott-Peters	115.20	INV	21/11/2019	28thOctober2019	Refund of credit membership at Recquatic	115.20

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3966.11745-01		Mavis Rosina Wilson	667.15	INV	18/11/2019	7.5	Rates refund	667.15
3966.11766-01		Vulin Investments Pty Ltd T/as Well	149.00	INV	14/11/2019	Refund	Reclassification of business	149.00
3966.11767-01		Slavin Architects Pty Ltd	11,550.00	INV	20/11/2019	INV-0097	Admin building refurbishment preliminary design	11,550.00
3966.11768-01		David Edwin Phillip Smartt	83.44	INV	18/11/2019	7.5	Rates refund	83.44
3966.11776-01		Wizard Pharmacy	149.00	INV	15/11/2019	refund	Reclassification of food business	149.00
3966.11779-01		Kimberley Teale Bishop	100.00	RFD	19/11/2019	1455079	Refund bond Patio hire 171119	100.00
3966.11780-01		Aurora Bizgjoni	100.00	RFD	19/11/2019	1544913	Refund bond Patio hire 171119	100.00
3966.11781-01		Jocelyn Chen	100.00	RFD	19/11/2019	1554073	Refund bond Patio hire 161119	100.00
3966.11782-01		Ashleigh Michelle Pattullo	100.00	RFD	19/11/2019	1563499	Refund bond Patio hire 171119	100.00
3966.11783-01		Alison Graham	100.00	RFD	19/11/2019	1569258	Refund bond Patio hire 281019	100.00
3966.11784-01		Nada Visic	100.00	RFD	20/11/2019	1569426	Refund bond Patio hire 151119	100.00
3966.11785-01		Zhu Wang	250.00	INV	20/11/2019	11thNovember19	Lyrik Incentive Awards round 24	250.00
3966.11786-01		Carol Ann Newman	250.00	INV	20/11/2019	14thNovember2019	Senior Security Subsidy Scheme 2019/20	250.00
3966.11787-01		Shaani Richards	100.00	RFD	20/11/2019	1477875	Refund bond Patio hire 130519	100.00
3966.1205-01		Ridleys Towing & Transport	487.50	INV	20/11/2019	3382	Bus cleaning October 19	100.00
				INV	20/11/2019	3384	Driver for HR tour October 19	62.50
				INV	20/11/2019	3385	Driver for bus service 161019	50.00
				INV	20/11/2019	3386	Bus service 231019	87.50
				INV	20/11/2019	3387	Bus service 241019	87.50
				INV	20/11/2019	3388	Bus service 101019	100.00
3966.1276-01		Satellite Security Services	330.40	INV	18/11/2019	IV006808	Wellard Pavilion alarm repairs	330.40
3966.1290-01		Shane McMaster Surveys	3,300.00	INV	19/11/2019	Kwin 299	Feature survey of Hefron Way Parmelia	3,300.00
3966.1297-01		Shenton Enterprises Pty Ltd	723.80	INV	20/11/2019	169824	Assorted pool cleaner items Recquatic	723.80
3966.1474-01		Toll Transport Pty Ltd	36.86	INV	19/11/2019	1055901	Courier services 081119	36.86
3966.1516-01		Trisley's Hydraulic Services Pty Lt	132.00	INV	20/11/2019	80203363	Service backwash tank pump Recquatic	132.00
3966.1528-01		Twights Plumbing Pty Ltd	3,250.20	INV	19/11/2019	G1872	Reticulation repair Callistemon Court U18-31	3,250.20
3966.1561-01		WA Limestone Co	374.95	INV	20/11/2019	MI3355/01	26.06 tonne yellow sand	374.95
3966.1592-01		Water Corporation of Western Austra	21,896.77	INV	19/11/2019	9000340559Nov19	297U Tennis Club/Adventure Park public toilet	747.85

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				INV	19/11/2019	9023167656Nov19	20U Hawkeswood Blvd drink fountains	50.36
				INV	19/11/2019	9000374062Nov19	38U Wells Park toilets	95.68
				INV	19/11/2019	9013156996Nov19	275U Darius Wells Library/Resource Centre	2,155.31
				INV	19/11/2019	9000341578Nov19	1357U Recquatic/Zone	6,983.22
				INV	19/11/2019	9012573982Nov19	23U Incubator	331.88
				INV	19/11/2019	9000341201Nov19	1015U Banksia Park	3,001.70
				INV	18/11/2019	9000339427Nov19	103U Victory for Life	396.53
				INV	18/11/2019	9000340874Nov19	890U Callistemon Court	3,775.51
				INV	19/11/2019	9000334589Nov19	7U Feilman Building	703.14
				INV	19/11/2019	9000341570Nov19	17U Rhodes Park	225.72
				INV	19/11/2019	9012543409Nov19	239U Admin/Arts/Parmelia	2,521.93
				INV	19/11/2019	9000341914Nov19	23/40 Meares Ave service charges	151.14
				INV	19/11/2019	9000341922Nov19	24/40 Meares Ave service charges	151.14
				INV	14/11/2019	9000294409Nov19	14U Leda Hall	323.64
				INV	14/11/2019	9000295305Nov19	112U Sloans Cottage	282.02
3966.1614-01		Westbooks	659.68	INV	19/11/2019	310546	Library items	194.91
				INV	19/11/2019	310282	Library items	37.54
				INV	19/11/2019	310281	Library items	206.26
				INV	19/11/2019	310283	Library items	21.25
				INV	19/11/2019	310280	Library items	179.95
				INV	19/11/2019	310284	Library items	19.77
3966.19-01		Absolute Painting Services	1,771.00	INV	19/11/2019	INV-1195	Painting service Callistemon Court U42	1,771.00
3966.1902-01		Belmont Business Enterprise Centre	200.00	RFD	19/11/2019	1498080	Refund bond hall hire 190619	200.00
3966.2125-01		Synergy	66,744.00	INV	19/11/2019	198694990Nov19	52990U Admin/Arts/Parmelia	14,573.08
				INV	19/11/2019	118367820Nov19	5223U New Thomas Oval Pavilion	1,236.08
				INV	19/11/2019	566370150Nov19	2026U Chipperton Park	742.27
				INV	19/11/2019	141057240Nov19	14387U The Zone	4,156.34
				INV	19/11/2019	149872970Nov19	4070U Incubator	1,106.70
				INV	19/11/2019	179469390Nov19	3357U Bertram Community Centre	984.19
				INV	19/11/2019	177581220Nov19	102131U Recquatic	24,483.58
				INV	19/11/2019	129764890Nov19	6200U Lambeth Park	1,350.83
				INV	19/11/2019	422268910Nov19	6306U Depot	1,803.15
				INV	19/11/2019	958335710Nov19	8387U Orelia Oval	1,856.08
				INV	19/11/2019	107029100Nov19	3434U Wellard Community Centre	861.69
				INV	18/11/2019	135567600Nov19	42469U Darius Wells	11,397.36

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				INV	14/11/2019	258360080Nov19	5609U Kwinana Adventure Park	1,112.76
				INV	14/11/2019	144372270Nov19	1917U Thomas Oval Retic	323.54
				INV	14/11/2019	970964040Nov19	1235U Conference Room Feilman Building	446.83
				INV	14/11/2019	127609840Nov19	739U Feilman Building top floor	309.52
3966.2224-01		Prestige Catering & Event Hire	1,576.60	INV	20/11/2019	INV-0513	Catering 121119	292.50
				INV	20/11/2019	INV-0503	Catering 091119	468.00
				INV	20/11/2019	INV-0535	OCM dinner 131119	463.50
				INV	20/11/2019	INV-0506	EMBS dinner 111119	352.60
3966.2256-01		GlobalX Information Services Pty Lt	183.37	INV	19/11/2019	PSI0150892	Legal name searches October 2019	81.84
				INV	19/11/2019	PSI0148105	Legal name searches September 2019	101.53
3966.235-01		Bristol Cleaning Services	450.00	INV	19/11/2019	1119C	Window cleaning Clubhouse September to November 19	360.00
				INV	19/11/2019	1019-1	Cleaning of screens and tracks Banksia Park U40	90.00
3966.2463-01		Battery World	80.00	INV	18/11/2019	IN6080155120	Drypower 12V 2.9AH SLA battery	80.00
3966.248-01		Bunnings Building Supplies	555.16	INV	18/11/2019	2163/01589262	Marquee dining setting for Recquatic staff room	267.76
				INV	18/11/2019	2163/01633318	Recquatic hooks	8.27
				INV	18/11/2019	2163/01633051	Dijilba Park basketball backboard materials	246.47
				INV	18/11/2019	2163/01587825	Darius Wells Library drill and counter sink bit	32.66
3966.2652-01		Modern Teaching Aids Pty Ltd	902.99	INV	19/11/2019	43805734	Robots spare parts Library	902.99
3966.2697-01		Smoke and Mirrors Audio Visual	903.00	INV	20/11/2019	INV-30207	Headset microphone Recquatic	903.00
3966.275-01		Cannon Hygiene Australia Pty Ltd	4,552.11	INV	18/11/2019	96463501	Cleaning services various 061019 to 051119	1,517.37
				INV	18/11/2019	96439759	Cleaning services various 060919 to 051019	1,517.37
				INV	18/11/2019	96488049	Cleaning services various 061119 to 051219	1,517.37
3966.2852-01		Downer EDI Works Pty Ltd	156,506.02	INV	19/11/2019	6007798	Supply and lay bituminous concrete Gilmore Avenue	91,639.83
				INV	19/11/2019	6007793	434.6 tonne asphalt Gilmore Avenue 081119	64,866.19
3966.2903-01		Connect CCS	3,036.61	INV	19/11/2019	00099121	After hours monitoring October 19	3,036.61
3966.2981-01		Peter Edward Feasey	604.08	INV	20/11/2019	November2019	Reimbursement of apparel expenses November 19	604.08
3966.303-01		Challenge Chemicals Australia	261.80	INV	20/11/2019	100935	Cleaning chemicals	261.80
3966.305-01		South Metropolitian TAFE	1,978.80	INV	19/11/2019	I0028546	Course fees	1,978.80

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3966.3212-01		Marketforce Pty Ltd	2,232.58	INV	19/11/2019	30327	Advertising 270919	225.50
				INV	19/11/2019	30328	Advertising 110919	225.50
				INV	19/11/2019	30336	Advertising 301019	416.27
				INV	19/11/2019	30329	Advertising 161019	344.28
				INV	19/11/2019	30326	Advertising 021019	1,021.03
3966.3243-01		Grant Thornton Audit Pty Ltd	2,090.00	INV	19/11/2019	1427006	Interim fee Developer Contributions Audit 2018	2,090.00
3966.3334-01		Bertram Primary School	100.00	RFD	19/11/2019	1497633	Refund bond Patio hire 140619	100.00
3966.335-01		City of Rockingham	61,976.42	INV	19/11/2019	108676	Contribution to the Joint Naval reception 081119	1,997.32
				INV	20/11/2019	108065	Tip fees to 031019	59,979.10
3966.36-01		ADH Fencing	2,310.00	INV	19/11/2019	00005283	Raised electric fence wire at works depot	2,310.00
3966.3632-01		Eclipse Soils Pty Ltd	3,393.50	INV	19/11/2019	KWIN01R043754	Tipping fees Clark Way	3,393.50
3966.3920-01		Sports Master Athletic Internationa	669.80	INV	20/11/2019	M10476	Gym equipment	669.80
3966.4003-01		Infiniti Group	1,524.22	INV	20/11/2019	475032	Cleaning and sanitary items Recquatic	1,524.22
3966.407-01		Winc Australia Pty Ltd	12.30	INV	20/11/2019	9029298360	Stationery Admin	12.30
3966.4190-01		AC Cooling Services	121.00	INV	19/11/2019	4454	Service air conditioner Callistemon Court U42	121.00
3966.4245-01		ED Property Services	253.00	INV	19/11/2019	00001360	Fix towel rail Callistemon Court U10	154.00
				INV	19/11/2019	00001361	Service leaking roof Banksia Park U12	99.00
3966.4412-01		JB Hi-Fi Rockingham	273.00	INV	20/11/2019	102935189-100	Fitbit and charger for Recquatic	273.00
3966.4627-01		Sara Natasha Urban	247.50	INV	20/11/2019	8	Facilitation of Boredom Busters class for 3 weeks	247.50
3966.4861-01		Big W	73.99	INV	19/11/2019	176630	Supplies for Boredom Busters class term 4	29.99
				INV	19/11/2019	176631	Items for school holiday activities at Library	44.00
3966.5823-01		Accord Security Pty Ltd	4,501.48	INV	19/11/2019	00024141	Security service period ending 101119 Darius Wells	4,185.78
				INV	19/11/2019	00024132	Security for summer outdoor movie night 091119	315.70
3966.598-01		Forpark Australia Pty Ltd	545.60	INV	18/11/2019	44633	Kwinana Adventure Park swing equipment	545.60
3966.5996-01		CMS Engineering Pty Ltd	8,303.65	INV	19/11/2019	34411	Air conditioning maintenance various locations	3,155.09
				INV	19/11/2019	34412	Air conditioning maintenance various locations	1,601.61

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				INV	19/11/2019	34413	Air conditioning maintenance various locations	1,081.85
				INV	18/11/2019	34521	Fiona Harris Pavilion repair cold room gas leak	2,465.10
3966.5997-01		Evolution Sports Imports Pty Ltd	458.00	INV	18/11/2019	53073	Recquatic futsal balls	458.00
3966.6018-01		ALSCO Pty Ltd	184.99	INV	20/11/2019	CPER1990190	Linen for OCM and EMBS Dinners	48.35
				INV	20/11/2019	CPER1991026	Linen for OCM and EMBS Dinners	76.20
				INV	20/11/2019	CPER1990189	Linen for OCM and EMBS Dinners	28.20
				INV	20/11/2019	CPER1990191	Linen for OCM and EMBS Dinners	32.24
3966.6267-01		Woolworths Group Limited	712.32	INV	20/11/2019	3739034	Items for Drop In programs	48.49
				INV	18/11/2019	3739031	Cafe splash supplies	41.60
				INV	18/11/2019	3739043	Zone supplies	7.17
				INV	18/11/2019	3739039	Cafe Splash supplies	31.40
				INV	18/11/2019	3739049	Kitchen supplies for City Operations	72.87
				INV	19/11/2019	41255240	Items for Admin	194.34
				INV	19/11/2019	3739038	Items for Bright Futures and Mooditj Kulungars	121.99
				INV	19/11/2019	3739026	Items for Mooditj Kulungars	147.29
				INV	19/11/2019	3739027	Items for Cafe Recquatic	47.17
3966.6277-01		Kim Baden McClennan	44.05	INV	20/11/2019	15thNovember19	Reimburse HR drivers licence	44.05
3966.6336-01		Print and Design Online Pty Ltd	600.00	INV	20/11/2019	17107	Website repairs	600.00
3966.6370-01		Elexacom	13,836.28	INV	19/11/2019	27956	Electrical repairs Callistemon Court	597.98
				INV	18/11/2019	27903	Recquatic install double GPO	146.95
				INV	18/11/2019	27824	Darius Wells replacement of PA system mixer	2,102.44
				INV	18/11/2019	27815	Old Thomas Oval Pavilion sewerage pump repairs	479.49
				INV	18/11/2019	27856	Koorliny Arts Centre lighting repairs	1,452.73
				INV	18/11/2019	27898	Darius Wells Library replace various lighting	1,419.22
				INV	18/11/2019	27897	Kwinana Adventure Park BBQ repair	1,021.33
				INV	18/11/2019	27805	Wandi Hall sewerage pumping system	5,955.68
				INV	18/11/2019	27851	Sloan Cottage electrical testing	96.04
				INV	18/11/2019	27850	Sloan Reserve toilets electrical testing	48.02
				INV	18/11/2019	27854	Depot lights out at mechanical workshop	516.40

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3966.6860-01		Advance Scanning Services	1,309.00	INV	19/11/2019	20164311	Scanning technician and gear for Gilmore Avenue	1,309.00
3966.694-01		Heatley Sales Pty Ltd	2,990.80	INV	19/11/2019	C903035	Uniforms Depot	502.38
				INV	19/11/2019	C903030	Uniforms Depot	473.18
				INV	19/11/2019	C903041	Uniforms Depot	291.01
				INV	19/11/2019	C903187	Uniforms Depot	323.74
				INV	19/11/2019	C903042	Uniforms Depot	409.48
				INV	19/11/2019	C903039	Uniforms Depot	322.36
				INV	19/11/2019	C903185	Uniforms Depot	341.34
				INV	19/11/2019	C903050	Uniforms Depot	327.31
3966.7388-01		Morris Jacobs	530.00	INV	20/11/2019	7-19/11/19	Facilitate Tuesday Art 191119	265.00
				INV	20/11/2019	12/11/19-6	Facilitate Tuesday Art 121119	265.00
3966.7555-01		Select Music	16,500.00	INV	20/11/2019	12585	50% deposit Performance Kwinana Youth Festival	16,500.00
3966.7575-01		Pickles Auctions	231.00	INV	19/11/2019	DI000155670	Towing pickup	121.00
				INV	19/11/2019	DI000155051	Towing pickup and delivery to Bibra Lake	110.00
3966.762-01		Blackwood & Sons Ltd	193.49	INV	19/11/2019	PE4641UI	Masking tape	70.29
				INV	19/11/2019	KW2862UR	Safety boots	123.20
3966.7732-01		Griffin Civil	1,765.50	INV	19/11/2019	00001016	Adjust drainage lid and reshape verge Langridge Cr	1,765.50
3966.7809-01		Frontline Fire and Rescue Equipment	835.78	INV	19/11/2019	65898	Items for bush fire brigade	835.78
3966.7833-01		Kwinana Veterinary Hospital Pty Ltd	195.00	INV	19/11/2019	63245	Microchipping fee	65.00
				INV	19/11/2019	64132	Microchipping fee	65.00
				INV	19/11/2019	64717	Microchipping fee	65.00
3966.795-01		K Mart	110.00	INV	20/11/2019	218489	Assorted items	110.00
3966.8290-01		Leda Education Support Centre	100.00	RFD	19/11/2019	1563499	Refund bond Patio hire 141119	100.00
3966.8421-01		Back Beach Co	488.10	INV	18/11/2019	16933	Back Beach robes for Proshop	488.10
3966.8442-01		Master Instruments	378.05	INV	19/11/2019	969782	TEB-MC5600 6V alkaline for metrocount	378.05
3966.8713-01		Saferight Pty Ltd	498.00	INV	19/11/2019	155613	Confined Space Entry Training x 2	498.00
3966.8761-01		Xiuzhen Li	240.00	INV	20/11/2019	014	Facilitate Botanical Drawing class Darius Wells	240.00
3966.8899-01		Majestic Plumbing	490.37	INV	18/11/2019	235037	Recquatic investigate gas leak	225.98

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				INV	18/11/2019	235039	Darius Wells Library replace mixer tap in toilet	88.13
				INV	18/11/2019	235038	Sloans 1950s House plumbing repairs	176.26
3966.8998-01		McLeods	11,821.12	INV	19/11/2019	111021	Legal fees matter No 44927	4,193.25
				INV	19/11/2019	111028	Legal fees matter No 43401	5,485.55
				INV	19/11/2019	110869	Legal fees matter No 38994	2,142.32
3966.9074-01		Natsales Advertising Pty Ltd	4,620.00	INV	20/11/2019	00342419	Advertising Litter Bin Housing 011119 - 310120	1,732.50
				INV	20/11/2019	00342445	Advertising Litter Bin Housing 010220 - 300620	2,887.50
3966.9338-01		Christopher Matthew Burton	25.42	INV	20/11/2019	14thNovember19	Reimbursement padlocks for Zone program	25.42
3966.9683-01		Yasmin Studio	250.00	INV	18/11/2019	177	Photography workshop Saturday 19 October	250.00
3967	20/11/2019	EFT TRANSFER: - 21/11/2019	221,071.51					
3967.151-01		Australian Services Union	547.76	INV	17/11/2019	PY01-11-Aust Ser	Payroll Deduction	233.10
				INV	17/11/2019	PY01-11-Aust Ser	Payroll Deduction	47.80
				INV	03/11/2019	PY01-10-Aust Ser	Payroll Deduction	233.10
				INV	03/11/2019	PY01-10-Aust Ser	Payroll Deduction	33.76
3967.153-01		Australian Taxation Office	210,594.00	INV	17/11/2019	PY01-11-Australi	Payroll Deduction - PAYG Tax Withheld	210,594.00
3967.2853-01		Maxxia Pty Ltd	4,404.33	INV	20/11/2019	October19	Being employee Net ITC for period October 2019	431.40
				INV	17/11/2019	PY01-11-Maxxia P	Payroll Deduction	1,945.84
				INV	17/11/2019	PY01-11-Maxxia P	Payroll Deduction	2,027.09
3967.3376-01		Health Insurance Fund of WA (HIF)	1,115.50	INV	17/11/2019	PY01-11-Health I	Payroll Deduction	1,115.50
3967.487-01		Child Support Agency	3,670.36	INV	17/11/2019	PY01-11-Child Su	Payroll Deduction	1,836.50
				INV	03/11/2019	PY01-10-Child Su	Payroll Deduction	1,833.86
3967.892-01		LGRCEU	739.56	INV	03/11/2019	PY01-10-LGREC U	Payroll Deduction	350.04
				INV	03/11/2019	PY01-10-LGREC U	Payroll Deduction	10.26
				INV	17/11/2019	PY01-11-LGREC U	Payroll Deduction	369.00
				INV	17/11/2019	PY01-11-LGREC U	Payroll Deduction	10.26
3968	21/11/2019	EFT TRANSFER: - 22/11/2019	191,297.16					
3968.10003-01		Susan Reeve	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.10052-01		Kathryn Vuletic	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75

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3968.10540-01		Rhiannon Lynch	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.10568-01		Fiona Jayne Grieves	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.10964-01		Lorette Jodie Trocinski	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.11571-01		Paula Jane Hunt	3,766.88	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	16.88
3968.11572-01		Alison Rogers	4,520.25	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	4,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	20.25
3968.11573-01		Meredith Janet Troeger	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.11574-01		Sharron Mae Beet	692.99	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	690.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	2.99
3968.11575-01		Christine Joyce Clark	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.11577-01		Marcia Myrtle Brenchley	723.17	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	720.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.17
3968.11578-01		Pauline Isla Igglesden	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.11579-01		Linda Margaret Barnett	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11580-01		Brooke Marie Comley	997.34	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	990.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	7.34
3968.11581-01		Richard Senior Garlett	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11655-01		Nicki Marree Tollarzo	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11662-01		Sharni Maree Hatch	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.11663-01		Alana Carrie Atkinson	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00

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				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.11675-01		Deborah Janine Rooke	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.11676-01		Susan Edwards	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.11677-01		Andrea Carroll Harold	5,273.62	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	5,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	23.62
3968.11678-01		Michelle Christine Owen	692.99	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	690.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	2.99
3968.11679-01		Emma Louise Vaughan-Williams	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.11680-01		Karina Deborah O'Neill	3,766.88	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	16.88
3968.11681-01		Narelle Best	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11682-01		Ajidah Zaitu	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.11689-01		Rhys Adrian Pryce	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.11690-01		Joseph Stephen Girod	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11691-01		Carl Joseph Mark Boffey	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.11692-01		Robert Luke Slaughter	2,410.74	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,400.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.74
3968.11693-01		Julia Lorelle Bristow	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.11694-01		John Klas	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.11695-01		Michael Peter Hird	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75

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3968.11696-01		Gerard Fitzmaurice	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11697-01		Corey James Stoneham	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11698-01		Samual James Mark Anderson	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.11699-01		Dannielle Lee-Ann Wheeler	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.11700-01		Jessica Ngahuia De Vorms	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11701-01		Andrew Francis Southall	2,258.51	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	8.51
3968.11702-01		Raymond Joseph Organ	1,506.75	INV	21/11/2019	Xmas Saver 2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.11719-01		Joanne McKane	211.83	INV	21/11/2019	Xmas Saver 2019	Xmas Saver 2019	210.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	1.83
3968.2440-01		Leanne Marie Cromb	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.3366-01		Mary Elizabeth Shortt	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.4029-01		Anne Elizabeth Anderton	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.4166-01		Alison Dymond	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.4203-01		Ann Margaret Nicholas	7,533.74	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	7,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	33.74
3968.4205-01		David Mario Boccuzzi	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.4296-01		Patricia Maria Kursar	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.4430-01		Janni Benjamin Curtis	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00

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				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.4718-01		Stuart Leonard Ernest Curtis	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.4777-01		Leeanne Parsons	3,766.88	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	16.88
3968.492-01		Dianne Stronach	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.5040-01		Marisa Jo Wilkinson	4,339.22	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	4,320.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	19.22
3968.5041-01		Cheryl Louise Stevens	4,520.25	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	4,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	20.25
3968.5054-01		Donna Leeanne Howatson	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.5055-01		Tania Louise Ross	1,446.48	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,440.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.48
3968.5258-01		Susan Michele Wiltshire	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.5266-01		Debra Evelyn Newell	4,520.25	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	4,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	20.25
3968.5611-01		Adam Glyn Salathiel	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.5940-01		Willem Lodewikus De Klerk	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.6016-01		Lindsey Karen Barker	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.6131-01		Victoria Jessica Patton	3,766.88	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	16.88
3968.6157-01		Frank James Gorman	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.6270-01		Alison Barbara Scott	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38

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3968.6277-01		Kim Baden McClennan	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.6376-01		Daniel Wakeford Turrell	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.6383-01		Alicia Jane McKenzie	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.6433-01		Pietro Paul Di Silvio	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.6601-01		Gary John Kay	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.7359-01		Huda Rashid	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.7592-01		Lisa Ann Crouch	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.8039-01		Emma Marie Lavery	6,507.60	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	6,480.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	27.60
3968.8131-01		Aaron Leigh McClennan	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.8187-01		Debby Mary Bridson	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.8276-01		Suzanne Frances Logan	6,026.99	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	6,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	26.99
3968.8281-01		Jack Heremia Ngamoki	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.8336-01		Lynne Brooke	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.8492-01		Gladys Nyashanu	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.8548-01		Kathryn Ann Smogavec	2,260.13	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	2,250.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	10.13
3968.8723-01		Jane Elizabeth Harris	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00

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				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.8776-01		Miranda Jane Gooding	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.8838-01		Julie Ann McKee	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.9070-01		Simon Roger Chant	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.9356-01		Felicitas Dhliwayo	3,013.50	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,000.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	13.50
3968.9599-01		Maria Cooke	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3968.9649-01		Edna Dianne Brown	3,766.88	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	3,750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	16.88
3968.9671-01		Darrell Monteiro	753.38	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	750.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	3.38
3968.9739-01		Evelyn Margaret Lance	1,506.75	INV	21/11/2019	XmasSaver2019	Xmas Saver 2019	1,500.00
				INV	21/11/2019	Interest2019	Interest Xmas Saver 2019	6.75
3969	28/11/2019	EFT TRANSFER: - 28/11/2019	1,977.22					
3969.530-01		Easifleet	1,977.22	INV	28/11/2019	129446	Novated lease for November 2019	1,977.22
3970	28/11/2019	EFT TRANSFER: - 28/11/2019	584,133.02					
3970.10313-01		Ikea Pty Ltd	368.00	INV	26/11/2019	162346911	Purchase of lounge for staff room at Recquatic	368.00
3970.1036-01		North Parmelia Primary School	50.00	INV	25/11/2019	19Nov2019	Donation for end of year book prize	50.00
3970.10373-01		Green Willows Industrial Cleaning a	400.00	INV	26/11/2019	35-24/11/19	Clubhouse and office cleaning	200.00
				INV	25/11/2019	36	Banksia Park/Callistemon Court office cleaning	200.00
3970.10507-01		David Wills and Associates	8,360.00	INV	27/11/2019	00030108	Structural integrity inspection Kwinana Boy Scouts	4,620.00
				INV	27/11/2019	00030107	Structural assessment of timber frame structure	3,740.00
3970.1072-01		Paint Industries	270.05	INV	25/11/2019	60998	Rhodes Park kiosk and public toilets paint	270.05
3970.10721-01		Brian Trevor Rowe	100.00	RFD	27/11/2019	1382475	Refund bond Patio hire 231119	100.00

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3970.10739-01		Rockingham Toyota	325.11	INV	27/11/2019	JC23010785	Transmitter assembly for 1EWZ823	325.11
3970.11243-01		GPC Asia Pacific Pty Ltd	1,650.00	INV	26/11/2019	1380009272	Amber lights	1,650.00
3970.11256-01		Hoffman Architecture	10,307.00	INV	27/11/2019	00002801	Architecture fees Mandogalup & Kwinana South Fire Brigades	10,307.00
3970.11299-01		Expo Signage and Digital Pty Ltd	206.80	INV	25/11/2019	503012	3 x lectern signs	206.80
3970.11345-01		Chorus Australia	300.00	RFD	27/11/2019	1572401	Refund bond hall hire 121119	300.00
3970.11521-01		Energy Plus Dance Company	600.00	RFD	27/11/2019	1572336	Refund bond room hire 231119	600.00
3970.11709-01		i2C Design & Management	16,214.00	INV	26/11/2019	00009597	Services for Community Infrastructure Concept Plan	16,214.00
3970.11792-01		Monique Robinson	175.00	INV	26/11/2019	19thNovember19	Financial assistance Figure Skating Championship	175.00
3970.11793-01		Cecilia Ann Colleen Jacob	87.00	INV	26/11/2019	13thNovember201	Reimburse Working With Children Check renewal	87.00
3970.11794-01		Messy Mat Perth	300.00	RFD	27/11/2019	1316696	Refund bond hall hire 020718	300.00
3970.11795-01		Royal Australian Navy	156.00	RFD	27/11/2019	1553344	Refund bond Patio hire 201219	100.00
				INV	27/11/2019	25thNovember201	Refund cancelled booking 201119	56.00
3970.11796-01		Danni-elle Broadbent	100.00	RFD	27/11/2019	1560294	Refund bond Patio hire 241119	100.00
3970.11797-01		Alicia Aitken	100.00	RFD	27/11/2019	1572401	Refund bond Patio hire 121119	100.00
3970.11798-01		June Taylor	100.00	RFD	27/11/2019	1542207	Refund bond Patio hire 200919	100.00
3970.11799-01		MDR Certification Engineers	100.00	RFD	27/11/2019	1550641	Refund bond Patio hire 231119	100.00
3970.11800-01		Jean George	100.00	RFD	27/11/2019	1572401	Refund bond Patio hire 121119	100.00
3970.11801-01		Stephanie Amanda Lauren Hanbury	100.00	RFD	27/11/2019	1580344	Refund bond Patio hire 221119	100.00
3970.11802-01		Centrepoint Church	300.00	RFD	27/11/2019	1577998	Refund bond hall hire 270919	300.00
3970.11803-01		JongChi Taekwondo Academy	300.00	RFD	27/11/2019	1121261	Refund bond hall hire regular user	300.00
3970.11804-01		Kym McDermott	500.00	RFD	27/11/2019	1562633	Refund bond hall hire 161119	500.00
3970.1223-01		Rockingham Betta Electrical & Gas	1,999.00	INV	26/11/2019	32410003832	Replace elevated oven combo Callistemon Ct U30	1,999.00
3970.1227-01		Rockingham Holden	202,571.26	INV	26/11/2019	50204	New Holden Colorado KWN2129	47,680.32
				INV	26/11/2019	50261	New Holden Colorado KWN2131	53,549.98
				INV	26/11/2019	50206	New Holden Colorado KWN2128	47,680.32
				INV	26/11/2019	50260	New Holden Colorado KWN2130	53,660.64

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3970.1249-01		Royal Life Saving Society	250.00	INV	26/11/2019	107225	Heart Beat Club at Recquatic 10 x attendees	250.00
3970.1276-01		Satellite Security Services	165.00	INV	25/11/2019	IV006933	Thomas Oval Pavilion replace alarm battery	165.00
3970.1360-01		St John Ambulance Australia (WA) In	19.91	INV	25/11/2019	STKINV00016754	Depot first aid supplies	19.91
3970.1408-01		Sylvia Ayton Snowden	89.00	INV	27/11/2019	20thNovember201	Reimbursement for items for Bright Futures	89.00
3970.1423-01		Telstra	65.69	INV	27/11/2019	1548725500Nov19	Feilman Building to 131219	19.25
				INV	26/11/2019	0335568200Nov19	Usage to 091119 Banksia Park	46.44
3970.1455-01		Returned Services League Of Austral	4,980.36	INV	26/11/2019	20thNovember19	Community funding program	4,980.36
3970.1474-01		Toll Transport Pty Ltd	28.62	INV	27/11/2019	0387-T221490	Courier fees 291019	28.62
3970.1491-01		Works Social Club	1,460.00	INV	26/11/2019	19thNovember201	Reimbursement Team Building Milestone event Depot	1,460.00
3970.1528-01		Twights Plumbing Pty Ltd	993.30	INV	25/11/2019	G2023	Banksia Park replace retic controller	993.30
3970.1530-01		Wormald Australia Pty Ltd	1,579.57	INV	25/11/2019	8093472	Thomas Oval Clubrooms supply new extinguisher	283.80
				INV	25/11/2019	8093446	Department of Housing replace extinguisher	255.20
				INV	25/11/2019	8097290	Routine inspection and testing various locations	1,040.57
3970.1561-01		WA Limestone Co	4,903.72	INV	26/11/2019	ML6210	Road base	4,472.57
				INV	27/11/2019	MI3253/01	29.92 tonne lawn sand	431.15
3970.1589-01		Waste Stream Management Pty Ltd	198.00	INV	26/11/2019	00424483	Tipping fees to 281019	198.00
3970.1592-01		Water Corporation of Western Austra	2,124.29	INV	26/11/2019	9000319469Nov19	2U Chisham Oval toilets	5.04
				INV	26/11/2019	9000313235Nov19	5U Peace Park	12.59
				INV	26/11/2019	9000323724Nov19	249U Frank Konecny Centre	901.34
				INV	27/11/2019	9014051352Nov19	38U Bertram Community Centre	644.01
				INV	27/11/2019	9014249617Nov19	5U Bertram Oval Club facility	561.31
3970.1614-01		Westbooks	351.69	INV	25/11/2019	310543	Junior book request items	25.89
				INV	25/11/2019	310545	Junior items for collection	13.31
				INV	25/11/2019	310541	Adult books popular	192.33
				INV	25/11/2019	310544	Junior items for requests	27.36
				INV	25/11/2019	310542	Junior items popular	92.80
3970.1649-01		Dennis Cleve Wood	2,931.50	INV	20/11/2019	ICTALLOW19/20	ICT allowance	291.67
				INV	20/11/2019	MEETINGFEES19/	Meeting fees	2,639.83

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3970.1688-01		Sherilyn Wood	3,774.45	INV	20/11/2019	ICTALLOW19/20	ICT allowance	291.67
				INV	20/11/2019	MEETINGFEES19/	Meeting Fees	2,639.83
				INV	27/11/2019	21stNovember2019	Reimbursement of apparels November 19	842.95
3970.1689-01		Sandra Elizabeth Lee	2,931.50	INV	20/11/2019	ICTALLOW19/20	ICT allowance	291.67
				INV	20/11/2019	MEETINGFEES19/	Meeting fees	2,639.83
3970.1762-01		Officeworks BusinessDirect	79.96	INV	26/11/2019	45234488	Items for Mandogalup Fire Brigade	79.96
3970.19-01		Absolute Painting Services	242.00	INV	26/11/2019	INV-1205	Touch up paint in unit at Callistemon Court U30	242.00
3970.2048-01		Palm Lakes Gardens & Landscape Serv	188.00	INV	26/11/2019	03589	Reticulation maintenance Callistemon Court U27	188.00
3970.2096-01		Orelia Primary School	50.00	INV	25/11/2019	19Nov2019	Donation for end of year book prize	50.00
3970.2118-01		Calista Primary School	50.00	INV	25/11/2019	19Nov2019	Donation for end of year book prize	50.00
3970.2121-01		Suez	1,821.77	INV	26/11/2019	34484120	Tipping fees October 19	1,821.77
3970.2125-01		Synergy	21.54	INV	21/11/2019	330244930Nov19	3U U65 Callistemon Court	21.54
3970.2357-01		Vorgee Pty Ltd	118.23	INV	26/11/2019	00145475	2 x teaching babies for swim school	118.23
3970.2410-01		ABCO Products	347.27	INV	26/11/2019	468240	Cleaning products for Admin	347.27
3970.2442-01		Christian Summerfield	200.00	RFD	27/11/2019	1382357	Refund bond hall hire 271118	200.00
3970.247-01		Bullet Sign Shop	165.00	INV	26/11/2019	00022407	Signs for OHS forms and flyers whiteboard	165.00
3970.248-01		Bunnings Building Supplies	754.83	INV	26/11/2019	2163/01590953	Plywood board and 4 caster wheels	84.51
				INV	26/11/2019	2163/01624966	Door handles for Recquatic staff room	30.51
				INV	25/11/2019	2163/01591044	Recquatic push plates	72.14
				INV	25/11/2019	2163/01221288	Master Lock 50mm padlock	33.11
				INV	25/11/2019	2163/01021382	Various garden supplies Bright Futures	247.91
				INV	25/11/2019	2163/01147826	Paint for Centennial Park and Moombaki	183.54
				INV	25/11/2019	2163/01637142	Park Darius Wells Library hardware supplies	103.11
3970.2507-01		Ixom Operations Pty Ltd	2,017.36	INV	26/11/2019	6179706	Chlorine gas for Recquatic	1,008.68
				INV	27/11/2019	6152851	Supply of chlorine gas Recquatic	1,008.68
3970.2546-01		Sigma Chemicals	880.99	INV	26/11/2019	134083/01	Pool chemicals for Recquatic	880.99
3970.2646-01		Neverfail Springwater	152.80	INV	26/11/2019	291706	Bottled water Admin	62.40
				INV	26/11/2019	316304	Bottled water Admin	90.40

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3970.2852-01		Downer EDI Works Pty Ltd	142,948.28	INV	26/11/2019	6007818	Supply 450.9 tonne asphalt Anketell Road 171119	77,359.06
				INV	26/11/2019	3007749	Supply of bitumen Gilmore Avenue 281019	65,589.22
3970.2981-01		Peter Edward Feasey	4,801.33	INV	20/11/2019	DEPMAYFEE19/20	Deputy Mayoral allowance	1,869.83
				INV	20/11/2019	ICTALLOW19/20	ICT allowance	291.67
				INV	20/11/2019	MEETINGFEES19/	Meeting fees	2,639.83
3970.30-01		Carol Elizabeth Adams	11,730.76	INV	20/11/2019	ICTALLOW19/20	ICT Allowance	291.67
				INV	20/11/2019	MAYALLOW19/20	Mayoral allowance	7,479.42
				INV	20/11/2019	MEETING19/20	Meeting fees	3,959.67
3970.3212-01		Marketforce Pty Ltd	3,091.00	INV	26/11/2019	30325	Advertising 091019 and 231019	3,091.00
3970.3293-01		Signaltech	550.00	INV	25/11/2019	3589	Banksia Park U7 to 10 replace TV antennas	550.00
3970.330-01		City of Cockburn	3,103.21	INV	25/11/2019	45479	Reimbursement of long service leave	3,103.21
3970.3334-01		Bertram Primary School	50.00	INV	25/11/2019	19Nov2019	Donation for end of year book prize	50.00
3970.3338-01		AAA Blinds Port Kennedy	914.00	INV	26/11/2019	7323	Replaces all blinds and tracks Callistemon Ct U42	770.00
				INV	26/11/2019	7324	Repair to blinds in bedrooms Banksia Park U43	144.00
3970.339-01		Civica Pty Ltd	9,597.81	INV	26/11/2019	C/LG016181	General ledger training 290819	440.00
				INV	26/11/2019	M/LG013611	License support maintenance 010120 to 310120	8,717.81
				INV	26/11/2019	C/LG016180	Authority online training	440.00
3970.3632-01		Eclipse Soils Pty Ltd	770.00	INV	25/11/2019	KWIN01R043770	Grass and waste tipping Abingdon Crescent	770.00
3970.3914-01		Bladon WA Pty Ltd	3,928.32	INV	25/11/2019	BWAI42761	Purchase of custom Keep Cups for events	3,928.32
3970.3977-01		MRP Osborne Park-General Pest/Termi	4,863.09	INV	25/11/2019	86227	Depot pest control	372.94
				INV	25/11/2019	86231	John Wellard pest control	255.00
				INV	25/11/2019	86225	Business Incubator pest control	187.00
				INV	25/11/2019	86224	Recquatic pest control	609.25
				INV	25/11/2019	86232	William Bertram Community Centre pest control	444.00
				INV	25/11/2019	86235	Victory for Life pest control	187.00
				INV	25/11/2019	86236	Rhodes Park pest control	108.50
				INV	25/11/2019	86278	Thomas Oval Pavilion pest control	235.66
				INV	25/11/2019	86234	Mandogalup Fire Station pest control	127.00
				INV	25/11/2019	86277	Business Incubator pest control	195.00

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				INV	25/11/2019	86279	Medina Hall pest control	145.00
				INV	25/11/2019	86280	Smirk Cottage pest control	257.50
				INV	25/11/2019	86229	Sloan 1950s House pest control	341.03
				INV	25/11/2019	86230	Fiona Harris Pavilion pest control	465.66
				INV	25/11/2019	86233	Challenger Beach toilets pest control	108.50
				INV	25/11/2019	86228	Medina Hall pest control	144.97
				INV	25/11/2019	86282	William Bertram Community Centre pest control	217.00
				INV	25/11/2019	86226	Feilman Building pest control	205.00
				INV	25/11/2019	86281	Thomas Kelly Pavilion pest control	257.08
3970.4007-01		Digitales	1,428.90	INV	25/11/2019	SINV-15722	Year subscription to CoderZ online coding resource	1,428.90
3970.4035-01		Wildflower Society of WA (Murdoch	400.00	INV	11/11/2019	034	Orelia Park Wildflower Walk 150919	400.00
3970.407-01		Winc Australia Pty Ltd	1,088.83	INV	25/11/2019	9029564525	Stationery Admin	978.80
				INV	26/11/2019	9029559627	Stationery Admin	48.58
				INV	26/11/2019	9029599620	Stationery Admin	61.45
3970.41-01		Advanced Traffic Management (WA) Pt	19,980.95	INV	26/11/2019	00130792	Traffic control Gilmore Avenue 211019	3,765.30
				INV	26/11/2019	00130889	Traffic control Gilmore Avenue 281019	3,396.25
				INV	26/11/2019	00131035	Traffic control Gilmore Avenue 021119	8,963.35
				INV	26/11/2019	00131289	Traffic control Abingdon Crescent 131119	1,525.70
				INV	26/11/2019	00131362	Traffic control Abingdon Crescent 141119	2,330.35
3970.42-01		Adventure World	1,095.00	INV	26/11/2019	45727	School Holidays Excursion The Zone	1,095.00
3970.4245-01		ED Property Services	2,970.00	INV	26/11/2019	00001362	Backyard patio works at Callistemon Court U42	2,970.00
3970.4256-01		Rockingham Skylights	250.00	INV	26/11/2019	12183	Replace ducting to skylight Callistemon Court U19	250.00
3970.4465-01		Medina Residents Group	3,500.00	INV	27/11/2019	19thNovember2019	Community Event Funding	3,500.00
3970.4719-01		Complete Office Supplies Pty Ltd	896.99	INV	26/11/2019	08775082	Stationery Darius Wells	650.69
				INV	26/11/2019	0853338	Stationery Depot	246.30
3970.4800-01		Web In A Box	55.00	INV	27/11/2019	21983	Domain Registration for Recquatic	55.00
3970.480-01		Department of Transport	71.40	INV	26/11/2019	4124368	Disclosure of information fees	71.40
3970.483-01		Landgate	51.00	INV	25/11/2019	65961672	Landgate title search fees October 19	51.00
3970.4861-01		Big W	219.25	INV	26/11/2019	176634	Items for Bright Futures	189.25

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				INV	26/11/2019	176639	Rubbish bin for staff room	30.00
3970.5035-01		Quell Cleen	300.00	INV	26/11/2019	00052188	Steam clean carpets Banksia Park U43	120.00
				INV	26/11/2019	00052183	Vacate clean to Callistemon Court U30	180.00
3970.5143-01		Wendy Gaye Cooper	2,931.50	INV	20/11/2019	ICTALLOW19/20	ICT allowance	291.67
				INV	20/11/2019	MEETINGFEES19/	Meeting fees	2,639.83
3970.5743-01		Programmed Maintenance Services Ltd	10,017.52	INV	26/11/2019	SINV567402	Garden and turf maintenance November 19	10,017.52
3970.5859-01		HK Calibration Technologies Pty Ltd	220.00	INV	25/11/2019	60540	Calibration of tools	220.00
3970.5996-01		CMS Engineering Pty Ltd	1,518.00	INV	26/11/2019	34566	Service air conditioner Margaret Feilman Centre	1,518.00
3970.6115-01		Imagesource Digital Solutions	55.00	INV	25/11/2019	449348	VIP invitations for concert plus 10 spares	55.00
3970.6189-01		Alexi Peacock	204.00	INV	26/11/2019	18thNovember19	Reimburse items for Seniors Christmas Lunch gifts	204.00
3970.6224-01		The Grant Finder	697.50	INV	27/11/2019	00153	Facilitate community event 221119	202.50
				INV	27/11/2019	00154	Facilitation of Boredom Busters class November 19	495.00
3970.6267-01		Woolworths Group Limited	1,095.24	INV	26/11/2019	41096976	Admin items	218.49
				INV	26/11/2019	3711756	Food for Drop In program Zone	89.76
				INV	26/11/2019	3711771	Milk and bags Zone	9.02
				INV	26/11/2019	3711769	Cafe items Recquatic	87.40
				INV	26/11/2019	3711751	Cafe items Recquatic	21.00
				INV	26/11/2019	3711768	Items for feral animal program	3.36
				INV	26/11/2019	3739021	Items for feral animal program	2.57
				INV	26/11/2019	3711762	Items for Mooditj Kulungars and Bright Futures	132.28
				INV	26/11/2019	41033610	Admin items	162.55
				INV	25/11/2019	3711753	Items for John Wellard Creche	95.09
				INV	26/11/2019	41329755	Admin items	200.65
				INV	25/11/2019	3711774	Zone food for drop in	73.07
3970.6370-01		Elexacom	9,224.78	INV	25/11/2019	27955	Wandi Pavilion repairs to pump electricals	553.63
				INV	25/11/2019	27961	Darius Wells Dome repairs to lighting	122.93
				INV	25/11/2019	27987	Fiona Harris Pavilion link exhaust fan	1,511.29
				INV	25/11/2019	27954	Recquatic cafe replacement of existing lights	1,415.21
				INV	25/11/2019	27950	Fiona Harris Pavilion repair cool room circuit	353.73
				INV	25/11/2019	27949	Little Racals electrical repairs	287.21

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				INV	25/11/2019	27970	Wandi Hall investigate and repair pump	39.55
				INV	25/11/2019	27994	Recquatic cafe repair broken power outlet	79.09
				INV	25/11/2019	28024	Incubator check/repair external lighting	1,611.74
				INV	25/11/2019	28022	Honeywood Park BBQ repairs	158.18
				INV	25/11/2019	27948	Business Incubator preventative maintenance repair	471.49
				INV	25/11/2019	27952	Darius Wells electrical repairs corridor toilets	955.35
				INV	25/11/2019	27968	Recquatic stadium changerooms electrical repairs	1,405.55
				INV	26/11/2019	28018	Replaced smoke alarm Callistemon Court U18	48.02
				INV	26/11/2019	28017	Various electrical work to Callistemon Court U42	113.51
				INV	26/11/2019	27922	Various electrical service Callistemon Court	98.30
3970.664-01		StrataGreen	386.28	INV	25/11/2019	116044	Depot garden supplies	386.28
3970.6700-01		Sprayking WA Pty Ltd	18,161.16	INV	26/11/2019	00001778	Treatment of weeds on hardstand various locations	8,885.83
				INV	26/11/2019	00001780	Treatment of weeds Robinson Road Wandi	214.50
				INV	27/11/2019	00001749	Treatment of weeds on hardstand various locations	9,060.83
3970.694-01		Heatley Sales Pty Ltd	2,476.47	INV	25/11/2019	C901893	Assorted uniforms for Depot	502.43
				INV	25/11/2019	C903044	Assorted uniforms for Depot	339.96
				INV	25/11/2019	C903200	Assorted uniforms for Depot	297.34
				INV	25/11/2019	C903034	Assorted uniforms for Depot	430.55
				INV	25/11/2019	C901895	Assorted uniforms for Depot	419.93
				INV	25/11/2019	C903037	Assorted uniforms for Depot	322.36
				INV	25/11/2019	C903680	Assorted uniforms for Depot	163.90
3970.7-01		AAA Windscreens & Tinting	295.00	INV	25/11/2019	INV-45555	Replace windscreen to 1EWO610	295.00
3970.7369-01		Specialised Tree Lopping	2,695.00	INV	26/11/2019	19110411	Various tree works around Callistemon Court	2,695.00
3970.7388-01		Morris Jacobs	265.00	INV	27/11/2019	26/11/19-8	Facilitation of Tuesday Art 261119	265.00
3970.7604-01		Tanya Halliday	108.38	INV	26/11/2019	20thNovember201	Reimburse purchase of birth certificates Zone	108.38
3970.7812-01		Starbucks Flooring	110.00	INV	26/11/2019	INV-000639	Repair flooring to Callistemon Court U19 and U26	110.00
3970.7937-01		Kerb Direct Kerbing Pty Ltd	880.00	INV	25/11/2019	18225	Sandringham Park repair kerbing	880.00
3970.805-01		Mervyn Thomas Kearney	2,931.50	INV	20/11/2019	ICTALLOW19/20	ICT allowance	291.67
				INV	20/11/2019	MEETINGFEES19/	Meeting fees	2,639.83

Cheque Listing

Payments made between

01/11/2019 to 30/11/2019

Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
3970.8234-01		Fire And Safety Australia Pty Ltd	275.00	INV	26/11/2019	TI033849	Fire Warden training 150120	275.00
3970.8454-01		Kwinana Community Financial Service	200.00	RFD	27/11/2019	1524670	Refund bond hall hire 211119	200.00
3970.849-01		Kwinana Scout Group	100.00	RFD	27/11/2019	1387719	Refund bond Patio hire 241119	100.00
3970.8595-01		Purearth	8,755.90	INV	26/11/2019	INV-0038	Road sweeping tip fees	8,755.90
3970.867-01		Lamp Replacements	398.20	INV	25/11/2019	IN1024868	Darius Wells lamp replacements	398.20
3970.8723-01		Jane Elizabeth Harris	72.50	INV	26/11/2019	13thNovember19	Reimbursement of items for Bright Future	72.50
3970.882-01		Leda Primary School	50.00	INV	25/11/2019	19Nov2019	Donation for end of year book prize	50.00
3970.8899-01		Majestic Plumbing	6,037.87	INV	25/11/2019	235127	Mandogalup Fire Station replace copper pipe	1,488.56
				INV	25/11/2019	235128	Fiona Harris Pavilion replace copper pipe	1,997.81
				INV	25/11/2019	235125	Administration kitchen dishwasher repair hose	88.13
				INV	26/11/2019	234256	Various plumbing works to Callistemon Court U40	880.26
				INV	26/11/2019	234259	Various plumbing works Callistemon Court U5	424.69
				INV	26/11/2019	235154	Plumbing repairs to Banksia Park U31	220.26
				INV	26/11/2019	235126	Repairs to garden tap Banksia Park U20	99.13
				INV	26/11/2019	235152	Replacement of plumbing Banksia Park U11	574.60
				INV	26/11/2019	235151	Replacement of plumbing Banksia Park U67	264.43
3970.9019-01		Kearns Garden Supplies	322.49	INV	26/11/2019	76-31/10/2019	Hardware items for Depot October 19	322.49
3970.903-01		Lo-Go Appointments	2,533.74	INV	25/11/2019	00420925	Temp staff week ending 261019	2,533.74
3970.9384-01		Taylored to Suit	3,300.00	INV	27/11/2019	00000842	Deposit for Christmas Styling 2019 Darius	2,000.00
				INV	27/11/2019	0000920	Final payment Christmas Styling 2019 Darius	1,300.00
3970.9405-01		Matthew James Rowse	2,931.50	INV	20/11/2019	ICTALLOW19/20	ICT allowance	291.67
				INV	20/11/2019	MEETINGFEES19/	Meeting fees	2,639.83
3970.9434-01		Akolade Pty Ltd	4,837.80	INV	27/11/2019	INV-2337	Social Media WA Summit	4,837.80
3970.9495-01		Diane Jane Berglund	175.00	INV	26/11/2019	19thNovember201	Financial assistance Figure Skating Championship	175.00
3970.9572-01		Aaron Thomas	650.00	INV	27/11/2019	127	Open Mic event 141119	650.00
3970.967-01		Medina Primary School	50.00	INV	25/11/2019	19Nov2019	Donation for end of year book prize	50.00
3970.9896-01		Mad Dog Promotional Products Pty Lt	440.00	INV	26/11/2019	INV-1766	Custom made polos Zone	440.00

Chq/Ref	Pmt Date	Payee	Amount	Tran	Date	Invoice	Description	Amount
		Total EFT	**-4,237,464.71**					
Payroll								
PY01-10	03/11/2019	Payroll	660,136.43					
PY99-05	03/11/2019	Payroll - Interim	755.85					
PY01-11	17/11/2019	Payroll	646,974.09					
PY99-06	17/11/2019	Payroll - Interim	895.19					
		Total Payroll	**-1,308,761.56**					
		Grand Total	**-5,590,435.42**					

ATTACHMENT B

Credit Card Transactions

1/11/2019 to 30/11/2019

Transaction No	Tran Type	Tran Reference	Invoice Date	Actual	Transaction Description
Credit Card Functions Officer to 051119				**$461.96**	
4603554	Invoice	051119A	05/11/2019	$10.91	Parking for election training
4603554	Invoice	051119A	05/11/2019	$121.41	Catering for election staff
4603554	Invoice	051119A	05/11/2019	$287.65	Bag toppers and badges for Citizenships
4603554	GST	051119A	05/11/2019	$41.99	GST
Credit Card Director City Legal 051119				**$41.51**	
4603556	Invoice	051119B	05/11/2019	$14.73	Parking Law Society of WA
4603556	Invoice	051119B	05/11/2019	$23.01	Parking Law Society of WA
4603556	GST	051119B	05/11/2019	$3.77	GST
Credit Card Executive Assistant to 051119				**$728.00**	
4603580	Invoice	051119C	05/11/2019	$220.00	Australian Institute of Company Directors Dinner
4603580	Invoice	051119C	05/11/2019	$461.82	Economic Development Kwinana Industrial Tour
4603580	GST	051119C	05/11/2019	$46.18	GST
Credit Card Director City Regulation to 051119				**$48.11**	
4603615	Invoice	051119D	05/11/2019	$8.77	New employees welcome to the City catering
4603615	Invoice	051119D	05/11/2019	$13.76	Parking Westport meeting
4603615	Invoice	051119D	05/11/2019	$23.32	New employees welcome to the City catering
4603615	GST	051119D	05/11/2019	$2.26	GST
Credit Card Director City Infrastructure to 051119				**$474.44**	
4603626	Invoice	051119F	05/11/2019	$13.76	Parking for Westport Corridors meeting
4603626	Invoice	051119F	05/11/2019	$21.11	CCI Conference Director City Infrastructure
4603626	Invoice	051119F	05/11/2019	$396.44	Conference Business Improvement Officer 241019
4603626	GST	051119F	05/11/2019	$43.13	GST
Credit Card Director City Engagement to 051119				**$256.92**	
4603788	Invoice	051119G	05/11/2019	$7.82	Youth Work Agency meeting catering
4603788	Invoice	051119G	05/11/2019	$40.15	Supplies for Zone Halloween event
4603788	Invoice	051119G	05/11/2019	$204.15	Facebook advertising
4603788	GST	051119G	05/11/2019	$4.80	GST
Credit Card Manager Corporate Communications to 051119				**$3,046.79**	

Credit Card Transactions

1/11/2019 to 30/11/2019

Transaction No	Tran Type	Tran Reference	Invoice Date	Actual	Transaction Description
4605504	Invoice	051119E	05/11/2019	$0.74	Xapier international transaction fee
4605504	Invoice	051119E	05/11/2019	$1.30	Typeform international transaction fee
4605504	Invoice	051119E	05/11/2019	$8.94	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$10.52	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$20.08	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$26.78	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$27.41	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$29.65	Zapier web app licence
4605504	Invoice	051119E	05/11/2019	$41.48	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$47.90	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$48.94	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$51.93	Typeform subscription
4605504	Invoice	051119E	05/11/2019	$89.99	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$100.00	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$120.00	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$135.17	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$161.69	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$173.49	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$185.27	Transmit corporate SMS system recharge
4605504	Invoice	051119E	05/11/2019	$185.27	Transmit corporate SMS system recharge
4605504	Invoice	051119E	05/11/2019	$185.27	Transmit corporate SMS system recharge
4605504	Invoice	051119E	05/11/2019	$191.06	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$215.79	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$289.52	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$300.05	Facebook advertising
4605504	Invoice	051119E	05/11/2019	$342.96	Mailchip marketing software
4605504	GST	051119E	05/11/2019	$55.59	GST
Credit Card Manager Human Resources to 051119				**$4,544.26**	
4605563	Invoice	051119H	05/11/2019	$39.14	2019 Youth Sector Summit 121119
4605563	Invoice	051119H	05/11/2019	$45.45	Smartrider autoload

Credit Card Transactions

1/11/2019 to 30/11/2019

Transaction No	Tran Type	Tran Reference	Invoice Date	Actual	Transaction Description
4605563	Invoice	051119H	05/11/2019	$45.45	Smartrider autoload
4605563	Invoice	051119H	05/11/2019	$54.55	2019 Engagement Forum 291119
4605563	Invoice	051119H	05/11/2019	$74.45	Flowers for staff member
4605563	Invoice	051119H	05/11/2019	$74.82	Flowers for staff member
4605563	Invoice	051119H	05/11/2019	$77.18	Flowers for staff member
4605563	Invoice	051119H	05/11/2019	$81.97	Fire Daemon software licence
4605563	Invoice	051119H	05/11/2019	$90.45	Achieving Energy Efficiency 081119
4605563	Invoice	051119H	05/11/2019	$99.09	FOI in WA Conference Records Officer
4605563	Invoice	051119H	05/11/2019	$136.36	Retirement Living Outlook 311019
4605563	Invoice	051119H	05/11/2019	$181.82	Renewal of Pest Management licence
4605563	Invoice	051119H	05/11/2019	$227.27	Industrial Property Launch 081119
4605563	Invoice	051119H	05/11/2019	$602.76	Advertising various positions LinkedIn
4605563	Invoice	051119H	05/11/2019	$919.91	Service Award voucher
4605563	Invoice	051119H	05/11/2019	$1,380.45	National Growth Areas Congress 211119
4605563	GST	051119H	05/11/2019	$413.14	GST
			Grand Total:	**$9,601.99**	

19 Notices of motions of which previous notice has been given

Nil

20 Notices of motions for consideration at the following meeting if given during the meeting

Nil

21 Late and urgent Business

Nil

22 Reports of Elected Members

22.1 Deputy Mayor Peter Feasey

Deputy Mayor Peter Feasey reported that he had attended the City of Kwinana Summer Symphony event, which was fantastic. The Deputy Mayor passed on his thanks and congratulations to all City Officers involved.

22.2 Councillor Wendy Cooper

Councillor Wendy Cooper reported that she had attended the Wellard Road Duplication Meetings.

Councillor Cooper advised that she had attended the Southern Metropolitan Regional Council Meeting.

Councillor Cooper mentioned that she had attended the City of Kwinana Local Organisations Christmas Function.

Councillor Cooper reported that she had attended a City of Kwinana Elected Members Briefing Session.

Councillor Cooper advised that she had attended the City of Kwinana Christmas Lolly Bagging.

Councillor Cooper mentioned that she had attended the Calista Primary School Board Meeting.

Councillor Cooper reported that she had attended the Wellard Village gathering for Volunteers Day.

Councillor Cooper advised that she had attended the Kwinana Industries Council (KIC) Christmas Function.

Councillor Cooper mentioned that she had attended the 2019 LYRIK Scholarship Award Presentation.

22 REPORTS OF ELECTED MEMBERS

Councillor Cooper reported that she had attended the City of Kwinana Summer Symphony event.

Councillor Cooper advised that she had attended the City of Kwinana Audit Committee Meeting.

Councillor Cooper mentioned that she had attended the Orelia Primary School Graduation.

Councillor Cooper reported that she had attended the Multicultural Advisory Group Meeting.

22.3 Councillor Merv Kearney

Councillor Merv Kearney reported that he had attended the Local Emergency Management Committee (LEMC) Meeting where a presentation was given by the Manager Essential Services on the roles of LEMC members.

Councillor Kearney added that a presentation was also given by the Department Primary Industries on the BEN Signs installed in Kwinana, Councillor Kearney explained that there are nine in Kwinana.

Councillor Kearney passed on his thanks to Lindsay Gates, whom advised after 15 years on the LEMC that he would be retiring to travel in his caravan. Councillor Kearney suggested that the City acknowledge his time with the LEMC with a certificate of appreciation.

Councillor Kearney advised that Department of Fire and Emergency Services (DFES) thanked the City for their assistance during recent fires, in particular the assistance by allowing the City's Community Emergency Services Officer to be deployed to NSW for the fires.

Councillor Kearney mentioned that the Health Department advised that a Heat Wave Health Plan would be issued in the coming days via Department of Local Government and WA Local Government Association (WALGA) and that all of this information would be circulated to Local Governments to disseminate lines via Facebook and websites etc.

22.4 Councillor Sandra Lee

Councillor Sandra Lee reported that she had attended the Rockingham Kwinana Chamber of Commerce (RKCC) Business After Hours Sundowner, co-hosted with the City of Kwinana and Roger Cook MLA Member for Kwinana, which was held at the Kwinana Golf Club.

Councillor Lee advised that she has attended the City of Kwinana Local Organisations Function which included the presentation of the Volunteer of the Year Award and the Martin Waudby Leadership of the Year Award. Councillor Lee stated that it had been a wonderful evening had by all and it had been great to see many of the representatives from the City's local clubs enjoy the evening.

22 REPORTS OF ELECTED MEMBERS

Councillor Lee mentioned that she had attended the WALGA State Council Induction, where Council representatives from across Western Australia advocate for the best interests of Local Councils.

Councillor Lee reported that she had attended the KIC Christmas Function and stated that we know the Kwinana Industrial Area is a powerhouse of economic drive for WA.

Councillor Lee advised that she had attended the LYRIK Scholarship Award Ceremony where local students received funds from the City of Kwinana, Alcoa and Coogee Chemicals to further assist them for their studies.

Councillor Lee mentioned that she had attended the City of Kwinana Summer Symphony event with the Perth Symphony Orchestra, which was held last Saturday evening at Calista Oval. Councillor Lee added that it was another fantastic event for our community.

Councillor Lee reported that she had attended the City of Kwinana Audit Committee Meeting.

Councillor Lee advised that she had attended the Seniors Christmas Lunch at the Ken Jackman Hall at the Darius Wells Library and Resource Centre, which was enjoyed by everyone. Councillor Lee added that it was great to listen to the Bertram Primary School sing some Christmas Carols too.

Councillor Lee passed on her thanks for all the support this year to the City's previous Chief Executive Officer (CEO), Joanne Abbiss, and the City's current CEO, Graeme Mackenzie, whom has taken the reins and embraced the City of Kwinana whole heartedly and all of the Directors and City Officers including the Council Administration Officer and Functions Officer whom do a wonderful job. Councillor Lee added that with everyone's kind assistance their role as a Councillor is helped tremendously.

Councillor Lee passed on her best wishes for a happy and safe, Merry Christmas.

22.5 Councillor Dennis Wood

Councillor Dennis Wood reported that he had attended the KIC Christmas Function which was good.

Councillor Wood advised that he had attended an RSL Meeting.

Councillor Wood mentioned that he had attended the WALGA Elected Member Mandatory Training for three days which had been tiring but good.

Councillor Wood reported that he had attended the City of Kwinana Summer Symphony which he enjoyed and he passed on his congratulations to all City Officers involved.

Councillor Wood advised that he had attended the South West Corridor Development and Employment Foundation (SWCDeF) Meeting and Annual General Meeting (AGM).

Councillor Wood mentioned that he had attended the Rockingham Kwinana Chamber of Commerce (RKCC) Sundowner which was co-hosted with Roger Cook MLA and the City of Kwinana and held at the Kwinana Golf Club.

Councillor Wood reported that he had attended the Environmental Improvement Plan Advisory Board Meeting at Alcoa.

22 REPORTS OF ELECTED MEMBERS

22.6 Councillor Sherilyn Wood

Councillor Sherilyn Wood reported that she had attended the KIC Christmas Function which was very nice.

Councillor Wood advised that she had attended the Environmental Improvement Plan Advisory Board Meeting at Alcoa.

Councillor Wood mentioned that she had attended the South West Corridor Development and Employment Foundation (SWCDeF) Meeting and Annual General Meeting (AGM).

Councillor Wood reported that she had attended the WALGA Elected Member Mandatory Training for three days which was quite good and the networking was great.

Councillor Wood advised that she had attended the Senior Christmas Luncheon at the John Wellard Community Centre.

Councillor Wood mentioned that she had attended the City of Cockburn's 40th Anniversary Celebration Gala Dinner.

23 Answers to questions which were taken on notice

Answers to questions taken on notice at the Ordinary Council Meeting held on 13 November 2019

23.1 Kevin Desmond, Parmelia

Question 1
Given that part of the Councils mission is “being accountable and transparent in our actions”, will all eight Councillors produce a report each week to show exactly how much work they are doing for the Kwinana residents? This should include all agendas for workshops, meetings with Federal and State Governments, Elected Members of other Councils, Federal and State Parliament, residents and business.

Response
The Deputy Mayor referred the question to the Chief Executive Officer.

The Chief Executive Officer took the question on notice, but added that he would raise the matter with elected members as a group to discuss this request further.

Further response from the City of Kwinana
Being an Elected Member involves attending Ordinary Council Meetings (generally two held monthly), Elected Member Briefing Sessions (generally held once a week), stakeholder functions/meetings, at least one night per month, Citizenship Ceremonies (approximately 1 held per month) as well as awards, and community and civic events as required. The City’s website details the Committees that elected members have been appointed to, and as a City delegate they are required to attend those meetings. The review of Council Agendas and Minutes, memos and reports from Officers, media items, committee (Council and non-Council) minutes and agendas and other reports are also components of the role of an Elected Member.

23 ANSWERS TO QUESTIONS WHICH WERE TAKEN ON NOTICE

Elected Members provide reports of meetings, functions and events that they have attended during the 'Reports of Elected Members' and 'Mayoral Announcements' sections of Council Meetings. Attendances at meetings of council is also published in the City's Annual Report.

There is no requirement however for elected members to keep records of, or report the amount of time they spend on council related activities. It is therefore entirely at the discretion of each elected member as to whether they wish to provide the information requested.

Question 2
Could the Acting Chief Executive Officer supply me with detailed expense claims and sitting fees for all eight Councillors and the detailed expense claims for the former Chief Executive Officer, since the 1 January 2019?

Response
The Deputy Mayor referred the question to the Chief Executive Officer.

The Chief Executive Officer took the question on notice.

Further response from the City of Kwinana
The below table provides the details of all sitting fees, allowances and expense claims in accordance with Council Policy from 1 January 2019 to 31 October 2019 for Elected Members and the former Chief Executive Officer.

Name / Type of Expenditure	Value (incl. GST)
Mayor Adams	118,212.77
ICT Allowance	2,916.66
Mayoral Allowance	74,349.62
Meeting Fees	39,361.64
Reimbursement Apparel Expenses	711.00
Reimbursement Travel Expenses - Parking	45.48
Reimbursement Travel Expenses – Mileage Claim	659.79
Reimbursement Travel Expenses - Taxi	129.68
Reimbursement Travel Expenses – Travel Incidentals	38.90
Councillor P Feasey	47,745.38
Deputy Mayoral allowance	18,587.34
ICT Allowance	2,916.66
Meeting Fees	26,241.38
Councillor D Wood	30,140.79
ICT Allowance	2,916.66
Meeting Fees	26,241.38
Reimbursement Apparel Expenses	982.75
Councillor M Kearney	29,158.04
ICT Allowance	2,916.66
Meeting Fees	26,241.38
Councillor M Rowse	29,158.04
ICT Allowance	2,916.66
Meeting Fees	26,241.38

23 ANSWERS TO QUESTIONS WHICH WERE TAKEN ON NOTICE

Councillor S Lee	30,946.66
ICT Allowance	2,916.66
Meeting Fees	26,241.38
Reimbursement Travel Expenses	873.16
Reimbursement Apparel Expenses	915.46
Councillor S Mills	28,529.96
ICT Allowance	2,813.17
Meeting Fees	25,304.65
Reimbursement Travel Expenses	412.14
Councillor S Wood	1,240.21
ICT Allowance	103.50
Meeting Fees	936.71
Reimbursement Laptop Bag / Briefcase per Policy	200.00
Councillor W Cooper	29,158.04
ICT Allowance	2,916.66
Meeting Fees	26,241.38
Former CEO J Abbiss	848.08
Travel Meals & Incidentals	848.08
Grand Total	**345,137.97**

24 Mayoral Announcements

Mayor Carol Adams reported that she had attended the Peter Carnley Anglican Community School Junior School Awards.

The Mayor advised that she had attended the Peter Carnley Anglican Community School Senior School Awards.

The Mayor mentioned that she had attended the Medina Primary School Crescendo End of Year Concert with the WA Symphony Orchestra (WASSO) school program.

The Mayor reported that she had attended the Gilmore College's Clontarf Academy End of Year Celebration and passed on her congratulations to Jermaine Picket and the overall award winner, Morgan Bropho.

The Mayor advised that she had attended the Leda Primary School Class of 2019 Graduation.

The Mayor mentioned that she had attended the City of Kwinana Local Organisations Function and passed on her congratulations to the award recipients:

- Volunteer of the Year - Colleen Collinge, Honeywood P&C
- Martin Waudby Leadership Award - Mike Nella

24 MAYORAL ANNOUNCEMENTS

The Mayor reported that she had attended the LYRIK 2019 Scholarship Award Ceremony and passed on her thanks to the generous sponsorship of Alcoa and Coogee Chemicals.

The Mayor advised that she had attended the Wellard Road Duplication Community Briefings.

The Mayor mentioned that she had attended the Gilmore College Board Meeting.

The Mayor reported that she had attended the Business After Hours Sundowner, co-hosted with the City of Kwinana and Roger Cook MLA Member for Kwinana.

The Mayor advised that she had attended the Lucy Saw Centre High Tea to commemorate 40 Years of Service to the Rockingham/Kwinana region.

The Mayor mentioned that she had attended the City of Armadale Civic Cocktail Function to welcome new Elected Members and to farewell outgoing Elected Members.

The Mayor reported that she had attended the South West Group Meeting of Mayors and CEO's.

The Mayor advised that she had attended the City of Kwinana Christmas Lolly Bagging and explained that 13,000 lolly bags and 65,000 individual lollies were wrapped by a team of volunteers.

The Mayor mentioned that she had attended a meeting with Ms Melinda Windolf regarding the School Chaplaincy Program in WA.

The Mayor reported that she had attended the WA Local Government Association President's Christmas Cocktail Function.

The Mayor advised that she had attended the Creating Community for Kids thankyou brunch for volunteers, service providers and agencies.

The Mayor mentioned that she had attended the WA Local Government Association final board meeting for 2019 and that the below were raised:

- Address by Local Government Minister, David Templeman MLA
- Kwinana led amendments (via South Metro Zone) were included in the State Council Agenda composite recommendations. The item on Local Government Financial Ratios was deferred so that WALGA could form a sector reference group to further review the ratios, including all Zones feedback and provide a recommendation to the May 2020 State Council Meeting.
- There was a respectful discussion with the Minister led by several country State Councillors in relation to the need to urgently reduce fuel loads. "*It you OWN the fuel – you OWN the fire*". Urgent need for fuel load reduction in bushfire prone areas to commence in July.

The Mayor reported that she had attended the KIC end of year Christmas Function.

The Mayor advised that she had attended the Kwinana Citizens Advice Bureau Thank a Volunteer Luncheon.

24 MAYORAL ANNOUNCEMENTS

The Mayor mentioned that she had attended the BP Centenary Celebration held at Perth Concert Hall.

The Mayor reported that she had attended the City of Kwinana Audit Committee Meeting.

The Mayor advised that she had attended the Official opening of BMT Mercury Technology by Environment Minister, Stephen Dawson.

The Mayor mentioned that she had attended the Seniors Christmas Luncheon held at the Darius Wells Library and Resource Centre.

The Mayor reported that she had attended the Seniors Christmas Luncheon held at the John Wellard Community Centre.

The Mayor advised that she had attended the Community Christmas Open Day held at the Office of Mr Reece Whitby MLA, Member for Baldivis.

The Mayor mentioned the announcement by Hon Simone McGurk MLA Minister for Child Protection; Women's Interests, Prevention of Family and Domestic Violence; Community Services and the new Kwinana Women's Refuge. The Mayor explained that the refuge is:

- To deliver accommodation and support service for women and children fleeing family and domestic violence
- The new centre will be a purpose-built facility with a specific focus on women with disabilities, Aboriginal women, women from culturally and linguistically diverse communities and women with large families including older boys
- The centre will operation 24 hours a day, seven days a week and will be staffed at all times to provide timely support and culturally safe services to clients

The Mayor reported that she had attended the City of Kwinana Summer Symphony Event which was another great success and she passed on her congratulations to the City of Kwinana Team whom worked tirelessly to make the event such an outstanding success.

The Mayor advised that as this is the final 'official' Ordinary Council Meeting for 2019, she took the opportunity to wish everyone a Merry Christmas and Happy New Year. The Mayor further advised that she is looking forward to 2020 and believes it will be a very good year for Kwinana in many ways.

25 Confidential items

COUNCIL DECISION
048
MOVED CR P FEASEY **SECONDED CR W COOPER**

That in accordance with Sections 5.23(2)(d) of the *Local Government Act 1995*, Council move behind closed doors to allow discussion of the Confidential item.

CARRIED
7/0

The gallery exited and the Council Chambers doors were closed at 8:11pm.

25.1 Minister for Works – Suites 2-5 Parmelia House, 10 Hutchins Way, Kwinana

DECLARATION OF INTEREST:

Deputy Mayor Peter Feasey declared an impartiality interest due to his supervisor being the Minister for Housing and the item referring to Departments he is responsible for.

COUNCIL DECISION
049
MOVED CR W COOPER **SECONDED CR S LEE**

That Council:

1. **Accepts a surrender of lease agreement from the Minster for Works for suites 2 – 5 subject to the terms and conditions detailed in Option A; and**
2. **Authorise the Chief Executive Officer to execute any documentation to give effect to the surrender of Lease.**

CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL
7/0

COUNCIL DECISION
050
MOVED CR P FEASEY **SECONDED CR W COOPER**

That Council return from Behind Closed Doors.

CARRIED
7/0

The Council Chambers were opened at 8:15pm

26 Close of meeting

The Mayor declared the meeting closed at 8:17pm.

Chairperson: 29 January 2020