Lake Macquarie Development Control Plan 2014
– Revision 22

Part 3 – Development within Residential Zones
Adopted by Council 10 February 2020
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1 INTRODUCTION

Part 3 - Development within Residential Zones applies to all development in the R1 General Residential, R2 Low Density Residential and R3 Medium Density Residential land use zones.

The R1 General Residential zone only applies to land at North Wallarah, which has a site specific Area Plan. The North Wallarah Area Plan (in Part 12 of this DCP) contains most controls for development in this area. For issues not covered in the North Wallarah Area Plan, the controls of Part 3 – Development within Residential Zones apply to development in the R1 General Residential Zone.

This part is to be read in conjunction with Part 1 (Introduction) of LM 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. These controls can be found within Part 9 - Specific Land Uses 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. They can be found in Parts 10 - Town Centre Area Plans, 11- Heritage Area Plans and 12 - Precinct Area Plans of this DCP.

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 Parts of LM DCP 2014 that contain 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 LM DCP 2014 is structured to promote a development process where the site and context analysis informs the design of the development. Parts 2 to 8 of this DCP generally have 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 group.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Development Design** – provides Council’s detailed design related 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 LMCC is seeking new development to achieve along with providing the intent behind the controls, 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 that LM DCP 2014 seeks to achieve. Where specific controls are not provided, the aims of each part will be used to provide direction for a merits based assessment of a development application.
For more information on how to use this document, refer to 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 this DCP. Where a conflict exists between the controls within this part and a specific land use, the specific land use section prevails.

<table>
<thead>
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<th>Multi Dwelling Housing</th>
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<tr>
<td>Bed and Breakfast / Farm Stay Accommodation</td>
<td>Places of Public Worship</td>
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<td>Dual Occupancy</td>
<td>Residential Flat Buildings</td>
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<td>Dwelling House in Rural and Environmental Zones</td>
<td>Housing on Small and Narrow Lots</td>
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<td>Foreshore and Waterway Development</td>
<td>Secondary Dwelling</td>
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<td>Health Consulting Rooms</td>
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1.3 AIMS FOR DEVELOPMENT IN THE RESIDENTIAL 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 Residential Zones are:

1. To ensure development responds to the characteristics of the site and the qualities of the surrounding urban environment, or the desired future character.
2. To support the principles of Ecologically Sustainable Development.
3. To inspire innovative design for all forms of development within the residential zones.
4. To ensure development does not have adverse impacts on residential amenity.
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 process.

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 2.20.

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

<table>
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<th>Type, category or impact of development:</th>
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<tr>
<td>Any designated, SEPP 14 or SEPP 65 development</td>
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<tr>
<td>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)</td>
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<tr>
<td>Telecommunication towers</td>
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<tr>
<td>Substantial loss of native tree cover (land parcels of one hectare or greater)</td>
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<tr>
<td>Subdivisions (in any zone with 10 or more lots proposed)</td>
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<tr>
<td>Tourist and visitor accommodation</td>
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<tr>
<td>Removal of any tree on the Significant Tree Register</td>
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<tr>
<td>Seniors living developments and hospitals with more than 30 beds</td>
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<tr>
<td>Educational facilities (new facilities in residential zones)</td>
<td></td>
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<tr>
<td>Any commercial buildings being more than 50 metres long on any side, or being over 10 metres high</td>
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<th>Location of development:</th>
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<td>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:</td>
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<td>o height equivalent to 3 or more storeys, or</td>
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<td>o sloping site (10% or more), or</td>
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<tr>
<td>o requiring a combined cut and fill exceeding 2 metres, or</td>
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<tr>
<td>o a development footprint exceeding 2000m².</td>
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<tr>
<td>Any building or structure in a public reserve having a footprint exceeding 100m² or being over 10 metres high.</td>
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<tr>
<td>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)</td>
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<tr>
<td>Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)</td>
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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.
Controls

1. A geotechnical report prepared by a geotechnical engineer must accompany an application for development within T1, T1A, T2, T2A, T3 and T3A areas, and within zones T4, T5 and T6 where specified after a site inspection by Council. Council has discretion whether a geotechnical report is required for the following minor structures and will consider site conditions and the size and construction materials of the proposed structure:
   - Garages,
   - Carports,
   - Decks and the like,
   - Pergolas and the like,
   - Fiberglass swimming pools, and
   - Earthworks including excavation and/or fill not exceeding 1000mm in depth.

2. A geotechnical report prepared by a geotechnical engineer must accompany an application for development within T5 and T6 areas where the proposed building is greater than 2500m² or where the building is three or more storeys high.

3. In areas not covered by Council’s geotechnical area maps and where the slope of the land exceeds 10%, Council may require a Slope Stability Assessment (subject to a site inspection by Council staff).

Note: Where an application relies upon a geotechnical report prepared as part of a previous development approval, a geotechnical engineer must endorse the plans submitted with the application to confirm that the proposed development is consistent with the geotechnical report.

2.4 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.

2.5 CONTAMINATED LAND

Objectives:

a. To ensure that contaminated land is identified through appropriate investigations

b. To ensure that the contaminated site is appropriately and effectively remediated prior to occupation of the land for its intended use.

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 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 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.
3. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.

4. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

**Note:** At discretion, 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 55 and the NSW State Governments ‘Managing Land Contamination: Planning Guidelines’ for more information.

### 2.6 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 adversely affected by Acid Sulfate Soils.

c. To ensure that habitat is not adversely affected by Acid Sulfate Soils.

d. To ensure that built structures and infrastructure are not adversely 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 Manual.*

3. 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 Manual.*

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.

### 2.7 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**

1. 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 dual-occupancy 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 Water Cycle Management Guidelines.

2.8 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as ‘Lots Affected by Catchment Flooding controls’ on Council’s ‘Flood Control Lots’ map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

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.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.9 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 NSW Floodplain Development Manual, 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 must have a finished floor height at least 500mm above the 100 year probable ARI (1% AEP) event. 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.

7. 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 must 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, must 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 *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, 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 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 |
| Medium and High density residential development |                                               |
### Development Type (including extensions) | Minimum Height Requirements
--- | ---
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 system to remove flood waters.
Unsealed electrical installations | 1 in 100 year probable flood level + 500mm freeboard

### Commercial and Retail

<table>
<thead>
<tr>
<th>Development Type (including extensions)</th>
<th>Minimum Height Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal floor height</td>
<td>1 in 100 year probable flood level + 500mm freeboard</td>
</tr>
<tr>
<td>Basement car parking</td>
<td>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.</td>
</tr>
<tr>
<td>Unsealed electrical installations</td>
<td>1 in 100 year probable flood level + 500mm freeboard</td>
</tr>
</tbody>
</table>

### Sensitive Uses (Residential care facilities, hospitals, etc.)

<table>
<thead>
<tr>
<th>Development Type (including extensions)</th>
<th>Minimum Height Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal floor height</td>
<td>Probable maximum flood level</td>
</tr>
<tr>
<td>Unsealed electrical installations</td>
<td>Probable maximum flood level</td>
</tr>
</tbody>
</table>

### 2.9 Lake Flooding and Tidal Inundation (Incorporating Sea Level Rise)

This section applies to land on and near the Lake Macquarie foreshore that is shown as ‘Lots Affected by Lake Flooding controls’ on Council’s ‘Flood Control Lots’ map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

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 2.8 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots shown as ‘Lots Affected by Lake Flooding controls’ on Council’s ‘Flood Control Lots’ map.

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.

2. 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 on the Lot 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, as well as medium and high density housing, and 50 years for other developments.

4. Notwithstanding the provisions for Cut and Fill in section 3.26, 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.

   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 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,

   iii. Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater,

   iv. Where flood proof materials are proposed, evidence of flood-proof characteristics of those materials is to be provided,
v. Where an innovative or 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 justification for an alternative adaptive measure to be implemented.

6. The assessing officer may determine that the development proposal is of a minor nature and there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer still needs to 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.

<table>
<thead>
<tr>
<th>Development Type (including extensions)</th>
<th>Minimum Floor Height Requirements</th>
<th>Actual Minimum Floor Level for Land to which the Lake Flood Study Applies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dwellings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habitable rooms</td>
<td>1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)</td>
<td>2.36 m AHD</td>
</tr>
<tr>
<td>Non-habitable rooms and garages</td>
<td>1 in 20 year probable flood level for 2050</td>
<td>1.61 m AHD</td>
</tr>
<tr>
<td>Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)</td>
<td>No requirement</td>
<td></td>
</tr>
<tr>
<td>Unsealed electrical installations</td>
<td>1 in 100 year probable flood level for 2050 + 500mm freeboard</td>
<td>2.36 m AHD</td>
</tr>
<tr>
<td><strong>Medium and High density residential development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habitable rooms</td>
<td>1 in 100 year probable flood level for 2100 + 500mm freeboard</td>
<td>2.82 m AHD</td>
</tr>
<tr>
<td>Non-habitable rooms and garages</td>
<td>1 in 20 year probable flood level for 2100</td>
<td>2.10 m AHD</td>
</tr>
<tr>
<td>Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)</td>
<td>No requirement</td>
<td></td>
</tr>
<tr>
<td>Basement car parking</td>
<td>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.</td>
<td>2.82 m AHD</td>
</tr>
<tr>
<td>Unsealed electrical installations</td>
<td>1 in 100 year probable flood level for 2100 + 500mm freeboard</td>
<td>2.82 m AHD</td>
</tr>
<tr>
<td><strong>Sensitive Uses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Residential care facilities,</td>
<td>Probable maximum flood level for 2100</td>
<td>3.27 m AHD</td>
</tr>
</tbody>
</table>
### Development Type (including extensions) | Minimum Floor Height Requirements | Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
--- | --- | ---
hospitals, etc.) Unsealed electrical installations | Probable maximum flood level for 2100 | 3.27 m AHD

2.10 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 should be maintained in a natural state including maintaining riparian vegetation and habitat such as fallen debris. Unless extraordinary circumstances exist, filling, redirecting, piping, capping or otherwise modifying natural water systems will not be permitted. Refer to Council’s Water Cycle Management Guidelines for further information.
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 runoff entering constructed drainage lines, natural watercourses, or waterways.
5. Development within a Vegetated Riparian Zone (VRZ) (as shown in Figure 1 – 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

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

\(^1\) 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.

2.11 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 Bushfire Prone Land Map.

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 NSW Planning for Bushfire Protection Guidelines.

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.

### 2.12 FLORA AND FAUNA

**Objectives**

a. To avoid and minimise impacts on native flora and fauna.

b. To protect and enhance significant flora and fauna, vegetation communities, and significant habitat on the site and surrounding development sites.

c. To protect and enhance ecological corridors and increase the connections between habitats.

d. To ensure rehabilitation of degraded areas.

**Controls**

1. 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 Flora and Fauna Survey Guidelines.

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 Council’s Native Vegetation and Corridors Map, 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 (e.g., 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 (i.e., 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 Vegetation Management Plan Guidelines. 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.

### 2.13 PRESERVATION OF TREES AND VEGETATION

**Objectives**

a. To ensure that trees listed on Council’s Significant Tree register are not adversely affected by development.

b. To maintain and enhance the natural bushland or treed 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:
   i. 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 E2 Zone, development consent is not 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 not 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 and 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, septic tank or swimming pool.

4. Development consent is not 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 not required for removal of a tree or native vegetation if:
   i. 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:
   i. 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:
   i. 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 Flora and Fauna Survey Guidelines.

2.14 EUROPEAN HERITAGE

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 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 an item of heritage significance 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.

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.

4. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.

5. Alterations and additions to items of heritage significance must where possible:
   i. 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.

6. Alterations and additions to items of heritage significance must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.

7. 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 the heritage item.

8. Utilitarian structures must be constructed of the same material as the heritage listed building.

Note: Refer to Council’s Heritage Guidelines for further information.
2.15 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 LMLEP 2014 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:
   i. 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

<table>
<thead>
<tr>
<th>Excluded Development</th>
<th>Land on which excluded development may not be carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td>All development on sites having a combined/total area less than 800m²</td>
<td>Within 200m of an AHIMS site</td>
</tr>
<tr>
<td>Exempt development under the SEPP (Exempt and Complying Development Codes) 2008 on sites having a total area</td>
<td>Setback from DP High Water mark does not</td>
</tr>
</tbody>
</table>
greater than 800m² subject to:

- 75% of combined/total site area already disturbed; or
- 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 fulfils 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.

2.16 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.
2.17 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

1. A Social Impact Assessment (SIA) must be prepared in accordance with Council’s Social Impact Assessment Guidelines, 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.

2. 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

<table>
<thead>
<tr>
<th>Uses requiring Social Impact Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Premises (Hotels, Taverns and Bottle Shops)</td>
</tr>
<tr>
<td>Bed and breakfast establishment</td>
</tr>
<tr>
<td>Boarding House</td>
</tr>
</tbody>
</table>
2.18 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.

Note: Refer to Council’s Economic Impact Assessment Guideline that guides economic considerations for specific types of development.

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.

2.19 LOT AMALGAMATION IN THE R3 ZONE

Definition: an isolated lot means an allotment that is bounded on all sides (excluding any road frontage) by existing (or approved) medium to high-density residential or commercial development that will preclude the development of the allotment beyond a dwelling house or dual occupancy dwelling or a two storey commercial 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 encourage the consolidation of development lots to allow efficient use of land.

d. To minimise the number of driveway crossings from the street or lane.
Controls

1. Site amalgamation should not result in an isolated lot this 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 provide for a future extension incorporating the isolated lot or demonstrate that the isolated lot can be developed independently.

3. 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.

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; Karavellas v Sutherland Shire Council [2004] NSWLEC 251; provide for a future extension incorporating the isolated lot, or demonstrate that the isolated lot can be developed independently.

2.20 UTILITIES

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 at the site planning stage.

2. 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.
3 DEVELOPMENT DESIGN

3.1 STREETSCAPE

Objectives

a. To ensure that development responds to the existing, or desired future character of the street.
b. To ensure that buildings address the street and any adjacent public space.
c. To ensure that development provides passive surveillance of the street.
d. To ensure that onsite car parking, garages, and driveways do not dominate the streetscape.
e. To enhance street amenity for pedestrians and make a positive contribution to the streetscape.

Controls

1. The development design must contribute to the streetscape through built form and landscape that respects and responds to the local context, and the desired streetscape of the area.
2. Development design must recognise the street function, by using appropriate species, and locating utilities and services to reflect that function.
3. Development must provide direct and legible pedestrian access from the street to the front entry of each dwelling or building and provide non-discriminatory access.
4. Development design must include windows of habitable rooms that overlook the street.
   Developments on corner sites must overlook both streets.
5. Garages and parking structures must be setback and designed to minimise visual impact when viewed from the street.
6. Retain and incorporate existing buildings and structures that are in sound condition that positively contribute to the streetscape character including heritage items.

3.2 STREET SETBACK

Objectives

a. To ensure that the development complements the existing setback pattern in the locality.
b. To permit flexibility for developments that may be vulnerable to the impacts of flooding.
c. To define the street edge and provide definition between public and private space.
d. To encourage entries, windows, balconies and living areas that overlook the street.

Controls

1. Where there are existing adjoining residential buildings within 40 metres,
   i. the front setback must be consistent with the established setbacks or,
   ii. where adjoining building setbacks vary by more than three metres, the front setback must be the same distance as one or other of the adjoining buildings, or:
   iii. where adjoining buildings vary in setback, development must locate between their setbacks.
2. Where there are no existing (or approved) dwellings within 40 metres of the lot, the front setback must be a minimum of four metres from the front boundary.
3. The secondary street setback for corner allotments must be a minimum of two metres.
4. Entry features and porticos, porches, balconies, decks, verandahs, bay windows, eaves and awnings may encroach up to 1.5 metres into the front setback area. This encroachment must not cover more than 50 percent of building width.
5. Where the site is identified as being vulnerable to flooding or expected sea level rise, street setbacks may be reduced to ensure that developments are adequately setback from the shoreline.
Note: A front setback is measured at 90° from the front lot boundary to the building facade.

Figure 2 - Street Setback where adjoining dwellings are present

Figure 3 - Street Setback – no existing adjoining dwellings
3.3 SIDE SETBACK

Objectives

a. To provide adequate separation between buildings to ensure there is a reasonable level of privacy, solar access and natural ventilation.

b. To provide visual separation between buildings.

c. To ensure greater separation between upper floors of adjacent dwellings.

d. To provide opportunities for the planting of vegetation.

Controls

1. In the R2 and R3 zones, side setbacks must be a minimum of 900mm for building height up to 4.5 metres.

2. In the R2 and R3 zones, side setbacks must be a minimum of 1.5 metres for building height over 4.5 metres but less than three storeys.

3. In the R2 and R3 zones, the side setback must be a minimum of 3 metres for building height of three storeys or more.

Note: The minimum setback of a point on a building is based on the building height at that point.

Note: Any additional controls for specific development types are located in Part 9 (Specific Land Uses).

Note: Awnings and carports may be located within the side setback, as long as they are not located under the main roof of the dwelling.

Note: Larger setbacks may be required on a sloping site as set out in Section 3.26 of this chapter.

Note: Section 3.5 of this chapter contains exceptions to the site boundary setbacks provided above.

Figure 4 - Side setbacks for 2 storey buildings
3.4 REAR SETBACK

Objectives

a. To provide for tree planting in deep soil at the rear of lots.
b. To maintain the existing visual continuity and pattern of buildings and landscape elements.
c. To provide vegetation screening between dwellings.
d. To provide sufficient space for outdoor living areas.

Controls

1. In the R2 and R3 zones, rear setbacks must be a minimum of three metres for buildings up to 4.5 metres in height.
2. In the R2 and R3 zones, rear setbacks must be a minimum of six metres for buildings over 4.5 metres in height, but less than three storeys.
3. In the R2 and R3 zones, the rear setback must be a minimum of nine metres for building height of three storeys or more.

Note: The minimum setback of a point on a building is based on the building height at that point.

Note: Outbuildings, garages, carports, swimming pools, spas, decks, terraces and private open space may be located within the rear setback, as long as they are not located under the main roof of the dwelling.

Note: Any additional controls for specific development types are located in Part 9 (Specific Land Uses).
Figure 6 - Side and Rear Setback – buildings up to 4.5m in height.

Figure 7 - Side and Rear Setback – buildings over 4.5m in height, but less than 3 storeys.
3.5 SITE COVERAGE

Objectives

a. To ensure density of development is in keeping with the local street character.

b. To provide sufficient area around a dwelling for access ways, private open space and landscape planting.

c. To maximise the potential for on-site stormwater retention.

Controls

1. The maximum site coverage, including ancillary development, must not exceed 50%.

Note: Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design must be considered when determining whether structures are included in the site coverage calculations. Note: Any additional controls for specific development types are located in Part 9 (Specific Land Uses).
3.6 BUILDING BULK

Objectives

a. To minimise the visual impact of development when viewed from adjoining properties, the street, waterways and land zoned for public recreation purposes.

b. To ensure future development responds to the desired future character of the area and that its bulk and scale is not excessive.

c. To provide adequate separation between buildings.

Controls

1. Building height, scale, and roof form must relate to the topography and the existing site conditions.

2. Verandas, recesses, surface treatments and variations in material selection and colour must be utilised to reduce building bulk.

3. Unbroken walls in excess of 15 metres in length or four metres in height must be avoided. This can be achieved by varying wall alignments, or incorporating door and window openings, balconies, awnings, architectural detail or changes in materials to provide visual relief.

4. Basement parking structures between the street frontage and the main front elevation must be no more than one metre above ground level at any point.

5. The scale and massing of landscape planting must be adequate to reduce the visual bulk of development.

3.7 GARAGES, CARPORTS, AND SHEDS

Objectives

a. To ensure that garages, sheds and carports do not dominate the streetscape.

b. To integrate the location and design of garages and car parking without compromising street character, landscape or pedestrian amenity and safety.

Controls

1. Garages and sheds must be setback a minimum of one metre from the front building line.

2. Garages, carports, and sheds must be integrated into the design of the building and be of an appropriate size and scale.

3. Laneways must be utilised where available, to provide rear access to car parking.

4. Where garages and carports address the street, openings must not exceed six metres or 50% of the building width, whichever is the lesser.

5. Where additional vehicular storage is required, garages and carports that address the street may be extended lengthwise, as opposed to increasing the width fronting the street.

6. Carports are preferred within the side or rear setbacks, but may be considered in the front setback where:
   i. The carport does not have a trafficable roof;
   ii. The carport is set back a minimum of two metres from the front street boundary;
   iii. The design of the carport complements the dwelling; and
   iv. The carport has minimal impact on the streetscape, does not obscure views from the street to the front elevation of the dwelling, and has at least three open sides.

7. Design of garages, carports, and sheds must contribute in a positive way to the streetscape and character of the locality.
3.8 ROOFS

Objectives
a. To ensure that roof forms are designed to complement the local street character.
b. To ensure that roof height does not unnecessarily increase the bulk of the building.
c. To ensure that roofs are designed to conceal plant and other associated equipment.

Controls
1. The roof form must not be the dominant built element of a dwelling on any elevation.
2. The roof design must be a low angled pitched form where this complements the prevailing built form in the street.
3. For single storey development or where the second floor is fully contained within the roof space the roof must not exceed 5m in height.
4. For all other development the roof must not exceed 3m in height.
5. Air conditioning units, lift motor rooms and other plant must be fully integrated within the building volume, either within the roof volume or within an architectural roof feature.
6. Other roof elements, such as photovoltaic panels, communication devices, antennae, satellite dishes, chimneys and flues must not have an adverse impact on views from neighbouring properties, or from the public domain.

3.9 VIEWS

Objectives
a. To allow for the reasonable sharing of views.
b. To ensure that solar access to each dwelling has priority over access to views.
c. To ensure that retention of existing canopy trees has 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.
2. 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. Dwelling design must address solar access before the access to views.

3.10 SOLAR ACCESS AND ORIENTATION

Objectives
a. To ensure that reasonable access to sunlight is maintained for occupants of new and existing dwellings.
b. To optimise solar access to habitable living areas.
c. To ensure solar access is maintained to adjoining open space and public domain areas.

Controls
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 a minimum, three hours of sunlight must be available between 9am and 3pm on June 21, to at least 50% of:
i. Habitable rooms, and
ii. The required area of private open space of each development, and
iii. The required area of private open space of adjoining developments.

*Note*: 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 of the adjacent buildings.

4. Dwellings with a single aspect facing south should be minimised. Where unavoidable, applications must demonstrate adequate levels of natural light penetration to 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 should be included on any shadow diagrams to allow assessment of the impact of overshadowing.

### 3.11 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.

**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. Development design for detached and semi-detached homes should achieve a higher than compliant SEPP BASIX rating to reduce future energy costs.

4. 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 is only required.
4 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 developments, on the subject and surrounding land.

b. To maximise outlook, views, and natural surveillance without compromising visual privacy.

Controls


2. Living areas, habitable rooms and windows must be orientated to private open space areas on the same lot, or to the street.

3. Doors, windows and balconies must be designed and orientated to avoid overlooking the private open space and habitable rooms of surrounding dwellings. Avoid direct or close views of 9 metres or less. Screening devices, high sills or obscured glass may be used only where other options are not feasible.

4. Planter boxes, louvres, 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 dwelling from overlooking from a higher dwelling. Landscape planting must not be relied upon as sole protection against overlooking.

4.1 ACOUSTIC PRIVACY

Objectives

a. To ensure that noise emissions do not unreasonably affect 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 roads, railways and industry must be designed to mitigate the effect of noise on the occupants.

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 through design measures such as , (e.g. orientation, separation, double glazing, screened balconies etc).

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.

4.2 LANDSCAPED AREA

Objectives

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 enable landscape planting in front setback areas that enhances the streetscape.
c. To enable landscape planting in rear setback areas that enhances residential amenity.
d. To ensure landscape areas are integrated into the design of the development.
e. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.
f. To conserve significant vegetation, topographical features and fauna habitat.

**Controls**

1. For lots less than 600m$^2$, the minimum landscaped area must be 20% of the total lot area.
2. For lots between 600m$^2$ and 900m$^2$, the landscaped area must be at least 25% of the total lot area.
3. For lots greater than 900m$^2$, the landscaped area must be at least 35% of the total lot area.
4. For lots greater than 1500m$^2$, the landscaped area must be at least 45% of the total lot area.
5. Proposals must retain significant natural features on the site, including mature trees, rocky outcrops and other major vegetation where practical.
6. At least one landscaped area capable of supporting a mature tree must be located adjacent to the rear boundary.

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

### 4.3 LANDSCAPE DESIGN

**Objectives**

a. To provide site landscaping that complements the nature and scale of the development and contributes to the desired streetscape character.

b. To enhance the privacy and amenity of new and existing dwellings.

c. To provide shade and screening to car parking areas.

d. To maintain clear lines of site to entry points and access ways.

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 3 – 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 6 - Landscape development type and requirements

<table>
<thead>
<tr>
<th>Development Type and Category</th>
<th>Landscape Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Landscape Concept Plan at DA stage</td>
</tr>
<tr>
<td><strong>Category 3: Large Scale</strong></td>
<td></td>
</tr>
<tr>
<td>• Development with an estimated value exceeding $1m, or</td>
<td>Yes</td>
</tr>
<tr>
<td>• Development of 10 or more dwellings, or</td>
<td></td>
</tr>
<tr>
<td>• Designated development, or</td>
<td></td>
</tr>
<tr>
<td>• Childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or.</td>
<td></td>
</tr>
<tr>
<td>• 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.</td>
<td></td>
</tr>
<tr>
<td><strong>Category 2: Medium Scale</strong></td>
<td>No</td>
</tr>
<tr>
<td>• development for 3-9 dwellings, or</td>
<td></td>
</tr>
<tr>
<td>• dual occupancy development</td>
<td></td>
</tr>
<tr>
<td><strong>Category 1 Small Scale</strong></td>
<td>No</td>
</tr>
<tr>
<td>• single dwellings, or</td>
<td></td>
</tr>
<tr>
<td>• development that will have little impact on the existing environment</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** If a development type is not detailed in this table or you are unsure of the category and requirements seek advice from Council.

**Note:** See Part 9 Specific Land Uses for landscape requirements related to Residential Flat Buildings and Multi-Dwelling Housing.

### 4.4 PRINCIPAL PRIVATE OPEN SPACE

#### Objectives

a. To ensure that dwellings are provided with functional, well located areas of private open space.

b. To ensure that private open space is integrated with, and is directly accessible from the living areas of a dwelling.

c. To ensure that private open space receives sufficient solar access and privacy.

d. To minimise adverse impacts on the private outdoor space of adjoining dwellings.

#### Controls

1. Residential developments must include private open space for each dwelling that:
   i. has a minimum area of 24m² and
   ii. has a minimum dimension of four metres, and
   iii. has a grade less than 1:50.

2. Private open space must be accessible from, and adjacent to a habitable room other than a bedroom.
3. Private open space within the front setback may only be considered on local roads and where it cannot be accommodated anywhere else as demonstrated by the site analysis.

4. Private open space located within the front setback area must:
   i. maintain clear, direct access to dwelling entry when viewed from the street, and
   ii. not cover more than 50% of the building frontage, and
   iii. have a minimum of 3 hours of sun access between 9 am and 3 pm, and
   iv. not have a solid fence that is more than 1 metres high or an open fence that is more than 1.5 metres high, and
   v. incorporate landscaping in front of fence for privacy and streetscape, and
   vi. maintain streetscape surveillance.

Figure 9 - Good and Poor Examples of Private Open Space within the Front Setback
4.5 FRONT FENCES

Objectives

a. To ensure that fencing, terracing, and retaining walls are compatible with the existing streetscape character and do not dominate the street.
b. To provide privacy and security for residents, by delineating between public space and private property.
c. To allow passive surveillance of the street.

Controls

1. Front fences and front fence returns must not exceed 1.2 metres above the existing ground level or the footpath level (whichever is higher) when measured from the street side of the fence.
2. Front and side return fences must not be lapped or capped timber, or powder coated metal (Colorbond®) fencing.
3. Front fences must be designed to allow a direct line of sight from windows and entries to the street.
4. Retaining walls, if required, must be integrated in the design of the fence.
5. Where it can be demonstrated that a solid fence is consistent with the existing streetscape and is required to mitigate traffic noise, a fence up to 1.8 metres in height may be permitted when fronting arterial roads or highways.
6. On corner blocks, both the front fence and the secondary frontage fence, including fence returns, must not exceed 1.2 metres above the existing ground level or the footpath level (whichever is higher) when measured from the street side of the fence. The fence return on the secondary frontage shall extend to the rear building line.

Note: A front fence return is that part of the fence located between the street boundary and the building alignment.

4.6 SIDE AND REAR FENCES

Objectives

a. To provide privacy and security for residents.
b. To limit the visual impact of side and rear fences.

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.
4.7 TRAFFIC AND TRANSPORT

Objectives

a. To provide effective, efficient and safe movement within urban areas for pedestrians, cyclists, and motor vehicles.

b. To ensure that vehicles can enter and leave a development site in a forward direction, unless otherwise justified to Council’s satisfaction.

c. To minimise vehicle crossing points along pedestrian footpaths.

Controls

1. Vehicular access points to a site must be kept to a minimum. A single access point is preferred for most developments.

2. Access directly from arterial and sub-arterial roads must be minimised to maintain the efficient flow of traffic on those roads. Alternative access is encouraged where available.

3. Driveways must be designed and constructed to provide adequate sightlines.

4. Driveways and internal road circulation must be designed to cater for safe manoeuvring and queuing so that traffic operations on external roads are not disturbed.

5. Driveways are of a type, construction and width suitable to the proposed development.

6. A Traffic Impact Statement must be prepared and submitted where:
   i. More than 20 dwellings are proposed; or
   ii. More than 1000m² Gross Floor Area is proposed; or
   iii. Direct access is required for an arterial or sub-arterial road; or
   iv. The main entry driveway is within 50 metres of a signalised intersection.

Note: Refer to Council’s Traffic Impact Statement and Vehicle Access Guideline for further details and requirements.
4.8 DESIGN OF PARKING AND SERVICE AREAS

Objectives:

a. To ensure that on-site car parking and driveways do not dominate or detract from the appearance of the development or the local streetscape.

b. To maximise pedestrian safety and amenity.

c. 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.

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

Controls:

1. On-site car parking and servicing facilities must be located at the rear of development.

2. Car parking and driveway areas must be located to minimise disruption to pedestrian movement, safety and amenity on the public footpath.

3. Car park design must include direct, safe, and well marked pedestrian routes from the car park to building entries.

4. Car park design must not result in dead-end aisles.

5. Parking aisles must be orientated at right angles to the main building frontage.

6. Car parks must be screened from the street with landscape planting or with high quality façade screening that allows natural lighting and ventilation.

7. Servicing facilities must be located and designed to protect the amenity of residents.

8. Stack parking may be permitted only where two spaces are designated for a single dwelling.

9. Permanent sub-surface support and retention structures must be set back a minimum of 900mm from adjacent property boundaries.

10. The design of parking areas must comply with AS2890 Parking Facilities.

4.9 DESIGN OF DRIVEWAYS

Objectives

a. To minimise the visual impact of driveways on the streetscape.

b. To ensure that driveways are designed to cater for the demands of the development.

Controls

1. For Dwelling House and Dual Occupancies (attached and detached), only one driveway access is permitted per lot.

2. For Dwelling House and Dual Occupancies (attached and detached), driveway crossings must have a maximum width of four metres at the apron and five metres at the lot boundary. Consideration may be given to wider driveways where it is demonstrated that additional width is required for safety reasons and materials minimise impact.

3. Driveways must be offset a minimum of one metre from any side boundary for their full length.

4. Driveways must not have a longitudinal grade exceeding 20% (1:5).

5. Stacked parking in front of a garage may be permitted where all parking is within the property boundary and located on the driveway.

6. Battle-axe carriages must have a minimum width of three metres.

7. Driveways for battle-axe allotments must be designed to ensure that vehicles can enter and leave the lot in a forward direction.

8. Landscaping should minimise the impact of the driveway on the streetscape without risk to safety.
4.10 MOTOR BIKE PARKING AND BICYCLE STORAGE

Objectives:

a. To provide convenient and safe access, movement and parking of motor bikes and bicycles for residential flat buildings.

Controls:

1. Development of a residential flat building must provide one motorbike parking space for each 20 car parking spaces (as required in Table 6: Parking Rates).
2. Development design should incorporate bicycle storage areas.

4.11 CAR PARKING RATES

Objectives

a. To ensure that the number of car parking spaces is sufficient to support the intended use.
b. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.

Controls

1. The number of car parking spaces provided must be consistent with the specifications of the Table 6: Car Parking Rates.
2. Where vehicle parking requirements are not specified in Table 6, justification must be provided that supports the proposed vehicle parking provisions, such as:
   i. Survey data from comparable facilities; and
   ii. Survey data from existing operations where expansion is proposed.
3. 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.
4. Where the proposed number of car parking spaces is less than or greater than as specified in Table 6, justification must be provided to support a variation, such as:
   i. Survey data from comparable facilities;
   ii. Survey data from existing operations where expansion is proposed; or
   iii. A proposal for dual use of parking spaces.
5. A reduction to the car parking rate must not exceed 20% or 20 spaces whichever is the lesser.

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 Residential Zones

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Car Parking Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attached dwellings</td>
<td>One undercover space and 1 space as single file parking per dwelling</td>
</tr>
<tr>
<td>Boarding houses and group homes</td>
<td>One space plus 0.75 spaces per bed, where located on an Arterial or Sub Arterial Road. Or One space plus 1 space per bed where located on roads other than an Arterial or Sub Arterial Road.</td>
</tr>
<tr>
<td>Disability parking rate</td>
<td>One 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. All disabled parking must comply with the relevant Australian Standard.</td>
</tr>
<tr>
<td>Dual occupancies – attached or detached</td>
<td>One undercover space and 1 space as single file parking per dwelling of the dual occupancy.</td>
</tr>
<tr>
<td>Dwelling house</td>
<td>One undercover space and 1 space as single file parking.</td>
</tr>
<tr>
<td>Residential flat buildings, multi dwelling housing and shop top housing.</td>
<td>No. of Bedrooms</td>
</tr>
<tr>
<td>1 bedroom or studio apartment</td>
<td>0.75</td>
</tr>
<tr>
<td>2 bedrooms</td>
<td>1.0</td>
</tr>
<tr>
<td>3 bedrooms</td>
<td>1.5</td>
</tr>
<tr>
<td>Plus visitor parking per dwelling – residential flat buildings</td>
<td>0.25</td>
</tr>
<tr>
<td>Multi dwelling housing</td>
<td>0.5</td>
</tr>
<tr>
<td>Single file parking may be used where two spaces are provided for one dwelling.</td>
<td></td>
</tr>
<tr>
<td>Semi-detached dwellings</td>
<td>One undercover space and 1 space as single file parking per dwelling.</td>
</tr>
<tr>
<td>Seniors housing</td>
<td>Car parking provision is in accordance with SEPP (Senior Living) requirements.</td>
</tr>
<tr>
<td>Home business or home industry</td>
<td>As per Dwelling - i.e. 1 undercover space and 1 space as single file parking per dwelling. As per dwelling, plus 2 spaces</td>
</tr>
<tr>
<td>Backpackers’ accommodation</td>
<td>One space per 100m² GFA and parking for a mini-bus</td>
</tr>
<tr>
<td>Bed and breakfast establishment</td>
<td>As per dwelling house, plus 1 space per guestroom. May be provided as single file parking where guest parking is provided behind dwelling parking.</td>
</tr>
<tr>
<td>Hotel or motel accommodation</td>
<td>One space per 25m² of GFA</td>
</tr>
<tr>
<td>May include dining facilities, outdoor eating areas or beer gardens. Where providing accommodation</td>
<td>One space per short-stay room, plus 1 space per 2 staff. One space per 5m² of GFA. Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on activity mix.</td>
</tr>
<tr>
<td>Serviced apartments</td>
<td>One space per unit, plus 1 space per 50m² GFA for any dining room provided as part of the development</td>
</tr>
<tr>
<td>Eco-tourist facilities (not including a Motel or Hotel)</td>
<td>One space per unit, plus 1 space per 50m² GFA for any dining room provided as part of the development</td>
</tr>
</tbody>
</table>
### Development Type

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Car Parking Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where Backpackers Hostel</td>
<td>One space per 100m² GFA and parking for a mini-bus</td>
</tr>
<tr>
<td><strong>Business premises</strong></td>
<td>One space per 40m² 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</td>
</tr>
<tr>
<td><strong>Funeral homes</strong></td>
<td>One space per employee plus 1 space per 3 seats in chapel(s)</td>
</tr>
<tr>
<td><strong>Restaurant or café</strong></td>
<td></td>
</tr>
<tr>
<td>Where the total area is less than 5000m² GFA</td>
<td>1 space per 25m² GFA</td>
</tr>
<tr>
<td>Where the total area is greater than 5000m² GFA</td>
<td>1 space per 40m² GFA</td>
</tr>
<tr>
<td>Note – See Australian Standard for Fast Food takeaway vehicle queuing lengths.</td>
<td></td>
</tr>
<tr>
<td><strong>Neighbourhood Shops</strong></td>
<td>One space per 25m² GFA</td>
</tr>
<tr>
<td>Where the total area is greater than 5000m² GFA</td>
<td>One space per 40m² GFA</td>
</tr>
<tr>
<td><strong>Education establishments</strong></td>
<td>One space per 4 children, plus 1 space per 1.5 full-time equivalent staff.</td>
</tr>
<tr>
<td>Where pre-school with normal school Hours</td>
<td>One space per 1.5 full-time equivalent staff, plus 1 space per 50 students</td>
</tr>
<tr>
<td>Where primary or secondary school</td>
<td>One space per 1.5 full-time equivalent staff, plus 1 space per 8 students</td>
</tr>
<tr>
<td>Above secondary school</td>
<td></td>
</tr>
<tr>
<td><strong>Hospitals (not including a day surgery facility – refer to Medical Centres)</strong></td>
<td>One space per 2 beds, plus 1 space per 2 staff, plus Ambulance spaces</td>
</tr>
<tr>
<td>Where a nursing home, hospice, or similar long-stay establishment</td>
<td>One space per 6 nursing home beds, plus 1 space per 2 staff.</td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td><strong>Medical centres</strong></td>
<td>One 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 As above, plus 1 space per 2 operating theatres</td>
</tr>
<tr>
<td>Where a health centre or diagnostic technology centre</td>
<td>One space, plus 1 space per collection room, plus 1 space for delivery and collection service</td>
</tr>
<tr>
<td>Where a day surgery</td>
<td>Two spaces, plus 1 space per 50m² GFA</td>
</tr>
<tr>
<td>Where a collection Centre</td>
<td>Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix</td>
</tr>
<tr>
<td>Where a laboratory</td>
<td></td>
</tr>
<tr>
<td><strong>Health consulting rooms</strong></td>
<td>One space per on-duty practitioner, plus 1 space per 2 full-time equivalent staff, plus 2 spaces per consulting room.</td>
</tr>
<tr>
<td><strong>Child care centres</strong></td>
<td>One 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.</td>
</tr>
<tr>
<td><strong>Community facilities</strong></td>
<td>Five spaces, plus 1 space per 40m² GFA</td>
</tr>
</tbody>
</table>
### Development within Residential Zones

#### Part 3

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Car Parking Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of Public Worship</td>
<td>One space per 3 seats</td>
</tr>
<tr>
<td>Recreation facilities (outdoor)</td>
<td></td>
</tr>
<tr>
<td>Football</td>
<td>Thirty spaces per field, plus 1 space per 3 seats, where spectator seating is provided.</td>
</tr>
<tr>
<td>Lawn bowls</td>
<td>Thirty spaces for the first green then 15 spaces for each additional green</td>
</tr>
<tr>
<td>Swimming</td>
<td>Fifteen spaces, plus 1 space per 100m² of site area</td>
</tr>
<tr>
<td>Tennis</td>
<td>Three spaces per court</td>
</tr>
<tr>
<td>Exhibition homes</td>
<td>Two spaces per dwelling house used for exhibition</td>
</tr>
</tbody>
</table>

#### 4.12 NON-DISCRIMINATORY ACCESS

**Objectives**

a. To ensure non-discriminatory access so that development accommodates all people.

**Controls**

1. 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/use.

2. Where development is listed in Table 7, a Disability Access Audit must be prepared in accordance with Council’s Non-discriminatory Access Guideline and submitted to Council. The Disability Access Audit must be prepared by an accredited access consultant.

**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 8 - Development types requiring a Disability Access Audit

<table>
<thead>
<tr>
<th>Amusement centres with a total floor area of 500m² or more</th>
<th>Markets with a total floor area of 500m² or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backpackers’ accommodation with 20 or more bedrooms</td>
<td>Manufactured home estate/caravan park</td>
</tr>
<tr>
<td>Boarding House with more than 20 rooms</td>
<td>Medical centre</td>
</tr>
<tr>
<td>Business/commercial premises with a total floor area of 500m² or more</td>
<td>Mixed use development with a total floor area of 500m² or more</td>
</tr>
<tr>
<td>Child care centre</td>
<td>Multi-dwelling housing with 10 or more dwellings</td>
</tr>
<tr>
<td>Community facility</td>
<td>Nightclub</td>
</tr>
<tr>
<td>Educational establishment</td>
<td>Passenger transport facilities</td>
</tr>
<tr>
<td>Entertainment facility</td>
<td>Place of public worship</td>
</tr>
<tr>
<td>Function centre</td>
<td>Recreation facilities – indoor, outdoor and major</td>
</tr>
<tr>
<td>Group home</td>
<td>Registered club</td>
</tr>
<tr>
<td>Health consulting rooms with four or more consulting rooms</td>
<td>Retail premises with a total floor area of 500m² or more</td>
</tr>
<tr>
<td>Health services facilities</td>
<td>Residential care facility</td>
</tr>
<tr>
<td>Hospital</td>
<td>Residential flat building with 10 units or more</td>
</tr>
<tr>
<td>Hotel or motel accommodation</td>
<td>Seniors housing</td>
</tr>
<tr>
<td>Information and education facility</td>
<td>Tourist accommodation with 20 units or more</td>
</tr>
<tr>
<td>Licensed premises</td>
<td>Change of Use</td>
</tr>
</tbody>
</table>
4.13 SAFETY AND SECURITY

Objectives

a. To assist the development in mitigating opportunities for criminal activity, behaviour, and perceived opportunities for crime.

b. To ensure a development contributes to the liveability, safety and security of its users.

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 must be designed and managed to maximise the potential for passive surveillance;
   ii. Access Control – Developments must be designed so as 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 Crime Prevention Through Environmental Design Guideline for further information on CPTED principles.

2. Where development:
   i. is listed in Table 8, or
   ii. is valued at $5,000,000 or more, or
   iii. has a gross floor area greater than 5,000m², or
   iv. will be open to the public between the hours of 9pm and 6am, a Crime Risk Assessment must be prepared and submitted to Council.

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; and
   iii. Inform the design, construction or future management practises of the development (e.g. building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).

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

Note: Refer to Council’s Crime Prevention Through Environmental Design Guideline for further information on what needs to be covered in a Crime Risk Assessment.
Table 9 - Development types requiring a Crime Risk Assessment

<table>
<thead>
<tr>
<th>Child care centres</th>
<th>Community facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health services facilities</td>
<td>Seniors housing developments and hospitals with more than 30 beds</td>
</tr>
<tr>
<td>Group homes</td>
<td>Recreation areas</td>
</tr>
<tr>
<td>Health services facilities</td>
<td>Hostels</td>
</tr>
<tr>
<td>Residential development comprising more than 20 dwellings</td>
<td>Boarding houses</td>
</tr>
<tr>
<td>Educational establishments</td>
<td>Recreation facilities (indoor)</td>
</tr>
<tr>
<td>Place of public worship</td>
<td>Car Parking Station</td>
</tr>
</tbody>
</table>

4.14 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.
f. To minimise the cost of future maintenance works required for retaining structures.
g. To maintain amenity and privacy for residents of the new dwelling and adjoining dwellings.
h. To ensure that fences are constructed on existing ground.

**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. All calculations for proposed fill must include existing fill material on the site.
3. Cut and fill associated with development must comply with the provisions in Table 9 and Figure 11 below.
4. Where the ground level change across the proposed footprint of a dwelling, measured in any direction, exceeds 2m, the dwelling design must include one or more of the following:
   i. split level design
   ii. 2 storey design with the garage below habitable floorspace
   iii. drop edge beam or suspended slab on a footing wall
   iv. pier and beam construction
5. Fences on common boundaries must be built at existing ground level.
6. A retaining wall within the front setback area or that faces the secondary street on a corner site must be constructed of masonry materials.
7. The face of a retaining wall must be a minimum of 1m from a common boundary.
8. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
9. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
10. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
11. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

*Note*: If an application seeks to replace an existing retaining wall, consideration must be given to whether it is possible to achieve the above controls on the particular site.

**Table 10 - Requirements for cut and fill works**

<table>
<thead>
<tr>
<th>Location</th>
<th>Type of Works</th>
<th>Requirement</th>
<th>Other Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>within building footprint</td>
<td>cut and/or fill - retained</td>
<td>c =3 m max</td>
<td></td>
</tr>
<tr>
<td>outside building footprint</td>
<td>cut and/or fill - retained</td>
<td>1.0m max</td>
<td></td>
</tr>
<tr>
<td>near common boundary</td>
<td>cut and/or fill - retained</td>
<td>a =1m min*</td>
<td>landscape planting to area between boundary fence and retaining wall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b =1m max</td>
<td></td>
</tr>
<tr>
<td>near common boundary</td>
<td>fill – unretained batter</td>
<td>e =400 min</td>
<td>side and rear fences built on existing ground level</td>
</tr>
<tr>
<td>remainder of site</td>
<td>cut and/or fill - retained</td>
<td>1.0m max</td>
<td>retaining walls on or near a front boundary do not exceed 1.0m.</td>
</tr>
<tr>
<td>all of site</td>
<td>fill – unretained batter</td>
<td>d = 600mm max</td>
<td>batter slope not to exceed 1:4</td>
</tr>
</tbody>
</table>

*Note*: distance to a boundary is measured from the face of the retaining wall.

**Figure 11 - Cut and fill for a dwelling**
5 OPERATIONAL REQUIREMENTS

5.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives

a. 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 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. Permitted without consent in this zone
   ii. Drainage
   iii. Earthworks
   iv. Roads
   v. Signs
   vi. Stormwater management facilities
   vii. Utility installations

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

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 path and clearances.

5.2 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 11, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 11 - Uses requiring an Operational Waste Management Plan

<table>
<thead>
<tr>
<th>Uses</th>
</tr>
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<tr>
<td>Dwellings</td>
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<tr>
<td>Commercial and retail, recreation and tourism facilities</td>
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<td>Industrial developments and infrastructure</td>
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<td>Events</td>
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<td>Subdivisions</td>
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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;
v. service stations;
vi. public and private recreation; and amusement and functions centres and entertainment facilities;
vii. vehicle repair workshops and depots;
viii. sustainable aquaculture; and
ix. light, heavy and general industries, hazardous, offensive and high technology industries;

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.

5.3 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.

Controls

1. On-site sewage management must not be located on sites:
   i. Where connection to reticulated sewer is available (this requirement does not apply to greywater 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. The assessment must be carried out by an appropriately qualified consultant. The site assessment must:
   i. Be undertaken in accordance with the Environmental Health Protection Guidelines, and On-site 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 NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises.

3. Applications for sewage treatment systems must include a:
   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 must be made up of irrigation zones that are a minimum 300m$^2$ and maximum 500m$^2$. 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.
5.4 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

1. 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.

5.5 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 Erosion and Sediment Control Guideline.
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.

5.6 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. 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 Approved Methods for the Modelling and Assessment of air pollutants in New South Wales 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.

### 5.7 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.

**Controls**

7. 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.
8. Noise or vibration generated by development must not exceed the criteria stipulated in the NSW Industrial Noise Policy or the Noise Guide for Local Government at the property boundary of the noise source, or at a receiving lot boundary.
9. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the Noise Guide for Local Government.
10. During construction, the operating noise level of machinery, plant and equipment must comply with the Noise Guide for Local Government.
11. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.
12. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.
13. 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.