

JRPP No.	2010STH036
DA No.	DA-2010/1562
Local Government Area	Wollongong City Council
Proposal	Demolition of existing Corrimal Leagues Club and construction of residential development comprising 60 x residential home units above basement parking and 6 x villa homes with double garages and visitor parking
Property	54-60 Railway Street, CORRIMAL NSW 2518
Applicant	ADM Architects
Number of Submissions	Nine (9)
Recommendation	Approval
Responsible Team	City Wide Planning

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Joint Regional Planning Panel

The proposal has been referred to Joint Regional Planning Panel pursuant to Clause 13B of the State Environmental Planning Policy (Major Development) 2005 as the Capital Investment Value (CIV) is greater than \$10 Million.

Proposal

This development application seeks consent for the demolition of the existing Corrimal Leagues Club and the construction of a four (4) storey residential development comprising 60 residential home units, above basement parking and (6) six villa homes with double garages and visitor parking.

Permissibility

The site is zoned R3 Medium Density Residential pursuant to Wollongong Local Environmental Plan 2009. The proposal is categorised as a Residential Flat Building and Multi Dwelling Housing, both of which are permissible in the zone with development consent.

Consultation

The proposal was exhibited in accordance with Appendix 1 - Public Notification and Advertising Procedures of Wollongong DCP2009 and received ten (10) submissions which are discussed at Section 3.9 of the assessment report. Consultation has also occurred with internal divisions of Council as well external authorities, namely the NSW Department of Environment Climate Change and Water (Air Quality).

Main Issues

The main issues arising from the assessment and consultation process are potential loss of privacy, potential loss of sunlight, noise impact, air quality impacts from adjoining extractive industry, potential

view loss and capability for existing public utility infrastructure and road network to accommodate the increase in density.

Conclusion

This application has been assessed in accordance with Section 79C (i) of the Environmental Planning and Assessment Act 1979, the relevant provisions of State Environmental Planning Policy (Major Development) 2005, State Environmental Planning Policy (Building Sustainability index: BASIX) 2004, State Environmental Planning 65 – Design Quality of Residential Flat Development, Wollongong Local Environmental Plan 2009 and Wollongong Development Control Plan 2009 is not considered to be in conflict with the objectives sought by these provisions.

Recommendation

It is recommended that development application DA-2010/1562 be approved pursuant to Section 80 of the Environmental Planning and Assessment Act 1979 subject to the imposition of the conditions contained within Attachment 9 of this report.

1. Application overview

1.1 Proposal

This development application seeks consent for the demolition of the existing Corrimal Leagues Club and construction of a four (4) storey residential development comprising 60 residential home units above basement parking and six (6) villa homes with double garages and visitor parking.

1.2 Background

BA-1959/25	Toilet Additions	Approved
BA-1962/2361	Club Additions Rec 40	Approved
BA-1966/1826	Additions To Club Premises Rec 42	Approved
BA-1968/880	Alterations To Leagues Club Premises	Approved
BA-1970/23	Additions Bar Store	Approved
BA-1973/1847	Club Alteration & Addition	Approved
BA-1977/2542	Internal Alterations To Club	Approved
BA-1979/3157	Extensions & Alterations To Leagues Club	Approved
BC-1954/1147	Club Room	Approved
BC-1955/755	Additions	Approved
BC-1956/443	Additions To Leagues Club	Approved
BC-1957/240	Alterations & Additions To Club	Approved
DA-1965/312	Extensions To Club Rec 43	Approved
DA-1971/476	Car Parking Area	Approved
DA-1973/16	Addition To Leagues Club	Approved
DA-1979/448	Additions & Internal Alterations	Approved
DA-2004/1705/A	New shade sail in existing BBQ area, relocation of porte cochere and internal partitions - modification to change condition 5	Approved
PC-2005/30212	New shade sail in existing BBQ area, relocation of porte cochere and internal partitions	Approved
DA-2007/396	Addition of smokers terrace	Approved

DA-2010/1562	Demolition of existing Corrimal Leagues Club and construction of residential development comprising 60 x residential home units above basement parking and 6 x villa homes with double garages and visitor parking	Current
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The property does not have any outstanding customer service actions of relevance to this application.

1.3 Site description

The site is located at 54-60 & 62 Railway Street, CORRIMAL NSW 2518 and the title reference is Lot 13 DP 1030814 and Lot 2 DP 38085. The allotment sizes are 8040m² and 607m² respectively that combine to give a total site area of 8647m². The land's main frontage is to Railway Street to the south; however there is currently vehicular access to the existing Leagues Club's car park from Harbinger Street that bounds the subject land to the west. The adjoining land uses to the north and east are primarily low density detached dwelling houses that are a mixture of one and two storeys. The site is relatively flat and does not contain any significant vegetation. The site is currently utilised by Corrimal Leagues Club and its associated car park.

Site constraints

Council records list the site as being affected by the following constraints:

- bushfire (100 metre buffer)

There are no restrictions on the title.

1.4 Consultation

1.4.1. Internal consultation

Stormwater

The initial referral was returned as unsatisfactory and additional information was requested on the 16 December 2010. A follow up referral was sought upon receipt of the requested information. The response was returned as satisfactory subject to conditions that have been recommended to be imposed should consent be granted.

Landscaping

A satisfactory referral has been returned from Council's Landscape Officer subject to conditions that have been recommended to be imposed should consent be granted.

Traffic

A satisfactory referral has been returned from Council's Traffic Engineer subject to conditions that have been recommended to be imposed should consent be granted.

Environment

The initial referral was returned as unsatisfactory and additional information was requested on the 16 December 2010. A follow up referral was sought upon receipt of the requested information. The response was returned as satisfactory and conditions have been recommended to be imposed should the consent be granted.

Safer Communities Division

The referral was completed by Council's Safer Communities Officer and conditions have been recommended to be imposed should consent be granted.

Civil Works in the Road Reserve

A satisfactory referral has been returned from Council's Civil Works Engineer and conditions have been recommended to be imposed should consent be granted:

1.4.2. External consultation

The Department of Environment, Climate Change and Water

Comments were requested from the department due to the development being located adjacent (within 100 metres) to an established industrial land use, being the Illawarra Coking Coal Company, that has potential to create airborne and acoustic impacts. The Department's advice (Attachment 5) stated that the industrial site has a current EPA licence and are operating in accordance with the requirements of the licence according to current monitoring, impacts and reporting requirements. The department have noted that the current operations generally satisfy recognised goals in relation to air quality for the protection of human health and amenity.

2. Environmental Planning and Assessment Act 1979

Section 79C Assessment

(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

- (a) *the provisions of:*
 - (i) *any environmental planning instrument, and*
 - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
 - (iii) *any development control plan, and*
 - (iiia) *any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and*
 - (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates, (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*
- (c) *the suitability of the site for the development,*
- (d) *any submissions made in accordance with this Act or the regulations,*
- (e) *the public interest.*

These matters are addressed below.

2.2 Section 79C 1(a)(i) any environmental planning instrument

2.2.1. State Environmental Planning Policy (Major Projects) 2005

Clause 13B of the SEPP Major Projects 2005 identifies the general developments to which Part applies:

- (1) *This Part applies to the following development:*
 - (a) *development that has a capital investment value of more than \$10 million,*
 - (b) *development for any of the following purposes if it has a capital investment value of more than \$5 million:*
 - (i) *affordable housing, air transport facilities, child care centres, community facilities, correctional centres, educational establishments, electricity generating works, electricity transmission or distribution networks, emergency services facilities, health services facilities, group homes, places of public worship, port facilities, public administration buildings, public ferry wharves, rail infrastructure facilities,*

research stations, road infrastructure facilities, roads, sewerage systems, telecommunications facilities, waste or resource management facilities, water supply systems, wharf or boating facilities,

- (c) *Crown development that has a capital investment value of more than \$5 million,*
- (d) *development for the purposes of eco-tourism facilities that has a capital investment value of more than \$5 million,*
- (e) *designated development,*
- (f) *subdivision of land into more than 250 lots.*

(2) *This Part also applies to development that has a capital investment value of more than \$5 million if:*

- (a) *a council for the area in which the development is to be carried out is the applicant for development consent, or*
- (b) *the council is the owner of any land on which the proposed development is to be carried out, or*
- (c) *the development is to be carried out by the council, or*
- (d) *the council is a party to any agreement or arrangement relating to the development (other than any agreement or arrangement entered into under the Act or for the purposes of the payment of contributions by a person other than the council).*

The proposed development has a capital investment value of greater than \$10 million.

2.2.2. State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development

The development meets the definition of a ‘residential flat building’ and as such, the provisions of SEPP 65 apply.

Part 2 of this policy sets out design quality principles for residential flat development. These must be considered in the assessment of the proposal pursuant to clause 30(2)(b) of the policy and are discussed below.

Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area.

Responding to context involves identifying the desirable elements of a location’s current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

The proposal has been developed in relation to the desired future character of the area as set out in Wollongong Local Environmental Plan 2009. The proposal provides residential uses consisting of apartments; with pedestrian connection to Railway and Harbinger Streets and is within reasonable pedestrian access to Corrimal Town Centre. The siting of the buildings responds to their specific topographic situation and the two street frontages. These responses result in building forms and articulation that contribute to a varied but coherent identity for the development site and the buildings that surround it.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings.

Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

The proposed buildings are appropriate in terms of their bulk and height. The overall height (12.92 metres) remains within what is identified as the maximum permissible height for the area as defined by the Wollongong Local Environmental Plan 2009 being 13 metres.

Principle 3: Built form

Good design achieves an appropriate built form for a site and the building’s purpose, in terms of building alignments,

proportions, building type and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

The proposal achieves an appropriate built form for the site and the buildings' purpose. It maintains the building alignments and massing appropriate to its medium density residential location. The buildings define the public road edges. The buildings depths are appropriate for the uses proposed within and the buildings are articulated in relation to these uses, the public and communal external spaces they relate to and the views to and from these spaces. The built form enhances the character of the public domain and maintains internal amenity within the proposal.

Principle 4: Density

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents).

Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

The density is defined by the Wollongong Local Environmental Plan 2009 in the form of floor space ratio and height limits and in greater detail by the Wollongong Development Control Plan 2009 in relation to setbacks and provision of features such as private and communal open space and landscaping. The design of the development satisfactorily addresses the WLEP2009 in relation to height and floor space ratio and the WDCP2009 in relation to setbacks, open space and landscaping.

Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction.

Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

Existing structures on the site will be demolished and materials where possible will be recycled and re-used. Apartments have been designed to optimise thermal performance, provide increased amenity to occupants and reduce greenhouse emissions and therefore the cost of energy supply. Certification required under the State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 has been provided.

Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.

Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character.

Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

The landscape design is well integrated with the building design and arrangement of external public and communal spaces. The landscape elements proposed play an important role in defining the key pedestrian walk lines and spaces on the site and enhance the occupants' privacy across public — private and communal — private thresholds. The species proposed have been selected in consideration of the climatic conditions on the site, the existing ecosystem, water management on the site and their long term success in relation to these factors.

Satisfactory referral advice has been received from Council's Landscape Officer having regard to the Concept Landscape Plan and Chapter E6 of Wollongong DCP2009.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development.

Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

The buildings have been designed to optimise their internal amenity, maintain the amenity of the adjoining properties and provide adequate open space between them. The site layout meets the requirements for accessibility and building separation. The orientation of rooms increases the apparent distance between habitable rooms. Appropriate room sizes and shapes are provided in all of the buildings and supported by access to sunlight and ventilation, sufficient storage, efficient layouts and service areas. Access to sunlight, ventilation and views is maximised throughout.

Principle 8: Safety and security

Good design optimises safety and security, both internal to the development and for the public domain.

This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

The proposal optimises safety and security both within the development and public domain. Active uses have been located to provide active frontages to all the public road frontages. Apartment layouts have been designed to provide overlooking of the public and communal spaces whilst providing privacy for the occupants. The public spaces are clearly defined, distinct from private and communal open space. They are well lit and avoid dark dead end spaces that are not visible. Apartment entries are clearly defined from the public domain, are well lit and secure.

Satisfactory referral advice has been received from Council's Safer Communities Officer having regard to the Chapter E1 of Wollongong DCP2009.

Principle 9: Social dimensions

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities.

New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

The proposal includes a range of apartment sizes and types. These can be broken down into the following:

- 6 x 1 bed units
- 48 x 2 bed units
- 6 x 3 bed units

Whilst not subject to the requirements of SEPP 65, the overall development includes 6 x 3 bedroom single storey villas as part of the proposal providing further diversification.

Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

The proposal contributes to both the existing streetscapes and the desired future character of the area through a diverse but coherent aesthetic approach in which each individual building and the public domain contribute to a sense of place with high aesthetic value through a related palette of forms, materials and colours to each building.

30 Determination of development applications

- (2) *In determining a development application for consent to carry out residential flat development, a consent authority is to take into consideration (in addition to any other matters that are required to be, or may be, taken into consideration):*
- (a) *the advice (if any) obtained in accordance with subclause (1), and*
 - (b) *the design quality of the residential flat development when evaluated in accordance with the design quality principles, and*
 - (c) *the publication Residential Flat Design Code (a publication of the Department of Planning, September 2002).*

An assessment of the application against the Residential Flat Design Code is contained within Attachment 6. A design verification statement has been received from a registered architect and a copy is presented as Attachment 7.

2.2.3. State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

- (1) *Regulations under the Act have established a scheme to encourage sustainable residential development (the BASIX scheme) under which:*
- (a) *an application for a development consent, complying development certificate or construction certificate in relation to certain kinds of residential development must be accompanied by a list of commitments by the applicant as to the manner in which the development will be carried out, and*
 - (b) *the carrying out of residential development pursuant to the resulting development consent, complying development certificate or construction certificate will be subject to a condition requiring such commitments to be fulfilled.*
- (2) *The aim of this Policy is to ensure consistency in the implementation of the BASIX scheme throughout the State.*
- (3) *This Policy achieves its aim by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.*

In accordance with Schedule 1 of the Regulations and SEPP (BASIX) 2004 a BASIX Certificate has been submitted in support of the application demonstrating that the proposed scheme achieves the BASIX targets.

2.2.4. State Environmental Planning Policy (Infrastructure) 2007

SEPP Infrastructure 2007 has been considered as part of the assessment of this application. There are no matters contained within this planning instrument that relate to the proposed development.

2.2.5. State Environmental Planning Policy 55 – Remediation of Land

SEPP 55 – Remediation of Land has been considered as part of the assessment of this application. There are no matters contained within this planning instrument that relate to the proposed development.

2.2.6. Wollongong Local Environmental Plan 2009

Clause 1.4 – Definitions

The proposal is consistent with the definitions of a Residential Flat building (RFB) and Multi Dwelling Housing (MDH) as follows:

- **Multi dwelling housing** means 3 or more dwellings (whether attached or detached) on one lot of land (not being an individual lot in a strata plan or community title scheme) each with access at ground level, but does not include a residential flat building.
- **Residential flat building** means a building containing 3 or more dwellings, but does not include an attached dwelling or multi dwelling housing.

Part 2 Permitted or prohibited development

Clause 2.1 – Land use zones

The site is zoned **R3 Medium Density Residential** pursuant to this plan

Clause 2.3 – Zone objectives and land use table

Residential Flat Buildings and **Multi Dwelling Housing** are both permissible land uses within the zone.

The objectives of the zone are as follows:

- *To provide for the housing needs of the community within a medium density residential environment.*
- *To provide a variety of housing types within a medium density residential environment.*
- *To enable other land uses that provides facilities or services to meet the day to day needs of residents.*

The proposal provides a variety of housing types within a medium density residential environment, which is considered to meet the objectives of the zone.

Clause 2.6A Demolition requires consent

This clause applies as the proposal seeks to demolish the existing club and associated structures on the subject land. Clause 92 of the Environmental Planning and Assessment Regulation 2000 requires applications for demolition undertake such works in accordance with AS2601.

Part 4 Principal development standards

Clause 4.3 Heights of Buildings

The proposed development has been designed to comply with the prescribed height limit of 13 metres as identified in the above WLEP2009 Map. The maximum height of the RFB component is noted at being 12.92 metres.

Clause 4.4 Floor Space Ratio

Maximum FSR permitted for the zone:	0.75:1
	Calculations: Villas – 6 x 131m ² = 785m ² <u>Basement (excluded) = 3210.04m²</u> Ground Level = 1742m ² 1 st Floor Level = 1741m ² 2 nd Floor Level = 1773m ² 3 rd Floor Level = 779m ² GFA = 6820m ² FSR – 6820m ² /8674.00m ² = 0.75:1
The Gross Floor Area (GFA) has been calculated in accordance with the definition contained in the dictionary of WLEP2009: The proposed development is compliant with the provisions of this clause.	

Local provisions – general

Clause 7.14 Minimum site width

- (1) *Development consent must not be granted for development for the purposes of multi dwelling housing unless the site area on which the development is to be carried out has a dimension of at least 18 metres.*
- (2) *Development consent must not be granted for development for the purposes of a residential flat building unless the site area on which the development is to be carried out has a dimension of at least 24 metres.*

The site has a dimension fronting Railway Street of 73.54 metres. The area for the multi dwelling housing component has dimensions of 65.52 metres running east to west and 33.015 running north to south. Minimum site widths required by this clause and are satisfactory.

2.3 Section 79C 1(a)(ii) any proposed instrument

None applicable.

2.4 Section 79C 1(a)(iii) any development control plan

2.4.1. Wollongong Development Control Plan 2009

B1 – RESIDENTIAL DEVELOPMENT

8 Multi Dwelling Housing

Multi-dwelling Housing is development involving the erection of three (3) or more dwellings upon an existing lot, each with separate access from the ground floor. Multi-dwelling housing includes villas and townhouses but does not include a residential flat building or an attached dwelling development.

The provisions of this section also apply to serviced apartments, where they take the form of villas or townhouses.

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
<u>8.2 Minimum Site Width Requirement</u>		Yes
A minimum site width of 18 metres is required for multi dwelling housing. Must not result in the creation of an “isolated lot”.	Site width is approximately 65 metres	
<u>8.3 Maximum Floor Space Ratio / Density</u>		Yes
The maximum floor space ratio for a multi dwelling housing development upon the subject site shall be in accordance with the relevant Floor Space Ratio Map	See Section 2.2.6 of this report relating to FSR calculations	
<u>8.4 Maximum Number of Storeys</u>		yes
The maximum number of storeys for multi dwelling housing in the R3 Medium Density Residential zone is Two (2) storeys.	The villas are single storey.	
<u>8.5 Front Setbacks</u>		N/A
Not applicable.	The MDH’s do not constitute any part of either site frontage.	
<u>8.6 Side and Rear Setbacks</u>		Yes
The minimum side and rear boundary setbacks for R3 Medium Density Residential Zone Beyond 16m of front property boundary is 0.8 x ceiling height	The villas are single storey with a ceiling height of 2.7 metres. $0.8 \times 2.7 = 2.16$ metres. The side and rear setbacks all exceed this requirement.	
<u>8.7 Building Character and Form</u>		Yes
The objective of the standards relating to building character and form is to design residential development to respond to the streetscape character.	The proposed multi dwelling component of this application does not form any part of the streetscape.	
<u>8.8 Access / Driveway Requirements</u>		Yes
The objectives of this section are: (a) <i>To provide adequate and safe vehicular access to all</i>	The application has been reviewed with regards to the standards within Chapter	

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
<p><i>dwelling.</i></p> <p><i>(b) To encourage driveways to be provided from lanes or secondary streets instead of major roads or primary street frontages, where such alternate access is available.</i></p>	E3 of WDCP2009 by Council's Traffic Engineer and found to be satisfactory.	
8.9 Car Parking Requirements		Yes
<p>Parking for cars, motorcycles and bicycles must be provided and designed in accordance with the requirements contained in Traffic, Access, Parking and Servicing Chapter contained in Part E of this DCP.</p> <p>The application has been reviewed with regards to the standards within the DCP by Council's Traffic Engineer and found to be satisfactory.</p>	The application has been reviewed with regards to the standards within the DCP by Council's Traffic Engineer and found to be satisfactory.	
8.10 Landscaping Requirements		Yes
<p>A minimum of 30% of the total site area must be provided as landscaped area.</p> <p>The required landscaped area must include a minimum 1.5 metre wide landscaping bed, which is provided along the side and rear boundaries of the site.</p>	Landscaping for the site is provided in conjunction with the residential flat building component.	
8.11 Deep Soil Planting		Yes
<p>A minimum of half of the landscaped area (i.e. 15% of the site) must be provided as a deep soil zone. The deep soil zone (DSZ) may be located in any position on the site, other than forward of the building line, subject to this area having a minimum dimension of 6m.</p>	A six (6) metre DSZ is located between the private open space of the MDH's and the northern boundary.	
8.12 Communal Open Space		N/A
<p>Developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 5m² per dwelling. Any area to be included in the communal open space calculations must have a minimum dimension of 5 metres.</p>	Not applicable in relation to the MDH's, however communal open space is required for the residential flat building (See section 9.15 of the DCP compliance for Residential Flat Buildings in this report).	
8.13 Private Open Space		Yes
<ul style="list-style-type: none"> • minimum dimension of 4 metres x 5 metres; • separated from boundaries by at least 1.5 metres; • primary private open area of at least 70% of the dwellings must receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21; • direct extensions of the living areas; 	Each of the six (6) villas is provided with private open space, all located on the northern side of the buildings and directly accessed from living areas within the villas.	

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
<ul style="list-style-type: none"> Clearly define private open space. 		
<u>8.14 Solar Access Requirements</u>		Yes
(a) To minimise the extent of loss of sunlight to living areas and private open space areas of adjacent dwellings. (b) To maximise solar access into living rooms and private open space of dwellings in the subject development. (c) To use a consistent sunlight access assessment approach for the assessment of solar access issues.	The proposal is ideally located to the south and west of adjoining residential properties in the locality and is proposed as single storey. 100% solar access is maintained for all adjoining properties with regard to the multi dwelling component.	
<u>8.15 Dwelling Mix and Layout</u>		N/A
Provide a mix of dwelling sizes and layouts within larger multi-dwelling developments having ten (10) or more dwellings.	Six (6) villas proposed.	
<u>8.16 Adaptable Housing</u>		N/A
Within a multi dwelling development incorporating more than six (6) dwellings, 10% of all dwellings (or at least 1 dwelling) must be designed to be capable of adaptation for disabled or elderly residents.	No adaptable units required as part of the multi unit development. See Section 9 RFB compliance table.	
<u>8.17 Crime Prevention through Environmental Design (Safety and Security)</u>		Conditioned
Ensure that the building design allows for casual surveillance of streets, accessways, entries, driveways, open car parks and public areas. Full compliance with the requirements of Chapter E2 Crime Prevention through Environmental Design (CPTED) in this DCP.	Council's Safe Communities Division has reviewed the proposal and provided comments in relation to CPTED compliance. Conditions have been recommended to be imposed should consent be granted.	

9 Residential Flat Buildings

This section details the specific objectives and development controls which apply to residential flat buildings. The provisions of this section also apply to serviced apartments, where they take the building form of a residential flat building.

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
<u>9.2 Minimum Site Width Requirement</u>		Yes
A minimum site width of 24 metres is required for residential apartment buildings. Must not result in the creation of an “isolated lot”.	The site has a dimension fronting Railway Street of 73.54 metres. The area for the multi dwelling housing component has dimensions of 65.52 metres running east to west and 33.015 metres running north to south. Minimum site widths are required by this clause and are satisfactory.	
<u>9.3 Maximum Floor Space Ratio (FSR) / Density</u>		Yes
The maximum floor space ratio for a residential flat building development upon the subject site shall be in accordance with the relevant Floor Space Ratio Map	See Section 2.2.6 of this report relating to FSR calculations. The development complies with the maximum FSR of 0.75:1.	
<u>9.4 Building Height</u>		Yes
The maximum permissible building height for a residential flat building upon a particular parcel of land is shown on the relevant Heights Map as contained in WLEP 2009.	The maximum height of the RFB component is noted at being 12.92 metres. The WLEP2009 Height Maps indicate a maximum height limit of 13 metres	
<u>9.5 Front Setbacks</u>		Satisfactory
The following setback requirements apply from the front property boundary to the front façade of the building: (a) The same distance as one or other of the adjoining buildings, provided the difference between the setbacks of the two adjoining dwellings is less than 2.0m. (b) The average of the setbacks of the two adjoining buildings, if the difference between the setbacks of the buildings is greater than 2.0m. (c) A minimum front setback of 6m applies to residential apartment buildings where calculations of a) or b) result in a front setback of less than 6m. On corner allotments, a minimum setback of 3m to the secondary street frontage from the dwelling façade must be provided.	The minimum setbacks on both street frontages are greater than 6 metres to the wall of the RFB. There are two encroachments on the Railway Street frontage by courtyard fences which have a setback of four (4) metres. The two fences are approximately 7.5 and 9.2 metres long and are separated by a distance of approximately 44 metres. This encroachment is considered reasonable as it provides additional articulation of the primary elevation. No objections have been received based on this encroachment from Council’s notification process. A statement of variation has been submitted, considered and on merit is considered acceptable.	

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
<u>9.6 Side and Rear Setbacks / Building Separation</u>		Yes
Buildings up to 4 storeys (12 metres): <ul style="list-style-type: none"> 6 metres where a habitable room/balcony on development site 3.5 metres where a non-habitable room/blank wall 	Setbacks from eastern boundary ranges from 6 metres to 22.36 metres The setback distance from the northern boundary is 8.665 metres.	
<u>9.7 Built Form</u>		Yes
(a) To promote high quality architectural design that is responsive and innovative. (b) To ensure that new developments have well articulated and harmonious facades which define the public domain. (c) To ensure corner sites are developed as visually significant elements to promote a strong and legible character. (d) To provide an identifiable and desirable street address to each building and dwelling. (e) To define the street edge by creating a clear transition between private and public spaces along the street frontage. (a) (f) To allow for outlook and surveillance towards the street and the public domain.	The proposal has been designed in accordance with the provisions of SEPP 65 in Section 2.2.2 of this report and the RFDC compliance table provided in Attachment 6.	
<u>9.8 Visual privacy</u>		Yes
New buildings should be sited and oriented to maximise visual privacy between buildings through compliance with minimum front, side and rear setback / building separation requirements.	Minimum setbacks achieved to all side and rear boundaries. There is potential for residences to the east to be affected by privacy impacts from overlooking. However, this issue appears to be addressed through the treatment of all balustrades being solid and opaque. The internal and external privacy impacts are considered acceptable in this regard.	
<u>9.9 Acoustic privacy</u>		Yes
This clause applies to proposals involving the erection of new residential flat buildings upon land directly adjoining or opposite a business or industrial zone or in cases where there is an existing nearby land use which generates external noise from either the land use activity itself or from patrons attending or leave the nearby premises. Chapter E4 - Development Near Railway Corridors and Major Roads has been considered with regard to acoustic privacy	The design is such that only a minimal number of apartments share a common wall (the apartments in the southern and northern portions of the towers). Where common walls feature, the apartments are designed such that living areas are located next to each other, and quieter areas are also located next to each other. For the most part, the internal circulation area acts as a buffer between the units on each level. Clauses 87 and 102 of the SEPP Infrastructure 2007 have also been considered as part of the assessment. Comments are included under Chapter	

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
	E4 of WDCP2009.	
<u>9.10 Car Parking Requirements</u>		Yes
Parking for cars, motorcycles and bicycles shall be provided in accordance with the requirements contained with the Traffic, Parking, Access and Servicing Chapter E3 of WDCP2009.	Whilst the visitor parking for the development is not located close to the entrance, it can be easily identified with the use of directional signage. Also, the location provides ideal separation distance between the proposed development and the adjoining properties to the east.	
<u>9.11 Basement Car Parking</u>		Yes
<ul style="list-style-type: none"> • Must not impact upon the ability of the development to satisfy minimum landscaping and deep soil zone requirements.\ • The roof of any basement podium, measured to the top of any solid wall located on the podium must not be greater than 1.2m above natural or finished ground level • Basement car park areas must be located to optimise deep soil planting around the building 	<p>15% of the site or a 6 metre wide strip along the rear of the property needs to be provided for residential apartment buildings. This development satisfies both criteria by providing a 6 metre wide strip of deep soil planting along the rear boundary as well as additional areas of deep soil planting on the site equating to 19.4% of the site proposed as deep soil planting.</p> <p>The basement location does not conflict with the provision of a deep soil zone.</p>	
<u>9.12 Access Requirements</u>		Yes
<p>(a) Provide driveways to parking areas from lanes and secondary streets rather than the primary street, wherever practical.</p> <p>(b) Locate driveways taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees.</p> <p>(c) All driveways must be located a minimum of 6 metres from the perpendicular of any intersection of any two roads.</p> <p>(d) Any driveway servicing a residential development is to be setback a minimum of 1.5m from any side property boundary.</p> <p>(e) Driveways are to be a maximum of 6m in width.</p> <p>(f) The design of driveway crossovers must be in accordance with council's standard vehicle entrance designs.</p>	The site is accessed from a secondary road. The crossover width is 6 metres wide as are the access ramps to the basement parking. Council's Traffic Engineer has indicated the development is satisfactory in relation to access and traffic matters as required by Chapter E3 of WDCP2009.	
<u>9.13 Landscaping Requirements</u>		yes
A minimum of 30% of the total site area must be provided as landscaped area.	30% landscaping area is achieved on the site.	
Any landscaped area on the site which is less than 1.5 metres in width is not included within	A satisfactory referral has been received from Council's Landscape Officer upon	

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
the landscaped area calculations.	review of the Concept Landscape Plan.	
<u>9.14 Deep Soil Zone</u>		Yes
A minimum of half of the landscaped area (i.e. 15% of the site) must be provided as a deep soil zone	The landscape plan identifies several deep soil zones. A satisfactory referral has been received from Council's Landscape Officer upon review of the Concept Landscape Plan.	
<u>9.15 Communal Open Space</u>	See RFDC compliance table response in Attachment 6.	Yes
Dwellings with more than 10 dwellings must incorporate communal open space at the rate of 5m ² per dwelling.	A satisfactory referral has been received from Council's Landscape Officer upon review of the Concept Landscape Plan.	
<u>9.16 Private Open Space</u>		Satisfactory
<p>1. Private open space must be provided for each dwelling in the form of a balcony, courtyard, terrace and/or roof garden.</p> <p>2. Courtyard/terrace (ground level):</p> <ul style="list-style-type: none"> • Min area 25m², min width of 2m, and separated from boundaries by at least 1.5m landscape strip. • The primary private open space of at least 70% of the dwellings must receive a minimum of 3 hours direct sunlight between 9am and 3pm on June 21. • Private open space (courtyards) must not encroach in the front setback by greater than 900mm. • Private open space should be sited to provide privacy, solar access and limited impact on adjoining neighbours. • Clearly define private open space through the use of planting, fencing or landscaping features. <p>3. Balconies:</p> <ul style="list-style-type: none"> • Primary balconies must not address side setbacks. • Min area 12m² and a min depth of 2.4m. • the primary balcony of at least 70% of dwellings shall receive at least 3 hours of sunlight between 9am and 3pm on June 21. • For new residential flat buildings, screening mechanisms must be incorporated into the initial design 	<p>A 1.1 metre encroachment into Railway Street front setback has been identified.</p> <p>A variation statement has been submitted and considered acceptable on merit (see comments 9.5 Front setbacks).</p> <p>A satisfactory referral has been received from Council's Landscape Officer upon review of the Concept Landscape Plan.</p>	

<p><u>9.17 Adaptable Housing</u></p>	<p>A total of 66 dwellings are provided within the development, which requires the provision of 7 adaptable units. Units A4, A9, A13, A18, B4, B13 and B18 within Block A and B are adaptable.</p> <p>An access consultant's report has been provided to support the claim that the identified adaptable units are capable of being modified.</p> <p>A condition has been imposed for a final access consultants report to be submitted to the certifying authority prior to the issue of the Occupation Certificate.</p>	<p>Yes</p>
<p>10% (or at least 1 dwelling) must be capable of adaptation for disabled or elderly residents, on the ground floor where possible.</p> <p>The DA must be accompanied by certification from a suitably qualified Access Consultant to confirm the adaptable dwellings are capable of being modified.</p>	<p>See comments under Chapter E1 of DCP 2009.</p> <p>An access consultant's report has been provided to support the claim that the identified adaptable units are capable of being modified.</p> <p>A condition has been imposed for a final access consultants report to be submitted to the certifying authority prior to the issue of the Occupation Certificate.</p>	<p>Conditioned</p>
<p><u>9.18 Access for People with a Disability</u></p>	<p>An access consultant's report has been provided to support the claim that the identified adaptable units are capable of being modified.</p> <p>A condition has been imposed for a final access consultants report to be submitted to the certifying authority prior to the issue of the Occupation Certificate.</p>	<p>Conditioned</p>
<p><u>9.19 Apartment Size and Layout Mix for Larger Residential Flat Building Developments</u></p>	<p>6 x 3 bedroom villas</p> <p>6 x 3 bedroom apartments</p> <p>48 x 2 bedroom apartments</p> <p>6 x 1 bedroom apartments = 10%</p> <p>3m floor to floor height provided for all levels.</p>	<p>Yes</p>
<p>The selected number of bedrooms should be determined having regard to the sites context, geographic location and anticipated demographic characteristics.</p> <p>Where >10 dwellings proposed, 10% must be 1 bedroom/studios.</p> <p>Ceiling heights:</p> <ul style="list-style-type: none"> - 2.7m for all habitable rooms on all floors, - 2.4m for non-habitable rooms on all floors 	<p>The majority of apartments have a dual aspect from living areas, with only 6 (10%) having a single aspect from living areas.</p> <p>The majority of balconies in the residential flat building will receive at least 3 hours of sunlight between 9am and 3pm on June 21 as the majority of balconies (54, or 90%) have at least a northern, eastern or western orientation.</p>	<p>Yes</p>
<p><u>9.20 Solar Access</u></p>	<p>Where northern aspect available, the living spaces and balconies should be oriented towards the north.</p> <p>The development should maximise the number of apartments with dual aspect. The living rooms and private open space of at least 70% of apartments should receive a min 3 hours of sunlight between 9am and 3pm on June 21.</p>	<p>Yes</p>

<u>9.21 Natural Ventilation</u>		Yes
All residential apartment buildings should have a building depth between 10m and 18m, measured across the shortest axis. Dwellings should have max depth of 21m, measured from the outside of the balcony. A min of 60% of all residential apartments shall be naturally cross ventilated. 25% of kitchens must have access to natural ventilation. Where kitchens aren't naturally ventilated, the back of the kitchen must be no more than 8m from a window.	The maximum depth of any dwelling is 12 metres when measured across the shortest access. 68.3% of the residential apartments are cross ventilated. 17 (28.3%) of the residential apartments contain a kitchen with direct access to natural ventilation. Where kitchens don't have direct access to a window (43 apartments, or 71.7%) the back of the kitchen is generally less than 8m from a window.	
<u>9.22 Crime Prevention Through Environmental Design (Safety And Security)</u>		Yes
Reference made to Chapter E2 of WDCP209	The residential flats are located to provide casual surveillance centrally within the subject site and towards the street network. Council's Safer Communities Officer has provided a satisfactory referral and conditions relating to CPTED matters.	

11 General Requirements For All Residential Development

<i>Controls/objectives</i>	<i>Comment</i>	<i>Reasonable Compliance</i>
<u>11.1 Waste Management</u>		Yes
	Waste servicing is available to the site. Turning movements of service vehicles has been assessed and considered satisfactory. See also comments in Chapter E7 of WDCP2009	
<u>11.2 Stormwater Drainage</u>		Yes
	Stormwater drainage has been assessed by Council's Stormwater Engineers and found to be satisfactory. See also comments in Chapter E14 of WDCP2009	
<u>11.3 Floodplain Management</u>	n/a	n/a
<u>11.4 Land Re-Shaping Works (Cut and Fill Earthworks)</u>		Yes
	The proposal does not require any earthworks outside of the basement envelope. The proposal is satisfactory in this regard.	
<u>11.5 Soil Erosion and Sediment Control</u>		Conditioned
	These items can be conditioned as part of any consent granted.	
<u>11.6 Development near the Coastline</u>	n/a	n/a

<u>11.7 Sunlight Access</u>	Assessed as part of the compliance with the Residential Flat Design Code. The proposal allows for at least three (3) hours of sunlight access to all adjoining properties.	Yes
<u>11.8 View Sharing</u>	View sharing of the escarpment is retained. The existing leagues club allows for only a partial view of the escarpment from dwellings east of the proposed development. The proposal contains a minor increase to the view obstruction.	Yes
<u>11.9 Services</u>	All essential public utility services are available to the site. Standard conditions relating to the applicant presenting the plans to the relevant authorities for their specific requirements prior to the issue of the Construction Certificate have been included in Attachment 9.	Conditioned
<u>11.10 Fire Brigade Servicing</u>	The property can be easily accessed by the vehicles of the NSW Fire Brigade. Mains water is available and any required fire hydrants can be easily connected.	Conditioned
<u>11.11 Site Facilities</u>	Conditions relating to site facilities have been imposed should consent be granted in Attachment 9.	Conditioned
Site facilities include letterboxes, air-conditioning systems, clothes drying devices, TV antennae, etc.		
<u>11.12 Storage Facilities</u>	Storage facilities have been provided in accordance with this standard.	Yes
Studio/1 bedroom 6m ³ 3m ²		
Two bedroom 8m ³ 4m ²		
Three or more bedrooms 10m ³ 5m ²		

CHAPTER D1: CHARACTER STATEMENT

Existing Character

Corrimal is framed by the Illawarra Escarpment and is positioned east of the escarpment landmark known as Brokers Nose.

Corrimal has a low to medium density residential character and is characterised by a mix of residential housing types including one to two storey detached dwelling-houses including circa 1920's - 1930's weatherboard and corrugated iron and brick and tile inter-war bungalows as well as newer larger brick and tile dwelling-houses as well as medium density villas and townhouses.

Corrimal contains a number of heritage items including the Colliery, Palm Court Hotel, former headmaster's residence at Corrimal Public School and the Catholic cemetery.

The Corrimal retail and business centre is classified as a major town centre (district level centre) and represents the highest order retail and business centre for the northern suburbs of Wollongong. The centre is a strong traditional retail and business strip situated along both sides of the Princes Highway. It contains two large enclosed shopping centres which feature a full line supermarket in each centre as well as a range of specialty retail outlets and service businesses.

Corrimal also contains a variety of light industries.

Desired Future Character

The lower density residential areas of Corrimal will retain their low density character. In this respect, it is likely that the replacement of some older dwelling stock will occur with newer two storey dwelling-houses. Any new building should be designed to be sympathetic with the prevailing streetscape and any adjoining dwelling-house, especially an inter-war bungalow.

Additional medium density housing is likely to occur within or in close walking distance (ie 400 – 600 metres) of the Corrimal retail and business centre.

The Corrimal retail and business centre is proposed to be strengthened through the expansion of the existing centre, the encouragement of mixed use developments designed to foster a lively main street and improvements to pedestrian linkages throughout the centre. This will help to establish Corrimal as a major town centre to serve the northern suburbs of Wollongong LGA.

The desired future character for Corrimal is to retain the existing street and built form character of the Corrimal retail and business centre through maintaining an active street frontage with continuous retail uses on the ground floor level and a two storey street façade. Continuous awnings will also be retained along footpath areas. Active retail frontages will be strongly encouraged for the facades of “big box” retail centres to improve the streetscape appearance of each shopping centre and to improve the overall vitality of the Corrimal retail centre.

The built form should also take a “perimeter block” form where public parts of buildings are orientated towards public roads and parking and service loading areas should be internalised.

The location and provision of parking is critical to achieving accessibility to and within the retail centre as well as the vision of a centre that is a general destination rather than a predominantly point-based and car dependent internalised shopping venue.

Off-street parking needs to be located as close as possible to retail and commercial activities but should not sacrifice pedestrian and streetscape amenity.

Residential uses are encouraged for all parts of the Corrimal retail and business centre with the blurring of the edges of the centre encouraged by mixed use development. Ground and first floors are to be designed for retail and commercial office use with residential activity permitted above the first floor.

Higher density mixed use retail, commercial office and residential apartment development is to be orientated towards Princes Highway, Railway Street and Underwood Street.

The strengthening of connections between the Stockland Mall in the south to Collins Street and to the north, along the Princes Highway is recommended.

Clear pedestrian linkages should be provided from Underwood Street to the Princes Highway and the Corrimal Memorial Park. This will also require stronger linkages between Corrimal Memorial Park and Ziems Park and key sites such as the Underwood Street carpark site and the proposed eastward expansion of the Stockland Mall shopping centre. Clear pedestrian routes are also necessary from parking areas to the retail and commercial centre. Through site links are also to be provided in accordance with the DCP.

Additionally, pedestrian linkages should be strengthened between Corrimal retail and commercial centre and Corrimal railway station through to the beach.

All public spaces (including roads, parks and plazas) should be directly overlooked by adjacent development and street planting is to be designed to avoid any potential concealment opportunities.

Night time activities such as restaurants, cinemas etc are encouraged to enliven the retail and commercial centre.

A range of community facilities are also envisaged for the Corrimal centre.

The future direction outlined above is mainly focused on the development and revitalisation of the Corrimal Town Centre. The proposed development is not considered to affect desired improvements to this area.

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

Standard conditions relating to access for people with a disability have been imposed in Attachment 9 should consent be granted. Many of the requirements are reflected in the Building Code of Australia that is assessed at the Construction Certificate stage by the Certifying Authority. The application has included an access consultants report identifying that the nominated adaptable units are capable of being modified. Plans and documents are presented in Attachment 8.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The development application has been reviewed by Council's Safer Communities Division against the requirements of this chapter. The proposal is considered satisfactory and conditions have been recommended to be imposed should consent be granted in Attachment 9.

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

The development application has been reviewed by Council's Traffic Division against the requirements of this chapter. The proposal is considered satisfactory and conditions have been recommended to be imposed should consent be granted in Attachment 9.

CHAPTER E4: DEVELOPMENT NEAR RAILWAY CORRIDORS AND MAJOR ROADS

The development is located approximately 150 metres from the Illawarra rail corridor to the east and approximately 180 metres from the Northern Distributor to the west and is separated from both by established low-density urban development being detached dwelling houses.

Clause 87 and 102 of the SEPP Infrastructure 2007 to require the inclusion of an acoustic report for development, including residential development, that is on land in or adjacent to a road corridor or rail corridor respectively. The proposed development is not on land in or adjacent to a road corridor or rail corridor and as such does not require an acoustic assessment. Conditions have been recommended to be imposed to mitigate rail and traffic noise impacts in Attachment 9.

CHAPTER E5: BASIX (BUILDING SUSTAINABILITY INDEX)

The development application contains a BASIX certificate indicate that the proposed development meets the minimum requirements for water efficiency, energy efficiency and thermal mass properties. Standard conditions relating to ensuring BASIX commitments are implemented and completed have been imposed in Attachment 9.

CHAPTER E6: LANDSCAPING

The application has been reviewed by Council's Landscape Division against the requirements of this chapter. The proposal is considered satisfactory and conditions have been recommended to be imposed should consent be granted in Attachment 9.

CHAPTER E7: WASTE MANAGEMENT

The application has been reviewed by Council's Traffic and Environment Divisions against the requirements of this chapter. The demolition will require a site audit of waste prior to demolition being undertaken. Waste management matters in relation to demolition and the ongoing use of the development have been imposed as conditions should consent be granted in Attachment 9.

CHAPTER E8: ON-SITE SEWER MANAGEMENT

Considered – no matters applicable to this development.

CHAPTER E9 HOARDINGS AND CRANES

The application has been reviewed by Council's Civil Works Engineer against the requirements of this chapter. Standard conditions relating to hoardings and cranes have been imposed should consent be granted in Attachment 9.

CHAPTER E10 - ABORIGINAL HERITAGE

Considered – no matters applicable to this development.

CHAPTER E11 - HERITAGE CONSERVATION

Considered – no matters applicable to this development.

CHAPTER E12 - GEOTECHNICAL ASSESSMENT

Considered – no matters applicable to this development.

CHAPTER E13 - FLOODPLAIN MANAGEMENT

Considered – no matters applicable to this development.

CHAPTER E14 STORMWATER MANAGEMENT

The application has been reviewed by Council's Stormwater Division against the requirements of this chapter. The proposal is considered satisfactory and conditions have been recommended to be imposed should consent be granted in Attachment 9.

CHAPTER E15 - WATER SENSITIVE URBAN DESIGN (WSUD)

The proposed development is a residential flat building of greater than 20 units. A WSUD Strategy has been submitted to support the application and reviewed by Council's Environment Officer against the requirements of this chapter. The strategy has been found to be satisfactory and conditions have been recommended to be imposed should consent be granted in Attachment 9.

CHAPTER E16 BUSHFIRE MANAGEMENT

The application has been assessed against the Rural Fires Act 1997 and the Rural Fires Regulation 2008 and it has been determined that it is not a development requiring special bushfire protection. The application has been assessed pursuant to Section 79BA of the Environmental Planning and Assessment Act 1979. The application submission report prepared by Ecological indicates that the bushfire attack source is not significant enough to warrant the imposition of any conditions relating to bushfire hazard management (Asset Protection Zone's or Construction requirements). Assessment recommendations are agreed with and no specific conditions of consent have been imposed in this regard.

CHAPTER E17 - PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

Considered - no matters applicable to this development.

CHAPTER E18 - THREATENED SPECIES IMPACT ASSESSMENT

Considered -no matters applicable to this development.

CHAPTER E19 – EARTHWORKS

Excavation of the site is proposed for the subfloor basement. The earthworks do not extend beyond the footprint of the basement carpark and are considered satisfactory.

The development application has been reviewed by Council's Environment Officer against the requirements of this chapter. Conditions have been recommended to be imposed should consent be granted in Attachment 9.

CHAPTER E20 CONTAMINATED LAND MANAGEMENT

The development application has been reviewed by Council's Environment Officer against the requirements of this chapter.

The application submission desktop audit has indicated that the site does not have any land uses in its recorded history that indicate the potential for contamination of the subsoil.

CHAPTER E21 - DEMOLITION AND ASBESTOS MANAGEMENT

The development application has been reviewed by Council's Environment Officer against the requirements of this chapter.

Standard conditions relating to the demolition of the existing buildings have been recommended to be imposed should consent be granted and are included in Attachment 9.

CHAPTER E22 - SOIL EROSION AND SEDIMENT CONTROL

Standard conditions relating to the sediment control have been recommended to be imposed should consent be granted and are included in Attachment 9.

CHAPTER E23 - RIPARIAN LAND MANAGEMENT

Considered – No matters applicable to this development.

2.4.2. Wollongong Section 94A Development Contributions Plan (2010)

Clause 1 identifies the rate of contributions to be calculated as follows:

Proposed cost of the development	Maximum percentage rate of the levy
Up to \$100,000	Nil
\$100,001 - \$200,000	0.5%
More than \$200,000	1%

This plan authorises the Council to grant consent to development to which this plan applies subject to a condition requiring the applicant to pay to the Council a levy calculated as per clause 10.

Clause 10 outlines the following equation to calculate the appropriate levy:

Levy payable = %C x \$C
Where:
%C is the levy rate applicable
\$C is the proposed cost of carrying out development as determined in accordance with clause 15.

The application is quoted at costing \$12,102,000.00 and as such attracts a levy payment of 1% or \$121,020.00.

2.5 Section 79C 1(a)(iia) Any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under Section 93F

There are no planning agreements entered into or any draft agreement offered to be entered into under S93F which affect the development.

2.6 Section 79C 1(a)(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph)

92 What additional matters must a consent authority take into consideration in determining a development application?

(1) For the purposes of section 79C (1) (a) (iv) of the Act, the following matters are prescribed as matters to be taken into consideration by a consent authority in determining a development application:

(a) in the case of a development application for the carrying out of development:

(i) in a local government area referred to in the Table to this clause, and

(ii) on land to which the Government Coastal Policy applies,

the provisions of that Policy,

(b) in the case of a development application for the demolition of a building, the provisions of AS 2601.

The application involves demolition and as such the provisions of AS 2601-1991: The Demolition of Structures applies. Conditions of consent are proposed in Attachment 9 to account for this activity.

The site is not located within the Coastal Zone. The NSW Government Coastal Policy does not apply to the development.

2.7 Section 79C 1(b) the likely impacts of development

Context and Setting:

The proposal is consistent with Council's future direction for the area in relation to scale and density. The higher density is justified by the close proximity of local retail and commercial opportunities as well as being part of a public transport hub. The context and setting is considered acceptable in this regard.

Access, Transport and Traffic:

Traffic and transport impacts have been assessed by Council's Traffic Engineer against Chapter E3 of WDCP2009.

Public Domain:

The proposal does not affect the public domain. The streetscape is not adversely affected by the proposal.

Utilities:

The proposal is not envisaged to place an unreasonable demand on utilities supply. Existing utilities may require augmentation to service the property. Draft conditions are in Attachment 9 requiring public utility service providers to be consulted prior to the issue of the Construction Certificate for their specific requirements.

Heritage:

No heritage items will be impacted by the proposal.

Other land resources:

The proposal is considered to contribute to orderly development of the site and is not envisaged to impact upon any valuable land resources. There are no significant site features to be adversely affected by the proposal.

Water:

The site is presently serviced by Sydney Water, which can be readily extended to meet the requirements of the proposed development. The proposal is not envisaged to have unreasonable water consumption.

A BASIX certificate for the development has been provided outlining the commitments required to be implemented to meet the NSW Government minimum standards for water efficiency.

Soils:

The proposal requires excavation for the purpose of constructing the basement parking area but is not expected to negatively affect soil quality. Conditions imposed in Attachment 9 account for appropriate soil and erosion controls during construction.

Air and Microclimate:

The proposal is not expected to have any negative impact on air or microclimate. The site adjoins Illawarra Coking Coal (ICC), which is a potential source of airborne contamination. Comments received from DECCW in relation to ICC's current EPA licence states that the air quality monitoring of ICC operations indicates that ambient air quality in residential areas generally satisfies recognised goals for that protection of human health and amenity. However, prospective residents would need to make their own judgements as to whether or not they intend to live in this area.

Flora and Fauna:

There is no vegetation removal required for the proposed development. No native fauna will be affected by the development. The existing site conditions limit any opportunities for native fauna to inhabit the site in terms of hollows, burrows or general migratory corridors.

Waste:

A condition will be attached to any consent granted that an appropriate receptacle be in place for any waste generated during the construction. Waste collection is also available to service the ongoing land use. Council's Traffic Engineer has reviewed the proposal against Chapter E7 of WDCP2009 and returned a satisfactory response.

Energy:

The proposal is not envisaged to have unreasonable energy consumption. A BASIX certificate for the development has been provided outlining the commitments required to be implemented to meet the NSW Government minimum standards for energy efficiency.

Noise and vibration:

The adjacent ICC has a history of contributing to ambient noise in the locality. Similar to air and microclimate comments, prospective residents will need to identify if this impact is acceptable to them or not. Council has also considered adjacent rail and traffic corridors against the requirements of Chapter E4 of WDCP2009. Conditions have been imposed in Attachment 9.

Natural hazards:

Council records list the site as bushfire hazard affected. The application has been assessed against the Rural Fires Act 1997 and the Rural Fires Regulation 2008 and it has been determined that it is not a development requiring special bushfire protection. Therefore the application can be assessed pursuant to Section 79BA of the Environmental Planning and Assessment Act 1979. The report prepared by Ecological indicates that the bushfire attack source is not significant enough to warrant the imposition of any conditions relating to bushfire hazard management (Asset Protection Zone's or Construction requirements).

Technological hazards:

There are no technological hazards affecting the site that would prevent the proposal.

Safety, Security and Crime Prevention:

Council's Safer Communities Division has assessed the application against Chapter E2 of WDCP2009 and provided satisfactory referral advice and conditions recommended to be imposed should consent be granted.

Social Impact:

The proposal is not expected to create any negative social impact. The development is expected to result in an improved visual appearance and streetscape in the locality.

Economic Impact:

The proposal is not expected to create any negative economic impact. The proposal is expected to generate some economic activity through the provision of construction work and materials supply.

Site Design and Internal Design:

The site and internal designs are considered to be in reasonable compliance with the relevant standards of Wollongong DCP 2009 and the RFDC.

Construction:

A condition will be attached to any consent granted that all works are to be in compliance with the Building Code of Australia. The draft conditions will require that WorkCover be consulted prior to the use of any hoist, cranes, plant or scaffolding.

Cumulative Impacts:

The proposal is not expected to have any negative cumulative impacts and it is proposed in an appropriately zoned site. The proposal is considered to generally comply with Council's planning controls. Minor variation requests have been submitted and considered. On merit, the requested variations are considered acceptable.

2.8 Section 79C 1(c) the suitability of the site for development

Does the proposal fit in the locality?

The proposal is considered appropriate with regards to the zoning of the site and is not expected to have any unreasonable negative impacts on the amenity of the locality or adjoining developments.

Are the site attributes conducive to development?

There are no site constraints that would prevent the proposal.

2.9 Section 79C 1(d) any submissions made in accordance with this Act or the regulations

The application was notified in accordance with WDCP 2009 Appendix 1: Public Notification and Advertising Procedures. Ten (10) submissions were received and the main issues identified are discussed below.

<u>Issue:</u>	<u>Submission comments:</u>
1. Loss of privacy	<i>(The development) is not only proposing to build four stories of units, but include balconies and windows that will overlook our entire backyard. In one development, there appears to now be around 12 (possibly more) families that will be happily staring into our backyard. That is not taking into account the 12 or more households of noise that will now be drifting over the fence as well.</i>
<u>Response:</u> The proposal provides adequate setbacks from the eastern and northern boundaries and provides opaque treatments to all balconies. It is considered that a reasonable use of those balconies would limit any opportunity to look down into adjoining yards.	
<u>Issue:</u>	<u>Submission comments:</u>
2. Impacts on Local Services	<i>Clarification is required to the current situation of the local services and how are these going to be upgraded to sustain such a large development and at whose cost?</i>
<u>Response:</u> Any upgrade of services required by the development shall be undertaken by the developer at their own cost to the satisfaction of the relevant authority. A standard condition can be imposed to require the developer present the plans to the appropriate service authorities for their specific requirements.	

<u>Issue:</u>	<u>Submission comments:</u>
3. Traffic Impacts	<p><i>There are a number of issues already with local traffic along Railway Street. The current problems are</i></p> <ol style="list-style-type: none"> <i>1. The congestion created with the railway line and the major intersection onto the motorway.</i> <i>2. Truck movements on and off Railway Street from the coke works has increased and the expansion of this business to the adjacent site will only create additional truck movements.</i> <i>3. The proposed development is only going to create additional problems at the intersection of Railway Street and Harbinger Street.</i> <i>4. As the property owner of 11 Harbinger Street which is situated opposite the current entry and exits of Corrimal Leagues Club I strongly disagree with traffic movements to and from Corrimal Leagues, which I believe have been grossly overstated in the Development Application.</i>
<u>Response:</u>	
<p>The generation rates of the development are based on RTA guidelines for residential development and compared to the same guidelines for leagues clubs. The rates for both morning and evening traffic movements have been identified and the resultant increase is considered acceptable. The report contains recommendations to improve access from Harbinger Street to Railway for all residents. However, these recommendations are separate from this application.</p>	
<u>Issue:</u>	<u>Submission comments:</u>
4. Social impacts	<p><i>The envisaged population density within the proposed development would create its own social challenges which we feel would bring about a detrimental change in character to the surrounding area possibly increasing the potential of antisocial behaviour. Currently a sense of community exists which could be at threat should the proposed development in its current form be approved.</i></p>
<u>Response:</u>	
<p>The proposal has been reviewed by Council's Safer Communities Division in relation to the designs potential for opportunities for criminal and antisocial behaviour. Fifteen (15) points have been recommended that have been addressed as conditions should consent be granted.</p>	
<u>Issue:</u>	<u>Submission comments:</u>
5. Non-compliance with relevant Environmental Planning Instrument's	<p><i>The proposed development appears to be above the standard height limits and would cause shadowing to the adjacent properties. There is no evidence to suggest that this has been taken into account.</i></p>
<u>Response:</u>	
<p>The proposed development is consistent with the Wollongong LEP2009 height map that permits a height of thirteen (13) metres.</p> <p>The proposed development is stated at having a height of 12.92 metres. Shadow diagrams have been provided that indicate the proposal complies with Council's standards.</p>	
<u>Issue:</u>	<u>Submission comments:</u>
6. Loss of Views	<p><i>The other major concern with the building height and proximity to our fence-line is that we will now lose the escarpment views...</i></p>
<u>Response:</u>	
<p>View loss has been considered as part of the assessment. The amount of view loss expected to impact the adjoining properties from the proposed development is not considered unreasonable in comparison to the impact created by the existing building with regard to bulk and mass throughout the site.</p>	

Issue:	Submission comments:
7. Inconsistent with the scale of surrounding development	<p><i>... the proposed development is not in keeping with the surrounding single dwelling environment. This development would have an adverse effect on the community.</i></p> <p><i>... to make this a mid-rise, high density development in an area where single dwellings with no more than a smattering of two stories homes preside clearly does not make sense.</i></p>
Response:	
<p>Wollongong LEP2009 provides for higher density in this area due to the close proximity of the railway station and short travel distance to the Corrimal Town Centre. This proposal is consistent with Council's future direction for the locality. It is also noted that under the previous Wollongong LEP1990 and Wollongong DCP49 – Residential Development, this area was identified as an Urban Consolidation Area capable of being developed at a greater density than other similarly zoned areas.</p>	
Issue:	Submission comments:
8. Loss of solar access	<p><i>At 3pm in winter, we will already have their imposing shadow across our backyard? With the sun setting quickly in winter, will we be overshadowed by 3:20pm? What is the shadow projection for 3:45pm? I actually doubt the accuracy of their shadow projection diagram. Will council be checking this diagram?</i></p>
Response:	
<p>The development is set back from the staggered eastern boundaries by 6 metres to 22.36 metres. The submitted shadow diagrams have been checked and are considered to accurately reflect the extent of overshadowing. The development does not unreasonably affect the solar access of adjoining properties.</p>	
Issue:	Submission comments:
9. Air quality impacts	<p><i>The issue is that those occupying the 60 home units and six villas will be living in very close proximity to an industry whose manufacturing by-products need to be properly identified, quantified then explained to potential buyers as well as the wider community.</i></p>
Response:	
<p>Comments have been sought from the Department of Environment Climate Change and Water in relation to what impacts the industrial operations will have on the prospective residents of the development. The adjacent ICC operations are generally in accordance with their licence and monitoring requirements designed to protect the health and amenity of adjoining residences.</p>	
Issue:	Submission comments:
10. Potential to impact the revitalisation of the Wollongong CBD.	<p><i>Excessive residential density development in Corrimal will delay and or obviate high density residential development in the Wollongong CBD and yet again retard revitalisation...</i></p>
Response:	
<p>The proposed development is consistent with the density as defined by the relevant planning instruments prepared and adopted by Council and the NSW Department of Planning. In this regard, the scale of the development is considered acceptable and is not expected to adversely impact the revitalisation of the Wollongong City Centre.</p>	

Submissions from public authorities

One submission received from the Department of Environment, Climate Change and Water in relation to the potential impact of the Illawarra Coking Coal operations on the proposed development. Their response indicates that the Illawarra Coking Coal operations are subject to an existing EPA licence and presently the operations generally satisfy recognised goals for the protection of human health and amenity. It is acknowledged that there are still occasions where the levels of noise and dust may exceed these goals and prompt complaints from residents. A copy of their comments has been included in Attachment 5.

2.10 Section 79C 1(e) the public interest

The application is not expected to have any unreasonable negative impacts on the environment or any unreasonable affects on the amenity of the locality. It is considered appropriate with consideration to the zoning and the future character of the area and is therefore considered to be in the public interest.

3. CONCLUSION

This application has been assessed having regard to the Heads of Consideration under Section 79C(1) of the Environmental Planning and Assessment Act 1979, the provisions of Wollongong Local Environmental Plan 2009 and all relevant Council DCPs, Codes and Policies.

The proposal was exhibited in accordance with Appendix 1 - Public Notification and Advertising Procedures of Wollongong DCP2009 and received ten (10) submissions which are discussed at Section 3.9 of the assessment report. Consultation has also occurred with internal divisions of Council as well external authorities, namely the NSW Department of Environment Climate Change and Water (Air Quality).

This application proposes a development comprising of a six (6) villa multi dwelling housing (MDH) and 60 unit residential flat building (RFB). The component of the proposal relating to the RFB contains some minor encroachments that have been formally requested to be varied. The requested matters have been considered on merit and are supported. The application is considered to be an appropriate development for the site having regard to the comments received from internal divisions of Council, external authorities and submissions from the public during the notification process.

4. RECOMMENDATION

It is recommended that development application DA-2010/1562 be approved pursuant to Section 80 of the Environmental Planning and Assessment Act 1979 subject to the imposition of the conditions contained within Attachment 9 of this report.

5. Attachments

1. **Aerial photo;**
2. **Wollongong LEP 2009 Zoning Map;**
3. **Wollongong LEP 2009 Height Map;**
4. **Wollongong LEP 2009 FSR Map;**
5. **Department of Environment, Climate Change and Water comments;**
6. **Residential Flat Design Code response;**
7. **Design Verification Statement;**
8. **Plans and documents;**
9. **Draft conditions;**

Aerial Photography Town January, 2008

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Wollongong Local Government Area

Aerial Photo

Scale 1:1500 @A4

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 Printed :Nov 26, 2010
 Printed by abames



While every effort has been made to ensure the highest possible quality of data, no liability will be accepted for any inaccuracy of the information shown.









**Environment,
Climate Change
& Water**

10 MAR 2011

Your reference:
Our reference: FIL10/12281:DOC11/9636:WD
Contact: William Dove (02) 4224 4100

Wollongong City Council
(Attention: Anthony Barnes)
Locked Bag 8821
WOLLONGONG NSW 2500

Anthony

ENTERED

Dear Sir

**DA-2010/1562 DEMOLITION OF CORRIMAL LEAGUES CLUB AND
CONSTRUCTION OF RESIDENTIAL DEVELOPMENT**

I refer to your letter to the Department of Environment, Climate Change and Water (DECCW) of 17 February 2011 referring DA-2010/1562 for comment, in relation to any environmental impacts from the Corrimal Coke Works.

Corrimal Coke Works is regulated by DECCW under an Environment Protection Licence (EPL No 125) for coke production. This Licence requires the Company to ensure emissions comply with stated limits, or where these are not specified, ensure activities are carried out by all practicable means to prevent or minimise air pollution. The Licence also requires monitoring and reporting of environmental performance to DECCW.

Corrimal Coke Works has operated on this site for approximately 100 years. Comprehensive environment protection legislation did not commence in NSW until the 1960s. Since this time DECCW (and its predecessors, the Environment Protection Authority and State Pollution Control Commission) have required Pollution Reduction Programs (PRPs) at the Coke Works which have led to major reductions in emissions and off site impacts. Current air quality monitoring indicates that ambient air quality in residential areas generally satisfies recognised goals for the protection of human health and amenity.

Notwithstanding the above outcomes, there is a risk that locating high density multi storey housing immediately adjacent to the Coke Works will create land use conflict between the Coke Works and new residents. This is because there are limitations in the pollution control measures and best management practices available to control emissions from industry, from a technical, operational and economic viewpoint. This is particularly so for coke making operations that are inherently odorous and dusty. It is not possible to prevent odours and dust generated from the Coke Works travelling beyond the Coke Works boundary and being detected off site at all times. Pollution incidents, though rare, can occur from plant upsets or failures of plant/equipment. Certain weather conditions can result in community complaints regarding odour and dust fallout from the Coke Works. Because of these limitations, land use planning is a very important consideration to ensure land use conflict does not occur.

PO Box 513 Wollongong NSW 2520
Level 3, 84 Crown Street Wollongong NSW
Tel: (02) 4224 4100 Fax: (02) 4224 4110
ABN 30 841 387 271
www.environment.nsw.gov.au

The Department has previously raised concerns regarding potential land use conflict regarding this development with Council in 2007, during consultation on the preparation of the draft Wollongong Local Environmental Plan 2007.

DECCW has an ongoing program with the Company to continually improve the operation and performance of the Coke Works as new environmental requirements emerge. Given the major improvements that have already occurred at the Coke Works through extensive PRPs over the last 20 years, the Department considers that further significant emission reductions or fundamental changes to the operation of the works are unlikely to occur in the short to medium term. Any such programs are likely to be complex and costly and present major challenges for the Company, residents and regulators.

If you have any questions, please contact the above officer.

Yours sincerely



07/03/11

PETER BLOEM
Manager Illawarra
Environment Protection and Regulation

(N:\2011\PLANNING\GENERAL\WD DOC\11-9836 DEMOLITION CORRIMAL LEAGUES CLUB.DOC)

Attachment 6 – Residential Flat Design Code response

Residential Flat Design Code

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
Part 1 – Local context		
<u>Building Envelope</u>		
Building envelopes set the appropriate scale of future development in terms of bulk and height in relation to the street layout and block and lot sizes in a particular location. They are appropriate for determining and controlling the desired urban form in town centres, brownfield sites, master plan sites and special sites - such as areas with extreme topography.	No building envelope exists for the site. The controls for the proposed building are set by the WLEP2009 height, FSR, etc controls.	n/a
<u>Building Height</u>		
Objectives <ul style="list-style-type: none"> To ensure future development responds to the desired scale and character of the street and local area. To allow reasonable daylight access to all developments and the public domain. 	The building height for the area is set by WLEP2009 at 13 metres. The proposal complies with this height limit. The area is identified as an urban consolidation area expected to be developed as a medium density hub in close proximity to services and public transport.	Yes
<u>Building Depth</u>		Yes
Max 18m (glass line to glass line) For wider buildings, must demonstrate how satisfactory daylight and natural ventilation are achieved	Building depth across the shorter axis within each section is principally 10-12m, with only limited sections within the building exceeding the 18m provision. The configuration of the building ensures that the units within each building meet the daylight and natural ventilation requirements.	

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Building Separation</u>		Yes
<p><i>Objectives</i></p> <ul style="list-style-type: none"> • To ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings. • To provide visual and acoustic privacy for existing and new residents. • To control overshadowing of adjacent properties and private or shared open space. • To allow for the provision of open space with appropriate size and proportion for recreational activities for building occupants. • To provide deep soil zones for stormwater management and tree planting, where contextual and site conditions allow. <p>Developments that propose less than the recommended distances apart must demonstrate that daylight access, urban form and visual and acoustic privacy has been satisfactorily achieved.</p>	<p>The subject land is within an urban consolidation area that has been entitled greater density provisions since 2002. These regulations have been reflected in the Wollongong LEP2009 and as such, the proposed development is consistent with the desired area character.</p> <p>Setback, height and FSR provisions are consistent with the WLEP and WDCP controls.</p> <p>The design indicates that the controls for separation distances between buildings have been adhered to. Solar access to internal units and adjoining properties is maintained as most of the overshadowing generated by the development falls on the road reserves of Railway and Harbinger Streets.</p> <p>Deep soil planting is provided throughout the development, including within the front building lines.</p>	
<p><i>Rule of thumb</i></p> <p>Between adjoining sites:</p> <ul style="list-style-type: none"> • Up to four storeys/12m <ul style="list-style-type: none"> – 12m between habitable rooms/balconies – 9m between habitable rooms/balconies and non-habitable rooms – 6m between non-habitable rooms 	<p>The component of the development that relates to the Residential Flat Design Code (RFCD) is set back from adjoining property boundaries by greater than six (6) metres. It is expected that any future development of similar scale would also be required to adopt this setback distance creating a building separation distance of greater than 12 metres.</p> <p>Internal separation between towers is in excess of 18 metres.</p>	Yes

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>Street setbacks</u></p> <p><i>Objectives</i></p> <ul style="list-style-type: none"> • To establish the desired spatial proportions of the street and define the street edge. • To create a clear threshold by providing a transition between public and private space. • To assist in achieving visual privacy to apartments from the street. • To create good quality entry spaces to lobbies, foyers or individual dwelling entrances. • To allow an outlook to and surveillance of the street. • To allow for street landscape character. 	<p>The minimum setbacks on both street frontages are greater than 6 metres to the wall of the RFB. There are two encroachments on the Railway Street frontage by courtyard fences resulting in a setback of four (4) metres. The two fences are approximately 7.5 and 9.2 metres long and are separated by a distance of approximately 44 metres. This encroachment is considered reasonable as it provides additional articulation of the primary elevation.</p>	<p>Satisfactory</p>
<p><u>Side and rear setbacks</u></p>		<p>Yes</p>
<p><i>Objectives</i></p> <ul style="list-style-type: none"> • To minimise the impact of development on light, air, sun, privacy, views and outlook for neighbouring properties, including future buildings. • Maintain deep soil zones • Maximise building separation to provide visual and acoustic privacy Where setbacks are limited by lot size and adjacent buildings, “step in” the plan to provide internal courtyards and limit the length of walls facing boundaries 	<p>Setbacks from eastern boundary ranges from 6 metres to 22.36 metres</p> <p>The minimum setback distance from the northern boundary is 8.665 metres.</p>	
<p><u>Floor space ratio</u></p>		<p>Yes</p>
<p><i>Objectives</i></p> <ul style="list-style-type: none"> • To ensure that development is in keeping with the optimum capacity of the site and the local area. • To define allowable development density for generic building types. • To provide opportunities for modulation and depth of external walls within the allowable FSR. • To promote thin cross-section buildings, which maximise daylight access and natural ventilation. • To allow generous habitable balconies. 	<p>The FSR under the RFDC requires a building envelope to be filled no more than 80%. The maximum building footprint has an area of 6755m² and the proposed RFB footprint has an area of 3210m². The ratio is calculated at 47.5%.</p>	

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
Part 2 – Site design		
<u>Deep Soil Zone</u>		
The rule of thumb is for a minimum of 25% of the open space area of site to be a deep soil zone.	Calculations undertaken indicate 46% of the open space areas of the site to be for Deep Soil Planting.	Yes
<u>Fences and walls</u>		
Objectives <ul style="list-style-type: none"> To define the edges between public and private land. To define the boundaries between areas within the development having different functions or owners. To provide privacy and security. To contribute positively to the public domain 	Fences and walls are of a high quality finish through the use of brick columns and horizontal timber infill slats. The fencing constitutes part of the building (courtyard walls) rather than being located on the boundary line. There is ample room left in front of the fencing for planting to soften the built form at the street level.	Yes
<u>Landscape design</u>		Yes
To add value to residents' quality of life within the development in the forms of privacy, outlook and views.	Deep soil planting is proposed between the east and west blocks to promote internal privacy. It is also proposed along the eastern boundary of the site to reduce any privacy loss to the adjoining residences.	
<u>Open Space</u>		Yes
<p>The rule of thumb is for between 25-30% of the site area to be communal open space.</p> <p>The minimum recommended area of private open space for each apartment at ground level or similar space on a structure is 25m², minimum preferred dimension is 4m.</p>	<p>It is difficult to identify the required amount of communal open space (COS) required for the development as the proposal consists of a residential flat building, which requires the provision of COS and a multi dwelling development that does not.</p> <p>WDCP2009 requires 5m² of COS per dwelling where ten or more units are proposed. A calculation of 5m² per bedroom has been used to identify a reasonable amount of COS for the entire development. as there are 148 bedrooms proposed, this equates to 740m² of communal open space for the development. The proposal has provided 911m² of COS, which is considered an appropriate amount for the development.</p> <p>Ground floor units all have 25m² courtyards</p>	
<u>Orientation</u>		Yes
<ul style="list-style-type: none"> To optimise solar access to residential apartments within the development and adjacent development. To contribute positively to desired streetscape character. To support landscape design of consolidated open space areas. 	<p>Building separation within the development and to adjacent buildings is in accordance with the requirements of the RFCD.</p> <p>The development fronts a north-south street (Harbinger) and an east-west street (Railway). The units primarily utilise an L-shape layout maximising solar access into each courtyard</p>	

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<ul style="list-style-type: none"> To protect the amenity of existing development. To improve the thermal efficiency of new buildings. 	<p>and unit.</p> <p>Six (6) one bedroom units have a single outlook to the south, limiting solar access.</p>	
<u>Planting on Structures</u>		Yes
<ul style="list-style-type: none"> To contribute to the quality and amenity of communal open space on roof tops, podiums and internal courtyards. To encourage the establishment and healthy growth of trees in urban areas. 	Planter boxes are proposed over the basement level	
<u>Stormwater management</u>		Yes
<ul style="list-style-type: none"> To minimise the impacts of residential development and associated works on the health and amenity of natural waterways. To preserve existing topographic and natural features, including watercourses and wetlands. To minimise the discharge of sediment and other pollutants to the urban stormwater drainage system during construction activity. 	Stormwater management details have been provided and reviewed by Council's Stormwater Engineers. Their response was satisfactory and conditions have been recommended to be imposed should the application be supported.	
<u>Safety</u>		conditioned
<ul style="list-style-type: none"> To ensure residential flat developments are safe and secure for residents and visitors.\ To contribute to the safety of the public domain. 	Comments were sought from Council's Safer Communities Division in relation to what potential safety risks the development poses when constructed. Fifteen matters were raised in relation to crime prevention through environmental design and management principles, which can be reflected as conditions of consent should the application be supported.	
<u>Visual privacy</u>		Yes
<ul style="list-style-type: none"> To provide reasonable levels of privacy externally and internally, during the day and at night To maximise outlook and views from principal rooms and private open space without compromising visual privacy. 	All balconies proposed have solid balustrades which reduce overlooking as well as acoustic impacts. Mature planting is proposed within the communal open space that in time will improve privacy between the two RFB's.	
<u>Building entry</u>		Yes
<ul style="list-style-type: none"> To create entrances which provide a desirable residential identity for the development. 	There are multiple entrances proposed as part of the development The entries appear to use pathways to orientate visitors to the entrances of the building in contrast to associates	

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<ul style="list-style-type: none"> To orient the visitor To contribute positively to the streetscape and building façade design 	landscaping.	
<u>Parking</u>		Yes
<ul style="list-style-type: none"> To minimise car dependency for commuting and recreational transport use and to promote alternative means of transport-public transport, bicycling and walking. To provide adequate car parking for the building's users and visitors, depending on building type and proximity to public transport. 	<p>The proposal is within close walking distance of public transport reducing the need for private vehicle movements.</p> <p>Visitor parking has been provided without adversely affecting the provision of deep soil planting and associated landscaping.</p>	
<u>Pedestrian Access</u>		Yes
Barrier free access to at least 20% of dwellings.	Both ground floors comprising of 18 dwellings have barrier free access. This equates to 30% of the dwellings.	
<u>Vehicle access</u>		Yes
<ul style="list-style-type: none"> Generally limit the width of driveways to a maximum of 6 metres. Locate vehicle entries away from main pedestrian entries and on secondary street frontages. 	The design complies with these requirements.	
Part 3 – Building Design		
<u>Apartment layout</u>		Yes
<ul style="list-style-type: none"> Single-aspect apartments should be limited in depth to 8m from a window Back of a kitchen should be no more than 8m from a window Providing open space in the form of a balcony, a terrace, a courtyard or a garden for every apartment Locating main living areas adjacent to main private open space. Include adequate storage space. 	<p>There are six single aspect units proposed, which are generally eight (8) metres in depth. The components that exceed the eight (8) metre depth are service rooms such as laundries and bathrooms. This arrangement is considered acceptable.</p> <p>Living areas adjoin private open space</p>	
<u>Apartment mix</u>		Yes
<ul style="list-style-type: none"> To provide a diversity of apartment types, which cater for different household requirements 	<p>6 x 3 bedroom apartments</p> <p>48 x 2 bedroom apartments</p>	

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<p>now and in the future.</p> <ul style="list-style-type: none"> To maintain equitable access to new housing by cultural and socio-economic groups. 	6 x 1 bedroom apartments	
<u>Balconies</u>		Yes
<ul style="list-style-type: none"> Provide primary balconies with a minimum depth of 2m. Developments that seek to vary from the minimum standards must demonstrate negative impacts from noise, wind can not be mitigated with design solutions. 	All balconies have the required dimensions. All appear to have a solid treatment to assist in reducing acoustic impacts as well as minimising visual intrusion into adjoining properties.	
<u>Ceiling heights</u>		Yes
Minimum 2.7m for habitable rooms		
<u>Flexibility</u>		Yes
<ul style="list-style-type: none"> To encourage housing designs which meet the broadest range of the occupants' needs as possible. To promote 'long life loose fit' buildings, which can accommodate whole or partial change of use. To encourage adaptive re-use. 	The ground floor units appear able to accommodate alternative uses in the form of small scale office or business premises in the form of a part change of use.	
<u>Ground floor apartments</u>		Yes
<ul style="list-style-type: none"> Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site. Provide ground floor apartments with access to private open space, preferably as a terrace or garden. 	All ground floor courtyards appear accessible from the numerous access points available.	
<u>Internal circulation</u>		Satisfactory
In general, where units are arranged off a double loaded corridor, the number of units accessible from a single core/corridor should be limited to eight.	A variation to this requirement has been requested to allow nine (9) units to be accessible from the corridors.	

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Storage</u>		Yes
<ul style="list-style-type: none"> To provide adequate storage for everyday household items within easy access of the apartment. To provide storage for sporting, leisure, fitness and hobby equipment. <p>Studio apartments – 6m³ One-bedroom apartments – 6m³ Two bedroom apartments – 8m³ Three plus bedroom apartments – 10m³</p>	<p>Storage is provided within the basement for the purpose of storing bikes and other bulky items.</p> <p>All units have built in cupboard arrangements for additional storage.</p>	
<u>Acoustic privacy</u>		Yes
<ul style="list-style-type: none"> Adequate separation from neighbouring buildings. Unit arrangement to avoid noise transmission. 	<p>The proposal achieves adequate separation distances from adjoining residences and also from all components of the proposed residential development. Acoustic issues are considered to be negligible given the proposal is a residential use in a medium density residential zone.</p>	
<u>Daylight access</u>		Yes
<p>Living rooms and private open spaces for at least 70% of apartments should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter. In dense urban areas a minimum of 2 hours may be acceptable.</p>	<p>All units, except the single southern aspect, achieve at least 3 hours of continuous sunlight during the winter solstice. Therefore 90% of the units achieve the daylight access requirements.</p> <p>The proposal includes 6 x single aspect apartments with a southerly aspect. This equates to 10% of the residential flat apartments.</p>	
<u>Natural ventilation</u>		Yes
<p>60% of residential units should be naturally cross ventilated.</p>	<p>68.3% of the residential apartments are naturally cross ventilated.</p> <p>17 (28.3%) of the residential apartments contain a kitchen with direct access to natural ventilation.</p> <p>Where kitchens don't have direct access to a window the back of the kitchen is generally less than 8m from a window.</p>	
<u>Awnings and signage</u>		
	Not applicable to this application	N/A
<u>Facades</u>		Yes
<ul style="list-style-type: none"> To ensure that new developments have facades which define and enhance the public domain and desired street character. To ensure that building elements 	<p>The proposal includes a building with high quality finishes and aesthetic. The proposed residential flat building has a higher façade at the Railway Street frontage, which steps down towards the residential development to the north.</p>	

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
are integrated into the overall building form and façade design.	The proposal balances vertical and horizontal elements with balustrade and glazing components. A variety of materials and finishes will be incorporated to add visual interest and the top, middle and base elements of the residential flat building are defined through material variations that are sympathetic to the local context.	
<u>Roof design</u>		Yes
<ul style="list-style-type: none"> To provide quality roof designs, which contribute to the overall design and performance of residential flat buildings. 	<p>The proposal includes a roof design that contributes to the appearance and performance of the residential flat buildings.</p> <p>The roof design is articulated to divide the appearance of a larger building into multiple volumes sympathetic to the neighbourhood.</p>	
<u>Energy efficiency</u>		Conditioned
<ul style="list-style-type: none"> To reduce the necessity for mechanical heating and cooling. To reduce reliance on fossil fuels. To minimise greenhouse gas emissions. To support and promote renewable energy initiatives. 	All except six (6) units have some degree of northerly exposure. Many of the requirements outlined in this Section are also required in accordance with the BASIX requirements for the building. Standard conditions relating to BASIX can be imposed should consent be granted.	
<u>Maintenance</u>		Conditioned
To ensure long life and ease of maintenance for the development.	Standard conditions relating to maintenance can be imposed should consent be granted.	
<u>Waste management</u>		Conditioned
Supply waste management plans as part of the development application.	Conditions can be imposed relating to waste management as well as the preparation of a waste management plan.	
<u>Water conservation</u>		Conditioned
<ul style="list-style-type: none"> To reduce mains consumption of potable water. To reduce the quantity of stormwater run off. 	Rainwater harvesting is proposed as part of the design to comply with the commitments required by the submitted BASIX certificate.	

SEPP 65 ASSESSMENT REPORT

RESIDENTIAL DEVELOPMENT

AT

**LOTS 13 & 2 DP 1030814 & DP 38085
HARBINGER & RAILWAY STREET
CORRIMAL**

Prepared By



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1.0 INTRODUCTION

This report should be read in conjunction with the architectural drawings provided in the Development Application set. The report responds to each of the ten SEPP 65 Design Quality Principles in the Residential Flat Design Code (RFDC), and includes a compliance table and associated comments which respond to each of the relevant numerical 'Rules of Thumb' contained within the Residential Flat Design Code.

2.0 DESIGN VERIFICATION

I, Angelo Di Martino, director ADM ARCHITECTS, verify that I contributed to the design of this residential flat development, and that the design quality principles set out in Part 2 of SEPP No. 65 - Design Quality of Residential Flat Development are achieved for the redevelopment of the Railway Street and Harbinger Street site.

Signed:



Name:

Angelo Di Martino DIRECTOR B.Arch (Hon) AIA

NSW ARB No.

7608

And

I, Louis Diek, of ADM ARCHITECTS, verify that I contributed to the design of this residential flat development, and that the design quality principles set out in Part 2 of SEPP No. 65 - Design Quality of Residential Flat Development are achieved for the redevelopment of the Railway Street and Harbinger Street site.

Signed:



Name:

Louis Diek B.Arch

NSW ARB No.

5073

3.0 SEPP 65 DESIGN QUALITY PRINCIPLES

Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

Statement of Compliance:

The proposal has been developed in relation to the desired future character of the area as set out in the 2009 Local Environmental Plan. The proposal provides residential uses consisting of apartments; with pedestrian connection to Railway and Harbinger Streets. The siting of the buildings responds to their specific topographic situation and the two street frontages. These responses result in building forms and articulation that contribute to a varied but coherent identity for the development site and the buildings that surround it.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

Statement of Compliance:

The proposed buildings are appropriate in terms of their bulk and height. Their overall height remains within what is identified as the maximum permissible height for the area as defined by the 2009 Local Environmental Plan.

Principle 3: Built form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Statement of Compliance:

The proposal achieves an appropriate built form for the site and the buildings' purpose. It maintains the building alignments and massing appropriate to its medium density residential location. The buildings define the public road edges. The buildings' depths are appropriate for the uses proposed within and the buildings are articulated in relation to these uses, the public and communal external spaces they relate to and the views to and from these spaces. The built form enhances the character of the public domain and maintains internal amenity within the proposal.

Principle 4: Density

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

Statement of Compliance:

The proposal meets the density objectives of the site as defined by the 2009 Local Environmental Plan.

Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

Statement of Compliance:

Existing structures on the site will be demolished and materials where possible will be recycled and re-used. Apartments have been designed to optimise thermal performance, provide increased amenity to occupants and reduce greenhouse emissions and therefore the cost of energy supply.

Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

Statement of Compliance:

The landscape design is well integrated with the building design and arrangement of external public and communal spaces. The landscape elements proposed play an important role in defining the key pedestrian walk lines and spaces on the site and enhance the occupants' privacy across public – private and communal – private thresholds. The species proposed have been selected in consideration of the climatic conditions on the site, the existing ecosystem, water management on the site and their long term success in relation to these factors.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

Statement of Compliance:

The buildings have been designed to optimise their internal amenity, maintain the amenity of the adjoining properties and provide adequate open space between them. The site layout meets the requirements for accessibility and building separation. The orientation of rooms increases the apparent distance between habitable rooms. Appropriate room sizes and shapes are provided in all of the buildings and supported by

access to sunlight and ventilation, sufficient storage, efficient layouts and service areas. Access to sunlight, ventilation and views is maximised throughout.

Principle 8: Safety and security

Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

Statement of Compliance:

The proposal optimises safety and security both within the development and public domain. Active uses have been located to provide active frontages to all the public road frontages. Apartment layouts have been designed to provide overlooking of the public and communal spaces whilst providing privacy for the occupants. The public spaces are clearly defined, distinct from private and communal open space. They are well lit and avoid dark dead end spaces that are not visible. Apartment entries are clearly defined from the public domain, are well lit and secure.

Principle 9: Social Dimensions

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood, or in the case of precincts undergoing transition, provide for the desired future community.

Statement of Compliance:

The proposal includes a range of apartment sizes, types (including 1, 2 and 3 bed types), and costs that will contribute to the rich community life of the area.

Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

Statement of Compliance:

The proposal contributes to both the existing streetscapes and the desired future character of the area through a diverse but coherent aesthetic approach in which each individual building and the public domain contribute to a sense of place with high aesthetic value through a related palette of forms, materials and colours to each building.

Attachment 8 – Plans and documents

DRAFT CONDITIONS FOR: DA-2010/1562

Plans and Specifications	To be inserted by Council
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General Matters

1) **Tree Retention**

The developer shall retain existing trees indicated on Landscape Concept Plan by Ochre Landscape Architects Dwg. No. 1247-LD01B Issue DA dated 05.11.10 consisting of tree numbered 5, 6, 9, 17, 23 (x 7 No.) and 24 Total number: twelve (12 No.)

Any branch or root pruning which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS4373 (1996).

All tree protection measures are to be installed in accordance with Australian standard AS4790-2009 Protection of Trees on development Sites.

All recommendations in Arborist's Report Ref. No. 4491010/Corrimal Leagues and Addendum dated 3 November by Landscapes By Lenice Author Lenice Tuckett-Carr to be implemented including and not restricted to: remedial tree pruning, deadwooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.

The developer shall transplant tree numbered 23 and 24 Total number: eight (8 No.) to an appropriate location on site by an experienced and qualified contractor if required or retain insitu.

2) **Tree Removal**

This consent permits the removal of trees and other vegetation from the site within three (3) metres of the approved buildings, structures, permanent accessways and car parks. This consent also permits the removal or pruning of trees within three (3) metres of approved buildings. No other trees or vegetation shall be removed or lopped, without the prior written approval of Council.

The developer shall remove existing trees indicated on Landscape Concept Plan by Ochre Landscape Architects Dwg. No. 1247-LD01B Issue DA dated 05.11.10 and in Arborist's Report Ref. No. 4491010/Corrimal Leagues and Addendum dated 3 November by Landscapes By Lenice Author Lenice Tuckett-Carr consisting of tree numbered 1, 2, 3, 4, 7, 8, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21 and 22 Total number: eighteen (18 No.)

3) **Splay Corner**

The corner lot shall be provided with a 4.25 metre splay. This splay corner is to be dedicated free of cost to Council and shall form part of the road reserve. The excised land must be dedicated at no cost to Council as road reserve on the final survey plan.

4) **Building Work - Compliance with the Building Code of Australia**

All building work must be carried out in compliance with the provisions of the Building Code of Australia.

5) **Construction Certificate**

A Construction Certificate must be obtained from Council or an Accredited Certifier prior to work commencing.

A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

Note: The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within **two (2)** days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.

6) **Disability Discrimination Act 1992**

This consent does not imply or confer compliance with the requirements of the Disability Discrimination Act 1992.

It is the responsibility of the applicant to guarantee compliance with the requirements of the Disability Discrimination Act 1992. The current Australian Standard AS1428.1 – Design for Access and Mobility is recommended to be referred for specific design and construction requirements, in order to provide appropriate access to all persons within the building.

7) **Protection of Public Infrastructure**

Council must be notified in the event of any existing damage to any of its infrastructure such as the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development site, prior to commencement of any work.

Adequate protection must be provided for Council infrastructure prior to work commencing and during building operations.

Any damage to Council's assets shall be made good, prior to the issue of any Occupation Certificate or commencement of the operation.

8) **Occupation Certificate**

A final Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of Section 109H of the Environmental Planning and Assessment Act 1979 have been complied with as well as all of the conditions of the Development Consent.

Prior to the Issue of the Construction Certificate

9) The development shall make provision for a footpath on Harbinger Street along the frontage of the site which connects with the existing footpath on Railway Street. This requirement shall be reflected on the Construction Certificate plans.

10) **Podium Planting**

All podium planting areas to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding to be installed to protect membrane from damage. All podium planting areas to be provided with an adequate drainage system connected to stormwater drainage system. Planter box to be backfilled with free draining planter box soil mix. Organic mulch only. Maximum decorative gravel pebble size 10mm diameter.

11) **Footpath Paving**

The developer is responsible for the construction of footpath paving for the entire frontage of the development to both Railway Street and Harbinger Street. The type of paving for this development is 1500mm wide 100mm thick reinforced broom finished concrete. A nominal two percent (2%) minimum 1%, maximum two and a half (2.5%) cross fall to be provided from property line to back of kerb.

Driveway entry threshold finish from property boundary line to face of kerb: Broom finished concrete to match footpath and be designed to withstand predicted traffic loadings.

Driveway threshold finish within property boundary line: To contrast with driveway entry.

Footpath must be installed to the satisfaction of WCC Manager of Works.

Pedestrian pathways to connect to street footpath.

Landscape Plan to be submitted to Council prior to issue of Construction Certificate showing proposed paving and location of all services.

- 12) **Street Trees**
The developer must address the street frontage by installing street tree planting. The number and species for this development are ten (10 No.) *Tristanopsis laurina* 'Luscious' 75 litre pot 2.5 m minimum height, 1.2m wide and 40mm minimum caliper. Trees are to be installed in accordance with Wollongong Development Control Plan 2009 – Chapter E6: Landscaping. Dial before you Dig must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Location of street tree plantings to be sited to ensure no conflict occurs with street light poles.
- Tree guard to consist of minimum 4 No 2400 x 90 x 90mm ACQ treated timber posts with weathered top with 2 No 1200 x 90 x 45mm timber rails neatly checked into each side of guard. Brick edging on concrete footing to be provided for each tree pit.
- Tree pits must be adequately mulched, plants installed and tree guard and edging installed to the satisfaction of WCC Manager of Works.
- 13) **Asbestos Clearance Certificate**
A certificate from a competent occupational hygienist stating that there is no longer any asbestos on the site shall be submitted to the Principal Certifying Authority (and Council in the event that Council is not the Principal Certifying Authority).
- 14) **Basement Carpark Ventilation System**
The developer shall provide certification from a suitably qualified and experienced professional verifying that the proposed basement carpark ventilation system complies with the Building Code of Australia and Australian Standard AS 1668.2-2002 to the Principal Certifying Authority and Council (in the event that Council is not the Principal Certifying Authority) prior to issue of the Construction Certificate.
- 15) **Existing/Proposed Levels**
Existing and proposed levels to Australian Height Datum (AHD), including floor, ground, grate, pipe inverts and pavement levels shall be shown on the detailed drainage design. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.
- 16) **Drainage Swales**
Details of each drainage swale located along the northern boundary of the development site upslope of the proposed villa homes and along the eastern boundary of the development site down-slope of the proposed bio-filtration system shall be provided with the detailed drainage design. Each swale must be capable of catering for the 1 in 100 year storm event flows from the contributing up-slope catchment area. Each swale shall be free of any vegetation and/or structures that are likely to impede overland flow, or make provision for such obstructions, so there will be no adverse stormwater impacts upon the subject site and adjoining properties. Full Manning's calculations shall be provided on the capacity of each swale. These requirements shall be reflected on the Construction Certificate plans and supporting documentation.
- 17) **Boundary Fences**
All new fences constructed along the northern boundary of the development site must incorporate a suitably sized gap beneath the fence to ensure that overland flows from adjoining up-slope properties are accepted by the development site. These requirements shall be reflected on the Construction Certificate plans prior to the release of the Construction Certificate.
- 18) **Scour Protection**
All overland flow paths must incorporate appropriate scour/erosion protection measures in accordance with good engineering practice. The final details of the proposed scour/erosion protection measures shall be reflected on Construction Certificate plans.
- 19) **Stormwater Connections to Street Kerb**
All new stormwater connections to the street kerb must incorporate a maximum of two 100mm diameter sewer grade UPVC pipes, or two 150mm x 100mm galvanised steel pipes, with the 150mm dimension being parallel with the road surface. These requirements shall be reflected on the Construction Certificate plans.

- 20) **Pump System**
A pump system must be provided in association with the detailed drainage design for the site to cater for stormwater from a prolonged/extreme storm event entering the basement. The pump system shall be designed by a suitably qualified and experienced civil engineer and reflected on the Construction Certificate plans and supporting documentation.
- 21) **Tank Overflows**
Overflows from all water storage tanks must be connected to the approved on-site stormwater drainage system. This requirement shall be reflected on the Construction Certificate plans prior to the release of the Construction Certificate.
- 22) **Bio Filtration System**
Details of the proposed bio filtration system shall be provided with the detailed drainage design for the site. This bio filtration system must incorporate an impermeable barrier to prevent subsurface flows from entering adjoining properties and a suitably graded invert to ensure that all subsurface flows are directed to the stormwater outlet pit. A continuous concrete perimeter kerb or hob shall be provided around the edge of the bio filtration system adjacent to the property boundary to prevent surface stormwater overflows from entering adjoining properties. The entire bio filtration system (including trench, lining, filtration medium, and surface kerbs/hobs) shall be contained wholly within the subject site. These requirements shall be reflected on the Construction Certificate plans and supporting documentation prior to the release of the Construction Certificate.
- 23) Landscaping in the hatched section shown on Plan KF110211/SK02 shall be limited to low level ground cover not exceeding 0.6 metres in height to improve sightlines for vehicles turning right from Harbinger Street into Railway Street. This requirement shall be reflected on the Construction Certificate plans.
- 24) **Entry points to residential flat building**
The entry points to the building should be fitted with an appropriate security gate no less than one (1) metre from the start of any corridor to reduce areas of concealment within the corridor. Alternatively, the entry door should be located closer to the outside of the building. These changes shall be reflected in the Construction Certificate plans.
- 25) **Fire Safety Schedule**
When issuing a Construction Certificate, a certifying authority must attach a Fire Safety Schedule specifying all of the fire safety measures required for the building to ensure the safety of persons in the building in the event of fire.
- 26) **Section 73 Compliance Certificate**
A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Coordinator. Please refer to the Building Developing and Plumbing section of the web site www.sydneywater.com.au then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.

Following application, a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.

The Notice of Requirements must be submitted to the Principal Certifying Authority prior to issue of the construction certificate.
- 27) **Integral Energy Requirements**
The submission of documentary evidence from Integral Energy to the Principal Certifying Authority is required confirming that satisfactory arrangements have been made with Integral Energy for the provision of electricity supplies to the development, prior to the release of the Construction Certificate.

Note: Applications should be made to Customer Connections – South Coast, Integral Energy PO Box 6366, Blacktown 2148.

- 28) **Telecommunications**
The submission of documentary evidence from an approved telecommunications carrier to the Principal Certifying Authority confirming that underground telecommunication services are available for this development is required prior to the issue of the Construction Certificate.
- 29) **Fencing**
The development is to be provided with fencing and screen walls at full cost to the applicant/developer as follows:
- a) where a screen wall faces the road, pedestrian walkway, reserve or public place that wall shall incorporate the same brickwork as that used in the external wall of the building; and
 - b) rear and side property boundaries (behind the building line) and private rear courtyards are to be provided with minimum 1.8 metre high brick, timber lapped and capped or colorbond fences.
- This requirement is to be reflected on the Construction Certificate plans.
- 30) **Garbage, Green Waste and Recycling Bin Enclosure Structure**
The garbage/recycling bin enclosure area shall incorporate brick or other approved masonry material and shall be provided with sufficient screening of all bins contained therein. The storage area shall be constructed with a concrete floor, suitably graded to enable drainage of run-off into Council's stormwater drainage system and shall be at-grade with any proposed pedestrian accessway. The final design details of the proposed storage area shall be reflected on the Construction Certificate plans.
- 31) **Crime Prevention through Environmental Design (CPTED)**
In order to reduce the opportunities for "hiding places" the proposed landscaping must:
- a) use shrubs/plants which are no higher than 1 metre adjacent to pathways.
 - b) the type of trees proposed must have a sufficiently high canopy, when installed and fully grown, so that pedestrian vision is not impeded.
 - c) Shrub planting to be set back min. 1 metre from the edge of the pathway. Groundcover planting acceptable.
- This requirement shall be reflected on the Construction Certificate plans.
- 32) The development shall incorporate appropriate design measures to minimise any crime risk to patrons or staff and motor vehicles within the car parking areas, including (but not limited to) the following:
- a) Landscape treatment which allows visibility from the road way and other public areas;
 - b) Landscaping at ground level provided which is difficult or uncomfortable to hide in or traverse,
 - c) Provide clearly marked and sign posted visitor car parking signs (including security/intercom system);
 - d) Ensure that fire rated doors in the car park have a clear glass panel located no more than 1.5 m from the floor. The panel shall have a minimum dimension of 300 mm x 300 mm to allow visual surveillance within the stairwell and/or next room/space.
- This requirement shall be reflected on the Construction Certificate plans.
- 33) The submission of documentary evidence to the Principal Certifying Authority from the NSW Fire Brigade, NSW Ambulance Service and the NSW Police Service verifying that each of the emergency service authorities are able to override the security system, in the event that a security intercom system is proposed to be installed within the development, prior to the release of the Construction Certificate.
- 34) The submission of final design details of proposed security systems to be installed within the development to the Principal Certifying Authority, in order to minimise crime and vandalism related matters is required, prior to the release of the Construction Certificate.

- 35) **Parking and Access**
The development shall make provision for a total of 118 car parking spaces (including 7 disabled parking spaces), 4 motorcycle parking spaces and 25 bicycle parking spaces. This requirement shall be reflected on the Construction Certificate plans. Any change in above parking numbers shown on the approved DA plans shall be dealt with via a section 96 modification to the development. The approved parking spaces shall be maintained to the satisfaction of Council, at all times.
- 36) The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with Australian Standard AS2890.1 (2004), except where amended by other conditions of this consent. Details of such compliance are to be reflected on the Construction Certificate plans.
- 37) The main entry point to the building shall be in accordance with Australian Standard 1428.1 - 2001 Design for Access and Mobility - Part 1 General Requirements for Access - Buildings. The proposed pedestrian ramps within the car parking areas shall incorporate gradients (with suitable landing intervals) in accordance with the Australian Standard. The final design of the pedestrian ramps, including ramp gradients shall be reflected on the Construction Certificate plans.
- 38) The designated loading/unloading facility shall be kept clear for that purpose at all times. The designated loading/unloading facility shall be shown on the Construction Certificate plans.
- 39) The provision of suitable barriers, line-marking and painted signage delineating vehicular flow movements within the car parking areas. These details shall be reflected on the Construction Certificate plans.
- 40) The car parking areas shall incorporate 'low impact' floodlighting to ameliorate any light spillage and/or glare impacts upon surrounding properties. The final design details of the proposed floodlighting system shall be reflected on the Construction Certificate plans. The erection of the floodlighting system shall be in accordance with the approved final design.
- 41) Should a proposed Vehicular Crossing be located where it is likely to disturb or impact upon a utility installation (ie power pole, Telstra pit etc) written confirmation from the affected supplier that they have agreed to the proposed impacts shall be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.
- 42) The arrangements and costs associated with any adjustment to a public utility service shall be borne by the applicant/developer. Any adjustment, deletion and/or creation of public utility easements associated with the approved works are the responsibility of the applicant/developer. The submission of documentary evidence to the Principal Certifying Authority which confirms that satisfactory arrangements have been put in place regarding any adjustment to such services is required prior to the release of the Construction Certificate.
- 43) **Driveways**
All driveways within the development shall be constructed with a maximum vertical alignment as shown in Council Drawing N° S-144 (Residential Driveways Maximum Internal Grading). This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.
- 44) A change in driveway pavement is required at the entrance threshold within the property boundary to clearly show to motorists they are crossing a pedestrian area. The developer must construct the driveway pavement outside property boundary in accordance with the conditions, technical specifications and levels to be obtained from the Council's Manager of Works. This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.
- 45) Any proposed structures adjacent to the driveway shall comply with the requirements of the latest version of Australian/New Zealand Standard AS/NZ 2890.1 to provide for adequate sight distance. This includes, but is not limited to, structures such as signs, letterboxes, retaining walls, dense planting etc. This requirement shall be reflected on the Construction Certificate.

- 46) **Traffic Noise**
Any dwelling erected upon this site shall be designed and constructed in accordance with the requirements of the Australian Standard AS3671 (1989) 'Acoustic – Road Traffic Noise Intrusion – Building Siting and Construction'. This requirement shall be reflected on the Construction Certificate plans and supporting documentation for the endorsement by the Private Certifying Authority, prior to the issue of the Construction Certificate.
- 47) **Rail Noise**
Any dwelling erected upon this site shall be designed and constructed in accordance with the recommendations and requirements of NSW State Rail Authority October 1995 document titled "*Rail Related Noise and Vibration Issues to Consider in Local Environmental Planning – Development Applications and Building Applications.*" This requirement shall be reflected on the Construction Certificate plans and supporting documentation for the endorsement by the Principal Certifying Authority, prior to the issue of the Construction Certificate.
- 48) Overflow paths must be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the land. Blocked pipe situations with 1 in 100 year ARI events must be incorporated in the design. Overflow paths must also be provided in low points and depressions. This requirement shall be reflected on the Construction Certificate plans prior to the release of the Construction Certificate.
- 49) Provision shall be made along the boundary of the property at the vehicular crossing/s for a minimum 200 mm wide grated drain to prevent waste and surface water entering the road reserve. This requirement shall be reflected on the Construction Certificate plans.
- 50) The depth and location of all services (ie gas, water, sewer, electricity, telephone, traffic lights, etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.
- 51) Details of each stormwater connection to Council's existing drainage system must be provided with the detailed drainage design for the site. The details must be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.
- 52) The final Landscape Plan shall be submitted to the Principal Certifying Authority prior to the release of the Construction Certificate. The final Landscape Plan shall address the following requirements:
- a deletion of the following plant species since they are unsuitable for this type of development; *Lomandra Tanika* and substituted with *Lomandra Shara*, *Cupaniopsis anacardioides* and substituted with *Eucalyptus cladoclayx* 'Vintage Red', *Fraxinus griffithii* and substituted with *Waterhousea floribunda* 'Sweeper'
 - b planting of indigenous plant species typical of the Illawarra Region such as: *Syzygium smithii* (formerly *Acmena smithii*) Lilly pilly, *Archontophoenix cunninghamiana* Bangalow palm, *Backhousia myrtifolia* Grey myrtle, *Elaeocarpus reticulatus* Blueberry ash, *Glochidion ferdinandii* Cheese tree, *Livistona australis* Cabbage palm tree, *Syzygium paniculatum* Brush cherry;
- A further list of suitable suggested species may be found in Wollongong Development Control Plan 2009 – Chapter E6: Landscaping;
- c a schedule of proposed planting, including botanic name, common name, expected mature height and staking requirements as well as number of plants and pot sizes;
 - d the location of all proposed and existing overhead and underground service lines. The location of such service lines shall be clear of the dripline of existing and proposed trees; and;
 - e any proposed hard surface under the canopy of an existing trees shall be permeable and must be laid such that the finished surface levels match the existing level. Permeable paving is to be installed in accordance with the manufacturer's recommendations;
- The completion of the landscaping works as per the final approved Landscape Plan is required, prior to the issue of Occupation Certificate or commencement of the development.

- 53) The provision of common tap(s) and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be indicated on the Landscape Plan for the Construction Certificate, as detailed in the Wollongong City Council Landscape Technical Policy No 98/4. This requirement shall be reflected on the Landscape Plan prior to the release of the Construction Certificate.
- 54) The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.
- 55) The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.
- 56) The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months to ensure that all landscape work becomes well established by regular maintenance. Details of the program must be submitted with the Landscape Plan to the Principal Certifying Authority prior to release of the Construction Certificate.
- 57) **Retaining Wall Structures**
The proposed retaining wall(s) shall be constructed in accordance with Council's Retaining Wall Policy. This requirement is to be reflected on the Construction Certificate plans and shall be supported by a certificate from a structural engineer which confirms the structural adequacy of the proposed retaining wall structure(s) and compliance with Council's Retaining Wall Policy.
- 58) **Engineering Plans and Specifications - Retaining Wall Structures**
Engineering plans and supporting documentation of all proposed retaining walls shall be submitted to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate. The retaining walls shall be designed by a suitably qualified and experienced civil and/or structural engineer. The required engineering plans and supporting documentation shall include the following:
- a) A plan of the wall showing location and proximity to property boundaries;
 - b) an elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall;
 - c) details of fencing or handrails to be erected on top of the wall;
 - d) sections of the wall showing wall and footing design, property boundaries and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The developer shall note that the retaining wall and footing structure must be contained wholly within the subject property;
 - e) the proposed method of subsurface and surface drainage, including water disposal;
 - f) the assumed traffic loading used by the engineer for the wall design.
- 59) **Payment of S94A Levy**
Prior to release of any associated construction certificate the certifier must ensure that the S94A levy has been paid in full. In this regard the certifier must submit to Council, with the construction certificate documentation, receipts which will specify whether the levy has been paid by cash or bank cheque.

Section 94A Levy Contribution

- 60) The following Section 94A Levy Contribution is required towards the provision of public amenities and services in accordance with the Wollongong City Council Section 94A Development Contributions Plan.

Pursuant to Section 80A(1) of the Environmental Planning and Assessment Act 1979, and the Wollongong City Council Section 94A Development Contributions Plan, a contribution of \$121,020.00 shall be paid to Council prior to the release of any associated Construction Certificate.

The amount to be paid will be adjusted at the time of actual payment, in accordance with the provisions of the Wollongong City Council Section 94A Development Contributions Plan. The Consumer Price Index All Group Index Number for Sydney at the time of the development application determination is 155.6.

The following formula for indexing contributions is to be used:

Contribution at time of payment = $\$C \times (CP2/CP1)$

Where

$\$C$ is the original contribution as set out in the Consent

$CP1$ is the Consumer Price Index (all groups index for Sydney) used in the preceding indexation calculation

$CP2$ is the Consumer Price Index (all groups index for Sydney) at the time of indexation

Details of CP1 and CP2 can be found in the Australian Bureau of Statistics website Catalog No 6401.0 - Consumer Price Index, Australia.

A copy of the Wollongong City Council Section 94A Development Contributions Plan and accompanying Fact Sheet may be inspected or obtained from the Wollongong City Council Administration Building, 41 Burelli Street, Wollongong during business hours or on Council's web site at www.wollongong.nsw.gov.au.

(Reason: To provide high quality and diverse public amenities and services to meet the expectations of the existing and new residents of Wollongong City Council).

Prior to the Commencement of Works

- 61) **Site Management, Pedestrian and Traffic Management (Where Works are Proposed in or from a Public Road Reserve)**

The submission, as part of an application for a permit under Section 138 of the Roads Act 1993, of a Site Management, Pedestrian and Traffic Management Plan to Council's Manager Regulation and Enforcement for approval is required, prior to works commencing on the site. This plan shall address what measures will be implemented for the protection of adjoining properties, pedestrian safety and traffic management and shall be in compliance with the requirements of the latest versions of Australian Standard AS1742 - Traffic Control Devices for Works on Roads and the RTA Traffic Control at Worksites Manual.

This plan is required to maintain public safety, minimise disruption to pedestrian and vehicular traffic within this locality and to protect services, during demolition, excavation and construction phases of the development. This plan shall include the following aspects:

- a) proposed ingress and egress points for vehicles to/from the construction site;
- b) proposed protection of pedestrians, adjacent to the construction site;
- c) proposed pedestrian management whilst vehicles are entering/exiting the construction site;

- d) proposed measures to be implemented for the protection of all roads and footpath areas surrounding the construction site from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like;
- e) proposed method of loading and unloading excavation machines, building materials formwork and the erection of any part of the structure within the site;
- f) proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period;
- g) proposed traffic control measures such as advanced warning signs, barricades, warning lights, after hours contact numbers etc are required to be displayed where works are in progress in any road reserve and shall be in accordance the latest versions of the NSW Roads and Traffic Authority's Specification - "Traffic Control at Work Sites Manual" and the Australian Standard AS1742. – "Manual of Uniform Traffic Control Devices" and accompanying field handbooks (SAA HB81);
- h) proposed method of support of any excavation, adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by an accredited certifier in Civil Engineering; and
- i) proposed measures to be implemented, in order to ensure that no soil/excavated material is transported on wheels or tracks of vehicles or plant and deposited on the roadway.

The approved plan shall be implemented, prior to the commencement of any works upon the construction site.

Note: Any proposed works or placement of plant and equipment and/or materials within any road reserve will require the separate approval of Council, prior to the commencement of such works, pursuant to the provisions of the Roads Act 1993.

62) Consent to Enter and Exit Demolition or Construction Site

Any use of the footpath or road reserve for demolition or construction purposes requires Council consent under the Roads Act 1993.

Where it is proposed to carry out demolition activities or construction vehicles entering and leaving the site from a public road reserve and/or installation of a fence or hoarding, a consent must be obtained from Council's Regulation and Enforcement Division prior to the works commencing.

63) Sign – Supervisor Contact Details

Before commencement of any work, a sign must be erected in a prominent, visible position:

- a) stating that unauthorised entry to the work site is not permitted;
- b) showing the name, address and telephone number of the Principal Certifying Authority for the work; and
- c) showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

64) Temporary Toilet/Closet Facilities

Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided must be:

- a) a standard flushing toilet; and
- b) connected to either:

- i) the Sydney Water Corporation Ltd sewerage system or
- ii) an accredited sewage management facility or
- iii) an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

65) **Structural Engineer's Details**

Structural engineer's details for all structurally designed building works such as reinforced concrete footings, reinforced concrete slabs and structural steelwork must be submitted to the Principal Certifying Authority, prior to the commencement of any works on the site.

66) **Hoardings (within any Public Road Reserve)**

The site must be enclosed with a suitable hoarding (type A or B) or security fence of a type in accordance with the Regulation and Enforcement Division Design Standard, and must satisfy the requirements of the Occupational Health and Safety Act, the Occupational Health and Safety Regulations and Australian Standard AS 2601. An application must be lodged and a permit obtained from Council's Regulation and Enforcement Division before the erection of any such hoarding or fence. The applicant must ensure that any such Type A fencing only opens inwards into the private property.

Note: No building work must commence before the hoarding or fence is erected.

67) **Enclosure of the Site**

The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifying Authority. No building work is to commence until the fence is erected.

68) **Demolition Works**

The demolition of the existing the existing Leagues Club and associated buildings shall be carried out in accordance with Australian Standard AS2601 (2001): The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of the NSW WorkCover Authority.

No demolition materials shall be burnt or buried on-site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Any unforeseen hazardous and/or intractable wastes shall be disposed of to the satisfaction of the Principal Certifying Authority. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application shall be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.

69) **Consultation with NSW WorkCover Authority**

Prior to any work commencing on the site it is the responsibility of the owner to contact NSW WorkCover Authority in writing in respect to any demolition or use of any crane, hoist, plant or scaffolding.

70) **Demolition Notification to Surrounding Residents**

Demolition must not commence unless at least 2 days written notice has been given to adjoining residents of the date on which demolition works will commence.

71) **Hazardous Material Survey**

At least one week prior to demolition, the applicant must prepare a hazardous materials survey of the site and submit to Council a report of the results of the survey. **Hazardous materials** includes, but are not limited to, asbestos materials, synthetic mineral fibre, roof dust, PCB materials and lead based paint. The report must include at least the following information:

- a) the location of hazardous materials throughout the site;
- b) a description of the hazardous material;
- c) the form in which the hazardous material is found, eg AC sheeting, transformers, contaminated soil, roof dust;

- d) an estimation (where possible) of the quantity of each particular hazardous material by volume, number, surface area or weight;
 - e) a brief description of the method for removal, handling, on-site storage and transportation of the hazardous materials, and where appropriate, reference to relevant legislation, standards and guidelines;
 - f) identification of the disposal sites to which the hazardous materials will be taken.
- 72) **Consultation with NSW WorkCover Authority – Prior to Asbestos Removal**
The applicant or appointed contractor is to give NSW WorkCover Authority at least seven days advanced notice, prior to the removal of asbestos from the site.
- 73) **Contaminated Roof Dust**
Any existing accumulations of dust in ceiling voids and wall cavities must be removed prior to any demolition work commencing. Removal must take place by the use of an industrial vacuum fitted with a high efficiency particulate air (HEPA) filter.
- 74) **Waste Management**
The developer must provide an adequate receptacle to store all waste generated by the development pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and reusable materials.
- 75) **Supervision of Works and Notification to Council of Works in Road Reserve**
The work shall be supervised by a suitably qualified and experienced Civil Engineer, Registered Surveyor or Civil Engineering Foreman. The supervisor's name, address and contact details (including telephone number) shall be submitted to the Principal Certifying Authority and Council prior to the commencement of any works.

The submission of a written construction program and anticipated duration of the construction to Council is required prior to the commencement of any works within any public road reserve.
- 76) **Public Liability Insurance**
All contractors working in Council's road reserve and/or public reserve areas shall take out public liability insurance for a minimum amount of \$10 Million. The policy shall specifically indemnify Council from all claims arising from the execution of the works. Written evidence of this insurance shall be supplied to the Principal Certifying Authority and Council (in the event that Council is not the Principal Certifying Authority) prior to the commencement of any such works in any road reserve or public reserve area.
- 77) **Site Management Program – Sediment and Erosion Control Measures**
A site management program incorporating all sediment and erosion control measures (eg cleaning of sediment traps, fences, basins and maintenance of vegetative cover) is to be initiated prior to the commencement of any demolition, excavation or construction works and maintained throughout the demolition, excavation and construction phases of the development.
- 78) **Erosion and Sediment Control Measures**
Erosion and sediment control devices are to be installed prior to the commencement of any demolition, excavation or construction works upon the site. These devices are to be maintained throughout the entire demolition, excavation and construction phases of the development and for a minimum three (3) month period after the completion of the project, where necessary.
- 79) **All-weather Access**
An all-weather stabilised access point must be provided to the site to prevent sediment leaving the site as a result of vehicular movement. Vehicular movement should be limited to this single accessway.

80) **Tree Protection and Management**

The existing trees are to be retained upon the subject property and any trees on adjoining properties shall not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to) the following:

- a) installation of Tree Protection Fencing - Protective fencing shall be 1.8 m cyclone chainmesh fence, with posts and portable concrete footings;
- b) mulch Tree Protection Zone: Areas within a Tree Protection Zone are to be mulched with minimum 75 mm thick 100% recycled hardwood chip/leaf litter mulch;
- c) irrigate: Areas within the Tree Protection Zone are to be regularly watered in accordance with the arborist's recommendations.

The tree protection fencing shall be installed prior to the commencement of any demolition, excavation or construction works and shall be maintained throughout the entire construction phases of the development.

81) **Supervising Arborist – Tree Inspection and Installation of Tree Protection Measures**

Prior to the commencement of any demolition, excavation or construction works, the supervising arborist must certify in writing that tree protection measures have been inspected and installed in accordance with the arborist's recommendations and relevant conditions of this consent.

82) **Certification from Arborist - Adequate Protection of Trees to be Retained**

A qualified arborist is required to be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist to the Principal Certifying Authority is required which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works.

83) The depth and location of all services (ie stormwater, gas, water, sewer, electricity, telephone, etc) must be ascertained and reflected on the plans and supporting documentation issued for construction.

84) These plans should be presented to Sydney Water for their specific requirements.

85) **Vehicular Crossing**

The applicant shall remove the existing and non complying concrete vehicular crossings and replace them with a new concrete crossing to service the development in accordance with Council's current policies and standards.

The applicant shall arrange, through Council's Regulation and Enforcement Division for a Council qualified concrete contractor to carry out the works.

A copy of the approval shall be submitted to the Principal Certifying Authority prior to works commencing. The entire length of any vehicular crossings must be constructed:

- a) to Council's currently adopted standard drawings;
- b) for the full width of the footpath; and
- c) by one of Council's qualified concrete contractors at the developer's expense.

86) **Footpath Levels**

Footpath levels must be obtained from Council's Works and Services Division prior to works commencing. This can be achieved by filling out an application form and payment of the relevant fee.

All such structures and internal driveways shall be constructed to these approved levels.

The longitudinal grade of the footpath must be parallel to the top of kerb level and all building entrance adjustments for level access to building floor levels must be developed within the private property of the building in accordance with the requirements of the latest versions of AS1428.1, the Building Code of Australia and the Disability Discrimination Act. No adjustments

to the uniform and even longitudinal grade of the footpath at the boundary line will be permitted for access points to buildings.

A copy of the approved levels shall be submitted to the Principal Certifying Authority prior to works commencing.

87) **Application for Occupation of Footpath/Roadway**

Any use of the footpath or road reserve for construction purposes requires Council consent under the Roads Act 1993. Where it is proposed to carry out activities such as, but not limited to the following:

- (a) Loading or unloading machinery/equipment/deliveries;
- (b) Installation of a fence or hoarding;
- (c) Stand mobile crane/plant/concrete pump/materials/waste storage containers;
- (d) Pumping stormwater from the site to Council's stormwater drains;
- (e) Carrying out survey or investigation works;
- (f) Installation of services, including water, sewer, gas, stormwater and power;
- (g) Construction of new vehicular crossings or footpaths;
- (h) Removal of street trees;
- (i) Any activity which proposes an interruption to pedestrian and or vehicular traffic.
- (j) Carrying out demolition works
- (k) Materials or equipment delivered to and from site;

an application for occupation of footpath/roadway must be submitted to and a S.138 consent obtained from Council's Regulation and Enforcement Division prior to the works commencing.

During Demolition, Excavation or Construction

88) **Pram Ramps**

The developer must provide completed pram ramps at all kerb returns in accordance with Wollongong City Council's current standard drawings.

89) **WSUD Installation**

All the stormwater water quality improvement structures/devices stated in the WSUD Strategy prepared by K.F. Williams & Associates dated February 2011 shall be implemented.

90) **Discharge of Accumulated Water**

Any water accumulating in excavations on-site shall not be discharged to Council's stormwater system, unless it is confirmed by testing at a NATA accredited laboratory that the pH is between 6.5 and 9, suspended solids are less than 30 mg/L, and that the water is free of oil and grease. Alternatively, such waters are to be removed by tanker for disposal at a NSW Department of Environment, Climate Change and Water licensed waste facility.

91) **Demolition Materials - Disposal**

All demolition materials not being reused on-site shall be disposed of only at a recycling or waste management facility that may lawfully receive that waste.

92) **Excess Excavated Material - Disposal**

Excess excavated material must be disposed of only at a location that may lawfully receive that waste.

93) **Pipe Connections**

All pipe connections to existing pits within the road reserve must be constructed flush with the pit wall in accordance with good engineering practice. The developer must ensure that the condition of the pit is not compromised and that the service life of the pit is not reduced as a result of the connection.

- 94) **Flows from Adjoining Properties**
Flows from adjoining properties must be accepted, contained and directed to the proposed stormwater surface inlet pits on site. Finished ground levels and free standing retaining walls on the boundary shall be no higher than the existing upslope adjacent ground levels. All new fences constructed along the northern boundary of the development must incorporate a suitably sized gap beneath the fence to ensure that overland flows from adjoining up-slope properties are accepted by the development site.
- 95) **Protection of Council Infrastructure**
The developer shall provide adequate protection to all Council assets prior to work commencing and during construction. Council's Manager Design and Technical Services must be notified immediately in the event of any damage to Council's assets. Any damage to Council's assets shall be made good to the satisfaction of Council, with all associated costs borne by the developer.
- 96) **Supervision of Engineering Works**
All engineering works associated with the development are to be carried out under the supervision of a practicing civil engineer.
- 97) **Piping of Stormwater to Existing Stormwater Drainage System**
Stormwater for the land must be piped to Council's existing stormwater drainage system. Prior to undertaking the connection the developer shall obtain a permit from and arrange inspections with Council's Regulation and Enforcement Division.
- 98) **No Adverse Run-off Impacts on Adjoining Properties**
The design of the development shall ensure there are no adverse effects to adjoining properties or upon the land as a result of flood or stormwater run-off. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.
- 99) **Re-direction or Treatment of Stormwater Run-off**
Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.
- 100) **Redundant Crossings**
Any existing vehicular crossings rendered unnecessary by this development must be removed and the footpath and normal kerbing and guttering must be restored. This work shall be carried out by a Council qualified concrete contractor at the developer's expense.
- 101) **Protection of Public Places**
If the work involved in the erection or demolition of a building involves the enclosure of a public place or is likely to cause pedestrian/vehicular traffic in a public place to be obstructed or rendered inconvenient, or have the potential for conflict between pedestrians and vehicles:
- a) A hoarding or fence must be erected between the work site and the public place;
 - b) an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place;
 - c) the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in a public place;
 - d) safe pedestrian access must be maintained at all times;
 - e) any such hoarding, fence or awning is to be removed when the work has been completed.
- 102) **Temporary Road Closure(s)**
If a road closure is required, an approval must be obtained from City of Wollongong Traffic Committee and Wollongong City Council.
- Note:** It may take up to six weeks for approval. An application for approval must include a Traffic Control Plan prepared by a suitably qualified person which is to include the date and times of closure and any other relevant information. The traffic control plan shall satisfy the requirements of the latest versions of Australian Standard AS1742-Traffic Control Devices for Works on Roads and the RTA Traffic Control at Worksites Manual.

- 103) **Prior approval from Council for any works in Road Reserve**
Approval, under Section 138 of the Roads Act must be obtained from Wollongong City Council's Regulation and Enforcement Division prior to any works commencing or any proposed interruption to pedestrian and/or vehicular traffic within the road reserve caused by the construction of this development. A traffic control plan prepared and implemented by a suitably qualified person must be submitted for approval and the appropriate fees paid a minimum of five working days prior to the expected implementation. The traffic control plan shall satisfy the requirements of the latest versions of Australian Standard AS1742 – Traffic Control Devices for Works on Roads and the RTA Traffic Control at Worksites Manual.
- Note:** This includes temporary road closures for the delivery of materials, plant and equipment, concrete pours etc.
- 104) **Copy of Consent to be in Possession of Person carrying out Tree Removal**
The applicant/developer must ensure that any person carrying out tree removal/vegetation clearance is in possession of this development consent and/or the approved landscape plan, in respect to the trees/vegetation which have/has been given approval to be removed in accordance with this consent.
- 105) **Waste Inventory Report**
A Waste Inventory report must be maintained on-site during demolition work. The waste inventory is a register of all materials and waste removed from the site during the demolition work. The register must record each load or movement of material and waste from the site and must include at a minimum the following information:
- a) the description of material (including identified hazardous material);
 - b) an estimate of the quantity by volume and weight;
 - c) the transporter and registration details of the relevant vehicle; and
 - d) the intended destination of the material;
- 106) **Restricted Hours of Work (not domestic residential scale)**
The developer must not carry out any work other than emergency procedures to control dust or sediment laden runoff outside the hours of 7.00 am to 5.00 pm, Monday to Friday and 7 am to 1.00 pm Saturdays without the prior written consent of the Principal Certifying Authority and Council.
- No work is permitted on public holidays, Sundays or the Saturday adjacent to public holidays on Mondays or Fridays.
- Any request to vary these hours shall be submitted to the **Council** in writing detailing:
- a) the variation in hours required;
 - b) the reason for that variation;
 - c) the type of work and machinery to be used.
- Note:** The developer is advised that other legislation may control the activities for which Council has granted consent including but not limited to the Protection of the Environment Operations Act 1997. Developers must note that EPA Environmental Noise manual restricts use of power tools (electronic or pneumatic) to between the hours of 7.00 am to 5.00 pm Mondays to Fridays and 8.00 am to 4.00 pm on Saturdays.
- 107) The developer must carry out work at all times in a manner which will not cause a nuisance, by the generation of unreasonable noise, dust or other activity, to the owners and/or occupiers of adjoining and adjacent land.
- 108) **Dust Suppression Measures**
Activities occurring during the construction and demolition phases of the development must be carried out in a manner that will minimise the generation of dust.
- 109) Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading.

- 110) **Asbestos – Removal, Handling and Disposal Measures/Requirements Asbestos Removal by an Approved Contractor**
The removal of any asbestos material must be carried out by an approved contractor if over 10 square metres in area in strict accordance with WorkCover Authority requirements..
- 111) **Asbestos Waste Collection**
The asbestos waste must be collected and stored on-site in impermeable bags inside an adequate waste receptacle pending transportation. The receptacle must be lined and covered in accordance with the bin provider's requirements and of the Protection of the Environment Operations Waste Regulations 2005.
- 112) Asbestos waste must be prepared in accordance with WorkCover requirements and disposed of to an EPA licensed landfill site.
- 113) **Asbestos Transportation Requirements**
Transportation of asbestos from the site must comply with the Protection of the Environment Operations (Waste) Regulation 2005.
- 114) Any demolition works involving asbestos are to be carried out in accordance with the WorkCover Authority's – "*Working with Asbestos Guide 2008*". Transportation and disposal of asbestos materials shall be in accordance with EPA requirements.
- 115) **Provision of Waste Receptacle**
The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.
- 116) **External Plant and Equipment**
All external plant such as air conditioners, compressors/pumps, exhaust systems and other equipment likely to emit noise shall have suitable noise attenuation so that the equivalent continuous noise level (LAeq) emanating from the operation of external plant and equipment does not exceed 5 dB(A) above the background noise level (LA90) of the area at any boundary of the land.
- 117) **Compliance with Statutory Authorities / Government Departments**
Compliance with the requirements of any Statutory Authorities or Government Departments such as, but not limited to:
- NSW Workcover Authority;
 - NSW Roads & Traffic Authority;
 - NSW Environment Protection Authority;
 - NSW Police Service; and
 - NSW Fire Brigades.

Prior to the Issue of the Occupation Certificate

- 118) **WSUD Installation Confirmation**
Prior to issue of the Occupation Certificate, the Principal Certifying Authority shall confirm the installation of all the stormwater water quality improvement structures/devices stated in the WSUD Strategy prepared by K.F. Williams & Associates dated February 2011.
- 119) **Drainage WAE**
The developer shall obtain written verification from a suitably qualified civil engineer, stating that all stormwater drainage and related work has been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor must be submitted. These plans must include levels and location for all drainage structures and works, buildings (including floor levels), and finished ground and pavement surface levels. This information must be submitted to the Principal Certifying Authority prior to the issue of the final occupation certificate.

- 120) **Consolidation of Lots**
A final, registered plan of subdivision shall be submitted to Council evidencing consolidation of Lot 2 DP 38085 and Lot 13 DP1030814 into one Torrens Title Lot prior to the issue of the Occupation Certificate.
- 121) **Fire Safety Certificate**
A Fire Safety Certificate must be issued for the building prior to the issue of an Occupation Certificate. As soon as practicable after a Fire Safety Certificate is issued, the owner of the building to which it relates:
- a) Must cause a copy of the certificate (together with a copy of the current fire safety schedule) to be given to the Commissioner of New South Wales Fire Brigades, and
 - b) must cause a further copy of the certificate (together with a copy of the current fire safety schedule) to be prominently displayed in the building.
- 122) **Access Certification**
Prior to the occupation of the building, the Principal Certifying Authority must ensure that a certificate from an “accredited access consultant” has been issued certifying that the building complies with the requirements of AS 1428.1.
- 123) **Retaining Wall Certification**
The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the Principal Certifying Authority is required, prior to the issue of the Occupation Certificate or commencement of the use. This certification is required to verify the structural adequacy of the retaining walls and that the retaining walls have been constructed in accordance with plans approved by the Principal Certifying Authority.
- 124) **Waste Inventory**
A copy of the Waste Inventory which was maintained on-site during the demolition work and copies of relevant receipts of waste material being deposited at a waste disposal facility shall be forwarded to the Principal Certifying Authority and Council’s Environment and Health Division (in the event that Council is not the Principal Certifying Authority), prior to the issue of the Occupation Certificate or commencement of the use.
- 125) The developer must make compensatory provision for the trees required to be removed as a result of the development. In this regard, eighteen (18 No.) 75 litre container advanced mature plant stock shall be placed within the property boundary of the site in appropriate locations. The suggested species are to be selected from the following list:
- Eucalyptus cladoclayx ‘Vintage Red’,
 - Waterhousea floribunda ‘Sweeper’
 - Syzygium smithii (formerly Acmena smithii) Lilly pilly,
 - Archontophoenix cunninghamiana Bangalow palm,
 - Backhousia myrtifolia Grey myrtle,
 - Elaeocarpus reticulatus Blueberry ash,
 - Glochidion ferdinandii Cheese tree,
 - Livistona australis Cabbage palm tree,
 - Syzygium paniculatum Brush cherry;
- A further list of suitable suggested species may be found in Wollongong Development Control Plan 2009 – Chapter E6: Landscaping.

Operational Phases of the Development/Use of the Site

- 126) **WSUD Operation and Maintenance**
Section 9.0 WSUD Operation and Maintenance of the WSUD Strategy prepared by K.F. Williams & Associates dated February 2011 shall be followed.

- 127) **Stormwater Water Quality**
Stormwater water quality leaving the site shall comply with the ANZECC water quality guidelines for recreational waters.
- 128) **Restricted Delivery Hours**
The delivery of service trucks shall be limited to 6.30 am to 9.00 pm daily, Mondays to Fridays and 8.00 am to 5.00 pm Saturdays only. Any alteration to the approved delivery hours will require the separate approval of Council.
- 129) **Clothes Drying on Balconies/Terrace Areas Prohibited**
The use of the balconies/terrace areas for the external drying of clothes is strictly prohibited.
- 130) **Loading/Unloading Operations/Activities**
All loading/unloading operations are to take place at all times wholly within the confines of the site.

Reasons

The reasons for the imposition of the conditions are:

- 1 To minimise any likely adverse environmental impact of the proposed development.
- 2 To ensure the protection of the amenity and character of land adjoining and in the locality.
- 3 To ensure the proposed development complies with the provisions of Environmental Planning Instruments and Council's Codes and Policies.
- 4 To ensure the development does not conflict with the public interest.