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1 INTRODUCTION

Part 4 - Development in Centres and Mixed Use Employment Zones applies to all development in the E1 Local Centre, E2 Commercial Centre, and in MU1 Mixed Use zones.

This part is to be read in conjunction with Part 1 (Introduction) of DCP 2014, which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application. Part 1 also contains requirements for when an application seeks to vary a development control. Additionally, controls for specific land uses may apply depending on the type of development proposed. They can be found within Part 9 of this DCP.

Furthermore, an Area Plan may apply depending on the location of the development. Area Plans contain area specific controls that need to be considered and can be found in Parts 10, 11 and 12 of this DCP.

For mixed-use development, any building that includes four or more dwellings and is three or more storeys in height must comply with the provisions of Part 9: Residential Flat Buildings, as well as the provisions of SEPP 65– Design Quality of Residential Flat Development and Residential Flat Design Code.

1.1 HOW TO USE THIS PLAN

LM DCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

- 1. Determine the land use zone that applies to the development site (refer to LM LEP 2014);
- 2. Refer to the Part of LM DCP 2014 that contains controls for the zone where the development is proposed (Parts 2 to 8);
- 3. Check if specific land use provisions apply to the proposed development (Part 9); and
- 4. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LM LEP 2014 zone objectives and aims in each part of LM DCP 2014.

Each part of this DCP is structured to promote a development process where the site and context analysis informs the design of the development. This part of the DCP has the following main headings:

- **Introduction** provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone.
- **Context and Setting** outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- Streets and Public Space outlines the public domain considerations that need to be addressed in a development application.
- Active Street Frontage outlines the specific requirements of how the building interacts with the street
- Access and Parking outlines the pedestrian and vehicular access issues that need to be addressed in the development application.
- **Development Design** provides Council's detailed site-specific building design related requirements.
- Landscape Design provides Council's detailed landscape design requirements.
- **Operational Requirements** provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each subsection in each part of LM DCP 2014 are presented as follows:



- Objectives state what outcomes Lake Macquarie City Council is seeking new development to achieve, and
- Controls advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Parts 2 to 8 contain the specific aims, which LM DCP 2014 seeks to achieve.

For more information on how to use this document, please consult Part 1 – Introduction.

1.2 ADDITIONAL CONTROLS FOR SPECIFIC LAND USES

If the development application relates to any of the following land uses, additional specific development controls must be considered in conjunction with controls in this part of the DCP. The detailed controls for these uses can be found in Part 9 of LM DCP 2014. Where a conflict exists between the controls within this part and a specific land use, the specific land use section prevails.

Bed & Breakfast/Farm stay Accommodation	Residential Flat Buildings
Child Care Centres	Service Stations
Foreshore and Waterway Development	Sex Services Premises
Health Consulting Rooms	Signage
Home Business and Industry	Tourist and Visitor Accommodation
Places of Public Worship	

1.3 AIMS FOR DEVELOPMENT IN CENTRES AND MIXED USE EMPLOYMENT ZONES

Where controls are not provided for a particular circumstance, the following aims will be used to provide direction for a merits based assessment of a development application.

The aims of LM DCP 2014 for development in business zones are:

- 1. To support the business centres hierarchy contained in the Lifestyle 2030 Strategy.
- 2. To support retail, business, entertainment and community uses that contribute to safe and vibrant places for people who live in, work in and visit the centre.
- 3. To provide for appropriate employment opportunities in accessible locations, and for housing within mixed use developments.
- 4. To maximise public transport patronage and encourage walking and cycling.
- 5. To make efficient use of land through the amalgamation of existing lots to facilitate higher yields and good built form, and to avoid unnecessary isolation of lots.
- 6. To encourage Ecologically Sustainable Design principles to reduce energy, materials and water consumption.



1.4 E2 COMMERCIAL CENTRE

Charlestown, Glendale and Morisset

The E2 Commercial Centre Zone is intended to provide the greatest concentration of commercial floor space, services and facilities for the wider community. The core activities in this zone are commercial and retail, supported by government services, with residential, community, recreational, educational, entertainment, tourist and open space uses.

Preferred land uses are retail premises, business premises, food and drink premises, entertainment facilities, and office premises at street level with office premises, tourist accommodation or apartments above.

See Charlestown Major Regional Centre Area Plan and Morisset Town Centre Area Plan for additional background and controls.

1.5 E1 LOCAL CENTRE

Swansea, Belmont, Warners Bay, Toronto, Mount Hutton, Cameron Park, Kahibah, Whitebridge, Dudley, Redhead, Windale, Jewells, Boolaroo, Northlakes, West Wallsend, Teralba, Woodrising, Bonnells Bay, Wangi Wangi and Wyee Point.

The E1 Local Centre Zone is intended to provide a range of retail, business and community uses that serve the needs of people who live, work or visit the area.

Preferred land uses are retail premises, business premises, and food and drink premises. Also preferred are office premises at street level with office premises, tourist accommodation or apartments above.

See Belmont Town Centre Area Plan, Warners Bay Town Centre Area Plan, Toronto Town Centre Area Plan, Mount Hutton Centre Area Plan and Cardiff Town Centre Area Plan for additional background and controls.

1.6 MU1 MIXED USE ZONE

Charlestown, Glendale, Cardiff, Belmont, Mount Hutton, Warners Bay, Swansea, Toronto, Morisset, Cooranbong, Argenton, Cockle Creek, Wangi Wangi, Belmont North and Caves Beach.

The MU1 Mixed Use Zone is intended to complement and enhance the activity of the local and regional centres, and to serve as a transition between the centre and surrounding residential zones.

The preferred mix of land uses is either business or office premises, retail premises, or food and drink premises at street level, with office premises, shop-top housing or apartments above. Activity in the centre should be supported by development of community, recreational, educational, entertainment, tourist and open space facilities.



2 CONTEXT AND SETTING

2.1 SITE ANALYSIS

Objectives

- a. To encourage good site planning, built form and landscape outcomes informed by an understanding of the site and its context.
- b. To illustrate how a development responds to a site and its relationship with the locality.
- c. To identify the opportunities and constraints of sites, and the prevailing characteristics of a locality.

Controls

- 1. A Site Analysis Plan must be submitted that identifies the existing conditions relating to the subject site and the surrounding land that may influence the design outcome.
- 2. The Site Analysis Plan must address:
 - i. all relevant items as set out in the Site Analysis Guidelines, and
 - ii. all relevant matters outlined below in section 2.2 to 2.22.
- 3. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.
- 4. The development application must clearly show that the constraints and opportunities identified in the Site Analysis Plan have been used to inform and resolve the development design.
- 5. An electronic 3D block model must be submitted for any development that is three or more storeys, or that has a Gross Floor Area of 2000m² or more. The model must clearly show the scale and form of the proposed development and its setting, from viewing points along the street, and from public open space, waterways and other significant vantage points.
- 6. Council may require an electronic model for smaller developments on sites with potentially high visual or physical impacts on the public realm.

Note: The detail of the Site Analysis Plan should be tailored to the site, and the complexity of the proposed development.

2.2 SCENIC VALUES

The Landscape Settings and Significant Natural Landscape Features Maps identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within the Scenic Management Guidelines. The Scenic Management Guidelines provide supporting documentation to this DCP.

Objectives:

- a. To ensure that the scenic values of the City are protected and enhanced.
- b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls:

1. A landscape and visual impact assessment is required for development identified in Table 1 unless specified by Council. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.



Table 1 - Development requiring a landscape and visual impact assessment

Type, category or impact of development:

- · Any designated or SEPP 65 development
- Any new development or alterations and additions resulting in a building or structure equivalent to 4 storeys or more (in any zone), or a car park of 2 or more storeys (in any zone)
- Telecommunication towers
- Substantial loss of native tree cover (land parcels of one hectare or greater)
- Subdivisions (in any zone with 10 or more lots proposed)
- Tourist and visitor accommodation
- · Waste or resource management facilities
- Recreation facilities (major)
- · Service stations
- · Removal of any tree on the Significant Tree Register
- Seniors living developments and hospitals with more than 30 beds
- Educational facilities
- Any commercial buildings being more than 50 metres long on any side, or being over 10 metres high

Location of development:

- Any development that is; within 300m of the Mean High Water Mark of the lake or coastal edge, or on a ridgeline and involves two or more of the following:
 - height equivalent to 3 or more storeys, or
 - sloping site (10% or more), or
 - o requiring a combined cut and fill exceeding 2 metres, or
 - a development footprint exceeding 2000m².
- Any building or structure in a public reserve having a footprint exceeding 100m² or being over 10 metres high.
- Any development on a heritage item and/or development within a heritage conservation area (apart from alterations and additions to existing houses or new complying development houses)
- Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)
 - 2. Developments must be designed and sited to complement their location through:
 - i. the retention of existing vegetation,
 - ii. incorporating appropriate landscaping,
 - iii. minimising cut and fill,
 - iv. building design and articulation compatible with natural context, and
 - v. colour and material selection.
 - 3. For developments visible from the coastline, Lake Macquarie, and adjacent waterways, or from significant ridgelines, external finishes should be non-reflective and muted in tone.



2.3 GEOTECHNICAL

Objectives:

- a. To minimise potential damage to buildings/structures resulting from land movement.
- b. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls:

- 1. The following development types do not require submission of a Slope Stability Assessment with a development application:
 - i. Minor development such as garages, carports, decks and the like, pergolas, fiberglass swimming pools and cut/fill not exceeding 1 metre high/deep.
 - ii. Development in Geo_4, Geo_5 or Geo_6 zone that consists of less than 3 storeys and less than 1000m² gross floor area and are not sensitive use facilities as defined by the Geotechnical Slope Stability Guidelines.
- 2. A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's *Geotechnical Slope Stability Guidelines*. The report must be prepared in accordance with these Guidelines.

Note: After lodgement of a development application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

2.4 CUT AND FILL

Objectives

- a. To minimise land shaping, particularly outside the building footprint.
- b. To ensure development is on a stable site.
- c. To minimise the impact on groundwater flow.
- d. To ensure that development does not concentrate surface water flows to adjoining properties.
- e. To minimise the extent of earthworks, stormwater infrastructure and retaining structures and the associated costs.

Controls

- 1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event
- 2. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
- 3. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
- 4. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
- 5. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

2.5 MINE SUBSIDENCE

Objectives:

a. To minimise risks to buildings and structures associated with potential mine subsidence.



Controls:

- 1. Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
- 2. Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

Note: Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.6 CONTAMINATED LAND

Objectives:

- a. To ensure that contaminated land is identified through appropriate investigations.
- b. To ensure that contaminated land at a site is appropriately and effectively remediated prior to development taking place.
- c. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contamination on site, or on adjacent properties.

Controls:

- 1. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land within the City of Lake Macquarie* for further information.
- 2. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application. Alternatively, for properties within the Pasminco Lead Contamination Survey Grid, a Detailed Site Investigation Report is not required where the parcel is assumed to be contaminated with lead oxide and/or Pasminco Black Slag.
- 3. For properties within the Pasminco Lead Contamination Survey Grid assumed to be contaminated with lead oxide and/or Pasminco Black Slag, a standard Remedial Action Plan Template can be completed and submitted with the application.
- 4. For properties contaminated with Black Slag that are not within the Pasminco Lead Contamination Survey Grid area, a Standard Remedial Action Plan Template can be completed and submitted with the application.
- 5. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted prior to issue of a construction certificate.
- 6. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

Note: Council may request a formal audit of contamination documentation by a site auditor accredited with the NSW Environment Protection Authority under the *Contaminated Land Management Act* 1997.

Note: Refer to SEPP Resilience and Hazards and the NSW State Government's 'Managing Land Contamination: Planning Guidelines' for more information.



2.7 ACID SULFATE SOILS

Objectives:

- a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impacts on soil conditions.
- b. To ensure that water quality and associated receiving waters are not detrimentally affected by the effects of Acid Sulfate Soils.
- c. To ensure that habitat is not detrimentally affected by the effects of Acid Sulfate Soils.
- d. To ensure that built structures and infrastructure are not detrimentally affected by Acid Sulfate Soils.

Controls:

- 1. Development must be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
- 2. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the NSW Acid Sulfate Soils Planning Guidelines.
- Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a
 detailed assessment report and management plan must be submitted, in accordance with the
 NSW Acid Sulfate Soils Planning Guidelines.
- 4. Any Acid Sulfate Soils must be identified on the site analysis plan.

Note: Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.8 STORMWATER MANAGEMENT

Objectives

- a. To ensure that development does not adversely affect water quality or availability, including ground water.
- b. To ensure that watercourses and associated riparian vegetation are maintained so as to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
- c. To minimise any adverse impacts on downstream built or natural environments, or on nearby land due to increased development.
- d. To incorporate Water Sensitive Urban Design techniques into all new developments.
- e. To minimise the volume and rate of stormwater leaving a development site.

Controls

- A Water Cycle Management Plan must be submitted for all development except single dwelling houses and dual-occupancy developments. The Water Cycle Management Plan must provide details of the management of stormwater, and the measures proposed to mitigate the effects of stormwater on adjoining or downstream sites in accordance with Council's Water Cycle Management Guidelines.
- 2. A Site Stormwater Drainage Plan must be submitted for all single dwelling houses and dualoccupancy development proposals. The Site Stormwater Drainage Plan must be prepared in accordance with Council's Water Cycle Management Guidelines.
- 3. On-site measures must be implemented to maintain water quality, and to minimise the volume of stormwater run-off and the rate at which stormwater leaves the site.



- 4. A maximum of 10% of run-off from built impermeable surfaces may be discharged directly to the drainage system. The remaining 90% of run-off must be captured for reuse, or managed through infiltration and retention measures prior to being discharged to the drainage system.
- 5. Stormwater management systems should be visually unobtrusive and integrated within site landscaping, car parks or building structures.
- 6. All developments (except dwelling house or dual occupancy) that involve the re-use of stormwater or the use of recycled water must demonstrate compliance with the Australian Guidelines for Water Recycling and the licensing requirements of the *Water industry Competition Act 2006*.
- 7. Stormwater management systems must be designed in accordance with the <u>Water Cycle Management Guidelines.</u>

2.9 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie City that are within the flood planning area. This section also applies to sensitive use development on land affected by the Probable Maximum Flood.

Information on flood risk and flood planning levels (floor levels) for particular lots can be obtained through the flood report tool or by applying for a Flood Certificate from Council. Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding lake flooding are contained in section 2.10 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives:

- a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
- b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

Controls:

- 1. Development must be consistent with the current version of the <u>NSW Floodplain Development</u> <u>Manual</u>, and any relevant local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
- 2. The proposed development must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.
- 3. Buildings must not be located in an identified floodway.
- 4. Buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.
- 5. Habitable rooms and commercial development must have a finished floor height at least 500mm above the 100 year ARI (1% AEP) event, or is to have equivalent measures in place to mitigate flood damage (e.g. flood barrier system with evacuation plan). Where probability flood levels are not available, habitable rooms must have a finished floor height at least 500mm above the highest observed flood level for the development site.
- 6. Non-habitable rooms must have a finished floor height at or above the 20 year probable ARI (5% AEP) event. Where probability flood levels are not available, non-habitable rooms must have a finished floor height at or above the highest observed flood level for the site, except where this would result in a floor level more than 500mm above the existing ground level. In this case, a floor level of at least 500mm above existing ground level must be achieved.



- Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
- 8. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
- 9. Any use of fill associated with development must not substantially impede the flow of floodwater, and must not contribute to flooding or ponding of water on any other property.
- 10. Additions or alterations to existing development will be assessed on the merits of the situation, having regard to meeting an acceptable level of risk of flood damage.
- 11. Development on designated flood prone land should incorporate the floodplain risk management measures, as recommended by a local flood study, floodplain management study or plan, which identifies and addresses appropriate actions in the event of flooding.
- 12. Development on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
- 13. Development on lots adjoining areas affected by a 100 year probable ARI event will be subject to floor height requirements, even when the site may not be subject to flooding from the 100 year probable ARI event. This requirement is not applicable for land higher than 500mm above the 100 year probable ARI, as calculated for the relevant site.
- 14. Development where 100 year probable ARI levels are not available, and which could be flood liable, should be designed to meet an acceptable level of risk from flood damage. This may require the preparation of a Local Flood Study that considers cumulative impact issues, and demonstrates negligible impacts on other lands.

Note: Refer to Council's <u>Flood Management Guideline</u> for further information on the <u>NSW Floodplain</u> <u>Development Manual</u>, completed floodplain management plans, and on Council's requirements for flood studies.

Table 2 - Flood Planning Levels and floor height requirements in areas affected by catchment flooding and covered by a Floodplain Management Study and Plan

Development Type (including extensions)	Minimum Floor Height Requirements
Dwellings	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard (post and beam rather than slab on ground preferred)
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard



Development Type (including extensions)	Minimum Floor Height Requirements
Medium and High density residential development	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Commercial and Retail	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Mixed Use development	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard



Development Type (including extensions)	Minimum Floor Height Requirements	
Industrial		
Internal floor height	1 in 100 year probable flood level	
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard	
Sensitive Uses (Residential care facilities, hospitals, etc.)		
Internal floor height	Probable maximum flood level	
Unsealed electrical installations	Probable maximum flood level	

2.10 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is within the flood planning area. This section also applies to sensitive use developments on land affected by the Probably Maximum Flood.

Information on flood risk and flood planning levels (floor levels) for particular lots can be obtained through the flood report tool or by applying for a Flood Certificate from Council.

Some lots are affected by both catchment flooding and lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding catchment flooding are contained in section 2.9 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots affected by lake flooding.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

- a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
- b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.
- c. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.
- d. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.
- e. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise.
- f. To encourage innovative responses to sea level rise impacts.



Controls

- 1. Development must implement measures to mitigate the adverse effects of projected sea level rise and increases in flood levels on the development.
- Development should be designed and situated to reduce the risk from the effects of sea level rise.
 For example, structures should be located on the highest part of the lot and/or located as far back
 from the foreshore or coastline as possible, while still meeting other controls and objectives of the
 DCP.
- 3. Development should not be located in areas predicted to be permanently inundated during the life of the asset. The assumed asset life is 100 years for residential care facilities and seniors housing, hospitals, mixed use development and for medium and high density housing, and 50 years for other developments.
- 4. Notwithstanding the provisions for Cut and Fill in section 2.4, special consideration may be given to increased fill allowances in areas affected by sea level rise provided that:
 - i. Additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas or adjoining properties; and
 - ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks and other local features.
- 5. Development identified within Table 3 should comply with the floor height provisions. Where the development proposed is not contained within Table 3, or an alternative to the provisions contained within Table 3 is proposed, a Flood Safety Audit and Management Plan must be submitted with the application, which is to include:
 - i. Current 100 year ARI flood levels and velocity, as well as at 2050 and 2100;
 - ii. Analysis of potential and likely risk of flooding, and/or potential threat to life and/or property now, and at 2050 and 2100;
 - Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater,
 - iv. Where flood-proof materials are proposed, evidence of the flood-proof characteristics of those materials must be provided;
 - v. Where an innovative of adaptable building design is proposed, it meets the principles and performance criteria set out in the Development Guidelines for Resilient Housing for Lake Macquarie, and
 - vi. Any other alternative adaptive measure must be justified.
- 6. The assessing officer may determine that the development proposal is of a minor nature, and that there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer must be satisfied that the proposed development adequately addresses projected sea level rise and increases in flood levels.



Table 3 - Floor height requirements for land affected by Lake Flooding and Tidal Inundation requirements.

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Dwellings Habitable rooms	1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)	2.36 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2050	1.61 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Medium and High density		
residential development Habitable rooms	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2100	2.10 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Commercial and Retail Internal floor height	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2050 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.36 m AHD
Unsealed electrical	1 in 100 year probable flood level for	2.36 m AHD



Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
installations	2050 + 500mm freeboard	
Mixed Use development Internal floor height	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Industrial Internal floor height	1 in 100 year probable flood level for 2050	1.86 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Sensitive Uses (Residential care facilities, hospitals, etc.)	Probable maximum flood level for 2100	3.27 m AHD
Unsealed electrical installations	Probable maximum flood level for 2100	3.27 m AHD

2.11 NATURAL WATER SYSTEMS

Definition: A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary, and/or other water body.

Objectives:

- a. To protect and maintain the water regime of natural water systems.
- b. To ensure that development does not adversely affect aquatic fauna.
- c. To ensure that development does not adversely affect water quality or availability, including ground water.
- d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
- e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.
- f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls:

- 1. Natural water systems must be maintained in a natural state, including the maintenance of riparian vegetation and habitat such as fallen debris.
- 2. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system as much as possible to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.



- 3. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan. This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.
- 4. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines, natural watercourses, or waterways.
- 5. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 2 Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible.
- 6. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
- 7. Asset Protection Zones must not be located within the Vegetated Riparian Zone.

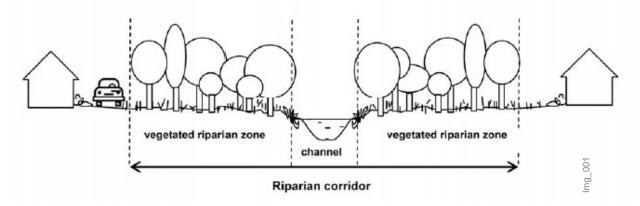


Figure 1 - Vegetated Riparian Zones

Types of watercourses	VRZ Width ² (Each side of watercourse)	Total Riparian Corridor Width
Any first order ¹ watercourse	10 metres	20m + channel width
Any second order ¹ watercourse	20 metres	40m + channel width
Any third order¹ watercourse	30 metres	60m + channel width
Any fourth order ¹ watercourse or greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80m + channel width

¹ As classified under the Strahler System of ordering watercourses.

² Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.



2.12 BUSHFIRE

This section only applies to land identified on Council's Bushfire Prone Land Map.

Objectives:

- a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.
- b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls:

- 1. Development must comply with the NSW Planning for Bushfire Protection Guidelines.
- 2. Asset Protection Zones must:
 - i. Be incorporated into the design of the development;
 - ii. Be as low maintenance as possible;
 - iii. Be located outside areas of ecological value and the buffers necessary to protect them; and iv. Not occur on adjoining environmental zoned land.
- 3. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's <u>Bushfire Prone Land Map</u>.
- 4. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
- 5. Clearing of vegetation must be limited to that necessary to meet the <u>NSW Planning for Bushfire</u> <u>Protection Guidelines.</u>
- 6. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act* 1997.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.13 FLORA AND FAUNA

Objectives

- a. To avoid and minimise impacts on native flora and fauna
- b. To protect and enhance native flora and fauna, vegetation communities, and native habitat on the site, and on surrounding development sites.
- c. To protect and enhance ecological corridors and increase the connections between habitats.
- d. To ensure rehabilitation of degraded areas.

Controls

- Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more native trees are proposed to be removed, a flora and fauna assessment must be submitted with the development application. The flora and fauna assessment must be prepared in accordance with Council's <u>Flora and Fauna Survey Guidelines</u>.
- 2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, provision of services (water and sewer, etc) and stormwater management.
- 3. Where a proposed development site is within a vegetation corridor identified on <u>Native Vegetation</u> and <u>Corridors Map</u>, or identified as part of a site specific flora and fauna assessment, the corridor must be surveyed. Within the survey, the appropriate corridor width must be determined with



- reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the development should be designed to minimise impacts.
- 4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.
- 5. A Site Vegetation Plan must be submitted clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.
- 6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.
- 7. A suitable barrier such as a perimeter road should be provided between development, (including landscaped areas) and native vegetation or significant habitat features, to minimise edge effects
- 8. Where a proposed development is likely to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).
- 9. Rehabilitation of degraded areas of the development site should include local native species to establish a self-maintaining ecosystem as close as possible to the natural state.
- 10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.
- 11. An application for removal of native vegetation will only be considered where it is ancillary to, and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).
- 12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's <u>Vegetation Management Plan Guidelines</u>. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
- 13. Long-term protection and management of areas set aside for ecological reasons is encouraged through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.
- 14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone and its protection from adverse impacts. It should include, but not be limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, feral and domestic animals.

Note: Council may require a bond to ensure that native vegetation is protected and any ameliorative measures are undertaken.



2.14 PRESERVATION OF TREES AND VEGETATION

Objectives:

- a. To ensure that trees listed on Council's <u>Significant Tree register</u> are not adversely affected by development.
- b. To maintain and enhance the natural bushland or vegetated character of the city.
- c. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls:

- 1. For the purposes of Clause 5.9 in LMLEP 2014, development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
 - Any species of vegetation that existed in the State of New South Wales before European Settlement:
 - ii. A tree which is listed in Council's Significant Tree Register;
 - iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
 - iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

- 2. Except in the C2 Zone, development consent is <u>not</u> required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over three metres in height), only if:
 - i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;
 - ii. The soil surface exposed in any period of 90 consecutive days is less than 250m²;
 - iii. The slope of the land is less than 15 degrees;
 - iv. The area is not subject to a development consent that requires the native vegetation to be retained; and
 - v. The work does not involve the disturbance of habitat for threatened species.
- 3. Development consent is <u>not</u> required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:
 - i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
 - ii. The tree or native vegetation is not required to be retained by a development consent, and
 - iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
 - iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
 - v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment as the building and owners of both properties reach a written agreement that is submitted to Council prior to removal.

Note: For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

Note: A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.



Note: A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure or septic tank.

- 4. Development consent is <u>not</u> required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:
 - i. Is dead and is not required as habitat for native fauna or
 - ii. Is a risk to life or property.

Note: Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

Note: Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

- 5. Development consent is <u>not</u> required for removal of a tree or native vegetation if:
 - The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and
 - ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
 - iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
- 6. Development consent is not required for removal of a NSW native tree if the tree is:
 - not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
 - ii. not located within other native vegetation and,
 - iii. less than three metres in height and
 - iv. has a trunk diameter at ground level of less than 75mm.
- 7. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.
- 8. A report from a suitably qualified arborist must be submitted to support:
 - i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area:
 - ii. Any request to review Council's determination of an application for tree pruning or removal; or
 - iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.
- 9. An arborist report must include a plan to scale that clearly shows:
 - The location of the proposed development;
 - ii. The location, diameter, canopy spread, condition and species of each tree on the site;
 - iii. All trees to be removed;
 - iv. All trees to be retained;
 - v. All trees with habitat hollows;
 - vi. Tree protection zones for all trees to be retained; and
 - vii. Any asset protection zones.
- 10. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.
- 11. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.



- 12. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
- 13. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the Significant Tree Register.

Note: Where the removal of five or more native trees is proposed, an arborist report may be required in addition to a Flora and Fauna Assessment prepared in accordance with Council's <u>Flora and Fauna Survey</u> <u>Guidelines.</u>

2.15 EUROPEAN HERITAGE

Definition: A *Contributory building* is a building that makes a positive contribution to the heritage character of the place or locality.

Objectives

- a. To protect and maintain European heritage items and their facades.
- b. To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.
- c. To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.
- d. To ensure that development is sympathetic to heritage items, adjoining heritage items and contributory buildings.

Controls

- 1. A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:
 - i. incorporates, or is adjacent to an item of heritage significance;
 - ii. is located within a heritage conservation area, or,
 - iii. has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

- The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,
- The development is considered in conflict with its heritage context, streetscape, or heritage precinct,
- The subject site includes a potential heritage item.
 - 2. The impact of development on a heritage item or contributory building must be minimised by:
 - i. Restricting the extent of development to that which is necessary;
 - ii. Conserving what is significant about the item;
 - iii. Clearly differentiating new development from the existing significant fabric;
 - iv. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and
 - v. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility and setting.
 - 3. For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's



compatibility with the physical context. The Statement of Heritage Impact must include details of the:

- i. Structural condition;
- ii. Overall extent of the remaining fabric;
- iii. Potential retention and adaptive reuse; and
- iv. Comparative costings.
- 3. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.
- 4. Alterations and additions to heritage items or contributory buildings must where possible:
 - Occur at the rear of the building;
 - ii. Maintain the established building line;
 - iii. Maintain an existing driveway access to the rear of the property;
 - iv. Incorporate or retain elements such as chimneys, windows and gables;
 - v. Maintain established patterns of buildings and garden; and
 - vi. Not overwhelm or dominate the existing building.
- Alterations and additions to heritage items and contributory buildings must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.
- 6. Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind a heritage item.
- 7. Utilitarian structures must be constructed of the same material as the heritage listed building.

Note: Refer to Council's <u>Heritage Guidelines</u> for further information.

2.16 ABORIGINAL HERITAGE

Objectives:

- a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
- b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls:

- 1. Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:
 - i. A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
 - ii. Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Excluded Development Criteria (Table 4) apply.
 - iii. A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

2. A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:



- An AHIMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or
- ii. The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.
- 3. The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

- 4. An Aboriginal Cultural Heritage Assessment Report should be prepared where:
 - i. A Due Diligence assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or
 - ii. The development will have an impact on a known Aboriginal object or place.

Table 4 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	Land on which excluded development may not be carried out
All development on sites having a combined/total area less than 800m ²	
Exempt development under the SEPP (Exempt and Complying Development Codes) 2008 on sites having a total area greater than 800m² subject to: • 75% of combined/total site area already disturbed; or	Within 200m of an AHIMS site Setback from DP High Water mark does not exceed 50m.
 Works do not exceed existing disturbed footprint; or Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent. 	

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfills the requirements of the Excluded Development Criteria Table.

- 5. Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* which includes consultation with the Aboriginal community.
- 6. Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development will be Integrated Development and will also require a permit from the Office of Environment and Heritage.



2.17 NATURAL HERITAGE

Objectives:

- a. To ensure the protection of items of natural heritage significance.
- b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.
- c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls:

- 1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.
- 2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during, and after construction.
- 3. The development should be designed to avoid natural heritage items.
- 4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.
- 5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.18 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community.

Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

- a. To ensure that development takes into consideration the likely social impacts that may arise, including any effects on equity, access, participation and rights.
- b. To ensure that development occurs in appropriate locations, and is supported by adequate services and facilities to support the community and its needs.
- c. To ensure that services and facilities are accessible to all members of the community.
- d. To facilitate availability of active and passive recreation, natural landscapes, educational opportunities, employment opportunities, health services, public transport, and neighbouring centres, as well as maintaining or enhancing the aesthetics and amenity of the area.

Controls

 A Social Impact Assessment (SIA) must be prepared in accordance with Council's <u>Social Impact</u> <u>Assessment Guidelines</u>, and submitted with the development application in the following circumstances:



- i. the development is identified in table 5, or
- ii. the development is valued at \$5,000,000 or greater, or
- iii. the development has a floor area greater than 3000m², or
- iv. where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(iv) above:

- The development is targeted at a particular socio-economic or demographic group,
- The development is considered in conflict with its locality, and
- The development has, or is anticipated to generate, significant levels of community opposition.
 - Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements.

Table 5 - Uses requiring Social Impact Assessment

- Amusement Centres
- Animal Training and Boarding Establishments
- Backpackers Accommodation
- Boarding House
- Brothels/sex service premises
- Child Care Centre
- · Community Facility
- Designated Development
- Education establishment
- Entertainment facility
- Expansion or Modification of an existing use that would otherwise be prohibited under the LEP
- Function Centre
- Funeral Chapel / Funeral Home
- Group Home
- Health Consulting Rooms
- Health service facilities
- Helipad
- Home Occupation (sex services)
- Home-based child care
- Hospital (not including a day surgery facility refer to medical centres)
- Hotel or Motel accommodation
- Information and Education Facility
- Licensed Premises (Hotels, Taverns and Bottle Shops)
- Major roads, arterial or transport corridors

- Markets
- Medical Centre
- Mixed Use Development (residential and commercial)
- Mortuary
- Passenger Transport Facilities
- Place of Public Entertainment
- · Place of public worship
- Port uses/port facilities
- Pub
- Public Transport facilities
- Recreation Areas
- Recreation facilities (indoor)
- Registered Club
- Residential Care Facility
- Residential Flat Building containing over 10 dwellings
- Restricted Premises
- School
- Seniors Housing
- Service Stations
- Sewage Treatment Plants
- Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets
- Waste Facilities
- Water System / Facilities



2.19 ECONOMIC IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the economic impact of a proposal when assessing a specific development application.

Economic Impact Assessment focuses on the economic dimensions of a locality. It seeks to identify how a proposal will contribute to the economic growth of the locality and City through locating development in appropriate areas, supporting existing development in the area and through the creation of employment opportunity and other economic benefits.

Objectives:

- a. To ensure that development supports the Lake Macquarie hierarchy of centres and positively contributes to the City by supporting existing development in the locality and the community through the creation of employment opportunities.
- b. To ensure development contributes through additional local employment and economic benefits.

Controls

- 1. An economic impact assessment must be prepared and submitted to Council at the discretion of the assessing officer under the following circumstances:
 - i. Where development is valued at \$5,000,000 or greater, or
 - ii. Where the proposed development has a floor area greater than 5000m², or
 - iii. Where the development is inconsistent with the zone objectives.

Note: Refer to Council <u>Economic Impact Assessment Guideline</u> for further information and guide to the economic considerations for specific types of development.



2.20 LOT AMALGAMATION

Definition: An **isolated lot** means an allotment (or allotments) that are bounded on all sides (excluding any road frontage) by existing (or approved) medium to high-density residential or commercial development that would preclude the development of the allotment(s) beyond a dwelling house or dual occupancy dwelling or a two storey commercial or mixed use building.

Objectives

- a. To avoid isolated lots with limited development potential.
- b. To support efficient development and increase floor space yields on amalgamated sites.
- c. To accommodate the desired built form of the town centre.
- d. To minimise the number of driveway crossings from the street or lane.

Controls

- 1. Site amalgamation should not result in an isolated lot that is unviable for redevelopment to the scale and intensity desired for the locality.
- 2. Development that would result in the creation of an isolated lot must be supported by documentation that demonstrates in writing that an offer to purchase has been made to the owner(s) of the isolated lot, and the owner has refused to negotiate. A Licensed Valuer must base the offer on at least one recent independent valuation.
- 3. Development that would result in the creation of an isolated lot must provide for a future extension incorporating the isolated lot or demonstrate that the isolated lot can be developed independently.
- 4. Development that would result in the creation of an isolated lot must comply with the Planning Principles established by the Land and Environment Court in *Melissa Grech v Auburn Council* [2004] NSWLEC 40, Cornerstone Property Group Pty Ltd v Warringah Council [2004] NSWLEC 189 and Karavellas v Sutherland Shire Council [2004] NSWLEC 251.

Note: Council may determine that sites with a frontage of less than 20 metres are not suited to achieving the maximum permissible height for that lot.

2.21 UTILITY INFRASTRUCTURE

Objectives:

- a. To identify utility requirements and new infrastructure at an early stage of development.
- b. To ensure utilities structures are integrated in the site planning and design of development.
- c. To protect and improve the visual amenity of the primary street frontage.

Controls:

- 1. All existing and additional utility infrastructure must be identified, and an assessment of whether these services need to be upgraded for the proposed development, at the site planning stage.
- The location of existing and proposed electricity kiosk sub-stations, fire hydrants, along with clearance areas and access ways must be identified and shown on building and landscape plans.
- 3. Council may require the provision of underground electricity services for the full length of the primary frontage of a development.



2.22 SITES WHERE A CONCEPT PLAN IS REQUIRED

Objectives

- a. To capture the opportunities for public benefit that planning and development of larger sites permit.
- b. To ensure that a thorough urban design analysis of the site, and its urban context, is used to inform the site planning and design process.
- c. To allow the site layout, building scale form and height, approximate yield and public benefit of a development proposal to be determined early in the development assessment process.
- d. To allow consideration of a proposal that varies from the specified block controls in the Town Centre Area Plans.

Controls

- 1. Where development is proposed on site(s) that exceeds 4000m² in area or that are identified as a 'Concept Plan Required' site in an Area Plan in Part 10, 11 or 12 of this DCP, a Concept Plan for the site must be prepared and submitted to Council as a Stage 1 Development Application.
- 2. A comprehensive urban design analysis of the site and its urban context must be prepared by a suitably qualified and experienced professional.
- 3. The urban design analysis must be used to inform and guide preparation of the Concept Plan.
- 4. The Concept Plan must include but is not limited to:
 - i. a site plan identifying new public views, new or improved public space, new or improved community facilities, items of heritage, landscape or environmental conservation, public transport facilities, new or improved pedestrian links and/or new vehicle access,
 - ii. utility infrastructure requirements such as electricity substations, fire hydrants and gas connections, and their location,
 - iii. a site plan and elevations showing proposed built form, heights, setbacks, building separation, podium levels, extent of podium, landscape areas and interface with the street or public space,
 - iv. an interactive electronic 3D block model of the proposed building masses and the existing buildings on surrounding sites,
 - v. illustrations that indicate proposed building character and materials,
 - vi. an indication of the extent of basement car parking, as basement car parking that is built to the boundary has implications for providing deep soil zones in accordance with Section 6.8 of Part 4 Development in Centres and Mixed Use Employment Zones.

3 STREETS AND PUBLIC SPACE

3.1 PEDESTRIAN LANES

Objectives:

- a. To provide pedestrian lanes between key destinations in each town centre.
- b. To focus pedestrian traffic and sustain retail activity along each lane.
- c. To ensure a pedestrian lane is open, accessible, safe, well lit, and has active frontages.

Controls:

- 1. A pedestrian lane must be a minimum five metres in width
- 2. A pedestrian lane must be open to the sky above.
- 3. A pedestrian lane must allow non-discriminatory access.
- 4. The alignment of a pedestrian lane must provide a clear line of sight from end to end.
- 5. Development must maximise the length of retail or office floor space with frontage to the lane.
- 6. Development must maximise the area of display windows fronting the lane.
- 7. Development must include entries, cantilevered awnings, and architectural detail at the footpath level.
- 8. Development must include windows or balconies on upper levels to provide surveillance to the lane
- 9. Development must include pedestrian lighting to the lane.
- 10. The property owner must maintain the lane as an open and public lane, or dedicate the land to Council as a public lane.

3.2 PEDESTRIAN LINKS THROUGH BUILDINGS

Objectives:

- a. To improve pedestrian access and ease of circulation through town centres.
- b. To provide pedestrian access through buildings that is easy to navigate, pleasant, safe and well lit.

Controls:

- 1. A pedestrian link through a building must:
 - i. be a minimum of four metres in width, and
 - ii. have a minimum floor to ceiling height of four metres, and
 - iii. incorporate non-discriminatory access, and
 - iv. incorporate CPTED principles, and
 - v. include signage to identify the link.
- 2. The alignment of the pedestrian link must ensure a clear line of sight from end to end.
- 3. The building elevation at ground level fronting the pedestrian link must include suitable uses that encourage pedestrian activity along with windows, entries, and architectural detail that supports casual surveillance and provides interest.
- 4. Development must include lighting for the length of the pedestrian link and the entries.



3.3 FOOTPATH DINING

Objectives:

- a. To support footpath dining in appropriate locations.
- b. To maintain safe and functional pedestrian access.
- c. To make efficient use of footpath dining space on active frontages.
- d. To integrate footpath dining with other footpath uses and infrastructure.
- e. To encourage the use of large wall openings and retractable windows or doors at the street level for café uses.

Controls:

- 1. Footpath dining must only be located in areas where it is possible to maintain a two metre wide clear pedestrian through route.
- 2. The two metre wide clear pedestrian route should be located along the building frontage to assist with navigation for the vision impaired.
- 3. New development for café use must include opening or retractable windows or doors below awning level that occupy at least 75% of the façade area.
- 4. The design of footpath dining areas must be integrated with other street uses and infrastructure such bus stops, pedestrian crossings, poles, trees, bins, seats and planter boxes.
- 5. Footpath dining areas adjacent to vehicle parking or no standing lanes must maintain a 600mm clear area, measured from the face of the kerb for access and egress.
- 6. A wheelstop must be provided for each rear to kerb parking space that abuts a footpath dining area.
- 7. Footpath planter boxes must be permanently fixed to the pavement or designed for removal and storage outside of trading hours.
- 8. A footpath dining proposal must be consistent with Council's Footpath Dining Procedure.
- 9. A licence agreement must be obtained from Council for footpath dining.

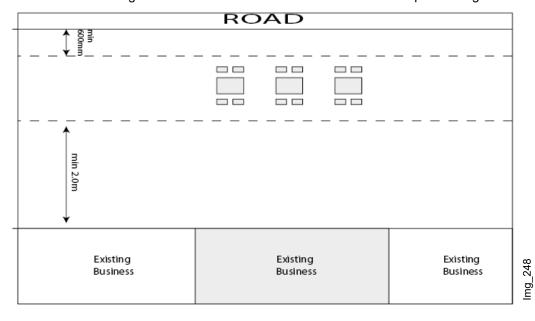


Figure 2 - Location of Footpath Dining



3.4 STREETSCAPE IMPROVEMENTS

Objectives:

- a. To provide high quality infrastructure such as pedestrian paving, kerb extensions, drainage, and cycleways that support walking, cycling and access to public transport.
- b. To enhance the amenity of the street for pedestrians.
- c. To develop the character of each town centre character through a consistent selection of materials, trees, furniture and design details.
- d. To provide opportunities for public art.

Controls:

- 1. Development must result in improvement to the amenity and appearance of adjoining footpaths or public domain.
- 2. Works undertaken within the public domain must be consistent with the provisions of the relevant *Streetscape Master Plan* and Council's *Streetscape Technical Guidelines*.
- 3. Where there is not a relevant *Streetscape Master Plan* for a town centre, Council will specify the extent and type of street trees, footpath paving, pedestrian lighting, street furniture, public art and the like.

3.5 NON-DISCRIMINATORY ACCESS

Objectives:

- a. To ensure that development accommodates all people regardless of mobility.
- b. To ensure universal design that provides non-discriminatory access and equitable use.
- c. To minimise the scale and visual impact of ramp structures on the footpath and building façade.
- d. To ensure that design for flooding and sea level rise does not preclude non-discriminatory access.

Controls:

- 1. Building entries must be located where there is the smallest level change from the public footpath to the ground floor interior.
- 2. The design and construction of development must ensure that non-discriminatory access is provided to enable all users of that development to access the same level of service and use.
- 3. Where floor levels are raised to accommodate flooding or projected sea level rise, the design of non-discriminatory access must incorporate an external terrace or internal floor space set at an intermediate level between the footpath and general ground floor level of development.
- 4. Where development is listed in Table 6, a Disability Access Audit must be prepared, in accordance with Council's non-discriminatory access guideline, and submitted to Council. An accredited access consultant must prepare the Disability Access Audit.

Note: Refer to Council's Non-discriminatory Access Guideline for further information.

Note: A Disability Access Audit may be waived for some developments at the discretion of the assessing officer for some Change of Use proposals.



Table 6 - Development types requiring a Disability Access Audit

Markets with a total floor area of 500m ² or more
Manufactured home estate/caravan park
Medical centre
Mixed use development with a total floor area of 500m ² or more
Multi-dwelling housing with 10 or more dwellings
Nightclub
Passenger transport facilities
Place of public worship
Recreation facilities – indoor, outdoor and major
Registered club
Retail premises with a total floor area of 500m ² or more
Residential care facility
Residential flat building with 10 units or more
Seniors housing
Tourist accommodation with 20 units or more
Change of Use

3.6 LIGHTING

Objectives:

- a. To ensure safe and convenient pedestrian movement on footpaths and through public spaces.
- b. To provide energy efficient external lighting.
- c. To allow for cost effective maintenance of external lighting.
- d. To ensure that the impact of light and glare on surrounding residential development is minimised.

Controls:

- 1. Development must include external lighting that provides at least 20 lux illumination at the building entrance and to the footpath at the street boundary, or the boundary with a public place.
- 2. External lighting must be located on the building façade and below awning level.
- 3. External lighting must be designed and sited in accordance with the relevant Australian Standard to minimise glare on surrounding dwellings, commercial and retail premises, and public spaces.
- 4. Footpath lighting must incorporate low energy design features such as:
 - i. Energy efficient lamps and lenses;
 - ii. Daylight sensors and timer controls; and
 - iii. Lamps located at an effective height and spacing.

4 ACTIVE STREET FRONTAGE

4.1 GROUND FLOOR RESIDENTIAL USES IN THE BUSINESS ZONES

Objectives:

- To maximise the extent of ground floor business, retail or community uses at the street frontage in the E2 Commercial Centre and E1 Local Centre zones.
- b. To support development of ground floor commercial premises, in conjunction with residential development, in the MU1 Mixed Use zone.

Controls:

- 1. For the purposes of Clause 7.10 in LMLEP 2014, development in the E2 Commercial Centre and E1 Local Centre zones must provide retail, business or community uses at ground level, for the full extent of the street frontage(s), not including entry and access ways.
- 2. Development in the MU1 Mixed Use Zone that provides commercial premises on the ground floor, may satisfy the requirements of Clause 7.10 in LMLEP 2014, provided that each office and each ground floor residential unit has:
 - i. frontage to the street,
 - ii. direct entry from the street that is visible from the footpath,
 - iii. direct access to the parking area,
 - iv. a minimum floor to ceiling height of 3.0m,
 - v. a minimum area of 30m²,
 - vi. basic facilities such as a sink and toilet,
 - vii. a front terrace or deck facing the street with a maximum height above the street of 1.0m, and
 - viii. a landscape area of at least 10m² between the street and front entry that satisfies the landscape requirements for planting in front setback areas.
- 3. For the purposes of Clause 7.10 in LMLEP 2014, each ground floor office in the MU1 Mixed Use Zone must have a dedicated parking space where the office area exceeds 40m².

4.2 GROUND FLOOR LEVELS

Definition: Active street frontage means a street frontage that enables direct visual and physical contact between the street and the interior of the building. Clearly defined entrances, windows and shop fronts are elements of the building façade that contribute to an active street frontage.

Objectives:

- a. To ensure non-discriminatory access between the public footpath and ground floor space.
- b. To allow a line of sight between the public footpath and ground floor space.
- c. To adapt floor levels close to the street where general ground floor levels are raised to meet Sea Level Rise Policy.

- 1. Where floor levels are raised to accommodate flooding or projected sea level rise the building design must incorporate either:
 - i. an external terrace within the front setback area that is set at an intermediate level between the footpath and the main ground floor and is suitable for outdoor trading, or:



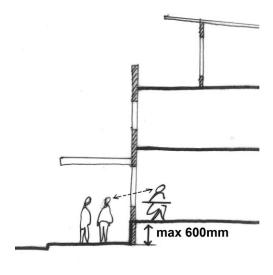
- ii. an internal floor space at the street frontage that is set at an intermediate level between the footpath and the main ground floor and is suitable for active use or display.
- 2. For all other sites the difference in level between the public footpath and the internal floor level at any point on the street boundary must not exceed 600mm (refer to Figure 4).
- 3. Where floor levels are raised to accommodate flooding or projected sea level rise an intermediate floor areas must be designed and built to withstand temporary inundation.

4.3 GROUND FLOOR ENTRIES

Objectives:

- a. To ensure that entries are located on the street frontage and are clearly recognisable.
- b. To ensure that entries are easily accessible for all users.

- 1. On sites that slope along the street boundary the building entry must be located to minimise the difference between the footpath level and the internal floor level.
- 2. Solid framing or solid wall elements must be used to distinguish entries from window display areas.
- 3. Fully glazed doors within fully glazed frontages are not an acceptable design solution.
- 4. Signage must be incorporated into the façade design to identify the tenancy and address.



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Figure 3 - Level change between footpath and ground floor level



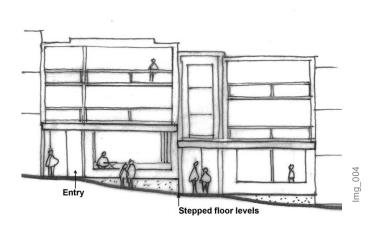


Figure 4 - Floor levels and roof levels stepping with topography

4.4 GROUND FLOOR GLAZING

Objectives:

a. To ensure that development allows a visual connection between the street and the ground level activity.

Controls:

- 1. The façade below awning level must include clear glazed windows with low sills or retractable glazed doors.
- 2. The clear glazing area below awning level must be at least 50% of the façade area.

4.5 STREET AWNINGS

Objectives:

- a. To provide shelter and shade for pedestrians and footpath activity in pedestrian priority areas.
- b. To create a consistent pedestrian scale and space, by stepping awnings with the slope of the footpath.

- 1. Development in E1 or E2 Zones must provide a continuous or stepped solid box awning for the full extent of the building frontage at the street. Use of tinted glass is not acceptable.
- 2. The awning on primary pedestrian streets must be at least 2.7 metres deep, or extend to within 600mm of the kerb face, except where Council requires a variation to accommodate street planting within the footpath area.
- 3. Development in the MU1 Zone must provide a solid box awning that is at least two metres deep for at least 50% of the building frontage, including the entrance to the building.
- 4. The vertical distance from the footpath to the underside of an awning must be between three and 3.6 metres at any point.
- 5. Awnings must use materials that are sun, rain and wind proof.
- Awnings must drain towards the building, and be supported by approved stormwater disposal methods.



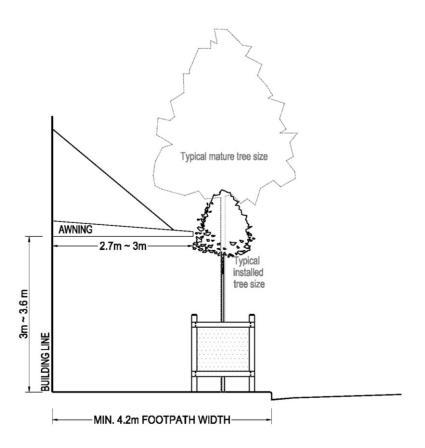


Figure 5 - Cantilever box awnings and street trees



5 ACCESS AND PARKING

Note: Several Australian Standards are specifically relevant to this section. All designs and development must be in accordance with the relevant Australian Standard.

5.1 TRAFFIC AND VEHICLE ACCESS

Objectives:

- a. To minimise impacts on the streetscape.
- b. To minimise the impacts of traffic generation on street function and other modes of transport.
- c. To maximise the retail frontage to streets in the town centre.
- d. To minimise vehicle crossing points along pedestrian footpaths.
- e. To maximise vehicle access along the rear of properties.
- f. To ensure adequate space for turning from a rear laneway into private property.

Controls:

- 1. A Traffic Impact Statement must be prepared and submitted where:
 - i. More than 1000m² Gross Floor Area is proposed; or
 - ii. Direct access is required for an arterial or sub-arterial road; or
 - iii. The main entry driveway is within 50 metres of a signalised intersection.
- 2. Vehicle access to on-site car parking or service areas must not be located on the primary street frontage if access can be gained from a secondary street or rear lane.
- 3. Vehicle access for light traffic must be restricted to one location.
- 4. The driveway crossover at the boundary must not exceed the minimum design width required to meet Council traffic requirements.
- 5. Access to on-site car parking and servicing facilities must be oriented perpendicular to the street alignment, and must not ramp along a street or lane alignment.
- 6. Where there is no alternative to access at the primary street frontage, the crossover must not occupy more than 25% of that frontage.
- 7. Where the existing laneway width is less than eight metres, development must be set back a minimum of one metre from the lane boundary.

Note: Refer to Council's <u>Traffic</u> Impact Statement and Vehicle Access Guideline for further details and requirements.

5.2 DESIGN OF PARKING AND SERVICE AREAS

Objectives:

- a. To maximise pedestrian safety and amenity.
- b. To design parking areas that do not have a negative impact in the movement of pedestrians and cyclists.
- c. To ensure that on-site car parking and driveways do not dominate or detract from the appearance of the development or the local streetscape.
- d. To support basement parking where there is adequate site area.
- e. To encourage co-operative approaches to car parking provision between adjoining small lots, such as amalgamation of car parks and shared access and egress points.



f. To ensure the safe and efficient movement of vehicles within, entering and leaving properties.

Controls:

- 1. Designs of parking areas must ensure that priority is given to the needs or pedestrians, disabled people and cyclists above the needs of the car.
- 2. Basement parking should be provided on all sites that have sufficient area for access and circulation at a basement level.
- Where unable to provide basement or rear parking, at grade car parking must be screened along the primary street frontage, and a minimum of 50% on the secondary street frontage for developments on corner lots.
- 4. On-site car parking and servicing facilities must be located at a basement level or at the rear of development.
- 5. Car parking and driveway areas must be located to minimise disruption to pedestrian movement, safety and amenity on the public footpath.
- 6. Car park design must include direct, safe, and well-marked pedestrian routes from the car park to building entries and footpaths / shared pathways.
- 7. Car park design must not result in dead-end aisles.
- 8. Where at-grade parking needs to be provided, aisles must be orientated at right angles to the main building frontage.
- 9. Car parks above ground level must be screened from the street with landscape planting or with high quality façade screening that allows natural lighting and ventilation.
- 10. Servicing facilities for non-residential uses must be located and designed to protect the amenity of residents.
- 11. For the non-residential component of parking, stack parking may be permitted for long stay spaces only.
- 12. For the residential component of parking, stack parking may be permitted only where two spaces are designated for a single dwelling.
- 13. The area of site excavated for the purposes of underground car parking must be limited to the building footprint of the development.
- 14. Permanent sub-surface support and retention structures must be set back a minimum of 900mm from adjacent property boundaries.
- 15. The design of parking areas must comply with AS2890 Parking Facilities.

5.3 BIKE PARKING AND FACILITIES

Objectives:

- a. To provide convenient and safe bike access, movement and parking.
- b. To encourage active forms of transport with convenient and secure end of trip facilities.

Controls:

- 1. The following bike facilities must be provided for customers and short term users:
 - i. Five bike parking spaces plus an additional 10% of bike parking spaces/ car parking spaces for up to 50 car parking spaces.
 - ii. For developments requiring over 50 car parking spaces, a flat 10% ratio of bike parking spaces/car parking spaces applies.

Note: Car parking rates are defined in Table 7: Car Parking Rates



- 2. Bike parking for customers and short term users must be:
 - Located close to the development's pedestrian entrance where there is active and passive surveillance;
 - ii. Within easy and safe access from outside the site, without impeding the movement of pedestrians or other vehicles; and
 - iii. At least 50% covered from the weather where there are more than 10 spaces.
- 3. The following bike facilities must be provided for employees:
 - i. One employee bike parking space for each 10 employees, or part thereof;
 - ii. One personal locker per two employee bike parking spaces;
 - iii. One unisex change room and one shower for developments greater than 1000m² GFA and less than 2500m² GFA;
 - iv. One female change room with one shower and one male change room with one shower, for developments greater than 2500m² GFA; and
 - v. One additional shower (in each change room) for each additional 5000m² GFA up to a maximum of five showers in each change room.
- 4. Bike parking for employees must be located in a secure undercover area.
- 5. The design of all bike parking must:
 - i. Include clear signposting and good lighting;
 - ii. Use racks that support the bicycle in an upright position, with the bicycle frame and at least one wheel locked to the rack;
 - iii. Ensure racks that fit all types and sizes of bicycles;
 - iv. Incorporate construction and materials that are durable and resistant to vandals and thieves; and
 - v. Be designed in accordance with relevant Australian Standards.

5.4 MOTOR BIKE PARKING

Objectives:

- a. To provide convenient and safe motor bike access, movement and parking.
- b. To ensure that the number of motorbike parking spaces is sufficient to support the intended use.

Controls:

1. Development must provide one motorbike parking space for each 20 car parking spaces (as required in Table 7: Parking Rates).

5.5 CAR PARKING RATES

Objectives

- a. To ensure the provision of parking does not result in a substandard urban outcome.
- b. To ensure that the number of car parking spaces is sufficient to support the intended use.
- c. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.
- d. To ensure the provision of car parking results in an efficient use of land within our centres.



Controls

- 1. Where the proposed number of car parking spaces is **less than** those specified in Table 7, detailed justification must be provided to support a variation, including:
 - i. Analysis of the active and public transport options available within the vicinity of the proposal; and
 - ii. Survey data from comparable facilities with similar levels of active and public transport provision; or
 - iii. Implementation of a Green Travel Plan.
- 2. Where the proposed number of car parking spaces is **more than** that specified in Table 7, detailed justification must be provided to support a variation, including:
 - i. Demonstration that exceeding the designated car parking rates does not detract from the urban design outcomes (streetscape and built form) of the proposal; and
 - ii. A detailed cost benefit analysis demonstrating the benefits to the community is superior than adherence to the rates including consideration of the environmental and economic benefits of using the land for a higher order use; and
 - iii. Parking survey data from existing operations where expansion is proposed.
- 3. The number of car parking spaces provided may be consistent with the specifications of Table 7 without further justification.
- 4. Where vehicle parking requirements are not specified in Table 7, justification must be provided that supports the proposed vehicle parking provisions, including:
 - Consideration of the desired urban design (streetscape and built form) outcomes of the area;
 - ii. Analysis of the active and public transport options available within the vicinity of the proposal; and
 - iii. Survey data from comparable facilities with similar levels of active and public transport provision.

Note: Determination of parking rates is at Council's discretion.

- 5. Where the floor area of an existing development is being increased, the required car parking is to be calculated for the additional floor area only.
- 6. Where a Green Travel Plan proposes to reduce the car parking rate, it must demonstrate a practical and effective combination of:
 - i. Employee incentives to encourage alternatives to car travel (such as public transport or taxi vouchers);
 - ii. End of trip facilities in excess of Council's requirements, including additional showers and lockers to encourage walking and cycling;
 - iii. Designated car parking spaces for car sharing; and
 - iv. Preparation of a Transport Access Guide (TAG) with concise instructions on how to reach a site or venue by public transport, walking and cycling (using such sources as maps, websites and business publications).
- 7. Where a Green Travel Plan is proposed, it must be accompanied by a written agreement with the owner or occupier to implement the plan.



Note: Where proposals cannot meet the parking requirements on site and cannot provide sufficient justification for the variation, alternative provisions for car parking may be made in accordance with the relevant Section 7.11 Contributions Plan(s) and/or Council's Voluntary Planning Agreement Policy.

Note: 'Amenities' and 'storage space' are not included when calculating Gross Floor Area (GFA) for car parking purposes.

Table 7 - Car Parking Rates for Development in Business Zones

Development Type	Car Parking Rate			
boarding houses and group homes	1 space plus 0.5 spaces per bed.			
disability parking rate	1 space per 50 spaces. Where the requirement is between 5 and 50 spaces, at least 1 space is to be provided for persons with a disability			
residential flat buildings, Multi dwelling housing and Shop top housing.				
Including, as a component of Mixed	Location	Α	В	
Use Developments.	1 bedroom or studio apartment	0.5	0.75	
	2 bedrooms	0.75	1.0	
	3 bedrooms Plus	1.0	1.5	
	Visitor parking per dwelling –			-
	Residential flat buildings and shop top housing	0.25	0.25	
	Multi dwelling housing		0.5	
	Where:	I		_
	than 400 metres from a railway station, transport interchange or a major bus route. B – In the E1 zone or in the E1, E2, and MU1 Zones where 'A' does not apply. Single file parking may be used where two spaces are provided for one dwelling.			
seniors housing	Car parking provision is in accordance with Housing SEPP requirements.			
home business and home industry	As per Dwelling – ie: 1 undercover space and 1 space as single file parking per dwelling.			
In E1, E2, MU1 zones or as a component of a Mixed Use Development	As per residential flat buildings, plus 1 space per 35m ² GFA of the workplace area to provide for employees and clients.			\ of
Where vehicles are an intrinsic component of the business or industry	As per dwelling, plus 2 spaces			
home occupation (sex services)	1 space per customer as expected at any one time			
backpackers' accommodation	1 space per 100m ² GFA and parking for a mini-bus			
bed and breakfast establishment	As per dwelling house, plus 1 spa provided as single file parking wh behind dwelling parking.			



Development Type	Car Parking Rate
hotel or motel accommodation	
May include dining facilities, outdoor eating areas or beer gardens.	1 space per 25m² of GFA
Where providing accommodation	1 space per short-stay room, plus 1 space per 2 staff.
Where providing conference facilities	1 space per 5m² of GFA.
	Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on activity mix.
serviced apartments	1 space per unit, plus 1 space per 50m ² GFA for any dining room provided as part of the development
business and office premises	1 space per 40m ² GFA
	And where more than 20 car spaces are required and the development is within 400m of a designated bus route, the development provides a 'Bus shelter' (or approved equivalent) in lieu of 1 car space in every 40, or part thereof, of the onsite spaces required. One shelter to be provided for each car space deleted
funeral homes	1 space per employee plus 1 space per 3 seats in chapel(s)
bulky goods premises	2 spaces per tenancy or lot, plus 1 space per 40m ² GFA.
food & drink premises	
Where the total area is less than 5000m ² GFA	1 space per 25m² GFA
Where the total area is greater than 5000m ² GFA	1 space per 40m² GFA
restaurant or café	
Where the total area is less than 5000m ² GFA	1 space per 25m² GFA
Where the total area is greater than 5000m² GFA	1 space per 40m² GFA
	Note:- See Australian Standard for Fast Food takeaway vehicle queuing lengths.
take-away food & drink premises	
Where the total area is less than 5000m ² GFA	1 space per 25m ² GFA
Where the total area is greater than 5000m ² GFA	1 space per 40m² GFA
hardware & building supplies	2 spaces per tenancy or lot, plus 1 space per 50m ² GFA.
shops or group of shops	
Where the total area is less than 5000m ² GFA	1 space per 25m² GFA
Where the total area is greater than 5000m ² GFA	1 space per 40m² GFA



Development Type	Car Parking Rate
	And where more than 20 car spaces are required and the development is within 400m of a designated bus route, the development provides a 'Bus shelter' (or approved equivalent) in lieu of 1 car space in every 40, or part thereof, of the onsite spaces required. One shelter to be provided for each car space deleted.
	Note - Where a development forms a group of shops or centre, parking requirements are calculated on the total GFA of the shops rather than the total GFA of the development. Where the development is a mix of activities, parking for these activities are calculated individually and added to the total GFA shop component.
neighbourhood Shops	
Where the total area is less than 5000m ²	1 space per 25m² GFA
GFA Where the total area is greater than 5000m ² GFA	1 space per 40m² GFA
vehicle sales or hire premises	1 space per 10 vehicles displayed, plus 1 space per 1.5 staff
registered club	
Less than 1,500m ² GFA	1 space, plus 1 space per 15m ² GFA
Greater than 1,500m ² GFA	40 spaces, plus 1 space per 25m² GFA
	And where more than 50 car spaces are required, a 'Courtesy bus' is provided for clientele transfers in lieu of 1 car space in every 20 spaces required.
	Note – See also Hotel/Motel if providing dining or accommodation.
restricted premises	
Where the total area is less than 5000m ² GFA	1 space per 25m ² GFA
Where the total area is greater than 5000m ² GFA	1 space per 40m ² GFA
service station	
Where including a convenience store	1 space per 60m² GFA
Where including a vehicle repair and service facility	1 space per repair bay
Where including vehicle hire	0.25 spaces per vehicle for hire
Where tyre retail and/or repair	1 space per staff, plus 2 spaces per work bay
	Note - Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
sex services premises	1 space per employee plus 1 space per customer as expected at any one time.
veterinary hospitals	1 space per practitioner, plus 0.5 per full-time equivalent employee, plus 3 visitor spaces



Development Type	Car Parking Rate
light industries	1 space per 100m² GFA, plus 1 space per 50m² ancillary office space
passenger transport facilities	2 spaces, plus 1 space per vehicle, plus 0.5 spaces per full-time equivalent employee
education establishments	
Where pre-school with normal school hours	1 space per 4 children, plus 1 space per 1.5 full-time equivalent staff.
Where primary or secondary school	1 space per 1.5 full-time equivalent staff, plus 1 space per 50 students
Above secondary school	1 space per 1.5 full-time equivalent staff, plus 1 space per 8 students
In E1, E2, MU1 zones or as a component of Mixed Use Development	1 space per 2 full-time equivalent staff, plus 1 space per 50 students
hospitals (not including a day surgery facility – refer to Medical Centres)	1 space per 2 beds, plus 1 space per 2 staff, plus Ambulance spaces
Where a nursing home, hospice, or similar long-stay establishment	1 space per 6 nursing home beds, plus 1 space per 2 staff.
	Note – Calculate staff spaces on the maximum number of staff at any one time. Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
medical centres	
Where a health centre or diagnostic technology centre	1 space per on-duty practitioner, plus 1 space per 2 full-time equivalent employees, plus 1.5 spaces per consulting room, plus 1 space for delivery and collection service
Where a day surgery	As above, plus 1 space per 2 operating theatres
Where a collection Centre	1 space, plus 1 space per collection room, plus 1 space for delivery and collection service
Where a laboratory	2 spaces, plus 1 space per 50m² GFA
	Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
health consulting rooms	1 space per on-duty practitioner, plus 1 space per 2 full-time equivalent staff, plus 2 spaces per consulting room.
child care centres	1 car space per 8 children, plus 0.75 spaces per staff member. Parking designated for staff may be provided as single file parking where practical.
community facilities	5 spaces, plus 1 space per 40m² GFA
place of public worship	1 space per 3 seats



Development Type	Car Parking Rate
recreation facilities (indoor)	
Squash	3 spaces per court
Indoor cricket or other court game	20 spaces per pitch or court
Swimming	15 spaces, plus 1 space per 100m² GFA (indoor pool)
Gymnasium	1 space per 10m² GFA
	Notes - Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix. Where a facility combines a number of sporting activities in one area, determine the vehicle parking requirement based on the highest use activity.
exhibition homes	2 spaces per dwelling house used for exhibition



6 DEVELOPMENT DESIGN

6.1 FRONT SETBACKS – SHOPPING CENTRES IN E1 ZONES

This section relates to small stand-alone shopping centres such as Woodrising, Jewells, Bonnells Bay and Wyee Point

Objectives:

- a. To ensure that stand alone shopping centres relate to the street.
- b. To encourage small public outdoor trading areas with good sun aspect and adjacent to a main entry

Controls:

- 1. Development of a shopping centre on land zoned E1 Local Centre must be built up to the primary street boundary, and occupy at least 50% of the frontage.
- 2. Development of a shopping centre on land zoned E1 Local Centre must include retail units that have direct access from the primary street.
- 3. Development must include a cantilever box awning to the full length of the street frontage.
- 4. Development must include an outdoor trading space on the street frontage or a north or east facing frontage that:
 - i. is open to the sky;
 - ii. immediately adjoins a main building entry; and
 - iii. has direct access to at least two retail units in the shopping centre as shown in Figure 7.

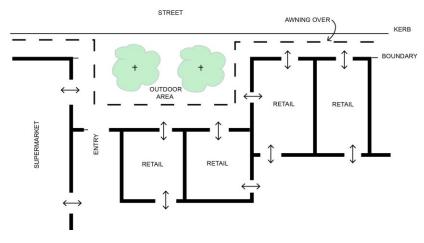


Figure 6 - Outdoor trading area at entry to a stand alone shopping centre

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6.2 FRONT SETBACKS – MAIN STREET SHOPS IN E1 AND E2 ZONES

Objectives:

- a. To maximise building mass and floor space at the street boundary.
- b. To define the spatial character of the street.
- c. To ensure privacy and amenity on upper levels



Controls:

- 1. Development on land zoned E1 Local Centre or E2 Commercial Centre must be built to the primary street boundary for the full width of the building.
- 2. On corner lots, development on land zoned E1 Local Centre or E2 Commercial Centre must be built to the secondary street boundary for the full depth of the building.
- 3. On upper levels, development must be set back at least three metres from the primary street boundary, and for corner lots, development must be set back three metres from the secondary street boundary, as shown in 8.

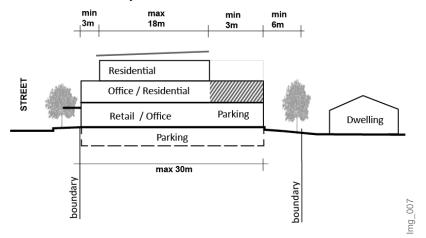


Figure 7 - Building setbacks and building depth for development in E1 and E2 zones

6.3 FRONT SETBACKS - MU1 ZONE

Objective:

- a. To provide for landscape plantings in the front setback area.
- b. To support building articulation at the street frontage.

- 1. Development must comply with the setbacks, as shown in Figure 9.
- 2. A maximum of 40% of the building frontage may encroach up to one metre into the front setback area, provided development retains adequate aerial space and deep soil volume for the planting of shade trees within the front setback area.

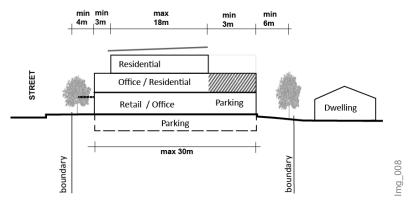


Figure 8 - Setbacks and building depths for development in MU1 zone



6.4 FAÇADE ARTICULATION

Definition: Articulation is the change in the external alignment of walls (or other elements) that expresses the way that the parts of the building fit together.

Objectives:

- a. To define smaller scale shopfronts, windows and doorways by articulation of the building façade.
- b. To provide interest and detail at a pedestrian scale and level.
- c. To avoid potentially unsafe places or opportunities for anti-social behaviour.
- d. To contribute to the existing character or desired future character of the street as described in each Town Centre Area Plan in Part 10.

Controls:

- 1. Articulation of the building façade must define the scale and extent of each shop or office at the street frontage.
- 2. For development built to the street boundary, street level entries must not be recessed more than one metre from the surrounding façade wall.
- 3. For development built to the street boundary, the change in wall alignment at street level for all façade elements, except entries, must not exceed 600mm.
- 4. Upper level balconies may encroach up to 600mm into the front setback area, for a maximum of 50% of the building façade width.
- 5. On upper levels, balconies, entry awnings, sun shading devices, cornices and the like may project up to 600mm into the front setback area.
- 6. Blank façade walls must not exceed five metres in length.

6.5 BUILDING EXTERIORS

Objectives:

- a. To ensure that buildings contribute positively to the streetscape and public domain, by means of high quality architecture, material selection and finishes.
- b. To provide richness of detail and architectural interest at the street level.
- c. To provide appropriate design responses to nearby development, which complement the streetscape and contribute to the efficiency of the building interior.
- d. To ensure that development contributes to the interest, character and sustainability of the street.
- e. To avoid glare or nuisance from highly reflective roofs, walls or windows.
- f. To ensure that materials are chosen based on environmental and life cycle considerations.

- 1. Building design must include:
 - i. Stepped awnings and parapets on sloping street elevations;
 - ii. Vertical articulation of the façade to define retail and office units;
 - iii. Horizontal changes in the façade treatment on upper levels; and
 - Recessed balconies on the first level above the street.
- 2. External walls must be constructed of high quality, durable materials and finishes, with self-cleaning attributes. Curtain wall glazing or other highly reflective finishes are not acceptable.



- 3. Finishes with high maintenance costs, or those susceptible to degradation or corrosion from coastal environments must be avoided.
- 4. External façades must include articulation and/or detail elements to define internal spaces and to provide visual interest.
- 5. The building wall finishes must include at least two surface materials and one other detail material.
- 6. A material sample board and schedule that includes the environmental performance and life expectancy for each material must be submitted for all developments two storeys or more.
- 7. Wall, roof or glazing finishes must not include highly reflective surfaces.

6.6 BUILDING SEPARATION

Objectives:

a. To ensure an appropriate level of amenity for building occupants and neighbouring residents, including solar access, ventilation, outlook view sharing and privacy.

Controls:

 Mixed use development that includes residential levels must meet the building separation requirements for residential flat buildings are contained within <u>SEPP 65 – Design Quality of</u> Residential Flat Buildings, and the accompanying Residential Flat Building Design Code.

6.7 SIDE AND REAR SETBACKS

Objectives:

- a. To support development of a continuous built form at street level in town centres.
- b. To ensure an appropriate level of amenity for building occupants and neighbouring residents, including natural light and ventilation, outlook, view sharing, wind shelter, and privacy.

- 1. Where possible, development must be built to the side boundary for the ground and first level, for a depth of no more than 12 metres measured from the street boundary, as shown in Figure 10.
- 2. Beyond the 12 meters referred to in control 1, development must be set back as follows:
 - i. a minimum of 1.5 metres from a side boundary for the ground and first levels, and
 - ii. 3 metres for all upper levels, beyond the first level.
- 3. Buildings must be set back a minimum of 1.5 metres from rear boundaries for the ground level and three metres for all upper levels.
- 4. Where setback distances are not sufficient for visual privacy, development must provide additional measures, such as privacy screens, to achieve visual privacy for occupants and neighbours.



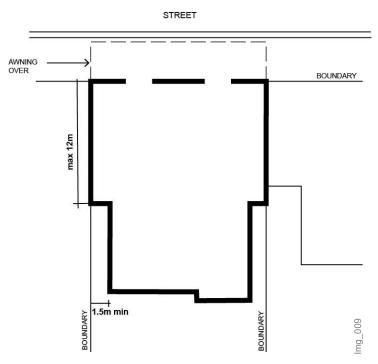


Figure 9 - Building to the side boundary

6.8 MINIMUM LANDSCAPED AREA

Objective:

- a. To provide areas of landscape planting that improve visual amenity, privacy, outlook, views and recreational opportunities for residents and occupants within a development.
- b. To ensure that mixed use commercial and residential development includes areas for planting on podium and roof structures.
- c. To ensure that mixed use commercial and residential development in the MU1 Zone includes areas for the mature growth of trees and large shrubs in deep soil.
- d. To ensure landscape areas are integrated into the design of the development.
- e. To encourage design of landscape planting on podium and roof structures that is suited for communal use by residents.

Controls:

- 1. All development must provide a minimum landscaped area of 20% of the total site area.
- 2. In the MU1 Mixed Use Zone at least 50% of landscaped area must be deep soil planting.
- 3. The deep soil planting area must have a minimum width of three metres to allow for the planting of trees and shrubs that will grow to be mature plants. Optimise the extent of deep soil zones beyond the site boundaries by locating them contiguous with deep soil zones of adjacent properties.
- 4. Where site levels allow, podium planting is to be integrated with surrounding deep soil landscaping and hard paved areas so the podium reads as an extension of the surrounding landscape.
- Structures to support or contain planting must be designed by a suitably qualified engineer.

Note: A minimum width of 2 metres is required for an area to be included in the landscaped area calculations.



6.9 BUILDING DEPTH

Objective:

- a. To allow for natural light and ventilation to residential floor space.
- b. To allow for efficient floor plans for retail and office space.

Controls:

- 1. Residential floor space should not exceed 18 metres in depth, unless all habitable floor space is within nine metres of an adequate natural light source.
- 2. Retail, business, or office floor space should not exceed 30 metres in depth, unless all floor space is within 15 metres of an adequate natural light source.

6.10 MAXIMUM OCCUPIED AREA

Definition:

100% occupied area means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

50% occupied area means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

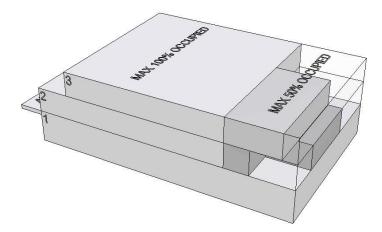


Figure 10 - Example of building mass that achieves 50% occupied area on upper levels at the rear of the development

Objectives

a. To reduce the impact of building mass and bulk on neighbouring development.

Controls

1. The floor space above ground level and within three metres of the rear setback line must not occupy more than 50% of the maximum possible area.

6.11 SETBACKS FROM RESIDENTIAL ZONED LAND

Objectives:

- a. To minimise the impacts of visual bulk and scale, privacy, ventilation, and solar access on the residential amenity of neighbouring dwellings.
- b. To ensure adequate separation distances between buildings.
- c. To encourage deep soil zones to maximum opportunities for landscaping and natural site drainage.

Controls:

 Development adjacent to residential zoned land must comply with the setbacks in Table 8 – Setbacks from residential zoned land.

Note: Additional setbacks requirements for residential flat buildings are contained within <u>SEPP 65 – Design</u> <u>Quality of Residential Flat Buildings</u>, and the accompanying <u>Residential Flat Building Design Code</u>.

Table 8 - Setbacks from residential zoned land

Proposed development	Minimum setback from residential zoned land
Ground level	3.0m
Level 2	6.0m
Level 3	9.0m

6.12 BUILDING HEIGHT

Definition: Building height is defined as the vertical distance between ground level (existing), at any point to the highest point of the building, including plan and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

Objectives:

- a. To allow solar access and restrict overshadowing of adjoining properties.
- b. To ensure that views from neighbouring dwellings are not unduly compromised.
- c. To ensure that the building height does not overwhelm the public street and is compatible with the scale of surrounding developments.

Controls:

1. Development must comply with the maximum height as shown on the height of building map in LMLEP 2014 and the number of storeys as shown in Table 9 – Maximum number of storeys:

Note: Calculation of permissible height has assumed 1.0 m for podium height, ground floor for retail or commercial use with 3.7m floor to floor, second level for commercial or residential use with 3.4m floor to floor, and upper levels for residential use with 3.1m floor to floor, and 1.5m for roof volume. A development proposal may reach the maximum number of storeys without reaching the maximum permissible height.

Table 9 - Maximum number of storeys

Permissible Height (m) – LMLEP 2014	Maximum Number of Storeys
6	1
10	2
13	3
16	4
19	5
22	6



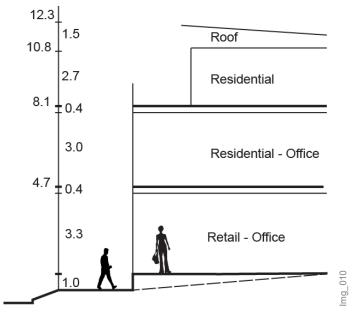


Figure 11 - Example of height allowed for three storey building

6.13 BUILDING HEIGHT AT THE STREET

Objectives:

- a. To maximise the building mass and floor space at the street.
- b. To define and reinforce the spatial character of the street.
- c. To emphasise each corner of a block with additional height and/or building mass.

Controls:

- 1. In the E1 and E2 zone, development must provide at least two storeys in height along the primary street boundary for at least 50% of the frontage(s).
- 2. On corner lots, the maximum height of development must occur at the corner element.

6.14 FLOOR TO CEILING HEIGHTS

Objective:

a. To ensure flexible use of commercial and mixed-use commercial-residential buildings.

- 1. The floor to ceiling heights must comply with Table 10 Minimum floor to ceiling heights.
- 2. Ground floor residential use must not be approved unless the floor to ceiling height is a minimum of three metres.

Table 10 - Minimum floor to ceiling heights

Level	Use	Minimum floor to ceiling height (m)
Ground floor	Commercial	3.3
Upper floors	Commercial	3.0



Upper floors	Residential	2.7
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6.15 **ROOFS**

Objectives:

a. To ensure that roofs and roof structures create minimum visual intrusion.

Controls:

- 1. On sloping sites, roof planes must step with the topography.
- 2. The roof form must be flat or low pitched.
- 3. The roof form should not exceed 1.5 metres in height.
- 4. Air conditioning units, lift motor rooms, and other plant must be fully integrated within the building or roof volume, or within an architectural roof feature and not openly viewed from public place or dwelling.
- 5. Other roof elements such as photovoltaic panels, communication devices, antennae, satellite dishes, chimneys and flues must not interfere with the outlook of viewers in neighbouring properties, or in the public domain.

Note: Council may consider architectural roof features that exceed the permissible height.

6.16 VIEWS

Objectives

- a. To allow for the reasonable sharing of views.
- b. To ensure that existing canopy trees have priority over views.

Controls

- 1. Developments must provide for the reasonable sharing of views in accordance with the Planning Principle established by the Land and Environment Court in *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
- Developments must provide for reasonable public domain views in accordance with the Planning Principle established by the Land and Environment Court in Rose Bay Marina Pty Limited v Woollahra Municipal Council [2013] NSWLEC 1046.
- 3. The desire for views must not outweigh the design for solar access.

6.17 BALCONIES AND COMMUNAL OPEN SPACE

Objectives:

- a. To reinforce the street wall by recessing lower level balconies in the building volume.
- b. To ensure balconies are functional and responsive to the environment thereby promoting the enjoyment of outdoor living for dwellings.
- c. To provide suitable privacy and amenity for users of balconies close to the street.
- d. To ensure that communal open space is consolidated, configured and designed to be useable and attractive.

Controls:

1. Balconies at the first level above the street must be recessed in the street façade wall. Minor projections up to 600mm from the wall face are acceptable.



- 2. Balconies on the uppermost level may occupy roof space if bounded by a parapet at the street frontage.
- 3. Balconies must not be enclosed unless the building is characterised by enclosed balconies.
- 4. Balconies must be provided for all dwellings with a minimum area of 8m² and a width of 2 metres
- 5. Where balconies cannot be provided for all dwellings, a communal open space with a minimum area of 40m² and minimum dimension of 5 metres must be provided.
- 6. Communal open space should be provided principally at ground level, except where no residential uses are required at ground level.

6.18 PLANTING ON STRUCTURES

Objectives:

- a. To enhance the quality and amenity of open space on roof tops, internal courtyards, and over car parking structures.
- b. To encourage the establishment of vegetation in urban areas.
- c. To maintain privacy of neighbouring residents.

Controls:

- 1. The planting of shrubs and trees is encouraged on the top of setback areas, rooftops, and over car parking structures.
- 2. Planter boxes must be located at the perimeter of rooftop gardens to minimise overlooking of neighbouring dwellings.
- 3. Planting containers must allow sufficient depth and volume, growing medium and irrigation to support the mature size of plants.
- 4. All planting areas on structures must be designed by a suitably qualified engineer.

6.19 SOLAR ACCESS AND ORIENTATION

Objectives:

- a. To ensure that reasonable access to sunlight is maintained for occupants of new and existing dwellings in the residential component of mixed-use development.
- b. To ensure solar access is maintained to adjoining open space and public domain areas.
- c. To ensure that the design for solar access is not outweighed by the desire for views.

- 1. Developments must provide for the reasonable access to sunlight in accordance with the Planning Principle established by the Land and Environment Court in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
- 2. At least 50% of the required area of private open space of each dwelling, and at least 50% of the required area of private open space of adjoining dwellings must receive a minimum of three hours of sunlight between 9am and 3pm on June 21. Council may accept a reduction in solar access for the development or adjacent sites if the topography and lot orientation is such that the three-hour standard is considered unreasonable.
- 3. Where adjacent existing developments and their private open space receive less than the minimum requirements, any new development must seek to maintain or enhance the solar access for the adjacent development.



- 4. Dwellings with a single aspect facing south should be minimised. Where they cannot be avoided, applications must demonstrate adequate levels of natural light penetration into habitable areas of the dwelling.
- 5. Where lot orientation allows, developments should be designed so that the long axis of the development is running east-west.
- 6. Building openings on the western elevations should be minimised. Where openings are unavoidable, they should be located higher on the façade and shaded by eaves or landscaping or similar.

Note: The shadow cast by fences, roof overhangs, and changes in level are to be considered and should be indicated on shadow diagrams submitted.

6.20 ENERGY EFFICIENCY AND GENERATION

Objectives

- a. To ensure building orientation maximises solar access and natural cross ventilation.
- b. To ensure energy efficiency is achieved in all developments .
- c. To allow opportunities for future installation of renewable energy generation and low carbon technology.
- d. To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.
- e. To promote increased levels of energy efficiency in large-scale developments.
- f. To ensure that development minimises the use of water and non-renewable resources.

Controls

- 1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
- 2. Designs must consider future potential for renewable energy generation and low carbon technology.
- 3. Commercial developments in excess of 4,000m² gross floor area must achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.
- 4. Commercial developments in excess of 2,000m² gross floor area should achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.

Note: These controls are in addition to the requirements of SEPP BASIX and Section J of the Building Code of Australia. Formal certification of Green Star Rating under the Green Building Council of Australia is not required. Justification that the design would achieve the Green Star rate or an equivalent rating under a different system (e.g. NABERS) is only required.

6.21 VISUAL PRIVACY

Objectives:

a. To ensure that the design of buildings provides an acceptable level of internal and external visual privacy for new and existing dwellings on subject and surrounding land.

Controls:

 Developments must provide for a reasonable level of privacy in accordance with the Planning Principle established by the Land and Environment Court in *Meriton v Sydney City Council* [2004] NSWLEC 313, Super Studio v Waverley Council [2004] NSWLEC 91 and Davies v Penrith City Council [2013] NSWLEC 1141.



- Living areas, habitable rooms and windows of dwellings must be orientated to minimise overlooking. The effective location of doors, windows, and balconies to avoid overlooking is preferred to the use of screening devices, high sills or obscured glass.
- 3. The use of landscape planting must not be solely relied upon to resolve visual privacy.
- 4. The windows of habitable rooms of one dwelling must be located so as to minimise direct or close views (less than 9 metres away) into the windows of habitable rooms of other dwellings.
- 5. Balconies and decks of one dwelling must be located so they minimise direct or close views (less than 9 metres away) to the balconies, decks, or habitable rooms of any adjoining dwelling.
- 6. Planter boxes, louvre screens, pergolas, balcony design, and the like must be used to screen a minimum of 50% of the principal private open space of a lower apartment from overlooking from an upper apartment. Landscape planting must not be relied upon as sole protection against overlooking.

6.22 ACOUSTIC PRIVACY

Objectives

- a. To ensure that noise emissions do not unreasonably impact on the amenity of the area or result in noise intrusion that would be unreasonable for occupants, users or visitors.
- b. To ensure that dwellings have an acceptable level of acoustic privacy.

Controls:

- 1. Developments near existing noise generating activities, such as plant, services, roads and industry, must be designed to mitigate the effect of noise on the occupants of dwellings.
- 2. Where viable, noise sensitive areas such as bedrooms and private open space in mixed use developments must be located away from noise sources.
- 3. Building structures must be designed to minimise the transmission of sound, particularly to sleeping and living areas in adjoining developments.
- 4. Development must demonstrate that dwellings achieve an internal comfort level in accordance with the relevant Australian Standard.
- 5. Private open space including balconies must be designed to achieve comfort levels in accordance with relevant Australian Standards for noise accentuation.
- 6. Developments must provide for a reasonable level of acoustic privacy in accordance with the Planning Principle established by the Land and Environment Court in *Davies v Penrith City Council* [2013] NSWLEC 1141.

6.23 FRONT FENCES

Objectives

- a. To limit the use of front fences.
- b. To ensure that any fence on the front boundary allows clear lines of sight from the street to car parks and building entries.

Controls

- 1. Front fences and front fence returns must not exceed 1.5 metres above the footpath level.
- 2. Front fences must not be solid masonry, sheet metal, solid timber that would block sight lines between the public footpath and development site.
- 3. Front fences must not be positioned forward of the building line.

6.24 SIDE AND REAR FENCES



Objectives

a. To provide privacy and security to residents and tenants on subject and adjoining land.

Controls

- 1. Side and rear boundary fences must not exceed 1.8 metres above the existing ground level.
- 2. For sloping sites, side and rear boundary fences may be regularly stepped provided the average height does not exceed 1.8 metres.
- 3. Where fences are proposed in conjunction with a retaining wall, the combined height of the fence and retaining wall must not exceed 1.8 metres above the existing ground level.
- 4. The design and materials of fencing must complement development and landscaping on site. The use of masonry and lapped and capped timber fencing is encouraged rather than excessive use of colour bond material.

6.25 SAFETY AND SECURITY

Objectives

 To ensure that development mitigates opportunities for crime, and perceived opportunities for crime.

Controls

- 1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:
 - i. Surveillance developments should be designed and managed to maximise the potential for passive surveillance;
 - ii. Access Control developments must be designed in order to make them legible for users without losing the capacity for variety and interest;
 - iii. Territorial Reinforcement developments must be designed to define clearly legitimate boundaries between private, semi private, and public space; and
 - iv. Space Management developments must be designed and detailed to minimise damage, and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building.

Note: Refer to Council's <u>Crime Prevention Through Environmental Design Guideline</u> for further information on CPTED principles.

- 2. A Crime Risk Assessment must be prepared and submitted to Council, where development:
 - i. is listed in Table 11, or
 - ii. is valued at \$5,000,000 or greater, or
 - iii. has a floor area greater than 5000m2, or
 - iv. will be open to the public between the hours of 9pm and 6am..
- 3. The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:
 - i. analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;
 - ii. provide information as to how the design was informed by the CPTED principles;
 - iii. inform the design, construction, or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).



4. Any recommendations or shortfalls identified by a Crime Risk Assessment must be implemented into the design of the development to the satisfaction of the assessing officer.

Note: Refer to Council's <u>Crime Prevention Through Environmental Design Guideline</u> for further information on what needs to be covered in a Crime Risk Assessment.



Table 11 - Uses requiring a crime risk assessment

Pub	Commercial or Retail premises greater than 3000m ²
Child care centres	Mixed use developments or Residential flat buildings comprising more than 20 dwellings
Boarding houses	Educational establishment
Information and education facilities	Medical centres
Entertainment facilities	Function centre
Passenger transport facilities	Community facilities
Service stations	Seniors living developments and hospitals with more than 30 beds
Car parks	Sex services premises
Recreation facilities (indoor)	Registered clubs
Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets (such as McDonalds	Tourist and visitor accommodation
Amusement centres	



7 LANDSCAPE

7.1 LANDSCAPE DESIGN

Objective:

- a. To provide landscape design that complements the nature and scale of the development and contributes to the desired streetscape character.
- b. To provide landscape design that supports a functional, safe, and pleasant pedestrian environment.
- c. To provide landscape design that informs and responds well with the built form.
- d. To ensure that landscaping and architectural features are integrated and complementary.
- e. To design landscape works that are robust and require minimum maintenance.

Controls:

- 1. Appropriate landscape documentation must be prepared and submitted in accordance with Table 12 Landscape Development Type and Requirements.
- 2. Appropriately qualified professionals must prepare landscape documentation. For Category 3 development, a qualified landscape architect should prepare landscape documentation. For Category 2 development, a landscape architect, landscape designer, or horticulturist should prepare landscape documentation.
- 3. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation.

Note: Refer to Council's Landscape Design Guideline for further details and requirements.

Table 12 - Landscape development type and requirements.

Development Type and Category	Landscape D	ocumentation
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
 Category 3: Large Scale development with an estimated value exceeding \$1m, or development of 10 or more dwellings, or designated development, or childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or. development in areas of high scenic quality, adjacent to the lake or Pacific Highway, in or adjacent to an environmental zone, on visually dominant ridgelines, or in a heritage conservation area. 	Yes	Yes
Category 2: Medium Scale industrial development with an estimated value exceeding \$0.25m, or development for 3-9 dwellings, or dual occupancy development; or	No	Yes



Development Type and Category	Landscape Documentation	
	Landscape Concept	Landscape
	Plan at DA stage	Masterplan and
		Report at DA stage
any development in a business zone		
Category 1: Small Scale	No	No
single dwellings, or		
 development that will have little impact on the existing environment 		

Note: If a development type is not detailed in this table or you are unsure of the category and requirements seek written advice from Council. Council's Landscape Architect has the authority to request landscape documentation for any category of development where written advice from Council is not sought.

7.2 STREET TREES AND STREETSCAPE IMPROVEMENTS

Objectives:

- a. To enhance the amenity and desired character of the street.
- b. To provide tree shade and shelter for pedestrians.
- c. To ensure that paving and street furniture is constructed from high quality material that provide consistency and continuity of the streetscape.

Controls:

- 1. Where the footpath is 4.2 metres or wider, development must include supply, installation and establishment of at least one advanced clear trunk tree for every 10 metres of street frontage.
- 2. The root volume for each tree must be a minimum of 8m³ and between 600 and 750mm deep.
- 3. All trees installed must be advanced stock, and at least 100L container size.
- 4. The tree supplier or landscape contractor must provide evidence that all trees generally comply with NATSPEC Guide to Specifying Trees Assessment of Tree Quality.
- 5. All trees installed must be established and maintained for a minimum period of 24 months. Any failed trees must be replaced immediately.
- 6. Where the footpath is less than 4 metres wide, Council may specify tree planting in the parking lane or alternative public space.
- 7. Council may specify details for tree supply and installation, paving, lighting, street furniture and similar landscape improvements.

Note: Refer to Council's <u>Landscape Design Guideline</u> for further details and requirements.

7.3 LANDSCAPE AND TREE PLANTING IN FRONT SETBACK AREAS

Objectives:

- a. To allow for the planting and healthy growth of large canopy trees which enhance amenity and street character.
- b. To provide large-scale planting between the street and parking and service areas, that reduces the visual impact of development.
- c. To maintain sightlines from the street to carparks and entrances.

Controls:

1. Development must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every 20m² of front setback area.



- 2. The root volume for each tree in the front setback area must be a minimum of 8m³ and between 600 and 750mm deep.
- 3. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
- 4. All trees installed must be advanced stock, and at least 45L container size.
- 5. Understorey planting must comprise low growing species less than 900mm in height.

Note: Refer to Council's Landscape Design Guideline for further details and requirements.

7.4 LANDSCAPE AND TREE PLANTING IN CAR PARKS

Objectives:

- a. To provide broad canopy tree cover in car parks for shade and shelter.
- b. To reduce the visual impact of car parking areas.
- c. To maintain safety for car park users and sightlines below the tree canopy.

Controls:

- 1. Development must include supply, installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every six at-grade car parking spaces.
- 2. Each landscape planting area must include at least one medium canopy tree, with suitable ground covers or low shrubs below.
- 3. Each landscape planting area must have a minimum width of two metres.
- 4. The root volume for each tree must be a minimum of 8m³ and between 600 and 750mm deep.
- 5. The root volume must be either existing deep soil or an equivalent volume of gap graded (load bearing) soil with a porous vehicle pavement over, that is installed to manufacturers specifications.
- 6. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
- 7. All trees installed must be advanced stock and at least 75L container size.
- 8. All trees installed must be established and maintained for the life of the development. Any failed trees must be replaced immediately.

Note: Refer to Council's Landscape Design Guideline for further details and requirements.

8 OPERATIONAL REQUIREMENTS

8.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives:

- To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.
- b. To avoid creating construction waste wherever possible.
- c. To enable maximum diversion of demolition and construction waste to reuse, recycling or composting.
- d. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.

Controls:

- 1. Applications must provide a completed Demolition Waste Management Plan (WMP) (where there are demolition works) and a Construction WMP (for all construction works), in accordance with Chapter 2 (for Demolition) and Chapter 3 (for Construction) of the *Lake Macquarie City Council Waste Management Guidelines* unless the development is:
 - i. Advertising structures
 - ii. Building or business identification signs
 - iii. Drainage
 - iv. Earthworks
 - v. Environmental protection works
 - vi. Roads
 - vii. Signs/signage
 - viii. Stormwater management facilities
 - ix. Utility installations
 - Waterbodies (artificial or natural)
 - xi. Watercourses
 - xii. Wetland

These plans must be provided to relevant person involved in the demolition and/or construction, including architects, project managers, builders, contractors or sub-contractors.

- 2. The Demolition WMP must describe how the proposal avoids creating waste and how it maximises the reuse and recycling of demolition and construction wastes.
- 3. The following must be shown on scaled plans to be submitted with the development application for demolition and construction stages;
 - i. waste storage area(s) with bins and equipment shown to scale;
 - ii. waste collection area(s) with bins shown to scale (if different from storage areas);
 - iii. waste carting route(s) from buildings to waste storage area(s)'
 - iv. bin carting route(s) from waste storage to collection point(s) (if different from storage areas);and
 - v. for developments proposing onsite collection, the waste collection vehicle route, swept paths and clearances.



8.2 OPERATIONAL WASTE MANAGEMENT

Objectives

- a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.
- b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
- c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
- d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
- e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
- f. To ensure secure separation of commercial waste from residential waste storage and collection.
- g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
- h. To provide unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

Controls

1. An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in Table 13, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 13 - Uses requiring an Operational Waste Management Plan

- Dwellings
- Commercial and retail, recreation and tourism facilities
- Industrial developments and infrastructure
- Events
- Subdivisions
- 2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
- 3. The development application must demonstrate in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale that the development has sufficient and usable:
 - i. bin type, sizes, numbers and collection frequency; and
 - ii. internal storage within premises; and
 - iii. waste carting route(s) from premises to external waste storage area(s); and
 - iv. external waste storage areas; and
 - v. bin carting route(s) from waste storage to waste collection point(s); and
 - vi. waste collection point(s);
 - vii. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
 - viii. waste management information guide for owners and occupants



- 4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
 - i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
 - ii. commercial and retail premises
 - iii. veterinary hospitals;
 - iv. aged care facilities;
 - v. child care centres;
 - vi. service stations;
 - vii. public and private recreation; and amusement and functions centres and entertainment facilities;
 - viii. vehicle repair workshops and depots;
 - ix. sustainable aquaculture; and
 - x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.
 - to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.
- 5. If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.

8.3 ON-SITE SEWAGE MANAGEMENT

Objectives:

a. To ensure that land is suitable for on-site sewage management, and that on-site sewage management systems are designed to operate sustainably, without resulting in environmental harm or risk to public health.

- 1. On-site sewage management must not be located on sites:
 - Where connection to reticulated sewer is available (this requirement does not apply to grey water treatment systems); or
 - ii. Below the 20-year ARI flood level.
- 2. Where an on-site sewage management system is proposed, an assessment report must be provided to determine land capacity for sewage effluent. An appropriately qualified consultant must carry out the assessment. The site assessment must:
 - i. Be undertaken in accordance with the Environmental Health Protection Guidelines, and Onsite Sewage Management for Single Households;
 - ii. Recommend suitable wastewater treatment technology;
 - iii. Include water balance calculations for determination of the size of the effluent irrigation area based on zero wet weather storage requirements; and
 - iv. For greywater treatment systems, it must be demonstrated that the proposed system complies with the <u>NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises.</u>
- 3. Applications for sewage treatment systems must include:
 - i. Sewerage Site Plan (1:200) indicating the location of the treatment system, disposal area, and buffer distances to boundaries, dwellings, water courses and other significant features on the site: and
 - ii. Detailed plans and sections of the proposed effluent disposal system.



- 4. Other than for greywater treatment systems, surface and subsurface irrigation areas should be made up of irrigation zones that are a minimum 300m² and maximum 500m². Multiple irrigation zones must be dosed via an automatic irrigation controller or indexing valve.
- 5. Pump-out septic systems are only acceptable where on-site disposal of effluent is not feasible, and where access is available for a pump-out service to be rendered safely from a public road at the property boundary.

8.4 LIQUID TRADE WASTE AND CHEMICAL STORAGE

Objectives:

- a. To ensure that liquid trade waste is disposed of appropriately, and does not enter the environment.
- b. To ensure that chemicals associated with a development are stored in a secure manner.

Controls:

- Where development is proposed that will generate liquid trade wastes, evidence of a liquid trade waste agreement with Hunter Water must be provided. On-site treatment and/or disposal of liquid trade waste will not be permitted.
- 2. Developments that generate liquid trade waste must ensure that this waste is adequately contained and bunded to prevent pollution entering the environment.
- 3. Where chemicals are stored within, or as part of development, those chemicals must be adequately contained and bunded to prevent chemicals entering the environment unintentionally in the event of a spill, flooding, or any other event that may lead to the escape of chemicals.
- 4. All containment and bunded areas must drain to the reticulated sewerage system under agreement with Hunter Water. No on-site treatment or disposal of liquid trade waste or spilt chemicals will be permitted.

8.5 EROSION AND SEDIMENT CONTROL

Objectives:

- a. To ensure that development is designed to prevent erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.
- b. To prevent erosion and sediment-laden run-off during site preparation, construction and the ongoing use of land.
- c. To ensure that a number of integrated solutions, using a treatment train approach, are implemented for the control and treatment of erosion and sediment.

Controls:

- 1. For proposals where the area of soil disturbance is less than 250m², appropriate erosion and sediment control measures must be installed and maintained. This will prevent pollutants from entering water courses during construction and until 70% ground cover is attained.
- 2. For proposals where the area of soil disturbance is more than 250m² but less than 2500m², an Erosion and Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
- 3. For proposals where the area of soil disturbance is more than 2500m², a Soil and Water Management Plan, identifying erosion prevention and sediment control measures, must be prepared and lodged, in accordance with Council's <u>Erosion and Sediment Control Guideline</u>.
- 4. The maximum area of soil exposure at any one time must not exceed 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.



8.6 AIR QUALITY

Objectives

- a. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.
- b. To ensure that measures are implemented to maintain air quality.
- c. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants
- d. To ensure that odours and emissions do not have an unreasonable impact on public health.
- e. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

- 1. An air quality report must be prepared by an air quality/odour expert where a proposed development has the potential to adversely affect air quality or to be affected by poor air quality. This report must:
 - i. Consider the information provided on Council's Local Air Quality Maps;
 - ii. Address impacts caused by construction and ongoing operation or occupation of the development;
 - iii. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and
 - iv. Be prepared in accordance with the <u>Approved Methods for the Modelling and Assessment of air pollutants in New South Wales</u> and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

8.7 NOISE AND VIBRATION

Objectives:

a. To minimise the generation of noise and/or vibration, and to mitigate associated adverse impacts on the amenity of neighbouring properties and their occupants, and on occupants of the proposed development.

- 1. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration study must be prepared by a qualified consultant, to Council's satisfaction.
- 2. Noise or vibration generated by development must not exceed the criteria stipulated in the <u>NSW Industrial Noise Policy</u> or the <u>Noise Guide for Local Government</u> at the property boundary of the noise source, or at a receiving lot boundary.
- 3. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*
- 4. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
- 5. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.
- 6. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.



 Council may request at any stage an independent report to confirm that noise emissions are within acceptable limits; such costs are to be borne by the applicant/ operator.