

## **ATTACHMENT 11 – WOLLONGONG DEVELOPMENT CONTROL PLAN 2009 assessment**

### **CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT**

Development controls to improve the sustainability of development throughout Wollongong are integrated into the relevant chapters of this DCP.

Measures implemented in the proposal to address Ecologically Sustainable Development include the following:

- Passive and active energy saving measures such as operable windows to enhance natural ventilation where appropriate;
- High levels of natural light to the development;
- Maximised solar exposure to the Medical Centre and Childcare Centre, allowing effecting passive temperature control;
- Incorporation of thermal mass. Concrete slab construction is proposed for all floors throughout the development - concrete has amongst the highest thermal mass capacity of a range of common building products. External walls, structural internal walls and slabs of the proposed development should be predominantly concrete or other high thermal mass materials.
- The provision of a 50 kL tank for the Medical Centre and 30 kL tank for the Childcare Centre have been proposed, with the recommended capacity capable of replacing up to 90% of potable water demand for irrigation.
- External walls and roof insulation in accordance with NCC 2019;
- Appropriate glazing selection in accordance with NCC 2019 requirements to cut excess solar heat gains;
- 30 kW of photovoltaic solar electricity to be provided to both the Medical Centre and Childcare Centre;
- Water efficient bathroom and kitchen fittings;
- Heat pump or solar thermal system or a central gas boiler hot water system with a star rating of above 3.5 for the proposed development.
- Light efficiency measures using motion sensors where required;
- LED and Fluorescent lighting throughout the project;
- Minimum 4-star energy efficient dishwashers, refrigerators and washing machines, if required;
- Incorporation of low water demand and low maintenance plant species in all areas to reduce mains consumption and fertiliser contamination of drainage water;
- Electricity sub-metering for significant end uses that will consume more than 10,000 kWh/a;
- Water sub-metering for major uses;
- Low levels of volatile organic compounds (VOC) paints and floor coverings and low formaldehyde wood products in accordance with Green Building Council of Australia requirements; and
- Car spaces for small or low emission cars.

### **CHAPTER C5: CHILD CARE CENTRES**

Controls within this chapter not otherwise addressed by the Child Care Planning Guideline are setbacks and car parking. Car parking is addressed in chapter E3. The medical centre is significantly set back from adjoining residential development. The child care centre has setbacks to the adjoining residence in excess of that which would be required for residential development with acoustic an acoustic wall to provide noise attenuation. The proposal is considered to provide a suitable interface with the adjoining residence.

## **CHAPTER D1 – CHARACTER STATEMENTS**

### Berkeley

It is noted that this chapter identifies higher order retailing and business functions for the surrounding residential population to continue to be provided either from Wollongong City Centre or Warrawong sub-regional centre. The proposal is contrary to this objective however the concept plan has already been approved and this chapter is not therefore considered to preclude the proposal.

## **CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY**

The development has been designed with input from an access consultant and supported by a NCC Assessment Report addressing the Disability (Access to Premises – Buildings) Standards 2010.

## **CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN**

The proposal is considered to have been designed in accordance with the principles of CPTED.

## **CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT**

### **6 Traffic impact assessment and public transport studies**

#### 6.1 Car Parking and Traffic Impact Assessment Study

A Traffic and Transport Assessment prepared by a suitably qualified consultant has been submitted with the application. That report undertook intersection analysis for Warwick and Hopman Street intersections with Nolan Street and found that these intersections would continue to operate with an acceptable level of service post development.

In regard to traffic generation more generally, based on the estimated peak traffic generation, the adjoining road network would continue to operate effectively.

The Traffic Impact Assessment estimates a peak traffic generation of 167 vehicles in the peak (8.00 to 9.00am and 3.15 to 4.15pm) which equates to approximately 1,670 vehicles per day (peak traffic representing approximately 10% of the total daily traffic).

This would be split to some degree between Hopman Crescent and Warwick Streets.

Both roads are approximately 9m wide and can accommodate two way traffic with parked vehicles either side.

These roads are nominated as “Major Local Roads” and Council controls in Chapter B2 describe local roads as having a safe operating capacity of up to 3,000 vehicles per day (vpd).

Warwick Street has approximately 60 houses and Hopman Crescent has approximately 43. There are an additional 23 dwellings located on Newcombe Street and Rosewall Place, traffic from which would be split generally between Warwick Street and Hopman Crescent. Traffic from Hunt Place and Hoad Place is excluded due to the close proximity of those streets to the intersection with Nolan Street.

The total number of dwellings utilising Warwick Street and Hopman Crescent are therefore 72 and 55 respectively.

Residential properties generate around 9 daily trips per day (RTA Guide to Traffic Generating Development). Based on this figure, the existing expected daily traffic for Warwick Street and Hopman Crescent is 648 vpd and 495 vpd respectively.

The expected daily traffic generation for the proposal is 1,670 vpd (167 two-way peak hour trips), which would be split between Hopman and Warwick (approximately 835 vpd each).

When added to the existing traffic, the proposal would not cause the daily traffic generation on adjoining streets to exceed the nominal 3,000 vpd operating capacity.

The traffic impact assessment has been reviewed by Council's Traffic Officer who has not raised any concerns subject to conditions of consent.

#### 6.2 Preliminary Construction Traffic Management Plan

A Construction Environmental Management Plan has been provided.

## 7 Parking demand and servicing requirements

	Rate	Required	Provided
<u>Car parking</u>	•		
Childcare centre	<ul style="list-style-type: none"> <li>1 per staff</li> <li>1 / 6 children.</li> <li>1 accessible</li> <li>2 large spaces (3.2m x 5.5m)</li> </ul>	12 $70/6 = 12$ 1 2 <b>27</b>	27
Medical centre	<ul style="list-style-type: none"> <li>4 / consulting room</li> <li>1 / 3 employees</li> </ul>	27 consulting rooms (108) 27 employees (9)	117
Café	<ul style="list-style-type: none"> <li>1 / 4 staff</li> <li>1 / 6m<sup>2</sup></li> </ul> OR <ul style="list-style-type: none"> <li>1 / 4 seats</li> </ul>	*	
Chemist	<ul style="list-style-type: none"> <li>1 / 25m<sup>2</sup></li> </ul>	*	
<b>Total</b>			<b>144</b>
<u>Bicycle parking</u>			
Childcare centre	<ul style="list-style-type: none"> <li>1 / 200<sup>2</sup></li> </ul>	$474/200 = 3$	4
Medical centre	<ul style="list-style-type: none"> <li>1 / centre</li> </ul>	1	~10

*\*Café and Chemist are considered ancillary to the medical centre and parking to be cross utilised.*

## 8 Vehicular access

Driveway grades and sight distances comply.

## 9 Loading / unloading facilities and service vehicle manoeuvring

The development complies with AS 2890.2.

Waste servicing will occur on site from designated servicing areas.

## 10 Pedestrian access

The proposal is satisfactory with regard to pedestrian access into and around the site.

## 11 Safety & security (Crime Prevention through Environmental Design) measures for car parking areas

The proposal is satisfactory with regard to the principles of CPTED.

## CHAPTER E6: LANDSCAPING

A Concept Landscape Plan prepared by a Registered Landscape Architect or eligible for registration with the Australian Institute of Landscape Architects.

The plan has been reviewed by Council's Environment/Landscape Officer and found to be satisfactory subject to conditions of consent.

## CHAPTER E7: WASTE MANAGEMENT

There is no demolition proposed.

Suitable on-site waste storage and servicing arrangements have been provided.

## **CHAPTER E9 HOARDINGS AND CRANES**

Conditions of consent are recommended with respect to use of any hoardings or cranes.

## **CHAPTER E10 ABORIGINAL HERITAGE**

An Aboriginal Heritage Assessment was prepared in support of the major project approval. That report found that there were no listed heritage items within the study area and the historic archaeological potential was assessed by Artefact as low, with no further archaeological work recommended. Council's Heritage Officer has reviewed the proposal in respect of Aboriginal Heritage and has not raised any concerns subject to conditions of consent.

## **CHAPTER E12 GEOTECHNICAL ASSESSMENT**

The application has been reviewed by Council's Geotechnical Engineer in relation to site stability and the suitability of the site for the development. Appropriate conditions have been recommended.

## **CHAPTER E13 FLOODPLAIN MANAGEMENT**

The site is identified as being within an uncategorised flood risk precinct. The application has been reviewed by Council's Stormwater Officer and found to be satisfactory subject to conditions of consent.

## **CHAPTER E14 STORMWATER MANAGEMENT**

Council's Stormwater Officer has reviewed the proposal in respect of stormwater management and has recommended conditions of consent.

## **CHAPTER E15 WATER SENSITIVE URBAN DESIGN**

The proposal is to incorporate a gross pollutant trap (GPT) and either a bioretention basin or wetland. The GPT will intercept the majority of gross pollutants greater than 3mm then the final polishing of runoff by bioretention or a wetland. It is proposed that this type of Treatment Train will be provided in the proposed Life City Wollongong development.

The results of MUSIC modelling indicate that by implementing the proposed treatment measures within the proposed development there will be no detrimental effect on the quality of stormwater running off from the site.

Use of rainwater tanks will provide an integrated, sustainable approach to water cycle management on the site. The water balance modelling shows that an average reduction in potable water demand of up to 90% can be achieved.

## **CHAPTER E16 BUSHFIRE MANAGEMENT**

The site is bushfire affected and was supported by a bushfire protection assessment. The application was forwarded to the Rural Fire Service as integrated development and they have issued their Bushfire Safety Authority.

## **CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)**

The proposed earthworks are satisfactory with regard to this chapter.

## **CHAPTER E20 CONTAMINATED LAND MANAGEMENT**

See discussion at SEPP 55.

## **CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL**

Conditions of consent are recommended in regard to appropriate sediment and erosion control measures to be in place during works.

## **CHAPTER E23: RIPARIAN LAND MANAGEMENT**

The proposal is not expected to adversely impact on any riparian land.