

REQUEST TO INITIATE SCHEME AMENDMENT
TO THE TOWN OF PORT HEDLAND TOWN
PLANNING SCHEME NO. 5

REZONING FROM PARKS AND RECREATION
RESERVE TO RESIDENTIAL R30

LOT 3581 YANDERRA CRESCENT, SOUTH
HEDLAND

Prepared by:



Prepared for:



PLANNING AND DEVELOPMENT ACT 2005
RESOLUTION DECIDING TO AMEND A LOCAL PLANNING SCHEME
TOWN OF PORT HEDLAND
TOWN PLANNING SCHEME NO. 5
AMENDMENT NO. XX

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 Lot 3581 on Plan 214186 from 'Parks and Recreation" Reserve to 'Residential' with a Residential Density of R30; and
2. Amend the Scheme Map accordingly.

Dated day of 2014.

CHIEF EXECUTIVE OFFICER

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FIGURES

LOCATION MAP

SITE MAP

TPS5 SCHEME MAP

1. INTRODUCTION

1.1. REQUEST

RFF Australia has prepared this report on behalf of the Town of Port Hedland (ToPH) who is the proponent for the scheme amendment.

This report has been prepared in support of a request to rezone Lot 3581 Yanderra Crescent, South Hedland (subject site) from a "Parks and Recreation" Reserve to a "Residential" zone under the provisions of the Town of Port Hedland Town Planning Scheme No. 5 (TPS5). The request also seeks to apply a residential density code of "R30" over the site.

Port Hedland has experienced significant growth over the past 5 – 10 years attributed mainly to the expansion of resource infrastructure. The resulting impact of this growth has placed significant strain on the existing housing stock available within the town. As such there has been a significant shortage of housing and readily available land to cater for these high growth periods.

The scheme amendment is an opportunity to rezone an unused and surplus recreation reserve for suitable residential development. The proposal to rezone land to a 'Residential' zone, is consistent with the ToPH Local Planning Strategy and other land development initiatives.

As a result of work undertaken on behalf of the ToPH, through the Land Availability Plan, the Pilbara Regional Council (PRC) commissioned a Feasibility Report to investigate residential development on the subject site. Recommendations of this Feasibility Report are contained within this report. The PRC initiative was set up to address the housing crises within Port Hedland.

The following report addresses site details, local context, servicing and strategic planning considerations which demonstrates the suitability and demand to rezone the site for residential development.

2. LAND DETAILS

2.1. LAND TENURE AND EXISTING USE

The subject site is legally described as Lot 3581 on Plan 214186, Yanderra Crescent, South Hedland, being the whole parcel of land contained within Certificate of Title LR3010 – 712 (subject site).

The subject site is owned by the State of WA with a Reserve Management Order to the Town of Port Hedland for use as parkland.

A copy of the Certificate of Title is provided within Attachment 1 of this report.

2.2. SITE DESCRIPTION AND CONTEXT

The subject site is located within the municipality of the Town of Port Hedland and comprises an area of 6518m² located within the Koombana residential area, South Hedland.

The subject site is approximately 189m in length running from southwest to northeast, and has an irregular width as it follows the adjoining properties boundaries to the south.

The subject site is located approximately 640m from the South Hedland Town Centre and approximately 4.7km from the Port Hedland International Airport.

The subject site is generally surrounded by a range of medium density residential properties. The Site is bound by Murdoch Drive (north), residential dwellings and an approximately 45m frontage to Yanderra Crescent (south), a Drainage Reserve (northeast) and Captains Way (southwest).

The subject site is vacant land and appears to be an unused area of public open space.

Figures 1 and 2 display the wider and immediate location of the site, respectfully.

2.3. PROJECT BACKGROUND

This scheme amendment request is part of a combined Local and State Government platform aimed at consolidating and/or de-risking development areas for further land releases. The 2010 Hedland Land Availability Plan (HALP), prepared on behalf of the Town of Port Hedland (ToPH), is a mechanism used to integrate Local and State government initiatives.

The HALP has two primary purposes:

- *To provide the ToPH with a resource identifying land release opportunities for publically owned land; and*
- *To demonstrate the importance of swift government action in assisting with the release of land in both Port and South Hedland and key areas outside the main settlements.*

The HALP has informed a number of subsequent Local and State Government actions and projects across the town.

On 25 July 2012 Council resolved to prepare a business case for the acquisition of certain lands parcels identified within the HALP. The land parcels identified are undeveloped recreational reserves not required for the future provision of Public Open Space in the town. The subject site is one of the eleven parcels identified. The decision to excise the subject site and cancel its



FIGURE 1 - LOCALITY PLAN



22 CARNARVON STREET, BROOME
PO BOX 2807 BROOME WA 6725



FIGURE 2 - SITE PLAN



22 CARNARVON STREET, BROOME
PO BOX 2807 BROOME WA 6725

recreation reserve was reaffirmed a second time at the 26th September 2012 Ordinary Council meeting.

Since the previous Council resolutions, a Feasibility Report, dated 6th May 2013, was prepared on behalf of the PRC. The Feasibility Report assesses the development potential of the site. The Feasibility Report recommends the site be acquired by the Town of Port Hedland and zoned residential prior to development.

A copy of the Feasibility Report is included within Attachment 2 of this report.

2.4. ENVIRONMENTAL CONTEXT

A preliminary environmental investigation was undertaken over the subject site as part of the Feasibility Study. The investigation was undertaken using publicly available data. A summary of the key findings are provided below:

- There is no threatened or Priority Ecological Communities identified during the preliminary investigation.
- No threatened flora species occur on the subject site, as per the Western Australian Herbarium (1998-).
- There is potential threatened fauna species that may occur on the site include:
 - Northern Quoll.
 - Greater Bilby.
 - Northern Marsupial Mole.
 - Pilbara Leaf-nosed Bat.

Taking into account the location of the area within the established South Hedland town site, it is unlikely that proposed local disturbance will impact the aforementioned fauna species.

- There is an extremely low risk of Acid Sulphate Soil with the subject site, with no further investigations or assessment required.
- According to the Department of Indigenous Affairs (DIA) website there are no indigenous heritage sites on the subject site.
- An online search of the DEC Contaminated Sites Database (CSD) was undertaken on 17 April 2013. The Site is not registered on the CSD.

2.5. SERVICING CONSIDERATIONS

As part of the Feasibility Study development infrastructure advice was provided on all service infrastructure issues for the subject site to be developed for residential purposes. A summary of the key findings are provided below:

Sewer

To service the lot, connection to the existing 300 PVC-U main will be required. Using Google Maps and Street View to access the topography in conjunction with depth of existing sewer, it is likely there will be adequate grade for connection.

While preliminary discussions have commenced with the Water Corporation, it is anticipated this scheme amendment will be referred to the Water Corporation for comments.

Water

Dial Before You Dig information has confirmed an existing 300 AC water reticulation main is located across the road on the Northern side of the lot within Murdoch Drive. This then branches to a 300 AC main on Captains Way and branches again to a 100 AC pipe on Yanderra Crescent. Connection to this existing pipe will be at Captains Way and Yanderra Avenue requiring a road crossing excavation.

Discussions have commenced with Water Corporation regarding any capacity issues, the connection to an existing main and if any upgrades would be required due to increased load from the proposed development. It is anticipated this scheme amendment will be referred to the Water Corporation for comments.

Power

Dial Before You Dig information has confirmed existing low voltage reticulation passing on the Southern side of the lot on the Southern side of Yanderra Crescent. This branches to Gascoyne Court. Existing low and high voltage reticulation is also located across the road on the Northern side of the lot within Murdoch Drive.

From review of Google Maps Street View imagery the existing low voltage reticulation is underground at Yanderra Crescent and Gascoyne Court and above-ground at Murdoch Drive. A service connection to the existing low voltage reticulation is expected to be appropriate to connect the lot from Yanderra Crescent, Gascoyne Court and Murdoch Drive.

Traffic

The scheme amendment simply seeks to provide additional residential zoned land with an existing urban framework. As no final development concept has been agreed, the scale of the anticipated development and traffic generation is not known at this stage. As such any future development will need to be designed to fit in with the existing road network. The location and size of the subject site is not expected to negatively impact the existing road network.

The Feasibility Report included a desktop review of traffic and made no mention of any fatal flaws for access onto the site. While it is appreciated larger scheme amendment proposals may require the need to understand traffic impacts holistically, the size of the proposed scheme amendment does not warrant assessment at this stage.

Similar to many, if not all, scheme amendment applications within South Hedland, there has been no requirement for a traffic assessment at the scheme amendment stage. Furthermore the Western Australian Planning Commission – Transport Assessment Guidelines for Developments does not include mention of the need for transport assessments at the scheme amendment stage.

The Town will have opportunity to assess any potential traffic impacts through the planning application of the proposed development.

3. TOWN PLANNING CONSIDERATIONS

3.1. STRATEGIC PLANNING FRAMEWORK

3.1.1. Pilbara Planning and Infrastructure Framework

The Pilbara Planning and Infrastructure Framework (PIIF) was adopted by the Department of Planning to provide strategic direction for the future development of the Pilbara region over the next 25 years. It seeks to ensure development and change in the Pilbara is achieved in a way that improves people's lives and enhances the character and environment of the region.

The key actions in the PIIF regarding settlement patterns and housing include the following relevant points:

- *Identify areas of land for community and recreational needs in growth and redevelopment areas through zoning in local planning schemes.*
- *Facilitate private sector involvement in urban land development.*
- *Continue to undertake work that focuses on accelerating land releases for housing.*
- *Provide serviced residential land in identified growth areas to meet the needs of the labour market.*

The proposed scheme amendment is part of a Local and State government initiative to rationalise unused land across Port Hedland. The rationalised land, through a scheme amendment process, can then be developed for much needed housing as identified within the PIIF.

3.1.2. Pilbara's Port City Growth Plan

Pilbara's Port City Growth Plan (Growth Plan) was adopted by the Western Australian Planning Commission (WAPC) as a Local Planning Strategy for the Town of Port Hedland. The Growth Plan sets out to achieve the following overarching vision:

A nationally significant, friendly City where people want to live and are proud to call home.

This vision presented in five (5) key city growth themes adopted within the Growth Plan. The growth themes ensure future planning and development achieves an integrated and sustainable outcome. One of the key themes of the Growth Plan is to provide housing diversity and land supply by:

Providing an orderly and adequate supply of affordable land along with increased choice in affordable housing products and tenure options to cater for a diverse and permanent population.

In addressing the critical issue of affordability and accessibility to housing, the Growth Plan recommends the following initiatives/strategies be undertaken:

- *Immediately address critical housing shortage through using Council held land, utilising high quality modular construction methods and providing incentives and other forms of inducement to deliver housing in the next six to twelve months; and*
- *Identification of priority land release sites to facilitate significant immediate and short term housing development in a variety of locations.*

The subject site is located within Precinct 12 – South Hedland East as outlined within the Growth

Plan. While the Growth Plan does not provide specific recommendations for the site, Precinct 12 outlines the following implementation indicators and highlights:

- *Immediate term housing supply opportunity.*
- *Opportunities for density increases across neighbourhood.*
- *Key immediate land release sites being progressed by the private sector and not-for-profit organisations.*

The proposed scheme amendment is a key initiative by the ToPH to identify and rationalise key development sites consistent with the key themes and recommended initiatives as proposed through the Growth Plan.

3.1.3. The Port Hedland Active Open Space Strategy

During the preparation of the Growth Plan, the ToPH commissioned the Active Open Space Strategy (AOSS). The AOSS was completed in September 2011. The AOSS effectively provides the ToPH with recommendations on the amount and location of active open space required across both Port and South Hedland. The AOSS recommendations are made in accordance with relevant State Planning Policy.

In addition to the work undertaken for the ToPH through the Land Availability Plan, the AOSS recommends smaller parks and recreational reserves be rationalised and disposed. It is intended that the loss of small public open space parcels be compensated for by allocation and development of larger public open space parcels.

The scheme amendment provides opportunity to rezone unwanted public open space for more desirable uses as outlined with the AOSS. In addition, the scheme amendment is further supported by the identification of the subject site for redevelopment with Town's Land Availability Plan.

3.2. STATUTORY PLANNING FRAMEWORK

3.2.1. Town of Port Hedland Town Planning Scheme No.5

The subject site is reserved for 'Parks and Recreation' under the provisions of the Town of Port Hedland Town Planning Scheme No. 5 (TPS5).

Clause 2.3 of TPS5 outlines relevant matters to be considered regarding the development of reserves:

Where an application for planning approval is made with respect to land within a reservation, the Council shall:

- a) Have regard to the ultimate purpose intended for the reservation,*
- b) Have regard for the intentions of agencies with responsibility for managing and developing the reservation, and*
- c) Confer with the organisations it considers relevant to the reservation and the proposed use or development.*

At the Ordinary Council Meetings held on the 25 July 2012 and 26 September 2012 Council resolved that the subject site is no longer required for public open space and should be disposed of accordingly. The ToPH, in conjunction with Pilbara Cities, has also clearly indicated an intention to develop the land for residential development.

Furthermore, the subject site was never formally established for either a park or recreational

purpose.

In light of the above, the purpose of the reserve is redundant to the Town's parks and recreational needs. Therefore, an alternative land use that makes best use of the land in accordance with the Town's strategic plans should be pursued.

Figure 3 displays the subject site in relation to the current TPS5 zoning.

3.2.2. Development Control Policy 2.3 – Public Open Space in Residential Areas

Development Control Policy 2.3, in conjunction with Element 4 of Liveable Neighbourhoods, are policy mechanisms which provide guidance on the appropriate provision of public open space for residential communities. Relevant Provisions of the Policy include:

- 1. Where practicable, 10 percent of the gross subdivisible area be ceded as Crown Reserve for the provision of public open space.*
- 2. Public open space should include an overall balance between incidental open space, readily accessible to all residents and recreational open space which are larger and more suited to active leisure pursuits. In determining the appropriate mix, location and site identification, the direction of the Local Government should inform the public open space provision.*

3.2.3. Operational Policy – Liveable Neighbourhoods

Element 4 – Parkland of Liveable Neighbourhoods provides guidance in relation to the provision of public parkland within residential subdivision. Key objectives relating to the provision of public parkland in residential communities include:

- To ensure the public open space of appropriate quality and quantity is provided in a timely manner to contribute towards the recreational and social needs of the community in appropriate locations;*
- To integrate urban water management functions with public open space;*
- To facilitate the provision for community facilities where appropriate, as part of land ceded for public open space*
- To protect and conserve margins of water courses, water bodies and wetlands and establish public foreshores along the coast and watercourses to urban development;*
- To provide public open space is safe and overlooked by nearby buildings;*
- To facilitate the provision of public open space contribution and its development as part of the subdivision process and to enhance local amenity*
- To ensure that public open space is integrated into the urban structure to produce both land use and efficiency and long term sustainability*
- To provide practical cash-in-lieu mechanism for open space allocation and improvements*
- To provide for regional variations that best reflect the local community requirements*
- To ensure the provision of adequate land to protect, and to provide public access to, river, creek, lake and ocean foreshore.*

Liveable Neighbourhoods particularly acknowledges the need for regional variations to the

provision of public open space and supports in the provision of public parkland in regional areas provided:

- *The public open space is designed, developed and located for the widest possible use of the community, including meeting, recreation, leisure and entertainment;*
- *The public open space is developed to a minimum standard including full earthworks, basic reticulation, grassing of key areas, pathways that form part of the overall pedestrian and/or cycle network..;*
- *Adequate areas provided elsewhere for drainage, flooding, particularly overland flow; public open space is readily available in the community that can be used at all hours of the day or night; and*
- *Does not include any restricted open space.*

The subject site is not developed as public open space (POS). The AOSS identifies the subject site is not required for future recreational needs and should be disposed in preference for larger multiuse POS.

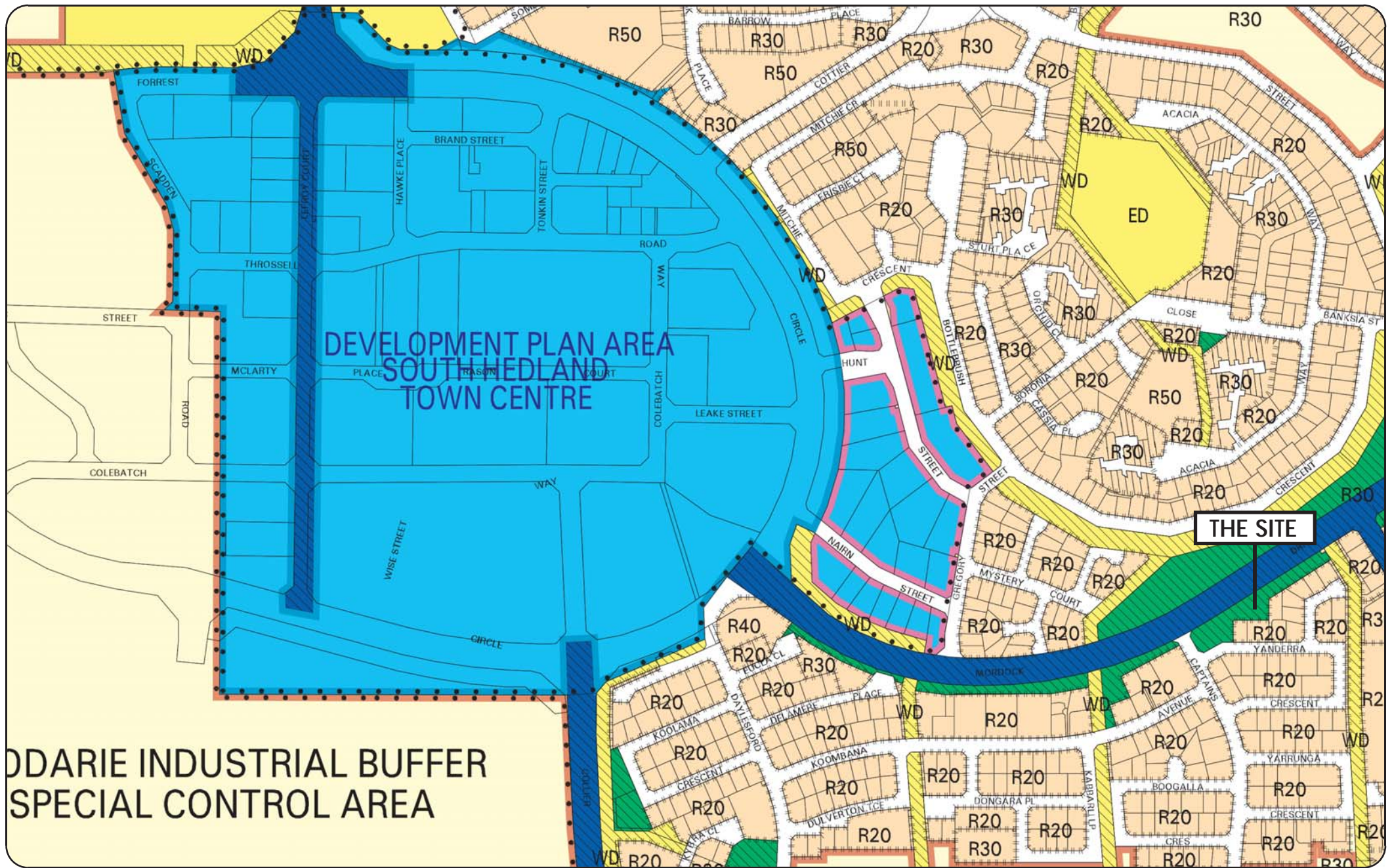


FIGURE 3 - TPS5 SCHEME MAP



22 CARNARVON STREET, BROOME
PO BOX 2807 BROOME WA 6725

4. PROPOSED SCHEME AMENDMENT

4.1. RATIONALE FOR AMENDMENT

The scheme amendment seeks to rezone Lot 3581 Yanderra Crescent, South Hedland from a "Parks and Recreation" Reserve to a "Residential" zone, and to apply a residential density code of R30. The rezoning rationalises what would otherwise be undeveloped land within South Hedland. The ToPH through the Active Open Space Strategy and Council Resolution has resolved that the subject site is redundant and surplus for the purposes of the parks and recreation.

The scheme amendment facilitates future subdivision and/or development of the land to provide additional housing consistent with the Feasibility Study commissioned by the PRC.

Infill development in Port Hedland is particularly important at the present given the release of any greenfield subdivision land in the next 2 - 4 years may be limited as a result of environmental and project cost concerns. Infill developments provide the most cost effective opportunity to meet on-going demand for housing in Port Hedland.

4.2. JUSTIFICATION

4.2.1. Site Context and Location

The subject site is located within the Koombana area within South Hedland. The surrounding area comprises a range of medium density housing. There has been very little (re)development in the immediate surrounding area of the subject site.

The subject site is located in close proximity to the South Hedland Town Centre with established footpaths providing pedestrian and bicycle transport possibilities into the Town Centre. The subject site is located within close proximity to a number of constructed and planned public open spaces. The Koombana Development Plan area is located approximately 380m southwest of the subject site. Within the Development Plan area, two (2) large existing drainage channels are proposed to be redeveloped into pedestrian and recreation spaces. In addition, these recreational channels will link the wider residential area, including the subject site, with existing and proposed public open spaces.

The subject site has an unconventional shape and size due to its location between a road reserve and existing residential development to the south. The subject site has three street frontages being, Murdoch Drive (north), Captains Way (west) and Yanderra Crescent (south). Vehicle access for the future development is expected to be obtained from Yanderra Crescent.

Murdoch Drive is identified as a District Road within TPS5 and is a major route into the South Hedland Town Centre. The importance and usage of this road is expected to increase due to future planned greenfield development in the east of Port Hedland.

The size and the immediate location to a District Road is not the most practical, or appropriate location for a parks and recreation land use. As such both the Land Availability Plan and the Active Open Space Strategy identify the subject site as surplus to recreational needs of the town and suitable for redevelopment.

In light of the above, the subject site is currently unused land that needs to be rationalised for a more appropriate land use.

4.2.2. Zone and Density

Spot rezoning (individual sites) is generally discouraged as it often results in conflicts with adjoining property zonings or sets a precedence for a proliferation of proposals. In this instance the scheme amendment rationalises undeveloped land in accordance with the surrounding land use. The rezoning of the subject site to a 'Residential' land use is consistent with a direct initiative of the ToPH as identified within the Land Availability Study. As such the scheme amendment will not set a precedence for a proliferation of proposals.

The Growth Plan identifies the site within Precinct 12 – South Hedland East. While the site is not specifically mentioned within Precinct 12, the Implementation Indicators for the precinct outline the need for immediate land release sites being progressed by the private sector and not-for-profit organisations. The subject site is identified as a key redevelopment site within the Land Availability Plan, and Council has since resolved to excise the subject site and cancel it as a recreation reserve.

The Pilbara Regional Council has since endorsed a Feasibility Study for the site for residential purposes. The Feasibility Study recommends the preparation and lodgement of a scheme amendment to zone the land to 'Residential'.

In light of the above, the subject site is clearly a key land release site and should be rezoned to residential development accordingly.

The unique shape and limited road access limits the potential redevelopment of the site under a R20 residential density. The R30 zoning is proposed to make the most efficient use of the subject site. In addition, the three (3) road frontages, including a District Road, provides flexibility in developing this unconventional site while reducing its impact on the existing residential area.

The site has limited shared street frontage with existing housing on Yanderra Crescent. This frontage onto Yanderra Crescent is the only real shared streetscape with other residential housing. It is more than likely the future development will use Yanderra Crescent to provide access onto the subject site. As such, the development will have no negative impact on the established streetscape along Yanderra Crescent. In addition, future development will more than likely be orientated towards Murdoch Drive.

The ToPH will have ultimate control over the future amenity and streetscape through the development approval process under TPS5 and the Residential Design Codes.

It is in keeping with proper planning principles to locate medium to high density housing along major traffic and high frequency public transport routes. The Growth Plan outlines that Port Hedland will be developed into a regional city of 50,000 people. To sustainably achieve this growth, the Growth Plan respects the importance of developing public transport within the town:

The Growth Plan advocates the development of a public transport strategy to coordinate and facilitate the expansion of existing services as well as more frequent services to encourage use of public transport.... Of particular priority and importance is the need to increase service provision and connectivity between key activity centres and centres of population.

Murdoch Drive does not currently facilitate high frequency public transport, however it is an important District Road linking the South Hedland Town Centre to the wider residential areas. In light of the recommendations with the Growth Plan, it would be expected Murdoch Drive would eventually cater for high frequency public transport. Therefore the R30 density immediately adjoining Murdoch Drive is in accordance with proper planning principles.

In addition, the R30 coding is consistent with previous scheme amendments (e.g. Scheme Amendment 61) which have up coded residential properties fronting District Roads in South Hedland.

5. SUMMARY

It is requested Council initiate the amendment to rezone Lot 3581 Yanderra Crescent, South Hedland from "Parks and Recreation" Reserve to "Residential" under the provisions of the Town of Port Hedland Town Planning Scheme No. 5 (TPS5) and apply a residential density code of "R30" over the site.

The amendment will provide for the highest and best use of undeveloped land and assist in addressing the Town's housing shortage.

In light of the information and justification included, Council's initiation of the amendment is requested at the earliest opportunity.

ATTACHMENT 1
CERTIFICATE OF TITLE & DEPOSITED PLAN

WESTERN



AUSTRALIA

REGISTER NUMBER 3581/DP214186	
DUPLICATE EDITION N/A	DATE DUPLICATE ISSUED N/A

RECORD OF QUALIFIED CERTIFICATE

VOLUME
LR3013

FOLIO
712

OF

CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893
AND THE LAND ADMINISTRATION ACT 1997

NO DUPLICATE CREATED

The undermentioned land is Crown land in the name of the STATE of WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 3581 ON DEPOSITED PLAN 214186

**STATUS ORDER AND PRIMARY INTEREST HOLDER:
(FIRST SCHEDULE)**

STATUS ORDER/INTEREST: RESERVE UNDER MANAGEMENT ORDER

PRIMARY INTEREST HOLDER: SHIRE OF PORT HEDLAND

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

- RESERVE 37547 FOR THE PURPOSE OF PARKLAND MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED.

- Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
 Lot as described in the land description may be a lot or location.
 (2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
 (3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND 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: DP214186.
 PREVIOUS TITLE: THIS TITLE.
 PROPERTY STREET ADDRESS: LOT 3581 YANDERRA CR, SOUTH HEDLAND.
 LOCAL GOVERNMENT AREA: TOWN OF PORT HEDLAND.
 RESPONSIBLE AGENCY: DEPARTMENT OF LANDS (SLSD).

NOTE 1: L217149 CORRESPONDENCE FILE 02596-1981-01RO

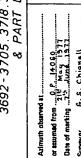
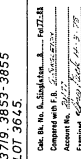
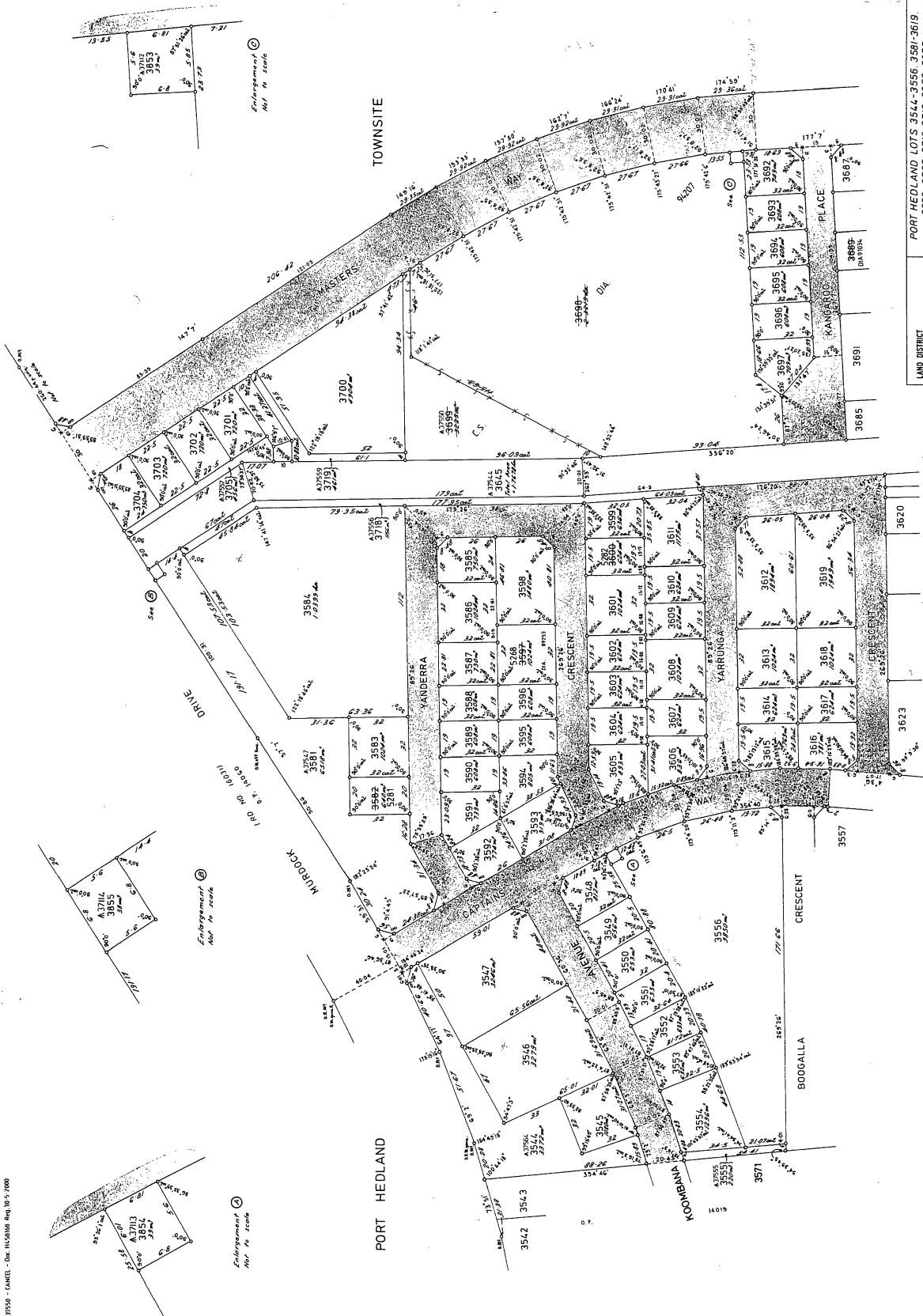
DP 214186



DP 14186

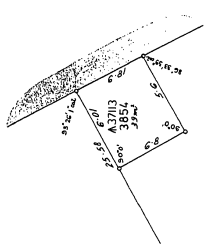


Date of Issue: 11/05/13
4000 11313



LAND DISTRICT	FORREST	FILE NO. 728/75 V/3
SURVEYOR'S CERTIFICATE	PORT HEDLAND LOTS 3544-3556, 3591-3619 & PART LOT 3645.	SCALE 1:1000
I, the undersigned, being a Surveyor registered in accordance with the Survey Act 1935 of Western Australia, do hereby certify that the above is a true and correct copy of the Survey Plan as shown to me by the holder of the Certificate of Survey, 1981, and that the same is in accordance with the original survey plan and the Survey Act 1935 of Western Australia.		
Surveyor	John S. Jones	Date of Issue
Reference	Survey Plan 214186 (2013)	Date of Issue
Plan No.	14186	Date of Issue

4 3550 - GAVEL - Use INCISUM Reg. 705-7000



Enlargement of lot 3543. Map to scale.

Enlargement of lot 3585. Map to scale.

Enlargement of lot 3685. Map to scale.

O. P. 14187

Joins

ATTACHMENT 2
SUBJECT SITE FEASIBILITY STUDY

PILBARA REGIONAL COUNCIL

Feasibility Report

LOT 3581 YANDERRA CRESCENT & CAPTAINS WAY, SOUTH HEDLAND



Prepared by Whelans (Australia)
6 May 2013

Ref: 16340

REVISION HISTORY

Version	Date	Author	Reviewed	Change Description
2.0	6 May 2013	D. Congdon	G. Hassett	For review by Client (FINAL)
1.0	24 April 2013	D. Congdon	G. Hassett	For review by Client (DRAFT)

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EXECUTIVE SUMMARY

Lot 3581 Yanderra Crescent, South Hedland is located within the Town of Port Hedland.

The site has been identified by the Shire as a potential development site, subject to Country Local Government Funding (CLGF).

A desktop market analysis indicates a general shortage of residential properties available for rent/sale within South Hedland, strong population forecasts and potential demand to support development.

The site is currently Crown land owned by the State of WA, with a designated purpose for Parkland. The land will need to be transferred to the Town of Port Hedland and zoned residential prior to development.

As the site is located within the 5 and 100 year expected flood areas. Clean fill will be required to raise the level of the site. Flood modelling should be undertaken to determine the impact on upstream and downstream catchment areas caused by the increase in site levels.

Capacity of existing services including water, sewer and electricity require confirmation from the asset owners. An existing sewer main on the lot will require either realignment or creation of an easement prior to development.

The site has a low risk of environmental impediments to future development. There are no Aboriginal or European heritage sites on the lot, no registered contamination of the site and native title has been cleared.

Development concepts indicate the potential for the site to yield up to eight (8) survey strata lots plus public open space. The estimated cost to undertake the development of these lots is \$799,771.

It is recommended that approval be given for the preparation of a business plan to be submitted to RDL for the acquisition of Lot 3581 Yanderra Crescent, South Hedland for the nominal sum of \$1.

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1 BACKGROUND

1.1 Project Overview

The Pilbara region has experienced enormous growth over the last decade. The expansion of the resource sector in response to international demand has greatly increased population in the region and this in turn has placed pressure on infrastructure and services increasing the cost of living.

Due to the expansive growth housing has become limited and this has led to an unsustainable situation with the cost of rental and saleable properties far exceeding affordability.

The Pilbara Regional Council (PRC) have established an initiative to tackle the housing crisis. Infill development is a key component of this initiative and as a result sites have been identified as potential locations for development.

This report has been undertaken from desktop studies to establish the viability of one such site and to propose possible options for subdivision and development.

1.2 Land Description

Lot 3581 Yanderra Crescent, South Hedland (Subject site) has been identified as having potential for infill development. The Lot is within the local authority of the Town of Port Hedland and details for the Subject site are as follows:

1.2.1 Lot Details

Lot Number	Plan Number	Volume	Folio	Owner
Lot 3581 (Reserve 37547)	DP 214186	LR3013	712	State of WA Responsible Agency: Department of Regional Development and Lands Primary Interest Holder: Shire of Port Hedland

A copy of the Certificate of Title is included within Appendix 1.

Feasibility Report
Lot 3581 Yanderra Crescent, South Hedland

Lot 3581 is a Crown reserve under a management order to the Shire of Port Hedland. The management order states that the reserve can only be used for "Parkland". This management must be removed before Lot 3581 could be developed for housing.

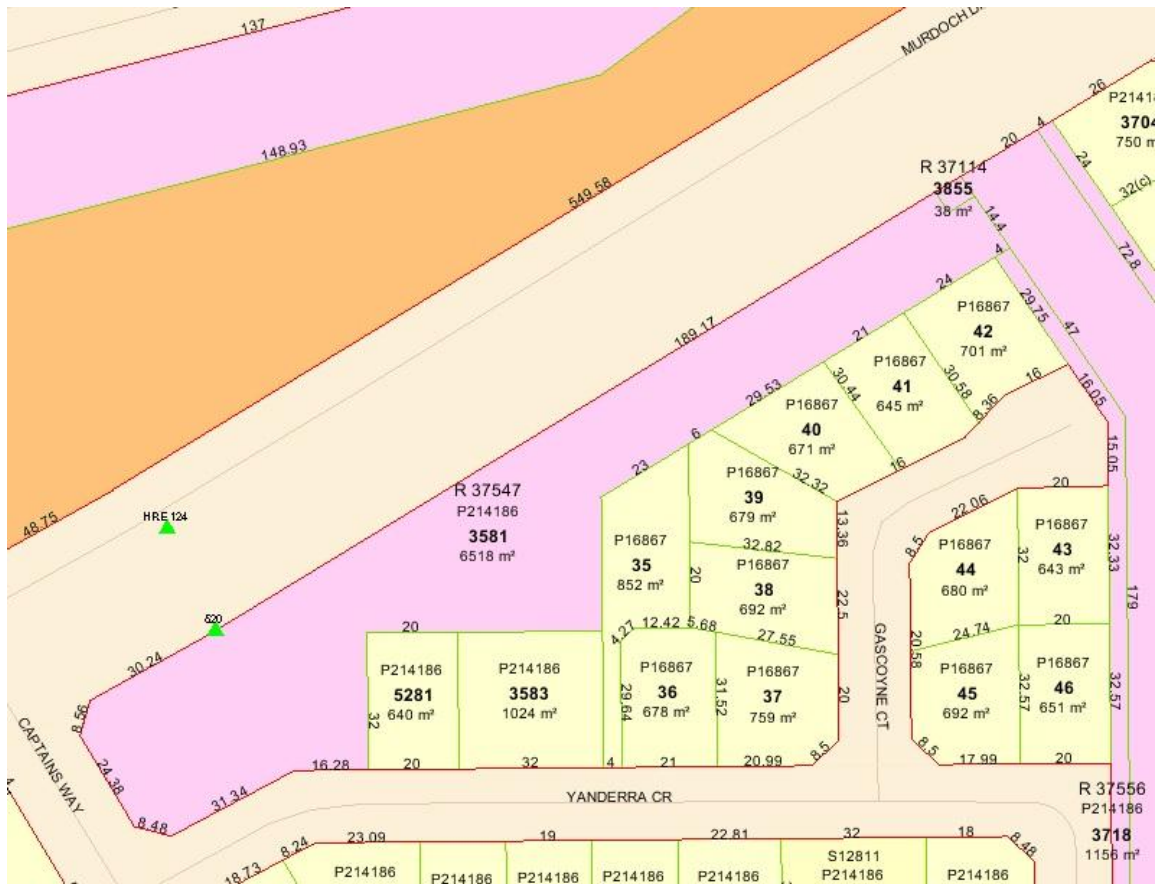


Figure 1: Tenure Extract - Landgate

2 PROJECT VISION AND OBJECTIVES

2.1 Project Scope

- The delivery of residential lots to provide housing within the Shire.

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

2.2 Project Vision

The development of residential lots to support the town's housing requirements and improve housing affordability within the Shire.

2.3 State Government/Shire Objectives

- The state government has an objective to fulfill the vision of building the population in Karratha and Port Hedland into cities of 50,000 people and Newman to 15,000 people by 2035, with other Pilbara towns growing into more attractive, sustainable local communities.
- The Town of Port Hedland seeks to provide an orderly and adequate supply of affordable land along with increased choice in affordable housing to cater for a diverse and permanent population.

2.4 Business Objectives

- The ToPH has an objective to play a key role in delivering outcomes of the Pilbara Planning and Infrastructure Framework as part of the Pilbara Cities Vision which sets out the regional planning principles, together with goals, objectives and actions that will improve the lives of people living in the Pilbara while maintaining and enhancing the character and environment of the region.

2.5 Project Objectives

- To maximise the use of Crown Land that is no longer required for the purpose for which it was designated.

3 PROJECT FACTORS

3.1 Town Planning Considerations

Previously, a due diligence was undertaken outlining planning options and providing guidance on the approval process required to prepare the site for development.

Following is a brief overview of the planning considerations:

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

- Lot 3581 reserved for ‘parks and recreation’ under the Town of Port Hedland’s Town Planning Scheme No 5.
- A scheme amendment to rezone the land to ‘Residential’ will be required prior to any residential use.
- Development of the site is supported by the Pilbara Planning and Infrastructure Framework 2011.
- Development of the site is supported by the Pilbara Port Cities Growth Plan 2011.
- The Department of Regional Development & Lands has confirmed Native Title has been cleared.

3.2 Service and Infrastructure Considerations

The consulting engineer, AECOM, has undertaken a desktop investigation of the subject site to assess the requirements, availability and capacity of infrastructure services.

A geotechnical investigation of the site has not been undertaken, however the site is cleared and appears to be of a typical soil combination found in the region.

The following provides a brief overview of service infrastructure:

- **Earthworks & Drainage** –A flood map issued by the ToPH indicates indicates that a small Eastern area of the lot is within the 5 year expected flood area. There is a large open unlined drain to the East adjacent to the site. The remainder of the lot is within the 100 Year Expected Flood area. Further investigation is recommended to determine and confirm the specific requirements from The Town of Port Hedland due to the lot being located within the 5 and 100 Year Expected Flood area.
- **Sewer** – Sewer plans for the locality confirm an existing 300 PVC-U sewer main running East West through the lot parallel to Murdoch Drive. This may require a re-alignment upgrade or easement to be provided over the line. Further consultation with Water Corporation is required to ensure that the proposed development can be serviced by the existing sewer or if there are any outstanding issues.
- **Water** –Water mains plans for the locality confirm an existing 300 AC water reticulation main is located across the road on the Northern side of the lot within Murdoch Drive. This then branches to a 300 AC main on Captains Way and branches again to a 100 AC pipe on Yanderra Crescent. Connection to this existing pipe will be at Captains Way and Yanderra Avenue requiring a road crossing excavation. Further consultation with

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

Water Corporation is required to ensure that the proposed development can be serviced by the existing water main or if there are any outstanding issues. Connection to this existing pipe may require excavation of a road crossing.

- **Power** – Electrical plans in the locality confirm existing low voltage reticulation passing on the Southern side of the lot on the Southern side of Yanderra Crescent. This branches to Gascoyne Court. Existing low and high voltage reticulation is also located across the road on the Northern side of the lot within Murdoch Drive. A service connection to the existing low voltage reticulation is expected to be appropriate to connect the lot from Yanderra Crescent, Gascoyne Court and Murdoch Drive.
- **Roads** - A suitable access location is subject to approval by the Town of Port Hedland. The Driveway Policy document has been obtained from The Town of Port Hedland. A minimum 2.9m vehicle crossing would be required if single accesses are used or widened to suit a common property access. Access would likely be via the Yanderra Crescent and possibly Murdoch Drive however as Murdoch Drive is a major road it will require for consultation from The Town of Port Hedland.
- **Telstra & Comms** – Communication layouts for the locality confirm the existence of Telstra services in the area. No other Communication providers have been identified. No plans have been received to accurately identify a connection location. It is expected that a service connection is possible as the surrounding areas are serviced by Telstra.

4 ENVIRONMENTAL CONSIDERATIONS

Environmental consultant, AECOM, have undertaken a preliminary environmental investigation to identify any environmental issues and assess the process to de-constrain the site.

The following is a brief overview of the findings:

- **Vegetation and Flora** – There were no Threatened or Priority Ecological Communities identified during the preliminary investigation. According to the Western Australian Herbarium (1998-) there are only three Threatened flora species that occur in the Pilbara, none of these occur within the town site of South Hedland.
- **Fauna** – The site is located within an established remote community. Development on the site is not likely to disturb or impact upon any threatened fauna species.

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Lot 3581 Yanderra Crescent, South Hedland

- **Acid Sulphate Soil (ASS)** – The ASS risk is extremely low with a probability of occurrence of 1 to 5 %. No further investigations or assessment is required.
- **Contaminated Sites** - The Site is not registered on the DEC Contaminated Sites Database (CSD).
- **Aboriginal Heritage** - Department of Indigenous Affairs (DIA) Aboriginal Heritage Inquiry System indicates that there are no indigenous heritage sites on this lot. It is recommended that an archaeological and ethnographic survey of the site be undertaken prior to development to avoid contravention of the *Aboriginal Heritage Act 1972*.
- **European Heritage** – A search of the State Heritage Register revealed that there are no registered sites located on the Subject site.

The environmental assessment indicates a low risk of environmental impediments to future development of the site.

It's anticipated that the site will be determined "Scheme not assessed" under the environmental process for the Scheme Amendment.

Native Title

The Department of Regional Development and Lands has confirmed that Native Title has been cleared for Lot 3581.

5 OPPORTUNITIES & CONSTRAINTS

5.1 Opportunities

The housing shortage instigated by unprecedented growth within South Hedland is a major factor in favour of infill development. This is highlighted in section 3.3 'Housing and Land Supply' of the Pilbara's Port Growth Strategy Plan:

The recent growth in population (resident and transient workers) and economic activity, coupled with a general undersupply of residential and non-residential properties, has had a significant effect in driving up property and rental prices in Port Hedland. Residential sales and rental prices have both increased by an average of 14% between 2008-2010, with average house prices of \$1.12m (triple that of Perth) and average rental prices of \$1,772 / week (four times higher than Perth) at present.

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Such high prices and lack of supply have created significant problems for local communities and businesses, and is a significant constraining factor for future population growth and the provision of a strong labour market to support strategic industry and local/regional services.

Over the next twenty years, rapid residential population growth will drive increased housing demand, and require the identification and subsequent delivery of residential development sites (both infill and greenfield) across both Port and South Hedland. Estimates suggest that to meet a population target of 50,000 people, an additional 15,635 dwellings will need to be built in the urban areas of Port Hedland and South Hedland by 2031.

The land is relatively flat with little vegetation, and close to existing infrastructure.

There are no Indigenous and European heritage sites on Lot 3581 that pose an impediment to development.

5.2 Constraints

The development of Lot 3581 Yanderra Crescent has the following possible constraints to residential development, as listed below. It is recommended that further investigation be undertaken for these items and to obtain more information for assessment.

- **Sewer:** No information is available for the capacity of existing pipes, pump station and wastewater treatment plant. (AECOM has submitted a request to Water Corporation)
- **Water:** No information is available for the capacity of existing pipes and water treatment plant. (AECOM has submitted a request to Water Corporation)
- **Earthworks and Drainage:** The lot is located within the 5 and 100 Year Expected Flood area. The storm water Management Document and required pad levels in flood areas are not available (AECOM has requested from The Town of Port Hedland)
- **Earthworks:** No geotechnical information available
- Lot 3581 is currently a "Parks and Recreation" Reserve. This reservation will need to be removed and the land zoned Residential for any development to occur. This will require a Town Planning Scheme amendment that we allow 18-24 months onto any development timeframe.
- In our experience, often "Parks and Recreation" reserves that are situated close to reserves for drainage can be subject to seasonal inundation. This requires further investigation, as well as the impact of services traversing this land.
- Frontage to the Subject site limits access to the corner of Yanderra Crescent - Captains Way. This will limit the type of development that could be achieved. It is envisaged that neither access nor frontage of lots will be allowed onto Murdoch Drive.

6 MARKET FACTORS

A market analysis was undertaken and included within the due diligence report for this site.

The analysis identified “normal market conditions” for residential properties for rent and sale within South Hedland, and potential demand to support small scale residential development.

7 ANALYSIS OF DEVELOPMENT OPTIONS

7.1 Options

7.1.1 Option 1- Green Title Subdivision

This option is a subdivision that would create 3 lots all having road frontage onto Yanderra Crescent. Due to the constrained access to road frontage the eastern part of the lot would remain public open space.

For a Green Title subdivision both lots would need to have their own separate service supply of water, sewer and power.

See Option 1 (below) design for lot layout.

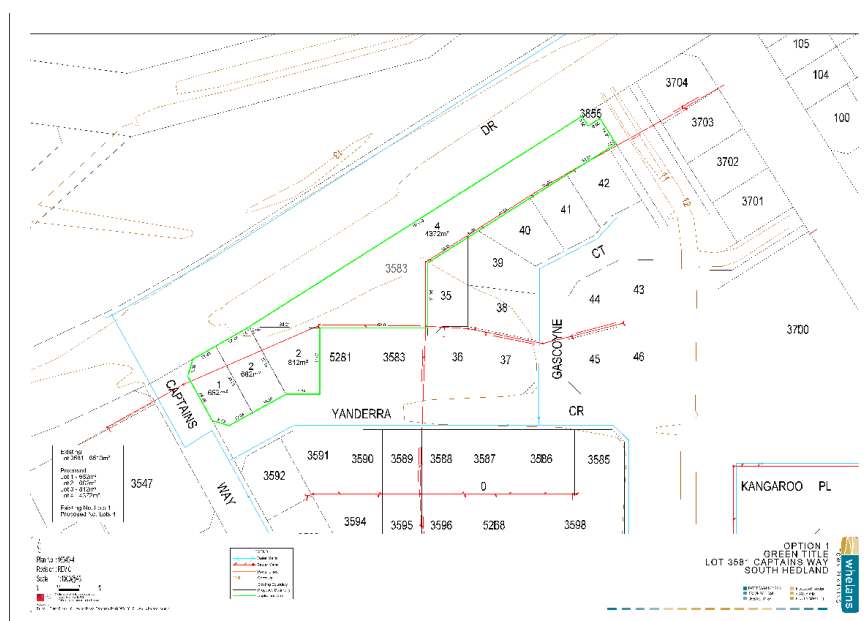


Figure 2 – Lot 3581: Development option 1

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

7.1.2 Option 2- Survey Strata - Grouped Dwelling

This option is a survey strata that would create 8 lots, 6 of which would be accessed via common property connecting to Yanderra Crescent.

Servicing the survey strata would be achieved from one point of service supply of water, sewer and power.

See Option 2 (below) design for lot layout.

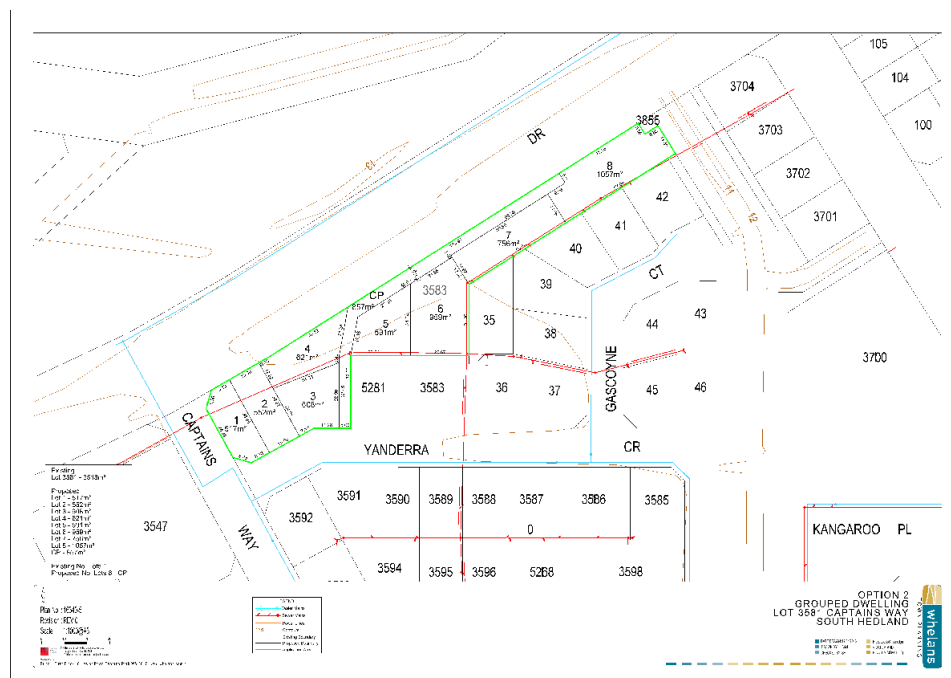


Figure 3: Lot 3581 – Development option 2

7.2 Options Analysis

Since the lot is currently reserved Parks and Recreation, there is no density coding associated with the site. As such we have base the design options on the surrounding Residential Design Code of R20.

From our discussions with council it may be possible to introduce a higher density of R30 to the site and this would possibly allow a higher lot yield for the design options.

Similarly, depending on engineering and traffic constraints, it may be possible to gain a small number of access points onto Murdoch Drive. Council has suggested this is not necessarily

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

desirable given the traffic flow, however, if it is achieved this would also increase the potential lot yield of the site.

Development options have been considered and summarized below;

7.2.1 Financial Analysis

A Discounted Cash Flow (DCF) Development Feasibility has been prepared to assess the financial feasibility of both options. The following table provides a summary of both options. Further detail is provided in Appendix 3.

	OPTION 1	OPTION 2
Net Revenue	Nil	Nil
Total Profit/Loss	\$616,748	\$799,771
Peak Debt	(\$616,748)	(\$799,771)
Peak Debt Timing	12	12

Options Analysis

	OPTION 1	OPTION 2
Pros	<ul style="list-style-type: none"> • Lower capital investment 	<ul style="list-style-type: none"> • Lower cost per lot • Higher lot yield
Cons	<ul style="list-style-type: none"> • Higher cost per lot • Lower lot yield 	<ul style="list-style-type: none"> • Higher capital investment required

7.2.2 Options Summary

The above financial and options analysis indicates both options would provide a financial loss. However, consideration should be given should the Council be able to acquire the land for a nominal amount and either retain or sell the proposed lots.

This business case will now focus on option 2.

8 PROJECT METHODOLOGY AND IMPLEMENTATION

8.1 Project Staging

Due to the small size of the subdivision (8 lots) staging of the development is not considered advantageous.

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

8.2 Key Deliverables

Key deliverables are required for the development of the Lots. A Gantt chart outlining preliminary program delivery is attached as Appendix 5.

9 PROJECT PROCUREMENT

Not applicable.

10 TIME AND PROGRAM MANAGEMENT

Definitive timing has not been determined. Preliminary program delivery is outlined in Appendix 5.

11 PROJECT EVALUATION AND COST MANAGEMENT

11.1 Project Feasibility and Evaluation Assumptions

Assumptions

- The land will be acquired for \$1;
- Services are available as outlined in the engineers report
- Scheme amendment to be undertaken

11.2 Financial Analysis

A discount cash flow (DCF) development feasibility has been prepared to identify the costs to develop the site.

The DCF indicates that the site has a negative net present value (NPV). However the total development costs indicate that the lot can be developed below its market value.

11.2.1 Land Acquisition

A business case based on Option 2 should be prepared to present to RDL the value of the lot and proposing that RDM dispose of the lot to the Shire for a nominal cost of \$1 to be used for mixed use purposes.

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

11.2.2 Expenditure Estimates

Preliminary desktop advice received from the consultant engineer indicates an estimated the development cost of \$799,771

11.2.3 Revenue Estimates

Nil. Land to be retained

12 RESOURCING

12.1 Consultant Team

The following consultants should be engaged to complete the proposed development:

- External Project Manager – to undertake project due diligence, feasibility, prepare project review and business case, and manage performance of consultants.
- Town Planning Services – to identify development concepts/options that support state and local government objectives, identify the planning approval process, identify any native title and heritage restrictions.
- Engineering Services – to identify the infrastructure and service requirements, location and capacity for development concept(s) as well as providing cost estimates to enable financial modeling.
- Environmental Services – to identify any environmental constraints or implications that may affect development of the site.
- Contractor – to undertake earthworks and construction.

13 GOVERNANCE

Not Applicable

14 COMMUNICATIONS AND MARKETING MANAGEMENT

14.1 Marketing Plan

Not Applicable

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

14.2 Ongoing Management/Handover

Any lots retained by the Shire will require ongoing management by the Shire.

14.3 Stakeholder Consultation

A detailed stakeholder Management and/or Communications Plan has not been prepared as part of this feasibility report.

14.4 Stakeholder Listings

14.4.1 Primary Stakeholders

Primary stakeholders involved in this project include:

- Minister for Regional Development and Lands
- Department of Regional Development and Lands
- Pilbara Development Commission
- Town of Port Hedland

14.4.2 Other Stakeholders - Services

Secondary stakeholders involved with this project include:

- Water Corporation
- Horizon Power
- Telstra

15 RISK MANAGEMENT AND OPPORTUNITIES

15.1 Risk Management Assessment

A risk assessment has been undertaken to identify the project risks and extent that these risks could impact on the Town of Port Hedland. These are contained within Appendix 6.

Each identified risk has been assessed for likelihood and consequence, with a value placed on the overall level of risk that each item poses.

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

Three levels of risk were established in this process, as follows:

High Risk	Immediate action required
Medium Risk	Management responsibility must be specified and risks monitored
Low Risk	Manage using routine procedures

The following summary highlights the notable risks identified:

RISK	MITIGATING ACTION
High – Site located within 5 and 100 year expected flood area	Flood modeling required to determine impact of proposed development upstream and downstream.
High – Quality and availability of clean fill unconfirmed	Site and geotechnical survey required
High – Sewer main located on site	Realignment or easement required over the sewer line
High – Infrastructure Services unconfirmed	Further discussions required with service providers to confirm sufficient capacity

16 SUMMARY

16.1 Summary

- A general shortage of residential land/dwellings within the town site exists;
- Strong future population increases are forecast;
- The site is relatively level and cleared of natural vegetation;
- The site is surrounded by residential dwellings
- The site is currently a Crown Reserve under a management order to the Shire of Port Hedland. The management order states the sites intended use as “Parkland”;
- Rezoning via a Scheme Amendment is required;
- Subdivision approval will be required;
- Native Title clearance is not required.
- The land is to be transferred from RDL for \$1;
- Development cost estimates have been prepared using second quarter 2013 rates;
- No geotechnical investigations have been undertaken. All material on site assumed to be suitable for engineering fill;
- No allowance for any developer or scheme contributions;

Feasibility Report

Lot 3581 Yanderra Crescent, South Hedland

- Assumes development construction timeframe of five months;
- Assumes total development period of 24 months

16.2 Pre-construction Approvals Process Required

- RDL to release Crown Reserve Lot.
- Scheme amendment to zone land 'residential'.

17 RECOMMENDATION

Approve the preparation of the business plan to submit to RDL for acquiring the site for the nominal sum of \$1.

APPENDIX 1 – CERTIFICATE OF TITLE

WESTERN



AUSTRALIA

REGISTER NUMBER 3581/DP214186	
DUPLICATE EDITION N/A	DATE DUPLICATE ISSUED N/A

**RECORD OF QUALIFIED CERTIFICATE
OF**

VOLUME **LR3013** FOLIO **712**

CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893
AND THE LAND ADMINISTRATION ACT 1997

NO DUPLICATE CREATED

The undermentioned land is Crown land in the name of the STATE of WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 3581 ON DEPOSITED PLAN 214186

**STATUS ORDER AND PRIMARY INTEREST HOLDER:
(FIRST SCHEDULE)**

STATUS ORDER/INTEREST: RESERVE UNDER MANAGEMENT ORDER

PRIMARY INTEREST HOLDER: SHIRE OF PORT HEDLAND

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

- RESERVE 37547 FOR THE PURPOSE OF PARKLAND MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED.

- Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.
- (2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
- (3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

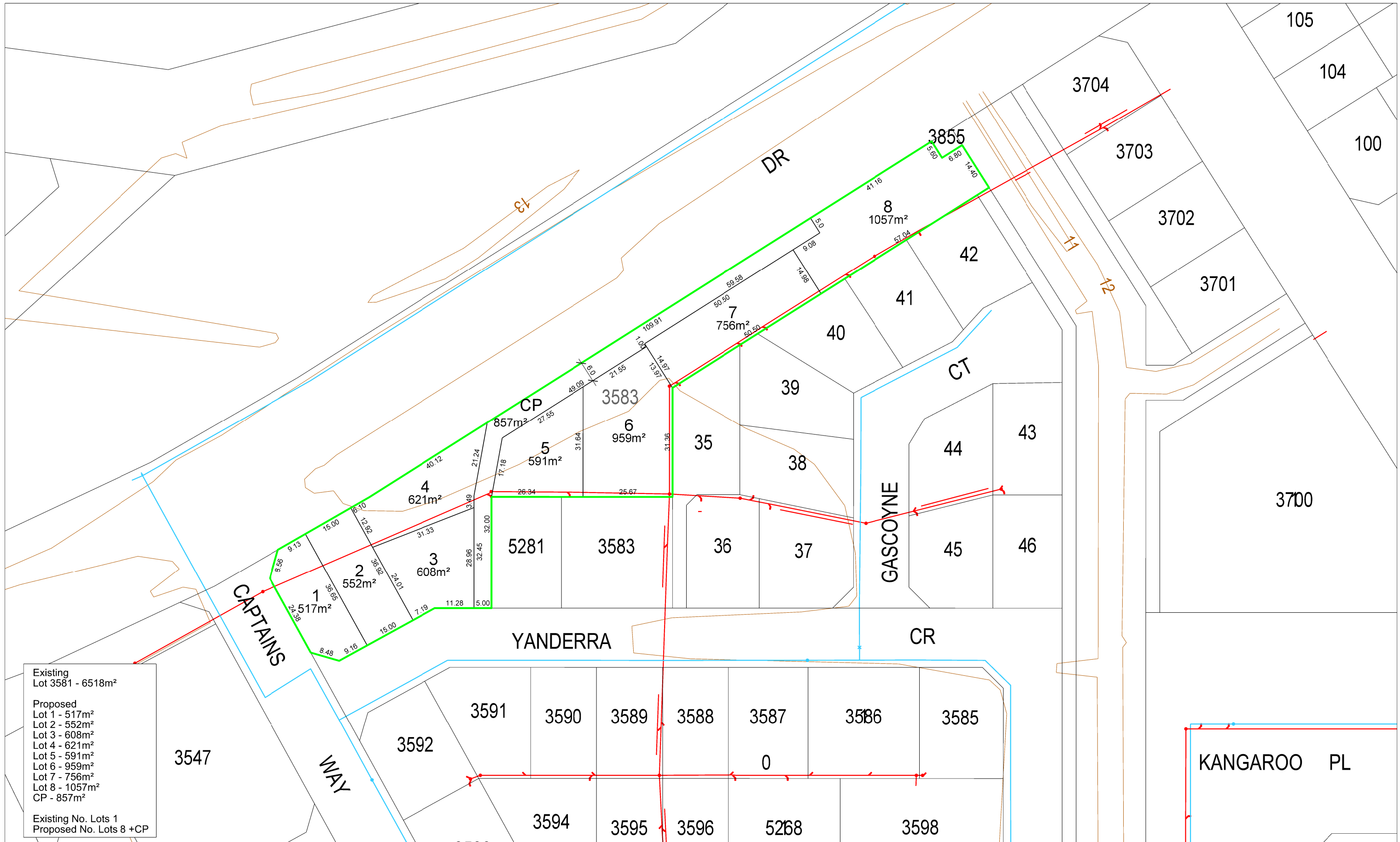
STATEMENTS:

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: DP214186 [SHEET 1].
 PREVIOUS TITLE: THIS TITLE.
 PROPERTY STREET ADDRESS: LOT 3581 YANDERRA CR, SOUTH HEDLAND.
 LOCAL GOVERNMENT AREA: TOWN OF PORT HEDLAND.
 RESPONSIBLE AGENCY: DEPARTMENT OF REGIONAL DEVELOPMENT AND LANDS (SLSD).

NOTE 1: L217149 CORRESPONDENCE FILE 02596-1981-01RO

APPENDIX 2 – DEVELOPMENT CONCEPTS



Existing Lot 3581 - 6518m ²
Proposed
Lot 1 - 517m ²
Lot 2 - 552m ²
Lot 3 - 608m ²
Lot 4 - 621m ²
Lot 5 - 591m ²
Lot 6 - 959m ²
Lot 7 - 756m ²
Lot 8 - 1057m ²
CP - 857m ²
Existing No. Lots 1
Proposed No. Lots 8 + CP

Plan No. : 16340-5
 Revision : REV.0
 Scale : 1:1000@A3

© This plan must not be reproduced without the permission of WHELANS. All dimensions and areas are subject to survey.

Member Practice
 Suite 4 First Floor 40 Hasler Road Osborne Park WA 6017 www.whelans.com.au

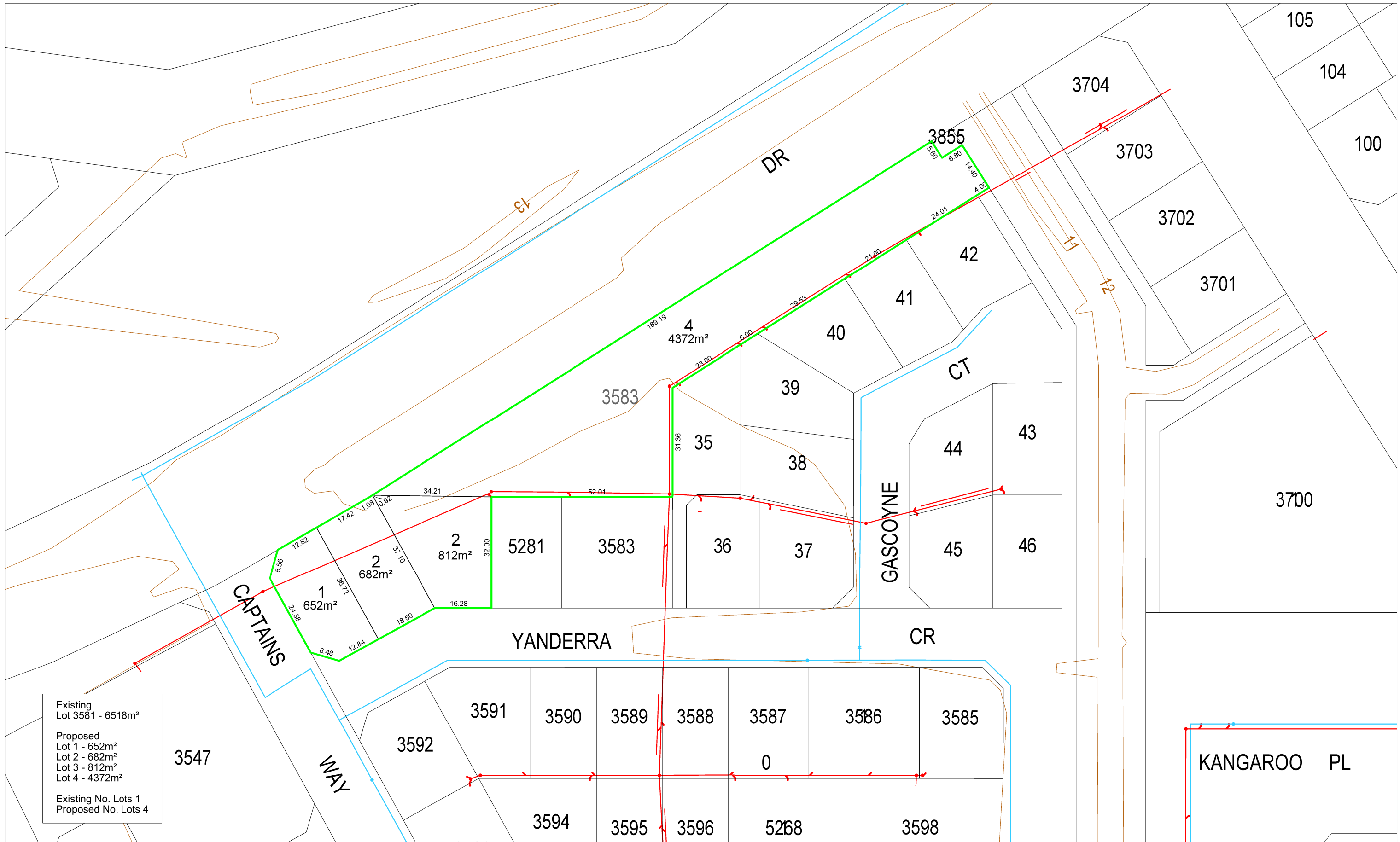
LEGEND	
	Water Mains
	Sewer Mains
	Power Lines
	Contours
	Existing Boundary
	Proposed Boundary
	Application Area

OPTION 2
GROUPED DWELLING
LOT 3581 CAPTAINS WAY
SOUTH HEDLAND

DATE DRAWN: 12/04/2013
 DRAWN BY: CdeL
 CHECKED BY: SF

FILE: Lot 3581 sub.dgn
 V DATUM: AHD
 H DATUM: MGA84 (50)





Existing Lot 3581 - 6518m²
 Proposed Lot 1 - 652m²
 Proposed Lot 2 - 682m²
 Proposed Lot 3 - 812m²
 Proposed Lot 4 - 4372m²
 Existing No. Lots 1
 Proposed No. Lots 4

Plan No. : 16340-4
 Revision : REV.0
 Scale : 1:1000@A3

LEGEND

	Water Mains
	Sewer Mains
	Power Lines
	Contours
	Existing Boundary
	Proposed Boundary
	Application Area

OPTION 1
 GREEN TITLE
 LOT 3581 CAPTAINS WAY
 SOUTH HEDLAND

DATE DRAWN: 12/04/2013
 DRAWN BY: CdeL
 CHECKED BY: SF
 FILE: Lot 3581 sub.dgn
 V DATUM: AHD
 H DATUM: MGA84 (50)

APPENDIX 3 – FINANCIAL ANALYSIS – DISCOUNTED CASH FLOW

REVENUE	
Total Sales Revenue	\$ -
less sales costs	\$ -
less purchaser costs	\$ -
NET SALES PROCEEDS	\$ -
Rental Income	\$ -
Less Outgoings and Vacancies	\$ -
Less Letting Fees	\$ -
Less Incentives	\$ -
Less outhur leasing costs	\$ -
NET RENTAL INCOME	\$ -
Interest received	\$ -
Other income	\$ -
TOTAL REVENUE (before GST paid)	\$ -
Less GST paid on all Revenue	\$ -
TOTAL REVENUE (after GST paid)	\$ -

COSTS	
Land Purchase Cost	\$ 1
Land Transaction Costs (<i>Provisional sum</i>)	\$ 5,000
Construction costs (inc contingency)	\$ 477,248
Other Construction costs	\$ 414,998
Contingency (15% construction costs)	\$ 62,250
Professional fees (20% construction costs)	\$ 83,000
Statutory Fees (<i>Provisional sum</i>)	\$ 15,000
Misc costs	\$ -
Project contingency (10% construction costs)	\$ 41,500
Land holding costs	\$ -
Pre sales commissions	\$ -
Finance Charges (inc Fees)	\$ -
Interest expense	\$ -
TOTAL COSTS (before GST reclaimed)	\$ 621,748
less GST reclaimed	\$ -
Plus Corporate Tax	\$ -
TOTAL COSTS (after GST reclaimed)	\$ 621,748

PERFORMANCE INDICATORS	
¹ Net Development Profit	-\$ 621,748
³ Development Margin	-100%
⁴ Residule Land Value (based on 20% target margin)	\$ 3,108,742
⁵ Net Present Value (12 mths, 20% cap rate)	-\$ 518,124
⁶ Project Internal rate of return (IRR)	N/A
⁷ Residule land value (based on NPV)	\$ 2,590,618
Equity IRR	N/A
Equity Contribution	\$ 621,748
Peak Debt exposure	\$ 621,748
Equity to Deby ratio	100%

Footnotes:

- ¹. Development Profit equals total revenue less total costs
- ². Note: No distribution of Developers gross profit
- ³. Development Margin equals profit divided by total development costs
- ⁴. Residule land value is the maximum purchase price for the land whilst achieving the target development margin
- ⁵. Net Present Value equals the project cashflow discounted to the present value. Includes finance costs, but excludes interest and corporate tax
- ⁶. Internal Rate of Return equals discount rate where thye NPV above equals zero.
- ⁷. Residule Land Value (based on NPV) equals purchase price for the land to achieve a zero NPV

REVENUE	
Total Sales Revenue	\$ -
less sales costs	\$ -
less purchaser costs	\$ -
NET SALES PROCEEDS	\$ -
Rental Income	\$ -
Less Outgoings and Vacancies	\$ -
Less Letting Fees	\$ -
Less Incentives	\$ -
Less outhur leasing costs	\$ -
NET RENTAL INCOME	\$ -
Interest received	\$ -
Other income	\$ -
TOTAL REVENUE (before GST paid)	\$ -
Less GST paid on all Revenue	\$ -
TOTAL REVENUE (after GST paid)	\$ -

COSTS	
Land Purchase Cost	\$ 1
Land Transaction Costs (provisional sum)	\$ 5,000
Construction costs (inc contingency)	\$ 618,438
Other Construction costs	\$ 537,772
Contingency (15% construction cost)	\$ 80,666
Professional fees (20% construction cost)	\$ 107,554
Statutory Fees (provisional sum)	\$ 15,000
Misc costs	\$ -
Project contingency (10% construction cost)	\$ 53,777
Land holding costs	\$ -
Pre sales commissions	\$ -
Finance Charges (inc Fees)	\$ -
Interest expense	\$ -
TOTAL COSTS (before GST reclaimed)	\$ 799,771
less GST reclaimed	\$ -
Plus Corporate Tax	\$ -
TOTAL COSTS (after GST reclaimed)	\$ 799,771

PERFORMANCE INDICATORS	
¹ Net Development Profit	-\$ 799,771
³ Development Margin	-100%
⁴ Residule Land Value (based on 20% target margin)	\$ 3,998,853
⁵ Net Present Value (12 mths, 20% cap rate)	-\$ 666,476
⁶ Project Internal rate of return (IRR)	N/A
⁷ Residule land value (based on NPV)	\$ 3,332,378
Equity IRR	N/A
Equity Contribution	\$ 799,771
Peak Debt exposure	\$ 799,771
Equity to Deby ratio	100%

Footnotes:

- ¹. Development Profit equals total revenue less total costs
- ². Note: No distribution of Developers gross profit
- ³. Development Margin equals profit divided by total development costs
- ⁴. Residule land value is the maximum purchase price for the land whilst achieving the target development margin
- ⁵. Net Present Value equals the project cashflow discounted to the present value. Includes finance costs, but excludes interest and corporate tax
- ⁶. Internal Rate of Return equals discount rate where thye NPV above equals zero.
- ⁷. Residule Land Value (based on NPV) equals purchase price for the land to achieve a zero NPV

APPENDIX 4 – SERVICE & INFRASTRUCTURE ENGINEERS REPORT

Lot 3581 Yanderra Crescent, Town of South Hedland

Development Infrastructure Assessment Report

Lot 3581 Yanderra Crescent, Town of South Hedland

Development Infrastructure Assessment Report

25405

Prepared for

Whelans

Prepared by

AECOM Australia Pty Ltd

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ABN 20 093 846 925

18 April 2013

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Quality Information

Document Lot 3581 Yanderra Crescent, Town of South Hedland

Ref 60290818 - 4

Date 18 April 2013

Prepared by Calvin Dudley, Cassie Lowry, Linda Kirchner, Sarah Horgan

Reviewed by Chris Lee

Revision History

Revision	Revision Date	Details	Authorised	
			Name/Position	Signature
A	09-Apr-2013	Draft Report	Chris Lee	
0	18-Apr-2013	Report	Chris Lee	

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1.0 Introduction

1.1 Project and Description

AECOM has been commissioned by Whelans to provide development infrastructure advice on all service, infrastructure and environmental issues for Lot 3581 Yanderra Crescent, located within the City of South Hedland to assess its suitability for residential development. This is a desktop investigation based on information able to be obtained by AECOM, including inputs from The Town of Port Hedland, Dial Before You Dig and Whelans.

This report includes a review of the following key elements:

- Existing Services and Infrastructure for Sewer, Water, Power and Roads
- Earthworks and Drainage considerations
- Environmental for Acid Sulphate soil, vegetation, flora and fauna
- Development Program
- Cost Estimate
- Risk analysis of constraints to the development

1.2 Site Location

Lot number 3581 is approximately 4500 m². It is situated approximately 0.8 km from South Hedland town centre within the city of Port Hedland. Refer to the site boundary indicated in Figure 1 below.

The proposed development site is currently zoned as Parks and Recreation as depicted on the Town of Port Hedland Town Planning Scheme (TPS) No. 5. A copy of TPS No. 5 is attached as Appendix A.



Figure 1 Site Boundary of Lot Number 3581

Source: ©2013 Google – Map Data ©2012 Google, Whereis (R), Sensis Pty Ltd.

2.0 Services and Infrastructure

2.1 Sewer

Dial Before You Dig information has confirmed an existing 300 PVC-U sewer main running East West through the lot parallel to Murdoch Drive. Buildings generally cannot be built on top of the sewer pipe in order to facilitate maintenance access by the owner of the asset (Water Corporation). As a result, a re-alignment upgrade may be required or easement provided over the line. A copy is attached as Appendix B.

To service the lot, connection to the existing 300 PVC-U main will be required. Using Google Maps and Street View to access the topography in conjunction with depth of existing sewer, it is likely there will be adequate grade for connection.

Discussions have commenced with Water Corporation regarding any capacity issues, the connection to an existing main and if any upgrades would be required due to increased load from the proposed development. No feedback has been provided yet. Further consultation with Water Corporation is required to ensure that the proposed development can be serviced by the existing sewer or if there are any outstanding issues.

2.2 Water

Dial Before You Dig information has confirmed an existing 300 AC water reticulation main is located across the road on the Northern side of the lot within Murdoch Drive. This then branches to a 300 AC main on Captains Way and branches again to a 100 AC pipe on Yanderra Crescent. A copy is attached as Appendix B. Connection to this existing pipe will be at Captains Way and Yanderra Avenue requiring a road crossing excavation.

Discussions have commenced with Water Corporation regarding any capacity issues, the connection to an existing main and if any upgrades would be required due to increased load from the proposed development. No feedback has been provided yet. Further consultation with Water Corporation is required to ensure that the proposed development can be serviced by the existing water main or if there are any outstanding issues.

2.3 Power

Dial Before You Dig information has confirmed existing low voltage reticulation passing on the Southern side of the lot on the Southern side of Yanderra Crescent. This branches to Gascoyne Court. Existing low and high voltage reticulation is also located across the road on the Northern side of the lot within Murdoch Drive. A copy is attached as Appendix B.

From review of Google Maps Street View imagery the existing low voltage reticulation is underground at Yanderra Crescent and Gascoyne Court and above-ground at Murdoch Drive. A service connection to the existing low voltage reticulation is expected to be appropriate to connect the lot from Yanderra Crescent, Gascoyne Court and Murdoch Drive.

2.4 Gas

Dial Before You Dig information did not identify any gas infrastructure in the area. It is assumed that there is no gas servicing residential areas.

2.5 Earthworks and Drainage

No topographical survey data is available for the site. Using Google Maps and Street View to access the topography, the Lot number 3581 area is best described as level.

The Town of Port Hedland provided a Flood Map from the South Hedland Drainage Study, dated 03 Dec 2010. A copy is attached as Appendix C. This map indicates that a small Eastern area of the lot is within the 5 Year Expected Flood area. The remainder of the lot is within the 100 Year Expected Flood area. A large Open Unlined Drain to the East adjacent to the site.

AECOM spoke to a council officer who advised that "South Hedland has substantial stormwater run-off from heavy rainfall during the cyclone season, and that the water is only able to soak through the clay-like pindan soil slowly."

Following discussions with The Town of Port Hedland and review of their Stormwater Drainage guidelines, future drainage networks are to be designed to cater for a 5 year Average Recurrence Interval (ARI). Stormwater for a 5 year ARI event is required to be detained onsite after rainfall before it is discharged. All building pads are to be a minimum 500mm above the 100 year flood level and for all sites regardless of whether they are within the flood extents or not, the pad level must be a minimum of 300mm above the crown of the road.

Further investigation is required to determine the proposed development impact on upstream and downstream catchments as a result of increasing the levels onsite, and for stormwater discharge. The Town of Port Hedland would need further consultation to allow the proposed development to impact on these catchments.

No geotechnical data is available. Rock may be present; this is likely to increase the costs for service excavation and impact drainage disposal if required as part of the development works.

2.6 Roads

A suitable access location is subject to approval by the Town of Port Hedland. The Driveway Policy document has been obtained from The Town of Port Hedland. A minimum 2.9m vehicle crossing would be required if single assesses are used or widened to suit a common property access.

Access would likely be via the Yanderra Crescent and possibly Murdoch Drive however as Murdoch Drive is a major road it will require for consultation from The Town of Port Hedland.

2.7 Telstra and Comms

Dial Before You Dig information has confirmed existing Telstra services in the area. No other Comms providers have been identified.

No plans have been received to aid in the identification of a connection point. It is expected that a service connection is possible as the surrounding areas would be serviced by Telstra.

Further consultation with Telstra is required to ensure that the proposed development can be serviced by the existing Telstra service or if there are any outstanding issues.

3.0 Environmental

From review of Google Maps imagery, it appears that Lot 3581 Yanderra Crescent has been cleared. Current assumptions are based on publicly available data such as the Environment Protection and Biodiversity Conservation Search Matters Tool and Florabase (Department of Environment and Conservation).

3.1 Vegetation

There were no Threatened or Priority Ecological Communities identified during the preliminary investigation.

3.2 Flora

According to the Western Australian Herbarium (1998-) there are only three Threatened flora species that occur in the Pilbara, none of these occur within the townsite of South Hedland.

3.3 Fauna

Potential threatened fauna species include:

- Northern Quoll
- Greater Bilby
- Northern Marsupial Mole
- Pilbara Leaf-nosed bat

Taking into account the locations of the area within established remote communities, it is unlikely that proposed local disturbance will impact the afore-mentioned fauna species.

3.4 Acid Sulphate Soil

Acid Sulphate Soil (ASS) risk mapping is sourced from the AECOM EnviroHub webpage, the ASS risk mapping layer is from the Atlas of Australian Soils and 1:250k hydrography CSIRO Land & Water.

The ASS risk is extremely low with a probability of occurrence of 1 to 5 %. No further investigations or assessment is required.

3.5 Heritage

3.5.1 Indigenous Heritage Review

The data for this Indigenous Heritage review is taken from searches of the registered sites database via the Aboriginal Heritage Inquiry System.

According to The Department of Indigenous Affairs (DIA) website there are no indigenous heritage sites on this lot.

3.5.2 Municipal Inventory – European Heritage Review

The South Hedland town site is listed on the Town of Port Hedland Municipal Inventory (2007) for its “Planning concept”. Category 4 - A site without built features, but of some cultural heritage significance to Town of Port Hedland. Implications: No constraints. Recommend: Interpret the place.

3.6 Contaminated Sites

An online search of the DEC Contaminated Sites Database (CSD) was undertaken on 17 April 2013. The Contaminated Sites Database holds information on confirmed contaminated sites only, i.e. sites that have been classified as contaminated - remediation required, contaminated - restricted use and remediated for restricted use.

The Site is not registered on the CSD.

The nearest registered contaminated site is located approximately 4 km to the north of the Site in Wedgefield and is classified as being ‘Contaminated – remediation required’. Due to its distance it is not considered likely to impact the Site.

It should be noted that information is only available from the CSD for locations that have been classified by the DEC and entered into the CSD. Locations that are not included in the CSD are those that:

- Have been reported but not classified by the DEC.
- Have been classified by the DEC but not yet registered in the CSD.

To search locations reported to the DEC, including those that have not yet been classified, submission of a request to the DEC for a summary of records in respect of the land under consideration is required.

4.0 Development Program

4.1 Development Options

The development options are provided by Whelans, and are based on the use of the code zone density of Residential R20 which is the same as the surrounding area. The Town of Port Hedland may allow a rezone of the land to Residential R30; this would increase the lot yield of the sites. The Whelans REV0 layout is attached as Appendix D.

Delivery options have been identified for access via Murdoch Drive and Yanderra Crescent (Option 1) and Yanderra Crescent (Option 2).

Option 1 – Green Title

Option 1 is for division of the Western side of Lot 3581 into three new lots with Green Title. These lots will have a driveway access from Yanderra Crescent. The North Eastern side of the lot will be a grouped housing site with driveway access from Murdoch Drive.

Option 2 – Grouped Dwelling

Option 2 is for a Common Property Access through the centre of lot 3581 to access new Green Title lots. The Remaining Green Title lots will have driveway access from Yanderra Crescent.

4.2 Staging Plans

Due to the small size of these subdivisions (4 to 8 lots) staging of the developments is not considered advantageous.

4.3 Key Deliverables and Program

Key deliverables are required for the development of the lots. An indicative Gantt chart program is attached as Appendix E.

5.0 Cost Estimate

An opinion of probable cost estimate has been prepared for the development of the lot into four new lots (Option 1) and eight new lots (Option 2). This is based on the Whelans REV0 layout, attached as Appendix D.

The cost estimate breakdown table is attached as Appendix F. The assumptions are listed below.

Option 1 – Green Title

1	Site Preparation	140,795
2	Roads, Footpaths and Paved Areas	24,000
3	Boundary walls,fencing and gates	37,500
4	Landscaping and Improvements	10,000
5	External Sewer Drainage	35,250
6	External Water Supply	14,020
7	External light and Power	15,100
8	Location allowance Port Hedland	55,333
9	Preliminaries	83,000
10	Contingencies	62,250
	Total	477,248

Option 2 – Grouped Dwelling

1	Site Preparation	140,795
2	Roads, Footpaths and Paved Areas	74,880
3	Boundary walls,fencing and gates	37,500
4	Landscaping and Improvements	10,000
5	External Sewer Drainage	41,500
6	External Water Supply	31,890
7	External light and Power	21,950
8	Location allowance Port Hedland	71,703
9	Preliminaries	107,554
10	Contingencies	80,666
	Total	618,438

5.1 Inclusions and Assumptions Used in the Estimate

The cost plan included the following:

- Builders preliminaries
- Contingency (15%)
- Location allowance (20%)

- The estimate has been priced at current 2nd quarter 2013 rates.

Option 1 – Green Title

- Sewer connection to the 300 PVC U main which traverses through the lot. Diversion of the existing main is included. No cost for upgrades to the existing pipe / pump station / wastewater treatment plant.
- Water connection to the 100 AC pipe located on the South side of Yanderra Crescent and Captains Way. No cost for upgrades to the existing pipe / water treatment plant.
- Power connection to the underground LV cable located on the Southern side of Yanderra Crescent and Northern side of Murdoch Drive.
- Earthworks allowance due to raising pad levels as the lot is within the 100 Year and 5 Year ARI Expected Flood area
- Driveways to Yanderra Crescent and Captains Way

Option 2 – Grouped Dwelling

- Sewer connection to the 300 PVC U main which traverses through the lot. Diversion of the existing main is included. No cost for upgrades to the existing pipe / pump station / wastewater treatment plant.
- Water connection to the 100 AC pipe located on the South side of Yanderra Crescent. No cost for upgrades to the existing pipe / water treatment plant.
- Power connection to the underground LV cable located on the Southern side of Yanderra Crescent.
- Earthworks allowance due to raising pad levels as the lot is within the 100 Year and 5 Year ARI Expected Flood area
- Driveways to Yanderra Crescent

5.2 Exclusions from the Estimate

The cost plan specifically excludes the following:

- Professional fees
- Land & legal costs
- Titling of blocks
- Abnormal ground conditions/ solutions
- Upgrading of services infrastructure. Assumed sufficient capacity in existing services in the close vicinity
- Escalation
- GST

6.0 Risk Analysis

A risk analysis table has been developed to summarise the risks with progressing to the development phase that have been identified in this desktop review, and appropriate mitigation measures.

The risk analysis table is attached as Appendix G.

7.0 Conclusions and Recommendations

The Lot 3581 appears to be generally suitable for residential development as it is surrounded by existing services and infrastructure that, subject to further investigation, are likely to provide suitable connectivity however, a sewer easement may be required over the existing DN300 U-PVC line which should be taken into consideration during the planning phase.

Also of note is that the subject site is currently considered to be an overflow area for the existing stormwater network and development of the site in accordance with the TOPH Development Guidelines regarding Lot levels

could have an impact on surrounding area. Hence it is likely that further flood modelling to confirm impacts and mitigate any associated risks could be required as part of the development approvals process.

8.0 References

- Department of Sustainability, Environment, Water, Population and Communities. 2013. *Environment Protection and Biodiversity Conservation Search Tool*. Available at: <http://www.environment.gov.au/arcgis-framework/apps/pmst/pmst-coordinate.jsf>. Accessed on 8 April 2013.
- Western Australian Herbarium. (1998-) *Florabase – the Western Australian Flora*. Department of Environment and Conservation. Available at: <http://florabase.dec.wa.gov.au/>. Accessed on 8 April 2013.
- DEC (2010), Contaminated Sites Database, Online database at <https://secure.dec.wa.gov.au/idelve/css/>, accessed 17 April 2013, Perth, Western Australia.

APPENDIX 5 – PROGRAM DELIVERY

ID	Task Name	Duration	Month -1	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
1	Lot 3581 Draft Key Deliverables and Program	17 wks							
2	Preliminaries	8 wks							
3	Topographic Survey, Geotechnical Investigation and Consultation with Authorities	4 wks							
4	Flood Modelling Investigation	4 wks							
5	Design and Approvals	9 wks							
6	Detailed Design of civil engineering elements – earthworks, drainage, access driveway, sewer, water, power	3 wks							
7	Authority approvals	6 wks							



APPENDIX 6 – RISK REGISTER

Lot 3581 Yanderra Cres, South Hedland

Risk Number	Risk Category	Risk Description	Comment	Mitigation	Likelihood	Consequence	Risk/.Impact Level
1	Sewer Infrastructure	INF. Upgrade requirements As Cons/Survey Sewer located within the lot	Unconfirmed Unavailable - insufficient to confirm the serviceability Possibility of an easement requirement or relocation	Water Corp to advise based on proposed layouts Water Corp to provide as cons/data/further survey may be required Consultation with Water Corp to confirm requirements	Rare	Major	H
2	Water Infrastructure	INF. Upgrade requirements As Cons/Survey	Unconfirmed Unavailable - insufficient to confirm the serviceability	Water Corp to advise based on proposed layouts Water Corp to provide as cons/data/further survey may be required	Rare	Major	H
3	Drainage	Flood impacts upstream and downstream due to the requirements of the development guideline for lot levels No geotechnical information available	Possible issues with containment of the 1 in 5 year event	Further flood modelling to mitigate risks/impacts Geotechnical study required	Likely	Moderate	H
4	Earthworks	No topographical survey Rock Fill availability	Unable to determine fill requirements or quantities Presence unconfirmed Unconfirmed availability	Undertake survey Geotechnical investigation required Discussion with TOPH	Likely	Minor	H
5	Roads	Access to lots	Possible locations identified	Whelans to consult with TOPH during planning	Possible	Minor	M
6	Electrical	INF. Upgrade requirements	Unconfirmed	Undertake HP feasibility study when lot layout is confirmed, to confirm external upgrade requirements	Possible	Moderate	H
7	Telstra and Comms	INF. Upgrade requirements	Unconfirmed	Telstra to advise when lot layout is confirmed	Possible	Minor	M
8	Land Assembly	RDL will not support the business case for acquisition of the land for \$1.		No further development	Rare	Major	L
9	Environment	Significant flora & fauna identified	Unexpected flora & fauna identified on site	Cease development	Rare	Major	L

PLANNING AND DEVELOPMENT ACT 2005

**TOWN OF PORT HEDLAND
TOWN PLANNING SCHEME NO. 5
AMENDMENT NO. XX**

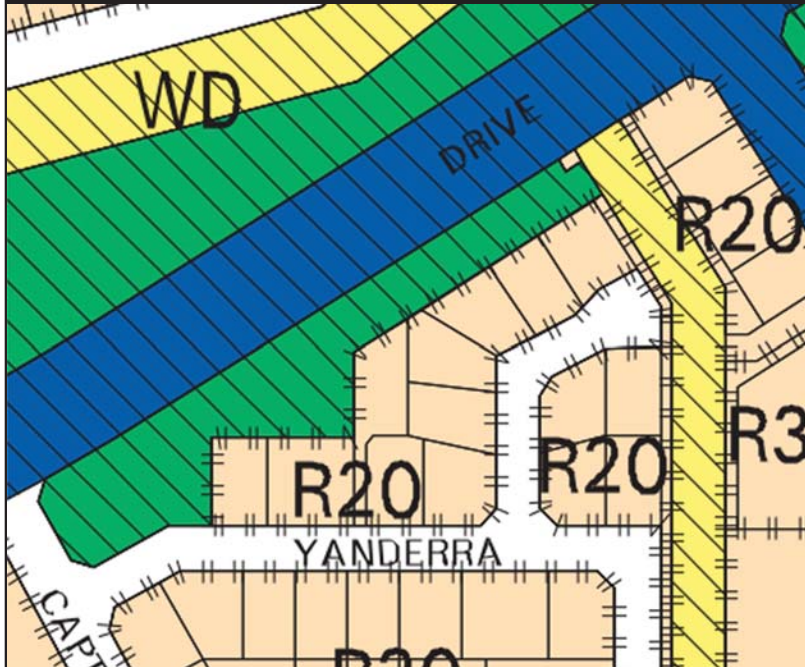
The Town of Port Hedland under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above local planning scheme by:

1. Rezoning Lot 3581 on Plan 214186 from 'Parks and Recreation' Reserve to 'Residential' with a Residential Density of R30; and
2. Amend the Scheme Map accordingly.

SCHEME AMENDMENT MAP

Town of Port Hedland
Town Planning Scheme No. 5
Scheme Amendment No. xx

EXISTING ZONING



LOCAL SCHEME RESERVES



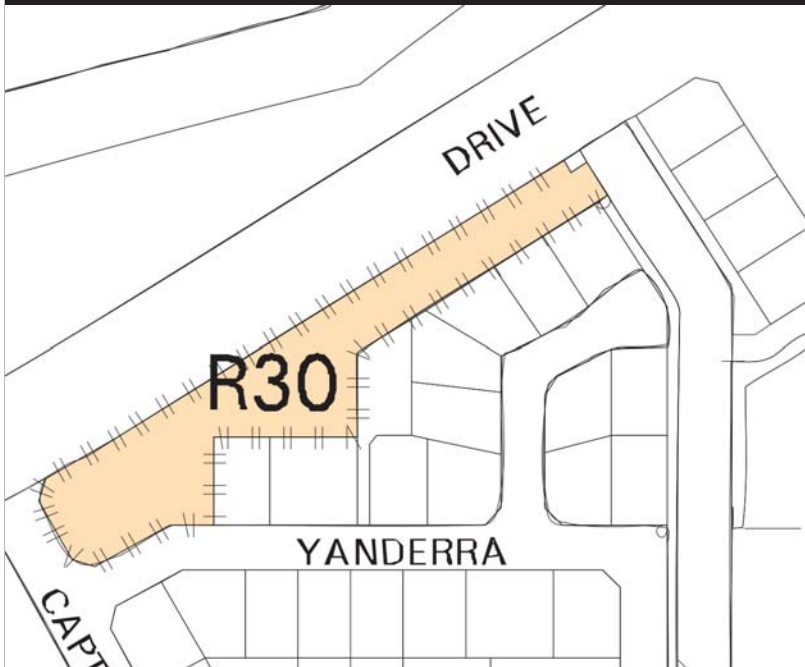
ZONES



OTHER



PROPOSED ZONING



ADOPTION

Adopted by resolution of Council of the Town of Port Hedland at the Meeting of the Council held on the day of 2015.

MAYOR

CHIEF EXECUTIVE OFFICER

FINAL APPROVAL

Adopted for final approval by resolution of the Town of Port Hedland at the Meeting of Council held on the day of 2015 and the Common Seal of the Town of Port Hedland 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 P&D ACT 2005

DATE_____

Final Approval Granted

MINISTER FOR PLANNING

DATE_____