



Waitakere Ranges Foothills Design Guide



The essential design guide for anybody subdividing or building in the Waitakere Ranges Heritage Area

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Design Guide text was prepared by Melean Absolum Limited, sketches by Gaynor Reville Design, and photographs were taken by Melean Absolum and various former Waitakere City Council staff members.

Version 2 - June 2014



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***“No house should ever be on a hill or on anything. It should be of the hill.
Belonging to it. Hill and house should live together, each the happier for the other”.***

Frank Lloyd Wright





INTRODUCTION

PURPOSE OF THIS DESIGN GUIDE

This design guide provides win-win outcomes for the landowner, community and the environment and provides for sustainable living in the foothills of the Waitakere Ranges. The guide emphasises quality of design rather than strict adherence to rules and standards. It is intended to assist landowners in making good choices about the design and layout of building projects, regardless of whether they require consent or are permitted by the District Plan.

This design guide illustrates the importance of good siting and sensitive design when subdividing and building in the Waitakere Ranges Heritage Area. It has been prepared as a tool for:

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

This design guide is intended to assist applicants to gain planning consent for subdivisions and buildings by highlighting the key issues that should be addressed early in the design process.

The design guide recognises that there are diverse landscapes and features within the Heritage Area and a 'one size fits all' approach to design isn't appropriate. Common sense must always prevail in determining the best means to ensure the long-term protection of the features of the Heritage Area.



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

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

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 proposals. No precise formula exists for the planning and design of rural building projects. This design guide outlines design principles that new subdivisions and building projects are expected to observe but it allows flexibility in terms of detailed design.

The District Plan provides discretion over the design, location and layout of building projects, and defines 'Design' to mean in the District Plan to mean "the external appearance of any building, structure, landform or any development, and includes materials used,

dimension and colour". This design guide provides interpretation of these discretions and proposes solutions to establish the best outcomes for the landowner to preserve important qualities of the Heritage Area. The design guide has status under section 104(1)(c) of the RMA, and as such, will be considered as part of the consenting process.



THE WAITAKERE RANGES HERITAGE AREA

The Waitakere Ranges Heritage Area has features and qualities that are of national, regional and local importance which have been recognised in the Waitakere Ranges Heritage Area Act. The Act aims to ensure that the valued features and qualities of the Heritage Area are not degraded by inappropriate building projects or other activities, but will be protected, enhanced, restored and thereby maintained for ever.

The Act creates certainty for the long term protection of the Heritage Area, providing a benchmark for the assessment of resource consent applications, and objectives which must be taken into account in the preparation of Regional Policy Statements and District Plans.

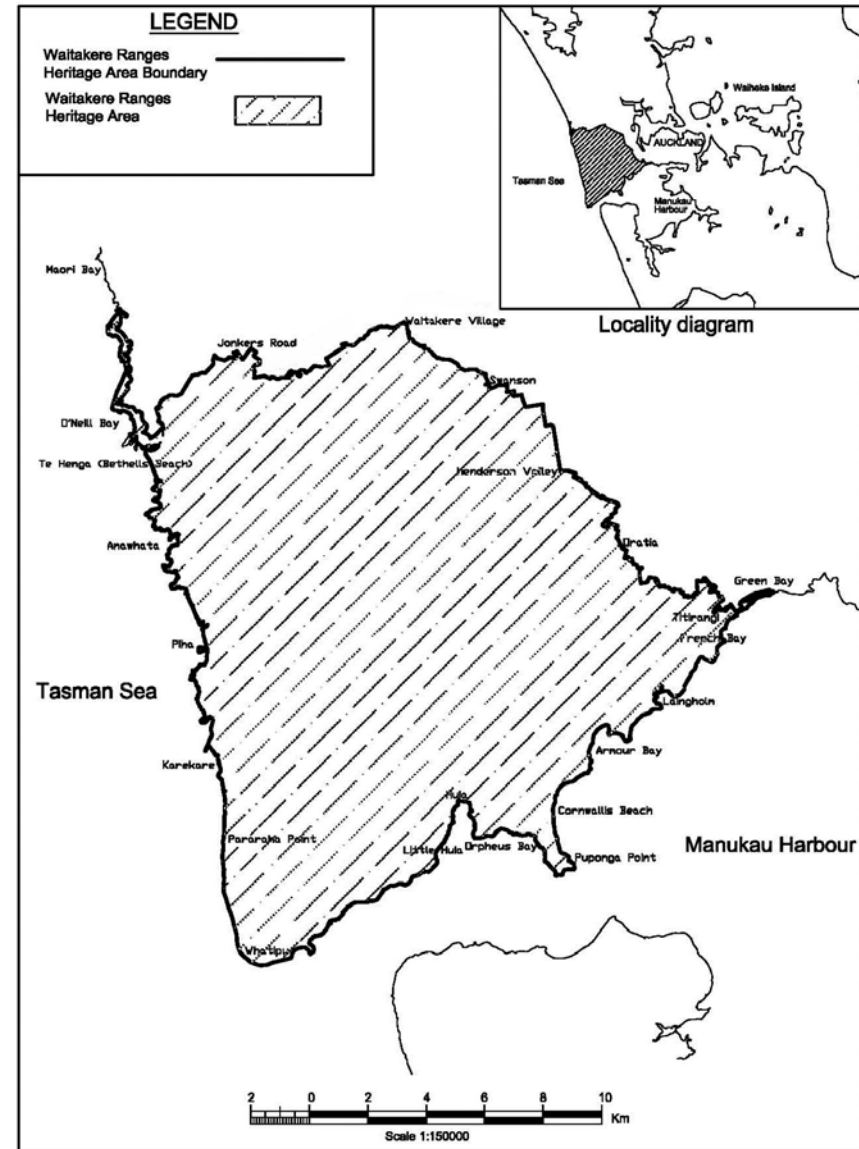


Figure 1 Map of Waitakere Ranges Heritage Area





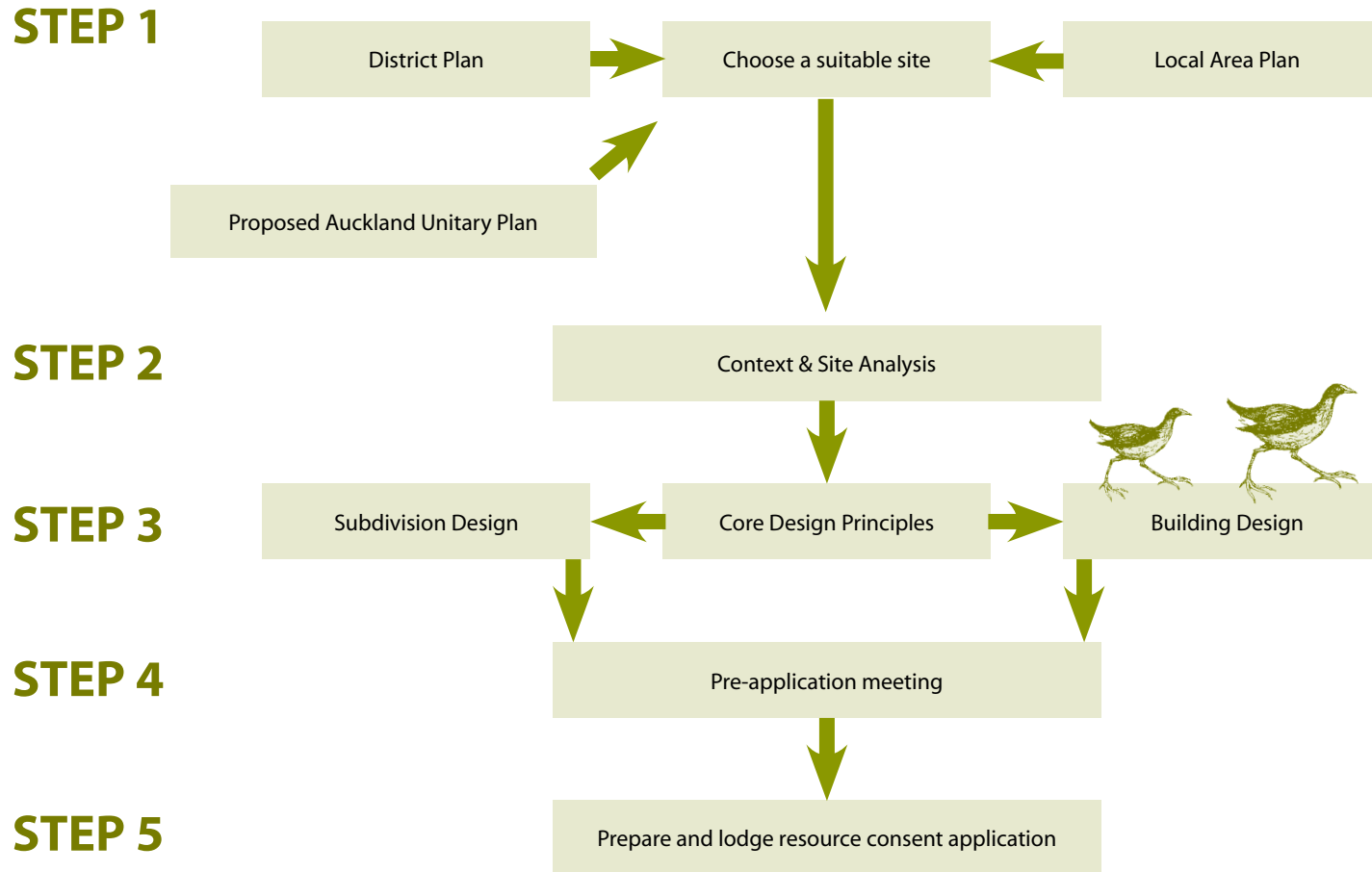
The 'heritage features' are elements of the area that are particularly valued and that individually and in combination contribute to the national, regional and local importance of the Heritage Area. These include:

- the terrestrial and aquatic ecosystems, the classes of natural landforms and landscapes; the natural functioning of streams;
- 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 Heritage Area's provision of wilderness experience, recreational, and relaxation opportunities;
- the subservience of the built environment to the natural and rural landscape;
- the historic, traditional and cultural relationships of people, communities and tangata whenua;
- the distinctive local communities;
- the origins of the Waitakere Ranges Regional Park, its natural and historic values, its accessibility and importance as a public place; and
- the operation, maintenance and development of the public water catchment and supply system.



THE RESOURCE CONSENT PROCESS

The following diagram illustrates the process involved in preparing a resource consent application for either a subdivision or building project within the foothills.



The design guide assists in this process by providing an overview of the District Plan (page 10) and Local Area Plans (page 11) which apply to the foothills of the Heritage Area. It then goes on to describe the overall landscape context of the foothills area (page 13). It also sets out the Core Design Principles (page 18) which apply to both the design of subdivisions in the foothills and to the design of individual building projects. These Core Design Principles are then described in more detail on pages 19 – 38 of the design guide.

HOW TO USE THIS DESIGN GUIDE TO DEVELOP YOUR SUBDIVISION AND / OR BUILDING PROJECT DESIGN

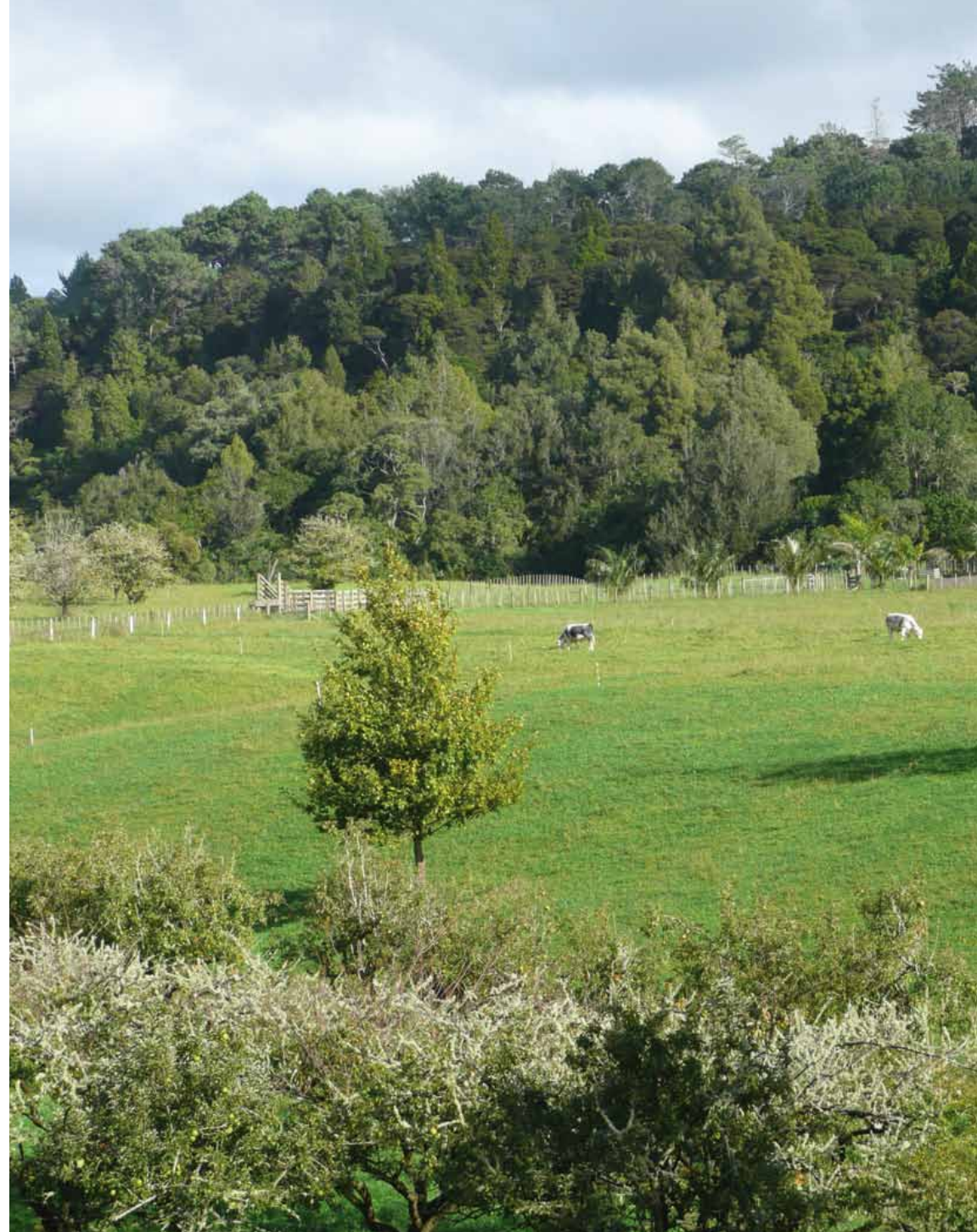
This design guide is intended to assist the subdivider or landowner, those who are responsible for the design of the subdivision and the subsequent buildings and the Council when assessing the merits of proposed subdivision and building projects.

Step 1 – Choose a suitable site see pages 10 - 12 of this Design Guide

The provisions of the District Plan and the Objectives and Policies of the Proposed Auckland Unitary Plan and any Local Area Plan will determine which sites are available for further subdivision in the foothills of the Heritage Area.

Step 2 – Context and Site Analysis see pages 13 - 17 of this Design Guide

Develop an understanding of the general character and qualities of the area and what the local people care about. Identify the attributes of the site and its immediate environs that need to be recognised and integrated into your design through the analysis of the site and local context. Refer to the Natural Area and Overlay Maps of the District Plan, Proposed Auckland Unitary Plan and any relevant Local Area Plan to assist in identifying local features.



Step 3a – Subdivision Design see pages 18 – 38 of this Design Guide

With the benefit of the context and site analysis plans it will be possible to explore options for subdivision and building projects on the site. With reference to this design guide, District Plan, Proposed Auckland Unitary Plan and any relevant Local Area Plan consider the layout of lots, location of building platforms, appropriate roadscape treatments and the design and appearance of driveways and infrastructure.

Step 3b – Building Design see pages 18 – 38 of the Design Guide

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, District Plan, Proposed Auckland Unitary Plan and any relevant Local Area Plan consider the location of the building platform (if not prescribed in the subdivision consent), the design, scale and appearance of buildings and associated infrastructure.

Step 4 – Pre-Application meeting with Council

Council encourages landowners and designers to meet with staff to discuss proposals at an early stage. 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 both time delays and increased costs.

Step 5 – Prepare the resource consent application

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



STEP 1 : SELECT A SUITABLE SITE



AUCKLAND COUNCIL DISTRICT PLAN (WAITAKERE SECTION) (THE DISTRICT PLAN)

Management of the effects of people's activities on the natural environment, features of West Auckland including the bush, trees, land and landscape, rivers, streams, lakes and the coast, is carried out through rules based on various "Natural Areas" in the District Plan. These 'Areas' are illustrated on the **Natural Areas Maps**.

Management of the effects of people's activities on other people, and the built environment is carried out through rules based on various "Human Environments." These 'Environments' are illustrated on the **Human Environments Maps**. The District Plan includes rules which require certain activities, such as vegetation removal, earthworks and new buildings to be subject to resource consent applications. This allows the effective management of these activities and the potential adverse effects that can result.

When resource consents are required, applicants need to consider and respond to the relevant objectives of the Waitakere Ranges Heritage Area Act. Applicants will need to demonstrate that the requirements of the Act, District Plan and the relevant objectives and policies in any Proposed Plan have been satisfied when they formulate their proposals and submit plans for Council to approve. The design guide provides practical advice to assist landowners and design professionals in achieving these requirements.

THE AUCKLAND PLAN

Adopted in 2012, the Auckland Plan (also known as the Spatial Plan) is the strategy to make Auckland the world's most liveable city. Section 18 of the Waitakere Ranges Heritage Area Act identifies that the Spatial Plan's provisions must not be inconsistent with the Act's purpose or objectives. Consequently, the Spatial Plan seeks to protect the Waitakere Ranges Heritage Area as a low density bush living, coastal and foothills rural area by containing urban Auckland at its boundaries.



Figure 2 Extracts from the Natural Environment and Human Environment maps

THE PROPOSED AUCKLAND UNITARY PLAN

The Proposed Auckland Unitary Plan (PAUP) is the first combined resource management plan for Auckland and once operative, it will replace the current Auckland Regional Policy Statement, four Regional Plans, and seven District Plans.

The PAUP seeks to give effect to Chapter 7 of the Auckland Plan which identifies the Waitakere Ranges Heritage Area as an outstanding natural feature and landscape that contains significant coastlines and ecosystems. This is reflected by the PAUP's regional objectives, zone, overlay and precinct rules which seek to ensure that settlement patterns continue to recognise the features of the Waitakere Ranges Heritage Area. This includes managing the immediate and cumulative landscape effects of development within the Waitakere Ranges Heritage Area, while also providing for its protection, restoration and enhancement as an outstanding natural feature and landscape.



LOCAL AREA PLANS

The Waitakere Ranges Heritage Area Act provides for the preparation and adoption by the Council of a Local Area Plan (LAP) for a local area that is within its district and the Heritage Area. LAPs are developed by the Council and the community working together. Local Area Plans have been prepared by the Council for Oratia, Waitatarua, Opanuku / Henderson Valley and Muddy Creeks areas.

Local Area Plans set out the extent and nature of existing heritage features within the boundaries of the LAP and identify long term objectives in relation to the future amenity

and character of the area. The LAP then sets out objectives (goals), policies and actions for achieving that desired amenity. For example, the protection of ecosystems (a heritage feature) might be achieved through a combination of Council / community restoration projects, conservation covenants, and monitoring. Together these actions combine to enhance the area.

Contact Council on (09) 301 0101 to find the LAP that applies to your local area.



CHOOSE A SUITABLE SITE

Identify sites with characteristics better able to absorb development, which include:

- flatter areas: lower spurs, terraces, toe of hill slopes;
- areas of low visibility from public places;
- areas with backdrops, and / or large numbers of trees and vegetation;
- landscapes where a variety of activities occur;
- areas where productive land use is marginal;
- areas where there are existing buildings and community amenities;
- areas where there are existing transport connections;
- areas that can accommodate on-site water collection, stormwater, grey water and waste water treatment or have access to existing infrastructure.

Characteristics of land less able to accommodate or absorb development include:

- landmark sites;
- highly visible sites i.e. dune tops and ridgelines;
- steep slopes requiring prominent earthworks;
- areas recognised as having special significance; cultural, historical or ecological;
- sites traversed by major overhead or underground services or infrastructure;
- areas prone to flooding, erosion and instability.





STEP 2 : CONTEXT & SITE ANALYSIS



LANDSCAPE CONTEXT

The foothills of the Waitakere Ranges are a complex mix of ridges and valleys, pasture, orchards, vineyards, bush remnants in gullies, shelterbelts and regenerating bush on the higher slopes. Expansive views of the rural landscape are available from many public roads on ridgelines and through property boundaries defined by visually permeable fencelines. Roads are predominantly sealed with metal shoulders and drainage swales. Lighting levels are low, with street lights typically found only at intersections.

THE TWO FOOTHILLS LANDSCAPE TYPES

LOWER FOOTHILLS ▼

Those areas of the foothills where the relationship with the Ranges is not as strong are generally lower, less steep and display fewer or more scattered patches of remnant native vegetation. Despite being less connected with the Ranges themselves, these areas display the strong rural characteristics of foothills, such as elevation and a landform clearly connected to the Ranges, with small pockets of remnant native vegetation, in some instances extending up through the Upper Foothills to the Ranges. Rural activities such as grazing, orcharding and vineyards are extensive.

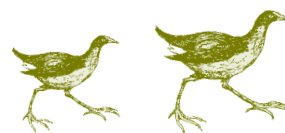


UPPER FOOTHILLS ▼

The Upper Foothills contain many of the characteristics of the Ranges where native vegetation is both extensive and markedly dominant. However, the extent of buildings, particularly of residential buildings, within bush clad slopes is generally more extensive than in the Ranges. The Upper Foothills are also generally lower than the prominent Scenic Drive ridge. While the 'bush living' areas of Titirangi are typical of these Upper Foothills areas, there are also areas with very much less native vegetation within this landscape type. These include the upper parts of the Opanuku and Oratia Valleys where grazing and horticultural landuses of the past saw extensive clearance, particularly of the flatter ridge tops. These areas are typically visible from a wider area.

Despite the absence of extensive forest cover, the elevation and aspect, high up and close to the Scenic Drive ridge with valleys facing primarily eastwards, mean these areas display a strong connection with the Ranges behind, particularly when seen from the east.

N.B. Appendix 1 includes a map which shows the geographical extent of the Lower & Upper Foothills landscape areas.



IDENTIFY AND ANALYSE THE WIDER CONTEXT

Careful consideration of the wider context and the site's place within it can add value to a subdivision or building project and ensure a good fit with the surrounding rural area. Identifying and analysing the notable features and characteristics of the wider area and the pattern of surrounding buildings is an important part of the process. The main factors to consider are:

- Identification of the local features, including:
 - landscapes and landforms (slopes, ridgelines, valleys, coastal cliffs etc);
 - significant views and visibility of different parts of the site;
 - orientation and aspect;
 - wind direction and other climatic conditions;
 - aquatic systems such as wetlands, streams, rivers, vegetation and the water catchment;

- heritage and cultural features; and
- water resources.
- The pattern of development in the wider community, including:
 - arterial roads, local roads, actual and potential cycle, bridleway and walking routes;
 - opportunities to connect direct routes;
 - open spaces, parks, and linkages to the Regional Park;
 - distinctive communities, buildings and architecture;
 - proximity to settlements, schooling, community facilities;
 - character and landuses of the surrounding area; and
 - existing infrastructure.

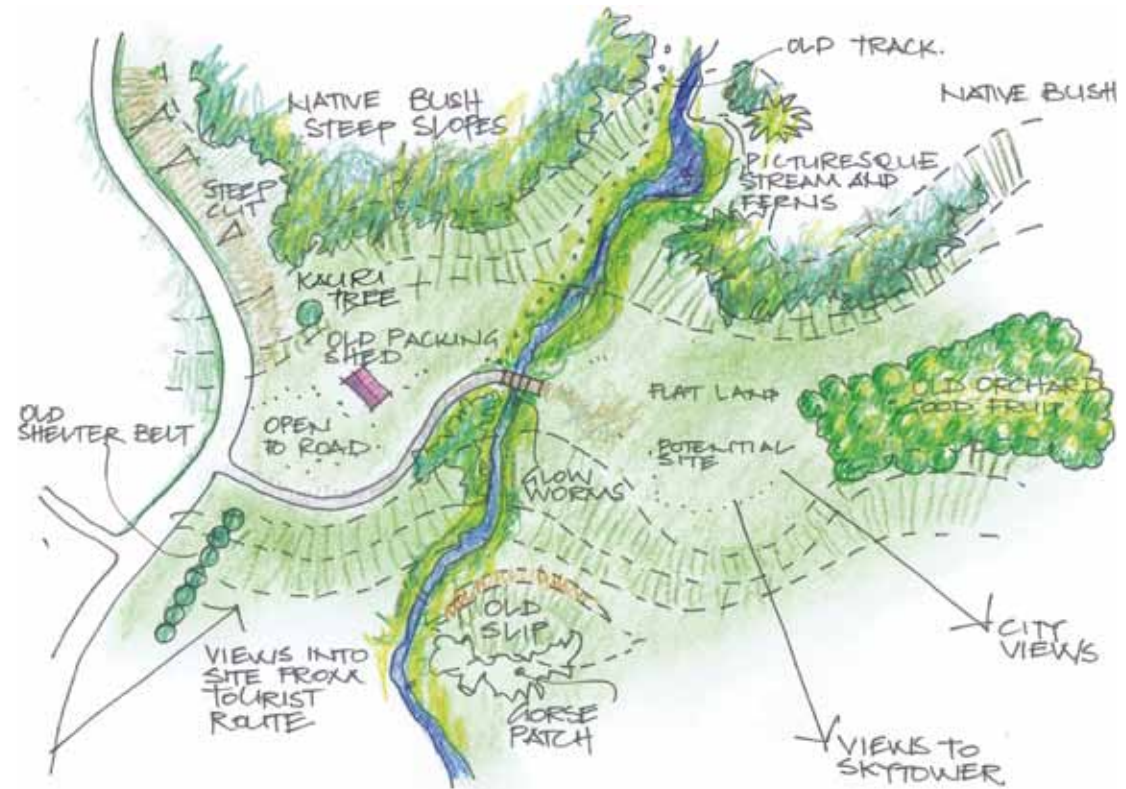


ANALYSE THE SITE

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

- heritage features;
- landscape views and vantage points;
- visibility of parts of the property from other places, particularly public places;
- hazards including relevant geotechnical and flooding information;
- landforms and topography;
- land use activities, including farming and horticulture patterns;
- streams, riparian areas and wetlands and stormwater flow patterns;
- native fauna and flora;
- weeds and pests;
- infrastructure and access to roads;
- archaeological sites, heritage structures, heritage trees and waahi tapu;
- existing buildings and structures;
- fence lines and boundaries;
- groundwater levels;

- solar orientation;
- wind and climatic considerations;
- ground contamination;
- local sources of noise, dust, odour, vibration; and
- unique character and amenity.



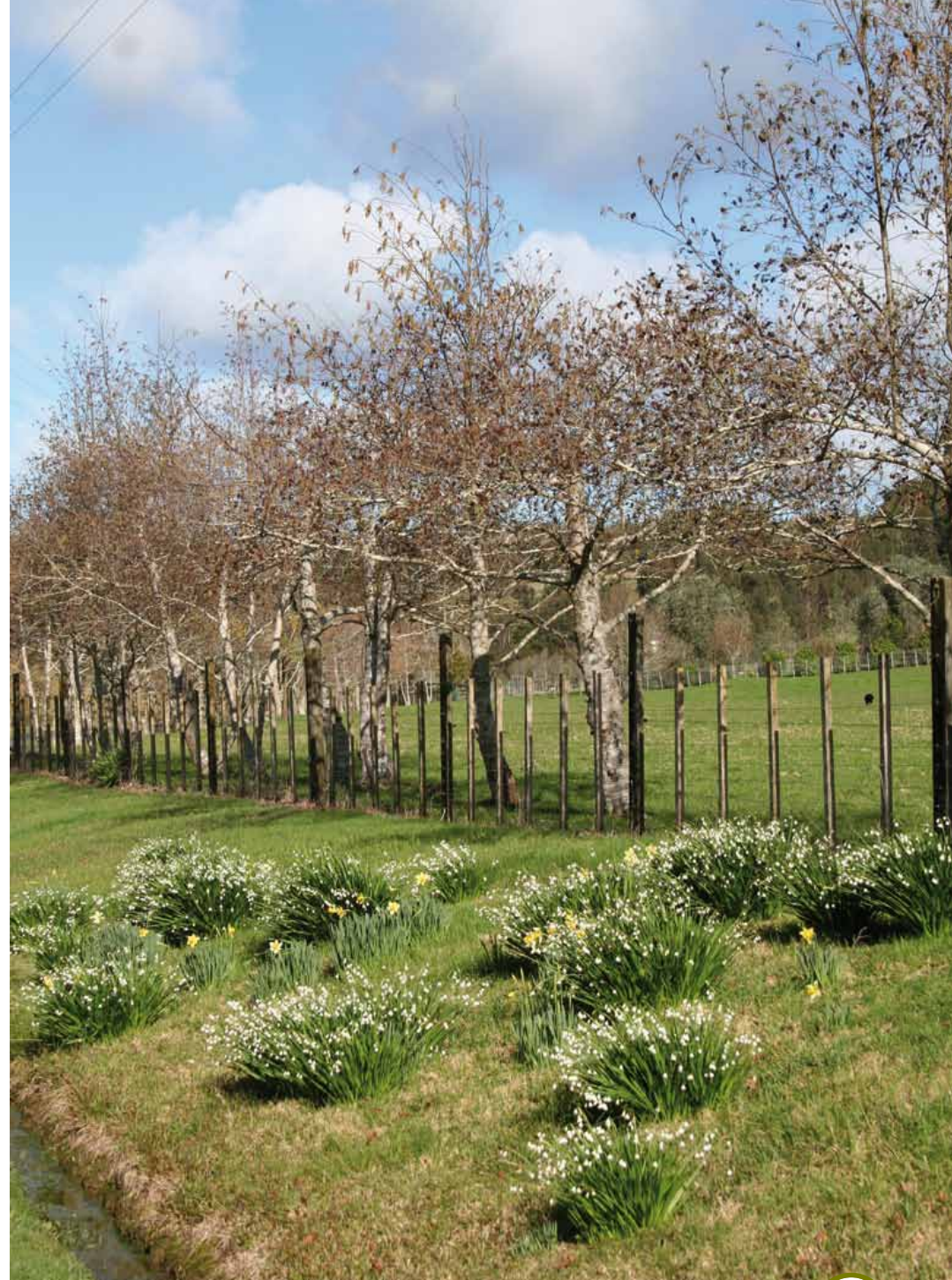
BENEFITS OF THIS APPROACH

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 rural environment;
- identifies issues 'up-front' before spending time and money on problematic responses;
- enables innovative design that avoids the unnecessary loss of landform and natural features; and
- promotes building projects that retain the appearance of the dominant landform and that visually link with the surrounding landscape.

Win-Win outcomes:

- Well designed proposals are more likely to receive resource consent in a timely manner.
- Opportunities to live in the rural area are provided that protect and enhance the productive potential without adversely affecting rural character.
- Rural amenity conflicts between activities are avoided.
- Subdivisions or buildings that make a positive contribution to existing community amenities are created.
- Ongoing costs related to the provision of infrastructure are minimised.
- Development is accommodated while protecting the heritage features of the Heritage Area.





STEP 3 : SUBDIVISION AND BUILDING DESIGN



CORE DESIGN PRINCIPLES

The core design principles provide a quick reference guide to best practice for both subdivision and building projects. They respond to the key issues and opportunities that need to be addressed in the design of rural subdivisions and building projects which significantly influence the quality of the rural area. These principles are illustrated in more detail on pages 19 - 38.

Create	suitable subdivision and site layouts. Some landscapes and locations have greater ability to absorb development than others. Rural subdivisions should complement the local identity of the foothills and respond to landform and other site and surrounding characteristics. Site layouts should respond to views, aspect, shelter and visual integration into the rural landscape. (pages 19 – 21).
Integrate	natural elements, patterns in the landscape, ecological systems and processes such as vegetation, landforms and water bodies into the subdivision layout to enhance the existing character, create identity and maintain and enhance valued and established natural ecosystems. (page 22).
Enhance	existing natural elements and landscape patterns with a comprehensive planting, weed and pest management strategy, providing a broad-scale framework that accommodates development while improving ecology. (pages 23 - 25).
Retain	the productive potential of the land. Avoid locating buildings in a manner which undermines the site’s potential to be used for a variety of rural activities. (page 26).
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 subdivisions and building projects. (page 27).
Connect	with the surrounding environment and community through walkways, cycleways, bridleways and the roading network to provide accessibility and choices which can reduce travel distances and vehicle emissions. Connect publicly accessible open spaces and reserves to the wider recreation network. (pages 28 - 29).
Reduce	the impact of infrastructure to help maintain the long-term quality of the rural environment and create rural communities that are more resilient and self reliant. Consider the scale, materials and detailing appropriate for the rural environment, when designing roading and driveways. Promote the use of low impact water supply, waste, grey and stormwater treatment options. (page 30).
Avoid	unnecessary earthworks, 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 31 - 32).
Complement	the rural character of the foothills in the design and location of structures including buildings, water tanks, signage and fencing etc. The style of these structures has the potential to undermine rural character if it is borrowed from an urban or suburban context. (pages 33 - 38).

CREATE SUITABLE SUBDIVISION AND SITE LAYOUTS

The location, layout, and lot density of a subdivision in the foothills area can influence the landscape character by affecting the proportion of structures to open space. This in turn determines whether development is subservient to natural features or dominates the landscape. These factors can also influence the area of land available for productive landuses and potentially undermine the rural character of the foothills.

Given the effect that subdivision and associated development can have on the rural area it is essential that careful consideration is given in the design process to the factors that determine the character of the whole subdivision and of each individual site.

When designing a subdivision layout, avoid creating sites that would produce a repetitive, suburban pattern of houses and gardens.

When designing rural lot layouts, the aim is to ensure that new development appears visually integrated and sympathetic with its surrounding landscape rather than imposed upon it. It is possible to construct a building that not only contributes to the character of the landscape but which sets high standards in terms of siting, location, and design. Some sites will be less sensitive to change and not all the siting issues will be relevant.

HOW to create a suitable lot layout:

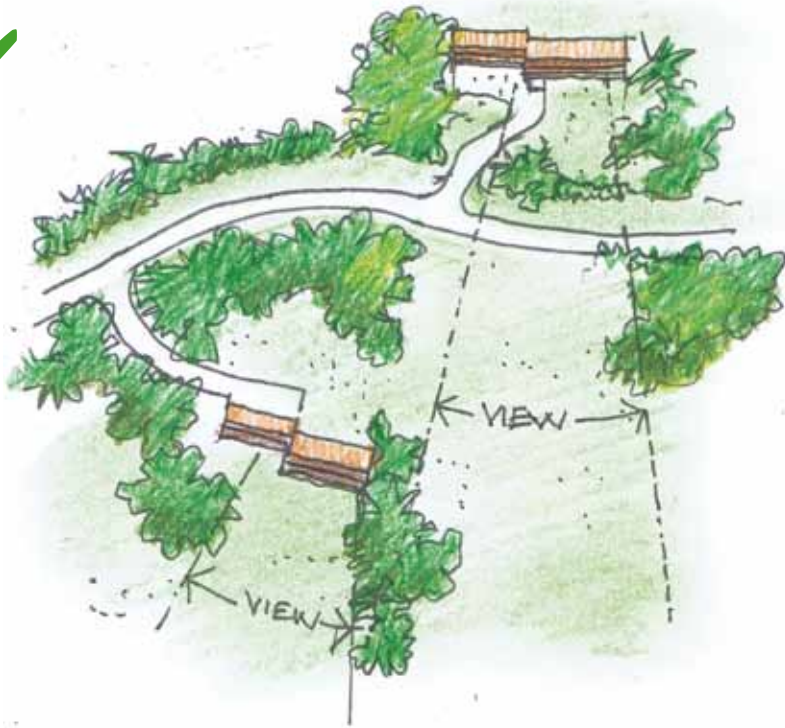
- Avoid locating building platforms that would contribute to ribbon development along roads



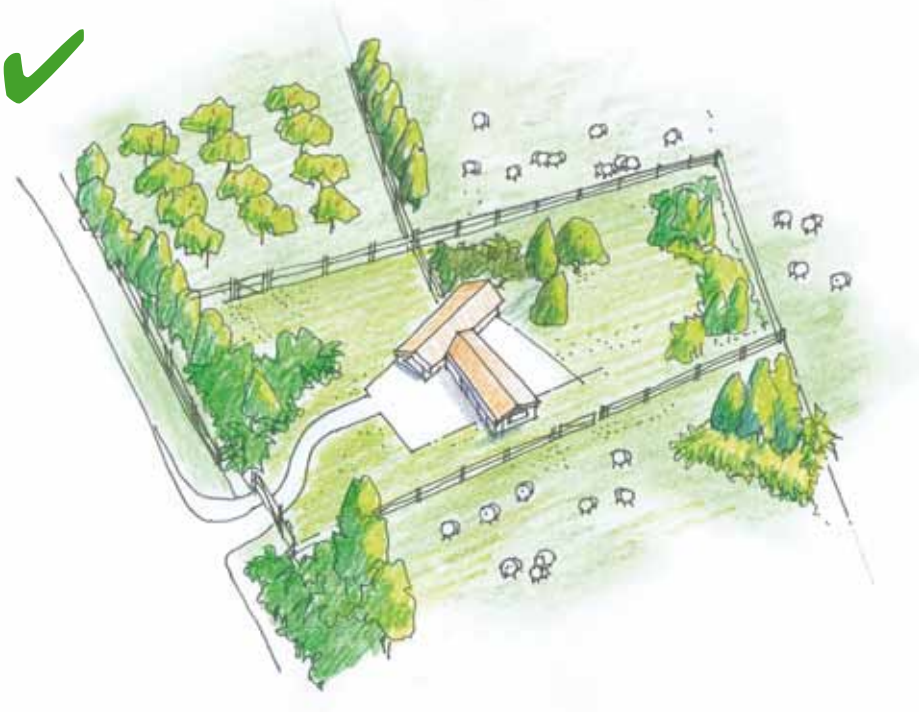
HOW to create a suitable site layout:

- Locate the building where natural features or the presence of trees and mature planting will minimise the visual impact of a building in the landscape.
- Avoid breaking the skyline or waterline when the building is viewed from roads and neighbouring properties.





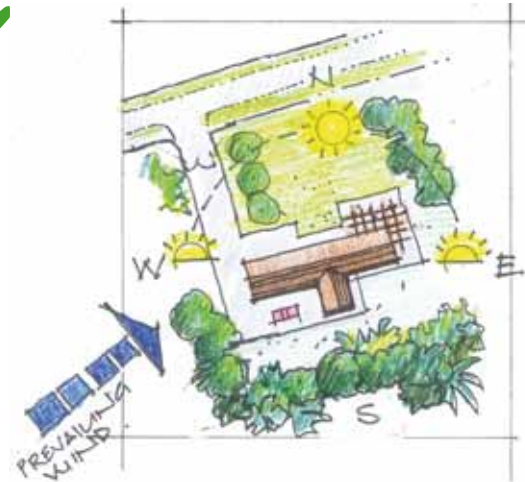
- Locate buildings to respect the privacy of neighbours and minimise obstruction of their views;



- Locate grazing, orchards, vineyards and other rural landuses close to the road, to reinforce the rural character.



- Ensure buildings are located and orientated to maximise passive solar heating gains and minimise exposure to prevailing winds



INTEGRATE NATURAL ELEMENTS, LANDSCAPE PATTERNS AND NATURAL PROCESSES

Integrating natural elements such as vegetation, landforms and water bodies enhances the character and should provide the framework for buildings, while providing benefits in terms of maintaining and enhancing established natural ecosystems.

HOW to integrate natural elements, landscape patterns and natural processes:

- retain and restore watercourses, streams and wetlands by planting stream banks and wetlands in suitable indigenous species and fencing from stock;
- retain existing vegetation, including mature exotic vegetation;
- seek the assistance of an ecologist or talk with the Council to identify the most appropriate method to restore a stream or wetland;
- use planting to connect areas / remnants of native bush, and enhance watercourses and wetlands to form wildlife corridors;
- design layout and building locations around vegetation and topography and avoid encroaching on important ecological systems; and
- eradicate weeds and pests.

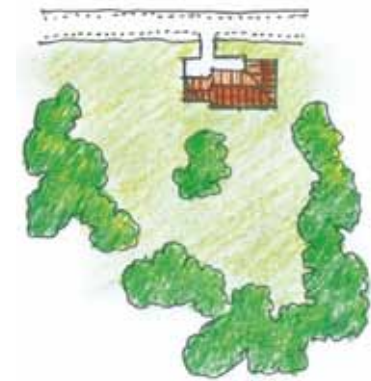


ENHANCE EXISTING NATURAL ELEMENTS AND PATTERNS

Planting and vegetation patterns can have as much impact on rural character as buildings. Comprehensive planting can provide a broad scale framework that absorbs development and enhances ecological systems. On the other hand, the foothills also contain linear planting patterns such as vineyards, orchards and shelterbelts which are part of the rural character. Avoid planting which has a suburban scale and character.

HOW to enhance natural elements and patterns with a comprehensive planting strategy:

- analyse the surrounding vegetation patterns and consider extending / reinforcing existing groups of trees, areas of natural vegetation, or shelterbelts (where they exist) so the subdivision or building project ties in with the surrounding landscape;
- make the most of opportunities to restore ecological systems, including degraded watercourses and wetlands;
- retain existing vegetation to provide context for developments and a level of maturity. In particular, retain areas of indigenous vegetation for their ecological value;
- design a comprehensive planting plan across the entire subdivision, of a scale that relates to the underlying and surrounding landscape, with species characteristic of the landscape type and suitable for the site conditions. Retain a sense of spaciousness and openness that is appropriate to the type of landscape in the rural area;



- use existing vegetation and planting to provide a context for and to anchor development;



- plant to follow topography and water bodies and avoid planting along boundary lines especially where they cut across hill faces;



- if planting areas of revegetation, design the boundaries of the planting area to follow the landform and not conflict with the natural pattern;



- use eco-sourced plants and plants which are beneficial to the location. Eradicate invasive environmental weeds from the site and avoid using them in proposed planting (refer to Regional Pest Management Strategy (RPMS)).

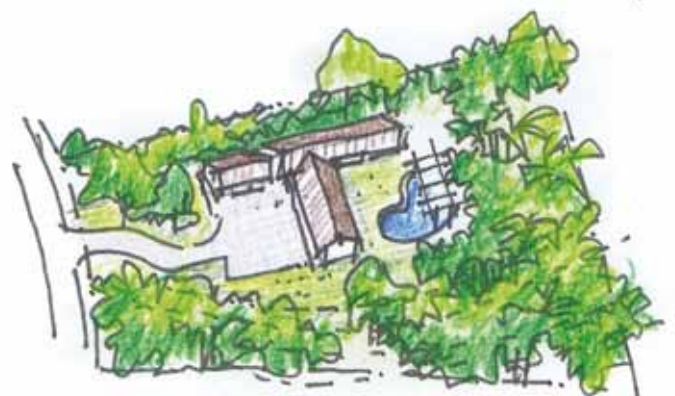


HOW to enhance site development with planting:

- use native plants in natural, informal patterns compatible with the existing vegetation;



- integrate accessory buildings and swimming pools into the site layout with vegetation to screen or soften.



- use vegetation to control erosion on steeper slopes;



RETAIN THE PRODUCTIVE POTENTIAL OF THE LAND

Historically rural subdivision has resulted in division of the land into lifestyle blocks with large gardens filling the space between dwellings. This can result in inefficient use of the land, maintenance problems for landowners, and the isolation of dwellings resulting in a lack of community. One approach to remedy this is to locate dwellings in a manner that retains an expansive area of the site available for rural activities. Other approaches where several lots are proposed, is to cluster dwellings together to retain larger areas, or to create a cluster of small lots for residential development and retain a large balance lot for rural activities.



HOW to retain the productive potential of the land by creating appropriate subdivision layouts:

- create clusters or groups of buildings, with smaller lot and site coverage sizes, set within the contours of the land avoiding ridge tops, to enable large balance lots to be created. This could also lead to reduced development costs from shared driveways and services.
- retain balance lot(s) of an appropriate size and in appropriate locations, for each landscape type, for productive and/or ecological purposes.



PRESERVE CULTURAL HERITAGE

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

HOW to preserve the cultural heritage of the site

- access the heritage register in the District Plan and the Cultural Heritage Inventory from Council to help identify specific cultural heritage sites;
- the local library has valuable resources for research into the history of a site and its surroundings;
- consult with the local iwi and Council officers 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 sites, and so it does not compromise the setting or the historic landscape connections of sites of cultural heritage.





CONNECT ROADS, WALKWAYS, CYCLEWAYS AND BRIDLEWAYS

Transport corridors have multiple functions that need to be accommodated within a rural context. Any new development should consider the provision of connected recreation routes (pedestrian, cycleways and bridleways) into and around the site, as well as opportunities to connect into broader scale recreation networks such as the walkways through the Waitakere Ranges Regional Park and proposed Foothills Walkway Concept.

Any proposed works to the existing road network should be carried out in a way that is consistent with the surrounding rural character, which in turn will help determine the speed environment of that road. Urban infrastructure should be avoided as it will undermine the rural character of the foothills.

HOW to ensure roads and accessways are safe, well connected and integrated into the landscape:

- implement methods and approaches so that traffic speed is lowered and consistent with that of the rural area, e.g. roads that are perceived as narrow or have 'side friction' can slow speeds;

- provide for a range of transportation options, including pedestrian, cycleways and bridleways, considering compatibility of uses i.e. separate bridleways from vehicle carriageways;
- ensure safe and efficient transportation function, this should complement traffic calming methods and lower traffic speeds;
- connect publicly accessible open spaces with roads and/or walking, cycling and horse riding tracks, ensuring these spaces are visible to and protected by passive surveillance from the surrounding community;
- use materials that reflect rural design standards, avoid the use of kerb and channel, use chip seal or loose road metal;

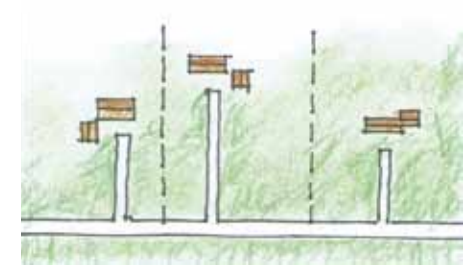
Auckland Transport is presently compiling a design guide for transport infrastructure in the Waitakere Ranges Heritage Area which will complement the Auckland Transport Code of Practice. Further information regarding the design guide can be obtained by contacting Auckland Transport on (09) 355-3553.



- aligning roads to follow the contours of the topography, avoiding prominent hill faces and ridges, will help to ensure that the development fits well into the rural area and minimises the need for earthworks;



- restrict entrances off public roads to reduce the apparent level of development and retain spacious rural character.



- provide swales for stormwater drainage;



- maximise opportunities to preserve and enhance access to rivers, swimming holes and native bush, including walking and horse riding trails;
- avoid walled and gated entrances that suggest private enclaves.



REDUCE THE IMPACTS OF INFRASTRUCTURE

Subdivision in rural areas requires the provision of on-site water supply and waste water treatment and disposal systems. Above ground services such as telecommunication and electricity lines can introduce urban clutter into the landscape and draw attention to development, and while secondary structures such as water tanks are typical rural features they can become dominant if not located sensitively.

HOW to reduce the impact of infrastructure:

- facilitate on-site water supply and waste water treatment and disposal within the subdivision layout;

- facilitate on-site infiltration of stormwater from roads and other impermeable surfaces through swales;
- consider on-site green waste composting;
- where possible, put services underground, or consider aligning them parallel to existing shelterbelts or so they have landform or other vegetation as a backdrop.



AVOID UNNECESSARY EARTHWORKS

Earthworks for subdivision and development can have substantial and cumulative effects on the environment, silting streams and estuaries, and altering catchments. They can significantly alter topography and result in the loss of vegetation, which would otherwise enhance the character and identity of the subdivision. Earthworks in sensitive areas that are easily eroded (such as steep slopes) and on visually prominent sites are of particular concern. Extra care should be taken in locating building platforms in these environments.

Earthworks and retaining structures can be expensive and can have adverse effects on 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 the impact of earthworks:

- avoid unnecessary earthworks, limit earthworks (volume and area), avoiding disturbance to the natural landform and adverse effects on aquatic environments, and avoiding the need to dispose of large volumes of spoil to cleanfill sites;



- identify naturally occurring shelves or the gentlest part of a slope to locate building platforms;
- design the layout and location of roads, driveways and building platforms to follow the lie of the land;



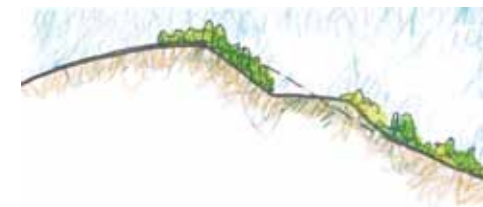
- avoid subdivision that results in significant earthworks on each lot to construct dwellings and driveways;



- on steeply sloping land consider suitable split level building designs;



- where cuts and fills are required, these should be shaped to integrate with the surrounding natural landform;
- avoid carrying out earthworks in proximity to watercourses, by following the landform and creating a buffer between earthworks and natural watercourses.
- retain the site's topsoil for productive purposes.



COMPLEMENT THE RURAL CHARACTER

The design and location of buildings and ancillary structures can have a considerable impact on the rural landscape. In cities, buildings are the focus of attention. In rural areas, however, it is the land and vegetation forms which dominate. Intricate or large scale building designs may be appropriate in urban or suburban streets full of buildings, but will often look out of place in the open, spacious, simpler rural landscape.

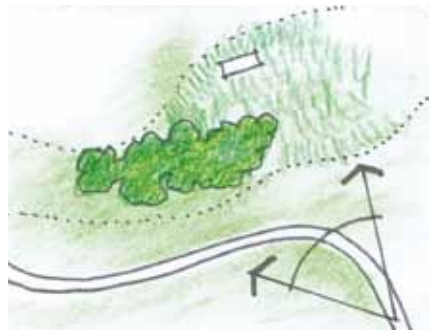
There are a number of techniques by which buildings can be made more sympathetic to their surroundings. Pitched roofs, verandahs and lean-tos are perceived as part of our rural

heritage. Curved roofs have, in some landscapes, more recently become part of the rural vernacular.

Buildings are more likely to reflect elements and patterns of the surrounding natural character, through the use of local natural materials.

HOW to complement the rural character in the design of subdivisions:

- don't introduce suburban design standards into the roading layout;
- set back houses from road frontages, avoiding screen planting adjacent to roads where this does not fit the existing planting patterns in the area;
- consider locating buildings at the base of the hill if the site is flat and backs onto the foothills. The hill will act as a backdrop to the buildings which will help to retain the open rural character and land for productive and or ecological habitat enhancement;
- locate buildings so the landforms and trees provide shelter from wind and rain and help integrate or absorb the development within the landscape.



HOW to complement the rural character in the design of buildings:

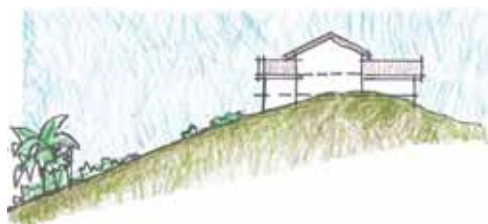
Form and scale

- design buildings of an appropriate form, scale and style to complement the rural 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 size should be in scale with its surroundings. Its mass should relate proportionately to the landscape setting and site size. Large buildings are usually incompatible within a small site.
- Where garages are attached to the house, make them subservient to the scale of the rest of the building.



Siting

- align driveways to follow the natural contours of the land and to blend with the natural setting, curving around site features and avoiding straight lines;
- design and locate buildings to maintain a low profile, avoiding prominent locations such as the tops of ridges;
- position buildings so that they are set well back from the road and their backdrop is land or vegetation;
- align buildings with the contour of the land, not the boundary fence.



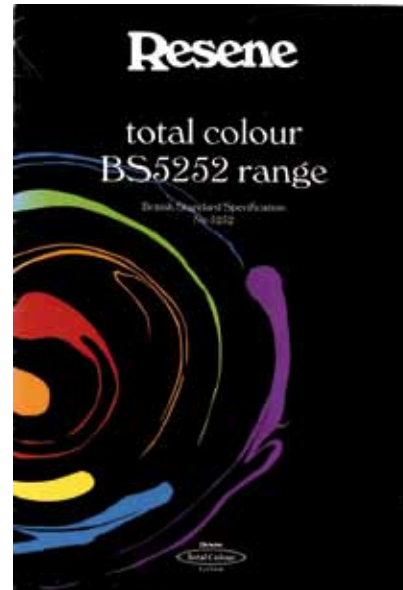
Appearance

- use natural colours and materials, and materials associated with the rural environment such as corrugated iron and timber;
- avoid elaborate, urban designs and materials and source materials locally, eg. local aggregates, timber and stone;
- use permeable materials (gravels and grass) to replace impermeable materials (concrete and paving);
- on sloped sites, step buildings with the ground, with lower floors close to ground level and upper floors with a smaller floor area;
- on sloping sites, roof ridgelines should generally be parallel with contour lines;
- design buildings for passive solar gain and explore opportunities for environmentally friendly technologies.



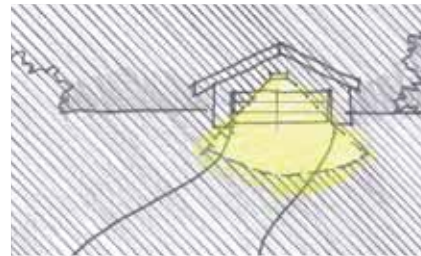
Reflectivity

- Use building materials, in particular roofs that complement the rural and natural character in terms of texture and colour, and do not cause glare and excessive reflectance;
- make use of materials and colours of lower reflectivity to aid in the ability for built elements to be absorbed into the landscape;
- Use a reflectivity level of between 0 to 40% for exterior walls and 0 to 25% for roofs chosen from Greyness Groups A, B or C (as defined in the British Standards BS 5252 - Standard Specification Colour Range);
- Consider the ways in which colour can be the expression of individuality, but can also affect how recessive or dominant buildings are in the landscape.



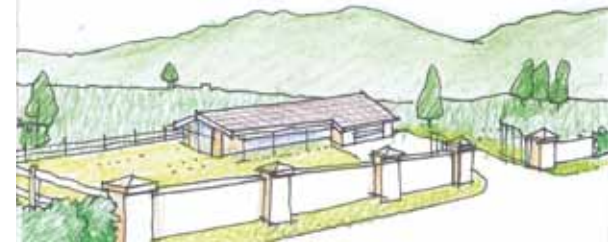
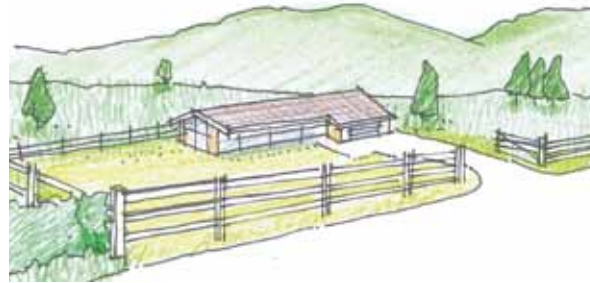
Lighting

- minimise site lighting by avoiding general area illumination, wall washing and unshaded light sources that shine onto neighbouring properties or the road;
- keep decorative lighting, such as uplighting of trees, to a minimum and out of sight of neighbours and road users.

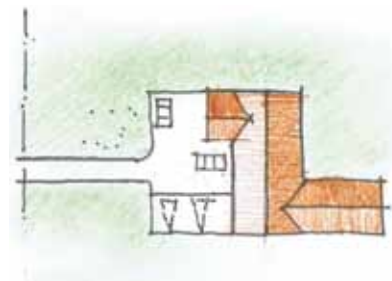


Boundaries / roadscape

- blend entries, gates and fences with the existing rural character by using a simple range of materials that are common in the area;
- the style of gates and fences can undermine rural character if they are borrowed from urban or sub-urban context;
- avoid elaborate feature gateways and letterboxes;
- use planting to integrate buildings into the surrounding landscape;



- minimise the visual impact of driveways, parking areas, garages and carports;



- set gates and entranceway fencing back from the road and blend with the existing landscape;
- fence heights should be similar to rural farm fencing;
- in areas where wire fencing dominates, it is better to use permeable fencing styles and hedges rather than solid walls;



- use signage only when necessary and keep to a small size;
- make signs simple and use natural and local materials.





STEP 4 : PRE-APPLICATION MEETINGS

Once you have a preliminary layout for your subdivision or building project within the foothills, 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 both time delays and increased costs. Pre-application meetings have many benefits, particularly to provide an opportunity to discuss:

- the proposed development and the Council's strategic approach to the Heritage Area;
- heritage features of the site and surrounds;
- what information will be required with the resource consent application;

- requirements of the District Plan, the objectives of the Act, this design guide and the criteria by which the application will be assessed, and initial feedback on any schematic plans provided;
 - 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;
 - the likely level of any financial or development contributions;
 - the methods that will be used to process the application;
- and to arrange a site visit.





LOCKING IN QUALITY

There are a number of mechanisms available to the Council, landowners and interested parties (through consultation or submissions) to ensure that the design elements of the subdivision or residential development are implemented and maintained into the future.

RESOURCE MANAGEMENT ACT

The Council may grant consent to subdivisions and building projects on the basis of their consistency with the District Plan and other matters considered by the Council to be relevant. This includes the ability of the subdivision or building project to meet the design recommendations of this guideline. (Section 104(1)(c) of the Act).



The Council can impose conditions on consents it grants requiring, for example, the:

- approval of engineering works (detailed design of earthworks, roads, and infrastructure);
- implementation of the scheme plan and design including planting;
- consent notices to register relevant requirements on the titles of new lots in perpetuity;
- maintenance and monitoring of infrastructure, including obligations for a set period after the release of the Section 224 Certificate;
- legal and physical protection and restoration of areas of native vegetation, wetlands and habitats, including fencing, weed management and pest control.



CONSENT NOTICES

Consent notices can be registered on the titles of new lots to identify information relevant to the development of that lot and can include conditions which must be met on an ongoing basis. Traditionally consent notices have been used to inform landowners of geotechnical constraints. However, they are also increasingly being used to provide for the ongoing maintenance of onsite infrastructure, the protection of natural features, vegetation and the management of buildings on a site.

Consent notices can be used to:

- require the development of waste water treatment plants and their continued maintenance;
- legally protect features on the site from inappropriate earthworks, animal grazing or development, including vegetation and water bodies;
- ensure setbacks from hazards and minimum floor levels;
- manage the height and location of buildings on a site.

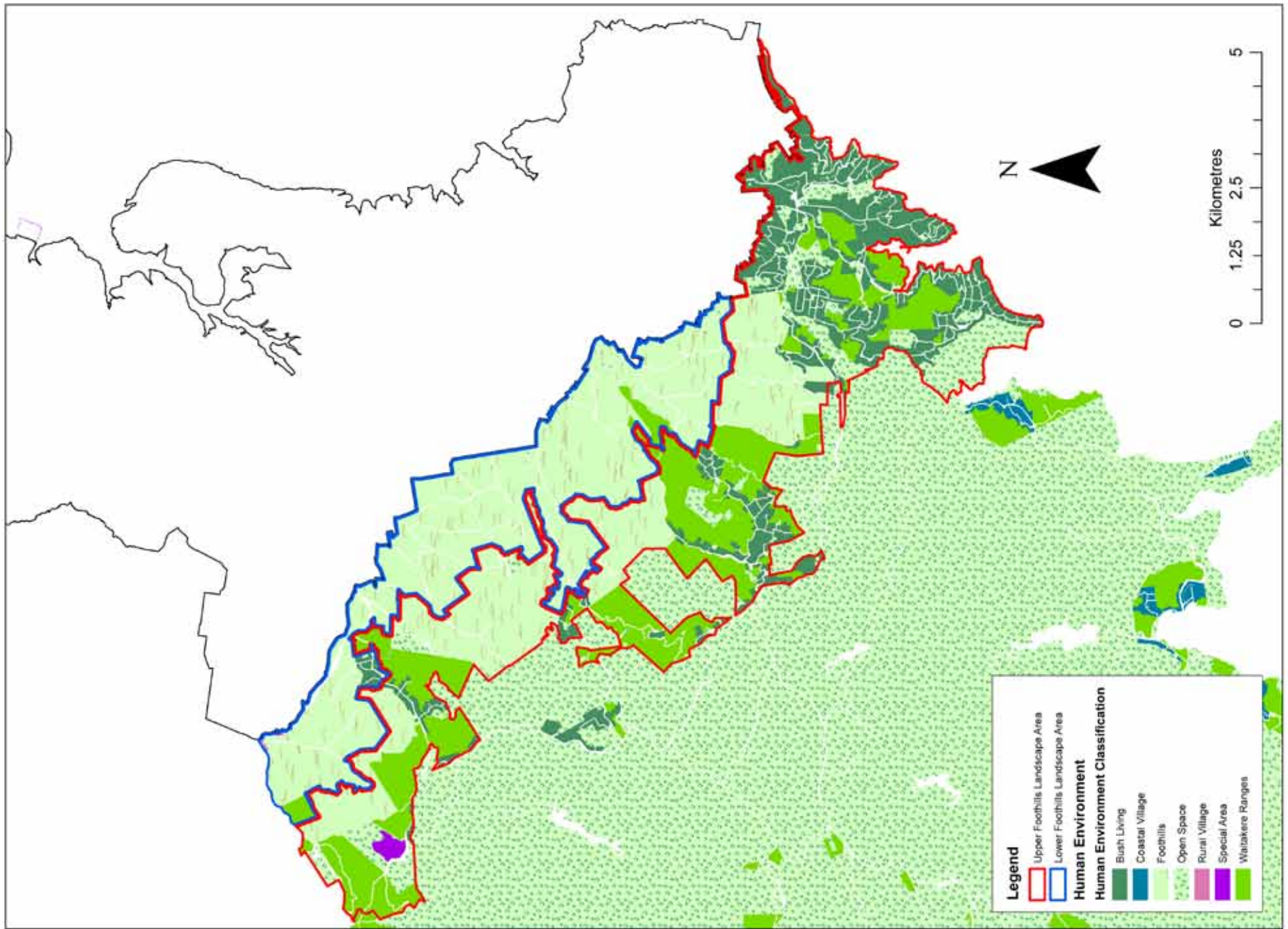
COVENANTS

Covenants and encumbrances are private legal mechanisms, used by many developers to lock in the quality of their subdivision design or residential development. These are registered on the titles of the new lots and can cover a wide range of obligations, including standards and guidelines for:

- the design and location of buildings. Typically these guidelines can be very brief, requiring dwelling design to comply with minimum architectural / building quality standards;
- the preservation and protection of vegetation, native animals, threatened species, landforms and water bodies;
- fencing design to preserve open character.



APPENDIX 1: LOWER AND UPPER FOOTHILLS LANDSCAPE AREAS





**Auckland
Council**

Te Kaunihera o Tāmaki Makaurau

