

# Lot 2 McGregor Street & Lot 5474 Thompson Street Development Plan

## Planning Report

18 November 2011

Prepared for Blaxland Property Pty Ltd

## Quality Assurance

Report Stage	Author	Date	Review	Date
<b>Draft Report</b>	Wesley Folitarik	27 July 2011	Wayne Gersbach	27 July 2011
<b>Final Report</b>	Wesley Folitarik	8 August 2011	Wayne Gersbach	16 November 2011

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18 November 2011

*This document is for discussion purposes only unless signed and dated by the persons identified.*

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# Endorsement Page

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

**24 November 2011**

In accordance with Schedule 2, Part 4, Clause 28 (2) and refer to Part 1, 2. (b) of the Planning and Development (Local Planning Schemes) Regulations 2015.

Date of Expiry:

**19 October 2035**

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# 1 Introduction

## 1.1 Background

On 27 January 2011, the Town of Port Hedland Council resolved to prepare Scheme Amendment No.38 to rezone the subject site to 'Urban Development' under the Town of Port Hedland Planning Scheme No.5.

The Scheme Amendment was placed on Public Exhibition from 15 April 2011 to 25 May 2011.

After consideration of the submissions made during the exhibition period, Council on 22 June 2011 resolved to adopt the Scheme Amendment and directed the proponent to prepare a Development Plan in accordance with Section 6.4.2 of the Town of Port Hedland Planning Scheme No.5.

The Scheme Amendment was referred to WAPC on 27<sup>th</sup> July 2011.

This Development Plan has been prepared in accordance with Council's resolution in order to facilitate the development of the site for urban purposes.

Council's resolution dealt with two separate rezoning requests – one covering the subject sites, the other addressing the adjacent Lot 4 McGregor Street. Council resolved to endorse an 'Urban Development' zoning for both rezoning applications.

As per the rezoning requests, it is intended to lodge two separate Development Plans for the properties. This Development Plan deals with the form of development now proposed for Lot 2 McGregor Street and Lot 5474 Thompson Street.

## 2 Site Context

### 2.1 Subject Site

The land subject to this Development Plan comprises two (2) properties being:

Lot No.	Street	Area (Ha)
Lot 2	McGregor Street	7.87
Lot 5474	Thompson Street	0.33
<b>TOTAL AREA</b>		<b>8.20</b>

The subject land is located approximately 4.5km east of Port Hedland harbour and 8.8km north of Port Hedland International Airport and has a combined area of 8.2 hectares.

The site is situated 200m from the coast, and is bounded by freestanding residential dwelling development to its northern and eastern boundaries, Clark Street to the west and McGregor Street to the south.

### 2.2 Ownership & Title

Lot No.	Certificate of Title	Owner
Lot 2	1327/627	Telstra Corporation Ltd
Lot 5474	3008/360	State of WA

### 2.3 Site Analysis

The land is predominantly open grassland, cleared of native vegetation.

Part of Lot 2 McGregor Street (approximately 0.32ha) is currently occupied by a Telstra Exchange which incorporates a transmission tower and building. The site is otherwise undeveloped.

The land slopes from a plateau at Relative Level (RL) of 11.5 m at its northern boundary down to an RL of 4.5 m at its southern boundary and is partly subject to potential impacts from storm surge. The issue is addressed in more detail in Chapter 4 of this report, but essentially involves filling of the site and the elevation of habitable floor levels above the 1:100yr surge event.

It is intended to excise the Telstra Exchange site in order that development may occur on the remaining land. The Telstra facility incorporates a transmission tower and an exchange building and is the termination point of the undersea fibre optic cable from Indonesia. It is intended that the telecommunications exchange will remain on the site and will continue to operate. Easements will be created as part of the subdivision to protect existing assets (cables).

Figure 1. Development Plan Area



Source: Google Earth (2011)

## 2.4 Surrounding Locality

To the north, west and north-east of the subject lands, the land is zoned Residential with R-Codes ranging from R15 to R30. Traditional detached residential dwellings are the predominant feature of this area.

Land to the west and south west of the subject site is zoned 'Parks and Recreation' and comprises the Port Hedland race track, skate park, dog club and expansive open space lands. The Spinifex Hill STP is located immediately south of the subject lands.

On 19 January 2011 the Regional Development Minister Brendon Grylls and Water Minister Bill Marmion announced a \$106 million project to relocate the STP facility to South Hedland. The purpose of this is to ensure that the site and surrounding lands can be used to address the Town of Port Hedland's housing shortages.

The Water Corporation is committed to decommissioning the STP and aims to transfer flows from Port Hedland to South Hedland by at least 2014.

It is possible (under TPS No.5 and Amendment 38) and practical, for site subdivision, construction works and occupation of the dwellings to occur simultaneously with the decommissioning of the STP with knowledge that the STP will be relocated.



## 3 Statutory Planning

### 3.1 Development Plan

The proposed Development Plan for Lot 2 McGregor Street and Lot 5474 Thompson Street is included at **Appendix 1**.

### 3.2 Aims & Objectives

The objectives of the Development Plan are to:

- facilitate the development of the subject site for a diversity of housing typologies
- facilitate the provision of internal road layouts to service the development and provide for future access to adjoining lands consistent with the strategic aims of the Town of Port Hedland;
- facilitate development works in order that the provision of new housing coincides with the decommissioning of the Spinifex Hill STP.

### 3.3 Relationship with the Scheme

This Development Plan has been prepared in accordance with clause 5.2 and Appendix 6 of Town Planning Scheme No.5.

In the event of there being any inconsistencies between the provisions of the Scheme and the provisions of the Lot 2 McGregor Street & Lot 5474 Thompson Street Development Plan then the provisions of the Lot 2 McGregor Street & Lot 5474 Thompson Street Development Plan shall prevail.

### 3.4 Zones & Reservations

The Development Plan (as amended – see Drawing No. BLAPH002J, revised 17/11/11) proposes the following land use provisions and adopts the relevant zone objectives and land use controls contained with the Scheme:

- Residential – R40
- Residential – R50
- Residential – R100
- Other Public Purposes – Telecommunications

### 3.5 Variations to R-Codes

In order to enable the concept masterplan to be achieved through subsequent subdivision and planning applications, a minor departure to State Planning Policy 3.1 (Residential Design Codes) is required.

The variation required is identified in the following table. The variation will enable a broader range of housing styles to be provided on the subject site in keeping with Port Hedland's housing needs, specifically facilitating the provision of lift-access 5-level apartment buildings.

As the variation is limited to land with the proposed R-100 area, located toward the south of the site and away from existing residential development, the departure will not have a deleterious impact on neighbouring land.

Figure 2. Standard R-Code Variations

R-Code – Table 4 – General Provisions for Areas with Coding of Greater than R30				
	Maximum Plot Ratio	Maximum Height		
		Top of External Wall	Top of External Wall (concealed roof)	Top of Pitched Roof
Existing R-100 Provisions	1.25	12	13	15
<b>R-100 Variations allowed by this Plan</b>	<b>1.5</b>	<b>15</b>	<b>15</b>	<b>18</b>

## 3.6 Supporting Technical Information

This Development Plan should be read in conjunction with the plans and technical reports contained in the appendices of this report.

## 3.7 Commencement

This Development Plan shall come into effect when it is adopted by the Council and endorsed by the Western Australian Planning Commission (WAPC).

## 3.8 Timing & Staging

- The Development Plan Area will be initially subdivided into several individual green title 'super-lots'. This will enable the excision of the Telstra facility from the balance of the Development Plan area.
- Several super-lots are proposed over the balance of the Development Plan area to facilitate development of different land parcels.
- The Development Plan Area will either be developed as individual lots under separate Planning Applications or, subject to market conditions, at the one time.
- This approach provides flexibility and the ability to produce new housing quickly to meet market demand. It enables the timing of development stages to suit market conditions.
- The delivery of new housing to market will be coordinated with the decommissioning of the Spinifex Hill STP.
- Site subdivision and construction works to be undertaken prior to or simultaneously with the decommissioning of the STP and occupation of dwellings will occur either following or with knowledge that the STP will be relocated.

## 3.9 Market Demand

Port Hedland's recent population growth has placed considerable strain on housing market conditions. Port Hedland's current resident population is around 14,000 people although its real day/night population is as high as 19,500 persons. It is expected to reach 25,000 by 2013.

A further \$170 billion in oil and gas projects are currently under consideration in Western Australia, several of which are located in close proximity to Port Hedland and which will continue to drive economic activity, employment and population growth in the region.

An anecdote to this growth is manifest in housing market pressure, as demonstrated by:

- Housing prices in Port Hedland having doubled in the 5 years to 2010. House prices far exceed the Western Australian regional and Perth metropolitan averages.
- Housing costs contributing to the diminishing value of working in the Pilbara.
- A current mismatch between housing stock and demand.
- Excessive rental and house prices – presently over \$1,800 rental per week for a 3-bedroom dwelling which has a median sale price of over \$800,000.

An additional 3,743 households are expected to be generated across the region between 2010-2015, accommodating an additional 9,601 persons. It is expected that more than 1,500 of these additional households (accommodating over 4,000 persons) will be required in Port Hedland during this period alone.

There is insufficient housing supply expected to come on line to satisfy current and expected demand in the short-medium term. Most new housing projects are low-yielding and represent small infill or add-on developments.

This Development Plan seeks to provide for a range of housing types and styles to meet underlying housing demand and the diverse housing needs of the Port Hedland community.

## 4 Matters Addressed by Development Plan

### 4.1 Topography

The land slopes from a plateau at RL 11.5 metres (AHD) at its northern boundary down to an RL of 4.5m at its southern boundary. The change in elevation is most pronounced at the northern end of the site (A survey plan is included at **Appendix 2**).

#### Relevant Development Principles

- Modification of the site's land form is required to achieve appropriate grades for residential development.
- Land levels and the configuration of roads need to be considered in order to minimise the importation of fill and to facilitate the ongoing operation of the Telstra Exchange with minimal site disturbances.

### 4.2 Storm Surge

The Development Plan Area is in part subject to impacts from storm surge. As part of the preparation this Development Plan, detailed investigation of the storm surge potential has been undertaken by Cardno Pty Ltd (refer to Local Water Management Strategy Report in Appendix 3).

Cyclonic activity impacts the study area during the wet season (November-May). Due to the proximity of the site to the Pretty Pool estuary, it is susceptible to ocean inundation occurring as a result of a storm surge in extreme events.

Cardno's assessment and modelling of site conditions has taken into consideration both current events and events under a future sea level rise situation (a 2110 climate condition scenario).

Under pre-development conditions the site is not inundated in the 100 year Recurrence Interval event, but would be partially inundated in the 100 year and 500 year events for the 2110 planning period.

Based on Cardno's advice, the design flood level criteria for the site is currently considered to be 5.9m AHD with a 500mm freeboard allowance, making the habitable floor level 6.4 metres AHD for the Development Plan Area. This design flood level is based on the level specified flood level for East Port Hedland (reported in the Port Hedland Coastal Vulnerability Study (Cardno in prep)). The subject site is upstream from the Pretty Pool Estuary entrance at which the 5.9m AHD 1:100yr level has been modelled. Accordingly, dissipation of storm surge would occur across the low lying areas of Pretty Pool, therefore reducing the inundation level at the subject site.

Further modelling is likely to demonstrate that the inundation level at the subject site could be lower than 5.9m AHD. A reduction in the assessed 1:100yr level may be modelled in future having regard to possible changes to entrance to the Pretty Pool Estuary.

The duration of the peak of the design storm tide event is relatively short, meaning that residents at the site will not be affected by storm surge events for prolonged periods.

Relevant Development Principles

- Maintain a habitable floor level with 500mm freeboard above the established 100 year ARI.

## 4.3 Stormwater Management

Cardno Pty Ltd has prepared a Local Water Management Strategy (LWMS) for the site's development. This is included at **Appendix 3**.

The objectives for the development are to:

- Retain low flow events (i.e. the first 15mm) on site.
- Convey the 5 year Average Recurrence Interval (ARI) event within roadside drainage.
- Convey the 100 year ARI event within road reserves and overland flowpaths so as to avoid flooding of Cooke Point Drive.

The LWMS specifies that habitable floor levels must be above the 100 year combined flood and storm surge level, with an additional 500mm freeboard.

Relevant Development Principles

- The first 15mm of rainfall (equivalent to a 5 year 6 minute storm event) is to be retained using an above-ground or below ground storage strategy.
- Pre-development ground water monitoring is required for a period of twelve months if underground storage is proposed. In the event that under-ground storage is not proposed, no pre-development ground water monitoring is required.
- Appropriate measures are to be employed to minimise the transportation of sediments and to reduce applied nutrient loads.
- Conserve water use through appropriate landscaping species selection and through household appliance efficiencies.
- Above ground storage areas will be located within public land to be vested in Council.

## 4.4 Road Network & Design

A traffic assessment was undertaken by Transcore Pty Ltd to assess the impacts of intended development and the appropriate design response.

The subsequent report confirmed that anticipated traffic volumes on local roads are within desirable thresholds for the relevant road classifications.

In response to the scheme amendment referral Main Roads requested that a detailed capacity assessment of the Port Hedland / Cooke Point Drive intersection in Port Hedland be undertaken. Transcore has undertaken such an assessment (refer to **Appendices 4 and 5**) and has concluded that the traffic from the proposed development will not have any adverse impacts on the performance of this intersection.

Relevant Development Principles

- Create a north/south road through Lot 2 to an Access Street "C" standard of 15.4m wide consisting of a 6.4m pavement with 4.5m wide verge either side and a footpath on one side only as requested by Council

- All other internal roads should meet or exceed Access Street “D” standards of 15.0m wide road reserve with a 6.0m pavement, 4.5m wide verge either side and a footpath on one side only as requested by Council

## 4.5 Geotechnical & Contamination

Douglas Partners have undertaken Geotechnical and Environmental Investigation of the site which is attached in the appendices of the report found at **Appendix 6**. The investigation found:

- A low risk of broad scale soil contamination.
- A low risk of acid sulphate soils occurring to a depth of 3.0 metres below surface level, consistent with published risk mapping.

### Relevant Development Principles

- The site is suitable for the proposed development provided its variable soil conditions are taken into consideration, in particular those in Zone B where there is shallow groundwater soft clay.
- Site works to be undertaken in accordance with measures identified in the Douglas Partners report.

## 4.6 Residential Codes

The development density able to be achieved at the subject site is influenced by a number of factors including site topography, the required design response to storm surge potential, surrounding land uses and the intended future character of the Spinifex Hill Commercial Community Precinct.

### Relevant Development Principles

- Development along the northern boundary abuts low density residential dwellings where the topography of the site is at its highest. The bulk and scale of development along this boundary and in the northern portion of Lot 2 therefore has been kept to a maximum R40 density.
- Development of the southern portion of Lot 2 & Lot 5474 should graduate from R50 up to R100 as the land slopes further away towards McGregor Street. Building form of this scale is appropriate for this part of the site which has a lower RL and is distant from neighbouring development. Development at this scale will support the supply of housing in Port Hedland.

## 4.7 Open Space & Landscaping

Public open space and recreational areas are not provided within the Development Plan Area given the close proximity of existing recreational facilities and open space areas. This provision includes a skate park, playing fields and public foreshore areas along Cemetery Beach, all of which are within walking distance of the Development Plan Area.

### Relevant Development Principles

- The Development Plan should seek to maximise the utilisation of the Development Plan Area for housing purposes.

- Private open spaces can provide sufficient shading throughout the estate and relief from hard surfaces. Private open space ought to be considered in the estate masterplan.

## 4.8 Liveable Neighbourhoods

The subdivision and development masterplan have been prepared in accordance with the design principles of the Liveable Neighbourhoods Policy. Relevant design features incorporated into the development approach for the site are identified below:

### Connectivity and Pedestrian Access

- The Development Plan provides for a series of compact neighbourhoods within walking distance of recreational facilities and urban services (Spinifex Hill/McGregor Street Commercial precinct).
- A permeable road network to encourage pedestrian linkages.
- Street planting to encourage comfortable pedestrian movements.

### Social Sustainability

- A diverse mix of dwelling types and styles to accommodate the different housing needs of the Port Hedland community.
- Suitable housing densities are achieved in buildings of a suitable scale which respond to the site's landform characteristics and which take into account the nature and form of adjoining development.
- The proposal contributes significantly to Port Hedland's much-needed housing supply.
- The proposal incorporates a series of landscaped, shaded common areas, able to be used both actively and passively, which encourage social interaction.

### Land Use Efficiency

- The Development Plan seeks to optimise the utilisation of the site for housing purposes, addressing Port Hedland's housing shortage.
- Appropriate re-shaping of the site's land form is proposed in order to ensure that low-lying portions of the site can be rendered suitable for development.
- The Development Plan sets a minimum floor level of 500mm above the 100 year ARI design flood level, ensuring that the site is developable in a manner that is protected from storm surge affectation.

### Development and Building Sustainability

- The indicative site masterplan seeks to maximise the north-south orientation of lots, enabling buildings to capture available views and to benefit from effective passive solar design principles.
- Dwellings are orientated with primary living spaces facing north where possible, avoiding low level sun and featuring dual aspect planning to maximise cross ventilation.
- A water conservation strategy will ensure that all dwellings are fitted with appropriate water efficient tap-ware and that water use within households meets the Western Australian Government's consumption targets. Water efficient gardens will also be incorporated in to site landscaping works.

## Heritage

- A review of Town of Port Hedland Municipal Inventory of Heritage Places Review (2007) has confirmed that there are no items or places of heritage significance within the Development Plan Area.

## 4.9 Environmental Considerations

VDM has undertaken an environmental review of the site to determine its environmental significance and appropriate design considerations. VDM's report is attached at **Appendix 7**.

Potential impacts, their significance and suggested management and mitigation strategies are outlined in the following table. Generally, VDM's review has not disclosed any specific environmental threats that are attributable to the proposed development. Appropriate measures however need to be taken to address stormwater management and the potential for acid sulphate soils. These matters are to be managed as part of the regular environmental construction techniques that are ordinarily applied for a development of this type and size.

Correspondence from the DEC (dated 07 June 2011) at the time of exhibition of the rezoning request identified a possible concern regarding the development's impact on flatback turtles. The site is located approximately 200 metres (two streets back) from Cemetery Beach, which is a known nesting beach for flatback turtles. DEC has raised concerns that artificial lighting from the construction of multiple storey dwellings at the site may impact nesting habits of the turtles.

Since the original submission of the Environmental Review (Issue 1 dated November 2010) alterations have been made to the scope and nature of development now planned for the site. Notably, the intensity and height of development has been reduced. The highest buildings on the site are now five storeys instead of the previous six. These are located at the lowest portion of the site, the result being that their elevation from the beach is essentially hidden.

The distance from the five storey buildings to the beach is approximately 220 m. Light transmitted from the buildings will be obscured by the existing residential buildings between the site and the beach.



Potential Impact	Significance of Impact	Management/Mitigation Strategy and Frequency
Flora and Fauna	None	Landscape in accordance with the requirements of the Town of Port Hedland.
Conservation	None	None required.
Socio-Economic	Positive	Extend existing development and provide additional land with the opportunity for residential and business development and local employment.
Visual Amenity	Positive	Incorporate the Town of Port Hedland Town Planning Scheme No 5.
Stakeholders	None	Undertake development in accordance with planning and approvals processes.
Soils/Geology	Surface Soils: likely, local	Contamination of surface soils is not evident. Implement a Construction Environmental Management Plan to control sediment and dust during construction.
	Acid Sulfate Soils: present, local	Investigate, prepare and obtain approvals for Acid Sulfate Soils and Dewatering Management including Dewatering and Disposal Licenses.
Surface Water	Regional flooding and inundation	Implement an Urban Water Management Strategy incorporating Water Sensitive Urban Design. Undertake Hydraulic Impact Assessment to facilitate detailed design. Design and construct to incorporate requirements of existing water supply and sewage infrastructure.
Ground Water	Local	Undertake ground water investigation and monitoring to support the detailed planning and design of urban water management measures. Implement a Dewatering Management Plan during construction.
Air Quality	Local	Site is located within the Waste Water Treatment Plant Buffer Special Control Area.
Noise and Vibration		Blaxland Pty Ltd indicated that the existing Waste Water Treatment Plant is currently being relocated. Once the plant and disposal ponds be decommissioned in accordance with acceptable environmental practice, odour assessments and management may not be required. Implement Demolition/Construction Environmental Management Plan to control dust, noise and vibration.
Rehabilitation	None	None required.
Other:		
Hazardous Materials	None	Existing infrastructure remains as part of development.
Site Contamination	Local	Limited soil and ground water sampling to be included in Acid Sulfate Soils Investigation.

## 4.10 Urban Services

### Spinifex Hill Wastewater Treatment Plant

The Spinifex Hill Wastewater Treatment Plant (WWTP) is located immediately adjacent to the southern boundary of the Development Plan Area. The Development Plan Area is located wholly within the odour exclusion zone of the WWTP. A small western portion of the Development Plan Area is affected by the chlorine exclusion zone.

The Regional Development Minister Brendon Grylls and Water Minister Bill Marmion on 19 January 2011 announced a \$106 million project to relocate the STP facility to South Hedland to facilitate new residential development at the site.

The Water Corporation is committed to transferring flows from the Port Hedland STP to South Hedland by no later than June 2014. Subdivision and construction of the development is

intended to occur simultaneously with the decommissioning of the STP plant in order that housing product can be brought to market in a timely manner.

The necessary scope of works to decommission the STP could be achieved earlier than mid-2014. Blaxland is working with stakeholders to bring the completion of these works forward.

### **Power**

The Development Plan Area is within an area that is currently supplied by underground power via two 22kV High Voltage (HV) feeders.

The final power connection requirements will be confirmed when a Design Information Package or Preliminary Assessment request is submitted to Horizon Power.

### **Gas**

WA Gas Networks has advised there are no assets in the area, and thus a domestic supply to each residence will not be available.

### **Water**

Water Corporation has advised the East Pilbara Water Scheme is currently unable to service the development. Water Corporation has indicated, however, that planning studies and the business case to augment the water conveyance systems will be completed in 2011.

### **Telecommunications**

As a result of the implementation of the National Broadband Network (NBN) the ownership issues for delivering the wholesale fibre to the home system have been transferred to the Government (NBN Co). In the event that the NBN roll-out is delayed, it will be possible to provide Telstra services to the site.

### **Telstra Infrastructure**

A separate allotment will be created for the Telstra Exchange facility. Easements will be provided to ensure the ongoing operation of the facility. These will be created as part of a future subdivision application.

An Infrastructure Report prepared by JDSI Consulting Engineers is included at **Appendix 8**.

## 5 Indicative Design Response

### 5.1 Architectural Masterplan

An architectural masterplan has been prepared to demonstrate the potential built form of the site based on the density allowances and design principles incorporated in this Development Plan (refer **Appendix 9**, as amended - see Drawing N0. 1211\_SK165 06, dated 11.11.2011 )

The design response achieves a mix of low-medium density dwelling formats, ranging from 3 and 4 bedroom houses to 4 bedroom townhouses and 3 bedroom apartments in 3 and 5 storey buildings.

The masterplan seeks to maximise the north-south orientation of lots, enabling buildings to capture available views and to benefit from effective passive solar access principles.

The siting and location of buildings within the site is appropriate to their surroundings in terms of building bulk, height and scale. The internal street network is complemented by a series of pedestrian pathways which lead to common outdoor recreation areas. These areas are available to all residents and offer shaded spaces which cater for both active and passive use.

A total of 313 dwellings are indicated as being able to be provided on the site. The masterplan's indicative dwelling yield is:

Dwelling Format	Yield	%
3-Bdr Detached Houses	8	3%
4-Bdr Detached Houses	33	10%
4-Bdr Semi-detached Houses	22	7%
4-Bdr Townhouses	26	8%
3-Storey Walk-up	144	46%
5-Storey Lift-up	80	26%
<b>TOTAL</b>	<b>313</b>	<b>100%</b>

### 5.2 Housing Typologies

#### Houses

The house forms that have been developed for the site are a semi detached dwelling type. This form utilises a common or party wall between a pair of dwellings, maximising the use of available site area by eliminating the often found narrow side setback zone between dwellings.

The consequent reduction in perimeter wall which is in contact with outside elements enables a more efficient response to climate control. Dwellings are orientated with primary living spaces facing either north or south, thus avoiding the low level sun and taking advantage of available views and cooling breezes. All dwellings are part single storey and part double storey, achieving an articulated form and variation in streetscape. Furthermore, the external finishes, roof pitches and setbacks of each dwelling can be varied to achieve variation to the streetscape. Each dwelling provides shaded parking for two vehicles, as well as opportunity for boat storage in many instances.

### **3 Bedroom House plus family room (R-40)**

This house type is applied to various lot sizes with a typical lot width of 10.9m and variable lot depths. The dwelling is setback from the street with two shaded car parking spaces located in parallel format beside the dwelling.

The ground level features open plan kitchen, dining and living spaces, together with the third bedroom and a separate study/family room. This level also includes a bathroom and laundry as well as an enclosed outdoor living space. A storage room is accessed from the exterior. The upper storey includes a master bedroom with robe and ensuite as well as second bedroom and family bathroom.

### **4 Bedroom House plus family room (R-40)**

This house type is applied to various lot sizes. The lot widths are typically 13m with variable lot depths. The dwelling is setback from the street with two shaded car parking spaces located in parallel format beside the dwelling.

The ground level features open plan kitchen, dining and living spaces, together with the third and fourth bedrooms and a separate study/family room. This level also includes a bathroom and laundry as well as an enclosed outdoor living space. A storage room is accessed from the exterior with allowance for small boats within many of the sites. The upper storey includes a master bedroom with robe and ensuite as well as second bedroom and family bathroom.

### **4 Bedroom Semi-detached House (R-40)**

The 4 bedroom semi-detached houses are configured as duplex dwellings. Typical lots are 385m<sup>2</sup> in area with a minimum 11.9m width and variable lot depths.

The ground level features open plan kitchen, dining and living spaces, together with the third and fourth bedrooms and a separate study/family room. This level also includes a bathroom and laundry as well as an enclosed outdoor living space. A storage room is accessed from the exterior with allowance for small boats within many of the sites. The upper storey includes a master bedroom with robe and ensuite as well as second bedroom and family bathroom.

### **4 Bedroom Townhouses (R-50)**

The 4 bedroom townhouses are configured in clusters of 4 - 8 dwellings. Typical lots are 198m<sup>2</sup> in area with a minimum 7.9m width and a minimum 25m depth.

The ground level features an access lobby with laundry and store room. Car parking is placed in tandem format beside the lobby, covered by the building level above. The first floor above ground features an open plan kitchen, dining and living space, as well as a versatile fourth bedroom or family/study space and a bathroom. The living space opens onto a protected external living space (enclosed deck).

The second floor above ground features the master bedroom with robe and en-suite, as well as second and third bedrooms and a separate bathroom and toilet.

### **3 Bedroom Apartments – Stair Access to 3-level Apartments (R-100)**

The 3 bedroom apartments are configured as building components of 12 or 24 dwellings. Each building is served by a ground level lobby with stair access to three levels of apartments. Elevators could be installed if required by the market. Each level of the building has four apartments. Car parking is located at ground level, predominantly under the apartments.

Each apartment is a single level, dual aspect configuration, with open plan kitchen, dining and living areas opening onto a covered outdoor space. The master bedroom, robe and en-suite are located adjacent to living spaces where they benefit from the primary outlook. Two bedrooms are located at the opposite end of the apartment and served by a family bathroom. The ground level parking of these buildings will be screened with landscaping. The density of landscaping will balance the need for screening and passive surveillance.

The McGregor Street frontage will incorporate a landscaped bank to screen the undercroft car park.

### **3 Bedroom Apartments – Lift Access to 5-level Apartments (R-100)**

5-level apartment buildings are provided at the eastern end of the site, providing a 'gateway' statement for the approach to East Port Hedland from Cooke Point Road.

This building type is served by a ground level lobby with lift access to five levels of apartments. Each level of the building has sixteen apartments. Car parking is located at ground level, predominantly under the apartments.

Each apartment is a single level, dual aspect configuration, using the same plan format as the 3 storey buildings.

## **5.3 Landscape Concept Plan**

The landscape design prepared by UDLA is included at **Appendix 10**. Whilst the attached Indicative Landscape concept does not precisely reflect the Development Plan, it outlines some principles for streetscape planting and plant selection which can be used to reinforce the definition of the street network and provide appropriate shade for pedestrian amenity.

Landscaping around buildings will serve to enhance their setting as well as contributing to the screening of vehicle parking bays and providing privacy between the public and the private domain, whilst maintaining sufficient permeability to achieve passive surveillance.

Common areas are differentiated by variation in planting types.

## 6 Conclusion - Key Outcomes

Development of the subject sites for residential purposes has been identified in several of The Town of Port Hedland's strategic planning documents for some time.

The current "Hedland's Future Today – 2010" identifies the relocation of the Spinifex Hill STP as a priority project expected to deliver up to 1,500 residential lots initially, and up to 3,800 lots eventually.

The proponents have now thoroughly investigated the physical capacity of the site to accommodate residential development. The resultant Development Plan seeks to allocate appropriate dwelling yields to address Port Hedland's pressing housing shortages whilst at the same time respecting the site's physical constraints and its relationship with adjoining land.

Importantly, the Development Plan facilitates the re-shaping of the site to best manage its potential affectation by storm surge events, essentially involving the filling of the site to an appropriate level and the elevation of habitable floor levels above the 1:100yr surge event. This is achieved both through a re-shaping of the site and by the judicious placement of building forms to suit design outcomes. The Development Plan also allocates R-50 provisions to the middle of the site, providing for townhouse-type development with car parking at grade level. Some imported fill will be required to achieve an appropriate floor level at this part of the site. No fill is required for the upper northern end of the site where individual dwellings are proposed.

The site is serviceable, does not contain threatened vegetative communities or species and is able to be developed without impacting negatively on local traffic flows.

The Development Plan provides for a much-needed range of housing typologies to meet the future requirements of Port Hedland's residents.

It is proposed that site subdivision and construction works will be undertaken prior to or simultaneously with the decommissioning of the adjacent Spinifex Hill STP and that occupation of dwellings will occur either upon final decommissioning or once this is imminent.

**ADOPTION OF DEVELOPMENT PLAN**

MCGREGOR STREET DEVELOPMENT PLAN  
WAS ADOPTED BY  
RESOLUTION OF THE COUNCIL OF THE TOWN OF PORT HEDLAND ON

.....Date

AND THE SEAL OF THE MUNICIPALITY WAS PURSUANT  
TO THE COUNCIL'S RESOLUTION HEREUNTO AFFIXED IN THE  
PRESENCE OF:

.....  
Mayor, Town of Port Hedland

.....  
Chief Executive Officer, Town of Port Hedland

..... Date

AND BY  
RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON

.....Date

Signed for and on behalf of the Western Australian Planning Commission

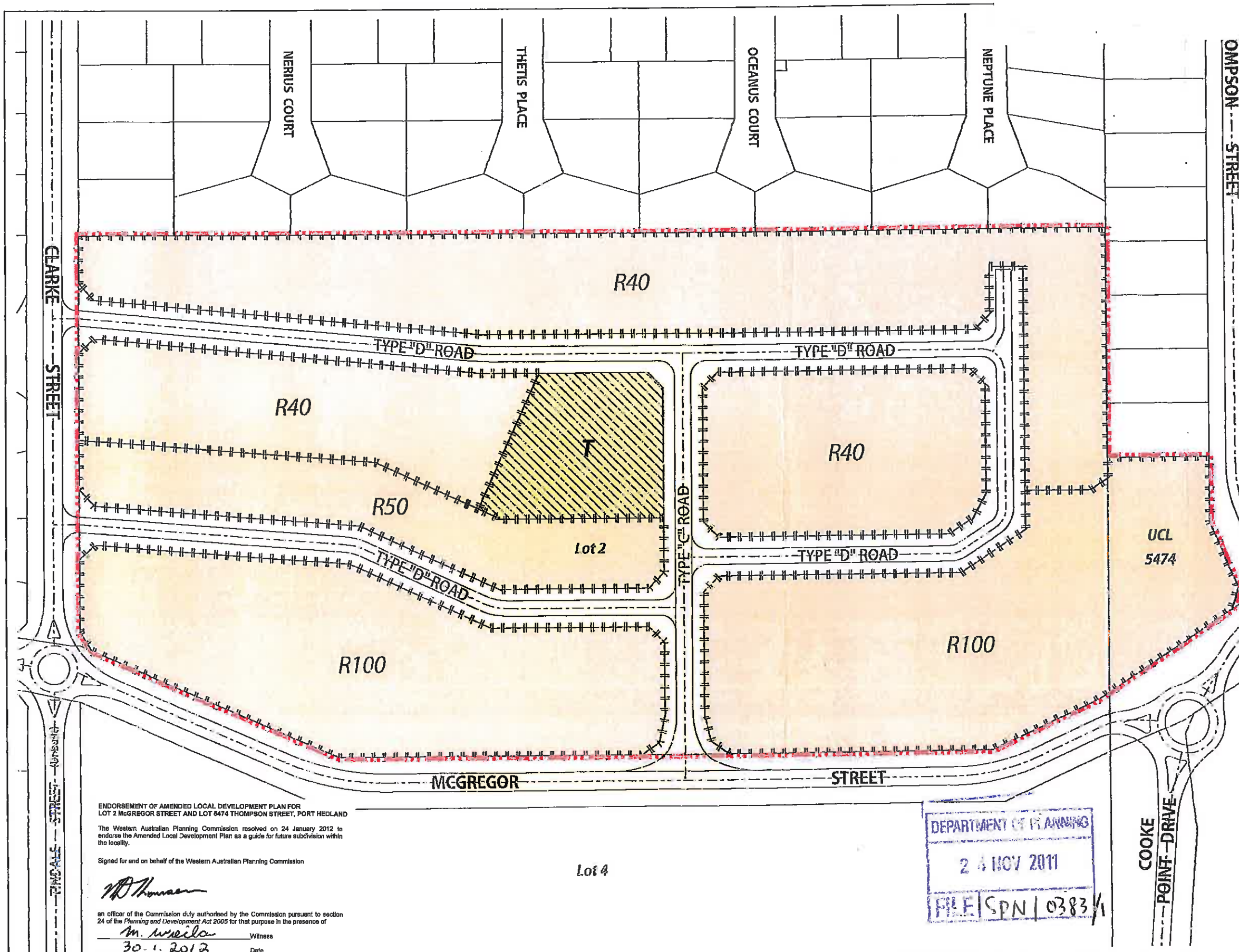
.....  
an officer of the Commission duly authorized by the Commission pursuant to section 57 of the Western  
Australian Planning Commission Act 1985 for that purpose, in the presence of:

..... Witness

..... Date

## Appendix 1 - Development Plan





# DEVELOPMENT PLAN PLANNING CONDITIONS

## DEVELOPMENT PLAN - LOT 2 & LOT 5474 MCGREGOR STREET

1. This Development Plan (Plan) applies to the land contained within the inner edge of the red dotted line.
2. The purpose of this Plan is to detail how the development of the site will be undertaken. In particular this Plan applies residential density codes, road layouts and signifies the location of the allotment that will remain in Telstra ownership.
3. The Plan may be subject to further refinement at the subdivision stage.
4. The development modifications outlined in chapters 3, 4 and 5 of the accompanying Planning Report apply to this Development Plan, except where updated by subsequent approved modifications.
5. Development on the subject land shall comply with State Planning Policy 3.1 - Residential Design Codes, except as varied by this Plan with respect to the maximum plot ratio and building height in the R-100 Code area. For the R-100 area, the following provisions apply:

	Maximum Plot Ratio	Maximum Height		
R Code Provisions for R-100 area	1.25	12	13	15
R-100 Variation allowed by this Plan	1.5	15	15	18

## TIMING AND STAGING

6. Site subdivision and construction works may be undertaken prior to or simultaneously with the decommissioning of the STP and occupation of dwellings may occur with knowledge that the STP will be relocated.

## CUT AND FILL

7. Modification of the site's land form is required to achieve appropriate grades for residential development.
8. Land levels and the configuration of roads need to be considered in order to minimise the imperviousness of R/L.

## STORM SURGE & FLOODING

9. Development levels are to be consistent with the Port Hedland Coastal Vulnerability Study 2009 (inundation level of 5.9m AHD for any other level determined on the 1:100yr level following further modelling and approvals).

## ROAD NETWORKS

10. Type "C" road to be 15.4m wide, 6.4m pavement with 4.5m wide verge either side, footpath on one side only.
11. Type "D" road to be 15.0m wide, 6.0m pavement with 4.5m wide verge either side, footpath on one side only.

## GEOTECHNICAL & CONTAMINATION

12. Site works to be undertaken in accordance with measures identified in the Douglas Partners report contained in the accompanying planning report, except as modified by subsequent approved approaches.

## OPEN SPACE

13. The Development Plan seeks to maximise the utilisation of the Development Plan Area for housing purposes and to facilitate private open space associated with dwellings.

## ENDORSEMENT OF REGISTERED TOWN PLANNER

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## ENDORSEMENT OF AMENDED LOCAL DEVELOPMENT PLAN FOR LOT 2 MCGREGOR STREET AND LOT 5474 THOMPSON STREET, PORT HEDLAND

The Western Australian Planning Commission resolved on 24 January 2012 to endorse the Amended Local Development Plan as a guide for future subdivision within the locality.

Signed for and on behalf of the Western Australian Planning Commission

*M. Hansen*

an officer of the Commission duly authorised by the Commission pursuant to section 24 of the Planning and Development Act 2005 for that purpose in the presence of

*M. Wreila* Witness  
30.1.2012 Date



# LOCAL DEVELOPMENT PLAN

Lot 2 McGregor Street and Lot 5474 Thompson Street,  
PORT HEDLAND

for: **blaxland**

## LOCAL SCHEME RESERVES

- Other Public Purposes
- Local Road

## ZONES

- Residential
- OTHER
- R Codes

## NOTES:

- SITE BOUNDARY
- AREAS AND DIMENSIONS SUBJECT TO SURVEY
- CARRIAGEWAYS ARE DIAGRAMMATIC ONLY
- BASE DATA SUPPLIED BY LANDGATE



Scale 1:1,500 @ A3  
0 10 20 30 40 50 metres

COMPILED: DPS	DRAWN BY: mch
DATE: 13/07/2011	REVISED: 17/11/2011
GRID: MGA 50	DATUM: AHD
DRAWING NUMBER: BLAPH0021	JOB CODE: BLAPHLSF
FILE ID: MBLAPH0021.dgn	



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## Appendix 2 – Survey Plan

## Appendix 3 – Local Water Management Strategy

## Appendix 4 – Traffic Report

## Appendix 5 – Traffic Technical Note 1

## Appendix 6 – Geotechnical Investigation

## Appendix 7 – Environmental Report

## Appendix 8 – Infrastructure Report



## Appendix 9 – Indicative Architectural Masterplan

## Appendix 10 – Indicative Landscape Concept Plan

## Appendix 11 – Conceptual Subdivision

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