# Engineering Design Specification D01 Development and Subdivision of Land

Print version is uncontrolled. Current version is maintained on Wingecarribee Shire Council Website in searchable PDF format.

This document is a modified version of AUS-SPEC 0011 Development and Subdivision of Land





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# 1 General

# 1.1 Introduction

## 1.1.1 Worksection

General: This worksection provides guidance on the design requirements and planning permission process for development and subdivision of land within Wingecarribee Shire Council area.

Structure: This worksection is divided into six sub-sections:

- General
- Pre-submission planning
- Application process
- Application requirements
- Post-determination requirements
- Completion

Each section has a description of the processes and requirements necessary to progressively take the reader from the decision to subdivide and develop land to the stage where allotments can be sold.

#### Other documentation:

This worksection also provides an introduction to other documentation affecting development and subdivision including:

## State planning legislation

Local Government Act - 1993

Local Government Act (Approvals) Regulation 1999

Local Government Planning and Environment - NSW

Environmental Planning and Assessment Act - 1979 (as amended)

Department of Urban Affairs and Planning (DUAP) - "Guiding Development - better outcomes"

State Environmental Planning Policies (SEPP's)

Regional Environmental Plans (REP's)

NSW Department of Environment and Climate Change

Conveyancing Act - 1919

Control of Burning Regulations - 2000

Work Health and Safety Regulation 2017

Roads Act 1993

WaterNSW - Sydney Drinking Water Catchment SEPP 2011

Protection of the Environment (Clean Air) Regulation - 2002

Water Management Act - 2000

# Council planning instruments

Wingecarribee Local Environmental Plan (LEP) - 2010

Development Servicing Plans (Developer Charges)

Development Control Plans (DCP's)

Berrima DCP (without section 8) - 5/9/2012

Berrima DCP - Section 8 - (Design in a Heritage Context) - 5/9/2012

Bowral DCP - 5/9/2012

**Bowral Town Boundary Map** 

**Bowral Flood Map** 

Bundanoon DCP - 5/9/2012

Burrawang DCP - 5/9/2012

Exeter DCP - 5/9/2012

Fitzroy Falls DCP - 5/9/2012

Mittagong DCP (includes Welby and Renwick) - 5/9/2012

Moss Vale DCP - 5/9/2012

Moss Vale Flood Map

Moss Vale Enterprise Corridor DCP - 14/11/2012

New Berrima and Medway DCP - 5/9/2012

Northern Villages DCP - (applies to Aylmerton, Balaclava, Balmoral, Braemar, Colo Vale, Hill Top,

Willow Vale, Yerrinbool)

Industrial DCP - 5/9/2012

Rural Lands DCP (RU1, RU2, E2, E3 and SP3)

Rural Living DCP (RU4 and E4) - Council Policy Manual

Strategic Development Control Guidelines

#### **Technical Documents**

Council's standard drawings

Council's Engineering Design Specifications

Council's Engineering Construction Specifications

**Australian Standards** 

# 1.2 Council's objectives

# 1.2.1 Planning

Objectives: Council's objectives for land development and subdivision are as follows:

- To provide a functional, attractive and safe environment for residents that is consistent with community standards and needs.
- To minimise adverse effects on the natural environment.
- To provide for the needs of future users of the land with respect to building requirements, vehicular and pedestrian access, provision of services and an amenity appropriate to the zoning of the land.
- To economically utilise the land resource of the area.
- To achieve a balance between the development/subdivision of residential, commercial and industrial land and the amenity of existing occupants/residents.
- To provide for an equitable and efficient distribution of public amenities and services.
- To minimise Council's future maintenance costs for roads, services and open spaces.

## 1.3 Cross references

## 1.3.1 General

Requirement: Conform to the following worksection(s):

The following worksections must be read in conjunction with this worksection in order to provide a complete design brief for the proposed works.

- D02 Quality requirements for design,
- D03 Public Lighting,
- D04 Site regrading,
- D05 Geometric road layout,
- D06 Pavement design,
- D07 Subsurface drainage (Design),
- D08 Bridges and other structures,

- D09 Stormwater drainage (Design),
- D10 Pathways and cycleways,
- D11 Control of erosion and sedimentation (Design),
- D12 Water supply Reticulation and Pumping Station (Design),
- D13 Sewerage systems Reticulation and Pumping Station (Design)

## 1.4 Referenced documents

## 1.4.1 Standards

General: The following documents are incorporated into this worksection by reference:

Australian standards

AS/NZS ISO 9001-2008 Quality management systems

AS 1742.3 – 2002 Traffic Control Devices for Works on Roads

AS 2601 – 2001 Demolition of Structures

AS 4970 – 2009 Protection of Trees on Development Sites

#### Other Publications

Landcom "Blue Book". Landcom Publication; Managing Urban Stormwater: Soils and Construction Vol 1, Landcom 2004-Latest Edition,

## Other publications

Wingecarribee Shire Council Policies, Plans and Guidelines available on Councils' website, www.wsc.nsw.gov.au together with Application Forms including the following:-

- Development Application
- Construction Certificate
- Subdivision Works Certificate
- Complying Development Certificate
- Occupation Certificate
- Certificate of Compliance Section 307 Water Management Act 2000
- Section 68 Local Government Act 1993 Application for Approval of Works associated with the proposed development
- Section 138 Roads Act 1993 Application for Approval of Works in the Road Reserve
- Subdivision Certificate Application
- Wingecarribee Shire Council Guideline for Lodgement of Development Applications
- Wingecarribee Shire Council Notification of Development Proposals Policy
- Wingecarribee Shire Council Community Engagement Policy
- Wingecarribee Shire Council Roadside Management Plan
- RMS Traffic Control at Work Sites Technical Manual 2018

Wingecarribee Shire Council - Climate Change Adaption Strategy: Council is implementing a Climate Change Adaptation Strategy across all operations and services. The latest information is available from Council's web site.

# 1.5 Interpretation

# 1.5.1 Abbreviations

**General**: For the purposes of this worksection the following abbreviations apply:

- ARI: Average recurrence interval.
- DA: Development assessment.

• WAE: Work-as-executed.

# 1.5.2 Definitions

**General**: For the purposes of this worksection the following definitions apply:

**Application**: Formal Development Application is to be submitted to Council for the development or subdivision of land.

- Development assessment: The process for ensuring that a proposed development on land is consistent with the plans, zones and other instruments determining how the land is to be used
- Hold point: A defined position in the different stages of the Contract beyond which work cannot proceed without mandatory verification and acceptance by the Superintendent.
- Planning: The process of making decisions to guide future allocation and development of land.
- Principal Certifier (PC): The PC is the authority appointed by 'the Client' (being the person having the benefit of the development consent or complying development certificate) under section 6.5 of the EP&A Act. A PC may either be Council or an registered private certifier (except in certain circumstances).
- Professional Engineer: Meets the criteria for registration on the National Engineering Register (NER) and has appropriate experience and competence in the relevant registered area of practice.
- Qualified surveyor: A surveyor who is eligible for membership of the Spatial Sciences Institute as a certified engineering surveyor.
- Registered Certifier: means a person who is registered under the Building and Development Certifiers Act 2018 and whose registration is in force.
- Registered Surveyor: A member of the Institution of Surveyors. The registered surveyor
  would need to attain acceptable accreditation for civil design in the relevant area of
  practice.
- Rural land: Land, other than urban and rural residential, comprising larger holdings.
- Rural residential land: Rural home site and hobby farm land.
- Urban residential land: Land within areas zoned residential, village or township.
- Witness point: A nominated position in the different stages of the Contract where the option
  of attendance may be exercised by the Superintendent, after notification of the
  requirement.
- Zones: A smaller area within the larger Council area which is identified in a Local Environmental Plan (LEP). A zone groups together areas with similar characteristics to integrate mutually beneficial uses and separate incompatible uses. Zones are typically based on land uses.

# 2 Pre-submission planning

# 2.1 Preparing an application

# 2.1.1 Requirements

**Consent**: Refer to the planning and development instrument(s) applying to the land to determine if the proposed development is permitted and, if so, whether an application for consent is required. Minor development and subdivisions may not require consent. Refer to exempt or complying development standards.

**Application form**: Submit an application on Council's standard application form and provide supporting information compiled following consultation with Council and to **APPLICATION REQUIREMENTS**.

## 2.1.2 Site Information

**Compilation:** Before submitting an application, compile the following site information and include on the plans for submission:

- Land title.
- Land zoning.
- Existing easements and restrictions.
- Items of heritage significance.
- Topography, slope and aspect.
- Stormwater and overland flows.
- Flood affected land.
- Bushfire affected land.
- Existing access.
- Surrounding development.
- Existing trees and vegetation.
- Existing and proposed local road and traffic situations.
- Other physical characteristics pertinent to the design
- Traffic impact assessments (TIA), traffic impact statements (TIS) and trip distribution postdevelopment (Refer to Section 7)
- Transport routes for import and export of materials.

# 2.1.3 Fees/contributions

**Schedule:** Fees for applications are prescribed by state legislation and regulations and Council. Obtain a fee schedule from Council which includes non-prescribed fees/contributions that may be required as a condition of consent. Common fees are Land Use Application, Construction Certificate, Subdivision Works Certificate, Water/Sewerage connection, Water and/or Sewer Compliance Certificate, Subdivision Certificate, Section 94 and Section 64 contributions, and Maintenance Bond.

# 2.2 Consultation

## 2.2.1 Council and other authorities

**Purpose:** To determine the planning, zoning, legislative and regulatory requirements and the extent of professional assistance required. The consultation process will identify the following:

- Any non-compliance.
- Council's specific requirements.
- Financial contributions for services and amenities.
- Modifications to application required before submission.
- Standards of construction acceptable to Council.

# 2.2.2 Requirement:

Consultation with Council before submission of an application is not mandatory. However, consultation with Council is recommended for the following reasons:

- Reduction of costs in preparation of application
- Reduction of the time Council needs to consider the application.
- Increased likelihood of consent.

# 2.2.3 Pre-lodgement Meeting:

Formal advice currently provided by way of pre-lodgement meeting by a formal request with appropriate payment. Formal meeting notes includes engineering advice sent to applicant by Planner following meeting.

# 2.2.4 Sketch plan:

Prepare a sketch plan for the consultation indicating the location, aspect and size of the various elements of the development including subdivision patterns surrounding the site. Provide enough information on the sketch plan so that Council is able to undertake an initial assessment of the proposal and provide appropriate advice on the application.

Suggested sketch plan inclusions:

- Reduction ratio.
- The location, boundary dimensions, site area and north point of the land.
- The existing vegetation and trees on the land.
- The location and uses of existing buildings on the land and adjoining properties.
- Any items of Environmental Heritage or relics defined by the Heritage Act, or considered to be of local significance.
- Contours showing the existing levels of the site (at one metre intervals) to Australian Height Datum, or lesser intervals for land with slopes less than 4% and proposed site regrading concept plan
- Any natural features of the site, including rock formations or cliffs, watercourses, flood levels, wetlands, forest areas and slip areas.
- Any existing drains, easements or rights-of-carriageway affecting the site.
- Title description of the land.
- Details of existing and proposed subdivision pattern (including the number of lots and location of roads.
- Proposed method of provision of services (stormwater, water supply effluent disposal). Location of access points to the lots.
- Any other relevant details relevant to the consideration of the application.

## 2.2.5 Utilities services

**General:** Consult public utility authorities to obtain their requirements.

**Requirements:** Contact the relevant authorities responsible for the provision, alteration or amplification of services to obtain their requirements for the development.

# 2.2.6 Public consultation

**Requirements:** In accordance with Wingecarribee Shire Council's Community Engagement Policy and Notification of Development Proposals Policy. Copies are available on Council's website – www.wsc.nsw.gov.au/council

# 3 Application process

# 3.1 Consent and exemptions

## 3.1.1 Consent

**Requirement:** Submit an application for proposed development and/or subdivision in conformance with state planning legislation and regulations and Council's requirements.

## 3.1.2 Exemptions

Applications deemed to comply or exempt: Council in some cases identifies minor development and subdivisions that meet specified standards as Complying or Exempt Development which do not require consent. Details of these minor developments or boundary adjustments and the requirements of the approval process may be obtained from Council.

# 3.2 Government authority

# 3.2.1 Council's authority

**Authority responsible for approving applications:** Wingecarribee Shire Council is the authority responsible for consent to development and approval of developments and subdivisions within the Wingecarribee Shire Council area.

Provisions for development and subdivisions are included in the following:

Council planning instruments:

Council has adopted policies, Development Control Plans (DCP's) and Local Environmental Plans (LEP's) that set out Council's necessary provisions for development and subdivision.

#### **Local Government Act:**

Local Government Acts

## **Planning Act and Regulations:**

- Environmental Planning and Assessment Act
- State Environmental Planning Policies
- Regional Environmental Plans
- In some circumstances Council is required to obtain the concurrence of the Department of Planning and Council must comply with the particular legislative requirements.

## Land title registration:

- Land and Property Information NSW
- Other consent authorities:
- WaterNSW
- Rural Fire Service
- Department of Lands
- Roads and Maritime Services
- Rail Corporation
- Department of Environment, Conservation and Climate Change
- Department of Planning and Infrastructure
- NSW Office of Water
- Hawksbury-Nepean Catchment Authority
- Southern Rivers Catchment
- Aboriginal Council
- Heritage Department

#### Approval criteria:

• Conformance with the provisions of Council's DCP's and LEP, or any state Acts or Regulations does not imply that Council is required to consent to, or approve, an application.

#### **Restrictions:**

 Council's authority to approve the development and subdivision of land is set out in the State Acts and Regulations.

## Responsibility:

• The Developer (or its consultants) is responsible for making sure that all works are designed and constructed in conformance with Council requirements. Obtain advice from Council's Planning/Engineering/Environmental/Services sections on any restrictions that apply to the land.

#### **Conditions of contribution:**

 Council's authority to impose conditions for contributions are set out in the state Acts and Regulations.

# 3.3 Submitting application

# 3.3.1 Development Application Information

A Development Application is only required if stated in the Environmental Planning instrument(s) applying to the land (SEPP, REP or LEP).

# 3.3.2 Preparation

#### General:

 Prepare the application in conformance with APPLICATION REQUIREMENTS and submit to Council. Refer to Council's development application form and accompanying matrix.

# **Development application form:**

A Development Application is required for all types of subdivision and all forms of building
construction not identified by Council as being Exempt or Complying Development.
Development applications are made on Council's standard Development Application form
available from Councils Customer Services Centre, or on the internet.

#### Fees schedule:

 Contact Councils Customer and Information Services for fees required for the development, or on the internet.

#### **Contributions schedule:**

Contact Council for contributions required for the development, or on the internet.

#### **Submission:**

All the necessary information should have been compiled in consultation with Council.
 Whilst formulating the application and preparing the Development/Subdivision sketch plan,
 a description of the existing and proposed site and a Statement of Environmental Effects
 should be included.

### Owner's approval:

• If the applicant is not the owner of the land to be developed, written authority from the owner must be submitted with the application form.

# 3.4 Assessment by Council

# 3.4.1 Assessment Criteria

# General:

Council will assess each application based on its merits in conformance with the state Planning Acts and Regulations and the following assessment criteria:

- Natural and built environmental impacts.
- Social and economic impacts.
- Suitability of the site.
- Public interest.
- Conformance with the provisions of any planning instruments, development control plans and regulations applying to the land.

## **Design standards:**

Minimum design standards do not relieve the applicant of the responsibility to properly address all assessment criteria. Council will consider alternative approaches to development and subdivision design if the applicant satisfies the Council that objectives of Council have been achieved.

# **Staged development:**

In some cases a development may be of sufficient size that it requires staging. If staged development is proposed, prepare a plan showing the complete concept with the various stages and conformance with the standard requirements.

# 3.5 Determination and appeal

## 3.5.1 Determination

#### **Notification:**

Council will notify the applicant in writing stating that consent has been granted subject to conditions, or that consent has been refused (with reasons).

## **Determination period:**

• Planning legislation requires Council to determination applications within 40 days of receipt of the application.

## Determination period where referral to other authorities is required:

• 60 days where the application requires referral to other authorities.

# **3.5.2 Appeal**

#### **Reconsideration:**

Where an Applicant is dissatisfied with the determination of an application, submit a request
for reconsideration pursuant to Section 82A of the Environmental Planning and Assessment
Act within the required time frame from determination. Include the reconsideration fee and
list the reasons for reconsideration.

#### Timeframe for reconsideration:

 The request for reconsideration must be lodged within six (6) months of receipt of Council's determination.

## **Appeal to Court:**

• Submit an appeal with the appropriate court within the required time frame from determination.

# Timeframe for appeal:

• The Applicant may lodge an appeal with the Land and Environment Court within six (6) months of receipt of Council's determination.

#### Appeal by third party:

 Applicants are advised that any Third Party may lodge an appeal to the Land and Environment Court if they believe a breach of the E P and A Act (1979) Act has occurred, (Section 9.45 of the E P and A Act).

# 3.6 Application approval

# **3.6.1 General**

**Revocation of consent:** Council may revoke or modify consent in circumstances of fraud, failure to conform with legislation or non-conformance with conditions of consent.

**Commencement:** The consent will lapse if the works have not commenced within the consent period from determination or such other shorter period stipulated by the consent.

# **Typical commencement period:**

• A Development Consent for development/subdivision requires works to commence within 5 years, otherwise it will lapse.

# 4 Application requirements

# 4.1 Accompanying information

# 4.1.1 Plans

Number of plan copies required to accompany application: 2 copies of development/subdivision sketch plans.

Include concept plans/report and DA application requirements

**Plan size required:** 2 x A3 and electronic version.

**Details:** Provide the following information on the plans accompanying the application:

- Title description of land.
- Scale (preferably 1:500 for subdivisions, 1:100 for developments).
- Location, boundary dimensions, site area and north point of the land.
- Existing vegetation and trees on the land. Refer to Council's tree preservation order.
- Location and use of existing buildings on the land and adjoining properties. Include measured floor plans of existing buildings for calculation of floor space ratios.
- Contours to Australian height datum at 1 m intervals based on existing levels of the site and proposed site regrading plan.
- Natural features of the site, including rock formations or cliffs, watercourses, flood levels, wetlands, forest areas and slip areas.
- Existing drains, easements or rights-of-way affecting the site.
- Details of existing and proposed subdivision pattern, including the number of lots and location of roads.
- Designated fire prone areas.
- Heritage items (buildings and sites), or relics defined by a heritage Act or considered of local significance.
- Details of proposed access to the site and the legal status of that access.
- Other details relevant to consideration of the application.

#### 4.1.2 Record of consultation

**Details:** Provide details of consultation with Council, the public, public utility authorities and/or other authorities.

# 4.1.3 Additional Information

**Requirements:** Provide the following additional information:

- A stormwater management plan detailing principles, assumptions and calculations behind the stormwater drainage design including on-site detention (OSD) and water quality measures proposed together with appropriate qualitative and quantitative drainage models.
- Rationale for the design of utilities, roads, open space, bicycle and pedestrian ways, bus routes, etc.

- A contamination assessment.
- Existing traffic situation (with appropriate model as outlined in section 7) including volumes, delays, queues.
- Existing utilities service plans and water and sewer modelling if applicable, refer to councils Water and Sewer modelling fact sheet on council's website.

# 4.2 Environmental considerations

# 4.2.1 Environmental input

**General:** Provide a Statement of Environmental Effects which generally address the following matters:

- Suitability of the land.
- Access.
- Traffic generation.
- Risk of flooding or other natural hazards.
- Flora and fauna.
- Local amenity.
- Waste management.
- Threatened species.
- Filling/earthworks.
- Erosion and sediment control/soil and water management.
- Sacred sites, heritage, conservation.
- Fire management.
- General pollution.
- Air quality.
- Water quality.
- Buffer area management.

# 4.2.2 Tree protection

## Tree preservation:

The development/subdivision sketch plan shall identify vegetation that is significant to the overall landscape of the area and any proposed removal of trees.

**Tree preservation officer:** Do not prune, damage or remove trees without the consent of Council's tree preservation officer. Contact Council's tree preservation officer before clearing or underscrubbing is carried out.

**Native vegetation:** Submit a management plan for the protection of native vegetation in rural areas. Covenant on land clearing: If required by Council, place a covenant on land clearing prohibiting the following acts to any tree without consent of the Council:

- Ringbarking
- cutting down
- topping
- pruning
- removal

• endangering or wilful destruction.

Lodgement of bonds for tree protection may be a condition of consent: Refer to Council's Bonds Policy

# 4.2.3 Heritage sites

**Heritage, Aboriginal and other relics:** Identify sites of Aboriginal or heritage significance. Maintain adequate curtilage around any significant item to protect its setting.

Contact for heritage/Aboriginal/other sites: Contact the following services:

- The National Parks and Wildlife Service for details and verification.
- The Heritage Council for details and verification.

All recognised heritage items, including natural features of the site and man-made buildings, works and sites are to be identified and retained wherever possible. For Heritage items identified in Council's LEP, development consent is required for alterations, additions or development. The Heritage Council should be contacted for details and verification.

# 4.2.4 Natural Hazard areas

**Flood prone land:** Submit details for the subdivision of flood prone land in conformance with Council requirements and the New South Wales Government's Floodplain Development Manual, the Management of Flood Liable Land, 2005.

Flooding in urban areas:

The development/subdivision of urban land, other than minor boundary adjustments, will
only be considered where it can be clearly demonstrated that flood free building
sites/allotments can be provided and that the creation of these developments/allotments
will not adversely affect flood patterns or levels in the area.

# Adequate flood free areas:

 Council will only support development/subdivision of rural properties, part of which are flood prone, if in Council's opinion there are adequate flood free homestead and stockholding areas on each allotment, as well as access to higher ground. Development will not be allowed to significantly alter flooding patterns, accordingly, development of internal roads etc will not be permitted to form significant embankments. Each case will be treated on its merits.

#### Bushfire:

 Provide protection zones and access for fire fighting vehicles and maintenance vehicles to minimise the risk of bushfire damage.

#### 4.2.5 Sensitive Environments

Environmentally sensitive sites: Development and subdivision will not be considered for the following environmentally sensitive sites:

- Rainforests.
- Steep slopes.
- Flood prone lands.

## 4.3 Urban residential areas

## 4.3.1 Roads

Access: Provide access in conformance with the following Council objectives:

• To provide for flow of through traffic, at the intended speed limit, giving regard to pedestrian priorities.

- To establish a road hierarchy in conformance with function and usage.
- To provide variation in alignment, allowing for existing natural features and creating interest in the streetscape.
- To provide traffic facilities and parking controls to suit the intended speed limit and streetscape.
- To provide safe pedestrian and cycle routes to each allotment and through the street network, including ramps, public transport infrastructure and environmentally sensitive illumination.

Requirement: Provide a fully serviced subdivision including a sealed road system with drainage, and kerb and channel (gutter), allowing functional and safe vehicular and pedestrian access to each allotment.

Refer to Design Specification D05 Geometric Road Design-Section 1.5

Costs: The applicant will be required to meet the full cost of kerb and channel (gutter) across all existing road frontages of any development and subdivision in urban areas, except where direct vehicular access is restricted.

Adjoining roads: Provide kerb and channel (gutter) to provide safe vehicular and pedestrian access. Provide footpaths if required by Council.

#### **4.3.2** Lot size

Requirements: Conform to state legislation and regulations and Council requirements for lot sizes, lot widths, building line setbacks and the supply of services to allotments. Council sets out these requirements for each zone type. The designer of a subdivision is required to provide for the requirements of Council's LEP/DCP's.

Legal easements width: Provide over stormwater drains and watercourses in conformance with state legislation and regulations and Council requirements. Provide over water and sewerage infrastructure

# 4.3.3 Services

Water and sewerage:

 Provide reticulation of water and sewerage services and connections to existing services, in conformance with Wingecarribee Shire Council, being the water and sewerage authority. Applicants will be required to meet the full cost of provision of water and sewerage reticulation and services in developments and subdivisions, as well as the cost of connections to existing services.

# Electricity:

• Provide reticulation of underground electricity services in conformance with the relevant electricity authority requirements. If underground services are not appropriate seek approval from Council and the relevant electricity authority.

#### Gas:

 Provide reticulation of gas services in conformance with the relevant gas authority requirements.

Telephone and data services:

• Provide underground telephone services. If underground services are not appropriate, seek approval from Council.

Stormwater runoff:

• Provide for urban stormwater runoff in conformance with Council's requirements, both within the development and external to the development, to a legal point of discharge.

# 4.3.4 Flooding

#### Consideration:

The development/subdivision of urban land, other than minor boundary adjustments, will
only be considered if it can be clearly demonstrated that flood free building sites/allotments
can be provided and that the creation of these developments/allotments will not adversely
affect flood patterns or levels in the area.

# Requirement:

For development and subdivision on urban land to be considered, demonstrate the following:

- The provision of flood free building sites/allotments to the designated ARI.
- No adverse effect on flood patterns or levels from the provision of allotments.
- Compliance with Councils DCP Flood Liable Land

# 4.4 Rural residential areas

## 4.4.1 Roads

Definition: Rural residential land is defined as rural homesite or hobby farm land.

Requirement: Provide a sealed road system with an appropriate drainage system in conformance with Council's requirements. Provide concrete lined table drains where scour velocities are excessive and/or the soils are susceptible to erosion from stormwater.

Refer to Design Specification D05 Geometric Road Design-Section 1.5

# **4.4.2** Lot size

Requirements: Conform to state legislation and regulations and Council requirements for lot sizes, lot widths, building line setbacks and the supply of services to allotments. Council's DCP's and LEP or other adopted standards set out these requirements for each zone type. The designer of a subdivision is required to comply with the requirements of Council's Development Control Plans (or interim Development Orders) LEP and various State Legislation.

# 4.4.3 Services

# Water supply:

 Applicants will be required to augment and meet the full cost of water reticulation and services, as well as the full cost of connection to existing services in developments and subdivisions, in conformance with the relevant water authority requirements.

#### Sewerage:

- Provide on-site disposal or connection to existing sewer, in conformance with Council's requirements and the requirements of the relevant sewerage authority.
- However, where the development is in near proximity to an existing sewered area, or where
  in the opinion of the Department of Health or Council's Environmental Health Department,
  the land is unsuitable for site disposal of effluent, reticulated sewerage will be required.
  Provide a geotechnical report to support the sewerage treatment proposal for this type of
  development.

#### Electricity:

 Provide reticulation of electricity services in conformance with the relevant electricity authority requirements.

## 4.4.4 Natural Features

Configuration: Configure the subdivision with consideration of the following natural features:

- Rivers.
- Creeks.
- Topography of the land.
- Tree groupings.
- Other prominent features.

Buffers: Provide buffers to separate conflicting land uses and to protect water courses.

Run-off to streams: Conform to state legislation and regulations on the diversion or storage of rainfall run-off to allow passage to natural streams.

#### Sensitive Environments

 Sites considered to be environmentally sensitive, such as rainforests, steep slopes and flood prone slopes and flood prone lands will not be considered for subdivisional development.
 SEPP 46 identifies the protection and management of native vegetation in rural areas, in addition to the Threatened Species Act.

## Covenant on Land Clearing

• A covenant may be required on larger lots being subdivided prohibiting the ringbarking, cutting down, topping, pruning, removal, endangering or wilful destruction of any trees without the consent on Council.

#### **Flooding**

• Developments on flood liable land to comply with Council's DCP.

# 4.5 Rural development areas

#### 4.5.1 Roads

Definition: Rural land is defined as that land, other than urban and rural residential land, and land generally comprising larger holdings.

Access: Provide a dedicated all-weather road system for functional and safe vehicular access to the development or each allotment, taking into consideration the following:

- The status of the road.
- Existing road surface condition.
- Cost of upgrading.
- Flooding frequency and hazards of creek or river crossings.
- Potential population catchment.
- Bushfire hazard.

Requirement: Refer to Engineering Design Specification *D05 Geometric Road Design-Section 1.5*Sealing of roads: Bitumen sealing of the road system will be required on all new roads which will be an extension of existing sealed roads.

Right-of-way: Council may consider the creation of a right-of-way to serve allotments having the minimum dedicated road frontage but not having road access. Such right-of-way should link an allotment directly to an existing or proposed dedicated road, constructed in conformance with Council's requirements.

Minor subdivisions in isolated rural areas shall require a reasonable standard all-weather access road suitable for all year round access for essential services such as school bus, ambulance, etc.

## 4.5.2 Services

Sewerage: Provide on-site disposal in conformance with Council's requirements. Provide a geotechnical report to support the on-site sewerage treatment proposal.

Electricity: Extend reticulation of electricity services to each allotment within the subdivision in conformance with the relevant electricity authority requirements.

Electricity in remote areas: If the subdivision is remote from reticulated electricity services, submit a written agreement from the relevant electricity authority to not supply electrical mains with the application.

# 4.5.3 Flooding

Requirement: For development and subdivision on rural land partly flood prone to be considered, demonstrate the following:

- To refer to the provision of flood free homestead and stock holding areas on each allotment to the designated ARI.
- No adverse effect on flood patterns or levels from the provision of allotments.
- No significant embankments formed by internal roads.
- Developments on flood liable land to comply with Council's DCP.

# 4.6 Industrial/commercial areas

# 4.6.1 General

LEP: The Local Environment Plan identifies various types of commercial and industrial zones. All proposed commercial and industrial subdivisions would be anticipated to be located in these zones. It is essential that early consultation with Council Officers is sought to determine that the proposed development/subdivision is in an allowable zoning and is in conformity with Council's planning principles for the area.

Lot Size: All lots should be large enough to accommodate parking and landscaping and the specific industrial or commercial use.

Design standards:

• The applicant should provide for a range of lot sizes for the needs of large and small developments. Both commercial and industrial subdivisions will need to comply with the Development Control Plan (DCP) for the area.

# 4.6.2 Roads

Requirement:

Refer to Design Specification D05 Geometric Road Design-Section 1.5

Heavy vehicles:

• Provide pavement for heavy vehicular traffic.

## 4.6.3 Services

Water and sewerage: Provide reticulation water and sewerage and connections to existing services in conformance with the requirements of Wingecarribee Shire Council, being the water and sewerage authority. Applicants will be required to meet the full cost of water and sewerage reticulations serving developments/subdivisions, plus the cost of connecting to existing services.

Electricity: Provide reticulation of underground electricity services to the development/subdivision at full cost to the developer, in conformance with the relevant electricity authority requirements, If underground electricity services are not appropriate, seek approval from Council and the electricity authority. Determine the maximum loading requirements of the electricity service.

Gas: Provide reticulation of gas services in conformance with the relevant gas authorities requirements.

Telephone and data services: Provide underground telephone services. Where underground services are not appropriate seek approval from Council.

Stormwater runoff: Provide for urban stormwater runoff in conformance with Council's requirements, both within the development and to a legal external point of discharge.

# 4.7 Contributions for offsite provisions

# 4.7.1 Council's authority

General: Council's authority to impose conditions of contribution is derived from the Environmental Planning and Assessment Act 1979, Section 94 and Water Act 1912 and the local Government Act 1993 Section 64. Accordingly Council's contribution requirements will be in accordance with an adopted "Contributions Plan".

# 4.7.2 Open space

Public reserve in residential subdivisions (both rural and urban): Provide an area of public reserve (open space) useable for recreation, or a monetary contribution in lieu of land or a combination of both.

Public reserve in rural subdivisions: Provide an area of public reserve (open space) where the subdivision contains significant areas of special scenic or public recreational value.

#### 4.7.3 Contributions

Requirement: Provide a contribution in conformance with the contribution plan for the following:

- Augmentation of water supply if reticulation is available to the development
- Augmentation of sewerage headworks if reticulation is available to the development
- Arterial roadworks where upgrading requirements can be attributed to the development.
- Roadworks and drainage works where upgrading requirements can be attributed to the development.

# 5 Post-determination requirements

# 5.1 Certificates

 S68 consent requires certification from a bushfire consultant where the property is in a bushfire prone zone.

# **5.1.1 Construction Certificate**

#### **General:**

• Obtain building approval before any works commence on site.

# **Certifying authority:**

• Wingecarribee Shire Council or a Registered Private Certifier.

# **5.1.2 Certificate of Compliance**

**General:** Obtain a certificate of compliance for subdivision work from the relevant water authority under S64 of the LGA prior to the issue of the Subdivision Certificate..

# **5.1.3 Occupation Certificate**

**General:** Before occupation of a building (excluding a class1A or 10 building under BCA), an Occupation Certificate is to be acquired. The Principle Certifier shall upon receiving a Compliance Certificate for the various aspects of the development, provide an Occupation certificate.

**Certifying authority:** Wingecarribee Shire Council or a registered private certifier.

## 5.1.4 Subdivision certificates

**General:** Obtain a subdivision certificate authorising the registration of the plan of subdivision and any associated instruments, when all aspects of the Development Consent have been satisfied. The issue of a Subdivision Certificate occurs upon completion of all conditions and payment of fees/levies, as required in the Development Consent.

**Certifying authority:** Wingecarribee Shire Council or a registered private certifier. Following endorsement of the final plan of subdivision, the Developer may lodge the plan for registration by the Lands Title Office and Property Information NSW. Separate titles for the new lots created will subsequently be issued.

# 5.1.5 Subdivision Works Certificates

General: Obtain approval before any subdivision works commence on site Certifying authority:

• Wingecarribee Shire Council or a Registered Private Certifier.

# 5.2 Engineering documentation

# 5.2.1 Certification

General: Provide certification of all drawings for the following works by a Professional Engineer:

- Earthworks (site regrading).
- Roadworks.
- Drainage works.
- Water supply reticulation.
- Sewerage reticulation.

**General:** Provide certification of all drawings for the following works by a Professional Engineer:

- Bridgeworks.
- · Retaining walls.
- Other major structures.
- Pumping stations.

#### 5.2.2 Documentation

**Council documents:** Obtain standard drawings, Engineering Design Specifications and Engineering Construction Specifications prepared by Council for use in developments and subdivisions.

**Specifications:** Provide specifications conforming to Council's requirements for all works not covered by Council specifications. Specifications other than those supplied by Council are to be prepared by a Professional Engineer and will need to be submitted to the Principal Certifier (PC) for approval, with each set of engineering drawings.

# 5.2.3 Design drawings

**Requirement:** Provide 2 copies of design drawings on paper size sheets  $1 \times A1$ ,  $1 \times A3$  and an electronic copy for the following works:

- Earthworks (site regrading).
- Roadworks.
- Road pavement.
- · Road furnishings.
- Stormwater drainage.
- Water supply works.
- Sewerage works.
- Landscaping works.
- Erosion control works.
- Works and signage management (if required)

# 5.3 Commencement of works

# 5.3.1 Necessary conditions

**Approval:** Do not commence works on development/subdivision sites before building approval is issued. Design drawings and specifications, in accordance with the conditions of consent, are to be submitted to Council for approval and a Construction Certificate or Subdivision Works Certificate issued. These certificates are issued by a consent authority (Council or the relevant Minister for Planning) or a private registered certifier and allows Developers to nominate Council or a private registered certifier as the Principal Certifier (PC) prior to commencement of works.

# 5.3.2 Quality control

**Minimum requirement:** Nominate the developer's Superintendent or representative and obtain approval from Council of their qualifications and experience.

The developer's representative is required to attend a prestart meeting with Council and notify commencement date prior to commencement of works

# 5.3.3 Quality assurance

Standard: To AS/NZS ISO 9001.

**Quality plan:** Submit a quality plan before commencement of works if a quality assured design or construction is a condition of consent.

# 5.3.4 Water, sewerage and drainage

Certifying authority: Wingecarribee Shire Council is the certifying authority for water, sewerage and drainage works in Wingecarribee Shire. The developer must ensure that all works are carried out in compliance with the Local Government Act 1993. The developer must ensure that water, sewerage and drainage works abide by the Local Government Act and associated Regulations, in particular Clauses 18 and 19 of the Local Government (General) Regulation 2005 regarding complying with any operating requirements notified by the Council.

# 5.4 Inspections and testing

# 5.4.1 General

Requirement: Submit test results to verify the materials supplied and the work carried out conform to the approved documentation and inspections.

Hold and Witness Points are comprehensively detailed throughout Councils Engineering Construction Specifications.

Each construction specification provides a summary of Hold points and Witness points required during certain stages of construction activity. Hold points prevent work proceeding without mandatory verification and acceptance from the Principal Certifier (Council or a registered private certifier).

All construction specification hold points specifying inspection details and documentation details with distinct notification time requirements are summarised in the Councils Engineering Construction Specification C32 – Summary of Inspections, Testing and Document Submission requirements for Civil Works Construction.

Additional inspections, tests and documentation may be required from time to time, and as required on the approved plans and notes.

Attendance to verify Witness points may be exercised by the Principal Certifier after notification of the requirement.

Failure to comply with hold point requirements detailed in council's Engineering Construction Specifications will lead to application refusals for subdivision certificates, occupation certificates, final Section 138 and Section 68 certificates and non-acceptance of asset ownership by council.

# 5.4.2 Inspections

## **Key stages:**

**Book for Civil Works Inspections through MyInspect** - Councils Building and Civil Works Inspection Booking System, before 3pm on the day before the inspection is required.

Booking contact details - 1300 842 361 or alternatively My.Inspect@wsc.nsw.gov.au

Bookings are to be made at key stages of construction nominated as HOLD POINTS in the appropriate construction specification. The specific hold point reference number must be provided at the time of booking.

# **5.4.3 Testing and Documentation Records**

**Procedures:** Submit records of all test results to the principal certifier promptly. Testing by organisations to conform to relevant standard documented test procedures.

All documentation relating to testing and submission requirements should be submitted to council either by mail/person addressed to the General Manager or by email to mail@wsc.nsw.gov.au for council document registration purposes.

The documentation must reference the development application reference number, the specific hold point reference number and the sender's details. Documentation must be received in accordance with the notification time requirements.

Access: Allow uninterrupted access at all times for audit inspections or testing.

#### 5.5 Insurances

# 5.5.1 Policies

**Professional indemnity:** Provide evidence of professional indemnity insurance for the Developer's lead consultant.

**Third party and public risk:** Provide evidence that all Contractors have obtained appropriate third party and public risk insurance in an amount of \$20 million (minimum) for the construction period and a copy provided to Council.

**Submission of insurance documentation:** Before the commencement of the works.

# 6 Completion

# 6.1 Completion of works and title issue

# 6.1.1 Construction completion

# 6.1.2 Final certification and inspection of completed works

Requirement: Council requires the designer or its representative to carry out sufficient site inspections to validate the final certification of the proposed works.

Completed works: On completion of construction works, the supervising consultant is to advise the PC to that effect in writing. The designer to provide evidence to the PC that the site inspections were undertaken during construction works and provide final certification that the completed work is consistent with the approved design.

Final Subdivision Works Certificate, Section 68 and Section 138 site inspections will be carried out on notification of the works being completed respectively.

#### Documentation

**Final survey (original) plan:** Provide the final survey plan to the PC, prepared by a Registered Surveyor upon completion of all conditions of development consent and any other certificate approvals, together with the appropriate fee, for the PC's endorsement of the Subdivision Certificate.

Subdivision certificate: Submit the following for endorsement of the subdivision certificate:

- The final survey plan and administration sheets.
- Number of copies: 3 copies
- Size of final survey plan: A1 or A3
- Street name and street numbering; approval from Council is required to approve all street naming and street numbering for inclusion on the final survey plan and administration sheet.
- Asset register information
- WAE plans
- Certification of completed internal civil works
- Technical data and test results
- Any Section 88 Instrument under the Conveyancing Act (easements, restrictions, etc)
- Title issue: Developer to submit plans to the Land and Property Information NSW to effect plan registration and the issue of new titles for the subdivision lots who will then advise Council of a Deposited Plan (DP) number so that sale of allotments of land may proceed.

# 6.1.3 Defects Liability period

**Commencement defects liability period:** In accordance with Council's Bonds Policy. The **defects liability** period will commence from the date of issue of the subdivision certificate or approval of occupation of the development.

# 6.1.4 Sewerage and water system commissioning

Commencement of defects liability period for pumping stations and associated facilities: At the completion of pump performance tests and commissioning.

Defects liability period for pumping stations and associated facilities: will be in accordance with Councils bonds policy.

# 6.2 Work-as-executed

# 6.2.1 General

Work as Executed (WAE) requirements apply when new infrastructure is to be handover over to council to become public assets.

# 6.2.2 Requirement

**Certification:** At completion, submit as an accurate record, one full set of WAE drawings marked up in red showing any variations from the design certified by a Professional Engineer, stating that all information shown on the drawings are correct and accurate.

WAE drawings to be prepared and validated by a Registered Surveyor.

Certification for digital submission: For all subdivisions, Council will require an electronic copy of the WAEx Drawings in DXF or DWG format using Co-ordinate system MGA (GDA94) Zone 56, in addition to the paper copy.

Refer to information on Council's website regarding Asset Handover and Work as Executed Specifications.

#### **Asset register**

The developer is to provide a detailed summary of the Assets that will fall into Council's care and control. The details are to be provided in a tabular form to allow Council to update the data on its assets register.

The assets to be identified include:

- Road
- Drainage
- Sewer
- Water
- Park/Open space and total area being dedicated
- Building
- Pump stations (water and sewer)

Refer to information on Council's website regarding Work as Executed Attribute Excel Tables.

# 6.3 BONDS

# 6.3.1 Defects and Liability bond

Refer to Councils Bonds Policy.

## 6.3.2 Damages Bond

Refer to Councils Bonds Policy

# 7 Traffic

# 7.1 Safe Systems Approach

1. The applicant must incorporate the Safe Systems Approach to design and planning of road infrastructure as outlined and discussed in Austroads "Guide to Road Design Part 1: Introduction to Road Design" 2.3 Road Safety and Road Deign".

# 7.2 Traffic Impact Statement or Traffic Impact Assessment

1. Either a Traffic Impact Assessment (TIA) or a Traffic Impact Statement (TIS) in accordance with Austroads Guide to Traffic Management Part 12 "Integrated Transport Assessments for

Developments" is required to be included. The developer must obtain written confirmation from council if a TIA or TIS is required for their development.

# 2. Council adopts Austroads Guidelines for:

- a. Traffic Impact Assessment (TIA) and Traffic Impact Statements (TIS).
  - i. The difference between a TIA and a TIS is the amount of detail and investigation. The Austroads Guide details the requirements of the TIA and TIS. Determining thresholds that will trigger going from no assessment required to TIS through to TIA are included in Council's checklist. The Austroads Guide to Traffic management Part 12 "Integrated Transport Assessments for Developments" is the reference document for preparing a submission which considers traffic. However, Council reserves the right to require a higher order of TIA (and this could extend to road safety audits) where the development has areas that have potential environmental, safety or social potential impact (for example). Council will state the reasons for a higher order assessment required for a particular development if required.
  - ii. Traffic Generation Rates the document that Council references is the latest Roads and Maritime Services Rates (currently RMS TDt 2013/04a May 2013 and if not covered in that document, the RTA "Guide to Traffic Generating Developments" Version 2.2 October 2002).
  - iii. Whilst applicants may choose to use traffic generation rates determined from surveys of similar developments, Council will require the use of the higher rate comparing the survey to the traffic generation rates included in the documents listed in 2.a.ii.
  - iv. Where a land use for a proposed development is not clearly defined in 2.a.ii then Council should be consulted prior to the development of any traffic assessment to gain agreement to the traffic generation rate to be applied to the proposal.

## 3. Trip Distributions:

- For minor developments the applicant shall provide the post development trip distributions entering and leaving the development during the peak morning and afternoon non-school holiday and peak Saturday midday periods.
- ii. For moderate and significant developments (i.e where 100 vehicle trips, combined in/out or more are generated by a proposed development), trip distributions should be determined through TRACKS modelling at the cost of the applicant. Whilst trip generation is important, a sound assessment of the distribution of those trips are equally important.
- iii. The "Guide to Traffic Generating Developments" by way of "rule of thumb" (in the absence of traffic modelling) suggests an attraction to some developments of 20% for "passing trade". This allowance shall not be used to reduce the traffic generation entering and leaving the site. The generation of traffic entering and leaving the development must match the traffic generation estimation (without discount).

# 4. TIA identified Intersections - Analysis:

i. The TIA will identify key intersections at the interface of the development site and those that may be more remote from the site but be required for movement between the wider road network and the site.

- ii. Generally for sites that are remote from congested areas, such as Town Centres, individual stand-alone SIDRA analysis of all peak periods will be required. In congested areas or where queuing is a consideration, then SIDRA Network analysis of all peak periods may be required as a minimum and micro-simulation may also be required.
- iii. In order to attain reliable analysis, existing conditions must be accurately reflected in any pre-development analysis undertaken using the analysis methods outlined in 4 (ii). These conditions are to include, where applicable, but not be limited to: approach grades; actual lane widths; entry radii (i.e. kerb returns; roundabout approach radii, etc.); roundabout circulating width; roundabout central island radius); 85<sup>th</sup> percentile approach queue lengths (based on observations taken throughout the survey period); morning, afternoon and Saturday midday peak periods during non-school holiday periods extending the traffic turning movement counts to begin at least 30 minutes before the start of the peak and conclude at least 30 minutes after the peak period ends and to capture data in 15 minute blocks. This process will determine the pre-development operation of all intersections identified in the TIA. Unless supported by data, the "Peak Flow Factor" should be set at 30 minutes over the hour, or, the peak 15 minute period can be analysed.

Council refers to documents such as the NSW Government "Traffic Modelling Guidelines" and Vicroads "Transport Modelling Guidelines" Volume 4: Simulation Modelling and Volume 5: Intersection Modelling and SIDRA Solutions reference documents for best practise.

- iv. Post development analysis must provide assessment of the performance of the intersections analysed through the methods outlined in 4 (ii)
- v. Provision for future growth: The applicant must demonstrate through the processes outlined above that the network affected by the development will function at acceptable Level of Service (i.e. LoS "C" or better) for a period of 10 years post development occupation (minimum 1% compound growth per annum to be applied to first year of development traffic on the network, nil further to be applied to turning traffic to and from the development (unless there are future stages of the development to be considered). Any identified remediation (e.g. intersection upgrade) should demonstrate that the upgrade will still perform no worse than LoS "C" over the 10 year period. Should performance be shown to worsen over the 10 year post development period, then the proposed remediation should be upgraded so that satisfactory LoS can be achieved and maintained over the 10 year post development growth period.

Where the existing intersection or local network is found to be operating under existing traffic demand worse than LoS C then the applicant is required to discuss the findings with Council and, where applicable, the Roads and Maritime Services for agreement on how the application may or may not proceed.

- vi. All designs should be in accordance with Australian Standards and Austroads.
- vii. Where possible, and cost consideration on its own is not always a justified defending argument, the Austroads guides/Australian Standards are to be applied as they represent "best practise". Should compliance mean significant cost, engineering judgment complying where possible with Austroads/Australian Standards should be investigated and where

compromises are the only way, then sound and defendable engineering judgment is required. This is consistent with Austroads guidelines "Guide to Road Design Part 1: Introduction to Road Design":

3.2.1 Legal Liability and Guidelines Legal claims against road agencies have steadily risen in recent years, and court decisions have cast doubts on general immunities previously enjoyed by road agencies. Adherence to guidelines is not, of itself, necessarily a sufficient defence against claims of negligence that may arise. Likewise, deviation from established guidelines does not necessarily justify a claim for negligence. It is essential that the rationale for all decisions be suitably documented so that any claims that might arise may be suitably defended.

3.2.2 Application of Guidelines Design guidelines usually provide a range of acceptable values for each parameter (the 'design domain' discussed in Section 3.3), from which designers choose the most appropriate value. Construction cost considerations sometimes lead to designers selecting recommended minimum values that may or may not be appropriate for the particular circumstances. The use of a minimum value for a single parameter may be acceptable, but the use of minimum values for several inter-related parameters is generally not recommended, as the resulting design might be hazardous. Experience and judgement must be used in selecting the correct balance of values.

# 7.3 Intersection Upgrade Specifications

- 1. Intersection upgrades (BAR/BAL, CHRs, etc.) for minor to moderately sized developments on local and regional roads:
  - i. There is guidance in Austroads and again requires engineering judgment when a development may not trigger BAR/BAL due to the small size of the development or access road AADT, safety issues need to be considered.
  - ii. BAR/BAL warrants:
    - a) On most local and Classified Regional roads (excluding minor local access roads which are to be confirmed through discussion with Council) a BAR/BAL (urban or rural) is required as a minimum for access into a non-commercial development generating 10 vehicle movements per day.
    - b) In some locations giving consideration to possible compromised location and site conditions, any traffic generation will likely require BAR/BAL or other possible improvements.
    - c) Generally, on rural roads for residential access a BAR/BAL is not required (but a general access driveway is required – Austroads: "Guide to Road Design Part 4: Intersections and Crossings – General" Figure 7.2).
    - d) Any commercial development will require a BAR/BAL as a minimum.
  - iii. Higher order treatments (e.g. CHR(s), CHR or CHL) may be required for low traffic generating developments where there may be other considerations such as limited sight lines etc. to the development access. This will be assessed on a case by case basis.

- iv. Higher order treatments (e.g. CHR(s), CHR/CHL) will be required in accordance with Austroads "Guide to Road Design Part 4: Intersections and Crossings General" "Warrants for BA,AU and CH Turn Treatments" giving consideration to the development's turning traffic and through road traffic volume and the 85<sup>th</sup> percentile speed of the through road. Where turning volumes exceed those shown in this guide the appropriate treatment will be determined through SIDRA analysis of movements occurring through the peak periods identified through traffic survey data.
- v. Some locations may warrant strategic considerations and network modification options in order to achieve a safe and efficient outcome. Council requires discussion with the applicant at the early stages of a development proposal to discuss access options and suitable remediation.
- vi. Sound engineering judgement overrides any guideline minima in difficult situations. Where the applicant believes that this should be a consideration for any departures from best practice, this will require a detailed report to outline the reason and how the proposal will still meet safety and performance objectives. Council will give consideration to the design report but this in itself does not necessarily guarantee approval.

# 7.4 Transport for NSW (formerly Roads and Maritime Services)

a. Where any development has access to or from a State Classified Road, then TfNSW support for approval of any access arrangement is a mandatory requirement.

# 7.5 Property access

- a. Proposed access to proposed lots and developments should be off the minor road where frontage to a higher order road may exist.
- b. Should a proposed development require access off a sub-arterial or collector road then measures need to be undertaken to preserve the safety and efficiency of the network provided by these roads. Measures could include (not limited to), for example:
  - i. the installation of a centre road median to prevent direct right turn movements to and from the development;
  - ii. construction of a BAR or higher order treatment (determined from consideration of traffic generated volumes and consideration of existing traffic and future traffic growth as per 7.4.2.v of the major road and in accordance with Austroads Guidelines).

# 7.6 Public Transport

a. Moderate and larger sized developments are to facilitate safe, accessible and efficient public transport (e.g. bus services, taxis and, where applicable, rail). Examples of a moderate residential development would be in the order of greater than 100 lots. Commercial and retail development which would include (but not limited to) several small shops, a supermarket, medical centre etc. are to incorporate facilities to support public transport. Council encourages early discussion to identify possible options. All proposed facilities are to meet the relevant Australian Standards and Austroads Guidelines.

# 7.7 Pedestrians and cyclists

a. Moderate and larger sized developments are to facilitate safe, accessible and efficient movement of pedestrians and cyclists. Council encourages early discussion to discuss possible options. Council encourages early discussion to identify possible options. All proposed facilities are to meet the relevant Australian Standards and Austroads Guidelines.