



General

Part 1

Part 1 General

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1A Introduction

1A.1 Preamble

This Development Control Plan (DCP) applies to all land within the Hornsby Local Government Area. The plan is called the *Hornsby Development Control Plan 2013*.

1A.2 Commencement Date

This DCP was adopted by Council on 19 December 2012 and came into effect on 11 October 2013. It is subject to amendments, which are listed in the Schedule of Amendments at the end of this part.

1A.3 Objectives

The objectives of this DCP are to:

- provide a comprehensive document that provides a framework for development of land in the Hornsby Local Government Area,
- clearly set out the processes, procedures and responsibilities for the involvement of the community and key stakeholders in the development of land,
- promote development that is consistent with Council's vision of creating a living environment,
- protect and enhance the natural and built environment, and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from development,
- encourage high quality development that contributes to the existing or desired future character of the area, with particular emphasis on the integration of buildings with a landscaped setting,
- protect and enhance the public domain,
- minimise risk to the community, and
- ensure that development incorporates the principles of Ecologically Sustainable Development (ESD).

Note:

For further information on Council's vision of creating a living environment, refer to *Hornsby Shire 2020 - Framework for a Sustainable Future* available on Council's website hornsby.nsw.gov.au

1A.4 Strategic Context

- a. The planning controls promote development that is consistent with Council's vision of '*creating a living environment*' for a sustainable Hornsby Shire. The planning controls within this DCP are informed by a number of studies and adopted strategies including the following:

[Hornsby Shire Biodiversity Conservation Strategy \(2006\)](#)

- b. The objectives of the Hornsby Shire Biodiversity Conservation Strategy include to achieve an improvement in the quality and extent of existing indigenous vegetation in Hornsby Shire, maintain biodiversity on private properties, and to conserve and recreate biodiversity connectivity across fragmented landscapes.

[Hornsby Shire Sustainable Total Water Cycle Management Strategy \(2005\)](#)

- c. The Hornsby Shire Sustainable Total Water Cycle Management Strategy promotes the implementation of sustainable total water cycle management. Sustainable water practices include:
 - maintenance of natural water courses,
 - adoption of current best management practices to reduce the quantity and improve the quality of runoff, and
 - minimised use of reticulated water through conservation practices and reuse of stormwater.

[Hornsby Integrated Land Use and Transport Strategy \(ILUTS\) \(2005\)](#)

- d. An objective of ILUTS is to reduce car travel by promoting other modes of transport. This includes promoting land use patterns and development controls that support the development of public transport services and the use of sustainable alternatives.

[Ku-ring-gai and Hornsby Subregional Employment Study \(2008\)](#)

- e. The objectives of the Ku-ring-gai and Hornsby Subregional Employment Study include to develop planning controls for employment lands consistent with the current strategic planning guidance. This includes to ensure that the distribution of additional jobs supports existing centres, and that employment lands are accessible to residents and workers and are linked into the transport network.

Hornsby Shire Housing Strategy (2010)

- f. The Hornsby Shire Housing Strategy identifies areas suitable for the provision of additional housing to assist meet Council's housing obligations into the future. The Strategy has been prepared in response to the State Government's Metropolitan Strategy and draft North Subregional Strategy.
- g. A concentrated housing model has been adopted, with housing located in planned precincts rather than dispersed throughout urban areas. The housing form identified includes some mixed use commercial precincts and consists predominantly of 5 storey apartment buildings, along with a mix of townhouses, 3 storey walk-up flats, and 8-10 storey apartments. The Housing Strategy precincts are identified in Figure 3(a) of this DCP.

Hornsby Shire River Settlements and Foreshores Review (2007)

- h. The Hornsby Shire River Settlements and Foreshores Review investigated the suitability of the existing planning controls for the River Settlement areas having regard to emerging issues and current best practices.

Hornsby Shire Rural Lands Study (1995) and Hornsby Shire Rural Lands Planning Provisions Review (2009)

- i. The Hornsby Shire Rural Lands Study investigates the role of rural lands within the Local Government Area and provides controls for development to improve the environment. Development should aim to protect rural activities, resource lands, rural landscapes and biodiversity. To conserve the desirable values of the rural lands, the Study (1995) identified the qualities which give the areas its scenic and rural character.

Epping Town Centre Precinct and the Urban Activation Precinct Program

- j. The planning controls within this DCP are also informed by the Epping Town Centre Study 2011 and the Epping Town Centre Precinct Structure Plan and Public Domain Plan 2013 prepared for the Precinct by the then Department of Planning and Infrastructure.

1A.5 Relationship to other plans and policies

- a. This DCP is made under Section 74C of the *Environmental Planning and Assessment Act 1979* (EP&A Act).
- b. This DCP must be read in conjunction with an environmental planning instrument (EPI) that applies to the land. EPIs include local environmental plans (LEP) and state environmental planning policies (SEPP).
- c. The *Hornsby Local Environmental Plan 2013* (HLEP) is the only local environmental planning instrument that applies to land to which this DCP applies. A number of State Environmental Planning Policies (SEPPs) may also apply to a development application. The provisions of any EPI prevail in the event of any inconsistency with this DCP.
- d. Section 1B.6 prescribes trees or other vegetation for the purpose of Clause 5.9 of the HLEP.

1A.6 Development contributions and planning agreements

- a. Some developments generate the need for development contributions where they result in an increase in the demand for community services and infrastructure. These developments will also need to address:
 - The *Hornsby Shire Council Section 94 Development Contributions Plan 2012-2021*.
 - The *Hornsby Shire Council Section 94A Development Contributions Plan 2012-2021*
- b. Planning agreements may also be made in accordance with the requirements of the EP&A Act and are voluntary agreements between Council and an applicant for development.

Note:

The above Development Contributions Plans are available for viewing on Council's website hornsby.nsw.gov.au

1B Administration

1B.1 How to Use this DCP

- a. This DCP consists of a written document and figures, and is divided into a number of Parts. Within each Part are a number of Sections.
- b. The Parts to the DCP relate either to all land, the zoning of land, a development type or a specific area. An application may be required to meet development controls contained in a number of parts of the DCP. Table 1B.1(a) provides a summary of the DCP parts and where they should be applied.
- c. DCP Part Nos.2 to 9 inclusive incorporate an Introductory statement that identifies a more detailed strategic context for the planning controls that follow.
- d. The applicability of each Part and/or Section of the DCP is described under the heading to each Part and/or Section of the DCP. An example of the applicability of the DCP to various development types is provided in Table 1B.1(b).

Table 1B.1(a): Description of DCP Parts

DCP Part	Summary of Applicability
Part 1 - General	Part 1 provides general controls that apply to all Development Applications . Part 1A explains the purpose of the DCP. Part 1B provides administrative provisions including how to use the DCP, Notification and Exhibition requirements and Tree and Vegetation preservation controls pursuant to Clause 5.9 of the HLEP. Part 1C establishes the general development controls for all development, including controls for the natural environment, built environment and hazards.
Part 2 - Rural	Part 2 provides controls for development of land in the Rural area, as defined by Figure 2(a). Section 2.1 provides controls for Rural Buildings within defined zones. Section 2.2 provides controls for certain rural landuses. Section 2.3 provides Village Masterplans within the rural area. Section 2.4 provides controls for land zoned RU5 in Rural Village. Section 2.5 provides controls for Extractive Industries.
Part 3 - Residential	Part 3 provides controls for development of prescribed residential landuses within prescribed residential localities (identified by the HLEP zone and HLEP height map).
Part 4 - Business	Part 4 provides controls for development of land in a Business Zone.
Part 5 - Industrial	Part 5 provides controls for development of land in Industrial Zones IN1 and IN2.
Part 6 - Subdivision	Part 6 provides specific additional controls for the subdivision of land.
Part 7 - Community	Part 7 provides specific controls for certain types of developments such as: childcare centres, schools, places of public worship, community housing, telecommunications, temporary events and health service facilities.
Part 8 - River Settlements	Part 8 provides controls for development of land in the River Settlements, as defined by Figure 8(a). Section 8.1 provides controls for buildings within defined zones. Section 8.2 provides controls for certain types of River Settlement Landuses, such as boat sheds, jetties and seawalls. Section 8.3 provides Masterplans for Berowra Waters and Kangaroo Point.
Part 9 - Heritage	Part 9 provides controls for development that may impact on heritage items or areas. Section 9.1 provides administrative controls for development involving heritage. Section 9.2 provides controls for development involving listed heritage items. Section 9.3 applies to Heritage Conservation Areas. Section 9.4 applies to land in the vicinity of heritage items and Heritage Conservation Areas. Section 9.5 applies to development of land (including undisturbed land) that may contain an Aboriginal relic or place. Section 9.6 provides specific controls for the Beecroft Heritage Precinct (redevelopment area).
Annexures	Contains detailed information referenced throughout the DCP

Table 1B.1(b): Example of Application of DCP Controls

Development Applications are to demonstrate compliance with the following DCP Parts and Sections		Dwelling house (Residential zone eg R2 zone)	Dwelling house (Rural zone eg RU2)	Dwelling house in Heritage Conservation Area (R2 zone)	Dwelling and Jetty in Brooklyn (R2 zone)	Townhouses (in R3 zone)	Residential flats (5 Storey Precinct)	Mixed Use Building (Beecroft Centre)	Place of Worship (IN1 zone)	Residential Subdivision (R2 zone)	Rural Subdivision (RU2 zone)	Child care centre (R2 zone)
1	General	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2.1	Rural Buildings		✓								✓	
2.3	Village Masterplans	*	*							*	*	*
3.1	Dwelling Houses	✓		✓	✓					*		
3.2	Medium Density Housing					✓						
3.4	Residential Flat Buildings (5 storeys)						✓					
4.1	Commercial Centres Hierarchy							✓				
5	Industrial							✓				
6.1	Subdivision (General Provisions)									✓	✓	
6.1	Residential Subdivision									✓		
6.3	Rural Subdivision										✓	
6.4	Accessway Design									✓	✓	
7.1	Community Uses							✓				✓
8.2	River Settlement Uses				✓							
9	Heritage	*	*	✓	*	*	*	✓	*	*	*	*

Legend

- ✓ Applicable
- * Section may be applicable.

1B.2 Desired Outcome, Prescriptive Measures, Figures and Notes

- a. Each DCP section includes desired outcomes, prescriptive measures, figures and notes.

Desired Outcomes

- b. Desired outcomes are statements that describe the outcomes sought.

Prescriptive Measures

- c. Prescriptive measures are requirements that are likely to achieve the desired outcomes.
- d. Where an application proposes a variation to the prescriptive measures of the DCP, justification should be provided with the application.
- e. Compliance with the prescriptive measures does not guarantee approval of an application. Each Development Application will also be assessed having regard to the *HLEP*, the provisions of this DCP, and other matters listed in Section 79C of *EP&A Act*.
- f. The provisions of this DCP will be consistently applied by the consent authority.

Figures

- g. Figures fulfil different functions within the DCP, as follows:
- Figures are Prescriptive Measures when specifically referenced in the text above and are indicated by the annotation (C),
 - Figures interpret the prescriptive measures in the text. These Figures are not referenced in the text above and are indicated by the annotation (I). For Example, Figure 3.1(a) explains how the building height controls should be interpreted, and
 - Figures provide an example of how the prescriptive measures could be applied. The Figure title identifies that this is an example and are indicated by the annotation (E). For Example, Figure 3.1(e) is an example of how sun shading devices could be incorporated into the design of a dwelling house. (E)

Notes

- h. Notes fulfil different functions within the DCP, as follows:
- Notes include definitions and are essential for the interpretation of the DCP,
 - Notes provide references for further information, guidelines and cross-references to other legislative requirements,
 - Notes include educational material to assist in interpreting the DCP controls and identify preferred and/or discouraged outcomes, and
 - Notes identify some Development Application submission requirements.

1B.3 Interpretation

- i. Where this DCP uses terms that are defined in the *HLEP*, the definitions in the *HLEP* are adopted. Other terms used throughout this DCP are defined in Annexure A Glossary of Terms.
- j. In addition, certain provisions of this DCP include definitions that are specific to those provisions.
- k. A reference in this DCP to any Australian Standard or legislation includes a reference to any amendment or replacement as made.

1B.4 Submitting an Application

- l. Development applications should be accompanied by information as described within:
- the Hornsby Shire Council Development Application Submission Guideline,
 - this DCP,
 - environmental planning instruments (eg *HLEP* and applicable SEPPs), and
 - *Environmental Planning and Assessment Regulation 2000* (Schedule 1).

Note:

For further information refer to the Hornsby Shire Council Development Application Submission Guideline available at Council's website hornsby.nsw.gov.au.

1B.5 Notification and Exhibition

1B.5.1 Public Exhibition Strategy

- a. The public exhibition strategy for a notifiable Development Application (DA) comprises the following steps:
- Adjoining property owners are notified via letter when a DA is lodged,
 - Property owners and occupiers in the broader area, who may have an interest in the DA, are notified via a sign that is to be erected on the site,
 - In addition, all significant applications are advertised in a Local Paper,
 - Neighbours are able to remain up to date with the status of the application via the DA tracking facility provided on line,
 - All submissions are taken into consideration in the Council's Development Assessment Report, and
 - All submitters are advised of the determination of the application via letter.

1B.5.2 Notification of Applications

General

- a. Council will publicly exhibit applications in accordance with the *EP&A Act* and the provisions of this DCP including Table 1B.5(a).
- b. The following applications do not require public notification or exhibition:
- Section 96(1) modifications for minor errors, misdescription or miscalculation,
 - Section 96(1A) modifications of minimal environmental impact,
 - Temporary community advertisements, or
 - Any other development which in Council's opinion would not adversely impact upon the amenity of the locality.

Sign On Property

- c. The applicant should display a Council issued A4 sized notice on the site in a prominent position for the duration of the exhibition period, in accordance with Table 1B.5(a).
- d. The applicant should provide Council with evidence that the sign was in place on the site at the commencement of the exhibition period.

Note:

Evidence could include a dated photo or statutory declaration.

Table 1B.5(a): Notification and Exhibition of Applications

Application Type	Sign on Property	Local Paper Advertisement	Letter to adjoining property owner	Exhibition Period
Designated, Advertised and Nominated Integrated Development (<i>Heritage Act and Water Management Act</i>)	Yes	Yes	Yes	30 days
Local Development (other than listed below)	Yes	Yes	Yes	14 days
Local Development involving <ul style="list-style-type: none"> ■ dwelling houses and ancillary work, or ■ advertising signs, or ■ temporary use of land per Clause 2.8 of <i>HLEP</i> 	Yes	No	Yes	14 days
Section 82A Applications	Yes	As per original DA	Yes, and to any objectors of original DA	14 days
Section 96(2) and 96(AA) Applications	Yes	As per original DA	Yes, and to any objectors of original DA	14 days

Exhibition Period

- e. Applications requiring exhibition will be exhibited in accordance with Table 1B.5(a).
- f. For applications that require a local paper advertisement, the minimum exhibition period is to commence on the day after the day on which the published notice is first published in a newspaper.
- g. Council may extend the minimum exhibition period for Local Development from 14 days to 21 days where there is significant community interest in the application.
- h. Council may extend the minimum exhibition period prescribed in Table 1B.5(a) during the Christmas/ New Year holiday period. In this regard, the dates between 20 December and 6 January inclusive should not be included in the minimum exhibition period.

Local Paper Advertisement

- i. Where required in accordance with Table 1B.5(a), Council will publish receipt of the application in a locally circulated newspaper, being one of the following:
 - Hornsby and Upper North Shore Advocate,
 - Hills News, or
 - Northern District Times.

Notification on Council's Website

- j. On a weekly basis, a list of all applications received during that period will be placed on Council's website.

Letter to Adjoining Property Owners

- k. A letter will be sent to adjoining property owners advising them of the receipt of an application and inviting them to comment in accordance with this part of the DCP.
- l. An adjoining property means properties that share a common boundary with the subject site or which are located on the opposite side of the road directly opposite the subject site.
- m. In addition to an adjoining property, Council may extend the area of notification if in Council's opinion the development may potentially impact upon the amenity of the wider locality.

- n. If an adjoining property is a lot within the meaning of the *Strata Schemes (Freehold Development) Act 1973*, a written notice to the owners corporation is taken to be a written notice to the owner of each lot within the strata scheme.
- o. If an adjoining property is a lot within the meaning of the *Strata Schemes (Leasehold Development) Act 1986*, a written notice to the lessor under the leasehold strata scheme concerned and to the owners corporation is taken to be a written notice to the owner of each lot within the strata scheme.
- p. If an adjoining property is owned or occupied by more than one person, a written notice to one owner or one occupier is taken to be a written notice to all the owners of that land.
- q. Upon request, Civic Trusts, Chambers of Commerce and other community groups will be provided with a written notice of applications likely to have implications for the broader community in the area in which the proposed development is situated.

Public Authorities

- r. Council will refer applications to public authorities where the concurrence or approval of the authority is required under the *EP&A Act*, or where Council is of the opinion the authority may have an interest in the application.

Notifications of Amendments Prior to Determination of Applications

- s. Council may re-exhibit an amended application where, in the opinion of the assessing officer, the amendments have the potential to alter the amenity of surrounding properties.
- t. Where re-exhibition occurs, and the assessing officer is of the opinion that the amended application differs only in minor respects from the original application, Council will notify by letter to affected property owners and submitters. The exhibition period will be for a period of 14 days, or upon receipt of all submissions, whichever occurs first.
- u. Where the amended application differs significantly from the original application, then a re-exhibition should be undertaken as occurred with the original proposal.

Note:

The re-exhibition requirements for Designated and other Advertised Development are prescribed in the EP&A Act and Regulations.

1B.5.3 Submissions

Lodging a Submission

- a. Any person may make a submission in response to a development application whether or not a notification letter has been forwarded to the person.
- b. Submissions must be made in writing (including e-mail). The submission should clearly identify the:
 - name and address of the writer (and email address where available),
 - the address of the proposed development,
 - Council's application number, and
 - the reasons for any objection to, or support of, the proposal.
- c. In accordance with Section 147 of the *EP&A Act*, any person or organisation who has made a submission in respect of a relevant planning application, and who has made a reportable political donation or gift to a Councillor or employee of the Council, must make a Political Donations Disclosure Statement.

Consideration of Submissions

- d. Council does not acknowledge receipt of submissions. However, all submissions received within the exhibition period will be included in the assessment of the application.
- e. Submissions are not regarded as confidential and may be placed on Council's website.
- f. Where an application is to be determined at a Council meeting, rather than by Council officers, Council will extend an invitation to the applicant and all submitters to attend the meeting.
- g. Where a petition has been received, all correspondence will be directed to the lead petitioner only. The responsibility to inform co-petitioners rests with the lead petitioner.

Notes:

Applicants can check on the status of development applications on Council's website hornsby.nsw.gov.au.

Whilst every effort will be made to consider a submission received by Council outside of the prescribed exhibition period, this can not be guaranteed.

A petition will be recorded as one submission containing x number of signatures.

1B.5.4 Determination of Applications

Post Determination Notification

- a. Council will notify submitters of its determination of the application in writing.
- b. Council will publish determination of all applications in a locally circulated newspaper, being one of the following:
 - Hornsby and Upper North Shore Advocate,
 - Hills News, or
 - Northern District Times.
- c. All applications determined will be notified on Council's website.

1B.6 Tree and Vegetation Preservation

This section is made in accordance with Clause 5.9 of the HLEP and prescribes the trees and vegetation to which Clause 5.9 and/or Clause 5.10 applies and the applicable approval process.

1B.6.1 Tree Preservation

Prescribed Trees

- a. The prescribed trees that are protected by Clause 5.9 and/or Clause 5.10 of the HLEP and this Section of the DCP include:
 - all tree species indigenous to Hornsby Shire, as listed in Table 1B.6 (b),
 - trees on land within a heritage conservation area described within the *HLEP*, and
 - trees on land comprising heritage items listed within the *HLEP*.
- b. To damage or remove any tree protected under this DCP is prohibited without the written consent of Council, except in accordance with the exemptions prescribed in this part (under the heading 'Exempt Tree Work').
- c. For the purposes of this section:
 - **A tree** is defined as a long lived woody perennial plant with one or relatively few main stems with the potential to grow to a height greater than 3 metres.
 - **Bushland** means land on which there is vegetation which is either a remainder of the natural vegetation of the land or, if altered, is still representative of the structure and floristics of the natural vegetation. This includes rehabilitated riparian land.
 - **Damage** means to impair the value or usefulness, or weaken the health or the normal function of a tree or vegetation.
 - **Remove** means to cut down, knock down, kill, lop or destroy.
 - **Prune** means to selectively remove branches.

Exempt Tree Work

- d. The following exemptions to this part apply as set out below:
 - The removal of or pruning to a tree where Council is satisfied the tree is dying or dead and is not required as the habitat of native fauna.
 - Pruning of a tree by less than 10% of the foliage area in accordance with Australian Standard *AS 4373-2007* not more than once annually.
 - The removal of or pruning of a tree where the base of the trunk of the tree at ground level is located within 3 metres of the foundation of an approved building.
 - The removal of a tree less than 3 metres in height not located within bushland.
 - Trees deemed by Council in writing and shown by recorded photographic evidence or written evidence provided by a qualified Arborist (AQF.5) as a risk to human life or is causing or likely to cause substantial damage to property.
- e. The exemptions at (d) above do not apply to:
 - all lands mapped as Biodiversity on the *HLEP Terrestrial Biodiversity Map*, or
 - threatened species or land that contains native vegetation which is habitat for threatened species, populations or ecological communities listed in Schedule 1, 1A or 2 of the Threatened Species Conservation Act 1995, or
 - work that is contrary to a development consent that requires trees to be retained, or
 - Any work to a tree that is or forms part of a heritage item or heritage conservation area, requires approval from the Council pursuant to the provisions of Clause 5.10 of the *HLEP*.

Notes:

Clause 5.9AA of the HLEP permits the removal of any tree or vegetation that is not of a species or kind prescribed by Clause 5.9 of the LEP.

AQF is the Australian Qualification Framework, a national framework for all educational and training purposes in Australia.

Lodging an Application for Tree Work

- f. An application is required to be completed and forwarded to Council for all work to protected trees where an exemption does not apply. Table 1B.6(a) below identifies what type of application is required to be completed for work to trees.
- g. Where works to trees is required as part of other works for which development consent is required, the works will be assessed as part of the Development Application.
- h. For the purpose of Table 1B.6(a), a *Tree Root Zone* is defined any work including development within:
 - 9 metres of a tree with a diameter at breast height of 800mm or greater,
 - 7 metres of a tree with a diameter at breast height of between 400mm and 800mm, and
 - 4 metres of a tree with a diameter at breast height of 400mm or less.

Table 1B.6(a) Type of Tree Application Required

Location	Extent of Works	Form of Application
Land identified as "Biodiversity" on the HLEP Terrestrial Biodiversity map	Work to any indigenous tree	Development Application
Land that contains native vegetation which is habitat for species, populations or ecological communities listed in Schedule 1, 1A or 2 of the <i>Threatened Species Conservation Act 1995</i>	Work to any indigenous tree	Development Application
Work that is contrary to a development consent that requires trees to be retained	Work to any indigenous tree	Section 96 Application
Heritage Item	Minor work to any tree that is or forms part of a Heritage Item as described by Clause 5.10(3) of the HLEP	Tree Permit
	Major work to any tree that is or forms part of a Heritage Item (i.e. work that is not minor as described by Clause 5.10(3) of the HLEP)	Development Application
Land within a Heritage Conservation Area	Minor work to any tree as described by Clause 5.10(3) of the HLEP	Tree Permit
	Major work to any tree (i.e. work that is not minor as described by Clause 5.10(3) of the HLEP)	Development Application
Other land - tree removal or pruning	Removal or pruning of No. 0-9 indigenous trees	Tree Permit
	Removal or pruning of 10 or more indigenous trees	Development Application
Other land - work within a Tree Root Zone. <i>Work includes Construction (driveways, concrete slabs, retaining walls) and earthworks (changes in soil levels, embankments, trenching)</i>	Work within the tree root zone of No.0-9 indigenous trees	Tree Permit
	Work within the tree root zone of 10 or more indigenous trees	Development Application

Note:

Actions required or authorised to be done by, or under separate legislation is not the subject of this Tree and Vegetation Preservation Clause as prescribed in Clause 5.9(8) of the HLEP. For example this Clause does not apply to some works prescribed by the Electricity Supply Act, Roads Act, Noxious Weeds Act and Forestry Act.

Consideration of an Application for Tree Work

- i. The removal of, or work to, trees should be consistent with the applicable provisions of the HLEP and HDCP.
- j. The impact of development upon trees will be assessed using arboricultural, ecological and/or occupational health and safety based evaluation to determine the significance of the trees. Accordingly, any application for removal should demonstrate that the removal of the tree is appropriate based on an assessment of the:
 - significance/health/longevity of the tree; and
 - risk to human life or property.
- k. Where such trees are deemed by Council to be significant, the provisions of Australian Standard AS 4970 Protection of Trees on Development Sites should be applied.
- l. All tree pruning work should be carried out in accordance with Australian Standard AS 4373 Pruning of Amenity Trees.
- m. Any tree approved to be removed from a site should be replaced with a tree of like habit and indigenous to Hornsby Shire, planted as near as practicable to the location of the removed tree, grown to maturity and replaced if the planting fails to survive and thrive.

Notes:

Works on land identified as "Biodiversity" on the HLEP Terrestrial Biodiversity Map should have regard to Section 1C.1.1 Biodiversity of this DCP.

Works involving heritage items and heritage conservation areas should also have regard to Part 9 Heritage of this DCP.

Table 1B.6(b) Tree Species Indigenous to Hornsby Shire

Botanical name	Common Name
<i>Acacia binervia</i>	Coast Myall
<i>Acacia decurrens</i>	Sydney Green Wattle
<i>Acacia elata</i>	Mountain Cedar Wattle
<i>Acacia falcata</i>	Sickle Wattle
<i>Acacia floribunda</i>	White Sally Wattle
<i>Acacia implexa</i>	Hickory
<i>Acacia longifolia</i>	Sydney Golden Wattle
<i>Acacia parramattensis</i>	Parramatta Green Wattle
<i>Acacia parvipinnula</i>	Silver-stemmed wattle
<i>Acacia schinoides</i>	Green Cedar Wattle
<i>Acmena smithii</i>	Lilly Pilly
<i>Aegiceras corniculatum</i>	River Mangrove
<i>Allocasuarina distyla</i>	Scrub She-oak
<i>Allocasuarina littoralis</i>	Black She-oak
<i>Allocasuarina torulosa</i>	Forest Oak
<i>Alphitonia excelsa</i>	Red Ash
<i>Angophora bakeri</i>	Narrow-leaved Apple
<i>Angophora costata</i>	Sydney Red Gum
<i>Angophora floribunda</i>	Rough-barked Apple
<i>Angophora hispida</i>	Dwarf Apple
<i>Avicennia marina</i>	Grey Mangrove
<i>Backhousia myrtifolia</i>	Grey Myrtle
<i>Banksia integrifolia</i>	Coast Banksia
<i>Banksia serrata</i>	Old Man Banksia
<i>Callicoma serratifolia</i>	Black Wattle
<i>Callistemon linearifolius</i>	Netted Bottle Brush
<i>Callistemon salignus</i>	Willow Bottlebrush
<i>Callitris rhomboidea</i>	Port Jackson Cypress
<i>Casuarina glauca</i>	She-oak, Swamp Oak

Notes:

Further information on some common indigenous tree species is available on Council's website hornsby.nsw.gov.au.

Table 1B.6(b)cont. Tree Species Indigenous to Hornsby Shire

Botanical name	Common Name
<i>Ceratopetalum apetalum</i>	Coachwood
<i>Ceratopetalum gummiferum</i>	NSW Christmas Bush
<i>Corymbia eximia</i>	Yellow Bloodwood
<i>Corymbia gummifera</i>	Red Bloodwood
<i>Cryptocarya glaucescens</i>	Jackwood
<i>Doryphora sassafras</i>	Sassafras
<i>Elaeocarpus reticulatus</i>	Blueberry Ash
<i>Eucalyptus acmenoides</i>	White Mahogany
<i>Eucalyptus agglomerata</i>	Blue-leaved Stringybark
<i>Eucalyptus botryoides</i>	Bangalay
<i>Eucalyptus camfieldii</i>	Heart Leaved Stringybark
<i>Eucalyptus capitellata</i>	Brown Stringybark
<i>Eucalyptus crebra</i>	Narrow-leaved Ironbark
<i>Eucalyptus elata</i>	River Peppermint
<i>Eucalyptus eugenioides</i>	Thin-leaved Stringybark
<i>Eucalyptus fibrosa</i>	Broad leaf Ironbark
<i>Eucalyptus globoidea</i>	White Stringybark
<i>Eucalyptus haemastoma</i>	Broad-leaved Scribbly Gum
<i>Eucalyptus longiflora</i>	Woollybutt
<i>Eucalyptus luehmanianna</i>	Yellow Top Mallee Ash
<i>Eucalyptus multicaulis</i>	Whipstick Ash
<i>Eucalyptus oblonga</i>	Common Sandstone Stringybark
<i>Eucalyptus paniculata</i>	Grey Ironbark
<i>Eucalyptus pilularis</i>	Blackbutt
<i>Eucalyptus piperita</i>	Sydney Peppermint
<i>Eucalyptus punctata</i>	Grey Gum
<i>Eucalyptus racemosa</i>	Narrow-leaved Scribbly Gum
<i>Eucalyptus resinifera</i>	Red Mahogany
<i>Eucalyptus robusta</i>	Swamp Mahogany
<i>Eucalyptus saligna</i>	Sydney Blue Gum
<i>Eucalyptus siderophloia</i>	Northern Grey Ironbark

Table 1B.6(b)cont. Tree Species Indigenous to Hornsby Shire

Botanical name	Common Name
<i>Eucalyptus sieberi</i>	Silvertop Ash
<i>Eucalyptus sparsifolia</i>	Stringybark
<i>Eucalyptus squamosa</i>	Scaly Bark
<i>Eucalyptus tereticornis</i>	Forest Red Gum
<i>Eucalyptus umbra</i>	Bastard White Mahogany
<i>Eupomatia laurina</i>	Bolwarra
<i>Ficus coronata</i>	Sandpaper Fig
<i>Ficus rubiginosa</i>	Port Jackson Fig
<i>Glochidion ferdinandi</i>	Cheese Tree
<i>Hakea dactyloides</i>	Broad-leaved Hakea
<i>Hakea salicifolia</i>	Willow-leaved Hakea
<i>Leptospermum petersonii</i>	Lemon-sented Tea Tree
<i>Melaleuca decora</i>	White feather honey-myrtle
<i>Melaleuca ericifolia</i>	Swamp Paperbark
<i>Melaleuca linariifolia</i>	Snow-In-Summer
<i>Melaleuca quinquenervia</i>	Broad-leaved Paperbark
<i>Melaleuca styphelioides</i>	Prickly-leaved Paperbark
<i>Myoporum acuminatum</i>	Boobialla
<i>Omalanthus populifolius</i>	Bleeding Heart
<i>Pittosporum undulatum</i>	Sweet Pittosporum
<i>Rapanea variabilis</i>	Muttonwood
<i>Rhodamnia rubescens</i>	Scrub Turpentine
<i>Schizomeria ovata</i>	White Crab-apple
<i>Stenocarpus salignus</i>	Scrub Beefwood
<i>Syncarpia glomulifera</i>	Turpentine
<i>Synoum glandulosum</i>	Scentless Rosewood
<i>Syzygium australe</i>	Brush Cherry
<i>Syzygium oleosum</i>	Blue Lillypilly
<i>Syzygium paniculatum</i>	Magenta Lilly Pilly
<i>Toona australis</i>	Red Cedar
<i>Tristaniopsis laurina</i>	Water Gum

1B.6.2 Vegetation Preservation

Prescribed Vegetation

- a. The prescribed vegetation that is protected by Clause 5.9 and/or Clause 5.10 of the *HLEP* and this Section of the DCP includes:
 - bushland, and
 - vegetation on heritage listed properties under the *HLEP*.
- b. To damage or remove any vegetation protected under this DCP is prohibited without the written consent of Council, except in accordance with the exemptions prescribed in this part (under the heading ‘Exempt Vegetation Work’).
- c. For the purposes of this part:
 - **A tree** is defined as a long lived woody perennial plant with one or relatively few main stems with the potential to grow to a height greater than 3 metres.
 - **Bushland** means land on which there is vegetation which is either a remainder of the natural vegetation of the land or, if altered, is still representative of the structure and floristics of the natural vegetation. This includes rehabilitated riparian land.
 - **Damage** means to impair the value or usefulness, or weaken the health or the normal function of a tree or vegetation.
 - **Remove** means to cut down, knock down, kill, lop or destroy.

Exempt Vegetation Work

- d. An application is not required for the following work to vegetation protected under this DCP:
 - The clearing of vegetation (excluding trees) on a property once every 5 years in accordance with the maximum cumulative area in Table 1B.6.2(a).

Table 1B.6.2(a) Exempt Vegetation Work

Land zone under HLEP	Maximum exempt vegetation removal
Prescribed rural areas (Zones RU1, RU2, RU4)	30m ²
Prescribed urban areas (Zones R2, R3, R4, RU5, SP2, SP3, B1, B2, B3, B4, B5, B6, IN1 & IN2)	10m ²

- The clearing of vegetation where Council is satisfied the vegetation is dying or dead and is not required as the habitat of native fauna.
- The clearing of vegetation where Council is satisfied the vegetation is a risk to human life or is causing or likely to cause substantial damage to property.
- e. The exemptions in Table 1B.6.2(a) do not apply to:
 - land with a gradient in excess of 20 percent,
 - land containing marine vegetation,
 - land located within 20 metres of and including a watercourse,
 - land located within 50 metres of and including land identified as “Biodiversity” on the Terrestrial Biodiversity Map in *HLEP*,
 - land located within 50 metres of and including land that contains native vegetation which is habitat or potential habitat for species, populations or ecological communities listed in Schedule 1, 1A or 2 of the Threatened Species Conservation Act 1995,
 - work that is contrary to a development consent that requires vegetation to be retained,
 - all vegetation on heritage listed properties,
 - bushland within heritage conservation areas,
 - land if it results in the fragmentation or isolation of bushland, or
 - land if it reduces effective vegetation buffers to adjoining Community Open Space or Private Open Space lands.
 - land that is defined as State Prosecuted Land under the Native Vegetation Regulation 2005.
- f. Notwithstanding the exemptions at (d) above, minor work to vegetation that is or forms part of a heritage item or heritage conservation area, requires approval from the Council pursuant to the provisions of Clause 5.9 and/or Clause 5.10 of the *HLEP*.
- g. Any vegetation removed pursuant to the exempt provisions within this section should:
 - occur in areas deemed to be ancillary to an approved existing dwelling or structure,
 - be undertaken by hand (not heavy machinery), and
 - require replacement planting to stabilise the soil (where necessary) that is indigenous to the adjoining vegetation community present and not include species recognised as invasive to bushland.

Lodging an Application for Vegetation Work

- h. An application is required to be completed and forwarded to Council for all work to protected vegetation where an exemption does not apply. Table 1B.6.2(b) below identifies what type of application is required to be completed for work to vegetation.
- i. Where vegetation work is required as part of other works for which development consent is required, the works will be assessed as part of the Development Application.

Table 1B.6.2(b) Type of Vegetation Application Required

Location	Extent of Works	Form of Application
Land identified as "Biodiversity" on the HLEP Biodiversity map	Work to any vegetation	Development Application
Land that contains native vegetation which is habitat for species, populations or ecological communities listed in Schedule 1, 1A or 2 of the <i>Threatened Species Conservation Act 1995</i> ,	Work to any vegetation	Development Application
Work that is contrary to a development consent that requires vegetation to be retained	Work to vegetation that is required to be retained or rehabilitated by the consent conditions	Section 96 Application
Heritage Item	Minor work to any vegetation that is or forms part of a Heritage Item as described by Clause 5.10(3) of the HLEP	Vegetation Permit
	Major work to any vegetation that is or forms part of a Heritage Item (i.e. work that is not minor as described by Clause 5.10(3) of the HLEP)	Development Application
Land within a Heritage Conservation Area	Minor work to any protected vegetation as described by Clause 5.9(7) of the HLEP	Vegetation Permit
	Major work to any protected vegetation (i.e. work that is not minor as described by Clause 5.9(7) of the HLEP)	Development Application
Other land zoned Rural (Zones RU1, RU2, RU4)	Removal of up 200m ² of vegetation	Vegetation Permit
	Removal of more than 200m ² of vegetation	Development Application
Other land zoned Urban (Zones R2, R3, R4, RU5, SP2, SP3, B1, B2, B3, B4, B5, B6, IN1 & IN2)	Removal of up 100m ² of vegetation	Vegetation Permit
	Removal of more than 100m ² of vegetation	Development Application
Other land not prescribed above	Work to any vegetation	Development Application

Consideration of an Application for Vegetation Work

- j. The removal of, or work to, vegetation should be consistent with the applicable provisions of the HLEP and HDCP.
- k. In determining if vegetation is significant, it will be assessed using an arboricultural, ecological and/or an Occupational Health and Safety based evaluation. Accordingly, any application for removal should demonstrate that the removal of vegetation is appropriate based on an assessment of the:
 - significance/health/longevity of the vegetation; and
 - risk to human life or property.

Notes:

The clearing of native vegetation that is exempt in Table 1B.6.2(a) is to facilitate minor development such as sheds ancillary to dwellings that may be otherwise permissible under SEPP (Exempt and Complying Development Codes) 2008. The intent is not to allow extensive bushland removal.

Clause 5.9AA of the HLEP permits the removal of any tree or vegetation that is not of a species or kind prescribed by Clause 5.9 of the LEP.

Works on land identified as "Biodiversity" on the HLEP Terrestrial Biodiversity Map should have regard to Section 1C.1.1 Biodiversity of this DCP.

Works involving heritage items and heritage conservation areas should also have regard to Part 9 Heritage of this DCP.

Actions required or authorised to be done by, or under separate legislation is not the subject of this Tree and Vegetation Preservation Clause as prescribed in Clause 5.9(8) of the HLEP. For example this Clause does not apply to some works prescribed by the Electricity Supply Act, Roads Act, Noxious Weeds Act, and Forestry Act.

Environmental Protection works including bush regeneration work is permitted without development consent in the land use table for all zones under the HLEP.

1C General Controls

The following section provides general controls for the protection of the environment and applies to all forms of development.

1C.1 Natural Environment

1C.1.1 Biodiversity

HLEP Clause 6.4 contains provisions for development of land identified as Biodiversity on the Terrestrial Biodiversity Map.

The following controls apply to land with biodiversity value, including land affected by the HLEP provisions.

Desired Outcomes

- a. Development that provides for the conservation of biodiversity including threatened species and populations, endangered ecological communities, remnant indigenous trees, regionally and locally significant vegetation.
- b. Development that maintains habitat for native wildlife and wildlife corridors to provide for the movement of fauna species.

Prescriptive Measures

General

- a. Development should seek to:
 - avoid potential adverse impact on biodiversity,
 - if that impact cannot be avoided, minimise that impact, or
 - if the impact cannot be minimised, to mitigate the impact.
- b. A flora and fauna assessment is required for development that may impact on:
 - land mapped as Biodiversity on the HLEP Terrestrial Biodiversity Map, or
 - native vegetation which is habitat for species listed in Schedule 1 or 2 of the *Threatened Species Conservation Act 1995*.
- c. Development should avoid the fragmentation of existing native vegetation.
- d. Development should seek to retain unique environmental features of the site including:
 - rock outcrops,
 - wetlands and the like,
 - watercourses, drainage lines and riparian land,

- groups of significant trees and vegetation, and
 - mature hollow trees and other fauna habitat features on the site.
- e. Development should incorporate and maintain a buffer zone to significant flora and fauna. Development should not include buildings, structures and earthworks within the required buffer zone prescribed in Table 1C.1.1(a).

Table 1C.1.1(a): Buffer Zones to Vegetation Types

Significant Vegetation Type	Minimum Buffer Zone (metres)
Endangered ecological communities and regionally significant bushland (as mapped in the HLEP Terrestrial Biodiversity Map)	20m
Wetland or saltmarsh plant communities	20m
Populations of threatened flora species, habitat for threatened species, locally significant bushland, groups of remnant indigenous trees	10m

- f. Notwithstanding the buffers presented in Table 1C.1.1(c) above, certain native vegetation that is habitat for species listed in the Threatened Species Conservation Act may require larger buffer zones in order to avoid potential adverse impacts on biodiversity.

Notes:

A flora and fauna assessment may be required for development that involves the clearing, removal or alteration of other native vegetation. A flora and fauna assessment should be prepared by a suitably qualified consultant and address Council's *Flora and Fauna Assessment Guidelines*. This may require an Assessment of Significance (7-part test) or Species Impact Statement. In addition, a Vegetation Management Plan (VMP) may be required where it is likely that a proposal will impact either directly or indirectly on areas of remnant native bushland and/or riparian areas. For further information refer to:

- *Flora and Fauna Assessment Guidelines for Development Applications* available at Council's website hornsby.nsw.gov.au
- *Guidelines for the preparation of Vegetation Management and Restoration Plans* available at Council's website hornsby.nsw.gov.au

Under the NSW Scientific Committee Determination for Blue Gum High Forest and Sydney Turpentine Ironbark Forest Endangered Ecological Communities, it is noted that these communities may only be represented by the presence of remnant trees with no remnant or a highly modified understorey.

Landscaping adjacent to bushland

- g. Fencing adjoining bushland should be designed to allow for the movement of native fauna, and limit predation on native wildlife by domestic animals. The use of barb wire fencing is not supported.
- h. Where landscaping is proposed within the buffer zones, it should comprise trees, shrubs, understorey and groundcover species indigenous to the adjoining vegetation community.

Note:

Species declared as a noxious weed in Hornsby Shire should not be used in landscaping works. For further information see the Noxious Weeds List for Hornsby Shire at website hornsby.nsw.gov.au.

Roadside Vegetation

- i. Native vegetation along roadsides should be retained where possible as it provides fauna habitat, links bushland areas, and maintains the scenic qualities of the area.
- j. Accessway crossings and utilities should be located and designed to minimise impacts on roadside vegetation.

Land Adjoining Public Open Space

- k. Development within or adjoining land zoned or reserved for public open space should address means to protect and minimise bushland disturbance.
- l. Development should provide buffers for bushfire protection on private land, not on public land.

Wetlands, Salt Marsh, Seagrass Beds, Mangroves and Fish Habitats

- m. Development proposals which may impact on fish habitats should have regard to gazetted Fish Habitat Protection Plans.

Note:

NSW Fisheries has gazetted the following Fish Habitat Protection Plans:

- Plan 1 – dealing broadly with dredging and reclamation activities, fish passage requirements and the protection of mangroves, other marine vegetation and snags.
- Plan 2 - for sea grasses,- with the aim to preserve fish stocks and habitats.
- Plan 3 - for the Hawkesbury Nepean River System,- the Plan aims to preserve fish stocks and habitats.

Riparian Areas

- n. Development should be designed and located to maintain an effective watercourse riparian zone comprising native vegetation. See planning controls for watercourses at Section 1C.1.3 of this DCP.

Notes:

The Biodiversity controls aim to implement the objectives of Council's Biodiversity Conservation Strategy that includes to protect and improve the quality and extent of existing indigenous vegetation and to conserve and recreate connectivity across fragmented landscapes.

For further information on and mapping of vegetation types refer to the following studies: *Native Vegetation Communities of Hornsby Shire* (P & J Smith 2008) and *Remnant Trees in the Southern Rural District of Hornsby Shire* (P & J Smith 2008)

Endangered Ecological Communities and regionally significant vegetation areas are mapped as Biodiversity on the HLEP Biodiversity Map. Lands excluded from the Biodiversity Map may still contain endangered ecological communities, threatened species or their habitats.

Threatened Species Conservation Act 1995 (NSW) - The clearing or removal of any threatened flora species, endangered population, endangered ecological community or critical habitat under the *Threatened Species Conservation Act 1995* may require a separate approval from the NSW Office of Environment and Heritage.

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) - The clearing or removal of remnant trees or other native vegetation which is listed as a "matter of national significance" under the *Environment Protection and Biodiversity Conservation Act 1999* may require a separate approval from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

1C.1.2 Stormwater Management

Desired Outcomes

- a. Development that protects waterways from erosion, pollution and sedimentation, and maintains or improves water quality and aquatic habitats.
- b. Water management systems that minimise the effects of flooding and maintains natural environmental flows.

Prescriptive Measures

Sediment and Erosion Control

- a. Development should have appropriate controls to stabilise and retain soil and sediments during the construction phase, designed in accordance with *Landcom's Managing Urban Stormwater (2006)* also known as *The Blue Book* and/or Council's water management guidelines.
- b. Applicants should submit a plan with the development application according to the level of sensitivity and amount of disturbed area on the site as outlined in Table 1C.1.2(a).

Table 1C.1.2(a) Erosion and Sediment Control

Development Scale	Submission Requirement
Less than 1,500 m ² of disturbed area	An Erosion and Sediment Control Plan (ESCP) prepared in accordance with Council's water management guidelines for all environmentally sensitive sites such as steep land (>20%), or works in the vicinity of waterways or bushland. See Note*
1,500 m ² to 2,500 m ²	An Erosion and Sediment Control Plan (ESCP) prepared in accordance with the Blue Book
More than 2,500 m ² of disturbed area	A Soil and Water Management Plan (SWMP) prepared in accordance with the Blue Book

Note*

For non-sensitive sites an Erosion and Sediment Control Plan may be required to be prepared as a condition of development consent, to be certified by the relevant accredited certifier.

For further information on The Blue Book refer to *Managing Urban Stormwater (2006)* by Landcom available at the website landcom.com.au

For further information on Council's water management guidelines for Erosion and Sediment Control refer to *HSC Sustainable Water Best Practices (1997)* available on hornsby.nsw.gov.au

Water Hydrology

- c. An on site stormwater management system is required for all development involving external works.
- d. An on-site detention (OSD) system, designed in accordance with the HSC Civil Works Specification, should be provided for the following types of development:
 - Subdivision,
 - Single dwellings where required by covenant,
 - Two or more dwellings, or
 - Non-residential developments with external alterations.
- e. Natural flow paths within a site and the discharge point from the site should be retained and directed to its natural catchment.
- f. Stormwater should be gravity drained to Council's drainage system, which may require inter-allotment drainage, except for single dwellings on existing lots where inter-allotment drainage is not available.
- g. Where an inter allotment drainage easement is required, proponents should negotiate the creation of easement/s over downstream properties for drainage purposes. A letter of consent from the owner/s of the downstream properties is to be submitted with the development application.
- h. On non urban properties, development should not prevent or significantly alter water flows to adjoining properties or natural ecosystems. Flows from impervious areas should be dispersed on-site to minimise erosion and impacts on adjoining properties.

Water Quality

- i. In urban areas, the following development types should be designed to achieve the water quality targets in Table 1C.1.2(b);
- major redevelopment on sites greater than 2000m², and
 - other development that increases the impermeable area on a site by more than 2000m².

Table 1C.1.2(b) Urban Stormwater Quality Targets

Pollutant Type	Performance Target Reduction Loads
Gross Pollutants	90% reduction in the post development mean annual load of total gross pollutants
Total Suspended Solids	80% reduction in the post development mean annual load of total suspended solids
Total Phosphorous	60% reduction in the post development mean annual load of total phosphorous
Total Nitrogen	45% reduction in the post development mean annual load of total nitrogen.

- j. Medium and high density residential developments with a site area of between 1000m² and 2000m² should demonstrate that they achieve the water quality targets in Table 1C.1.2(b) above, or utilise one of the following deemed to comply solutions:
- 80% of the roof area of the development is to drain to a tank(s) that has a capacity of 3,000 litres per 100m² of roof area of the development. The tank(s) is to be connected to the communal water system, and to all dwellings for toilet flushing and laundry, or
 - provide a bioretention system(s) which is at least 1.5% of the total impervious area and drains all of the impervious areas.
- k. In non urban areas, intensive rural activities should include water management systems that are designed to achieve water quality targets that comply with *Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)*.
- l. Chemical storage should be bunded and located away from watercourses, drainage lines or drainage pits which lead to the storm water system.

Notes:

Urban areas include business, industrial, special use and residential zones.

Submission Requirements

- m. Where development is required to address the water quality targets in Table 1C.1.2(b), a Water Sensitive Urban Design (WSUD) Strategy should be submitted that addresses water hydrology, water quality and water conservation.
- n. For an application requiring a WSUD Strategy, the application is to be accompanied by a Model for Urban Stormwater Improvement Conceptualisation (MUSIC) or equivalent demonstrating compliance with the relevant prescriptive controls.
- o. The WSUD Strategy should include measures for access to and the maintenance of WSUD elements.
- p. Where WSUD facilities serve more than one property, these facilities should be held in strata or community title.
- q. A Water Cycle Management Plan (WCMP) should be submitted with an application for any intensive rural activity detailing how water will be sourced, stored, used, treated and recycled for use.

Notes:

For further details on Council's water management guidelines refer to:

- HSC Civil Works Specification, and
- HSC Sustainable Water Best Practices (1997)

For further technical information on Water Sensitive Urban Design refer to *Evaluating Options for Water Sensitive Urban Design – A National Guide (2009)* available at www.environment.gov.au

The storm water quality targets in Table 1C.1.2(b) apply to the operational phase, requiring developments to achieve the prescribed minimum reductions in pollutant load, when compared to untreated stormwater run-off:

Water Quality Modelling should be undertaken using the *Model for Urban Stormwater Improvement Conceptualisation (MUSIC)* and in accordance with the NSW (Draft) MUSIC modelling guidelines 2010.

Water Conservation Targets are provided in Section 1C.2.8 of this DCP

Some WSUD elements may require a Positive Covenant and a Restriction on Use to be placed on the property title in order to bind all current and future owners to specific maintenance requirements.

A WCMP is also required for an application for a number of rainwater tanks that results in the total capacity of all dams and rainwater tanks on the property exceeding 1 megalitre.

An intensive rural activity includes intensive agriculture, garden centres, plant nurseries, landscaping material supplies, animal boarding or training establishments, rural industries, extractive industries and the like.

1C.1.3 Watercourses

Desired Outcomes

- a. Watercourses such as creeks and rivers are retained and enhanced to promote the improvement and protection of the environment.
- b. Native riparian vegetation areas are retained and enhanced and degraded riparian areas are rehabilitated

Prescriptive Measures

General

- a. Existing natural drainage lines and water bodies on a site should be utilised as part of the major drainage network rather than piping stormwater flows.
- b. All work should not cause bed and bank instability and any bank stabilisation measures should preferably use soft engineering techniques.
- c. Watercourses should be linked with other areas of indigenous vegetation, wildlife corridors and/or natural or visually important site features.
- d. Stormwater outlets proposed in the vicinity of a watercourse should:
 - point downstream for the final entry point of the structure,
 - be graded to the bed level of the stream, or just below any permanent water, and
 - be located to avoid existing native vegetation
- e. The environmental flow characteristics of down stream watercourses should be maintained.
- f. Watercourses should not be piped, filled, excavated, or relocated. In some instances, Council will permit these works to occur. In determining whether to retain or restore a watercourse, consideration should be given to the following:
 - the sustainability of actual or potential biodiversity and habitat,
 - the actual or potential ability of the watercourse to enhance water quality,
 - the actual or potential visual/aesthetic character of the watercourse,
 - the actual or potential recreational value of the watercourse,
 - the effect on the watercourse of the existing and likely future development in the catchment,
 - the effect on the catchment and existing development of any treatment to the watercourse,
 - the influence of previously altered sections on the watercourse,
 - the actual or potential influence of the watercourse on public health and safety, and
 - the mitigation of flooding and the hazard to property.

Riparian Areas

- g. The design and location of any development should seek to maintain an effective riparian area and comply with best practice guidelines, that may require:
 - A core riparian zone (CRZ) that is the land within and adjacent to the channel. The width of the CRZ from the banks of the stream is determined by assessing the importance and riparian function of the watercourse, and
 - A vegetated buffer (VB) that protects the environmental integrity of the CRZ, with a minimum width of 10 metres.
- h. In addition, development shall comply with any applicable Foreshore Building Line as prescribed by Clause 6.1 of the HLEP.
- i. The riparian area should be fully vegetated with local native vegetation (trees, shrubs and groundcover species) at a density that would occur naturally. Species should be consistent with the existing native species present and Council's Riparian Species List.
- j. A permanent physical barrier should be placed at the landward extent of the riparian area to prevent inadvertent damage to riparian vegetation where vehicle access to the riparian land, or mowing or slashing of vegetation may otherwise occur.
- k. Any Bushfire Asset Protection Zone (APZ) should be measured from the asset to the outer edge of the vegetated buffer (VB). The APZ should contain managed land which should not be part of the CRZ or VB.

Notes:

A watercourse includes a 'river' as defined in accordance with the *Water Management Act 2000*.

A riparian area is a zone of vegetation in and around the banks of a watercourse, lake or estuary. This vegetation stabilises the banks and river bed and acts as a buffer restricting exotic species from entering the river. This is an essential element in retaining good water quality within a catchment area.

For further information refer to the NSW Department of Water *Guidelines for Riparian Corridors on Waterfront Land* available at www.water.nsw.gov.au.

Development within 40 metres of a watercourse may require a licence under the *Water Management Act, 2000*.

For further information on planting in a riparian zone refer to Council's Riparian Species List available at website hornsby.nsw.gov.au.

1C.1.4 Earthworks and Slope

HLEP Clause 6.2 contains provisions for earthworks. The following DCP controls supplement the HLEP provisions.

Separate DCP controls for *Extractive Industries* are provided in Section 2.5 of the DCP.

Desired Outcomes

- a. Development that is designed to respect the natural landform characteristics and protects the stability of land.
- b. Development that limits landform modification to maintain the amenity of adjoining properties and streetscape character.
- c. Earthworks below Mean High Water Mark (MHWM) that avoids, minimises and mitigates the potential for significant environmental harm.

Prescriptive Measures

Development Above MHWM

- a. Development should be sited on the area of land presenting the least topographic constraints and away from ridge lines.
- b. Earthworks involving filling should not exceed 1 metre in height from the existing ground level.
- c. Excavation that extends outside of the building platform should be limited to a depth of 1 metre from the existing ground level, unless the excavation is required to:
 - achieve a high quality built form, or
 - provide for safe vehicular access to the site, and
 - it maintains the amenity of adjoining properties and the desired streetscape character.
- d. Filling or excavation should not occur on or adjacent to sensitive environments, such as watercourses, riparian land, wetlands, bushland, or significant vegetation.
- e. Sloping sites with a gradient in excess of 20% require certification from a geotechnical engineer as to the stability of the slope in regard to the proposed design.

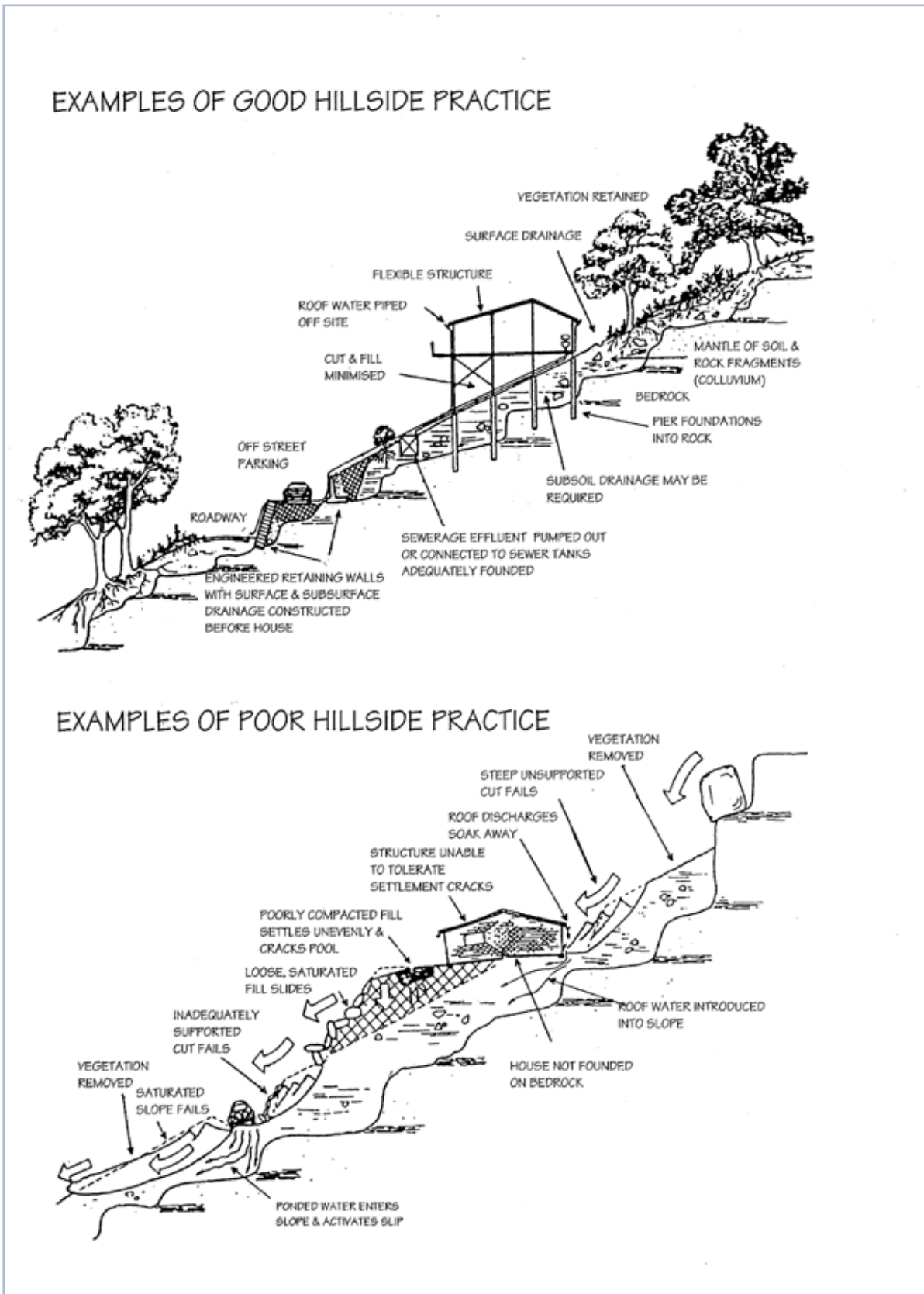


Figure 1C.1.4(a)
 Development should be sited and designed to minimise disturbance of land with topographic and geotechnical constraints. (I)

Earthworks Below MHWM

- f. Applications for earthworks below MHWM (i.e. dredging or reclamation) should submit adequate environmental documentation that demonstrates there is no significant environmental harm.
- g. A Statement of Environmental Effects for the dredging or reclamation of land should (at a minimum) address impact on total catchment management, environmentally sensitive areas, water quality, water quantity, cultural heritage, flora and fauna, riverine scenic quality, agriculture/aquaculture and fishing, rural/residential development, urban development, recreation and tourism, the Metropolitan Strategy and more specifically the following matters for consideration:
- the effect of extraction or reclamation on river dynamics, instream structures and, in particular, the effect on water clarity and turbidity, water velocity, river enlargement and light penetration,
 - the desirability of maintaining river shallows to protect and support the aquatic habitat,
 - the likely effect of extraction or reclamation on recreational opportunities available in the region,
 - the advantages of using cutter-suction methods as against drag-line methods in carrying out the extraction,
 - the likely effect of the proposed development on riparian and aquatic plant colonisation and, in particular, the desirability of:
 - confining extractive or reclamation operations to small sections of the waterways which do not contain those colonies, and
 - not permitting extractive or reclamation operations in large sections of those rivers, and
 - re-establishing riparian and aquatic plants if destroyed by the development,
 - the need to protect fish breeding grounds, commercial and recreational fishing areas and oyster farming,
 - whether the proposed development is appropriate to mitigate the problem necessitating the development without creating a similar problem elsewhere in the river,
 - any alternative means of undertaking the works which would reduce the need for extraction or reclamation,
 - the necessity to permanently remove materials from those rivers rather than relocating them within those rivers, especially for the purpose of rehabilitating areas of former extractive operations,
 - the potential for dredging to bring to the surface pollutants or anoxic sediment that may result in the formation of acid sulphate soils,
 - whether, in the circumstances, sufficient understanding exists of the likely impact of the works on the river,
 - any representations made by a public authority.
- h. The Statement of Environmental Effects for reclamation or dredging of land should contain a level of detail commensurate with an Environmental Impact Statement and demonstrate community benefit where the:
- total material volume proposed to be extracted is 10,000 cubic metres or greater, or
 - proposed earthworks operation is located within 40 metres of the E1 National Parks and Nature Reserves zone, E2 Environmental Conservation zone or priority oyster aquaculture areas identified by the NSW Oyster Industry Sustainable Aquaculture Strategy.

Notes:

MHWM means mean high water mark

Clause 6.2(2) of the *HLEP* prescribes that development consent is required for earthworks, unless the earthworks are *exempt development* or ancillary to development that is permitted without consent or development for which development consent has been given. Notwithstanding, pursuant to Clause 11(7) of SREP No.20, development consent is also required for earthworks that involves filling in excess of 1 metre in depth or an area of 100m².

Clause 6.6(3) of the *HLEP* provides additional matters for consideration when assessing proposals for earthworks.

Compaction of filled areas should be undertaken in accordance with relevant Australian Standards, including AS 1289 and AS 3798.

1C.2 Built Environment

The following section provides general controls for the protection of the built environment and applies to all forms of development.

1C.2.1 Transport and Parking

Desired Outcomes

- a. Development that manages transport demand around transit nodes to encourage public transport usage.
- b. Car parking and bicycle facilities that meet the requirements of future occupants and their visitors.
- c. Development with simple, safe and direct vehicular access.

Prescriptive Measures

General

- a. Direct vehicular access to main roads should be avoided where alternative access is available via side roads or service lanes.
- b. For development (other than single dwelling houses on existing lots), vehicle access and parking should be designed to allow vehicles to enter and exit the site in a forward direction.
- c. Design and dimensions of car parks, loading areas and driveways should comply with AS2890.1 and AS2890.2.
- d. Planning and design layout of parking areas for people with disabilities should be in accordance with AS2890.6 and AS1428.1.
- e. Planning and design layout of loading and manoeuvring areas should be provided in accordance with AS2890.2 and:
 - preferably be located to the side or rear of buildings,
 - screened from view from local and main roads, and
 - located so that vehicles do not stand on any public road, footway, laneway or service road.
- f. Planning and design layout of bicycle parking (rails, racks or lockers) should be designed in accordance with AS2890.3.

Dwelling Houses (additional general controls)

- g. The driveway to a single dwelling house should be located at least 6 metres from an intersection in accordance with AS2890.1.

- h. Driveways for single dwelling houses on existing lots should incorporate a dedicated turning area, designed to allow the 85% Design Car Turning Path, where:
 - there is poor sight distance from the driveway to pedestrian or vehicular traffic,
 - the accessway fronts a main road or highly pedestrianised area, or
 - where vehicles would otherwise have to reverse more than 50 metres.
- i. The minimum dimensions of car parking spaces for single dwelling houses should be in accordance with AS2890.1, as summarised in Table 1C.2.1(a):

Table 1C.2.1(a) Dwelling House - Parking Design Guide

Parking Type (residential)	Minimum Dimensions
Unobstructed parking space	2.4m(w) x 5.4m(l)
Single lock-up garage	3m(w) x 5.4m(l)
Double lock-up garage	5.7m(w) x 5.4m(l)

- j. The maximum grade for a driveway to a single dwelling house should be no greater than 25% with a maximum transition for changes of grade of 8% per plan metre. Table 1C.2.1(b) may be used as a guide in designing driveways.

Notes:

A Main road includes Pacific Highway, Pennant Hills Road, Beecroft Road, Blaxland Road, Castle Hill Road, Old Northern Road, Hastings Road, Galston Road, Belmont Parade, Kuring-gai Chase Road, Carlingford Road, Epping Road, Mid-Dural Road, Boundary Road, New Line Road, Berowra Waters Road, Bay Road, Bayfield Road, Blacks Road (from Bayfield Road to Arcadia Road), Arcadia Road, George Street (Hornsby), Jersey Street-north, Edgeworth David Avenue.

A highly pedestrianised area includes sites located in close proximity to schools, shopping centres, bus stops, places of worship and other busy community facilities.

Australian Standard AS2890 is available at www.sai-global.com.

Note* Design levels at the top of the adjacent kerb and gutter/crown or road must be obtained from Council's Works Division and the driveway design amended to comply with AS2890.1.

Table 1C.2.1(b) Dwelling House - Driveway Design Guide

Distance of parking area from the Front Boundary	Level of the parking area above the top of adjacent road* (Property higher than road)	Level of the parking area below the top of adjacent road * (Property lower than road)
5.5m	1.067m	0.567m
6.0m	1.192m	0.692m
7.0m	1.442m	0.942m
8.0m	1.692m	1.192m
9.0m	1.942m	1.442m
10.0m	2.192	1.692m
11.0m	2.442	1.942
12.0m	2.692	2.192m

Service Vehicles

- k.** On site loading and unloading areas for non-residential developments should be provided in accordance with the RTA Guide to Traffic Generating Development (2002).
- l.** The on site loading and unloading area in a non residential development should incorporate provision for 1 car space and 1 motor cycle space for use by couriers, sited in a convenient location. Larger developments may require more.
- m.** On site pick up and manouvering areas for waste collection vehicles should be provided in accordance with the waste collection provisions at Section 1C.2.3 of the DCP.
- n.** On site parking for a removalist vehicle should be provided for a residential development with more than 20 dwellings that adjoins a public road where kerb side parking for removalist vehicles is difficult or restricted. Parking for a removalist vehicle should be designed to accommodate at least a small rigid vehicle (SRV), and preferably a medium rigid vehicle (MRV) as defined by AS2890.2.
- o.** Car parking should be provided on site in accordance with the minimum parking rates in Tables 1C.2.1(c) and 1C.2.1(d). Parking spaces are for cars, unless otherwise specified. The minimum parking rates in Tables 1C.2.1(d) shall apply for development within EppingTown Centre Core. Where the land use is not specified in Table 1C.2.1(d), the relevant rate in Table 1C.2.1(c) will apply.
- p.** The parking rate for sites located within the Epping Town Centre Core referred to in Table 1C.2.1(d) and paragraphs 1C.2.1(y)-(ak) refers to residential, educational and business development sites that fall within those areas identified as "Town Centre Core" on Figure 4.6(a) in Part 4 - Business. Where a development site falls partly within the Epping Town Centre Core, the parking rate for the Town Centre Core is to apply to the whole development.
- q.** The car parking rate for sites less than (<) 800 metres from a railway station in Table 1C.2.1(c) is a radial distance from the main pedestrian entry. Where a development site falls partly within the 800 metre radius, the parking rate for "sites <800m" is to apply to the whole development.
- r.** A Car Parking Demand Assessment should be provided for:
- any significant variation proposed to the minimum parking rates prescribed in Table 1C.2.1(c) or 1C.2.1(d),
 - land uses not specified in Table 1C.2.1(c) or 1C.2.1(d), or
 - intensive traffic generating developments.
- s.** Before granting approval to depart from on-site parking rates specified in Tables 1C.2.1(c) or 1C.2.1(d), Council will consider the Car Parking Demand Assessment and any other relevant planning consideration.
- t.** A Car Parking Demand Assessment should address at minimum the following matters:
- any relevant parking policy,
 - the availability of alternative car parking in the locality of the land, including:
 - efficiencies gained from the consolidation of shared car parking spaces on the same site,
 - public car parks intended to serve the land,
 - extent of existing on-street parking in non residential zones,

Notes:

The RTA Guide to Traffic Generating Development (2002) is available at www.rms.nsw.gov.au. For servicing rates refer to Table 5.1 (page 5-3)

- extent of existing on-street parking in residential zones,
 - the practicality of providing car parking on the site, particularly for constrained development sites,
 - any car parking deficiency associated with the existing use of the site,
 - local traffic management in the locality of the site,
 - the impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas,
 - the need to create safe, functional and attractive parking areas,
 - access to or provision of alternative transport modes to and from the land, and.
 - the character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.
- u.** The minimum number of car parking spaces is to be rounded up to the nearest whole number if it is not a whole number.
- v.** Stacked parking spaces may be provided if reserved for use by a particular dwelling, commercial unit or the like.
- w.** Shade trees should be provided in open parking areas at the ratio of 1 shade tree for every 6 spaces.

Note:

Where a Car Parking Demand Assessment or a Parking Study is required, a report should be prepared by a suitably qualified traffic and transport consultant.

Motor Cycle Parking (excluding Epping Town Centre Core)

- x.** In all buildings that provide on site parking, 1 space suitable for motor cycles should be provided per 50 car parking spaces provided, or part thereof. Each motor cycle parking space is to be designated and located so that parked motorcycles are not vulnerable to being struck by a manoeuvring vehicle.

Motor Cycle Parking (Epping Town Centre Core)

- y.** In buildings that provide on site parking with less than 25 car spaces, a minimum of 1 motor cycle parking space should be provided. In buildings that provide on site parking with more than 25 car spaces, an area equal to a minimum of one car parking space (four motor cycle spaces) is to be provided as separate parking for motor cycles for every 25 onsite car parking spaces provided, or part thereof. Each motorcycle parking space is to be designated and located so that parked motorcycles are not vulnerable to being struck by a manoeuvring vehicle.

Note:

* The Motor Cycle Parking is in addition to the car parking required in Tables 1C.2.1(c) and 1C.2.1(d) for tenants and/or visitors (not service vehicles which are separately addressed).

** Motor Cycle Parking is not required for dwelling houses.

Table: 1C.2.1(c) On Site Car Parking Rates (Excluding Development Listed in Table 1C.2.1(d) in the Epping Town Centre Core)

Type of Development	Minimum Car Parking Requirement	
	Sites < 800m from Railway Station	Sites > 800m from Railway Station
Residential Accommodation		
Dwelling Houses		
0-2 Bedroom	1 space/ dwelling	
3 or more Bedrooms	2 spaces/ dwelling	
Medium and High Density Dwellings		
0-1 Bedroom	0.75 space/ dwelling	1 space/ dwelling
2 Bedrooms	1 space/ dwelling	1.25 spaces/ dwelling
3 or more Bedrooms	1.5 spaces/ dwelling	2 spaces/ dwelling
Visitors (see Note*)	1 space per 7 dwellings	1 space per 5 dwellings
Seniors Housing	per SEPP (Housing for Seniors or People with a Disability) 2004	
Tourist and Visitor Accommodation (see Note**)		
Bed & Breakfast Accommodation, Farmstay Accommodation	1 space/guest bedroom + 2 spaces for the permanent residents	
Short Term Rental Accommodation (Holiday lets)	Apply residential accommodation rates above	
Hotel or Motel accommodation	1 space/room + 1 space per 2 employees	
Caravan Parks	1 space/van, cabin or tent site	
Commercial Premises		
Business or Office Premises	1/48m ² GFA	1/40m ² GFA
Shops	1/29m ² GLFA	1/20m ² GLFA
Bulky Goods Premises	1/75m ² GLFA, including space for cars with trailers	1/50m ² GLFA, including space for cars with trailers
Restaurants or Cafes (ex drive-through take-away restaurants)	1/29m ² GLFA	15/100m ² GFA + 15/100 m ² of outdoor seating area
Vehicle Sales or Hire Premises	1/150m ² site area + 6 spaces/work bay	
Markets	2 spaces per stall (customers only)	
Marina	0.6 spaces/ berth	

Notes:

* Visitor parking for medium/high residential development is required for development proposals comprising more than 5 dwellings.

**On-site parking for visitor accommodation applies to areas accessible by road only.

***Parking requirements for Industrial Units is increased when ancillary retailing is permitted, or an ancillary office space component is in excess of 20% of the floor area.

Gross Floor Area is as defined by the HLEP.

Gross leasable floor area means the sum of the area of each floor of a building where the area of each floor is taken to be the area within the internal faces of the walls, excluding stairs, amenities, lifts corridors and other public areas but including stock storage areas.

Table: 1C.2.1(c) On site Car Parking Rates (Cont.) (Excluding development listed in Table 1C.2.1(d) in Epping Town Centre Core)

Type of Development	Minimum Car Parking Requirement	
	Sites < 800m from Railway Station	Sites > 800m from Railway Station
Industrial Uses and Areas		
Industry and Warehouse or Distribution Centres (max 20% ancillary office floor area, Note***)	1/150m ² GLFA	1/100m ² GLFA
Vehicle Repair Station and Vehicle Body Repair Workshops	1/150m ² GFA + 6 spaces/work bay	
Sex Services Premises	1 space/ workroom + 1 space per 2 employees	
Agriculture		
Intensive Plant Agriculture	1 space/ employee	
Plant Nursery	0.5 spaces per 100m ² of that part of the site used in conjunction with the nursery + parking for any ancillary uses per rates in this table	
Education		
Child Care Centre	1 space per 4 children	
Educational Establishments	1 space per full time teacher + 1 space per 2 students of driving age	
Health Care		
Health Consulting Rooms	3 per surgery	
Medical Centres	4 per surgery	
Halls, meeting places		
Community Halls	1 space per 5 seats min (subject to parking study)	
Places of Public Worship	1 space per 5 seats min (subject to parking study)	
Entertainment Facility	1 space per 5 seats min (subject to parking study)	
Temporary Community Events	Markets to provide 2 spaces per stall (customers only) available on site or in the immediate locality. Other events subject to a parking study	
Other Uses	as per RTA Guide to Traffic Generating Development or a Parking Study	

Table: 1C.2.1(d) On Site Car Parking Rates (Epping Town Centre Core)

Type of Development	Car Parking Requirement
Residential Accommodation	
Medium and High Density Dwellings	
Studio	0.5 space/ dwelling
0-1 Bedroom	0.75 space/ dwelling
2 Bedrooms	1 spaces/ dwelling
3 or more Bedrooms	1.5 spaces/ dwelling
Visitors (see Note*)	Minimum of 1 space per 10 dwellings
Adaptable/Accessible Unit Parking	A minimum of 1 space shall be provided for every adaptable/accessible unit, appropriately designed for use by people with disabilities. (see Note**)
Commercial Premises/Health Care	
Business or Office Premises	Minimum of 1/70m ² of GFA Maximum of 1/50m ² of GFA
Shops	Minimum of 1/60m ² , GLFA Maximum of 1/30m ² , GLFA
Restaurants or Cafes (ex drive-through take-away restaurants)	Minimum of 1/60m ² , GLFA Maximum of 1/30m ² , GLFA
Accessible Parking	Minimum of 1-2% of all spaces to be provided as readily accessible spaces, appropriately designed for use by people with disabilities.
Health Consulting Rooms/Medical Centres	Minimum of 1/70m ² of GFA Maximum of 1/50m ² of GFA
Other Uses	as per Table 1C.2.1(c)

Notes:

* Visitor parking for medium/high residential development is required for development proposals comprising more than 5 dwellings.

** Accessible parking is to be designed in accordance with the requirements of relevant Australian standards.

Gross Floor Area is as defined by the HLEP.

Gross leasable floor area means the sum of the area of each floor of a building where the area of each floor is taken to be the area within the internal faces of the walls, excluding stairs, amenities, lifts corridors and other public areas but including stock storage areas.

Carshare

z. Parking carshare spaces are encouraged for:

- any residential development containing more than 25 residential units, or
- any employment generating development with a floor space of 5,000m², and
- is located within 800 metre radial catchment of a railway station, or within a transit node centre that is serviced by a strategic bus corridor.

A car share parking proposal should be:

aa. supported by a parking study to be submitted with the Development Application.

Car share (Epping Town Centre Core and Hornsby West Side)

ab. A minimum of 1 space is to be allocated to car share for developments with 50 or more dwellings. If agreement with a car share provider is not obtained then the car share space is to be used for additional visitor parking until such time as a car share provider is obtained.

ac. For developments which comprise 50 or more dwellings, Council may consider car share spaces in lieu of some resident parking, subject to evidence of an appropriate arrangement with a car share scheme provider.

Storage Areas within Car Parking Areas

ad. Where storage space is provided adjacent to car parking areas or within designated car parking spaces, it shall not impede or reduce the area allocated for car parking requirements as set out in the AS 2890 Parking Facilities series, including parking for bicycles and motor cycles.

Notes:

Car share is a self service car rental scheme for short periods of time, typically on an hourly basis. Car sharing works best in locations where there is a good level of public transport provision and access to local services and facilities by walking and cycling (eg. commercial centres inside transit nodes).

Employment generating development comprises office premises and industries.

A transit node centre serviced by a strategic bus corridor comprises land within a 600m radial catchment of the Carlingford commercial centre or a 400m radial catchment of the West Pennant Hills commercial centre.

For further information on Council’s carshare parking policy refer to the Policy available for view at Council’s website

hornsby.nsw.gov.au.

Parking for people with disabilities

ae. Car parking for people with disabilities should be provided on-site in accordance with the parking rates in Table 1C.2.1(e):

Table: 1C.2.1(e) Accessible Car Parking Provision

Land uses	Minimum Number of Accessible Spaces
Commercial Premises	1-2% of spaces
Passenger Transport Facility e.g. railway stations, bus/rail interchanges	1-3% of spaces
Community and Recreation Facilities eg. civic centres and gymnasiums	2-3% of spaces
Educational Establishments	2-3% of spaces
Entertainment Facilities eg. theatres, libraries, sport centres	3-4% of spaces
Health Service Facilities eg. medical centres, clinics, community health centre	3-4% of spaces (See Note 1)
Places of Public Worship	See Note 1
Medium and High Density Residential Development	1 for each accessible unit provided

Notes:

The percentages in Table 1C.2.1(e) refers to the total number of car parking spaces required in Table 1C.2.1(c).

Note 1 To be provided as needed in consultation with management of the premises.

Bicycle parking and associated facilities

af. Bicycle parking and facilities should be provided on site in accordance with the minimum rates in Table 1C.2.1(f).

ag. Secure and safe bicycle parking should be separated from motor vehicles.

Table: 1C.2.1(f) On site bicycle parking and facilities

Type of Development	Minimum Bicycle Parking Requirement
Medium and High Density Residential Development	1 space per 5 units for residents within the residential car park area 1 space per 10 units for visitors in the visitor car park area
Commercial Premises (over 1200m ² GFA)	1 space per 600m ² (GFA) for staff+ Developments with a gross floor area over 2500m ² should provide end of destination facilities for staff in the form of at least 1 shower cubicle with ancillary change rooms
Industrial Developments (over 2000m ² GFA)	1 space per 1000m ² (GFA) for staff + Developments with a gross floor area over 4000m ² should provide end of destination facilities for staff in the form of at least 1 shower cubicle with ancillary change rooms
Educational Establishments	1 rack per 20 full-time staff or part thereof, and 5 racks per class (between grades 5 and 12), and lockers for staff at a rate of 1 per 3 staff bicycle racks or part thereof, and end of destination facilities for staff in the form of at least 1 shower cubicle with ancillary change rooms for every 10 bicycle racks required.

Note:

The above rates are based on a rate of 1 bicycle rack/locker per 20 employees, using an average commercial employee ratio of 1 employee per 30m² and an industrial rate of 1 employee per 50m².

Bicycle Parking (Epping Town Centre Core)

ah. Bicycle parking for medium and high density development (including mixed use and shop top component) shall be provided at the following rate:

- secure resident bicycle parking at a minimum rate of 1 space per dwelling, and
- secure visitor bicycle parking at a minimum rate of 1 space per 10 dwellings.

ai. Secure bicycle spaces for residents can be provided individually (per dwelling) or collectively for the use of all residents within a designated area. Bicycle parking and access should ensure that potential conflict with vehicles are minimised.

aj. Visitor bicycle parking should be provided close to the street entrance of a residential or mixed use development in accordance with Safer by Design principles and be appropriately designated. Bicycle parking and access should ensure that potential conflict with vehicles is minimised. Council's consent will be required where visitor bicycle spaces are proposed on Council's footpath.

Notes:

Bicycle parking should be designed in accordance with AS 2890.3 Parking Facilities – Bicycle Parking Facilities.

Accessible parking is to be designed in accordance with the requirements of relevant Australian Standards.

1C.2.2 Accessible Design

Desired Outcomes

- a. Publicly accessible buildings that provide a safe and continuous path of travel for people with impaired mobility.
- b. Residential development that includes adaptable units and accessible residential accommodation to address potential demand.

Prescriptive Measures

General

- a. All new building work should comply with the accessibility provisions of the *Building Code of Australia (BCA)* and the *Disability (Access to Premises - Buildings) Standards 2010* where required.
- b. Continuous unobstructed paths of travel should be provided from public footpaths, accessible car parking, and setdown areas to public building entrances. Paths of travel should be designed in accordance with the *Disability (Access to Premises - Buildings) Standards 2010*.
- c. Accessways for pedestrians and for vehicles are to be separated.

Seniors Housing

- d. Access is to be provided in accordance with the requirements of SEPP (Housing for Seniors or People with a Disability) 2004.

Heritage Buildings

- e. Access to heritage buildings should be provided that is sympathetic to the heritage significance of the building and its curtilage.

Medium and High Density Residential Developments

- f. For developments with 10 or more dwellings:
 - At least 30% of proposed dwellings should be adaptable housing, designed to meet the needs of residents as they age.
 - At least one third of adaptable units (i.e. 10% of all units) are to be provided with a parking space designed for people with a disability.
 - Adaptable housing is to be equitably distributed through all types and sizes of dwellings.

Notes:

For further information refer to the Disability (Access to Premises - Buildings) Standards 2010 available at www.ag.gov.au.

An access report, prepared by a relevantly qualified access consultant may be required for development that involves the following:

- Medium to high density residential developments with 10 or more dwellings, or
- Housing for Aged or People with Disabilities, or
- Other developments that are required to comply with the Disability (Access to Premises - Buildings) Standards 2010.

Adaptable housing is defined by Australian Standard AS 4299 (excluding the provisions in Appendix A regarding private car accommodation).

1C.2.3 Waste Management

Desired Outcomes

- a. Development that maximises re-use and recycling of building materials.
- b. Waste storage and collection facilities that are designed to encourage recycling, located and designed to be compatible with the streetscape, accessible, clean and safe for users and collectors.

Prescriptive Controls

Demolition and Construction Waste

- a. A Waste Management Plan should be prepared in accordance with Council guidelines and submitted with the development application, to address demolition and construction waste, and include:
 - An estimate of the types and volumes of waste and recyclables to be generated,
 - A site plan showing sorting and storage areas for demolition and construction waste and the vehicle access to these areas,
 - How excavation, demolition and building waste materials will be re-used or recycled and where residual wastes will be disposed, and
 - The total percentage (by weight) of demolition and construction waste that will be reused or recycled to achieve the minimum waste minimisation target established by the State Government.

Notes:

The State Government waste minimisation targets are set out in the *Waste Avoidance and Resource Recovery Act 2001* and NSW Waste Avoidance and Resource Recovery Strategy 2014 - 2021. The minimum reuse/ recycling rate for construction and demolition waste is currently 80%. (until 2021).

For further information on preparing a waste management plan refer to Council's guideline the Waste Minimisation and Management Guide available at website hornsby.nsw.gov.au.

Asbestos and other hazardous demolition materials should be handled and disposed of to authorised waste disposal depots.

Waste Facility Design

- b. The location and design of waste storage and collection areas and facilities should:
 - accommodate the required number of mobile waste containers and materials separation area in accordance with Council's guideline (See Note 1),
 - have regard to streetscape aesthetics, odour, and noise generation and be sited away from adjacent

sensitive landuses and comply with the location guidelines in Table 1C.2.3(a),

- comply with Council's design guidelines (see Note 2),
 - include bunding in impervious materials where Dangerous Goods may be stored,
 - incorporate an additional bulky item storage area of at least 8m² for residential flat developments of 17 or more dwellings, and
 - allow for ease of access for tenants and ensure the path of travel between the waste storage area and the collection point is of a suitable width, distance and gradient (maximum 1 in 8 and no steps).
- c. Residential developments proposing on-site collection of waste should:
 - design for a large Council waste collection vehicle, or
 - for land within the 5 storey residential flat building precincts (R4 Zone, Area P on the HLEP Height of Building Map), design for a small Council waste collection vehicle (SRV), and
 - provide an easement in favour of Council to enable collection vehicles to service the development (see Note 3).
 - d. New Commercial and Industrial developments proposing on site collection of waste should design for a large commercial garbage truck. (see Note 4).

Note:

The guideline reference notes above are included within the Council's guideline the *Waste Minimisation and Management Guide* available at website hornsby.nsw.gov.au, as noted below:

- Note1: See reference FD1.01
- Note 2: See references FD1.02, FD1.03, FD1.04
- Note 3: See reference A5.04
- Note 4: See reference A5.02

Large Council waste collection vehicle details are provided at A5.02 of the *Waste Minimisation and Management Guide* (9.7m long truck with 4.5m vertical clearance).

Small Council waste collection vehicle (SRV) is a small rigid vehicle as defined by AS 2890.2 (6.4m long with 3.5m vertical clearance)

Table 1C.2.3(a) Location of Waste Storage and Collection Areas (including recyclables)

Landuse	Waste Storage	Waste Collection
Residential Subdivision (no new roads)		
0-6 lots	NA	Road frontage of the property
7 or more lots	NA	Accessway frontage (i.e. on-site access for a large Council waste collection vehicle is required to be designed as part of the subdivision)
Residential Development		
0-6 dwellings	Provide a hard stand area of 1m x 2m behind the building line for each dwelling	Road frontage of the property
Multi Dwelling Housing, Townhouses, and 2-3 Storey RFBs	<p>Provide a communal waste storage facility in a level position within 6 metres of the front property boundary</p> <p>Alternatively, an internal communal waste storage facility or waste room should be provided where development characteristics or site constraints dictate, such as:</p> <p>The status of the roadway (heavy traffic or extensive on-street parking) requires on-site access,</p> <p>An open air storage and recycling facility would detrimentally impact on streetscape or residential amenity; or</p> <p>Site characteristics make access to the street difficult for individual unit holders (e.g. Distance > 75 metres and/or Gradient > 1:8).</p> <p>The waste collection point should be no more than 10 metres from the communal waste storage facility/ waste room and designed to accommodate a large Council waste collection vehicle</p>	
5 storey RFBs Housing Strategy Precincts (R4 Zone, Area P on Height Map)	Preferably provide a waste room within the basement of the development, or alternatively an internal communal waste storage facility behind the building line.	On-site access required for a small Council waste collection vehicle. The waste collection point should be no more than 10 metres from the communal waste storage facility/ waste room.
6 or more storey RFBs, and Mixed-Use Buildings	Preferably provide a waste room within the basement of the development, or alternatively an internal communal waste storage facility behind the building line.	On-site access required for a large Council waste collection vehicle. The waste collection point should be no more than 10 metres from the communal waste storage facility/ waste room.
Commercial and Industrial Development		
New buildings	<p>Provide an internal communal waste storage facility behind the building line or a waste room within the development.</p> <p>Where a development involves multiple occupancy, communal facilities should be provided:</p> <ul style="list-style-type: none"> • where the design makes it difficult for all units to have ready access to a collection point; and • where site characteristics restrict entry of vehicles to individual units. <p>Provide a refrigerated garbage room where there are large volumes of food scraps and perishables (such as seafood), and/or when infrequent collection is arranged.</p>	<p>For large developments, a waste collection area should be located on site</p> <p>On-site access required for a large commercial garbage truck.</p> <p>The waste collection point should be located to provide efficient access by collectors and collection vehicles.</p>

Garbage Chute Systems

- e. Buildings containing more than 3 storeys should incorporate a garbage chute system for waste and an interim recycling bin storage room on each floor.
- f. Where a required garbage chute system is unable to be provided, an interim waste storage room is to be provided on each floor that is serviced by a goods lift to transfer the waste to the communal waste storage facility in the basement.
- g. The location, design and construction of garbage chute systems and storage rooms should be in accordance with Council's guidelines.

Note:

For further information refer to part FD2.01 in Council's guideline the Waste Minimisation and Management Guide available at website.hornsby.nsw.gov.au.

Volume Handling and Reduction Equipment

- h. Where a building requires a chute system and where in excess of 20 residential units are serviced by the chute, appropriate volume handling or reduction equipment should be provided.
- i. The location, design and construction of volume handling and reduction equipment should be in accordance with Council's guidelines.

Note:

For further information refer to part FD2.02 in Council's guideline the Waste Minimisation and Management Guide available at website.hornsby.nsw.gov.au.

Ongoing Waste Management Submission Requirements

- j. A Waste Management Plan should be prepared in accordance with Council's guidelines and submitted with the development application, to address the generation of waste from the occupation of the development, and include:
 - an estimate of the amount of waste and recyclables to be generated,
 - identify the number of, and capacity of, waste storage bins and volume handling and reduction equipment required,
 - a site plan showing:
 - areas allocated for waste storage and recycling,
 - details of any volume handling and reduction equipment,
 - nomination of the waste collection point for the site, and

- identification of the path of access for users and collection vehicles.
- details of the on-going management of the storage and collection of waste, including responsibility for cleaning, transfer of bins between storage areas and collection point, maintenance of signage, and security of storage areas.

Note:

For further information refer to:

Council's guideline *Waste Minimisation and Management Guide* available on the website website.hornsby.nsw.gov.au. - see parts A6.01 and A03.02 to estimate waste generation and bins required.

Better Practice Guide for Waste Management in Multi-unit Dwellings (2008) – Department of Environment and Climate Change.

Waste Classification Guidelines (2008) - Department of Environment, Climate Change and Water.

NSW Waste Avoidance and Resource Recovery Strategy 2014 - 2021 and Performance Report 2008 - Department of Environment and Climate Change.

1C.2.4 Effluent Disposal

Desired Outcomes

- a. Sewage is disposed of in a manner that minimises impacts on the natural and built environment and public health.

Prescriptive Measures

- a. Areas that are not serviced by the Sydney Water reticulated sewerage system are required to dispose of wastewater using a NSW Health Department accredited Sewage Management Facility.
- b. An on site sewage management plan should be provided for applications involving new work in the unsewered areas of the shire, involving:
- the subdivision of land,
 - the erection of new or enlarged habitable buildings, or
 - other work that requires modification to an existing on-site sewage management system.
- c. The sewage management plan should demonstrate the existing and/or proposed system is sited and designed to:
- prevent the spread of disease by micro-organisms, foul odours, the contamination of water, the degradation of soil and vegetation, and discourage insects and vermin,
 - ensure that persons do not come in contact with untreated sewage or effluent,
 - accommodate a suitable pump-out point and tanker standing location, where necessary,
 - minimise any adverse impacts on the amenity of the premises and surrounding lands,
 - protect water quality in watercourses, and
 - comply with relevant Best Practice Guidelines.

Notes:

The installation of any on site sewage management facility requires approval from Council under the *Local Government Act (1993)*. An application to install an On Site Sewage Management Facility should be submitted when the Development Application is lodged.

Best practice guidelines and legislation to be considered in designing an on-site sewage management system includes, but is not limited to, the following:

- *Hornsby Shire Council On site Sewage Management Strategy 2007-2009*,
- *Hornsby Shire Council Greywater Reuse Policy, 2010*,
- *Environment & Health Protection Guidelines - On-site Sewage Management for Single Households* (Department of Local Government, 1998),
- *AS 1547- On-site Sewage domestic- wastewater disposal* (Standards Australia, 2000),
- *Septic Tank and Collection Well Accreditation Guidelines 2001* (NSW Health),
- *Register of Accredited Sewage Management Facilities*, (NSW Health),
- *Greywater Reuse in Single Domestic Premises 2000*, (NSW Health),
- *Interim NSW Guideline for Management of Private Recycled Water Schemes*,
- *Water Industries Competition Act 2006*,
- *Local Government (Approvals) Regulation*,
- SREP No.20 - Hawkesbury Nepean River, and
- SEPP No.62 - Sustainable Aquaculture.

The above documents are accessible from either Council's website www.hornsby.nsw.gov.au, the Department of Environment, Climate Change and Water on www.environment.nsw.gov.au, the NSW Department of Health, on www.health.nsw.gov.au, and legislation can be viewed at www.legislation.nsw.gov.au.

For further information on some of the key controls from the above best practice guidelines, refer to Hornsby Shire Council, *Form 18 - An application for approval to Install a Wastewater Treatment System* available at [website hornsby.nsw.gov.au](http://www.hornsby.nsw.gov.au)

1C.2.5 Noise and Vibration

Desired Outcomes

- a. Development designed and managed to minimise noise and vibration impacts on the occupants of residential dwellings and other noise sensitive land uses.

Prescriptive Measures

Construction Noise Management

- a. Development proposals should be accompanied by documentation that includes a conceptual description of the measures to be applied to minimise construction noise.

Note:

Applicants should refer to the *Interim Construction Noise Guidelines (2009)* by the Department of Environment and Climate Change NSW available at www.environment.nsw.gov.au in preparing a noise management plan.

Noise Sensitive Development

- b. Noise sensitive landuses should include siting and design measures to ameliorate the potential impact of existing noise generating uses on the proposed development.
- c. Noise sensitive landuses adjoining a major road or a railway corridor should be accompanied by an acoustic report that demonstrates the site and building design is suitable for use in terms of acoustic amenity.
- d. High, solid acoustic fences should be avoided forward of the building line other than for noise sensitive landuses along major roads that are exposed to significant noise. In these instances, fences should be a maximum height of 1.8 metres and incorporate articulation. Large unbroken sections of fencing should be avoided.

Notes:

Noise sensitive landuses include dwellings or approved residential building envelopes on vacant lots, a place of public worship, a hospital, an educational establishment, a child care centre, a public open space area/park and other specialised commercial uses such as temporary accommodation (eg caravan parks or motels).

Major Roads for the purpose of this part of the DCP comprises roads with an annual average daily traffic volume of more than 40,000 vehicles, as defined by Clause 102 in SEPP (Infrastructure) 2007, that may include Pennant Hills Road, Beecroft Road, Epping Road, Castle Hill Road and Boundary Road.

Noise Generating Development

- e. Development should be sited and designed so that noise is kept to a minimum and does not create offensive noise as defined by the *Protection of the Environment Operations Act 1997*.
- f. Noise generating developments should be accompanied by an acoustic report that demonstrates the development is sited and designed to:
 - minimise the effect of noise and vibration on surrounding sensitive landuses, and
 - comply with relevant State Government and Council guidelines.
- g. The location and design of noise generating activities, such as loading and unloading areas, garbage collection areas, driveways, parking areas, active recreation areas, air conditioning or mechanical plants, should be sited away from adjacent sensitive landuses and/or screened by walls or other acoustic treatments.
- h. In addition to physical noise mitigation measures, noise impact management measures should be used to further limit potential noise impacts on sensitive landuses such as:
 - scheduled times to undertake noise generating activities and/or use of noise generating machinery, and
 - reasonable hours of operation including delivery hours.

Notes:

Noise generating development may include, but is not limited to the following: child care centres, schools, places of public worship, industrial uses, commercial developments, hotels, backpackers' accommodation, and some active recreational facilities.

For further information on relevant guidelines refer to:

- State Government Guidelines, including the *NSW Industrial Noise Policy* (EPA 2000) and the *NSW Environmental Criteria for Road Traffic Noise* (EPA 1999), available at www.environment.nsw.gov.au, and
- SEPP (Infrastructure) and the associated guidelines *Development Near Rail Corridors and Busy Roads - Interim Guideline* (DoP 2008) available at www.planning.nsw.gov.au, and
- Council's *Policy and Guidelines for Noise and Vibration Generating Development* available at website hornsby.nsw.gov.au.

1C.2.6 Air Quality

Desired Outcomes

- a. Development designed and managed to minimise air quality impacts on the occupants of residential dwellings and other sensitive land uses.

Prescriptive Measures

General

- b. Buffer zones should be provided between potentially air polluting activities and air quality sensitive landuses.

Note:

Some buffers to sensitive landuses are prescribed within the chapters of this DCP - for example buffers between intensive rural uses and sensitive landuses are prescribed in Chapter 2 of this DCP.

Air Quality Sensitive Development

- c. Air quality sensitive landuses adjoining a major road are to include siting and design measures to ameliorate the potential impact of vehicle emissions on the site.
- d. An Air Quality assessment report that takes into account the provisions of SEPP (Infrastructure) 2007 should be provided for air quality sensitive landuses within 100 metres of a major road (excluding a single dwelling house on an existing lot).

Notes:

Air quality sensitive landuses include a dwelling, school, child care centre, residential aged care facility, hospital, office or public recreational area per page 33 in *Development Near Rail Corridors and Busy Roads - Interim Guideline* (DoP 2008).

Major Roads for the purpose of this part of the DCP, comprises freeways and main roads with moderate congestion levels and accommodating more than 2500 vehicles per hour, that may include the Pacific Highway (south of Edgeworth David Ave), Pennant Hills Road, Carlingford Road, Beecroft Road, Epping Road, Castle Hill Road, Boundary Road and New Line Road.

Air Quality Impacting Development

- e. Any development that is likely to, or capable of, generating levels of air emissions exceeding the requirements of the *Protection of the Environment Operations Act 1997* should incorporate appropriate measures to mitigate against air pollution.
- f. Land uses that have the potential to generate offensive odour should be sited and designed to minimise odour impacts on adjoining land uses.

Notes:

For further information, refer to:

- SEPP (Infrastructure) 2007 and additional guidelines on air quality are provided in *Development Near Rail Corridors and Busy Roads - Interim Guideline* (DoP 2008) available at www.planning.nsw.gov.au, and
- Development assessment guidelines on air quality available at www.planning.nsw.gov.au
- *Technical framework: Assessment and Management of Odour from Stationary Sources in NSW* (November 2006) by the Department of Environment and Conservation

1C.2.7 Crime Prevention

Desired Outcomes

- a. Development designed to reduce crime risk and minimise opportunities for crime.

Prescriptive Measures

Surveillance

- a. Development should be designed to provide or enhance opportunities for effective surveillance by providing:
- clear sight lines between public and private places,
 - effective lighting of public places, and
 - landscaping that makes places attractive but does not provide offenders with a place to hide or entrap victims.

Access Control

- b. Development should be designed to incorporate physical or symbolic barriers to attract, channel or restrict the movement of people to clearly defined public spaces.
- c. Development should comprise elements that contribute to effective access control by creating:
- landscapes and physical locations that channel and group people into public areas,
 - public spaces that attract, rather than discourage people from gathering, and
 - restricted access to high crime risk areas such as car parks and other rarely visited areas.

Territorial Reinforcement

- d. Development should incorporate design elements that contribute to the creation of a sense of community ownership of public spaces by:
- encouraging people to gather in public spaces and feel some responsibility for its use and condition,
 - clearly defining transitions and boundaries between public and private spaces, and
 - clearly defining the use of public spaces.

Space Management

- e. A Crime Prevention Through Environmental Design (CPTED) report is required for large scale or crime sensitive developments and should detail:
- how the proposal has incorporated CPTED principles,
 - strategies to be implemented to ensure site cleanliness, rapid repair of vandalism and graffiti, removal or refurbishment of decayed physical buildings and elements, and
 - measures to be incorporated into the development to reduce the potential for crime.

Note:

For further information refer to the NSW Government's publication *Crime Prevention and the Assessment of Development Applications – Guidelines under Section 79C of the Environmental Planning and Assessment Act 1979* available at www.planning.nsw.gov.au.

A CPTED assessment (Safer by Design Evaluation) is required for the following large scale and/or crime sensitive developments:

- Developments with 20 or more dwellings,
- Major commercial/ retail developments,
- Major community facilities, hospitals and schools,
- New industrial complexes,
- Clubs/ hotels, liquor outlets,
- Service stations,
- Sex services premises, and
- Other high risk landuses.

1C.2.8 Building Sustainability

Desired Outcomes

- a. Development that incorporates environmentally sustainable design and construction.

Prescriptive Measures

Residential Buildings

- a. A certificate should be submitted, when required, demonstrating that the building complies with *SEPP - Building Sustainability Index (BASIX)*.

Non-Residential Buildings

- b. The energy efficiency provisions of the *Building Code of Australia* should be incorporated into the design of non-residential buildings. This may require the inclusion of the following:

- Windows that are appropriately sized and shaded to reduce summer heat load and permit entry of winter sun,
- Building materials selected to assist thermal performance and ceiling insulation used where appropriate,
- Natural ventilation,
- Buildings should have an area, orientation and roof pitch that is suitable for the installation of solar collectors,
- Low energy, high efficiency plant, fittings and appliances should be specified, and
- The use of solar collectors for hot water heating and power is encouraged to reduce energy consumption.

- c. Water conservation principles should be incorporated into non-residential developments, including the following:

- Water efficient fittings and appliances including: 4 star dual-flush toilets and taps, 3 star showerheads and urinals, water efficient washing machines and dishwashers,
- Rainwater tanks should be provided to meet 80% of non-potable demand including outdoor use, toilets and laundry,
- Cooling Towers are designed in accordance with best practice guidelines to reduce potable water consumption, and
- Water use within open spaces (for irrigation, water features etc.) should be supplied from sources other than potable mains water (eg stormwater, greywater or wastewater) to meet 80% water use demand.

- d. Ecologically sustainable, second hand and recycled building materials should be considered for use in building construction.

Note:

In achieving the desired outcomes of this element, applicants for non-residential developments are encouraged to demonstrate that the development is designed to achieve a minimum 4 star rating under the Green Building Council of Australia's Green Star Rating Tool. Go to www.gbca.org.au for more details on the green star rating tool.

Sydney Water's best practice guide for cooling towers is available at www.sydneywater.com.au

For further information on ecologically sustainable building materials refer to Council's guidelines at A3.01 of the *Waste Minimisation and Management Guide* available at website hornsby.nsw.gov.au.

1C.2.9 Landscaping

Desired Outcomes

- a. Landscaping that integrates the built form with the locality and enhances the tree canopy.

Prescriptive Measures

- a. Landscaping on site should be incorporated into the site planning of a development to (where appropriate):
 - reinforce the desired future character of the locality,
 - maintain significant landscape features,
 - provide planting within setback zones (setbacks identified within the relevant applicable parts of the DCP),
 - soften the visual impact of buildings, carparks and roads,
 - cater for outdoor recreation areas,
 - separate conflicting uses,
 - screen undesirable elements, and
 - improve the aesthetic quality of the development.
- b. Landscape planting should achieve a mature height in scale with the structures on the site.
- c. Where canopy trees are required, preference should be given to incorporating locally indigenous trees.
- d. Street tree planting within public land should comply with Council's Tree Management Plan.
- e. Development should comply with landscape construction standards prescribed in Annexure C.

Notes:

Detailed landscape requirements for some localities are prescribed within the relevant applicable parts of this DCP.

The applicant is encouraged to incorporate species from Council's publication *Indigenous Plants for the Bushland Shire* available at website hornsby.nsw.gov.au. The use of non-locally indigenous plants is acceptable where they are recognised as providing a superior performance to the micro-climatic conditions of the development.

Locally indigenous plants suitable for landscaping areas adjacent to bushland may include, but is not limited to, those native species found in adjacent bushland or species contained in Council publications *Indigenous Plants for the Bushland Shire* and the *Create a Native Garden* booklets at website hornsby.nsw.gov.au.

The development of landscapes that provide tree cover and more extensive permeable surfacing is encouraged as it is recognised that they can significantly improve the environmental performance of the development, reducing the impacts of climate change and a reliance on energy consuming systems.

Council generally does not support the planting of shrubs, groundcovers and native grasses within verge areas outside of town centres as it introduces hazards that can have unacceptable liability implications and additional maintenance issues.

1C.2.10 Services and Lighting

Desired Outcomes

- a. Development that provides necessary services to cater for future occupants.
- b. Development that integrates required services in building and site design to minimise impacts on the streetscape.

Prescriptive Measures

Services

- a. Applicants should consult service providers for energy, electricity, gas, water, telephone, national broadband network (NBN) fibre cables and fire requirements.
- b. Any services and structures required by the providers should be located within the basement, or concealed within the facade, with appropriate access. Where this is not possible, an alternative method of minimising street impact should be demonstrated, such as screening with landscape or built elements.
- c. With the exception of dwelling houses, all buildings should accommodate proposed or future air conditioning units within the basement or on rooftops, with provision of associated vertical/ horizontal stacks to all sections of the building.
- d. Air conditioning units and mechanical plant located on the roof should be well screened and integrated into the building form.
- e. Air conditioning units and mechanical plant should be sited away from adjacent sensitive landuses and/or screened by walls or other acoustic treatments.

Lighting

- f. External and security lighting should be positioned to avoid light spillage, particularly to adjacent sensitive areas in accordance with AS4282- Control of the Obtrusive Effects of Outdoor Lighting.
- g. Tennis courts and sports patios ancillary to a dwelling house should not be artificially illuminated xxx

Satellite dishes

- h. A maximum of one satellite dish should be provided per residential building.
- i. Satellite dishes should be preferably ground mounted, and
 - located to the rear of an existing building,
 - setback 15 metres from any property boundary in a rural zone,
 - be of a dark or recessive colour to blend with the surrounds,
 - not impact on the streetscape and views enjoyed by adjacent properties, and
 - in an urban area, have a maximum height of 2.5 metres above the natural ground level, or
 - in a non-urban area, have a maximum height supported by a report prepared by an appropriately qualified consultant demonstrating that the height proposed is required to receive the signal.
- j. Satellite dishes may be roof mounted where:
 - a report is submitted by an appropriately qualified consultant demonstrating that roof mounting of the satellite dish is required to receive a signal,
 - it is located no higher than the ridgeline of the section of roof on which it is located,
 - it is of a similar colour to the roof on which it is located, and
 - it does not impact on the streetscape and views enjoyed by adjacent properties.

Note:

Transgrid's guidelines on development in the vicinity of easement areas should be considered for work near any high voltage transmission network infrastructure. For further information, refer to transgrid.com.au.

1C.2.11 Signage

Desired Outcomes

- a. Signage compatible with the character of the locality.
- b. Signage that complements the scale, size and architecture of the building or structure on which it is displayed.
- c. Signage that does not compromise pedestrian, cyclist or motorist safety.

Prescriptive Measures

General

- a. Signs should be designed and located to:
 - relate to the use of the premises,
 - be consistent with best practice guidelines,
 - be integrated with the architecture of the supporting building, not obscure significant architectural features and maintain the dominance of the architecture,
 - be limited in number to avoid cluttering, distraction and unnecessary repetition,
 - not cover mechanical ventilation inlets or outlets,
 - not comprise a roof sign,
 - not compromise road or pedestrian safety,
 - be a minimum of 2.6 metres above any footpath where the sign is not flush with the wall, and
 - be at least 600mm from a kerb or roadway edge where the sign is over a public road.
- b. In addition to the above, illumination of signage should:
 - be integrated with the design of the sign,
 - not cause light spillage into nearby residential properties,
 - not use complex displays, moving signs, flashing lights or the like that hold driver's attention beyond 'glance appreciation', and
 - be fitted with an automatic timing device, controlling the illumination hours.
- c. In residential zones, signage should not be illuminated.
- d. All commercial advertising should comply with *SEPP No.64-Advertising and Signage*.

Notes:

Signage means any sign, notice, device, representation or advertisement that advertises or promotes any goods, services or events and any structure or vessel that is principally designed for, or that is used for, the display of signage, and includes any of the following:

- (a) an advertising structure,
- (b) a building identification sign,
- (c) a business identification sign,

but does not include a traffic sign or traffic control facilities.

For best practice guidelines on the planning and design of outdoor advertisements refer to *Transport Corridor Outdoor Advertising Signage Guidelines* (July 2007) available at www.planning.nsw.gov.au. Note that this includes prescriptive maximum luminance levels for signs to maintain road safety. (at Section 3.2.5 of the guidelines).

All signage applications are to consider the provisions of *State Environmental Planning Policy (SEPP) No.64 - Advertising and Signage* which is available at www.planning.nsw.gov.au.

The following signage types are discouraged: illuminated signs in residential areas, flag signs, animated signs, mechanical moving signs, scrolling messages, moving LED signs, video/ television screens, projected laser advertising and other flashing lights, signs with large areas of red or incorporate a display resembling traffic lights.

Business Identification Signs

e. Business identification signs should:

- identify the significant owners, tenants and uses of buildings,
- consolidate signs for multiple tenancies,
- not incorporate advertising of products and services that are not directly related to the approved use of the premises, and
- comply with the general controls and the relevant prescriptive measures in the following Tables 1C.2.11(a) to (f).

Note:

A *business identification sign* means a sign:

(a) that indicates:

- (i) the name of the person or business, and
- (ii) the nature of the business carried on by the person at the premises or place at which the sign is displayed, and

(b) that may include the address of the premises or place and a logo or other symbol that identifies the business, but that does not contain any advertising relating to a person who does not carry on business at the premises or place.

Table 1C.2.11(a) Awning fascia sign

- Should not project above or below the fascia
- Should not be illuminated

An awning fascia sign is attached to the fascia or return end of an awning.

Table 1C.2.11(b) Under Awning Sign

- Should be erected below the awning fascia, horizontally to the ground and at right angles to the building
- Should not exceed 0.4m in width
- Should not exceed a vertical height of 0.5m
- Should be located 2m from the side property boundary, and not closer than 3m to another under awning sign

A suspended under awning sign, also known as an under awning sign, is a sign attached to the underside of an awning.

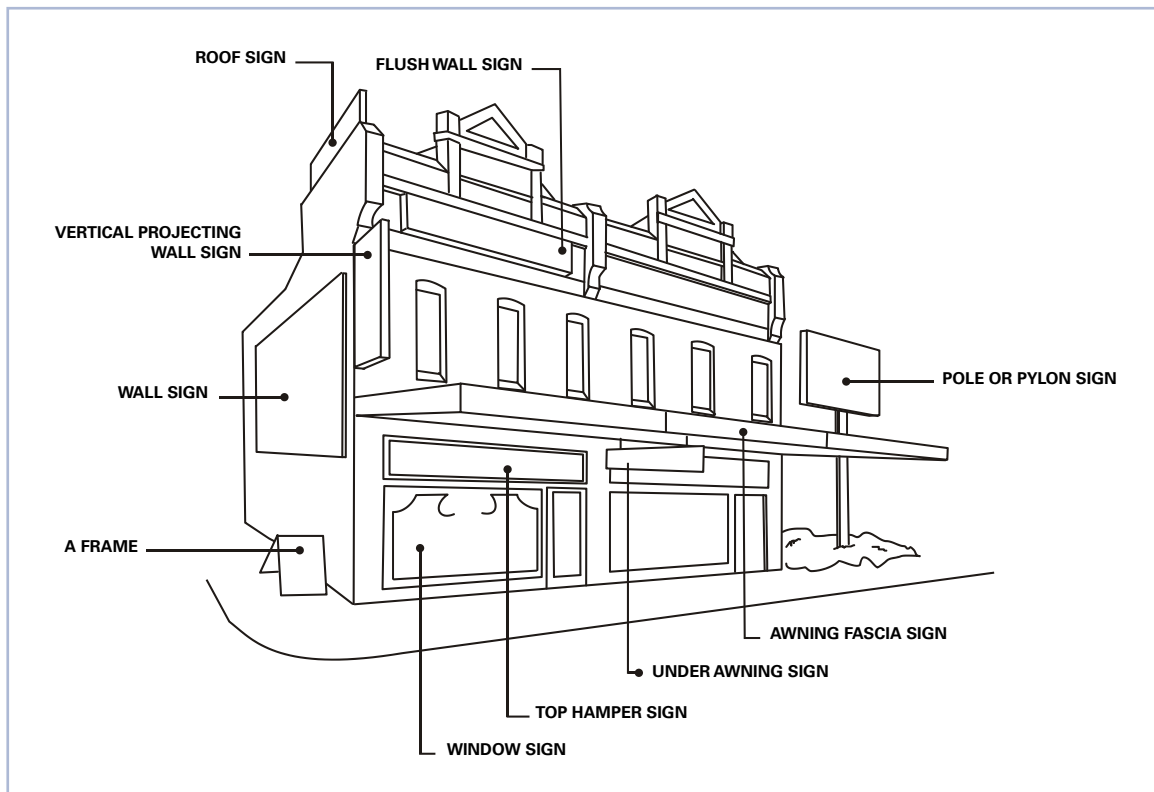


Figure 1C.2.11(a) Illustration of signage types (I)

Table 1C.2.11(c) Flush wall and painted wall signs

Should not extend laterally beyond the wall of the building to which it is attached

Should be flush with the building

The total area of wall signs should not exceed 5m², unless it can be demonstrated that the sign is consistent with the character of the locality in accordance with SEPP No.64.

A flush wall or painted wall sign are signs that are fixed flat or painted on the wall on which they are displayed. This also includes a top hamper sign, and a window sign. Note that painting a building in corporate colours may be considered a painted wall sign.

Table 1C.2.11(d) Vertical projecting wall signs

Should not project above the wall to which it is attached

Should not exceed 1.5m² in area

Should be erected at right angles to the wall of the building to which it is attached

Maximum of one sign per building

A projecting wall sign is a sign that is attached to the wall of a building and projecting horizontally more than 300mm.

Table 1C.2.11(e) Pole or pylon sign

Signage for multiple businesses within the one complex should be advertised on a single sign structure

Should not exceed a maximum height of 8m above ground

Should not exceed 2m in width

Should not exceed 0.5m in depth

Should be located:

- Within property boundaries, and
- A minimum of 2.6m above any footpath.

A pole or pylon sign, also known as a freestanding signs, are signs erected on a pole or pylon independent of any building or other structure.

Table 1C.2.11(f) Moveable signs (A-Frame, sandwich board signs)

Where site constraints make it difficult to provide a fixed sign, a moveable sign may be supported

Maximum area of 1.2m² per face - maximum 2 faces

Should not exceed 0.6m in width

Should be located to maintain an unencumbered pedestrian throughfare of 2 metres where located on a public footpath

Minimum frontage of 6m per sign

Moveable free standing signs are generally discouraged as they contribute to visual and physical clutter and increase trip hazards for pedestrians. It is preferable to have business identification signs fixed to buildings or structures.

Temporary Community Banners

- f. Temporary community banners are exempt from requiring development consent when erected in accordance with the provisions of Schedule 2 of the *HLEP*.
- g. Special consideration will be given to signs associated with community events that comply with Table 1C.2.11(g) below:

Table 1C.2.11(g) Temporary Community Banner

The banner is a temporary advertisement for a religious, cultural, political, social or recreational event only

Maximum area of 4m²

Sponsorship information is a maximum of 20% of the total area of the banner displayed at the venue or the sponsor's premises

The banner is erected a maximum of 28 days before the event

The banner is removed within 7 days following the event

Maximum of 6 banners are erected in association with the event at separate locations including the venue

The banner should not be attached to a tree

Details of the locations designated by Council as suitable for the display of community banners without consent are available at website.hornsby.nsw.gov.au

1C.2.12 Avoiding Isolated Sites

Desired Outcomes

- a. The consolidation of sites in a manner that avoids adjoining sites becoming isolated so that they cannot be developed in accordance with the planning controls.

Prescriptive Measures

- a. The creation of isolated sites is not desirable.
- b. Where a development may result in the creation of an isolated site, the applicant should demonstrate that:
 - Negotiations for amalgamations of sites commenced early, prior to the lodgement of a development application,
 - If negotiations are not successful, details of the negotiations should be provided with the development application submission, including at least one recent independent valuation and include other reasonable expenses likely to be incurred by the owner of the isolated property in the sale of the property, and
 - The orderly and economic development of the isolated site can be achieved that is consistent with the provisions of the HLEP and DCP. This should include the applicant providing an envelope for that site, indicating height, building form, setbacks and separations (building and basement) sufficient to understand the relationship between the proposed development and the isolated site and the streetscape implications.
- c. The development of an isolated site should not detract from the character of the streetscape and is to achieve a satisfactory level of amenity, including solar access, visual and acoustic privacy.

Notes:

An Isolated Site means a site whose size and location could potentially significantly limit development as a result of not being included in an adjoining development proposal. Sites may not be defined as isolated if they have the future potential to amalgamate with an alternate adjoining property.

For further information on the Planning Principles for considering the isolation of sites refer to *Karavellas v Sutherland Shire Council* [2004] NSWLEC 251 at www.lawlink.nsw.gov.au.

1C.3 Hazards

The following section provides general controls for hazards and applies to all forms of development.

1C.3.1 Bushfire

Desired Outcomes

- a. Development that is located and designed to minimise the risk to life and property from bushfires.
- b. Development that balances the conservation of native vegetation and bushfire protection.

Prescriptive Measures

- a. Development on land identified as bushfire prone on Council's Bushfire Prone Land Map should address the bush fire protection measures in the publication *Planning for Bushfire Protection (2006)*.
- b. Development should be located and designed to minimise the need for bushfire hazard reduction within native vegetation areas.
- c. Bushfire Asset Protection Zones should be located entirely within the development site.
- d. Measures such as higher fire resistant construction standards, improved access and water supplies should be considered for infill developments where they would reduce the need for removal of significant native vegetation, provided the development still complies with *Planning for Bushfire Protection (2006)*.

Notes:

The key objectives and controls to address bushfire risk are not set out in this Plan but are incorporated into the Rural Fire Service publication entitled 'Planning for Bushfire Protection 2006 (PBP) (as amended), as well as the Rural Fires Act 1997 available at www.bushfire.nsw.gov.au.

All development applications on bushfire prone land will require either:

- A bushfire risk assessment and certification or
- A detailed bushfire report (for integrated development)

A Bushfire Risk Assessment and Certification are prepared for non-integrated developments such as single dwelling houses. The report and certification will state the applicable Bushfire Attack Levels (BAL) that apply and the relevant Asset Protection Zones (APZ) required, and that the development conforms to the relevant specifications and requirements, AS 3959 and Planning for Bushfire Protection 2006. Council or a suitably qualified consultant can provide this assessment.

A Detailed Bushfire Report is required to be provided for Integrated Development under the Rural Fires Act, including for example the subdivision of land. The report must be prepared by a suitably qualified bushfire consultant and address the requirements of the NSW Rural Fire Service (RFS) and Planning for Bushfire Protection 2006. The Council will refer this plan to the RFS for its consideration.

1C.3.2 Flooding

HLEP Clause 6.3 contains provisions for development of land at or below the flood planning level. Areas identified as 'Flood Planning areas' are identified in the HLEP Flood Planning Map.

Desired Outcomes

- a. Development that is located and designed to minimise the risk to life, property and the environment from flooding.

Prescriptive Measures

General

- a. Where a development proposal is on land shown as 'Flood Planning areas' on the HLEP Flood Planning Map OR is on other land at or below the flood planning level, a comprehensive flood study should be prepared by a qualified engineer and is to be submitted with any development application on land that demonstrates that:
 - The development addresses the provisions of Clause 6.3 of the HLEP, and
 - The development complies with best practice.
- b. Development should not obstruct overland flow paths. Development is required to demonstrate that any overland flow is maintained for 1 in 100 year average recurrence interval (ARI) flood.
- c. All potential pollutants that are stored or detained on-site (such as on-site effluent treatment facilities, chemicals or hazardous materials) should be stored 0.5 metres above 1 in 100 year ARI flood level. Details should be provided as part of any application.

Sea Level Rise

- d. Development on land adjacent to tidal waters, including the Hawkesbury River and Berowra Creek, should be designed to minimise the risk to property and the environment from sea level rise in the event of a 1 in 100 year ARI flood by:
 - siting the floor level of habitable rooms, wet areas and other sensitive uses (eg. on-site wastewater disposal areas) above the 2100 (year) NSW sea level rise planning benchmark of 0.9 metres, and
 - siting other non-habitable structures (eg. sheds, decks, pergolas) above the 2050 (year) NSW sea level rise planning benchmark of 0.4 metres.

Notes:

The flood planning level means the level of a 1 in 100 year ARI (average recurrence interval) flood event plus 0.5 metre freeboard.

For best practice guidelines refer to :

- NSW Governments's *Floodplain Development Manual (2005)*, and
- *NSW Coastal Planning Guideline: Adapting to Sea Level Rise (DoP 2010)* and
- *Flood Risk Management Guide - Incorporating sea level rise benchmarks in flood assessments (DECCW 2010)*

Clause 6.3 of the HLEP refers to the 1 in 100 year Average Recurrence Interval (ARI) flood event for flood planning purposes. ARI is the long term average number of years between the occurrence of a flood as big as or larger than the selected event. This flood event is a tool for broadly assessing the suitability of land for development. It does not mean that properties and development above the flood planning level are not subject to flood risk.

While some of the land in the Hornsby Shire that is at or below the flood planning level is depicted on the HLEP Flood Planning Map - 'Flood planning area', this map is not exhaustive.

The *NSW Sea Level Rise Policy Statement (2009)* adopts a sea level rise planning benchmark of an increase above 1990 mean sea levels of 90cm by 2100 or 0.4m by 2050.

1C.3.3 Acid Sulfate Soils

HLEP Clause 6.1 contains provisions for development of land that may contain acid sulfate soils. These lands are identified on the HLEP Acid Sulfate Soils Map.

Desired Outcomes

- a. Development that does not disturb, expose or drain acid sulfate soils and cause environmental damage.

Prescriptive Measures

- a. Developments that involve the carrying out of works prescribed in Clause 6.1 of the HLEP should be accompanied by an Acid Sulfate Soil Management Plan prepared in accordance with the *Acid Sulfate Soils Manual*.

Notes:

For further information refer to the HLEP and the Acid Sulfate Soils Map.

The Acid Sulfate Soils Manual means the manual by that name published by the Acid Sulfate Soils Management Advisory Committee and made publicly available.

A preliminary investigation of the proposed development site or an acid sulfate soils management plan required by the HLEP must be prepared by a suitably qualified environmental consultant.

1C.3.4 Land Contamination

Desired Outcomes

- a. Development that remediates contaminated land for the purpose of reducing the risk of harm to human health and the environment

Prescriptive Measures

- a. Developments applications should prepare and submit a preliminary contamination assessment in accordance with *SEPP 55 Remediation of Land* where land is suspected to be contaminated, and:
 - The application proposes a change of use to a sensitive land use such as residential, educational, recreational, child care purposes, or for the purposes of a hospital land, or
 - Work is proposed that may disturb contaminated land (for example, earthworks at a petrol station).
- b. Where a preliminary assessment identifies that a contaminant is present on the site, a detailed investigation of the site should also be prepared and lodged with the development application.
- c. A remedial action plan, validation report and a site audit statement may also be required to be completed.

Notes:

For further information refer to:

- SEPP No.55 Remediation of Land is available at www.planning.nsw.gov.au, and
- NSW Environment Protection Authority's *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites and Contaminated Sites – Sampling Design Guidelines* available at www.environment.nsw.gov.au.