56 RESIDENTIAL SUBDIVISION

19/01/2006
VC37

Purpose

To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.

To encourage subdivisions that provide a wide range of lot sizes, are cost-effective and meet community standards for health and amenity.

To provide safe, environmentally sustainable and livable neighbourhoods.

To encourage subdivision design that:

- Identifies and appropriately responds to site opportunities and constraints.
- Respects the existing neighbourhood character or achieves a preferred neighbourhood character for the area.
- Gives new communities a sense of place and identity.
- Provides safe and convenient access to a range of physical and community infrastructure.
- Protects natural and cultural features.

Application

These provisions apply to an application to subdivide land in the Residential 1 Zone, Residential 2 Zone, Residential 3 Zone, Mixed Use Zone or Township Zone.

These provisions do not apply to an application to subdivide land into lots each containing an existing dwelling or car parking space.

Operation

The provisions of this clause contain:

- **Objectives.** An objective describes the desired outcome to be achieved in the completed subdivision.
- **Standards.** A standard contains the requirements to meet the objective.

A standard should normally be met. However, if the responsible authority is satisfied that an application for an alternative design solution meets the objective, the alternative design solution may be considered.

Requirement

A subdivision should meet all of:

- The objectives of this clause.
- The standards of this clause.

56.01 SITE AND CONTEXT DESCRIPTION AND DESIGN RESPONSE

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An application must be accompanied by:

- A site and context description.
- A design response.

56.01-1 Site and context description

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The site and context description may use a site plan, photographs or other techniques and must accurately describe:

- In relation to the site:
  - Site shape, dimensions and size.
  - Orientation and contours.
  - Trees and other significant vegetation.
  - The siting and use of existing buildings on the site.
  - Street frontage features such as poles, street trees and kerb crossovers.
  - Access points.
  - Drainage and infrastructure connections.
  - Easements.
  - Any significant natural features of the site, including drainage lines, watercourses, significant habitat and habitat corridors for the movement of fauna.
  - Significant views to and from the site.
  - Noise and odour sources or other external influences.
  - Soil conditions, including any land affected by contamination, salinity or fill.
  - Any other notable features or characteristics of the site.
- In relation to the surrounding area:
  - The pattern of subdivision of the surrounding area.
  - Existing land uses.
  - The siting and use of existing buildings on the adjacent properties.
  - The location and type of significant vegetation.
  - Street and footpath widths, material and detailing.
  - Location, distance and characteristics of any nearby public open space.
  - Direction and distances to local shops, schools, community and recreational facilities.
  - Directions and distances to public transport routes and stops.
  - Direction and distances to existing neighbourhood, town and regional activity centres and major employment areas and their catchments.
  - Existing transport routes, including freeways, arterial and sub-arterial roads and major roads connecting neighbourhoods.
  - Local street network.
  - Traffic volumes and movements on adjacent roads.

- Pedestrian and bicycle paths.
- Any places of natural or cultural significance.

If in the opinion of the responsible authority a requirement of the site and context description is not relevant to the evaluation of an application, the responsible authority may waive or reduce the requirement.

Satisfactory site and context description

The responsible authority must inform the applicant in writing:

- Before notice of an application is given, or
- If notice of an application is not required to be given, before deciding the application, that the site and context description meets the requirements of Clause 56.01-1 and is satisfactory or does not meet the requirements of Clause 56.01-1 and is not satisfactory.

If the responsible authority decides that the site and context description is not satisfactory, it may require more information from the applicant under Section 54 of the Act.

The responsible authority must not require notice of an application to be given or decide an application until it is satisfied that the site and context description meets the requirements of Clause 56.01-1 and is satisfactory.

This does not apply if the responsible authority refuses an application under Section 52(1A) of the Act.

56.01-2 Design response

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The design response must explain how the proposed design:

- Derives from and responds to the site and context description.
- Meets the objectives of Clause 56.
- Responds to any site and context features for the area identified in a local planning policy or a Neighbourhood Character Overlay.

The design response must include a correctly proportioned plan showing the subdivision in context with the adjacent area. If in the opinion of the responsible authority this requirement is not relevant to the evaluation of an application, it may waive or reduce the requirement.

If the subdivision will create a new residential community, the plan should also show and explain:

- Proposed neighbourhood areas and centres.
- Proposed commercial centres.
- Proposed schools and community facilities.
- Pedestrian catchments of proposed commercial and community facilities.
- Proposed land uses.
- Proposed street layout and network including street types.
- Mixture and distribution of lot sizes.
- Proposed public open space.
- Natural features to be retained.
- Proposed urban water management network.
- Proposed public transport routes.

- Proposed bike paths.
- Proposed staging of the subdivision.

56.02 COMMUNITY DESIGN

19/01/2006
VC37

56.02-1 Residential character and identity objective

19/01/2006
VC37

To design residential areas that promote community development through the creation of neighbourhood focal points and a sense of local character and identity.

Standard C1

Subdivision layouts should give a residential environment a strong and positive identity by responding to site characteristics, its setting, landmarks and views, and through the street and open space networks.

Neighbourhood identity should be reinforced by locating focal points for community and retail facilities within reasonable walking distance of most residents.

Subdivision layouts:

- Must respect the existing neighbourhood character or achieve a preferred neighbourhood character consistent with any relevant neighbourhood character objective, policy or statement set out in this scheme.
- Must respond to and integrate with the surrounding urban environment.
- Should encourage development to front major streets, through the use of service roads or side or rear access.

56.02-2 Planning for movement objective

19/01/2006
VC37

To provide a movement network that establishes good internal and external access for residents, maximises safety, encourages public transport patronage and minimises the impact of through traffic.

Standard C2

The movement network should be designed to:

- Ensure vehicles are able to move in a convenient, logical, safe and efficient manner.
- Provide a high level of access within a residential area and have good connections to external routes.
- Slow traffic within residential areas and divert through traffic to desired routes.
- Respect the existing or preferred neighbourhood character and maximise residential amenity.
- Provide a safe, accessible, convenient, efficient and logical pedestrian and bicycle network.
- Provide opportunities for public transport.
- Ensure emergency and service vehicle access to all developments.

56.02-3 Environmental sustainability objective

19/01/2006
VC37

To facilitate an environmentally sustainable approach to urban development by minimising fossil fuel use, protecting environmental assets and providing for higher densities.

Standard C3

Street layouts and lot densities should be designed to minimise fossil fuel use by reducing local vehicle travel distances, maximising public transport effectiveness and encouraging walking and cycling to daily activities.

Street and lot layouts should enable efficient provision of physical services.

Street and lot dimensions should facilitate the siting and design of dwellings to minimise fossil fuel use and maximise use of passive solar energy.

Subdivision layouts should:

- Retain significant vegetation and habitat areas.
- Incorporate natural and cultural features.
- Minimise soil erosion.
- Encourage on-site water retention.
- Avoid inappropriate development on floodplains.
- Use drainage methods that protect and enhance streams.

56.02-4 Residential diversity objective

19/01/2006
VC37

To provide residential areas that meet the diverse needs of the community with a wide choice in housing and associated public and commercial uses.

Standard C4

The design of neighbourhoods should:

- Provide for a variety of housing types and other compatible land uses.
- Be arranged to encourage provision of local services, facilities and employment, in a manner that minimises land use conflicts.

A mix of lot sizes should be provided within neighbourhoods that includes smaller residential lots and lots suitable for integrated medium density housing in areas close to services, public transport and public open space.

56.02-5 Public open space objective

19/01/2006
VC37

To provide a public open space network, including appropriate land for recreation, that can meet the diverse needs of today's residents and be adapted to the needs of future users.

Standard C5

Public open spaces should be located and designed to:

- Improve the legibility and character of the development.
- Provide for a range of uses and activities.
- Promote on-site infiltration of stormwater run-off.

56.02-6 Safety and security objective

19/01/2006
VC37

To enhance the safety and security of residents and property in residential areas by reducing the potential for crime and vandalism.

Standard C6

Subdivision layouts should:

- Provide for public surveillance of streets and public open spaces by:
  - Orienting lot frontages to streets and public open spaces.
  - Providing streets on public open space boundaries.
- Locate open space and community facilities at focal points that are easily observed by surrounding and passing residents.
- Locate pedestrian and bicycle paths along streets fronted by dwellings.
- Avoid creating areas of poor surveillance on routes to and from public transport.

56.02-7 Environmental constraints and bushfire hazard objective

19/01/2006
VC37

To ensure that the design of residential areas takes into account environmental constraints including soil erosion, flooding and bush fire hazard.

Standard C7

Subdivision layouts should:

- Avoid inappropriate development on land subject to flooding.
- Minimise soil erosion.
- Retain significant vegetation and habitat areas.
- Incorporate natural and cultural features.
- Encourage on-site water retention and use drainage methods that protect and enhance streams.

The layout of subdivisions abutting long term non-urban areas or conservation areas that are of high bushfire hazard should ensure that:

- Streets are located, connected and designed to allow safe and efficient movement of fire emergency vehicles.
- Lots are configured to facilitate siting and design of dwellings incorporating bushfire protection measures.

56.03 MOVEMENT NETWORK

19/01/2006
VC37

56.03-1 Street network objectives

19/01/2006
VC37

To provide a network of streets with clear physical distinctions between traffic routes and residential streets based on function, legibility, convenience, traffic volumes, vehicle speeds, public safety and amenity.

To provide acceptable levels of accessibility, safety and convenience for all street and road users in residential areas, while ensuring acceptable levels of amenity and minimising the negative impact of through traffic.

To orient the street network to facilitate the production of lots with high solar access potential and integrate the street network with natural drainage and open space systems.

Standard C8

Streets should be designed to meet the adopted functions, carry the volumes and limit target street speeds specified in Table C1.

The design features of each type of residential street should convey its primary functions and encourage appropriate driver behaviour.

Larger roads and traffic routes should be located and designed to provide routes that are more convenient for external traffic than the residential street network.

Larger roads and traffic routes should be provided at intervals of approximately 1.6 kilometres and have adequate capacity to accommodate projected movement.

Internal street layouts should conform to the requirements of the external traffic route network and satisfy the transport provisions of any relevant plan or policy in the scheme. Where appropriate, the proposed external road system should be modified to achieve a better overall network.

The street network should be oriented:

- Approximately east-west and north-south to promote efficient solar access for dwellings.
- Along valleys where the street is part of the drainage system, if this is consistent with the management of stormwater and environmental values of the valley.

Table C1 Classifications of residential streets

RESIDENTIAL STREETS TYPE AND FUNCTION	NUMBER OF DWELLINGS SERVED	VOLUME [1]	TARGET STREET SPEED
Access Lane			
A side or rear lane principally providing access to parking for lots with another street frontage.		300 veh/day	15 km/hr
Access Place			
A minor street providing local residential access with shared traffic pedestrian and recreation use, but with pedestrian priority. The maximum length of an access place is 100m.	Small and fewer than 30.	300 veh/day	15 km/hr

RESIDENTIAL STREETS TYPE AND FUNCTION	NUMBER OF DWELLINGS SERVED	VOLUME [1]	TARGET STREET SPEED
Access Street			
A street providing local residential access where traffic is subservient, speed and volume are low, and pedestrian and bicycle movements are facilitated.	Fewer than 200 and preferably fewer than 100.	1000 veh/day	30 km/hr
It includes streets serving 30 dwellings or less that are not comprehensively designed as access places.		2000 veh/day	40 km/hr
Collector Street			
The collector street collects traffic from the access places and access streets and carries higher volumes of traffic.		3000 veh/day	50 km/hr 20 km/hr at designated pedestrian or bicycle crossings [2]
Trunk Collector			
The trunk collector streets provide a specialised form of connection between the residential streets and the traffic route system where it is desirable to concentrate local traffic to an outlet, but not to attract through traffic. Its principal function is to facilitate the convenient and safe movement of residential traffic to and from the major arterial road system usually at a signalled intersection. It is not a typical residential street. Residential development may be considered on these streets with siting conditions that ensure acceptable amenity and that provide for vehicles to enter the street in a forwards direction.		6000	60 km/hr [3]

1 Indicative maximum traffic volume for 24 hour period. These volumes depend upon location. Generation rates may vary between existing and newly developing areas.

2 Requires special design and control so that vehicle speeds are reduced progressively.

3 Design speed on trunk collector streets not to exceed legal speed limit.

56.03-2 Street network detail objectives

19/01/2006
VC37

To provide acceptable levels of accessibility, safety and convenience for all street and road users in residential areas, while ensuring acceptable levels of amenity and minimising the negative impact of through traffic.

To discourage residential streets from operating as through traffic routes for externally generated traffic, while limiting the length of time local drivers need to spend in a low speed environment.

To provide the basis for cost effective design and construction of the street network.

Standard C9

Residential streets should:

- Discourage through flow of externally generated traffic.
- Limit the length of time local drivers need to spend at a low speed.

Street networks should be designed to optimise the use of the traffic route investment by ensuring they will operate at high volume/ capacity ratios at peak times in situations where no significant future increases in traffic volume are anticipated.

Trunk collector streets should be less than 150 metres in length, except where topography or the location of traffic routes makes a longer distance unavoidable.

There should be no more than three turns at street intersections or junctions when travelling from any dwelling to the most convenient collector street or higher order street.

The driving distance from any dwelling to the nearest collector or higher order street should be less than 700 metres.

Speed should be controlled by limiting street leg length and providing appropriate slow points at the end of each leg. Slow points may include street junctions, sharp bends and speed humps. Speeds may also be restrained by a continuous series of bends or by a combination of approaches.

56.03-3 Intersection objective

19/01/2006
VC37

To ensure street intersections are safe, convenient and appropriate for the type of street.

Standard C10

Intersections between residential streets should be controlled by T-junctions, roundabouts or other appropriate traffic management treatment to slow and control traffic.

Street and road junctions should be spaced in accordance with the requirements specified in Table C2.

Table C2 Junctions along residential streets and traffic routes

	TYPICAL AVERAGE [1] JUNCTION SPACING	MIN. SPACING OF STAGGERED JUNCTION-- LEFT/ RIGHT STAGGER	MIN. SPACING OF STAGGERED JUNCTION-- RIGHT/ LEFT STAGGER
Residential Streets			
Access Place			
Access Street	40	20	20
Collector Street	40	20	20
Trunk Collector	80	40	20
Traffic Routes			
2-lane sub arterial	100	60	30
3-lane sub arterial	100	100	30
Divided sub arterial	150	150	50
Divided arterial	150	150	50
Divided major arterial	200	150	50

[1] The typical average junction spacing relates to the total number of junctions along both sides of the specified residential street or traffic route. Each cross-road counts as one junction. A right/left stagger on a three lane sub-arterial or higher order road also counts as one junction. Other junctions may form T-junctions or allow only restricted vehicle movement.

56.03-4 Controlling speed objective

19/01/2006
VC37

To provide accessibility, safety and convenience for all street users in residential areas by ensuring that the speed of traffic is appropriate for the type of the street.

Standard C11

Street leg lengths should be:

- Designed as specified in Table C3.
- Limited to control vehicle speed between slow points designed to restrict design speeds to 20 kilometres per hour.

Table C3 Street leg length and design speed

STREET TYPE	TARGET STREET SPEED	MAXIMUM LEG LENGTH BETWEEN 20 km/hr SLOW POINTS.
Access Street	30 km/hr	75 to 100 m
	40 km/hr	100 to 140 m
Collector Street	50 km/hr	120 to 155 m
Trunk Collector	60 km/hr	120 to 155 m

Slow points and carriageway narrowing should be designed taking into account the need of cyclists by ensuring:

- Speed compatibility.
- Adequate space for concurrent passage.
- Off-street diversions.

Where bends are introduced to control speeds to 20 kilometres per hour or less, the deflection angle in the change of alignment of a street pavement should be at least the angle specified in Table C4.

Table C4 Minimum deflection angles for speed control to 20 km/hr

BEND TYPE	STREET PAVEMENT WIDTH [1]		
	3.5 m	5-5.5 m	7-7.5 m
Single bend	60 degrees	70 degrees	90 degrees
Chicane (2 reverse bends)	30-30 degrees	45-45 degrees	60-60 degrees

[2] Pavements may be reduced to 3.5 metres at bends by the use of medians.

Where bends or slow points are used which allow speeds greater than 20 kilometres per hour, the length of street between two bends or slow points should meet the distance specified in Table C5.

Table C5 Slow point speed and length of street between slow points

SPEED AT SLOW POINT OR BEND	MAXIMUM LEG LENGTH OF STREET BETWEEN SLOW POINTS/ BENDS TO LIMIT TARGET STREET SPEED TO:		
	30 KM/HR	40 KM/HR	50 KM/HR
20 km/hr	Refer Table C3		
25 km/hr	45 m	80 m	135 m
30 km/hr	–	65 m	115 m
35 km/hr	–	50 m	100 m
40 km/hr	–		80 m
45 km/hr	–		60m

56.03-5 Local accessibility objectives

19/01/2006
VC37

To provide a safe, convenient and legible movement network for pedestrians and cyclists along streets and paths to points of attraction within and adjoining the development.

To provide a movement network that contributes to limiting the use of fossil fuels.

Standard C12

The street network should:

- Facilitate walking, cycling and the use of public transport for access to daily activities.
- Enable relatively direct local vehicle trips within the neighbourhood and to local activity points.

The street network and paths should provide a movement system for pedestrians and cyclists that is efficient, cost effective and substantially capable of visual surveillance by residents.

Links should be provided to facilitate major pedestrian or cyclist movement where cul-de-sac heads abut other streets or public open space.

56.03-6 Public transport objectives

19/01/2006
VC37

To provide for bus routes that are accessible from all dwellings and activity centres and efficient to operate.

To provide a movement network in the vicinity of fixed rail that is focused towards passenger stops.

To establish a movement network that provides convenient linkages to activity centres and local facilities either within or adjoining the development.

Standard C13

The street and road network should provide for access to public transport within a reasonable safe and convenient walking distance of all dwellings.

Proposed bus routes should connect efficiently with existing or likely future bus routes, to provide for ease of movement of buses between developments, and to link major activity centres internal and external to the development.

Buses should be able to safely access the development and move safely between developments without complicated turning manoeuvres.

The alignment and geometry of streets that form bus routes should provide for the efficient and unimpeded movement of buses.

Streets suitable for bus routes through the development should be no more than 30 per cent longer than the bus routes available on the adjacent traffic route network.

Street networks near railway stations and major tram routes should be focussed towards stops to provide high levels of accessibility and surveillance.

At least 90 per cent of dwellings should be within 400 metres safe walking distance from an existing or proposed bus or tram route and should not be more than 500 metres from the nearest stop, or within 800 metres of a railway station.

56.04 PEDESTRIANS AND CYCLISTS

19/01/2006
VC37

56.04-1 Pedestrian and cyclists objectives

19/01/2006
VC37

To provide a safe, convenient and legible network of on-street and off-street paths for pedestrians and cyclists to points of attraction within and beyond the development.

To design and develop new residential communities to promote walking and cycling to daily activities.

Standard C14

Subdivisions should provide a network of pedestrian and bicycle paths in accordance with any relevant approved state, regional or local walking trail or bicycle plan and constructed in accordance with the Austroads Guide to Traffic Engineering Practice, Pt 13: Pedestrians, 1995 (AP 11.13-95/HB 69.13-1995).

The residential street network should be designed to:

- Provide a permeable network of low traffic volume and low traffic speed routes for cyclists.
- Promote the use of streets for on-road cycling to daily activities.
- Connect abutting cul-de-sac heads with pedestrian and bicycle paths.

Footpaths and bicycle paths should be provided on streets in accordance with the requirements specified in Table C7.

Footpaths should be designed and located taking into account pedestrian amenity, sun and shade, postal deliveries and other likely use patterns.

Footpaths should be provided on both sides of an access street. Footpaths may be provided on one side if:

- There is no development fronting that side of the street or topography or vegetation precludes provision.
- Vehicle volumes and speeds are low and the use of the street pavement is considered safe and comfortable for some pedestrian use.
- Adequate arrangements are made for postal delivery.
- Pedestrian use will not be deterred by the lack of a footpath.

Footpaths should be separated from the street pavement unless vehicle volumes are low and site constraints exist that require footpaths to abut kerbs.

Footpaths or shared paths should:

- Be constructed with a durable, non-skid surface.
- Be constructed in accordance with an approved construction standard.
- Be of sufficient width and strength to cater for projected user types and volumes.
- Facilitate ease of use by the disabled, aged and very young.

Maximum longitudinal gradient of bicycle paths should generally be no greater than any adjacent street pavement and provide for safe sight distances at crossings.

Alignment of paths should:

- Allow safe and convenient use by pedestrians and cyclists.
- Be varied to protect trees and other significant features.

- Focus on vistas and landmarks to add visual interest where possible.

Wider paths should be provided at meeting points or junctions to allow for passing of pedestrians and cyclists and provision should be made for the location of seats at appropriate locations.

56.05 PUBLIC OPEN SPACE

19/01/2006
VC37

56.05-1 Shared usage objective

19/01/2006
VC37

To encourage the efficient use of public open space to meet diverse community needs.

Standard C15

Public open space should be designed:

- To encourage its use for a variety of purposes.
- To encourage shared use with other community facilities.

56.05-2 Public open space provision objectives

19/01/2006
VC37

To ensure that public open space of appropriate quality and quantity is provided to contribute towards meeting the recreational and social needs of the community in convenient locations.

To incorporate natural and cultural features in the design of public open space where appropriate.

Standard C16

The location and design of open space should be consistent with any public open space plan or policy set out in this scheme.

The provision of public open space should:

- Provide a balance between local, district and regional open space.
- Take advantage of and protect natural and cultural features.
- Incorporate land for regional linear open space where appropriate.
- Provide for district parks of 3 hectare minimum, combining passive and active use, within 2 kilometres of all dwellings.
- Provide for large local parks of 1 hectare minimum, for active and passive use, within 500 metres safe walking distance from all dwellings.
- Provide for small local parks within 150 metres to 300 metres safe walking distance of all dwellings.
- Take into account shared use of active open space.
- Take into account land used for drainage control or stream and floodway purposes, if generally available for recreational use.

56.05-3 Public open space design objectives

19/01/2006
VC37

To ensure that public open space of appropriate quality and quantity is provided to contribute towards meeting the recreational and social needs of the community in convenient locations.

To incorporate natural and cultural features into areas of public open space, where appropriate.

To ensure that public open space is designed and located to provide a safe environment for users and abutting and adjacent residents.

Standard C17

The location and design of public open space should take into account the following matters:

- The consistency of the location and function of the public open space with any metropolitan, regional or local public open space plan or policy, bicycle or walking trail network or structure plan set out in this scheme.
- The needs of the community to be served, the population density and the profile of user groups, including those with limited mobility.
- The distance and accessibility of open space to users.
- The physical characteristics of the land.
- The requirements for protection of existing trees, habitats, rocks, streams and other features of natural or cultural value.
- Proposed landscaping.
- The proposed maintenance program including responsibilities, requirements and costs.
- The opportunities to link open space into public open space and movement networks and to community facilities.
- The opportunity to use public open space for recreational and drainage purposes by the retention or creation of water features and land forming.
- The need for some areas of open space to be available for exercising pets.

Land provided for public open space should be:

- Of a quality and character that relates to its potential functions.
- Located to ensure that every lot in the subdivision is within 500 metres walking distance of an area of existing or proposed public open space.
- Related to the street and lot layout in a manner that promotes personal safety and surveillance for users of the public open space and surrounding areas.

Public open space should be:

- In parcels of 4000 square metres or greater in area, or
- A linear connection between streets, or to existing or proposed public open space, or
- Combined with existing or proposed public open space on adjacent land, or
- A small local park serving a neighbourhood within 300 metres safe walking distance.

56.06 LOT SIZE AND ORIENTATION

19/01/2006
VC37

56.06-1 Lot diversity objective

19/01/2006
VC37

To provide a range of lot sizes to suit a variety of dwelling and household types, with an area and dimensions that meet user requirements.

Standard C18

Lot sizes should be provided to meet the projected requirements of people with different housing needs, and to provide for housing diversity and choice.

Lots should be designed to have the appropriate area and dimensions to enable the siting and construction of a dwelling and associated outbuildings, the provision of private open space, and convenient vehicle access and parking.

56.06-2 Solar orientation objective

19/01/2006
VC37

To orient lots to reduce fossil fuel use and make best use of solar energy.

Standard C19

At least 70 per cent of lots should have appropriate solar orientation, unless there are significant constraints that limit the achievement of this target.

Lots have appropriate solar orientation when:

- The long axes of lots are within the range N20 degrees west to N30 degrees east, or E20 degrees north to E30 degrees south.
- Dimensions of lots are adequate to protect solar access to the lot, taking into account likely dwelling size and the relationship of each lot to the street.

56.06-3 Site constraints and features objective

19/01/2006
VC37

To provide lots with an area and dimensions that protect environmental features and take account of site constraints.

Standard C20

Lots should be designed to have an area and dimensions that enable dwellings to be sited to:

- Protect natural or cultural features.
- Take into account site constraints including soil erosion, poor drainage, saline soils or bushfire risk.

56.06-4 Lot area and dimensions objective

19/01/2006
VC37

To provide lots with area and dimensions to enable the appropriate siting and construction of a dwelling, private open space and vehicle access and parking.

Standard C21

An application to subdivide land that creates lots of less than 300 square metres should be accompanied by information that shows:

- That the lots correspond with a development approved under this scheme, or
- That a dwelling may be constructed on each lot in accordance with the requirements of this scheme.

Lots of between 300 square metres and 500 square metres should:

- Contain a building envelope that is consistent with a development of the lot approved under this scheme, or
- If no development of the lot has been approved under this scheme, contain a building envelope and be able to contain a rectangle measuring 10 metres by 15 metres, or 9 metres by 15 metres if a boundary wall is nominated as part of the building envelope.

If lots of between 300 square metres and 500 square metres are proposed to contain semi-detached dwellings, the long axis of the lots should be within 30 degrees east and 20 degrees west of north unless there are significant physical constraints that make this difficult to achieve.

Lots greater than 500 square metres should be able to contain a rectangle measuring 10 metres by 15 metres, and may contain a building envelope.

A building envelope may specify or incorporate any relevant siting and design requirement. Any requirement should meet the relevant standards of Clause 54, unless:

- The objectives of the relevant standards are met, and
- The building envelope is shown as a restriction on a plan of subdivision registered under the Subdivision Act 1988, or is specified as a covenant in an agreement under Section 173 of the Act.

Where a lot with a building envelope adjoins a lot that is not on the same plan of subdivision or is not subject to the same agreement relating to the relevant building envelope:

- The building envelope must meet Standards A10 and A11 of Clause 54 in relation to the adjoining lot, and
- The building envelope must not regulate siting matters covered by Standards A12 to A15 (inclusive) of Clause 54 in relation to the adjoining lot. This should be specified in the relevant plan of subdivision or agreement.

56.07 STREET DESIGN

19/01/2006
VC37

56.07-1 Streetscapes objectives

19/01/2006
VC37

To provide attractive streetscapes that contribute to the creation and enhancement of neighbourhood character and amenity.

To provide sufficient carriageway and verge widths to enable streets to perform their designated functions within the street network.

To encourage use of residential streets by pedestrians and cyclists and allow cars, buses and other users to proceed safely and without unacceptable inconvenience and delay.

To provide a safe, distinct and pleasant environment for residents and other users.

Standard C22

The design of the street reserve should:

- Create an attractive streetscape and establish a clear character and identity for the street or neighbourhood.
- Provide for appropriate street tree planting taking into account the image and role of the street, solar access requirements, soils and services.
- Encourage use of the street for walking, cycling and interaction between residents.
- Encourage informal surveillance of public open spaces from within dwellings.
- Manage the speed and behaviour of traffic in accordance with the street type to maximise safety and amenity.
- Respond to the features of the site in terms of views, vistas, existing vegetation and landmarks.
- Provide adequate space for the proposed pavement, paths, planting, drainage and services.
- Facilitate infiltration of stormwater run-off wherever practical.
- Take into account maintenance responsibilities, requirements and costs.

A streetscape plan should be prepared for all subdivisions creating new residential streets that shows, as appropriate:

- The street reserve together with typical cross sections.
- Location of carriageway pavement, parking bays, bus stops, kerbs, cross overs, footpaths, bicycle paths and speed control devices.
- Location and species of proposed street trees and other vegetation.
- Location of existing vegetation to be retained and proposed treatment to ensure its health.
- Any relevant details for the design and location of street furniture, lighting, seats, bus stops, telephone boxes and mailboxes.

56.07-2 Street width objectives

19/01/2006
VC37

To provide sufficient carriageway and verge widths to allow streets to perform their designated functions within the street network.

To encourage use of residential streets by pedestrians and cyclists and allow cars, buses and other uses to proceed safely and without unacceptable inconvenience and delay.

Standard C23

The street reserve width should be sufficient to cater for:

- The safe location, construction and maintenance of required paths and public utility services (above or below ground).
- All expected functions of the street, including the safe and efficient movement of all users.
- The provision for parked vehicles.
- The provision of public utilities and landscaping.

The carriageway width together with verge width and crossover dimensions should allow for unobstructed access to individual lots. Motorists should be able to enter or reverse from a lot in a single movement.

The verge, when considered in conjunction with the horizontal alignment and likely fence and property frontage treatments, must provide appropriate sight distances taking into account expected vehicle speeds and pedestrian and cyclist movements.

The carriageway width must allow vehicles to proceed safely at the operating speed intended for that type of street in the network, with acceptable minor delays in the peak period. This should take into account the restrictions caused by parked vehicles where parking will occur on the carriageway.

Carriageways should be of sufficient width to ensure the safety of pedestrians using shared roadways.

Bus routes should have carriageways of sufficient width to allow for movement of a Design Ultra Low Floor Bus (12.5m) (Austroads Pavement Design - A Guide to Structural Design of Road Pavements, Revised 1999 (AP 17/92)) unimpeded by parked cars, and to safely accommodate cyclists.

Where required, provision should be made for vehicles to park safely generally in accordance with Australian Standard AS2890.5-1993, Parking Facilities: On-street parking.

56.07-3 Street alignment objective

19/01/2006
VC37

To provide street geometry that is consistent with the needs of the street function, physical land characteristics and safety.

Standard C24

The horizontal and vertical alignments and cross fall of streets should reflect physical land characteristics and major drainage functions and should not be conducive to excessive speeds.

Cross-falls on street pavements should be between 0.025 and 0.040 metres (fall) per metre (width).

Longitudinal gradient should not exceed 20 per cent on access streets and 15 per cent on other streets.

Super elevation of curves used for speed control should not exceed 3 per cent.

56.07-4 Street function objectives

19/01/2006
VC37

To provide sufficient carriageway and verge widths to allow streets to perform their designated functions within the street network.

To provide street geometry that is consistent with the needs of the street function, physical land characteristics and safety.

To accommodate public utility services and drainage systems.

Standard C25

The design features of each type of residential street should convey its primary function and encourage appropriate driver behaviour, including discouraging motorists speeding.

Carriageway widths, verge widths and parking provision within the street reserve should be designed in accordance with the requirements specified in Table C6.

Verge widths should be increased where necessary to allow space for larger scale landscaping, indented parking, future carriageway widening, retaining walls, bicycle paths or swale drains.

The drainage function of the carriageway and/or street reserve should be satisfied by the cross section profile of the total street reserve.

Streets designated as bus routes should comply with the requirements of the Public Transport Corporation and should have the maximum carriageway widths as specified in Table C6.

Street kerbs, footpaths and bicycle paths should be designed in accordance with the requirements specified in Table C7.

Table C6 Street widths and parking

STREET TYPE	CARRIAGEWAY WIDTH [1]	PARKING PROVISION WITHIN STREET RESERVE	VERGE WIDTH [5]
Access Lane	3-8m [2]	None	None
Access Place	3.5m [3] or 5m	1 hard standing verge space per 2 lots with scope for additional spaces	Total width 7m For services 3.5m, on one side, 2.5m on the other
Access Street	5 - 5.5m 5 - 5.5m or 7 - 7.5m [4]	Carriageway Carriageway	4m minimum each side 4.5m minimum each side

STREET TYPE	CARRIAGEWAY WIDTH [1]	PARKING PROVISION WITHIN STREET RESERVE	VERGE WIDTH [5]
Collector Street	6 - 6.5m or 7 - 7.5m At bus stops avoid vehicles overtaking a bus when passengers are alighting.	Indented to leave 6m minimum clear carriageway Carriageway	4.5m minimum each side with adequate road reserve width for widening for future bus route if required.
Trunk collector street	2 x 3.5m or 2 x 5 - 5.5m Dual carriageway plus median. Bus bays to be indented	Parking not permitted on minimum width carriageways If required parking should be provided on a 5.5m carriageway in parking locations that allow cars to exist in a forward direction and includes parallel parking.	6m minimum each side

1. The maximum width within the range should be used when bus use is anticipated or when upright kerbs are used.

   Width is measured from kerb invert to invert. Widening may be required at bends to allow for wider vehicle paths (using Australian Standard AS2890.5-1993, Parking Facilities: On-street parking and Australian Standard AS2890.2-2002, Parking Facilities: Off-street parking - Commercial vehicle facilities), but should not negate the function of bends serving as slow points.

2. Width will be determined by requirements for access to off street parking.

3. Requires parking provision and provision for widening to 5m if necessary in the future; 5m width required within 7m of junction with collector street; passing bay if more than 15 dwellings are served.

   Typical verge widths of 3.5m each side, with indented parking to within 1.5m of a boundary. Add width on one side for future widening of carriageway to 5m if necessary.

4. 7 - 7.5m width should be used when parking is required on both sides.

5. Verge width includes footpaths. Additional width may be required to accommodate a bicycle path.

Table C7 Street kerbs, footpath and bicycle path provision

STREET TYPE	KERBING [1]	FOOTPATH PROVISION	BICYCLEPATH PROVISION
Access Lane		Not required if serving 5 dwellings or less 1.2m wide footpath required if serving more than 5 dwellings	Not required
Access Place	layback/ flush and swale	Not required if serving 5 dwellings or less 1.2m wide footpaths required if more than 5 dwellings are being served	Not required
Access Street	layback/ flush and swale	1.2m wide footpaths [2] Footpath should be widened to 1.4m in vicinity of an education centre, shop or other activity centre	Not required
Collector Street	layback/ upright	1.2m wide footpath on both sides of the street Footpath should be widened to 1.4m in vicinity of an education centre, shop or other activity centre	Footpath should be widened to 2m in vicinity of an education centre to allow for shared use by cyclists.
Trunk collector street	layback/ upright	1.2m wide footpath or part of 2m wide bicycle path desirably offset 1m from abutting residential frontages, on both sides of the street Footpath should be widened to 1.4m in vicinity of an education centre, shop or other activity centre	Footpath should be widened to 2m in vicinity of an education centre to allow for shared use by cyclists. If required, 2m bicycle path one side only in the verge or two 1 - 1.5m wide bicycle lanes marked on carriageway but only where there is no carriageway parking

6. Where drainage is not required a flush pavement edge treatment can be used.

   Layback kerbs are preferred for safety reasons. Upright kerbs may be considered for drainage purposes or in locations where on-street parking should be clearly defined and parking within the verge is not desired.

7. Footpaths should be provided on both sides of the street unless the requirements of Standard C14 in relation to the provision of only one side of the street can be met.

56.07-5 Emergency vehicle access objective

19/01/2006
VC37

To provide appropriate emergency vehicle access.

Standard C26

Street carriageways must be designed to accommodate the passage of emergency vehicles.

Emergency vehicles should have easy access to all dwellings in a residential area.

Street carriageways abutting areas of high bush fire hazard comprising the long term urban edge or conservation areas should be designed to the requirements of the relevant fire authority to provide adequate access to fire emergency vehicles under conditions of poor visibility.

56.07-6 Intersections and turning objective

19/01/2006
VC37

To ensure that intersections are designed to provide safe and convenient vehicle movements.

Standard C27

Roundabouts should be designed according to the Austroads Guide to Traffic Engineering Practice, Part 6: Roundabouts, 1993 (AP 11.6-93/HB 69.13-1993).

Kerb radii at intersections should be kept to a minimum, subject to satisfying required turning templates, to keep pedestrian crossing distances to a minimum and to control turning vehicle speeds.

The design of intersections or junctions should allow all desired movements to occur safely without undue delay. If the intersection or junction is part of a designated bus route, the design should allow for the movement of a Design Ultra Low Floor Bus (12.5m) (Austroads Design Vehicles and Turning Path Templates, 1995 (AP 34-95/HB 72-1995)). Projected traffic volumes should be used in designing all intersections or junctions on traffic routes.

Stopping sight distances and junction or intersection sight distances should be based on the intended speeds for each street type.

The sight distances for stopping purposes should be greater than the distances specified in Table C8.

Table C8 Minimum stopping distances

STREET TYPE	TARGET SPEED	MINIMUM STOPPING SIGHT DISTANCE (Y)
Access Place	15 km/hr	5 m
Access Street	30 km/hr	20 m
	40 km/hr	30 m
Collector Street	50 km/hr	40 m
Trunk Collector Street	60 km/h	55 m

At intersections, turning vehicles should be accommodated using Australian Standard AS2890.2-2002, Parking Facilities: Off-street parking - Commercial vehicle facilities to enable turns to be made in a single forward movement as follows:

- For turns between a trunk collector and traffic routes, collector streets or access streets, the ‘design articulated vehicle’ (turning path radius of at least 11 metres), using any part of the pavement (Figure B5 in Australian Standard AS2890.2-2002, Parking Facilities: Off-street parking - Commercial vehicle facilities).
- For turns between collector streets and access places, access streets or collector streets the ‘design heavy rigid vehicle’ (turning path radius 11 metres) using any part of the pavement (Figure B4 in Australian Standard AS2890.2-2002, Parking Facilities: Off-street parking - Commercial vehicle facilities).
- For turns between access streets and access streets or access places, the B99 ‘design car’ (turning path radius 7.5m), using the correct side of the pavement only (Figure B1 in Australian Standard AS2890.2-2002, Parking Facilities: Off-street parking - Commercial vehicle facilities).

Adequate provision should be made at the end of any no-through street for those vehicles that frequently use these streets to turn around. For turning movements at cul-de-sac heads, sufficient area should be provided for a Design Medium Rigid Vehicle (10.5m) to make a three point turn. Where driveway entrances are to be used for turning movements, the required area should be able to withstand the relevant loads (Figure B3 in Australian Standard AS2890.2-2002, Parking Facilities: Off-street parking - Commercial vehicle facilities).

Kerb radii should not exceed 6 metres, except if required to accommodate turning vehicles in accordance with this standard.

Driveways and direct vehicle access to trunk collector streets should be designed to allow forward entry and exit of vehicles from properties.

56.08 STREET CONSTRUCTION

19/01/2006
VC37

56.08-1 Pavement construction objectives

19/01/2006
VC37

To provide street pavement and edges that reinforce the function and amenity of the street.

To construct streets of appropriate strength to enable the carriage of vehicles at a minimum total cost to the community.

Standard C28

Street pavements should be designed to:

- Carry wheel loads of travelling and parked vehicles.
- Enable the carriage of vehicles at a minimum total cost to the community over a 20 year period, including maintenance costs.

Street pavements should be strong enough not to be damaged by construction or building equipment.

Street pavement surfaces should be of a quality and durability to ensure the:

- Safe passage of vehicles, pedestrians and cyclists.
- Discharge of rainfall.
- Preservation of all-weather access and maintenance of a reasonable, comfortable riding quality.

Flexible street pavement construction should be based on the requirements of the Austroads Pavement Design - A Guide to Structural Design of Road Pavements, Revised 1999 (AP 17/92) using equivalent standard axle loadings based on an average traffic generation rate of 10 vehicles per day per lot and a 20 year design life.

Concrete street pavement should be based on the Concrete Pavement Design for Residential Streets, Cement and Concrete Association, 1997 (CCA T51-1997), to a minimum 20 year life span.

Interlocking block street pavement should be based on the requirements of the Austroads Pavement Design - A Guide to Structural Design of Road Pavements, Revised 1999 (AP 17/92), to a minimum 20 year life span.

56.08-2 Pavement edge objective

19/01/2006
VC37

To provide a pavement edge that is appropriate for the control of vehicle movements, performs any required drainage function and is structurally adequate.

Standard C29

The pavement edge treatment and cross sectional profile of the street reserve should perform the required drainage functions and enable connections from house drains where necessary.

The pavement edge should clearly delineate to all street users the edge of the carriageway and be detailed to take into account streetscape character and amenity.

The pavement edge treatment should provide for:

- An appropriate level of control for vehicles.

- Safe crossing by cyclists at driveways and other appropriate locations.

The pavement edge treatment should allow for efficient and comfortable access to abutting properties at appropriate locations.

The pavement edge and drainage method on local streets should be designed to facilitate infiltration of stormwater run-off where soils and topography permit.

The pavement edge treatment should provide sufficient strength to prevent edge fretting.

Kerbs of the type specified in Table C7 should be provided.

Pavement edge material should be concrete, stone or mortared brick.

Single driveway kerb crossover length should be:

- 4.5 metres in streets 5.5 metres or less wide.
- 3.8 metres in streets greater than 5.5 metres wide.

56.08-3 Path construction objective

19/01/2006
VC37

To ensure the geometry and construction of footpaths and bicycle paths is appropriate.

Standard C30

Pedestrian paths in access lanes, access places and access streets should be constructed of bitumen, concrete or blockwork to an approved construction standard. Where street pavements are 5.5 metres or less in width, footpaths may abut a kerb.

Pedestrian paths in trunk collector streets or collector streets should be constructed of bitumen, concrete or blockwork to the requirements of the Austroads Guide to Traffic Engineering Practice, Part 14: Bicycles, 1999 (AP 11.14-99/HB 69.14-1995) clear of the street pavement from which there is access to lots or where there is a planned pedestrian or bicycle path.

Pram crossings with a maximum gradient of 1:12 should be provided at upright kerbs.

56.09 DRAINAGE SYSTEMS

19/01/2006
VC37

56.09-1 Minor drainage layout objectives

19/01/2006
VC37

To prevent stormwater damage to property.

To provide a stormwater system that can be maintained economically.

To minimise the occurrence of traffic accidents during minor storm events.

To minimise increases in stormwater run-off and protect the environmental values and physical characteristics of receiving watercourses from degradation by urban run-off.

Standard C31

The design of drainage systems should use recognised hydrologic, hydraulic and residential parameters and design methodology.

The minor drainage system must ensure that any overflow is directed to the major drainage system without causing damage to property or affecting the safety of people.

The minor drainage system should be designed to ensure that existing downstream flows are restricted to pre-development levels unless otherwise agreed to by the responsible drainage authority.

The minor drainage system must enable the safe passage of vehicles at reduced speeds on streets that have been affected by run-off from an Annual Exceedance Probability (AEP) of 50 per cent.

The drainage network should be accessible and designed for easy maintenance.

Drainage networks should minimise the potential for accumulation of silt and debris, and provide for collection and removal at accessible locations.

Drainage networks must ensure that there are no hidden flow paths that could reduce the effectiveness and operation of failsafe mechanisms.

Where a portion of the drainage system lies within a lot, access must be available for maintenance.

56.09-2 Minor drainage design objectives

19/01/2006
VC37

To prevent stormwater damage to property.

To contain nuisance flows to a level that is acceptable to the community.

Standard C32

Materials used in drainage networks must be durable, maintainable and cost effective to the community.

The design of the minor drainage system:

- Should be based on Australian Rainfall and Run-off - A guide to flood estimation, Australian Institute of Engineers, 1987 and cited references.
- Should be based on a coefficient of run-off for impervious areas of 0.9, and for pervious areas, a coefficient derived from Australian Rainfall and Run-off - A guide to flood estimation, Australian Institute of Engineers, 1987 or from locally based research.
- Should have the capacity to control stormwater flows under normal operating conditions for an AEP of 50 per cent, except where overland flows exceed 0.4 square metres per second in this case piping to 20 per cent AEP should be provided. In this

standard control means the management of the flows to ensure the system will act in a predetermined manner under a specific rainfall event.

- Should be based on a rainfall intensity based on the AEP as follows:
  - For suburban residential areas, an AEP of 50 per cent, except where the gap flows create a situation where the mean flow depth (d_a) multiplied by the mean flow velocity (V_{ave}) exceeds 0.4 square metres per second.
  - For residential lots with gross densities less than 20 lots per hectare, an AEP of 20 per cent.
  - For residential lots with gross densities greater than 20 lots per hectare, an AEP of 10 per cent.

The minor drainage system should prevent ponding for a prolonged period from a stormwater flow of an AEP of 50 per cent, which is ponding for longer than 1 hour after cessation of rainfall.

Swale drains on access places or access streets should be designed so that:

- Ponding for greater than 1 hour after cessation of rainfall is unlikely,
- Operating flow velocities are less than 1.5 metres per second, and
- The turf used is resistant at operating flow velocities to scour and erosion and tolerant of submersion.

56.09-3 Minor drainage discharge objective

19/01/2006
VC37

To prevent stormwater damage to property.

Standard C33

Dwelling drainage should be directed to the front of the lot and discharged into the street gutter or legal point of discharge unless the topography of the lot makes it necessary to do otherwise.

Where soil permeability is adequate for on-site filtration, a soak pit may be provided.

Where the topography of the lot makes it necessary to discharge to the rear of the lot, inter-lot drainage designed to accept the run-off from impervious areas should be provided.

56.09-4 Drainage pits objective

19/01/2006
VC37

To protect the environmental values and physical characteristics of receiving watercourses from degradation by urban run-off.

Standard C34

Drainage pits should be spaced at intervals of no greater than 90 metres, to assist maintenance programs.

Drains should be placed so that the minimum depth below the top of the kerb is 0.75 metres to top of pipe, and in lots the minimum depth is 0.3 metres from top of pipe to the finished surface (except where plastic pipes are used, when the minimum depth is 0.45 metres).

Drainage pits should be designed for the collection and retrieval of silt, debris and litter provided at locations nominated by the responsible drainage authority.

Culverts and piped drains should operate with flow velocities between 0.6 and 8 metres per second under normal conditions providing that it can be demonstrated that the culvert or drain will remain serviceable at high velocities.

Culverts and piped drains should operate under head during a designed flow, providing that a detailed hydraulic grade line analysis demonstrates that no section of the drainage network is surcharged to the extent that stormwater will leave the piped drainage system and discharge overland except by design.

Culverts and pipes should comply with the appropriate Australian Standard for their manufacture and installation.

56.09-5 Major drainage system objectives

19/01/2006
VC37

To prevent flood damage to the built and natural environment and prevent both short term and long term inundation of dwellings.

To contain nuisance flows to a level that is acceptable to the community.

To ensure the street system operates adequately during and after major storm events.

To provide a stormwater system that minimises erosion and utilises open space in a manner that does not detract from its principal function.

To protect the environmental values and physical characteristics of receiving watercourses.

Standard C35

The drainage system should be designed in accordance with the requirements of the responsible drainage authority.

The major drainage network should have the capacity to control stormwater flows under normal and minor system blockage conditions for an AEP of 1 per cent.

All dwellings must be protected from inundation during a flood of 1 per cent AEP.

The drainage system should be designed to ensure that flows downstream of the site are restricted to pre-development levels unless increased flows are approved by the responsible drainage authority.

The built environment downstream of the proposed residential development should not be degraded by major drainage flows or floodwaters.

The street system should retain access to lots and minimise the occurrence of traffic accidents during and after major storm events.

The drainage system should be designed to ensure that the land form of watercourses is stabilised and that erosion is minimised.

Floodways must be restricted to areas where no damage to property can occur and must discharge all gap flows. Roadways may be used as floodways provided the flow depths and velocities do not create hazards for motorists.

Flow depths on streets should not exceed 50 millimetres above the top of the kerb (or where there is no kerb, above the top of theoretical kerb). Flows should be contained in the street reserve.

Flows within the street should be limited in depth and velocity by the formula:

- $d_a V_{ave} < 0.4$ square metres per second,

where,

- d_a = kerb side flow depth in metres, and
- V_{ave} = flow mean velocity in metres per second.

56.10 UTILITIES PROVISION

19/01/2006
VC37

56.10-1 Shared trenching objective

19/01/2006
VC37

To provide public utilities to each lot in a timely, efficient and cost effective manner.

To maximise the opportunities for shared trenching and reduce constraints on landscaping within road reserves.

Standard C36

The reticulated services for water, gas, telecommunications and electricity should be provided in shared trenching wherever practical to minimise construction costs and land allocation for underground services.

56.10-2 Sewerage objective

19/01/2006
VC37

To provide a sewerage system that is adequate for the maintenance of public health and the disposal of effluent in an environmentally friendly manner.

Standard C37

Provision must be made for the treatment and disposal of sewerage wastes to the satisfaction of the responsible authority or relevant servicing authority.

Sewerage should be disposed of by a reticulated system.

Sewerage facilities should be designed in accordance with the requirements of the relevant servicing authority.

56.10-3 Water supply objective

19/01/2006
VC37

To provide an adequate, reliable, safe, efficient and potable supply of water.

Standard C38

An adequate supply of water must be provided to all lots in the development to the satisfaction of the responsible water supply authority.

56.10-4 Electricity, telecommunications and gas objective

19/01/2006
VC37

To provide public utilities to each lot in a timely, efficient and cost effective manner.

Standard C39

The electricity supply system should be designed in accordance with the requirements of the relevant electricity supply agency.

The telecommunications system should be designed in accordance with the requirements of the relevant telecommunications servicing agency.

The reticulated gas supply should be designed in accordance with the requirements of the relevant gas supply agency.

56.10-5 Public lighting objective

19/01/2006
VC37

To provide public lighting to ensure safety of pedestrians, cyclists and vehicles.

Standard C40

Public lighting should be provided to streets, footpaths, public telephones, and to major pedestrian and bicycle links likely to be well-used at night to provide safe passages for pedestrians, cyclists and vehicles.

The street lighting should be designed in accordance with Australian Standard AS1158.1.1-1997, Road lighting, Vehicular traffic (Category V) lighting - performance and installation design requirements.

The lighting of public areas should be designed in accordance with Australian Standard AS1158.3.1-1999, Road lighting, Pedestrian Area (Category P) lighting - performance and installation design requirements.