Attachment 4: WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT

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

Generally speaking, the proposal is considered to be consistent with the principles of Ecologically Sustainable Development

CHAPTER B4 – DEVELOPMENT IN BUSINESS ZONES

The development is located in a business zone and as such this chapter is applicable to the development. An assessment against the relevant sections is outlined below.

9 General design requirements for retail and business premises developments

9.2 Development Controls

9.2.1 Floor Configuration

* An even transition is provided between the building and the footpath.
* Floor to ceiling height of the commercial tenancies on ground floor is greater than 3.3m.

An access report has been submitted detailing compliance with transitions at street level.

9.2.2 Building Appearance

* The building is considered to be designed to provide character, visual legibility and human scale and to delineate the distinct uses.
* The façade is suitable broken into a base, middle and top
* Curtain wall glazing is not proposed
* Reflectivity from the proposal is not expected to be significant.

Improvements have been made to the build form with the rationalising of floor levels and a slimmer tower proposed.

9.2.3 Building Alignment

The building is aligned with the property boundary and footpath.

9.2.4 Active Street Frontages

Ground floor commercial proposed providing active street frontages.

9.2.5 Urban Design / Streetscape Appearance

* Appropriate horizontal and vertical emphasis is provided to the building.
* High quality, durable finishes are proposed.
* An schedule of materials and finishes has been provided.

A schedule of materials and finishes is provided which is acceptable.

9.2.6 Pedestrian Access

The site is not identified as being one where a through site link is required.

9.2.7 Awnings

Suitable awnings are provided to street frontage.

9.2.8 Public Domain – Footpath Paving

New footpath and street tree planting is required.

9.2.9 Solar access and overshadowing

Shadow diagrams and view from the sun diagrams are provided.

9.2.10 Shower and Change Facilities & Parenting Facilities in Large Business Premises / Commercial Office Buildings

N/A

9.2.11 Advertising Signage

N/A- none proposed.

9.2.12 Wind Impact Assessment

Not required.

9.2.13 Access, Car parking and Servicing

See Chapter E3

9.2.14 Access for People with a Disability

See Chapter E1

9.2.15 Land Consolidation

Lot consolidation is required if the application is approved.

13 Works in the public domain

Footpath and street tree planting required on Parkinson Street.

CHAPTER D13 – WOLLONGONG CITY CENTRE

2 Building form

| *Objectives/controls* | *Comment* |
| --- | --- |
| 2.2 Building to street alignment and street setbacks |  |
| Build to street alignment | Complies |
| 2.3 Street frontage heights in commercial core |  |
| 12-24m street frontage height with 4m minimum setback above. | The proposed street frontage height is 13.3m. |
| 2.4 Building depth and bulk |  |
| Maximum 18m depth. | Complies |
| 2.5 Side and rear building setbacks and building separation |  |
|  | Clause 4.6 submission received. |
| 2.6 Mixed used buildings |  |
| 1. a) Provide flexible building layouts which allow variable tenancies or uses on the first two floors of a building above the ground floor. 2. b) Minimum floor to ceiling heights are 3.3 metres for commercial office and 3.6 metres for active public uses, such as retail and restaurants in the B3 Commercial Core zone. In the B4 Mixed Use zone, the ground floor and first levels of a building shall incorporate a minimum 3 metre floor to ceiling height clearance, to maximise the flexibility in the future use of the building. 3. c) Separate commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook. 4. d) Locate clearly demarcated residential entries directly from the public street. 5. e) Clearly separate and distinguish commercial and residential entries and vertical circulation. 6. f) Provide security access controls to all entrances into private areas, including car parks and internal courtyards. 7. g) Provide safe pedestrian routes through the site, where required. 8. h) Front buildings onto major streets with active uses. 9. i) Avoid the use of blank building walls at the ground level. 10. j) For mixed use buildings that include food and drink premises uses, the location of kitchen ventilation systems shall be indicated on plans and situated to avoid amenity impacts to residents. | Commercial/retail land uses have been provided on ground floor as per the requirements of shop top housing. |
| 2.7 Deep soil zone |  |
| For residential components in mixed use developments in the Commercial Core, Mixed Use (city edge) and Enterprise zones, the amount of deep soil zone may be reduced commensurate with the extent of non-residential uses. Where non-residential components result in full site coverage and there is no capacity for water infiltration, the deep soil component must be provided on structure | No deep soil zone is provided as the site is located within a commercial zone. |
| 2.8 Landscape design |  |
| * Chapter E6 – Landscaping and Public Domain Technical Manual to be considered. * Landscape management plan required. | Satisfactory |
| 2.9 Green roofs, green walls and planting on structures |  |
| Various controls. | Council’s Landscape officer has reviewed the landscaped areas proposal and has given a satisfactory referral. |
| 2.10 Sun access planes |  |
|  | N/A |
| 2.11 Development on classified roads |  |
|  | N/A |

3 Pedestrian amenity

| *Objectives/controls* | *Comment* |
| --- | --- |
| 3.2 Permeability |  |
| N/A |  |
| 3.3 Active street frontages |  |
| 1. a) In commercial and mixed use development, active street fronts are encouraged in the form of non residential uses on ground level. 2. b) Active street fronts in the form of non-residential uses on ground level are required along streets, lanes and through site links shown in Figure 3.4 for all buildings in the Commercial Core and Tourist zones, and for mixed use buildings in the Mixed Use (city edge) and Enterprise zones. 3. c) Active ground floor uses are to be at the same general level as the footpath and be accessible directly from the street. 4. d) For all non-residential ground floor frontages outside the streets shown in Figure 3.4, provide clear glazing where ever possible to promote passive surveillance and contribute to street activity. 5. e) Restaurants, cafes and the like are to consider providing openable shop fronts. 6. f) Residential developments are to provide a clear street address and direct pedestrian access off the primary street front, and allow for residents to overlook all surrounding streets. 7. g) Provide multiple entrances for large developments including an entrance on each street frontage. | Complies- ground floor business premises proposed, |
| 3.4 Safety and security |  |
| 1. a) Ensure that the building design allows for casual surveillance of accessways, entries and driveways. 2. b) Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and carparks. 3. c) Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering. 4. d) Where private open space is located within the front building alignment any front fencing must be of a design and/or height which allows for passive surveillance of the street. 5. e) Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption and glare nuisance. 6. f) Provide clear lines of sight and well-lit routes throughout the development. 7. g) Where a pedestrian pathway is provided from the street, allow for casual surveillance of the pathway. 8. h) For large scale retail and commercial development with a GFA of over 5,000m², provide a ‘safety by design’ assessment in accordance with the CPTED principles. 9. i) Provide security access controls where appropriate. 10. j) Ensure building entrance(s) including pathways, lanes and arcades for larger scale retail and commercial developments are directed to signalised intersections rather than mid-block in the Commercial zone, Mixed Use (city edge) and Enterprise Corridor zones. | Satisfactory |
| 3.5 Awnings |  |
| 1. a) Continuous street frontage awnings are to be provided for all new developments as indicated in Figure 3.6. 2. b) Awning design must match building facades and be complementary to those of adjoining buildings. 3. c) Wrap awnings around corners for a minimum six metres from where a building is sited on a street corner. 4. d) Awnings dimensions should generally be: 5. i) Minimum soffit height of 3.3 metres, 6. ii) Low profile, with slim vertical facias or eaves (generally not to exceed 300mm height), 7. iii) Setback a minimum of 1.2 metres from the kerb, and 8. iv) Generally minimum 2.4 metres deep. 9. e) To control sun access/protection, canvas blinds along the street edge may be permitted, subject to design merit and assessment. 10. f) Signage on blinds is not permitted. 11. g) Provide under awning lighting to facilitate night use and to improve public safety | Awning proposed at street frontage. |
| 3.6 Vehicular footpath crossings |  |
| One vehicle access point generally not from primary frontage. | Complies, reviewed by Council’s Traffic Engineer. |
| Maximum 5.4m crossover width. |  |
| Doors to vehicle access points are to be roller shutters or tilting doors fitted behind the building façade. |  |
| Vehicle entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No service ducts or pipes are to be visible from the street. |  |
| 3.7 Pedestrian overpasses, underpasses and encroachments | N/A |
|  |  |
| 3.8 Building exteriors |  |
| a) Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of:  i) Appropriate alignment and street frontage heights.  ii) Setbacks above street frontage heights.  iii) Appropriate materials and finishes selection.  iv) Façade proportions including horizontal or vertical emphasis.  v) The provision of enclosed corners at street intersections. | Improvements have been made to the side setbacks and the relationship with the adjoining property to the east. |
| b) Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings are encouraged. |  |
| c) Articulate facades so that they address the street and add visual interest. |  |
| d) External walls should be constructed of high quality and durable materials and finishes with ‘selfcleaning’ attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. |  |
| e) Finishes with high maintenance costs, those susceptible to degradation or corrosion from a coastal or industrial environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided. |  |
| f) To assist articulation and visual interest, avoid expanses of any single material. |  |
| g) Limit opaque or blank walls for ground floor uses to 30% of the street frontage. |  |
| h) Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass. |  |
| i) Highly reflective finishes and curtain wall glazing are not permitted above ground floor level (see Section 5.3). |  |
| j) A materials sample board and schedule is required to be submitted with applications for development over $1 million or for that part of any development built to the street edge. |  |
| k) Minor projections up to 450mm from building walls in accordance with those permitted by the Building Code of Australia may extend into the public space providing it does not fall within the definition of gross floor area and there is a public benefit, such as:  i) Expressed cornice lines that assist in enhancing the streetscape,  ii) Projections such as entry canopies that add visual interest and amenity, and  iii) Provided that the projections do not detract from significant views and vistas (see Figure 3.12).  l) The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building. |  |
| 3.9 Advertising and signage | N/A |
|  |  |
| 3.10 Views and view corridors |  |
| a) Existing views shown in Figure 3.12 are to be protected to the extent that is practical in the planning and design of development.  b) The redevelopment of sites with potential to open a blocked view shown in Figure 3.12 must take into account the restoration of that view.  c) Align buildings to maximise view corridors between buildings.  d) Remove or avoid installation of built elements that obstruct significant views.  e) Carefully consider tree selection to provide views along streets in Figure 3.12 and keep under storey planting low where possible.  f) Site analysis must address views with the planning and design of building forms taking into account existing topography, vegetation and surrounding development. | Satisfactory, Crown Street tower has been removed from this application. |

4 Access, parking and servicing

| *Objectives/controls* | *Comment* |
| --- | --- |
| 4.2 Pedestrian access and mobility |  |
| a) Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or highquality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.  b) The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, AS 2890 Pt 1, or as amended) and the Disability Discrimination Act 1992 (as amended).  c) The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.  d) The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access.  e) Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours in accordance with Council’s Public Domain Technical Manual.  f) Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1:2001, AS/NZS 2890.1:2004 and the Disability Discrimination Act. | Satisfactory, Access Report provided. |
| 4.3 Vehicular driveways and manoeuvring areas |  |
| a) Driveways should be:  i) Provided from lanes and secondary streets rather than the primary street, wherever practical.  ii) Located taking into account any services within the road reserve, such as power poles, drainage pits and existing street trees.  iii) Located a minimum of 6 metres from the perpendicular of any intersection of any two roads.  iv) If adjacent to a residential development setback a minimum of 1.5m from the relevant side property boundary.  b) Vehicle access is to be designed to:  i) Minimise the impact on the street, site layout and the building façade design; and  ii) If located off a primary street frontage, integrated into the building design.  c) All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn.  d) Design of driveway crossings must be in accordance with Council’s standard Vehicle Entrance Designs, with any works within the footpath and road reserve subject to a s138 Roads Act approval.  e) Driveway widths must comply with the relevant Australian Standards.  f) Car space dimensions must comply with the relevant Australian Standards.  g) Driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standard, (AS 2990.1).  h) Vehicular ramps less than 20m long within developments and parking stations must have a maximum grade of 1 in 5 (20%). Ramp widths and design must be in accordance with AS 2890.1.  i) Access ways to underground parking should not be located adjacent to doors or windows of the habitable rooms of any residential development.  j) For residential development in the General Residential zone, use semi-pervious materials for all uncovered parts of driveways/spaces to provide for some stormwater infiltration. | Satisfactory. Reviewed by Council’s Traffic Engineer. |
| 4.4 On-site parking |  |
| General (all development)  a) On-site parking must meet the relevant Australian Standard (AS2890.1 2004 – Parking facilities, or as amended).  b) Council may require the provision of a supporting geotechnical report prepared by an appropriately qualified professional as information to accompany a development application to Council.  c) Car parking and associated internal manoeuvring areas which are surplus to Council’s specified parking requirements will count towards the gross floor area, but not for the purpose of determining the necessary parking.  d) Any car parking provided in a building above ground level is to have a minimum floor to ceiling height of 2.8m so it can be adapted to another use in the future.  e) On-site vehicle, motorcycle and bicycle parking is to be provided in accordance with Part E of this DCP.  f) To accommodate people with disabilities, provide a minimum of 1% of the required parking spaces, or minimum of 1 space per development, (whichever is the greater) as an appropriately designated and signed disabled parking space. | Complies with residential parking requirements. |
|  |  |
| 4.5 Site facilities and services |  |
| Mail boxes  a) Provide letterboxes for residential building and/or commercial tenancies in one accessible location adjacent to the main entrance to the development.  b) They should be integrated into a wall where possible and be constructed of materials consistent with the appearance of the building.  c) Letterboxes shall be secure and large enough to accommodate articles such as newspapers. | Satisfactory, to be conditioned. |
| Communication structures, air conditioners and service vents  a) Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures:  i) Away from the street frontage,  ii) Integrated into the roof scape design and in a position where such facilities will not become a skyline feature at the top of any building, and  iii) Adequately setback from the perimeter wall or roof edge of buildings.  b) A master antennae must be provided for residential apartment buildings. This antenna shall be sited to minimise its visibility from surrounding public areas. | Satisfactory |
| Waste (garbage) storage and collection | Improvements have been made to the basement waste storage design. |
| General (all development)  a) All development is to adequately accommodate waste handing and storage on-site. The size, location and handling procedures for all waste, including recyclables, is to be determined in accordance with Council waste policies and advice from relevant waste handling contractors.  b) Access for waste collection and storage is preferred from rear lanes, side streets or rights of ways.  c) Waste storage areas are to be designed to:  i) Ensure adequate driveway access and manoeuvrability for any required service vehicles,  ii) Located so as not to create any adverse noise impacts on the existing developments or sensitive noise receptors such as habitable rooms of residential developments, and  iii) Screened from the public way and adjacent development that may overlook the area.  d) The storage facility must be well lit, easily accessible on grade for movement of bins, free of obstructions that may restrict movement and servicing of bins or containers and designed to minimise noise impacts. |  |
| Location requirements for Waste Storage Areas and Access  a) Where waste volumes require a common collection, storage and handling area, this is to be located:  i) For residential flat buildings, enclosed within a basement or enclosed carpark,  ii) For multi-housing, at ground behind the main building setback and façade, or within a basement or enclosed carpark,  iii) For commercial, retail and other development, on-site in basements or at ground within discrete service areas not visible from main street frontages.  b) Where above ground garbage collection is prohibitive or impractical due to limited street frontage, or would create an unsafe environment, an on-site basement storage area must be provided.  c) Where a mobile compaction vehicle is required to enter the site, the access and circulation area shall be designed to accommodate the likely vehicle. | Complies, storage areas provided. |
| Service docks and loading/unloading areas  a) Provide adequate space within any new development for the loading and unloading of service/delivery vehicles.  b) Preferably locate service access off rear lanes, side streets or rights of way.  c) Screen all service doors and loading docks from street frontages and from active overlooking from existing developments.  d) Design circulation and access in accordance with AS2890.1. |  |
| Fire service and emergency vehicles  a) For developments where a fire brigade vehicle is required to enter the site, vehicular access, egress and manoeuvring must be provided to, from and on the site in accordance with the NSW Fire Brigades Code of Practice – Building Construction – NSWFB Vehicle Requirements.  b) Generally, provision must be made for NSW Fire Brigade vehicles to enter and leave the site in a forward direction where:  i) NSW Fire Brigade cannot park their vehicles within the road reserve due to the distance of hydrants from the building or restricted vehicular access to hydrants; or  ii) The site has an access driveway longer than 15m. | Satisfactory |
| Utility Services  The provision of utility services and access for regular servicing and maintenance must be considered at the concept stage of site development.  a) Development must ensure that adequate provision has been made for all essential services including water, sewerage, electricity and telecommunications and stormwater drainage to the satisfaction of all relevant authorities.  b) The applicant must liaise with the relevant power authority with regard to the need for a conduit to be installed within the foot way area for the future provision of an underground power supply and extension of the conduit up to the wall of the existing or proposed building.  c) The development must ensure that ready connection of the building(s) can be made in future when underground power is installed and the overhead connection is replaced with a connection to the underground line.  d) The applicant must liaise with the power authority with regard to the retention, relocation, or removal of any existing power pole. | Satisfactory |

5 Environmental management

| *Objectives/controls* | *Comment* |
| --- | --- |
| 5.2 Energy efficiency and conservation |  |
| Residential: Comply with BASIX | Complies |
| Non-residential:  a) Improve the control of mechanical space heating and cooling by:  i) Designing heating/cooling systems to target only those spaces which require heating or cooling, not the whole building.  b) Improve the efficiency of hot water systems by:  i) Insulating hot water systems, and  ii) Installing water saving devices, such as flow regulators, 3.5 stars rated shower heads, dual flush toilets and tap aerators.  c) Reduce reliance on artificial lighting and designing lighting systems to target only those spaces which require lighting at any particular ‘off peak’ time, not the whole building.  An energy efficiency report from a suitably qualified consultant is to accompany any development application for non-residential development with a construction cost of $1million or greater. This report must demonstrate commitment to achieving a minimum of 4 stars Green Star rating (design and as built tool) or 4 stars NABERS rating (energy tool) for the development). |  |
| 5.3 Water conservation |  |
| Residential: Comply with BASIX | Basix Certificate submitted with the development. |
| Non-residential:  a) The following water saving measures are to be incorporated into non-residential building. Water fixtures (shower heads, taps, toilets, urinals etc) are to be 3.5 stars or better rated.  i) Appliances (dishwashers, clothes washers etc) are to be 3.5 stars or better rated with respect to water use efficiency. Demonstrate, if necessary, how these requirements will be achieved for replacement appliances, appliances not installed at construction or bought in by occupants following construction,  ii) Stormwater runoff control, capture and reuse, including water quality management in accordance with Council’s guidelines,  iii) Select water efficient plants and/or, indigenous vegetation for landscape in accordance with Council’s recommendations,  iv) Use non-potable water for watering gardens and landscape features, and  v) Operating details for swimming pools and water features including filling, draining and maintenance activities. Covers are to be included in the design and operational aspects of swimming pool installations. |  |
| 5.4 Reflectivity |  |
| a) New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers.  b) Visible light reflectivity from building materials used on facades of new buildings should not exceed 20%.  c) Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians or motorists may be required. | Satisfactory, Reflectivity Report submitted (Windtech27/10/20). |
| 5.5 Wind mitigation |  |
| A Wind Effects Report is to be submitted with the DA for all buildings greater than 32m in height. | N/A |
| 5.6 Waste and recycling |  |
| a) Development applications for all non-residential development must be accompanied by a waste management plan that addresses:  i) Best practice recycling and reuse of construction and demolition materials,  ii) Use of sustainable building materials that can be reused or recycled at the end of their life,  iii) Handling methods and location of waste storage areas in accordance with the provisions of Section 4.4.3 of this DCP, such that handling and storage has no negative impact on the streetscape, building presentation or amenity of occupants and pedestrians, and  iv) Procedures for the on-going sustainable management of green and putrescible waste, garbage, glass, containers and paper, including estimated volumes, required bin capacity and on-site storage requirements. | A Waste Management Plan has been provided. |
| Residential development  Provision must be made for the following waste generation:  a) In developments not exceeding six dwellings, individual waste storage facilities may be permitted.  b) In development of more than six units or dwellings, or where the topography or distance to the street collection point makes access difficult for individual occupants, a collection and storage area is required. The storage area must be located in a position which is;  i) Not visible from the street,  ii) Easily accessible to dwelling occupants,  iii) Accessible by collection vehicles (or adequately managed by the body corporate to permit relocation of bins to the approved collection point),  iv) Has water and drainage facilities for cleaning and maintenance, and  v) Does not immediately adjoin private open space, windows or clothes drying areas.  c) Subject to Council collection policy, common garbage storage areas must be sized to either accommodate the number of individual bins required or to accommodate sufficient larger bins | Waste storage areas have been improved. |

6 Residential development standards

| *Objectives/controls* | *Comment* |
| --- | --- |
| 6.2 Housing choice and mix |  |
| 10% studio/one bedroom  10% three or more bedrooms | A total of 54 units are proposed comprising 7x1b/r units, 32 x 2b/r units, 8x3b/r and 7 x4b/r units. |
| 10% adaptable |  |
| The Development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995). | Complies |
| 6.3 Dwelling houses |  |
| N/A |  |
| 6.4 Multi dwelling housing |  |
| N/A |  |
| 6.5 Dual occupancy |  |
| N/A |  |
| 6.6 Basement Carparks |  |
| Integrate the siting, scale and design of basement parking into the site and building design. | Complies |
| 6.7 Communal open space |  |
| 5m² per dwelling communal open space | Complies,429sqm of COS provided on level 3. |
| must be easily accessible and within a reasonable distance from apartments, be integrated with site landscaping, allow for casual social interaction and be capable of accommodating recreational activities. |  |
| must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21 |  |
| 6.8 Private open space |  |
| i) Avoid locating the primary balconies where they address side setbacks.  ii) The balcony must have a minimum area of 12m2 open space a minimum depth of 2.4 metres.  iii) The primary balcony of at least 70% of the dwellings within a multi dwelling housing development shall receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.  iv) Balconies must be designed and positioned to ensure sufficient light can penetrate into the building at lower levels.  v) Individual balcony enclosures are not supported. Balcony enclosures must form part of an overall building façade design treatment and should not compromise the functionality of a balcony as a private open space area. | Minimum balcony sizes and depths are met. |
| 6.9 Overshadowing |  |
| a) The design of the development must have regard to the existing and proposed level of sunlight which is received by living areas and private open space areas of adjacent dwellings. Sensitive design must aim to retain the maximum amount of sunlight for adjacent residents. Council will place greatest emphasis on the retention of sunlight within the lower density residential areas.  b) Adjacent residential buildings and their public spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.  c) In determining access to sunlight, overshadowing by fences, roof overhangs and changes in level must be taken into consideration. Overshadowing by vegetation should also be considered, where dense vegetation appears as a solid fence. Refer to Land and Environment Court Planning Principles – Parsonage vs Ku-Rin-Gai Council (2004).  d) In areas undergoing change, the impact of overshadowing on development likely to be built on adjoining sites must be considered, in addition to the impacts on existing development. | Shadow diagrams and view from sun diagrams have been provided illustrating the impacts to the adjoining development. |
| 6.10 Solar access |  |
| a) Residential apartment buildings must aim to maximise their level of northern exposure to optimise the number of dwellings having a northern aspect. Where a northern aspect is available, the living spaces and balconies of such apartments must typically be orientated towards the north.  b) The development must maximise the number of apartments with a dual orientation. Single aspect, single storey apartments should preferably have a northerly or easterly aspect and a reduced depth to allow for access of natural light to all habitable spaces.  c) Shading devices should be utilised where necessary, particularly where windows of habitable rooms are located on the western elevation.  d) The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm.  e) The number of single aspect apartments with a southerly aspect (south-westerly to south-easterly) is limited to a maximum of 10% of the total number of apartments proposed.  f) Provide vertical shading to eastern and western windows. Shading can take the form of eaves, awnings, colonnades, balconies, pergolas, external louvres and planting. | Complies- Refer to comments in ADG compliance table. |
| 6.11 Natural ventilation |  |
| 10-18m building depth maximum |  |
| Minimum of (60%) of all residential apartments shall be naturally cross ventilated. | Complies- Refer to comments in ADG compliance table |
| Twenty five percent (25%) of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, the back of the kitchen must be no more than 8m from a window. |  |
| Single aspect apartments must be limited in depth to 8m from a window. |  |
| 6.12 Visual privacy |  |
| 1. 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.  2. The internal layout of buildings should be designed to minimise any direct overlooking impacts occurring upon habitable rooms and private balcony / open space courtyards, wherever possible by separating communal open space and public domain areas from windows of rooms, particularly sleeping room and living room areas.  3. Buildings are to be designed to increase privacy without compromising access to sunlight and natural ventilation through the following measures:  (a) Off-setting of windows in new buildings from windows in existing adjoining building(s).  (b) Recessed balconies and / or vertical fin elements between adjoining balconies to improve visual privacy.  (c) Provision of solid, semi-solid or dark tinted glazed balustrading to balconies.  (d) Provision of louvers or screen panels to windows and / or balconies.  (e) Provision of perimeter landscaped screen / deep soil planting.  (f) Incorporating planter boxes onto apartment balconies to improve visual separation between apartments within the development and adjoining buildings.  (g) Provision of pergolas or shading devices to limit overlooking of lower apartments or private open space courtyards / balconies. | Refer to comments in ADG compliance table |
| 6.13 Acoustic Privacy |  |
| 1. Residential apartments should be arranged in a mixed-use building, to minimise noise transition between apartments by:  (a) Locating busy, noisy areas next to each other and quieter areas, next to other quieter areas (eg living rooms with living rooms and bedrooms with bedrooms);  (b) Using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas; and  (c) Minimising the amount of party (shared) walls with other apartments.  2. All residential apartments within a mixed use development should be designed and constructed with double-glazed windows and / or laminated windows, solid walls, sealing of air gaps around doors and windows as well as insulating building elements for doors, walls, roofs and ceilings etc; to provide satisfactory acoustic privacy and amenity levels for occupants within the residential and / or serviced apartment(s).  3. Noise transmission from common corridors or outside the building is to be minimised by providing seals at entry doors.  Field Sound Transmission Class to comply | Satisfactory |
| 6.14 Storage |  |
|  | Satisfactory storage areas are provided in the basement and units. |

7 Planning controls for special areas

The site is not located within a special area.

8 Works in the public domain

New footpath and street trees are to be provided in accordance with Council policy.

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

An Access Report has been submitted with the application (Access Link Consulting, 12/11/20) demonstrating compliance with relevant Australian Standards.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The proposal is considered to be satisfactory with regard to the Principles of Crime Prevention Through Environmental Design.

There are not considered to be undesirable concealment or entrapment opportunities.

Access to residential car park area is secure.

Passive surveillance of the street is provided.

There are no blind corners.

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

6 Traffic impact assessment and public transport studies

6.1 Car Parking and Traffic Impact Assessment Study

A traffic impact assessment was submitted with the proposal.

The traffic impact assessment has been reviewed by Council’s Traffic Officer.

The application proposes a total of 69 car spaces, 28 bicycle spaces, 5 motorcycle spaces in a multi-level basement car parking area.

8 Vehicular access

Driveway grades and sight distances comply.

9 Loading / unloading facilities and service vehicle maneuvering

The development complies with AS 2890.2. Waste servicing will occur on-site.

10 Pedestrian access

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

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

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

CHAPTER E6: LANDSCAPING

The landscaped areas are consistent with the requirements of this chapter. A satisfactory referral has been received and conditions imposed.

CHAPTER E7: WASTE MANAGEMENT

A Site Waste Minimisation and Management Plan has been provided in accordance with this chapter.

The proposal involves demolition of all existing structures and a demolition plan and Hazardous Materials Survey have been provided.

The proposal provides separate commercial and residential waste storage rooms and on-site servicing arrangements.

CHAPTER E12 GEOTECHNICAL ASSESSMENT

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

CHAPTER E14 STORMWATER MANAGEMENT

Stormwater management and disposal is in accordance with this chapter. A satisfactory referral has been received. The application proposes a new stormwater line to be connected to an existing drainage pit in Parkinson Street.

CHAPTER E13 FLOODPLAIN MANAGEMENT

The proposal has been amended to provide for an overland flow path for stormwater. This has been assessed and found satisfactory from Council’s Stormwater Engineers.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

The proposed earthworks are satisfactory with regard to this chapter.

CHAPTER E20 CONTAMINATED LAND MANAGEMENT

The proposal has been supported by a Detailed Site Investigation Stage 2 report (Aargus Pty Ltd, 10 March 2020). The recommendations of that report have been reviewed by Council’s Environment Officer and a satisfactory referral has been received.

CHAPTER E21 DEMOLITION AND HAZARDOUS BUILDING MATERIALS MANAGEMENT

Should the application be approved, conditions of consent are recommended with respect to demolition.

CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL

Should the application be approved, conditions of consent are recommended in regard to appropriate sediment and erosion control measures to be in place during works.