



Architecture  
Interior Design  
Landscape Architecture  
Planning  
Urban Design

Australia  
China  
Hong Kong SAR  
Singapore  
Thailand  
United Kingdom



# COCKBURN COAST AFFORDABLE HOUSING STRATEGY

Prepared for LandCorp  
September 2012

## **Contact**

**Gary McCullough** Senior Associate  
gmccullough@hassellstudio.com

**Jess Payne** Planner  
jpayne@hassellstudio.com

HASELL  
Podium Level, Central Park  
152 – 158 St Georges Terrace  
Perth WA  
Australia 6000

T +61 8 6477 6000

© September 2012

HASELL Limited  
ABN 24 007 711 435

## Executive Summary

The aim of this document is to identify strategies to guide the provision of affordable housing within the Cockburn Coast project in the City of Cockburn, through the Local Structure Planning process and other relevant mechanisms. The intention is to establish a project strategy that will assist to deliver a range of tenure types, where possible in perpetuity, and guide the location of potential sites for affordable housing.

iii

A District Structure Plan (CCDSP Pt 1) for Cockburn Coast was endorsed by the Western Australian Planning Commission in September 2009. The CCDSP Pt 1 anticipated a residential population of approximately 10,000, and a dwelling yield of 4,850 across the whole Cockburn Coast project area, with a 'stretch' target of 20% (or approximately 970 units) being 'affordable'. This District Structure Plan was further refined by the District Structure Plan 2 (CCDSP Pt2) which sets new density targets resulting in an increased dwelling yield of 5193 dwellings but still seeks to achieve the stretch target of 20% affordable housing. As the planning for the area moves into greater levels of detail, it is necessary to ensure that the various objectives and targets of the CCDSP Pt 1 & 2 are carried through, where possible to implementation. This includes trying to achieve the 20% target for the provision of affordable housing and resulted in the preparation of this Affordable Housing Strategy.

In order to understand how to implement affordable 'product' across the Cockburn Coast project, it is important to first understand what constitutes 'Affordable Housing'. The definition of 'Affordable Housing' adopted by the Western Australian Planning Commission in the Cockburn Coast District Structure Plan 2009 and utilised by this strategy is:

*"That which is accessible to low income households (the bottom 40% of income distribution) without spending more than 30% of the gross household income on housing costs."*

As this definition is formulaic, it is necessary to determine the benchmark of a low income household. This is as set out in Table 1. It is noted that very low income households will be catered for through the social housing sector. Low to moderate income households will be the target market for affordable housing delivered by the private sector.

**Table 1:** Affordable Housing Benchmarks for Perth Statistical Division

	Very low- income householdw	Low-income household	Moderate-income household
<b>Income Benchmark</b>	<\$655-\$736 per week	<\$984 per week	\$984-\$1,467 per week
<b>Affordable Rental Benchmarks</b>	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
<b>Affordable Purchase Benchmarks</b>	<\$153,000 - \$174,000	<\$230,000 total	\$230,000 - \$345,000 total

Source: Judith Stubbs and Associates December 2010

Note: This table is updated in conjunction with the release of new ABS data.

The basis, scope and methodology of this Affordable Housing Strategy has been developed following direct consultation with the City of Cockburn, the Department of Housing and the Department of Planning. The methodology includes in summary; a literature review, desktop research to identify relevant benchmarks, liaison with key government and private sector stakeholders, local market research, model development scenarios, and feasibility testing.

The research, literature review and scenario modelling undertaken identified a number of key elements which have guided and shaped the recommendations made as part of this strategy. These key outtakes include;

- \_The Judith Stubbs and Associates recommendation of a minimum 15% affordable rental and purchase accommodation in all new release and redevelopment areas is warranted, with 20% being considered as a reasonable 'stretch' target.
- \_State government policy does not support the mandatory provision of affordable housing.

## Executive Summary

- iv
- \_Resultantly inclusionary zoning is not considered as an appropriate mechanism of implementation. In addition to Dwelling Density based initiatives are not considered relevant given the Residential Design Codes applied to the area.
  - \_Plot Ratio Bonuses are considered to be most applicable and attractive as a mechanism for achieving affordable housing.
  - \_The most successful methodology of achieving affordable housing will utilise a factor of mechanisms such as those listed by this report.
  - \_Factors affecting the apartment market have directly impacted the viability of development sites and placed downward pressure on land values. The sustained withdrawal of credit availability for this sector and weak consumer demand has placed continued pressure on land values over the last 30 months. This in turn affects the attractiveness of affordable housing provision by the private sector.
  - \_In considering the feasibility of plot ratio bonuses as a mechanism for achieving affordable product within the typologies proposed by the Cockburn Coast District Structure Plan Part 2, sites characterised by heights of 3 to 5 stories with a density coding of Residential R80 are considered the most feasible in today's market conditions.
  - \_As a result of the study it is reasonable to make recommendations for mechanisms to achieve a 15% target for the provision of affordable housing (with 20% as a stretch target) utilising a number of the mechanisms outlined.

State Government can assist in the provision of affordable housing through public private partnerships, the provision of social housing, and utilising mechanisms such as plot ratio bonuses when developing state owned land. In considering that, it is likely government owned land may be sold prior to development occurring, there is an opportunity to ensure affordable product delivery by guaranteeing the provision of 15% affordable housing product by requiring its delivery as a condition of sale.

The private sector could assist in the provision of affordable product by utilising all mechanisms outlined. A combination of mechanisms is most likely to be successful and would require the commitment of the developer, local government and state government alike. It is likely that a sliding scale of plot ratio bonuses may provide the most attractive mechanisms in incentivising the private sector. Additionally, the strategy identifies fast tracked approvals, development conditions and development standard concessions as appropriate mechanisms for achieving affordable product.

The strategy also examines the role of statutory planning documents in providing the ability to implement the desired mechanisms for achieving affordable housing. As a result, local structure plans, detailed area plans and design guidelines will play a role in the provision of affordable product.

In summary, the targets as set by the CCDSP Pt 1 & 2 for the delivery of 20% affordable housing product may be reasonable and indeed an achievable stretch target over the full life span of this project. Realistically, it could be expected that with the appropriate framework and guidance, 15% affordable housing product could be delivered through the Cockburn Coast project. It is perhaps obvious, but achieving this target will require the commitment of all stakeholders in the development industry, being the government and private sector alike. The delivery of affordable housing in the Cockburn Coast provides an opportunity to set a precedent in Western Australia, and for both the government and private sector to contribute to the creation of a diverse and vibrant coastal community.



Cockburn Coast WA\_Imagery by HASSELL



Catherine Point Perspective, Cockburn Coast WA\_Imagery by HASSELL



## Content

	Page
<b>Section</b>	
1.0 Introduction	1
1.1 Aim	
1.2 Background	
1.3 Methodology	
2.0 Affordable Housing	3
2.1 What is Affordable Housing?	
2.2 Types of Affordable Housing	
2.3 Why Affordable Housing is Important	
2.4 Affordable Living	
3.0 Literature Review	6
3.1 Overview	
3.2 Cockburn Coast District Structure Plan Parts 1 and 2	
3.3 City of Cockburn Town Planning Scheme No. 3	
3.4 Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia	
3.5 Affordable Housing Strategy 2010-2020: Opening Doors to Affordable Housing	
4.0 Potential Mechanisms	15
4.1 Overview	
4.2 Public Private Partnerships	
4.3 Shared equity schemes	
4.4 Planning System Controls	
4.5 Other Mechanisms and Incentives	
4.6 Summary	
5.0 Drivers of Housing Development	24
5.1 Public Sector	
5.2 Private Developers	
6.0 Market Characteristics	29
7.0 Case Studies	31
7.1 International	
7.2 Australia	
7.3 Western Australia	
8.0 Development Feasibility	35
8.1 Development Scenarios	
8.2 Scenario Feasibility Assessment	
9.0 Recommended Strategies	41
9.1 Overview	
9.2 State Government	
9.3 Private Sector	
9.4 Statutory Planning Provisions	
<b>Appendices</b>	
i Appendix A Colliers Housing Affordability Modelling Assessment	47
i Appendix B References	177



## 1.0 Introduction

**The strategy will assist in the delivery of a range of tenure types in perpetuity, and investigate the location of potential sites for affordable housing.**

### 1.1 Aim

The aim of this document is to identify a strategy to guide provision of affordable housing within the Cockburn Coast project area within the City of Cockburn, through the Local Structure Planning process and other relevant mechanisms.

The intention is to establish a project strategy that will assist to deliver a range of tenure types, where possible in perpetuity and guide the location of potential sites for affordable housing.

### 1.2 Background

The former industrial area south of Fremantle now known as Cockburn Coast has been identified for urban renewal. Most of the former industrial activities have long since ceased, leaving approximately 330 hectares of underutilised land in close proximity to the infrastructure, amenities and services of the surrounding urban area. The creation of a high quality mixed use urban development within close proximity to Fremantle and a beautiful stretch of metropolitan coast would accommodate housing, employment and recreation opportunities for a significant number of people and contribute towards achieving population and employment targets identified in *Directions 2031 and Beyond*.

A District Structure Plan (DSP) for Cockburn Coast was endorsed by the Western Australian Planning Commission in September 2009. The DSP anticipated a residential population of approximately 10,000, and a dwelling yield of 4,850 across the whole Cockburn Coast project area, 20% (or approximately 970 units) of which should be 'affordable'.

As the biggest single landowner within the project area, LandCorp led the preparation of the Cockburn Coast master plan in consultation with landowners and key government agencies and stakeholders for the land south of Rollinson Road that resulted in some refinements to the detail of the 2009 DSP (refer to Figure 1). This master plan was subsequently advertised and its status as the prevailing guiding document for the land within the City of Cockburn was confirmed through adoption of Amendment 89 to City of Cockburn Town Planning Scheme No. 3. As a result, the master plan is now referred to as District Structure Plan Part 2. Because it identified the potential for a higher dwelling yield than anticipated by the DSP, with the possibility of 5,200 dwellings south of Rollinson Road, the resultant targets for affordable housing subsequently increased up to 1,040 units within the City of Cockburn alone. No adjustment was made to population targets although clearly the potential exists for a larger total population if more dwellings can be achieved.

As planning moves into greater levels of detail, it is necessary to ensure that the various objectives and targets of the District Structure Plan are carried through to implementation. This includes targets for the provision of affordable housing. It is therefore important to understand the means by which the targets can most successfully be achieved within Cockburn Coast.

This strategy will assist LandCorp and other agencies including Verve Energy, Western Power and the Western Australian Planning Commission to identify those aspects of affordable housing provision that it can directly influence, and those that will require interventions or other forms of control that are outside government agency jurisdiction.

## 1.0 Introduction

2

### 1.3 Methodology

The basis, scope and methodology of this Affordable Housing Strategy has been developed following direct consultation with the City of Cockburn, the Department of Housing and the Department of Planning. As a result, it was developed that to identify suitable mechanisms and locations for delivering affordable housing targets within Cockburn Coast, the following methodology was followed:

- \_ Literature review of key documents discussing housing affordability issues relevant to Cockburn Coast
- \_ Desktop research to identify relevant benchmarks for possible applicability to Cockburn Coast

- through a review of relevant affordable housing case studies
- \_ Liaison with key Government and private sector stakeholders to determine drivers and aspirations
- \_ Local market research to determine local land valuations and construction costs
- \_ Model development scenarios to determine likely development costs and developer margins for housing provision within Cockburn Coast
- \_ Test development feasibility on a mixture of notional LandCorp owned and privately owned sites
- \_ Based on this information, make recommendations as to appropriate strategies for application within the Cockburn Coast project area.

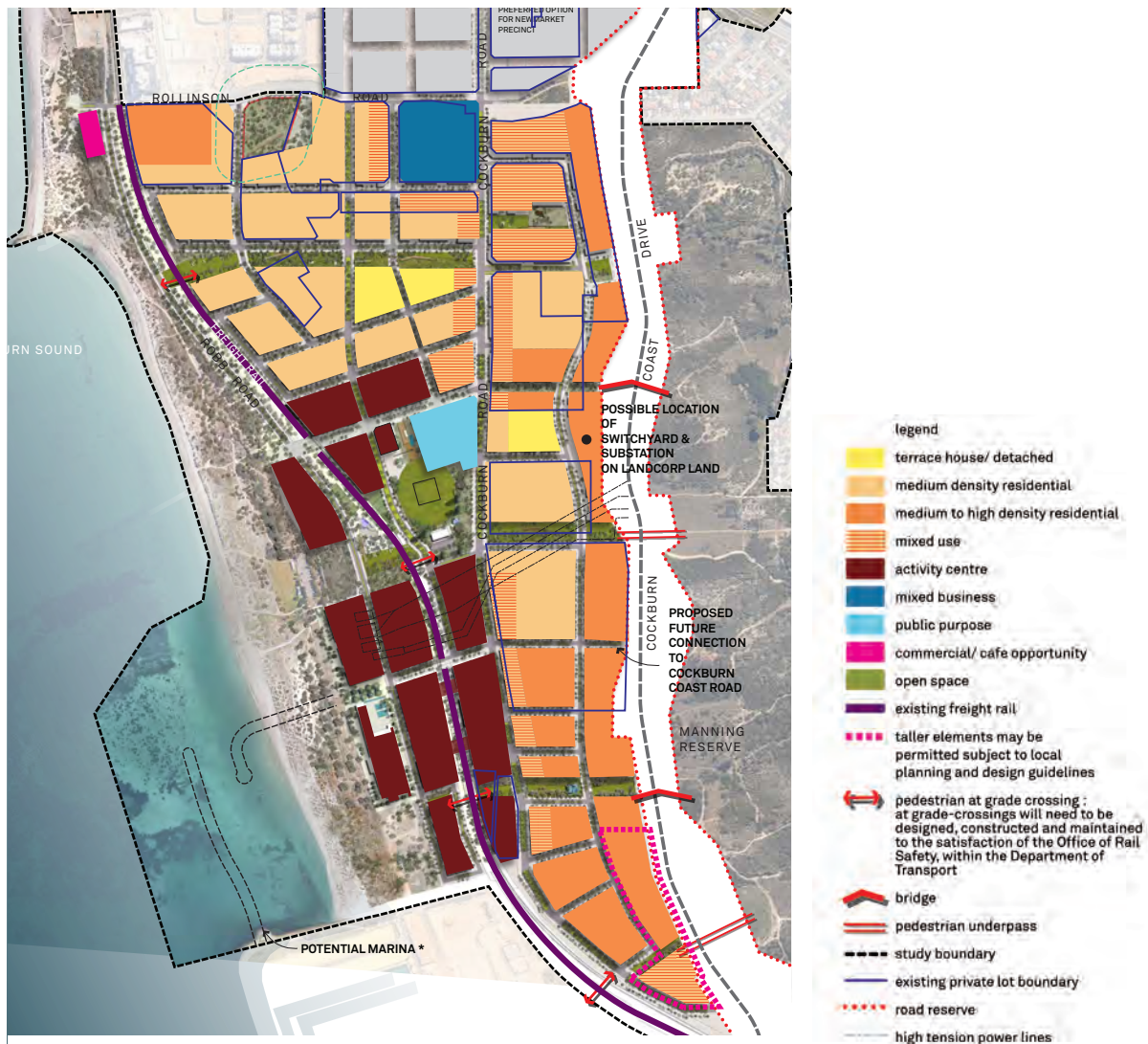


Figure 1\_District Structure Plan Part 2

## 2.0 Affordable Housing

### 2.1 What is Affordable Housing?

3

There have been many attempts to define what is meant by the term 'affordable housing'. The definition adopted by LandCorp in its *Affordable Communities Policy* is:

*"\_ 75 percent of the median value for a property of that type in that area, or affordable by a household on a moderate income (80% to 120% of median income)."*

The definition that has been adopted by the Western Australian Government in its *Affordable Housing Strategy 2010 – 2020: Opening Doors to Affordable Housing* is:

*"...dwellings which households on low-to-moderate incomes can afford, while meeting other essential living costs. It includes public housing, not-for-profit housing, other subsidised housing under the National Rental Affordability Scheme together with private rental and home ownership options for those immediately outside the subsidised social housing system."*

The definition adopted by the Western Australian Planning Commission in the *Cockburn Coast District Structure Plan 2009* is:

*"that which is accessible to low income households (the bottom 40% of income distribution) without spending more than 30% of the gross household income on housing costs."*

It is important that a definition is agreed that can be formula-based so it can be measured. As affordable housing targets for Cockburn Coast arise from the Structure Plan, it is this last definition that has been adopted for the purposes of this strategy.

For the definition to be useful, it is necessary to benchmark both household income levels and the cost of both rental and purchase housing. This has been done for the Perth Statistical Division, within which Cockburn Coast is located, based on 2006 ABS Census data indexed to 2010 dollars, in the following table.

	Very low- income household	Low-income household	Moderate-income household
<b>Income Benchmark</b>	<\$655-\$736 per week	<\$984 per week	\$984-\$1,467 per week
<b>Affordable Rental Benchmarks</b>	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
<b>Affordable Purchase Benchmarks</b>	<\$153,000 - \$174,000	<\$230,000 total	\$230,000 - \$345,000 total

Source: Judith Stubbs and Associates December 2010

Note: This table is to updated in conjunction with the release of new ABS data.

**Table 2:** Affordable Housing Benchmarks for Perth Statistical Division

## 2.0 Affordable Housing

4

**Project objectives relating to diverse social mix are unlikely to be delivered if no effort is taken to influence normal market forces.**

Very low income households will be catered for through the social housing sector. Low to moderate income households will be the target market for affordable housing delivered by the private sector.

### 2.2 Types of Affordable Housing

Judith Stubbs and Associates (2010) identified and defined types of affordable housing most relevant to the Western Australian market in the following broad categories:

Affordable Rental Accommodation	Affordable Purchase Accommodation
Public Housing	Rent-to-Buy
Community Housing	Shared-Equity
Co-operative Housing	Property Covenants
Discount Market Rental Housing	Land Trusts
Time Limited Affordable Rental	Assisted Purchase

Low cost housing - housing that is available through the market but is cheaper due to cheaper construction materials or methods, or smaller size or amenity standards - might in some circumstances also be considered 'affordable' if it meets the income and price benchmarks identified in Table 1. However it is not the prime focus of this strategy.

### 2.3 Why Affordable Housing is Important

Households are generally considered to be in 'housing stress' when more than 30% of gross household income is spent on housing costs. If more than 50% is spent on housing, the household is considered to be in 'severe housing stress'. Without access to affordable housing that is suited to their needs, individuals and families are more likely to suffer increased levels of financial and personal stress and find it difficult to access other opportunities in life. Ultimately, society as a whole will feel the affect of this through increased levels of social dysfunction and economic under-achievement. (Stubbs, 2010)

In Western Australia, housing affordability has been steadily declining. The *Affordable Housing Strategy 2010 – 2020* notes that in May 2000 a Perth household on the median income of \$40,700 pa could buy a home for 3.9 times their annual income, but by September 2010 a household on the median income of \$73,300 pa needed 6.5 times their annual income to purchase a similar home. This ability to pay relates to the cost of finance; a further issue is the ability to save for the necessary deposit to qualify for a loan.

The evidence that housing – both rental and purchase - is less affordable than ever has been well documented elsewhere, and is not repeated in this report. For example, refer to the *Affordable Housing Strategy 2010 – 2020*, and the National Housing Supply Council's *State of Supply Report 2011*.

The implications of the lack of affordable housing are already being felt in some sectors of the economy, with some employers unable to attract or retain staff because there is no suitable and affordable accommodation within close proximity to the workplace. This is particularly the case for

## 2.0 Affordable Housing

so-called 'key workers', who are generally modestly paid but provide basic and essential services required for thriving communities (eg: police, teachers, nurses, fire fighters, ambulance officers, hospitality workers).

Based on the price of land and housing realised in other comparable redevelopment projects, new dwellings within Cockburn Coast, with its prime coastal location, are unlikely to be affordable to those in low to moderate income brackets. **Project objectives relating to achieving a diverse social mix are therefore unlikely to be delivered if no effort is taken to influence normal market forces.**

### 2.4 Affordable Living

Related to and expanding upon the concept of affordable housing is that of affordable living. Affordable living is a term used to describe the factors in addition to the cost of renting or purchasing housing, that affect household expenditure.

In addition to the direct cost of housing (rent or mortgage repayments), factors such as the cost of transport and access to employment, education, health, shopping, recreation and other opportunities are closely linked to the location of housing. For this reason, cheap housing on the urban fringes will not necessarily help a household's financial position if, for example, it requires them to bear the expense of owning and running multiple private vehicles in order for its members to get to work and thus maintain their income. Thus the most socially disadvantaged households may be even worse off financially and socially if their housing is poorly located.

LandCorp has recognised this in their 'Affordable Communities' policy (undated). in relation to affordable living considers the wider issues of affordable housing particularly access to services, transport and employment, which includes amenity quality, economic opportunities and transport equity.

Where appropriate, LandCorp will make provision to develop affordable living by facilitating the development of affordable housing located close to, or within easy access to shopping centres, public open space, employment, transport and government and community services.



01\_

01\_ Residential\_3 stories  
02\_ Residential\_2 stories



02\_

### 3.0 Literature Review

#### 6 3.1 Overview

There is a growing body of literature relating to the subject of affordable housing. The intention here is not to attempt a comprehensive review of the subject, but rather to acknowledge the key documents of relevance to the consideration of affordable housing in the Cockburn Coast project area.

The documents outlined in this section are:

- \_Cockburn Coast District Structure Plan, Parts 1 and 2
- \_City of Cockburn Town Planning Scheme No. 3
- \_Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia
- \_State Affordable Housing Strategy

#### 3.2 Cockburn Coast District Structure Plan Parts 1 and 2

The *Cockburn Coast District Structure Plan* (CCDSP) consists of the plan adopted by the Western Australian Planning Commission in September 2009 for the whole project area, and a second report, known as the *Cockburn Coast District Structure Plan Part 2* (CCDSP Pt 2), which was commissioned by LandCorp for the part of the project area within the City of Cockburn, which was formerly zoned 'Industrial' in the Metropolitan Region Scheme and the City of Cockburn Town Planning Scheme No. 3.

CCDPS Pt 2 is a refinement of the earlier report, responding to a more detailed examination of various elements of the plan. It does not supersede the objectives or targets outlined in the earlier document. However, because of some adjustments to the design it does identify an opportunity to achieve a higher dwelling yield than anticipated by the September 2009 report.

#### Housing Targets

The CCDSP seeks a community with a diversity of demographics, income and household types. This diversity will contribute to the sustainability of the community and the vibrancy, energy and activity of the place. To achieve this, the CCDSP aims to achieve:

- \_a range of sustainable housing types that match Perth's changing demographics and provide alternatives to the majority of existing single dwelling housing stock available in the broader area
- \_a diversity of built form, dwelling types and sizes, attracting a mix of demographics and lifestyles
- \_increased densities focussed on the bus rapid transit system, improving accessibility for a wide range of new residents
- \_an affordable housing target to enable representation of people in lower income brackets

On this basis, the CCDSP set the following targets relating to housing, based on yield estimates:

- \_Minimum 3% separate houses (single dwellings)
- \_Minimum 22% terrace or row houses
- \_Minimum 33% low-rise apartments (3 to 5 storeys)



01\_



02\_

01\_ District Structure Plan September 2009  
02\_ District Structure Plan Part 2

### 3.0 Literature Review

- \_Minimum 31% medium to high-rise apartments (6 to 8 storeys and over 8 storeys respectively)
- \_Minimum 20% affordable housing
- \_Minimum 20% adaptable buildings (dwellings that are adaptable to changing demographics with the ability to transition over time)
- \_15% of homes need to be 'family homes' (suitable for accommodating families - assume 3 or more bedrooms)

Social housing is low income rental housing provided by Department of Housing or another community housing provider at a subsidy so that not more than 30% of household income is spent on rent. Social Housing is a sub-set of affordable housing, ie: part of the 20% affordable housing target. The actual proportion of housing that will be social housing is likely to be negotiated depending upon the partners involved (eg: Department of Housing, community housing provider, private developer) but could be in the order of a third of the affordable housing component, or up to 6% of all housing. This compares with approximately 10% of all housing that would typically be targetted in a standard (low density) residential subdivision.

'Adaptable Housing' is that which accommodates lifestyle changes without the need to demolish or substantially modify the existing structure and services. It is an extension of the concept of 'Universal Housing', being easily adapted to become 'universally accessible' when required.

With sufficient foresight at the design stage, multiple storey houses and apartments can all be suitable for adaptation.

This strategy is concerned with affordable housing, however in implementing the strategy, regard will have to be given not just to achieving affordable housing product, but to achieving it across a range of housing types in order to ensure that the product available suits a range of lifestyles and household types.

It should be noted, that the 20% affordable housing target as set by the District Structure Plan Part 2 was based on little rigor or justification and was set as an ambitious target. It was anticipated by DSP2, that as the project progressed a more detailed examination would be undertaken into the rationale for affordable housing for the Cockburn Coast, including such targets, culminating in the commissioning of the Judith Stubbs report on Affordable Housing (as examined in section 3.4 of this report) and this Affordable Housing Strategy.

Table 2 shows the target number of dwellings in each of the categories above if an exact mirror of the overall housing mix target were to be applied to the affordable housing product target using the CCDSP dwelling yield estimates. Note that totals in the table are greater than the estimated total number of dwellings, because the dwelling types are not mutually exclusive (for example, a dwelling might be a detached, adaptable family home, or an adaptable, affordable apartment in a low rise building).

### 3.0 Literature Review

8

Dwelling Type	CCDSP	
	No. Dwellings	No. Affordable Dwellings
All Dwellings	4,850	970
Detached single dwellings (3%)	146	29
Terrace or row house (22%)	1,067	213
Low-rise apartments (33%)	1,601	320
Medium to high-rise apartments (31%)	1,504	301
Adaptable housing (20%)	970	194
Family homes (15%)	728	146
Social Housing (6%)	291	291

**Table 3:** Indicative Dwelling Mix based on CCDSP

CCDSP Pt 2 subsequently revised the target dwelling mix, aiming to maximise yield, breaking housing down as follows:

- \_ High rise 25%
- \_ Medium rise 11.6%
- \_ Low rise 31.6%
- \_ Terraces 1.1%
- \_ Mixed use 11.3%
- \_ Activity centre 19.4%

Mixed Use and Activity Centre housing refers to housing that will be developed within these use areas, as defined in Figure 1. They will almost certainly take the form of apartments.

Detached single dwellings were removed as a housing typology, because there is a significant amount of this typology available in the immediate vicinity of Cockburn Coast, and it is very difficult to maximise yield using this form.

Because CCDSP Pt 2 is silent on adaptable and 'family' housing, the targets from the original CCDSP remain.

On the same basis as for Table 2, Table 3 estimates the number of dwellings that could be expected if affordable housing were to be equally apportioned across all housing types.

### 3.0 Literature Review

Dwelling Type	CCDSP Pt 2	
	No. Dwellings	No. Affordable Dwellings
All Dwellings	5,200	1,040
Terrace or row house (1.1%)	57	11
Low-rise apartments (31.6%)	1,643	329
Medium to high-rise apartments (11.6%)	603	121
Adaptable housing (20%)	1,040	208
Family homes (15%)	780	156
Social Housing (5%)	260	260

**Table 4:** Indicative Dwelling Mix based on CCDSP Pt 2

It is noted that there has been a context shift in the dwelling mix from CCDSP Pt 1 to CCDSP Pt 2. This is a reflection of the refinement of detailed planning in keeping with principles of Directions 2031 and Beyond (WAPC, 2010) and the updated assessment of the opportunity presented by the Cockburn Coast.

In reality, the demand for affordable housing in Cockburn Coast is likely to require a different mix from that indicated above; for example it is unlikely that there would be many, if any 'affordable' terrace or row houses, because these will be very high value product and relatively scarce in this location.

The demographic profile of population qualifying for 'affordable' housing product in this location is likely to vary according to economic conditions, so it would be desirable if this could be monitored by the State Government in order that affordable housing developments can appropriately respond to demand. In the meantime, the targets indicated above can be used as a guide.

### 3.3 City of Cockburn Town Planning Scheme No. 3

#### Zoning

Amendment No. 89 to City of Cockburn Town Planning Scheme No. 3 (TPS 3) rezoned the Cockburn Coast project area from 'Industry' and 'Light Industry' to 'Development', and included it within a new 'Development Area No. 33'.

The Development Area provisions set out the requirements for future Local Structure Plans and urban development in the area. The requirements seek to ensure the targets and objectives for the area are achieved. Provisions outline the considerable amount of detail that is expected to be resolved prior to subdivision and development being permitted, including matters such as building design, transport, sustainability, and affordable housing.

Subdivision and development within Cockburn Coast will be subject to the approval of Local Structure Plan/s, Design Guidelines and Detailed Area Plans. These are to be prepared having regard to District Structure Plan and District Structure Plan Part 2, noting that in the event of any discrepancy between the two, the requirements of the District Structure Plan Part 2 will prevail.

### 3.0 Literature Review

10 This strategy is in response to the requirement of TPS 3 to describe how affordable housing can be addressed in the Local Structure Plans.

#### Affordable Housing

With reference to Affordable Housing, the provisions of the Scheme relating to Development Area 33:

\_include an objective “to encourage a diverse population that contributes to the interest and vitality of the Development Area by providing a genuine mix of dwelling types to cater for a range of living options”

\_require subdivision and development applications to achieve at least 85% of the potential number of dwellings under the applicable R-Code as defined by an adopted Local Structure Plan, using the following per-dwelling site areas:

\_R30 = 300sqm

\_R40 = 220 sqm

\_R50 = 180 sqm

\_R60 = 180sqm

\_R80 = 125 sqm

\_R160 = 62.5 sqm

Note: These provisions were endorsed prior to the Multi Unit Housing Codes (Residential Design Codes Part 7 (Design elements for multiple dwellings in areas with a coding of R30 or greater and within mixed use development and activity centres)). As a result, the Local Structure Plan details that minimum and maximum yields should be calculated based on the Plot Ratios established by the relevant Local Structure Plan.

\_require Local Structure Plans to address (inter alia) ‘housing product and mix’, how affordable housing targets set out in the CCDSP will be achieved, and how minimum dwelling targets will be met

This affordable housing strategy does not directly address the wider issue of overall housing mix and minimum dwelling targets. The District Structure Plan already provides high level targets for housing type mix, which will need to be translated into detailed planning of individual precincts. Affordable housing is inevitably a sub-set of all housing.

### 3.0 Literature Review

#### 3.4 Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia

11

##### Overview

The Western Australian Planning Commission engaged Judith Stubbs and Associates (JSA) to examine what planning mechanisms and strategies may feasibly be used to achieve affordable and diverse housing within three case study areas, one of which was Cockburn Coast. The study, *Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia*, is an unpublished draft in two parts (December 2010 and April 2011), but provides important context and input to this strategy. This strategy does not attempt to replicate the investigations undertaken by JSA but rather uses them as a basis from which to evaluate the viability of options considered.

The JSA study was undertaken in three stages:

1. Profile of each redevelopment area, focussing on the question: *"If affordable housing were to be provided within, or associated with, the three redevelopment areas, for whom should it be provided and what are their housing needs in terms of price, tenure, type, size and any particular locational requirements?"*
2. Planning mechanisms and strategies for selected redevelopment areas, identifying *"feasible, legal, reasonable and equitable mechanisms for achieving affordable housing within or associated with each redevelopment area"*.
3. Overview and recommendations.

##### Cockburn Coast Affordable Housing Market

The JSA research indicated a range of groups likely to be excluded from affordable rental and purchase in Cockburn Coast if active steps are not taken to create such housing through appropriate mechanisms or strategies *either within the area or in association with it* (emphasis added).

Within the City of Cockburn (ie: that part of the Cockburn Coast project area that is the subject of this strategy), JSA notes that, based on data derived from the 2006 Census (the latest available):

- \_Low income households in purchasing stress are either families with children or single person households
- \_Moderate income households in purchasing stress are most likely to be couple households with children
- \_Low income households in rental stress are either families with children or single person households
- \_Moderate income households in rental stress are most likely to be working households with children and less likely to be single person households

### 3.0 Literature Review

12 The study states that the degree to which low and moderate income households will be excluded from Cockburn Coast will depend on:

1. whether the development has a similar amenity to South Fremantle
2. the type of stock provided

JSA consider that depending on the degree to which smaller medium density dwellings are provided in relatively low amenity areas in the eastern parts of the project area, Cockburn Coast is likely to provide access to a range of low and moderate income households, with the possible exception of families with children, noting that detached houses (most suitable and sought after by families with children) are available nearby in Hamilton Hill.

Except to the extent that social rental housing is provided, social housing tenants will be excluded from the development. The involvement of social housing providers in the project will therefore be important if this group is to be included.

#### Recommendations

JSA use the proportion of people currently experiencing housing stress in the Perth market as the basis for a recommendation that a minimum 15% affordable rental and purchase accommodation in all new release and redevelopment areas is warranted, and 20% as a stretch target.

Principally, three approaches are contemplated:

1. Raising of Funds via Development Scheme Contributions for Community Infrastructure
2. Market based mechanisms where developers are required to provide a proportion of dwellings as a prescribed type or tenure in the anticipation that, within that market, such low-cost dwellings would also be affordable. The proposal contemplates developers delivering up increased levels of profit due to rezoning or density bonuses or where profits are lower, compensation being paid to developers where mandatory mechanisms result in a loss of profits.
3. A mixture of 1 and 2 above through incentivisation of planning schemes enabling density bonuses supplemented by compensation, grants, tax abatements, partnering and joint ventures with both state and local governments and not-for-profit organisations.

To inform the development of this strategy, Colliers International prepared a synthesis of the ideas and measures in the JSA work and prepared a commentary on the principles concluded therein as they apply to medium and high density property development in the current market. Their report is included in Appendix A.

As will be discussed in section 8.2, some of the assumptions made by JSA, and hence the validity of some of the recommended mechanisms, are called into question when the reality of the Western Australian development industry is considered.

Notwithstanding these reservations, the work is a good overview of the issues and challenges of providing affordable housing.



01\_

01\_ Opening Doors report

### 3.0 Literature Review

#### 3.5 Affordable Housing Strategy 2010-2020: Opening Doors to Affordable Housing

The State Government's affordable housing strategy (Opening Doors) was released in December 2010 via the Department of Housing. This is a landmark strategy that marks a repositioning of Government effort compared with past practice to:

- \_Work with markets and market mechanisms to help address the social and affordable housing needs of lower income households

- \_Share provision with the not-for-profit community sector

- \_Re-establish social housing as a *pathway rather than a destination* (emphasis added) by providing housing assistance to capable tenants for the duration of their need

- \_Create more support and options to help both tenants and applicants to move into mainstream housing

The stated goal is to increase the range of housing opportunities for those on low to moderate incomes, summarised as 'AAA':

- \_Available as and when needed

- \_Affordable for low to moderate income households

- \_Appropriate to the needs of individual circumstances

The strategy has an objective to achieve at least 20,000 additional affordable homes across the State by 2020.

Importantly, the strategy is a 'whole of government' one that seeks to engage more actively with the private and not-for-profit sectors to achieve greater access to appropriate housing for more people. It recognises that there is no single cause of and no single solution to 'the affordable housing crisis'.

Open Doors canvasses a range of strategies that combined would result in a significant shift in the way affordable housing is provided in WA.

In the context of providing a strategy for Cockburn Coast that can be applied through the planning process, the recommendations of Opening Doors relating to improving the supply of affordable dwellings outside the social housing system are particularly relevant. The first of these recommendations is the implementation of key planning system reforms. Significantly, the strategy notes that "*formal inclusionary zoning will not be supported*". In other words, the strategy does not support the imposition of mandatory affordable housing provision on developers, instead preferring voluntary incentives.

The second set of strategies aimed at increasing affordable housing supply relate to leveraging the private sector, recognising that traditional solutions and an over-reliance on limited government funding will not be enough to deliver the diversity or the volume of affordable housing required.

Thirdly, the State Government will leverage its own development activities to improve the supply and diversity of housing options. Government land and housing development agencies will dedicate a minimum of 15% of project yields to affordable price points. LandCorp's involvement in Cockburn Coast is a specific example of this. The Department of Housing will also pursue partnership opportunities with the private sector and local governments.

Finally, the strategy seeks to develop alternative tenures, such as 'land rent', community land trusts, leasehold strata, and perpetual shared equity schemes.



## 4.0 Potential Mechanisms

### Research did not find a single example of affordable housing delivery that did not rely on a Public Private Partnership.

#### 4.1 Overview

The issue of affordable housing is topical throughout the developed world, and jurisdictions everywhere are seeking ways to encourage its provision. Some mechanisms that have been adopted relate to the land use/planning regulatory system, and others have a broader basis. However it is by no means the case that mechanisms that have been adopted elsewhere are automatically transferrable into the Western Australian context.

Mechanisms can be broadly categorised as market based or off-market (JSA 2010). Market based mechanisms require a developer to provide dwellings of a prescribed type or tenure without requiring any further subsidy and on a cost-neutral basis for the developer. Off-market mechanisms include various types of inclusionary zoning, in which the developer is required to provide a proportion of the profit arising from the planning approvals process for affordable housing, with or without some form of off-set or compensation.

Research undertaken by Colliers (2012) failed to find a single example of private sector delivery of 'affordable' dwellings without some form of community or statutory support in the funding and delivery model. As prime coastal land it is unlikely that Cockburn Coast will be an exception.

This section provides a broad overview of the most widely applied mechanisms for encouraging affordable housing provision, and notes whether, on face value at least, they have possible application in Cockburn Coast, and under what circumstances.

#### 4.2 Public Private Partnerships

The State Government's Affordable Housing Strategy identifies the private sector as having a key role in increasing the supply of affordable housing product. One way of doing this is through Public Private Partnerships (PPPs), which involve a contract between a public sector authority and a private party, in which the private party provides a project and assumes substantial financial, technical and operational risk in the project.

PPPs are increasingly being used to construct public facilities and infrastructure because they reduce the risk to Government and provide economic opportunities to the private sector. The private sector partner provides services such as design, construction and maintenance.

The effectiveness of PPPs for the provision of new affordable housing has not been extensively tested in Australia, although it has been used in the redevelopment or refurbishment of areas formerly dominated by public housing (eg: the Department of Housing 'New Living, programme).

It is noted that research undertaken by Austin 2008 (refer to Colliers 2012) did not find a single example of affordable housing delivery that did **not** rely on a PPP.

##### Key points to note:

- \_ The effectiveness of PPPs for providing affordable housing in Western Australia has not been extensively tested
- \_ Some form of PPP is likely to be required for any private sector involvement in affordable housing provision in Cockburn Coast

## 4.0 Potential Mechanisms

16

### 4.3 Shared equity schemes

Shared equity schemes allow consumers to obtain part equity in a home by sharing the overall cost with an equity partner - either a financial institution or a government backed provider (eg: Department of Housing through First Start).

The involvement of an equity partner helps to reduce the overall costs involved in a mortgage, and thus improves housing affordability. Two different models are:

\_ Individual equity model. This allows a household to enter into arrangements with an equity partner so as to reduce mortgage repayments and the size of the required deposit. At the time of resale, the partner recoups their equity loan plus a proportion of the capital gain. In some variants of this model household may have the opportunity to eventually gain full ownership by progressively buying out the equity partner.

\_ Community equity or subsidy retention model, which preserves ongoing affordability by limiting the resale value of properties through the use of a predetermined formula. This may require registration of a restrictive covenant on the property (refer to 4.4).

The Department of Housing operates shared equity schemes (First Start), where the government combines with a private lender and first-time home buyers to co-fund the home. This scheme has been very successful and has been used for both conventional detached housing and apartment housing.

The Department of Housing has indicated that it is likely to seek opportunities to be involved in Cockburn Coast, including possibly

10% (to be confirmed) shared equity schemes.

#### Key points to note:

\_ If there is no restriction applied, the first shared equity buyer has the capacity to eventually own 100% of the equity in the property and thereafter be able to sell it on the open market for market prices. This would effectively result in removing the property from the affordable 'pool' and potentially result in an increased profit margin.

\_ Shared equity schemes have so far been very popular when offered in Western Australia.

### 4.4 Planning System Controls

Planning controls are planning scheme provisions and policies that can be applied to proposed developments to require or encourage the provision of certain types of development.

Planning controls can only apply within the allowable jurisdiction of the planning authority, as defined by the Planning and Development Act (applicable in the case of Cockburn Coast). The responsible planning authority for Cockburn Coast is the City of Cockburn, along with the WAPC for certain classes of development and subdivision.

State Planning Policy 1 was prepared under the Planning and Development Act and through the *State Planning Framework (Variation 2)*, setting out the key principles to guide the way in which planning decisions are made. In effect it defines the scope of planning in Western Australia, identifying the various aims of planning, in pursuit of which planning controls can be formulated. The provision of affordable housing is not explicitly identified as one of the aims of planning, although it might be implied by extrapolating some of the other aims.

The absence of specific reference to the provision of affordable housing in SPP 1 has resulted in some ambiguity around the extent to which planning schemes and policies can incorporate controls relating to affordable housing. This has potentially guided the WAPC and State Affordable Housing Strategy away from the use of mandatory requirements for affordable housing. The matter of ambiguity is highlighted by Judith Stubbs and Associates (see 3.4) as being a likely impediment to the introduction of mandatory requirements for the provision of affordable housing into planning schemes in Western Australia.

Examples of planning controls that could be applied to affordable housing include:

- \_ Inclusionary zoning
- \_ Development standards
- \_ Dwelling density
- \_ Dwelling mix
- \_ Plot ratio
- \_ Design guidelines
- \_ Developer contributions

These are discussed in the following paragraphs.

#### Key points to note:

\_ Overly onerous planning requirements can have the effect of limiting development by making it unviable or otherwise unattractive for a developer to proceed. Therefore, care must be exercised in formulating inflexible mandatory requirements in particular.

#### 4.4.1 Inclusionary Zoning

Inclusionary zoning requires a certain percentage of dwellings in a development to be set aside as affordable product on either a compulsory or voluntary basis. For

## 4.0 Potential Mechanisms

voluntary provision, bonus density or floor area is offered as an incentive.

Affordable housing generated in this way may be required through a condition of approval to be permanently affordable, which can be achieved through a deed restriction such as a restrictive covenant (see 4.4).

As an alternative to the provision of on-site affordable units, the opportunity may be provided for a developer to build affordable units elsewhere in the community, or contribute to a fund used to build affordable housing (cash-in-lieu or developer contributions). Such alternatives would require a governance structure to guide administration.

An example of inclusionary policy is the Metropolitan Redevelopment Authority's (MRA's) Affordable and Diverse Housing Policy for the East Perth Redevelopment Area, which requires any development incorporating 10 or more dwellings to provide a minimum of 12% of dwellings as affordable housing for disposal as either social housing or affordable owner occupier housing. A 1:1 offset of floor space can be granted for every square metre of affordable floorspace provided within the development.

The affordable product is required to be sold to a nominated housing provider at cost upon completion of the development.

The MRA also administers a fund into which cash-in-lieu of the provision of affordable dwellings can be paid, for use by the Authority or a nominated housing provider for the purchase, provision or development of affordable housing elsewhere within the Redevelopment Area.

However it should be noted that the MRA operates under its own legislation, not the Planning and Development Act. Therefore it is not limited by perceived ambiguities or absence of reference to affordable housing in the Act and supporting policies such as SPP 1.

### Key points to note:

- \_ There is ambiguity about the ability to have mandatory inclusionary zoning provisions in planning schemes made under the Planning and Development Act, as it currently stands
- \_ If mandatory, may affect development feasibility
- \_ Developments under the nominated size threshold would not provide affordable units
- \_ Incentives are typically only attractive to developers in 'up' market cycles
- \_ Cash-in-lieu requires an equitable formula for calculating the amount owing
- \_ Cash-in-lieu requires a special fund to be administered by the planning authority, and a governance structure around how and where the funds can be expended
- \_ Cash-in-lieu schemes (traditionally most often used for car parking) require a strategy for how and where funds will be applied, in order to justify the requirement (ie: there is a nexus between the development and the demand created)
- \_ Can only be applied within the area to which the planning instrument applies (ie: there would be limitations to where the funds could be expended)
- \_ Ability to expend cash-in-lieu funds outside the Scheme Area would require some form of legislative amendment and accompanying governance structure

## 4.4.2 Development Standards

Development elements commonly dictated by the *Residential Design Codes* (State Planning Policy 3.1), planning schemes and/or design guidelines include building height, the amount of landscaping required, the amount of parking, site coverage, unit size, boundary setbacks, etc. Such standards are aimed to ensuring a minimum quality of development for the benefit of the whole community, however they can add to the cost of development and may adversely impact on the affordability of housing (and other land uses).

Concessions on development standards might be offered for affordable housing. The most common concession granted is the number parking bays required, on the assumed basis that affordable housing occupants have lower rates of car ownership, and/or that the development is located with excellent access to high frequency public transport. These assumptions should be scrutinised for accuracy rather than taken as truth, otherwise the concession may negatively impact on the surrounding area.

If a concession is given and the reason for the concession (affordable housing product) is not guaranteed, in future the development may revert to another use for which the concession no longer applies.

### Key points to note:

- \_ Development concessions can reduce the construction and/or maintenance cost of a development, making it more affordable
- \_ If a development standard concession is granted for affordable housing product, consideration should be given to

## 4.0 Potential Mechanisms

18

ways of ensuring the product is actually provided

- \_ Consideration should be given to the impact of granting a concession on development standards if the development later reverts from affordable housing
- \_ Care must be exercised to ensure that reduced standards do not result in sub-standard housing; just because it is 'affordable' does not mean its occupants should be subjected to poor quality accommodation (eg: balconies that are too small to use, inadequate storage)

### 4.4.3 Dwelling Density

Related to the concept of inclusionary zoning (see 4.4.1), density bonuses may be used as an incentive to provide affordable housing and enable increased return to developers.

The Residential Design Codes already allow for a 50 percent density bonus for the provision of housing for people over 55, single bedroom apartments of minimum 60sqm gross area, and dependent persons' housing - all of which are likely to be represented in a mix of affordable housing product. The codes also require a diversity of dwelling types (eg: number of bedrooms) and sizes within a multiple unit development in areas coded R30 and above, or in mixed-use development or activity centres.

The extent of density bonus and/or the type of housing that can earn a density bonus could be extended beyond that which is currently available in the R-Codes. Acceptable design solutions to achieve additional density for affordable housing should be identified.

#### Key points to note:

- \_ Dwelling density per se is not the prime determinant of dwelling yield in areas coded R30 and above - like

Cockburn Coast. Plot ratio and dwelling size will dictate yield in such areas.

- \_ Density bonuses will only be effective if the market conditions make it worthwhile (profitable)
- \_ Cockburn Coast proposed densities are already much higher than those prevailing in surrounding suburbs, so density bonuses may not provide much incentive in early stages of the development
- \_ Early yield estimates for Cockburn Coast used the now superseded R-Codes site-area-per-dwelling method rather than the plot ratio method that now applies for multi-unit housing in areas coded R30 and above.

### 4.4.4 Plot Ratio

Plot ratio or floor space bonuses are frequently used as an incentive to encourage provision of desired uses or facilities with a public benefit. This can be effective as an incentive for the provision of affordable housing in circumstances where other uses are a more attractive (profitable) than affordable housing product. In these cases, an additional amount of floor space is offered in exchange for provision of affordable dwelling units.

There are two ways in which this mechanism can be applied to encourage affordable housing. One is as a percentage bonus over and above the maximum usual permitted plot ratio on a site, for the provision of affordable housing.

It would be important to have a policy that guides the circumstance under which bonus plot ratio will be granted. Acceptable design solutions to achieve additional plot ratio for affordable housing should be identified.

The second way in which plot ratio can be used as an incentive for

affordable housing provision is to allocate a base plot ratio and an upper level that can be achieved if a minimum amount of the additional plot ratio is used to provide affordable housing. For example, a base plot ratio of 2.0:1 for 'standard' development and up to 3.0:1 if a minimum of 0.5:1 of the total development is for affordable dwellings. This could be an 'as of right' provision embodied in the planning scheme.

The actual amount of bonus offered should be determined after examination of both market (to determine what would be attractive) and the likely built form outcomes (to ensure that application of bonuses will not result in unintended negative impacts).

The Cockburn Coast District Structure Plan (Part 2) is characterised by medium to high density residential development featuring relatively high plot ratio bonuses. This form of development would generally preclude the desire for a plot ratio bonus (refer to 5.2 for a discussion on the drivers for private development). However, given the flexible building height requirements and tendency towards medium density development there is potential for the encouragement of affordable housing using a plot ratio bonus.

There is potential to allow for the transfer of plot ratio bonuses to allow for flexibility in their application. It should be noted however, that this would only be considered appropriate where the provision of affordable product as a result of the bonus is provided within the Cockburn Coast project area.

The City of Perth have similarly implemented a transfer of plot ratio mechanism. This is done via a clause in their Town Planning Scheme and

## 4.0 Potential Mechanisms

then further dealt with by way of a policy adopted under the scheme provisions. The City of Cockburn would need to implement a similar policy to establish criteria for both the donor site and the site being awarded the Plot ratio by transfer. Additionally, a register of the transferred plot ratio need to be generally maintained.

The potential for plot ratio bonuses to act as an incentive for affordable housing delivery in Cockburn Coast was tested in feasibility analysis undertaken for this strategy (refer to 8.2 and Appendix A).

### Key points to note:

- \_Plot ratio bonuses may not prove attractive for developers considering high density sites. The Cockburn Coast District Structure Plan (Part 2) features both high to medium density development with a tendency for medium density.
- \_City of Cockburn needs to be comfortable that bonuses offered can be satisfactorily accommodated in acceptable built form
- \_Bonuses offered have to be sufficient to make the additional cost of providing the extra floor space commercially viable for the developer.

### 4.4.5 Design Guidelines

Design guidelines are a requirement of the City of Cockburn planning scheme, in association with local structure plans. For Cockburn Coast, the design guidelines will essentially replace development standards set out elsewhere in the planning scheme.

As well as addressing the usual built form and public realm interface elements of development, the City requires the design guidelines for Cockburn Coast to address affordable housing and diversity.

Design guidelines can be very detailed and include requirements for the design and layout of dwellings, including finishes and materials.

Whilst design guidelines can ensure a minimum standard of design they are sometimes criticised for stifling innovative design, techniques, technologies and materials, or alternative solutions. Design guidelines may also (inadvertently) preclude forms of development and thereby restrict diversity in the community. They can add to the cost of development, affecting affordability.

Alternatively, design guidelines can be used to ensure that a diversity of dwellings and facilities is provided.

It is important that design guidelines contain only elements that contribute towards the desired outcome, leaving room for choice and flexibility in other elements. Performance-based approaches are more likely to promote affordable housing than overly prescriptive requirements.

In terms of affordable housing, the design guidelines could specify development standards such as the amount of car parking required, the size of private open space, and other relevant design considerations. In terms of housing diversity, they could specify the proportion of particular dwelling types required in a certain class of development.

Because they are required to be adopted by the City prior to or in conjunction with the relevant local structure plan (ie: prior to definition of final lot layout), the design guidelines can not be targeted at specific sites, which is the role of detailed area plans.

### Detailed Area Plans

Detailed area plans as required by the City of Cockburn for Cockburn Coast, are essentially a further refinement of the design guidelines applied to a specific site or sites, once defined by subdivision.

### Key points to note:

- \_If overly prescriptive, design guidelines can stifle the potential for innovative design solutions (eg: materials, construction techniques, responses to energy and water conservation) and add to development costs

### 4.4.6 Developer Contributions

Developers can be required to contribute towards the cost of infrastructure and community facilities if a clear need and nexus can be established between the proposed development and the infrastructure or community facilities.

State Planning Policy 3.6 *Development Contributions for Infrastructure* (SPP 3.6) sets out the manner in which developer contributions can be requested, and seeks to provide consistency and transparency in the manner and purposes for which contributions are sought and calculated. Development contributions will be calculated and applied as:

- \_standard conditions of subdivision
- \_conditions of development
- \_legal/voluntary agreements

As defined by SPP 3.6, standard development contribution requirements are:

- \_land for public open space, foreshore reserves, primary schools and roads
- \_Infrastructure works for public utilities (water, sewerage, drainage, etc) and roads

## 4.0 Potential Mechanisms

20

\_monetary contributions for standard headworks charges, off-site major infrastructure works, and in-lieu of other contributions

A development contribution scheme is being developed for Cockburn Coast.

Developer contributions can also be requested for the capital cost of community infrastructure if it can be demonstrated that the development generates a need for that infrastructure.

It is necessary to prepare a community infrastructure plan for the area and supporting documentation, before developer contributions for community infrastructure can be requested.

JSA suggests that affordable housing could be interpreted as 'community infrastructure' and hence that developer contributions could be requested for the provision of affordable housing.

Contributions would be paid into a dedicated fund that could be used to directly build affordable housing, or provide funds for its purchase or construction by an affordable housing provider.

### Key points to note:

\_A case would have to be made to the Western Australian Planning Commission under SPP 3.6 to support affordable housing being included in the definition of community infrastructure, because it is by no means explicit in the current definition. The Department of Planning is unlikely to support this initiative.

\_The development industry is likely to resist inclusion of affordable housing as another form of developer contribution, and already argues that contribution requirements are adding to the cost of delivering land and consequently

adding to the cost of housing (see Colliers 2012).

### 4.5 Other Mechanisms and Incentives

#### 4.5.1 Subsidies

Some form of subsidy will typically be required to ensure the provision of affordable housing product.

A typical subsidy will target one or more of the factors influencing the cost of providing housing, for example:

- \_ Land costs
- \_ Construction costs
- \_ Fees - include planning, engineering and design costs
- \_ Service connection costs
- \_ Infrastructure charges including water and sewerage headworks and developer contributions
- \_ Cost of approvals and compliance fees
- \_ Local Government rates
- \_ State Government taxes and charges such as stamp duty, Land Tax, water rates
- \_ Federal Government taxes and charges - includes Goods and Services Tax
- \_ Marketing costs
- \_ Management costs (rental)
- \_ Cost of finance, including holding costs
- \_ Profit expectations of the owner/seller
- \_ Market conditions

Subsidies may include:

- \_ Taxation relief, rent assistance and home purchase assistance
- \_ Direct discount on the price charged for housing
- \_ Discounted land price and/or construction costs for the developer, enabling a lower selling price without affecting development viability

\_Grants for provision of affordable housing

\_Grants for ongoing operation of affordable housing

\_Concessions and development incentives

#### 4.5.2 Discounts

Discounts on various planning authority imposed costs for new developments could be offered as an additional incentive to developers who comply with the affordable housing provisions. This could include development assessment fees and developer contributions. The City of Brisbane, for example, offers such financial incentives when 100% affordable housing is provided in a development. For proposals including a proportion of affordable and market housing, financial incentives are calculated on a pro-rata basis. Funding is not provided unless a covenant and management plan or other acceptable arrangement, has been established, and developments will be subject to a requirement that the affordable housing component remain affordable for the long term use (minimum 10 years).

#### 4.5.3 Fast Tracked Approvals

Time taken to obtain planning and other development approvals can add a significant cost to developments (holding costs), and are often unpredictable, notwithstanding statutory time limits that may apply. Guaranteed speedy approvals for affordable housing developments could therefore be an incentive.

Notwithstanding that all applications should be processed in the most efficient manner possible, developments incorporating a minimum affordable housing component could be exempt from certain referral or assessment processes and/or have 'as of right' status that makes approval quicker.

## 4.0 Potential Mechanisms

### 4.5.4 Restrictive Covenants

Not an incentive for provision but a way of protecting affordability in perpetuity or for a specified minimum period is for a restrictive covenant to be registered on a property, setting the conditions for resale.

A restrictive covenant may last indefinitely or for a specified period of time. A covenant could require the owner-occupant to resell the property to someone from a specified pool of income eligible buyers for a specified, formula-determined price. The covenant could also contain an option that gives a not-for-profit developer, public agency, or some other party, the first right to repurchase the homeowner's property at the formula-determined price.

This could be particularly relevant in a shared equity scheme.

Restrictive covenants may be established by a developer or required as a condition of planning approval for subdivision or development. They should not however be contrary to the provisions of the local planning scheme or other statute.

The WAPC advises that restrictive covenants should be used sparingly, and only in situations where a more transparent mechanism, such as planning scheme provision, is not available.

### Key points to note:

- \_ Some form of governance would be needed to monitor compliance with a restrictive covenant, and to identify potential purchasers.
- \_ The City of Cockburn is unlikely to be able to resource the policing and implementation of restrictive covenants.

### 4.5.5 Non-Planning Building Controls and Requirements

A review of building related controls and standards administered by State and local government could identify requirements that deter building owners and developers from providing affordable housing. For example, health and building requirements for such housing forms as lodging houses may be very prescriptive and costly to implement. Risk based or performance criteria would allow flexibility, particularly for the conversion of existing buildings.

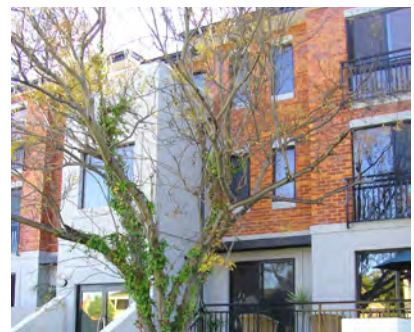
### 4.5.6 Facilitation and Demonstration

Facilitation would involve bringing together parties with different resources (skills, land, capital, clients, etc) with the aim of delivering projects. LandCorp and/or the City of Cockburn could fill the facilitation role.

Demonstration would involve the public sector (LandCorp, the City of Cockburn, and/or the Department of Housing) carrying out a new form of development - for example using

innovative construction materials or techniques to deliver cheaper and more affordable housing product. By being 'first' to 'risk' something unfamiliar to the development or construction industries or the consumer market, demonstration projects show what is possible and help stimulate different approaches in the market.

For example, when the East Perth Redevelopment first created small housing lots, no housing firms had small house products. The Redevelopment Authority commissioned the design and construction of houses, showing what was possible on small lots and helping both builders and consumers to envisage a type of housing product that did not previously exist in Perth. Now most home builders offer small lot product within their standard ranges.



Three to five storey housing development\_Photo taken by HASSELL

## 4.0 Potential Mechanisms

22

### 4.6 Summary

Table 5 represents a summary of the mechanisms available to promote affordable housing that have the most potential for application to Cockburn Coast.

<b>Mechanism</b>	<b>Applicability to Cockburn Coast</b>	<b>Comment</b>
PPP	Yes	Government Agencies such as Landcorp and the Department of Housing could determine that parts of the development be subject to a PPP, with provision of affordable housing product a required outcome. Some form of PPP has been a factor in all examples of affordable housing provision by the private sector identified in preparing this strategy.
Shared Equity	Yes	Department of Housing could identify product in Cockburn Coast for which shared equity loans would be available.
Inclusionary zoning	No	There is legal ambiguity for local government if mandatory requirements to provide an affordable housing component in developments are applied. A clear statement at State Planning Policy level that such requirements can be imposed is highly desirable. Policies that have been adopted by Redevelopment Authorities have been adopted outside the Planning and Development Act.
Development standards	Yes	For Cockburn Coast, development standards will be contained within Design Guidelines, so any concessions for affordable housing will be outlined in those documents.
Dwelling density	No	Dwelling density is not an applicable control on land coded R30 and above - which applies to all of the Cockburn Coast project area.
Plot Ratio	Yes	Plot ratio bonuses can be offered for the provision of affordable housing. Bonuses will provide a greater or lesser incentive to developers to provide affordable product depending on the state of the market at the time the development is proposed. In the current market,
Design Guidelines	Yes	Development concessions should be granted on appropriate elements of affordable housing product if it is guaranteed to remain 'affordable' in perpetuity or an agreed period. Design guidelines can also nominate specific requirements for affordable product, such as size or number of bedrooms.
Developer Contributions	No	There is no established governance framework for the administration of a developer contribution scheme or cash-in-lieu payments for affordable housing.

#### 4.0 Potential Mechanisms

<b>Mechanism</b>	<b>Applicability to Cockburn Coast</b>	<b>Comment</b>
Subsidies	Yes	Research has shown that some form of subsidy is involved in all successful affordable housing projects. It may be discounted land, purchase of affordable units by a housing provider, or some other direct or indirect subsidy or combination thereof.
Restrictive Covenants	Yes	In appropriate situations, a restrictive covenant or similar mechanism can be required as a condition of development approval to ensure affordable housing product remains 'affordable' for a specified period or in perpetuity. The period of time applied would need to be assessed in light of prevailing circumstances at the time of the development.
Discounts	Yes	The City of Cockburn could offer discounts on application fees and rates for bona fide affordable housing development.
Fast Tracked Approvals	Yes	The City of Cockburn could establish a procedure to guarantee fast tracking of affordable housing projects, to ensure that holding costs to the developer are minimised.
Facilitation and Demonstration	Yes	LandCorp and the Department of Housing have already expressed a willingness to participate in facilitation and demonstration affordable housing projects. The City of Cockburn has expressed a willingness to facilitate affordable housing development through the means available to it.

**Table 5:** Summary of Potential Mechanisms

## 5.0 Drivers of Housing Development

24

### 5.1 Public Sector

State and local government departments and agencies have differing motivations for being involved in affordable housing development.

At a high level, a healthy housing development sector is good for the economy.

Ensuring that the population is adequately housed is an important Government objective.

#### 5.1.1 Department of Planning

The Department of Planning supports the Western Australian Planning Commission. It initiated the planning process that led to the Cockburn Coast District Structure Plan and the identification of a target of 20% affordable housing for Cockburn Coast. The urban renewal of Cockburn Coast is an important component of metropolitan urban development to achieve the objectives of *Directions 2031 and Beyond*.

The Department therefore has an interest in ensuring that the objectives of the CCDP, including targets, are achieved.

The State Planning Strategy, currently being drafted, is expected to include direction on affordable housing. The State Planning Strategy will have flow-on consequences for the content of planning statutes and policies.

It is anticipated that if the statutory framework changes to become supportive, mandatory requirements can be introduced. Should the Department of Planning choose to introduce mandatory requirements for affordable housing this would need to be instituted as an industry wide requirement, rather than on a case by case basis as this could distort the property market and create disincentives for development. Until such time that a planning policy is introduced, the Department of Planning does not support mandatory requirements for affordable housing.

#### 5.1.2 City of Cockburn

The City of Cockburn is seeking to fulfil its responsibilities as the primary planning authority and the local government responsible for Cockburn Coast by introducing objectives and provisions into its town planning scheme that relate to population and housing diversity and affordable housing in the project area.

As the level of government closest to the local community, the City is aware of groups who could be in the market for affordable housing in the Cockburn Coast area, such as housing co-operatives, at-risk students and the homeless.

The City is interested in the mix of income ranges for affordable housing (very low income, low income, moderate income) and how housing appropriate to the needs and limitations of this mix can be delivered.

The City is concerned that affordable housing remain available in perpetuity, being aware of the risk that the first purchasers of affordable housing (whether shared equity or discounted sale price) could essentially receive a 'free kick' or windfall profit by later selling their dwelling at market price.

The City has expressed a preference for mandatory rather than incentive-based mechanisms for the provision of affordable housing, citing concerns that incentives are hard to pitch at the right level to motivate developers to take advantage of them.



Subi Centro, WA\_Photo taken by HASSELL

## 5.0 Drivers of Housing Development

In consultation for this strategy, the City expressed doubt about whether the target densities envisaged in the District Structure Plan can be achieved for housing generally, and hence that offering bonus plot ratio and height could be an effective incentive. However it should be noted that TPS 3 includes a requirement that a minimum of 85% of nominated density be achieved.

Although preferring a mandatory approach, the City acknowledges that methods such as a developer contribution scheme requiring contribution to the purchase of land by the City for affordable housing would be difficult without supportive State level legislation and policy.

The City sees potential in a policy similar to the Affordable and Diverse Housing Policy that applies in the East Perth and Subiaco Redevelopment Areas, noting however this policy applies only to larger developments (10 dwellings and above), meaning that smaller developments would not contribute to the delivery of affordable housing. As noted in 4.4.1, however, these policies were introduced under different legislation from that which applies to Cockburn Coast. Additionally, these policies have experienced limited success due to their interventionist nature and developer aversion to this approach.

Finally, the City considers it has a role as a facilitator for affordable housing development.

### 5.1.3 Department of Housing

As the Government's deliverer of social and affordable housing Department of Housing (DOH) is able to bring together a range of housing options and programs that cumulatively facilitate a diversity of housing products. DOH is able to deliver social housing programs to low to moderate income earners,

specific target groups such as people with disabilities etc, new affordable housing rental initiatives, shared equity home ownership products, low deposit full home ownership and normal market sales.

The Department's current focus is on supply.

DOH is increasingly endeavouring to work cooperatively with the private sector to deliver affordable housing outcomes rather than simply apply the traditional 100% government capital investment ownership model. This is seeing the Department apply a number of different development/acquisition/investment models. These include:

\_Joint Venture (JV) developments where DOH may contribute land or cash in partnership with the private sector. Ideally DOH makes a site available to the private sector partner to undertake the development as JV partner. This helps the private sector by removing the requirement for land and holding costs and also provides equity into the transaction and an asset that can be mortgaged. Projects of this nature are underway in Pier Street East Perth and Campbell Street West Perth.

\_Equity Contribution – DOH may become an equity partner in a particular built form development. This enables DOH to deliver affordable housing outcomes by influencing the shape and form of the development and taking its return in dwellings, cash or a combination of both. This helps unblock the private sector challenges around project finance and derisks the development.

\_Presales – DOH may be able to facilitate development by pre-purchasing units in specific developments thereby enabling developers to meet presales

commitment and enabling capital funding to be obtained.

\_Underwriting sales – through home ownership schemes such as SharedStart DOH may be able to provide developers with a commitment to deliver end user sales to particular target groups; this can facilitate presales and capital funding.

\_Procurement – DOH's Expression of Interest process provides an opportunity for developers to put development proposals to the Department and for DOH to purchase in full all units in the development, purchase some units, or any other arrangement that would help the development proceed while enabling the Department to deliver affordable housing outcomes.

\_Integrated Housing Developments – DOH has developed and continues to develop fully integrated housing developments that bring a range of housing tenures and client groups together to deliver financially viable and socially sustainable housing developments. Ideally, these would see social, affordable and full market rental, shared equity and full market ownership and possibly commercial units in the same complex. This brings together a range of different funding sources and funding/investment opportunities together to help projects stand up financially.

\_Linkage with other affordable housing investors and providers – DOH is also able to facilitate linkages with other affordable housing providers such as Community Housing Organisations who undertake social and affordable housing developments in partnership with or independent of Government. Similarly, DOH involvement in facilitating and supporting other Government affordable housing initiatives such as the joint state/commonwealth

## 5.0 Drivers of Housing Development

26

initiative National Rental Affordability Scheme (NRAS) can provide further linkages with investment opportunities for affordable housing. (NRAS provides cash and tax benefits for investors who are prepared to rent their new investment properties at less than 80% of market rent).

The traditional model of DOH acquiring, funding and developing a site itself also remains an option that can be pursued in the right circumstances.

When all of these activities are layered across the new delivery models DOHs brings a breadth of opportunity and market outcomes that make the delivery of affordable housing outcomes in all market settings a realistic option.

Public housing provision is more expensive than assisting someone to buy a house (KeyStart) which can actually be income positive. Consider KeyStart to be filling a gap while banks aren't lending but will retract when banks start lending again.

DOH hope to influence affordability through the use of different materials and construction techniques and will be open to opportunities to participate in developments that exhibit innovation in these ways.

DOH is aware of a current need to keep up activity in the housing construction industry to keep workers employed, or risk losing them to the resources industry.

DoH is willing to be involved in governance arrangements and may even take a leadership role if required.

The Department also recognises a need to educate the market as to difference between affordable

housing and social housing, as there remain some negative perceptions about affordable housing and the people who occupy it, which are influenced by negative perceptions of social housing tenants.

### 5.2 Private Developers

It will be self evident that private developers need to be reasonably confident of achieving an adequate profit margin before they are likely to proceed with any development. This is especially so since the GFC has tightened developer margins, generally as a requirement for 'pre-sales' in order to secure financing for construction.

Analysis of a wide range of medium density property development sites (Colliers 2012, see Appendix A) shows that target profit margins after finance provisioning, typically range from 15% – 30% with a central tendency of 17.5% to 25%. The margins are dependent on location, product, capital at risk and market conditions and can be highly volatile given the lengthy duration of planning, sales and delivery.

This strongly suggests that the JSA assumption that 10% profit would be considered sufficient for a developer to proceed with a development, and that any profit about 10% could be considered to be 'super profit' from which affordable housing could be provided is not valid in the current Perth market.

Developer decisions vary from location to location and are often a function of market depth and demand for the particular product type. In recent times in metropolitan Perth, the majority of medium to high density development activity has centred on the Perth CBD and fringe. Suburban apartment market activity fundamentally remains in the low to mid rise format due to the limited

price variance between competing dwelling types and existing market preferences.

The critical observation made in the reviewing of JSA 2011 report is the presumption that higher density equates to higher profitability and accordingly higher residual value to land. This paradigm generally no longer applies to medium to high density residential/mixed use development market in Metropolitan Perth.

The principal driver for this paradigm shift is construction cost, which for this class of development sits almost a third higher in WA than in east coast markets. In addition, more recently capital rationing of debt markets has further affected viability in this market sector.

As a result, in recent times the development market has focussed on lower yield, lower capital, medium density development, typically from two to five levels in height.

### Developer Survey

A survey of residential developers was conducted by Colliers to establish an industry perspective regarding housing affordability, and views on the measures to enable private sector delivery of affordable dwellings advocated by JSA 2011.

Sixteen developers active in the medium to high density residential development market in Western Australia were invited to participate in a survey by questionnaire; eight agreed. A copy of the questionnaire and a summary of the responses to each question can be found in Colliers 2012, in Appendix A.

The intent of the questionnaire was to gauge the attitude of developers towards the proposed Cockburn Coast development, and to test the

## 5.0 Drivers of Housing Development

attitudes of private sector developers on:

- \_private sector delivery of affordable dwellings
- \_the observations and conclusions of JSA 2011 report with respect to:
  - \_private sector financial capacity to absorb the mandating of affordable dwellings in medium to high density development
  - \_observations as to super profits
  - \_private sector financial capacity for to provide affordable dwellings in a medium to high density format through incentives on height and dwelling yield

Broadly the developer interviews established:

- \_Support for the housing typology and densities proposed for Cockburn Coast
- \_Indicated the proportion of 'low' density dwellings (terraces/town houses and cottage lot residential) as too low
- \_Considered early infrastructure delivery to engage the market in the location and product typology to be critical and cited as important:
  - \_Transport
  - \_Retail and convenience amenity
  - \_Community/civic services
  - \_Schools
  - \_Recreational amenity
  - \_Employment
- \_Acknowledged the need for the delivery of affordable dwellings but several questioned the appropriateness of product typology and location
- \_All accepted but questioned the delivery of affordable dwellings at the price points of JSA 2010 in view of current price points for land, product typology, demand, current apartment price points and cost of construction

\_All interviewed considered that the supply of affordable dwellings should be a role of governments but accepted the need for private sector engagement

\_Delivery and/or funding of affordable dwellings through developer scheme contributions were often described as 'another tax' and clear resistance to this approach emerged. All acknowledged an acceptance of simplified developer scheme contributions linked to gross realisation and on completion market values (or similar) with deferred payment citing the need for clarity and minimising the impost on development feasibility and price setting for land

\_All indicated the inclusion of affordable dwellings either via developer scheme contributions or mandating of delivery will affect the attitudes of developers to the precinct when making development site selection decisions, and confirmed a general view it will have a negative impact on the residual value of land

\_All developers indicated a positive interest in partnering and joint venture opportunities with local and state government, and not-for-profit organisations in developing and delivering affordable dwellings

\_The developers acknowledged and accepted incentive schemes providing height and density bonuses but in view of the already high (relative to broader market) densities established in the CCSP2, questioned the inference (JSA 2010) that sufficient additional profit could be realised to offset the cost of affordable dwelling supply

\_A key concern raised by developers is the risk of stigma arising at market with the knowledge that affordable dwellings will be offered in a proposed development or precinct at such high proportions (20%); particularly if it was known

(and it would require disclosure) that Department of Housing had acquired the stock. A clear risk mitigation strategy would be required by way of public education and branding (the difference between social housing and affordable housing) together with site selection and application. This is premised on the CCDSPP aspirational target of 20% affordable dwellings

\_Finally, the issue of governance was raised. Developers want to know who will coordinate, administer and manage the affordable dwellings such that they are retained as 'affordable dwellings' in perpetuity?

## 5.0 Drivers of Housing Development

28

### The Questions

The questions answered by developers who took part in the survey are summarised below:

1. What are your preliminary thoughts on the form of development contemplated for the Cockburn Coast?
2. What market based hurdles or opportunities can you envisage for the Cockburn Coast?
3. Are there specific infrastructure deliverables at state and local government level which may stimulate the contemplated form of development?
4. Are there initiatives at state and local government level which may be implemented to stimulate the contemplated form of development?
5. Have you any thoughts on initiatives that place a greater focus on increasing supply (such as NRAS) as opposed to subsidising demand?
6. What is your view of the contemplated accommodation mix in the context of the WA market?
7. In terms of the medium high density development contemplated for Cockburn Coast, what are your initial thoughts of enabling affordability measures such as those described in JSA 2010 (*these were summarised*)?
8. In the context of the contemplated built form, is a proposal to include affordable housing as 'special infrastructure' under State Planning Policy 3.6: Development Contributions for Infrastructure feasible? Are there alternative performance based measures that can be reasonably applied? Should such measures be incentivised? If yes, what forms of incentivisation will likely support built form supply as contemplated and meet the measures of affordability outlined above?
9. Do you see planning bonuses (examples cited) as a feasible mechanism in the context of:
  - a) the density and heights already contemplated for Cockburn Coast
  - b) a nil or low parking ratio for affordable housing supply
  - c) proposed 'affordable' (Stubbs 2011) pricing regime?
10. What are the principal constraints to delivering 'affordable' dwelling product in a medium/high density format and meeting the implied diversity and pricing requirements?
11. What product typologies are more likely to achieve the implied diversity and pricing requirements? Are there low cost options such as pods and lightweight demountable structures that can be applied in part or in whole?
12. In the context of Cockburn Coast, what locational and infrastructure needs will better promote or support the supply of diversity in dwelling modes and pricing need?
13. What incentivisation based variation to planning provisions are likely to best generate sufficient funds/super profits to offset delivery of affordable housing?
14. How in your view, would the market likely respond to the mandatory provision of affordable housing in Cockburn Coast and what are the likely implications to market input?
15. Assuming an equitable and feasible solution, should there be a 'blanket' cap or ratio approach to the volume and type of affordable housing on:
  - a) whole of Scheme area basis
  - b) a project by project basis
  - c) defined in designated precincts?
16. Initiatives already implemented in several redevelopment areas (SRA – EPRA) have met with some success (examples listed): What are your thoughts on applicability and feasibility of these schemes in Cockburn Coast? Are there alternative mechanisms that you could propose or are aware of that may prove feasible?
17. Is the provision of affordable dwellings a state responsibility? Is market intervention warranted through a mandatory planning regime or should it be focused on state/local government controlled land?
18. Would greater direction, clarity and simplicity be preferred, such as a blanket 'cash-in-lieu' mechanism applied on GFA and paid on completion of sales into a pooled fund to support delivery of affordable dwellings by the State? Could this be expanded to stimulate density and delivery by utilising mechanisms such as decreasing scales of 'cash-in-lieu' for greater diversity, set product modules and GFA?
19. Are there other alternatives worth considering such as profit sharing, that is, an agreed proportion of additional profits earned on the delivery of affordable density bonuses?
20. Do you consider there is joint venture or partnering opportunities between state and private developers that will facilitate the vision for Cockburn Coast as well as delivery of affordable dwellings? If so, can you provide some insight to JV or partnering structures and models that you would consider reasonable and functional?

## 6.0 Market Characteristics

Current residential market conditions will not necessarily carry forward, however they are the necessary starting point for considering the likely situation for housing in Cockburn Coast once development commences. They also aid feasibility assessments (refer to 8.2).

The residential market is of course impacted by global economic conditions, as well as national and local political and economic fluctuations.

Colliers research (see Appendix A for more detail) indicates that the deterioration of global economic conditions over 2008 and into 2009 had a dampening effect on Western Australia's residential property market. Despite an improvement in the residential market in early 2010, demand for residential real estate has continued to weaken on the back of declining consumer confidence.

Real Estate Institute of Western Australia (REIWA) statistics indicate the median house price increased by 0.4% during both the December 2011 and March 2012 quarters. The increase in the December 2011 median house price was the first since March 2010, potentially suggesting that the residential market may have bottomed out and is now showing early signs of improvement. Preliminary REIWA March 2012 quarter statistics signal a general softening from the previous year but stabilisation from the previous quarter.

Factors affecting the apartment market (refer to Appendix A) have directly impacted the viability of development sites and placed downward pressure on land values. The sustained withdrawal of credit availability for this sector and weak consumer demand has placed continued pressure on land values over the last 30 months.

The economic and market conditions of late 2007 and 2008 resulted in a retraction of development site activity and limited new development. As a result of the economic downturn, there was a general lack of prominent apartment/mixed-use development site sales over late 2008 and 2009, however this began to turn in 2010 with mid-tier developers returning to market taking advantage of discounted land pricing.

It is anticipated market (consumer) sentiment in this sector may improve into 2012, and with the limited production/initiation of new apartment stock since 2009, a scarcity of stock may emerge in 2013, enabling achievement of presale/pre-lease requirements to obtain development funding, suggesting a recovery in demand for sites and values may occur from 2013.

The withdrawal from the market by developers was a direct function of the uncertain times experienced over the period 2008 - 2010. Although demand for large built form development sites with high capital requirements remains relatively subdued and has resulted in a softening of those values, the general consensus is that enquiry has increased. Of the limited transactions that have occurred, values appear to have stabilised and typically reflect discounts in the vicinity of 20% to 50% off the top of the market.



## 7.0 Case Studies

### The research failed to identify examples of where the private sector delivered 'affordable' dwellings without some form of community or statutory support in the funding and delivery model.

In addition to reviewing the work by Judith Stubbs and Associates, Colliers undertook further investigations to establish whether there are examples of private sector delivery of affordable dwellings in Australia and internationally.

The full text of the Colliers report can be found in Appendix A.

The research failed to identify examples of where the private sector delivered 'affordable' dwellings without some form of community or statutory support in the funding and delivery model.

#### 7.1 International

In summarising her international research for Waitakere City Council, Patricia M Austin (2008) identified the following essential factors or key components for affordable housing partnerships to achieve desirable affordability outcomes:

- \_ Access to land or property at reduced cost – including discount market price, leasehold, deferred payments and the effect of planning policy
- \_ Access to finance such as grants, deferred loans or loans at below market interest rates
- \_ The incorporation of debt finance based on a net income stream
- \_ Management expertise, particularly the capacity to manage development risk and ongoing management risk
- \_ Non-profit, charitable or community trust status of housing organisations, enabling profits to be foregone; accessing finance in more favourable terms; and maximising tax exempt status
- \_ A broader range of household incomes for the household group being targeted including moderate income households

- \_ Opportunities for cross subsidisation within and between development(s)
- \_ Good quality design that is highly energy and water efficient to minimise residents' outgoings
- \_ Local Government support through the planning process and through contributions for the partnership of resources and/or implicit subsidies
- \_ The support of the local community
- \_ Mechanisms that retain the housing as affordable into the future.

She also noted that all of the case study partnerships researched make use of one or more of three key components:

- \_ Either land (or property) being available at below market rates, or deferred payments or leasehold
- \_ Finance being available in the form of grants, loans at below market rates or deferred interest on loans
- \_ Incorporation of debt finance based on net income stream.

Where only one of these three key components is used, the schemes rely upon some form of cross-subsidisation from market rate Development or provide affordable housing or shared ownership for moderate-income households.

In every case study considered by Austin 2008 the affordable housing delivery mechanism relied on a public private partnership, which in nearly all cases constituted either the local authority, not for profit organisations, state and federal governments.

There is not one example where the private sector has outwardly established a role in delivering affordable dwellings where all inputs to the model are kept at the market level. Each case study involved the

## 7.0 Case Studies

32

contribution of land at discounted market rates.

### 7.2 Australia

#### 7.2.1 Inkerman Oasis, Port Phillip, Victoria

This case study is sourced from <http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Developing+Affordable+Housing/Case+Studies/Inkerman+Oasis+Port+Phillip+Victoria.htm>

Inkerman Oasis is a 242-unit project in the City of Port Phillip, Victoria. It is a joint venture between the City of Port Phillip Council and Inkerman Developments Pty Ltd. The Council contributed land and added value through masterplanning, which included paying for the remediation of the site. Inkerman developed the site, and repaid council for the remediation on settlement.

In exchange for the land, the developer provided 28 units of affordable housing. The State Housing Authority and another housing agency have purchased an additional four units.

The council benefits by having affordable housing developed with no additional resource commitments.

The developer benefits by having land provided for its development yielding 210 units for private housing.

The community benefits by having access to affordable housing which was developed only after community input and support were sought

Port Phillip Housing Association, an organisation with considerable experience, is managing the affordable housing units. The Association is responsible for all operating, property and tenancy management costs, and maintains

detailed financial records for each managed property. It must comply with accountability requirements, which include six monthly auditing inspections and production of an annual report for public release.

#### 7.2.2 City Edge, ACT

This case study is sourced from <http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Developing+Affordable+Housing/Case+Studies/City+Edge+ACT.htm>

City Edge is a housing development of 40 townhouses and 86 apartments in O'Connor ACT. ACT Housing entered into a joint venture with a private developer to create a mixed affordable and private housing site.

City Edge, which opened in December 2001, represents \$6.5 million worth of housing available to people on low-to-moderate incomes through Community Housing Canberra and ACT Housing.

Each agency owns 15 apartments. In addition, the private developer retained 40 townhouses and 56 apartments for private sale.

#### 7.2.3 Forest Glade, Parklea, NSW

This case study is sourced from <http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Affordable+Home+Purchase/Forest+Glade+Parklea.htm>

The Forest Glade Smart Housing project at Parklea, Sydney, was developed collaboratively by Landcom and developers, Cosmopolitan Developments, and targeted 20% of its properties for sale to those on moderate-incomes.

The project comprised 64 detached homes with a mix of two, three and four bedroom houses. Thirteen were targeted to moderate-income households, through a balloting process to eligible purchasers.

(Landcom defines moderate household incomes as being between \$48,000 and \$69,000).

Pricing for the 13 designated homes ranged from \$156,000 to \$220,000 (2002 prices), while the asking prices of those aimed at the broader market were between \$270,000 and \$415,000. Apart from income, assets and property eligibility (purchasers had to be first time buyers), there were also re-sale restrictions placed on the moderate-income homes.

These homes were distributed throughout the site and are indistinguishable from the other 50 in the project. The project went on sale in June 2002 and the moderate-income homes were oversubscribed by eligible purchasers by a ratio of 25 to one.

The provision of affordable housing at this site was a condition stipulated by the local council in return for a more flexible approach to planning, design and construction.

Smart design, regulatory provisions and the use of efficient construction and materials planning delivered increased project value, which was then transferred to make the moderate-income homes affordable. While providing moderate-income housing, the developers were nonetheless required by council to guarantee high standards of amenity and design.

#### 7.2.4 Waverley Council, NSW

This case study is sourced from <http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Developing+Affordable+Housing/Case+Studies/Waverley+Council+NSW.htm>

Waverley Council's Affordable Housing Program offers a density bonus to developers who provide affordable housing as part of their residential development. A bonus is

## 7.0 Case Studies

offered only to projects where the increased density can be accommodated within a building in a manner that will not compromise the environmental amenity of the surrounding area.

The affordable housing units can be provided in perpetuity (that is permanently) or for a specified time, with rent capped at well below market rent. The council owns units that are provided in perpetuity. Rent-capped units are owned by the private developer, or private owner, and leased to council for a capped rent lower than market rent for a specified time.

Waverley Council provided a density bonus to the Orion Group, a private developer operating in the eastern suburbs of Sydney, in exchange for providing some of their developments as affordable housing.

A registered social housing provider manages the affordable housing properties under a headlease agreement between the provider and the council.

A standard Residential Tenancy Agreement is then executed between the provider and the affordable housing tenants.

The density bonus increased the commercial attractions of the development while still providing environmental amenity and affordable housing at no cost to council.

It was therefore mutually beneficial for the council, the developer and the community.

### 7.3 Western Australia

#### 7.3.1 Department of Housing

The Department of Housing (DoH) is increasingly endeavouring to work cooperatively with the private sector

to deliver affordable housing outcomes rather than simply apply the traditional 100% government capital investment ownership model. This is seeing the DoH apply a number of different development, acquisition, investment models.

These include joint venture developments, equity contribution, presales, underwriting sales, procurement, integrated housing developments, and linkage with other affordable housing sector investors and providers.

The traditional model of the DoH acquiring, funding and developing sites itself also remains an option that could be pursued in the right circumstances. DoH accesses and enables a breadth of opportunity and market outcomes that make the delivery of affordable housing outcomes in all market settings a realistic option.

#### 7.3.2 Department of Housing Developer Engagement

Enquiries to a range of Western Australian and national developers identified several instances where developers had engaged with the Department of Housing in the delivery of affordable dwellings in a medium to high density product form. In each instance, the Department of Housing effectively secured a proportion of available product at full market price and then allocated the product to a mix of

- \_Social housing
- \_Shared Equity purchase
- \_Affordable rental

The most recent example is OneAberdeen, located at the juncture of Pier Street and Aberdeen Street, Perth. This project is a partnership between Diploma Properties Pty Ltd and Department of Housing (DoH). The Department of Housing owns the land and Diploma is engaged in a joint venture. In effect

DoH applies the land and warrants the acquisition of some 30% of the apartment stock. It is understood, DoH insisted on maximising the yield outcome in order to optimise the volume of affordable housing stock it could secure whilst enabling the developer as joint venture partner sufficient scope to earn a reasonable profit. To this end, the trade off in market value of land was close to a discount of 40%. DoH has applied similar methods to secure affordable dwellings across several notable medium to high density projects including;

- \_Fort Knox, Fremantle – Match Projects
- \_Stella Apartments, Cockburn Central - Goodland Properties.

#### 7.3.3 Foundation Housing

Foundation Housing's is a 'not for profit' affordable housing provider whose core objective is founded on its aim to increase the supply of secure, affordable good quality rental housing and to undertake effective tenancy and property management that achieves sustainable housing outcomes. Foundation Housing is one of the largest affordable housing providers in Western Australia with over 1,300 households currently in management and development, and some 1,700 tenants across Perth and regional Western Australia.

- Foundation Housing provides a range of housing services with expertise in
- \_Property management
  - \_Public and private sector partnership
  - \_A commitment to providing sustainable and affordable housing
  - \_A sound financial base

Simplistically, the financial model enabling growth and further delivery of affordable accommodation is one that leverages off the capital base and net cash flow from operation of

34

its property portfolio. Foundation Housing makes a long term investment in its growing portfolio. This enables capital leverage to develop new accommodation independently or in a range of joint venture, alliance and partnership models with both private and public sector participants, that is further supplemented through;

Foundation Housing makes a long term investment in its growing portfolio. This enables capital leverage to develop new accommodation independently or in a range of joint venture, alliance and partnership models with both private and public sector participants, that is further supplemented by

- \_wider access to the National Rental Affordability Scheme
- \_strategic asset management
- \_innovative management services
- \_discounts and concessions on
  - \_the Goods and Services Tax
  - \_stamp duty
  - \_ water and council rates to name a few

Department of Housing additionally offer via Tender the transfer of social housing rental stock (to a range of affordable housing providers).

#### 7.3.4 Access Housing

Access Housing is similar in nature to Foundation Housing and was established in 2006, providing accommodation solutions across the spectrum of social housing to affordable home ownership founded on a property model of;

- \_Property and Tenancy Management Services (1,400 social and affordable rental properties), and
- \_Affordable Housing Property Development.

Similar to Foundation Housing, the capital base and rental stock was initially 'gifted' via the State to facilitate a capital and net cash flow base from which to leverage and grow the portfolio. This is additionally supplemented through property and tenancy management services whilst taking a more commercial approach in the property development arena to generate greater margins for reinvestment and growth of the portfolio. This latter approach is the principal difference to Foundation Housing and to this end Access Housing has developed a wider range of financial models for funding and development with institutional partners and developers. As an example, Access Housing has entered into Alliance Agreements with private companies in the building, development and finance industries in order to share expertise and de-risk the delivery of affordable housing options.

Access Housing additionally partners with the Department of Housing to provide affordable and sustainable housing solutions in the community and as for Foundation Housing, competes for State Government programs and capital grants for the supply of affordable housing.

## 8.0 Development Feasibility

### 8.1 Development Scenarios

To aid understanding of the likely viability of different forms of housing development in Cockburn Coast, development concepts were modelled on sites likely to be suitable locations for affordable housing. The selection criteria for the sites, which are identified in Figure 2, were:

- \_Represent a range of building typologies, but not terrace housing as this is considered to be premium product
- \_Represent a range of building heights
- \_Mixture of 100% residential and mixed use buildings
- \_Mixture of LandCorp and privately owned sites
- \_All precincts represented
- \_Sites close to, but not immediately adjacent to or facing high amenity locations such as, ocean views, and 'main street'
- \_Easy walking distance to the proposed bus rapid transit route

At this stage, the structure plan only identifies indicative street blocks. Individual lots will only be designed at subdivision stage, based on any criteria specified in the Local Structure Plan and/or design guidelines.

For this exercise, it was necessary to nominate conceptual lot boundaries within each street block. The lots created are of a size and dimension

that would be suitable for the building typology used in each case.

The four conceptual development scenarios were based on a typical product mix based on market activity, and established a number of apartments (yield) and parking provision for each development based on assumptions documented in Appendix A.

For each site a 'complying' development was derived (Base Case), and one each assuming a 30% plot ratio bonus and a 40% plot ratio bonus (Scenarios 1 and 2, respectively).

The Base Case developments are briefly described below, and the Base Case and Scenario 1 and Scenario 2 conceptually illustrated in Figure 3, Figure 4, Figure 5, and Figure 6.

#### Site Option 1A

- \_Site area 3,500 sqm
- \_R100 Activity Centre
- \_Plot Ratio 1.25:1
- \_3 - 5 levels
- \_Retail commercial 1,375sqm
- \_13 apartments per level
- \_Ownership:

#### Site Option 1B

- \_Site area 4,050 sqm
- \_R160
- \_Plot Ratio 2.5:1
- \_6 - 9 levels
- \_17 apartments per level

\_Ownership:

#### Site Option 2

- \_Site area 4,435 sqm
- \_R160
- \_Plot Ratio 1.25:1
- \_6 - 9 levels
- \_Retail commercial 1,800 sqm, 4 apartments
- \_18 apartments per level
- Ownership:

#### Site Option 3A

- \_Site area 4,330 sqm
- \_R100 Activity Centre
- \_Plot Ratio 1.25:1
- \_3 - 5 levels
- \_20 apartments per level
- \_Ownership:

#### Site Option 3B

- \_Site area 3,603 sqm
- \_R100 Mixed Use
- \_Plot Ratio 1.5:1
- \_3 - 5 levels
- \_Retail commercial 1,455 sqm
- \_13 apartments per upper level
- \_Ownership:

#### Site Option 4A

- \_Site area 2,760 sqm
- \_R100
- \_Plot Ratio 1.25:1
- \_3 - 5 levels
- \_12 apartments per level (10 for lifted)
- \_Ownership:



01\_



02\_

01\_ Medium Density Residential Housing  
02\_ Medium Density Residential Housing

## 8.0 Development Feasibility

36

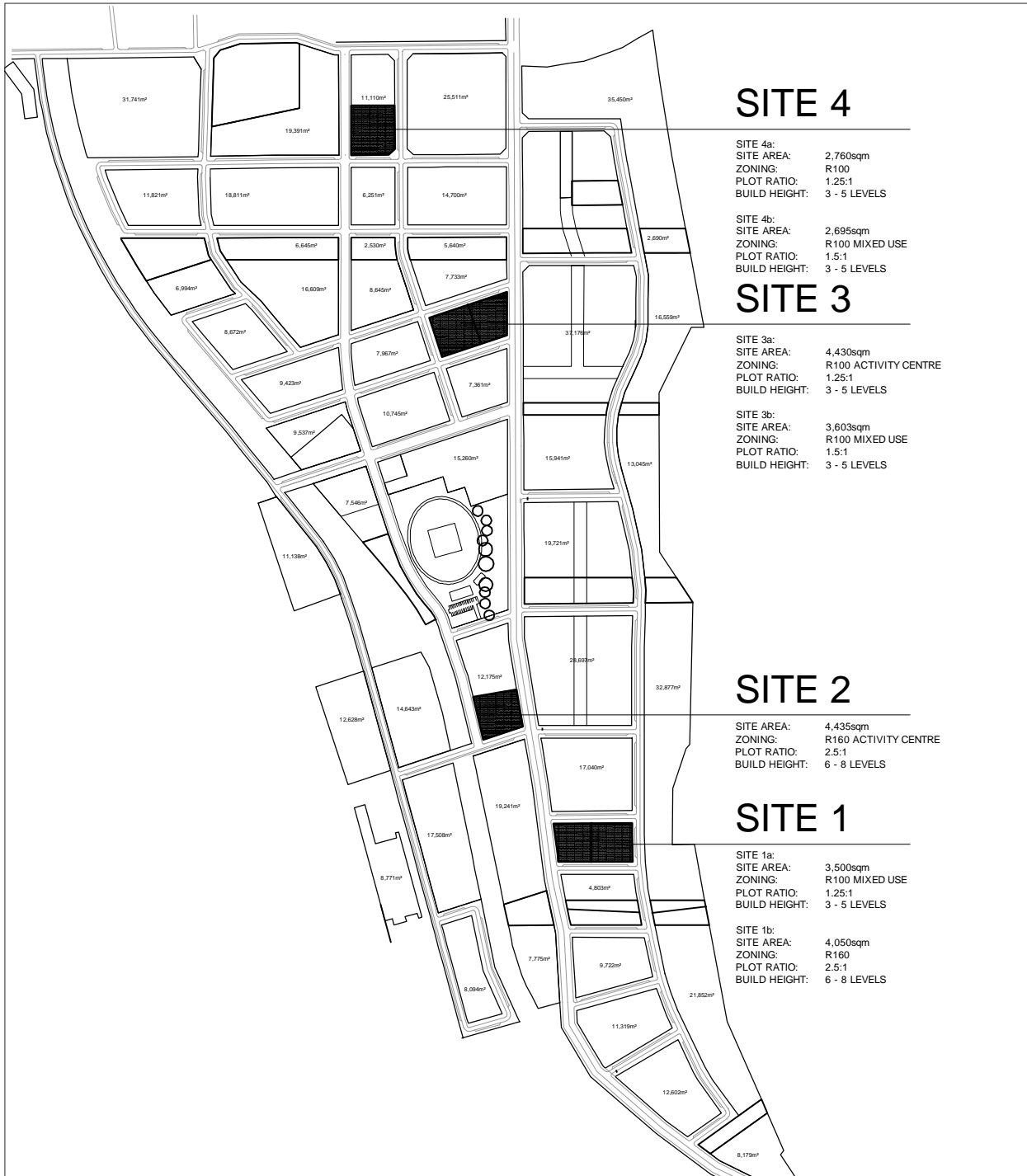
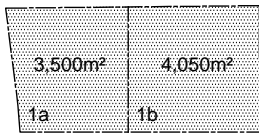


Figure 2\_Development Scenario Sites

### SITE 1

SITE 1a:  
 SITE AREA: 3,500sqm  
 ZONING: R100  
 PLOT RATIO: 1.25:1  
 BUILD HEIGHT: 3 - 5 LEVELS

SITE 1b:  
 SITE AREA: 4,050sqm  
 ZONING: R160  
 PLOT RATIO: 2.5:1  
 BUILD HEIGHT: 6 - 9 LEVELS



COMBINED AREA:  
 7,550m²

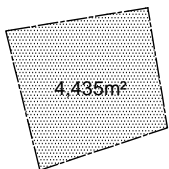
#### COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

Site 1a	3,500sqm	Site 1b	4,050sqm
R100 PR=1.25:1 4,375sqm		R160 2.5:1 10,125sqm	
Complying Development: 32 Apart@95sqm + 1,375sqm Retail/Comm		Complying Development: 107 Apart@95sqm	
+ 30 % = 5,687sqm 45 apart + 1,375sqm Retail/Comm		+ 30 % = 13,162sqm 138 apart	
+ 40 % = 6,125sqm 50 apart + 1,375sqm Retail/Comm		+ 40 % = 14,175sqm 149 apart	
13 apart/level		17 apart/level	
4 levels = 52 apart 5 levels = 65 apart 3 levels = 39 apart		6 levels = 102 apart 7 levels = 119 apart 8 levels = 136 apart	

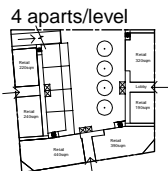
Figure 3\_Site Options 1A and 1B

### SITE 2

SITE AREA: 4,435sqm  
 ZONING: R160 ACTIVITY CENTRE  
 PLOT RATIO: 2.5:1  
 BUILD HEIGHT: 6 - 9 LEVELS



SITE AREA:  
 4,435m²



2 Lifted Option

#### COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

Site 2	4,435sqm	
R160 PR=2.5:1 11,087sqm		
Complying Development: 98 Apart@95sqm + 1,800sqm Retail/Comm		
+ 30 % = 14,413sqm 133 apart@95sqm + 1,800sqm Retail/Comm		
+ 40 % = 15,522sqm 144 apart@95sqm + 1,800sqm Retail/Comm		
18 apart/level		10 apart/level
8 levels = 98 apart 8 full levels = 130 apart 9 full levels = 148 apart		Complying 8 Level Option Upper Level Plan

Figure 4\_Site Option 2

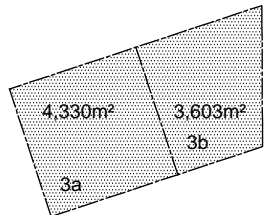
### 8.0 Development Feasibility

38

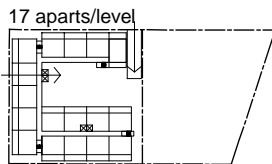
#### SITE 3

SITE 3a:  
 SITE AREA: 4,430sqm  
 ZONING: R100 ACTIVITY CENTRE  
 PLOT RATIO: 1.25:1  
 BUILD HEIGHT: 3 - 5 LEVELS

SITE 3b:  
 SITE AREA: 3,603sqm  
 ZONING: R100 MIXED USE  
 PLOT RATIO: 1.5:1  
 BUILD HEIGHT: 3 - 5 LEVELS



Combined Site Area:  
 7,933m²



3a Lifted Option

#### COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

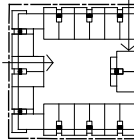
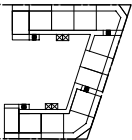
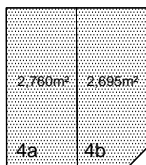
Site 3a	4,330sqm	Site 3b	3,603sqm
R100 PR=1.25:1 5,412sqm		R100 1.5:1 5,405sqm	
Complying Development: 57 Apartments@95sqm (3 levels walkup)		Complying Development: 42 Apartments@95sqm + 1,455sqm Retail/Comm	
+ 30 % = 7,036sqm 74 apartments (4.5 levels lifted)		+ 30 % = 7,026sqm 59 apartments@95sqm + 1,455sqm Retail/Comm	
+ 40 % = 7,577sqm 80 apartments@95sqm (5 levels lifted)		+ 40 % = 7,567sqm 64 apartments@95sqm + 1,455sqm Retail/Comm	
20 apartments/level		13 apartments/level	
			
3 levels = 57 apartments (walkup) 4.5 levels = 74 apartments (lifted) 5 levels = 80 apartments (lifted)		4.5 levels = 42 apartments 5.5 levels = 59 apartments 6 levels = 64 apartments	

Figure 5\_Site Options 3A and 3B

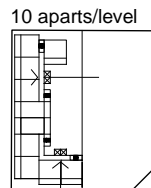
#### SITE 4

SITE 4a:  
 SITE AREA: 2,760sqm  
 ZONING: R100  
 PLOT RATIO: 1.25:1  
 BUILD HEIGHT: 3 - 5 LEVELS

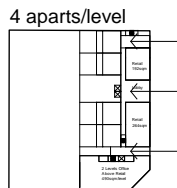
SITE 4b:  
 SITE AREA: 2,695sqm  
 ZONING: R100 MIXED USE  
 PLOT RATIO: 1.5:1  
 BUILD HEIGHT: 3 - 5 LEVELS



COMBINED AREA:  
 5,455m²



4a Lifted Option



4b Ground Floor

#### COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

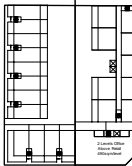
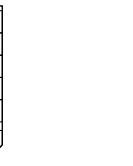
Site 4a	2,760sqm	Site 4b	2,695sqm
R100 PR=1.25:1 3,450sqm		R100 1.5:1 4,042sqm	
Complying Development: 36 Apartments@95sqm (3 - 4 levels walkup/lifted)		Complying Development: 22 Apartments@95sqm + 1926sqm Retail/Comm	
+ 30 % = 4,485sqm 47 apartments (5 levels lifted)		+ 30 % = 13,162sqm 35 apartments (4.5 levels) + 1926sqm Retail/Comm	
+ 40 % = 4,830sqm 51 apartments (5.5 levels lifted)		+ 40 % = 14,175sqm 39 apartments (5 levels) + 1926sqm Retail/Comm	
12 apartments/level (10 apartments/level lifted development)		9 apartments/level	
			
3 levels = 36 apartments		3 levels = 22 apartments 4 levels = 31 apartments 5 levels = 40 apartments	

Figure 6\_Site Options 4A and 4B

## 8.0 Development Feasibility

### Site Option 4B

- \_Site area 2,695sqm
- \_R100 Mixed Use
- \_Plot Ratio 1.5:1
- \_3 - 5 levels
- \_Retail commercial 1,926 sqm
- \_9 apartments per level
- \_Ownership:

In effect the four conceptual developments resulted in seven individual sites. It should be noted that the configuration of the lots affects the ability to design an efficient building. For example, Site 4, which CCDSP Pt 2 shows as being partly Mixed Use and partly Residential resulted in two long, narrow development sites corresponding with each land use type, which are difficult to efficiently develop.

### 8.2 Scenario Feasibility Assessment

The development scenarios described in 8.1 were then used to test development feasibility.

The intent of the feasibility assessment was to establish whether there is an incentive structure related to density and height bonuses that will enable private sector delivery of affordable dwellings as defined by the thesis of JSA 2011.

The two principal factors that measure feasibility for the private sector will be the level of profitability and residual value to land.

'Base Case' development feasibilities were established for each 'complying' site concept option outlined in 8.1, and the residual value of land and developer profit margin measured.

The viability of increasing plot ratio/ height (bonus) and delivering a quantum of affordable dwellings could then be measured by change in residual value of land or change in profitability. In view of the attitudes expressed in the developer survey (refer to 5.2), the developer margin or profitability ratio was 'fixed' as this would be a very sensitive factor at market, impacting the desire of developers to participate.

Ultimately, nine sets of feasibility calculations were prepared for each development site.

For each plot ratio scenario, a residual value analysis was done based on 20% provision of affordable housing, and 10% provision. For each of these, two Sub Sets with differing sales prices for the affordable product were analysed.

Sub Set A assumed that the sale price of affordable stock is set at the 'actual delivery cost'. Sub Set 1B assumed the sale price is set at the price range established by JSA 2011.

In each case, the balance increase in dwelling yield is provided to the developer as an offset and incentive, for sale.

#### Interpreting the Results

The results of the analysis are shown in Table 5.

If the percentage change from the Base Case is negative, it implies that the addition of plot ratio/height and requiring delivery of affordable dwellings is not feasible.

A 'no change' (0%) outcome in the residual land value means the 'bonus' yield has traded off the delivery of 'affordable' stock and not disadvantaged the developer profit margin or the notional market value of land.

An increase in the residual land value outcome demonstrates the 'bonus' yield has provided a benefit to the developer in the delivery of 'affordable' stock, in that the increase in land value will in reality translate to improved profit, however over time economic principles of demand and supply will see this benefit transfer to improved site values.

## 8.0 Development Feasibility

40

**Table 6:** Residual Value Output Analysis

Site	Base Case	Scenario 1 Subset 1A	Scenario 2 Subset 1A	Scenario 1 Subset 1B	Scenario 2 Subset 1B	Scenario 1 Subset 2A	Scenario 2 Subset 2A	Scenario 1 Subset 2B	Scenario 2 Subset 2B
Affordable dwelling yield = Base Case + 20%					Affordable dwelling yield = Base Case + 10%				
Balance of Yield Increase to Developer for sale									
	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer	Sale Price of Affordable dw = cost to developer
	Residual value to land	Change from BC value to land	Residual value to land	Change from BC value to land	Residual value to land	Change from BC value to land	Residual value to land	Change from BC value to land	Residual value to land
<b>1A</b>	\$1,074	\$246 (77%)	\$200 (81%)	\$46 (96%)	\$0 (100%)	\$280 (74%)	\$234 (78%)	\$183 (83%)	\$137 (87%)
<b>1B</b>	\$1,094	\$857 (21.7%)	\$877 (19.9%)	\$220 (79.9%)	\$240 (78.1%)	\$965 (11.7%)	\$985 (9.9%)	\$642 (41%)	\$662 (40%)
<b>2</b>	\$1,026	\$1,057 3%	\$1,103 7%	\$462 (55%)	\$510 (50%)	\$1,026 0%	\$1,204 17%	\$722 (30%)	\$909 (11%)
<b>3A</b>	\$1,169	\$217 (81%)	\$217 (81%)	NA	Not Feasible	NA	Not Feasible	\$275 (76%)	\$275 (76%)
<b>3B</b>	\$1,010	\$1,243 23%	\$1,299 29%	\$944 (7%)	\$1,002 (1%)	\$1,288 27%	\$1,346 33%	\$1,124 11%	\$1,182 17%
<b>4A</b>	\$1,130	\$109 (90%)	\$109 (90%)	NA	Not Feasible	NA	Not Feasible	\$167 (85%)	\$156 (86%)
<b>4B</b>	\$1,577	\$942 (40%)	\$1,058 (33%)	\$764 (52%)	\$876 (44%)	\$1,032 (35%)	\$1,076 (32%)	\$942 (40%)	\$987 (37%)

Source: Colliers 2012

### Conclusions on Feasibility

Site 3B proved to be the most workable configuration. The feasibility analysis concluded that one form of proposed development can reasonably be expected to yield affordable housing by the private sector through application of the incentive of a 40% plot ratio bonus: 3 - 5 storey development in the R80 coded areas shown on Figure 1.

If all private land were to be developed to take advantage of a 40% plot ratio bonus and related height concessions where required, 5% affordable housing would result.

In higher density, higher-rise locations, the 40% plot ratio bonus for the provision of affordable product would not be feasible in the current development climate.

## **9.0 Recommended Strategies**

### **9.1 Overview**

Recommended strategies to promote the provision of affordable housing in the Cockburn Coast project area are summarised by sector below, and in Table 5.

Statutory planning provisions are primarily the responsibility of the City of Cockburn to introduce and enforce, and will influence the potential yields and financial viability of development provided by all sectors. Through the Department of Planning, the State Government can also influence planning policy throughout Western Australia.

Non-statutory strategies to encourage affordable housing provision are possible from all sectors.

The strategies recommended below should be utilised to achieve a diversity of affordable housing product (i.e mix of single, double, three bedroom dwellings). Both private and state government developers alike should ensure that the strategies adopted by their development should ensure this diversity is achieved.

### **9.2 State Government**

#### **9.2.1 Provision of Affordable Housing on State Land**

All State Government land and housing development agencies are required to contribute a minimum of 15% of project yields to affordable price points. In order to ensure the provision of the 15% requirement, all state agencies will develop their own strategy for the delivery of affordable housing within the Cockburn Coast.

Within the Cockburn Coast project area, approximately 34.5 hectares of development land is owned by State Government agencies. Based on the land use and density proposals in CCDSP Pt 2, this would equate to approximately 504 affordable dwellings.

State Government agencies should approach the delivery of affordable housing at a rate of 15% by drawing upon all options available. This would include plot ratio bonuses, Public Private Partnerships and other strategies outlined in this strategy. In reference to State owned land, it is likely that some of this land will ultimately be offered for sale to the private sector. There is an opportunity here to make it a condition of sale that a minimum of 15% of the resultant development dwelling yield must be 'affordable' product. It must be noted that such a requirement will affect the value of the land, which will be a factor in the relevant business case.

In addition, all residential development would be eligible for a plot ratio bonus for the provision of affordable product, meaning that further affordable product on top of the required 15% could potentially be achieved on State Government land.

#### **9.2.2 Social Housing**

The Department of Housing has a mandate to provide social housing. It is envisaged that up 5% of housing stock will be provided as Social Rental Housing. This would equate to around 260 dwellings based on an estimated 5,200 dwellings overall.

## **9.0 Recommended Strategies**

42

### **9.2.3 Public Private Partnerships**

The various options for public private partnerships should be pursued to achieve affordable housing outcomes in Cockburn Coast, including:

- \_ Discounted land
- \_ Purchase of dwellings
- \_ Equity contribution
- \_ Underwriting sales

### **9.2.4 Perpetuity**

All development providing affordable housing should aim to provide a minimum of 50% of affordable product in perpetuity.

## **9.3 Private Sector**

The feasibility analysis demonstrates that if a plot ratio bonus of 40% is offered for the provision of 20% above the base development dwelling yield as affordable housing, there is every possibility that private sector developers of land within the R80/3 - 5 storey land use areas depicted in Figure 1 will deliver affordable housing product, even under current conditions.

A bonus should be offered across all parts of the project area, as in the future conditions may well change such that the availability of this incentive will also be viable in higher density/higher rise configurations.

It is recommended that a sliding scale of plot ratio bonus be made available for the provision of affordable housing, as follows:

- \_ 10% Affordable yield: 30% plot ratio bonus
- \_ 20% Affordable yield: 40% plot ratio bonus
- \_ 25% Affordable yield: 50% plot ratio bonus

Other forms of incentive can and should be available to the private sector for the provision of affordable product, however on their own, these are unlikely to have much impact on yields but may influence developer decisions and feasibilities.

It is likely that to ensure the success of this strategy a committee will be formulated to guide and assist private land developers in the delivery of affordable housing to be covered on an 'as-needs' basis. This should assist in the fostering of relationships between private land owners and the key stakeholders in the provision of affordable housing.

All development providing affordable housing should aim to provide a minimum of 50% of affordable product in perpetuity.

## 9.0 Recommended Strategies

**Table 7:** Affordable Housing Mechanisms for Cockburn Coast

<b>Mechanism</b>	<b>Responsibility</b>
Plot ratio bonus	City of Cockburn
Development standards concessions	City of Cockburn
Development conditions	City of Cockburn, WAPC as appropriate
Fast tracked approvals	City of Cockburn, WAPC as appropriate

### 9.4 Statutory Planning Provisions

#### 9.4.1 Overview

The District Structure Plans (Parts 1 and 2) have no statutory weight in their own right, as they have not been adopted under City of Cockburn Town Planning Scheme No. 3. Accordingly, a local structure plan must be prepared for each local structure plan area defined in the District Structure Plan Part 2, for adoption under the scheme.

It is important to reiterate the statement in the 2009 District Structure Plan that, "Precise lot and dwelling yields will only be known as detailed subdivision design progresses. The design phase of works will occur as part of the implementation of the structure plan, thus ensuring that each stage is carefully planned for site responsiveness." In other words, preliminary estimates of yield are just that - estimates, not guarantees.

It would not be reasonable to expect final yields to match early estimates exactly. What would be reasonable is for detailed design to be undertaken with the aim of getting as close to the original estimates as possible.

The Local Structure Plans will be the primary source of development guidance for subdivision and development, along with associated design guidelines and detailed area plans, where applicable.

This section identifies elements for inclusion in the structure plans and supporting statutory instruments that will be relevant to ensuring that the aspirations for provision of affordable housing are carried through to implementation. The scope of content for these documents can only encompass matters that can be directly implemented through the planning system. Other mechanisms for encouraging affordable housing provision (eg: tax incentives) will be at least as important as planning mechanisms, but are necessarily beyond the capacity of the planning system to enforce.

#### 9.4.2 Local Structure Plans

The City of Cockburn requires the Local Structure Plans for Cockburn Coast to include discussion of how affordable housing provision targets from the District Structure Plans will be achieved. In particular, they are required to identify specific measures to achieve the targets, to the satisfaction of the City of Cockburn and the WAPC.

#### Residential Density

TPS 3 requires achievement of at least 85% of dwelling yield possible under the R-Codes allocated within each Local Structure Plan. The challenge with

## 9.0 Recommended Strategies

44

this measure is the in areas coded higher than R30, site area can not be used as a simple measure of a site's potential yield. Instead, plot ratio dictates the amount of development in terms of floor area. However initial yield estimates for Cockburn Coast were based on site area and R-Codes, the method that was current at the time.

Feasibility analysis undertaken for this strategy indicates that in current circumstances, the areas identified as R80 with a height between 3 and 5 storeys is likely to be the most attractive to developers wishing to take advantage of a bonus plot ratio in return for providing affordable housing. However the bonus opportunity should be available throughout the project area, as market conditions will change and with them, the feasibility of different development types.

Final allocation of R-Codes within the Local Structure Plans must be carefully considered in relation to the potential for subdivision to accommodate the desired building types. Subsequently, subdivision of land must ensure that the lots created are capable of accommodating at least 85% of the dwelling yield in the buildings that can be constructed upon them.

Table 7 summarises the recommended ways in which the Local Structure Plans should respond to affordable housing targets.

**Table 8:** Recommended Content for Local Structure Plans

Element	Pre-Requirement	Comment
Specify that site yield is calculated based on site area, for the purposes of assessing minimum 85% yield	NA	This is necessary to avoid confusion between the provisions of the Planning Scheme and the way in which the R-Codes apply to land coded above R30.
Plot Ratio bonus for the provision of affordable housing, as follows: Affordable yield 10% = 30% bonus Affordable yield 20% = 40% bonus Affordable yield 25% = 50% bonus		Feasibility analysis for this strategy has indicated that a plot ratio bonus could provide an incentive for provision of affordable housing, particularly in 'low rise' R80 areas.
Guidance for future subdivision on optimal lot dimensions to accommodate the different building typologies intended for the each precinct.	Clear understanding of the optimal lot dimensions for different building typologies.	Inadequate lot dimensions can limit the design and hence yield options. Not directly related to provision of affordable housing but relevant to maximising overall dwelling yield.
Target affordable housing yield for each precinct,	Identification of the likely nature of affordable housing demand in Cockburn Coast (eg: singles, families, aged, etc).	Simply aiming to provide 20% of each housing typology may not meet the true affordable needs profile of Cockburn Coast.
Preferred locations and indicative site areas for affordable housing product according to intended development typology.	Locational criteria for affordable housing applied to each precinct but should be flexible in its implementation.	Necessary if there specific sites are going to be required to provide affordable housing as a condition of sale.
Define what is meant by the different target dwelling types (ie: ie: detached single dwellings, terrace or row houses, low-rise apartments, medium to high-rise apartments, adaptable buildings, family homes, affordable housing, social housing).	Agreement with stakeholders on what these should be.	The definition should be consistent between precincts. Not necessarily affordable but needs to be understood for all housing or achievement of targets can not be measured.

## 9.0 Recommended Strategies

### 9.4.3 Design Guidelines

45

The City of Cockburn requires the preparation of design guidelines for each local structure plan area, to address amongst other things affordable housing and housing diversity. Affordable housing is a sub-set of all housing and hence housing diversity general will reflect in affordable housing provision.

**Table 9:** Recommended Content for Design Guidelines

Element	Pre-Requisite	Comment
Minimum and maximum dwelling size for 'affordable' product according to dwelling type (eg: studio apartment, 1 and 2 bedroom apartments, 3 or more bedroom apartments)	Agreement with stakeholders on what these should be.	Should be consistent between precincts. May be decided that there should be no size difference.
Required design elements for each housing type (eg: required storage area size and location for family housing compared with other dwelling types)	Agreement as to whether and what these design elements would be.	Needs to be based on reasonable expectation of user needs.
Design elements to distinguish between the different dwelling types (family housing, adaptable housing, etc)	Agreement as to whether and what these design elements would be.	Not specific to affordable housing so not defined in this strategy but will affect all housing.
Any specific variation to development or design standards applicable to affordable housing product - eg: car parking provision, balcony size	Determine whether variations are necessary or desirable as incentives	These are likely to be both precinct specific where appropriate and applied across all precincts where appropriate.
Required dwelling mix within each development. eg: proportion of adaptable dwellings, family dwellings, 1 and 2 bedrooms, etc.	Agreement with stakeholders on what these should be.	Not necessarily specific to affordable housing. Current R-Codes requirements may be adequate to cover some types.

## **9.0 Recommended Strategies**

46

### **9.4.4 Detailed Area Plans**

Sites requiring detailed area plans will be identified in the Local Structure Plans. The City of Cockburn requires detailed area plans for activity centres, which means that both the Robb Jetty Precinct and the Power Station Precinct Local Structure Plans will include reference to detailed area plans.

With regard to affordable housing, detailed area plans should identify:

- \_Any sites that will be required to accommodate affordable housing product
- \_The target and minimum affordable housing yield for each development site required to accommodate affordable housing product
- \_The target and minimum dwelling type mix for each development site

### **9.4.5 Development Control and Conditions of Approval**

To the extent necessary, conditions will be put on development and subdivision approvals by the relevant planning authority (City of Cockburn, Western Australian Planning Commission, Development Assessment Panel) to ensure that affordable housing is actually delivered and managed as expected. This will be particularly important where bonuses or incentives have been taken. Conditions may cover such things as:

- \_Evidence that the affordable product will be managed as such by a recognised affordable housing provider
- \_Minimum period of time for which product will remain 'affordable'
- \_Requirement for restrictive covenants to prevent sale or occupation of dwelling approved as affordable to non-eligible buyers or occupants to ensure 'affordability in perpetuity' (however note that monitoring of restrictive covenant compliance would have administrative implications)



# Cockburn Coast District Structure Plan Property Consultancy Services, Affordable Housing Strategy Property Research and Market Testing

January 2012 – May 2012

PREPARED BY:  
Colliers International Valuation & Advisory Services

480 offices in 61 countries worldwide  
This business is independently owned and operated by Colliers  
International (WA) Pty Ltd  
ABN 26 791 928 513 & ACN 008 919 524  
Licensee: Colliers International (WA) Pty Ltd

Ref: V513065

## Report Details

<b>Instructing Party</b>	<b>Reliant Party</b>	Hassell and LandCorp
Ms Denise Morgan Senior Associate Podium Level, Central Park 152 – 158 St Georges Terrace Perth WA 6000	<b>Purpose of Report</b>	Assist in the Preparation of an Affordability Strategy for Cockburn Coast
	<b>Date of Initial Backgrounding and Research</b>	January 2012 - May 2012

## Preamble

The Cockburn Coast District Structure Plan (DSP) has been prepared to guide future land use and transport initiatives within the area stretching between South Beach in South Fremantle and the Port Coogee marina.

The plan has been developed over several years in conjunction with local government and state government agencies, with a focus on community and landowner consultation.

The form of development contemplated for the corridor is predominantly medium/high density mixed use apartments (multiple dwellings), and less than 10% single attached/detached dwellings.

The Cockburn Coast District Structure Plan (DSP), which was endorsed by the WA Planning Commission in 2009, envisages a population of 10,800 residents throughout Cockburn Coast with an employment base of approximately 3,600 jobs.

Key considerations in the development of the plan included:

1. State Government policy, particularly support for infill development as the metropolitan population increases;
2. Appropriate interface with the surrounding areas of South Beach and Port Coogee;
3. Regional public transport and road network connections, with significant consideration given to connections with Fremantle;
4. Regional infrastructure requirements;
5. Likely demographic projections and requirements;
6. Improving access to the beach and Beeliar Regional Park;
7. Existing industrial operations and transitioning arrangements for these uses over time; and
8. Providing an appropriate framework to encourage the regeneration of the South Fremantle Power Station.

LandCorp require an Affordable Housing Strategy to deliver on the DSP targets set for the Cockburn Coast. Hassell, with sub-consultants Colliers, have provided a scope of works, process and fee to develop a strategy that will assist to facilitate the provision of affordable housing through the Local Structure Plan (LSP) process (and enforced further through Design Guidelines). LandCorp as a major landowner in the project area has an imperative and the mandate to provide affordable housing. Yet to be determined are the housing typologies, tenure arrangements, location and mechanisms to deliver affordable product to market. With regard to the private land holdings there are currently no tested statutory powers at State or Local level to enforce the provision of affordable housing.

The challenge is to devise an incentive based strategy to encourage private developers to meet the targets set in the DSP.

## Property Scope

---

1. Synthesise the ideas and measures tabled within;
  - a. Judith Stubbs and Associates, December 2010, Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia; Report 2 Planning Mechanisms and Strategies (Final Draft not for circulation).
  - b. Judith Stubbs and Associates, April 2011, Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia, Report 1 Profile of Selected Redevelopment Areas.
2. Prepare commentary on the principles concluded by Stubbs as they apply to medium/high density property development in the current market.
3. Research secondary data for examples of private sector delivery of affordable housing in medium/high density built form.
4. Prepare a questionnaire for primary data research. Present the questionnaire by direct interview to a sample of eight to twelve Western Australian and national built form developers active in the medium/high density residential market. The aim of the questionnaire is to gauge/confirm developer principles in feasibility analysis plus attitudes on affordability and delivery thereof, plus extract alternate ideas/options in delivery.
5. Collate/synthesise the findings/observations of items 1 to 4 above and conclude a series of incentive structures and localised strategies that provide practical and realistic prospects for delivery.
6. Test the feasibility of the concluded incentive structures on notional development sites in the Cockburn Coast Area.
7. Where incentive structures prove workable, refer the strategies to the developer group for comment feedback/critique and improvement.
8. Provide summation of above to Hassell for incorporation into an Affordable Housing Strategy for Cockburn Coast.

## Observations

---

### Literature Review

Stubbs 2010<sup>1</sup> and Stubbs 2011<sup>2</sup> establishes a need for affordable housing and sets a dwelling and rental pricing framework that meets the needs of very low, low and moderate household incomes.

Stubbs 2010 establishes three core approaches to enabling (mandating) the delivery of affordable dwellings;

1. Statutory and Policy approach via legislation or Town Planning Schemes - Developer Scheme contributions;
2. Private sector partnering with not for profit and local and state governments; and
3. A mixture of 1 and 2 above through incentivisation of planning schemes enabling density bonuses supplemented by compensation or other support schemes with local and state governments and not for profit organisations.

The Stubbs 2010 core approaches are confirmed by research of Austin 2008<sup>3</sup> and Gurran et al 2008<sup>4</sup> who also illustrate by case study the prevalence of government intervention in the delivery of affordable dwellings nationally and internationally. No examples of 'pure' private sector delivery of affordable dwellings is cited and for the most part, case studies illustrate government incentives in density bonuses supplemented by various mechanisms including provision of funding grants, taxation offsets, discounted land value and other assistance measures. This activity in supply of affordable dwellings is in most cases supplemented by not-for-profit organisations providing various forms of community and housing aid.

Local market activity in the supply of affordable dwellings in a medium to high density residential format is essentially limited to Department of Housing and organisations such as Foundation Housing. Department of Housing for the most part, engage in the market by acquiring a proportion of the product at full market value and then allocating this to social housing, affordable rental and shared equity schemes that target essential workers and first home buyers. Foundation Housing is a not-for-profit that utilises 'gifted' land and/or government grants to fund and deliver affordable dwellings, of which the greater volume remains group or detached housing.

---

<sup>1</sup> Judith Stubbs and Associates, December 2010, Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia; Report 2 Planning Mechanisms and Strategies (Final Draft not for circulation).

<sup>2</sup> Judith Stubbs and Associates, April 2011, Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia, Report 1 Profile of Selected Redevelopment Areas

<sup>3</sup> Austin Patricia M., April 2008, Public Private Partnerships For Funding Affordable Housing Developments In New Zealand, Waitakere City Council

<sup>4</sup> Gurran Nicole, Milligan Vivienne, Baker Douglas, Bugg Laura Beth, and Christensen Sharon, June 2008, New Directions in planning for affordable housing: Australian And international evidence and Implications, Australian Housing And Urban Research Institute. Sydney Research Centre.

## Observations Cont'd

---

### Developer Perspective

Broadly the developer interviews established;

- Support for the housing typology and densities of the Cockburn Coast Master Plan,
- Indicated the proportion of 'low' density dwellings (terraces/town houses and cottage lot residential) as too low,
- Considered critical the need for early infrastructure delivery to engage the market in the location and product typology, and cited as important;
  - Transport,
  - Retail and convenience amenity,
  - Community/civic services,
  - Schools,
  - Recreational amenity, and
  - Employment.
- Acknowledged the need for the delivery of affordable dwellings but several questioned the appropriateness of product typology and location.
- All accepted but questioned the delivery of affordable dwellings at the price points of Stubbs 2010 in view of current price points for land, product typology, demand, current apartment price points and cost of construction.
- All confirmed a view the supply of affordable dwellings should be a role of governments but accepted the need for private sector engagement.
- Delivery and/or funding of affordable dwellings through developer scheme contributions were oft described as 'another tax' and clear resistance to this approach emerged. All acknowledged an acceptance of simplified developer scheme contributions linked to gross realisation and on completion market values (or similar) with deferred payment citing the need for clarity and minimising the impost on development feasibility and price setting for land.
- All indicated the inclusion of affordable dwellings either via developer scheme contributions or mandating of delivery will affect the attitudes of developers to the precinct when making development site selection decisions, and confirmed a general view it will have a negative impact on the residual value of land.
- All developers indicated a positive interest in partnering and joint venture opportunities with local and state government, and not-for-profit organisations in developing and delivering affordable dwellings.
- The developers acknowledged and accepted incentive schemes providing height and density bonuses but in view of the already high (relative to broader market) densities established in the Cockburn Coast Master Plan, questioned the inference (Stubbs 2010) that sufficient additional profit could be realised to offset the cost of affordable dwelling supply.
- A key concern raised by developers is the risk of stigma arising at market with the knowledge that affordable dwellings will be offered in a proposed development or precinct at such high proportions (20%); particularly if it was known (and it would require disclosure) that Department of Housing had acquired the stock. A clear risk mitigation strategy would be required by way of public education and branding (the difference between social housing and affordable housing) together with site selection and application. This is premised on the DSP aspirational target of 20% affordable dwellings.
- In closing, the issue of governance was raised. Who will coordinate, administer and manage the affordable dwellings such that they are retained as 'affordable dwellings' in perpetuity?

## Observations Cont'd

### Incentive Based Delivery and Feasibility

The aim of this paper is to test whether incentive based schemes for the delivery of affordable dwellings is feasible in the context of the Cockburn Coast Master Plan. To this end Hassell and Colliers selected four sites of which several could be split into two components; the net effect is seven test sites that illustrate the range of heights and density across the Cockburn Coast Master Plan, and also meet fundamental needs of transportation access and walkable amenity.

Development yields were established under notional concepts conforming to the broad statutory provisions of the Cockburn Coast District Structure Plan and Cockburn Coast Master Plan; the Base Case. Two additional yield scenarios were prepared for each site premised on an increase in plot ratio (and height as required) of 30% (Scenario 1) and 40% (Scenario 2).

The yield increase in Scenario 1 and Scenario 2 was allocated to reflect affordable dwellings at 10% of Base Case Yield and 20% of Base Case Yield with the balance provided to the developer for sale to offset the financial impact of providing the affordable dwellings.

On the premise developers would not compromise profitability, residual value feasibilities were developed to establish whether the increase in yield could sufficiently offset the financial impact of providing the affordable dwellings at two designated ('affordable') price points. The price points elected are the actual cost of the affordable dwellings to the project and then at the price point range cited in Stubbs 2010.

The feasibility testing indicated that across the various sites and whilst cognisant of character of location, scale and contemplated built form, that in certain circumstances affordable dwellings at 'cost' to the developer and/or at the Stubbs 2010 benchmarks may be feasibly delivered by the private sector whilst maintaining profitability to developers and residual land values.

The results clearly indicate the outcome is particular to a specific scale of site and built form and suggests it is not achievable on all sites through out the DSP.

The most workable configuration is that of Site 3B;

Site 3B	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	3,603	3,603	3,603
Plot Ratio	1.50	1.95	2.10
Plot Ratio - NLA m <sup>2</sup>	5,405	7,026	7,566
Increase in Plot Ratio		30%	40%
Height (levels)	3.0	4.5	5.0

Figure 1

The Cockburn Coast Master Plan Figure 31 Land Use Plan identifies Site 3B as being contained within the 'Low Density Residential' zone which is broadly described as having a Residential Density Code of R80 and general heights ranging from three to five storeys.

The below extract from the Cockburn Coast Master Plan identifies this land use component as delivering 31.6% of the dwellings or 1,641 dwellings.

Building Typology	Indicative Density	Dwelling Yield	% Component
High Rise	R160	1,300	25.0%
Medium Rise	R120	602	11.6%
Low Rise	R80	1,641	31.6%
Terrace	R40	57	1.1%
Mixed Use	R100	585	11.3%
Activity Centre	R160	1,008	19.4%
<b>TOTAL</b>	-	<b>5,193</b>	<b>100%</b>

Table 3.1 Dwelling Yield by Building Typology

Figure 2

Conditioned on the assumption affordable dwellings are delivered by the private sector at the maximum plot ratio/height incentive available (Scenario 2) in this land use zone only; the dwelling yield will increase approximately 50% from 1,641 dwellings to 2,508 dwellings, of which some 341 dwellings are 'affordable dwellings'. This will result in a total yield adjustment from 5,193 to 6,060 and enable an affordable dwelling ratio of 5.6% of the entire Cockburn Coast Master Plan.

## Conclusion

---

The research into delivery of affordable dwellings did not identify a generally applicable model or mechanism that was wholly reliant on private sector delivery.

In the main, case studies clearly establish intervention by governments and not-for-profit organisations through statutory planning and policy in addition to the density incentivisation whilst supplemented with the provision of grants, financial incentives, low cost land or tax abatement whether it be local, state or federal.

In Western Australia, the delivery of affordable dwellings in medium high density formats has been limited to date by the activities of the Department of Housing. The model is premised on the state funding delivery of affordable dwellings through the acquisition of stock at market price and the enabling of stock (also at market price) through partnerships and joint ventures.

There are no known examples of incentivised private sector delivery of affordable dwellings that do not involve some form of government and not-for-profit intervention or support.

The modelling of incentive based schemes enabling plot ratio (and height as required) bonuses to private sector developers to offset the cost of delivery at 'affordable' price points identified a general market failure across the product lines tested with the exception of a regular shaped 'low density' allotment of three to five level; Concept 3B.

The Cockburn Coast Master Plan presently sets aside some 31.6% of the precinct under this land use zone.

The application of 40% plot ratio incentives in this land use zone may enable the delivery of approximately 341 affordable dwellings amounting to 5.6% of total contemplated residential stock.

This is well short of the District Structure Plan aspirational target of 20%.

It is understood, 5% of total stock is to be social housing and will be delivered by the State through Department of Housing.

Additionally, it is understood State policy mandates that development of government held land in brownfield or similar projects now deliver 15% of product as affordable housing. The State through various agencies controls some 40 hectares of land within the Cockburn Coast Master Plan area. Premised on an average yield of R80 and land use efficiency of 65%, a further 312 affordable dwellings maybe delivered equating to 5.1% of total stock. This is premised on there being no overlap between the government land holdings and the abovementioned 'low density' zone. This is a critical assumption and one requiring further analysis and confirmation across the master plan area.

In total, this suggests a delivery of some 15% of total dwelling stock as affordable dwellings is possible inclusive of social housing.

This number maybe further supplemented via partnerships and joint ventures that engage state government and not-for-profits through mechanisms such as application of land at discounted or nil value, the provision of grants or other funding support as well as abatement of local and state taxes for the delivery of higher proportions of affordable to market based product.

## Limitations

This report is provided by Colliers International (WA) Pty Ltd and not by any other company in the Colliers International Group. The report has been prepared for Decision Analysis purposes and should not be relied upon for any other purpose or by any person other than Hassell and LandCorp. Colliers International (WA) Pty Ltd accepts no responsibility for any statements in this report other than for the stated purpose.

Colliers International does not give any warranty in relation to the accuracy of the information contained in this report. If you intend to rely upon the information contained herein, you must take note that the information, figures and projections have been provided by various sources and have not been verified by us. We have no belief one way or the other in relation to the accuracy of such information, figures and projections.

The opinions, estimates and information given herein or otherwise in relation hereto are made by Colliers International (WA) in their best judgement, in good faith and as far as possible based on data or sources which are believed to be reliable.

Colliers International will not be liable for any loss or damage resulting from any statement, figure, calculation or any other information that you rely upon that is contained in the material.

Finally, and in accordance with our normal practice, we confirm that this report is confidential to Hassell and LandCorp for Decision Analysis purposes. No responsibility is accepted to any third party and neither the whole of the report or any part or reference thereto may be published in any document, statement or circular nor in any communication with third parties without our prior written approval of the form and context in which it will appear.

## Document Control

Description	Prepared By	Reviewed By	Review Date
Cockburn Coast	John Del Dosso	Jennifer Wong	12 June 2012
Property Consultancy Services	Director	Valuer	
Affordability Strategy	Valuation and Advisory Services	Valuation and Advisory Services	

COPYRIGHT. Colliers International all rights reserved. No part of this work may be reproduced or copied in any form or by any means (graphic, electronic or mechanical, including photocopying, recording, recording taping, or information retrieval systems) without the written permission of Colliers International.



Liability limited by a scheme approved under Professional Standards Legislation.

# TABLE OF CONTENTS

---

1	Introduction	1
1.1	PREAMBLE	1
1.2	REPORT SCOPE	5
2	Literature Review	6
2.1	STUBBS SYNOPSIS	6
2.2	STUBBS SYNOPSIS	11
2.3	INVESTIGATIONS TO PRIVATE SECTOR DELIVERY OF AFFORDABLE DWELLINGS	11
2.4	AUSTRALIAN CASE STUDIES	15
2.5	WESTERN AUSTRALIAN ACTIVITY	15
3	Developer Survey	21
3.1	PURPOSE	21
3.2	QUESTIONNAIRE	23
3.3	SAMPLE GROUP	23
3.4	SUMMARY OBSERVATIONS	24
4	Market Commentary	37
4.1	WESTERN AUSTRALIAN ECONOMIC OVERVIEW	37
4.2	RESIDENTIAL MARKET OVERVIEW	39
4.3	RESIDENTIAL APARTMENT MARKET OVERVIEW	42
4.4	DEVELOPMENT SITE MARKET	44
4.5	PREVAILING MARKET CONDITIONS - CHANGING TIMES	45
5	Market Sales Evidence	46
5.1	RESIDENTIAL DEVELOPMENT SITES	46
5.2	RESIDENTIAL APARTMENT PRICING	50
5.3	CATCHMENT AREA PRICING	53
6	Feasibility of Incentivised Delivery	56
6.1	MEASUREMENT METHODOLOGY	56
6.2	TEST CASE: DENSITY AND HEIGHT BUILT DESIGN OPTIONS	57
6.3	INCENTIVISATION - FEASIBILITY TESTING	61
6.4	VALUE DEFINITIONS - LIMITATIONS	64
6.5	FEASIBILITY OUTPUTS	64
6.6	RESIDUAL VALUE OUTPUT OBSERVATIONS	66
7	Conclusions	68

## Appendices

- A. Developer Survey
- B. Hassell Notional Development Concepts and Yields
- C. Residual Value Calculations

# 1 INTRODUCTION

## 1.1 PREAMBLE

Hassell has been engaged by LandCorp to prepare an Affordable Housing Strategy for the Cockburn Coast.

Colliers has been appointed as sub consultant to provide property research and a 'property perspective' on potential private sector developer delivery modes and mechanisms.

The form of development contemplated for the corridor is predominantly medium/high density mixed use apartments (multiple dwellings low/high rise – 64%), group dwellings/terraces (22%), and 3% single detached dwellings.



Figure 3

	Population	Approximately 10 000 people
Society		1) Approximately 4850 dwellings <sup>1</sup> Minimum 3 per cent separate houses Minimum 22 per cent terrace
	Housing stock	2) Minimum 33 per cent low-rise apartments <sup>2</sup> 3) Minimum 31 per cent medium to high-rise apartments <sup>3,4</sup> Minimum 20 per cent affordable housing Minimum 20 per cent adaptable buildings 15 per cent of homes need to be 'family homes' <sup>5</sup>

- 1 Potential dwelling yield assumes residential build out of the South Fremantle landfill site and the South Fremantle chalet village
- 2 Low rise apartments - 3 to 5 storeys
- 3 Medium rise apartments - 6 to 8 storeys
- 4 High rise apartments - over 8 storeys
- 5 Adaptable housing refers to dwellings that are adaptable to changing demographics with the ability to transition over time

Figure 4

The Cockburn Coast District Structure Plan (DSP), which was endorsed by the Western Australian Planning Commission (WAPC) in August 2009 (now referred to as Part 1), envisages a population of 10,800 residents throughout Cockburn Coast with an employment base of approximately 3,600 jobs.

The DSP has been prepared to guide future land use and transport initiatives within the area stretching between South Beach and the Port Coogee marina, and sets a framework for future redevelopment of the Cockburn Coast area as an intensive, mixed use urban environment.

Since then the planning for the area has been progressing, and in September 2011 the Cockburn Coast area was rezoned by the WAPC from 'Industry' to 'Urban' under the Metropolitan Region Scheme.

The Draft Cockburn Coast District Structure Plan (Part 2) applies to the Cockburn Coast project area south of Rollinson Road (formerly referred to as the 'Master Plan').

Part 2 has been prepared to build upon the endorsed Cockburn Coast District Structure Plan (2009) Part 1, and to provide the next layer of planning to guide future Local Structure Plans.

It is intended that both the Cockburn Coast District Structure Plan Parts 1 and 2 will be used as guiding documents to inform the preparation of Local Structure Plans which will be a requirement under the Scheme.

## Land Use

The following extract from the Draft Cockburn Coast District Structure Plan (Part 2) outlines contemplated land uses.



Figure 5

The predominant use is residential and the legend illustrates increasing density from 'yellow' (terrace house/detached) to 'activity centre' (commercial/retail/ and medium to high density residential).

The residential components are further described as 'Single detached', 'Terraced housing', 'Low Rise Apartments (3 - 5 storeys)', 'Medium Rise Apartments (6 - 8 storeys)' and 'High Rise Apartments (above 8 storeys)'.

Conceptually the development form and subsequent yield analysis are illustrated below.

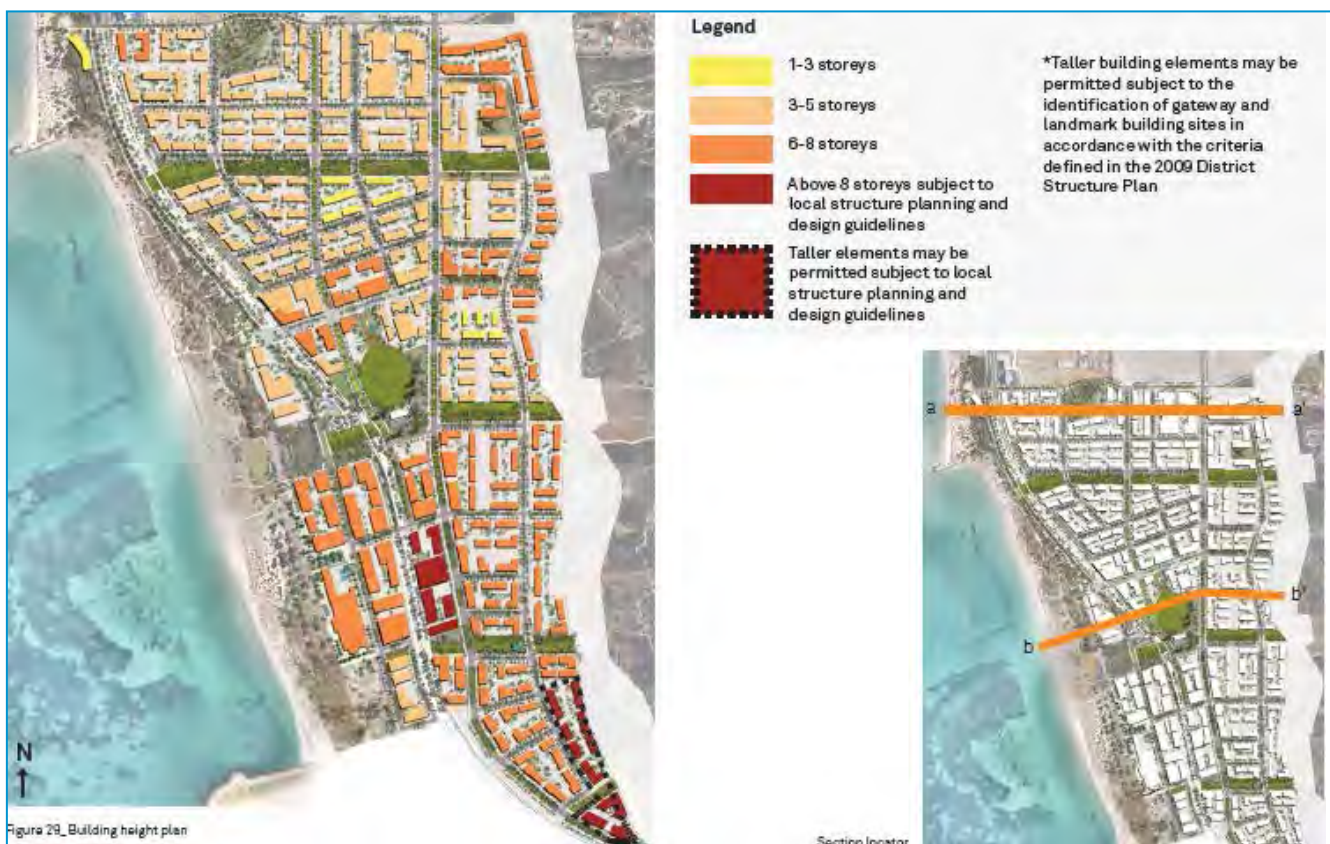


Figure 6

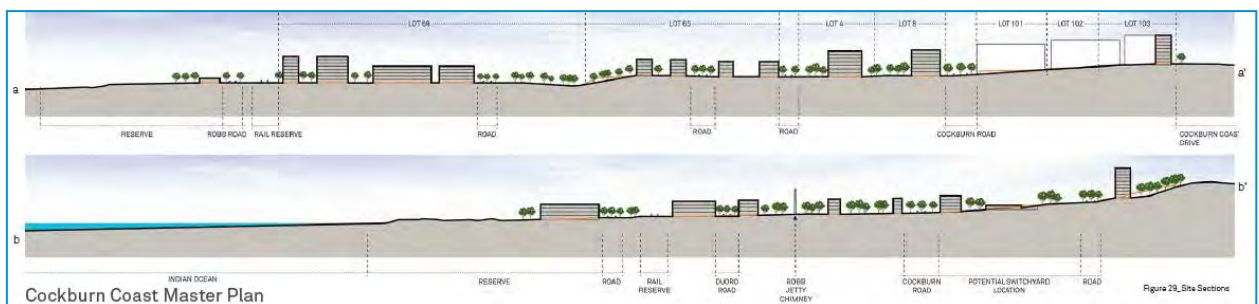


Figure 7

Building Typology	Indicative Density	Dwelling Yield	% Component
High Rise	R160	1,300	25.0%
Medium Rise	R120	602	11.6%
Low Rise	R80	1,641	31.6%
Terrace	R40	57	1.1%
Mixed Use	R100	585	11.3%
Activity Centre	R160	1,008	19.4%
<b>TOTAL</b>	-	<b>5,193</b>	<b>100%</b>

Figure 8



Figure 9



Figure 10

## 1.2 REPORT SCOPE

The property research and analysis is to inform the development of an affordability strategy for the Cockburn Coast and includes;

1. Synthesise the ideas and measures tabled within;
  - a. Judith Stubbs and Associates, December 2010, Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia; Report 2 Planning Mechanisms and Strategies (Final Draft not for circulation);
  - b. Judith Stubbs and Associates, April 2011, Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia, Report 1 Profile of Selected Redevelopment Areas.
2. Prepare commentary on the principles concluded by Stubbs as they apply to medium/high density property development in the current market.
3. Research secondary data for examples of private sector delivery of affordable housing in medium/high density built form.
4. Prepare a questionnaire for primary data research. Present the questionnaire by direct interview to a sample of eight to twelve Western Australian and national built form developers active in the medium/high density residential market. The aim of the questionnaire is to gauge/confirm developer principles in feasibility analysis plus attitudes on affordability and delivery thereof, plus extract alternate ideas/options in delivery.
5. Collate/synthesise the findings/observations of items 1 to 4 above and conclude a series of incentive structures and localised strategies that provide practical and realistic prospects for delivery.
6. Test the feasibility of the concluded incentive structures on notional development sites in the Cockburn Coast Area.
7. Where incentive structures prove workable, refer the strategies to the developer group for comment feedback/critique and improvement.
8. Provide summation of above to Hassell for incorporation into an Affordable Housing Strategy for Cockburn Coast.

## 2 LITERATURE REVIEW

### 2.1 STUBBS SYNOPSIS

#### Report 1

The below extracts sourced from Report 1 succinctly define the parameters for affordable dwellings.

'Affordable housing' includes the full range of housing for various types of groups, and special needs accommodation such as group homes, lodging houses, and social (community and public) rental housing for those more disadvantaged in the housing market, to the 'key worker' rental housing, and assisted or subsidised purchase for working households who still require some assistance or support into the home ownership market (Stubbs 2011: pp 6).

Social housing and special use accommodation generally requires 'deep subsidies' to be affordable, and rent is tied to a proportion of the income (generally no more than 25% for a very low – or low – income social housing tenant, for example). Affordable housing for moderate income households including groups like key workers is generally offered at a discounted rate on the rent that would normally apply (typically around 70 – 80% of market rent), or subsidised purchase, shared equity and the like for moderate income purchasers (Stubbs: pp 6).

Affordable housing is different to low cost housing (Stubbs 2011: pp6). 'Affordable housing' is benchmarked against the relevant household income to ensure that a low – to moderate – income household does not fall into housing stress (Stubbs 2011: pp 6).

Low cost housing generally denotes a dwelling that can be purchased or rented for less than other dwellings within an area due to savings related to construction materials or methods, amenity, size or development standards (Stubbs 2011: pp 6).

Using the benchmark of 30% of gross household income as a measure of housing stress, the upper limits of **affordable rents** in Perth SD were calculated as \$295 per week for low income households and \$440 per week for moderate income households for 2010. For purchasing households, using current interest rates and assuming a 20% deposit, the maximum cost of the dwelling would need to be \$230,000 for a low income household and \$345,000 for a moderate income household (in 2010 dollars) (Stubbs 2011: pp 6).

Affordable housing is important for social or economic sustainability, and may be regarded as important community infrastructure that supports social and economic diversity and wellbeing (Stubbs 2011: pp 7).

Other relevant factors including relative cost of transport, access to services, and the appropriateness of housing regarding location, type or condition to meet the needs of particular households (Stubbs 2011: pp 5).

It is likely that land values in the development will be high due to the coastal location, and more reflective of South Fremantle and Port Coogee rather than the areas to the east. In addition, some land may carry high remediation costs. Diversity of Zoning has led to varying lot sizes but has not particularly resulted in the diversity of housing. Land values and/or building costs are such that there is not a lot of pressure to take up the density, although there is a demand for density in higher amenity areas just near the marina. Higher density is likely to require a government intervention (Stubbs 2011: pp 36).

## Report 2

The lack of affordable housing to rent or buy not only affects the quality of the life of individual families, who may be sacrificing basic necessities to pay for their housing, it also has a serious impact on employment growth and economic development. The loss of young families and workers in lower paid essential service jobs can adversely affect local economies, and is contributing to shortages in some areas of Western Australia. This can contribute to a lack of labour supply among 'key workers' that are essential to various services including childcare, aged services, health care, tourism and hospitality, whose wages do not allow them to access rental or purchase housing close to where they work (Stubbs 2010: pp 5).

The provision of adequate stocks of affordable housing is thus both an efficiency and equity measure in a public policy sense, and can be regarded as necessary 'community infrastructure' to support the objectives of government including the social, economic and environmental sustainability of communities and the Perth Metropolitan Area more generally, social mix and economic growth (Stubbs 2010: pp 5).

Some 'affordable housing' can be provided through the market without the need for subsidy or government intervention, for example, dwellings in smaller and/or in low amenity areas under certain market conditions. However, such dwellings may need to be mandated where the market is reluctant to provide such accommodation, for example, due to considerations of reduced profitability or risk (Stubbs 2010: pp 7).

State Planning Policy 3.6: Development Contributions for Infrastructure potentially provides a powerful tool for requiring mandatory development contributions toward 'affordable housing' as a form of 'community infrastructure' in areas designated as Development Contribution Areas capitalised under relevant local planning scheme schedules, and where need, nexus, transparency, equity, consistency and accountability are demonstrated (Stubbs 2010: pp 35).

Currently, 'affordable housing' is not provided for under the Policy as either a 'standard requirement' under *Appendix 1*, or 'community infrastructure' in *clause 5.1 Scope*. However, the definition of 'community infrastructure' as *'the structures and facilities which help communities and neighbourhoods to function effectively including....other services and facilities for which development contributions may reasonably be requested, having regard to the objectives...of this policy'* appear to provide for adequate scope for consideration of 'affordable housing' under this policy (Stubbs 2010: pp 35).

This, particularly given Objectives under clause 4, include meeting of the *'demands arising from new growth and development'* and *'to ensure the social well-being of communities arising from, or affected by, development'* (Stubbs 2010: pp 35).

'...the provision of affordable housing can also be seen as supporting both the wellbeing of the local community in the face of exclusion and displacement as a result of incremental, or more rapid gentrification resulting from redevelopment (Stubbs 2010: pp 35 - 36). The policy provides positive support for the levying of development contributions for 'community infrastructure' in accordance with a Development Contribution Plan under a local planning scheme schedule...' (Stubbs 2010: pp 36).

**Market-based mechanisms** include those where a developer is required to provide a proportion of dwellings as a prescribed type or tenure in the anticipation that, within that market, such 'low-cost' dwellings would also be 'affordable'. No other subsidy is required and the outcome is generally cost neutral to the developer (Stubbs 2010: pp 68).

**Off-market or more interventionist mechanisms** include various types of inclusionary zoning, where the developer is required to provide a proportion of the private benefit or profit arising from the planning approvals process for affordable housing, with or without some form of offset or compensation (eg. bonus plot ratio). These types of mechanisms may be cost neutral (where an offset is provided), or may result in some impost on the development. The type of mandatory mechanism used will be highly dependent upon the reasonableness and economic feasibility or equity of the development context. For example, where a major uplift in land or unit value is anticipated due to rezoning and/or significant increase in density or plot ratio to that which would have formally applied, and where nexus considerations are met, mandatory development contributions may be justifiable. Where anticipated profits are lower but there is still clear need and nexus, mandatory mechanisms with compensation (eg. combined with relaxation of controls or bonuses) may be more appropriate (Stubbs 2010: pp 68).

There are effectively four broad ways in which government can use mandatory or inclusionary provisions through market and off-market approaches to achieve affordable housing goals (Stubbs 2010: pp 68).

- **Mandatory Provision of Low Cost Dwelling Types/Tenure via the Market.**

The first involves requiring a component of low cost dwelling types or tenures in private market developments. Government does not require a 'contribution' toward affordable housing as such, but assumes that the low cost nature of the stock will provide 'affordability' within the given market.

As noted...EPRA is currently implementing a range of mandatory mechanisms to achieve a complement of affordable housing in its project precincts, including mandating a proportion of smaller dwellings or of rental housing under certain development scenarios in the expectation that 'low cost' stock would also be 'affordable' or will increase supply of such stock and therefore have a flow on effect to demand/price.

City of Perth has likewise recently adopted recommendations from a report to incorporate such dwellings within multi-unit developments for amendments to City Planning Scheme No. 2 (Stubbs 2010: pp 69).

- Mandatory Sale of Percentage Land or Dwellings at Cost in Perpetuity

Other inclusionary approaches include a requirement that a minimum proportion of stock be sold as affordable housing to a nominated not-for-profit housing provider at cost, with or without development concessions to offset lost profit. For example, EPRA requires that 12% of the development of 10 or more dwellings be sold or made available as either social housing or affordable owner/occupier housing for the cost of construction. EPRA prefers that affordable housing be provided on site, scattered throughout the development and indistinguishable from conventional dwellings through comparable design standards, and contain a mix of sizes. The Policy also provides for variations to plot ratio where such housing is provided on site to compensate the developer for foregone profit, though provision of this bonus is at the discretion of EPRA and the affordable housing requirement applies whether or not the bonus is granted. Other positive aspects of the Scheme include a maximum parking requirement and the ability to relax or vary any requirement of the Scheme or any relevant Design Guideline or Development Policy to encourage the incorporation of a 'Preferred Use' into a development.

Cash in lieu options are also provided for, with the amount payable where dwellings are not provided on site calculated as the difference between the 'open market value' and the 'construction cost' of the dwellings. Appropriate administrative provision to apply, and EPRA or a housing provider nominated by EPRA will use the moneys collected for development of affordable housing within an EPRA area.

EPRA achieves this in a number of ways, including a covenant of the title on the land sold to developers that can be lifted when the conditions of sale or development approval have been met and, more generally through conditions of consent on the development approval.

However, there are some limitations to the main mechanisms used by EPRA. The target of 12% appears low compared with assessed need in the Metropolitan Area and case study redevelopment areas. Further, it is quite likely that the yield will not be achieved by relying on the main mechanisms within the current funding policy environment, as social housing providers are likely to lack in the ability to purchase the number of dwellings on offer, especially if the geographic area is not a priority for them. Also, many low – and moderate – income earners are likely to 'fall through the gaps' of DOH's eligibility criteria. Finally, the mandating smaller dwellings will not always guarantee 'affordable housing' in high amenity and gentrifying areas (Stubbs 2010: pp 70).

- Mandatory Percentage of Dwellings at Discount Market Rent or Social Housing Costs for Time Limited Period.

A variation on the latter form of mandatory mechanism involves requiring that a proportion of dwellings be provided for rental at discount market rent for a time-limited period (generally 10 years) through a registered community housing provider. This represents deferred profit for the developer, who would then be able to sell these dwellings (or rent them at the appropriate market rent) after the defined period, generally realising a capital gain, particularly in a well located area or a buoyant market.

Again, lost profit may be offset through the use of a bonus or similar incentive used in tandem with the requirement to provide time-limited discount market rental units. Alternatively, the requirement to provide time-limited discount market rental may be used as a standalone mechanism where there is likely to be a significant uplift in land values, density and above normal development profit. It is noted that, if used in conjunction with NRAS funding, the refundable tax credits can fully or partly offset the discount market rent in some markets (Stubbs 2010: pp 70).

There is likely to be a major increase in the yields of affordable housing if the affordable housing is provided on land within Hamilton Hill rather than Cockburn Coast itself (eg. on other land owned by Council, a developer, or another public authority or community housing provider). It is likely that yield will double though this may be at odd with aims to provide a social mix on the site (Stubbs 2010: pp 117).

- **Mandatory Development Contributions.**

Other forms of mandatory mechanisms used in overseas jurisdictions and states such as South Australia and New South Wales under an explicit regulatory regime include mandatory development contributions for affordable housing as a form of 'community infrastructure' or 'public purpose'. Generally, though not always, it is necessary to demonstrate need, nexus and reasonableness. In these cases, a specified proportion of the value of development or anticipated profit above 'normal profit'<sup>5</sup> are provided in cash or in kind (land or units) in perpetuity as affordable rental housing, with appropriate and transparent methods of cost calculation, apportionment administration and accountability.

The development can be levied on the basis of net land area (per SPP 3.6 – Development Contributions), or per dwelling, bedroom or lot created in residential development, and/or for each square metre of floor space created in commercial and retail developments. The latter is relevant in the redevelopment areas, given the likely nexus between the creation of certain types of employment arising from significant commercial and retail floor space and the need for affordable key worker housing in close proximity to work and local services.

Such mandatory contributions have been used to good effect in various international and interstate jurisdictions where research indicates that likely 'windfall' profit is sufficient to make such a requirement reasonable and economically feasible, where there is a reasonable nexus between the development and the need for affordable housing (for example, where redevelopment is contributed to a gentrifying market and/or displacement of traditional lower-income residents) and where the development contribution will not impact upon those in need of affordable housing (for example, where the development is likely to accommodate higher-income earners including those migrating in from other areas in displacing lower-income residents, and will not provide an additional impost upon first home buyers or low-income renters) (Stubbs 2010: pp71).

---

<sup>5</sup> Stubbs cites in the footnote that normal profit is generally taken as 10%.

## 2.2 STUBBS SYNOPSIS

Stubbs 2011 presents research on the community needs for affordable housing. This report has determined the price levels that very-low, low-and moderate-income households can afford to pay for rental and owner occupier housing as shown below:

**Affordable Housing Benchmarks in Perth SD**

	Very low-income household	Low-income household	Moderate-income household
Income Benchmark	<\$655-\$736 per week	<\$984 per week	\$984-\$1,467 per week
Affordable Rental	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
Benchmarks			
Affordable Purchase	<\$153,000 - \$174,000	<\$230,000 total	\$230,000 - \$345,000 total
Benchmarks	purchase cost	purchase cost	purchase cost

Table 1

The report documents the proportion of people that are currently experiencing housing stress in the Perth market. Stubbs uses this as the basis for the recommendation that a *minimum 15% affordable rental and purchase accommodation in all new release and redevelopment areas is warranted, and 20% justified.*

Principally, three approaches are contemplated;

1. Raising of Funds via Development Scheme Contributions for Community Infrastructure, or
2. Market based mechanisms where developers are required to provide a proportion of dwellings as a prescribed type or tenure in the anticipation that, within that market, such low-cost dwellings would also be affordable. The proposal contemplates developers delivering up increased levels of profit due to rezoning or density bonuses or where profits are lower, compensation being paid to developers where mandatory mechanisms result in a loss of profits.
3. A mixture of 1 and 2 above through incentivisation of planning schemes enabling density bonuses supplemented by compensation, grants, tax abatements, partnering and joint ventures with both state and local governments and not-for-profit organisations.

## 2.3 INVESTIGATIONS TO PRIVATE SECTOR DELIVERY OF AFFORDABLE DWELLINGS

In addition to reviewing Stubbs 2011, further investigations were made to establish whether there are examples of private sector delivery of affordable dwellings in Australia and internationally. The research failed to identify examples of where the private sector delivered “affordable dwellings” without some form of community or statutory support in the funding and delivery model.

Austin Patricia M., April 2008, Public Private Partnerships for Funding Affordable Housing Developments in New Zealand, Waitakere City Council: summarises in her research the following essential factors or key components for affordable housing partnerships to achieve desirable affordability outcomes;

- *Access to land or property at reduced cost – including discount market price, leasehold, deferred payments and the effect of planning policy;*
- *Access to finance such as grants, deferred loans or loans at below market interest rates;*
- *The incorporation of debt finance based on a net income stream;*
- *Management expertise; particularly the capacity to manage development risk and ongoing management risk;*
- *Non-profit, charitable or community trust status of housing organisations: enabling profits to be foregone; accessing finance in more favourable terms; and maximising tax exempt status;*
- *A broader range of household incomes for the household group being targeted including moderate income households;*
- *Opportunities for cross subsidisation within and between development(s);*
- *Good quality design that is highly energy and water efficient to minimise residents outgoings;*
- *Local council support through the planning process and through contributions for the partnership of resources and/or implicit subsidies;*
- *The support of the local community;*
- *Mechanisms that retain the housing as affordable into the future.*

Moreover, Austin 2008 further notes that ... *all of the case study partnerships make use of one or more of three key components:*

- *Either land (or property) being available at below market rates, or deferred payments or leasehold;*
- *And/or finance being available in the form of grants, loans at below market rates or deferred interest on loans;*
- *And/or the incorporation of debt finance based on net income stream.*

*Where only one of these three key components is used, the schemes rely upon some form of cross-subsidisation from market rate-development or provide affordable housing or shared ownership for moderate-income households. Whilst a number of the partner housing associations have adopted not-for-profit status resulting in reduced development costs, the adopting of non-profit charitable status may be a critical component for some partnerships, especially if targeting low income households, in order to access finance on favourable terms and tax exemptions (Austin 2008: pp3).*

*Retention as affordable is an important component of almost all of the case studies. This recognises that many of the partners are supportive of the wider community interest (that is the provision of affordable housing for social investment, community and economic development reasons) and not necessarily for individual households to achieve a capital gain (Austin 2008: pp3).*

It is important to note that in every case study considered by Austin 2008 the affordable housing delivery mechanism relied on a public private partnership, which in nearly all cases constituted either the local authority, not for profit organisations, state and federal governments. There is not one example where the private sector has outwardly established a role in delivering affordable dwellings where all inputs to the model are kept at the market level. Each case study involved the contribution of land at discounted market rates.

The most relevant Australian case study within Austin 2008 is Inkerman Oasis, Port Phillip, Victoria, Australia.

Inkerman Oasis is a partnership between the City of Port Phillip Council and Inkerman Developments Pty Ltd. In this instance, the council contributed the land and master planning of a 1.223 hectare site for high density mixed use development in part of St Kilda. The land was the former City of St Kilda Municipal Depot Site which became redundant for the Council. The Council contributed the land and undertook the master planning design and underwrote the associated costs including site remediation. The total value was estimated at \$7.5 million and was based on the book value of the land plus the actual costs of master planning and associated costs inclusive of site remediation. The development resulted in 210 dwellings and three retail tenancies of which 28 units of affordable housing were returned to the Council in exchange for the land and a further four were sold to the State Housing Authority.

Further case studies are cited below at Section 2.4 Australian Case Studies for your consideration, but in each instance local and state government intervention has occurred to offset the typical market inputs in development feasibility in order to engage the private sector.

Gurran et al 2008<sup>6</sup> has researched how planning mechanisms intersect with the broader policy, legislative and financial frameworks supporting affordable housing supply and considered which government, spatial and housing market contexts are most effective. To this end, the following observation is noted in the executive summary at page 4;

*In the United States, where inclusionary zoning is used widely, targets of 10 to 15 per cent affordable housing inclusion are not directly linked to capital funding for affordable housing developments. However, such targets are usually supported by the availability of planning bonuses (such as density increases) or concessions (like reduced fees). Many state and local jurisdictions with affordable housing strategies in place also dedicate their own resources or public land to support low income housing programs. Mandatory inclusionary requirements in the United States are also made more feasible by the existence of Federal and State tax incentives designed to stimulate development of housing for lower income households (such as the Low Income Housing Tax Credit program).*

*By combining planning requirements for affordable housing with funding, subsidies or incentives, strong not for profit housing developers have emerged in the United States, United Kingdom and the Netherlands, to provide a viable "delivery infrastructure" for affordable housing that can be created or secured through the planning and development process.*

---

<sup>6</sup> Gurran Nicole, Milligan Vivienne, Baker Douglas, Bugg Laura Beth, and Christensen Sharon, June 2008, New Directions in planning for affordable housing: Australian and international evidence and implications, Australian Housing and Urban Research Institute. Sydney Research Centre.

The above observation clearly supports the need for local, state and federal government intervention not only for mandatory inclusionary policy with respect to affordable dwellings but also in the provision of grants or other funding mechanisms, taxation or other incentives such as the provision of low cost land to enable delivery of affordable dwellings. Moreover, it signals the need for a whole of government approach.

Further to this Gurren et al 2008 goes on to note that *“Incentive or concession schemes will be effective in contexts where land costs or building costs are high enough to generate a valuable bonus when prevailing controls are varied. Incentive approaches appear to work best when they are situated within a framework of national or central government policy for affordable housing, and when they are clearly supported by legislation (Gurren et al 2008: pp 5).*

*Mandatory inclusionary housing schemes will have an impact within a high value market characterised by significant development activity and limited development opportunity. In such schemes, a proportion of the development is dedicated to affordable housing, either as onsite contribution or a payment. By contrast, lower value markets – characterised by development activity and demand for housing, but more potential opportunities for growth – are likely to support affordable housing and inclusionary targets that deliver dwellings that can be purchased at lower cost for social housing providers or low and moderate income households (Gurren et al: pp 5).*

Further, Gurren et al 2008 notes that

*In an Australian context, incentives will create the most value within inner city or very high value coastal areas. Similarly, mandatory requirements for affordable housing contributions (either negotiated or as a fixed amount) will usually have the greatest yield in inner city locations and in outer fringe release areas where there is significant value uplift associated with a rezoning. In middle ring areas or Greenfield areas where the gap between affordable home purchase costs and actual market values are relatively small, there is an opportunity to require a significant proportion of new housing to be made available for low and moderate income home purchases, or for allocation by social housing providers.*

*Two major elements separate Australia from the majority of international jurisdictions reviewed in this study. The first is the lack of national policy for housing and affordability in general, and new affordable housing creation in particular. The second element that is distinctively absent from Australian practice is a policy and practice linkage between planning objectives and requirements and the existing funding or incentives for affordable housing development. Irrespective of the total amount of capital funding for housing assistance in Australia there is a potential to maximise the leverage of this investment by a stronger use of the planning system to secure land for affordable housing development (Gurren et al 2008: pp 7).*

## 2.4 AUSTRALIAN CASE STUDIES

Inkerman Oasis – Port Philip - Victoria

<http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Developing+Affordable+Housing/Case+Studies/Inkerman+Oasis+Port+Phillip+Victoria.htm>

City Edge – ACT

<http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Developing+Affordable+Housing/Case+Studies/City+Edge+ACT.htm>

Forrest Glade – Parklea NSW

<http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Affordable+Home+Purchase/Forest+Glade+Parklea.htm>

Waverley Council, NSW

<http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/Developing+Affordable+Housing/Case+Studies/Waverley+Council+NSW.htm>

## 2.5 WESTERN AUSTRALIAN ACTIVITY

### Department of Housing

The Department of Housing (DoH) is increasingly endeavouring to work cooperatively with the private sector to deliver affordable housing outcomes rather than simply apply the traditional 100% government capital investment ownership model. This is seeing the DoH apply a number of different development, acquisition, investment models. These include:-

**Joint Venture (JV) developments** – where the DoH may contribute land or cash in partnership with the private sector. Ideally this works where the DoH makes a site available to the private sector partner to undertake the development as a JV partner. This helps the private sector by removing the requirement for land and holding costs and also provides equity into the transaction and an asset that can be mortgaged. Projects of this nature are underway in Pier Street, East Perth and Campbell Street, West Perth.

**Equity Contribution** – the DoH may become an equity partner in a particular built form development. This enables the DoH to deliver an increase in affordable housing outcomes by influencing the shape and form of the development and taking its return in units, cash or a combination of both. This helps unblock the private sector challenges around project finance and also de-risks the development.

**Presales** – The DoH may be able to facilitate development by pre purchasing units in specific developments thereby enabling developers to meet presales commitment and enabling capital funding to be obtained.

**Underwriting sales** – the DoH through its innovative home ownership schemes such as SharedStart may be able to provide developers with a commitment to deliver end user sales to particular target groups – again this can facilitate presales and capital funding.

**Procurement** – the DoH’s Expression of Interest process provides an opportunity for the developers to put development proposals to the DoH and for the DoH to purchase in full all units in the development, to purchase some units or any other arrangement that would help the development proceed while enabling the DoH to deliver affordable housing outcomes.

**Integrated Housing Developments** – the DoH has developed and is continuing to develop fully integrated housing developments that bring a range of housing tenures and client groups together to deliver financially viable and socially sustainable housing developments. Ideally, these would see social, affordable and full market rental, shared equity and full market ownership and possibly commercial units in the same complex. This obviously brings together a range of different funding sources and funding/investment opportunities together to help projects stand up financially.

**Linkage with other affordable housing investors and providers** – the DoH is also able to facilitate linkages with other affordable housing providers such as Community Housing Organisations who undertake social and affordable housing developments in partnership with or independent of Government. Similarly, DOH facilitates and supports other Government affordable housing initiatives such as the National Rental Affordability Scheme (joint state/commonwealth initiative), which can provide further linkages with investment opportunities for affordable housing. (NRAS provides cash and tax benefits for investors who are prepared to rent their new investment properties at less than 80% of market rent).

The traditional model of the DoH acquiring, funding and developing sites itself also remains an option that could be pursued in the right circumstances.

In addition to these, it must be recognised that the DoH as the Government’s deliverer of social and affordable housing is able to bring together a range of housing options and programs that when accumulated facilitate a diversity of housing products throughout a vibrant and diverse population. This includes social housing programs to low to moderate income earners, specific target groups such as people with disabilities, new affordable housing rental initiatives, shared equity home ownership products, low deposit full home ownership and normal market sales.

When all of these activities are layered across the above delivery models DoH accesses and enables a breadth of opportunity and market outcomes that make the delivery of affordable housing outcomes in all market settings a realistic option.

## DoH Developer Engagement

Enquiries to a range of Western Australian and national developers identified several instances where developers had engaged with the Department of Housing in the delivery of affordable dwellings in a medium to high density product form.

In each instance, the Department of Housing effectively secured a proportion of available product at full market price and then allocated the product to a mix of;

- Social housing,
- Shared Equity purchase, and
- Affordable rental.

The most recent example is OneAberdeen, located at the juncture of Pier Street and Aberdeen Street, Perth. This project is a partnership between Diploma Properties Pty Ltd and Department of Housing (DoH). The Department of Housing owns the land and Diploma is engaged in a joint venture. The product allocation is tabled below. In effect DoH applies the land and warrants the acquisition of some 30% of the apartment stock, and verbal advice indicates this may move to up to 70 apartments in total.

Apartment buyer type	Number	Allocation
Market	117	69.6%
NRAS	7	4.2%
Shared Equity	16	9.5%
Essential Worker	11	6.5%
DoH	17	10.1%
	168	

Figure 11

A description of the proposed development is tabled below.

Concept plans illustrate the site will be developed to incorporate a fourteen level mixed use development, with the thirteenth floor partly incorporating a mezzanine level. The proposed development will comprise inter alia the following:

- Seven (7) commercial strata suites situated on the ground level and fronting onto both Aberdeen Street and Pier Street. The Draft Strata Plan indicates ground floor commercial suites ranging in area from 38m<sup>2</sup> to 69m<sup>2</sup> of strata building area, totalling 413m<sup>2</sup>.
- 64 single covered and secured car parking bays situated within the ground floor car parking area, and being allocated to both the residential and commercial units, as well as four (4) m<sup>2</sup> storage areas forming part of the thirteenth floor apartment strata areas, plus 18 bike racks.



- 62 single covered and secured car parking bays situated within the first floor car parking area, and being allocated to the residential apartments, as well as thirty six (36) 4m<sup>2</sup> storage areas forming part of the residential strata units, plus 4 bike racks.
- 42 single covered and secured car parking bays situated within the second floor car parking area, and being attributed to the residential apartments, as well as nine (9) 4m<sup>2</sup> storage areas forming part of the residential strata units and being located within the car parking area, plus 14 bike racks.
- 161 strata titled residential apartments located over levels one to thirteen, including the mezzanine level at level thirteen.
- The communal facilities area located on the first floor.
- Residential apartment accommodation typically comprises one (1) and two (2) bedroom apartments with internal strata areas ranging from 46m<sup>2</sup> to 76m<sup>2</sup>.
- One (1) car bay and a storeroom ranging in area from 4m<sup>2</sup> to 6m<sup>2</sup> for each apartment.
- One (1) car bay to each commercial strata suite.

An analysis of the proposal from a feasibility perspective to arrive at the residual value of land identified a significant discounting effect to market value arising from the development proposal. The recent sale of land opposite well established the market value for the site 'as is'.

A number of low rise market developments nearby 'for sale' off the plan and under construction confirmed the market value rate for land in the locale via residual value analysis.

The inference is that the highest and best use at market for the land is low rise residential in three to six storey formats delivering modules of 30 to 50 dwellings.

It is understood, DoH insisted on maximising the yield outcome in order to optimise the volume of affordable housing stock it could secure whilst enabling the developer as joint venture partner sufficient scope to earn a reasonable profit. To this end, the trade off in market value of land was close to a discount of 40%.

DoH has applied similar methods to secure affordable dwellings across several notable medium to high density projects including;

- Fort Knox, Fremantle – Match Projects
- Stella Apartments, Cockburn Central - Goodland Properties.

## Foundation Housing

Foundation Housings' is a 'not for profit' affordable housing provider whose core objective is founded on its aim to increase the supply of secure, affordable good quality rental housing and to undertake effective tenancy and property management that achieves sustainable housing outcomes.

Foundation Housing was established in 2005 after the merger of three separate successful housing organisations. Foundation Housing is now one of the largest affordable housing providers in Western Australia with over 1,300 households currently in management and development, and some 1,700 tenants across Perth and regional Western Australia.

Foundation Housing provides a range of housing services with expertise in;

- Property management,
- Public and private sector partnership,
- A commitment to providing sustainable and affordable housing,
- A sound financial base.

Foundation Housings' capital and cash flow base was established with the transfer of title of 340 rental houses in 2005.

Simplistically, the financial model enabling growth and further delivery of affordable accommodation is one that leverages off the capital base and net cash flow from operation of its property portfolio. Foundation Housing makes a long term investment in its growing portfolio.

This enables capital leverage to develop new accommodation independently or in a range of joint venture, alliance and partnership models with both private and public sector participants, that is further supplemented through;

- wider access to the National Rental Affordability Scheme,
- strategic asset management,
- innovative management services,
- discounts and concessions on;
  - the Goods and Services Tax,
  - stamp duty, and
  - water and council rates to name a few.

Department of Housing additionally offer via Tender the transfer of social housing rental stock ("Transfer of Freehold Title of Social Housing Initiatives Dwellings to Community Housing Organisations") to a range of affordable housing providers enabling further expansion of the capital base and growth in net cash flow from strategic asset management and property management. To this end Foundation Housing was successful in adding a further 300 dwellings to its portfolio in 2011.

## Access Housing

Access Housing is similar in nature to Foundation Housing and was established in 2006, providing accommodation solutions across the spectrum of social housing to affordable home ownership founded on a property model of;

- Property and Tenancy Management Services (1,400 social and affordable rental properties), and
- Affordable Housing Property Development.

Similar to Foundation Housing, the capital base and rental stock was initially 'gifted' via the State to facilitate a capital and net cash flow base from which to leverage and grow the portfolio.

This is additionally supplemented through property and tenancy management services whilst taking a more commercial approach in the property development arena to generate greater margins for reinvestment and growth of the portfolio.

This latter approach is the principal difference to Foundation Housing and to this end Access Housing has developed a wider range of financial models for funding and development with institutional partners and developers.

As an example, Access Housing has entered into Alliance Agreements with private companies in the building, development and finance industries in order to share expertise and de-risk the delivery of affordable housing options including:

- BGC,
- ABN Group/ Dale Alcock Homes,
- Niche Living,
- Coastline Homes,
- Questus Ltd,
- Commonwealth Bank of Australia (CBA).

Access Housing additionally partners with the Department of Housing to provide affordable and sustainable housing solutions in the community and as for Foundation Housing, competes for State Government programs and capital grants for the supply of affordable housing.

### 3 DEVELOPER SURVEY

#### 3.1 PURPOSE

The purpose of the developer survey is to establish an industry perspective against the definitional criteria of affordability together with the proposed measures to enable private sector delivery of affordable dwellings advocated by Stubbs 2011.

Stubbs 2011 presents research on the community need for affordable housing. This report has determined the price levels that very-low, low-and moderate-income households can afford to pay for rental and owner occupier housing as shown below:

**Affordable Housing Benchmarks in Perth SD**

	Very low-income household	Low-income household	Moderate-income household
Income Benchmark	<\$655-\$736 per week	<\$984 per week	\$984-\$1,467 per week
Affordable Rental	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
Benchmarks			
Affordable Purchase	<\$153,000 - \$174,000	<\$230,000 total	\$230,000 - \$345,000 total
Benchmarks	purchase cost	purchase cost	purchase cost

Table 2

Stubbs 2011 documents the proportion of people that are currently experiencing housing stress in the Perth market. It uses this as the basis for the recommendation that a *minimum 15% affordable rental and purchase accommodation in all new release and redevelopment areas is warranted, and 20% justified.*

The critical observation made in the reviewing of Stubbs 2011 is the general presumption that higher density equates to higher profitability and accordingly higher residual value to land. This paradigm generally no longer applies to medium to high density residential/mixed use development market in Metropolitan Perth.

The principal driver for this paradigm shift is construction cost, which for this class of development sits near one third higher than the east coast markets and, more recently, capital rationing of debt markets has further impacted appetite and viability in this market sector.

Consequently, the development market has in recent times focussed on lower yield, lower capital, medium density development typically from two to five levels in height.

Further to this, Stubbs 2011 infers there is sufficient ‘super profits’ in the development of medium to high density product that the industry can be mandated to ‘sacrifice’ a component of this super profit to deliver affordable dwelling stock or incentivised to offset a component of the yield in increased height and density. This is premised on an inference a ‘normal’ developer profit is 10%.

The decision analysis of developers varies from location to location and is often a function of market depth and demand for the product typology in question, with the majority of medium to high density development activity in recent times centred on the Perth CBD and fringe. The suburban apartment market activity fundamentally remains in the low to mid rise format due to the limited price variance between competing dwelling stock typologies and existing market preferences.

Additionally, competition in this market has emerged with greenfields and brownfields development via house and land packages tailored to 165m<sup>2</sup> to 250m<sup>2</sup> green title allotments. This single and double storey product is proving price point competitive and can be delivered at a far lower built form cost.

A final misconception drawn from Stubbs 2011 is the inference that 10% is a 'normal profit' profit for property development and that profits beyond this are 'super profits', which can be tapped by various methods including scheme contributions for the delivery of affordable dwellings (Stubbs 2011: pp70).

A number of the incentive based density approaches aim to secure an allocation of the perceived super profit above a normal profit as an allocation to affordable dwellings in kind or as cash in lieu. In the first instance a 'normal profit' would need to be agreed or defined between the parties and then a superior profitability demonstrated.

It is our market experience based on the analysis of a wide range of medium density property development sites that target profit margins after finance provisioning, typically range from 15% – 30% with a central tendency of 17.5% to 25%. The margins are dependent on location, product, capital at risk and market conditions and can be highly volatile given the lengthy duration of planning, sales and delivery.

The effect and fall out of the GFC has tightened developer margins in recent times, generally due to 'pre sale' needs to enable debt funding of construction.

Therefore, with any incentive based affordable delivery model, the developer would be seeking a degree of certainty and comfort in the profit position before allocating unearned 'super profit' to affordable dwellings in kind or as cash in lieu.

Current market conditions are such that it is unlikely that affordability schemes will be able to tap into perceived super profits from medium density built form development in the short to medium term. Market conditions may change longer term and this potential should be captured with the affordable dwelling strategy.

## 3.2 QUESTIONNAIRE

The survey questionnaire has been designed to interrogate a sample of developers active in the medium to high density residential development market. The intent of the questionnaire is principally two fold, firstly to gauge the attitude of developers towards the proposed development within Cockburn Coast and then secondly, to test the attitudes of private sector developers on matters of;

- Private sector delivery of affordable dwellings,
- The observations and conclusions of Stubbs 2011 with respect to;
  - Private sector financial capacity to absorb the mandating of affordable dwellings in medium to high density development,
  - Observations as to super profits and financial capacity for private sector developers to provide affordable dwellings in a medium to high density format through incentivisation that enables increasing profit levels through the addition of height and density at an equal or higher level than the affordable stock contributed within the proposed development.

A copy of the questionnaire is tabled at **Appendix A**.

## 3.3 SAMPLE GROUP

Participation was sought from the he following list of 16 developers.

- |                         |             |               |
|-------------------------|-------------|---------------|
| • Pindan                | • DevWest   | • ABN Group   |
| • Giorgiou              | • Mirvac    | • Doric       |
| • Australand            | • Stockland | • Goodland    |
| • TRG Property Group    | • Diploma   | • LendLease   |
| • Psaros Property Group | • Finbar    | • Nicheliving |
| • Match                 |             |               |

Of the developers approached, eight elected to participate.

### 3.4 SUMMARY OBSERVATIONS

The questions tabled for developers are listed below with summary of responses.

The questionnaire leads with a preamble describing the aspiration and form for development for Cockburn Coast inclusive of plans depicting layout, height, density and contemplated product typology.

#### Question 1

What are your preliminary thoughts on the form of development contemplated for the Cockburn Coast?

Six of eight developers considered the product typology as ambitious in scale and density premised on market preferences, built form cost and the historic practice of State to not deliver the necessary infrastructure in a timely manner.

Two of eight developers were highly supportive of the density plan; one suggesting higher densities were required with the second suggesting a rebalance between 'low rise' (3 – 5 storeys) and 'medium rise' (6- 8 storeys) was required' with more medium rise.

All respondents described the clear need for early amenity and infrastructure, chiefly transport as key to facilitating the density and massing depicted.

One respondent indicated a higher proportion of product in the 1 – 3 storey 'terrace' category is required (current DSP only 1.1%).

A similar comment was made with respect to application of some detached dwellings.

Out of character with the location and demographic.

Management of transition and interface with current uses and planned uses.

## Question 2

What market based hurdles or opportunities can you envisage for the CC?

Prompts

- Accommodation preferences
- Demographic Profile
- Household Income
- Amenity
- Transport
- Employment
- Built Form Cost
- Land Acquisition and Development Financing
- Service Infrastructure

The majority of respondents indicated a concern that current accommodation preferences for a majority of home owners in the current market may not be met by this concept. This is additionally inhibited by the demographic profile as measured by factors of household income and employment profiles for the south west coastal corridor.

All respondents identified critical barriers to the form of development as being construction costs and depth of market which is intrinsically linked to the above point.

In the present market, land acquisition and development financing subject to pre-sales is creating a barrier to development. This is, in part, a function of a weak residential market and therefore a weak pre-sales environment, however respondents identified this issue as more sensitive with medium to high density dwelling accommodation due to present accommodation preferences and relative pricing as compared to alternatives of low rise group/multiple dwellings and single detached dwellings. There was a general concern this would be further emphasised in this location due to the demographic of surrounding suburbs as well as local employment and connectivity.

All the respondents identified the opportunity to address a number of these barriers through the creation of 'place', that is providing people a reason to want to live here, and key to this opportunity was the provision of early amenity and strong public transport linkages.

### Question 3

Are there specific infrastructure deliverables at state and local government level which may stimulate the contemplated form of development?

- Creation of place – destination
- Transportation, emphasis light rail and broader metropolitan linkages
- Convenience retail
- Employment
- Refurbishment of derelict power station and establishment of local activity node
- Servicing infrastructure
- Community infrastructure
- Government offices

### Question 4

Are there initiatives at state and local government level which may be implemented to stimulate the contemplated form of development?

- Instil market confidence through delivery of early infrastructure – emphasis transportation. Incentivisation of amenity inclusive of retail and community based services such as childcare.
- Fast track approval processes.
- No developer scheme contributions.
- Partnering opportunities on State land.
- Deferred settlement on land transactions (State).
- State commitment for Government Office of Education at the District Centre.

## Question 5

Various studies (National Housing Supply Council) indicate an imbalance between demand (high) and supply (low) and forecast a worsening of the situation in the longer term.

In the past Governments have subsidised demand (First Home Owners Grant) to stimulate supply (Post GST and Post GFC). In each instance a pull forward of demand resulted together with short term demand led house price inflation followed by a lull in market activity as the anticipated flow through to second and third home buyers did not eventuate.

Have you any thoughts on initiatives that place a greater focus on increasing supply (such as NRAS) as opposed to subsidising demand?

- No stamp duty on the first sale of newly built product.
- Limit first home buyer grant to newly built product only.
- Index NRAS to meet predetermined tiers of residential product pricing in order to encourage a greater diversity in product investment and thereto supply to a wider market.

## Question 6

It is argued the creation of 'sustainable communities' mandates the planning and production of diverse dwelling/accommodation types. The anticipated implementation, delivery and build out of CC is 15 – 20 years.

What is your view of the contemplated accommodation mix in the context of the WA market?

Generally all respondents indicated the requirement for significant place making and as previously noted the delivery of early upfront infrastructure and amenity.

Concerns were generally raised that private sector developers would not be keen to initiate development prior to significant infrastructure investment by the State to establishing confidence in location and delivery.

Premised on the aspirational built form contemplated, all respondents anticipated slow product absorption and as previously noted anticipate improved market acceptance with early investment and infrastructure and also the transition in management of the interface with existing industrial uses and an emerging residential coastal node.

All respondents indicated reasonable confidence of delivering built out over the next 15 to 20 years.

Critical to stimulate demand and interest and if successful, delivery may be sooner.

## Affordability

In accordance with the DSP, a minimum target of 20% affordable housing is to be achieved throughout Cockburn Coast. Rising housing prices in Australia have led to significant problems of housing affordability, particularly for those on low or moderate incomes.

What is affordable housing?

Housing that costs more than 30% of a household's income is generally considered to be 'unaffordable', but because housing costs vary between different geographic areas (and from site to site), what constitutes 'affordable' will vary both by income and location. Housing in some high value areas may be unaffordable to households with relatively high incomes.

'Affordable housing' is required that covers all dwelling types to suit the needs of the population, that is – single bedroom dwellings, family housing and aged and dependent persons accommodation.

Affordable housing is housing that is reasonably adequate in standard and location for households in lower or middle parts of the income scale and which does not cost so much that such a household is unlikely to be able to meet other basic living costs on a sustainable basis. It includes owner-occupied housing as well as rental housing owned by governments, non profit organisations, corporations or individuals. As a rule of thumb, housing is considered to be affordable if the cost of purchase or rental does not exceed 30% of the gross household income.

Social housing is publicly funded housing and is proposed to make up 5% of the housing stock at Cockburn Coast. Social housing is a sub-set of affordable housing. The Department of Housing is currently the main provider of social housing. Further work is desirable to clarify whether 20% is an appropriate or achievable target for Cockburn Coast. Given the location of the project on prime section of the coast, high land values will be a significant factor influencing the ability to deliver affordable housing product.

In 2010 The Western Australian Planning Commission (WAPC) commissioned a study into 'Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia'.

The report was prepared by Judith Stubbs and Associates and delivered in two parts;

- Judith Stubbs and Associates, April 2011, Report 1: Profile of Selected Redevelopment Areas.
- Judith Stubbs and Associates, December 2010, Report 2: Planning Mechanisms and Strategies.

The above reports have been circulated to various state agencies for consideration and in part, application.

## Developer Survey

An assessment is required to quantify the market for and type of affordable housing that would be appropriate without creating an undesirable imbalance in the future community profile, and without adversely affecting development viability for this and other types of desirable development (residential and non residential).

The intent of this interview process is to gauge development industry views on affordability, modes and methods of delivery including incentivisation options such as density and plot ratio bonuses; and for that matter any innovative thought towards a realistic delivery model for affordability in a medium to high density format.

### Question 7

Affordable housing consultant Judith Stubbs (Stubbs 2010) has analysed the community needs for affordable housing for the WAPC.

The report documents the proportion of people that are currently experiencing housing stress in the Perth market. It uses this as the basis for the recommendation that a *minimum 15% affordable rental and purchase accommodation in all new release and redevelopment areas is warranted, and 20% justified.*

To this end, the Cockburn Coast District Structure Plan has set a minimum target of 20% affordable housing to be achieved throughout Cockburn Coast.

Stubbs 2010 defines housing affordability;

*“Housing is ‘affordable’ when a very low-, low- or moderate income household pays no more than 30% of gross household income on rental or mortgage payments...”*

Stubbs 2010 goes on to state;

*“...such households are considered to be in ‘housing stress’ when they pay more than 30% of gross income on housing costs, and in ‘severe housing stress’ when paying more than 50% of gross income on housing costs.”*

Stubbs 2010 has determined the price levels (2010) that very low, low and moderate income households can afford to pay for rental and owner occupier housing are:

#### Affordable Housing Benchmarks in Perth SD

	Very low-income household	Low-income household	Moderate-income household
Income Benchmark	<\$655-\$736 per week	<\$984 per week	\$984-\$1,467 per week
Affordable Rental Benchmarks	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
Affordable Purchase Benchmarks	<\$153,000 - \$174,000 total purchase cost	<\$230,000 total purchase cost	\$230,000 - \$345,000 total purchase cost

Figure 12

In terms of the medium high density development contemplated for CC, what are your initial thoughts of enabling such affordability measures?

All respondents indicated it would be highly unlikely the private sector could deliver affordable dwellings at the price points stipulated for very low-income and low-income households in a medium to high density residential format. The critical barrier to this delivery is construction cost where for the most part typical apartment product cannot be delivered at the price benchmark for very low-income households and marginally at the price benchmark for the low income household.

All respondents identified the benchmark pricing for the low-income to moderate-income household could feasibly be achieved in a single storey detached dwelling format although this prospect is likely to be marginal in a medium density format.

Three of eight developers question whether the location was appropriate for the mandating of affordable product. Similarly, the question of appropriateness of product was raised with suggestions the Cockburn Coast District Structure Plan concept provided insufficient scope for diversity of product. The concept plans suggesting apartment living across 90% or more of the product.

## Question 8

Stubbs Report 1 proposes an amendment to *State Planning Policy 3.6: Development Contributions for Infrastructure* to include 'affordable housing' as 'special infrastructure'. Further to this, the proposal suggests a more equitable developer contribution based on dwelling yield, bedroom count and even accounting for retail/commercial GFA as opposed to a land based measure.

In the context of the contemplated built form, is such a proposal feasible?

Are there alternative performance based measures that can be reasonably applied?

Should such measures be incentivised? If yes, what forms of incentivisation will likely support built form supply as contemplated and meet the measures of affordability outlined above?

Four of eight respondents accepted the proposal as reasonable, although this was qualified to the extent it may affect feasibility and thereto the residual value to the land and the capacity of developers to consider the scale of development proposed and additional delivery of affordability. More detail required.

All respondents noted a dislike of developer scheme contributions and the principal issue identified was certainty in assessment methodology and thereto cost.

Four of eight respondents identified developer scheme contributions as a "disincentive".

Concerns were raised by four respondents as to the control and application of developer scheme contributions to affordable housing and the risk it may lead to concentrations of such development that may create stigmatised pockets. Only one of eight respondents provided an idea as to an alternative performance based measure this being the government prefund all affordable housing through dedicated acquisition of stock from developers. Conversely, a concern as to governance is raised, that is who will administer, monitor and maintain affordable dwellings in perpetuity.

Six of eight respondents indicated incentivisation of affordable dwellings will unlikely meet with measures of affordability outlined above. One respondent identified the option of providing “cheaper” land together with a guaranteed government purchase. One respondent reinforced the proposal for no stamp duty on new construction and limitation of first home buyer grant to new construction only thereto stimulating supply.

Four of eight respondents indicated a high likelihood that incentivisation via density and height may have a reverse effect further diminishing profits and placing greater pressure on residual land value.

Two respondents suggested a greater level of state participation to land and construction either in partnering or in joint venture format to offset acquisition and financing costs.

### Question 9

JSA Report 2 page 42 cites;

*One approach to affordable housing is to offer bonuses to developers to offset loss of profit associated with provision of affordable housing, or in order to generate funds for the construction of affordable housing through sharing additional profit generated through the developer taking up the planning incentive... . Bonuses that may result in increased saleable floor area include plot ratio and height (where other constraints affect the use of allowable plot ratio) and bonuses around parking may reduce costs in high density development.*

Do you see this as a feasible mechanism in the context of;

- a. the density and heights already contemplated for CC;
- b. a nil or low parking ratio for affordable housing supply; and
- c. proposed ‘affordable’ (Stubbs 2011) pricing regime?

	Very low-income household	Low-income household	Moderate-income household
Affordable Rental Benchmarks	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
Affordable Purchase Benchmarks	<\$153,000 - \$174,000 total purchase cost	<\$230,000 total purchase cost	\$230,000 - \$345,000 total purchase cost

All respondents queried the super profit theory. Intuitively all respondents indicated it would be highly unlikely that sufficient super profits could be generated to offset the cost of implementing affordable dwellings within a project at the levels contemplated.

Several respondents raised questions of administration and management, that is who would take responsibility for the governance of the affordable dwellings and how will the affordable dwellings be managed in a pool such that they remain affordable? Three of eight developers reinforced the fact that increasing density and height bonuses may be self defeating in that this typically incurs additional costs as height increases and in parallel with this, the need for additional parking may impose further basements or a loss in GFA to parking.

## Question 10

What are the principal constraints to delivering 'affordable' dwelling product in a medium/high density format and meeting the implied diversity and pricing requirements?

All respondents identified;

- Construction costs, construction methods, parking ratios, social stigma,
- "End buyer",
- Administration and management.

## Question 11

What product typologies are more likely to achieve the implied diversity and pricing requirements? Are there low cost options such as pods and lightweight demountable structures that can be applied in part or in whole?

Six of eight respondents identified the most practical delivery model is that of single storey detached/attached dwellings. Two respondents identified recent product typologies on small lots with five metre frontages presently being delivered across a broad range of suburban Greenfields residential estates.

Four of eight respondents identified the possibility of meeting the affordability benchmarks in some of the lower rise, one to three storey product, with one bed and possibly small two bed walk up format.

All respondents recognise that alternative construction methods did exist although in their experience failed to achieve sufficient cost efficiency to shift the mindset of current builders.

One respondent suggested the "mentality" of WA buyers for masonry/concrete construction as opposed to lighter weight steel framed/timber frame construction was a key barrier to alternate delivery mechanisms.

## Question 12

In the context of CC, what locational and infrastructure needs will better promote or support the supply of diversity in dwelling modes and pricing need?

All respondents identified four principal requirements;

- Integrated transport, both local and to the broader metropolitan area;
- The provision of early amenity and convenience retail;
- The provision of social and civic infrastructure primarily in the form of place making and destination;
- Provision of employment opportunities.

### Question 13

What incentivisation based variation to planning provisions (if any) such as height, plot ratio, parking to name a few are likely to best generate sufficient funds/super profits to offset delivery of affordable housing?

All respondents provided a null response to this question.

### Question 14

How in your view, would the market likely respond to the mandatory provision of affordable housing in CC and what are the likely implications to market input such as;

- a. implementation,
- b. take up, and
- c. residual land values to name a few?

All respondents identified the mandating of affordable housing at Cockburn Coast will likely have the largest effect on residual land values.

Four of eight respondents identified the risk of an emerging stigma with the public confusing social housing with affordable housing.

To this end, the same group of respondents identified a strong need to properly make the market fully aware of the distinction between social and affordable housing with the need to salt and pepper the distribution throughout Cockburn Coast.

Two respondents identified the mandatory provision of affordable housing as restricting implementation seeing undeveloped land and left idle for lengthy periods of time.

The mandating of affordable housing is likely to be a disincentive to developers and a major downside to residual value.

## Question 15

Following on from Q12 and 13 above, assuming an equitable and feasible solution, should there be a 'blanket' cap or ratio approach to the volume and type of affordable housing on;

- a. whole of Scheme area basis, or
- b. a project by project basis, or
- c. should it be defined in designated precincts?

Can you provide a broader explanation of the reasoning behind your views outlining the key drivers, motivations and foreseeable advantages to community and supply of affordable dwellings?

Six of eight respondents preferred a salt and pepper approach. Two of eight respondents preferred a project by project approach. The respondents preferring the salt and pepper approach generally indicated this preference to avoid the construction of "ghettos" as well as identifying it as the likely most cost effective approach if delivered by private enterprise.

The two respondents who cited the project by project basis were both keen to see the affordable dwelling product retained to State land and delivered by the State.

## Question 16

Initiatives already implemented in several redevelopment areas (SRA – EPRA) that have met with some success include;

- a. the sale of serviced land at cost or a discount to market value to Department of Housing or a Community Housing provider,
- b. mandating 10% of dwellings constructed be offered to Department of Housing or a Community Housing provider for use as affordable housing with transfer at construction cost and incoming buyer utilising a shared equity scheme,
- c. provision of density bonuses and responsible agency secures 50% of the additional profit arising from the application of bonus GFA to both affordable and non-affordable housing. This maybe 'cash in kind' or a number of the additional units constructed within the development or elsewhere in the locality.

What are your thoughts on applicability and feasibility of these schemes in CC? Moreover, are there alternative mechanisms that you could propose or are aware of that may prove feasible?

Four of eight respondents noted Option A as the most preferable with affordable dwellings being delivered by the Department of Housing or some similar community housing provider. Six of eight respondents considered Option B as feasible although questions were raised as to management and governance.

As previously noted all respondents failed to see the application of Option C in a feasible and workable manner.

## Question 17

Is the provision of affordable dwellings in your view a state responsibility?

In view of your response, is market intervention warranted through a mandatory planning regime or should it be focused on state/local government controlled land; for example LandCorp control 40 hectares of land with the City of Fremantle in control of 20 hectares under the former South Fremantle Landfill Site?

- Generally all respondents cited the preference that the provision of affordable dwellings should be a State responsibility.
- Many were borderline quoting potential for private enterprise to engage in the delivery of affordable dwellings.
- In this regard, the principal concern raised generally related to the “end buyer”, management, and administration; that is governance of the affordable dwelling pool. Several cited a fear the failure of such governance may lead to social stigma that impacts the various projects within which affordable dwellings are delivered, particularly at the percentages presently targeted.

Two respondents cited the government should play the major role but encourage private public partnerships.

Six of eight respondents maintained a preference for the salt and pepper approach as opposed to focusing all the affordable product to State controlled land.

## Question 18

Following on from Q15-16 above, from an industry perspective, would greater direction, clarity and simplicity be preferred, and as such, a blanket ‘cash in lieu’ mechanism be applied on GFA of private and public built form development, which is paid on completion of sales into a pooled fund to support delivery of affordable dwellings by the state, on either publicly or privately owned land?

Could this be expanded to stimulate density and delivery by utilising mechanisms such as decreasing scales of ‘cash in lieu’ for greater diversity, set product modules and GFA?

Fifty per cent of respondents accepted the cash only mechanism although this was qualified to the extent the mechanism and method of calculation was simple and clear such that developers could easily work into project feasibilities with certainty. The other four respondents indicated a low response and as for question 8, noted this approach as being quite similar to a developer scheme contribution citing both as ‘just another form of taxation’.

## Question 19

Are there other alternatives worth considering such as profit sharing, that is, an agreed proportion of additional profits earned on the delivery of affordable density bonuses?

All respondents provided a null response to this question.

## Question 20

Do you consider there is joint venture or partnering opportunities between state and private developers that will facilitate the vision for CC as well as delivery of affordable dwellings? If so, can you provide some insight to JV or Partnering structures and models that you would consider reasonable and functional?

Prompts;

- a. land at \$nil; development bonuses, profit share and delivery of affordable dwellings,
- b. land at cost; development bonuses, profit share and delivery of affordable dwellings,
- c. either a or b, development bonuses, where profit share paid into pooled fund for delivery of affordable dwellings on specific sites; contract award on construction of affordable dwellings,
- d. either a or b, development bonuses, with state capital funding of affordable dwellings.

All respondents quoted an acceptance for joint venturing and partnering models to enable the delivery of product and affordable dwellings in concert with the vision for the Cockburn Coast.

Four of eight developers showed a preference for Prompt A where land is submitted at \$0 and the State through a dedicated agency engages in profit share and delivery of affordable dwellings at the contemplated ratios.

## 4 MARKET COMMENTARY

### 4.1 WESTERN AUSTRALIAN ECONOMIC OVERVIEW

The Western Australian economy continues to prop the national GDP through significant increases in Gross State Product and investment into infrastructure and resource sector based projects.

Despite this, the effect felt on the ground in the WA economy is tiered with not all in the community benefiting from the investment into the State. Deloitte's Access Economics is predicting a continuation of superior growth of the WA economy in the short term, however this falls away and plateaus from 2014 onwards.

Generally, at the consumer level, consumption is in decline and savings rates are increasing and this is being mostly felt in the retail, small business and residential housing sector.

Consumer confidence remains low although improving and small business expectations for WA continue to remain cautious. This survey data reflects the nature of the predominant small business sector providing goods and services into the WA community. The corporate sector and corporate services, particularly through mining and engineering as well as property, financial and administration have conversely performed better.

The lack of confidence at the consumer and small business end of the WA economy has fundamentally been driven by the external woes affecting international economies and markets to which WA and Australia are intrinsically linked as well as political uncertainty and concern to effect of policy such as the Mineral Resources Rent Tax and Carbon Tax.

In Summary;

- WA's economy recovered from the 2008 GFC on the back of short term commodities demand and resource based investment and maintains a positive short to medium term outlook.
- The peak of the commodity demand cycle appears to have been reached post GFC and more recently on weaker European and US markets; however committed investment into WA is anticipated to continue and peak circa 2014 - 2015. Refer overleaf.

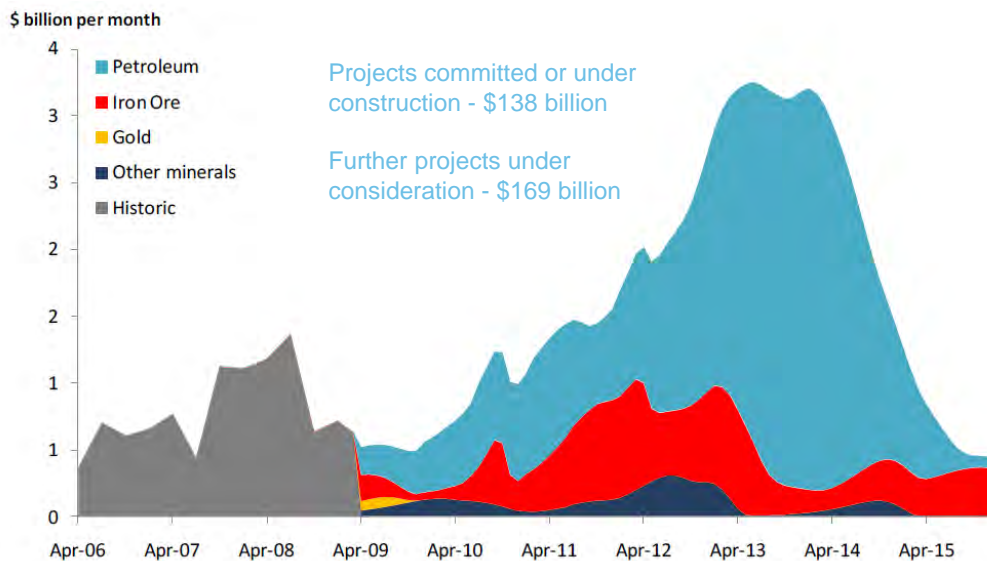


Figure 13: Source ACIL Tasman

- Consumer and business sentiment has improved on the news of better short term economic fundamentals however remains fragile. Business sentiment in WA is rising whilst consumer sentiment has plateaued principally on the concerns/effects of a dual economy in WA, compounded by remaining uncertainty of effects of external markets into WA, political policy making that has the potential to increase household costs and an unclear direction with interest rates.
- Retail turnover performance is two tier with a strong good/convenience sector whilst general retail and particularly fashion and plus accessories has been weak and often in decline on the back of weak consumer sentiment and a sustained shift from consumption to savings; although 2012 ABS data suggests a change may be in the wind.
- Deloitte's Access Dec 2011 long term forecasts indicate a healthy average annual retail turnover growth of 3.9% per annum for WA.
- Business investment is increasing however not all business sectors managed the GFC well and some remain fiscally weak, particularly those not benefiting from the resource sector investment.
- Unemployment levels appear to have stabilised and have now improved. Despite this, long term forecasts remain modest with average employment growth of 1.7% per annum (Deloitte's Access Dec 2011).
- Long term population growth forecasts of 1.7% to 2.5% per annum (Deloitte's Access Dec 2011) over the next decade suggest sustained dwelling demand will emerge once current sentiment improves and stock on the market returns to 'normal' levels. Additionally, the State of WA is signalling a more robust population growth in its recent WA Tomorrow (2012) publication.
- Long term economic growth for WA (GSP) is forecast to sustain a band of 2.9% to 3.7% (Deloitte's Access Dec 2011) per annum over the next decade.
- Industrial production for WA is forecast to average 4.0% per annum (Deloitte's Access Dec 2011) over the next decade.

Demand for resources from China and other emerging economies remained strong in 2011, resulting in continued strong exports and capital expenditure in Western Australia's resources sector. These emerging economies have been the driving force of economic growth in Western Australia, however, the contagion from the issues affecting advanced economies has started to affect growth in emerging markets. Despite this, the IMF anticipates China's economy will remain reasonably robust in 2012, although does caution a softening trend.

Further to this, European sovereign debt issues, concerns emerging of China's shadow financial system and local government debt serviceability is sapping business and consumer sentiment. Consequently, a cautionary approach continues to be observed with respect to capital investment in property for WA, however there was a strong increase in commercial property transactions in 2011, as a result of continuing institutional business and portfolio reweighting. The main concerns regarding the market is the further tightening of credit availability placing pressure on business and investment projects together with a possible slowing in mineral resource demand from emerging markets.

## 4.2 RESIDENTIAL MARKET OVERVIEW

The deterioration of global economic conditions over 2008 and into 2009 had a dampening effect on Western Australia's residential property market. What began as a stagnation of residential prices and transactions in late 2007 to early 2008 predominantly as a result of affordability and rising interest rates, quickly transformed into a downturn of values and demand during the latter half of 2008 into early 2009. The period was characterised by a substantial increase in stock on the market, a significant reduction in demand and a fall in values across most residential property subsectors.

Mid 2009 saw a noticeable increase in activity in the residential property market. This was primarily for the affordable house and land product and lower range apartments (under \$500,000) due to the First Home Buyers Grant (FHOG) increase. However, the increase in activity was also attributed to second and third home owner trade up buyers and was the result of a low interest environment, governmental stimulus and the perception that the residential property market had bottomed out. As anticipated by the market, upon expiry of the increased FHOG incentive on 30 June 2009, the first home buyer market activity softened.

Despite an improvement in the residential market in early 2010; the past 18 months has seen demand for residential real estate continue to weaken on the back of a declining consumer confidence due to a number of factors including, but not limited to, the flow on effects from the withdrawal of government incentives; and ongoing political, interest rate and economic uncertainty. These factors have had a dampening effect on the market and contributed to price falls across the house and unit sectors, with the premium / luxury market affected most severely. Whilst selling agents are presently reporting an increased level of enquiry for the majority of residential property classes, the conversion of this interest to an increase in volume of transactions and values is yet to occur although early 2012 data suggests a change.

The most recent Real Estate Institute of Western Australia statistics available indicate the median house price increased by 0.4% during both the December 2011 and March 2012 quarters. The increase in the December 2011 median house price was the first since March 2010, potentially suggesting that the residential market may have bottomed out and is now showing early signs of improvement. This trend is considered premature to confirm although the benefit recent interest rate reductions by the Reserve Bank of Australia is yet to flow through. Further to this, REIWA reported the Perth Metropolitan vacancy rate has fallen -4.0% and -1.4% from the previous quarter and year respectively.

This change is influencing all residential submarkets and in turn is signalling an imminent change in dwelling demand spurred by a lack of rental accommodation and renewed investor interest as yields improve.

Anecdotally, the supply of stock on the market appears to be slowly unwinding and returning to longer term trend volumes, however the REIWA data for the March 2012 quarter also showed average selling days extending two days from 77 to 79. The changing dynamics are characterised by David Airy, REIWA, following the release of the December 2011 quarter statistics:

*“First-home buyers have been skewing the median downwards by generating large sales volumes of more affordable homes, but now this has been balanced with more upgrade buyers in the market, who tend to purchase the more expensive properties.”*

*“REIWA data show that while first-home buyers continue to be increasingly active in the market, we saw an increase in trade-up buyers during the December quarter and an increase in house sales of around 6% to 7%, which may have put a floor under prices.”*

*“It’s a similar situation in the multi-residential sector with units, apartments, villas and townhouses also experiencing an increase in turnover and a 1% increase in median price.” “The number of houses for sale has fallen to its lowest level since March 2010, while land remains over represented with 2,800 lots on the market.”*

*“The housing market seems to be stabilising, with an increasing number of sellers adopting more realistic asking prices, with both the number of sellers discounting and the average discount both coming down in the quarter.”*

*“Our preliminary data show the vacancy rate dropping to 2.3% in the quarter and well down on the 3.4% from the same period last year. While the median rent for units and apartments remains steady at \$380 per week, it has increased by \$20 for houses to \$420 per week. The overall median rent for Perth has reached \$400 per week, representing an increase of 8.1% over the last year.”*

*“It’s evident there is greater confidence returning to the property market reflected in the increase in sales activity in the December quarter and the fall in listings we saw across 2011.*

*“This bodes well for a positive start to 2012, but we still maintain some level of cautiousness given the global economic situation despite WA having a more robust economy.”*

**Source:** Property Observer

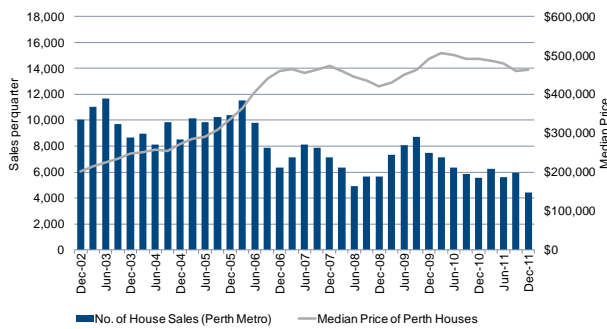
The preliminary REIWA March 2012 quarter statistics are summarised below, which signal a general softening from the previous year but stabilisation from the previous quarter.

Median Sale Price	Mar Qtr 2012	% Change Previous Qtr	% Change Previous Yr
Houses, Perth	\$469,000	0.4%	-3.3%
Units/Apartments, Perth	\$399,000	2.30%	-1.5%
Land, Perth	\$265,000	13.2%	10.0%

Figure 14: Source REIWA

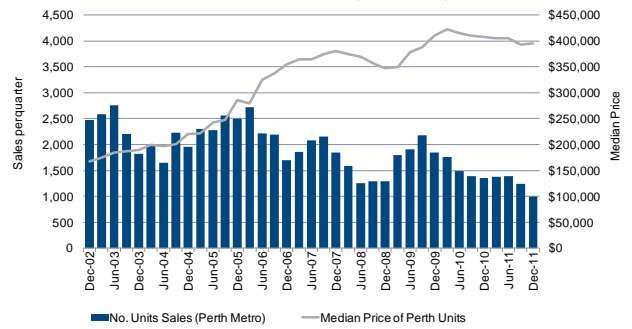
Further to this transactional data and approvals continue to trend down. Refer charts below.

### Established House Sales (Perth Metro)



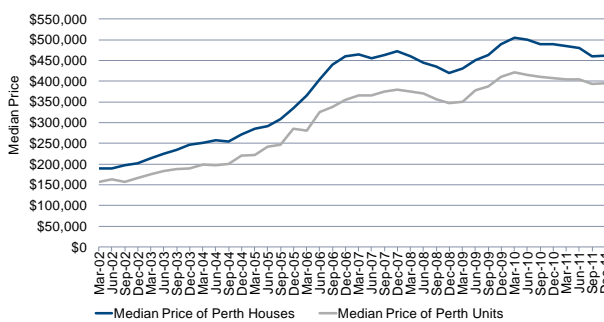
Source: REIWA (Latest figures are preliminary figures), Colliers International Research

### Perth Established Units Sales (Perth Metro)



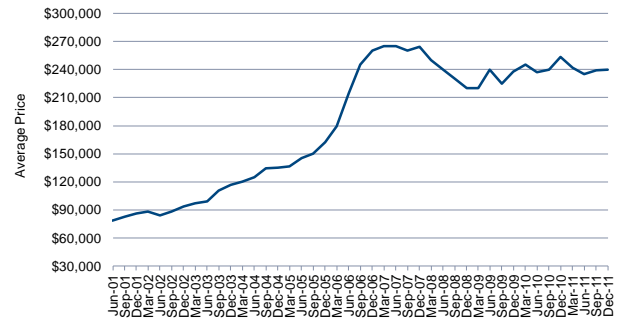
Source: REIWA (Latest figures are preliminary figures), Colliers International Research

### Perth Quarterly Median House & Unit Price



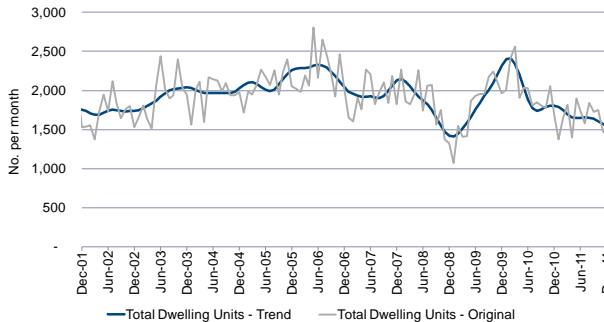
Source: REIWA (Latest figures are preliminary figures), Colliers International Research

### Perth Median Residential Lot Price



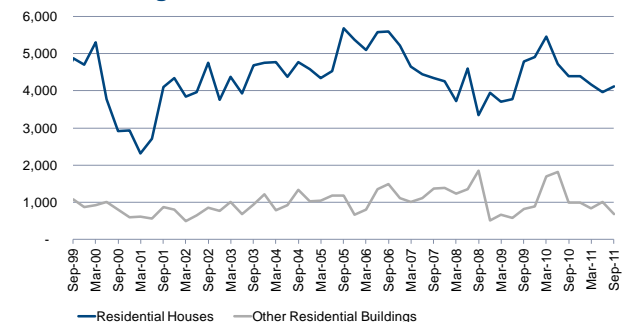
Source: REIWA (Latest figures are preliminary figures), Colliers International Research

### WA Dwelling Units Approvals



Source: ABS - WA Dwelling Units Approved, Colliers International Research

### W.A. Dwelling Unit Commencements



Source: ABS Dwelling Commencements (Table 8750-05), Colliers International Research

Figure 15

### 4.3 RESIDENTIAL APARTMENT MARKET OVERVIEW

With regard to the market for units and apartments, the following comments can be made:

- Federal Government initiatives, more specifically the First Home Owner's Grant (FHOG) Boost, resource sector optimism, relatively low interest rates, price discounting and a projected shortage of housing were the drivers for the apartment/unit market during 2009. However, 2010 witnessed a retraction in demand due to higher interest rates and economic uncertainty.
- 2010 witnessed first homebuyers diminishing in numbers after the withdrawal of the FHOG Boost at the end of December 2009. This carried through to 2011 with relatively low levels of first homebuyer transactions.
- Second half of 2011 and into 2012 has seen increased first home buyer activity.
- Apartment market pricing stabilised in the second half of 2010 after strong discounting in 2009 however transactional activity remains sluggish with all buyer groups price sensitive.
- This is further impacted by detached dwelling substitutes in suburban locations now priced sub \$350,000 which in many cases is 15% to 25% less than typical entry level apartment stock.
- A similar relativity has emerged in the premium residential sub markets creating wider choice.
- This is compounded by the negative perception that emerged from the last cycle on the back of speculative buying, long development lead times and then with the change in market, the public laundering of settlement defaults and number of developer failures on incomplete projects further extending delivery times for legitimate buyers.
- Stock on the market is slowly returning to longer term trend.
- Due to the tightening rental market in 2012, improving yields are seeing a return of investors to the apartment market.
- Selling agents have reported increased levels of enquiry in 2012, particularly for city-fringe (apartment/unit) projects priced between \$350,000 and \$600,000.
- The Real Estate Institute of Western Australia (REIWA) reported quarterly and annual increases to the March 2012 median weekly rent for the Perth Metropolitan Area of 5% and 10% respectively; and quarterly and annual decreases to the vacancy rate of -4.0% and -1.4% respectively.
- Demand for luxury apartments in all locations of the metropolitan area remained subdued through 2011 and into 2012, however 'western suburbs' selling agents generally report improving activity although this generally pertains to detached dwellings sub \$1.8m.
- Recent uncertainty in the global economic conditions and concerns of a property bubble in Australia are likely to keep a lid on a significant recovery in activity for premium priced stock due to the market 'memory' of fallout experienced from 2008 to 2010.
- Long term investors remain cautious, although activity is improving.

- General residential lending criteria of banks has tightened making difficult the achievement of a home loan without a savings and employment track record together with capacity to meet 10% to 20% deposit requirements. This is more so with apartments with many of the banks taking a cautious stance after the fallout of the last cycle peak.
- A number of developers are introducing selling incentives.
- Consequently, new apartment project commencements have softened due to GFC impact and credit constraints placed on buyers and developers.
- High construction costs continue to inhibit feasible medium to high rise apartment development.
- Developers are seeking alternative methods of finance raising to activate projects i.e. fund syndication, joint ventures.
- Builder/developers are most active in the market place due to the internal cost advantage. This is well demonstrated by the continued activities of Finbar, Diploma, Qube Property Group, Pindan and Match through 2010 and into 2011.
- The effect of weak product line demand (at comparative price point) and higher cost base has seen a general shift to low to mid rise (3 to 8 storey) development and increasing levels of group house, town house and terrace styled multi unit development. Consequently the suburban apartment/unit markets are characterised by single and 2 to 4 storey multi unit housing with 'city' fringe areas at 3 – 6 storeys.
- The primary observation in this submarket is that developers are finding it difficult to make feasible medium density development due to the existing balance between product line comparative pricing, cost and funding. The first factor of production to suffer is land value with decreases from the highs of 2007 observed in a range from 20% to 50%.
- This withdrawal from market of medium density development has and is resulting in limited short term supply of this product line. On the premise of continued population growth, there should be over time, a natural correction to demand the timing of which is presently being tempered by consumer caution and affordability. It is anticipated that medium term (defined as 3 – 5 years) the supply shortage and higher demand may drive pricing forward, that together with softer land pricing may enable a return to feasibility of such projects at comparative price cost ratios.
- New apartment project commencements have softened considerably due to GFC impact and credit constraints, with a number of development sites that were proposed to accommodate new developments now in receivership. The 'pre-sale' market emerging is likely to create a 'gap' in supply from 2013 potentially setting up the market for demand led price movement upwards. The effect will be balanced by pricing of detached dwellings and available supply thereof. 'WA Tomorrow 2012' population growth forecasts for 2012 – 2014 suggests the present lack of new supply and market tardiness in delivery (meeting demand) should avail improving demand led conditions from 2013.

## 4.4 DEVELOPMENT SITE MARKET

The above factors have directly impacted the viability of development sites and placed downward pressure on land values. The sustained withdrawal of credit availability for this sector and weak consumer demand has placed continued pressure on land values over the last 30 months.

The economic and market conditions of late 2007 and 2008 resulted in a retraction of development site activity and limited new development. As a result of the economic downturn, there was a general lack of prominent apartment/mixed-use development site sales over late 2008 and 2009, however this began to turn in 2010 with mid tier developers returning to market taking advantage of discounted land pricing.

It is anticipated market (consumer) sentiment in this sector may improve into 2012, and with the limited production/initiation of new apartment stock since 2009, a scarcity of stock may emerge in 2013, enabling achievement of presale/pre-lease requirements to obtain development funding, suggesting a recovery in demand for sites and values may occur 2013.

The withdrawal from the market by developers was a direct function of the uncertain times experienced over the period 2008 - 2010. Although demand for large built form development sites with high capital requirements remains relatively subdued and has resulted in a softening of those values, the general consensus is that enquiry has increased. Of the limited transactions that have occurred, values appear to have stabilised and typically reflect discounts in the vicinity of 20% to 50% off the top of the market.

The shift in development site price points from 2007 to 2010 is demonstrated in the table below:

Development Site	Sale 1 Date	Sale 1 Price	Sale 2 Date	Sale 2 Price	Discount
Various Lots Welshpool Road & Swansea Street, East Victoria Park	Nov-07	\$12,209,091	Jan-10	\$9,300,000	24%
Lot 140 Stirling Highway, North Fremantle	Mar-07	\$61,000,000	Apr-10	\$30,000,000	51%
Cnr Wellington Street & George Street, West Perth	Sep-07	\$13,350,000	Jun-10	\$7,550,000	43%
Lot 110 Bennet Avenue, North Coogee	Apr-07	\$13,909,091	May-10	\$9,000,000	35%

Figure 16

#### 4.5 PREVAILING MARKET CONDITIONS - CHANGING TIMES

The events of early 2008 including the initial sub-prime fallout in the United States and subsequent Global Financial Crisis (GFC) created uncertain times for both the equities and property markets in Australia which softened considerably during this period. This change in markets impacted to varying degrees upon a variety of participants.

Whilst a degree of uncertainty still remains within these markets, the magnitude would appear to be less than that evident throughout 2008 and the majority of 2009. Improving levels of investor confidence and general market activity within Australian property markets were evidenced throughout 2010 and until early to mid-2011. Since this time the concerns regarding European sovereign debt crises appear to have re-introduced a layer of general market conservatism into domestic markets, somewhat setting back the momentum that appeared to be gaining throughout late 2010 and early 2011.

**We draw your attention to the fact that the market value adopted herein is subject to the issues outlined above, and should be closely monitored in light of future events. Furthermore, it is our strong recommendation that regular valuation updates be initiated and instructed by the party wishing to rely upon this valuation.**

## 5 MARKET SALES EVIDENCE

The identification of the market value of typical medium density sites in this locale is required for benchmarking against the residual value analyses at Section 6: Feasibility of Incentivised Delivery. In this regard a sample of market activity pertaining to residential development sites throughout North Coogee is investigated and tabled below.

Similarly, the market activity pertaining to residential apartments within the locality is investigated to assist with the assessment of the ‘as if complete’ gross realisation estimate for the residual value analyses at Section 6: Feasibility of Incentivised Delivery.

### 5.1 RESIDENTIAL DEVELOPMENT SITES

#### 13 O’Connor Close, North Coogee

Contract Date	November 2011
Contract Amount	\$2,100,000 (exclusive of GST)
Site Area	2,252 m <sup>2</sup> (1,689 m <sup>2</sup> estimated ‘effective’ site area)
Site Rate	\$933/m <sup>2</sup> \$1,243/m <sup>2</sup> (effective)
Potential Yield (estimated)	9 dwellings (townhouse concept) 19 dwellings (assuming average apartment area of 85 m <sup>2</sup> )
Yield Analysis	\$233,333/dwelling (townhouse concept) \$110,526/dwelling (apartment concept)
Town Planning	The site is predominantly zoned “Mixed Business / Residential (R60 / R80) with the western margin of the site zoned “Public Open Space” (approximately 25% of site).
Comment	Situated on the western side of O’Connor Close approximately 85 metres north of Rollinson Road, the property features a rectangular shaped allotment improved with a functional concrete tilt panel office-warehouse facility constructed in the late 1990’s. The site is separated from the Indian Ocean by a freight railway line and beachfront vegetation area, however future multi-level development on the site will benefit from having unrestricted ocean views as demonstrated by a multi-level apartment development which adjoins the site to the immediate south. Whilst the existing improvements offer a utility value, they are not considered to enhance the underlying land value under highest and best use principles.

---

### Lot 460 Barrow Crescent, North Coogee

---

Sale Date	December 2011
Sale Amount	\$2,927,100 (exclusive of GST)
Site Area	2,342 m <sup>2</sup>
Site Rate	\$1,250/m <sup>2</sup> \$1,132/m <sup>2</sup> (present value analysis of deferred payment structure)
Potential Yield (estimated)	13 dwellings (townhouse concept) 34 dwellings (apartment concept – assuming average apartment area of 85 m <sup>2</sup> )
Yield Analysis	\$225,162/dwelling (townhouse concept) \$86,091/dwelling (apartment concept)
Town Planning	“Group / Multiple Dwelling Site R60 – R100”
Comment	<p>Forming part of the South Beach estate and situated on the northern corner of Barrow Crescent and Harrison Way, the property comprises an irregular shaped residential development site. Acquired by a subsidiary organisation of local residential developer Match, the site benefits from fronting a public open space area and being within short walking distance of South Beach. The site is presently improved with Stockland’s estate sales office.</p> <p>We understand that the property sold subject to a staged payment structure, with \$500,000 payable initially; and the balance \$2,427,100 to be paid in 18 months. Moreover, we understand Stockland will continue operating the sales office on-site during this 18 month period rent free. Our present value analysis of the transaction cognisant of the deferred payment structure reveals a slightly lower site rate of \$1,132/m<sup>2</sup>.</p>

---

### Lot 462 Shoalwater Street, North Coogee (Under Contract)

---

Sale Date	June 2011
Sale Amount	\$3,835,000 (exclusive of GST)
Site Area	2,950 m <sup>2</sup>
Site Rate	\$1,300/m <sup>2</sup> \$1,170/m <sup>2</sup> (present value analysis of deferred payment structure - rounded)
Potential Yield (estimated)	16 dwellings (townhouse concept) 43 dwellings (apartment concept – assuming average apartment area of 85 m <sup>2</sup> )
Yield Analysis	\$239,690/dwelling (townhouse concept) \$89,190/dwelling (apartment concept)
Town Planning	“Group / Multiple Dwelling Site R60 – R100”
Comment	<p>Forming part of the South Beach estate and situated to the southwest ‘elbow’ of Shoalwater Street, the property comprises an irregular shaped residential development site. Acquired by a subsidiary organisation of local residential developer Match, the site benefits from fronting a public open space area and being within short walking distance of South Beach.</p> <p>We understand that the property sold subject to a staged payment structure, with \$400,000 payable initially; and the balance \$3,430,000 to be paid in 18 months. Our present value analysis of the transaction cognisant of the deferred payment structure reveals a slightly lower site rate of \$1,170/m<sup>2</sup> rounded.</p>

---

---

#### Lot 786 Orsino Boulevard, North Coogee

---

Sale Date	September 2010
Sale Amount	\$7,565,000 (exclusive of GST)
Site Area	4,625 m <sup>2</sup>
Site Rate	\$1,636/m <sup>2</sup>
Approved Yield	100 residential apartments
Yield Analysis	\$75,650/dwelling (premised on proposed development)
Town Planning	"Residential R80": Proposed "Marina Village (Local Centre)"
Comment	Forming part of the developing Port Coogee residential estate, the subject site features a generally regular shaped oceanfront development site. The site benefits from being located close to the future marina and is located directly opposite an existing public open space area. Additionally, the site is located close to a proposed shopping centre that will be anchored by a national supermarket. Development approval was recently granted for a multi-level project proposed for the site incorporating 100 residential apartments.

---

#### Lots 119 and 120 O'Connor Close, North Coogee

---

Sale Date	June 2010
Sale Amount	\$4,500,000
Site Area	4,503 m <sup>2</sup>
Site Rate	\$999/m <sup>2</sup> , refer to "comment" \$1,301/m <sup>2</sup> , based on net area
Potential Yield	19 dwellings (townhouse concept) 50 dwellings (apartment concept – assuming average apartment area of 85 m <sup>2</sup> )
Yield Analysis	\$236,842/dwelling (townhouse concept) \$90,000/dwelling (apartment concept)
Town Planning	"Residential R60/R100"
Comment	<p>The site is located on the western side of O'Connor Close, within the new developing South Beach precinct. The site is situated towards the northern end of O'Connor Close and the western boundary is adjacent to a railway line. As a portion of the land on the western side of the railway line will be suitable for multi level development, it appears likely that most ocean views from Lots 119 and 120 will be obscured. The beach front is located about 200 metres from the rear boundary, with a majority of the land on the opposite or western side of the railway line being reserved for parks and recreation.</p> <p>Development of the site requires a 15 metre wide strip along the western boundary to be ceded free of cost to the Crown for POS. However, the development potential or density is calculated on the whole site area of 4,503 m<sup>2</sup>. Based on the adjusted land area of 3,459 m<sup>2</sup> (after allowing for the POS), this sale reflects a rate of \$1,301/m<sup>2</sup>. The development of 45 apartments on the net site area of 3,459 m<sup>2</sup> reflects a density of around R130.</p>

---

---

### Lot 749 Corner Orsino Boulevard & Cockburn Road, Port Coogee

---

Sale Date	February 2010
Sale Amount	\$10,000,000 inclusive of GST (Margin Scheme)
Site Area	1.5442 ha (15,442 m <sup>2</sup> )
Site Rate	\$648/m <sup>2</sup>
Potential Residential Yield	107 dwellings (R80)
Proposed Residential Yield	58 dwellings
Yield Analysis	\$93,458/dwelling (potential) \$172,414/dwelling (proposed)
Town Planning	"Neighbourhood Centre (R80)" (Proposed Local Structure Plan)
Comment	Located within Australand's developing Port Coogee development, the property features a beachfront mixed-use development site. The property is generally triangular shaped and benefits from having three frontages to Cockburn Road, Orsino Boulevard and Prenlite View. Future built form development on the site will benefit from having extensive ocean views.

---

### Lot 110 Bennett Avenue, North Coogee

---

Sale Date	\$9,000,000 (exclusive of GST)
Sale Amount	May 2010
Site Area	10,024 m <sup>2</sup>
Site Rate	\$898/m <sup>2</sup>
Town Planning	"Industry – Restricted Use 9"
Comment	<p>Situated approximately 16 kilometres southwest of the Perth Central Business District within the coastal locality of North Coogee, the property features a rectangular shaped development site of 1.0024 hectares. More particularly, the site is orientated on the western side of Bennett Avenue approximately 90 metres southeast of Abattoir Loop. Fronting a railway line, the site has a single frontage to Bennett Avenue of 94 metres and future multi-level development on the site will benefit from having unrestricted ocean views. The site is currently improved with older style improvements of an industrial nature; however we do not consider they add value under highest and best use principals.</p> <p>The site forms part of an underutilised industrial area located between the South Beach and Port Coogee residential developments. Incorporating approximately 330 hectares, the precinct has been earmarked by the State Government as a mixed-use rejuvenation opportunity and the Department of Planning endorsed the "Cockburn District Structure Plan" in August 2009. However, the majority of the precinct remains zoned "Industrial" under the Metropolitan Region Scheme and at the date of sale a five-year time frame was estimated until the site will be zoned "Urban/ Residential" under the appropriate Town Planning Schemes to facilitate redevelopment. The site was strategically acquired by LandCorp who are a key stake holder within the locality and therefore we believe this transaction reflects a degree of 'special value'.</p>

---

## Development Site Market Evidence Summary

The market evidence investigated is summarised within the schedule below:

Property	Sale Date	Sale Price	Site Area	Site Rate	Potential Yield (Ths.)	Yield Analysis (\$/dwel.)	Pot Yield (apts.)	Yield Analysis (\$/dwel.)
13 O'Connor Close, North Coogee	Nov-11	\$2,100,000	*1,689 m <sup>2</sup>	*\$1,243/m <sup>2</sup>	9	\$233,333	19	\$110,526
Lot 460 Barrow Crescent, North Coogee	Dec-11	\$2,927,100	2,342 m <sup>2</sup>	*\$1,132/m <sup>2</sup>	13	\$225,162	34	\$86,091
Lot 462 Shoalwater Street, North Coogee	Jun-11	\$3,835,000	2,950 m <sup>2</sup>	*\$1,170/m <sup>2</sup>	16	\$239,690	43	\$89,190
Lot 786 Orsino Boulevard, North Coogee	Sep-10	\$7,565,000	4,652 m <sup>2</sup>	\$1,636/m <sup>2</sup>	-	-	100	\$75,650
Lots 119 & 120 O'Connor Close, North Coogee	Jun-10	\$4,500,00	*3,459 m <sup>2</sup>	\$1,301/m <sup>2</sup>	19	\$236,842	50	\$90,000
Lot 749 Corner Orsino Boulevard & Cockburn Rd, Port Coogee	Feb-10	\$10,000,000	15,442 m <sup>2</sup>	\$648/m <sup>2</sup>	107	\$93,458	58	\$178,414
Lot 110 Bennett Avenue, North Coogee	May 10	\$9,000,000	10,024 m <sup>2</sup>	\$898/m <sup>2</sup>	-	-	-	-

\*Effective

Figure 17

## 5.2 RESIDENTIAL APARTMENT PRICING

The following provide a snapshot of coastal residential apartment pricing in this locale from premium to standard stock.

### "Islands Apartments" – Stage 1 21 – 23 Ocean Drive, North Coogee

Sale Details:

Unit	Sale Date	Sale / Asking Price	Year Built	Type	Net Area	Strata Rate
41 (Apt)	Oct-11	\$2,300,000	2010	3 x 3	143 m <sup>2</sup>	\$16,084/m <sup>2</sup>
47 (Apt)	Sep-11	\$2,150,000	2010	3 x 3	136 m <sup>2</sup>	\$15,809/m <sup>2</sup>
20 (Apt)	Mar-11	\$2,080,000	2010	3 x 3	135 m <sup>2</sup>	\$15,407/m <sup>2</sup>
46 (Apt)	Mar-11	\$2,200,000	2010	3 x 3	136 m <sup>2</sup>	\$16,176/m <sup>2</sup>
19 (Apt)	Dec-10	\$2,300,000	2010	3 x 3	135 m <sup>2</sup>	\$17,037/m <sup>2</sup>
APT3A	For Sale	\$1,860,000	2010	2 x 2	111 m <sup>2</sup>	\$16,757/m <sup>2</sup>
APT7A	For Sale	\$2,030,000	2010	2 x 2	110 m <sup>2</sup>	\$18,455/m <sup>2</sup>
APT4B	For Sale	\$1,720,000	2010	2 x 2	110 m <sup>2</sup>	\$15,636/m <sup>2</sup>
BH3A	For Sale	\$1,050,000	2010	2 x 2	111 m <sup>2</sup>	\$9,459/m <sup>2</sup>
BH4A	For Sale	\$5,190,000	2010	4 x 3	231 m <sup>2</sup>	\$22,468/m <sup>2</sup>
BH1B	For Sale	\$4,450,000	2010	3 x 3	177 m <sup>2</sup>	\$25,141/m <sup>2</sup>
BH3B	For Sale	\$1,515,000	2010	2 x 3	151 m <sup>2</sup>	\$10,033/m <sup>2</sup>
BH5B	For Sale	\$1,415,000	2010	2 x 2	118 m <sup>2</sup>	\$11,992/m <sup>2</sup>

Comment

The properties form part of the initial stage of the "Islands Apartments".

**“Beachside Leighton North”**  
**1 Freeman Loop, North Fremantle**

Sale Details:

Unit	Sale Date	Asking Price	Year	Type	Net Area	Strata Rate
54	Apr-11	\$1,650,000	2010	2 x 3	122 m <sup>2</sup>	\$13,525/m <sup>2</sup>
22	Feb-11	\$2,100,000	2010	2 x 3	156 m <sup>2</sup>	\$13,462/m <sup>2</sup>

Comment

The properties form part of a recently constructed apartment complex overlooking Leighton Beach. Forming part of the first floor, apartment 22 has a southern aspect; whilst apartment 54 is orientated on the second floor and has northern aspect.

**“Vueze”**  
**20 Enderby Close, North Coogee**

Sale Details:

Unit	Sale Date	Sale Price	Year	Type	Net Area	Strata Rate
11	Dec-10	\$1,115,000	2009	3 x 2	144 m <sup>2</sup>	\$7,743/m <sup>2</sup>

Comment

Located opposite Stage 1 of the “Islands Apartments” and overlooking a public water feature with viewing platform, the apartment forms part of a six-level complex.

**“The Promenade”**  
**2 South Beach Promenade, North Coogee**  
**(For Sale)**

Price List

Lot	Level	Type	Net	Balc.	Store	Park.	Total	Contract Date	Contract/ Asking Price	Strata Rate
1	1	1 x 1	60 m <sup>2</sup>	13 m <sup>2</sup>	6 m <sup>2</sup>	13 m <sup>2</sup>	92 m <sup>2</sup>	Mar-12	\$475,000	\$7,917/m <sup>2</sup>
2	1	1 x 1	60 m <sup>2</sup>	18 m <sup>2</sup>	6 m <sup>2</sup>	13 m <sup>2</sup>	97 m <sup>2</sup>	Dec-11	\$475,000	\$7,917/m <sup>2</sup>
3	1	1 x 1	55 m <sup>2</sup>	23 m <sup>2</sup>	5 m <sup>2</sup>	13 m <sup>2</sup>	96 m <sup>2</sup>	Feb-12	\$475,000	\$8,636/m <sup>2</sup>
4	1	2 x 2	88 m <sup>2</sup>	22 m <sup>2</sup>	7 m <sup>2</sup>	26 m <sup>2</sup>	143 m <sup>2</sup>	Apr-12	\$695,000	\$7,898/m <sup>2</sup>
5	1	1 x 1	54 m <sup>2</sup>	12 m <sup>2</sup>	6 m <sup>2</sup>	13 m <sup>2</sup>	85 m <sup>2</sup>	For Sale	\$475,000	\$8,796/m <sup>2</sup>
6	2	2 x 2	89 m <sup>2</sup>	27 m <sup>2</sup>	6 m <sup>2</sup>	26 m <sup>2</sup>	148 m <sup>2</sup>	For Sale	\$735,000	\$8,258/m <sup>2</sup>
7	2	2 x 2	88 m <sup>2</sup>	23 m <sup>2</sup>	9 m <sup>2</sup>	26 m <sup>2</sup>	146 m <sup>2</sup>	Mar-12	\$735,000	\$8,352/m <sup>2</sup>
8	2	2 x 2	88 m <sup>2</sup>	22 m <sup>2</sup>	8 m <sup>2</sup>	26 m <sup>2</sup>	144 m <sup>2</sup>	Apr-12	\$720,000	\$8,182/m <sup>2</sup>
9	2	1 x 1	54 m <sup>2</sup>	12 m <sup>2</sup>	7 m <sup>2</sup>	13 m <sup>2</sup>	86 m <sup>2</sup>	Apr-12	\$465,000	\$8,611/m <sup>2</sup>

Comment

Titled “The Promenade” and contained over three levels; the proposed development features a modern residential complex incorporating 9 apartments ranging between 54 and 89 square metres. The total net living area of the complex equates to 636 square metres; and the product mix of the yield comprises five one-bedroom apartments and four two-bedroom apartments.

**“30 South Beach Promenade”**

**30 South Beach Promenade, North Coogee**

Sale Details:

Unit	Sale Date	Sale / Asking Price	Year Built	Type	Net Area	Strata Rate
1	For Sale	\$795,000	U.C.	2 x 2	99 m <sup>2</sup>	\$8,030/m <sup>2</sup>
2	For Sale	\$1,235,000	U.C.	3 x 2	151 m <sup>2</sup>	\$8,179/m <sup>2</sup>
3	For Sale	\$795,000	U.C.	2 x 2	97 m <sup>2</sup>	\$8,196/m <sup>2</sup>
4	For Sale	\$780,000	U.C.	2 x 2	97 m <sup>2</sup>	\$8,041/m <sup>2</sup>
5	For Sale	\$1,175,000	U.C.	3 x 2	142 m <sup>2</sup>	\$8,275/m <sup>2</sup>
6	For Sale	\$838,000	U.C.	2 x 2	99 m <sup>2</sup>	\$8,465/m <sup>2</sup>
7	For Sale	\$1,150,000	U.C.	3 x 2	136 m <sup>2</sup>	\$8,456/m <sup>2</sup>
8	For Sale	\$1,345,000	U.C.	3 x 2	158 m <sup>2</sup>	\$8,513/m <sup>2</sup>
9	For Sale	\$815,000	U.C.	2 x 2	97 m <sup>2</sup>	\$8,402/m <sup>2</sup>
10	For Sale	\$815,000	U.C.	2 x 2	98 m <sup>2</sup>	\$8,316/m <sup>2</sup>
11	For Sale	\$1,245,000	U.C.	3 x 2	142 m <sup>2</sup>	\$8,768/m <sup>2</sup>
12	For Sale	\$1,190,000	U.C.	3 x 2	136 m <sup>2</sup>	\$8,750/m <sup>2</sup>
13	For Sale	\$1,425,000	U.C.	3 x 2	158 m <sup>2</sup>	\$9,019/m <sup>2</sup>
14	For Sale	\$1,290,000	U.C.	3 x 2	141 m <sup>2</sup>	\$9,149/m <sup>2</sup>
15	For Sale	\$1,300,000	U.C.	3 x 2	136 m <sup>2</sup>	\$9,559/m <sup>2</sup>
16	For Sale	\$1,525,000	U.C.	3 x 2	158 m <sup>2</sup>	\$9,652/m <sup>2</sup>
17	For Sale	\$1,350,000	U.C.	3 x 2	142 m <sup>2</sup>	\$9,507/m <sup>2</sup>

Comment

Currently under construction, the four level development is orientated on the eastern corner of South Beach Promenade and Keeling Way.

**“Ocean View Apartments North Coogee”**

**52 Rollinson Road, North Coogee**

Sale Details:

Unit	Sale Date	Asking Price	Year	Type	Net Area	Strata Rate
16	For Sale	\$1,290,000	2007	3 x 2	131 m <sup>2</sup>	\$9,847/m <sup>2</sup>
4	For Sale	\$700,000's	2007	3 x 2	131 m <sup>2</sup>	\$5,344/m <sup>2</sup>

Comment

Situated on the northwest corner of Rollinson Road and O'Connor Close, the apartments form part of a multi-level apartment development constructed in 2007. Titled “Ocean View Apartments North Coogee”, apartment 16 is located on the fourth floor and benefits from having extensive ocean views; whilst apartment 4 is located on the first floor and we understand has limited ocean views.

**“Palazzo Apartments”**  
**9 O’Connor Close, North Coogee**

Sale Details:

Unit	Sale Date	Asking Price	Year	Type	Net Area	Strata Rate
8	Mar-11	\$1,450,000	2008	3 x 2	176 m <sup>2</sup>	\$8,239/m <sup>2</sup>

**Comment**

Adjoining the “Ocean View Apartments North Coogee” to the north, the property forms part of a multi-level apartment complex constructed in 2008.

### 5.3 CATCHMENT AREA PRICING

The pricing of unit product within the market catchment of the Cockburn Coast has been broadly analysed to confirm depth, product and price points. The summary data is tabled below.

#### Price Points

Suburb - Bed Count	Min of Sale Price	Average of Sale Price	Max of Sale Price
<b>Beaconsfield</b>	<b>\$325,000</b>	<b>\$688,021</b>	<b>\$1,315,000</b>
2	\$325,000	\$595,050	\$866,000
3	\$525,000	\$700,026	\$1,300,000
4	\$500,000	\$795,962	\$1,315,000
<b>Cockburn Central</b>	<b>\$455,000</b>	<b>\$481,667</b>	<b>\$500,000</b>
4	\$455,000	\$481,667	\$500,000
<b>Coogee</b>	<b>\$539,000</b>	<b>\$815,598</b>	<b>\$1,500,000</b>
2	\$575,000	\$575,000	\$575,000
3	\$600,000	\$831,786	\$1,150,000
4	\$539,000	\$793,614	\$1,500,000
5	\$632,000	\$935,400	\$1,200,000
6	\$1,000,000	\$1,000,000	\$1,000,000
<b>Fremantle</b>	<b>\$325,000</b>	<b>\$939,303</b>	<b>\$2,600,000</b>
2	\$325,000	\$819,136	\$2,600,000
3	\$555,000	\$917,694	\$1,850,000
4	\$745,000	\$1,202,250	\$1,995,000
5	\$1,055,000	\$1,367,500	\$1,680,000
6	\$875,000	\$875,000	\$875,000
<b>Hamilton Hill</b>	<b>\$225,000</b>	<b>\$492,533</b>	<b>\$775,000</b>
1	\$480,000	\$480,000	\$480,000
2	\$225,000	\$463,058	\$755,000
3	\$295,000	\$493,789	\$775,000
4	\$237,500	\$535,120	\$737,000
5	\$495,000	\$610,000	\$720,000
<b>North Coogee</b>	<b>\$801,500</b>	<b>\$1,253,325</b>	<b>\$1,850,000</b>
2	\$801,500	\$801,500	\$801,500
3	\$895,000	\$1,160,556	\$1,500,000
4	\$1,150,000	\$1,382,000	\$1,850,000

Suburb - Bed Count	Min of Sale Price	Average of Sale Price	Max of Sale Price
<b>South Fremantle</b>	<b>\$425,000</b>	<b>\$1,027,873</b>	<b>\$2,210,000</b>
2	\$625,000	\$858,107	\$1,400,000
3	\$555,000	\$1,056,278	\$1,900,000
4	\$425,000	\$1,060,769	\$1,550,000
6	\$2,210,000	\$2,210,000	\$2,210,000
<b>Spearwood</b>	<b>\$268,275</b>	<b>\$496,518</b>	<b>\$800,000</b>
1	\$625,000	\$625,000	\$625,000
2	\$385,000	\$461,717	\$550,000
3	\$268,275	\$472,214	\$670,000
4	\$300,000	\$529,198	\$800,000
5	\$515,000	\$515,000	\$515,000
<b>Success</b>	<b>\$230,000</b>	<b>\$513,133</b>	<b>\$830,000</b>
3	\$380,000	\$465,581	\$610,000
4	\$230,000	\$521,183	\$830,000
5	\$456,000	\$570,400	\$740,000
<b>White Gum Valley</b>	<b>\$380,000</b>	<b>\$694,198</b>	<b>\$945,000</b>
1	\$380,000	\$380,000	\$380,000
2	\$499,000	\$700,283	\$865,000
3	\$490,000	\$687,267	\$945,000
4	\$580,000	\$725,111	\$885,000

## Analysis \$/m<sup>2</sup>

Suburb - Bed Count	Min of \$/m <sup>2</sup>	Average of \$/m <sup>2</sup>	Max of \$/m <sup>2</sup>
<b>Beaconsfield</b>	<b>\$3,103</b>	<b>\$4,428</b>	<b>\$5,800</b>
3	\$3,103	\$4,602	\$5,800
4	\$3,635	\$3,993	\$4,448
<b>Cockburn Central</b>	<b>\$2,717</b>	<b>\$2,747</b>	<b>\$2,784</b>
4	\$2,717	\$2,747	\$2,784
<b>Coogee</b>	<b>\$2,821</b>	<b>\$3,694</b>	<b>\$6,190</b>
3	\$2,895	\$4,477	\$6,190
4	\$2,857	\$3,510	\$4,109
5	\$2,821	\$3,600	\$4,940
<b>Fremantle</b>	<b>\$3,007</b>	<b>\$4,921</b>	<b>\$8,150</b>
3	\$4,126	\$5,349	\$8,150
4	\$4,032	\$4,207	\$4,382
5	\$3,552	\$3,552	\$3,552
6	\$3,007	\$3,007	\$3,007
<b>Hamilton Hill</b>	<b>\$2,295</b>	<b>\$3,651</b>	<b>\$4,712</b>
3	\$2,878	\$4,006	\$4,712
4	\$2,295	\$3,092	\$3,892

Suburb - Bed Count	Min of \$/m <sup>2</sup>	Average of \$/m <sup>2</sup>	Max of \$/m <sup>2</sup>
<b>North Coogee</b>	<b>\$3,013</b>	<b>\$4,428</b>	<b>\$6,584</b>
2	\$3,013	\$3,013	\$3,013
3	\$3,689	\$4,443	\$5,157
4	\$4,000	\$4,557	\$6,584
<b>South Fremantle</b>	<b>\$2,237</b>	<b>\$5,013</b>	<b>\$7,280</b>
2	\$5,533	\$5,567	\$5,601
3	\$4,068	\$5,294	\$7,280
4	\$2,237	\$4,669	\$5,939
6	\$4,055	\$4,055	\$4,055
<b>Spearwood</b>	<b>\$2,266</b>	<b>\$2,913</b>	<b>\$3,473</b>
4	\$2,266	\$2,913	\$3,473
<b>Success</b>	<b>\$1,608</b>	<b>\$2,690</b>	<b>\$4,231</b>
3	\$2,212	\$2,960	\$4,231
4	\$1,608	\$2,651	\$3,972
5	\$1,727	\$2,332	\$2,681
<b>White Gum Valley</b>	<b>\$3,333</b>	<b>\$4,782</b>	<b>\$6,786</b>
1	\$6,786	\$6,786	\$6,786
2	\$4,397	\$4,495	\$4,594
3	\$3,798	\$4,984	\$5,927
4	\$3,333	\$4,105	\$5,566

## 6 FEASIBILITY OF INCENTIVISED DELIVERY

### 6.1 MEASUREMENT METHODOLOGY

The intent of this process is to establish whether there is an incentive structure related to density and height bonuses that will enable private sector delivery of affordable dwellings as defined by the thesis of Stubbs: 2011.

The methodology applied considers a typical developer feasibility with consideration of proposed development, developer margins, development cost and the residual land value result.

It in effect contemplates the notion of 'super profits' in the development sector and the ability of increased density and height to offset delivery of affordable stock.

To this end consideration is given to the product typology contemplated for the DSP and market activity of similar product from which probable market price points are established. These price points are applied to a 'base case' acknowledging traditional delivery methods to establish a notional residual value for land at market.

The resultant residual value of land should in general align with the analysis of market activity of comparable development sites (developer acquisitions) and this is demonstrated with sales evidence.

To this end, Colliers and Hassell have identified four sites within the DSP that demonstrate the variance in density and height options presently available under the DSP.

'Base Case' development feasibilities are established for each site and the residual value of land and developer profit margin is measured. This is contrast and confirmed against Market Evidence tabled at Section 5.1 above.

Height and density bonuses are applied as a percentage of Plot Ratio to deliver a ratio of 20% of the 'conforming' or Base Case yield as affordable dwellings, and a minimum 'one for one' additional yield is granted to the developer. The developer margins are locked at constant levels and not applied to the 'affordable' stock.

A 'no change' outcome in the residual land value demonstrates the 'bonus' yield has traded off the delivery of 'affordable' stock and not disadvantaged the developer profit margin or the notional market value of land.

An increase in the residual land value outcome demonstrates the 'bonus' yield has provided a benefit to the developer in the delivery of 'affordable' stock, in that the increase in land value will in reality translate to improved profit, however over time economic principles of demand and supply will see this benefit transfer to improved site values.

A decrease in the residual land value outcome demonstrates the 'bonus' yield has disadvantaged the developer in the delivery of 'affordable' stock. Reality will likely see a smaller change in site values whilst owners of land maintain value expectations and as such developer margins will be reduced or placed at risk unless compensation under the Scheme is applied to affected landowners.

## 6.2 TEST CASE: DENSITY AND HEIGHT BUILT DESIGN OPTIONS

### Site Location

The four sites and baseline density height outcomes under the current CCDSP are tabled below.

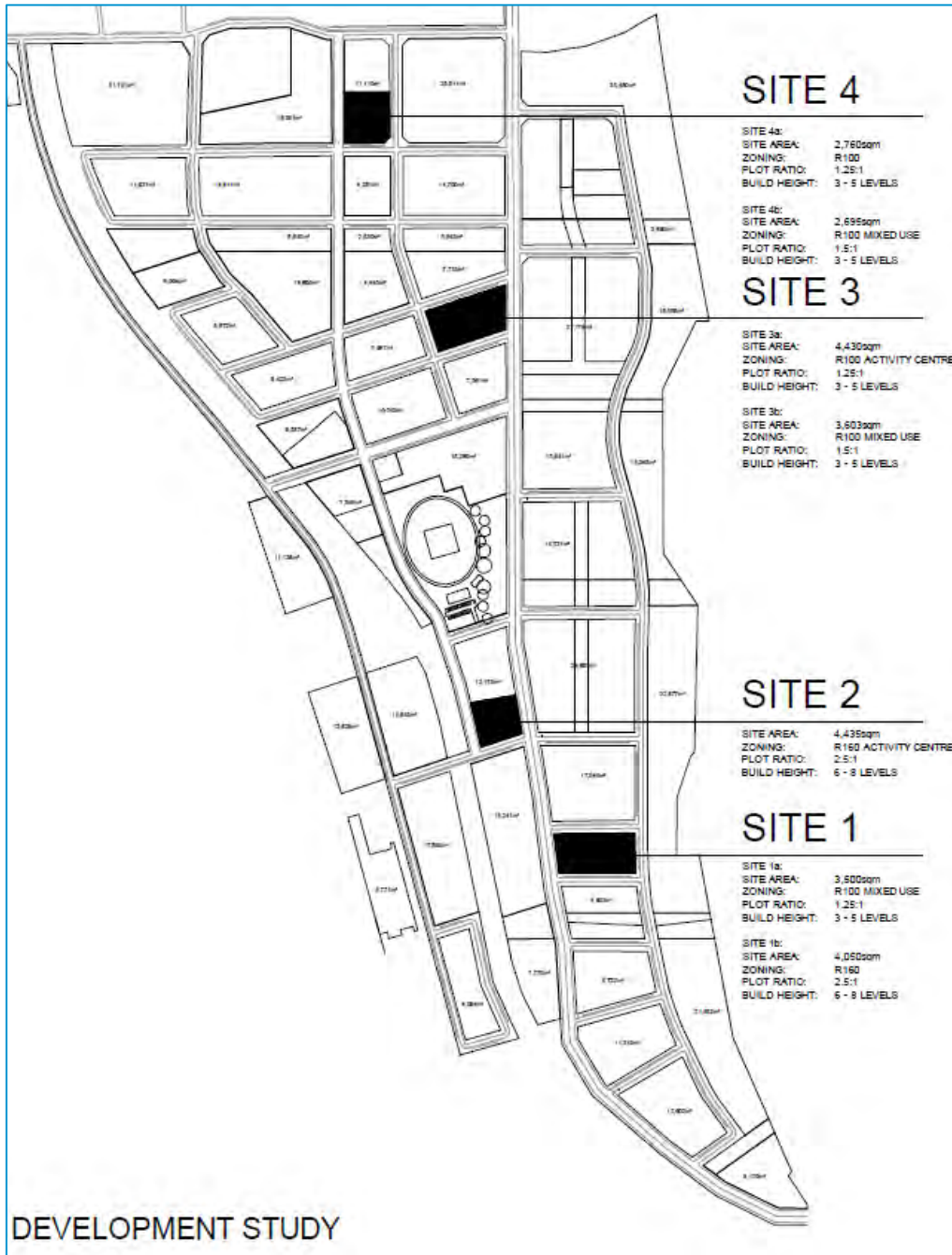


Figure 18

A full copy of the Hassell Concepts is tabled at **Appendix B**.

## Height and Density Analysis

The height density analysis for each option in the Base Case and bonus Scenarios is tabled below.

Site 1A	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	3,500	3,500	3,500
Plot Ratio	1.25	1.63	1.75
Plot Ratio - NLA m <sup>2</sup>	4,375	5,688	6,125
Increase in Plot Ratio		30%	40%
Height (levels)	3.0	4.0	5.0

Site 1B	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	4,050	4,050	4,050
Plot Ratio	2.50	3.25	3.50
Plot Ratio - NLA m <sup>2</sup>	10,125	13,163	14,175
Increase in Plot Ratio		30%	40%
Height (levels)	7.0	8.0	9.0

Site 2	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	4,435	4,435	4,435
Plot Ratio	2.50	3.25	3.50
Plot Ratio - NLA m <sup>2</sup>	11,088	14,414	15,522
Increase in Plot Ratio		30%	40%
Height (levels)	8.0	8.0	9.0

Site 3A	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	4,330	4,330	4,330
Plot Ratio	1.25	1.62	1.75
Plot Ratio - NLA m <sup>2</sup>	5,413	7,036	7,577
Increase in Plot Ratio		30%	40%
Height (levels)	3.0	4.5	5.0

Site 3B	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	3,603	3,603	3,603
Plot Ratio	1.50	1.95	2.10
Plot Ratio - NLA m <sup>2</sup>	5,405	7,026	7,566
Increase in Plot Ratio		30%	40%
Height (levels)	3.0	4.5	5.0

Site 4A	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	2,760	2,760	2,760
Plot Ratio	1.25	1.63	1.75
Plot Ratio - NLA m <sup>2</sup>	3,450	4,485	4,830
Increase in Plot Ratio		30%	40%
Height (levels)	3.0	5.0	5.5

Site 4B	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	2,695	2,695	2,695
Plot Ratio	1.50	1.95	2.10
Plot Ratio - NLA m <sup>2</sup>	4,043	5,255	5,660
Increase in Plot Ratio		30%	40%
Height (levels)	3.0	5.0	6.0

Figure 19

For each of the sites and height/plot ratio combinations above, we have had regard to market activity and compiled a 'typical' product mix for the contemplated apartment projects emerging from the DSP. The concluded apartment typology is tabled below in overview: Figure 20.

This typology is then broadly applied to each of the concepts to establish a product yield (number of apartments) and parking requirement. A provision for residential visitor parking at 10% of total occupier parking is applied.

The commercial and retail Net Lettable Area (NLA) is kept constant and converted to strata unit equivalents based on the averages at Figure 20. Parking ratios for tenant users are applied at 1 bay per 75m<sup>2</sup>. No parking provision is made for commercial/retail customers as it is assumed this will be delivered on street or in dedicated parking stations.

The results of this approach to yield analysis for each of the selected sites, is tabled at Figure 21 overleaf.

# Apt	Bed Count	Net Area m <sup>2</sup>	Total Net Area m <sup>2</sup>	Parking Ratio	Parking Bays	%age Apt by Count			%age Apt by NLA		
10	1	55	50	1.00	10	10.0%			6.9%		
20	1	65	1,300	1.00	20	20.0%	30%	total 1 bed	16.2%	23%	total 1 bed
35	2	75	2,625	1.00	35	35.0%			32.7%		
20	2	90	1,800	1.00	20	20.0%	55%	total 2 bed	22.4%	55%	total 2 bed
10	3	110	1,100	1.00	10	10.0%			13.7%		
5	3	130	650	2.00	10	5.0%	15%	total 3 bed	8.1%	22%	total 3 bed
100			8,025		105						

Average Apartment floor area	80.25	m <sup>2</sup>
Residential Parking Ratio	1.05	
Average Balcony Area	15	m <sup>2</sup>
Visitor Parking - Ratio of Total Res Parking	10%	
Commercial/Retail Parking at 1 bay per	75	m <sup>2</sup>
Average Retail Strata Shop	75	m <sup>2</sup>
Average Commercial Strata Unit	150	m <sup>2</sup>

Figure 20

Site	Site Area m <sup>2</sup>	Height	NLA Res m <sup>2</sup>	NLA Com/Ret m <sup>2</sup>	Residential Parking (includes visitor)	Comm/Retail Tenant Parking	Total Parking	Residential Dwellings	Commercial Units	Retail Units	Total Number of Units
1A	3,500	3.5	3,040	1,335	46	18	64	39	5	7	51
1B	4,050	6.5	10,125	0	149	0	149	130	0	0	130
2	4,435	8.0	9,285	1,800	137	24	161	119	0	24	143
3A	4,430	3.5	5,415	0	81	0	81	69	0	0	69
3B	3,603	4.5	3,950	1,455	59	19	78	53	6	7	66
4A	2,760	3.5	3,450	0	52	0	52	45	0	0	51
4B	2,695	3.5	2,110	1,926	30	26	56	27	7	13	47

Figure 21

A similar yield analysis is then applied to the plot ratio and height increases illustrated under Scenario 1 (+ 30%) and Scenario 2 (+ 40%). Refer Figure 19.

The intent of the increase in plot ratio and height is to enable the provision of additional dwellings as affordable product and also to provide additional units for sale to the developer to offset the 'cost' of providing the affordable dwellings. In other words, the additional dwellings provided to the developer should at a minimum maintain profit levels and not affect the residual value of land and ideally; to incentivise delivery of affordable stock, improve profitability and thereto in time improve the residual value of land as markets adjust to the 'super' profit.

The yield analysis with the increased plot ratio/height under Scenario 1 (+ 30%) firstly applies the increase in dwellings to affordable stock equating to 20% of the 'Base Case' yield and then 1:1 to the developer. Under Scenario 2 (+ 40%), the increase in dwelling yield applies 20% of the 'Base Case' yield to affordable stock and the balance to the developer, that is, the developer stock for sale is improved by more than 20% in the aim to further improve the chances of meeting the 'cost' of delivering affordable dwellings and then improving the profitability. The application of yield is tabled at Figure 22 overleaf.

Site	Base Case		Base Case + 30%			Base Case + 40%				
	Apartments	Total Parking	Increase in Apartments	Applied to Affordable	Applied to Developer	Total Parking	Increase in Apartments	Applied to Affordable	Applied to Developer	Total Parking
1A	39	64	18	8	10	83	24	8	16	90
1B	130	149	52	26	26	206	62	26	36	207
2	119	161	48	24	24	214	38	24	14	227
3A	69	81	28	14	14	112	28	14	14	112
3B	53	78	22	11	11	102	28	11	17	109
4A	45	52	18	9	9	72	18	9	9	72
4B	27	56	12	6	6	69	21	6	15	79

Figure 22

The above illustrates a market derived yield under the current DSP (Base Case). It also illustrates that within the performance bounds of the DSP an increase in yield of 40% (Scenario 2) is possible of which half representing a 20% increase on the Base Case is applied to affordable dwellings.

This identifies a risk to the DSP in that if proven successful, the contemplated yield for the DSP may increase by 40% (Scenario 1) to 50% (Scenario 2) but in doing so will see the private sector deliver affordable dwelling numbers that are on average approximately 14% of stock.

Whether the proposed incentivisation of affordable dwellings through height and density bonuses proves feasible is demonstrated in the pages following and the second consideration is whether it is widely accepted at market. If a 50% take up is adopted then one could imagine under Scenario 2 a DSP yield increase of some 25% with delivery of a DSP affordable dwelling ratio of approximately 7%.

## 6.3 INCENTIVISATION - FEASIBILITY TESTING

### Modelling Technique

If in fact there is scope for the private sector to deliver affordable dwellings the two principal factors that measure the feasibility is the level of profitability and residual value to land. The hypothetical development approach is applied to the concept options outlined above to establish a Base Case residual land value which is contrast to the local market activity as a test of reasonableness.

This approach best replicates the development scenarios whilst recognising the attributes and disadvantages of site specific land use and built form limitations, benefit of location, amenity and planning and infrastructure framework.

The hypothetical development method of valuation typically consists of firstly, calculating the gross realisation for the product of the proposed development on an 'as if complete' basis and then deducting from this figure an allowance for Goods and Services Tax, selling commission, development management, legal expenses, advertising, profit and risk, loss of interest over the development and selling period, development costs, rates and taxes and the initial purchase expense for the notional site.

This figure is then adopted as being a realistic guide to the market value of the land, in that it measures what a prudent purchaser would be able to pay for the land for development purposes and earn a return/profit from the venture, while at the same time being sufficiently rewarded for the risk undertaken.

The principal inputs of this method are outlined in the table below.

Component	Comment
Acquisition Costs	Includes Stamp Duty on acquisition and costs associated with the assumed purchaser due diligence.
Professional Fees	Costs predominantly associated with the initial planning and pre-construction works, together with a development management fee.
Construction Costs	<p>The adopted costs are based on Cordell Commercial, Industrial and Housing Building Cost Guide, WA, February 2012.</p> <p>The adopted construction costs reflect an 'average' to 'quality' standard development and the 'as if complete' pricing has acknowledged this fact.</p> <p>Independent expert advice on this input element specific to the concepts has not been obtained.</p> <p>This is not considered a major factor due to the preliminary nature of the concepts applied and also the premise upon which the calculations are being made, which is fundamentally a benchmarking exercise.</p>
Statutory Fees and Contributions	Fees payable to Councils and other statutory authorities such as Development Approvals, Building Licence and Headworks charges and fees. A Scheme Contribution for local infrastructure is applied at \$100/m <sup>2</sup> of land area.
Land Holding Costs	Land Tax, Water rates and Council rates. These costs are incorporated into the model on a proportional basis.
Selling Costs	Costs associated with the sale of the completed apartments, including selling agents fees, project marketing fees, title registration costs and conveyance expenses.
Interest Charges	<p>Based on 100% debt funding with the interest rate adopted on a nominal basis assuming a senior debt facility only.</p> <p>The adopted rate is 8.0% per annum nominal plus loan charges.</p>

Component	Comment
Hurdle Rates	<p>A Profit and Risk Factor is utilised in the static approach and represents the target developers margin representing a percentage of total development costs (net of selling costs).</p> <p>The Developer Margins utilised reflect the analysis of developer inputs sourced from recent valuation and feasibility submissions received from or made available from;</p> <ul style="list-style-type: none"> <li>• LandCorp;</li> <li>• Pindan;</li> <li>• Match;</li> <li>• Psaros Property Group;</li> <li>• Australand;</li> <li>• Mirvac;</li> <li>• Lendlease;</li> <li>• BGC;</li> <li>• Finbar.</li> </ul> <p>The adopted profit and risk is varied from concept to concept to reflect factors of;</p> <ul style="list-style-type: none"> <li>• Location;</li> <li>• capital outlay; capital risk;</li> <li>• quantum and type of product; marketability risk; and</li> <li>• duration.</li> </ul> <p>Typically analysed developer margins on medium to high density built form range from 15.0% to 22.5% in the current market.</p>
Escalation Rates	<p>No escalation is incorporated into the model for neither development costs nor sales revenues. The adopted costs and revenues are reflective of market levels as at the date of analysis.</p>
Goods and Services Tax (GST)	<p>The General Tax Rule has been applied to the notional land acquisition and subsequent development. Construction costs, professional fees, due diligence costs and selling costs have been incorporated into the model on a GST net basis, on the presumption an Input Tax Credit would ordinarily be reclaimed the month following where the cost was incurred.</p>
Gross Realisation	<p>Represents the GST inclusive sales revenue for the completed apartments and retail/commercial suites. There are a large number of key variables involved in achieving sale prices into the future and draw your attention to this fact. As such, it is stressed that the estimate of Gross Realisation “As If Complete” represents current values as at the date of analysis.</p>

It is critical to recognise that in these analyses the projected income stream reflects the anticipated growth, or otherwise, inherent in a property investment based upon the physical and market characteristics related to that property. The future values quoted for property prices and costs are projections only, formed on the basis of information currently available and are not representations of what the value of the property will be as at a future date. This information includes the current expectations as to property values and income that may not prove to be accurate.

The premise of these calculations is benchmarking and enabling comparative measures.

## Rationale

The Base Case Scenario should demonstrate a residual value for land commensurate with market activity. Once this is demonstrated, on the premise cost rates and other development inputs remain constant and relative to scale of built form, the measure of profitability can be ascertained (developer margin).

The viability of increasing plot ratio/height and delivering a quantum of affordable dwellings can then be measured by change in residual value of land or change in profitability. In view of the attitudes expressed in the developer survey, the developer margin or profitability ratio has been 'fixed' as this would be a very sensitive factor at market impacting the desire of developers to participate.

To this end, a residual value analysis is applied to both Scenario 1 and Scenario 2.

This has been applied to two sub sets of both Scenario 1 and 2;

### Sub Set 1A

- The affordable stock attributed to the increase in plot ratio and height is 20% of the Base Case.
- The balance increase in dwelling yield is provided to the developer as an offset and incentive; for sale.
- The sale price of affordable stock is set at the 'actual delivery cost'.

### Sub Set 1B

- The affordable stock attributed to the increase in plot ratio and height is 20% of the Base Case.
- The balance increase in dwelling yield is provided to the developer as an offset and incentive; for sale.
- The sale price of affordable stock is set at the 'Price Range established by Stubbs 2011'.

### Sub Set 2A

- The affordable stock attributed to the increase in plot ratio and height is 10% of the Base Case.
- The balance increase in dwelling yield is provided to the developer as an offset and incentive; for sale.
- The sale price of affordable stock is set at the 'actual delivery cost'.

### Sub Set 2B

- The affordable stock attributed to the increase in plot ratio and height is 10% of the Base Case.
- The balance increase in dwelling yield is provided to the developer as an offset and incentive; for sale.
- The sale price of affordable stock is set at the 'Price Range established by Stubbs 2011'.

## 6.4 VALUE DEFINITIONS - LIMITATIONS

In order to apply a hypothetical development approach to the residual value of land, the Valuer must determine the gross realisation of the proposed development which includes establishing the 'as if complete' value for the individual products of development whether they be residential dwellings, commercial office suites or retail shops.

To this end the following definitions as endorsed by the International Valuation Standards Committee (IVSC) and the Australian Property Institute (API) are applied:-

<b>Market Value</b>	Market Value is the estimated amount for which an asset should exchange on the date of valuation between a willing buyer and a willing seller in an arms length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.
<b>Gross Realisation</b>	Gross Realisation at the date of valuation is the sum of the Market Values of the individual units which a property can achieve over a specified selling period, assuming an orderly sale, between willing buyers and willing sellers, in arms length transactions, after proper marketing, wherein the parties acted knowledgeably, prudently and without compulsion.
<b>"As Is" Value</b>	The "As Is" valuation means a valuation that provides the current market value of the property as it currently exists rather than a value of the proposed development.
<b>"As If Complete" Value</b>	The Value "As If Complete" assessed herein is the Market Value of the proposed improvements as detailed in the report on the assumption that all construction had been satisfactorily completed in all respects at the date of this report. The valuation reflects the valuer's view of the market conditions existing at the date of the report and does not purport to predict the market conditions and the value at the actual completion of the improvements because of the time lag. Accordingly, the "As If Complete" valuation must be confirmed by a further inspection by the valuer, initiated and instructed by the reliant party on completion of improvements. The right is reserved to review, and if necessary, vary the valuation in this report if there are any changes in relation to the project itself or in the property market conditions and prices.

## 6.5 FEASIBILITY OUTPUTS

The residual value outputs for the 63 (7 sites x 9 calculation sets) feasibility analyses prepared are tabled below at Figure 23.

Where the residual value output has improved or the reduction is less than 10%, the outcome is highlighted in pink/red.

Site	Base Case	Scenario 1 Subset 1A		Scenario 2 Subset 1A		Scenario 1 Subset 1B		Scenario 2 Subset 1B		Scenario 1 Subset 2A		Scenario 2 Subset 2A		Scenario 1 Subset 2B		Scenario 2 Subset 2B	
		Affordable dw yield = Base Case + 20%		Affordable dw yield = Base Case + 20%		Affordable dw yield = Base Case + 20%		Affordable dw yield = Base Case + 20%		Affordable dw yield = Base Case + 10%		Affordable dw yield = Base Case + 10%		Affordable dw yield = Base Case + 10%		Affordable dw yield = Base Case + 10%	
		Balance of Yield Increase to Developer for sale		Balance of Yield Increase to Developer for sale		Balance of Yield Increase to Developer for sale		Balance of Yield Increase to Developer for sale		Balance of Yield Increase to Developer for sale		Balance of Yield Increase to Developer for sale		Balance of Yield Increase to Developer for sale		Balance of Yield Increase to Developer for sale	
		Sale Price of Affordable dw = cost to developer		Sale Price of Affordable dw = cost to developer		Sale Price of Affordable dw = Stubbs 2011		Sale Price of Affordable dw = Stubbs 2011		Sale Price of Affordable dw = cost to developer		Sale Price of Affordable dw = cost to developer		Sale Price of Affordable dw = Stubbs 2011		Sale Price of Affordable dw = Stubbs 2011	
		Residual value to land	Change from BC	Residual value to land	Change from BC	Residual value to land	Change from BC	Residual value to land	Change from BC	Residual value to land	Change from BC	Residual value to land	Change from BC	Residual value to land	Change from BC	Residual value to land	Change from BC
1A	\$1,074	\$246	(77%)	\$200	(81%)	\$46	(96%)	\$0	(100%)	\$280	(74%)	\$234	(78%)	\$183	(83%)	\$137	(87%)
1B	\$1,094	\$857	(21.7%)	\$877	(19.9%)	\$220	(79.9%)	\$240	(78.1%)	\$965	(11.7%)	\$985	(9.9%)	\$642	(41%)	\$662	(40%)
2	\$1,026	\$1,057	3%	\$1,103	7%	\$462	(55%)	\$510	(50%)	\$1,026	0%	\$1,204	17%	\$722	(30%)	\$909	(11%)
3A	\$1,169	\$217	(81%)	\$217	(81%)	NA	Not Feasible	NA	Not Feasible	\$275	(76%)	\$275	(76%)	\$152	(87%)	\$152	(87%)
3B	\$1,010	\$1,243	23%	\$1,299	29%	\$944	(7%)	\$1,002	(1%)	\$1,288	27%	\$1,346	33%	\$1,124	11%	\$1,182	17%
4A	\$1,130	\$109	(90%)	\$109	(90%)	NA	Not Feasible	NA	Not Feasible	\$167	(85%)	\$156	(86%)	\$72	(94%)	\$22	(98%)
4B	\$1,577	\$942	(40%)	\$1,058	(33%)	\$764	(52%)	\$876	(44%)	\$1,032	(35%)	\$1,076	(32%)	\$942	(40%)	\$987	(37%)

Figure 23: Residual Value Output Analyses

## 6.6 RESIDUAL VALUE OUTPUT OBSERVATIONS

### Measures

A comparison of residual values resulting from the Base Case analysis confirms relativity to current market evidence. Refer Section 5.1. This confirms the Base Case results as a relevant baseline to which results for Scenario 1 and Scenario 2 can be measured.

If the percentage change noted at Figure 23: Residual Value Output Analyses is negative, it implies the addition of plot ratio/height and compelling delivery of affordable dwellings either at a ratio of 10% or 20% and at price points equating to 'cost' or at price points tabled by Stubbs 2011, is infeasible.

A 0% change would imply the cost of delivery of affordable dwellings at the tested ratio and price points is offset by the addition of plot ratio/height and residual land values and profitability are maintained.

A positive increase in residual values implies the cost of delivery of affordable dwellings at the tested ratio and price points is more than offset by the addition of plot ratio/height and super profits may in fact exist, in which case normal market forces will improve the residual value of land over time and return profits to an equilibrium.

### Observations

- Of the 56 comparative feasibility outputs; 23% (13) indicated a change in residual value of less than negative 10% or an improvement.
- Of the above affirmative indicators (13);
  - one (1) related to Site 1B although a negative shift in residual value of (9.9%) is recorded,
  - four (4) related to Site 2 with range in residual value shift of 0% to 17%, and
  - eight (8) related to Site 3B with range in residual value shift of (7%) to 33%.
- Site 3B showed a balanced or positive change for seven (7) of eight (8) iterations demonstrating private sector delivery of affordable dwellings incentivised by plot ratio/height bonuses is workable at this scale site cognisant of site/locational characteristics and contemplated built form.
- Of the 56 iterations benchmarked against the base case; 11% of outcomes (6) achieved a balance or positive improvement to residual land value whilst maintaining developer profitability at current market levels.

## Conclusions

- The feasibility testing indicates that across the various sites and whilst cognisant of character of location, scale and contemplated built form, that in certain circumstances affordable dwellings at 'cost' to the developer and/or at the Stubbs 2011 benchmarks may be feasibly delivered by the private sector whilst maintaining profitability to developers and residual land values.
- Having said that, the results clearly indicate the outcome is particular to a specific scale of site and built form and suggests it is not achievable on all sites through out the DSP.
- The most workable configuration is that of Site 3B;

Site 3B	Base Case	Scenario 1	Scenario 2
Site Area m <sup>2</sup>	3,603	3,603	3,603
Plot Ratio	1.50	1.95	2.10
Plot Ratio - NLA m <sup>2</sup>	5,405	7,026	7,566
Increase in Plot Ratio		30%	40%
Height (levels)	3.0	4.5	5.0

- The Cockburn Coast Master Plan Figure 31 Land Use Plan identifies Site 3B as being contained within the 'Low Density Residential' zone which is broadly described as having a Residential Density Code of R80 and general heights ranging from three to five storeys.
- The below extract from the Cockburn Coast Master Plan identifies this land use component as delivering 31.6% of the dwellings or 1,641 dwellings.

Building Typology	Indicative Density	Dwelling Yield	% Component
High Rise	R160	1,300	25.0%
Medium Rise	R120	602	11.6%
Low Rise	R80	1,641	31.6%
Terrace	R40	57	1.1%
Mixed Use	R100	585	11.3%
Activity Centre	R160	1,008	19.4%
<b>TOTAL</b>	-	<b>5,193</b>	<b>100%</b>

Table 3.1 Dwelling Yield by Building Typology

- Conditioned on the assumption affordable dwellings are delivered by the private sector at the maximum plot ratio/height incentive available (Scenario 2) in this land use zone only; the dwelling yield will increase 50% from 1,641 dwellings to 2,508 dwellings, of which some 341 dwellings are 'affordable dwellings'. This will result in a total yield adjustment from 5,193 to 6,060 and enable an affordable dwelling ratio of 5.6% of the entire Cockburn Coast Master Plan.

## 7 CONCLUSIONS

The research into delivery of affordable dwellings did not identify a generally applicable model or mechanism that was wholly reliant on private sector delivery.

In the main, case studies clearly establish intervention by governments and not-for-profit organisations through statutory planning and policy in addition to the density incentives whilst supplemented with the provision of grants, financial incentivisation, low cost land or tax abatement whether it be local, state or federal.

In Western Australia, the delivery of affordable dwellings in medium high density formats has been limited to date by the activities of the Department of Housing. The model is premised on the state funding delivery of affordable dwellings through the acquisition of stock at market price and the enabling of stock (also at market price) through partnerships and joint ventures.

There are no known examples of incentivised private sector delivery of affordable dwellings that do not involve some form of government and not-for-profit intervention or support.

The modelling of incentive based schemes enabling plot ratio (and height as required) bonuses to private sector developers to offset the cost of delivery at 'affordable' price points identified a general market failure across the product lines tested with the exception of a regular shaped 'low density' allotment of three to five level is; Concept 3B.

The Cockburn Coast Master Plan presently sets aside some 31.6% of the precinct under this land use zone.

The application of 40% plot ratio incentives in this land use zone may enable the delivery of approximately 341 affordable dwellings amounting to 5.6% of total contemplated residential stock.

This is well short of the District Structure Plan aspirational target of 20%.

It is understood, 5% of total stock is to be social housing and will be delivered by the State through Department of Housing.

Additionally, it is understood State policy mandates that development of government held land in brownfield or similar projects now deliver 15% of product as affordable housing. The State through various agencies controls some 40 hectares of land within the Cockburn Coast Master Plan area. Premised on an average yield of R80 and land use efficiency of 65%, a further 312 affordable dwellings maybe delivered equating to 5.1% of total stock. This is premised on there being no overlap between the government land holdings and the abovementioned 'low density' zone. This is a critical assumption and one requiring further analysis and confirmation across the master plan area.

In total, this suggests a delivery of some 15% of total dwelling stock as affordable dwellings is possible inclusive of social housing.

This number maybe further supplemented via partnerships and joint ventures that engage state government and not-for-profits through mechanisms such as application of land at discounted or nil value, the provision of grants or other funding support as well as abatement of local and state taxes for the delivery of higher proportions of affordable to market based product.



# APPENDIX A

## Developer Survey Questionnaire



## Cockburn Coast Affordability Strategy – Developer Survey

### Interview Details

Company:

Interviewed:

Position:

Role:

Contact:

Email:

Tele:

Mob:

Date:

## Introduction

Hassell has been engaged by LandCorp to prepare an Affordable Housing Strategy for the Cockburn Coast.

Colliers has been appointed as sub consultant to provide property research and a 'property perspective' on delivery modes and mechanisms.

The form of development contemplated for the corridor is predominantly medium/high density mixed use apartments (multiple dwellings low/high rise – 64%), group dwellings/terraces (22%) and 3% single detached dwellings.



Figure 1

Population		Approximately 10 000 people
Society	Housing stock	1) Approximately 4850 dwellings <sup>1</sup> Minimum 3 per cent separate houses Minimum 22 per cent terrace 2) Minimum 33 per cent low-rise apartments <sup>2</sup> 3) Minimum 31 per cent medium to high-rise apartments <sup>3,4</sup> Minimum 20 per cent affordable housing Minimum 20 per cent adaptable buildings 15 per cent of homes need to be 'family homes' <sup>5</sup>

- 1 Potential dwelling yield assumes residential build out of the South Fremantle landfill site and the South Fremantle chalet village  
 2 Low rise apartments - 3 to 5 storeys  
 3 Medium rise apartments - 6 to 8 storeys  
 4 High rise apartments - over 8 storeys  
 5 Adaptable housing refers to dwellings that are adaptable to changing demographics with the ability to transition over time

Figure 2

The Cockburn Coast District Structure Plan (DSP), which was endorsed by the WA Planning Commission in August 2009 (now referred to as Part 1), envisages a population of 10,000 residents throughout Cockburn Coast with an employment base of approximately 3,600 jobs.

It was prepared to guide future land use and transport initiatives within the area stretching between South Beach and the Port Coogee marina. It sets a framework for future redevelopment of the Cockburn Coast area as an intensive, mixed use urban environment.

Since then the planning for the area has been progressing, and in September 2011 the Cockburn Coast area was rezoned by the WAPC from Industry to Urban under the Metropolitan Region Scheme ("MRS").

The Draft Cockburn Coast District Structure Plan (Part 2) applies to the Cockburn Coast project area south of Rollinson Road (formerly referred to as the 'Master Plan').

It has been prepared to build upon the endorsed Cockburn Coast District Structure Plan (2009) Part 1, and to provide the next layer of planning to guide future Local Structure Plans.

It is intended that both the Cockburn Coast District Structure Plan Parts 1 and 2 will be used as guiding documents to inform the preparation of Local Structure Plans which will be a requirement under the Scheme.

## Land Use

The following extract from the Draft Cockburn Coast District Structure Plan (Part 2) outlines contemplated land uses.



Figure 3

The predominant use is residential and the legend illustrates increasing density from 'yellow' (terrace house/detached) to 'activity centre' (commercial/retail/ and medium to high density residential).

The residential components are further described as 'Single detached', 'Terraced housing', 'Low Rise Apartments (3-5 storeys)', 'Medium Rise Apartments (6 – 8 storeys)' and 'High Rise Apartments (above 8 storeys)'.

Conceptually the development form and subsequent yield analysis are illustrated below.



Figure 4

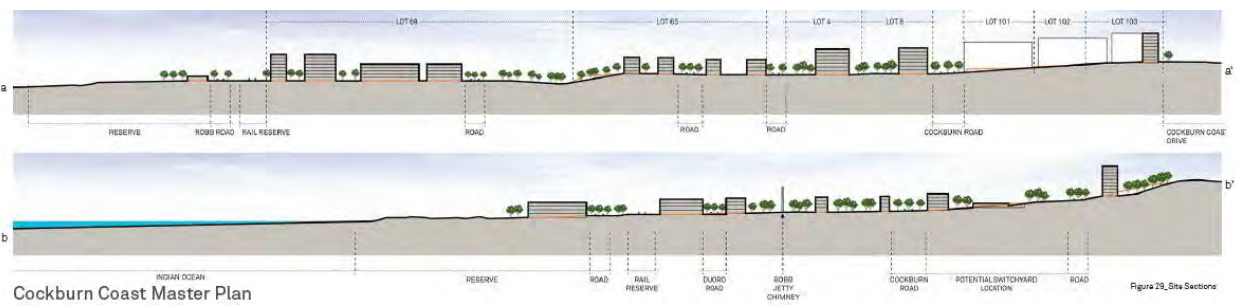


Figure 5

Building Typology	Indicative Density	Dwelling Yield	% Component
High Rise	R160	1,300	25.0%
Medium Rise	R120	602	11.6%
Low Rise	R80	1,641	31.6%
Terrace	R40	57	1.1%
Mixed Use	R100	585	11.3%
Activity Centre	R160	1,008	19.4%
<b>TOTAL</b>		<b>5,193</b>	<b>100%</b>

Figure 6



Residential buildings will actively engage with the public realm



Figure 7



Figure 8

## Question 1

What are your preliminary thoughts on the form of development contemplated for the Cockburn Coast?

## Question 2

What market based hurdles or opportunities can you envisage for the CC?

Prompts

- Accommodation preferences
- Demographic Profile
- Household Income
- Amenity
- Transport
- Employment
- Built Form Cost
- Land Acquisition and Development Financing
- Service Infrastructure

### Question 3

Are there specific infrastructure deliverables at state and local government level which may stimulate the contemplated form of development?

### Question 4

Are there initiatives at state and local government level which may be implemented to stimulate the contemplated form of development?

## Question 5

Various studies (National Housing Supply Council) indicate an imbalance between demand (high) and supply (low) and forecast a worsening of the situation in the longer term.

In the past Governments have subsidised demand (First Home Owners Grant) to stimulate supply (Post GST and Post GFC). In each instance a pull forward of demand resulted together with short term demand led house price inflation followed by a lull in market activity as the anticipated flow through to second and third home buyers did not eventuate.

Have you any thoughts on initiatives that place a greater focus on increasing supply (such as NRAS) as opposed to subsidising demand?

## Question 6

It is argued the creation of 'sustainable communities' mandates the planning and production of diverse dwelling/accommodation types. The anticipated implementation, delivery and build out of CC is 15 – 20 years.

What is your view of the contemplated accommodation mix in the context of the WA market?

## Affordability

In accordance with the DSP, a minimum target of 20% affordable housing is to be achieved throughout Cockburn Coast. Rising housing prices in Australia have led to significant problems of housing affordability, particularly for those on low or moderate incomes.

What is affordable housing?

Housing that costs more than 30% of a household's income is generally considered to be 'unaffordable', but because housing costs vary between different geographic areas (and from site to site), what constitutes 'affordable' will vary both by income and location. Housing in some high value areas may be unaffordable to households with relatively high incomes.

'Affordable housing' is required that covers all dwelling types to suit the needs of the population, that is – single bedroom dwellings, family housing and aged and dependent persons accommodation.

Affordable housing is housing that is reasonably adequate in standard and location for households in lower or middle parts of the income scale and which does not cost so much that such a household is unlikely to be able to meet other basic living costs on a sustainable basis. It includes owner-occupied housing as well as rental housing owned by governments, non profit organisations, corporations or individuals. As a rule of thumb, housing is considered to be affordable if the cost of purchase or rental does not exceed 30% of the gross household income.

Social housing is publicly funded housing and is proposed to make up 5% of the housing stock at Cockburn Coast. Social housing is a sub-set of affordable housing. The Department of Housing is currently the main provider of social housing. Further work is desirable to clarify whether 20% is an appropriate or achievable target for Cockburn Coast. Given the location of the project on prime section of the coast, high land values will be a significant factor influencing the ability to deliver affordable housing product.

In 2010 The Western Australian Planning Commission (WAPC) commissioned a study into 'Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia'.

The report was prepared by Judith Stubbs and Associates and delivered in two parts;

- Judith Stubbs and Associates, April 2011, Report 1: Profile of Selected Redevelopment Areas.
- Judith Stubbs and Associates, December 2010, Report 2: Planning Mechanisms and Strategies.

The above reports have been circulated to various state agencies for consideration and in part, application.

## Developer Survey

An assessment is required to quantify the market for and type of affordable housing that would be appropriate without creating an undesirable imbalance in the future community profile, and without adversely affecting development viability for this and other types of desirable development (residential and non residential).

The intent of this interview process is to gauge development industry views on affordability, modes and methods of delivery including incentivisation options such as density and plot ratio bonuses; and for that matter any innovative thought towards a realistic delivery model for affordability in a medium to high density format.

### Question 7

Affordable housing consultant Judith Stubbs (JSA 2010) has analysed the community needs for affordable housing for the WAPC.

The report documents the proportion of people that are currently experiencing housing stress in the Perth market. It uses this as the basis for the recommendation that a *minimum 15% affordable rental and purchase accommodation in all new release and redevelopment areas is warranted, and 20% justified.*

To this end, the Cockburn Coast District Structure Plan has set a minimum target of 20% affordable housing to be achieved throughout Cockburn Coast.

JSA 2010 defines housing affordability;

*“Housing is ‘affordable’ when a very low-, low- or moderate income household pays no more than 30% of gross household income on rental or mortgage payments...”*

JSA 2010 goes on to state;

*“...such households are considered to be in ‘housing stress’ when they pay more than 30% of gross income on housing costs, and in ‘severe housing stress’ when paying more than 50% of gross income on housing costs.”*

JSA 2010 has determined the price levels (2010) that very low, low and moderate income households can afford to pay for rental and owner occupier housing are:

#### Affordable Housing Benchmarks in Perth SD

	Very low-income household	Low-income household	Moderate-income household
Income Benchmark	<\$655-\$736 per week	<\$984 per week	\$984-\$1,467 per week
Affordable Rental Benchmarks	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
Affordable Purchase Benchmarks	<\$153,000 - \$174,000 total purchase cost	<\$230,000 total purchase cost	\$230,000 - \$345,000 total purchase cost

Figure 9

In terms of the medium high density development contemplated for CC, what are your initial thoughts of enabling such affordability measures?



## Question 8

JSA Report 1 proposes an amendment to *State Planning Policy 3.6: Development Contributions for Infrastructure* to include 'affordable housing' as 'special infrastructure'. Further to this, the proposal suggests a more equitable developer contribution based on dwelling yield, bedroom count and even accounting for retail/commercial GFA as opposed to a land based measure.

In the context of the contemplated built form, is such a proposal feasible?

Are there alternative performance based measures that can be reasonably applied?

Should such measures be incentivised? If yes, what forms of incentivisation will likely support built form supply as contemplated and meet the measures of affordability outlined above?

## Question 9

JSA Report 2 page 42 cites;

*One approach to affordable housing is to offer bonuses to developers to offset loss of profit associated with provision of affordable housing, or in order to generate funds for the construction of affordable housing through sharing additional profit generated through the developer taking up the planning incentive... . Bonuses that that may result in increased saleable floor area include plot ratio and height (where other constraints affect the use of allowable plot ratio) and bonuses around parking may reduce costs in high density development.*

Do you see this as a feasible mechanism in the context of;

- a. the density and heights already contemplated for CC;
- b. a nil or low parking ratio for affordable housing supply; and
- c. proposed 'affordable' (JSA) pricing regime?

	Very low-income household	Low-income household	Moderate-income household
Affordable Rental Benchmarks	<\$197-\$221 per week	<\$296 per week	\$296-\$440 per week
Affordable Purchase Benchmarks	<\$153,000 - \$174,000 total purchase cost	<\$230,000 total purchase cost	\$230,000 - \$345,000 total purchase cost

### Question 10

What are the principal constraints to delivering 'affordable' dwelling product in a medium/high density format and meeting the implied diversity and pricing requirements?

### Question 11

What product typologies are more likely to achieve the implied diversity and pricing requirements? Are there low cost options such as pods and lightweight demountable structures that can be applied in part or in whole?

### Question 12

In the context of CC, what locational and infrastructure needs will better promote or support the supply of diversity in dwelling modes and pricing need?

### Question 13

What incentivisation based variation to planning provisions (if any) such as height, plot ratio, parking to name a few are likely to best generate sufficient funds/super profits to offset delivery of affordable housing?

### Question 14

How in your view, would the market likely respond to the mandatory provision of affordable housing in CC and what are the likely implications to market input such as;

- a. implementation,
- b. take up, and
- c. residual land values to name a few?

### Question 15

Following on from Q12 and 13 above, assuming an equitable and feasible solution, should there be a 'blanket' cap or ratio approach to the volume and type of affordable housing on;

- a. whole of Scheme area basis, or
- b. a project by project basis, or
- c. should it be defined in designated precincts?

Can you provide a broader explanation of the reasoning behind your views outlining the key drivers, motivations and foreseeable advantages to community and supply of affordable dwellings?

## Question 16

Initiatives already implemented in several redevelopment areas (SRA – EPRA) that have met with some success include;

- a. the sale of serviced land at cost or a discount to market value to Department of Housing or a Community Housing provider,
- b. mandating 10% of dwellings constructed be offered to Department of Housing or a Community Housing provider for use as affordable housing with transfer at construction cost and incoming buyer utilising a shared equity scheme,
- c. provision of density bonuses and responsible agency secures 50% of the additional profit arising from the application of bonus GFA to both affordable and non-affordable housing. This maybe 'cash in kind' or a number of the additional units constructed within the development or elsewhere in the locality.

What are your thoughts on applicability and feasibility of these schemes in CC? Moreover, are there alternative mechanisms that you could propose or are aware of that may prove feasible?

## Question 17

Is the provision of affordable dwellings in your view a state responsibility?

In view of your response, is market intervention warranted through a mandatory planning regime or should it be focused on state/local government controlled land; for example LandCorp control 40 hectares of land with the City of Fremantle in control of 20 hectares under the former South Fremantle Landfill Site?

### Question 18

Following on from Q15-16 above, from an industry perspective, would greater direction, clarity and simplicity be preferred, and as such, a blanket 'cash in lieu' mechanism be applied on GFA of private and public built form development, which is paid on completion of sales into a pooled fund to support delivery of affordable dwellings by the state, on either publicly or privately owned land?

Could this be expanded to stimulate density and delivery by utilising mechanisms such as decreasing scales of 'cash in lieu' for greater diversity, set product modules and GFA?

### Question 19

Are there other alternatives worth considering such as profit sharing, that is, an agreed proportion of additional profits earned on the delivery of affordable density bonuses?

### Question 20

Do you consider there is joint venture or partnering opportunities between state and private developers that will facilitate the vision for CC as well as delivery of affordable dwellings? If so, can you provide some insight to JV or Partnering structures and models that you would consider reasonable and functional?

Prompts;

- a. land at \$nil; development bonuses, profit share and delivery of affordable dwellings,
- b. land at cost; development bonuses, profit share and delivery of affordable dwellings,
- c. either a or b, development bonuses, where profit share paid into pooled fund for delivery of affordable dwellings on specific sites; contract award on construction of affordable dwellings,
- d. either a or b, development bonuses, with state capital funding of affordable dwellings.

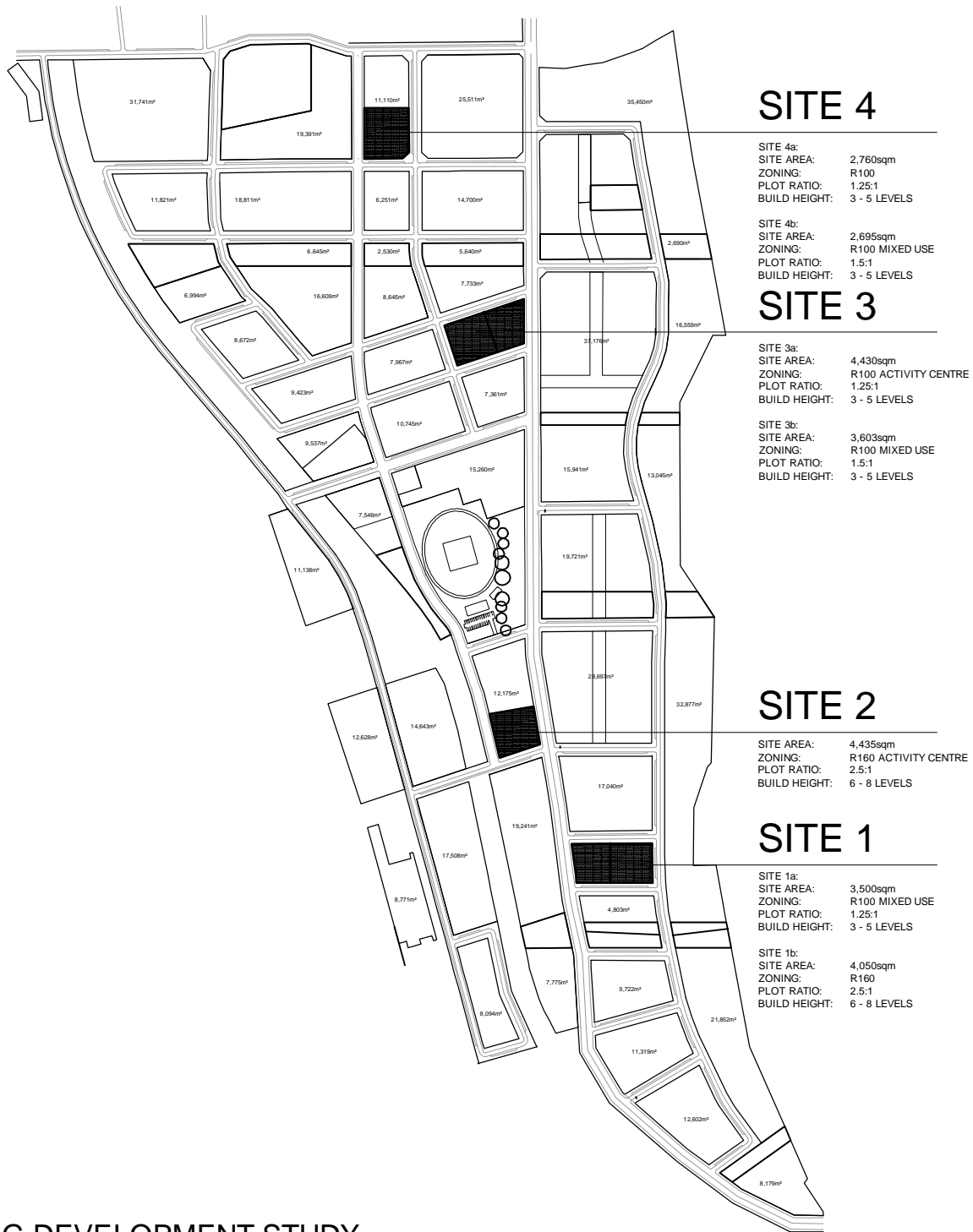
## Final Comments/Summary



# APPENDIX B

## Hassell Notional Development Concepts and Yields



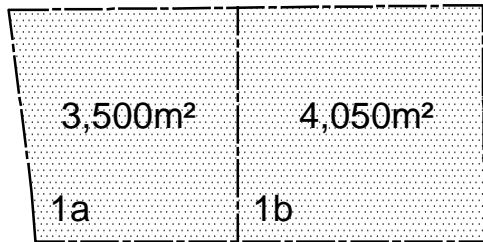


SITE LOCATION KEY PLAN  
 COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

# SITE 1

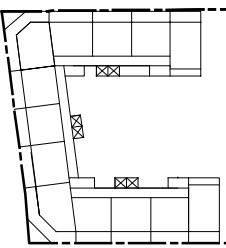
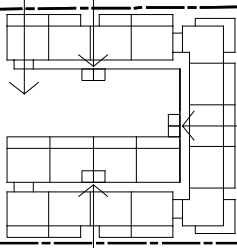
SITE 1a:  
 SITE AREA: 3,500sqm  
 ZONING: R100  
 PLOT RATIO: 1.25:1  
 BUILD HEIGHT: 3 - 5 LEVELS

SITE 1b:  
 SITE AREA: 4,050sqm  
 ZONING: R160  
 PLOT RATIO: 2.5:1  
 BUILD HEIGHT: 6 - 9 LEVELS



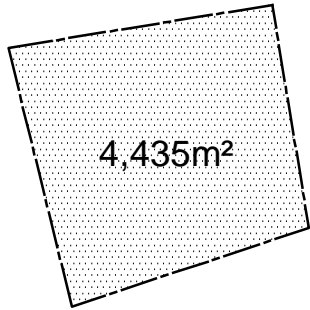
COMBINED AREA:  
 7,550m²

## COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

Site 1a	3,500sqm	Site 1b	4,050sqm
R100 PR=1.25:1 4,375sqm		R160 2.5:1 10,125sqm	
Complying Development: 32 Apartments@95sqm + 1,375sqm Retail/Comm		Complying Development: 107 Apartments@95sqm	
+ 30 % = 5,687sqm 45 apartments + 1,375sqm Retail/Comm		+ 30 % = 13,162sqm 138 apartments	
+ 40 % = 6,125sqm 50 apartments + 1,375sqm Retail/Comm		+ 40 % = 14,175sqm 149 apartments	
13 apartments/level		17 apartments/level	
			
4 levels = 52 apartments 5 levels = 65 apartments 3 levels = 39 apartments		6 levels = 102 apartments 7 levels = 119 apartments 8 levels = 136 apartments	

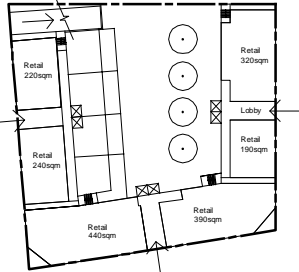
# SITE 2

SITE AREA: 4,435sqm  
 ZONING: R160 ACTIVITY CENTRE  
 PLOT RATIO: 2.5:1  
 BUILD HEIGHT: 6 - 9 LEVELS



SITE AREA:  
4,435m²

4 apartments/level



2 Lifted Option

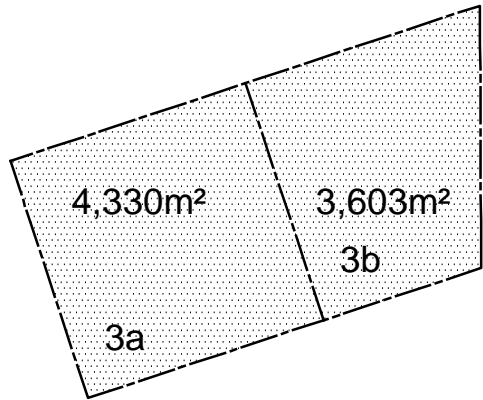
## COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

Site 2	4,435sqm	
R160 PR=2.5:1 11,087sqm		
Complying Development: 98 Apartments @ 95sqm + 1,800sqm Retail/Comm		
+ 30 % = 14,413sqm 133 apartments @ 95sqm + 1,800sqm Retail/Comm		
+ 40 % = 15,522sqm 144 apartments @ 95sqm + 1,800sqm Retail/Comm		
18 apartments/level		10 apartments/level
8 levels = 98 apartments 8 full levels = 130 apartments 9 full levels = 148 apartments		Complying 8 Level Option Upper Level Plan

# SITE 3

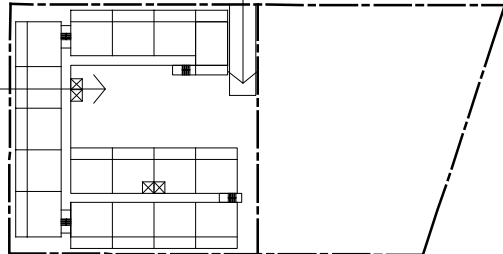
**SITE 3a:**  
**SITE AREA:** 4,430sqm  
**ZONING:** R100 ACTIVITY CENTRE  
**PLOT RATIO:** 1.25:1  
**BUILD HEIGHT:** 3 - 5 LEVELS

**SITE 3b:**  
**SITE AREA:** 3,603sqm  
**ZONING:** R100 MIXED USE  
**PLOT RATIO:** 1.5:1  
**BUILD HEIGHT:** 3 - 5 LEVELS



**Combined Site Area:**  
 7,933m<sup>2</sup>

17 apartments/level



3a Lifted Option

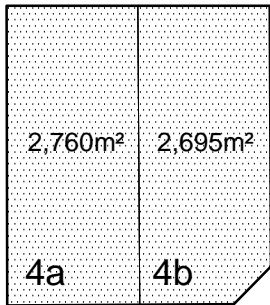
## COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

Site 3a	4,330sqm	Site 3b	3,603sqm
R100 PR=1.25:1 5,412sqm		R100 1.5:1 5,405sqm	
Complying Development: 57 Apartments@95sqm (3 levels walkup)		Complying Development: 42 Apartments@95sqm + 1,455sqm Retail/Comm	
+ 30 % = 7,036sqm 74 apartments (4.5 levels lifted)		+ 30 % = 7,026sqm 59 apartments@95sqm + 1,455sqm Retail/Comm	
+ 40 % = 7,577sqm 80 apartments@95sqm (5 levels lifted)		+ 40 % = 7,567sqm 64 apartments@95sqm + 1,455sqm Retail/Comm	
20 apartments/level		13 apartments/level	
3 levels = 57 apartments (walkup) 4.5 levels = 74 apartments (lifted) 5 levels = 80 apartments (lifted)		4.5 levels = 42 apartments 5.5 levels = 59 apartments 6 levels = 64 apartments	

# SITE 4

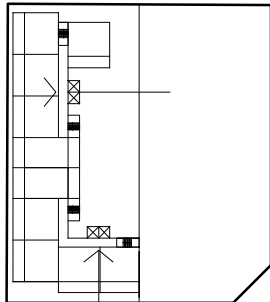
SITE 4a:  
 SITE AREA: 2,760sqm  
 ZONING: R100  
 PLOT RATIO: 1.25:1  
 BUILD HEIGHT: 3 - 5 LEVELS

SITE 4b:  
 SITE AREA: 2,695sqm  
 ZONING: R100 MIXED USE  
 PLOT RATIO: 1.5:1  
 BUILD HEIGHT: 3 - 5 LEVELS



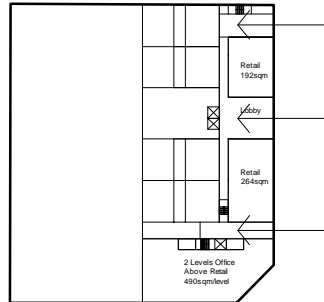
COMBINED AREA:  
 5,455m²

10 apartments/level



4a Lifted Option

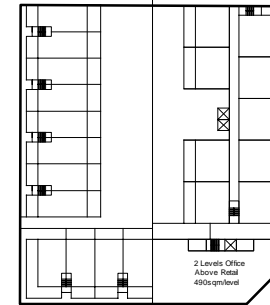
4 apartments/level



4b Ground Floor

## COCKBURN COAST -AFFORDABLE HOUSING DEVELOPMENT STUDY

Site 4a	2,760sqm	Site 4b	2,695sqm
R100 PR=1.25:1 3,450sqm		R100 1.5:1 4,042sqm	
Complying Development: 36 Apartments @ 95sqm (3 - 4 levels walkup/lifted)		Complying Development: 22 Apartments @ 95sqm + 1926sqm Retail/Comm	
+ 30 % = 4,485sqm 47 apartments (5 levels lifted)		+ 30 % = 13,162sqm 35 apartments (4.5 levels) + 1926sqm Retail/Comm	
+ 40 % = 4,830sqm 51 apartments (5.5 levels lifted)		+ 40 % = 14,175sqm 39 apartments (5 levels) + 1926sqm Retail/Comm	
12 apartments/level (10 apartments/level lifted development)		9 apartments/level	
3 levels = 36 apartments		3 levels = 22 apartments 4 levels = 31 apartments 5 levels = 40 apartments	





# APPENDIX C

Residual Value Calculations





# APPENDIX C

Base Case



	<b>Land</b>	3,500	sqm	Hassell Base Case	Hassell Bonus 1	Hassell Bonus 2
	Plot Ratio	1.25		Plot Ratio Driver	30%	40%
	Plot Ratio Area	4,375	sqm	32	45	50
	Levels	3.50	storeys	95	97	96
	RCode Equivalent	100		3,040	4,352	4,790
		44		1,335	1,335	1,335
<b>Site Cover</b>	80%			4,375	5,687	6,125
<b>Podium</b>	85%	Basement	95%	PRatio	1.62	1.75
	-		Efficiency			
	-		Levels			
	-					
	-					

							\$5,000	Rounding Factor			
# Apt	Bed	Net Area	Total area	Carbays/apt	Total Carbays	\$/sqm net	Average price	Gross Realisation	Affordable Component		
<b>Affordable Stock Added</b>											
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
<b>Additional Stock to Developer</b>											
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
<b>Complying Yield</b>											
6	1	55	330	1.00	6	\$7,000	\$385,000	\$2,310,000	15%		
10	1	65	650	1.00	10	\$7,000	\$455,000	\$4,550,000	26%		
10	2	75	750	1.00	10	\$7,100	\$535,000	\$5,350,000	26%		
8	2	90	720	1.00	8	\$7,050	\$635,000	\$5,080,000	21%		
3	3	110	330	1.00	3	\$6,725	\$740,000	\$2,220,000	8%		
2	3	130	260	2.00	4	\$6,600	\$860,000	\$1,720,000	5%		
39			3,040		41			\$21,230,000	100%		
					1.05			\$21,230,000	100%		
		Average floor area	77.95					Average price	\$545,000		
		Balcony Average	15						\$6,984		
		Carbay provision	35								
		Amenities - sqm per apartment	-								
		Total Apartments	39								
		Visitor Parking	10.0%	5.0							

Commercial	Average Unit	No.	NLA	Total Carbays	m <sup>2</sup> /car bay	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
	150	5	800	11		\$6,600	\$1,056,000	\$5,280,000	\$6,000	\$450	7.50%

Retail	Average Unit	No.	NLA	Total Carbays	m <sup>2</sup> /car bay	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
	75	7	535	7		\$7,150	\$546,464	\$3,825,250	\$6,500	\$400	6.15%

Total Net Floor Area	4,375	1.25
Surplus/Deficit Plot Ratio	0	
Total Units	51	
Total Parking	64	64
<b>Total Realisation</b>		
		\$30,335,250

Timings	Statutory Planning	Planning	Pre - sales commitment	Construction Design and Tender/mobilisation	Development	Selling	Total Duration	PR Guide	Sale Rate	Pre Sales
	6	4	4	18	3	35	2.9	6.0%	8	4.0
										\$16,546,500
										\$15,758,055
										17.5%

<b>Development Calculations</b>													
Gross Realisation											\$/unit		
LESS	GST	Land Res GR	\$21,230,000	Com GR	\$9,105,250							\$30,335,250	\$594,809
		GST	\$1,930,000		\$827,750							\$2,757,750	\$2,757,750
LESS	Agency Selling Fee				2.00%						\$606,705	\$11,896	
	Development Management Fee				1.00%						\$303,353	\$5,948	
	Settlement Fee Vendor				0.15%						\$45,503	\$892	
	Marketing				0.75%						\$227,514	\$4,461	
	Ancillary Costs				0.00%						\$0	\$0	
											\$1,183,075	\$26,394,425	
LESS	Profit and Risk				20.00%						\$4,399,071	\$86,256	\$1,006
											\$21,995,354		
LESS	<b>Development Costs</b>												
	Basement Car Park	Net Area	2,228	Efficiency	95.0%	Gross Area	2,345		\$945	\$2,216,025	\$43,451		
	Podium Car Park		-	85.0%			-	\$770	\$0	\$0	\$0		
	Commercial		800	85.0%		941		\$1,925	\$1,811,765	\$35,525			
	Retail		535	85.0%		629		\$1,400	\$881,176	\$17,278			
	Residential		3,040	90.0%		3,378		\$1,965	\$6,637,333	\$130,144			
	Balcony		585					\$885	\$517,725	\$10,151			
	External Works		0.0%			4,375		\$400,000	\$0	\$7,843			
	External Services		0.0%					\$0	\$0	\$0			
	Scheme Costs							\$100	\$350,000	\$6,863			
	Sustainability Initiatives		0.0%					\$0	\$0	\$0			
	Public Art		1.0%					\$0	\$124,640	\$2,444			
	Headworks/Statutory Fees		51					\$4,000	\$204,000	\$4,000			
	Professional Fees		9.0%					\$0	\$1,182,840	\$23,193			
	Contingency		10.0%					\$0	\$1,432,550	\$28,089			
									\$15,758,055	\$308,981			\$3,602
LESS	Rates and Taxes	Completed Product	\$1,500	pa per unit for half selling period					\$9,563	\$15,767,618	\$6,227,737	\$3,604	
LESS	Interest on Development Costs			8.00%					\$1,103,733	\$5,124,004	\$252		
LESS	Interest on Land Purchase	For Planning, Development and half selling Period		8.00% p.a.		34	months		\$935,445	\$4,188,559	\$214		
LESS	Rates and Taxes	Land		5.00%	for land during planning and development				\$199,455	\$3,989,104	\$46		
LESS	Purchase Costs			6.00%					\$225,798	\$3,763,305	\$52		
									\$5,027	\$5,027	Cost Base		
									\$3,760,000	\$859			
									\$/unit All	\$73,725			
									\$/unit Res Only	\$96,410			
									\$/sqm land	\$1,074			









	<b>Land</b>	2,760	sqm	Hassell Base Case	Hassell Bonus 1	Hassell Bonus 2
	Plot Ratio	1.25		Plot Ratio Driver	30%	40%
	Plot Ratio Area	3,450	sqm		36	47
	Levels	3.50	storeys		96	95
	RCode Equivalent	100			3,450	4,485
		35			-	-
<b>Site Cover</b>	80%				3,450	4,485
<b>Podium</b>	85%	Basement	95%	Efficiency	PRatio	1.63
	-		0.70	Levels		1.75
	-		1,835			
	-		52			

							\$5,000	Rounding Factor			
# Apt	Bed	Net Area	Total area	Carbays/apt	Total Carbays	\$/sqm net	Average price	Gross Realisation	Affordable Component		
<b>Affordable Stock Added</b>											
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
<b>Additional Stock to Developer</b>											
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
<b>Complying Yield</b>											
8	1	55	440	1.00	8	\$6,300	\$345,000	\$2,760,000	18%		
10	1	65	650	1.00	10	\$6,300	\$410,000	\$4,100,000	22%		
14	2	75	1,050	1.00	14	\$6,400	\$480,000	\$6,720,000	31%		
8	2	90	720	1.00	8	\$6,350	\$570,000	\$4,560,000	18%		
3	3	110	330	1.00	3	\$6,050	\$665,000	\$1,995,000	7%		
2	3	130	260	2.00	4	\$5,950	\$775,000	\$1,550,000	4%		
45			3,450		47			\$21,685,000	100%	100%	
		Average floor area	76.67		1.04			Average price	\$480,000		
		Balcony Average	15						\$6,286		
		Carbay provision	35								
		Amenities - sqm per apartment	-								
		Total Apartments	45								
		Visitor Parking	10.0%	5.0							

Commercial	Average Unit	No.	NLA	Total Carbays	m <sup>2</sup> /car bay	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
	150			75			\$6,600	\$0	\$6,000	\$450	7.50%
Retail	Average Unit	No.	NLA	Total Carbays	m <sup>2</sup> /car bay	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
	75			75		\$7,150	\$0	\$0	\$6,500	\$400	6.15%

Total Net Floor Area	3,450	1.25
Surplus/Deficit Plot Ratio	0	
Total Units	45	
Total Parking	52	52
<b>Total Realisation</b>		<b>\$21,685,000</b>

Timings		Sale Rate	Pre Sales
Statutory Planning	6 months	10	3.0
Pre - sales commitment	3 months	56%	25.0
Construction Design and Tender/mobilisation	4 months		\$11,039,636
Development	18 months		\$10,743,015
Selling	3 months		
Total Duration	34 months		
PR Guide	2.8	6.0%	17.0%

Development Calculations				\$/unit
<b>Gross Realisation</b>				\$21,685,000
<b>LESS</b>	GST			\$481,889
	Land Res GR	\$21,685,000	Corn GR	\$1,971,364
	GST	\$1,971,364		\$19,713,636
<b>LESS</b>	Agency Selling Fee	2.00%	\$433,700	\$9,638
	Development Management Fee	1.00%	\$216,850	\$4,819
	Settlement Fee Vendor	0.15%	\$32,528	\$723
	Marketing	0.75%	\$162,638	\$3,614
	Ancillary Costs	0.00%	\$0	\$0
			\$845,715	\$18,867,921
<b>LESS</b>	Profit and Risk	20.00%	\$3,144,654	\$69,881
				\$15,723,268
<b>LESS</b>	<b>Development Costs</b>	<b>Net Area</b>	<b>Efficiency</b>	<b>Gross Area</b>
	Basement Car Park	1,835	95.0%	1,932
	Podium Car Park	-	85.0%	\$945
	Commercial	-	85.0%	\$770
	Retail	-	85.0%	\$1,925
	Residential	3,450	90.0%	\$1,400
	Balcony	675		\$1,460
	External Works	0.0%		\$885
	External Services	0.0%		\$597,375
	Scheme Costs			\$400,000
	Sustainability Initiatives	0.0%		\$0
	Public Art	1.0%		\$100
	Headworks/Statutory Fees	45		\$276,000
	Professional Fees	9.0%		\$6,133
	Contingency	10.0%		\$0
				\$84,198
				\$180,000
				\$4,000
				\$806,398
				\$17,920
				\$976,638
				\$21,703
				\$10,743,015
				\$238,734
<b>LESS</b>	Rates and Taxes	Completed Product		
		\$1,500	pa per unit for half selling period	\$8,438
				\$10,751,453
<b>LESS</b>	Interest on Development Costs	8.00%		\$4,971,815
	Interest on half the development and selling period			\$752,602
				\$4,219,213
<b>LESS</b>	Interest on Land Purchase			
	For Planning, Development and half selling Period	33 months		
	8.00% p.a.	21.67%		\$751,367
				\$3,467,846
<b>LESS</b>	Rates and Taxes			
	Land	5.00%	for land during planning and development	\$165,136
				\$3,302,711
<b>LESS</b>	Purchase Costs	6.00%		\$186,946
				\$3,115,765
				\$54
				\$4,559
				Cost Base
				\$904
				\$3,120,000
				\$/unit All
				\$69,333
				\$/unit Res Only
				\$69,333
				\$/sqm land
				\$1,130

	<b>Land</b>	2,695	sqm	Hassell Base Case	Hassell Bonus 1	Hassell Bonus 2
	Plot Ratio	1.50		Plot Ratio Driver	30%	40%
	Plot Ratio Area	4,043	sqm	22	apts	35
	Levels	3.50	storeys	96	m <sup>2</sup>	95
	RCode Equivalent	100		2,117	m <sup>2</sup>	3,329
		40		1,926	m <sup>2</sup>	1,926
<b>Site Cover</b>	80%			4,043	m <sup>2</sup>	5,255
<b>Podium</b>	85% Basement	95%	Efficiency Levels	PRatio	1.95	2.10
	-	0.76				
	-	1,946				
	-	56				

							\$5,000	Rounding Factor			
# Apt	Bed	Net Area	Total area	Carbays/apt	Total Carbays	\$/sqm net	Average price	Gross Realisation	Affordable Component		
<b>Affordable Stock Added</b>											
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
<b>Additional Stock to Developer</b>											
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	1	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	2	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
0	3	0	-	-	0	\$0	\$0	\$0	0%		
<b>Complying Yield</b>											
3	1	55	165	1.00	3	\$6,300	\$345,000	\$1,035,000	11%		
7	1	65	455	1.00	7	\$6,300	\$410,000	\$2,870,000	26%		
8	2	75	600	1.00	8	\$6,400	\$480,000	\$3,840,000	30%		
5	2	90	450	1.00	5	\$6,350	\$570,000	\$2,850,000	19%		
4	3	110	440	1.00	4	\$6,050	\$665,000	\$2,660,000	15%		
0	3	130	-	2.00	0	\$5,950	\$775,000	\$0	0%		
27			2,110		27			\$13,255,000	100%	100%	
								\$13,255,000			
		Average floor area	78.15					Average price		\$490,000	
		Balcony Average	15							\$6,282	
		Carbay provision	35								
		Amenities - sqm per apartment	-								
		Total Apartments	27								
		Visitor Parking	10.0%	3.0							

Commercial	Average Unit	No.	NLA	Total Carbays	m <sup>2</sup> /car bay	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
	150	7	980	13		\$6,600	\$924,000	\$6,468,000	\$6,000	\$450	7.50%
Retail	Average Unit	No.	NLA	Total Carbays	m <sup>2</sup> /car bay	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
	75	13	946	13		\$7,150	\$520,300	\$6,763,900	\$6,500	\$400	6.15%

Total Net Floor Area	4,036	1.50	
Surplus/Deficit Plot Ratio	7		
Total Units	47		
Total Parking	56	56	
		<b>Total Realisation</b>	<b>\$26,486,900</b>

Timings	Statutory Planning	Planning	Pre-sales commitment	Construction Design and Tender/mobilisation	Development	Selling	Total Duration	PR Guide	Sale Rate	Pre Sales
	6	4	4	18	3	35	2.9	6.0%	8	4.0
										\$13,484,240
										\$12,530,553
										17.5%

<b>Development Calculations</b>										
Gross Realisation	LESS	GST	Land Res GR	Land GST	Com GR	Development Costs	Net Area	Efficiency	Gross Area	Cost Base
			\$13,255,000	\$1,205,000	\$13,231,900					\$26,486,900
										\$563,551
										\$2,407,900
										\$24,079,000
										\$23,046,011
										\$81,723
										\$952
										\$19,205,009
										\$41,182
										\$0
										\$47,222
										\$33,151
										\$72,827
										\$8,511
										\$0
										\$5,734
										\$0
										\$2,105
										\$4,000
										\$20,012
										\$24,237
										\$266,608
										\$3,105
										\$8,813
										\$12,539,365
										\$6,665,644
										\$217
										\$5,787,888
										\$262
										\$4,731,244
										\$56
										\$4,505,947
										\$63
										\$4,250,893
										\$4,758
										Cost Base
										\$1,053
										\$4,250,000
										\$90,426
										\$157,407
										\$1,577

# APPENDIX C

Scenario 1 + 40%







	Hassell Base Case	Hassell Bonus 1	Hassell Bonus 2
Land	4,435 sqm	30%	40%
Plot Ratio	2.50	133	144
Plot Ratio Area	11,088 sqm	95	96
Levels	10.00 storeys	9,310 m <sup>2</sup>	12,643
RCode Equivalent	160	1,800 m <sup>2</sup>	1,800
Site Cover	80%	11,110 m <sup>2</sup>	14,443
Podium	85% Basement	PRatio	3.26
	69		3.51
	1.78		
	7,500		
	214		

Residential										\$5,000	Rounding Factor
# Apt	Bed	Net Area	Total area	Carbays/apt	Total Carbays	\$/sqm net	Average price	Gross Realisation	Affordable Component		
<b>Affordable Stock Added</b>											
4	1	55	220	1.00	4	\$3,182	\$175,000	\$700,000	2%		
5	1	65	325	1.00	5	\$3,154	\$205,000	\$1,025,000	3%		
8	2	75	600	1.00	8	\$3,133	\$235,000	\$1,880,000	5%		
5	2	90	450	1.00	5	\$3,056	\$275,000	\$1,375,000	3%		
2	3	110	220	1.00	2	\$3,045	\$335,000	\$670,000	1%		
0	3	130	-	2.00	0	\$2,962	\$385,000	\$0	0%	14%	20%
<b>Additional Stock to Developer</b>											
4	1	55	220	1.00	4	\$7,700	\$425,000	\$1,700,000	2%		
5	1	65	325	1.00	5	\$7,700	\$500,000	\$2,500,000	3%		
8	2	75	600	1.00	8	\$7,800	\$585,000	\$4,680,000	5%		
5	2	90	450	1.00	5	\$7,750	\$700,000	\$3,500,000	3%		
2	3	110	220	1.00	2	\$7,400	\$815,000	\$1,630,000	1%		
0	3	130	-	2.00	0	\$7,250	\$945,000	\$0	0%	14%	
<b>Complying Yield</b>											
20	1	55	1,100	1.00	20	\$7,700	\$425,000	\$8,500,000	12%		
24	1	65	1,560	1.00	24	\$7,700	\$500,000	\$12,000,000	14%	26%	total 1 bed
35	2	75	2,625	1.00	35	\$7,800	\$585,000	\$20,475,000	21%		
25	2	90	2,250	1.00	25	\$7,750	\$700,000	\$17,500,000	15%	36%	total 2 bed
10	3	110	1,100	1.00	10	\$7,400	\$815,000	\$8,150,000	6%		
5	3	130	650	2.00	10	\$7,250	\$945,000	\$4,725,000	3%	9%	total 3 bed
167			12,915		172	1.03		\$71,350,000	71%	71%	
		Average floor area	77.34					\$91,010,000			
		Balcony Average	15					\$545,000			
		Carbay provision	35					\$5,525			
		Amenities - sqm per apartment	-								
		Total Apartments	167								
		Visitor Parking	10.0%	18.0							

Commercial										Average Unit	150	75	m <sup>2</sup> /car bay
No.	NLA	Total Carbays	\$/sqm GST Inc	Average	Gross Realisation	GST Net							
					\$6,600	\$0			\$6,000		\$450	7.50%	
<b>Retail</b>													
											\$400	6.15%	

Total Net Floor Area	14,715	3.32
Surplus/Deficit Plot Ratio	(272)	
Total Units	191	
Total Parking	214	
Total Realisation	\$103,880,000	

Timings									
	Statutory Planning	Planning	6 months	Sale Rate	10	14.0			
	Pre - sales commitment	10 months		Pre Sales	71%	135.0			
	Construction Design and Tender/mobilisation	4 months				\$67,049,818			
	Development	24 months				\$67,236,681			
	Selling	3 months							
	Total Duration	47 months							
	PR Guide	3.9	6.0%	23.5%					

Development Calculations										\$/unit
Gross Realisation										\$103,880,000
LESS	GST									\$543,874
	Land Res GR	\$91,010,000	Com GR	\$12,870,000		\$103,880,000		\$94,436,364		\$9,443,636
	GST	\$8,273,636		\$1,170,000						
LESS	Agency Selling Fee		2.00%			\$1,964,600		\$10,286		
	Development Management Fee		1.00%			\$1,038,800		\$5,439		
	Settlement Fee Vendor		0.15%			\$155,820		\$816		
	Marketing		0.75%			\$736,725		\$3,857		
	Ancillary Costs		0.00%			\$0		\$0		
						\$3,895,945		\$265		
LESS	Profit and Risk		20.00%			\$14,234,009		\$90,540,419		\$85,234
								\$76,306,409		\$1,103
LESS	Development Costs		Net Area	Efficiency	Gross Area					
	Basement Car Park	7,500	95.0%		7,894	\$945	\$7,460,114	\$39,058		
	Podium Car Park	-	85.0%		-	\$770	\$0	\$0		
	Commercial	-	85.0%		-	\$1,925	\$0	\$0		
	Retail	1,800	85.0%		2,118	\$1,400	\$2,964,706	\$15,522		
	Residential	12,915	90.0%		14,350	\$2,960	\$42,476,000	\$222,387		
	Balcony	2,505				\$885	\$2,216,925	\$11,607		
	External Works	0.0%			14,715	\$500,000	\$0	\$2,618		
	External Services	0.0%				\$0	\$0	\$0		
	Scheme Costs					\$100	\$443,500	\$2,322		
	Sustainability Initiatives	0.0%				\$0	\$0	\$0		
	Public Art	1.0%				\$556,177	\$556,177	\$2,912		
	Headworks/Statutory Fees	191				\$4,000	\$764,000	\$4,000		
	Professional Fees	9.0%				\$5,164,328	\$5,164,328	\$27,038		
	Contingency	7.5%				\$4,690,931	\$4,690,931	\$24,560		
							\$67,236,681	\$352,025		\$4,569
LESS	Rates and Taxes	Completed Product						\$35,813		
		\$1,500	pa per unit for half selling period					\$67,272,494		\$4,572
LESS	Interest on Development Costs		8.00%					\$9,033,916		
	Interest on half the development and selling period							\$2,979,392		\$411
LESS	Interest on Land Purchase									
	For Planning, Development and half selling period			46 months				\$2,285,978		
	8.00% p.a.			30.33%				\$693,413		\$47
LESS	Rates and Taxes									
	Land	5.00%	for land during planning and development					\$108,856		\$7
LESS	Purchase Costs		6.00%					\$123,233		\$8
								\$2,053,889		\$5,185
								\$5,446		Cost Base
								\$139		
								\$2,050,000		
								\$/unit All	\$10,733	
								\$/unit Res Only	\$12,275	









# APPENDIX C

Scenario 2 + 40%







Land	4,435	sqm
Plot Ratio	2.50	
Plot Ratio Area	11,088	sqm
Levels	11.00	storeys
RCode Equivalent	160	
Basement	69	
Efficiency	95%	
Levels	1.90	
	8,005	
	229	

Plot Ratio Driver	30%	40%
98	133	144
95	95	96
9,310	12,643	13,754
1,800	1,800	1,800
11,110	14,443	15,554
PRatio	3.26	3.51

Residential									
# Apt	Bed	Net Area	Total area	Carbays/apt	Total Carbays	\$/sqm net	Average price	Gross Realisation	Affordable Component
<b>Affordable Stock Added</b>									
4	1	55	220	1.00	4	\$3,182	\$175,000	\$700,000	2%
5	1	65	325	1.00	5	\$3,154	\$205,000	\$1,025,000	3%
8	2	75	600	1.00	8	\$3,133	\$235,000	\$1,880,000	4%
5	2	90	450	1.00	5	\$3,056	\$275,000	\$1,375,000	3%
2	3	110	220	1.00	2	\$3,045	\$335,000	\$670,000	1%
0	3	130	-	2.00	0	\$2,962	\$385,000	\$0	0%
<b>Additional Stock to Developer</b>									
6	1	55	330	1.00	6	\$7,700	\$425,000	\$2,550,000	3%
8	1	65	520	1.00	8	\$7,700	\$500,000	\$4,000,000	4%
12	2	75	900	1.00	12	\$7,800	\$585,000	\$7,020,000	7%
8	2	90	720	1.00	8	\$7,750	\$700,000	\$5,600,000	4%
2	3	110	220	1.00	2	\$7,400	\$815,000	\$1,630,000	1%
0	3	130	-	2.00	0	\$7,250	\$945,000	\$0	0%
<b>Complying Yield</b>									
20	1	55	1,100	1.00	20	\$7,700	\$425,000	\$8,500,000	11%
24	1	65	1,560	1.00	24	\$7,700	\$500,000	\$12,000,000	13%
35	2	75	2,625	1.00	35	\$7,800	\$585,000	\$20,475,000	20%
25	2	90	2,250	1.00	25	\$7,750	\$700,000	\$17,500,000	14%
10	3	110	1,100	1.00	10	\$7,400	\$815,000	\$8,150,000	6%
5	3	130	650	2.00	10	\$7,250	\$945,000	\$4,725,000	3%
179			13,790		184			\$71,350,000	66%
					1.03			\$97,800,000	
		Average floor area	77.04					Average price	\$545,000
		Balcony Average	15						\$5,174
		Carbay provision	35						
		Amenities - sqm per apartment	-						
		Total Apartments	179						
		Visitor Parking	10.0%	19.0					

Commercial									
Average Unit	No.	NLA	Total Carbays	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
150			75	m <sup>2</sup> /car bay					
					\$6,600	\$0	\$6,000	\$450	7.50%

Retail									
Average Unit	No.	NLA	Total Carbays	\$/sqm GST Inc	Average	Gross Realisation	GST Net		
75			75	m <sup>2</sup> /car bay					
	24	1,800	24	\$7,150	\$536,250	\$12,870,000	\$6,500	\$400	6.15%

Total Net Floor Area	15,590	3.52
Surplus/Deficit Plot Ratio	(36)	
Total Units	203	
Total Parking	227	229
Total Realisation		\$110,670,000

Timings									
Statutory Planning	Planning	Pre-sales commitment	Construction Design and Tender/mobilisation	Development	Selling	Total Duration	PR Guide	Sale Rate	
6	10	4	24	3	47	3.9	6.0%	23.5%	
								10	14.0
								71%	\$71,432,455
									\$71,482,408

Development Calculations									
Gross Realisation	LESS	Agency Selling Fee	Development Management Fee	Settlement Fee Vendor	Marketing	Ancillary Costs	Profit and Risk	Development Costs	Rates and Taxes
\$110,670,000		\$2,100,400	\$1,106,700	\$166,005	\$787,650	\$0	\$15,218,662		\$38,063
\$10,060,909		\$10,347	\$5,452	\$818	\$3,880	\$0	\$85,020		\$71,520,470
		\$4,160,755					\$81,229,674		\$9,709,203
									\$6,436,842
									\$3,272,361
									\$761,598
									\$2,510,763
									\$119,560
									\$135,351
									\$2,255,852
									\$9
									\$5,211
									\$5,456
									\$145
									\$11,133
									\$12,626



	<b>Land</b>	<b>3,603</b>	sqm	Hassell Base Case	Hassell Bonus 1	Hassell Bonus 2
	Plot Ratio	1.50		Plot Ratio Driver	30%	40%
	Plot Ratio Area	5,405	sqm	42	42	64
	Levels	6.00	storeys	94	94	95
	RCode Equivalent	100		3,950	5,570	6,111
		54		1,455	1,455	1,455
<b>Site Cover</b>	80%			5,405	7,025	7,566
<b>Podium</b>	85%	Basement	Efficiency Levels	PRatio	1.95	2.10
	-					
	-					
	-					
	-					

							\$5,000	Rounding Factor			
# Apt	Bed	Net Area	Total area	Carbays/apt	Total Carbays	\$/sqm net	Average price	Gross Realisation	Affordable Component		
<b>Affordable Stock Added</b>											
2	1	55	110	1.00	2	\$3,182	\$175,000	\$350,000	2%		
2	1	65	130	1.00	2	\$3,154	\$205,000	\$410,000	2%		
3	2	75	225	1.00	3	\$3,133	\$235,000	\$705,000	4%		
2	2	90	180	1.00	2	\$3,056	\$275,000	\$550,000	2%		
2	3	110	220	1.00	2	\$3,045	\$335,000	\$670,000	2%		
0	3	130	-	2.00	0	\$2,962	\$385,000	\$0	0%	14%	21%
<b>Additional Stock to Developer</b>							\$244,091	<b>\$2,685,000</b>			
2	1	55	110	1.00	2	\$7,000	\$385,000	\$770,000	2%		
3	1	65	195	1.00	3	\$7,000	\$455,000	\$1,365,000	4%		
6	2	75	450	1.00	6	\$7,100	\$535,000	\$3,210,000	7%		
4	2	90	360	1.00	4	\$7,050	\$635,000	\$2,540,000	5%		
2	3	110	220	1.00	2	\$6,725	\$740,000	\$1,480,000	2%		
0	3	130	-	2.00	0	\$6,600	\$860,000	\$0	0%	21%	
<b>Complying Yield</b>							<b>\$9,365,000</b>				
8	1	55	440	1.00	8	\$7,000	\$385,000	\$3,080,000	10%		
14	1	65	910	1.00	14	\$7,000	\$455,000	\$6,370,000	17%		
18	2	75	1,350	1.00	18	\$7,100	\$535,000	\$9,630,000	22%		
9	2	90	810	1.00	9	\$7,050	\$635,000	\$5,715,000	11%		
4	3	110	440	1.00	4	\$6,725	\$740,000	\$2,960,000	5%		
0	3	130	-	2.00	0	\$6,600	\$860,000	\$0	0%	5%	total 3 bed
81			6,150		81			\$27,755,000	65%	65%	
		Average floor area	75.93		1.00			\$39,805,000			
		Balcony Average	15					\$490,000			
		Carbay provision	35					\$4,513			
		Amenities - sqm per apartment	-								
		Total Apartments	81								
		Visitor Parking	10.0%	9.0							

<b>Commercial</b>	Average Unit	150	NLA	75	m <sup>2</sup> /car bay						
	No.	6	910	12	\$/sqm GST Inc	Average	Gross Realisation	GST Net			
					\$6,600	\$1,001,000	\$6,006,000	\$6,000	\$450	7.50%	

<b>Retail</b>	Average Unit	75	NLA	75	m <sup>2</sup> /car bay						
	No.	7	545	7	\$/sqm GST Inc	Average	Gross Realisation	GST Net			
					\$7,150	\$556,679	\$3,896,750	\$6,500	\$400	6.15%	

Total Net Floor Area	7,605	2.11	
Surplus/Deficit Plot Ratio	(39)		
Total Units	94		Total Realisation
Total Parking	109	112	\$49,707,750

<b>Timings</b>				Sale Rate	8	8.0
	Statutory Planning	6	months	Pre Sales	59%	60.0
	Pre - sales commitment	5	months			\$26,661,430
	Construction Design and Tender/mobilisation	4	months			\$29,488,666
	Development	18	months			
	Selling	3	months			
	Total Duration	36	months			
	PR Guide	3.0		6.0%	18.0%	

<b>Development Calculations</b>											
<b>Gross Realisation</b>								\$49,707,750		\$/unit	
<b>LESS</b>	GST	Land						\$4,518,886		\$528,806	
		Res GR	\$39,805,000	Corn GR	\$9,902,750		\$49,707,750	\$45,188,864		\$4,518,886	
		GST	\$3,618,636		\$900,250						
<b>LESS</b>											
	Agency Selling Fee			2.00%			\$940,455			\$10,005	
	Development Management Fee			1.00%			\$497,078			\$5,288	
	Settlement Fee Vendor			0.15%			\$74,562			\$793	
	Marketing			0.75%			\$352,671			\$3,752	
	Ancillary Costs			0.00%			\$0			\$0	
							\$1,864,765			\$245	
<b>LESS</b>	Profit and Risk			20.00%			\$6,813,865			\$82,095	\$1,011
										\$36,510,234	
<b>LESS</b>	<b>Development Costs</b>	<b>Net Area</b>	<b>Efficiency</b>	<b>Gross Area</b>							
	Basement Car Park	3,936	95.0%	4,143	\$945	\$3,915,560				\$41,655	
	Podium Car Park	-	85.0%	-	\$770	\$0				\$0	
	Commercial	910	85.0%	1,071	\$1,925	\$2,060,882				\$21,924	
	Retail	545	85.0%	641	\$1,400	\$897,647				\$9,549	
	Residential	6,150	90.0%	6,833	\$2,235	\$15,272,500				\$162,473	
	Balcony	1,215			\$885	\$1,075,275				\$11,439	
	External Works	0.0%		7,605	\$400,000	\$0				\$4,255	
	External Services	0.0%			\$0	\$0				\$0	
	Scheme Costs				\$100	\$360,300				\$3,833	
	Sustainability Initiatives	0.0%			\$0	\$0				\$0	
	Public Art	1.0%			\$0	\$236,219				\$2,513	
	Headworks/Statutory Fees	94			\$4,000	\$376,000				\$4,000	
	Professional Fees	9.0%			\$0	\$2,213,494				\$23,548	
	Contingency	10.0%			\$0	\$2,680,788				\$28,519	
						\$29,488,666				\$313,709	\$3,878
<b>LESS</b>	Rates and Taxes	Completed Product									
		\$1,500	pa per unit for half selling period			\$17,625					
						\$29,506,291				\$7,003,943	\$3,880
<b>LESS</b>	Interest on Development Costs		8.00%							\$2,065,440	\$272
	Interest on half the development and selling period									\$4,938,503	
<b>LESS</b>	Interest on Land Purchase										
	For Planning, Development and half selling Period			35	months					\$923,460	\$121
				8.00%	p.a.	23.00%				\$4,015,043	
<b>LESS</b>	Rates and Taxes	Land	5.00%	for land during planning and development						\$191,193	\$25
										\$3,823,851	
<b>LESS</b>	Purchase Costs		6.00%							\$216,444	\$28
										\$3,607,406	\$4,801
										\$4,994	Cost Base
										\$475	
	<b>Adopt</b>					<b>\$3,610,000</b>					
										\$38,404	
										\$44,568	
										\$1,002	







Colliers International (WA) Pty Ltd offers a range of valuation and research services in the following specialist areas:

Commercial  
Industrial  
Retail (including Bulky Goods)  
Healthcare & Retirement Living  
Property Development  
Corporate Valuations  
Consultancy Services



CONTACT DETAILS:

DIR 61 8 9261 6666  
FAX 61 8 9261 6677

Colliers International (WA) Pty Limited  
Real Estate and Business Agents  
ABN 26 791 928 513  
Level 19, 140 St Georges Terrace  
Perth WA 6000

[www.colliers.com.au](http://www.colliers.com.au)

COPYRIGHT Colliers International.



Liability limited by a scheme approved under Professional Standards Legislation.

178 **Documents Referenced**

Austin Patricia M, April 2008, *Public Private Partnerships for Funding Affordable Housing Developments in New Zealand*, Waitakere City Council

Department of Housing 2010, *Affordable Housing Strategy 2010-2020: Opening Doors to Affordable Housing*, Department of Housing, Perth.

Judith Stubbs and Associates December 2010, *Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia - Report 2: Planning Mechanisms and Strategies*, report to the Western Australian Planning Commission, Perth.

Judith Stubbs and Associates April 2011, *Achieving Affordable and Diverse Housing in Regeneration Areas in Western Australia - Report 1: Profile of Selected Redevelopment Areas*, report to the Western Australian Planning Commission, Perth.

National Housing Supply Council, *State of Supply Report 2011*, Department of Sustainability, Environment, Water, Population and Communities, Commonwealth of Australia, Canberra

Name of agency as author Year of publication, *Title of publication - in italics*, Name of publisher, place of publication

## **Australia**

### **Adelaide**

HASSELL  
Level 5  
70 Hindmarsh Square  
Adelaide SA  
Australia 5000  
T +61 8 8220 5000  
E [adelaide@hassellstudio.com](mailto:adelaide@hassellstudio.com)

### **Brisbane**

HASSELL  
36 Warry Street  
Fortitude Valley QLD  
Australia 4006  
T +61 7 3914 4000  
E [brisbane@hassellstudio.com](mailto:brisbane@hassellstudio.com)

### **Melbourne**

HASSELL  
61 Little Collins Street  
Melbourne VIC  
Australia 3000  
T +61 3 8102 3000  
E [melbourne@hassellstudio.com](mailto:melbourne@hassellstudio.com)

### **Perth**

HASSELL  
Podium Level, Central Park  
152 – 158 St Georges Terrace  
Perth WA  
Australia 6000  
T +61 8 6477 6000  
E [perth@hassellstudio.com](mailto:perth@hassellstudio.com)

### **Sydney**

HASSELL  
Level 2  
88 Cumberland Street  
Sydney NSW  
Australia 2000  
T +61 2 9101 2000  
E [sydney@hassellstudio.com](mailto:sydney@hassellstudio.com)

## **China**

### **Beijing**

HASSELL  
Building A7  
50 Anjialou  
ChaoYang District  
Beijing 100125 China  
T +8610 5126 6908  
E [beijing@hassellstudio.com](mailto:beijing@hassellstudio.com)

### **Chongqing**

HASSELL  
28F, International Trade Centre  
38 Qing Nian Road  
Yu Zhong District  
Chongqing 400010 China  
T +8623 6310 6888  
E [chongqing@hassellstudio.com](mailto:chongqing@hassellstudio.com)

### **Hong Kong SAR**

HASSELL  
22F, 169 Electric Road  
North Point Hong Kong SAR  
T +852 2552 9098  
E [hongkong@hassellstudio.com](mailto:hongkong@hassellstudio.com)

### **Shanghai**

HASSELL  
Building 8 Xing Fu Ma Tou  
1029 South Zhongshan Road  
Huangpu District  
Shanghai 200011 China  
T +8621 6887 8777  
E [shanghai@hassellstudio.com](mailto:shanghai@hassellstudio.com)

### **Shenzhen**

HASSELL  
37F, Landmark  
4028 Jintian Road  
Futian District  
Shenzhen 518035 China  
T +86755 2381 1838  
E [shenzhen@hassellstudio.com](mailto:shenzhen@hassellstudio.com)

## **South East Asia**

### **Bangkok**

HASSELL  
18F, K Tower  
209 Sukhumvit Soi 21  
Klongtoey-Nua Wattana  
Bangkok 10110 Thailand  
T +66 2207 8999  
E [bangkok@hassellstudio.com](mailto:bangkok@hassellstudio.com)

### **Singapore**

HASSELL  
17A Stanley Street  
068736 Singapore  
T +65 6224 4688  
E [singapore@hassellstudio.com](mailto:singapore@hassellstudio.com)

## **United Kingdom**

### **Cardiff**

HASSELL  
Haywood House North  
Dumfries Place  
Cardiff CF10 3GA United Kingdom  
T +44 2920 646140  
E [cardiff@hassellstudio.com](mailto:cardiff@hassellstudio.com)

### **London**

HASSELL  
Level 2, Morelands  
17 – 21 Old Street  
Clerkenwell  
London EC1V 9HL United Kingdom  
T +44 20 7490 7669  
E [london@hassellstudio.com](mailto:london@hassellstudio.com)