

Appendix BB - Willoughby Development Control Plan Compliance Table

Section	Consistency
Part B: Residential Development	
2.1 General Performance Criteria	
2.1.1 Subdivision	The proposal seeks approval for a Torrens Title subdivision as

2.1.1 Subdivision

The objective is to ensure new allotments have access to services and facilities and that subdivided land has the capacity for the proposed development on the individual lots.

The subdivision of land should:

- a. Provide adequate services including water supply, sewerage, electricity, gas, and telecommunication facilities.
- b. Demonstrate stormwater disposal by gravity to Willoughby Council's street drainage system or, if this is not possible, that an inter allotment drainage easement can be established over downstream property or properties.
- c. Ensure each new dwelling within a multi dwelling or attached dwelling development has a frontage to a public road or a properly constructed internal private road.
- d. Ensure all allotments are provided with a constructed driveway, including access along the entire access handle of battle-axe allotments
- e. Demonstrate that each allotment has the capacity to be developed for the purposes of a dwelling house, dual occupany, multi dwelling housing or attached dwelling (this may require a concept plan showing building envelopes

Architectural Plans at Appendix A).

2.1.2 Site area and lot dimensions

The objective is to ensure allotments have sufficient area to allow the effective siting of developments with a good relationship to adjoining development.

The site area and lot dimensions should:

- a. ensure adequate provision is made for usable open space and sufficient area for landscaping, including deep soil zones that can support tree planting
- b. allow convenient vehicle access and parking
- c. enable erection of buildings that do not unduly overshadow adjoining properties
- have regard to topographical constraints and retention of trees
- e. enable effective onsite control of stormwater
- reduce the instances of isolated properties being left with reduced development potential on land that permits medium and high-density residential development

The proposal has been designed to:

• provide for sufficient landscaping area inclusive of deep soil zones that can support tree planting;

described in the Statement of Environmental Effects (SEE)

and illustrated in the Subdivision Plan at Appendix AA. Both

allotments will be appropriately serviced in response to the

needs outlined by Ausgrid and Sydney Water, provided at

Appendix #. Both allotments will be provided with

separated vehicular and pedestrian access (refer to

- provide for vehicular access into the ILUs;
- provide a built form that minimises overshadowing impacts to adjoining properties;
- respond to the site's undulating topography; and
- incorporate adequate on-site control of stormwater. Further information is provided in the Architectural Design Statement prepared by Antoniades Architecture and provided at Appendix B.

2.1.3 Setbacks

The objective is to ensure the siting of buildings provide adequate separation for the amenity of residents, provide adequate space for landscaping (including deep soil zones) and solar access, and minimise overshadowing. Setbacks should:

- a. progressively increase as the height of the external wall increases to reduce bulk and overshadowing
- b. reinforce the streetscape character of the locality
- d. ensure that garages and carports, or access to underground parking, do not dominate the streetscape

Appropriate setbacks have been provided for both the clubhouse and ILUs which have been informed by the surrounding development and influenced by the site's undulating topography. The clubhouse building is proposed to align with the setback of the neighbouring residential property to ensure consistency on the streetscape. A varied setback from the eastern boundary has been provided, spanning from 3m to 19.58m. It is acknowledged there are pinch points due to the unique site allotment shape which have been addressed through privacy screening to obscure views into and out of the neighbouring residential property. Further justification of the setbacks is provided in **Section 4.4.3** of the SEE.

2.1.4 Design

The objective is to encourage good environmental outcomes and a high standard of architectural design. The design of buildings should:

- a. provide durability, resilience and environmental sustainability over the long term
- b. minimise overshadowing, overlooking and visual impacts on the streetscape and adjoining and adjacent properties
- minimise carbon emissions with the sustainable choice of materials
- d. use materials with a low Solar Reflectance Index (SRI) and incorporate shade structures to reduce urban heat island effects
- e. ensure that residential buildings address the street and incorporate a visible and readily identifiable entry point
- avoid open under-croft spaces, particularly when viewed from the street and other public places
- h. ensure the orientation promotes, as far as possible, passive heating and cooling for thermal comfort and reduced carbon emissions due to mechanical heating and cooling
- i. ensure the orientation, siting and height provides for reasonable sharing of views from surrounding properties and the public domain
- i. provide articulation to break up the length of walls to reduce the bulk and visual impacts
- k. respect the visual and aural privacy of adjoining properties by effective siting, layout and location of windows and balconies to avoid direct overlooking
- l. maintain a reasonable level of solar access to adjoining properties by careful siting, height, and orientation of buildings
- m. locate noise sensitive rooms and private open spaces away from noise sources such as busy roads and railway lines

The proposal has been designed by Antoniades Architects. A Architectural Design Statement providing a detailed overview of the guiding principles that have informed the proposal's design is provided at **Appendix B**. Further assessment of the proposal's built form has been provided in **Section 4.4** of the SEE.

2.1.5 Landscaping

The objective is to achieve good environmental outcomes and enhance the visual quality of the locality. Landscaped areas should:

- a. retain significant trees and be sensitive to site attributes such as land capability (soil type and slope), microclimate (especially access to sunlight), views and natural features
- b. include deep soil zones located primarily along the street frontage, and side and rear boundaries of individual lots these are areas of soil unimpeded by buildings or structures above or below ground

A Landscape Design Intent Statement has been prepared by SiteDesign Studios and is provided at **Appendix E** providing an overview of the landscape treatment. Landscape Plans are provided at **Appendix D**. Existing trees have been retained where possible and significant additional planting is proposed throughout the site to integrate the built form into its surrounding green context, providing a green buffer. The landscaping treatment will

- c. retain and plant trees with wide canopies within the deep soil zones to reduce the impacts of urban heat island effects and support local ecology
- d. provide greening and enhancement to the street frontage to encourage the benefits of local walkability
- e. consider the location and scale of buildings in the selection of species
- f. be designed to minimise the impact of overlooking, maintain privacy between dwellings and minimise the dominance of buildings from adjoining properties
- g. predominantly use species which are native/endemic to the locality, and ensure the vegetation types decrease surface runoff, reduce maintenance, and minimise water use
- h. provide irrigation using a non-potable water supply and maximise absorption for onsite infiltration of stormwater
- relate well to the indoor living areas and contribute to useable outdoor recreation space
- j. contribute to the solar efficiency of buildings by selecting and positioning trees for shade in summer and solar access in winter
- k. consider maintaining significant views from adjoining properties and the public domain
- consider potential bushfire hazard in the selection of species and reduce any potential for soil erosion or weed establishment
- m. be located to protect solar access to roof mounted solar energy systems on adjoining buildings
- n. be provided on walls and roofs of larger developments at various levels of the building

2.1.6 Private Open Space

Private open space for dwellings, including secondary dwellings, should:

- a. be relatively flat and have sufficient area to provide for the reasonable recreational needs of residents
- b. be located to integrate with living areas, achieve privacy from the public domain and receive adequate sunlight
- c. be located or screened to ensure visual and aural privacy

Generous private open spaces have been provided for each of the ILUs which are connected to living areas and are mostly oriented towards the Golf Course. The provision is generally consistent with the design criteria of the ADG and the provisions within the Housing SEPP. The Architectural Plans at **Appendix A** show the provision of private open space.

2.1.7 Private Recreation Facilities

The objective is to integrate private recreational facilities with the natural environment, topography of the land, and limit the impact on adjoining properties.

Private recreation facilities such as tennis courts and swimming pools should:

- be constructed to limit the amount of cut and fill
- b. be located to maintain the amenity of neighbouring properties in terms of privacy, glare or light spill from external lighting, noise and visual impacts
- c. ensure adjoining properties, including reserves, are not impacted by stormwater drainage

The proposal provides for communal recreational facilities within the site's eastern setback which will provide opportunities for social interaction through the inclusion of outdoor facilities such as a designated seating and BBQ area, bocci field, and vegetable and herb garden. Due to the site's significant change in level from the neighbouring residential properties (approximately 5m below), the area will not be visible from surrounding properties.

2.1.8 Privacy

The objective is to protect the visual and acoustic privacy of residents.

Developments should maintain a reasonable level of aural and visual privacy for both residents of the development and neighbours by:

- a. providing effective siting, layout and location of windows, balconies, and private open space
- b. avoiding elevated terraces or decks that result in direct overlooking

The proposal has been sited to maximise visual privacy from neighbouring residential properties. Appropriate privacy screening has been provided on certain ILUs where visual privacy is compromised as a result of the site's unique allotment. The screening will mitigate views in and out of the ILUs. Landscaping around the site's boundary will also

enhance the visual appeal for occupants and surrounding residential properties as well as those viewing the site from the Golf Course. Further, 861.92m² (15%) of the site comprises deep soil in accordance with the Housing SEPP has been provided throughout the site.

- c. constructing privacy screens, high windowsills or translucent glazing
- d. increasing building setbacks

mitigate views into the site. Refer to the Architectural Plans at **Appendix A** and the Landscape Plans at **Appendix D**.

Note: Greater emphasis should be placed on maintaining privacy to the living areas and private open spaces of dwellings.

2.1.9 Solar Access

The objective is to protect residential amenity and maximise energy efficiency of buildings.

Developments should maintain and provide a reasonable level of solar access to both residents of the development and adjoining properties by:

- a. avoiding overshadowing to living areas and private open spaces
- b. planting deciduous trees in appropriate locations to maximise winter sun
- c. exploring alternative design options

Note: Shadow diagrams may need to be submitted to show that an acceptable level of solar access can be achieved for both residents of the development and adjoining properties.

The proposed ILUs have been sited to maximise solar access and views out to the Golf Course.

The Architectural Plans illustrate 76.5% of the ILUs will achieve a minimum of 2 hours of direct sunlight in the private open space and living areas between 9 am and 3 pm in mid-winter.

Overshadowing diagrams have been prepared and provided at **Appendix A** which show the overshadowing impacts are primarily contained within the site, the Golf Course and Deepwater Road. Minor overshadowing is expected on the neighbouring properties which is not expected to have any adverse amenity impacts.

2.1.10 Service facilities and structures

The objective is to protect the residential amenity and integrate the provision of services and facilities with the design of the development.

Service facilities should be located and designed to:

- a. ensure safe and convenient access to garbage and clothes drying areas by residents
- b. ensure garbage areas do not have an adverse effect on the amenity of adjoining neighbours
- c. contain garbage bins in an enclosed area and in the basement area for larger developments where possible
- d. ensure clothes drying areas do not have an adverse visual impact on the amenity of adjoining properties
- e. visually integrate within the development and not impact on the streetscape
- f. ensure satellite dishes and similar structures are out of sight from the public domain and not visually intrusive on adjoining neighbours
- g. ensure air conditioning units and any other noise generating plant and equipment are designed to minimise noise impacts and meet relevant environmental standards

An Operational Waste Management Plan detailing the waste practices for the proposed development has been prepared by Elephants Foot and is provided at **Appendix R**. It should be noted the waste storage areas are located within both proposed built forms and concealed from the public domain.

Services are contained within the rooftops of both the clubhouse and ILUs and have been appropriately concealed from view where possible.

An Environmental Noise Assessment has been prepared by Day Design and is provided at **Appendix T** which identifies measures to contain noise impacts associated with the clubhouse use and mechanical equipment.

2.1.11 Urban heat

The objective is to reduce temperatures and create a resilient framework to mitigate the extreme impacts of urban heat by including appropriate measures to improve the health, comfort and wellbeing of residents.

To reduce the impacts of urban heat island effects the development should:

- a. use external materials, façade elements and glazing to limit solar reflectivity (this may include retractable shade structures, 'green' walls, and roofs, and/or rooftop solar panels)
- b. $\,$ apply best practice water sensitive urban design (WSUD) principals

Yes. A Landscape Design Intent Statement has been provided in **Appendix E** by SiteDesign Studios and further detailed in **Section 3.6**, which demonstrates that urban heat will be mitigated through the selective use of mixed native indigenous plantings that support local ecology and contribute to long-term vegetative growth.

- c. reduce the extent of hard surfaces
- d. irrigate landscaped areas using non-potable water
- e. ensure landscaped areas include large trees with wide canopies

2.1.12 View sharing

The objective is to limit the extent and impact on existing views. Developments should, as far as reasonably possible:

- a. maintain existing views from adjoining and neighbouring properties
- b. have particular regard to water views which are more highly regarded than land views
- c. prioritise consideration of potential view loss from living areas
- d. consider alternative design options to maintain significant and iconic views

The proposal provides for a built form which minimises visual impacts to neighbouring properties. Due to the site's level, being significantly below that of the neighbouring properties (within the northern portion of the site), views from the neighbouring properties have been retained where possible. It should be noted the ILUs proposed comprise of an overall height that is less than the existing Golf clubhouse. Refer to **Appendix A** and **B**.

2.1.13 Natural heritage

The objective is to preserve and protect significant trees/vegetation and other natural features such as rock outcrops.

Willoughby City Council has a natural heritage register which identifies items of natural heritage, including items on private properties. A proponent should access the register to determine if the subject property has significant trees or other natural features that should be preserved and protected from any proposed development.

The proposal seeks to retain a rock outcrop located on the site. The vegetation on the site has been assessed as part of the Arboricultural Impact Assessment Report prepared by Rennie Bros Tree Surgeons and provided **Appendix M**.

4.3 Specific controls for manor houses, attached dwellings, multi dwelling housing and residential flat buildings.

Note: Where relevant, the controls below apply to other major residential developments such as boarding houses that exceed 300m2 or 12 persons, **seniors housing**, the residential component of shop top housing and mixed use developments, and build-to-rent housing.

4.3.1 Site area and lot dimensions

Minimum lot size (Willoughby LEP 2012): 835m²

Consistent as the total site area is 5723m². The subdivision proposed will also propose lots that are consistent with the minimum lot size.

4.3.2 Street frontage

The minimum street frontage is 27m. This is to ensure vehicles can enter and leave a site in a forward direction, and adequate landscaped areas are provided along the streetscape.

The street frontage facing Deepwater Road achieves a length of approximately 82m.

4.3.3 Adaptable housing, access, and mobility

Minimum number of adaptable dwellings is 50% of residential flat buildings greater than 3 storeys

No adaptable units are proposed nor are necessary in accordance with the Housing SEPP. The proposal includes 100% accessible units.

<u>4.3.4 Energy Efficiency</u> Willoughby City Council encourages applying best practice principles in the design and construction of buildings to create energy efficient and environmentally sustainable buildings.

All major developments are required to comply with the relevant provisions of Part J (Building Sustainability) of the DCP plan.

A NatHERS, BASIX Certificate and Section J Report have been prepared to demonstrate the proposal's commitment to sustainability and energy efficiency. These are found in **Appendix I**.

4.3.5 Bicycle and car parking

Refer to Part F provisions below.

4.3.6 Water Management and Conservation

All major developments must provide onsite detention systems to capture and detain stormwater runoff for recycling (including irrigation systems for landscaped areas), and to mitigate the impacts of flooding.

The development application must include details of stormwater management.

Stormwater management details have been provided in the Civil Engineering Plans and Statement prepared by Intrax Projects and provided at **Appendix U**.

The proposal integrates both passive and active principles

suitable plant selection, low-maintenance, long lifecycle.

considered. The proposal also incorporates on-site water

The Landscape Design Intent Statement (**Appendix E**) demonstrates that urban heat will be mitigated through the

selective use of mixed native indigenous plantings that

support local ecology and contribute to long-term

vegetative growth.

recyclable and reuseable materials have all been

saving measures, such as the re-use of water for

landscaping and rainwater storage and reuse.

as key criteria of the proposal's design. Climate and location

4.3.7 Urban Heat

Willoughby City Council encourages applying 'best practice' principles in the design and construction of buildings and other measures to reduce the impacts of urban heat island effects. This means increasing landscaped areas and the number of trees with large canopies, reducing hard surfaces, encouraging alternative and active transport, and applying water management, including water sensitive urban design principles. Buildings should also use external materials, façade elements and glazing to limit solar reflectivity to minimise urban heat impacts. This may include retractable shade structures, 'green' walls and roofs, and/or rooftop solar panels.

Roofs should achieve these Solar Reflectance Index (SRI) values

- a. for roof pitch <150, 3-year SRI minimum of 64
- b. for roof pitch >150, 3-year SRI minimum of 34
- c. for terrace areas, 3-year SRI minimum of 38

Notes:

- Plans must illustrate the SRI values of all roof surfaces.
- Plans do not need to include an SRI value for areas where photovoltaic (PV) panels are mounted flat on the roof.

4.3.8 Waste management

Willoughby City Council has adopted the Waste Management Technical Guide and Development Controls by North Sydney Regional Organisation of Councils for multi dwelling housing, residential flat buildings and mixed-use developments.

The technical guide provides comprehensive information to achieve best practice design and construction of waste management and recycling systems.

The development controls provide specific requirements for internal waste storage facilities, individual bin storage areas, communal bin storage areas, bin carting routes, and access for collection vehicles. All major residential developments must comply with the technical guide and the specific controls for multi dwelling housing, residential flat buildings, and mixed-use buildings.

A copy of Waste Management Technical Guide and Development Controls is at willoughby.nsw.gov.au.

An Operational Waste Management Plan has been prepared and is provided at **Appendix R**. All relevant specifications such as internal waste storage facilities, individual bin storage areas, communal bin storage areas, bin carting routes, and access for collection vehicles have been designed in accordance with Council's requirements.

4.3.9 Safety by Design

All major developments are required to include safety and security measures to prevent criminal activity.

Crime prevention measures include high visibility to front entries, careful siting of shrubs and landscape elements, and lighting of pathways or hidden spaces.

The development application must include details of the design and safety measures incorporated into the design.

The design of the ILUs is capable of providing a safe outcome on site as the internal layout of the ILUs facilitate short sightlines that can ensure good quality passive surveillance is maintained. The proposed development will incorporate sufficient lighting that will be adequate to permit facial recognition and will be illuminated in

	alignment with the relevant Australian Standards for outdoor lighting.
 4.3.10 Utility Structures These controls apply to ensure the design of the development has adequate provision for utility structures such as substations and water main boosters: a. The application must include written advice from the energy provider and Sydney Water if these utility services are required to be provided for the development b. All structures that are visible from the street or public domain must be suitably screened by landscaping c. Substations should preferably be located below ground level or at the rear of the property if rear lane access is available 	Site Investigation Requests were made to Ausgrid and Sydney Water which have outlined the required electricity, water and sewage requirements. The Utility Services Assessment is attached in Appendix Y .
	The recommendations from Ausgrid related to the augmentation of the electricity network with the installation of a kiosk-type substation to facilitate the required power usage. This has been indicatively shown in the Architectural Plans at Appendix A . This substation will be appropriately screened by both retained and new vegetation on Deepwater Road.
	Sydney Water identified that there is currently both a 250mm CICL water main and a 150mm SGW sewer main that will be required to be altered to accommodate the proposed development. The proposed development is capable of accommodating this request.
4.3.11 Undergrounding of services All services, including overhead electricity wires, are to be located underground for major development. This includes publicly owned land immediately outside the development site.	Noted.
4.4 Further controls for residential flat buildings, and the residential components of shop top housing and mixed use	developments
4.4.1 Site coverage The site coverage for residential flat buildings should not exceed: 28% of the site area for four storey building	The portion of the site that relates to the ILU component exceeds the DCP site coverage controls which is considered appropriate given the site's unique allotment shape and substantial proposed landscaping.
4.4.2 Building height Governed by LEP standards.	The ILU building height is governed by the development standards located in the Housing SEPP. A minor variation to the Housing SEPP is proposed and therefore the SEE is accompanied by a Clause 4.6 Variation Request at Appendix G .
	The clubhouse building is located within the maximum height limit of 8.5m under the Willoughby LEP 2012.
4.4.3 Floorspace ratio	The floor space ratio that applies to the ILUs is governed by the Housing SEPP. The portion of the proposal which relates

	and the use in isolation (ie not considering the clubhouse GFA) which is consistent with the 0.5:1 FSR required under the Housing SEPP.
	Due to the overall exceedance of the FSR development standard of the Willoughby LEP 2023, a Clause 4.6 Variation Request has been prepared by Ethos Urban which demonstrates why the exceedance is considered appropriate and is provided at Appendix H .
4.4.4 Setbacks No front setback specified for R2 residential zoning. Side and rear setbacks: 3m plus 1.2m per storey above the ground floor level.	Setbacks have been provided in general accordance with the ADG design criteria. An assessment of the setbacks is provided in Section 4.2.2 of the SEE and in the Apartment Design Guide Compliance Table in Appendix CC .
 4.4.5 Open Space a. Soft Landscaped Area/Deep Soil Zones and Tree Planting The site should: comprise at least 35% of soft landscaped areas and deep soil zones at ground level (excluding planter boxes) provide deep soil zones primarily in the front setback areas and around the perimeter of the site include species with a wide tree canopy which can cover hard stand areas to reduce the impacts of heat island effects include new trees within deep soil zones that are semi mature when planted to be compatible with any existing predominant street trees 	The proposal provides for deep soil located throughout the site that is in accordance with the non-discretionary standard of the Housing SEPP (15%) and over double what is required by the ADG. Existing trees have been retained where possible and generous landscaping has been provided throughout the site, which equates to a landscaped area of 21.5% of the site's area. A Landscape Design Intent Statement has been provided at
	Appendix E , which outlines the site wide landscaping response. Landscape Plans (Appendix D) also illustrate the proposed landscape design and species selection.
4.4.5 Open Space b. Private Open Space Refer to ADG Design Criteria.	The Housing SEPP and the ADG design criteria has guided the provision of private open space. Refer to Section 4.5.1 of the SEE for an analysis of the provided areas which are also illustrated in Appendix A .
 4.4.5 Open Space c. Communal Open Space For developments with 15 or more apartments, communal open space should: 1. provide 25m² of communal open space per each dwelling where balconies are the only form of open space 2. have a minimum dimension of 5m and minimum area of 50m² 3. include a children's play area that has a minimum area of 30m², a minimum dimension of 5m and be no steeper than 1 in 20 	No communal open space is required under the Housing SEPP, despite this, in accordance with the ADG design criteria relating to communal open space, an area within the site's eastern setback has been provided which comprises a designated seating and BBQ area, bocci field, and vegetable and herb garden. Refer to Appendix A .

Part D: Commercial Development

4.1 Building design (4.1.2 Controls)

- a. use of roller shutters in lieu of glazed facades is not permissible unless a minimum 70% of the roller shutter is transparent
- b. any kind of internal security shutter, mesh gate or similar must be located a minimum of 1m behind the facade of the premises facing a public space or at the rear of any display window
- c. any plant, equipment or machinery should be suitably screened from the general public
- d. the above awning facades of 2-storey shop frontages should have a solid to void ratio of around 60:40
- e. developments should use materials with a low solar reflectance index (SRI) and incorporate shade structures to reduce urban heat island effects
- f. the entire ground floor level of a shop top housing development must be used for retail/commercial purposes; this may include loading/unloading facilities but does not include car parking

Plant equipment is located on the rooftop of the clubhouse and will be suitably screened from the general public. No awnings are proposed.

4.4 Frontages (4.4.2 Controls)

- a. a minimum width of 27m is required for developments that exceed 11m in height or where vehicular access is only available from the primary street frontage
- b. no more than 30% of the street frontage is to be used for vehicle and pedestrian access to lower and upper levels
- c. the bulk of new facades should be divided into equal units of around 6m each to reflect traditional small retail shopping frontages
- d. allotments should be consolidated to reflect the general pattern of street frontages in the commercial precinct

The clubhouse includes a frontage of approximately 65.6m. No more than 30% of the clubhouse's frontage has been used for vehicle and pedestrian access. The façade has been appropriately articulated to ensure a design that is sympathetic to the surrounding residential built forms. Refer to the Architectural Plans at Appendix A.

Note:

• Development may be allowed on an existing lot that is isolated and cannot be consolidated with another lot. It may also be allowed on an existing lot if written advice is provided to Willoughby City Council that adjoining landowners are not willing to consolidate their properties.

4.5 Streetscape (4.5.2 Controls)

- a. new developments or significant alterations and additions may be required to provide improvements to the quality of the public pedestrian domain, such as adding suitable paving, street trees and landscaping
- b. if shop frontages are predominantly built along the street alignment, new developments or significant alterations and additions may be required to improve the pedestrian amenity at street level with transparent interactive frontages, including outdoor seating and/or dining areas

The clubhouse building is proposed to align with the setback of the neighbouring residential property to ensure consistency on the streetscape. The landscaping of the site will provide suitable public pedestrian domain as seen at Appendix D.

4.6 Car parking and vehicular access (4.6.2 Controls)

- a. the width of the entry portal for a driveway providing access to a car parking area should not exceed 5m and the head clearance should not be more than 2.4m. If the access is also the entry to a loading dock, a head clearance of 3.6m may be allowed
- b. the layout of car parking spaces must comply with AS/NZS 2890.1 and AS/NZS 2890.6 and details are to be shown on the architectural plans
- c. the location, siting and grades of driveways, and driveway width must be in line with Australian Standard AS/NZS 2890.1
- d. all new developments and significant alterations and additions must provide accessible car parking spaces for people with disability in line with Section D3.5 of the Building Code of Australia under the National Construction Code

Car parking and access arrangements have been designed in accordance with Council's requirements and Part F of the DCP.

Of the 76 spaces being provided within the club house, 4 are dedicated as accessible spaces, consistent with the DCP requirement of 3% at a rate of 5.3% and Section D3.5 of the BCA.

Refer to Appendix A and Appendix BB.

- e. details of swept paths may be required to demonstrate all vehicles can enter and leave the site in a forward direction
- f. compliance with the provisions in Part F (Transport and Parking Management) of this plan

4.7 Loading/unloading facilities (4.7.2 Controls)

- a. each commercial premises must have a separate loading facility provided off a secondary road or laneway
- b. if onsite loading facilities are not available, details are to be provided of the nearest onstreet loading areas and the method of conveying goods in a safe and efficient manner to and from the premises
- c. all new commercial developments, and developments that involve significant demolition, alterations or additions with a floor area in excess of 1,000m2 must make adequate provision for off-street loading and unloading facilities in line with Part F of this plan

Details on the loading areas is provided in the Traffic and Transport Assessment Report at **Appendix L**.

4.8 Waste and recycling (4.8.2 Controls)

- a. all waste management facilities must comply with the Building Code of Australia and relevant Australian Standards
- b. any compactors or mechanical devices must comply with occupational health and safety requirements
- c. bin storages areas must:
 - be suitably screened from public areas and adjoining properties
 - located in areas to reduce the impacts of visual amenity, noise, and odour
- d. refrigerated garbage rooms are required in either of these cases:
 - the waste generated contains 20% or more by weight or volume of seafood, poultry or meat
 - 50 litres or more of seafood, poultry or meat is generated in total per day, unless the waste is collected daily
- e. the onsite collection point must provide adequate space for garbage vehicles to enter and leave the site in a forward direction
- f. basement waste and recycling storage areas and access to these areas must have a minimum clearance height of 4.5m to accommodate waste and recycling collection vehicles
- g. a resource recovery and waste management plan must be submitted with the development application (see Attachment 1 in this part)

An Operational Waste Management Plan has been prepared and is provided at **Appendix R**. All relevant specifications such as internal waste storage facilities, individual bin storage areas, communal bin storage areas, bin carting routes, and access for collection vehicles have been designed in accordance with Council's requirements.

4.9 Pollution control (4.9.2 Controls)

- a. depending on the type, scale, and location of development, the development application may need to include an acoustic report and/or other reports to address pollution control measures
- b. depending on the type, scale, and location of construction works, the application may need to include a site management plan to address sediment and erosion control measures
- c. the discharge of any solid, liquid, or gaseous materials must comply with the Protection of the Environment Operations Act 1997
- d. if there is likely to be a need for the disposal of liquid waste to the sewer, Sydney Water should be contacted for its requirements on installing grease arrestors
- e. new commercial buildings which include retail premises that allow cafés, restaurants or similar, must make adequate provision for the vertical discharge of exhaust from the lower floor levels
- f. the hours of operation may be restricted if a particular use is likely to interfere with the residential amenity of adjoining and nearby dwellings

Any potential pollutants from the clubhouse restaurant will be suitably managed through mechanical ventilation.

4.10 Stormwater disposal and flooding (4.10.2 Controls)

- a. depending on the type, scale, and location of development, the development application may need to include a stormwater management plan
- b. if the development is on flood prone land, the development application may need to include a flood risk assessment report and/or a flood study
- c. new commercial developments on land exceeding 2,000m2 must implement appropriate water sensitive urban design
- d. the application must show the proposal satisfies the objectives and controls in Part I (Stormwater Management) in this plan

Stormwater management details have been provided in the Civil Drawings prepared by Intrax Projects and provided at **Appendix U**.

4.11 Sustainable development (4.11.2 Controls)

- a. depending on the type, scale and cost of development, the development application must include a Sustainable Performance Statement, a Green Star rating report, and/or a National Australian Built Environment Rating Scheme (NABERS)
- b. the application must show the proposal satisfies the objectives and controls under Part J (Building Sustainability) in this plan
- c. applications for large developments exceeding 2,000m2 must include a travel demand management plan (green travel plan); this should detail how the operation intends to modify travel decisions to and from the building so that more desirable modes of transport are used, such as bicycles, car-pooling, mini-bus pick-up/drop off, and provision of car share spaces (see Part F in this plan for details)

A NatHERS, BASIX Certificate and Section J Report have been prepared to demonstrate the proposal's commitment to sustainability and energy efficiency. These are found in **Appendix I**.

Note:

• The Australian Government's commercial building disclosure program requires a NABERS Energy rating to be disclosed when office space of more than 2,000m2 is offered for lease or sale.

4.13 Safety by design (4.13.2 Controls)

a. the design should include high visibility to front entries, lighting of pathways or hidden spaces and where applicable, careful siting of shrubs and landscape elements

Note:

• The development application must include details of the design and safety measures incorporated into the design.

The design of the proposed clubhouse is capable of providing a safe outcome on site as the internal layout facilitates short sightlines that can ensure good quality passive surveillance is maintained. The proposed development will incorporate sufficient lighting that will be adequate to permit facial recognition and will be illuminated in alignment with the relevant Australian Standards for outdoor lighting. The clubhouse features an arrival lobby and concierge desk which is able to demonstrate a level of territorial reinforcement by way of including formal guardians whose responsibility it is to oversee people entering and existing the clubhouse.

4.14 Utility facilities (4.14.2 Controls)

- a. the application must include written advice from the energy provider and Sydney Water that states if these utility facilities must be provided for the development
- b. all facilities that are visible from the street or public domain must be suitably screened by landscaping

Site Investigation Requests were made to Ausgrid and Sydney Water which have outlined the required electricity, water and sewage requirements. Both Utility Services Assessment are attached in **Appendix Y**.

c. substations should preferably be located below ground level or at the rear of the property if rear lane access is available 4.14 Undergrounding of services (4.15.2 Undergrounding of services) a. all services, including overhead electricity wires, for major developments exceeding 2,000m2 are to be located underground (this includes publicly owned land immediately outside the development site) Note: • In some circumstances it may not be practical or possible to provide undergrounding of services. For example, there may not be sufficient capacity within the road reserve to accommodate additional services or it may be cost prohibitive to do these works as part of the proposed development. Any proposed variation to this control must include a written request to justify why this requirement cannot be satisfied. • If there is a request to vary this requirement because it is considered cost prohibitive, the development application must include a detailed cost report prepared by a registered quantity surveyor. 4.16 Access and mobility (4.16.2 Controls) Access and mobility has been addressed in the Access Assessment Report prepared by Jensen Hughes and a. Details are to be submitted with the development application to demonstrate the development will comply with the provided at Appendix W. Disability (Access to Premises - Building) Standards 2010 under Disability Discrimination Act 1992 Part F: Transport and Parking Management Section 3 - Parking Provisions in the Railway Precincts of Chatswood, St Leonards and Artarmon 3.1 Parking provisions outside of the railway precincts of Chatswood, St Leonards and Artarmon. Car parking related to the ILU use has been provided in accordance with the Housing SEPP requirements. Refer to the Traffic and Transport Assessment Report at Appendix L. The DCP states that "if a specific land use is not included in this table, the car parking requirements will be assessed on the merits of the application". As the clubhouse is not a defined land use with a prescribed requirement of parking provision, a bespoke rate, based on the current provision of car parking on the site has been provided. Refer to Appendix A. 3.2 Motorcycle parking Motorcycle parking is not required under the Housing SEPP. No motorcycle parking is proposed nor considered necessary for the clubhouse. 3.3 Bicycle parking and end-of-trip facilities Bicycle parking and end of trip facilities are not required

under the Housing SEPP. No bicycle parking or end of trip facilities are proposed nor considered necessary for the

clubhouse.

Section 4 - Car Parking and Driveway Design	
4.1 Car parking	Car parking and access arrangements have been designed in accordance with Council's requirements. Refer to Appendix L .
4.2 Vehicle crossing/driveways	The vehicle driveways have been designed in accordance with Council's requirements. Refer to Appendix L .
Section 5 – Major Development	
5.1 Parking and traffic studies	A Traffic and Transport Assessment Report has been prepared by CJP (Appendix L) which assesses the parking and traffic impacts of the development on the surrounding arterial and local road network.
5.2 Off-street loading/unloading facilities	Details on the loading areas is provided in the Traffic and Transport Assessment Report at Appendix L .
5.3 Visitor car parking	Whilst visitor car parking associated with the ILUs is not a requirement under the Housing SEPP, 2 spaces have been provided. Refer to Appendix A .
5.4 Accessible car parking for people with disability ILU The ILU use is classified as Class 2 in accordance with the BCA. The DCP requires Class 2 development for provide the following accessible parking (whichever is greater): a. Minimum 1 resident and 1 visitor space for developments comprising 10 or more units b. 1 space/4 accessible or adaptable units + 1 visitor space for developments comprising 50 or more car parking spaces	ILU 50% of the carparking spaces are accessible and therefore complies with the DCP requirements. Clubhouse Of the 76 spaces being provided within the club house, 4 ar dedicated as accessible spaces, consistent with the DCP
Clubhouse	requirement of 3% at a rate of 5.3%.
The clubhouse use is classified as Class 6 in accordance with the BCA. The DCP requires Class 6 development to provide the following accessible parking (whichever is greater):	е
a. 1 employee and 1 visitor space	
b. 3% of the total car parking spaces (10% of spaces must be provided as a visitor space)	
5.6 Electric vehicle charging	Provision for electrical capacity to accommodate EV charging in the future will be provided.

Refer to Arboricultural Impact Assessment (**Appendix M**).

Part I: Stormwater Management

Refer to Civil Drawings (Appendix U).

Part J: Building Sustainability

Refer to NatHERS, BASIX Certificate and Section J Report (Appendix I).