







LEGEND

ZONES AND R-CODES

-  RESIDENTIAL R20
-  RESIDENTIAL R25
-  RESIDENTIAL R30
-  RESIDENTIAL R40

LOCAL SCHEME RESERVES

-  PARKS, RECREATION AND DRAINAGE

OTHER

-  LOCAL STRUCTURE PLAN BOUNDARY
-  10m BUFFER LINE AROUND WASTE WATER PUMP STATION
-  AREA SUBJECT OF MODIFICATIONS



PROPOSED MODIFICATIONS

REALLOCATION OF R30/R40 CODING

- 1 RE-CODE RESIDENTIAL R30 TO R40
- 2 ZONE RESIDENTIAL R40
- 3 REMOVE RESIDENTIAL R40 ZONE
- 4 RE-CODE RESIDENTIAL R40 TO R30

RECODING R25 TO R40

- 5 RE-CODE RESIDENTIAL R25 TO R40

 LOCAL STRUCTURE PLAN BOUNDARY

 AREA SUBJECT OF MODIFICATIONS



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NOTE:

1. FURTHER DETAILED DESIGN OF THE MOVEMENT NETWORK IS REQUIRED AT THE SUBDIVISION STAGE AND SHOULD ADDRESS THE OUTCOMES OF THE REVISED MOVEMENT NETWORK POLICY.
2. THE TAKING OF INDIVIDUAL GRACEFUL SINKHOLES AS A RESULT OF THE CLEARING OF MABITA SUCH AS LOMANDRA HERMAPHRODITA AND MARITIMA, REQUIRES THE PERMISSION OF THE MINISTER FOR ENVIRONMENT OR THEIR DELEGATE, PURSUANT TO THE WILDLIFE CONSERVATION ACT 1998.

CRAIGIE HIGH SCHOOL SITE PROPOSED LOCAL STRUCTURE PLAN
Lots 500 & 501 Camberwarra Drive, Craigie
A Landcorp Project

Scale: 1:2000 (A3)
Date: 15/08/2014
Project: P1: 07/098/002G

0m 10m 20m 30m

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DOCUMENT HISTORY AND STATUS

Craigie High School Site Structure Plan (07/088)	Revision	Date Issued
Prepared By: Taylor Burrell Barnett Town Planning and Design 187 Roberts Road SUBIACO WA 6008 Phone: 9382 2911 Fax: 9382 4586 admin@tbbplanning.com.au	0	02.08.10
	1	03.08.10
	2	16.08.10
	3	18.08.10
	4	07.10.10
	5	14.01.11
	6	17.05.11
	7	27.09.11
	8	24.10.11
	9	04.04.14

As part of the Draft Local Housing Strategy, the City of Joondalup has identified 10 areas in the City as being suitable for higher residential densities. The subject land sits within Opportunity Area 5 (refer Figure 7 – Draft Local Housing Strategy), where it is notated as being “*subject to further detailed planning.*”

The general future direction for Opportunity Area 5 is that it “*presents an excellent opportunity for more compact living and greater housing choices focussed around Whitfords Regional Centre and the important public transport services on Whitfords Avenue. There is an opportunity to revitalise the older part of Craigie.*”

An R20/R40 dual density code is recommended for residential properties close to Whitfords Centre and the public transport corridor for Whitfords Avenue. Elsewhere in the Housing Opportunity Area, and surrounding the former Craigie High School site, R20/30 is recommended for residential properties.

The former Craigie High School site is identified as “*subject to future planning.*” The urban design directions for the Craigie High School Site are:

-  The focus will be on good design outcomes that will improve the area and respect the amenity of current and future residents.
-  A new Dual Density Code Policy will be prepared and development at the higher densities will have to meet the requirements of the policy.
-  Enhancing/maintaining streetscapes and environmentally responsible housing designs are features of the proposed new Dual Density Code Policy.
-  The expected increase in housing diversity will build on existing neighbourhood character and sense of place.

All of these urban design directions/principles have been key considerations in the design formulation of the proposed local structure plan.

The Residential Design Codes of Western Australia (R-Codes) are a regulatory and comprehensive tool for the control of built form and density of the residential development throughout WA and are supported by the Local Housing Strategy.

Community concerns about the impact of infill housing can be addressed by the application of additional standards (refer **Part One, Section 4 – Development**).

4.2.5 CITY OF JOONDALUP LANDSCAPE MASTER PLAN

The City of Joondalup contains a diverse range of public open space that includes: bush forever sites, conservation category wetlands, regional parks, areas of passive and active recreation, a wide range of purpose-built sporting grounds, and generous road verges and medians. In 2008, the City prepared a Water Conservation Plan to demonstrate a reduction in groundwater consumption for Public Open Space irrigation, in response to limitations imposed by the State Government in 2007. This process was a major catalyst for the production of the City of Joondalup Landscape Master Plan 2009-2019. The relevance of this document to the former Craigie High School site is discussed below.

8.2.1 RESIDENTIAL

The density within the Craigie High School Structure Plan has been considered within the context of the State Government’s *Directions 2031* and the City’s *Draft Local Housing Strategy*, which both encourage more efficient use of land. Areas of lower density have been provided where site-responsiveness has been a priority. That is, to retain trees on site, respecting the interface with the existing R20 residential areas and incorporating the dunal grades within the lots.

Densities have generally been provided for by locating the lower densities on the periphery of the site to interface with the existing lower density residential, while the density intensifies towards the Public Open Space located in the centre of the site.

Through the *Residential Design Codes*, together with the *Built Form Requirements* (refer **Part One, Section 4 - Development**) of this Structure Plan, and the *Energy Efficient and Water Sensitive Design* section of the City’s *Draft Dual Density Code Policy*, the Craigie High School Development encourages residential development to occur in a sustainable way.

The location, variety and orientation of the residential densities are in accordance with Element 3 – Liveable Neighbourhoods. The Structure Plan (refer **Figure 1 - Structure Plan**) provides for the following density ranges:

-  R20 Residential
-  R25 Residential
-  R30 Residential
-  R40 Residential

Based on the densities proposed by the Local Structure Plan, approximately **181** dwellings will be achieved. **Table 1** provides an indicative dwelling yield breakdown for the Structure Plan area:

TABLE 1: DWELLING UNIT YIELDS

R-Code	Dwelling Yield (1)	% of Yield
R20	39	21.6%
R25	46	25.4%
R30	27	14.9%
R40 (incl. GH Sites)	69	38.1%
Total	181	100%

Note: (1) The dwelling yields have been calculated at the Structure Plan stage and will be subject to detailed design refinement and are therefore subject to change. The dwelling yields have been determined based on Net Developable Area (NDA) divided by R-Code averages/unit. The yields may vary at the developer’s discretion as development occurs.

Based on the residential area proposed by the Local Structure Plan, approximately 59,830m² of Net Developable Area (NDA) will be achieved. **Table 2** provides an indicative R-Code Area breakdown for the Structure Plan area:

**Craigie High School Site
Local Structure Plan**

TABLE 2: R-CODE AREAS

R-Code	NDA (m ²)	% of Area
R20	19,960	33.4%
R25	16,286	27.2%
R30	8,207	13.7%
R40 (incl. GH Sites)	15,377	25.7%
Total	59,830	100%

8.2.1.1 R20 RESIDENTIAL

The land proposed for residential development at R20 has been generally located on the periphery of the subject land to provide a similar built form transition from the abutting R20 development to the more compact residential housing towards the centre of the site. The Structure Plan provides for these peripheral R20 zones in response to the existing residential R20 housing adjacent to the site.

Similarly, an R20 residential zone has been located adjacent to the Parks and Recreation Reserve to the north, providing a lower density transition into the site.

An R20 residential zone has been located towards the north-eastern corner for the provision of larger lots as a response to the steep topography. Additional depth has been provided to the R20 residential zone fronting Camberwarra Drive to allow, through Part One, section 4.3.1.1(c) Front Setbacks, for the retention of a number of significant Tuart trees along the western edge of these future lots.

8.2.1.2 R25 RESIDENTIAL

The R25 residential zone provided within the subject site facilitates front-loaded housing on an affordable lot size.

The R25 residential zone is located along both the north-south and east-west entry roads leading to the central open space, as well as a pocket towards the eastern portion of the site. The R25 coding also provides for a subtle density transition from the R20 on the periphery to the R40 in the centre of the development.

8.2.1.3 R30 RESIDENTIAL

An area of R30 rear-loaded laneway product is strategically located along the north-eastern interface of the high amenity central open space. This location provides the opportunity for direct Public Open Space interface with rear laneway access. This R30 residential zone promotes a more equitable urban structure and offers high accessibility to open space for smaller lots. This strategic allocation of density provides for increased accessibility and promotes a lively community nucleus by allowing for the population required to support these high amenity areas. The R30 Code allows for larger laneway lots generally between 270-350m², with some having direct access to the central open space.

This mid-range laneway lot size and front loaded R30 housing product provide and support an additional diversity of housing and lot sizes within the Structure Plan area.

8.2.1.4 R40 RESIDENTIAL

The higher R40-density areas are provided by the Structure Plan in order to facilitate housing variety, socio-economic and demographic diversity, and to contribute to the efficient use of the land. The R40 coded zones optimise density around areas of high amenity promoting a more equitable urban structure and offering high accessibility to open space for smaller lots. This strategic allocation of density provides for increased accessibility and promotes a lively community nucleus by allowing for the population required to support these high amenity areas

The single lot sizes, located along the south-western interface of the high amenity central open space, will be in the order of between 200-300 m². The R40 coded precincts within the Structure Plan are also capable of being developed as grouped housing sites, contributing to the diversity of housing within the development.

The R40-density areas allow for both rear-loaded, single-lot development and grouped-housing development opportunities, with a large proportion of the R40 product overlooking Public Open Space (refer **Part One, section 4 – Development for control over R40 single lot housing**).

8.2.2 PUBLIC OPEN SPACE

Approximately 1.7705 ha of Public Open Space (exclusive of 1 in 1 year Drainage) have been provided for within the Structure Plan (refer **Figure 19 – Public Open Space Plan**) resulting in 17.91% Public Open Space provided (refer **Table 3 - Public Open Space Schedule**).

The Structure Plan has been designed around an approximate 6,500m² central linear open space spine, traversing the site in a NW - SE direction. The alignment of the open space spine has been centred on a visual corridor between the existing dunal system to the NW down to the existing Otago Park in the SE. The green spine also offers a grade within the open space area of 12m over approximately 220m (i.e. 1:18).

Public Open Space Area 1 (approximately 1.1414 ha), provided in the north-west of the site, is dedicated to retaining (part of) the existing dunal system and remnant vegetation within the subject site, whilst integrating seamlessly with the existing Parks and Recreation reserve that contains (greater portion of) the dunal system.

Public Open Space Area 2 (approximately 6,516 m²) is the open space spine, which is to be a central focus of the Structure Plan, that links the dunal system with Otago Park. This central green spine provides for a permeable open space network incorporated within the urban fabric to be primarily utilised for passive recreation pursuits and drainage, with active recreational pursuits to take place in the larger areas of Otago Park.

The high amenity of this central open space is complemented by higher density allotments (up to R40), on its periphery, providing surveillance and high quality built form interface. The design of the central open space has been done in way to optimise view corridors to/from the dunes, to/from Otago Park and across the open space from the eastern termination of the entry road towards the R30 housing opposite.

**Craigie High School Site
Local Structure Plan**

TABLE 3: PUBLIC OPEN SPACE SCHEDULE - CRAIGIE HIGH SCHOOL STRUCTURE PLAN		
Gross Site Area	(m ²)	(m ²)
Lot 500	2,381	
Lot 501	99,089	
Total Gross Site Area		101,470
Deductions		
1 in 1 year drainage (within Public Open Space 2) (*)	225	
Total Deductions	225	
Net Subdivisible Area/ Public Open Space Contribution Area		101,245
Required Public Open Space (10%)		10,124
Public Open Space Requirements		
Unrestricted public open space – minimum 80%	8,100	
Restricted public open space – maximum 20%	2,024	
Total		10,124
PUBLIC OPEN SPACE PROVISION		
Unrestricted Public Open Space		
Public Open Space 1	11,414	
Public Open Space 2	6,032	
1 in 100 year drainage (within Public Open Space 2) (*)	160	
Total Unrestricted Public Open Space		17,606
Restricted Public Open Space		
1 in 5 year drainage (within Public Open Space 2) (*)	99	
Total Restricted Public Open Space		99
Total Public Open Space Provided		17,705
Percentage of Public Open Space Provided		17.48%
(Unrestricted and Restricted PUBLIC OPEN SPACE Contribution)		
Surplus Restricted Public Open Space		n/a

1. Detailed drainage calculations are subject to detailed calculation at the Subdivision stage
2. Assumes no drainage into potential drainage 1 and/or potential drainage 2 (Schedule requires modification if the drainage requires changes).

(*) Detailed drainage calculations are subject to detailed calculation at the Subdivision stage.

8.3 BUILT FORM

In promoting a Structure Plan objective to facilitate quality built form and diverse housing, it is important that achieving the required outcomes is not restricted by the City’s Policy 3.2 *Height and Scale of Buildings Within Residential Areas*. For this reason, Part 1 (refer **Part One, Section 4 – Development**) proposes a variation to this Policy to allow more development scope for the lots within the Structure Plan area.

-  Access and infrastructure to minimise dune damage.
-  Educate the public of the importance of the dunes and associated restrictions.
-  Fire management regime (to minimise disturbance of GSM territories during breeding season).
-  Chemical management (pesticides, herbicides and fertilisers).
-  Investigate methods to rehabilitate and improve GSM habitat, including options to increase numbers of food plants.

9.2.3 TRAFFIC MANAGEMENT PLAN

The Traffic Report (refer **Appendix 4**) is appended for Council's consideration.

9.3 STAGING/SUBDIVISION

The proposed Structure Plan is to be approved by early to mid 2011. Accordingly, subdivision of the subject land is expected to commence thereafter, with the subject site to be developed as a staged practical completion of works.

9.4 DESIGN GUIDELINES

The Structure Plan establishes the framework and themes for development within the former Craigie High School site. These are applied through **Part One, Section 4 - Development**. In addition to the built form requirements, specific development controls and design guidance may be implemented at a later date at the developer's discretion.