

SUTHERLAND SHIRE

**E1 LOCAL CENTRE MU1
MIXED USE KIRRAWEE**
DCP 2015 CHAPTER 17



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Kirrawee Centre

This part of the DCP provides the site specific planning requirements for development within the area of Kirrawee Centre partly zoned E1 Local Centre and partly zoned MU1 Mixed Use. The residential flat component of any development should be designed in accordance with the State Environmental Planning Policy (Housing) 2021 and the Apartment Design Guide 2015 (ADG).

The chapter is to be read in conjunction with other chapters: “Vehicular access, Traffic, Parking and Bicycles”, “Late Night Trading”; “Stormwater and Groundwater Management”, Natural Resource Management”, “Environmental Risk”, “Administrative Provisions”, “Social Impact” and “Other uses”.

Council’s Public Domain Design Manual contains specifications for elements in the public domain, for example street furniture and footpath design. Required frontage works for developments must be in accordance with the Public Domain Design Manual.

1. Centre Aims

1. Reinforce the role and function of the existing Oak Road retail precinct as the town centre of Kirrawee.
2. Retain and enhance the landscape character of the centre, particularly the established remnant trees (Sydney Ironbark Turpentine Forest), public open space, and incidental spaces.
3. Maintain solar access to footpaths suitable for outdoor dining.
4. Improve pedestrian accessibility.
5. Integrate the Brick Pit site and development along Flora Street with the town centre.
6. Provide opportunities for a live/work environment.
7. Optimise solar access to residential development.

2. Centre Strategy

Kirrawee Centre currently comprises a small shopping strip along Oak Road, between Flora Street and President Ave. The centre is strategically located with good access to road and rail, employment areas and Sutherland Centre. Kirrawee is located at a high point in the landscape, offering views to the Shire as a whole.

The centre is characterised by significant trees. The centre contains remnant Sydney Turpentine Ironbark Forest which is to be reinforced through the landscape strategy.

Currently, Oak Road between President Avenue and Flora Street forms the commercial core of Kirrawee Village. One and two storey street edge buildings define the precinct. Active shopfronts enhance the vitality of the centre. Development is setback from the street to provide opportunities for outdoor dining. New buildings at the northern and southern ends of Oak Road commercial strip could assist in defining the edges of the precinct. To facilitate good urban design and enable service access to shops at the back of the retail strip, site amalgamation will be required for the redevelopment of the majority of sites in the centre.

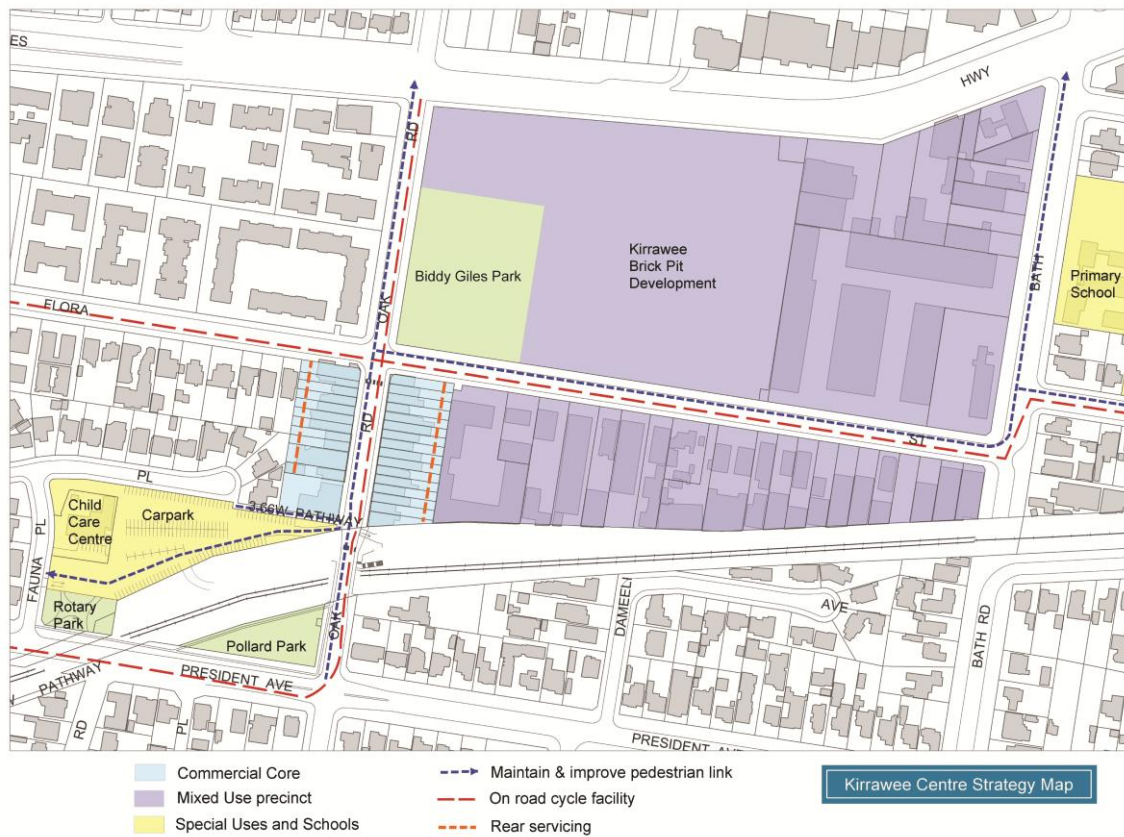
The future character of Kirrawee Centre will be driven to some extent by the redevelopment of the former Brick Pit site and adjacent residential areas, rezoned for increased density. Kirrawee is likely to expand to include part of Flora Street. This would provide an extension to the shopping precinct on Oak Road, complementing the redevelopment of the Brick Pit. Development should also seek to activate Flora Street with increased residential and commercial floor space, street planting and improved pedestrian infrastructure, bringing the street to life.

The mixed use precinct in Flora Street and Bath Road will include new residential flats above lower level (ground and first floor) commercial development. It is anticipated that at ground level, commercial uses will complement and create an extension of the Oak Road main street precinct. New development should preserve remnant trees and be setback from the street to provide a buffer between new buildings and the public domain. New development will offer the opportunity to provide underground power in Flora Street helping to improve the streetscape. New development will be designed to help create opportunities for social interaction and passive surveillance so that a safe neighbourhood develops in what was originally an industrial services precinct. Built form should emphasise the junction of major roads.

The design and siting of development within the mixed use precinct shall have clear, direct accessible pedestrian links to the existing Oak Road commercial core so that shops support the revitalisation of the retail function of the Kirrawee Centre. Pedestrian access to the child care centre and public car park needs to be retained and improved.

The Flora Street / Bath Road mixed use precinct, contains a number of existing industrial uses that perform a valuable service function. Development for heavy and noxious industrial uses is not compatible with residential development.

The creation of a green corridor along railway will assist in to providing ecological sustainability and a visual buffer for new developments along the railway. The main strategies of the DCP for Kirrawee Centre are illustrated in the map below.



3. Landscape Strategy

Kirrawee Centre is located at the top of a long ridge, with the land falling to the east, north and west. This gives the centre prominence within the landscape. Pleasant views to Woollooware Bay and the city are available from the north-eastern part of the centre. The intersection of Oak Road and Flora Street is the visual “heart” of the centre, being set at the top of the ridgeline, high in the landscape. The shale based soils of the ridge top support Sydney Turpentine Ironbark Forest, an endangered ecological community. To reinforce the topography, the intersection is to be defined by a large new park containing remnant Sydney Turpentine Ironbark Forest.

Remnant Sydney Turpentine Ironbark exists along Flora Street. These trees are to be retained and enhanced by additional planting. Provision of increased deep soil zones for the future developments in Flora Street west and Bath Road is required to protect remnant trees and enhance local tree cover.

Pollard and Rotary Park have an important role in supporting the endangered ecological community. Further tree planting and landscaping throughout the centre should reinforce this existing landscaped character, pulling the remanent tree species into the centre. The proposed 0.9 hectare public open space (zoned as Public Recreation) on the Brick Pit site will preserve the existing trees and also provide a recreational resource for Kirrawee residents. Pedestrian safety should be improved in Pollard Park through installation of low impact lighting and gravelling of pedestrian routes.



3.1 Objectives

1. Retain and enhance the existing tree canopy.
2. Contribute to streetscape character and the amenity of the public domain by using planting and landscape elements appropriate to the desired character of the streetscape and the scale of the development.
3. Minimise the impact of driveways and parking areas on existing landscaping, landform and streetscape, in terms of siting and choice of materials.

3.2 Controls

1. Indigenous trees are to be planted to shade and visually enhance surface car parking areas and screen any blank elevations or service areas.
2. Indigenous trees should be planted to minimise building bulk and improve the transition between the centre and residential/adjacent uses.
3. Landscaping should be used to enhance the extent of any remnant trees and the indigenous canopies in the locality.
4. Landscaping in the vicinity of a driveway entrance should not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.
5. Where planting is proposed on that part of a basement which extends beyond the building footprint, roof tops or within planter boxes, the space to be planted must be designed and constructed to contain a minimum soil depth of:
 - 450mm for grass and ground covers
 - 600mm for shrubs
 - 900mm for small trees
 - 1200mm for large trees.

Species selection must be suited to the future microclimate. Landscaping on basement roofs and planter boxes must be accessible for maintenance access.

6. Where trees are proposed on roofs or planter boxes an area of 3m x 3m per tree must be provided. Planter boxes in this case must be stepped, mounded or set down in the slab to reduce their apparent height on the surface to 450mm.
7. Appropriate paving must be provided to driveways, walkways, entries, fire egress points garbage bin enclosures, letter boxes, clothes lines and under pergolas.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the locality. The tool is available online at Council's website.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications – Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirements refer to Council's DA Guide.

4. Streetscape and Built Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. In the Sutherland Shire, the relationship of the built form to the natural environment, particularly along the waterways is an important consideration. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character. How carefully ancillary elements of development are resolved such as vehicle entrances or garbage storage, can also be critical to the quality of the streetscape. To make a positive contribution to the streetscape, new development needs to reinforce the scale and character of existing buildings and landscape elements.

Facades are the external face of buildings and make a very important contribution to the streetscape. The composition and detailing of the building facade has an impact on its apparent scale as well as its appearance. The pattern or rhythm established by the proportions of the facade, the modulation of the external walls, the design of facade elements, their materials and detailing are all important considerations.

Architectural quality contributes to the character and quality of the streetscape. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, internal design and structure of a development.

Local centres should encourage pedestrian movement and create an environment of vibrancy and vitality. Active frontages are locations where retail shopfronts address the street, building entries are positioned and pedestrians circulate, accessing shops and services.

4.1 Objectives

1. Ensure sites are of sufficient size to accommodate well designed development.
2. Have regard to the future development of adjacent land.
3. Achieve quality architecture in new development through appropriate composition and articulation of building elements, textures, materials and colours that respond to the building's use and locality.
4. Achieve development that is of an appropriate scale and context for the street and locality and which makes a positive contribution to the streetscape and amenity of the centre.
5. Ensure sufficient solar access for occupants of adjacent residential buildings, and to public open space and adjoining development.
6. Create opportunities for incidental open spaces and public domain.
7. Create entrances which provide a desirable and safe identity for the development and which assist in visitor orientation and minimise potential conflicts between pedestrians and vehicles.

4.2 Controls

1. Lots must be of sufficient width to accommodate development. A site of minimum width of 20m is appropriate for larger scale centre development. Where development of a narrower site is proposed, the development must:
 - a. provide for required parking on the site, usually in an underground car park, that allows for vehicles to leave in a forward direction;
 - b. provide appropriate access and servicing facilities, loading, storage and waste management areas;
 - c. respond to the local context.

Development sites with site frontage width less than 20m may not allow for the full FSR to be realised.

2. Development must be designed and sited so that it addresses the street and must have a clearly identifiable entry.
3. Development should acknowledge the established rhythm and scale of existing shopfronts/ small lot subdivisions in vertical facade proportions.
4. The building form must be articulated to avoid large expanses of unbroken wall, and to visually reduce bulk.

Note:

Articulation can be provided by setbacks, balconies, awnings, porticos, recesses, blade walls or projecting bays. Large flat facades are to be avoided.

5. Where development has two (2) or more road frontages, vehicular access shall be from the lowest order road. Vehicular access is to be from a rear lane where such is provided.
6. Highly reflective materials are not acceptable for roof or wall cladding.
7. Where a basement car park extends above the natural ground level, it is to be designed to ensure that podiums and vehicular entries do not dominate the overall design of the building or streetscape. Basements and podiums are to be integrated into the architectural design of the building. Driveway walls adjacent to the entrance of a basement car park are to be treated so that the appearance is consistent with the external finish of the building.

Note:

Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing).

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015.

8. Existing street trees in good health are to be retained and protected. A minimum street tree planting rate is set at one indigenous canopy tree that will attain a minimum mature height of 6m to be planted at maximum spacing of 5m planted at least 1m from the kerb and/or footpath. Informal clumping of trees is encouraged. Street trees must be selected from the Native Plant Selector available on Council's website. Turf must also be planted. Planting is to be undertaken in accordance with Council's Public Domain Design Manual.
9. Ground floor residential uses are only permitted subject to demonstration of satisfactory amenity for building occupants, particularly in relation to impacts from noise and traffic.
10. Where a development has a blank end wall, it is to have a high quality finish that makes a positive contribution to the appearance of the centre, should it potentially remain exposed in the long term.
11. Access to all levels of the development, including the basement, must be made available by a lift in order to facilitate access by people with disabilities.
12. Development should contribute to a comfortable pedestrian environment, with improvement to signage, lighting, planting, awning cover and seating, where appropriate. Frontage works are to be designed and constructed in accordance with the Public Domain Manual.
13. Residential flat buildings, shop top housing, commercial premises or industrial development must include the replacement of existing local distribution power lines and other utilities with subsurface utilities and the provision of new street lighting to meet the requirements of the Public Domain Design Manual.
14. Where there are powerlines which are not being undergrounded or bundled, street tree planting will only be required if they can be located 2m away from the wires. Where power lines are bundled, suitable trees can be planted underneath the bundled wires.

5. Street Setbacks

Street setbacks establish the front building line. Controls over street setbacks create the proportions of the street the continuity of street facades. Setbacks make an important contribution to the perceived scale of a street, and to the pattern of buildings and the spaces between them.

Traditional strip retail characterises the Oak Road portion of the Kirrawee centre, generally with an uninterrupted series of shops opening directly onto the footpath. The retail strip is setback to facilitate outdoor dining and a greater public domain.

This pattern is highly successful in Kirrawee, providing visibility and ease of access for businesses, and contributing to commercial viability as well to the comfort and attractiveness of the public domain for pedestrians.

5.1 Objectives

1. Establish the desired spatial proportions of the street and define the street edge.
2. Create opportunities for the planting of canopy trees and landscaping.
3. Ensure new development is compatible with the desired future streetscape character, or contributes to the desired future streetscape character.
4. Assist in achieving visual privacy for residential development.
5. Strengthen the urban form of the centre with consistent street wall heights.

5.2 Controls

1. Development must be set back in accordance with the Kirrawee Street Setbacks Plan as shown below.
2. New development shall maintain the established street setback.
3. The first two storeys of new development must have a consistent setback to the street, with a wall height of approximately 8m. If single storey development is proposed in Oak Road, it shall employ parapets to reinforce the established scale of the streetscape.
4. For development of more than two storeys, the upper storeys should be setback at least 4m and solar access to the public domain in mid-winter is to be maintained.



Note:

Street setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, sunscreens, podiums and the like.

6. Active Frontages

Active street frontages are locations where retail shop fronts and building entries address the street, building entries are positioned and such that pedestrians circulate along the streets length, accessing shops and services. Active street fronts create the character of a centre, facilitate pedestrian movement between shops and services, and create an environment of vibrancy and vitality. A non active frontage within a shopping strip creates a dead zone that may break the cohesiveness of a centre.

6.1 Objectives

- 1 Identify those places in Kirrawee where it is desirable for ground floor uses to have a clear street presence that connects the public and private domain through:
 - a. Display windows, retail shop fronts and other activities that attract people to the area.
 - b. Outdoor eating or dining areas, whether connected to a particular use or available for general uses that encourage people to stay in the area.
 - c. Commercial premises or service activities that utilise a street frontage for access that encourages people to come to the centre for business purposes.
- 2 Allow safe and convenient pedestrian access to shops.

6.2 Controls

1. Active frontages at footpath level are required in accordance with map below.
2. Active frontages must be at footpath level along the full length of the building frontage. This may require the floor plate of development to step up/down with the topography to ensure that the floor level of the active frontage is at footpath level.
3. Places indicated on the map as semi-active are locations where active commercial premises or retail frontages are preferred but need not be continuous.
4. Vehicle entrances and service areas are not to be located in active street frontages.
5. Continuous awnings must be provided along shop fronts and active street frontages. Awnings are to be designed to maintain street canopy trees that form part of the landscape character of the locality.
6. Shop fronts are to be glazed to ensure visual interest, provide borrowed light and surveillance to the street.



Active Frontage Map

7. Side and Rear Setbacks

Side and rear setbacks, either onto lanes or adjacent to established residential dwellings, are required to protect the amenity of those dwellings. Setbacks allow rear access to be provided for onsite parking and service vehicles, so that the active street front is a safe and attractive pedestrian environment.

7.1 Objectives

1. Reinforce the desired spatial character of an area in terms of openness and density.
2. Mitigate the visual intrusion of building bulk on neighbouring properties.

7.2 Controls

1. Unless specifically identified in the strategy, a nil setback to side and rear boundaries is permitted. However, where new development adjoins or is across the road from a residential zone, open space or school where it is likely to remain as a standalone building side and rear setbacks will be assessed on merit, having regard to the impacts on residential amenity of both the neighbouring buildings and the future residents of the proposed building, and the design quality of the building.

A setback and or a reduction in the height and scale will be necessary to achieve acceptable transition in building forms where amenity would be unreasonably compromised by a nil setback and a blank façade. Applications will be assessed depending on the specific context of the site. The early presentation of a design to the Design Review Forum is recommended in such circumstances.

Note:

Side setbacks are taken to include secondary and tertiary street frontages where a site adjoins or is across the road from a residential site

2. Development shall be designed to achieve an appropriate transition to the edge of centres, public open space, community uses, schools, and low density residential land uses.

8. Building and Site Layout

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of workers and/or occupants.

Similarly, good design meets the needs of its occupants by providing adequate site facilities. Considering the need and location of site facilities at the design stage is important in achieving good design outcomes. There is less opportunity to achieve good outcomes for ancillary facilities following construction.

8.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation.
2. Ensure that vehicle access points do not dominate the street frontage of developments and provide safe pedestrians access along the street and into the development.
3. Integrate essential amenities and facilities within developments.
4. Minimise the impacts of ancillary aspects of development on people, building occupants or neighbours, and on the streetscape.

8.2 Controls

1. Incorporate passive solar building design including cross ventilation, the optimisation of sunlight access and the minimisation of heat loss and energy consumption, to avoid the need for additional artificial heating and cooling.
2. All loading, unloading and manoeuvring of vehicles shall take place within the curtilage of the site, and vehicles are to enter and exit the site from a rear laneway wherever possible, and in a forward direction at all times.
Where other arrangements for loading and unloading of vehicles are proposed, they will be assessed on merit and may be accepted where:
 - a. There is a low intensity of commercial use;
 - b. The proposed arrangement maintains a safe and convenient pedestrian and traffic environment.
3. Loading areas shall be located so as to avoid on-street loading and be freely available for use at all times.
4. Non-residential and residential land uses in the same development shall be sited and designed to not adversely affect the residential amenity of building occupants.

9. Shop Top Housing & Residential Flat Buildings

This section applies to shop top housing and residential flat buildings. Shop top housing is defined as, “one or more dwellings located above the ground floor of a building, where at least the ground floor is used for commercial premises or health services facilities” (SSLEP2015 Dictionary).

Shop top housing that is only two storeys in height, and/or contains less than four dwellings is not subject to State Environmental Planning Policy (Housing) 2021 (the “Housing SEPP”) and the objectives and design criteria of the Apartment Design Guide 2015 (ADG). However the following provisions aim to ensure all future dwellings in the centre achieve the design principles of the Housing SEPP and the objectives and design criteria of the Apartment Design Guide (2015).

Local Centres can provide opportunities for greater housing choice, particularly opportunities for older people to age in place. The benefits of housing include: revitalisation of business centres; better use of existing public transport infrastructure; and improved safety and security by increasing the range and hours of activity in neighbourhood centres.

Development in Kirrawee could provide increased opportunities for shop top housing and residential flat development. Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Good design also needs to have particular regard to the amenity of residents and surrounding residential uses.

The following controls for shop top housing and residential flat buildings are in addition to the general controls for the Kirrawee Centre.

9.1 Objectives

1. Improve the design quality of shop top housing and residential flat buildings.
2. Encourage greater housing choice.
3. Ensure small scale shop top housing development provides opportunities for solar access, cross-ventilation and natural ventilation.
4. Ensure all sites in a centre are capable of meeting their full development potential.
5. Ensure building design and dwelling layout provides a high level of resident amenity.
6. Ensure outdoor areas are functional and responsive to the environment.

9.2 Controls

1. Residential flat buildings and shop top housing should achieve the design quality principles of State Environmental Planning Policy (Housing) 2021 and the Apartment Design Guide. This includes buildings that are two storeys or less, and/or contain less than four dwellings.
2. Facades of upper storey residential accommodation with no windows or balconies/openings may have a nil boundary side setback.
3. Small scale shop top housing (that is, development is two storeys in height, and/or contains less than four dwellings), is required to achieve the following minimum side and rear boundary setbacks:

Building Height	Setback from boundary where the façade contains windows from bathroom and/or laundry, storage, or highlight windows only	Setback from boundary where the façade contains windows from habitable rooms including living rooms, kitchens, bedrooms, or studies, and/or balconies
Up to 12m	4.5m	6m

Note:

Highlight windows have a sill height of at least 1.6m above the respective floor level. Side and rear setbacks are measured perpendicular from the side or rear boundary to the closest extent of the building, including balconies, awnings, sunscreens and the like (excluding eaves).

4. The side and rear setbacks must result in a development that:
 - a. provides adequate resident amenity- including privacy, solar access, and ventilation;
 - b. responds to the local context and streetscape, providing adequate separation from existing and future adjoining development ;
 - c. does not prevent a neighbouring site from achieving its full development potential and optimal orientation;
 - d. has architectural merit.
5. Shop top housing is to be sited and designed to maximise direct sunlight to north-facing living areas and all private open space areas.
6. A variety of dwelling types between one-, two-, three- and three plus bedroom dwellings should be provided, particularly in large developments.
7. Living rooms and private open spaces for at least 70% of residential units in a development should receive a minimum of 2 hours direct sunlight between 9am and 3pm in midwinter.

8. A new residential flat building, without an active street frontage, must be setback 4m from the street to provide appropriate residential amenity. Changes in level, landscaping and building design should be employed to facilitate privacy for occupants.
9. Dwelling entries shall be distinguished from commercial premises /retail entries.
10. Each dwelling in a small scale shop top housing development must be provided with a primary balcony/patio with direct access from the living area, with sizes as follows:

Dwelling type	Minimum area	Minimum depth
Studio apartments	4 m ²	-
1 bedroom apartments	8 m ²	2m
2 bedroom apartments	10 m ²	2m
3+ bedroom apartments	12 m ²	2.4m
Apartment at ground level or podium	15 m ²	3m

11. Balcony design is to be integrated into the architectural form and detail of the buildings.
12. Balcony balustrades should respond to the location, being designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony.
13. Suitable clothes drying facilities shall be provided and not be visible from a public place and have access to sunlight.
14. Secure space in a small scale shop top housing development must be provided for each dwelling in accordance with the following table:

Dwelling type	Storage size volume
Studio apartments	4 m ³
1 bedroom apartments	6 m ³
2 bedroom apartments	8 m ³
3+ bedroom apartments	10 m ³

At least 50% of the required storage is to be located within the dwelling and accessible from circulation or living spaces.

15. Communal open space should have a minimum area equal to 25% of the site for residential flat buildings and shop top housing with a floor space ratio of 2:1 or greater. Where residential flat buildings and shop top housing have a floor space ratio of less than 2:1, 100 sqm of communal open space is required.
16. Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions. This space must incorporate shelter, furniture and facilities suitable for outdoors, and if provided at ground level, include canopy trees. Communal open space on roof tops should be designed to optimise privacy for occupants and adjoining residents.

17. A communal rainwater tank and pump should be located in common open space. Common open space areas must be provided with a water efficient irrigation system and taps at a minimum 25m intervals connected to the rainwater tank. Each private open space at ground level must be provided with a tap connected to the rainwater tank.

10. Adaptable and Livable Housing

Adaptable and 'livable' dwellings are conventional dwellings that incorporate construction and design elements to meet people's changing mobility requirements over their lifetime (e.g. level pathways, wider doorways and corridors and reinforced bathroom walls to enable future installation of grab rails). The focus is on creating safe, accessible and functional housing for a diverse demography including the elderly, families with children and people with permanent or temporary disabilities.

An 'adaptable dwelling' is a dwelling with design features that are easily adapted at a later date to flex with the changing needs of the occupants, as specified in AS 4299 (Adaptable Housing). The provision of adaptable housing units within a development can assist people to continue to live in a dwelling which is suited to their mobility and level of ability. It is far more cost effective than relocation or substantial building renovations to modify a home to be more accessible at a later date. Adaptable housing is an important part of the housing mix in the Shire as the number of people over the age of 55 years is above the Sydney average. It is also increasing as a proportion of the total population.

A 'livable' dwelling is a form of adaptability that incorporates elements 'designed in' at the construction stage, thus not requiring subsequent modification or adaptation through the lifecycle of occupants. For the purpose of this section, a livable dwelling means a dwelling designed to Silver Standard *Livable Housing Design Guidelines*.

In addition to the above, the National Construction Code and associated Australian Standards set technical requirements in regards to the accessibility of buildings.

10.1 Objectives

1. Provide housing that will meet the access and mobility needs of any occupant.
2. Ensure a suitable proportion of dwellings include layouts and design features to accommodate changing mobility requirements of residents.
3. Promote ageing in place by extending the usability of dwellings to meet 'whole of life' needs of the community.

10.2 Controls for Adaptable Housing

1. All new residential flat buildings and shop top housing developments must provide dwellings designed in accordance with the Australian *Adaptable Housing Standard* (AS4299) to Class C Certification at the following rates:
 - Development containing 3-5 dwellings – none.
 - Developments of 6 or more dwellings – 20% adaptable.
2. When the calculations for the number of dwellings results in a fraction, numbers ≤ 0.5 should be rounded down.
3. Variations will be considered where it can be demonstrated that site conditions would preclude achieving the controls.

4. An applicant will need to demonstrate compliance with the adaptable housing provisions. This may include a report prepared by an appropriately qualified person submitted with the development application, specifying how the proposal has addressed the requirements in this chapter, the relevant Australian Standards (e.g., *Australia Standard 1428 – Design for access and mobility*) and the National Construction Code.
5. The design of adaptable dwellings must be integrated into the development with the use of consistent materials and finishes.

10.3 Controls for Livable Housing

1. In addition to complying with the adaptable housing rates in clause 1 above, all residential flat buildings and shop top housing and boarding house developments must provide 'livable dwellings (i.e., dwellings designed to *Livable Housing Design Guidelines*) at the following rates:
 - Developments 3-5 dwellings – 1 dwelling.
 - Developments of 6 or more dwellings – 10% of dwellings.
2. When the calculations for the number of dwellings results in a fraction, numbers ≤ 0.5 should be rounded down.
3. Dwellings provided in accordance with Clause 1 must incorporate the following *Livable Housing Design Guidelines*:
 - An accessible continuous path of travel from the street entrance and/or parking area to dwelling entrance.
 - At least one level entrance into the dwelling.
 - Internal doors and corridors width that facilitate comfortable and unimpeded movement between spaces.
 - A toilet on the ground (or entry) level that provides easy access.
 - Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date.
 - A continuous handrail on one side of any stairway where there is a rise of more than one metre.
4. On-site car parking spaces shall be in accordance with Australian Standard – AS 2890.1 (as amended) and Australian Standard – AS 2890.6.
5. Where proposed, all 'livable' dwellings must be clearly identified on the submitted DA plans.
6. Variations to (1) will only be considered where it can be demonstrated that site conditions would preclude achieving the controls.

Note:

For further details on the *Livable Housing Design Guidelines*, applicants are encouraged to visit www.livablehousingaustralia.org.au.

11. Visual and Acoustic Privacy

Building design must take into consideration aspects of visual privacy and noise sources and minimise their future impacts on occupants. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building on the site, the internal layout, the building materials used, and screening devices.

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

11.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dwellings and their associated private open spaces.
2. Ensure development is sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.
3. Minimise direct overlooking of dwelling windows and private open space so that the amenity of neighbours and intended occupants is respected.

11.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings, and between buildings and adjacent private open space.
2. Use building design to increase privacy without compromising access to light and air.
3. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.
4. Residential development adjacent to a rail corridor or a busy road should be designed and sited to minimise noise impacts. Refer to State Environmental Planning Policy (Transport and Infrastructure) 2021 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guidelines*.

Note:

Compliance with the NSW Planning and Environment's *Development near Rail Corridors and Busy Roads – Interim Guidelines* is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA).

The Guidelines apply to development:

- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track

The Guidelines require that noise levels in any such residential development not exceed:

- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.

Depending on the classification of a development using the screen tests in the *Development near Rail Corridors and Busy Roads – Interim Guidelines*, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

12. Safety and Security

In April 2001, the NSW State Government introduced *Crime Prevention Through Environmental Design (CPTED)* to Section 4.15 of the *Environmental Planning and Assessment Act, 1979*. The guidelines require consent authorities to ensure development provides safety and security to users and the community. If a development presents a crime risk, the guidelines can be used to justify modification of the development to minimise crime risk, or refusal of the development on the grounds that crime risk cannot be appropriately minimised.

12.1 Objectives

1. Reduce opportunities for crime through building layout, orientation and location, and the strategic use of design, landscaping and lighting.

12.2 Controls

1. Any design must demonstrate compliance with *Crime Prevention Through Environmental Design (CPTED)* guidelines.

Note:

For further information, refer to:
NSW Police Service 2001, *Safer by Design* NSW Department of Urban Affairs and Planning 1979, *Crime Prevention and the Assessment of Development Applications, Guidelines under Section 4.15 of the Environmental Planning and Assessment Act, 1979*.

13. Parking

Accommodating vehicles can have a significant impact on the design of new development. The location and layout of the parking will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site. The provision of sufficient parking must not compromise the safety of the on street and off street environment for vehicles, pedestrian and cyclists. Parking is required for different types of vehicles according to the proposed use. Vehicles include passenger vehicles, motor bikes, light vehicles and heavy vehicles and pushbikes.

13.1 Objectives

1. Ensure all land uses and/or combination of activities provides sufficient parking on site to satisfy the demand for parking by different vehicle types generated by the development including Traffic Generating Development.
2. Minimise amenity impacts on neighbouring properties including streetscape, noise and light spill.
3. Provide off-street parking areas having regard to the area of the building, the number of employees, residents and visitors, the availability of public transport and use of bicycles.

13.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.
2. Where a proposed development is not listed in these controls, or where the development proposal raises unique traffic and parking issues, or where a development is identified as Traffic Generating Development, then the parking requirement specified in the TfNSW Guide to Transport Impact Assessment shall apply.
3. In addition to the car parking requirements, motorcycle parking shall be provided at a rate of 1 motorcycle space per 25 car spaces or part thereof. For example where 26 car parking spaces are required, then 2 motorbike parking spaces are to be provided. Motor cycle parking spaces shall comply with the relevant standards.
4. In addition to the car parking requirements, bicycle parking space must be provided at the rate of 1 space per 10 car parking spaces for first 200 car spaces, then 1 space per 20 parking spaces thereafter. In addition, 1 unisex shower is required per 10 employees.
5. Bicycle parking facilities are to be installed in accordance with Australian Standard AS2890.3 - Bicycle Parking Facilities (as amended), Austroad's Guide to Traffic Engineering Practice - Part 14 Bicycles and the Austroads Bicycle Parking Facilities: Guidelines for Design and Installation (AP-R527-16).

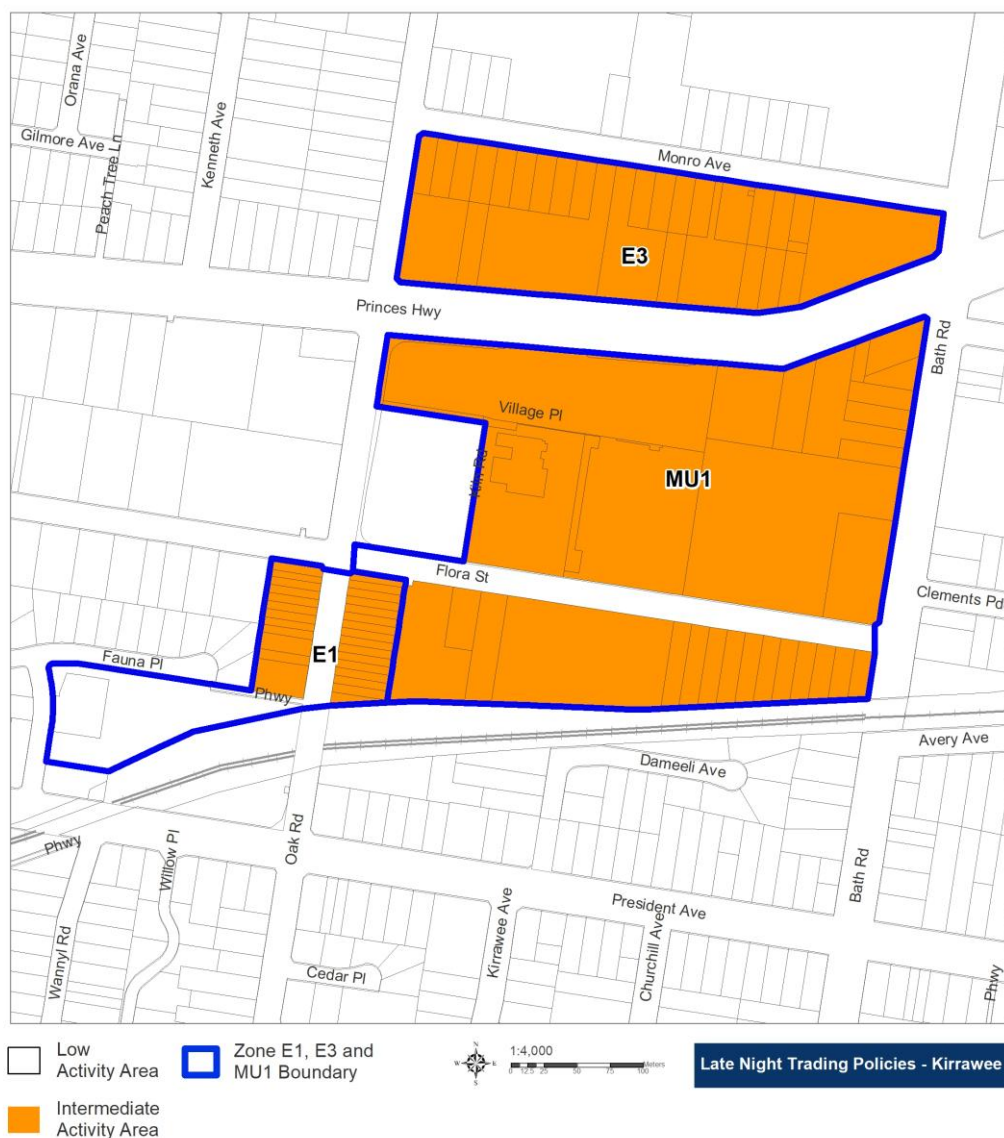
6. Bicycle parking facilities must address the following design principles:
 - a. Accommodate all usual types of bicycles such that damage to them is minimised during storage and retrieval.
 - b. Not pose a hazard to bicycle users, pedestrians or motorists.
 - c. Be well lit, safe and secure, easy to access and use.
 - d. Cater for the different needs of residents, employees and visitors to the development.
 - e. Be located in convenient and accessible locations within the development that allow for good passive surveillance; such as near key building entrances, the lobby and the lift core.
 - f. When located within a car park, preferably be situated at street level and in a manner that provides the most direct, safe and convenient access while minimising conflict with vehicles and pedestrians.
 - g. Where a bicycle parking and storage facility cannot be located at street level, it must be located no more than one level above or below street level. Access to street level entry and exits must be direct, safe and minimise potential conflicts with vehicles.
7. Where the car parking requirement is expressed as a maximum number of spaces the development shall not exceed that maximum.
8. Where the car parking requirement is expressed as a minimum number of spaces the development shall not provide less spaces than that minimum.
9. When the calculations for the number of parking spaces results in a part or fraction of a parking space of 0.5 or greater for the whole development, then the actual number shall be rounded up. For example 1.5 spaces shall be rounded up to 2 spaces for the whole development.
10. Where a development proposal contains two or more land uses the parking requirement shall be the sum of parking required for the individual land uses.
11. Where a proposed development comprises two or more land uses with different peak parking demands, the total requirement may be reduced such that the peak demand is met at any one time where supported by a study by a suitably qualified traffic engineer.

14. Late Night Trading Premises

A late night premise is any commercial premise or community facility which may impact on the amenity and safety of a neighbourhood resulting from its operation at night. The regulation of late night trading also applies to licensed premises under the Liquor Act 2007.

In relation to Late Night Trading Premises controls, Kirrawee Centre is an Intermediate Activity Area.

The guidelines for Late Night Premises are in Chapter 37: Late Night Trading of the DCP.



15. Waste Management Requirements

The design of waste and recycling storage areas within the development determines the efficiency of waste handling as well as affecting occupant amenity and the streetscape presentation of the development.

Multiple uses accompanied by residential accommodation within a property increase challenges with regard to minimising the volume of waste, the ease of access and the efficiency of waste sorting and removal systems.

15.1 Objectives

1. Ensure appropriate waste storage and collection facilities.
2. Maximise source separation and recovery of recyclables.
3. Ensure waste management systems are intuitive for occupants and are readily accessible, integrated with the design of a development.
4. Minimise risk to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.
5. Minimise adverse environmental impacts associated with waste management.
6. Discourage illegal dumping by providing on site storage and removal services for hard waste. Hard waste consists of discarded items of bulky household waste which are awaiting removal.
7. Enable the servicing of the waste management system on site, and the efficient collection of waste and recyclables by collection service providers, with minimum disruption and impact on the community.
8. Ensure bin storage areas/rooms do not dominate the streetscape.

15.2 Controls

1. Provision must be made for waste management, including storage and collection, in accordance with Sutherland Shire Council's *Development Application and Modification Lodgement Guideline* and *Waste Collection Policy for Multi-Unit Dwellings and Residential Flat Buildings*.