ATTACHMENTS TO REPORTS

ORDINARY COUNCIL MEETING

Wednesday 9 December 2020

COPIES CIRCULATED SEPARATELY HEREWITH

Distribution:

Mayor T D Gair
Clr G J Andrews
Clr K J Halstead OAM
Clr G McLaughlin
Clr P W Nelson
Clr I M Scandrett
Deputy Mayor Clr G M Turland
Clr L A C Whipper
Acting General Manager
Deputy General Manager Corporate, Strategy and Development Services
Acting Deputy General Manager Operations, Finance and Risk
Group Manager Corporate and Community
Group Manager Planning, Development and Regulatory Services
Chief Information Officer
Administration Officer (for Archives)

Attachments to Reports

Item

11.4 Draft Masterplan - Casburn Park

ATTACHMENT 1 Draft Casburn Park Masterplan.....4

12.3 Draft Development Control Plan Amendments - Engineering Specifications - Outcomes of Public Exhibition

ATTACHMENT 1 Draft DCP Provisions - Engineering Review 27

ATTACHMENTS TO REPORT

Item 11.4

Draft Masterplan - Casburn Park

Attachment 1

Draft Casburn Park Masterplan

DRAFT CASBURN PARK MASTER PLAN

Contents

1 OVERVIEW
- 1.1 Introduction
- 1.2 Purpose of the Master Plan
- 1.3 Master Plan Objectives
- 1.4 Relevant Planning Documents

2 CURRENT SITUATION
- 2.1 Regional Context
- 2.2 Local Context
- 2.3 Site Analysis
- 2.4 Opportunities and Constraints

3 COMMUNITY CONSULTATION
- 3.1 Community Consultation Methodology
- 3.2 Key Concerns and Requests

4 VISION & PRINCIPLES
- 4.1 Vision Statement
- 4.2 Key Principles

5 MASTER PLAN
- 5.1 Master Plan Overview
- 5.2 Master Plan
- 5.3 Playground Concept Plan
- 5.4 Perspectives
- 5.5 Staging Plan

Issue	Status	Checked By	Date
A	For Client Review	MW	02/11/20
B	For Submission	MW	23/11/20
C	For Submission	MW	24/11/20

1

OVERVIEW

1.1 Introduction

Casburn Park is situated in the heart of Wingello Village and is a valued community social and recreation space. During the January 2020 bushfires that devastated vast areas of the Southern Highlands including Wingello Village, Casburn Park was the centre of activity for bushfire volunteers, operations and a community muster point prior to being evacuated. The scars of the fires are still evident in the village surrounds including Casburn Park, with the removal of trees and garden beds that posed a threat to the adjoining RFS building and Village Hall. The fires have left psychological scars amongst the residents and the renewal of Casburn Park is seen by the locals as an opportunity to help heal the community; physically and emotionally.

Overview 01

1.2 Purpose of the Master Plan

The purpose of the master plan is to provide a framework for the development of Casburn Park over the next 10 years. The master plan will be predominantly a site enhancement master plan, putting place site improvement recommendations and strategies to ensure the Park meets its full potential and community aspirations in terms of access, amenity, functionality and sustainability. The master plan will consider the following deciding factors to guide the concept design, staging and pathway for future development of the Park;

- Outcomes of the stakeholder and community engagement
- Relevant Council policies and guidelines
- Current user requirements including RFS operations
- Aspirations of the community and stakeholders
- Site opportunities and challenges.

1.3 Master Plan Objectives

The objective of the master plan is to provide clear direction for Council to develop a concept plan, founded on community and stakeholder input, to ensure the Park meets current and future needs of its users. The master plan objectives for Casburn Park include;

- Provide a holistic strategic planning and design outcome that considers Casburn Park within it's broader geographical context.
- Provide tangible and realistic recommendations that can be delivered in stages.
- Implement recommendations relevant to Casburn Park from applicable Council strategic plans and policies.
- Improve access and connections within the Park as well as through the Village.
- Address car parking issues.
- Consider traffic calming measures to improve pedestrian safety in the Village.
- Create opportunities for a variety of uses to attract visitation and help activate the Village.
- Consider management of the existing trees and strategies for supplementary tree planting.
- Provide a concept plan for an inclusive playspace that adopts the principles of the Everyone Can Play Guidelines.
- Ensure future development and design interventions consider the requirements outlined in the NSW Rural Fire Services Neighbourhood Safer Places guidelines.
- Respect the history and cultural heritage of the Village and the adjacent Hall.

1.4 Relevant Planning Documents

The following Council policies and guidelines are to be referenced in the development of the master plan;

- WSC Parks Strategy (2016)
- WSC Street Tree Master Plan (2016)
- WSC Public Toilet Strategy (2017)
- WSC Draft Playspace Strategy (2020)
- WSC Wingello Village Precinct Plan

Additional to the Council documents listed, the following NSW Government guidelines will be considered;

- Everyone Can Play – A Guideline to Create Inclusive Playspaces (2019)
- Draft Greener Places Design Guide (2020)
- RFS - The NSP Guidelines (2017)

2

CURRENT SITUATION

Current Situation 02

2.1 Regional Context

Wingello is the southern most village in the Wingecarribee Shire LGA. It is a small rural village with a population of approximately 570 residents. Situated approximately midway between Canberra and Sydney, Wingello is often a place for visitors to stop as they travel along the Southern Highlands Tourist Drive Number 16. Wingello is one of a number of quaint villages along the route such as Tallong, Penrose, Bundanoon and Exeter. Wingello State Forest borders the Village and is a popular place for mountain bike riding and camping, with the main camp ground set amongst Pine Forest approximately 5km from the Village. The Southern Highlands Railway Line traverses the Village and provides a connection between Sydney and Goulburn.

Major vehicular corridor
Wingello
Site Location

Current Situation 02

2.2 Local Context

Wingello Village is concentrated around the railway station and is characterised by the railway station building, Wingello Store, Wingello Community Hall and Casburn Park. The Bill O'Reilly sports ground is located directly opposite the Village on the northern side of the railway line, with Wingello Primary School situated approximately 700m to the north of the Village. The Store, Hall and Casburn Park are important community facilities and social meeting places. All community activities are conducted in these three locations and are treasured by the local residents. Surrounding the Village is a mix of rural, semi-rural and large lot residential development. The Wingello landscape is characterised by large expanses of Eucalyptus Forest with significant stands of Pine trees and forest interspersed throughout the area. Rural clearings are a dominant feature of the landscape as are some of the ornamental plantings within the private properties. The rural character of the place is reinforced by the narrow roads with informal edges aligned with remnant trees close to the road edge.

N.T.S

Current Situation 02

2.3 Site Analysis

Casburn Park is in the centre of the village and a key focal point. It is bordered by Railway Parade and Wingello railway station to the north, Wingello Community Hall and the Store to the west, RFS compound in the east and a rear laneway and residential dwellings to the south. It is situated at the busy intersection of Railway Parade / Murrimba Road and the at-grade railway crossing, creating a hazardous pedestrian situation. Car parking is in the form of a wide gravel shoulder along the Railway Parade frontage and identified by barrier fencing and signage.

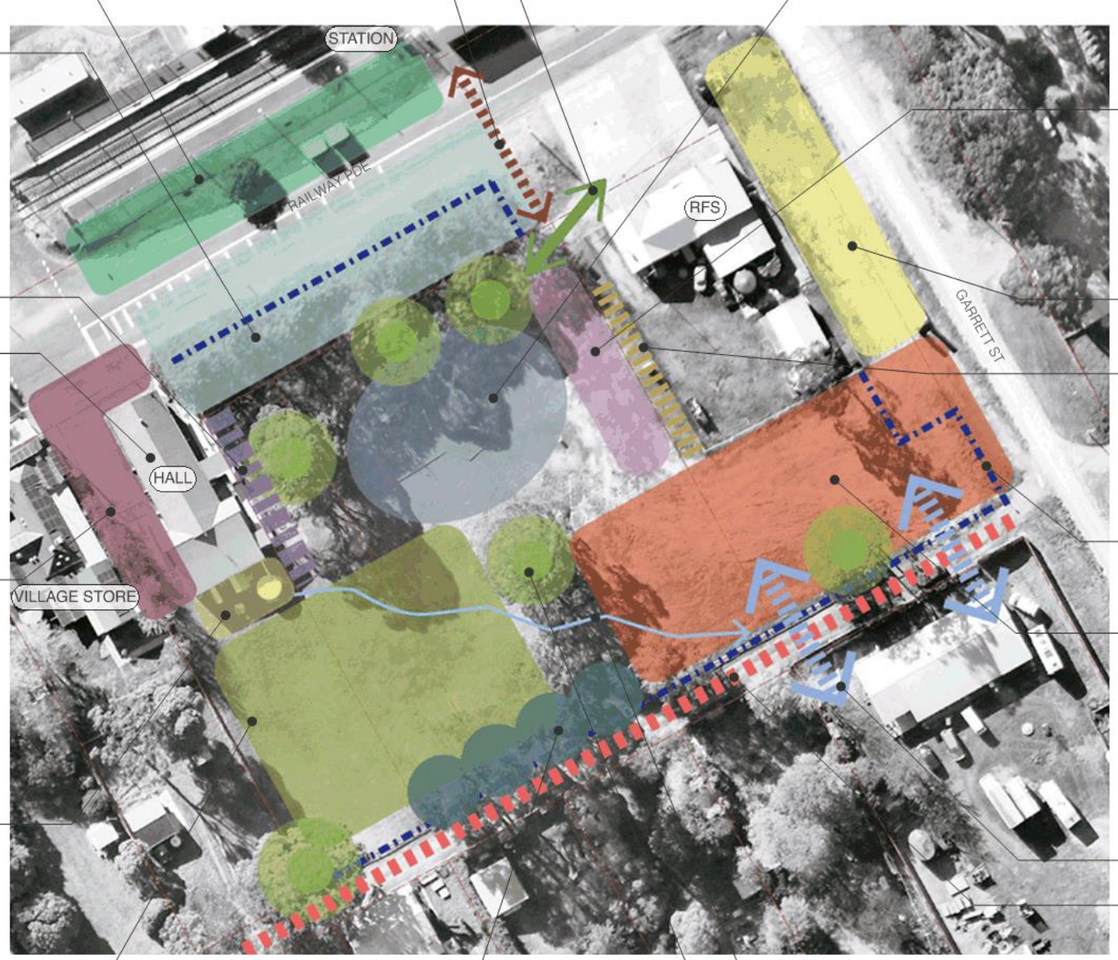
The existing vegetation is a mix of native and non-native species. A dense row of Cupressus species along the Railway Parade frontage is significant feature of the park and Village, creating a visual screen into the park. Mature Eucalyptus and Pinus species are dispersed across the park and provide valuable shade during the hotter months.

The existing playground has a combination of equipment of varying age and quality. There are no connecting paths and the raised edge and bark softfall does not enable users with a mobility disability to access the playspace. A recently installed basketball half court is a popular addition to the park, attracting older children and families. The lack of shade makes the playspace unpleasant during the hotter months.

Toilet facilities are connected to the back of the Hall and are in poor condition. They are not disabled compliant and hidden from view which does not align with sound CPTED principles. Council has identified these toilets for replacement under their Public Toilet Strategy (2017).

Evidence of the January bushfires remain in the park. Trees and garden beds were removed during the fires and a large expanse of grass cover in the south east corner has been extensively damaged. Recent topsoiling and grass seeding have occurred but it is yet to strike. The RFS building and compound is highly visible from the park and the park and Village would benefit from screening to improve the visual amenity.

Current Situation 02



- Undefined edge.
- Open views into railway station
- Void of connectivity to bus stop.

- Existing Cupressus trees hinders views into park.
- Trees define the park edge, provide shade and creates a sense of entry into the village.
- Undefined parking.
- Mulched sloping frontage to park.
- Existing regulatory signage at corner of hall and park.

- Elevated access ramp creates barrier between the hall and park.

- Heritage listed community hall on crown land.
- Lack of outdoor breakout space.

- Underutilised space.
- Lack of formal gateway/entry to village along hall frontage.
- Cafe courtyard opens out to space.
- Access to parcel lockers at village store.
- Poor quality surface.
- Used for loading access during events.

- Toilets in poor quality.
- Poor visual surveillance and accessibility.
- Water tank harvests stormwater from hall roof.

- Large open turf area.
- Used for helicopter landing.

- Maintenance access

- No formal connection from park to station.
- Lack of traffic calming measures along street.

- Pine trees at rear of site.

- Playground only caters for younger children.
- No path connections and inaccessible for disabled.
- Lack of shade.
- New half court to be retained.
- Play equipment in varying state.

- Damaged surface due to maintenance vehicles and fire truck access.

- Underutilised space adjacent to RFS.

- Unsightly views to rear of RFS.

- Timber post and rail barrier fence.
- Limits accessibility to site.

- Undertutilised space at rear of site.
- Void of grass/vegetation.
- Recovering from bushfire related disturbance - removal of trees and vehicle access.

- Views of rear dwellings from park.
- Passive surveillance from dwellings.

- Rear lane access.

- Overflow from rainwater tank.

- Healthy, mature eucalyptus trees.
- Large shade canopies.

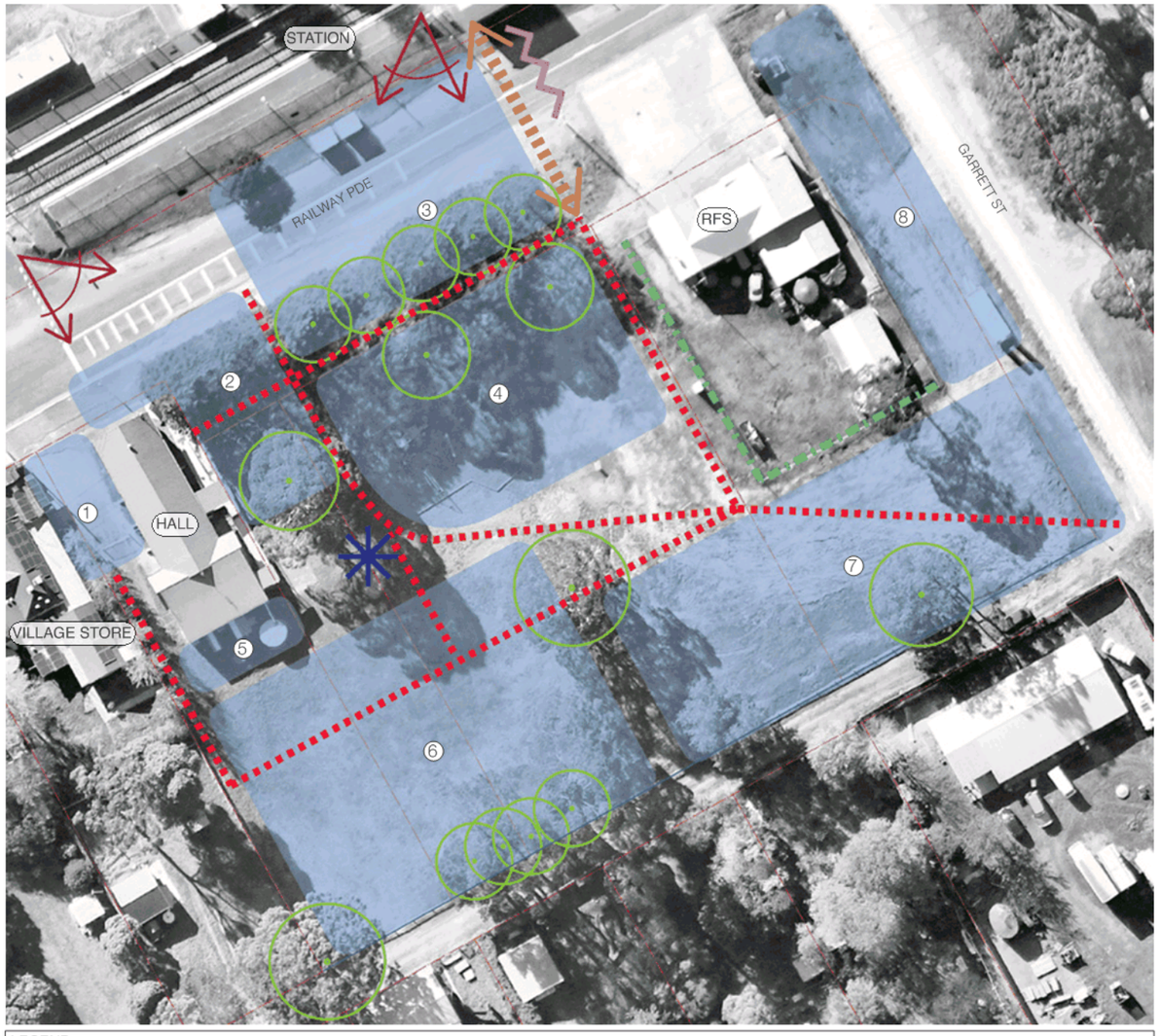
N.T.S

Current Situation 02

2.4 Opportunities and Challenges

Based on our observations of the site, understanding of the master plan intent and discussions with Council staff, a number of opportunities and challenges were identified that would inform the development of a concept design for the park. These opportunities and challenges were presented to the community and stakeholders, the people most knowledgeable of the park and Village, to understand which opportunities had support and were worth exploring further. A summary of the opportunities and challenges are shown in the following plan.

Current Situation 02



LEGEND

- Potential to open up views into
- Opportunity for new amenities/ toilet block in central location
- Opportunity for clear and logical pedestrian thoroughfares
- Potential to improve pedestrian access connections between station and park
- RFS fence line screening opportunity
- Traffic calming opportunity
- Opportunity to consider selectively retain/remove trees as part of park upgrade

N.T.S

① **Cafe Courtyard**
OPPORTUNITIES
- Provide paved seating area.
- Improve service and operations access to hall.
- Provide an open through connection to park.

CHALLENGES
- Hall heritage listing will limit design interventions.
- Security fencing and need to lock outdoor dining area.

② **Village Plaza**
OPPORTUNITIES
- Remove existing Cupressus trees and open up views through to park and improve pedestrian access along Railway Parade.
- Provide feature sign/public art welcoming visitors to Wingello and Casburn Park.
- Create a paved 'Village Plaza' meeting place and spill out space from the hall.
- Introduce colour with the planting of ornamental deciduous trees.

CHALLENGES
- Elevation of hall above ground level would create a stepped breakout space.
- Large existing Eucalyptus tree will dictate extent of earthworks and design of space if retained.
- Existing location of disabled access ramps impacts ability for connected spill out space from hall.

③ **Park Edge**
OPPORTUNITIES
- Formalise car parking
- Open up views through to park by selectively removing existing Cupresses trees
- Utilise existing site levels to create a terraced seating edge.
- Remove barriers to improve pedestrian access & connectivity.
- Opportunity for greater connectivity to existing bus stop and train station.

CHALLENGES
- Community's acceptance to remove existing Cupressus.
- Existing trees if retained will dictate design levels and extent of disturbance.
- Retaining regulatory signage.

④ **Playspace**
OPPORTUNITIES
- Remove/upgrade existing playground to an accessible, fun, imaginative and exciting playspace suited to a broader age group.
- Remediate damage from maintenance vehicles and fire trucks.
- Create a space where families can gather.
- Provide BBQ/Picnic facilities.

CHALLENGES
- Recently installed half court needs to remain in current location which will dictate playspace levels and general arrangement.

⑤ **Hall Storage**
OPPORTUNITIES
- Remove existing toilets and replace with storage facility for the hall and park infrastructure.
- Relocation of toilets to improve visibility and accessibility.
- Opportunity for water harvesting.

CHALLENGES
- Will need to reconsider location of existing water and septic tanks.

⑥ **Village Green**
OPPORTUNITIES
- Utilise current open space area to create a defined 'Village Green'.
- Install infrastructure to enable markets and events.
- Use landscaping to define the space and create an attractive setting.
- Utilise public laneway to access for maintenance and events.

CHALLENGES
- May require re-grading/earthworks to create a level and even surface suitable for markets/events.
- Space will need to be accessible for emergency helicopter landing.
- Hall partially blocks views.

⑦ **Park Corner**
OPPORTUNITIES
- Consider options to activate and connect the current underutilised portion of the park.
- Feature tree planting along southern edge to partially screen views of rear yards and fences.
- Opportunity for vehicular access/parking from Garrett Street.

CHALLENGES
- RFS requirement to use space during emergencies.
- Good passive surveillance from dwelling but aesthetically unappealing view from park.

⑧ **RFS Space**
OPPORTUNITIES
- Dedicate space for RFS muster, operations and overflow parking.

CHALLENGES
- May not be large enough in extreme emergencies.

3

COMMUNITY CONSULTATION

3.1 Community Consultation Methodology

Community and stakeholder was undertaken in the form of an online questionnaire on the Council 'Your Say' platform and a face to face workshop / presentation of three preliminary concept options. Key findings of the consultation are summarised in '3.2 Key Concerns and Requests'.

Community Consultation 03

3.2 Key Concerns and Requests

Stakeholder Conversations

It is evident that Casburn Park is an important community meeting place given it is in the centre of the Village. It holds life-long memories and has supported community events throughout the existence of Wingello Village. It has survived bushfires and been a safe haven during the fires. The park is much loved and in need of an upgrade to support the growing population and help the community overcome the trauma of the January 2020 bushfires.

Parking

- On-street parking in front of the park should be retained as it is critical for the shop and park users.
- When events are on there is limited parking, however, it is acknowledged that we should try and design parking capacity for these events. Consider informal overflow parking areas.
- The parking behind the RFS compound was supported.
- Parking in the rear lane should be explored.
- Parking along Railway Parade needs to allow space for the bus stop which is not clearly defined.

Traffic Management

- The intersection and railway crossing is dangerous and the community has been lobbying for many years for safety upgrades. The master plan should identify possible solutions to reduce speed and improve the pedestrian crossing / movements through the village.
- The bus stop needs to be clearly identified.
- Kerb and guttering, reduced lane, raised crossings, line marking and landscaping should all be considered as traffic calming measures to improve the safety.

Bushfire Safety and Operations

- Preliminary advice is that the existing trees do not pose a fire hazard. Any new tree planting needs to consider combustibility of species.
- Currently the park meets the guidelines of the 'Neighbourhood Safer Places' (NSP). Any design interventions need to make sure the park remains compliant with the NSP.
- Shrubs along the RFS compound boundary were removed during the January bushfires as they posed a risk to the facility. Any new planting needs to be fire resistant.
- The dedicated parking in front of the RFS building needs to be sign posted or clearly identified not for public parking. Volunteer parking during busy periods can occur along Garrett Street
- RFS would prefer the park maintenance access gate was removed and maintenance access come from Garrett Street or the rear laneway.

Playground

- Would like to see a new playground cater for all ages, including adults.
- The halfcourt has been a great success and attracted more people to the park. Would like to see more things like this that will attract multiple ages.
- The current equipment is not great and would prefer to see new equipment and softfall.
- Given it is the only playground within a large radius, many people drive to use it and its an important recreational asset for the residents.
- Would like to see shade over the playground.

Tree Retention

- Retention of the existing trees should be a priority as they provide important shade in the summer months.
- The row of Conifers along the park frontage play an important role in capturing embers during bushfires, particularly as the majority of the fires come from the north. Thinning out of the trees is acceptable as long as the canopy barrier is retained.
- Trees were removed during the January bushfires and the community would not like to see anymore removed.

Park Facilities

- The current toilets are not appropriate and would like to see new toilet facilities in close proximity to the Hall and playground that is visible from Railway Parade.
- The design of the toilet building needs to be sympathetic to the heritage of the village
- BBQs and picnic shelters would be a welcome addition.
- There are no paths or disabled accessible facilities apart from a ramp to the Hall. Connecting paths throughout the site should be a priority.
- More seating.

Community Consultation 03

Concept Options Comments

- There were elements of all the options that were liked, however, Option 2 was the most supported, particularly the bike trail.
- The location of the toilet in options 1 & 2 was the most supported.
- The 'Village Laneway' was strongly supported. Access to the sewerage tanks must be maintained and the Village Laneway could extend all the way through to the rear laneway for maintenance / operations access.
- Heritage interpretation is strongly supported
- The 'Village Green' is a great idea but should be rectangular in shape as it is more functional / flexible.
- The 'Village Plaza' concept was well-received and provides good breakout space for the Hall.
- A flying fox and natural looking play equipment was the most supported.

'Your Say' General Comments

- More exciting play equipment to challenge older children
- BMX / pump track, skate park, scooter track should be included
- Beautify the park through landscaping and feature garden beds
- The toilet facilities need replacing.
- A large underground water tank that assist with bushfire preparedness / operations should be included.
- Nature-based play and climbable trees should be included.

4

VISION & PRINCIPLES

4.1 Vision Statement

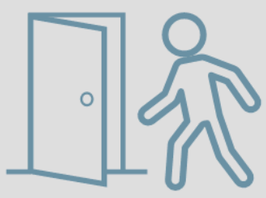
Casburn Park will be a welcoming and inclusive meeting place that supports the Village activities through the provision of multifunctional spaces that promote social interaction and play in a safe parkland setting.

The vision for Casburn Park has been developed by listening and capturing the community and stakeholders aspirations for the Park. It is a holistic vision that will ensure the Park is developed in a way that benefits the community and continues to support the Village as an important meeting place. Underpinning the vision, are a set of guiding principles that are intended to guide the design decision making process. The principles will assist in assessing and prioritising ideas and interventions for the Park.

Vision & Principles 04

4.2 Key Principles

Safe and Welcoming



- Incorporate landscaping and traffic calming measures throughout the Village to create a safe pedestrian environment and an enhanced sense of arrival.
- Integrate Crime Prevention Through Environmental Design (CPTED) principles in the Park upgrades and design interventions.
- Improve the passive surveillance into the park from public vantage points.
- Ensure the Park upgrades adhere to the 'Neighbourhood Safer Places' (NSP) guidelines so that the Park maintains its function of serving Wingello residents as a NSP.
- Create visible and welcoming entry and gathering spaces.

Social and Fun

- Leverage the Park's central location within the Village and create spaces that cater for large and small social gatherings.
- Expand the diversity of facilities and recreational offering for the Park.
- Provide an upgrade playspace for all ages that promotes fun, imagination and social interaction.
- Provide outdoor spill out spaces from the Store and Community Hall to encourage socializing and cater for larger events.

Connected and Accessible

- Incorporate universal design access principles for people of all ages and abilities
- Adopt inclusive playspace design principles as outlined in the 'Everyone Can Play Guidelines' prepared by the NSW Government.
- Provide safe, legible and equitable DDA compliant access to all park facilities and amenities.
- Provide pedestrian connections throughout the Village that connect the Store, Railway Station and the northern side of the railway line.

Green and Relaxing

- Plant a variety of tree species to introduce more shade and seasonal colour.
- Provide structured and informal places to sit and relax.
- Investigate water capture and harvesting opportunities for irrigation and storage during bushfire emergencies.
- Retain and protect the existing trees.

Village Narrative

- Celebrate the rich history of Wingello Village.
- Incorporate interpretive elements into the design interventions including the use of public art.
- Acknowledge significant bushfire events that have impacted Village and brought the community together.

5

MASTER PLAN

5.1 Masterplan Overview

The following masterplan seeks to guide and suggest future development proposals for Casburn Park. The masterplan has been produced taking into consideration information gathered through site analysis research, community consultation and the strategic and aspirational visions of Council.

Master Plan 05

5.2 Masterplan

1. "Village Plaza"
2. "Welcome to Wingello" signage
3. Spillout deck from community hall
4. Formalised carpark with kerb and gutter and 90 degree parking
5. Thinned out Cupressus trees to improve views into the park and overall surveillance
6. Terrace steps/seating
7. Turf picnic space
8. Playground with natural and traditional elements for all ages and abilities
9. Concrete kids bike track
10. Existing half court to be retained
11. Toilet block to complement heritage character of Community Hall
12. Flying fox
13. Loop of deciduous flowering trees
14. Low maintenance and fire resistant garden
15. Hall storage
16. "Village Laneway" with paving, public art and historic interpretation
17. Underground water tank to capture water from Hall and toilet block roofs
18. "Village Green" arbour with seating
19. "Village Green"
20. Dirt pump track
21. Carpark off rear lane
22. Upgraded rear lane access
23. Maintenance access point with removable bollards
24. Formalised road with kerb and gutter
25. Overflow RFS parking
26. Signage to indicate prohibited parking in front of RFS
27. Bus stop
28. Pedestrian refuge to allow for safe crossing between station and park

Master Plan 05

5.3 Playground Concept Plan

1. Nature play composite timber steppers and balance beams
2. Nature play stone steppers and composite timber balance
3. Inclusive spinner
4. Springer
5. Three bay swings
6. Sandpit with digger and play table
7. Climbing net and slide
8. Flying fox
9. Concrete bike path with berms

Master Plan 05

5.4 Perspectives

Perspective A
Village Plaza/Spillout Deck

Perspective B
Village Laneway

Perspective C
Plaza Frontage with Terraced Steps

Master Plan 05

5.5 Staging Plan

1. Railway Parade upgrade and parking
2. Village Plaza, picnic area and toilet
3. Playspace, bike trail, pump track and Village Green
4. Village Laneway, rear laneway/parking and Garrett Street upgrade

Prepared by Moir Landscape Architecture for Wingecarribee Shire Council

ATTACHMENTS TO REPORT

Item 12.3

Draft Development Control Plan Amendments - Engineering Specifications - Outcomes of Public Exhibition

Attachment 1

Draft DCP Provisions - Engineering Review

Draft Development Control Plan Provisions – Engineering Specifications

Incorporating into all Wingecarribee Development Control Plans

Note: The proposed changes outlined in this document will be incorporated into the relevant sections within all of Council's Development Control Plans. The numbering in this document will not reflect the numbering in the final Development Control Plans.

Additional provisions shown highlighted yellow

Deleted provisions shown ~~with strikethrough~~

A4.5 Stormwater Management Plan

A Stormwater Management Plan report will be required by Council for all development that will result in:

a) An increase in the impervious area of the site, or
b) A change in the direction of overland flow

The intent of the Stormwater Management Plan is to demonstrate that 'post development' overland water flows will not exceed 'pre development' flows in terms of:

a) Volume,
b) Quality (including nutrient content), and
c) Direction,

The Stormwater Management Plan must be prepared in accordance with Council's Engineering Design and Construction Specifications ~~Report must contain the following:~~

- ~~A concept plan~~
- ~~Details of proposed drainage and site discharge~~
- ~~Identification of possible onsite storage and water quality treatment devices.~~
- ~~Reference to the Landcom publication: *Managing Urban Stormwater: Soils and Construction Vol 1, 4th Edition, Landcom, 2004* will be required.~~

A4.7 Water Sensitive Urban Design

This section shall be read in conjunction with the relevant technical information in Council's Engineering Design and Construction Specifications.

Introduction

~~A typical consequence of development is an increase in the volume and frequency of water runoff and flood events within developed environments. These events largely result from large areas of hard, impervious surfaces, e.g. roofs, roads and driveways. Hard, impervious surfaces reduce the capacity of the environment to absorb water and increase reliance on stormwater pipes, creeks and rivers, and flood mitigation structures.~~

~~The overall aim of Water Sensitive Urban Design (WSUD) is to avoid or minimise the impact of development on all aspects of the natural water cycle. (WSUD) is a commitment to avoiding waterway pollution, reducing potable water use, reducing wastewater production and the use of recycled water. This reduces reliance on aquifer ecosystems, wetlands, creeks and rivers, for both water supply and discharging wastewater.~~
~~Specifically,~~
Water Sensitive Urban Design (WSUD) aims to:

(a) Conserve potable water.

(b) Protect natural ecosystems and waterways.

(c) Protect water quality entering natural ecosystems and waterways.

(d) Minimise surface runoff entering natural ecosystems and waterways.

(e) Integrate stormwater and wastewater treatments into the public and private natural landscape to optimise visual, social, cultural, recreational and ecological values.

Objectives

WSUD controls must be satisfied for all development applications and integrated into a Water Cycle Management Study when such a study is required by Water NSW. Water NSW should be contacted directly to determine if a Water Cycle Management Study is required as circumstances vary widely.

When planning and designing development within the Shire, reference is to be made to Current Recommended Practices contained within *SEPP (Sydney Drinking Water Catchment)* 2011 and current best practice guidelines and technical documents such as:

- *Technical Guides: Australian Runoff Quality – A Guide to Water Sensitive Urban Design (Engineers Australia, 2006).*
- *Water Sensitive Urban Design Engineering Procedures: Stormwater (Melbourne Water, 2005).*
- *Water Sensitive Urban Design (Landcom, 2009).*
- *Council's Engineering Design and Construction Specifications.*

Controls

To achieve this Objective, the following Controls apply.

a) All development within the Shire is to utilise potable water efficiently. For residential dwellings, including houses and units, the requirements of BASIX ensures the development complies with NSW planning requirements to conserve water.

b) Development should not occur within riparian buffer zones outlined in Wingecarribee Shire Council Local Environment Plan 2010 (Clause 7.5

Natural Resource Sensitivity – Water and related maps) and vegetation within the riparian buffer distances is to be maintained and intact.

c) All development within the shire must comply with the requirements of *SEPP (Drinking Water Catchment) 2011* to ensure water quality exiting a site post development achieves a neutral or beneficial effect (NorBE) in comparison to pre-development water quality runoff.

d) All developments within the Shire shall be designed in accordance with the WSUD part of Council's Engineering Design and Construction Specifications

~~e) Development which proposes to re-develop an existing, developed site (particularly those used previously for commercial and/ or industrial purposes), must comply with one of the following, whichever provides the greatest treatment of water:~~

~~i. Water quality exiting a site post-development must achieve a neutral or beneficial effect (NorBE) in comparison to pre-development water quality runoff (in accordance with *SEPP (Sydney Drinking Water Catchment)* 2011.~~

~~ii. Post-development water quality runoff must achieve the following targets as improvements to the pre-development water quality runoff exiting the site:~~
- ~~85% reduction in the average annual total suspended solids loads.~~
- ~~65% reduction in the average annual total phosphorus load.~~
- ~~45% reduction in the average annual total nitrogen load.~~
- ~~90% reduction in the average annual gross pollutant (size >5mm) load.~~
- ~~To retain sediment coarser than 0.125mm for flows up to 25% of the 1 year ARI peak flow.~~
- ~~To ensure no visible oils for flows up to 25% of the 1 year ARI peak flow, in areas with concentrated hydrocarbon deposition.~~

~~f) For proposals to subdivide land and create four or more allotments, the maximum discharge for the 1:100 year storm must not exceed the pre-development discharge.~~

~~g) Development must not pipe or channel riparian corridors or waterways.~~

h) ~~Current recommended practices outlined in the SEPP (Sydney Drinking Water Catchment) 2011 and current best practice technical guides must be utilised to ensure effective functioning of treatment options.~~

A4.8 Water Treatment Train

The water treatment train designs will be considered in accordance with technical guidelines in Engineering Design and Construction Specifications as well as Councils set of Standard Drawings.

~~In order to implement WSUD a 'treatment train' approach is recommended. A WSUD Treatment Train is a number of measures and treatments in a series, rather than one single measure to achieve the objectives of water sensitive design.~~

An example of a treatment train at a street scale for a proposed subdivision may include:

- Use of permeable surfaces, to allow water to infiltrate soil
- Grassed swales adjacent to road/s,
- Onsite bio-retention system and gross pollutant trap to capture runoff, filter pollutants and discharge water into natural system at a rate similar to pre-development, and
- Bio-retention system to filter water discharge from any onsite car park.

Examples of WSUD 'Treatment Train' Options

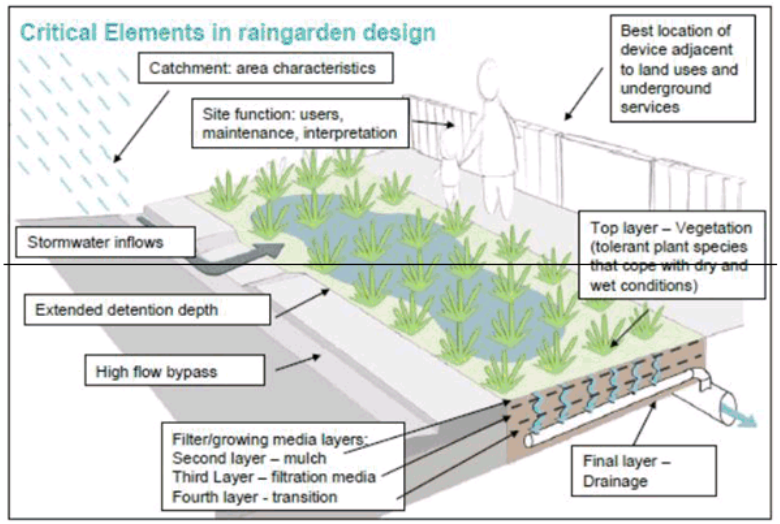
In order to achieve WSUD objectives, development will require the use of treatments in series, complementing one another. Table D provides examples of suitable WSUD treatment options to assist in achieving these targets.

Table D: Examples of suitable WSUD treatment for various development scale

WSUD treatment option	Allotment scale	Street Scale	Catchment / sub catchment scale
Rain garden	x	x	x
Rain water tank	x	x	
Swales/ buffer strips		x	
Porous paving	x	x	x
Infiltration systems	x	x	
Bioretention basins	x	x	x
Constructed wetlands		x	x
End of pipe treatment e.g. gross pollutant traps	x	x	x

- **Rain Gardens**

Rain gardens are landscaping features of locations, shapes or sizes, and capture and filter stormwater runoff. They may also conveying water flow into the stormwater pipe network beneath. Common locations include small parks, between car parking bays and surrounding residential dwellings.



Example of a Rain Garden at Mittagong

- ~~**Swales and Buffer Strips**~~

~~Swales and buffer strips collect stormwater runoff, decrease flow rates and reduce downstream impacts. Swales and buffer strips can also act as biofilters where water passes through a filtration medium (e.g. grass, vegetation and gravel).~~

~~Swales and buffer strips can be used adjacent to roads however they should not be used as infiltration points as pools of collected water can affect road base materials. Council prefers swales and buffer strips to be located adjacent to roads and not to be included in the medium-stripe design due to access and maintenance issues associated with these locations.~~

Example of a Vegetated Swale at Renwick

Example of a Grass Swale at Renwick

- ~~**Porous Pavements**~~

~~Porous paving allows rainwater to penetrate into soil and subsoil layers, recharging water supplies and filtering pollutants. In some cases excess water from rainfall events may also be conveyed into drainage pipes located beneath.~~

~~Example of Porous Pavement~~

- ~~**Infiltration Systems**~~

~~Infiltration systems do not treat stormwater, instead aim to capture runoff and promote infiltration. Infiltration systems reduce damage downstream from heavy rainfall events by reducing peak flows and downstream flooding. These systems also assist in recharging groundwater.~~

~~Example of an Infiltration System at Renwick~~

- ~~**Bio-retention Systems**~~

~~Bio-retention systems (e.g. basins and swales) are designed to capture stormwater runoff and then improve the water quality by passing through a filter. Bio-retention basins may take a variety of shapes and forms within a catchment. They are sensitive to materials which may block them.~~

Example of a Bio-retention System at Renwick

Example of a Bio-retention System at Mittagong

- ~~**Constructed Wetlands**~~

~~Constructed wetlands are shallow vegetated water bodies which remove pollutants from stormwater through sedimentation, fine filtration, detention and biological uptake. Wetlands can also have significant social and community benefits, providing habitat for wildlife and sites for recreational or active transport activities~~

~~such as walking and cycling. The constructed wetland may be located on-stream or off-stream and will vary in size depending on their location within a catchment.~~

~~Example of a Constructed Wetland~~

- ~~**End of Pipe Treatments e.g. gross pollutant traps**~~

~~End of pipe treatments capture gross pollution prior to it entering creeks and waterways. These devices retain litter, debris, and coarse materials washed downstream through storm and heavy rainfall. They require frequent maintenance and cleaning. End of pipe treatments are a last attempt to remove pollution from waterways.~~

Example of a Gross Pollutant Trap

Ongoing Maintenance of WSUD 'Treatment Train' Devices

WSUD water management devices are only as good as the level of maintenance applied to them. If they are neglected, or filled in or built over or in some other way modified, they may no longer function as efficiently as they should and in some cases they may cease to function at all. This can cause stormwater management issues on the property on which they are located, or on neighbouring properties.

Rain gardens and other stormwater quality devices are requirements imposed on certain development by Water NSW due to much of the Shire being within the Sydney Catchment Area. Only Water NSW can vary or remove the condition.

Water NSW conditions in respect of stormwater quality devices are often placed on the 88B Instrument as a restriction or covenant on the title. Either Water NSW or Wingecarribee Shire Council can be nominated as the beneficiary.

Generally the benefiting party to the restriction or covenant are able to pursue regulatory compliance action where a device has not been maintained or has failed. However, Council also has the right to undertake maintenance at the property owner's expense. Such action would probably be prompted by a complaint to Council.

Therefore, applicants who are required to provide such devices are strongly advised to maintain them in good repair for their own benefit and for the benefit of neighbouring properties and the environment generally. Such devices, especially rain gardens and wetlands, can provide a significant ecological and visual benefit to the property and the locality.

Section 2 Flood Liable Land

This section is to read in conjunction with related technical information in Council's Engineering Design and Construction Specifications – Stormwater Drainage

A2.0 Introduction

This Section applies to any development for which consent is required that is located on land affected by flooding (flood liable or flood prone land).

In 1984, the State Government introduced its Flood Prone Land Policy, applicable to all land in New South Wales. The first Floodplain Development Manual (FDM) was published in 1986, providing guidelines for the implementation of the government's Flood Prone Land Policy and the 'merit approach' that underpins its application.

In 2005, the State Government released revised guidelines under the *Floodplain Development Manual* (FDM April 2005) to support the Flood Prone Land Policy, the primary objective of which is:

> *"to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property, and to reduce private and public losses resulting from floods, utilising ecologically positive methods wherever possible."*

Local Government is the primary authority responsible for both flood risk management and land use planning in New South Wales. The State Government's flood policy provides for a flexible merit based approach to be followed by local government when preparing controls for planning, development and building matters on flood liable land. For Council to fully carry out its responsibilities for management of flood liable land, it is necessary to prepare a local *"Floodplain Risk Management Plan*" (FRMP).

The FDM requires that Councils prepare *Floodplain Risk Management Studies* (FRMS) as a prelude to the formulation of a FRMP that, among other things, would control development and other activity within the floodplain. The process for preparing a FRMS and FRMP is depicted by Figure A4.1 below.

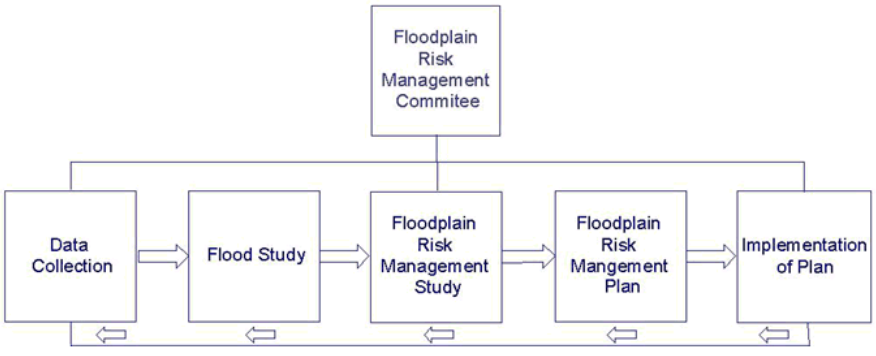


Figure A4.1 - Floodplain Risk Management Process (FDM, 2005)

The following controls are consistent with the State Government's "Flood Prone Land Policy" and the FDM. The controls in this section represent an application of the State Policy to reflect local circumstances as identified for the Mittagong floodplain, through the preparation of a FRMS and FRMP.

The purpose of this section of the DCP is to guide development to ensure risk to life and property associated with flooding is minimised in a manner consistent with the Policies of Council formulated under the NSW Flood Policy and Floodplain Development Manual.

A2.1 Objectives

The objectives of this Section are to:

(a) Increase public awareness of the hazard and extent of land affected by all potential floods, including floods greater than the 100 year average recurrence interval (ARI) flood and to ensure essential services and land uses are planned in recognition of all potential floods.

(b) Inform the community of Council's policy for the use and development of flood prone land.

(c) Manage the risk to human life and damage to property caused by flooding through controlling development on land affected by potential floods.

(d) Provide detailed controls for the assessment of applications lodged in accordance with the Environmental Planning and Assessment Act 1979 on land affected by potential floods.

A2.2 Requirements and Controls

A2.2.1 How to Determine Compliance

Different controls apply to different land uses, depending on the flood hazard applying to the land. The controls in this part of the DCP comprise:

- **The objectives** - a statement of the purpose intended to be achieved by each control, to assist in understanding the control.
- **The performance criteria** - state a desired outcome and a means of assessing whether the desired outcome will be achieved.
- **The prescriptive controls** - preferred ways of achieving the desired outcome. While adherence to the prescriptive controls may be important, it is paramount that the objectives and the performance criteria are clearly satisfied.

A2.2.2 Flood Risk Precincts

Figure A4.2 (overleaf) illustrates the various Flood Risk Precincts (FRPs) identified in Mittagong. The identification of these Precincts is to grade the relative severity of flood risks across the floodplain and thereby provide a basis for assigning development controls. The various FRPs in Mittagong are described below.

High Flood Risk Precinct

This Precinct contains that land below the 100 year flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties. The high flood risk precinct is where high flood damages, potential risk to life, and evacuation problems would be anticipated or development would significantly and adversely effect flood behaviour. Most development should be restricted in this precinct. In this precinct, there would be a significant risk of flood damages without compliance with flood related building and planning controls.

Medium Flood Risk Precinct

This Precinct contains that land below the 100 year flood that is not subject to a high hydraulic hazard and where there are no significant evacuation difficulties. In this precinct there would still be a significant risk of flood damage, but these damages can be minimised by the application of appropriate development controls.

Fringe-Low Flood Risk Precinct

This Precinct contains that land between the extents of the 100 year flood and the 100 year flood plus 0.5m in elevation (being a freeboard). In this precinct there would still be a significant risk of flood damage, but these damages can be minimised by the application of appropriate development controls.

Low Flood Risk Precinct

This Precinct contains that land within the floodplain (i.e. within the extent of the probable maximum flood) but not identified within any of the above Flood Risk Precincts. The Low Flood Risk Precinct is where risk of damages is low for most land uses and most land uses would be unrestricted within this precinct.

A2.2.3 Land Use Categories

The list of land use definitions contained within WLEP 2010 has been grouped into major land use categories based on their sensitivity to flood risks. The eight land use categories and the identified land uses they contain are:

Category	Included Land Uses
Critical uses and facilities	Emergency services facility; administration building or public administration building that may provide an important contribution to the notification or evacuation of the community during flood events (e.g. SES Headquarters and Police Stations); Hospital.
Sensitive uses and facilities	Community facility; Telecommunications facility; Institution; Educational establishment; Liquid fuel depot; Public utility undertaking (including electricity generating works and utility installations) which is essential to evacuation during periods of flood or if affected would unreasonably affect the ability of the community to return to normal activities after flood events; Residential care facilities.
Residential	caravan park (approved long-term sites and/or "annuals"); child care centre; exhibition home; home-based child care centre; home business; home industry; home occupancy; moveable dwelling; neighbourhood shop; residential accommodation; tourist and visitor accommodation.
Commercial or industrial	Air transport facility; airport; amusement centre; bulky goods premises; business premises; community facility (other than critical and sensitive uses and facilities); correctional centre; crematorium; depot; entertainment facility; exhibition village; freight transport facility; function centre; funeral chapel; funeral home; hazardous industry; hazardous storage establishment; health services facility; heavy industry; heliport; highway service centre; industrial retail outlet; industry; liquid fuel depot; light industry; market; mixed use development; mortuary; night club; offensive industry; offensive storage establishment; office premises; passenger transport facility; place of public entertainment; place of public entertainment; place of public worship; pub; public administration building (other than critical uses and facilities); recreation facility (major); registered club; restricted premises; retail premises; self-storage units; service station; sex services premises; shop top housing; storage premises; timber and building supplies; transport depot; truck depot; vehicle body repair workshop; vehicle repair station; vehicle sales or hire premises; veterinary hospital; warehouse or distribution centre; waste disposal facility; waste management facility; waste or resource management facility; waste or resource transfer station; and wholesale supplies.
Recreation and non urban	Animal boarding or training establishment; biosolid waste application; biosolids treatment facility; boat launching ramp; boat repair facility; boat shed; caravan park (with no approved long term sites and no "annuals"); charter and tourism boating facility; environmental facility; environmental protection works; extensive agriculture; extractive industry; information and education facility; horticulture; kiosk; landscape and garden supplies; marina; mine; mining; moveable dwelling; port facilities; public utility undertaking (other than critical uses or facilities); recreation area; recreation facility (indoor); recreational facility (outdoor); research station; resource recovery facility; utility installations (other than critical uses and facilities); water recreation structure; water recycling facility; and water storage facility.
Concessional development	(a) In the case of **residential development**: (i) an addition or alteration to an existing dwelling of not more than 10% or 30m^2 (whichever is the lesser) of the habitable floor area which existed at the date of commencement of this Plan;

	(ii) the construction of an outbuilding with a maximum floor area of 20m^2; or (iii) rebuilt dwellings which substantially reduce the extent of flood affectation to the existing building. (b) In the case of **other development**: (i) an addition to existing buildings of not more than additional 100m^2 or 10% of the floor area which existed at the date of commencement of this DCP (whichever is the lesser); (ii) rebuilding of a development which substantially reduces the extent of flood risks to the existing development; (iii) a change of use which does not increase flood risk having regard to property damage and personal safety; or (iv) subdivision that does not involve the creation of new allotments with potential for further development.

Section 3 Subdivision, Demolition, Siting and Design

Councils Engineering Design and Construction Specifications outline background and technical information necessary to assist in the preparation of development applications.

Users of this Section of the DCP should therefore refer to Council's Engineering Specifications. With any inconsistency between the provisions/specifications of the DCP and Councils Engineering Specifications, the Engineering Specifications will prevail.

A3.4 Cut and Fill

A3.4.1 Introduction

In undertaking the site analysis, applicants are reminded that Council expects new development be designed to respond to a site's topography. Cut and fill is not considered an acceptable alternative to responsive design. Excessive cutting and filling of a site disturbs the natural soil profile and results in built form that is not sensitive to the existing landform on a site.

This section shall be read in conjunction with relevant technical information in Council's Engineering Design and Construction Specifications.

A3.4.2 Objectives

a) Encourage stepping of buildings in response to existing topography.
b) Minimise disturbance to existing landforms and soil profile.
c) Minimise use of retaining walls.

A3.4.3 Controls

a) Where the cut and fill objectives cannot be met, the development must be stepped in order to accommodate the contours of the site.
b) Any cut and fill required shall comply with the maximum controls set out in Clause 7.3 (Earthworks) of Wingecarribee Local Environmental Plan 2010.

Section 4 Construction Standards & Procedures

Councils Engineering Design and Construction Specifications outline background and technical information necessary to assist in the preparation of development applications.

Users of this Section of the DCP should therefore refer to Council's Engineering Specifications. With any inconsistency between the provisions/specifications of the DCP and Councils Engineering Specifications, the Engineering Specifications will prevail.

A4.0 Introduction

When preparing detailed plans, applicants are directed to the following surveys and reports which may be required to address specific site conditions and to Council's construction standards with regard to certain matters. Council inspection procedures with regard to certain matters are also addressed in this Section.

A4.2 Building near or over Council Mains and Easements

The building of structures over/adjacent to Council's water, stormwater and sewerage assets will be considered in accordance with technical guidelines in the Engineering Design and Construction Specifications, as well as Council's set of standard drawings.

~~**NB: Structures are to be erected clear of Council's water, sewer and drainage mains by a minimum of one (1) metre and 1.2 metres for a sewer manhole and shall be clear of any easement over such a main. The following controls apply only in those situations where Council is satisfied that there is no alternative to the proposed location.**~~

~~A4.2.1 Sewer Mains~~

~~(a) Under no circumstances will Council permit a building to be erected over a sewer rising main.~~

~~(b) Council may permit the building over a sewer main in accordance with the following:~~

~~(i) The maximum length of the sewer main built over by an unelevated structure (ie. Less than 1.7 metres clearance above the pipe) shall not exceed 12 metres unless otherwise authorised by Council.~~

~~(ii) A registered easement over the main being granted at the owner's expense.~~

~~(iii) Where replacement, augmentation or amplification of the sewer main is required, the pipes shall be UPVC or cast iron at a cost to be negotiated between the owner and the Council.~~

~~(iv) No building is permitted over a sewer manhole.~~

~~(v) The unobstructed personal access of minimum width 900mm shall be provided to any manhole located upon private property.~~

(vi) A building shall not be erected within the area of influence above the angle of repose of 45 degrees for normal loam/clay/sand foundations, or 60 degrees for rock foundations measured 600mm from the outside of the pipe for the trench bottom.

(vii) Piers designed by a professional engineer shall be provided to carry structural loadings below the invert level of the main. In all circumstances the clearances between a building and a main or drain shall be to the satisfaction of special requirements of the Council.

A4.2.2 Construction Requirements

a) The weight of any building shall be distributed away from any sewer main or stormwater drain by pier & beam construction. The piers shall be embedded on firm foundation at least 300mm below the invert of the pipe with a minimum horizontal clearance from the pipe of 600mm.

A4.2.3 Water mains

a) No building is permitted over a water main.

A4.2.4 Other mains

a) No building is permitted over a stormwater drain or easement unless special extenuating circumstances prevail, and permission is resolved by the Council.

A4.2.5 Proximity to easements

a) A structure is permitted to be constructed up to a registered easement (but not encroaching on the easement unless permitted in the wording of the easement). If a structure is to be located within 200mm of a registered easement, Council will require the submission of a survey report at footing stage and prior to occupation of the building.

A4.3 Inspections relating to water, stormwater, sanitary drainage and effluent disposal systems under a Section 68 approval under the Local Government Act 1993

Councils hold point inspections for water, stormwater, sanitary drainage and effluent disposal systems shall be undertaken in accordance with the Section 68 consent under which the works are approved.

Council shall be notified twenty four (24) hours in advance that the following works are ready for inspection. A satisfactory inspection shall be carried out prior to covering any completed works.

(a) Stormwater drains if acting as the PCA (NB Council inspects stormwater drainage within properties only where a Hydraulic Consultant has NOT completed a hydraulics design)
(b) Stormwater absorption trenches
(c) Internal sewer drains under water test

~~(d) External sewer drains under water test~~
~~(e) Water plumbing~~
~~(f) Pump well and associated pump lines~~
~~(g) Septic tank or aerated wastewater treatment system~~

~~Absorption trenches~~
~~(a) Final inspection of water plumbing, on site septic disposal, sanitary drainage and stormwater drainage~~
~~(b) Works in relation to road reserves, footpath, kerb and gutter, road shoulder and drainage within public lands or road reserves~~

A4.4 Civil Design & Certification

A practising professional engineer in their area of qualification will be required to certify civil designs and drawings for road works, drainage works, water and sewerage works and; structural designs and drawings for bridges, retaining walls, pumping stations and miscellaneous structures.

Refer to council's Engineering Design Specifications for accreditation requirements.

~~On completion of works and prior to occupation, certification from a Professional Engineer shall be submitted to Council detailing that all internal civil works are in accordance with the approved plans and specifications for developments where these plans were required by Council. The relevant Hydraulic Consultant shall certify that stormwater and any fire services installed are in accordance with the Council accepted design.~~

A4.5 Property Address – Street and Rural numbering

a) After completion of a building, the mailbox or building must be identified with letters or numerals with a minimum height of 38mm, of colour contrasting with the area of attachment.

b) Kerbs: Letters and numerals to have a minimum height of 100mm.

c) Rural numbering is to be fixed at the entry to the property and is available from council's offices.

A4.6 ~~Unformed Roads~~

A4.6.1 ~~Introduction~~ Upgrading Unformed Public Roads

Vehicular access to the site shall be provided in accordance with Council's Unformed Roads Policy. An application to construct the road under the Roads Act is to be made prior to the release of any development consent, with the road to be constructed prior to the occupation of the building. ~~A copy of the policy follows~~.

~~Safety Workers Compensation Insurance is to be held by the contractor for all employees engaged for works relating to the development that work within Council's roads and other public land. All vehicles and plant used shall be registered and covered by a third party personal and third party property insurance policy.~~

~~Traffic Control/Safety Prior to any work commencing which affects Council's roads, the applicant is to notify Council and obtain relevant approvals. A traffic Management Plan, prepared by a suitably qualified consultant, may be required with the Development/Construction Certificate application.~~

~~A4.6.2 Policy for the Upgrading of Unformed Roads~~

If a landowner intends to gain vehicular access to their land along an unformed road, then the following conditions will apply:-

(a) A written application to conduct a formed road must be lodged, stating the reasons for the proposal.

The application will be assessed, and written conditional approval may be granted:-

(i) In the case of access to a single lot, the access to generally take the form of a 4m wide gravel surfaced road, with culverts, generally located in the centre of the road reserve. Steep grades will require sealing of the road and lining of table drains in accordance with normal standards.

(ii) In the case of access to multiple lots in the same ownership, the access will be conditioned as if the application was subdivision to create the existing lots.

If an approval is given, standard conditions will apply, including:-

(i) Normal engineering standards of road construction

(ii) Provision for traffic in accordance with the relevant Australian Standard

(iii) Approval by Council's Engineers of the contractor, following proof of the usual licences, insurances, etc

(iv) Approval by Council's Engineer of the materials and methods proposed to be used

Following construction of the road in accordance with the conditional approval, and its acceptance by Council's Engineer, Council may assume responsibility for its maintenance after occupation of a dwelling served by the road only in residential or village zones.

~~A4.6.3 Background to the Policy~~

~~(a) Legal Framework~~

~~(i) The relevant legal framework is contained in the Roads Act 1993.~~

~~(ii) Council has no statutory duty to carry out works of construction or repair of public roads, or to keep them in repair.~~

(iii) It is an offence to carry out any work on a public road without the consent of Council. (Section 138)

(iv) Council can give this consent subject to conditions. (Section 139)

(v) Council can revoke this consent at any time and for any reason. (Section 140)

(vi) If the road is a Crown road rather than a public road, the relevant State Government Department will only permit its upgrading if Council will then accept it as a public road. Therefore, Council can impose identical conditions to those that would apply to a public road.

(b) The principles behind the policy are:-

(i) Council has an obligation to ensure that legal access is available to all lots. Council has NO obligation to provide physical access to lots.

(ii) The market value of a lot reflects the amenities which benefit the lot, such as water supply, sewerage, gas, sealed road access, etc.

(iii) Council should not be required to provide vehicular access at its cost as this is effectively subsidising the purchase price of the lot.

(iv) Owners of a lot on an unformed road who genuinely wish to build on the land should be able to do so at a reasonable cost, including the cost of provision of vehicular access.

(v) Council needs to minimize its exposure to subsequent complaints and requests for construction and sealing of the formed access road, by ensuring that it is built to an appropriate standard.

(vi) Owners or developers of multiple lots located on an unformed road who intend to develop and resell the lots should be required to provide access to a standard that would apply to subdivision. In such cases, the developer should be prevented form the sequential extension of the read and sale of the lots one at a time, by "bending" the policy.

(c) The intentions of the policy are:-

(i) To allow property owners to provide access to their land at reasonable cost.

(ii) To minimize requests for Council to further upgrade or maintain a road provided by a property owner.

(iii) To ensure that the effects on the environment are considered and adverse impacts minimised.

(iv) To ensure that de-facto land developers are required to provide a standard of road identical to that required by subdivision.

PART B BUSINESS ZONED LAND

Section 2 On-site Car Parking

B2.0 Introduction

All new commercial development must make adequate provision for the off-street parking of cars associated with it, either by providing on-site parking, or by making a contribution towards the provision of public car parks. Where on-site parking is provided, the development must ensure that vehicular access to and from the site is safe and does not impede traffic flow.

This Section of the DCP should be read in conjunction with Councils Engineering Design and Construction Specifications.

B2.1 Objectives

Council's vehicular access and off-street parking controls seek to achieve the following objectives:

(a) To ensure that adequate off-street parking is provided in conjunction with development in order to discourage the use of streets for the parking of vehicles associated with additional traffic generated by new developments.

(b) To provide communal public car parking in appropriate areas, funded from developer contributions, where the development cannot accommodate adequate on-site parking, and/or where Council chooses to aggregate parking into a centralised location(s).

(c) To ensure that car parking areas are safe and functional.

(d) To ensure that parking supply is equitable and include at least the minimum number of accessible spaces in accordance with AS2890 series.

(e) To ensure that car parking areas are visually attractive.

(f) To ensure that vehicular access points to the site are located to minimise danger or disruption to vehicles and pedestrians on the public street system.

B2.2 ~~Relevant Technical Documents~~

~~Applicants are directed to the following technical documents which must be read in conjunction with this Section of the DCP:~~

~~(a) Australian Standards – Parking Facilities – AS2890 series as applicable:~~

~~(b) Roads & Traffic Authority – Traffic and Transport Technical Directions and Manuals.~~

~~(c) TDT 2001/06a – Autoturn Swept Path Computer Program.~~

~~(d) Roads & Traffic Authority – Guide for Traffic Generating Developments.~~

~~(e) Investigation of Parking Rates in Wingecarribee Shire prepared by Chris Hallam dated August 2005~~

~~(f) Austroads – Design Vehicles and Turning Templates 1995~~

B2.3 Definitions used in this section

(a) Redevelopment means the total demolition of buildings on a site or the demolition to such an extent where the character of the existing development is changed, and the replacement with a new building and or usage.

(b) Gross Leaseable Floor Area means the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the internal faces of the walls including stock storage areas and aisles but excluding stairs, amenities, lifts, corridors and other public areas, but only, where they are not associated with the use of the site, eg dining area, display of goods.

(c) Gross floor area means the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external closing walls excluding:

(i) columns, fin walls, sun control devices or any other elements, projections or works outside the general line of the outer face of the external wall;

(ii) lift towers, cooling towers, machinery and plant rooms and ancillary storage space and vertical air-conditioning ducts;

(iii) car parking needed to meet any requirements of the Council and any internal access thereto;

(iv) space for the loading and unloading of goods (source – Environmental Planning & Assessment Act Model Provisions 1980);

(d) Floor means that space within a building which is situated between one floor level and the floor level next above or if there is not floor above, the ceiling or roof above;

~~(e) Restaurants means, places, the principal purpose of which, on a retail basis, is preparation and serving of food and drinks to people for consumption on premises~~

(f) Shop means retail premises that sell groceries, personal care products, clothing, music, home wares, stationery, electrical goods or other items of general merchandise, and may include a neighbourhood shop, but nor include food and drink premises or restricted premises. For the purpose of calculating car parking requirements, the following sub-categories of the standard definition of a shop shall be used:

(i) **Small shop**: Gross Floor Area up to and including 150m² AND serviced by a small rigid type vehicle (up to 6.4 metres in length) AND has a maximum delivery frequency of 2 times per week.

(ii) **Medium shop**: Gross Floor Area up to and including 151m² to 1000m² AND serviced by a medium rigid type vehicle (up to 8.8 metres in length) AND has a maximum delivery frequency of 2 times per week.

(iii) **Large shop**: Gross Floor Area of 1001m² or more OR serviced by a heavy rigid type vehicle (up to 12.5 metres in length) OR an articulated vehicle (up to 19 metres in length) OR any shop with a delivery frequency of more than 2 times per week.

B2.4 Requirements for New Development or Redevelopment

(a) The number of car parking spaces to be provided on the site is determined by the nature of the development. Applicants should refer to the Table at the end of this section for the requirements for all types of commercial development.

(b) If the car parking requirements for a specific development are not contained within this Plan, Council will have regard to the Roads and Traffic Authority Guide for Traffic Generating Developments, and to comparable uses at other locations, in assessing the car parking requirements of the development.

(c) The loss of any on-street parking as a result of the development, including new vehicular entry points or loading zones, shall be compensated for by providing on-site parking equal to the number of lost spaces.

B2.5 Requirements for Additions or Alterations to Existing Buildings

(a) Car parking provision for additions or alterations to existing buildings shall comply with the requirements of this Plan.

(b) Council requires either on-site car parking or a contribution in lieu for additional car parking deemed to be generated by the additions or alterations.

(c) Where parking was not required by Council for an existing use, but where such parking was provided, Council will require the retention of such parking up to, but not exceeding, Council's requirements for the specified type of development.

(d) A redevelopment is to comply with the Schedule of Car Parking Requirements in the terms of amount of car parking generated by the new proposal. Any claim for car parking credits for an existing building and / or usage will need to be substantiated by appropriate documentary evidence, ie previous development consents, with the development application for Council to assess. In circumstances where the applicant cannot demonstrate a previous requirement, the amount of car parking that is deemed to be credited shall be based upon the rates in Table B~~3.4~~5.4 located at the end of this section of the Plan. Council may decide to accept car parking credits to offset the demand deemed to be generated for the new development proposal.

B2.6 Use of Parking Areas

(a) All parking spaces shall be used solely for the parking of motor vehicles for owners, staff and customers, and on no account shall such spaces be used for storage or garbage purposes.

(b) Boom gates, remotely operated doors and other devices designed to stop the public from accessing the parking are not permitted.

(c) No signposting or restrictions on individual spaces is allowed.

B2.7 Disabled Parking Requirements

a) Disabled parking spaces shall be provided for each building use according to the applicable Standard.

b) The disabled parking requirements will be to the current Australian standard.

B2.8 On Site Parking Deficiencies

a) In circumstances where it is not physically possible or where, for traffic reasons or otherwise, it is impracticable to provide on-site, the total number of parking spaces required under this Plan, the applicant shall make appropriate arrangements for the provision of the car parking shortfall with Council.

b) Council's preferred approach for such arrangements is through a voluntary Planning Agreement (VPA) lodged with the Development Application. Council's adopted policy in relation to Planning Agreements sets out the requirements and process.

c) If there is a deficiency in the required number of car spaces, and no Planning Agreement is entered into, or alternative arrangements made, the Development Application may be refused.

B2.9 Design of Off-Street Parking Facilities

a) The minimum design requirements for parking facilities are the Australian Standard AS 2890 series.

b) While the Australian Standard is the minimum standard this does not prohibit designs to a higher standard which can improve accessibility and amenity thereby possibly increasing the attraction of a particular development to future customers.

c) Applicants are directed to B3.11 below for advice on how to design a car park.

d) Council prefers the use of AUSTROADS Design Vehicles and Turning Templates for all vehicle movements on, or on to public roads, and the turning template, found in AS 2890.1 and AS 2890.2 for on-site manoeuvring.

e) Where Autoturn or similar packages are to be used, they must be only within the confines of RTA Technical Directive TDT 2001/06a – RTA Policy Autoturn Swept Path Computer Program or any subsequent amending directive.

B2.10 How to Design a Car Park Using AS 2890.1:2004

The following Table B5.1 provides a guide for designing a car park using AS 2890.1:2004. The table indicates the tasks involved and the relevant clause, table or figures from AS 2890.1 : 2004 (unless otherwise stated) which should be consulted.

Please note that not all design requirements are listed below and AS 2890.1 : 2004 must be used as the primary reference source.

Table B5.1 Design Process

Step	Task	Based on information from:
1.	Determine number of car spaces required.	Table B3.4 & other relevant sections of this Plan.
2.	Determine classification of off-street parking facilities.	Clause 1.4 & Table 1.1
3.	Determine dimensions of parking bay module • Parking bay • • Aisle width	Clause 2.4.1 & Figure 2.2 Clause 2.4.2-2.4.4 & Figures 2.2-2.4
4.	Design of Circulation Roadways and ramps.	Clause 2.5
5	Driveway Access width. • Determine Parking Facility Category • Determine Driveway width using Parking Facility Category	Clause 3.2.1 & Table 3.1 Clause 3.2.1, Clause 3.2.2 & Table 3.2
6.	Determine Access Driveway Location.	Clause 3.2.3 & Figure 3.1
7.	Check Sight Distance requirements.	Clause 3.2.4 & Figure 3.2
8.	Additional Requirements: • Column Location & Spacing • Height Clearances	Clause 5.2 & Figure 5.2 Clause 5.3 & Figure 5.3

Following are two worked examples.

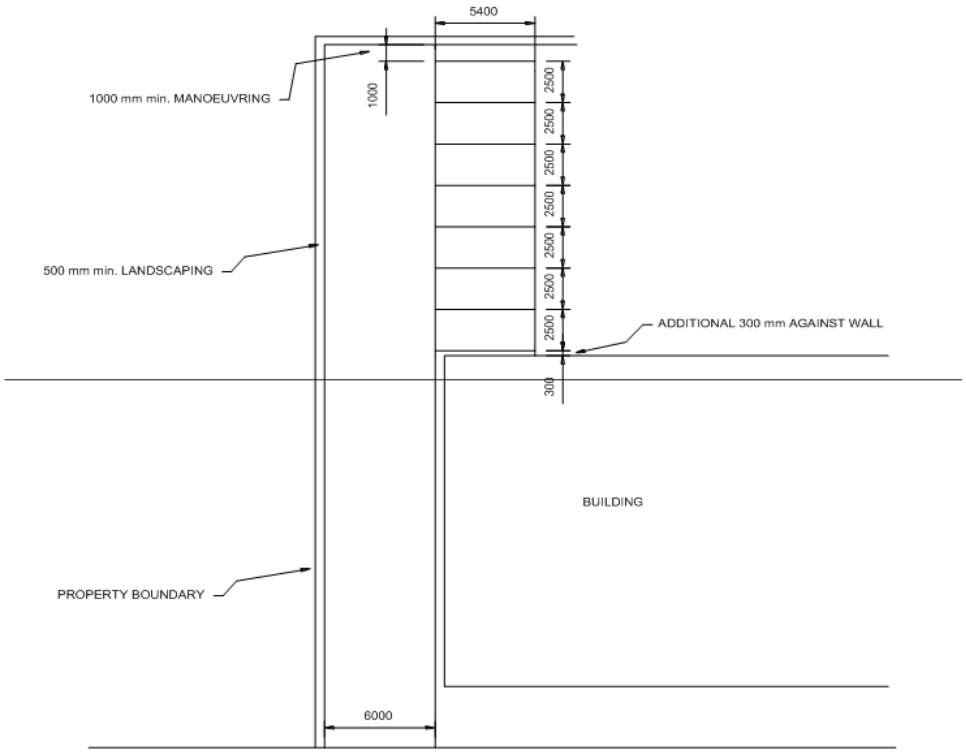
EXAMPLE 1

The proposed development is a medium turnover commercial development in a town centre, on a Local Road, requiring (seven) 7 parking spaces.

~~**Table B5.2 Design Process**~~

~~**Step**~~	~~**AS 2890 Design Requirements**~~	~~**Example 1 requirements**~~
~~1.~~	~~Determine number of spaces required.~~	~~7~~
~~2.~~	~~Determine classification of off street parking facilities.~~	~~Classification 2~~
~~3.~~	~~Determine dimensions of parking bay module~~ ~~1) Parking bay~~ ~~2) Aisle width~~	~~A = 2.5m~~ ~~B = 5.4m~~ ~~Aisle Width = 5.8m~~
~~4.~~	~~Design of Circulation Roadways and ramps~~	~~Width = 5.5 m minimum~~
~~5.~~	~~Driveway Access width.~~ ~~1) Determine Parking Facility Category~~ ~~2) Determine Driveway width using Parking Facility Category~~	~~Parking Facility Category = 1~~ ~~3.0 to 5.5. Use 6.0 m to comply with Council's Standard Drawing SD 108~~
~~6.~~	~~Determine Access Driveway Location~~	~~Checked - OK~~
~~7.~~	~~Check Sight Distance requirements.~~	~~Landscaping & Fencing terminated before front boundary to comply.~~
~~8.~~	~~Additional Requirements:~~ ~~Column Location and Spacing~~ ~~Height Clearances~~	~~Not Applicable.~~

~~**Resulting Layout of Car Park (over)**~~



~~**EXAMPLE 2**~~

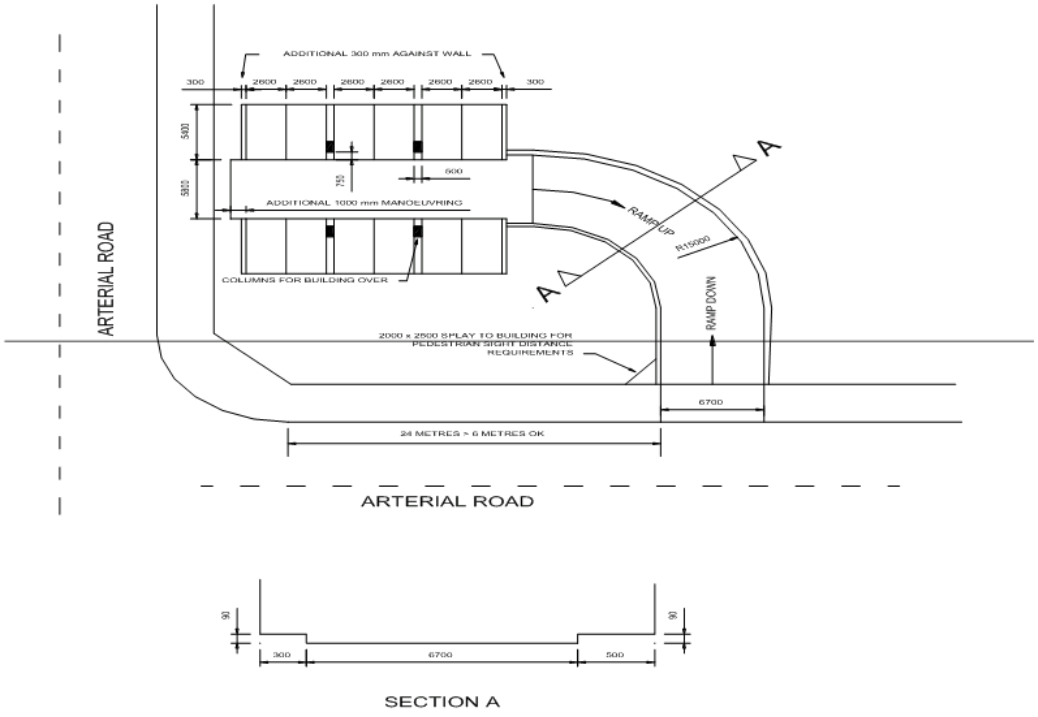
~~The proposed development is a high turnover retail development in a town centre on an Arterial Road, requiring 12 parking spaces. The car park will be underground and have access via a curved ramp.~~

B2.11 ~~Design Process~~

~~Step~~	~~AS 2890 Design Requirements~~	~~Example 2 requirements~~
~~1.~~	~~Determine number of spaces required.~~	~~12~~
~~2.~~	~~Determine classification of off-street parking facilities.~~	~~Classification 3~~

3.	Determine dimensions of parking bay module 1) Parking bay 2) Aisle width	A = 2.6m B = 5.4m Aisle Width = 5.8m
4.	Design of Circulation Roadways and ramps	Ro = 15m Width = 6.7m Clearance outside of curve 500mm. Clearance inside of curve 300mm. A line-marked centre line is required. The ramp long-section was designed using Council's Standard Drawing SD 123 to provide a more accessible ramp.
5.	Driveway Access width. (a) Determine Parking Facility Category (b) Determine Driveway width using Parking Facility Category	Parking Facility Category = 2 6 to 9 metres permissible. Choose 6.7 metres to match ramp width.
6.	Determine Access Driveway Location	Checked - OK
7.	Check Sight Distance requirements.	Building Splay required for pedestrian sight distance
8.	Additional Requirements: Column Location and Spacing Height Clearances	Columns located outside of building envelope. Ramp terminated before car park entry - Height OK.

~~Resulting Layout of Car Park~~



SECTION A

Figure B5.4 Schedule of Car Parking Requirements

USE	CAR PARKING SPACES
Relevant to all use categories	Accessible parking spaces in accordance with AS 2890 series are to be provided
Retail, Office, Commercial	1 space per 30 m² of gross leaseable floor area for buildings of single storey. For buildings greater than one storey in height the disaggregated method for car park calculation (Section 5 RTA Guide for Traffic Generating Developments) may be considered.
Consulting Rooms/Medical Centre/Hospital/surgery/GP/ Dentist etc	1 space per doctor or health care professional (on duty at any one time), 1 space per 3 other employees (on duty at any one time), 1 space for every 3 beds for visitor parking and one 1 space suitable for an ambulance ~~1 space per doctor (on duty at any one time), 1 space per 3 employees (on duty at any one time), 1 space for every 3 beds for visitor parking and one 1 space suitable for an ambulance~~
Shops › Small or medium › Large	 1 space per 30 m² of gross floor area. 1 space per 20 m² of gross floor area.
Veterinary Surgery	1 space per vetinarian, 1 space per other employee, 2 spaces per vetinarian for clients
Supermarkets	1 space per 20 m² of gross leaseable floor area.
Bulky Goods	1 space per 50 sq m of office and showroom/retailing area, plus 1 space per 100 sq m of warehouse gross floor area
Restaurants and Café's	1 space per 3 seats OR 15 spaces per 100 m² of gross floor area. NB: Council may reduce the above parking requirements where it considers that ample parking will be available in the vicinity for patrons during evening hours should the development only operate after 6pm, without adversely affecting the amenity of the surrounding locality during the day or evening. ~~1 space per 3 seats OR 15 spaces per 100 m² of gross floor area.~~ ~~NB: Council may reduce the above parking requirements where it considers that ample parking will be available in the vicinity for patrons during evening hours, without adversely affecting the amenity of the surrounding locality during the day or evening.~~
Public Bars ~~Coffee Shops / Cafés (with dine-in fixtures)~~	1 space per 3 seats OR 15 spaces per 100 m² of gross floor area. NB: Council may reduce the above parking requirements where it considers that ample parking will be available in the vicinity for patrons during evening hours should the development only operate after 6pm, without adversely

USE	CAR PARKING SPACES
	affecting the amenity ~~1 space per 30 sq m of gross leaseable floor area. Council may reduce the above parking requirements where it considers that ample parking will be available in the vicinity for patrons during evening hours, without adversely affecting the amenity of the surrounding locality during the day or evening.~~
~~Coffee Shops / Cafés (with dine-in fixtures)~~	~~1 space per 30 sq m of gross leaseable floor area. Council may reduce the above parking requirements where it considers that ample parking will be available in the vicinity for patrons during evening hours, without adversely affecting the amenity of the surrounding locality during the day or evening.~~
Fast Food Take Away Food Outlets (eg McDonalds, Kentucky Fried Chicken)	• With no on site seating and no drive through facilities.12 spaces per 100 sq m gross floor area • Developments with on-site seating but no drive-through facilities: 12 spaces per 100 sq m gross floor area, plus the greater of 1 space per 5 seats (both internal and external seating), or 1 space per 2 seats (internal seating) • Developments with on-site seating and drive-through facilities, greater of: 1 space per 2 seats (internal), or 1 space per 3 seats (internal and external).
Clubs	A traffic study is to be prepared by a qualified traffic engineer, with the parking requirement established through surveys of similar existing developments, noting the existing supply of and demand for parking in the area, and of the peak parking periods of individual facilities within the club.
Cinemas	1 space per employee, 1 space per 10 seats (maximum usage should there be more than one theatre operational at any one time). A parking study may be required to support the application for consideration.
Warehouses	1 space per 300 sq m of gross floor area
Car Repair Stations	6 spaces per workshop bay
Motor Car, Caravan, Boat and Truck Showrooms	1.5 spaces 200m² site area plus 6 spaces per any workshop bay
Storage Units	1 space per 500m² of storage area – plus 1 space per employee
Places of Worship	1 space per 10 seats or 1 space per 10 sq.m of space used by the public, whichever is the greater (Note: total parking provision may be reduced where it can be demonstrated that the time of peak demand for parking associated with the locality does not coincide and there is ample available unused parking supply within 3 minutes of walking distance of the development site).
Accommodation	
Motels (where Restaurant included, use to include	1 space per Motel room plus 1 space per 2 employees.

USE	CAR PARKING SPACES
appropriate rate)	
Hotels	• Accommodation component: 1 space per Hotel room plus 1 space per 2 employees. • Bar, lounge & dining component: A traffic study is to be prepared by a qualified traffic engineer, with the parking requirement established through surveys of similar existing developments, noting the existing supply of and demand for parking in the area, and of the peak parking periods of individual facilities within the hotel.
Sex services premises	On-site parking is to be provided at the rate of 1 space per 40m² of gross floor area.
Educational Establishments	1 space per 2 staff, plus 1 space per 20 Year 12 students, plus • 1 space per 10 tertiary students, • 1 space per 10 seats in an assembly hall (these spaces may be inclusive of all other requirements) • spaces for sports fields etc, shall be determined by Council in each case. Note: Where a facility is ancillary to the principle use eg; school, church, consideration will be given to the actual likely increased patronage.
Recreational Facility	3 spaces per squash court, 3 spaces per tennis court, 3 spaces per bowling lane, 30 spaces for first bowling green plus 15 spaces for each additional bowling green, 16 spaces per indoor cricket court, 1 space per 40 sq. m GFA otherwise.
Gymnasium	1 space per employee on duty at any one time plus whichever is the greater of 1 space per 30 sq. m GFA (excluding reception, office, store, food preparation, serving areas).
Swimming Pool	1 space per employee on duty at any one time plus whichever is the greater of 7 spaces per swimming lane or 8 spaces per 60 sq.m pool (water) area, or 1 space per 2 students (based on maximum possible number of students in a class).
Aquatic Centre	Parking impact and needs study required where the Centre proposes a range of uses and/or proposes to hold events.
Wineries, Cellar Door Sales and other Local Rural IndustriesEducational Establishments	1 space per 30m² of gross leaseable floor areas with a minimum of 3 spaces. 1 space per 2 staff, plus 1 space per 20 Year 12 students, plus • 1 space per 10 tertiary students, • 1 space per 10 seats in an assembly hall (these spaces may be inclusive of all other requirements) • spaces for sports fields etc, shall be determined by Council in each case. Note: Where a facility is ancillary to the principle use eg; school,

USE	CAR PARKING SPACES
	church, consideration will be given to the actual likely increased patronage.
Wineries, Cellar Door Sales and other Local Rural Industries	1 space per 30m² of gross leaseable floor areas with a minimum of 3 spaces.
Other land uses not listed	Council will give consideration to rates published by other Councils operating in a similar large regional location to Wingecarribee Shire (i.e. comparisons must be made with similar developments in similar locations). Council may also require the completion and submission of a parking impact and needs study by the applicant.
~~Wineries, Cellar Door Sales and other Local Rural Industries~~	~~1 space per 30m² of gross leaseable floor areas with a minimum of 3 spaces.~~

Section 3 Loading Facilities and Waste & Resource Recovery Storage and Collection

B3.0 Introduction

All business development where future tenants will require regular deliveries of goods and the removal of waste and resource recovery material must ensure that loading facilities are adequate for the realistic needs of the proposed service vehicles. In the past, the servicing of retail developments by large trucks has often caused considerable traffic disruption with further potential danger to pedestrians.

B3.1 Controls

To improve the servicing of retail developments and to reduce vehicle and pedestrian conflicts, Council requires all future commercial developments to meet the following controls:

(a) Full details of anticipated vehicle sizes, volumes and frequency of delivery and other service vehicles must be supplied with the development application. These estimates, particularly vehicle sizes, must be realistic and based on established averages for the range of businesses likely to occur in the development.

(b) AUSTROADS Design Vehicles and Turning Templates must be used for all vehicle movements on, or on to, public roads.

(c) The turning templates from Australian Standard AS 2890.1 and AS 2890.2 must be used for on-site manoeuvring, including reversing manoeuvres and vertical clearance requirements.

(d) For retail developments with a gross leaseable floor area of less than 1,000 square metres and not a supermarket, discount department store or other high volume delivery usages, the following controls apply:

(i) The development must provide:

- either a loading facility on site to accommodate a Heavy Rigid Vehicle (12.5 metre) as defined by Australian Standard AS 2890.2, or Single Unit Truck (12.5 metre) as defined by Austroads ~~2008~~ as the minimum standard, or
- may be permitted to utilise a loading zone if it is within 100 metres as measured along the travel path.

(ii) Consideration of servicing of the development by vehicles equal to or larger than a Medium Rigid Vehicle (8.8 metre) as defined by Australian Standard AS 2890.2, or Service Vehicle (8.8 metre) as defined by Austroads ~~2008~~, may be deemed as the appropriate design vehicle, subject to Council ~~the~~ approval of supporting evidence ~~by Council's Director Environment and Planning~~.

(i) No use of the loading zone will be permitted where deliveries require the use of fork lifts, or other mechanically assisted lifting devices on the footpath or crossing a public road or footpath.

(ii) Council will require a positive covenant to be placed on the title of the land giving Council the power to release, vary or modify the restriction to enforce the requirements of this clause.

(e) For retail developments with a gross leaseable floor area of 1,000 square metres or greater or developments such as supermarkets, discount department stores or other high volumes delivery usages, the following controls shall apply:

(i) The development shall provide a loading facility to accommodate an Articulated Rigid Vehicle (19.0 metre) as defined by Australian Standard AS 2890.2 or Single Articulated Vehicle (19.0 metre) as defined by Austroads ~~2008~~ as the minimum standard.

(ii) Council will require a positive covenant to be placed on the title of the land giving Council the power to release, vary or modify the restriction to enforce the requirements of this clause.

(iii) The reversing of vehicles on to a main road, or arterial road, or future ~~by-pass route~~ road, or any other public road, will not be permitted.

~~(iv) Should a small development site, located off a car park or local access lane, be unsuitable for the turning of service vehicles due to site constraints, the applicant must demonstrate to the satisfaction of Council that the safety of other road users will not be compromised by allowing reversing manoeuvres on to or from the site.~~

(v) The design of off-street commercial vehicle facilities must comply with AS 2890.2 : 2002.

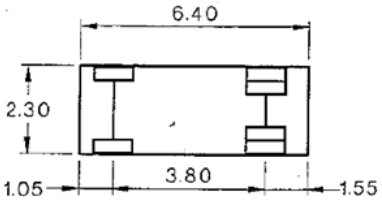
(vi) Loading bays are not to be used for the storage of goods or waste storage other than during the unloading / loading process.

(vii) Waste and resource recovery material storage should be enclosed or screened from the road in a dedicated facility.

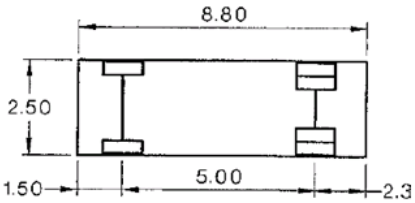
(viii) Waste and resource recovery material collection shall be from the loading facility if one is provided with the development. If no loading facility is provided then collection of waste and resource recovery material must be from a central collection area by private contractor. The waste and resource recovery material must be collected outside of business hours to ensure disruption to the public is minimised.

(ix) All service vehicles accessing a development need to accommodate geometric swept path and vertical clearance in accordance with Austroads and Australian standards.

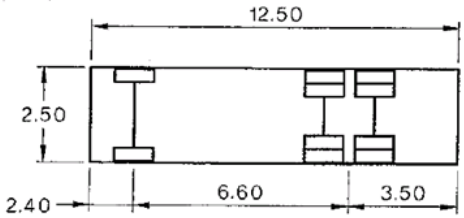
~~Commercial Vehicle Dimensions~~



(a) Small rigid vehicle
Clearance height 3.50
Design turning radius 7.1



(b) Medium rigid vehicle
Clearance height 4.50
Design turning radius 10.0



(c) Heavy rigid vehicle
Clearance height 4.50
Design turning radius 12.5

PART C RESIDENTIAL ZONED LAND

C2.0 Garaging & Driveways

The location and treatment of garages and driveways can have a significant impact on the streetscape, particularly in the case of infill development in streets with more traditional forms of housing design. Garages must not dominate the streetscape and, preferably, should be situated behind the primary building line.

The appropriate location of garages can also provide additional covered space for both active and passive recreation. Garages with front and back doors which can be fully opened provide opportunities for casual entertaining spaces which link front and rear private open spaces.

All driveway crossings and verge crossing materials shall be provided in accordance with Council's Engineering Design and Construction Specifications and Standard Drawings.

C2.0.1 Objectives

The objectives of considering the location of garages associated with dwellings are to ensure that:

(a) Garages are located to minimise the dominance of garages and driveways in the streetscape.

(b) Garages shall be designed and located to minimise adverse solar impacts.

(c) Where possible, garages should offer linkages between on-site open space areas.

(d) Driveways shall be designed and located so as to be recessive in the streetscape.

(e) Driveways shall be located so as not to impact on existing street trees.

C2.0.2 Specific Controls

All applications for residential development shall comply with the following controls:

(a) In established residential areas, the location of new garages should reflect the current street pattern.

(b) The height of the garage shall not exceed the height of the principal dwelling.

(c) Where garages form part of the dwelling they shall not exceed 40% of the total width of the dwelling frontage to a maximum width of six (6) metres.

(d) Double garages are only permitted on allotments of at least 12.5 metres in width.

(e) Triple fronted garages are not permitted where they face directly on to the street.

(f) The garage shall be set back from the front façade and designed so that the dwelling entry and façade are the dominant building features.

(g) New dwellings (including principal, dual occupancy or secondary dwellings) shall provide a minimum of two car spaces behind the building line for each dwelling which may include an access way to the side of the dwelling of a minimum width of 2700mm.

(h) Driveways are to be located a minimum of three (3) metres from the nearest street tree.

(i) Driveways are to be located a minimum of one (1) metre from any side boundary.

~~(j) Driveway and verge crossing materials shall complement the current streetscape, and shall be preferably of compacted earth, gravel, stone cobble or plain concrete surface. Strong textures and bright colours, including stamped concrete, shall not be permitted on driveways or verge crossings.~~

~~(k) The vehicular crossing point to the garage from the street shall be located to reflect the existing vehicular access point pattern in the street. Applicants are directed to Council's relevant Endorsed Technical Specifications.~~

~~(l) The width of the driveway at the street shall reflect the current streetscape.~~

~~(m) The width of the driveway on site shall not exceed the width of the garage opening and shall reflect the surface material currently in the streetscape.~~

(n) Where possible, the edges of hard surfaces shall be softened through landscaping and material treatment.

(o) Driveways are to be located a minimum of one (1) metre from any side boundary.

Section 3 Renwick Precinct

Access, Parking, Garages & Driveways

Objectives

(a) Coordinate all access between private and public domain.

(b) Minimise the dominance of garages and driveways in the streetscape.

Development Controls

(a) All dwelling applications that have swale type drains to the frontage are to ensure that it is adequately fenced during construction to avoid damage to Council assets.

(b) Vehicle access is to be solely from the rear lane where one is available.

(c) Vehicle crossings are not to exceed 3m wide in streets or 4.8m wide in lanes.

(d) All driveway crossings and verge crossing materials shall be provided in accordance with Council's Engineering Design and Construction Specifications and Standard Drawings.

~~(e) Vehicle crossings are not to exceed 3m wide in streets or 4.8m wide in lanes.~~

~~(f) Vehicle crossings are to be constructed in natural concrete from the road pavement to the footpath or, where there is no footpath, to the property boundary.~~

(g) A minimum of 2 on-site parking spaces are to be provided for each dwelling.

(h) Garages facing the primary street frontage are to be setback a minimum of 1metre behind the main house façade. Refer Figure C18.12

(i) Where garages form part of the dwelling, the garage doors should not exceed more than 40% of the total width of the dwelling frontage.

(j) Garage doors facing the street are not to exceed width 6.0m in total.

(k) Triple garages facing the street are not permitted.

(l) Maximum height of garage with self contained flat is 5.5m to underside of eaves.

(m) Garages up to 36m² are not included in FSR.