landscape management

GUIDELINE TWO

RURAL LAND USE ACTIVITIES

2006

DUNEDIN CITY COUNCIL
Kaunihera-a-rohe o Otepoti
CITY PLANNING

LANDSCAPE MANAGEMENT GUIDELINES

This guideline is the second of a set of three landscape management guidelines for Dunedin City. The purpose of providing guidelines is to help landowners and developers to integrate land use activities and development into the landscape. Guideline 1 contains information on the Landscape Management Areas identified in the Dunedin City District Plan. Guideline 3 deals with rural subdivision and development issues.

These guidelines can only be of a general nature. Because every site is different, it is not possible to offer specific advice. It is important that each individual site is assessed to determine an appropriate design solution based on site character and the specific development requirements. In some cases it is possible that the effects of the proposed activity or development may not be able to be adequately mitigated and may not be appropriate at all. Where the project has the potential to have significant impact on the landscape, it is recommended that advice from a professional landscape architect is sought.

RURAL LAND USE ACTIVITIES

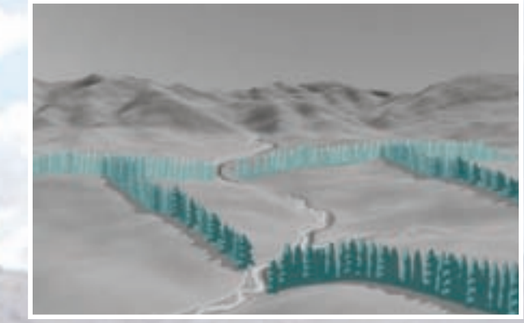
Rural landscapes are the product of many factors. These include natural elements such as the landform, streams, and natural vegetation, and human land use activities such as buildings, fences, roads and plantings. These factors are not static, but change at various rates over time. This means that our landscapes change as well.

Every landscape has its own character based on its particular combination of natural landform and vegetation and the patterns and intensity of human land use. Where land use activities have been planned and designed to recognise and respect the natural patterns and the natural processes at work in the landscape, landscape quality tends to be high. Where this is not the case, both the ecological health and the appearance of the landscape often suffer.

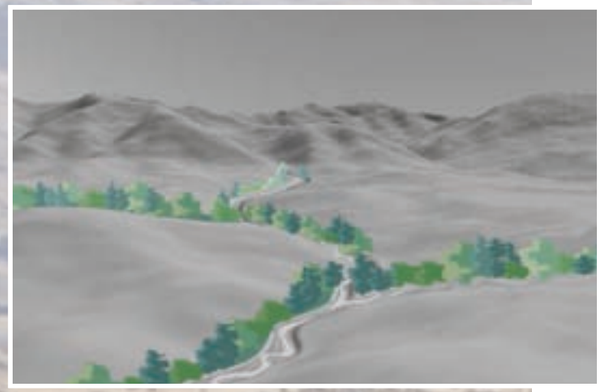
These guidelines outline some general principles of landscape management which will help to promote development which is sensitive to the character of rural landscapes.

Shelter Plantings

Shelter plantings are necessary features of working farms, providing shelter for stock and crops, and in some cases, timber and firewood production. In many instances they contribute to a pleasant landscape. In some cases, however, they are features that detract from landscape character. The following points outline some general principles for shelter plantings so that they are positive features in the landscape.



Shelter planting insensitive to the landform



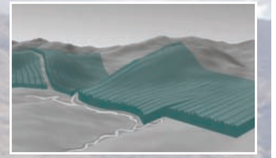
Shelter planting which enhances landscape character

- Reinforce the natural character of the landscape by siting shelter plantings to relate to natural features such as a change in slope or a water course. Avoid shelter plantings which cut across the natural features and patterns of the landscape, and which will block significant views.
- Traditional lineal shelter-belts may not always be the best solution. Group plantings can provide effective shelter and can lessen risks associated with increasing wind turbulence on the downwind side and cold air ponding. Where rows are desirable, their integration with the landscape can be enhanced by linking them with other plantings where possible, and by minimizing regularity by widening out in places.
- Where appropriate, link shelter planting with existing areas of trees. Small disjointed lines of planting should be avoided in favour of unified entities.
- The dark colours and strong forms of exotic coniferous species such as Pine and Macrocarpa make them very visually dominant. The use of other species with rounded forms and softer colours will make shelter plantings easier to integrate with the landscape.
- The use of local native trees helps to promote distinctive local landscape character and has advantages for indigenous wildlife habitat. Avoid adding ornamental trees or shrubs to enhance amenity as these typically look fussy and inappropriate in the scale of the rural landscape.
- Use species which will reach an appropriate height at maturity so that they will not have to be trimmed or hedged. The use of a range of species can help to reduce the visual impact of shelter plantings. Species should be mixed naturally and informally. Avoid use of variegated or golden varieties as these attract too much attention and give an unnatural appearance.
- Avoid using species which are likely to create wilding tree problems e.g. Lodgepole Pine (Pinus contorta), Scotts Pine (Pinus sylvestris), Austrian Pine (Pinus nigra), Douglas Fir (Psuedosuga meziesii) and Larch (Larix decidua). See Rule 6.5.3(v)(c) of the Dunedin City District Plan.

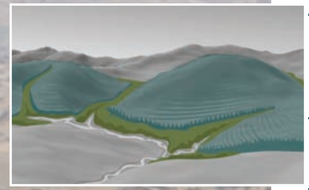
It is hoped that the principles outlined here will provide a useful starting point. If required, further advice can be sought from the Council's Landscape Architect. It is also recommended that City Planning staff be consulted as early as possible before project planning and design is too far advanced. Please direct any enquiries by phone to (03) 477 4000 or by email to planning@dcc.govt.nz. The Landscape Section of the District Plan should also be referred to, and can be accessed on-line at www.cityofdunedin.com/districtplan.

Forestry and Woodlots

Forestry plantations and woodlots are an established part of Dunedin's rural landscape. They are grown for a variety of purposes, including wood production, firewood, shelter, land stability and amenity. In some cases, they are attractive features which enhance the quality of our landscape. In others, however, they can detract from landscape character by disguising the underlying details of the landscape. The following points outline some general principles for integrating woodlots and plantations so that they are positive features in the landscape.



Forestry development insensitive to landscape values



A more appropriate approach to forestry development

- Wherever possible, the edges between forestry and adjacent land uses should be located to reflect the natural landform rather than human-imposed boundaries e.g. a fence line. Planting which recognizes variations in topography will reinforce natural landscape character and is more likely to maximize productivity through being responsive to variations in soil and microclimate. It is usually desirable to avoid planting on prominent skylines as this will minimize the negative impacts on the landscape during the harvesting phase.
- Highly visible forest edges adjacent to roads require extra care. Provide generous margins and plant long term species to provide screening during the harvesting phase. Irregular natural-looking edges responsive to any landform features will help to integrate the forest more than straight lines. Avoid planting where the plantation will block or detract from significant views or shade roads and contribute to problems with ice in winter.
- Where areas of native bush or shrublands remain, these should be retained as far as possible.
- When planting adjacent to watercourses or streams (riparian areas), leave an unplanted margin and allow native vegetation to establish. This helps to protect water quality during harvesting, provides a richer habitat for wildlife, and helps to emphasise the stream or gully as a natural feature. The boundary between the gully and the riparian species should be located to reflect the landform.
- Use contour planting rather than rows running up and down the slope for a more natural appearance. If possible, use a mixture of species rather than just one, to reflect changes in landform, soil or microclimate and to create a more diverse landscape, and richer wildlife habitat. This may also help to reduce the severity of landscape change during harvesting.
- Keep access tracks off conspicuous faces, or as low in the landscape as possible. Avoid firebreaks which do not follow the landform. Live firebreaks of native species in damp gullies are much preferable to artificial-looking cleared swathes.
- Avoid using species which are likely to create wilding tree spread problems e.g. Lodgepole Pine (*Pinus contorta*), Scotts Pine (*Pinus sylvestris*), Austrian Pine (*Pinus nigra*), Douglas Fir (*Psuedosuga meziesii*) and Larch (*Larix decidua*). See Rule 6.5.3(v)(c) of the Dunedin City District Plan.

Buildings

Buildings are typically focal points in the rural landscape because of their contrast with the forms, textures, and colours of landform and vegetation. As such, they can either be a highlight which enhances the landscape, or features which detract from the character of the area. Adherence to the following principles will help ensure that they integrate with the landscape and are not seen as overly dominant features.

Building sited in a prominent position

Building with major impact sited close to the road

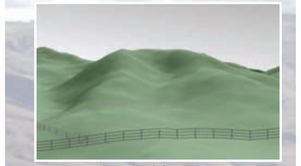
Building sited to integrate with lesser impact and set back from road

- Where possible, site a new building in association with a stronger natural feature e.g. a group of trees. Ensure that it has a backdrop of land or vegetation rather than sky as seen from main viewpoints. Seek to avoid prominent ridgelines, spurs and hilltops.
- In siting, take care to minimize the need for any earthworks and align the building with the direction of the landform. Blend any cut and fill required with the surrounding natural contours.
- Site at a distance from adjacent roads wherever possible to retain the spaciousness of the rural landscape. Take care not to block or detract from any significant views.
- Where other buildings already exist, site the new building to visually relate to the group rather than be seen as an isolated element.
- Aim to relate the building to the land by keeping it as low as possible. The proportions should be wider than higher. Relate floor levels to the ground level and avoid high foundations.
- Traditional, simple, non-fussy designs are likely to integrate most readily into the rural setting. Where practicable, relate roof shapes to the lie of the land and break up large wall and roof planes. Provide for eaves and the shadow line they create which help to tie the building visually with the land.
- Use materials which occur naturally in the area e.g. local stone or timber, or materials that have traditionally been used in rural buildings e.g. appropriately coloured corrugated iron. Materials with a rough, coarse texture will help to minimize reflectivity of light. Do not use a great variety of different materials. Keep the effect simple.
- Minimise the visual impact of buildings by using colours which blend with, or provide subtle contrast with, the background landscape. Avoid sharp colour contrasts. Generally, roofs should be darker than walls to help visually relate the building to the land.

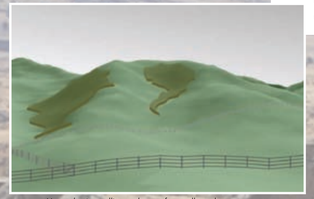
Native Bush Conservation and Enhancement

Despite the massive clearing of native forest cover to make way for agriculture, many pockets of native bush remain in Dunedin's rural landscape. These are typically in damp gullies, steep faces and other areas unsuitable for farming purposes. Some remnant forest remains but most of these areas are regenerating following past disturbance.

Whilst these areas may have been seen as waste space in the past, they are now increasingly being valued for their contribution to native biodiversity, soil and water protection and as habitat for wildlife. They also make an important contribution to the visual quality of the landscape. The following are some general principles for appropriate management of these areas.



Landscape devoid of native vegetation



Unproductive gullies and steep faces allowed to regenerate

- Protect what is left. Many bush areas on farmland are in poor shape due to being un-fenced and stock grazing their under-story. This means that they are unable to regenerate and will decline over time. Wherever possible, fence these bush areas off from adjacent grazed areas. Locate the fence line to relate to a landform feature and a logical place for a boundary. This will reinforce and emphasise landscape character.
- Extend and enhance these areas. The biological value of conservation areas is generally enhanced where they are linked with other natural areas and where their size is increased. The environments most suited to bush regeneration are damp gullies, stream sides, water courses and wetland edges. A framework of natural areas based on the drainage pattern of the property will enrich the landscape both ecologically and visually.
- Encourage revegetation through retiring appropriate areas from 'productive' use and then fencing, removing rank grass and planting of early colonising species.
- Long term legal protection of these areas may be the desired outcome. A range of options for the provision of this protection on private land exists. These include QE2 Open Space Covenants, Conservation Covenants (Department of Conservation) and Protected Private Land Agreements. The Dunedin City Council has a policy for granting rates remission on land over which covenants have been placed, as long as specific conditions have been met.
- Section 16.6 of the Dunedin City District Plan sets out the rules relating to the management of indigenous vegetation. Larger areas of indigenous vegetation may already be protected by rules in the District Plan.
- There are a number of different biodiversdity funding sources available which provide advice and financial assistance for activities such as fencing, pest control and restoration projects. More information on there is available at www.biodiversity.govt.nz or www.orc.govt.nz.

Tracks and Earthworks

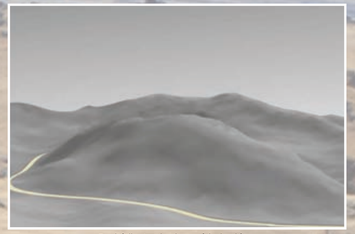
Tracks are a necessary part of the rural landscape, providing for vehicle or stock access. They are often also developed to prepare for the construction of a fence line. Adherence to the following general principles will help to ensure that tracks and other earthworks do not become features that detract from landscape quality.

Steep cuts and fills create long term scars

Gentle gradients revegetate more quickly

- Align tracks to follow a natural route, usually the most gentle terrain rather than necessarily the most direct. Follow the landform and minimize cut and fill required, rather than cutting across the landform.
- Wherever possible, site a track near an edge in the landscape e.g. an edge between trees and pasture land or a change in grade. In this way, the track reinforces an existing landscape feature rather than introducing a new one. Avoid crossing steep, open, highly visible slopes wherever possible.
- If cut and fill is required, shape the batters to merge in with the surrounding landform. Encourage quick revegetation to minimize visual impact by providing batter slopes with as gentle a gradient as practicable, and ensure that topsoil is not buried but spread over the top of the new slope.
- If spreading aggregate for a hard surface, use local material rather than imported. This will fit in more readily with the landscape.

Track sited for maximum impact



Track following the shape of the land form