

<b>PART 13</b>	<b>LANDSCAPE DESIGN</b>
----------------	-------------------------

## **DESIGN AND IMPLEMENTATION OF LANDSCAPING**

### **13.1 INTRODUCTION**

This part of the Plan provides the means of complying with the Council's requirements for landscaping where, in accordance with the stated policy and objectives of the Council for each zone, landscape design proposals are to be submitted.

### **13.2 OVERVIEW**

In relation to any specific site, landscape design is the organisation of the total land area and air space to enhance the amenities of the site and adjacent areas. This means an integrated design in which buildings, engineering construction, open space and natural materials are planned together to form a complete, balanced and pleasant environment.

Papakura District has a pleasant landscape interspersed with a number of significant features. The Hunua Ranges, the coastal margin and the low areas of the Takanini-Clevedon Valley constitute landscapes which provide interest and relief for the balance of the District.

Within urban Papakura, localised areas, though less spectacular, still provide significant amenity qualities which could be prejudiced by inappropriate development. Insensitive and poorly planned proposals aimed at enhancing the urban landscape could have the reverse effect if not designed to complement and enhance the existing landscape quality.

Landscape design must be considered at the very commencement of any project as an integral part of the development and not as cosmetic treatment applied after other site works are completed.

Design factors and elements should be closely considered when the landscape design is prepared as the nature of the design will be influenced by these factors. In respect of any particular site and its immediate context, these factors include existing natural features, existing man-made features and existing landscape characteristics.

At the outset, it is essential to avoid the destruction of the quality and character given to the site by, for example, existing vegetation and landforms, where this character is considered worth preserving. Measures will be taken to allow for and to protect existing trees in terms of Part 3 of this Section of the Plan and wherever else practicable.

In this regard, trees are particularly valuable for urban use because their potential size can be chosen to relate to the scale of the site and buildings. The use of a few carefully selected species planted in groups will create effective mass, texture and colour and will provide a theme to the planting. Plant types selected could be linked to any existing or proposed planting theme that may be established for the site or neighbourhood.

For enhanced interest, contoured landforms are an inexpensive, rapid, low maintenance means of achieving improvements on the site. They may be grassed, planted in ground cover or 'forested' with trees or paved in a material such as brick.

There are a wide variety of materials, in various colours and textures, available. Those selected will largely be determined by the character and function of the area concerned. A simple design is most effective.

The choice of materials fulfils both aesthetic and functional requirements of the design. Materials should be appropriate to the character of the overall development. The choice of the most suitable form of enclosure is governed by function, degree of permanence and durability required, relationship with other landscape elements, as well as the availability of materials and cost of maintenance.

### **13.3 RESOURCE MANAGEMENT ISSUES**

The resource management issues raised by the matter of landscape design are:

- the enhancement of the environment of the District.
- the establishment of functional and aesthetic landscaping.
- the retention of the quality and character of existing vegetation and landforms.
- the use of complementary materials in landscaping.

### **13.4 RESOURCE MANAGEMENT STRATEGY**

The resource management strategy in respect of landscape design in the District is:

- the formulation of District Plan provisions relating to landscape design.
- the preparation of design guidelines to assist land developers in the matter of landscape design.

### **13.5 OUTCOMES**

The outcome of this strategy is expected to be the emergence of an urban environment which is harmonious with the existing character of the landscape and which enhances the amenity qualities of the District.

### **13.6 OBJECTIVES AND POLICIES**

#### **Objective**

**13.6.1** *To ensure that landscaping is undertaken as an integral part of the development or redevelopment of land.*

#### **Policies**

**13.6.1.1** To require a landscape plan to be submitted for all activities requiring a resource consent or building consent.

**13.6.1.2** To take into account the matters set out in this part of the District Plan when considering landscape design proposals.

**13.7 EXPLANATION**

The application of the above objectives and policies will secure present amenity values in the District. Further, additional landscaping at the time of the establishment of various activities through the District will enhance the quality of the environment.

**13.8 RULES**

**13.8.1 Required Plans and Information**

Where landscaping is required for any development, use, or building by the provisions of a particular zone, or any other part of the District Plan, a plan indicating the overall landscape design concept is required. The plan shall include such details as are appropriate to the scale of the proposed development.

In the case of industrial and commercial developments and residential developments being either controlled or discretionary activities and in such other cases as the Council may direct, the required information shall include the following:

- (a) a written statement to supplement the landscape concept plan and explain the purpose of each aspect of the design. This should include a plant list incorporating such information as the number and botanical name of each species used and any special planting requirements. An indicative maintenance programme should also be included in the statement.
- (b) details, in plan form, of existing vegetation, contours, structures and landscape features of note.
- (c) details, in plan form, of proposed contours, landforms, hard surfacing, walls, fences and amenity or water features in sufficient detail to enable assessment of the proposals in terms of the design criteria set out below.

Where planting plans are submitted, plants shall be drawn to scale at the size they will ultimately attain at maturity.

**13.8.2 Completion & Maintenance Requirements**

All landscape work shall be completed before the buildings on the site are occupied or, where this is not seasonally practicable, within the first planting season after completion of the buildings. The owner may be required to enter into a bond prior to the commencement of building to secure completion of landscape works within a specified period.

The owner shall be responsible for tending every growing thing in the approved proposal, including cultivation and watering as well as the replacement of any plants which do not survive. The owner may be required to enter into a bond to observe this obligation for the first year after planting.

**13.8.3 Landscape Design of Parking Areas**

Parking areas containing 100 or more parking spaces shall be designed with landscaped dividers or islands to provide separate parking bays each containing not more than 100 car parking spaces. The dividers or islands shall be planted with well developed specimen trees capable of growing to a height of 6 metres within 10 years of planting, thereby imparting a mature appearance.

#### **13.8.4 Landscape Design of Yards**

The planting of trees and shrubs shall be so arranged that they do not prevent access for fire fighting appliances to all sides of the buildings.

In the case of road frontages, the equivalent of at least one tree for each five metres of frontage shall be included. Where existing trees on the site are retained these shall be credited towards these requirements and form the basis of a planting theme. Where a development occurs on the arterial and principal road network and there are no existing trees on site, then regard shall be had to Council's existing or proposed street tree theme. In the case of service stations, trees shall not be required across site frontages.

In the case of front yards of industrial zones where those yards are adjacent to or opposite a residential zone, the landscape design shall be to a high standard. In some cases the requirements may include earthmounding to reduce the transmission of noise.

In the case of a coastal protection yard any landscaping shall be such as to enhance the visual or ecological value of that part of the coastline.

In the case of rear and side yards any landscaping between different adjoining uses shall be designed to provide a dense visual screen and a physical barrier between those uses.

In the case of rear and side yards any landscaping between adjoining uses may be required to incorporate provision for direct pedestrian access between the sites.

#### **13.9 ASSESSMENT CRITERIA**

In assessing any landscape plan submitted in accordance with the requirements of the District Plan, the Council will take the following criteria into account:

##### **13.9.1 Design Factors**

The physical characteristics of the site and its immediate context:

- (a) Existing natural features
  - geology
  - soil
  - vegetation
  - climate, micro-climate
  - topography
  - ecology
- (b) Existing man-made features
  - structures
  - roads
- (c) Existing characters
  - views
  - vistas

The needs of the development:

- (a) the specific activities and functions;
- (b) the human factors of physical, psychological and sociological needs;
- (c) special considerations particular to the site relating to such matters as intensity of use, noise and location.

Desirable visual qualities of the site may be retained through careful integration of the site and use, aiming for maximum convenience for the user and minimum conflict with the site.

### **13.9.2 Design Elements and their Functions**

There are four groups of basic materials used in landscape design:

- (a) plant material
- (b) landforms
- (c) structural materials and landscape construction
- (d) water

### **13.9.3 Plant Material**

Plant material has distinct functions in the improvement of the environment.

Functional Role

- to define space
- to provide a screen for privacy or to conceal objectionable views
- to reduce glare and reflection
- to provide acoustic control
- to control erosion
- to provide shade and shelter
- to create a physical barrier

Aesthetic Role

- to minimise or reduce conflicts of scale
- to soften hard structures and bleak sites
- to provide form, texture and colour
- to provide a visual linkage between sites

Trees should have a minimum height of 1.8 metres when planted to be visually effective. Semi-mature trees are more effective with large scale buildings and sites.

Plant material selected should achieve the height and growth for the particular uses required. All plants should be tolerant to the soils and climate conditions. An inappropriate selection will mean a costly maintenance programme.

#### **13.9.4 Landforms (Earthmounding)**

Mounds or depressions, if on a large scale, should be appropriate to those natural in the area and should be blended discreetly into the existing landform. Shapes are best determined by the use of a model.

Functions

- to increase the elevation of screen planting
- to display planting to an advantage
- to screen carparks and service areas
- to provide an acoustic screen to reduce noise, either physically or psychologically
- to exist in their own right as a landscape feature to act as a physical barrier between different uses

#### **13.9.5 Structural Materials and Landscape Construction**

Structural materials provide a means of achieving an infinite variety of effects through different form, texture and colour combinations.

#### **13.9.6 Hard Surface Materials**

Hard surface materials that could be used in landscape design are:

- gravel
- concrete – in situ, exposed, precast
- brick
- asphalt
- cobbles
- stone paving
- timber

Function of Hard Surface Materials

- to indicate a change in function of an area (e.g vehicle access, entrance)
- to indicate direction of movement
- to add visual interest through the use of patterns and/or contrasting colours

#### **13.9.7 Walls, Fences, Screens, Bollards**

##### **13.9.7.1 Walls**

Walls are the most permanent, effective type of enclosure, although more expensive than fences. They may be an extension of the architecture or an individual feature.

There is a variety of materials that could be used including:

- brick
- stone
- timber
- concrete – in situ, pre-cast, block

### **13.9.7.2 Fences and Screens**

Fences and screens are usually constructed of timber. Simple, well constructed fences give the best functional and visual results. Screens may have an interesting texture through perforations where a complete visual barrier is not necessary.

### **13.9.7.3 Bollards**

Bollards are a traditional method of creating an enclosure to prevent vehicles from using pedestrian areas while maintaining pedestrian movement. They may be constructed in a variety of materials in an infinite range of styles.

Functions of Walls, Fences, Screens and Bollards

- to provide security
- to provide privacy
- to control wind, shade and noise
- to provide visual linkage
- to define space
- to control vehicular and pedestrian movement
- to provide screening
- to retain materials

### **13.9.8 Natural Features**

Artificially created features, for example, a naturalistic arrangement of boulders, may be used free standing in a sculptural sense or combined with planting to create a definite environmental character.

### **13.9.9 Amenity Features**

Constructed amenity features should be co-ordinated in the quality of detailing, colour and material to achieve an overall unity of theme and to provide visual accents throughout the site. Simple, well-constructed features will be most successful.

### **13.9.10 Water**

Water, in the form of lakes, ponds, fountains, water sculptures, can provide a wide range of aesthetic, psychological and functional uses.

Functions

- to create a focal point (to attract attention)
- to provide movement, sound, reflection
- to provide a cooling effect
- to act as a barrier
- as an aesthetic feature combined with an industrial use such as reservoir or cooling pond.

*This page intentionally blank*