COASTAL GROVE
LENNOX HEAD

DRAFT DEVELOPMENT CONTROL PLAN

SEPTEMBER 2006

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CONTENTS

1.0 Introduction

1.1 Name of the DCP

This Plan is known as Ballina Development Control Plan No. XX – Coastal Grove (the DCP).

1.2 Purpose of the DCP

The DCP has been prepared in accordance with Section 72 of the Environmental Planning and Assessment 1979 (the Act) and Clause Nos 16-24 of the Environmental Planning and Assessment Regulation 2000 (the Regulation). The DCP supplements the Ballina Shire Development Control Plan 2006 and will form an annexure to Chapter 16 – Lennox Head Residential and Tourist Development.

Council (the consent authority) is required under Section 79C of the Act to take into consideration relevant provisions of the DCP in determining development applications on the subject land.

1.3 Land to which the DCP Applies

The DCP applies to all land contained within the development area as identified in Figure 1 being land located at 1 Survey Street (Lot 2 in DP 622475), Lennox Head. The site is known as Coastal Grove.

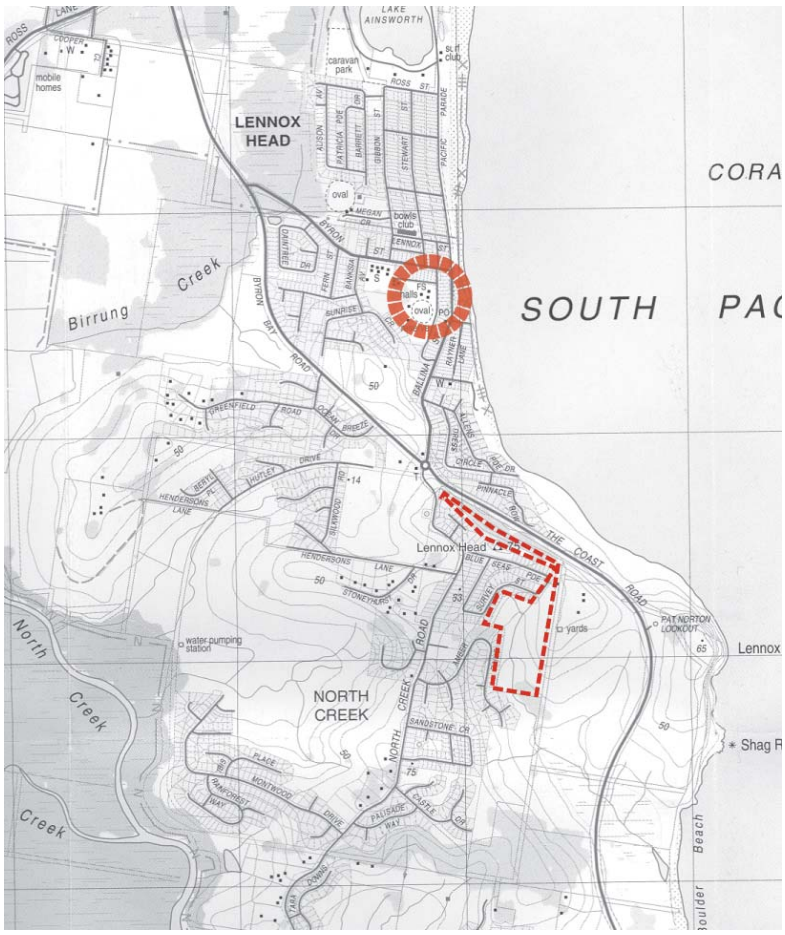


Figure 1: Site to which the DCP applies

1.4 Aims and Objectives

The site specific aims and objectives for development within Coastal Grove are as follows:

- To provide a high quality residential development to meet the demand for housing within the Lennox Head area;
- To protect the inherent environmental qualities of the site including its visual character, landscape setting and riparian corridor; and
- To provide services and facilities to meet the needs of the future residential of the site.

Prior to granting development consent to any development application relating to the subject land, Council must consider the extent to which the application is consistent with the above aims and objectives and the development controls contained in this DCP.

1.5 The Consent Authority

Ballina Shire Council (Council) is the consent authority for local development within the Coastal Grove site.

1.6 Monitoring and Review of the DCP

Council is required to keep its LEP and DCPs under regular and periodic review to ensure that these Plans:

(a) continue to be useful and relevant;
(b) can be judged as to their effectiveness;
(c) reflect an adequate and appropriate capacity for development; and
(d) provide for the appropriate protection of the environment and natural resources.

This DCP shall be reviewed every five (5) years, or earlier, as considered necessary by Council.

1.7 Variation to Planning Controls and Standards within the DCP

Council may consider variations to the requirements of this DCP in certain circumstances. Requests for variations are required to be in writing and shall clearly demonstrate the reason(s) why the variation sought would not adversely impact on the environment or local amenity, would not erode the relevant standard and requirement; and that compliance with the objectives and requirements of the DCP are unreasonable or unnecessary in the circumstances of the case. Council gives no assurance that it will permit any variation(s) to the requirements of this DCP. Variations will only be considered in exceptional circumstances.

Consistent application of the provisions of the DCP will be given high priority by Council.

1.8 Relationship to other Plans and Documents

The provisions contained in the DCP are in addition to the provisions within SEPPs, REPs and the LEP. In the event of any inconsistency between the DCP and SEPPs, REPs, and/or the LEP, the SEPPs, REPs and/or LEP will prevail.

This DCP provides detailed development guidelines and controls to control the future development of housing on the subject land. It supplements the Part 3A Environmental Assessment for the site which provides for development of the site as follows:

- subdivision of the site into 45 residential lots ranging in size from 519m^2 to 1987m^2, fronting a new loop road (described as Roads No 1 and No 2) and cul-de-sac (described as Road No 3);
- the establishment of a landscaped open space corridor either side of the creek, including a children's playground; and
- the creation of two residue lots, one to the south of the site (lot 46) and one within the northern escarpment area (lot 48). These residue lots will provide for the protection and enhancement of significant remnant vegetation within the site.

The proposed development of the site is shown in Figure 2 below:

Figure 2: Development Scheme ((Source: Hassell, September 2006)

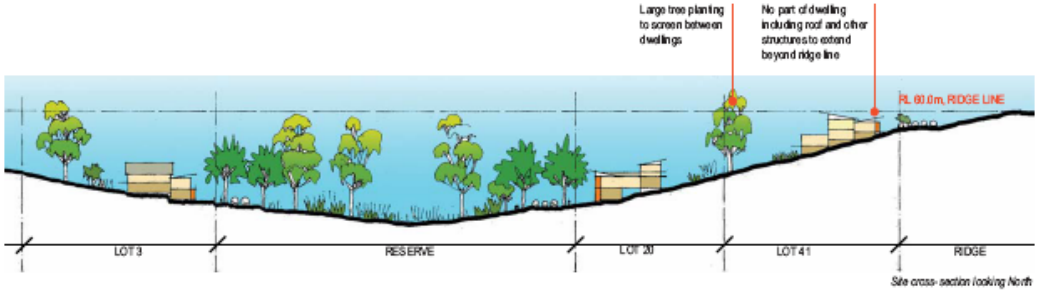
2.0 Development Guidelines

The purpose of this section is to provide Design Guidelines in the form of strategies and controls to guide the design, construction and management of the building environment of the site. The intention of the Guidelines is to ensure a cohesive high quality development and to ensure that the natural views and topography of the site are preserved.

2.1 Desired Future Character

The desired future character for Coastal Grove requires that any development on the site:

- Be of high quality
- Be appropriately sited within the natural context. The only new development to be seen above the existing hillside will be on the downward slope in the context of existing suburban development beyond.
- Be architecturally appropriate to the natural, sensitive coastal site.



(Source: Hassell, September 2006)

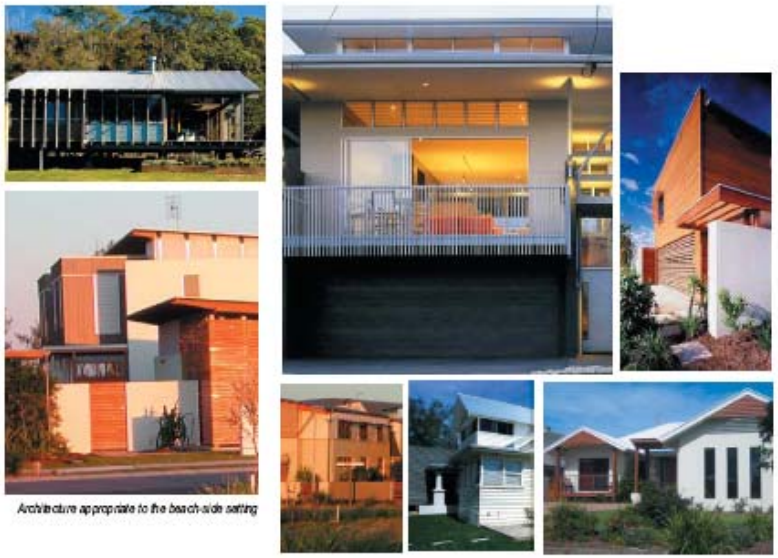
Architecture should be of:

- Lightweight structure and materials, prefabricated where possible.
- Be visually harmonious with existing built and natural features.
- Have minimum physical impact on the site by minimising cut and fill and hard paved surfaces.

In order to protect the rural coastal character of the site, specific height controls (refer section 2.2.4 below) have been applied to certain residential lots. In doing so the natural grassed hilltop running along the eastern edge can be preserved and views towards and from the site can be maintained.

2.2 Dwelling Design

All dwellings on the subject site are to be individually designed to suit the coastal character of the site and the particular characteristics of the individual lots. Figure 3 below illustrates some examples of architectural character and materials.



Architecture appropriate to the beach-side setting

Generous decks and 'outdoor rooms'

Stepped to suit the steep topography

Light weight natural coloured materials, harmonious with the natural landscape

HASSELL

Architectural Character and Materials

- Finishes and materials are to be appropriate to the local climate and environment;

Suitable materials include:

- Timber;
- Rendered masonry;
- Lightweight cladding, e.g. compressed fibre cement, weatherboard;
- Natural dressed stone;
- Metal deck roofing;
- Slate or shingle tile roofing;
- Face brickwork is discouraged.

Construction should be light weight with, structurally honest and require minimal topographical adjustments.

Colours should:

- Be complimentary to the natural landscape
- consist of natural native palette
- Result from the natural inherent colours of materials e.g. timber, stone, metal.

Figure 3: Appropriate Architectural Character and Materials

2.2.1 Siting

Dwellings should be sited to:

- Minimise site topographical adjustments and cut and fill;
- Follow the natural topography, i.e. split level design to reduce building undercrofts. Pile construction should be used in preference to slab on ground.
- So that ground floor levels are set 350mm above adjacent natural ground level and limited to 2500mm above natural ground on the downward slope.
- Maximise northern solar orientation to living areas and private open space.
- Minimise overshadowing.
- Minimise the impact on natural vegetation.
- Provide maximum visual and acoustic privacy between dwellings.
- Ensure that the main dwelling entry is readily identifiable from the street, and that dwellings adjacent to a public reserve address the open space by way of design, fenestration and dwelling entry.

Requirements

1 Dwellings shall be located on allotments generally in accordance with the indicative building footprints shown on Figure 4 below unless reasonable grounds can be provided for why they should be otherwise located.

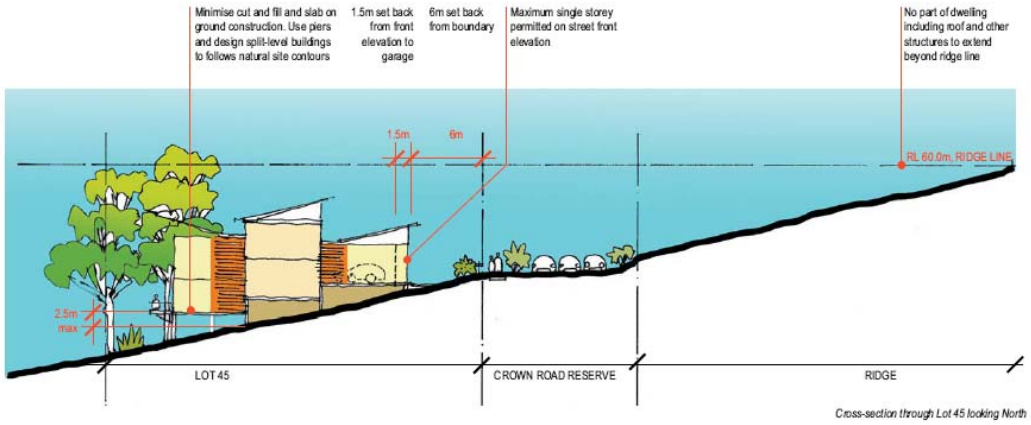
2 Any retaining walls are to be constructed in rendered or coated masonry, boulders or dry stone. 'Cribwall' or treated pine logs will not be permitted.

Figure 4: Indicative Building Footprints (Source: Hassell, September 2006)

2.2.2 Setbacks

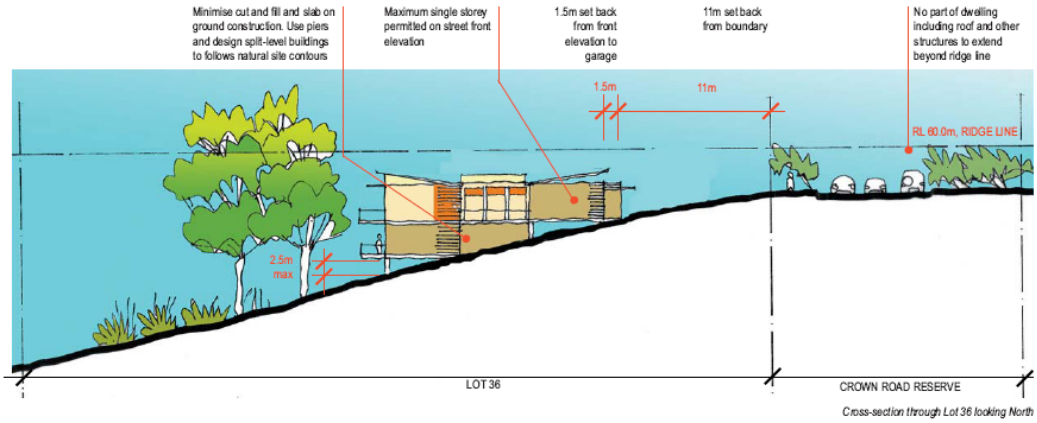
Requirements

1 Front dwelling setbacks to be a minimum of 6m from the lot boundary.



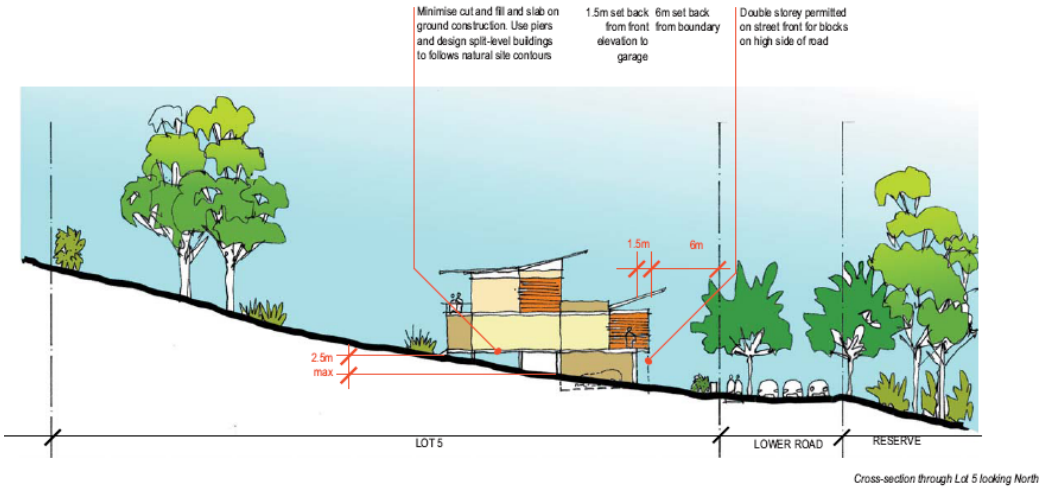
(Source: Hassell, September 2006)

2 Front dwelling setbacks for Lots 34 – 40 to be a minimum 11m to reduce the visual impact of these dwellings when viewed from the Coast and Coast Road (refer Appendix 1).



(Source: Hassell, September 2006)

3 Garages are to be setback a minimum of 1.5 m behind the front dwelling line.



(Source: Hassell, September 2006)

2.2.3 Dual Occupancy

Requirements

1. Dual occupancy development is only permitted on corner lot numbers 12, 13, 33 and 34.
2. Dwellings are to be attached unless site constraints such as slope inhibit this arrangement.
3. Dwellings are to comply with all other requirements of this DCP.
4. Dwellings should be designed such that each has a clear identifiable entrance visible from the street frontage.

2.2.4 Height

Requirements

1. The maximum height of any dwelling on site is to be a maximum of 2 storeys and 6.4m from natural ground level to the uppermost point of the ceiling.
2. Houses located on the low side of the street are restricted to a maximum of a single level above natural ground level at the front of the dwelling.

2.2.5 Roofs

Requirements

1. Roofs must be designed and appear as an integral part of the dwelling.
2. Generous eaves (greater than 300mm), overhangs and/or awnings are to be provided to all dwellings.
3. The use of guttering on dwellings is to be minimised.
4. Flat roofs will be permitted only where concealed behind parapets.
5. Conventional hipped roofs are to have a minimum pitch of 25 degrees.

6. Skillion roofs are permitted where they marry with the architectural design of the dwelling.

2.2.6 Garages

Requirements

1. Garages are not to occupy more that 50% of the building or site frontage of any allotment.
2. Garages are to be designed as an integral part of the dwelling.
3. Garages may not be larger than a standard double car garage in size. Triple garages are not permitted.
4. Detached garages, domestic garden sheds or ancillary storage facilities are permitted however rural scaled storage facilities such as barns, rural sheds and the like are prohibited.

2.2.7 Driveways

Requirements

1. Only one driveway will be permitted per dwelling.
2. One single driveway crossover, a maximum width of 3m is permitted, splaying to a maximum of 5.4m for double garages.
3. Materials for driveways are to be semi-pervious where possible. Painted or stencilled concrete is not permitted.

2.2.8 Private Outdoor Space

Requirements

1. Private Outdoor Space (POS) shall be designed to perform as an extension to the function of the dwelling.
2. POS should be located behind the front building line.
3. POS should be located for maximum solar access.
4. POS should be design to minimise overlooking and maximum visual and acoustic privacy.

2.2.9 Fences

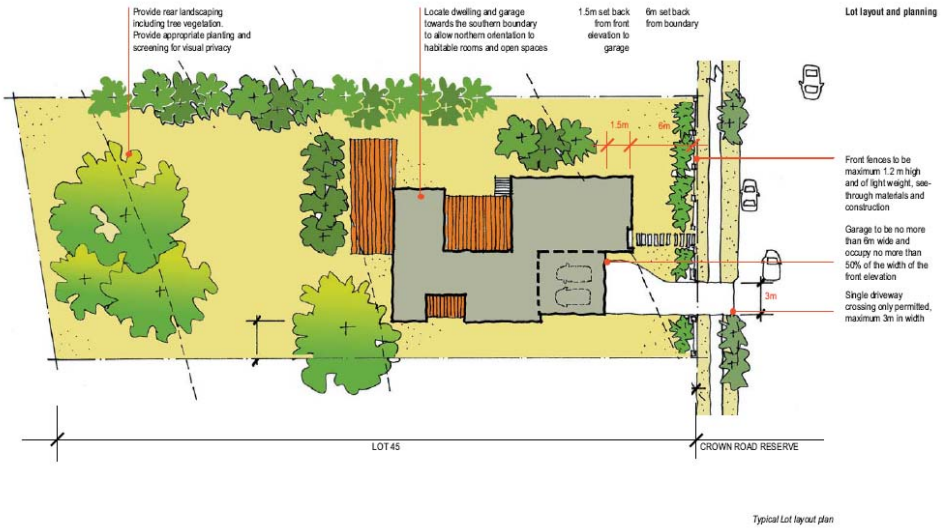
Requirements

1. Front fences shall be a maximum of 1.2m in height.
2. Front fences shall be constructed of lightweight see through materials.

2.2.10Landscaping

Requirements

1. Landscaping is to be used in preference to built elements for shade or screening.
2. The majority of plant species utilised on site are to be native to the area.



(Source: Hassell, September 2006)

2.3 Building on Sloping Sites

Slopes on the subject site vary but generally fall within one of three zones: Zone 1 – Generally less than 10-12^{o}, Zone 2 – Typically in the range of 15-18^{o} and Zone 3 – Slopes of typically 18-22^{o}. An assessment of slope stability across the site has revealed the following assessed risk for each zone:

- Zone 1 Very low to low risk of slope instability (Lots 9-18, 45))
- Zone 2 Low risk of slope instability (Lots 1-8, 19-33, 42-44)
- Zone 3 Low to moderate risk of instability (Lots 34-41).

(refer Figure 5 below for Slope Stability Zoning Plan)

The assessment concludes that construction on the subject site shall adhere to the construction requirements specified below regardless of location with additional requirement having been specified specific site stability zones.

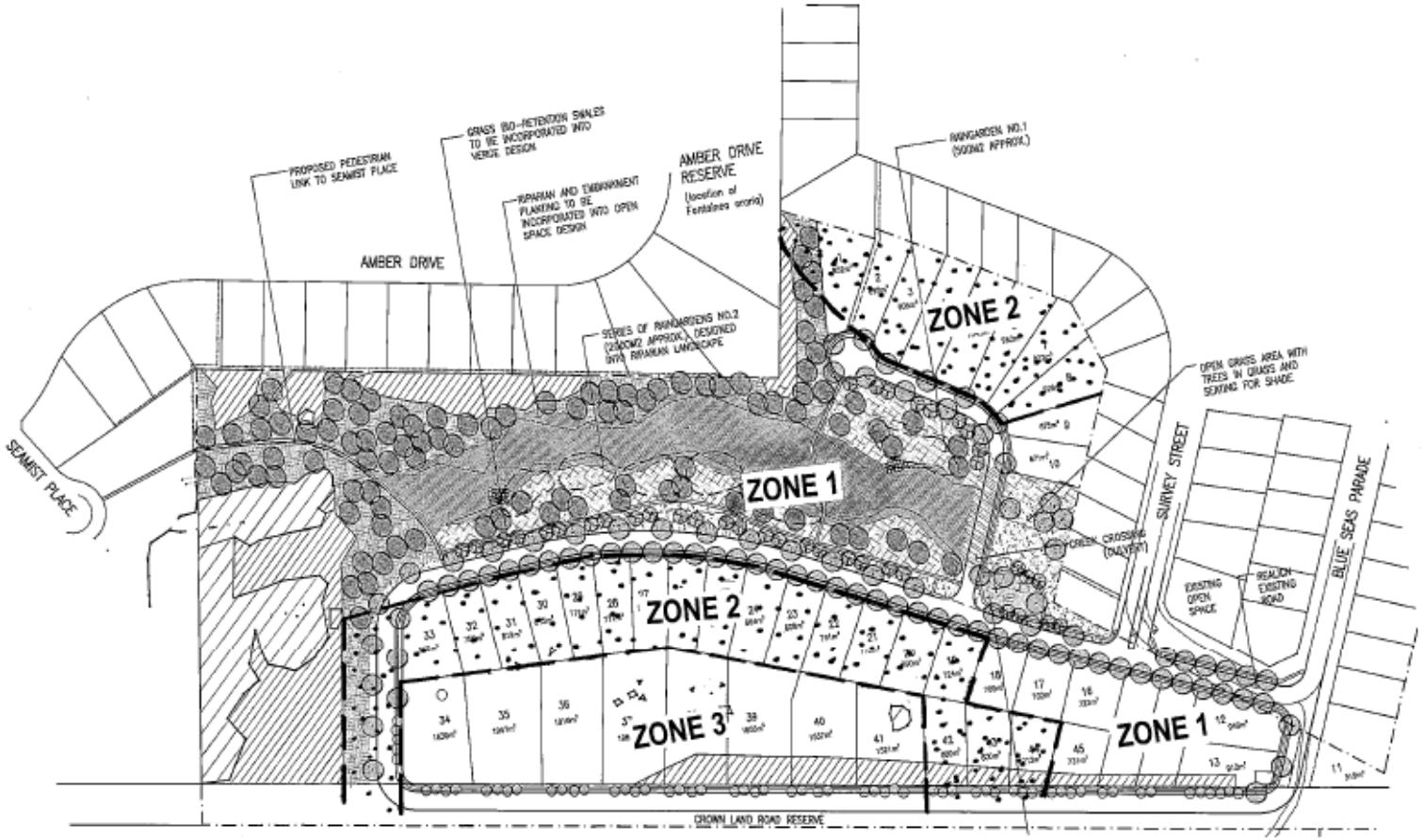


Figure 5: Assessed Slope Stability Zoning Plan (Source: Coffey Geosciences, August 2006)

2.3.1 Design and Construction

Requirements

1. The design and construction of all developments on site shall be carried out in accordance with good hillside practice as shown in Appendix 2 and the other controls outlined below.
2. All development should be designed by an engineer with appropriate experience and knowledge of the site conditions, using sound engineering principles and in accordance with the relevant Australian Standard or appropriate industry standard.
3. Foundations for residential structures should be designed and constructed in accordance with the recommendations and advice of AS2870-1995, 'Residential Slabs and Footings'. Footings should be founded outside or below the zone of influence of any existing or excavations (e.g. batter slopes, services trenches or retaining walls etc) where the structure loads have not been incorporated into the design of the excavation.

2.3.2 Earthworks

Requirements

1. The design and construction of all developments on site shall be carried out in accordance with the guidelines presented in AS3798-1996 "Guidelines on Earthworks for Commercial and Residential Developments".
2. Prior to the placement of any fill the proposed areas should be stripped to remove all existing uncontrolled fill, vegetation, topsoil, root affected or other potentially deleterious material. Following stripping, the exposed materials should be proof rolled to identify any wet or excessively deflecting material. Any such areas should be over excavated and backfilled with an approved select material. Fill should be compacted in layers to appropriate engineering specifications.
3. Where fill is placed on slopes in excess of 1V:8H (7 o), horizontal benches should be cut into the natural slope prior to placement of the fill.
4. Excavation and batter slopes should be designed for surcharge loading from slopes, retaining walls, structures and other improvements in the vicinity of the excavation.
5. Temporary slopes in soil strength materials up to 3m in height should be formed at no steeper than 1H:1V. Further geotechnical advice should be sought where cuts greater than 3m in height are proposed. Adequate drainage should be provided for all batter slopes. During rainfall periods, temporary slopes should have surface water on the high and low side diverted away from the batter face. The face may also need to be protected by the placement of plastic sheeting.
6. Unsupported permanent batter slopes in soils strength materials should be battered at no greater than 2H:1V. All batter slopes should be protected against erosion by appropriate plantings or fabric.

2.3.3 Retaining Walls

Requirements

1. Retaining walls should be designed by a suitably qualified engineer who is familiar with the site conditions.
2. The design of walls must take into account any surcharge from sloping ground of other loadings behind the wall. The design should incorporate an allowance for water pressures.
3. Adequate drainage should be provided for all retaining walls. Flushing point should be incorporated into the design of the perimeter drain to allow for maintenance.

2.3.4 Specific Guidelines for Construction in Zone 1

Requirements

1. Nil specific requirements other than general controls outlined above.

2.3.5 Specific Guidelines for Construction in Zone 2

Requirements

1. Flexible structures of timber or steel framed clad brick veneer or similar construction shall be used in this zone.
2. Footings for development in this zone should be founded within the natural undisturbed residual soils beneath all topsoil, uncontrolled fill or other deleterious materials.
3. Cut and fill in this zone should be limited to 2.5m in depth/height subject to a site/development specific geotechnical assessment. Appropriate batters and/or retaining walls designed by an engineer who is familiar with the site conditions should be provided. The expertise of the contractor, the nature of the fill material and the degree of monitoring and testing of the filling will control the footing design required for any structures placed on the fill.

2.3.6 Specific Guidelines for Construction in Zone 3

Requirements

1. Flexible structures of timber or steel framed clad brick veneer or similar construction shall be used in this zone.
2. Foundations should be design and constructed in accordance with AS2870-1996, with footings for developments founded at least 0.6m into the natural undisturbed residual soils or weathered rock beneath all topsoil, uncontrolled fill or other materials.
3. Cut and fill in this zone should be limited to 1.5m in depth/height subject to a site/development specific geotechnical assessment. Appropriate batters and/or retaining walls designed by an engineer who is familiar with the site conditions should be provided. The expertise of the contractor, the nature of the fill material and the degree of monitoring and testing of the filling will control the footing design required for any structures placed on the fill.

2.4 Bushfire

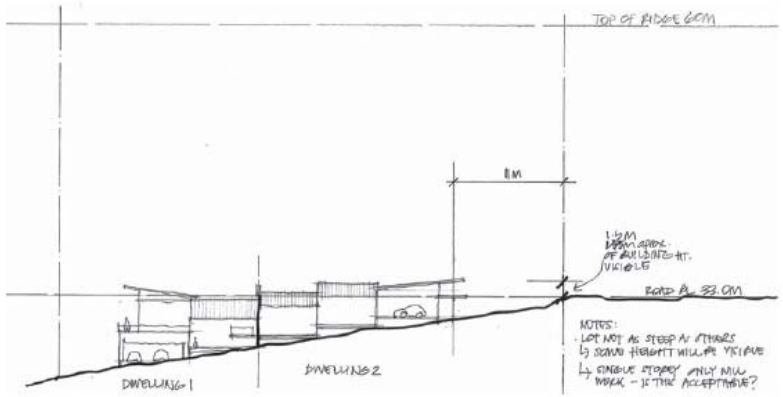
Requirements

1. Consistent with the Bushfire Hazard Assessment (Barry Eadie Consulting, July 2006) no specific construction requirements for the proposed dwellings are warranted.

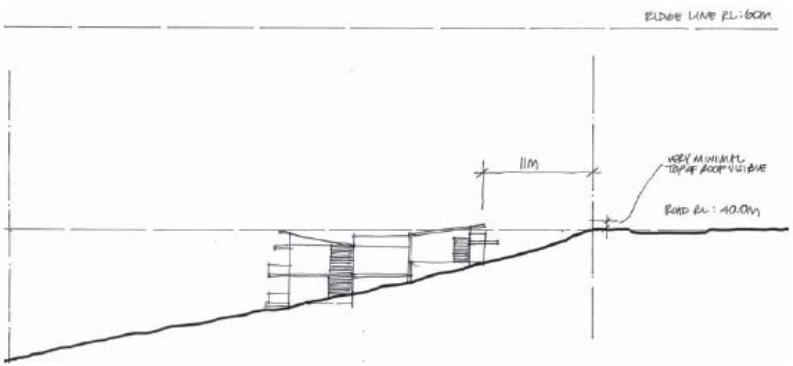
APPENDIX 1

Sections for Steep Sites (Lots 34-40)

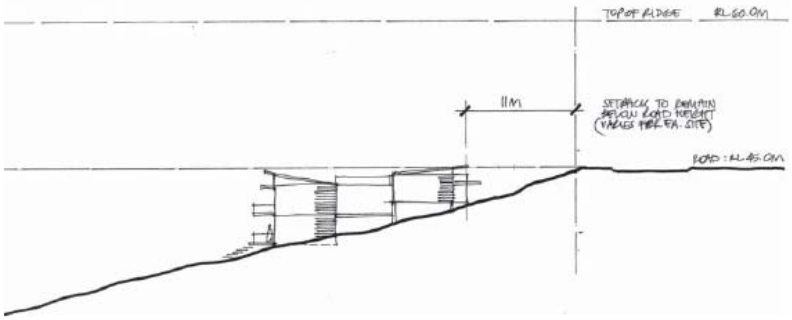
APPENDIX B - ADDITIONAL SECTIONS THROUGH LOTS 34-40 SHOWING 11M SETBACK



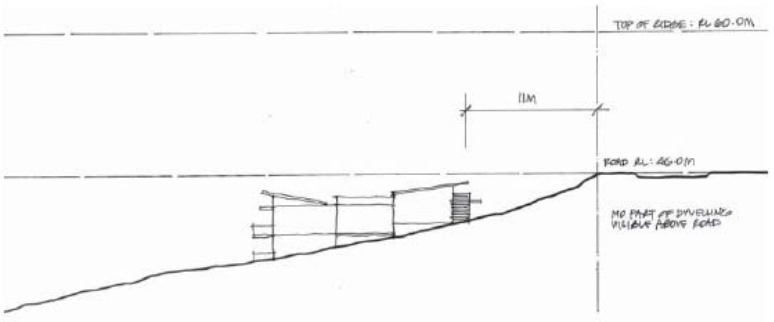
LOT 34 1:100



LOT 35 1:100

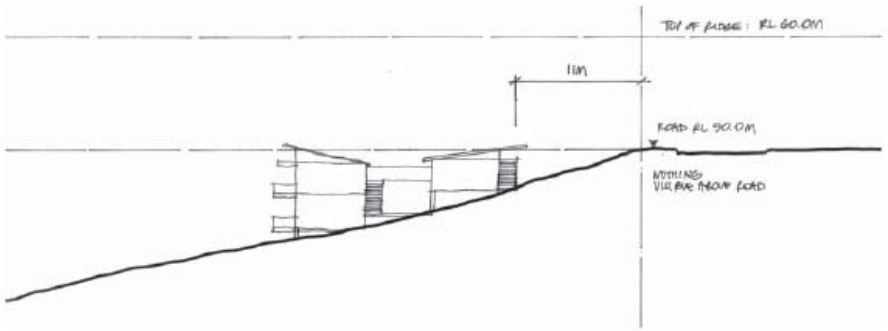


LOT 36 1:100

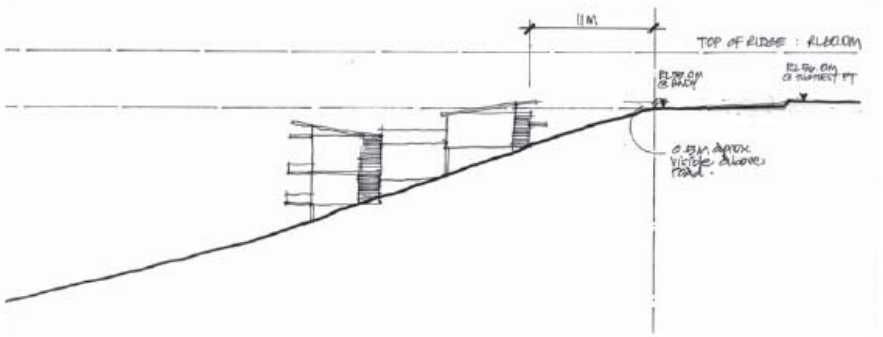


LOT 37 1:100

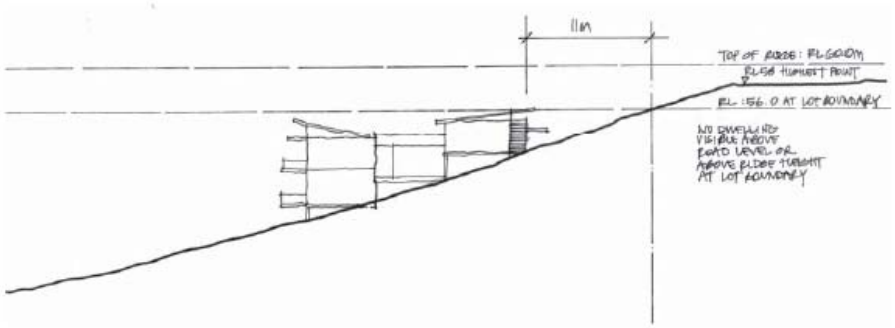
(Source: Hassell, September 2006)



LOT 38 1:100



LOT 39 1:100



LOT 40 1:100

(Source: Hassell, September 2006)

APPENDIX 2

Hillside Construction Guidelines

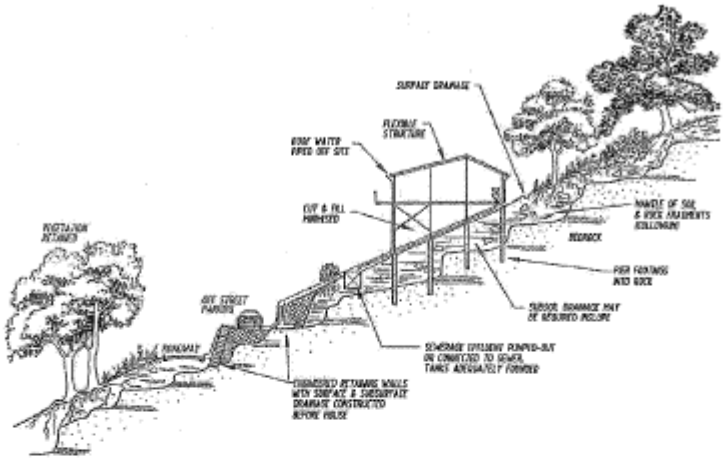
SOME GUIDELINES FOR HILLSIDE CONSTRUCTION

	GOOD ENGINEERING PRACTICE	*POOR ENGINEERING PRACTICE*
ADVICE		
GEOTECHNICAL ASSESSMENT	Obtain advice from a qualified, experienced geotechnical consultant at early stage of planning and before site works.	Prepare detailed plan and start site works before geotechnical advice.
PLANNING		
SITE PLANNING	Having obtained geotechnical advice, plan the development with the risk arising from the identified hazards and consequences in mind.	Plan development without regard for the Risk.
DESIGN AND CONSTRUCTION		
HOUSE DESIGN	Use flexible structures which incorporate properly designed brickwork, timber or steel frames, timber or panel cladding. Consider use of split levels. Use decks for recreational areas where appropriate.	Floor plans which require extensive cutting and filling. Movement intolerant structures.
SITE CLEARING	Retain natural vegetation wherever practicable.	Indiscriminately clear the site.
ACCESS & DRIVEWAYS	Satisfy requirements below for cuts, fills, retaining walls and drainage. Council specifications for grades may need to be modified. Driveways and parking areas may need to be fully supported on piers.	Excavate and fill for site access before geotechnical advice.
EARTHWORKS	Retain natural contours wherever possible.	Indiscriminate bulk earthworks.
CUTS	Minimise depth. Support with engineered retaining walls or batter to appropriate slope. Provide drainage measures and erosion control.	Large scale cuts and benching. Unsupported cuts. Ignore drainage requirements
FILLS	Minimise height. Strip vegetation and topsoil and key into natural slopes prior to filling. Use clean fill materials and compact to engineering standards. Batter to appropriate slope or support with engineered retaining wall. Provide surface drainage and appropriate subsurface drainage.	Loose or poorly compacted fill, which if it fails, may flow a considerable distance including onto property below. Block natural drainage lines. Fill over existing vegetation and topsoil. Include stumps, trees, vegetation, topsoil, boulders, building rubble etc in fill.
ROCK OUTCROPS & BOULDERS	Remove or stabilise boulders which may have unacceptable risk. Support rock faces where necessary.	Disturb or undercut detached blocks or boulders.
RETAINING WALLS	Engineer design to resist applied soil and water forces. Found on rock where practicable. Provide subsurface drainage within wall backfill and surface drainage on slope above. Construct wall as soon as possible after cut/fill operation.	Construct a structurally inadequate wall such as mudstone flagging, brick or unreinforced blockwork. Lack of subsurface drains and weepholes.
FOOTINGS	Found within rock where practicable. Use rows of piers or strip footings oriented up and down slope. Design for lateral creep pressures if necessary. Backfill footing excavations to exclude ingress of surface water.	Found on topsoil, loose fill, detached boulders or undercut cliffs.
SWIMMING POOLS	Engineer designed. Support on piers to rock where practicable. Provide with under-drainage and gravity drain outlet where practicable. Design for high soil pressures which may develop on uphill side whilst there may be little or no lateral support on downhill side.	
DRAINAGE		
SURFACE	Provide at tops of cut and fill slopes. Discharge to street drainage or natural water courses. Provide general falls to prevent blockage by silt/litter and incorporate silt traps. Line to minimise infiltration and make flexible where possible. Special structures to dissipate energy at changes of slope and/or direction.	Discharge at top of fills and cuts. Allow water to pond on bench areas.
SUBSURFACE	Provide filter around subsurface drain. Provide drain behind retaining walls. Use flexible pipelines with access for maintenance. Prevent inflow of surface water.	Discharge roof runoff into absorption trenches.
SEPTIC & SULLAGE	Usually requires pump-out or mains sewer systems; absorption trenches may be possible in some areas if risk is acceptable. Storage tanks should be water-tight and adequately founded.	Discharge sullage directly onto and into slopes. Use absorption trenches without consideration of landslide risk.
EROSION CONTROL & LANDSCAPING	Control erosion as this may lead to instability. Revegetate cleared area.	Failure to observe earthworks and drainage recommendations when landscaping.
DRAWINGS AND SITE VISITS DURING CONSTRUCTION		
DRAWINGS	Building Application drawings should be viewed by geotechnical consultant	
SITE VISITS	Site Visits by consultant may be appropriate during construction/	
INSPECTION AND MAINTENANCE BY OWNER		
OWNER'S RESPONSIBILITY	Clean drainage systems; repair broken joints in drains and leaks in supply pipes. Where structural distress is evident see advice. If seepage observed, determine causes or seek advice on consequences.	

FIGURE 3: SOME GUIDELINES FOR HILLSIDE CONSTRUCTION

This figure is an extract from LANDSLIDE RISK MANAGEMENT CONCEPTS AND GUIDELINES as presented in Australian Geomechanics, Vol 35, No. 1, 2000 which discusses the matter more fully.

EXAMPLES OF GOOD HILLSIDE PRACTICE



EXAMPLES OF POOR HILLSIDE PRACTICE

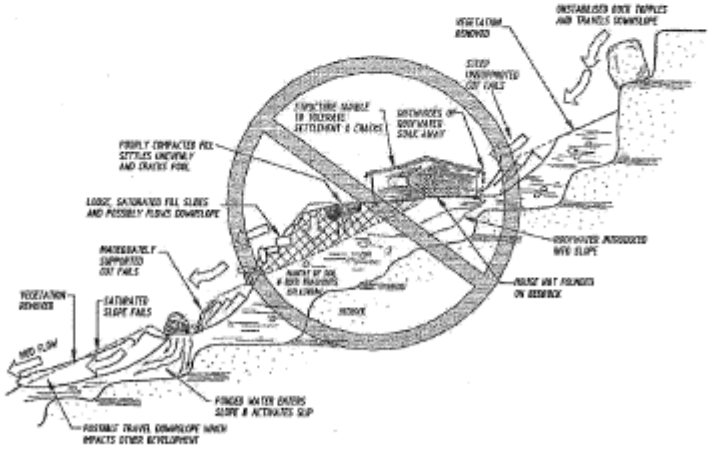


FIGURE 4: ILLUSTRATIONS OF GOOD AND POOR HILLSIDE PRACTICE

This figure is an extract form LANDSLIDE RISK MANAGEMENT CONCEPTS AND GUIDELINES as presented in *Australian Geomechanics*, Vol 35, No 1, 2000 which discusses the matter more fully.