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Baulkham Hills Development Control Plan

Residential



February 2012

Baulkham Hills Shire Council

Part C Section 3

INDEX

1. INTRODUCTION	1
1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES	1
1.2. AIMS AND OBJECTIVES OF THIS SECTION	1
2. OBJECTIVES AND DEVELOPMENT CONTROLS	1
2.1. DEVELOPMENT CONTROL MAP SHEETS	1
2.2. SITE SPECIFIC DEVELOPMENT CONTROL	1
2.3. RESTRICTED DEVELOPMENT AREAS	2
2.4. SITE ANALYSIS.....	2
2.5. STREETScape AND CHARACTER	3
2.6. BUSH FIRE HAZARD MANAGEMENT	4
2.7. GEOTECHNICAL SITE STABILITY	4
2.8. BUSHLAND AND BIODIVERSITY	5
2.9. EROSION AND SEDIMENT CONTROL	5
2.10. HERITAGE	6
2.11. SIGNAGE.....	6
2.12. STORMWATER MANAGEMENT	6
2.13. SUBDIVISION	7
2.14. DWELLINGS	9
2.15. FENCING	23
2.16. WASTE MANAGEMENT	24
2.17. SERVICES	25
2.18. SWIMMING POOLS.....	25
3. NO. 64 MACKILLOP DRIVE, BAULKHAM HILLS.....	26
3.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES	26
3.2. SITE ANALYSIS.....	26
3.3. SITE SPECIFIC OBJECTIVES AND DEVELOPMENT CONTROLS	28
4. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION	38
4.1. SINGLE DWELLINGS AND ADDITIONS / ALTERATIONS TO AN EXISTING DWELLING.....	38
4.2. SUBDIVISION APPLICATIONS / INTEGRATED DEVELOPMENT	38
5. REFERENCES	39
APPENDIX 1 - DEVELOPMENT CONTROLS CALCULATION SHEET	40
APPENDIX 2 - RESIDENTIAL DCP MAP SHEET GUIDE.....	44

1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A - Introduction.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to all activities permissible in the residential zones. Further specific controls for dual occupancy, villa, townhouse or apartment building developments as defined in Baulkham Hills Local Environmental Plan 2005 are included in separate Sections of this DCP.

1.2. AIMS AND OBJECTIVES OF THIS SECTION

The aim of this Section of the DCP is to identify Council's objectives for residential development in the Shire and identify controls to ensure the objectives are achieved.

Council's overarching objectives for residential development are:

OBJECTIVES

- (i) *Encourage a high standard of aesthetically pleasing and functional residential developments that sympathetically relate to adjoining and nearby developments to create consistent streetscape and character.*
- (ii) *Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development.*
- (iii) *Encourage innovative and imaginative design with particular emphasis on the integration of buildings and landscaped areas that add to the character of the neighbourhood.*
- (iv) *Provide high levels of amenity for future residents of any residential development.*
- (v) *Implement the principles of Ecologically Sustainable Development.*
- (vi) *To facilitate the implementation of the aims and objectives of residential development as set out in Baulkham Hills LEP 2005.*

Additional objectives covering a range of specific issues, related to residential development in the Shire, are identified in section 2 below. These specific objectives are all related to the six objectives identified above.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives performance criteria and development controls for residential development are set out in the following sections.

A checklist including many of the development controls is provided as a summary in Appendix 1 of this Section of the DCP.

In addition to those policies, guidelines and documents specified in Section 1.4 of Part A – Introduction, this residential Section is to be read in conjunction with other relevant Sections including:

- Part D Section 1 – Parking
- Part D Section 3 - Landscaping
- Part D Section 5 – Heritage

2.1. DEVELOPMENT CONTROL MAP SHEETS

The form of residential development is controlled by this Section of the DCP and it's specific locality maps. These DCP map sheets (Part C Section 3 - Residential, Sheets 1 to 41) provide additional detail as to local subdivision patterns, road layouts and development controls.

A Map showing which Residential DCP Sheets apply is provided in Appendix 2 of this Section of the DCP.

NB. The Residential Map Sheets 1 – 41 are provided separately to this written document and can be viewed at Council's Customer Service Centre.

2.2. SITE SPECIFIC DEVELOPMENT CONTROL

In addition to this Section of the DCP, Council has adopted a number of site specific development controls to address issues specific to certain areas.

Note: In the event of any inconsistency between this Section of the DCP and site specific DCP Sections,

the site specific DCP Section shall prevail only to the extent of the inconsistency.

Part E Section 15 - Kellyville/Rouse Hill is a site specific Section of this DCP. The purpose of this Section of the Plan is to provide for the control of residential development within the Rouse Hill Development Area.

Part E Section 17 – Balmoral Road Release Area is a site specific Section of this DCP. The purpose of this Section of the Plan is to provide for additional controls of residential development within the Balmoral Road Release Area.

2.3. RESTRICTED DEVELOPMENT AREAS

OBJECTIVES

- (i) *To protect sensitive land from development in order to retain natural drainage channels, vegetation and topographic features in accordance with Council's ESD Objective 6.*
- (ii) *To reduce the risk to development arising from geotechnical constraints.*

DEVELOPMENT CONTROLS

- (a) Development is to be limited at specified environmentally sensitive locations as identified on the locality maps for this Section of the DCP (Part C Section 3).
- (b) Development consent is required prior to the carrying out of any development within Restricted Development Areas. Works included in the reference to development include:-
 - The erection of a fence;
 - The removal of soil or rock;
 - The deposit of soil or rock or any other matter;
 - The destruction or removal of any tree or other vegetation;
 - The construction or clearing of an access way;
 - The carrying out of works for the purpose of rehabilitating land or landscaping;
 - The erection of minor structures such as gazebos, barbecues (other than portable barbecues) or fixed outdoor seating; and

- A Restriction as to User will be required, as a condition of development consent on subdivision applications relating to land which includes any Restricted Development Area.

SUBMISSION REQUIREMENTS

- Restricted Development Areas must be accurately plotted on the Site Plan; and
- Any development proposed within the Restricted Development Area must be clearly identified.

2.4. SITE ANALYSIS

OBJECTIVES

- (i) *To encourage a comprehensive approach to site planning, design and assessment of residential development.*
- (ii) *To facilitate assessment of how future dwellings relate to their immediate surroundings and each other.*
- (iii) *To facilitate development of a design that minimises the negative impacts on the amenity of adjoining residential development in accordance with Council's ESD objective 7.*
- (iv) *To ensure development is compatible with land capability.*
- (v) *To minimise adverse impacts on the environment in accordance with Council's ESD objectives 3 and 4.*

DEVELOPMENT CONTROLS

- (a) Development should be designed to respect site constraints such as topography, drainage, soil, landscapes, flora, fauna and bushfire hazard.
- (b) Disturbance to existing natural vegetation and landforms, watercourses, wetlands and overland flow paths should be minimised.
- (c) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.
- (d) Development should be sited on the area of land presenting the least topographic constraints.
- (e) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

- (f) Development should be designed to be consistent with the character of the streetscape.

SUBMISSION REQUIREMENTS

- Site Analysis.

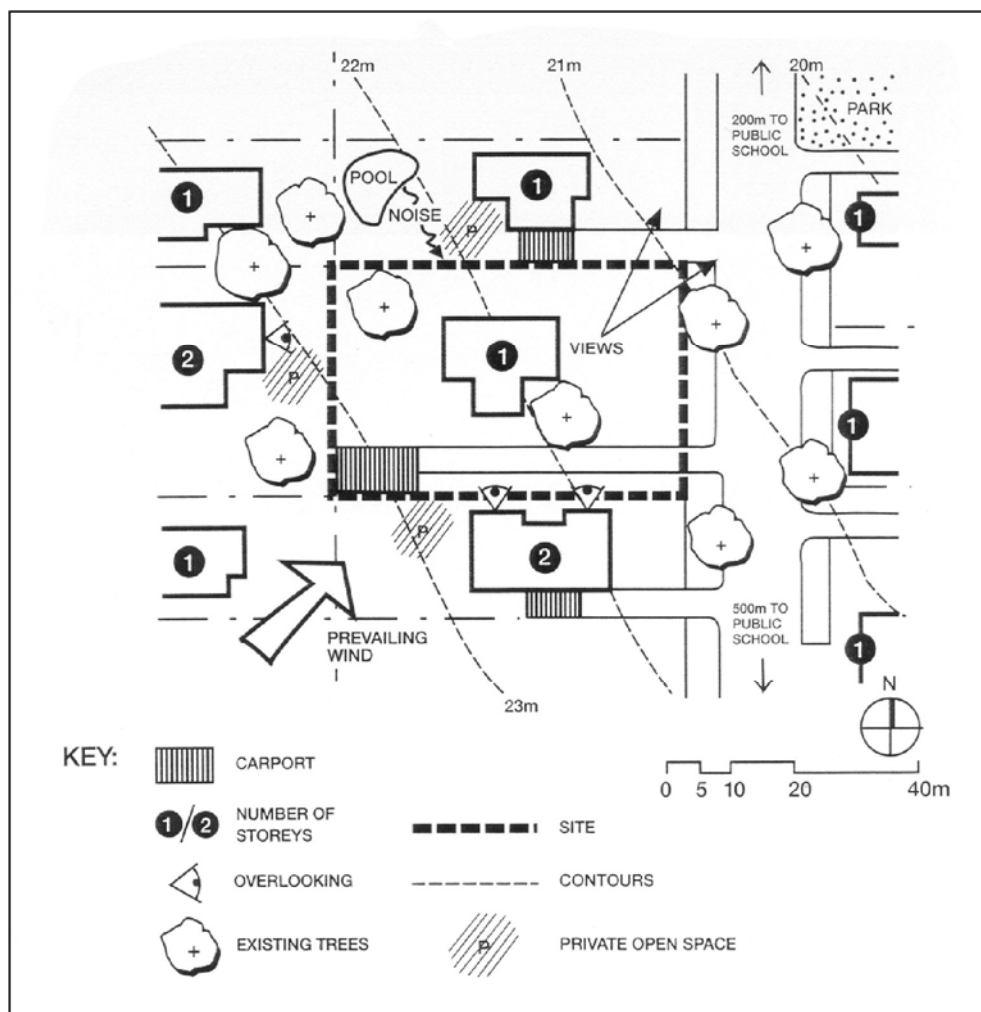


Figure 1: SITE ANALYSIS PLAN

2.5. STREETSCAPE AND CHARACTER

Note: Streetscape is created by many visible features in a street including lot size, kerbs, fencing, setbacks, spatial separation, bulk and scale, access arrangements, street tree planting, native vegetation and private gardens, colours and materials, as well as the architecture of individual residences and buildings.

The relationship of these elements create character which contributes to the 'look and feel' of a street, a sense of place and identity. Understanding the character of an area is critical in ensuring development contributes, enhances, and integrates

with the existing character that makes an area desirable.

OBJECTIVE

- (i) To ensure that the appearance of new development is of a high visual quality, enhances the streetscape and complements surrounding development.

DEVELOPMENT CONTROLS

- (a) The proposed development must:
- contribute to an attractive residential environment with clear character and identity;

- address the street and boundaries to the site with a building form compatible with adjoining development in terms of street elevation and presentation; and
 - retain, complement and sensitively harmonise with any heritage item or conservation area in the vicinity that are identified in Council's local environmental plan.
- (b) The proposed development should maintain neighbourhood amenity and appropriate residential character by:
- providing building setbacks that progressively increase as wall heights increase to reduce bulk and overshadowing;
 - using building form and siting that relates to the land form;
 - adopting building heights at the street frontage that do not dominate the streetscape;
 - retaining where possible and providing landscaping in the front and rear yards in particular tall planting in scale with the building proposed; and
 - considering where buildings are located on neighbouring properties.

SUBMISSION REQUIREMENTS

- Demonstrate that the development is consistent with existing streetscape and character

2.6. BUSH FIRE HAZARD MANAGEMENT

OBJECTIVES

- (i) *To reduce the risk to life and property in areas of bushfire risk.*
- (ii) *In determining Development Applications, Council will have regard to any likely bushfire hazard.*

DEVELOPMENT CONTROLS

- (a) Council has adopted the NSW Rural Fire Service Guidelines entitled "Planning for Bushfire Protection 2006". Development subject to bushfire risk will be required to address the requirements in these guidelines.

2.7. GEOTECHNICAL SITE STABILITY

OBJECTIVES

- (i) *To ensure proposed development does not result in movement or slip.*
- (ii) *To ensure soil movement or land slip does not adversely affect proposed development.*

DEVELOPMENT CONTROLS

- (a) Areas possibly subject to movement or slip are identified by the words "POSSIBLE DWELLING SITES TO BE DETERMINED BY GEOTECHNICAL APPRAISAL" and shown by cross-hatching on the site specific maps for this Section of the DCP or identified by Council to be considered subject to movement or slip.
- (b) Prior to the determination of any subdivision or development application, a geotechnical appraisal prepared by an Engineer qualified as a corporate Member of the Institution of Engineers of Australia or similar recognised industry body (and who is experienced in the fields of landslides, soil and rock mechanics, slope stabilisation and residential developments) must be submitted by the applicant and may, as determined by Council, be subject to assessment by an independent expert review panel at the expense of the applicant.
- (c) The geotechnical appraisal must certify that the design of all the structures the subject of the application are suitable to withstand the effects of high plasticity clays subject to shrink/swell movements and possible creep movement of near surface soils.
- (d) The geotechnical appraisal must satisfy Council that an acceptable level of risk is achieved with respect to the possibility of movement or slip adversely affecting the proposed subdivision or development or being caused by the proposed subdivision or development.
- (e) An 'acceptable risk level' is defined in accordance with the AGS Guidelines for Landslide Susceptibility, Hazard and Risk Zoning for Land Use Planning (AGS 2007a) as the loss of life for the person most at risk (from the landslide) as 1 in a million per annum and for property loss the risk is to be 'low' as identified in Appendix C of the Practice Note Guidelines for Landslide Risk Management 2007 (AGS 2007c).

The application must demonstrate that any proposed remedial works will satisfy these requirements.

Note: The land zoned Residential 2(e), and additional land shown stippled and labelled "Geotechnical Assessment Area" in Baulkham Hills Local Environmental Plan (Amendment No. 92), has been identified as being subject to geotechnical constraints and reference should be made to Clause 30 of Baulkham Hills Local Environmental Plan 2005 for details of the controls that apply to this land.

SUBMISSION REQUIREMENTS

- Any part of the site shown as being subject to Geotechnical constraints on the site specific maps for this Section of the DCP or identified by Council to be considered subject to movement or slip must be identified on the site plan.
- A Geotechnical Assessment will be required for works proposed within these areas.

2.8. BUSHLAND AND BIODIVERSITY

OBJECTIVES

- To conserve and protect the biodiversity of the Shire including habitats of threatened flora and fauna species and communities in accordance with Council's ESD objective 1 and 4.
- To ensure that development is consistent with the Threatened Species Conservation Act, 1995.

DEVELOPMENT CONTROLS

- Significant flora and fauna species, communities and ecological communities should be preserved.
- Development should be designed to retain existing bushland and fauna habitats, including identifiable corridors and linkages.
- Applications should include a Fauna and Flora Assessment in accordance with Section 5A of the Environmental Planning & Assessment Act, 1979 if there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats.
- Applicants may be required to submit a Species Impact Statement (SIS) for development likely to significantly affect threatened species,

populations and ecological communities. Reference should be made to the requirements of the Environmental Planning & Assessment Act, 1979, and the Threatened Species Conservation Act, 1995.

SUBMISSION REQUIREMENTS

- Fauna and Flora Assessment and a Species Impact Statement as required.

2.9. EROSION AND SEDIMENT CONTROL

Land degradation associated with urban development can be avoided or mitigated, largely through appropriate planning before commencement of earthworks and by using best management practices available.

OBJECTIVES

- Minimise land degradation, water pollution and damage to infrastructure from accumulated sediment in accordance with Council's ESD Objective 3.
- To ensure development controls are identified for all stages of development and to ensure a consistent approach to erosion and sediment control.

DEVELOPMENT CONTROLS

- Applications for residential development including subdivision are to be accompanied by an Erosion and Sediment Control Plan (ESCP) which will describe the measures to be taken at development sites to minimise land disturbance and erosion and control sediment pollution of waterways. ESCPs are to clearly identify the erosion and sediment control measures to be used.
- Erosion and Sediment Control Plans shall be prepared in accordance with "Managing Urban Stormwater – Soils and Construction", produced by the NSW Department of Housing.
- The erosion and sediment control measure proposed may need to change during the development process. The erosion sediment control plan should address all phases of the development process.

- (d) Erosion and sediment controls must be in place before work commences and be retained and revised to reflect changes in site conditions, until the development is finalised and the site stabilised.

SUBMISSION REQUIREMENTS

- Erosion and Sediment Control Plans.

2.10. HERITAGE

OBJECTIVES

- (i) *To conserve the heritage significance of the heritage items within the Shire.*
- (ii) *To ensure that development is undertaken in a manner that is sympathetic to, and does not detract from, the heritage significance of heritage items and conservation areas, and their settings.*

DEVELOPMENT CONTROLS

- (a) Views to and from significant items of natural or cultural heritage should not be impeded by development.
- (b) If the development is within the Rouse Hill Development Area, SREP No. 19 will also apply.
- (c) All developments must address and comply with the provisions of Part D Section 5 – Heritage where:
- The development site is listed in Schedule 1 of Baulkham Hills Shire Council LEP 2005 or is within a conservation area under Baulkham Hills Shire Council LEP 2005; or
 - The development site adjoins a site listed in Schedule 1 of Baulkham Hills Shire Council LEP 2005 or adjoins a conservation area under Baulkham Hills Shire Council LEP 2005; or
 - The development site is, or adjoins a site, listed in any Draft LEP or Heritage Study that identifies potential heritage items or sites.

SUBMISSION REQUIREMENTS

- When applicable, documentation to demonstrate how the objectives and controls of Part D Section 5 - Heritage are satisfied.

2.11. SIGNAGE

OBJECTIVES

- (i) *To permit an approved use to adequately identify their premises while maintaining the residential character of the area.*
- (ii) *To ensure that advertising signs are appropriate to the size and scale of the activity conducted on the property.*

DEVELOPMENT CONTROLS

- (a) All signage proposed in Residential areas is to be designed in accordance with Part D Section 2 – Signage.
- (b) Advertising signs must not detract from any residential area. The size, shape, materials and location of signage must complement the visual character of the surrounding area.

SUBMISSION REQUIREMENTS

- Signage Plan.

2.12. STORMWATER MANAGEMENT

OBJECTIVES

- (i) *To provide for the disposal of stormwater from the site in efficient and environmentally sensible ways in accordance with Council's ESD objective 3.*
- (ii) *To control stormwater and to ensure that developments do not increase downstream drainage flows or adversely impact adjoining or downstream properties.*
- (iii) *To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.*
- (iv) *To provide for on-site detention of stormwater.*
- (v) *To encourage the reuse of stormwater.*

DEVELOPMENT CONTROLS

- (a) Water Sensitive Urban Design (WSUD) measures should be employed in the management of the site's/development's stormwater in terms of water retention, reuse and cleansing.

In all development, consideration should be given to utilising one of the following water sensitive urban design measures:-

M1 Low Impact Building Design

M2 Low Impact Landscape Design

A detailed description of the actions required to implement each of these measures is included in Appendix B.

- (b) *Rain water tanks to reuse rainwater must be installed for each new dwelling outside the Kellyville Rouse Hill Release Area. The requirements for their installation and use are included in Appendix B under the heading:

M3 Rainwater Utilisation – toilet, irrigation

Rainwater tanks are not required in the Kellyville - Rouse Hill Release Area because a recycled water system has been installed in this area. However owners may choose to install a rainwater tank if they consider it appropriate for their property.

[*Applies only where BASIX exemption is relied on.]

- (c) Drainage systems are to be designed and constructed in accordance with the design guidelines set out in "Australian Rainfall and Runoff 1987" published by the Institution of Engineers, Australia.
- (d) On-site detention systems (OSD) when required, are to be designed in accordance with (a) above and the specific requirements of (as relevant) the Upper Parramatta River Catchment Trust On-site Detention Handbook.
- (e) All urban residential allotments shall be clear of the 1% Average Exceedence Probability (AEP) flood level.
- (f) The construction of any permanent structure (e.g. dwellings, garages, impervious fences, pools etc.) or the placement of fill is not permitted within the 1% AEP storm flood level, over a watercourse, drainage depression or piped drainage system.
- (g) Concentrated stormwater flows must be connected to Council's drainage system. In some cases this may require the creation of drainage easements over downstream properties. In this circumstance, a letter of consent from the owner(s) of the downstream properties is to be submitted with the development application. On rural properties

overflow from rainwater tanks must be dispersed on site to ensure concentrated flows do not impact on adjoining properties or cause erosion.

- (h) Reference should be made to the Restrictions As To User on the title of the land to which the development is proposed in relation to requirements for on-site detention.
- (i) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Plans indicating the proposed drainage infrastructure.
- If required, easements are to be created over downstream properties prior to the release of the linen plan for the subdivision, or prior to the release of a Building or Occupation Certificate whichever is earliest.
- On-site Detention (OSD) Plans if required.

2.13. SUBDIVISION

The objectives and development controls in Section 2.13 below are primarily related to applications involving subdivision. The controls in Section 2.14 relate to the erection of a dwelling but must still be considered at subdivision stage to ensure all lots created can accommodate a suitable dwelling in accordance with this part of the DCP.

2.13.1. ENVIRONMENTALLY INTEGRATED HOUSING

Environmentally Integrated Housing is a type of residential development permissible in all the Residential zones under Baulkham Hills LEP 2005 except the Residential 2(b) and Residential 2(e) zones.

The objective of this form of development is to encourage the siting and design of dwellings before arbitrary subdivision boundaries are created. It recognises that environmentally significant or sensitive features of a site can often be better protected or enhanced by an integrated development approach to development.

Buildings, structures and cleared open space areas can be designed 'around' the significant features of

the site, which can provide both an attractive housing environment and afford protection to the natural environment.

“Environmentally Integrated Housing” is defined in Baulkham Hills LEP 2005.

All development must comply with the general development objectives and controls contained in this Section of the Plan.

2.13.2. MINIMUM ALLOTMENT SIZE

OBJECTIVES

- (i) To provide allotments of a size conducive to residential living, having regard to any development constraints or environmental qualities of that land; and
- (ii) To ensure allotments have sufficient area to provide adequate access, open space, a sufficient building platform and attractive presentation to the street.

DEVELOPMENT CONTROLS

The minimum allotment size for subdivision or the erection of a “dwelling house” within each residential zone is shown in the Table below:

Minimum Allotment Size and dimensions for Single Dwellings				
Zone	Area	Classified road frontage	Other road frontage	Depth
2(a), 2(a1), 2(a2), 2(a3), 2(a4)	700m ²	27m	18m	27m
2(b)	700m ²	27m	18m	27m
2(c)	700m ²	27m	18m	27m
2(d)*	2000m ² * to 4000m ² *	27m	23m	50m
2(e)	Refer Clause 33 of BHLEP 2005			

(*Refer to DCP Map Sheets)

- (a) For an irregular shaped allotment the average width shall not be less than the minimum frontage shown in the table above.

- (b) For battle-axe shaped allotments and allotments served by a right-of-way where allotments have no road frontage in 2(a), 2(a1), 2(a2), 2(a3), 2(a4), 2(b) and 2(c) zones, the minimum area, excluding the access corridor shall not be less than 900m².

The minimum width for the battleaxe handle on battleaxe shaped allotments is:

Number of lots to be accessed	Minimum Width
One allotment	4 metres
Two or more allotments	6 metres

- (c) Within the Residential 2(b) zone, any allotment created by subdivision, a minimum area of 450m² is to be provided free of any restricted development designation.
- (d) Within the Residential 2(d) zone, any allotment created by subdivision, a minimum area of 650m² is to be provided free of any restricted development designation other than the land described on Sheet 1 (Kenthurst Village) where a minimum of 1,000m² free of restricted development area is to be provided.

SUBMISSION REQUIREMENTS

- Site Plan and/or Subdivision Plans
- Site Analysis

2.13.3. BUILDING PLATFORM

OBJECTIVE

- (i) To ensure allotments have a suitable area for the erection of a dwelling and associated structures free of constraints or restrictions.

DEVELOPMENT CONTROL

- (a) The site must be capable of providing a building platform of at least 20 metres by 15 metres. The platform shall be sited in an accessible and practical location and on relatively flat terrain with stable soil and geology.
- (b) Practical and suitable access shall be provided from a public road to the building platform.
- (c) The building platform is to be applied independently of the minimum building setbacks.

SUBMISSION REQUIREMENTS

The subdivision plans must clearly indicate where the building platforms can be located on each lot and the proposed access paths to the platforms free of any restrictions.

2.13.4. PEDESTRIAN ACCESS, SAFETY AND SECURITY

OBJECTIVE

- (i) *To ensure the needs of residents and visitors are considered with particular regard to access requirements, safety and security in accordance with Council's ESD Objective 7.*

DEVELOPMENT CONTROLS

- (a) Residential developments are to provide safe and convenient access for prams, wheelchairs and people with disabilities from the public road to all areas of the development.
- (b) Movement areas should be designed to provide convenient, obvious and safe pedestrian and bicycle links from the site to public transport services and local facilities.
- (c) Footpaths, landscaped areas and driveway designs are to provide opportunities for surveillance and allow safe movement of residents and visitors.
- (d) The design of residential developments is to demonstrate consideration of resident safety and security.
- (e) Signage is to be clear and easy to understand.
- (f) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

2.13.5. DEVELOPER CONTRIBUTIONS

OBJECTIVES

- (i) *To address the likely demands placed on public amenities and public services by an increasing residential population.*
- (ii) *To determine a reasonable development contribution based upon the impact of residential development.*

DEVELOPMENT CONTROLS

- (a) Council may prepare or have in place a Developer Contribution Plan under Section 94A of the Environmental Planning and Assessment Act 1979. Where this is the case, development consents permitting additional dwellings will include a condition requiring the payment of Developer Contributions.

SUBMISSION REQUIREMENTS

Applicants should consult with Council's Section 94 Contributions Plan and Council's Officers to determine the required amount of Section 94 Contributions payable.

2.14. DWELLINGS

The controls in Section 2.14 below apply to developments for single dwelling houses.

2.14.1. BUILDING SETBACKS

OBJECTIVES

- (i) *To provide setbacks that complement the streetscape and protect the privacy and sunlight to adjacent dwellings in accordance with ESD Objective 7.*
- (ii) *To ensure that new development is sensitive to the landscape setting, site constraints and established character of the street and locality.*
- (iii) *To ensure that the appearance of new development is of a high visual quality and enhances the streetscape.*

DEVELOPMENT CONTROLS

- (a) The minimum road frontage setback for any classified road is 10 metres.
- (b) The minimum road frontage setback requirement for any non classified roads is as follows:

Primary Road Frontage Setback 10m

The areas where the primary road setback is not 10 metres are shown on Maps 1-4. The setbacks for these areas are outlined in the table below.

Areas where Primary Road Frontage Setback is less than 10m	Map No	Primary Setback
--	--------	-----------------

West Pennant Hills Valley	1	7.5
Bingara Crescent/ Crestwood	2	7.5
Kings Road	3	7.5
Bella Vista Residential	4	6m
Kellyville/Rouse Hill Development Area	n/a	*

*Refer to Part E Section 15 – Kellyville / Rouse Hill Release Area, Part E section 16 Rouse Hill Regional Centre and Part E Section 17 – Balmoral Road Release Area.

- (c) Where the predominant setback pattern of the existing streetscape reflects setbacks which exceed the required minimum, the greater setback suggested by the character created by the three (3) adjoining dwellings either side of the proposed dwelling will apply .
- (d) Development on corner allotments, with no frontages to classified roads shall have regard to the streetscape of both street frontages and may provide a setback of not less than 6 metres for the primary frontage and 4 metres to a secondary road frontage.
- (e) All garages must be setback in accordance with the setbacks described in a), b) and c) above, or 5.5 metres, whichever is the greater. This is required to ensure vehicles parked on the driveway in front of the garage do not encroach into the road reservation.
- (f) The maximum width of a dwelling must be:-

Width of allotment at the building line	Percentage of width at the building line
Less than or equal to 18m	80%
Greater than 18m	75%

- (g) The minimum side boundary setback requirement is:

Height of building	Distance of wall to boundary line	Distance of eave to boundary line
1 or 2 storeys	900mm	675mm
3 storey	1500mm	1175mm

- (h) The minimum rear boundary setback requirement is:

Height of building	Setback
1 storey element of dwelling'	4 metres
2-3 storey elements of dwelling'	6 metres

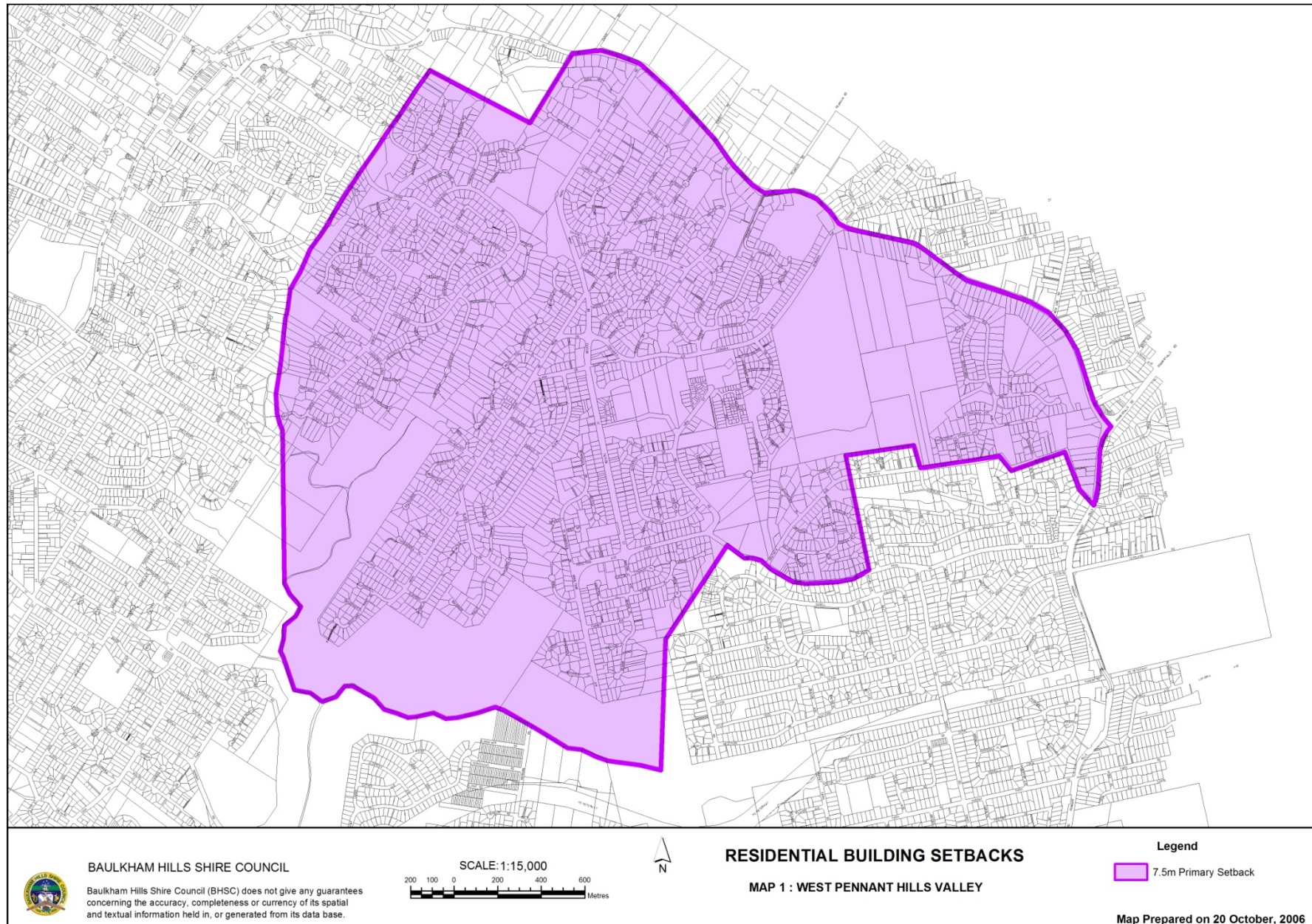
- (i) For battleaxe allotments dwellings shall be setback a minimum distance to three sides only of the lot of 4m for the single storey element and 6m for the 2 and 3 storey element.
- (j) Except where the lot has two road frontages and the dwelling is to back onto an arterial or sub-arterial road. In this case the required rear wall setback to the road frontage is:

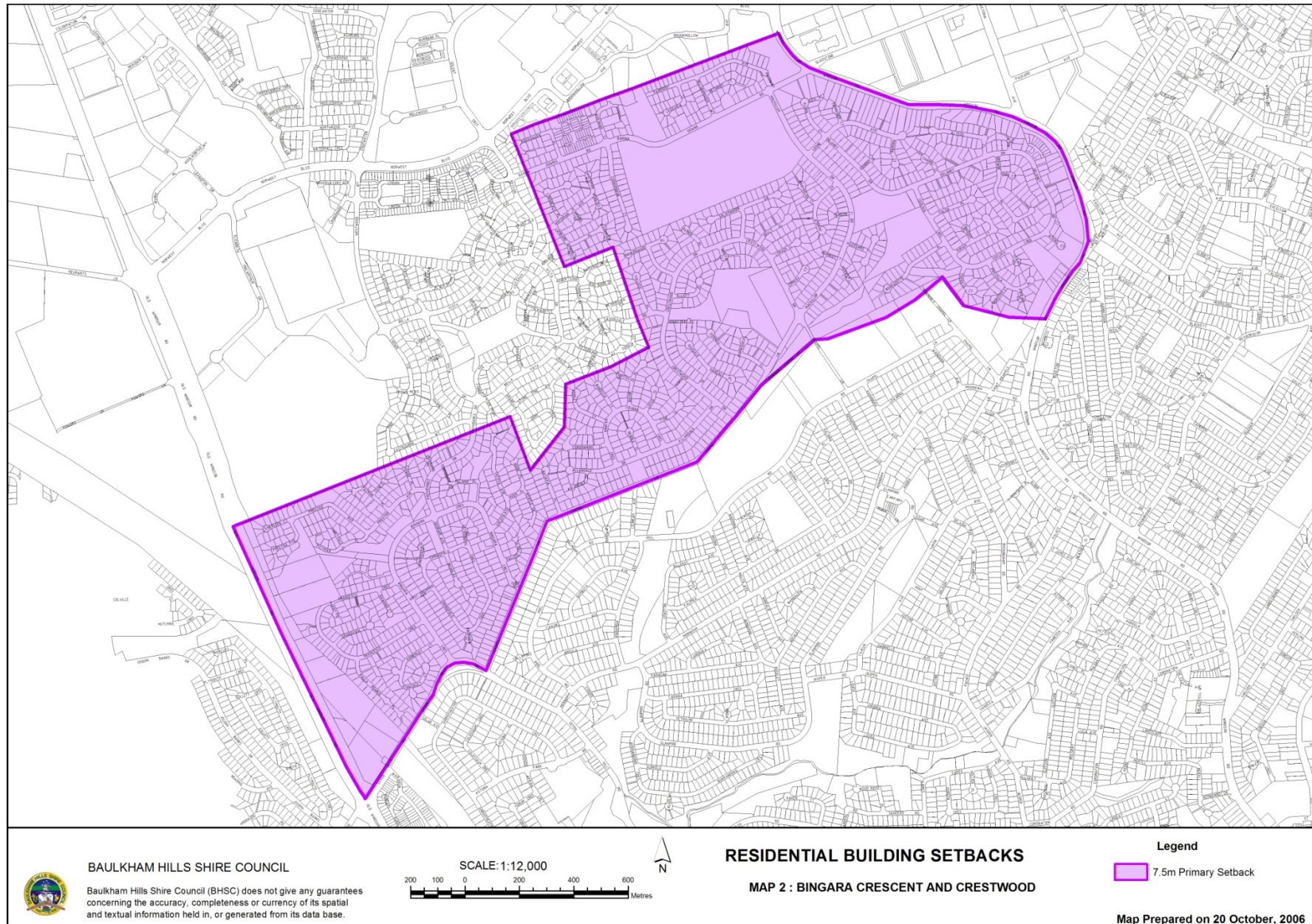
Height of building	Rear wall setback to a classified road
1 storey	6 metres
2-3 storey	8 metres

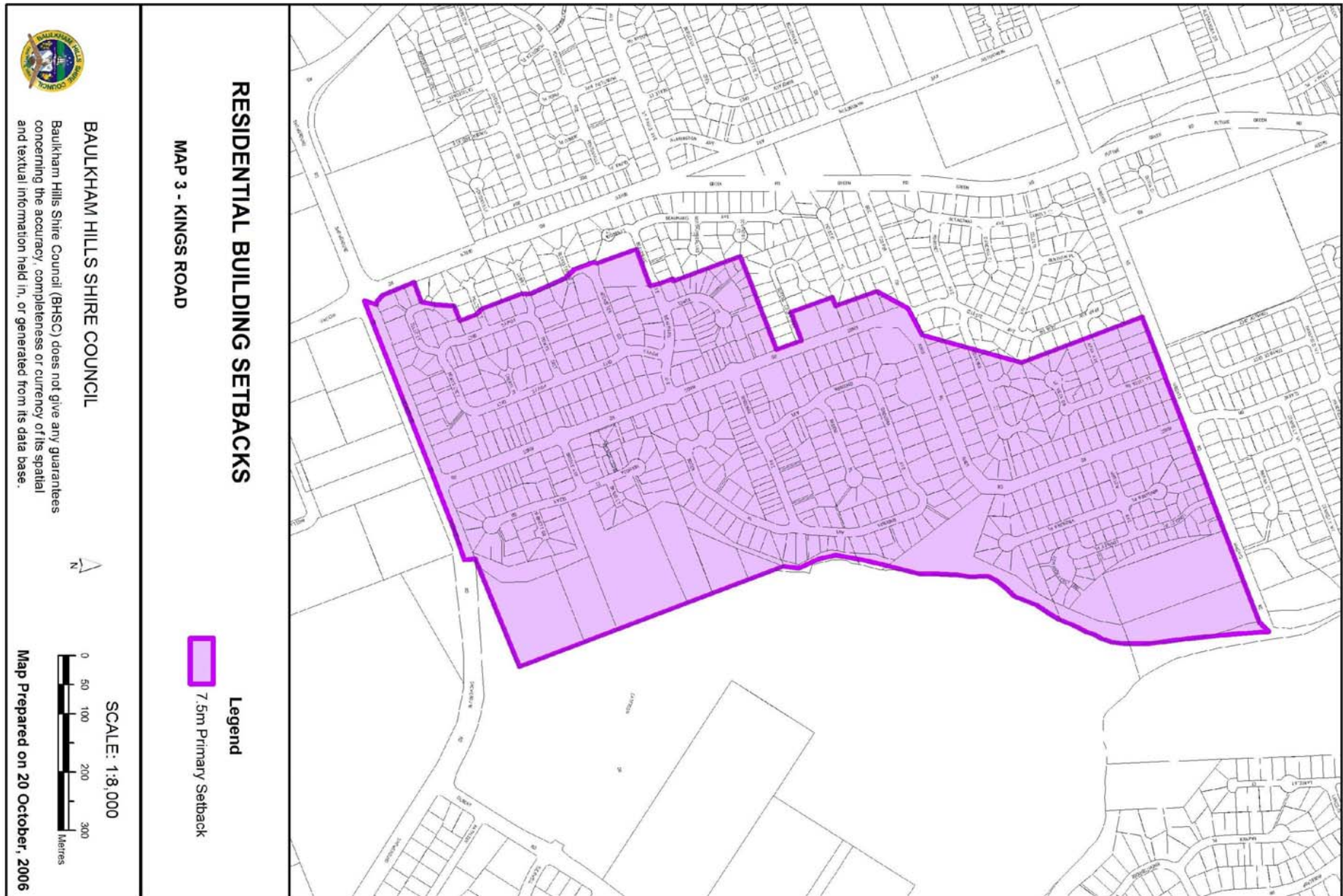
- (k) Consideration should be given to Council's Safer By Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

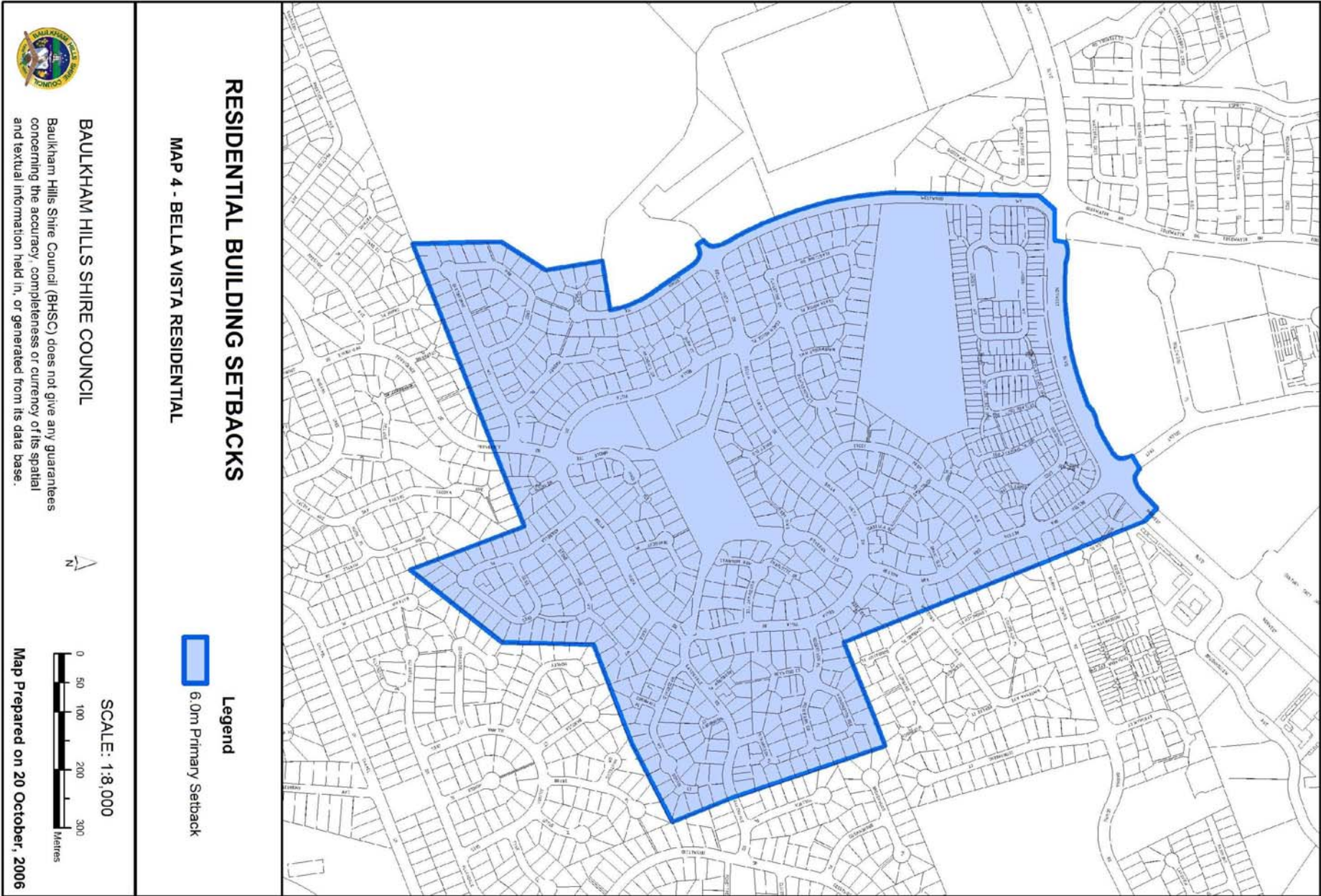
SUBMISSION REQUIREMENTS

- Site plans









2.14.2. SITE COVERAGE

OBJECTIVES

- (i) To maximise the provision of open space.
- (ii) To avoid the creation of drainage and runoff problems, through minimising the amount of impervious area in accordance with Council's ESD Objective 3.
- (iii) To minimise bulk and scale of development.
- (iv) To facilitate spatial separation between buildings.
- (v) To provide for adequate landscaped area.
- (vi) Maintain the character of existing areas by retaining vegetation.

DEVELOPMENT CONTROLS

- (a) The maximum site coverage permitted in residential zones is:-

Sites Zoned	Maximum Permitted Site Coverage
Residential 2(a)*	60%
Residential 2(b)	60%
Residential 2(c)	60%
Residential 2(d)	30%
Residential 2(e)	N/A Refer to Note below

* 2(a) includes 2(a1), 2(a2), 2(a3), 2(a4) zones.

The maximum site coverage calculations must include areas containing garage/carport, driveways (excluding battleaxe handle), outbuildings, decks, patios, tennis courts and pools.

- (b) Of the maximum permitted site coverage, the dwelling building footprint is to be no more than 45% in zones at 2(a), 2(b), and 2(c).
- (c) The controls above do not apply to the Residential 2(e) zone. Restrictions on the extent of development included in Clause 33 of Baulkham Hills Local Environmental Plan must be considered.
- (d) Development Controls for site coverage will be noted on Section 88B instruments at subdivision stage.

SUBMISSION REQUIREMENTS

- A schedule showing the site coverage and landscape area should be submitted with the application or included on the Site Plan.

2.14.3. BUILDING HEIGHT

OBJECTIVES

- (i) To ensure the scale and height of buildings are compatible with that of adjoining development and the overall streetscape.
- (ii) To minimise the impact of overshadowing, and loss of privacy on adjoining properties and open space areas.

DEVELOPMENT CONTROLS

- (a) Unless the established character of the immediately adjoining developments is higher and an average height can be determined, the maximum height of all dwellings is not to exceed:-

➤ 8.9 metres measured vertically from the natural ground level to the roof ridgeline

- (b) The maximum height of flat or skillion roofed dwellings shall not exceed 7.9 metres above natural ground level.

Note: Natural ground level means the actual physical level of a site prior to development taking place.

SUBMISSION REQUIREMENT

- The height of dwelling measured from natural ground level to the eaves and to the roof ridgeline is to be shown on plans.

2.14.4. PRIVATE OPEN SPACE

OBJECTIVES

- (i) To ensure adequate private open space is provided for use by residents.

DEVELOPMENT CONTROLS

- (a) Private open space (behind the front building line) is to be 20% of the lot area or 80m²

whichever is the greater and can be contained within the landscaped area of the site.

- (b) The private open space area must be able to contain a rectangle measuring 6 metres by 4 metres.

SUBMISSION REQUIREMENTS

- The location and dimensions of the private open space must be shown on the Site Plan.

2.14.5. LANDSCAPING

OBJECTIVES

- (i) *To enhance the quality of the built environment by providing a high standard of landscaping.*
- (ii) *To ensure that landscaping may be efficiently maintained.*
- (iii) *To promote a pleasant and safe living environment.*
- (iv) *To limit tree removal to maintain the character of the area.*

DEVELOPMENT CONTROLS

- (a) All setback and carparking areas are to be landscaped and maintained in accordance with the provisions of Part D Section 3 – Landscaping.
- (b) The minimum required landscaped or naturally vegetated area for residential development as a percentage of the total site area is:
 - 40% in the case of land zoned other than Residential 2(d) (Protected); and
 - 70% in the case of land zoned Residential 2(d) (Protected).
- (c) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

Note: Landscaped area does not include any paved or built upon area such as driveways, tennis courts, patios/decks, outbuildings or pools.

SUBMISSION REQUIREMENTS

- A Landscape Plan including details of site coverage and Landscape area.

2.14.6. DWELLING DESIGN AND CONSTRUCTION

OBJECTIVES

- (i) *To ensure that dwellings are designed with regard to site conditions and constraints such as drainage easements.*
- (ii) *To ensure that dwelling design and siting have regard to the existing streetscape and character of the area, and the amenity of adjoining development.*
- (iii) *To protect existing trees on the site.*

DEVELOPMENT CONTROLS

- (a) Removal of existing trees should be minimised in any building proposal. Attention is directed to Council's Tree Preservation requirements that apply to the land covered by this plan. A copy can be obtained at Council.

Council approval is required before the removal of any tree. A tree for the purposes of the Order is a perennial plant with a self supporting woody stem which has a height of more than five (5) metres or a spread of more than three (3) metres with a trunk diameter of one hundred and fifty (150) millimetres or greater, measured one (1) metre from the base of the tree.

- (b) Any part of the structure must comply with the building line setbacks applying to the land.
- (c) Stairs, single storey verandahs, single storey entry features, and single storey porticos may encroach up to 1.2 metres of the building setback for 30% of width of the dwelling provided the design, materials, colours and construction be consistent with the dwelling.
- (d) Dwellings must be designed so that walls facing public spaces contain window or door openings to a habitable room.
- (e) Council discourages design that results in carports and garages facing a public place as prominent elements of the streetscape. Garages should be no more than 6.5m in width and should not extend across more than 50% of the width of the property (measured at the required building line setback). Garages must be designed to be:-

- visually subservient;

- integrated into the overall dwelling design; and
- constructed of similar materials and finishes to the dwelling

Two of the criteria listed below should be utilised to minimise the impact of garages.:-

- Garage doors are divided by a vertical masonry pillar or similar;
- Upper floor element projected forward of the garage to cast a shadow and take prominence;
- Colours and textures to ensure the garage doors do not dominate the street elevation;
- Verandah or pergola provided across the face of the garage;
- Utilisation of vertical elements to mitigate the horizontal elements of the garage;
- Garage entrance to be oriented away from the primary street frontage; and
- Staggered garages whereby one garage is setback from the adjoining garage (triple garages will not be supported unless one garage is setback from the adjoining two garages).

In cases where triple garages are proposed the suitability of the proposal will be considered on the basis of the impact on the streetscape utilising the criteria listed above as guidelines.

- (f) The floor level of the dwelling is to be a minimum of 500 mm above the 1% AEP (Average Exceedence Probability) level of any adjacent drainage easement or watercourse.
- (g) Vehicular and pedestrian access from the street to the dwelling shall be above the 1% AEP (Average Exceedence Probability) level of any adjacent drainage easement or watercourse.

SUBMISSION REQUIREMENTS

- Development applications submitted for new dwellings shall indicate the site levels and finished floor levels related to a datum (AHD preferred) at the invert of the gutter.
- Applications for dwellings located near a drainage easement or watercourse may need to be accompanied by a Drainage Study to demonstrate the 1% AEP (Average Exceedence Probability).

2.14.7. CUT AND FILL

OBJECTIVE

- (i) *To ensure that dwellings are designed with regard to site conditions and minimise the impact on landform.*

DEVELOPMENT CONTROLS

- (a) Building siting and design should consider the topography of the site and if cut and fill is necessary it must be balanced to ensure no fill leaves the site.
- (b) Where plans show an excess of 600mm of filling and, provided that the filling does not exceed 1.5 metres, a condition of approval will be imposed requiring a concealed dropped edge beam to contain the fill in excess of 600mm. Should the plans show an excess of filling above 1.5 metres, the applicant will be requested to amend the design to reduce the filling required.
- (c) Excavation in excess of 1 metre may be permitted, subject to there being no adverse effect on the adjoining owners and the submission of structural engineers details of retaining walls with the Development Application, or alternatively, a separate Development Application is to be submitted.

SUBMISSION REQUIREMENTS

- Details of the exact amount and extent of excavation and filling on the site.

2.14.8. BUILDING MATERIALS

OBJECTIVES

- (i) *To promote integrated, visually harmonious and attractive buildings in residential and rural areas.*
- (ii) *To encourage the use of renewable, energy efficient materials that are durable and cost effective in accordance with Council's ESD objective 5.*
- (iii) *To reduce waste generation and wastage of resources in accordance with Council's ESD objective 6.*
- (iv) *To encourage consideration of the long-term impact of the production and use of materials used in construction of the development.*

DEVELOPMENT CONTROLS

- (a) All building construction must comply with the Environmental Planning and Assessment Act 1979, Local Government Act, 1993, and Building Code of Australia.
- (b) The choice of materials and external finishes are to be compatible with surrounding developments and landscape features in terms of colours, textures and quality.
- (c) The following factors must be considered when selecting materials:
 - suitability for the purpose;
 - durability;
 - long term appearance;
 - local environmental impacts;
 - broader and longer term environmental impacts; and
 - the quantity of material required.
- (d) Avoid oversupply and waste of materials by careful assessment of quantities needed.
- (e) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde or those that may create a breathing hazard in the case of fire (eg polyurethane).
- (f) Select materials that will minimise the long-term environmental impact over the whole life of the development.
- (g) Preference should be given to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost, recycled material or materials with low embodied energy, better lifecycle costs and durability.
- (h) Choice of materials should be based on consideration of both their environmental and economic costs.
- (i) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to the use of anti – graffiti surfaces.

SUBMISSION REQUIREMENTS

- Schedule of External Materials including schedule of colours.

2.14.9. PRIVACY – VISUAL AND ACOUSTIC

OBJECTIVES

- (i) *To site and design buildings to ensure visual privacy between dwellings in accordance with Council's ESD objective 7.*
- (ii) *To avoid overlooking of living spaces in dwellings and private open spaces.*
- (iii) *To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.*

DEVELOPMENT CONTROLS

- (a) Buildings are to be designed to ensure maximum protection of privacy, in particular the privacy of primary living areas must be protected. Where appropriate consideration should be given to:
 - using windows that are narrow, translucent or obscured or, in the case of bathrooms, have window sills a minimum of 1.5 metres above the upper storey floor level; and
 - ensuring that windows that face directly to the windows, balconies or yards of adjoining dwellings are appropriately screened.
- (b) First floor balconies will not be permitted where they overlook living areas of adjacent dwellings.
- (c) Windows should be placed to minimise direct viewing between dwellings.
- (d) Dwellings are to be designed to limit the potential for noise transmission to the living and sleeping areas of adjacent existing and future developments.
- (e) Careful consideration should be given to the location of air-conditioning systems, swimming pools and the like to minimise the impact on the amenity of adjoining properties.
- (f) Private open space areas and driveways are to be designed to minimise noise impacts.
- (g) Dwellings that adjoin classified roads are to be designed to ensure acceptable internal noise levels, based on Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

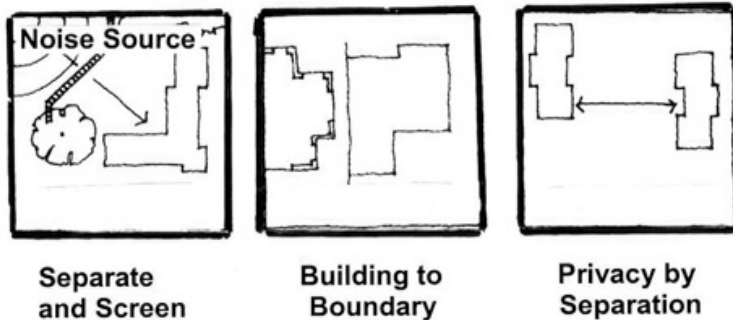
SUBMISSION REQUIREMENTS

- Statement from a qualified acoustic consultant certifying that the design and construction of the building meets the Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

Privacy for Single Dwelling Residents and Neighbours

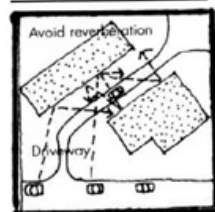
Site Planning and Layout

Privacy for Neighbours

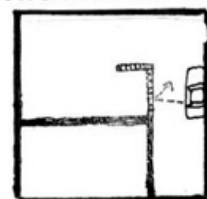


Design Techniques

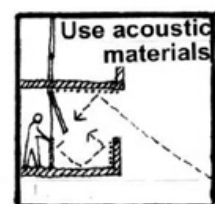
Acoustic Privacy



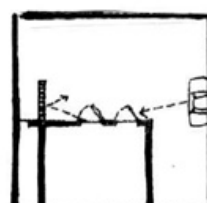
Avoid reverberation



*Screen wall to
shield noise*



*Bottom opening
windows*



*Direction of window
opening away from noise*

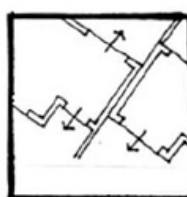
Relationship Between Dwellings

Screening

Window Style And Materials

Location and Direction of Windows

Visual Privacy



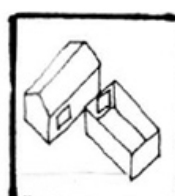
Build to boundary



Screening



Bay windows



Offset windows

Source: Australia's Guide to Good Design – Residential

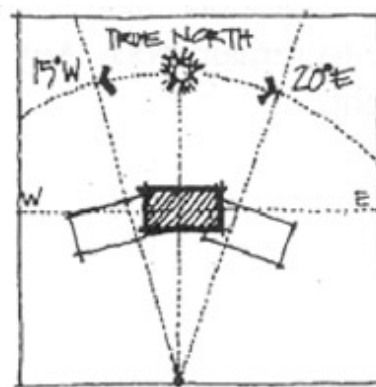
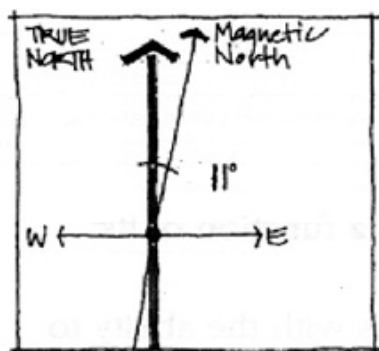
2.14.10. SOLAR ACCESS

OBJECTIVES

- (i) To maximise solar access to internal living and open space areas in winter.
- (ii) To ensure no adverse overshadowing of adjoining allotments/developments.
- (iii) To orient the development in a way that best allows for appropriate solar access and shading, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.
- (iv) To minimise the need for artificial lighting in dwellings during the day, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.
- (v) To orientate dwellings so that the living areas face north.

DEVELOPMENT CONTROLS

- (a) Dwellings should be sited to allow adequate provision for access of direct sunlight to private open space within the subject land and on adjacent properties. At least 50% of the required private open space within the subject property and that on adjoining properties is to receive direct sunlight for a minimum of 4 hours between 9am and 3pm on 21 June.
- (b) Living areas of dwellings shall be orientated to the north wherever possible.
- (c) Maximise the amount of direct sunlight available to clothes drying areas.
- (d) Orient buildings so that each dwelling obtains direct sunlight where possible. Ideally, orientate the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in the following diagrams:



Source: BDP Environment Design Guide

- (e) Where winter solar access is not optimum consider the use of double-glazing or high performance glass.
- (f) Windows should have suitable shading or other solar control to avoid summer overheating.
- (g) Consider the use of horizontal shading devices (for north facing windows) including eaves, verandahs, pergolas, awnings and external horizontal blinds to allow low winter sun whilst providing shade from high summer sun.
- (h) West facing windows can cause excess heat in summer. If suitable, minimise the size of east and west facing windows, or consider external vertical shading devices such as vertical blinds, blade walls and thick vegetation.
- (i) Shading elements are to be integrated into the overall elevation design.

SUBMISSION REQUIREMENTS

- Shadow diagrams may be required.

2.14.11. VENTILATION

OBJECTIVES

- (i) To maximise ventilation flows in dwellings.
- (ii) To minimise the filtering of cold or warm air through gaps in the construction of dwellings in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

- (a) Consider ventilation in early design stages.
- (b) Consider prevailing breezes in relation to building orientation, window design and internal circulation.
- (c) Place windows to allow for cross ventilation.

- (d) Consider the installation of fans, roof vents, louvered windows and high-level windows for rooms or spaces where cooling rather than heating is the priority.
- (e) Windows should be lockable in a partly open position.
- (f) Provide security screen doors at dwelling entries.
- (g) Minimise air gaps by incorporating door and window seals.

2.14.12. LIGHTING

OBJECTIVE

- (i) *To maximise the use of natural lighting and to minimise the energy consumption of developments in accordance with Council's ESD objective 5.*

DEVELOPMENT CONTROLS

- (a) The design should maximise the use of natural lighting through window placement and skylights.
- (b) Incorporate dimmers, motion detectors, automatic turn-off switches where appropriate.
- (c) Provide separate switches for special purpose lights.

2.14.13. ON-SITE SEWAGE MANAGEMENT

Residences in unsewered residential zones such as Wisemans Ferry, Glenorie, Kenthurst and Lower Portland will need to address on-site sewage management requirements.

OBJECTIVES

- (i) *To ensure all new installations are appropriate for the situation and site.*
- (ii) *To ensure all development has adequate provision for water and sewerage. Where Sydney Water does not provide sewerage, adequate provision must be made for an on-site sewage management system.*
- (iii) *To provide guidance on the minimum requirements and land size needed for the commonly required systems.*
- (iv) *To protect the amenity of an area.*

- (v) *To ensure the protection of the environment and public health.*

DEVELOPMENT CONTROLS

- (a) All applications proposing an On-site Sewage Management System (OSMS) shall be accompanied by a full site assessment with consideration to topography, soil composition and absorption capacity and vegetation of areas to be used for effluent disposal. Site assessments and designs of on-site sewage management systems shall be in accordance with AS/NZS 1547: 2000 "Onsite Domestic Waste Water Management" and the Environment & Health Protection Guidelines: "Onsite Sewage Management for Single Households" January.
- (b) Pump-out systems will not be permitted in residential zones.
- (c) Any alteration to a system shall require Council approval.
- (d) OSMS should be selected, sited, designed, constructed, operated and maintained so that surface waters and groundwater are not contaminated.
- (e) Effluent from primary treatment systems (i.e. septic tank) shall only be disposed of through soil absorption or removed from the site.
- (f) Contact with effluent from aerated systems shall be minimised or eliminated.
- (g) There shall be no contact with effluent from any other type of system.
- (h) Treated sewage shall not be used on edible crops.
- (i) Surface irrigation shall only occur with disinfected effluent from an aerated system.
- (j) Disposal areas should be fenced off from children's play areas.

SUBMISSION REQUIREMENTS

- Plans and details of the OSMS proposed including a detailed site assessment addressing the requirements of the documents referred to in a) above.

2.14.14. CAR PARKING AND VEHICULAR ACCESS

OBJECTIVES

- (i) *To ensure dwellings have adequate areas of ingress and egress from the local road system and satisfactory on-site access in accordance with Council's ESD Objective 7.*
- (ii) *To provide sufficient and convenient parking for residents and visitors to the site.*
- (iii) *To ensure that adequate carparking is provided on-site so as to prevent inconvenience to residents and congestion in nearby streets in accordance with Council's ESD Objective 7.*

DEVELOPMENT CONTROLS

- (a) Car parking is to be provided in accordance with Part D Section 1 - Parking.
- (b) The location and design of driveways and parking areas should enable the opportunity for landscape screening.
- (c) Provision is to be made for convenient and safe access to car parking facilities.
- (d) At least one car parking spaces must be provided behind the front building line. Single garages must have minimum internal dimensions of 5.5m by 3.0m. Double garages must have minimum internal dimensions of 5.5m by 5.0m.

SUBMISSION REQUIREMENTS

- Plans showing proposed vehicular access and circulation and calculations, specifically relating to vehicular movement, turning circles, parking spaces, and driveway widths. The Australian Standard 2890.1 – Off Street Car Parking templates must be overlaid on the appropriate plans.

2.14.15. ACCESS AND SURVEILLANCE

OBJECTIVE

- (i) *To ensure the needs of residents and visitors are considered with particular regard to access requirements, safety and security in accordance with Council's ESD Objective 7.*

DEVELOPMENT CONTROLS

- (a) Site planning and dwelling design is to allow general observation of the street, the site and the approaches to the dwelling entry from the inside of each dwelling.
- (b) Access to dwellings is to be direct and without unnecessary barriers. For example, use ramps instead of stairs/steps, consider the height and length of handrails and eliminate changes in level between ground surfaces.
- (c) Stairs and ramps are to have reasonable gradients and non slip even surfaces. Refer to Australian Standard 1428.1 - 2001 Design for Access and Mobility and supplementary AS 1428.2 - 1992.

2.15. FENCING

OBJECTIVES

- (i) *To ensure that fencing is of a high visual quality, compliments the character of the area and is compatible with the proposed development.*

DEVELOPMENT CONTROLS

- (a) Any boundary fencing shall be subject to the requirements of the Dividing Fences Act.
- (b) Front fencing is to be consistent with the height, scale, and style of existing fencing in the street. Where there are no existing front fences, front fences are not supported.
- (c) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and anti-graffiti surfaces.
- (d) Where front fencing over 1 metre in height is proposed, this shall be of open style.
- (e) Any fencing in the front setback over 1.2m in height shall be setback from the front boundary

a minimum of 500mm to allow opportunities for landscaping to soften the impact of the fence.

- (f) Consideration will be given to fencing on secondary road frontage setbacks, subject to there being no adverse affect on the immediate area and on traffic visibility and be of a design to incorporate features such as landscaping bays or a variation/combination of materials.
- (g) Side and rear boundary fencing should be a maximum of 1.8 metres in height.

SUBMISSION REQUIREMENTS

- Details of all fencing proposed for the site.

2.16. WASTE MANAGEMENT

2.16.1. STORAGE AND FACILITIES

OBJECTIVES

- (i) *To minimise the overall environmental impacts of waste.*
- (ii) *To maximise, through appropriate design, the opportunities to deal with domestic waste according to the Waste Hierarchy as given in Council's ESD objective 6.*
- (iii) *To provide, in accordance with Council's ESD Objective 6, domestic waste management systems that allow for:*
 - ease of use by occupants; and
 - ease of service by collection contractors.
- (iv) *To provide waste storage areas that are integrated with the design of the development.*
- (v) *To ensure minimum visual impact of the waste storage facilities.*
- (vi) *To assist in achieving Federal and State Government waste minimisation targets.*

DEVELOPMENT CONTROLS

- (a) Waste collection and separation facilities must be provided for each dwelling. Each dwelling should have a waste storage cupboard in the kitchen capable of holding at least a single days waste, and be sufficient to enable separation of recyclable material.

- (b) Adequate storage for waste materials must be provided on site.
- (c) All waste storage areas must be screened from view from any adjoining property or public place.
- (d) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.
- (e) Bin storage space is to be:
 - incorporated into the landscape design of each dwelling; and
 - adequate for one 240 litre garbage bin and one 240 litre recycling bin per dwelling.
- (f) Location of the bin storage space:
 - is to be convenient to the occupant(s) of the dwelling; and
 - must allow the bins to be wheeled to the street kerb over flat or ramped surfaces with a maximum grade of 7% and not over steps, landscape edging or gutters or through the dwelling.

2.16.2. WASTE MANAGEMENT PLANNING

OBJECTIVES

- (i) *To promote improved project management and to reduce the demand for waste disposal during demolition and construction in accordance with Council's ESD Objective 6.*
- (ii) *To maximise, re-use and recycle building/construction materials in accordance with Council's ESD Objective 6.*
- (iii) *To encourage building designs and construction techniques that will minimise waste generation in accordance with Council's ESD Objective 6.*
- (iv) *Minimise waste generation to landfill via the waste hierarchy in accordance with Council's ESD objective 6.*
- (v) *To assist in achieving Federal and State Government waste minimisation targets.*

A. DEMOLITION

DEVELOPMENT CONTROLS

- (a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

- (b) Traditional comprehensive demolition should be replaced by a process of selective deconstruction and re-use of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as Asbestos.
- (c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or off site. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.
- (d) When separated, materials are to be kept uncontaminated to guarantee the highest possible re-use value.
- (e) Details of waste sorting areas and vehicular access are to be provided on plan drawings.

B CONSTRUCTION

DEVELOPMENT CONTROLS

- (a) Avoid over-supply and waste of materials by careful assessment of quantities needed.
- (b) The use of prefabricated components may reduce waste.
- (c) Re-use of materials and use of recycled material is desirable where possible.
- (d) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.
- (e) All Asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan (WMP). Appendix A contains a template that can assist in the preparation of a WMP.

2.17. SERVICES

OBJECTIVE

- (i) *To ensure adequate provision is made for services for each dwelling including garbage, sewer, water, drainage, electricity and telecommunications.*

DEVELOPMENT CONTROLS

- (a) Unless it is satisfied that adequate provision has been made for the supply of water and disposal of sewage, Council may not grant consent to the development.
- (b) All water, gas, power and communication services are to be located underground.

2.18. SWIMMING POOLS

OBJECTIVES

- (i) *To ensure swimming pools are located so that they are not visually prominent from the street.*
- (ii) *To ensure that the amenity of adjoining owners is considered when siting and designing swimming pools.*

DEVELOPMENT CONTROLS

- (a) Swimming pools are not to be located within the front or secondary boundary setback.
- (b) Swimming pools are required to have a minimum setback of 1m from the waterline to side and rear boundaries.
- (c) Swimming pool filters are to be placed at a location away from dwellings on adjoining properties and enclosed in soundproof structures.

3. 64 MACKILLOP DRIVE, BAULKHAM HILLS

3.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This chapter of the Development Control Plan establishes site specific objectives and controls to guide future development on Lot 2 DP 817696, No.64 Mackillop Drive, Baulkham Hills (see Figure 2).



Figure 2: SUBJECT SITE

This chapter must be read in conjunction with Part A – Introduction of this DCP and other relevant Sections, including:

- Part C Section 3 – Residential
- Part C Section 6 – Town Houses
- Part C Section 7 – Apartment Buildings
- Part D Section 1 – Parking
- Part D Section 3 – Landscaping
- Part D Section 5 – Heritage

In the event of any inconsistency between this Section of the DCP and any other Sections of the DCPs, the provisions of this Section shall prevail only to the extent of the inconsistency.

3.2. SITE ANALYSIS

The subject site is bounded by Mackillop Drive to the east and Barina Downs Road to the north. The site has an area of 181,500m².

Located to the east of the site is the former farmhouse which is identified as a heritage item of local significance under the Baulkham Hills Local Environmental Plan 2005. Located on the western portion of the site is the Conference/Retreat Centre, associated facilities and the former priest's house. The remainder of the site is vacant.

Residential properties adjoin the southern and western boundaries of the subject site. Surrounding development is mostly detached dwellings to the north with some town houses. An apartment development has been approved on vacant land to the north.

The topography of the site is characterised by moderate to steeper slopes with a central ridgeline that is oriented along an east-west direction. Slopes on the northern side of the ridgeline range from 5% to 14% and range from 10% to 25% on the southern side. The sloping land presents challenges for future dwelling design and construction.

The dominant central ridgeline allows panoramic views on both the northern and southern aspect. Views from the northern aspect of the central ridge are local views over the Norwest Business Park and distant views to the mountains to the west. Views from the south side of the ridge are primarily over the established residential areas.

Five distinct drainage catchments are present on the site due to spur lines that extend from the eastern and western edges of the ridge. The largest catchment which drains to the south generates flood risk management issues at the confluence of three overland flow paths.

The majority of native vegetation has been cleared from the site for grazing of livestock, but areas along the access road and around the heritage listed building have been landscaped with exotic plants. Small remnants of vegetation occur on the western edge of the site and are listed on National Parks and Wildlife Service (2002) maps as Sydney Turpentine Ironbark Forest. This is listed as a Critically Endangered Ecological Community under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 and as an Endangered Ecological Community under the Threatened Species (TSC) Act. Councils mapping identifies the remnant vegetation as Cumberland

Plain Woodland which is also listed a Critically Endangered Ecological Community under the schedules of both the EPBC and TSC Acts. A flora and fauna survey and assessment undertaken in November 2011 has identified that the site is within a geographical transition zone between these two endangered ecological communities.

The key features of the site are shown in Figure 3.



Figure 3 SITE ANALYSIS

3.3. SITE SPECIFIC OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives and development controls for this site are set out in the following sections.

3.3.1. SITE PLANNING

OBJECTIVES

- (i) To achieve coherent site planning and development that relates to the natural topography of the site and contributes to the character of the area.
- (ii) To protect, contribute and enhance the existing residential character and amenity.
- (iii) To ensure acceptable levels of amenity and minimise negative impacts of traffic movements on the surrounding locality.

DEVELOPMENT CONTROLS

- (a) Apartment buildings, small lot integrated housing and single dwelling houses are to be provided in the locations identified in Figure 4.

- (b) Access to the site is to be provided in the locations identified in Figure 4.
- (c) Prominent views identified in Figure 4 are to be retained. Streets are to be located to enable additional view corridors into No.64 Mackillop Drive, Baulkham Hills and to the heritage item.
- (d) The central ridgeline between the single dwelling housing and small lot integrated housing areas is to be retained as common-open space.

3.3.2. HERITAGE

The existing building is an interwar Californian bungalow built around circa 1928. It is described in The Hills Shire Council Inventory Sheet No.92 as “A fine example of a bungalow in original condition”.

An important aspect of maintaining and enabling the interpretation of the heritage significance of a building is the land around it that establishes its context, commonly known as curtilage. Curtilage can include (but is not limited to) significant features of a site such as outbuildings and driveways and also vegetation, for example, the original garden or an avenue of trees.



Figure 4 SITE PLANNING

OBJECTIVES

- (i) To ensure that the subdivision of land on which a heritage building is located does not isolate the heritage building from its setting or context or adversely affect its amenity or privacy.
- (ii) To ensure that new dwellings erected on land upon which the heritage building is located are sympathetic to the character of the heritage building and its setting.
- (iii) To ensure that the development of land in the vicinity of a heritage site is undertaken in a manner that complements the heritage significance of the site.
- (iv) To ensure that development of the site respects the curtilage established by the original garden associated with the heritage item.
- (c) The rural qualities of the bitumen avenue with swale drainage lines are to be retained. There shall be no concrete edging.
- (d) Civil works for stormwater drainage dish drains to be kept away from root zones of trees in the access avenue.
- (e) A Conservation Management Plan must be produced and submitted to Council to ensure that the existing heritage building is managed appropriately for its heritage values.
- (f) A landscape plan shall be prepared by a landscape architect experienced in dealing with heritage gardens and is to include at a minimum the following:
 - The retention of original and or significant landscaping (including plants with direct links or association with the heritage item); and
 - Details of how new plantings retain significant views to and from the heritage item.

DEVELOPMENT CONTROLS

- (a) The heritage curtilage is to be consistent with the area shown edged yellow in Figure 5.
- (b) Brush box trees located parallel to Mackillop Drive and within the immediate curtilage in Figure 5 shall be retained.

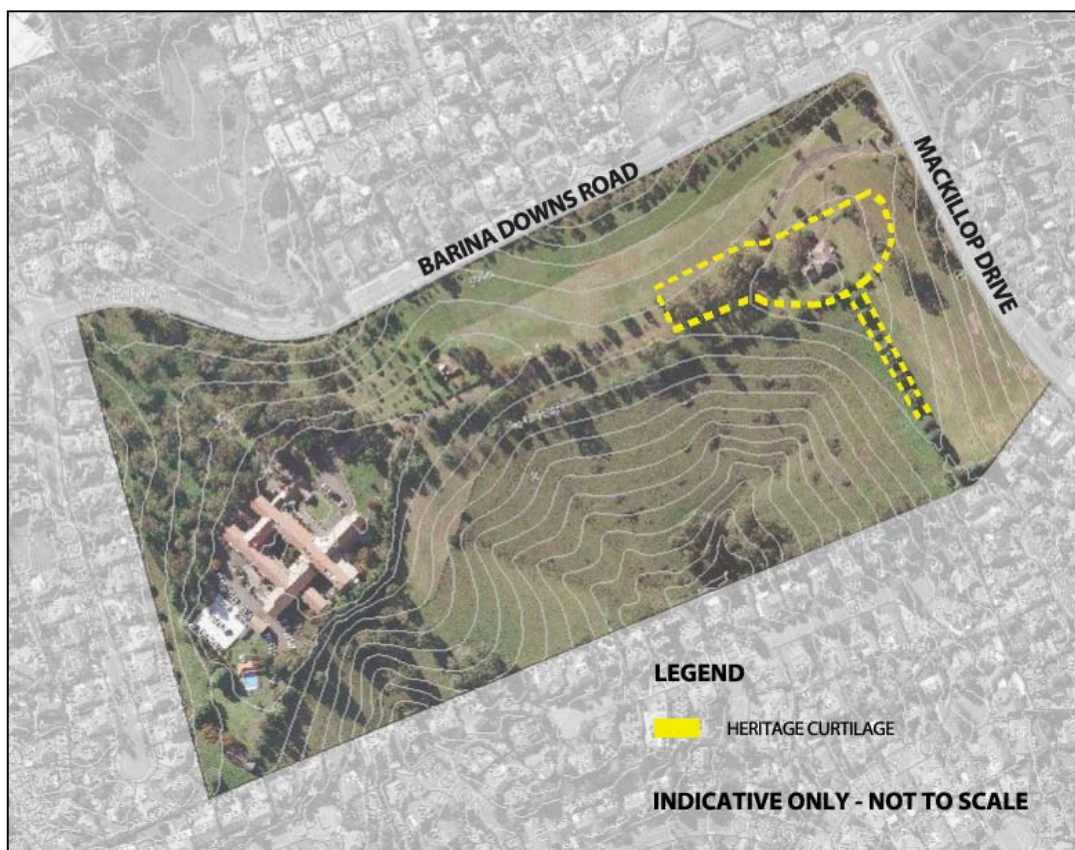


Figure 5: REQUIRED HERITAGE CURTLAGE

3.3.3. SURFACE WATER RUNOFF

OBJECTIVES

- (i) Assist in the management of stormwater to minimise flooding and reduce the effects of stormwater pollution on receiving waterways.
- (ii) Ensure that development is not subjected to undue flood risk, nor exacerbate the potential for flood damage or hazard to existing development and to the public domain.

DEVELOPMENT CONTROLS

- (a) Water sensitive urban design infrastructure will not be accepted as part of any public road or open space dedication.
- (b) The development proposal must demonstrate how the drainage system for the development site is designed to address any site specific conditions, and how it connects into the downstream drainage system.
- (c) The drainage system is to be designed in a manner that ensures that personal and property safety is not compromised.
- (d) A Local Drainage Management Plan is required for development of the site.
- (e) The Local Drainage Management Plan is to address:
 - the hydrology of the locality and its relationship to the drainage system;
 - the distribution of soil types and the scope for on-site infiltration;
 - any expected rise in ground water level due to development;
 - the role of the principal landscape components on the site for water conservation and on-site detention;
 - the scope for on-site stormwater detention and retention, including the collection of water for re-use;
 - how any detrimental impacts on the existing natural hydrology and water quality is proposed to be minimised; and
 - how pedestrian and property safety is to be ensured.
- (f) Onsite Stormwater Detention (OSD) is required to be provided in accordance with Council's

adopted policy except where modified in control (g) below.

- (g) Runoff from the development site is constrained by downstream infrastructure/easements, specifically those connecting the subject site to Salamander Grove and Albion Place. The Local Drainage Management Plan must include a hydrological and hydraulic analysis of the existing infrastructure downstream to determine the capacity of the existing piped stormwater system. Where runoff from the site in its post development condition exceeds the capacity of the system, additional stormwater management practices will be required to be implemented on site. Alternatively, amplification of the existing downstream drainage network may be necessary.

Additionally, overland flowpaths must be created to safely contain and convey any gap flows generated by the capacity of the storm drainage system being exceeded, or caused by system blockage. The overland flowpaths must be capable of conveying the maximum discharge between the 100 year ARI catchment runoff and pipe system capacity, safely connecting to the closest existing overland flowpath (road reserve). This may require improvements to the surface of easements where relied upon by the proposed development.

- (h) All hydrological and hydraulic modelling undertaken must be submitted to Council as part of a development application.
- (i) The post development run-off from impermeable surfaces (such as roofs, driveways and paved areas) is to be managed by stormwater source measures that:
 - contain frequent low-magnitude flows;
 - maintain the natural balance between run-off and infiltration;
 - remove some pollutants prior to discharge into receiving waters;
 - prevent nuisance flows from affecting adjacent properties; and
 - enable appropriate use of rainwater and stormwater.

- (j) Where filtration and bio-retention devices are proposed, they are to be designed to capture and provide temporary storage for stormwater.
- (k) Public stormwater easements within residential lots are not permitted. Instead, local drainage links/ pathways must be used to retain public infrastructure within public land. The minimum width of any local drainage link must be 5m. (Refer to Council's Design Guidelines – Subdivisions & Developments)
- (l) A stormwater quality assessment is to be submitted with the development application to demonstrate that the development will achieve the post-development pollutant load standards indicated in the table below:

Litter and vegetation larger than 5mm:	90% reduction on the Baseline Annual Pollutant Load;
Total Suspended Solids:	85% reduction on the Baseline Annual Pollutant Load;
Total Phosphorous:	65% reduction on the Baseline Annual Pollutant Load; and
Total Nitrogen:	45% reduction on the Baseline Annual Pollutant Load.

- (m) The stormwater quality assessment is to be prepared by a suitably qualified engineer with experience in water sensitive urban design and include:
- Modelling of pre-development and post-development pollutant loads with an industry standard water quality model;
 - The design of water sensitive urban design measures used to achieve the required post-development pollutant loads; and
 - Maintenance schedules of any proposed water sensitive urban design measure that requires maintenance and/or likely full replacement.
- (n) Water sensitive urban design elements, consisting of, but not limited to:
- Bio-retention swales;
 - Rain gardens;
 - Vegetated swales;
 - Vegetated buffers;
 - Rainwater tanks; and

- Gross pollutant traps, must be incorporated into the planning for, and appropriately located within any future subdivision of the land.

3.3.4. ROADS

OBJECTIVES

- (i) To provide an acceptable level of access, safety and convenience for all road users, whilst ensuring acceptable levels of amenity and protection from the impact of traffic.
- (ii) To provide sufficient road reserves, carriageway and verge width to allow roads to perform their function within the road network.
- (iii) Roads are to be designed and located in a manner which respects and responds to the environmental features and constraints of the site.

DEVELOPMENT CONTROLS

- (a) Roads are to be designed to integrate into the local road network and provide for the efficient and safe movement of vehicles, bicycles and pedestrians throughout the development site.
- (b) The location and design of roads should minimise the extent of cut and fill and cause the least disturbance and impact on native vegetation.
- (c) All roads are to be designed in accordance with the standards established in the table below:

Street Types				
Type	Max number of dwellings	Street reserve	Lane width	Footpath width and verge
Access Place	30	14.5m	7.5m	2 X 3.5m verge (1.5m wide path provided in verge on one side)
Access Street	200	15.5m	8.5m	2 X 3.5m verge (1.5m wide path provided in verge on one side)

- (d) A lesser verge width may be considered where the road is adjacent to common open space.

3.3.5. SINGLE DETACHED DWELLINGS

The provisions of Part C Section 3 – Residential will apply. However, the additional setback control as stated below will apply to ensure that new development is sensitive to the landscape setting, site constraints, existing amenity and established character of the street and locality.

A. LOT SIZE AND SITE COVERAGE

OBJECTIVES

- (i) To provide allotments of a size conducive to residential living, having regard to any development constraints or environmental qualities of that land.
- (ii) To ensure allotments have sufficient area to provide adequate access, open space, a sufficient building platform, attractive presentation to the street and are consistent with the established character of the area.

DEVELOPMENT CONTROLS

- (a) The minimum allotment size and dimensions for the erection of a detached dwelling must be in accordance with the table below:

Area	Depth	Width	Site coverage
700m ²	27m	18m	60%

- (b) For battle-axe shaped allotments and allotments served by a right-of-way where allotments have no road frontage, the minimum area, excluding the access corridor shall not be less than 900m².

The minimum width for the battleaxe handle on battleaxe shaped allotments is:

Number of lots to be accessed	Minimum Width
One allotment	4 metres
Two or more allotments	6 metres

B. SETBACKS

OBJECTIVES

- (i) To provide setbacks that complement the streetscape and protect the privacy and sunlight to adjacent dwellings.

DEVELOPMENT CONTROLS

- (a) Lots fronting Mackillop Drive shall have a primary setback of not less than 7.5 metres with corner allotments having a minimum secondary setback of 4 metres. All other lots shall have a primary setback of 6 metres and secondary setback of 2 metres for corner allotments.

A minimum rear setback of 10 metres is to be provided on the southern boundary of the development site. This requirement does not apply to any residential lot having direct frontage to Mackillop Drive.

3.3.6. TOWN HOUSES

The provisions of Part C Section 6 – Town Houses will apply.

3.3.7. APARTMENT BUILDING

The provisions of Part C Section 7 – Apartment Buildings will apply. However, the additional controls as stated below will apply:

A. SETBACKS

OBJECTIVES

- (i) To provide setbacks that complement the setting and contribute to the streetscape and character of the street.
- (ii) To minimise any adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.

DEVELOPMENT CONTROLS

- b) The minimum front setback to Barina Downs Road for apartment buildings is 10 metres.
- c) The minimum setback to the western boundary where the proposal abuts a residential property is 10 metres.

- d) The minimum rear setback is 6 metres where development abuts the conference centre.

B. DENSITY

OBJECTIVES

- (i) To ensure that the apartment development is compatible with the surrounding development and the bushland landscape setting.

DEVELOPMENT CONTROLS

- (a) The maximum population density is 140 persons. The density is based upon the following occupancy rates:

Dwelling Type	Occupancy (Persons)	Rate
1 bedroom unit	1.3	
2 bedroom unit	2.1	
3 bedroom unit	2.7	
4 bedroom unit	3.5	

3.3.8. SMALL LOT INTEGRATED HOUSING

Integrated housing presents the opportunity to consider all aspects of building and site design together, to be combined effectively to create a functional and attractive residential environment.

It is essential in any integrated housing development that all proposed dwelling-houses are shown to be capable of being accommodated on proposed allotments without compromising Council's requirements, particularly solar access and privacy.

All integrated housing developments must be designed so as to ensure a compatible relationship between dwelling-houses within the development and dwellings on adjoining land.

Any person undertaking an integrated housing development is required to submit a combined Development Application to Council for the construction of the dwelling-houses and subdivision of the land.

Factors which should be considered in the layout of an integrated housing development include:

- slope and orientation of the land;
- energy-efficient design of subdivision and dwelling-houses;
- solar access to adjoining dwellings/dwelling-houses;
- adequate visual and acoustic privacy to each dwelling-house;
- relationship to adjoining dwellings/dwelling-houses;
- retention of special qualities or features such as trees and views;
- provision of adequate site drainage;
- provision for landscaping and private open space; and
- existing streetscape character.

A. LOT SIZE

OBJECTIVES

- (i) To facilitate a range of lot sizes and housing types to meet changing demographic profiles and housing requirements.

DEVELOPMENT CONTROL

- (a) The minimum lot size for integrated housing is 240m². The lot width and depth is to be considered on merit.

B. SITE COVERAGE

OBJECTIVES

- (i) To minimise bulk and scale of development and ensure that suitable land is available for landscaping, drainage and retention of vegetation.

DEVELOPMENT CONTROLS

- (a) The maximum site coverage (including garage/carport, driveways, outbuildings, decks, patios, paved areas and pools) for a development lot of 240m²-450m² is 65%.
- (b) Decks located over garages which provide private open space are to be excluded from the site coverage.

C. SETBACKS**OBJECTIVES**

- (i) To create an attractive, interesting and pleasant streetscape through the siting of buildings.
- (ii) To provide visual separation of built forms, privacy and opportunities for landscaping.
- (iii) To protect solar access to habitable rooms, protect and optimise useable open space around dwellings, and protect adjoining dwellings from excessive overlooking, overshadowing and general loss of amenity.
- (iv) To provide sufficient space for vehicle parking, manoeuvrability and clear sight lines.
- (v) Maintain and enhance established streetscape and character of the neighbourhood. This includes building setback, landscaping, fencing, lighting, pathways and street trees.

DEVELOPMENT CONTROLS

- (a) Zero lot line housing shall occur only on the southern side boundary of east-west allotments and either side boundary but not both sides of north-south allotments.
- (b) The length of the zero lot line wall is to be a maximum of 10 metres.
- (c) No dwelling built on the zero lot line is to abut an adjoining dwelling also built on the zero lot line.
- (d) No openings shall be located along the zero boundary wall. The boundary wall shall be constructed of maintenance free materials such as face brick or masonry. Walls located on the boundary must comply with the requirements of the Building Code of Australia in terms of fire separation.
- (e) All boundary walls must extend at least 300mm above the roof line of the dwelling to ensure that roof drainage is contained within the site.
- (f) A restriction as to user is created for a one metre wide maintenance easement over the adjoining property pursuant to Section 88B of the Conveyancing Act 1919.
- (g) Building setbacks are to be in accordance with the table below:

Location/Frontage	Setback
Primary Street	
- MacKillop Drive	7.5m
- Barina Downs Road	6m
Secondary Street	4m
- MacKillop Drive	
- All other corner allotments	2m
All other streets - internal	4.5m
All Garages	5.5m
Side boundary	zero lot line or 900mm
Rear boundary	6m

D. VEHICULAR ACCESS**OBJECTIVES**

- (i) To provide an acceptable level of vehicular access, safety and convenience for all users of the development.
- (ii) To ensure that the internal roadway design can satisfactorily accommodate the expected traffic volumes of the development.
- (iii) To provide a safe environment for both pedestrians and vehicles using the site and surrounding road network.

DEVELOPMENT CONTROLS

- (a) All internal roadways are to be of a sufficient width as determined by a traffic report to adequately accommodate the volume of traffic generated by the development, and the provisions of service vehicles.

E. CAR PARKING**OBJECTIVES**

- (i) To ensure that garages do not dominate the streetscape.
- (ii) To provide sufficient and convenient parking for residents.
- (iii) To ensure that adequate car parking is provided on-site so as to prevent inconvenience to residents and congestion in nearby streets.

DEVELOPMENT CONTROLS

- a) A minimum of one car parking space is to be provided per dwelling. This space is to be located within a garage.
- b) Carports and garages facing a public place are to be no more than 6m in width, nor extend across more than 50% of the property frontage, whichever is the lesser.
- c) Carports and garages are to be designed to be:
 - visually subservient;
 - integrated into the overall dwelling design; and
 - constructed of similar materials and finishes to the dwelling.
- d) Where a double garage is proposed a minimum of two of the following design measures are to be employed:
 - garage doors are divided by a vertical masonry pillar or similar;
 - upper floor element projected forward of the garage to cast shadow and take prominence;
 - colours and textures to ensure garage door subservience;
 - utilisation of vertical elements to mitigate the horizontal emphasis of the garage;
 - garage entrance to be orientated away from primary street frontage to face the side boundary; and
 - staggered garages whereby one garage is setback from the adjoining garage.

F. FACADES

OBJECTIVES

- (i) To provide visual interest to the streetscape through the incorporation of design features.

DEVELOPMENT CONTROLS

- (a) For all dwellings the facade must be suitably articulated and incorporate two of the following design elements:
 - Non-enclosed verandah for at least 40% of the dwelling width
 - Entry feature or portico
 - Balcony or window box treatment to first floor element
 - Recesses or projection of prominent architectural elements to visually break up

the facade and avoid blank wall appearance;

- Verandah, pergola or similar provided over garage doors

G. PRIVATE OPEN SPACE

OBJECTIVES

- (i) To ensure the private open space is usable, functional and easily accessible for residents
- (ii) To ensure private open space includes landscape and soft features
- (iii) To ensure direct access and a relationship between indoor and outdoor living areas.

DEVELOPMENT CONTROLS

- (a) Each dwelling must have a minimum private open space area of 24m² capable of containing a dimension of 4m and must have direct and level access to the dwelling's living areas, such as a lounge room, a family room, a dining room, or a kitchen.

In the calculation of private open area:

- a minimum of 50% of the open space area must be grassed or soft landscaped area located in the rear yard except where such private open space is an elevated deck over rear lot access.
- no area is less than 2.5 metres in width.
- outdoor clothes drying area are included as private open space.
- car spaces are not included in private open space calculations.

- (b) Private open space is not permitted in the front setback.
- (c) A garage or gate must provide access between the private open space and the driveway.
- (d) At least half (50%) of the principal private open space area is to receive a minimum of 2 hours direct sunlight between 9am and 3pm during mid winter.

H. COMMON OPEN SPACE

OBJECTIVES

- (i) To provide outdoor living space which is an extension of the dwelling for the enjoyment of its inhabitants.

- (ii) To provide outdoor living space which is of useable dimensions and which is located to receive a reasonable quantity of sunlight.
- (iii) To enhance the quality of the built environment by providing high quality landscaping.
- (iv) To promote a pleasant and safe living environment.
- (v) To provide functional open space within the development for the informal recreation of residents and children's play.

DEVELOPMENT CONTROLS

- (a) The central ridgeline and curtilage of the heritage item is to be retained as common open space.
- (b) The common open space areas is to be:
 - easily accessible to all residents within the development;
 - of a configuration, slope, and design so as to ensure it is easily maintained;
 - located to ensure the area receives adequate sunlight during mid winter;
 - of a sufficient size to satisfy the immediate open space demands of the proposed population and accommodate informal active recreational activities; and
 - provided with passive surveillance.
- (c) The common open space area is to include a child play area or recreation activities area.
- (d) The common open space area must have a minimum dimension of 12m x 12m.
- (e) For developments consisting of 15 or more dwellings the common open space area is to comprise an area equivalent to 10m² per dwelling.
- (f) Access for all residents to the common open space area is to be guaranteed via the titling system.
- (g) The majority of the common open space area is to receive direct sunlight between 9am – 3pm during mid-winter.

I. LANDSCAPING

OBJECTIVES

- (i) To enhance the setting of the heritage building and the environmental quality of the neighbourhood.
- (ii) To conserve significant natural features of the site and incorporate them into landscape areas.

DEVELOPMENT CONTROLS

- (a) The minimum required landscaped or naturally vegetated area for integrated housing as a percentage of the total site area is 35%.
- (b) Existing trees should be preserved.
- (c) Native species are to be used to maintain a strong natural theme for the neighbourhood due to their low maintenance characteristics, relative fast growth, aesthetic appeal and compatibility with the natural habitat.
- (d) All landscaped areas are to have a minimum width of 2m.

J. SOLAR ACCESS

OBJECTIVES

- (i) To maximise solar access to internal living and open space areas in winter.
- (ii) To ensure no adverse overshadowing of adjoining allotments/developments.
- (iii) To orient the development in a way that best allows for appropriate solar access and shading.
- (iv) To minimise the need for artificial lighting in dwellings during the day.
- (v) To orientate dwellings so that the living areas face north.

DEVELOPMENT CONTROLS

- (a) All dwellings must be designed to ensure that the living areas are orientated towards north where possible and that all north facing living area windows receive at least 3 hours of direct sunlight between 9am and 3pm on 21 June.
- (b) Garages, bathrooms and laundries should be located in areas with a west to southwest orientation, with windows (glazing) minimised in

size and number as well as being protected with effective sun shades.

- (c) Shadow diagrams shall be submitted showing the impact of a proposal on the adjacent residential buildings and their private open space. Such diagrams shall be based on a survey of the site and adjoining development. The shadow diagrams shall include all openings and windows of adjoining buildings and shall demonstrate likely shadow impact on the 21 June for 9am, 12pm and 3pm.

K. PRIVACY CONTROLS

OBJECTIVES

- (i) To site and design buildings to ensure visual privacy between dwellings.
- (ii) To avoid overlooking of living spaces in dwellings and private open spaces.
- (iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

DEVELOPMENT CONTROLS

- a) Buildings are to be designed to ensure maximum protection of privacy; in particular the privacy of primary living areas must be protected. Where appropriate consideration should be given to:
 - using windows that are narrow, translucent or obscured or have window sills a minimum of 1.5m above the upper storey floor level.
 - ensuring that windows that face directly to the windows, balconies or yards of adjoining dwellings are appropriately screened.
- b) First floor balconies will not be permitted where they overlook living areas of adjacent dwellings.
- c) The placement of windows should be staggered to minimise direct viewing between dwellings.
- d) Dwellings are to be designed to limit the potential for noise transmission to the living and sleeping areas of adjacent existing and future developments.
- e) Careful consideration should be given to the location of air-conditioning systems, swimming pools and the like to minimise the impact on the amenity of adjoining properties.

- f) Private open space areas and driveways are to be designed and located to minimise noise impacts.

L. ACCESS AND SURVEILLANCE

OBJECTIVES

- (i) To ensure the needs of residents and visitors are considered with particular regard to access requirements, safety and security.
- (ii) To promote incorporation of community safety aspects in the development design.

DEVELOPMENT CONTROLS

- (a) Integrated housing developments are to provide safe and convenient access for prams, wheelchairs and people with disabilities from the public road to all areas of the development.
- (b) The design of an integrated development is to demonstrate consideration of resident safety and security whereby pedestrian pathways and associated areas are not to be obscured, but rather provided with natural surveillance.
- (c) The siting and design of dwellings shall ensure surveillance of all common areas.
- (d) Access to dwellings is to be direct and without unnecessary barriers.
- (e) Stairs and ramps are to have reasonable gradients and non slip even surfaces.

M. FENCING

OBJECTIVES

- (i) To ensure that fencing is of a high visual quality, compliments the character of the area and is compatible with the surrounding streetscape.

DEVELOPMENT CONTROLS

- (a) There shall be no colourbond fencing located along the street frontages of Barina Downs Road and Mackillop Drive.
- (b) Any fencing in the rear setback (facing Barina Downs Road) over 1.2 metres in height shall be setback from the rear boundary a minimum of 500mm to allow landscaping to soften the impact of the fence.

- (c) Side and rear boundary fencing shall be a maximum height of 1.8 metres in height.

4. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

4.1. SINGLE DWELLINGS AND ADDITIONS / ALTERATIONS TO AN EXISTING DWELLING

The following plans and details are required for new dwellings or alterations/additions to existing dwellings:-

COMPLETED APPLICATION FORM

You must have the written consent of all current owners.

SITE ANALYSIS

SITE PLANS (3 copies plus 6 reduced A4 copies for notification purposes)

ARCHITECTURAL PLANS (3 copies plus 6 reduced A4 copies (except floor plans) for notification purposes)

- Floor Plan (Existing and Proposed)
- Elevations
- Schedule of External Materials

LANDSCAPE PLAN (3 copies)

STATEMENT OF ENVIRONMENTAL EFFECTS (SEE)

BASIX CERTIFICATE

WASTE MANAGEMENT PLAN

Refer to section 2.13.18 and Appendix A.

SEDIMENT EROSION CONTROL PLAN

Refer section 2.8.

Note: Refer to Part A – Introduction section 4.0 for detailed requirements to be included in each of the above documentation.

4.2. SUBDIVISION APPLICATIONS / INTEGRATED DEVELOPMENT

COMPLETED APPLICATION FORM

You must have the written consent of all current owners.

SITE ANALYSIS

PROPOSED LAYOUT PLANS (10 Copies)

These plans should:

- Be produced in ink and be not less than A4 and no greater than A1 in size;
- Be of suitable scale (1:500 or 1:1000 wherever possible). In cases where there is more than 1 sheet an overall plan at 1:4000 should be submitted to illustrate the overall layout;
- Include existing boundaries and lot or portion numbers in broken lines/lettering;
- Show proposed boundary lines;
- Show proposed dimensions and areas;
- Show proposed lots consecutively numbered and include any easements and restricted development areas;
- Show widths of all existing roads;
- Show footpath and pavement widths of all proposed roads, proposed road widening and corner plays;
- Show all proposed roads consecutively numbered;
- Show the position of all intersecting adjoining property boundaries, existing roads or property boundaries of land on the opposite side of all existing roads adjoining the site;
- All vegetation and trees on the subject property (separate plan);
- Contours in one metre intervals at Australian Height Datum;
- Show all existing buildings, watercourses, drains, dams, swamps, easements, right-of-ways, structures or permanent improvements; and
- Show all services.

Community Title Subdivision

In addition to the plans required above, a Draft Management Statement and Development Contract must be provided.

Strata Title Subdivision

For Strata Title Subdivision the plans required must:

- Be produced in ink and be not less than A4 and no greater than A1 in size;
- Be of suitable scale (1:500 or 1:000 wherever possible). In cases where there is more than 1 sheet an overall plan at 1:4000 should be submitted to illustrate the overall layout;
- Show proposed boundary lines;
- Show proposed dimensions and areas; and
- Show proposed lots consecutively numbered and include any easements and restricted development areas.

Additional Reports/Plans

The following reports may be required depending on the nature of the site and application. Advice will be provided at pre-lodgement stage as to which of the following are required with the application:

- Flora and Fauna Report
- Soil Analysis Report
- Heritage Report
- Bushfire Report
- Tree Management Details
- Flood Study
- Landscape Plan
- Streetscape Plan
- Solar and Siting Plan

Note: Refer to Part A – Introduction section 4.0 for detailed requirements to be included in each of the above documentation.

5. REFERENCES

Australian Council of Business Design Professionals, (2000) BDP Environment Design Guide

Baulkham Hills Shire Council, 2002 Making Access For All.

Donovan I, Cameron C, and Coombes P (1999). Water Sensitive Urban Development: Model Planning Provisions. Lake Macquarie City Council, Speers Point, on behalf of the Lower Hunter and Central Coast Environmental Management Strategy.

Faculty of the Constructed Environment, RMIT University et al, Australia's Guide to Good Design – Residential, Prepared on behalf of the National Office for Local Government.

APPENDIX 1 - DEVELOPMENT CONTROLS CALCULATION SHEET

Issue		Development control	Proposed development	Complies
1	Development Control Map Sheets	Refer to Site Specific DCP Map sheets		
2.	Site Specific Development Control Plans			
3.	Restricted Development Areas	Refer to Site Specific DCP Map Sheets		
4.	Site Analysis	Refer to Section 2.4		
5.	Streetscape and Character	Refer to Section 2.5		
6.	Bush Fire Hazard Management	Refer to Section 2.6		
7.	Geotechnical Site Stability	Refer to Section 2.7		
8.	Bushland and Biodiversity	Refer to Section 2.8		
9.	Erosion and Sediment Control	Refer to Section 2.9		
10.	Heritage	Refer to Part D Section 5 - Heritage		
11.	Signage	Refer to Part D Section 2 - Signage		
12.	Stormwater Management	Refer to Section 2.11 and Appendix B of the DCP		
13.	Environmentally Integrated Housing			
14.	Minimum Allotment Size	Refer to Section 2.13.2		
15.	Building Platform	20 metres x 15 metres		
16.	Access and Safety			
17.	Developer Contributions			
18.	Setbacks: ➤ primary setback ➤ width of dwelling ➤ In front of garages ➤ Corner allotments (secondary setback) for second road frontages ➤ Battle axe allotments	➤ Refer to Section 2.14.1 ➤ Refer to Section 2.14.1 ➤ Min 5.5 metres ➤ Not less than 4 metres, provided a garage is not part of this setback ➤ Min 4 metres (single storey) ➤ Min 6 metres (2-storey)		
19.	Site Coverage: ➤ Residential 2(a), 2(b), & 2 (c) Zones ➤ Residential 2(d) Zone	➤ Max 60% of total site area ➤ Of the above max, building footprint to be max 45%. ➤ Max 30% of total site area		

Issue		Development control	Proposed development	Complies
20	Building Height	Refer to Section 2.14.3 ➤ Max 8.9m measured natural ground level to roof ridgeline. ➤ Max 7.9m flat roofed dwellings		
21.	Open Space: ➤ Landscaped area for Residential 2(a), 2(b), & 2(c) Zones ➤ Landscaped area for Residential 2(d) Zone ➤ Private Open Space	➤ 40% total site area ➤ 70% total site area ➤ 20% of lot area or 80m ² which ever is greater, incorporating a rectangle measuring 6 metres x 4 metres.		
22.	Landscaping	Refer to Part D Section 3 - Landscaping		
23.	Dwelling Design and Construction	Refer to Section 2.14.6		
24.	Cut and Fill	Refer to Section 2.14.7		
25.	Building Materials	Refer to Section 2.14.8		
26.	Privacy	Refer to Section 2.14.9		
27.	Solar Access	Refer to Section 2.14.10		
28.	Ventilation	Refer to Section 2.14.11		
29.	Insulation and Thermal Mass			
30.	Energy Efficiency Hot water system			
31..	On-site Sewage Management: ➤ Min land areas for types of systems ● Land smaller than 1400m ² ● Min 1400m ² ● Min 2000m ²	Refer to Section 2.14.13 ● Site Specific design required ● Aerated systems with disinfectant ● Absorption trench		
32.	Carparking ➤ Single Garage ➤ Double Garage	At least one carparking space provided behind the building line. ➤ Min internal dimension 5.5 metres x 3 metres ➤ Min internal dimension 5.5 metres x 5 metres		

Issue		Development control	Proposed development	Complies
33.	Surveillance			
34.	Fencing	Maximum height of 1.8 metres		
35.	Waste Management			
36.	Services			
37.	Swimming Pools	• Not in front of secondary boundary setback • Minimum one metre setback from side and rear boundaries		

APPENDIX 2 - RESIDENTIAL DCP MAP SHEET GUIDE

