

Building in the bush design guide

The essential guide for anybody building or redeveloping in the bush areas of the Waitākere Ranges Heritage Area



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**Waitākere Ranges
Local Board**
Auckland Council 

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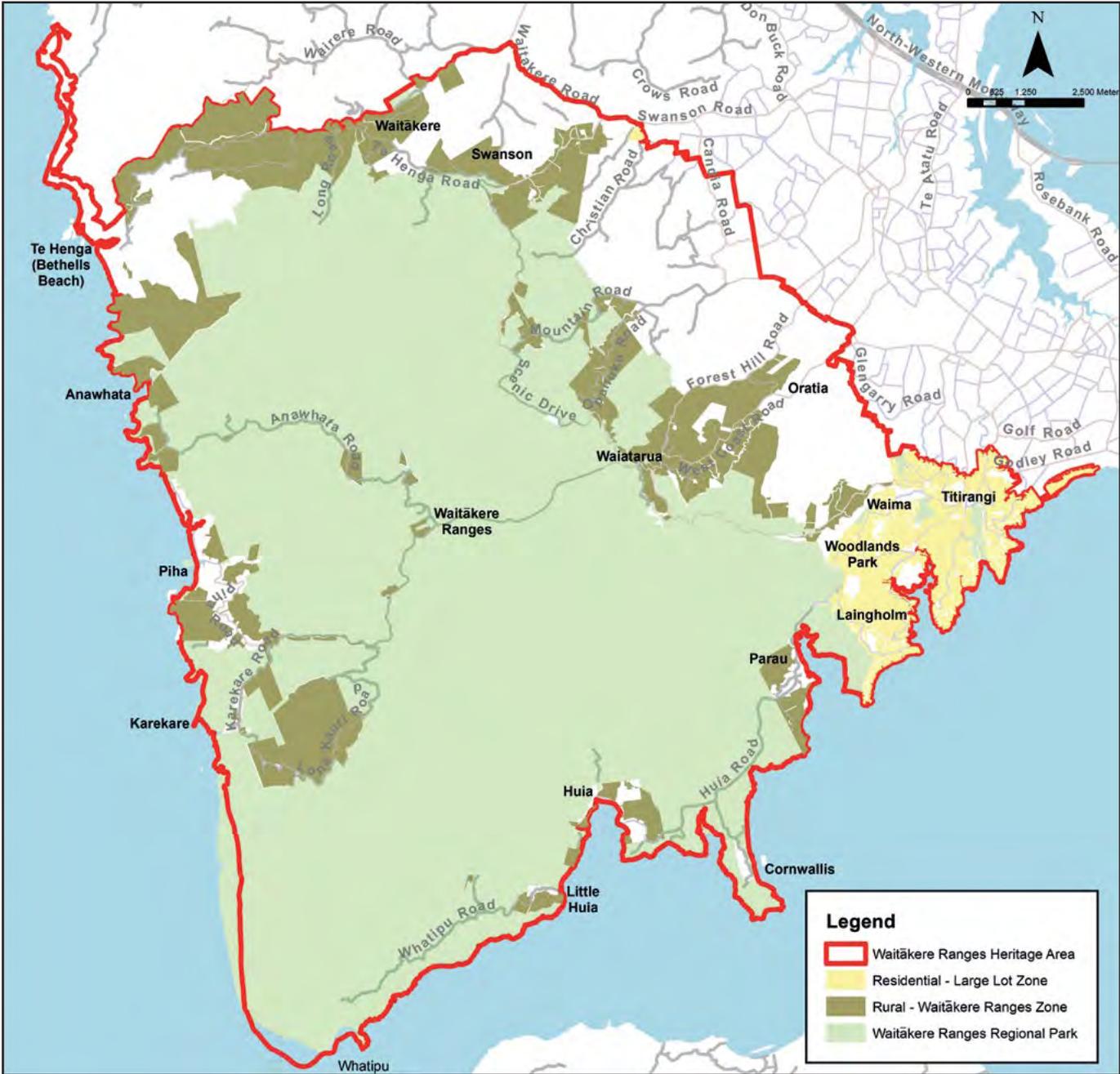
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Building in the bush design guide

July 2017



"We borrow from nature the space upon which we build"
– Tadao Ando, Japanese architect.
Image: Katrina David



Map 1: Where this design guide applies: Residential - Large Lot Zone and Rural - Waitākere Ranges Zone.

Introduction

Purpose of this design guide

The purpose of this design guide is to highlight the best design outcomes for the landowner, community and the environment, and to encourage sustainable residential living within the bush areas of the Waitākere Ranges Heritage Area. In the Auckland Unitary Plan, these bush areas are generally zoned Rural – Waitākere Ranges or Residential – Large Lot. Map 1 shows the geographical extent of these zones within the Waitākere Ranges Heritage Area. The extent of these zones may change. Please check the Auckland Unitary Plan GIS Viewer for the most up-to-date planning maps.¹

This design guide emphasises quality of design. It is intended to help landowners make good choices about the design and layout of building projects, regardless of whether the building project requires consent or is permitted by the Auckland Unitary Plan. Where resource consents are required for building in the bush, the guide highlights key issues that should be addressed early in the design process. Please check the Auckland Unitary Plan to determine if resource consent is required.²

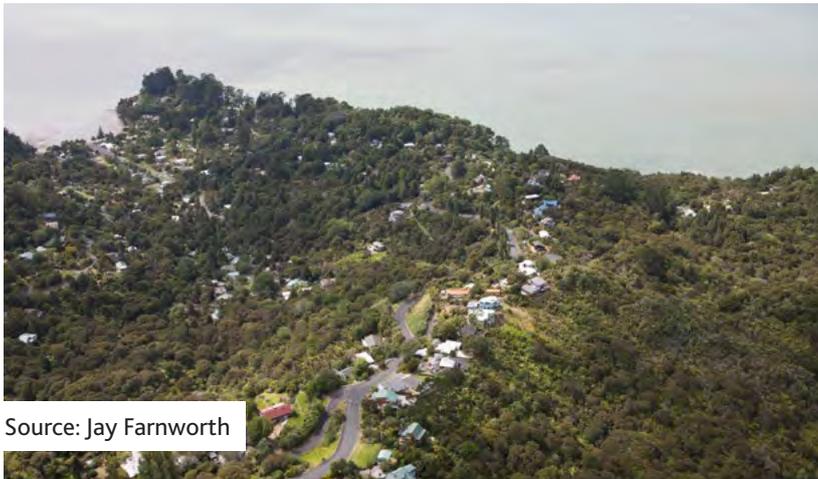
This design guide illustrates the importance of careful positioning and sympathetic design. This is relevant to new residential development or the redevelopment of existing residential sites in the bush areas of the Waitākere Ranges Heritage Area. It has been prepared as a tool for:

- landowners
- design professionals, including:
 - planners
 - landscape architects
 - surveyors
 - engineers
 - architects
- Auckland Council decision-makers.



¹ <https://unitaryplanmaps.aucklandcouncil.govt.nz/upviewer>

² aucklandcouncil.govt.nz/unitaryplan



Source: Jay Farnworth

Given the limited capacity for new subdivision inside the Waitākere Ranges Heritage Area, this design guide focuses on the techniques for ensuring new residential built development on existing titles sits comfortably within the heritage area. However, it is also relevant for development on newly subdivided land. A companion publication, called the Waitākere Ranges Foothills Design Guide (June 2014), provides guidance on how subdivision and development

can be best integrated with the bush-dominated upper foothills landscape. The subdivision core design principles in the foothills design guide also apply to the area addressed in this guide.

This design guide recognises that there are diverse landscapes and features within the Waitākere Ranges Heritage Area and that a 'one size fits all' approach to design is not always appropriate. Common sense in the location and scale of development is often a good place to start in determining the best means to ensure the long-term protection of the heritage area's features. Applying the planning rules in the Auckland Unitary Plan will further inform your consideration of design and location.

It is recognised that many forms of design can develop interesting and attractive buildings that contribute to the landscape character of the Waitākere Ranges Heritage Area. It is intended that building projects will:

- take a sensitive approach to the unique coastal and bush character, amenity and landscapes of the heritage area and avoid effects that undermine its valued heritage features
- protect, restore and enhance the heritage features
- be environmentally sustainable, creating attractive and vibrant places to live, work and play
- be consistent with the purpose of the Waitākere Ranges Heritage Area Act and give effect to its objectives.



Source: Katrina David

The benefit of this design guide to applicants is that well-designed proposals may enable timely and more efficient processing of resource consent applications and avoid delays and costs from having to redesign their proposals.

There is no precise formula for the planning and design of building projects. As a non-statutory document, this design guide outlines design principles that new building projects are expected to observe, but it allows flexibility in terms of detailed design.

For development in the Waitākere Ranges Heritage Area that requires resource consent, the Auckland Unitary Plan often includes assessment criteria relating to the design, location and layout of the development. 'Design' generally relates to 'the external appearance' of any building, structure, landform or development, and includes materials, dimension and colour.

This design guide provides additional guidance that is related to these assessment criteria. It also suggests practical and realistic solutions to help the landowner achieve the best design outcomes, while preserving the important qualities of the Waitākere Ranges Heritage Area.



The Waitākere Ranges Heritage Area

The Waitākere Ranges Heritage Area has heritage features and qualities of national, regional and local importance, which are formally recognised in the Waitākere Ranges Heritage Area Act (WRHA Act). The WRHA Act aims to ensure that the valued heritage features and qualities of the heritage area are not degraded by inappropriate building projects or other activities. Instead they will be protected, enhanced, restored so they are maintained forever.

The WRHA Act creates certainty about the long-term protection of the Waitākere Ranges Heritage Area. It includes a set of objectives and describes the 'heritage features' within the area.

While all WRHA Act objectives are relevant, several are particularly pertinent to this design guide. These include:

- "(f) to ensure that any subdivision or development in the area, of itself or in respect of its cumulative effect,—*
- (i) is of an appropriate character, scale, and intensity; and*
 - (ii) does not adversely affect the heritage features; and*
 - (iii) does not contribute to urban sprawl;*
- (g) to maintain the quality and diversity of landscapes in the area by—*
- (i) protecting landscapes of local, regional, or national significance; and*
 - (ii) restoring and enhancing degraded landscapes; and*
 - (iii) managing change within a landscape in an integrated way, including managing change in a rural landscape to retain a rural character;*
- (h) to manage aquatic and terrestrial ecosystems in the area to protect and enhance indigenous habitat values, landscape values, and amenity values."*

The 'heritage features' identified in the WRHA Act are elements of the Waitākere Ranges Heritage Area that are particularly valued. They contribute both individually and collectively to the national, regional and local importance of the heritage area. These features are summarised as:

- the terrestrial and aquatic ecosystems of prominent indigenous character
- the varying classes of natural landforms and landscapes
- coastal areas
- the natural functioning of streams
- the quietness and darkness of the area
- the functioning of the area as a visual backdrop to the Auckland metropolitan area and the functioning of the eastern foothills as a buffer to, and transition from, metropolitan Auckland
- the area's provision of wilderness experience, recreational and relaxation opportunities

- the subservience of the built environment to the natural and rural landscapes
- the historic, traditional and cultural relationships of people, communities and mana whenua
- the evidence of past human activities in the area
- the distinctive local communities
- the Waitākere Ranges Regional Park, its natural and historic values, and its accessibility and importance as a public place
- the operation, maintenance and development of the public water catchment and supply system.

The first five-yearly monitoring report for the Waitākere Ranges Heritage Area was published in June 2013. Its purpose was to identify whether the objectives of the WRHA Act are being met and whether human activity is affecting the heritage area. Key findings relevant to this design guide include the observation that unsympathetic positioning of development within a site and the scale and design of new dwellings are generating adverse effects on landscape character in places. Put simply, in some locations buildings are dominating the natural landscape and detracting from the character of the wider heritage area.

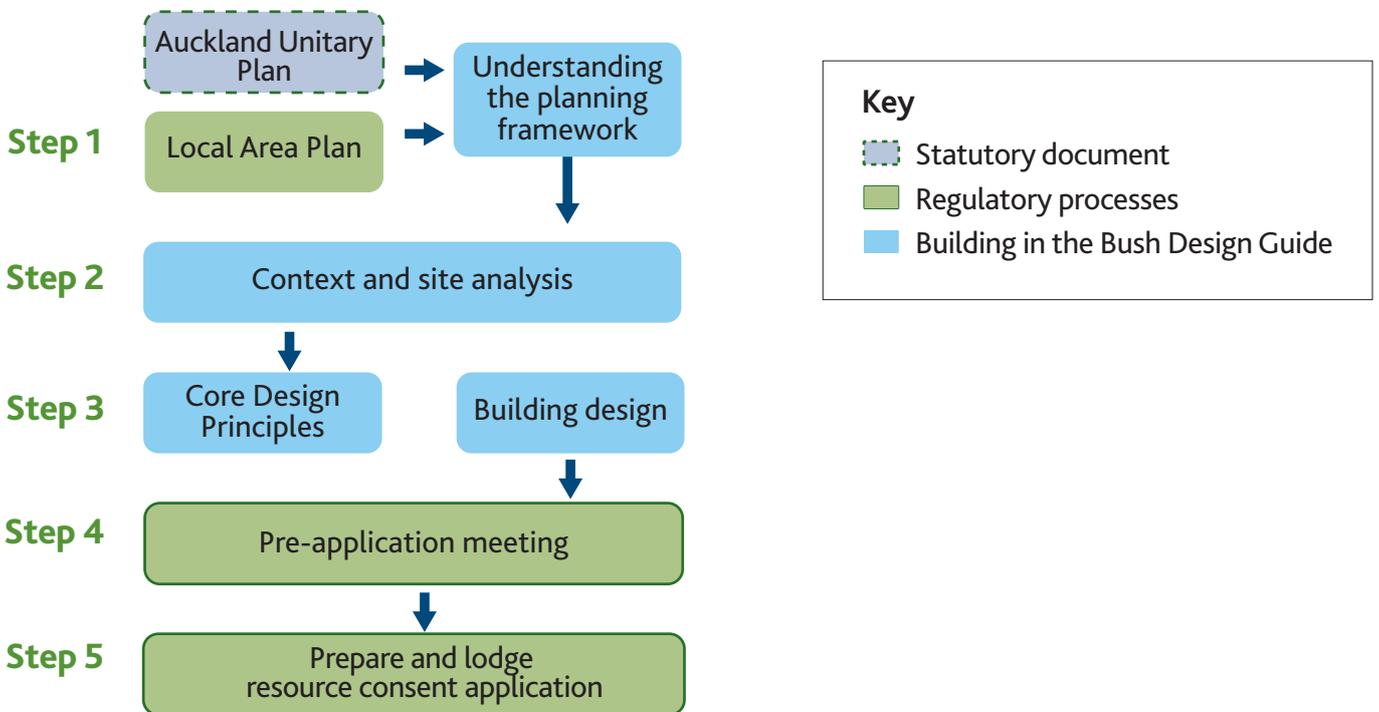


Buildings tucked into bush, with bush setting dominating.



Process for building in the bush

The following diagram illustrates the process involved in preparing a resource consent application for a building project within the bush areas of the Waitākere Ranges Heritage Area.



How to use this guide to develop your building project design

This design guide is intended to help the landowner, those responsible for the design of buildings, and the council when assessing the merits of building proposals.

Step 1: Understanding the planning framework

The Auckland Unitary Plan will determine what development is permitted and what development will require a resource consent application. It determines which sites are available for new residential buildings in the bush areas of the Waitākere Ranges Heritage Area. Generally these sites are existing vacant lots.

It is also recommended that landowners review the Certificate of Title for the site, as it could be subject to covenants which restrict the scale and nature of development that may take place. Building consent will also be required. Local Area Plans (if available) provide insight on matters of local community value.

Step 2: Context and site analysis

This step involves developing an understanding of the general character and qualities of the local area to identify the attributes of the site and its immediate environs that need to be recognised and integrated with your design. The Auckland Unitary Plan and any relevant Local Area Plan are likely to be of help in identifying local features.

Step 3: Building design

With the benefit of the context and site analysis plans, it will be possible to explore options for buildings on the site. With reference to this design guide, the Auckland Unitary Plan and any relevant Local Area Plan, consider the:

- location of any building platform and associated accessway (if not prescribed in the subdivision consent or on the site's Certificate of Title)
- design, scale and appearance of buildings and associated infrastructure, such as above-ground tanks, accessways, fencing, screening and the like, and how they integrate with the landform and vegetation of the site.

Step 4: Pre-application meeting with the council

The council encourages landowners and designers to meet with its staff to discuss proposals at an early stage. While there is a fee for these meetings, savings can be made as a result of the discussions, especially as reworking plans at later stages can cause delays and increased costs.

Step 5: Preparing the resource consent application

Refer to the council's website for information on preparing a resource consent application or engage professional assistance.³

³ aucklandcouncil.govt.nz/consents

Step 1: Understanding the planning framework

The Auckland Plan

Adopted in 2012, the Auckland Plan is the strategy to make Auckland the world's most liveable city. The WRHA Act identifies that the Auckland Plan must not be inconsistent with the Act's purpose or objectives. Consequently, the Auckland Plan seeks to protect the Waitākere Ranges Heritage Area as a low-density bush living, coastal and foothills rural area by containing urban Auckland at its boundaries. The Auckland Plan also identifies the heritage area as an outstanding natural feature and landscape that contains significant coastlines and ecosystems.

The Auckland Unitary Plan

The Auckland Unitary Plan is the first combined resource management plan for Auckland and replaces the legacy Auckland Regional Policy Statement, four regional plans and seven district plans, including the Auckland Council District Plan – Waitākere section.

When preparing the Auckland Unitary Plan, council must give effect to the purpose and objectives of the WRHA Act. The unitary plan also seeks to give effect to Chapter 7 of the Auckland Plan by ensuring that settlement patterns continue to recognise the heritage features of the Waitākere Ranges Heritage Area. This includes managing the immediate and cumulative landscape effects of development within the heritage area, while also providing for its protection, restoration and enhancement as an outstanding natural feature and landscape.

To manage the effects of people's activities in the bush areas of the Waitākere Ranges Heritage Area, the Auckland Unitary Plan may require resource consent for certain activities such as vegetation removal, earthworks and new buildings. This allows the effective management of these activities and the avoidance or mitigation of potential adverse effects that can result.

The Auckland Unitary Plan uses a variety of methods to manage these effects. Some methods apply only to the Waitākere Ranges Heritage Area and include the:

- Rural – Waitākere Ranges Zone
- Waitākere Ranges Heritage Area Overlay.

Other methods may also apply to the Waitākere Ranges Heritage Area, and include but are not limited to the:

- Auckland-wide rules
- Residential – Large Lot Zone

- Significant Ecological Areas (SEA) Overlay
- Outstanding Natural Landscapes (ONL) Overlay
- Ridgeline Protection Overlay
- Outstanding Natural Character (ONC) Overlay
- High Natural Character (HNC) Overlay
- Outstanding Natural Features (ONF) Overlay
- Notable Trees Overlay
- Historic Heritage Overlay.

A significant part of the bush areas is covered by one or more of these overlays, in particular the SEA, ONL and Ridgeline Protection overlays.

When resource consent is required, applicants will need to demonstrate that the requirements of the Auckland Unitary Plan and the WRHA Act have been satisfied when they formulate their proposals and submit plans for the council to approve.

When considering a discretionary or non-complying resource consent application the council must have particular regard to the purpose of the WRHA Act and any relevant objectives.

When considering a controlled or restricted discretionary resource consent application the council must consider the purpose of the WRHA Act and any relevant objectives.

Where development complies with all of the relevant permitted standards, there is little ability within the Auckland Unitary Plan to control and assess the design and layout of buildings and development in the bush areas. In these circumstances the voluntary use of this design guide is encouraged to promote the best design outcome for individual landowners and the wider community, and generally to safeguard the outstanding natural values of the Waitākere Ranges landscape.

Put simply, it is in everyone's interests that new built development and the redevelopment of existing sites within the Waitākere Ranges Heritage Area are sympathetically sited and designed.

Bulk and location standards

The Rural – Waitākere Ranges Zone or Waitākere Ranges Heritage Area Overlay applies bulk and location standards (development control rules). These generally cover building coverage, building height, yard setbacks, and the like. The assessment criteria for development that infringes these standards typically require an assessment of effects of the design.

This includes considering the effects of the development on the surrounding natural landscape and how the development fits with the existing local neighbourhood character.

Careful consideration is also given to the specific effects of the particular infringement. For example, where a development infringes the building coverage standard, careful consideration will be given to the effects of the infringement on the natural landscape, including neighbouring properties.

The Residential – Large Lot Zone also has a height in relation to boundary standard in addition to bulk and location standards. If development infringes these standards, a resource consent application will generally require assessment of the effects on the spacious landscape character of the zone and landscape qualities and natural features.

Vegetation

Many of the existing 'undeveloped' lots within the bush areas of the Waitākere Ranges Heritage Area are covered in well-established vegetation. Vegetation clearance is generally managed by one of the Auckland Unitary Plan overlays, e.g. SEA Overlay. However, there are also Auckland-wide vegetation clearance rules. These apply to contiguous areas of native vegetation that are outside the Rural Urban Boundary and that are within specific parameters.

Some activities are permitted, provided they meet the permitted standards. These include maintenance and trimming within specified parameters, pest plant removal, clearance of deadwood, and emergency works to protect people or property. Other activities, such as vegetation clearance greater than a specified amount or for a building platform and accessway, are likely to require resource consent.

The resource consent application will require consideration of the effects the development will have on ecological, landscape, and natural character values and features, as well as the extent to which vegetation needs to be altered or removed to enable reasonable use of a site for a building platform. The slope and stability of the site and proximity to the coast may also be factors for consideration.

Sensitive ridgelines

Development on several prominent ridgelines is managed by the Ridgeline Protection Overlay. Depending on the visual sensitivity of the ridgeline, resource consent may be needed. Assessment criteria for this overlay include consideration of the position of buildings within the site; the design of buildings; the effects on landscape values and the visual amenity; and the mitigation of these effects.

Earthworks (land disturbance)

Regional and/or district resource consents may be required for earthworks (land disturbance). This depends on a variety of factors, including the volume of earthworks, and which Auckland Unitary Plan overlays apply to the site. If resource consent is required, assessment criteria require the consideration of the effects of the earthworks on landscape, natural character, and ecological and historic heritage values.

Local Area Plans

The WRHA Act provides for the development of Local Area Plans by the council and community working together. These plans have been prepared for Oratia, Waiatarua, Muddy Creeks, Opanuku/ Henderson Valley, and the Te Henga (Bethells Beach)/Waitākere River Valley areas.

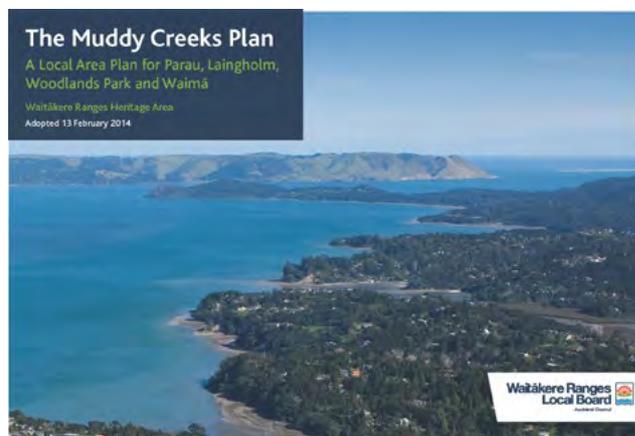
Local Area Plans identify the extent and nature of existing heritage features within the boundaries of the local area and set out long-term objectives for the future amenity and character of the area. They provide objectives, policies and actions for achieving that desired amenity. For example, protecting ecosystems (a heritage feature) might be achieved through a combination of council and community restoration projects, conservation covenants, and monitoring. Together, these actions enhance the area.

Local Area Plans also provide a wealth of information about community groups and other agencies which may be working in an area that includes your site or immediate area (e.g. ecological restoration or weed and pest control programmes).

Where Local Area Plans encompass bush areas in the Waitākere Ranges Heritage Area, policies for new building development in these environments tend to focus on:

- protecting, restoring and enhancing natural landforms and landscapes
- promoting ecological restoration efforts within identified ecological corridors (including weed management)
- promoting riparian restoration
- minimising light spill from artificial lighting
- encouraging healthier, warmer and more comfortable homes.

Local Area Plans may also provide useful information when preparing an assessment of effects required by a resource consent.⁴



⁴ View the plans here: aucklandcouncil.govt.nz/waitakererangesheritage

Step 2: Context and site analysis

Landscape context

The bush areas of the Waitākere Ranges Heritage Area are generally zoned Residential – Large Lot or Rural – Waitākere Ranges in the Auckland Unitary Plan. They are located close to and within the Waitākere Ranges proper and include Titirangi, Laingholm, parts of the upper Oratia and Opanuku valleys and along the south-eastern flanks of Scenic Drive North. Generally these areas are elevated and cover steep slopes where native forest is still dominant.

The existing level of development within these areas varies from very little development close to the Waitākere Ranges Regional Park, to strongly suburban settings in parts of eastern Titirangi. In the more bush-dominated areas, buildings are nestled into the vegetation and are subservient to the natural landscape.

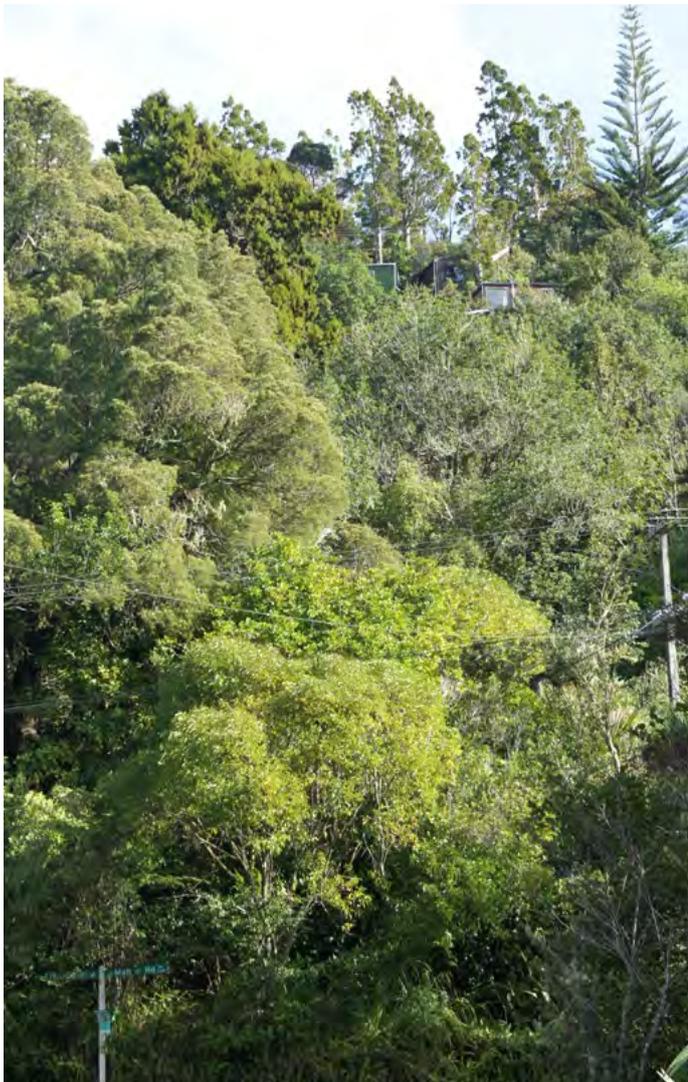
The 2013 WRHA Act monitoring report identifies a variety of 'landscape units' within the Waitākere Ranges Heritage Area. While the extent of these units does not align exactly with the extent of the Residential – Large Lot and Rural – Waitākere Ranges' zones within the heritage area, they are a useful way of better understanding the landscape context.

See Appendix 1 for a map showing the location of these landscape units. It also contains a table that identifies and describes the key features of the units most relevant to areas covered by this design guide.

The more suburban landscapes are generally associated with a more urban type of road-scape (e.g. street lighting, footpaths, kerb and channelling, exotic boundary plantings and suburban fencing styles). Buildings tend to be more dominant and prominent and, due to the difficult contour, they are often close to the road, potentially exacerbating this dominance.

Within these landscapes the approaches to vegetation management range from properties where the bush is left to take care of itself, to those where the native vegetation is managed, manipulated or removed.

The ways in which buildings can be constructed on an individual site range from concrete floor slab construction that requires a flat building site, and in some cases extensive earthworks or retaining structures, to pole or pile foundation construction with buildings stepped down the slope to follow the contour.



More modest and discreet buildings around the margins of Laingholm.



Relatively suburban road-scape character evident in places throughout the Ranges.



More remote bush-dominated streetscape character evident elsewhere.



Visually prominent buildings scattered along the Scenic Drive ridgeline.



Relatively intensively-settled area around Titirangi.

Identify and analyse the wider context

Careful consideration of a site's place within its wider context can ensure a good fit with surrounding bush areas. This involves identifying and analysing the notable features and characteristics of the wider area, and the characteristics of existing residential properties that are successfully integrated into the landscape.

Notable features and characteristics of the wider area include:

- landscapes and landforms (slopes, ridgelines, valleys, coastal cliffs)
- significant views and visibility of different parts of the site
- significant public views of the site
- local and regional parks in close proximity
- orientation and sunlight aspect
- wind direction and other climatic conditions
- vegetation character and patterning
- hydrological systems such as wetlands, streams, rivers, overland flow paths and tidal areas
- heritage and cultural features
- distinctive architectural styles that contribute positively to the area's identity.

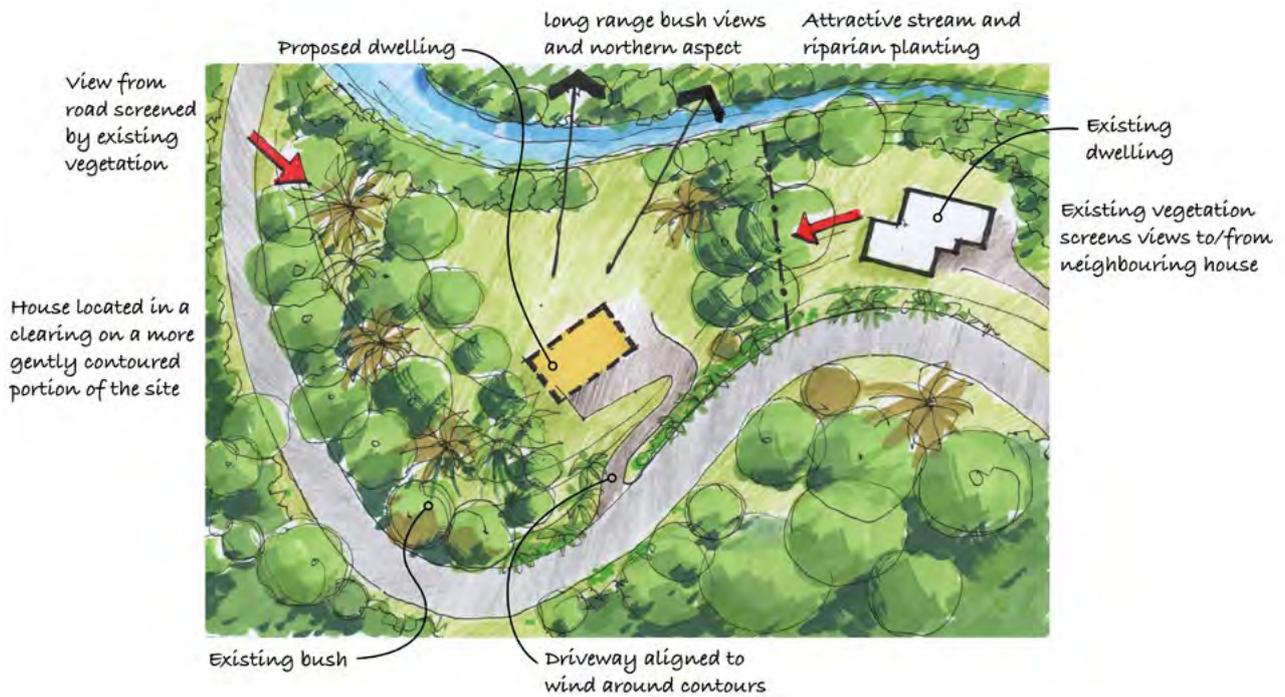
Characteristics of existing residential properties that ensure successful integration into the local bush living area include:

- the scale, form, colour and appearance of buildings and other structures such as garaging and retaining walls, and the lack of fencing and lack of gateway treatments
- how buildings relate to the topography of their site (e.g. landform features such as slopes and ridgelines)
- how buildings relate to the vegetation patterning of their site and the wider context
- how outdoor living areas, such as decks and paved areas, fit with the setting
- how garden plantings fit with the wider vegetation patterns.

Analyse the site

Recognising that each site will have its own characteristics, a site analysis identifies both constraints and opportunities, and aids development of an appropriate design response. A site analysis plan should be prepared for the property, showing its defining attributes and features, which may include:

- fence lines and boundaries
- infrastructure and access to roads
- hazards, including relevant geotechnical and flooding information
- ground contamination, topography and landforms, particularly where the landform is recognised as a sensitive ridgeline in the Auckland Unitary Plan
- streams, riparian areas, wetlands and stormwater (or overland flow path) patterns
- groundwater levels
- native vegetation features (e.g. areas of native bush, significant trees that are not scheduled, or wetland)
- native fauna features (e.g. bird or skink habitat)
- weed and pest problems (e.g. areas of weed infestation or problems with rats and possums)
- heritage features, including those identified for protection in the Auckland Unitary Plan (e.g. archaeological features, heritage trees, waahi tapu sites, heritage structures)
- both high-quality and unattractive landscape views and vantage points
- visibility of parts of the property from other places, particularly public places (e.g. roads, local and regional parks) and neighbouring dwellings
- existing buildings, other structures and paved areas/decking
- orientation to the sun
- wind and climatic considerations
- local sources of noise, dust, odour or vibration
- the unique character and amenity of the site and immediate area.



Benefits of this approach

Identifying these elements early and responding to site constraints, opportunities and characteristics:

- enables responsive designs to be created
- identifies and accommodates natural and cultural elements in and around the site, retaining or creating a unique identity
- enables the subdivision or building to be integrated into its surrounding bush setting
- identifies issues 'up-front' before spending time and money on problematic responses
- enables innovative design that avoids 'over-development' and the unnecessary loss of landform and natural features
- promotes building projects that retain the dominance of the landform and bush setting, and visually link with the surrounding landscape
- contributes to the overall health of the environment.

Win-win outcomes

- Well-designed proposals are more likely to receive resource consent in a timely and cost-effective manner.
- Vegetation clearance and earthworks are minimised, which contributes towards the overall amenity of the Waitākere Ranges Heritage Area being maintained for future generations to enjoy.

Step 3: Building design

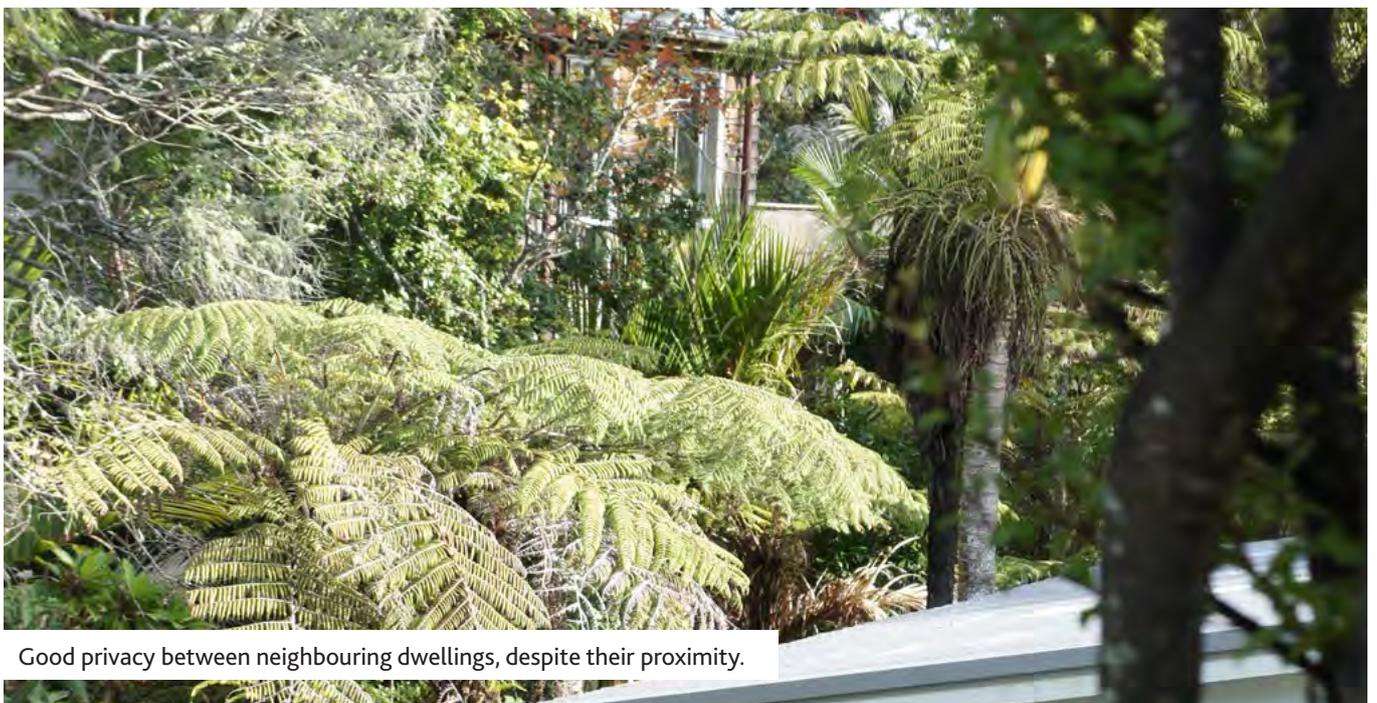
Core design principles

The core design principles provide a quick reference guide to best practice for building projects. They respond to the key issues and opportunities that need to be addressed in designing building projects which significantly influence the quality of bush-clad areas.

Create	suitable site layouts. Some landscapes and locations are more able to absorb development than others. Residential development in bush areas should complement the local identity of the area and respond to landform and other site and surrounding characteristics. Site layouts should respond to views, aspect, shelter and visual integration with bush-clad landscapes. (Pages 24 to 26)
Integrate	natural elements, patterns in the landscape, ecological systems and process, such as vegetation, landforms and water bodies, into the site layout to enhance the existing landscape character, create identity, and maintain and enhance valued and established natural ecosystems. (Pages 27 to 30)
Avoid	unnecessary earthworks (land disturbance) and minimise unavoidable earthworks to maintain the natural landform. Design the layout and location of access and building platforms to follow the shape of the land, avoiding steep slopes and adverse effects on aquatic environments and other natural systems. (Pages 30 to 33)
Preserve	heritage features, including waahi tapu sites, heritage buildings and structures, natural areas and topographic features, for future generations. This can be achieved in a manner that adds value and uniqueness to building projects. (Page 34)
Reduce	the impact of infrastructure to help maintain the long-term quality of bush-clad environments and create communities that are more resilient and self-reliant. Consider the scale, materials and detailing appropriate for building in the bush when designing buildings and driveways. Promote the use of low-impact water supply; waste, grey and stormwater treatment options; solar, insulation and building materials. (Pages 35-36)
Complement	the 'low-key' character of bush-clad environments in the design and location of structures including buildings, water tanks, retaining structures, and paving. The style and exterior colour of these structures has the potential to undermine a bush-clad environment's character if it is borrowed from an urban or suburban context. (Pages 37 to 46)

Create suitable site layouts

When designing lot layouts in bush areas, the aim is to ensure that new development appears visually integrated and sympathetic with its surrounding landscape, rather than imposed on it. The desired outcome is for built development to remain subservient to the natural landscape for which the area is so highly valued. It is possible to construct a building that not only contributes to the character of the landscape, but which sets high standards in siting, location and design. Some sites will be less sensitive to change and not all the siting issues will be relevant.





Ridgeline building sympathetically located and designed to follow the contour and use dark colours.

How to create a suitable site layout

- Use any already-cleared areas on the site for buildings and driveways. Consider shorter and narrower driveways (e.g. 2.5m width) to minimise earthworks and vegetation clearance.
- Avoid breaking the skyline or being seen against water when the building is viewed from roads, public places such as the coast or reserves, and neighbouring properties.
- Locate buildings to respect the privacy of neighbours and minimise obstruction of their views.
- Ensure buildings are located and orientated to maximise passive solar heating gains and minimise exposure to prevailing winds.
- Make allowance for the growth of trees, especially those close to the house. Contact with vegetation damages buildings, through reduced ventilation, blocked spouting, prolonged dampness and abrasion of coatings. Tree roots can interfere with foundations.
- Site the house to optimise sunlight access and keep spouting unblocked, without having to continually prune vegetation. Consider using a product that protects gutters from being filled with falling leaves.



✓ Driveway designed to wind around the contours and vegetation.



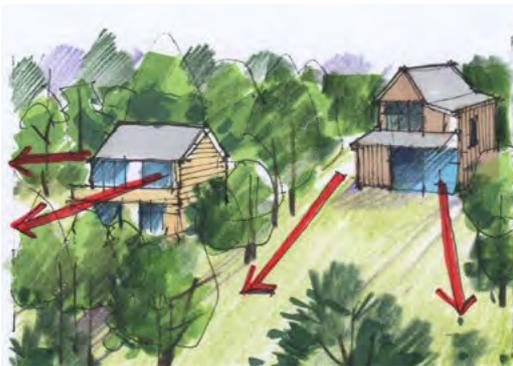
✗ Driveway runs straight up the contour necessitating earthworks.



✓ Good planting between neighbouring dwellings.



✗ Lack of privacy between neighbouring dwellings.



✓ Buildings sited to retain views from neighbouring dwelling.



✗ Building location obstructs view from neighbouring dwelling.

Integrate natural elements and processes, and landscape patterns

Integrating natural elements such as vegetation, landforms and water bodies will help to maintain the character of the bush areas. These elements should provide a framework for buildings that helps to ensure they sit comfortably within a bush setting. This will also provide benefits in terms of protecting and enhancing established natural ecosystems, including their environmental health.

How to integrate well

- Retain existing vegetation, including native plantings and mature exotic vegetation (where this is not a pest plant), to provide a context for development. Where possible, completely avoid existing significant trees (including their drip-lines).
- Remove pest plants.⁵
- Consider building close to the road, where permitted, to minimise the extent of vegetation clearance and earthworks (although at a distance that still enables some screen or buffer vegetation between buildings and the road).
- Analyse the surrounding vegetation patterns. Consider extending, reinforcing and enhancing existing groups of trees and areas of bush, so buildings and structures appear nestled into a cohesive bush setting.
- Make the most of opportunities to retain and restore watercourses, streams and wetlands by planting stream banks and wetlands in locally appropriate, eco-sourced indigenous species (and fencing from stock if appropriate). Seek the assistance of an ecologist or talk to the council to identify the most appropriate method to restore a stream or wetland.

⁵ For information on how to identify and control pest plants, visit: aucklandcouncil.govt.nz/pest



Building nestled into vegetation.

Photographer Patrick Reynolds, image courtesy of Herbst Architects.

- Use native species in new garden and boundary plantings. The Auckland Council Biodiversity Team (part of the Environmental Services Unit) can assist with advice. Another helpful reference is the Native to the West planting guide for advice on which species to plant on your site.⁶
- Use planting to connect areas and remnants of native bush, and enhance watercourses and wetlands to form wildlife corridors.
- Use vegetation to control erosion and aid stability on steeper slopes.
- Consider the implications of your development for kauri dieback disease. For example, avoid bringing soil into kauri areas and require construction staff to clean footwear, tyres and equipment.⁷
- Design the site layout (buildings, driveway and outdoor living areas) around vegetation, topography, solar orientation and views. Avoid encroaching on important ecological systems.
- Where driveways need to pass through the drip-line of existing vegetation, consider using timber bridges, gravel laid over a geotextile membrane, or permeable paving laid on a sand base to protect tree roots.
- Locate native privacy (or screen) planting between buildings and the road, to reinforce the bush character of local roads.
- Eradicate invasive environmental weeds from the site and avoid using them in proposed plantings. The council biosecurity team can advise which plants are invasive.⁸
- Seek to minimise vegetation edges by minimising overall vegetation clearance, as weeds often invade the edges of stands of bush.



Good riparian planting improves water quality, stream bank stability, soil conservation and habitat values.



Lack of riparian planting to stream edges.

⁶ whauriver.org.nz/wp-content/uploads/2012/11/NativeToThe-West-Pt1.pdf and whauriver.org.nz/wp-content/uploads/2012/11/Native-to-the-West-Pt2.pdf

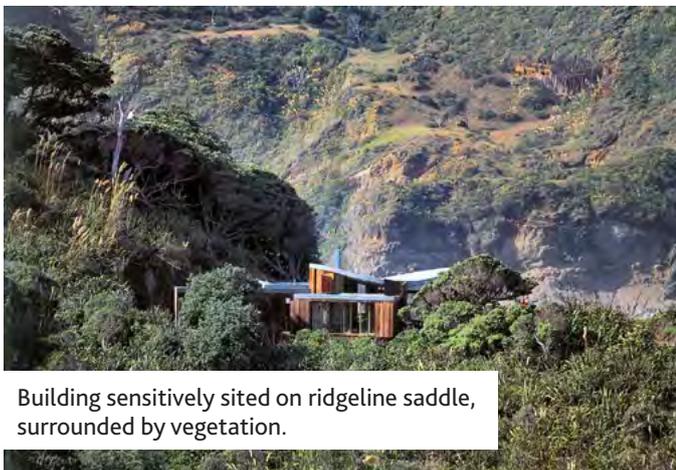
⁷ aucklandcouncil.govt.nz/pest

⁸ aucklandcouncil.govt.nz/pest



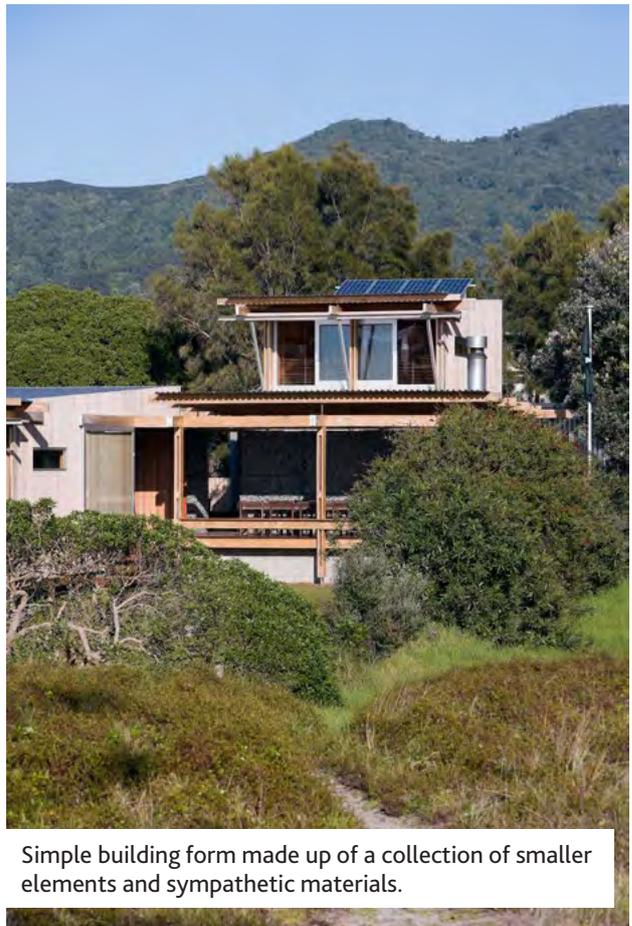
Simple building form set into vegetation.

Image courtesy of Crosson Architects.



Building sensitively sited on ridgeline saddle, surrounded by vegetation.

Bethells Beach House, image courtesy of Patterson Architects.



Simple building form made up of a collection of smaller elements and sympathetic materials.

Lindale Bach, Photographer Jackie Meiring, image courtesy of Herbst Architects.

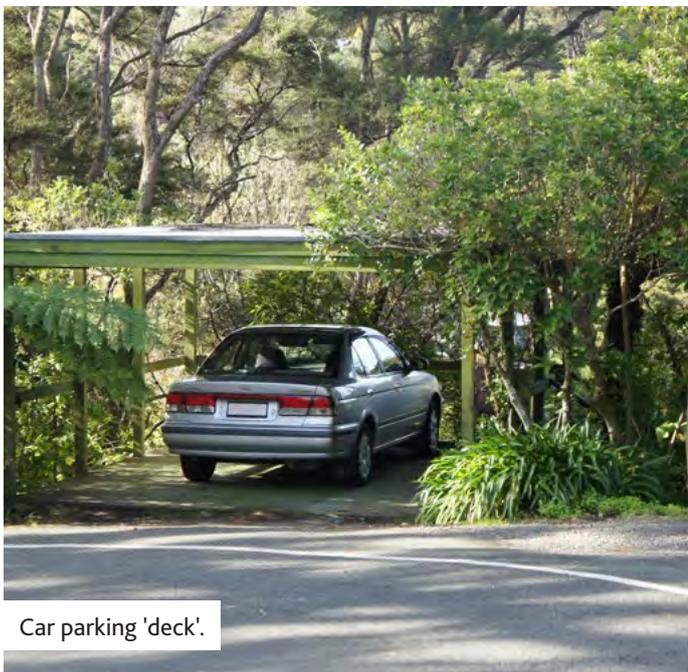
Avoid unnecessary earthworks and land disturbance

Earthworks for subdivision and development can have substantial and cumulative effects on the environment including the look and feel of the landscape, silting streams and estuaries, and altering catchments. They can significantly alter topography and result in the loss of vegetation, which would otherwise enhance the area's character and identity. Earthworks in sensitive areas that are easily eroded (such as steep slopes) and on visually prominent sites are of particular concern. Consider carefully where to locate building platforms and driveways in these environments.

Earthworks and retaining structures can be expensive (e.g. costs of construction and disposal to cleanfill) and can adversely affect the environment if poorly managed. Best-practice design solutions limit the extent of earthworks, reduce opportunities for erosion and sedimentation, and retain and emphasise the site's natural features.

How to reduce earthwork impacts

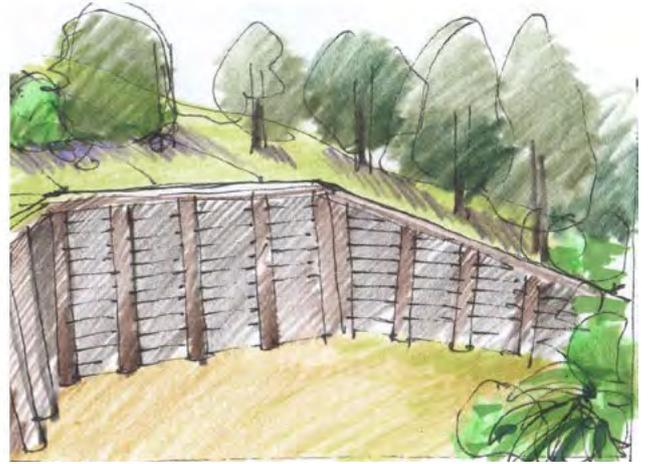
- Avoid unnecessary earthworks and limit earthworks (volume and area).
- Identify naturally occurring shelves or the gentlest part of a slope to locate building platforms.
- Design the layout and location of driveways, building platforms and outdoor living areas to follow the lie of the land.
- Consider using a parking platform near the road on steep sites to reduce earthwork requirements.
- On steeply sloping land, consider split-level building designs that reduce the building footprint and elevate living areas for better daylight and sunlight access.



- Consider the impact building foundations will have on the site's topography (and vegetation features). Timber pile foundations or pole houses are typically more suited to steep bush sites because they need smaller earthworks. Consider not using a concrete floor slab unless needed for passive solar design.
- Where cuts and fills are required, shape batter slopes to integrate with the surrounding natural landform.
- Consider using planting on batter slopes to help integrate them with surrounding vegetation patterns. Generally, a slope profile of maximum 1:3 will allow vegetation to establish successfully, as topsoil will not be washed off.
- Where retaining structures are unavoidable, use visually recessive materials, such as timber, that are sympathetic to the bush setting. It is generally preferable to locate retaining structures near buildings to minimise effects.



✓ Appropriately scaled, stepped retaining wall integrated with planting.

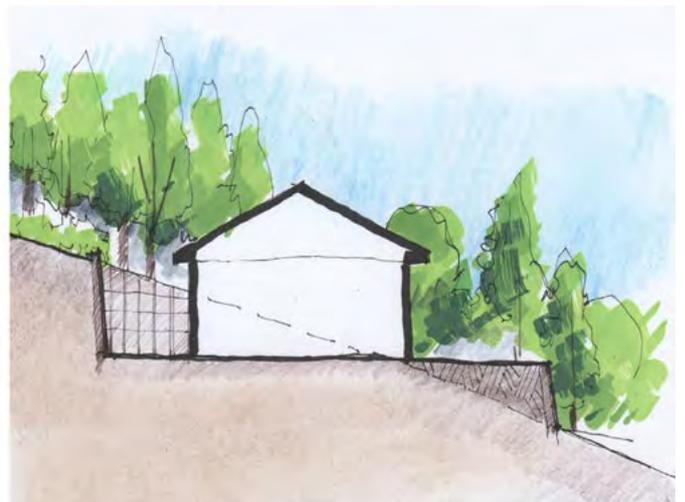


✗ Inappropriately scaled retaining wall with no planting.

- Avoid carrying out earthworks close to watercourses, by creating a buffer between earthworks and natural watercourses.
- Retain the site's topsoil for use in any new planting areas.
- Before construction, think about minimising disturbance from material storage areas and machinery access. Install protective fencing around the drip-line of vegetation features to prevent damage to root systems and consider the practicality of your construction methods.



✓ Building stepped to follow the contour on sloping site, reducing the need for earthworks.



✗ Single level building on sloping site necessitates substantial earthworks.



Building designed around vegetation with material and colours complement the bush context.
Brake House. image courtesy of Ron Sang Architects.



Sensitive retaining structure with building sitting lightly on the landscape.
Clevedon Estate, Photographer Lance Herbst, image courtesy of Herbst Architects.



Building stepped to follow the contour of the land.

Ellis and Stevenson House, Photographer Paul McCredie. image courtesy of Amelia Minty, Minty Architecture.

Preserve cultural heritage

Sites may have important heritage features or historical associations which should be preserved. Identify and locate these features before beginning the design process. Maximise opportunities to preserve and enhance cultural heritage, including waahi tapu sites, heritage buildings or structures, and ecological, geological and archaeological sites such as traditional and contemporary food collection areas, trade routes and timber milling remnants. There may also be significant trees or vegetation features.

How to preserve the cultural heritage of the site

- Check any relevant schedules in the Auckland Unitary Plan, e.g. Sites and Places of Significance to Mana Whenua (Schedule 12), Historic Heritage (Schedule 14) and Notable Trees (Schedule 10). Also contact the council for the Cultural Heritage Inventory to help identify specific cultural heritage sites.
- Libraries may have valuable resources for research into the history of a site and its surroundings.



Colin McCahon House, Titirangi.

Source: Jay Farnworth

- Consult the local iwi and the council to help identify sites of cultural importance and to determine the best ways to preserve each site.
- Locate new development so it does not dominate nearby heritage places or compromise the setting or historic landscape connections of places of cultural heritage.
- An archaeological authority is required from Heritage New Zealand Pouhere Taonga to modify or destroy any pre-1900 archaeological site.

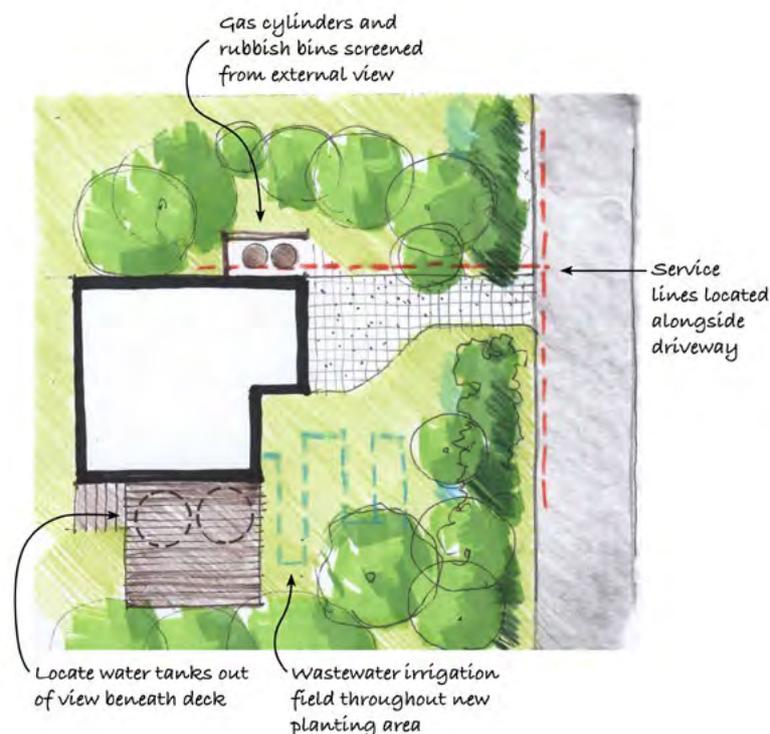


Outbuilding at Kettle House, Anawhata.

Source: Auckland Council Heritage Unit

Reduce the effects of infrastructure

Built development in bush areas may require the provision of on-site water supply and wastewater treatment and disposal systems. Above-ground services such as telecommunication and electricity lines can introduce visual clutter of an urban nature into the landscape and draw attention to development. Secondary structures such as water tanks are common features within bush-clad environments; they can become dominant if not located sensitively in a bush setting.



How to reduce infrastructure impacts

- Facilitate on-site infiltration of stormwater from roads and other impermeable surfaces through swales and rain gardens. Avoid using kerb and channel where practicable.
- Avoid direct piping of stormwater discharges to streams.
- Consider the site layout design to minimise the impermeable footprint and the integration of water reuse systems within the building design to minimise stormwater volumes. Use permeable paving materials where possible.
- Locate any services such as power, water, wastewater and phone lines underground. To minimise disturbance to root zones, it is often best to locate water pipes and power/phone lines along the driveway access.

- Consider locating wastewater irrigation fields throughout newly planted areas to help plant growth generally, and survival during the drier summer months. Avoid laying irrigation fields within the drip-lines of established trees; the increased moisture and nutrients can shock trees, and some species prefer 'dry feet'.
- Ideally, locate water storage tanks underground at the edge of cleared areas or under the house. Where this is not feasible, locate tanks to integrate with the overall design of the house and minimise vegetation clearance. Use planting (or buildings) to screen the tank from views outside of the site. Consider the practicality of the location, both for initial placement and future maintenance.
- Consider using water-saving devices such as dual-flush toilets, low-flow shower heads and grey water systems to reduce water and wastewater requirements.
- Consider solar hot water and energy provision.
- Air conditioning or heating structures should be integrated within the building envelope and should not be obtrusive in views from outside the site.
- Gas bottles and rubbish and recycling bins should be screened from views outside the site.
- Consider on-site green waste composting.

Talk to the council's eco design advisor to discuss other ways you may be able to reduce infrastructure impacts.⁸



Solar panels integrated into a visually recessive roofing style.

Source: Jay Farnworth

⁸ aucklandcouncil.govt.nz/ecodesign

Complement the bush setting

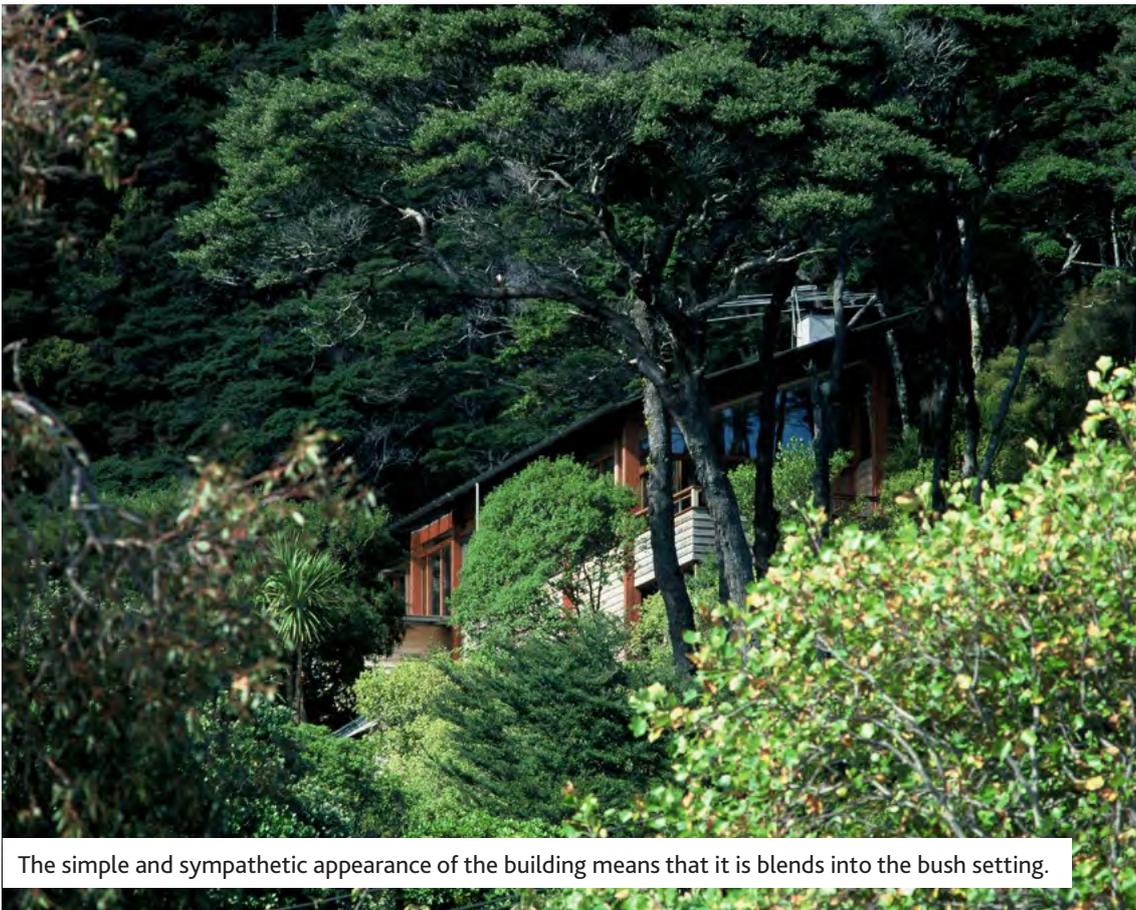
Building design

The design and location of buildings and ancillary structures can have a considerable effect on the bush landscape. In cities, buildings are the focus of attention. However, in bush living areas it is the land and vegetation forms which should dominate. Intricate or large-scale designs may be appropriate in urban or suburban streets full of buildings, but will often look out of place in a bush landscape where simple and clean building lines tend to be more appropriate.

A number of techniques can make buildings more sympathetic to their surroundings. For example, pitched roofs, verandas and lean-tos tend to help settle the building into the landscape and darker colours tend to help the building blend into a bush setting.

Buildings are more likely to reflect elements and patterns of the surrounding natural character if local natural materials are used.

A bush environment presents a number of challenges for building design, particularly in terms of light, sun, warmth and avoiding dampness. Modern building design suggests a wide range of innovative solutions that can successfully address these issues.



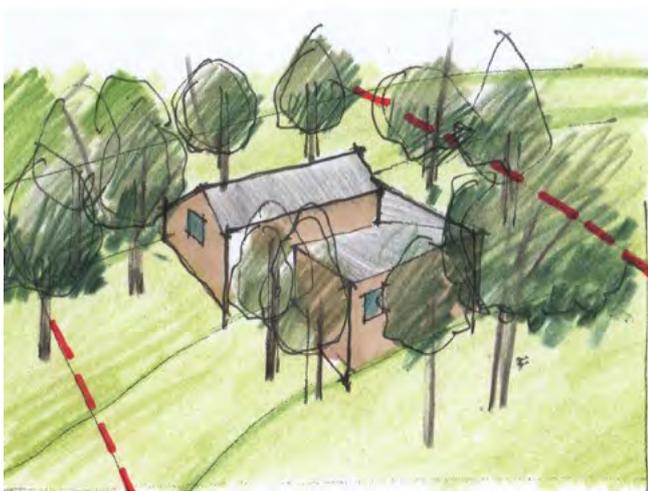
The simple and sympathetic appearance of the building means that it blends into the bush setting.

Eastbourne House, image courtesy of Parsonson Architects

How to complement bush character in building design

Siting (location and position within a site)

- Wherever possible, building location should take advantage of existing established planting to break up the 'straight lines' of constructed elements.
- Design and locate buildings to maintain a low profile, avoiding prominent locations such as the tops of ridges. Where it is unavoidable to break the skyline, use foreground and background planting to break up straight building lines and provide a more natural visual backdrop in views from outside the site.
- Position buildings to enable privacy (or screen) planting between the road and building to maintain the perception of a bush setting in views from the road.



- ✓ Building sited to optimise the screening effect of existing vegetation.



- ✗ Poorly sited building necessitates the need for substantial earthworks and vegetation removals.

- Align buildings with the contour of the land, not the boundary fence.
- Align driveways to follow the natural land contours and blend with the natural setting, curving around landform and vegetation features and avoiding straight lines.
- Orient garaging so that it does not dominate the view from the road into the property.
- Position buildings and accessways to minimise the need for earthworks and retaining structures.

Form and scale

- Design buildings of an appropriate form, scale and style to complement the bush environment and avoid importing a suburban style of building (and garden).
- On flatter sites, design buildings with a horizontal emphasis, minimising two-storey elements.



✓ Building massing responds to the bush setting.



✗ Suburban style inappropriate in bush setting.



✓ Articulation of elevation and varied roof profile reduces building scale.



✗ Bulky form and light colours inappropriate in bush setting.



✓ Stepped building form responds to sloping nature of site.



✗ Single level.

- Building size should be in scale with its surroundings. The mass should relate proportionately to the landscape setting and site size. Large buildings are usually incompatible within a small site.
- Consider the articulation of building elevations (i.e. how the different parts of the building exterior visually work together). This will help avoid the perception of a large-scale or bulky building. Using a coordinated range of materials in combination with a stepped building footprint, recessed windows and generous overhangs can reduce the perceived scale of a large building.
- Where garages are attached to the house, make them subservient to the scale of the rest of the building.



✓ Garage located discretely behind the house.



✗ Garage dominates the view of the property.

- On steeply sloping sites, a collection of smaller building forms arranged to step down the landform (and also potentially, around vegetation) is a more sympathetic solution than a single large-scale level platform. Staggering forms down the landform will also avoid the perception of a single tall building form.
- On steeply sloping sites, consider the 'look' of the pile or pole foundations of the building from outside the site. Ideally, the underside of decks, buildings, eaves and stairs should be screened from external view. Usually, the careful siting of the building means existing vegetation can achieve this screening effect. Where this is not possible, consider planting to mitigate, or close the area in so it looks like an integrated part of the building.



✓ Pole foundations screened by cladding and plantings.



✗ Exposed pole foundations.

Building layout and design

- Configure indoor and outdoor living areas in the north-facing parts of the platform to maximise sunlight penetration.
- Consider placing windows above eye level and using double-glazed skylights to maximise light penetration on heavily vegetated sites. Skylights should be small-scale to reduce heat loss, and consider their potential for overheating during summer if there are no shade trees nearby.
- Insulate walls, roofs and under floors to minimise heat loss, overheating and dampness, particularly in houses with a reduced foundation mass (i.e. pole or pile foundations, rather than a concrete slab foundation).
- Insulate the building to the highest practicable thermal resistance (R-value). Consider using double glazing, particularly on south-facing windows, and close fitting drapes. All extractor fans should be vented to the outside.
- Design buildings for passive solar gain and explore opportunities for environmentally-friendly technologies.



Skylights and windows above eye level improve solar access.

Roofline

- Broken forms or roof configurations which diminish the apparent extent of the roof are encouraged, unless they introduce unneeded complexity or angularity.
- Pitched roofs tend to sit a building into the landform. On sloping sites, pitched roof ridgelines should generally be parallel with the contour lines.
- On sloping sites, mono pitch roofs tend to be more successful where they follow the landform and vegetation patterns.
- Consider using 'green' roofs, which assist visual integration as well as insulation and stormwater management.
- Consider the requirements for potable water supply in the choice of roof form, pitch and material selection.
- Integrate solar panels so that they look like part of the roof design.



Varied roof profile and dark visually recessive materials help the building blend into bush setting.

Canna House, photographer Paul McCredie, Image courtesy of Tennent Brown Architects Ltd.

Chimneys and rooftop structures

- Chimneys and rooftop structures should be considered as part of the building's overall massing and proportions.
- Avoid locating antennae, aerials and satellite dishes where they can be seen from outside the site.

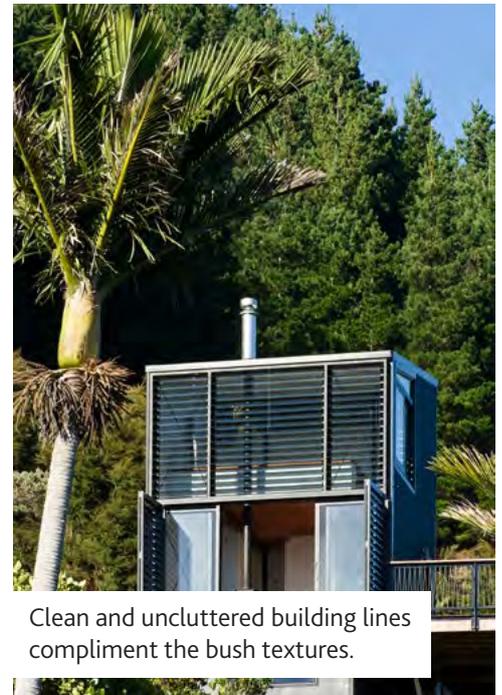
Appearance

- Use natural colours and materials, and materials associated with the bush environment. These include weathered timber, timber with a stain or darker paint finish, darker-coloured corrugated iron, rammed earth, darker-coloured precast and in situ concrete finishes, stone, and darker-coloured plaster finishes.
- Avoid elaborate, urban-type designs and materials. Source materials locally where possible (e.g. local aggregates, timber and stone).
- Use a similar design approach for the form and materials of garaging and any ancillary structures so they look like an integrated part of the overall development.
- Replace impermeable paving materials (concrete, asphalt) with permeable ones (gravels, grass, dark-coloured permeable pavers).
- Avoid large concreted driveway, manoeuvring and parking areas. These do not visually complement the bush environment.
- Timber decking is often an appropriate solution for outdoor living areas in the bush environment. It minimises ground and vegetation disturbance, is visually appropriate and can be designed to enable an outlook over the bush setting.



Simple dark building forms do not compete with the bush context.

Blackpool House, photographer Samuel Hartnett, image courtesy of Glamuzina Architects.



Clean and uncluttered building lines compliment the bush textures.

Turn Point, photographer Paul McCredie, Image courtesy of Tennent Brown Architects Ltd.

Reflectivity

- Use building materials, particularly for roofs, that complement the bush character in terms of texture and colour, and do not cause glare and excessive reflectance.
- Use materials and colours of lower reflectivity to help enable built elements to be absorbed into the landscape. Examples include unstained timber and natural materials.
- For materials with a coloured finish, use a reflectivity level between 0 and 40 per cent for exterior walls and 0 to 25 per cent for roofs.
- Consider the ways in which colour can express individuality but also affect how recessive or dominant the building is in the landscape. Generally, limit the use of brighter painted finishes to the accenting of defined architectural elements and to no more than one third of an elevation.



Darker building colours with a low reflectivity rating ensure that buildings blend with the bush setting and do not stand out, making them 'visually recessive'.

Lighting

- Consider the influence of interior and exterior lighting on the night sky.
- Minimise exterior lighting by avoiding general area illumination, wall washing and unshaded light sources that shine onto neighbouring properties or the road.
- Orient exterior lights towards the ground and back into the site.
- Keep exterior decorative lighting, such as up-lighting of trees, to a minimum and out of sight of neighbours and road users.
- Use drapes, blinds or shutters to minimise interior light spill and protect the night sky.

Glazing

- Use double glazing with a low reflectance value.
- Consider glazing on north-facing aspects for optimal passive solar heating.
- Where large expanses of glazing are visible from outside the site, consider using generous building overhangs to reduce their visual prominence.
- Avoid highly reflective materials such as mirror glazing.
- Ornate window and door designs and multiple glazing bars with numerous small panes of glass are generally discouraged.



Building overhang casts shadow over glazing.



Larger expanses of glazing oriented towards the north-facing aspect of the dwelling to optimise passive solar heating.

Francis Bell House, image courtesy of Parsonson Architects.

Boundary treatments

- Generally (and where required), planting is the preferred method to delineate boundaries of residential lots.
- Where fencing is required, it should comprise a simple low-key style that is visually recessive within a bush context and does not disrupt connections between bush and other ecological features.
- If a less permeable solution is required to control pets, low wire-mesh fencing within a native hedging or planting is encouraged to avoid the perception of a suburban fencing character. Landowners in the bush living areas should also consider electronic methods for animal control.

- Avoid close-boarded timber fencing and stone or masonry walls.
- Set gates and fencing back from the road edge so they blend with the surrounds and do not dominate the road-scape.
- Avoid elaborate gates, letterboxes and entranceway statements, as these are more urban elements.



Low-key post and wire fencing enables continuity of planting.



Inappropriate suburban-style boundary fencing.

Step 4: Pre-application meetings

Once you have a preliminary layout for your building project, the council encourages you to meet with the staff who will be involved in processing your application.

There is a fee associated with these meetings. However, savings can be made as a result of these discussions, especially as reworking plans at later stages can cause delays and increased costs. Pre-application meetings have many benefits, particularly providing an opportunity to discuss:

- the proposed development and the council's strategic approach to the Waitākere Ranges Heritage Area
- heritage and landscape features of the site and surrounds (e.g. scheduled vegetation features, significant ecological areas, archaeological sites, sensitive ridgelines)
- the information required for the resource consent application
- requirements of the Auckland Unitary Plan, the objectives of the WRHA Act, information in this design guide, the criteria on which the application will be assessed, and initial feedback on any schematic plans
- methods for avoiding, remedying or mitigating any adverse effects of the proposal
- the council's requirements for infrastructure provision and potential development constraints associated with servicing the development

- how the application will be processed
- arranging a site visit.⁹

Locking in quality – resource consent conditions

The council may grant resource consent to building projects based on their consistency with the Auckland Unitary Plan and other matters the council considers relevant. This includes the ability of the building project to meet the design recommendations of this guideline (as provided for by section 104(1)(c) of the Resource Management Act 1991).

The council can impose conditions on resource consents it grants to avoid, remedy or mitigate any actual or potential adverse effects a building project may have on the surrounding environment. Before any resource consent is granted, applicants can also volunteer conditions to the council to consider, but this should be done in collaboration with the council planning officer processing the application.

In bush areas, consent conditions often relate to such aspects as:

- supervision and approval of engineering works by a suitably qualified engineer (detailed design of earthworks and infrastructure)
- the obtaining of all building and resource consents before any vegetation pruning or removal works can start
- the requirement to install protective fencing around vegetation and other landscape features to be retained and protected as part of the development before construction starts
- the requirement for a pre-start meeting on site with the council's environmental monitoring officer to discuss such matters as earthworks, erosion and sediment control measures, vegetation protection or removal, and protection of landscape features
- certification at foundation (and possibly pre-lining) stage of the building location and any development control infringements (e.g. height in relation to boundary infringements) by a licensed cadastral surveyor
- controls on the height and materiality of retaining structures; the materiality of access ways, paving and fencing; and on building heights, materials and colours.
- the requirement to carry out the design in accordance with the application documents, including planting
- maintenance and monitoring of any mitigation or enhancement planting for a defined period. This usually corresponds to a time when the planting has established, is beginning to achieve the mitigation effect and is at low risk of invasion by weeds. Planting conditions often include a bond to cover the cost of establishing the mitigation planting should the consent holder default on this
- maintenance and monitoring of infrastructure
- physical protection of existing and new native plantings, wetlands and habitats, including fencing, weed management and pest control.

⁹ aucklandcouncil.govt.nz/consents

Appendix 1: Location and key features of each landscape unit

From Waitakere Ranges Heritage Area Monitoring Report Vol 2, June 2013 (figure 2).



Table 1: Bush Living Landscape Units

Bush Living Landscape Unit	Location name	Key features
21	Te Aute Ridge	Inland bush-clad ridgeline framing Lake Wainamu to the south and the Bethells valley to the north. Dwellings generally scattered throughout lower and middle slopes of northern side, many with areas of pasture and/or domestic plantings around the dwelling itself. Generally a low-key mixed rural and bush landscape character.
23a	Wigmore Bay	Small-scale bay immediately south of Te Henga (Bethells Beach). Dramatic coastal cliffs and bush backdrop with minimal built modification evident. Generally a relatively untouched landscape character.
23b	Anawhata	Medium-scale bay about midway between Te Henga and Piha. Dramatic coastal cliffs, dunes and bush backdrop. A few buildings are visible within the bay and backdrop. However, they generally convey a low-key character subservient to the natural character, due to their modest scale, the integrating effects of vegetation and the absence of urban-type infrastructure (e.g. fences, sealed roads).
23c	Whites Beach	Smaller-scale bay between Anawhata and North Piha. Dramatic bush-clad cliffs frame the bay with a fringe of houses visible perched along the ridgeline. Generally, a low-key built character subservient to the natural character, due to the houses' modest scale, the integrating effects of vegetation and the absence of urban-type infrastructure (e.g. fences, sealed roads).
23d	Kohunui	Bush-clad coastal ridgeline at the north end of Piha Beach. Dramatic bush-clad coastal cliffs with very little built modification evident. Generally a relatively sparsely inhabited landscape character. Visually recessive building forms and colours, combined with plantings, play an important role in ensuring buildings remain subservient.

Bush Living Landscape Unit	Location name	Key features
23 e, f, g, h, j, k, l, m, n, o, q	Ranges properties	Scattered dwellings throughout the western Waitākere Ranges. Generally a subservient character, due to the dwellings' modest scale, scattered pattern and/or the integrating effects of their location within dense bush plantings.
23p	La Trobe	Series of inland coastal ridgelines and valleys east of Karekare. Generally a more inhabited, mixed rural and bush landscape character, due to the frequency of buildings and visibility of pastoral and domestic plantings around dwellings. Low-key road character and the integrating effect of plantings assist the perception of subservience in places.
A1	Aio Wira	Inland bush-clad ridge, east of Te Henga. Generally, built development is subservient to the natural character, due to the modest scale of buildings, dense bush setting and relatively limited extent of bush clearance, and the absence of urban infrastructure (e.g. fences, sealed roads).
A2	Pukematekeo	Series of bush-clad ridgelines and slopes bounded by Scenic Drive North and Scenic Drive to the south-east of the Te Henga turn-off. A varying relationship between buildings and the bush setting. Some places exhibit a more suburban impression, due to: <ul style="list-style-type: none"> • bush clearance and the introduction of a more domestic and ornamental planting character • the introduction of suburban fencing and gate styles • incongruous and/or prominent building forms and styles • prominent building colours • highly reflective building materials • exposed and large-scale retaining structures • the absence of road boundary and integrating vegetation generally. In other locations, buildings are of a more modest scale and visually recessive character, and nestled into a bush context.
A13	Opanuku	Series of bush-clad ridgelines and elevated valleys on the eastern side of the Ranges. Generally, the perception is of built development remaining subservient to the natural character. This is due to the modest scale and visually recessive character of buildings, the limited amount of bush clearance, the sympathetic siting of buildings into the landform and bush setting. Some exceptions to this, including larger-scale rural production-related buildings and more recent subdivisions, which have seen bush removed and replaced with manicured lawns, ornamental garden plantings and the like.

Bush Living Landscape Unit	Location name	Key features
A14	Turanga	Series of bush-clad ridgelines and elevated valleys on the eastern side of the Ranges. Generally, the perception is of built development remaining subservient to the natural character, largely due to the screening effect of boundary vegetation. The presence of exotic species in places confuses the underlying bush setting identity. A varying scale and style of building and dwelling curtilage treatments is evident, with successfully integrated buildings demonstrating visually recessive colours and forms, and very limited vegetation clearance. More recent subdivision appears to have seen the introduction of much larger building footprints and associated manicured lawns, ornamental garden plantings and the like. This forms a marked contrast with the more sympathetic building and vegetation patterning characterised in more established parts of the landscape unit.
UF2	Cassel	<p>South-east facing bush-clad ridgeline coinciding with Scenic Drive North roughly between Kitewaho Road and the rail corridor. A varying relationship between buildings and the bush setting. Some places exhibit a distinctly suburban impression due to</p> <ul style="list-style-type: none"> • bush clearance and the introduction of a more domestic and ornamental planting character • the introduction of suburban fencing and gate styles • incongruous and/or prominent building forms and styles • prominent building colours • highly reflective building materials • exposed and large-scale retaining structures • the absence of road boundary and integrating vegetation generally. <p>In other locations, buildings are of a more modest scale and visually recessive character, and successfully nestled into a bush context.</p>
UF4	Welsh Hills	Series of mixed bush and pasture-clad ridgelines on the western edge of the Henderson Valley foothills. Generally a more inhabited, mixed rural and bush landscape character, due to the frequency of buildings and visibility of pastoral and domestic plantings around dwellings. Low- key road character and the integrating effect of plantings assist the perception of subservience in places.

Bush Living Landscape Unit	Location name	Key features
UF6	Potter	Bush-clad ridgelines and elevated valleys south-west of Oratia. A varying relationship between buildings and the bush setting. Some places exhibit a distinctly suburban impression, largely due to bush clearance and the introduction of a more domestic and ornamental planting character. In other locations, buildings are of a more modest scale and visually recessive character, and successfully nestled into a bush context. More recent subdivision appears to have seen the introduction of much larger building footprints and associated manicured lawns, ornamental garden plantings and the like. This forms a marked contrast with the more sympathetic building and vegetation patterning characterised in more established parts of the landscape unit.
UF8	Scenic ridge	Bush-clad ridgeline coinciding with a stretch of Scenic Drive, west of Titirangi. Generally, built development remains subservient to the wider bush setting, largely due to the dense road boundary vegetation, limited bush clearance and more modest building footprints.
UF9	Titirangi	<p>Bush-clad ridgelines and elevated valleys around Titirangi. A varying relationship between buildings and the bush setting. Some places exhibit a more suburban impression due to:</p> <ul style="list-style-type: none"> • bush clearance and the introduction of a more domestic and ornamental planting character • the introduction of suburban fencing and gate styles • incongruous and/or prominent building forms and styles • prominent building colours • highly reflective building materials • exposed and large-scale retaining structures • the absence of road boundary and integrating vegetation generally • a more urban streetscape character (e.g. footpaths, lighting, kerb and channel). <p>In other locations, buildings are of a more modest scale and visually recessive character, and nestled into a bush context.</p>



