Appendix 1 – Landscape, Amenity and Energy Efficiency Guidelines

1. Buildings and Structures

a. Location

- Have regard to surrounding landforms when siting buildings and structures.
- Where practicable, buildings should be located where they complement or enhance the landform.
- Landforms as backdrops to buildings have a unifying effect.
- Avoid skylines, ridgelines, promontories, important views and other prominent positions, particularly as viewed from public places.
- Locate near a change in a landform, such as at the base of a hill or the edge of a fan and avoid central locations on open terrace plains or wide valley floors.
- Make use of existing vegetation as a background. Additional planting should be bold, large and dense enough to relate to the scale of the building.
- Minimise excavation and reduce the need for large foundations by following the landform with the building and/or stepping the building into the slope.
- Align the building with the land, so the length of the roofline runs parallel to the contour of the land.
- Group buildings and structures together. Link small structures with other structures.
- Keep buildings well back from the road, where possible.

b. Design

i. Landscape

- The scale and form of buildings and structures should be complimentary to the surrounding landscape.
- Relate roof shapes to the lie of the land - reflecting the steepness and direction of the landform.
- Give a sense of unity and identity by keeping building proportions and roof type similar on all buildings in an area.
- Simple forms should be used where the landscape setting is not complicated, such as a valley floor or river terrace. Complex forms are more appropriate where the landscape is more complex, such as a complex hillside.
- Aim for low buildings with a width greater than the height, which helps to "anchor" the buildings to the site.
- Keep the height of the walls similar to the pitch of the roof.
- Avoid visible basements or foundations, where possible, keeping the floor closely related to ground level.

ii. Energy Efficiency

- Insulate all wall and roof cavities.

- Use insulating building materials including flooring.
- Consider using photovoltaic panels (solar panels) to generate free electricity.
- Design for maximum use of the sun for heating.
- Use heat retaining floor in sun rooms such as conservatories.
- Use low emissivity double or triple glazing.
- Use energy efficient appliances and heating methods.
- Consider nil discharge sewage disposal systems (such as compost toilets and reed beds).
- Consider use of wind for electricity generation in rural areas.
- Convert to "night store" electricity supply if available.
- Lag hot water cylinders and pipes to reduce heat loss.

c. Materials

- Where possible, materials should complement the landscape.

d. Colour

The following colour palettes provide a guide to the colours generally considered to be suitable for the Kaikoura District. These colours are intended to reflect the natural elements of the District, such as the marine environment, limestone outcrops, indigenous vegetation and "earthy" tones. There are also colours not included in the palettes, which may be suitable in certain instances, such as the original colours of historical buildings.

In addition to the following colours, roof colours should be non-reflective and should be only one colour. Colours complimentary to the surrounds may also be used as "accent" colours.

The following colours are the recommended colours for buildings in the Kaikoura District:

a. British Standard Specification 2660

0-012 Venice Blue	3-025 Coral	5-061 Forest Green	9-093 moon Mist
0-013 Regal Blue	3-033 Spanish White		9-094 Mist Grey
	3-034 Raffia	6-068 Holly	9-095 Dawn
2-026 Pancho	3-035 Coral	6-073 Sherwood Green	9-096 Friar Grey
2-027 Sandrift	3-044 Cinnamon	6-074 Deep Fir	9-097 Trout
2-028 Leather			9-098 Gunmetal
2-029 Spice	4-046 Dutch White	7-084 Hippie Blue	9-099 Ash
2-032 Nutmeg	4-048 Grey Olive	7-085 Teal Blue	9-100 Flint
			9-101 Merlin
		8-089 Storm Grey	

b. British Standard 5252 Colour Range

00 A09 Scarpe Flow	08 B15 Solitaire	12 B15 Frost	18 B25 Trout
00 A11 Ship Grey	08 B17 Soft Amber	12 B23 Siam	18 B27 Charade
00 A13 Baltic Sea	08 B19 Bronco	12 B25 Kelp	18 D41 Glacier
	08 C31 Champagne	12 B27 Scrub	18 D43 Calypso
02 A11 Mortar	08 C33 Calico	12 C39 Turtle Green	18 D44 Chathams Blue
			18 D45 Astronaut Blue
06 C33 Brandy	10 A01 Sea Fog	14 C39 Everglade	
06 D44 Hawaiian Tan	10 A03 Grey Nickel	14 D45 Zucchini	22 B17 French Grey
06 D45 Peru Tan	10 A05 Delta	16 D45 Cyprus	22 B19 Sun Pearl
	10 B15 Pearl lustre		
	10 C31 Colonial White		

2. Fences, Power Lines, etc

- Follow the flow of the landform and avoid cutting across contours.
- Where practicable, avoid skylines, ridgelines, promontories, dominant features and cutting across views.
- Where practicable, locate at the edges of landforms and/or adjacent to existing vegetation or landform, where they can be subordinate to the backdrop.
- Fences should reflect any historical character in the area, or the design and materials of any historic buildings in the vicinity.

3. Tracks and Roads

- Absorb into the landscape with careful siting to minimise visual impact.
- Follow natural contour lines to reduce the height of cuttings and fill batters, maintain easier grades and reduce scouring and run-off problems.
- Keep earthworks to a minimum. Where cuts must occur, grade back and round off batters to merge into the adjoining landform.
- Locate adjacent to vegetation, slopes or edges of landforms.
- Avoid crossing steep slopes.
- Avoid crossing open spaces. If there are no edges to follow then use large clumps of trees, for example.
- Blend with existing vegetation, avoiding felling where possible.
- Plan and design track drainage carefully.
- Avoid compaction of excavated material, where possible, to retain soil fertility and enhance revegetation.
- Cross waterbodies carefully, at right angles and narrow points, with simple structures.

4. Tree Planting

a. Location

- Follow and complement natural landform patterns and boundaries.
- Build on and merge into existing vegetation.
- Avoid ridgetops, crests, promontories or where planting will obscure or screen important views.
- Avoid planting steeper slopes or where planting will obscure landscape features.
- Avoid planting immediately adjacent to rivers, streams and wetland. Retain buffer areas along margins and existing riverside vegetation.
- Use existing vegetation or enclosing landforms as screens.
- Locate plantings in natural depressions or with dominant landform backdrop.
- Siting of trees to minimise wilding tree spread.

b. Design

- Avoid straight line edges to plantings.
- Group plantings, rather than plant individual trees. Avoid small disjointed plantings, in dominantly horizontal landscapes. Use plantings to integrate existing scattered plantings or wildings.
- Group woodlot plantings informally, if possible, rather than in strict lines or rows.
- Vegetation which adds to the natural or historical character of an area should be retained and enhanced with similar planting.
- Group planting of several species can be more appropriate than individual plants or groups of one species.
- Ornamental plantings around the edge are not always the answer to beautification. Good overall planting and design following the natural patterns of the land will usually give better looking results.
- Care should be taken when clearing vegetation, that this is done in sympathy with existing vegetation, landforms and contours.
- Selection of tree species and the design of plantations to avoid wilding tree spread.

5. Signs

- The guidelines for buildings and structures also apply to signs.
- Roadside signs should be placed where they do not obstruct sight distances around curves, over rises and at intersections.
- Signs should be located so they have a "backdrop" of either vegetation, landform, or a structure.
- Messages should be short and easily read. Layout should be horizontal, and lettering styles should be simple.

- Signs with horizontal forms are more acceptable in simple landscapes, such as river flats, basin floors. Vertical signs are more appropriate where the landscape is more enclosed such as in a narrow river valley. Avoid tall vertical signs that are higher than surrounding structures, or that do not have a backdrop.
- Materials should be durable. Posts of signs near roads should be "frangible" by providing a weakened plane where they will break if hit by a vehicle.
- Roadside signs should not be reflective.
- Large internally lit signs should be avoided.

The following publications provide additional information for people planning to undertake development in the District:

1. Rural Landscape Guidelines. Series of six leaflets produced by the Land Settlement Board and available from . the Department of Conservation.

2. Moore, J, 1991. On the Edge - Management Options for Plantation Edges. Ministry of Forestry.

3. Lucas, DJ, 1987. Woodlots in the Landscape.

4. Transit New Zealand Sign guidelines.

5. Ledgard, NJ and Langer, ER: 1999. Wilding Prevention. Guidelines for minimising the risk of unwanted wilding spread from new plantings of introduced conifers

6. Native Planting List for Kaikōura Business Park Outline Development Plan

The following species are all permitted to be planted within the boundaries of Kaikōura Business Park Outline Development Plan:

1. Short grasses
    a. Wīwī| Ficinia nodosa (hardy),
    b. Silver tussock / wī | Poa cita (hardy),
    c. NZ blueberry / turutu |Dianella nigra (hardy),
    d. NZ Iris|Libertia ixioides,
2. Groundcovers – medium shrubs
    a. Pohuehue | Muehlenbeckia axillaris (hardy),
    b. Pohuehue | Muehlenbeckia complexa, (hardy),
    c. Shrubby toatoa | Haloragis erecta (hardy),
    d. Mingimingi | Coprosma rhamnoides (hardy),

e. Porcupine shrub | Melicytus alpinus (Slow growing),

3. Medium - tall grasses
    a. Swamp flax / harakeke | Phormium tenax (hardy),
    b. Mountain flax / whararekí | Phormium cookianum (hardy),
    c. South Island toetoe | Austroderia richardii (hardy),
4. Medium - tall shrubs
    a. Mingimingi | Coprosma propinqua (hardy),
    b. Karamu | Coprosma robusta (hardy),
    c. Mingimingi | Coprosma crassifolia (hardy),
    d. Mikimiki | Coprosma linariifolia (hardy),
    e. Mikimiki | Coprosma rigida (hardy),
    f. NZ native broom / Makaka | Carmichaelia australis,
    g. Koromiko | Veronica salicifolia (hardy),
    h. Korokio | Corokia cotoneaster,
5. Medium – tall trees (suit clipping)
    a. Galden akeake | Olearia paniculate (hardy),
    b. Akeake | Dodonea viscosa (hardy),
    c. Kōhūhū | Pittosporum tenuifolium (hardy),
    d. Lemonwood / Tarata | Pittosporum eugeniodes (hardy)
    e. Mānuka | Leptospermum scoparium,
    f. Broadleaf / Kapuka | Griselinia littoralis (hardy),
    g. Whauwhaupaku / five finger | Pseudopanax arboreus (frost tender),
    h. Kaikōmako / bellbird tree | Pennantia corymbosa (frost tender),
    i. Marbleleaf / putaputāwētā | Carpodetus serratus (frost tender),
    j. Whiteywood / māhoe | Melicytus ramiflorus (frost tender),
    k. Red matipo | Myrsine australis (frost tender),
    l. Black Maire | Nestegis cunninghamii (Slow growing, frost tender)
    m. Makomako / wineberry | Aristotelia serrata (hardy),
6. Tall trees (not to be clipped)
    a. Kānuka | Kunzea robusta (hardy),
    b. Kowhai | Sophora microphylla (hardy),
    c. Ngaio | Myoporum laetum (frost tender),
    d. Tōtara | Podocarpus tōtara(hardy),
    e. Cabbage tree / tī kōuka | Cordyline australis (hardy),

f. Horoeka / lancewood | Pseudopanax crassifolius (frost tender),

g. Lowland ribbonwood / manatū | Plagianthus regius (hardy),

h. Narrow-leaved lacebark | Hoheria angustifolia (hardy)

i. Mataī | Prumnopitys taxifolia (slow growing)

7. Lighting Requirements

All artificial lighting within the Inland Kaikōura Business Park Outline Development Plan must comply with the following:

a. Outdoor lighting:

i. All lights are to have a clear, specific purpose (task specific), and should be selected and installed to illuminate only the area requiring lighting. Gardens should not be lit.

ii. Lighting intensities shall be the minimum intensities necessary to carry out each site activity.

iii. All light fittings when installed shall not project any light at or above the height of their light source.

iv. All light emitted from light fittings shall have a correlated colour temperature of 2700K (Kelvin) or less. 2200K with minimum colour rendering index of 70 preferred

v. All light fittings are to be low lumen output, maximum 5000 Lumens.

vi. The lighting is to have automatic motion sensors and daylight controls such that the lights are only on from dusk to dawn, and when motion has been detected, maximum on time of 5 minutes.

b. Outdoor illuminated signs:

i. Self-illuminated signs and billboards (with an internal light source) are not permitted.

ii. Signs that are to be illuminated shall have a matt surface with dark background.

iii. Signs to be illuminated by shielded downlights, light fittings when installed shall not project any light at or above the height of their light source, lights to be dimmable and lighting intensities set to the minimum intensities required for the sign to be legible from the adjacent road.

iv. Sign illumination shall not to operate between 11 pm and 5 am

c. Interior lighting

i. All perimeter windows in buildings are to be fitted with curtains, blinds or shutters to stop interior lighting from radiating out through windows. Curtains, blinds or shutters to be closed when the interior lighting is to be used at night.

ii. Skylights in buildings are acceptable if they do not emit light skywards during the hours of 11 pm to 5 am.