

# **Papamoa Hills Regional Park**

## **Conservation Plan**

**December 2006**

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## **Conservation Plan**

**Environment Bay of Plenty,  
Whakatane**

**31 December 2006**

**Prepared by:**

**Lynda Walter &  
Karen Greig  
InSitu Heritage Ltd.  
PO Box 710  
WHAKATANE**

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## EXECUTIVE SUMMARY

The Papamoa Hills Regional Park, also known as Te Rae o Papamoa, is located to the south-east of Tauranga City between Tauranga and Te Puke near State Highway 2 in the Bay of Plenty. The Park is owned and managed by Environment Bay of Plenty.

The Park encompasses a number of interrelated natural and cultural physical features and spaces which comprise a significant cultural heritage landscape. The Park contains a number of large pa with defensive earthworks that are highly visible. The archaeological/cultural features within the Park most probably represent occupation of the area over a period of several hundred years. Heritage places within the Park are of archaeological and cultural significance.

Archaeological features in the Park have the potential to provide information about settlement patterns, economy and environment in the past and contribute to an understanding of the archaeology and history of the region. The archaeological/cultural features within the Park are closely related to the Maori history of the region and have considerable cultural significance for tangata whenua with an ancestral association with the place.

This plan has been prepared for the heritage places and their setting at the Park. It includes a heritage description, and an assessment of heritage significance, policies and work recommendations, including remedial work and maintenance specifications. The purpose of this plan is to ensure that the heritage places within the Park are cared for so that their meaning and importance is conserved and interpreted for present and future generations.

# 1. INTRODUCTION

## 1.1 Purpose

The conservation planning process provides a structured and informed approach to the management of heritage places. A conservation plan assesses how and why a place is significant, and provides guidance on how it should be managed in order to conserve that significance.

The Bay of Plenty's first regional park, the Papamoa Hills Regional Park or Te Rae o Papamoa ('the Park'), opened to the public in July 2004. Thousands of people have subsequently explored the 135 ha park and enjoyed the 45 minute walk up to its summit, which offers sweeping views of the Bay of Plenty coastline. The Park contains numerous archaeological features including a number of pa sites, and is rich in Maori historical and ancestral associations.<sup>1</sup>

This plan has been prepared for the heritage places and their setting at the Park. It includes a heritage description, and an assessment of heritage significance, policies and work recommendations, including remedial work and maintenance specifications. The purpose of this plan is to ensure that the heritage places within the Park are cared for so that their meaning and importance is conserved and interpreted for present and future generations.

The heritage places within the Park have considerable cultural significance for tangata whenua. The Park should be managed and conserved in a manner consistent with the cultural and spiritual values of the tangata whenua.

## 1.2 Park status and management

The Park is held by Environment Bay of Plenty under the Local Government Act 2002. The Act enables regional councils to be involved in land purchase for regional parks.

The Park operates under the provisions of a resource consent issued under the Resource Management Act 1991 by Western Bay of Plenty District Council in May 2004. Environment Bay of Plenty is responsible for the day to day operation and maintenance of the Park. The Park is open for public visits.

The Park contains archaeological sites as defined by the Historic Places Act 1993, and those sites are subject to the provision of that Act.

## 1.3 Kaitiakitanga – Tangata whenua and Park management

The Park is a place of Maori cultural significance. A fundamental element in the preparation of a conservation plan is the role of tangata whenua in this planning process. Ideally, land managers and tangata whenua should reach agreement and

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<sup>1</sup> Draft Papamoa Hills Regional Park Management Plan, November 2006.

have a formal understanding or management partnership prior to the preparation of a conservation plan.

The tangata whenua have expressed a vision for the Papamoa Hills Regional Park, including aspirations and an expectation of continuing cultural use. They have maintained their cultural links with the place and have been actively involved in recent planning for the development and management of the Park. The tangata whenua should have an integral role in all aspects of Park management.

#### **1.4 Assessing heritage values**

Proposed Change No. 1 to the Bay of Plenty Regional Policy Statement (Heritage Criteria) incorporates policies, methods and criteria for assessing heritage values and places. The assessment of heritage values for this plan utilises those criteria (see Appendix 1).

The proposed heritage criteria are consistent with those contained within the government's policy on government departments' management of historic heritage<sup>2</sup>. This policy requires that departments identify places of historic heritage value on the land they manage, based on the following values: aesthetic, archaeological, architectural, cultural, historical, scientific, social, spiritual, technological, or traditional significance or value.

#### **1.5 Developing this plan**

InSitu Heritage Ltd was commissioned by Environment Bay of Plenty to prepare this conservation plan. The project team consisted of Lynda Walter and Karen Greig. The conservation plan was developed in consultation with Environment Bay of Plenty staff.

#### **1.6 Review of this plan**

Any management proposals, that are more than minor in nature and not currently within the scope of this plan, require a change to the plan before the proposals proceed. Changes in policies or management should be discussed and agreed, in writing, by Environment Bay of Plenty and tangata whenua.

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<sup>2</sup> Policy for Government Departments' Management of Historic Heritage 2004, <http://www.mch.govt.nz/publications/her-policy/heritage-policy.html>.

## 2. HISTORY OF THE PARK

Te Rae o Papamoa, or the Papamoa hills, has witnessed many waves of immigration, from the earliest Maori ancestral waka through to European explorers and settlers. Those who have participated in the shifting patterns of occupation of the strategic pa atop the Papamoa hills include Ngamarama, Waitaha, Ngati Ranginui, Ngai Te Rangi, Ngati Pukenga, Nga Potiki and Ngati He.<sup>3</sup> The Cultural and Archaeological Assessment: Papamoa Hills Cultural Heritage Regional Park ('Te Rae o Papamoa') prepared by Boffa Miskell in 2003 traverses some of the Maori histories associated with the Park.

The Crown acquired the Papamoa No. 1 Block in the 1890s, and partitioned the block into lots for sale to settlers. John MacNaughton, an immigrant from Scotland, purchased one of the lots of one thousand acres, which included much of the Park. After John died in 1910, his son Colin continued to farm the Papamoa land. He added to the farm, acquiring two adjacent properties. Colin's descendants have continued to farm at Papamoa ever since, progressively clearing the bush and draining the swamp at the base of the hills.<sup>4</sup>

In 2003 the McNaughton family sold the land comprising the bulk of the Park in three equal shares to Environment Bay of Plenty, Western Bay of Plenty District Council and Tauranga City Council. In 2004 Environment Bay of Plenty bought out the other two councils' shares in the Park, making it the sole owner<sup>5</sup>. In addition to the original McNaughton purchase, there have been three additions of smaller areas of land to the Park.<sup>6</sup>

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3 Boffa Miskell. 2003. Cultural and Archaeological Assessment: Papamoa Hills Cultural Heritage Regional Park ('Te Rae o Papamoa'). p 3.

4 Ibid, pp. 57-59.

5 Draft Papamoa Hills Regional Park Management Plan, November 2006. p 13.

6 Ibid, p. 1.



### 3. PHYSICAL DESCRIPTION

#### 3.1 Environment and setting

The Park is located to the south-east of Tauranga City between Tauranga and Te Puke near State Highway 2 (Figure 1)<sup>7</sup>. It encompasses 135 hectares of rolling hill country, rising to a summit of 224 metres above sea level, and overlooks the Bay of Plenty coastline. The ocean view is towards Motiti Island and Whakaari (White Island) to the south-east, Tuhua (Mayor) and Mauao in the west (Figure 2). Tauranga Harbour can be seen from the western section of the hills with Mount Ngongotaha at Rotorua visible to the south. The Coromandel Peninsula extends as a backdrop to the north with the Eastern Bay of Plenty coastline, running toward East Cape to the east.

The Park is situated in a rural landscape surrounded by a mixture of pastoral farming, lifestyle blocks and orchards. The majority of the Park is identified in the Western Bay of Plenty District Plan as being a significant landscape feature. The expanding urban landscape on the Papamoa dune-plain is visible to the north-east, while to the southern boundary of the Park there is a large open cast quarry. The south-western boundary of the Park is dominated by rising hill country toward the bush clad peaks of Otawa and Otanewainuku.

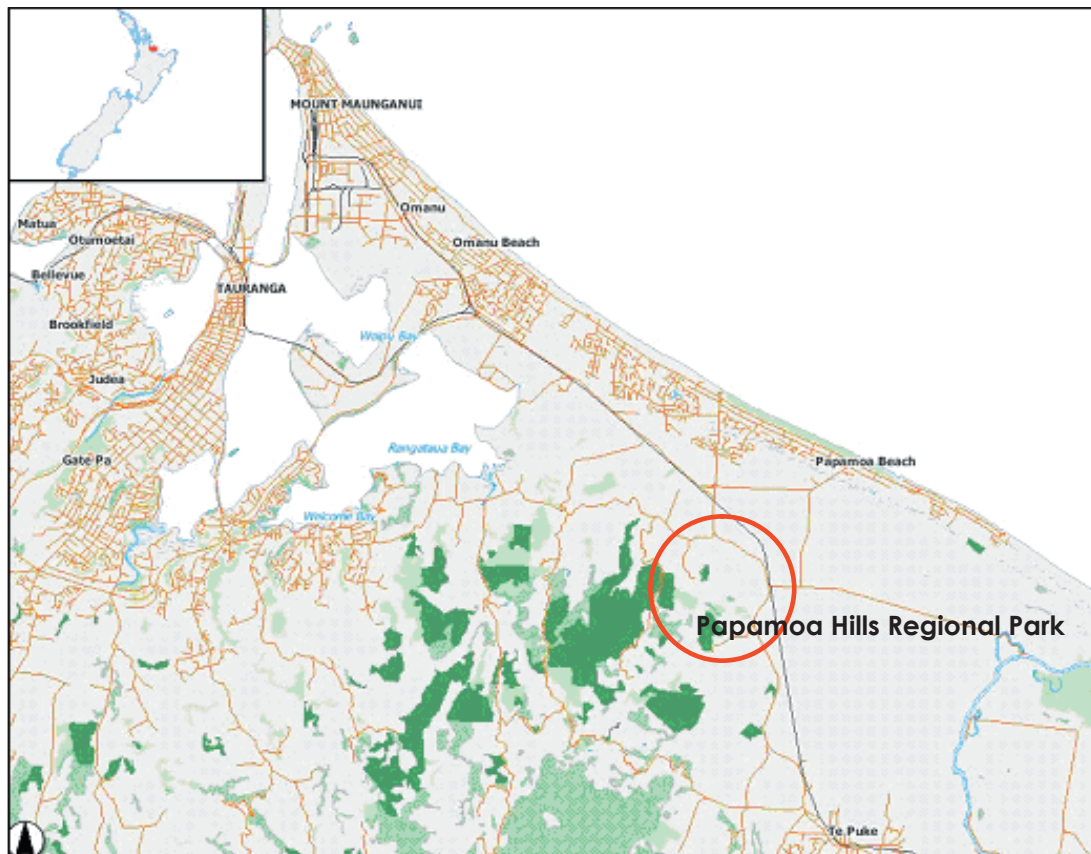


FIGURE 1: LOCATION OF THE PARK.

<sup>7</sup> Parts of this section summarise information contained in the Draft Papamoa Hills Regional Park Management Plan, November 2006.



FIGURE 2: VIEW FROM THE PARK TOWARDS TAURANGA HARBOUR AND MAUAO TO THE WEST.

The Park is predominantly a mixture of grazed pasture, blocks of exotic pine and wattle forest, with remnant tracts of indigenous vegetation scattered in the gullies. A characteristic of the open pastoral landscape is the large mature trees throughout the Park, often in prominent positions. These are a mixture of pine, puriri and karaka.

The heritage setting of the archaeological/cultural features is an essential element of their value. “A place is seldom separable from its setting. For most places, aspects of the setting contribute to the significance of the place, and the place may contribute to the setting and other places within it...The setting often explains why the place came to be where it is...”<sup>8</sup>.

Numerous associated heritage places are located outside the Park boundaries which are fundamental to understanding the historic and cultural significance of the features within the Park. These include nearby Wharo Pa, and the more distant Mauao, as well as the open settlement and horticultural sites on the Papamoa dune-plain. The spaces and views between the features within and outside the Park are an important part of their meaning.

### 3.2 Archaeological/cultural features

The New Zealand Archaeological Association Site Recording Scheme contains thirty eight individual site records for archaeological sites within or straddling the Park boundaries. Most of these sites were recorded as part of the NZ Historic Places Trust archaeological survey of the former Tauranga County carried out in the early 1980s.

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<sup>8</sup> *The Illustrated Burra Charter*, p 37.

The visible archaeological/cultural features within the Park have been described and comprehensively mapped by Geometria Ltd. as part of the preparation of the Cultural and Archaeological Assessment: Papamoa Hills Cultural Heritage Regional Park ('Te Rae o Papamoa') prepared by Boffa Miskell in 2003<sup>9</sup>. A short summary is provided below – the Boffa Miskell report should be consulted for further detail.

The archaeological survey undertaken by Geometria Ltd. adopted a methodology based on the premise that the Park represents a continuous archaeological landscape. The concept of a 'site' as a distinct unit of inter-related archaeological/cultural features was not seen as an appropriate concept to be applied during the survey. The report stated that "There are no borders between individual sites and the definition of the end of one site and the beginning of another is quite subjective"<sup>10</sup>.

The Geometria Ltd. survey identified 1480 features within the survey area, which extended beyond the Park boundaries in some areas. The report notes "Distinguishing man-made terraces from natural slips can also be challenging...the reliability of the documentation is lower in relation to small terraces on steep slopes..."<sup>11</sup>. Therefore, it is possible that some of the identified features are of natural rather than cultural origin. However, the vast majority of the identified features form clear patterns within the landscape which conform to the field evidence of archaeological/cultural features characteristic of Maori habitation found elsewhere in the region.

The Geometria Ltd. survey identified a range of visible surface archaeological/cultural features in the Park. These are:

- Pa with terraces, platform, pits, ditch and bank;
- terraces and terraces and pits;
- pits;
- platform;
- exposed shell from cultural subsoil;
- karaka trees;
- springs;
- possible cultivated soils.

The most visible and easily recognisable archaeological/cultural features within the Park are the concentrated areas of defensive features, comprising of ditches, banks and steepened scarps that represent the visible surface evidence of pa. Eight pa are recorded within the NZAA Site Recording Scheme within the Park boundaries (Figures 3 and 4).

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9 Boffa Miskell. 2003. Cultural and Archaeological Assessment: Papamoa Hills Cultural Heritage Regional Park ('Te Rae o Papamoa').

10 Ibid, p 73.

11 Ibid, p 71.



FIGURE 3: VIEW TOWARD TUHUA (MAYOR ISLAND) ACROSS NORTHERNMOST PA IN THE PARK.



FIGURE 4: KARANGAUMU PA, AT THE HIGHEST ELEVATION IN THE PARK.

The most common archaeological/cultural feature within the Park are terraces. “They range from multi-levelled, complex, large affairs to tiny ones, just big enough for a single small whare. In some areas terraces cluster together, especially along steep ridges, overlooking the valley floors”<sup>12</sup>.

The archaeological/cultural features within the Park most probably represent occupation of the area over a period of several hundred years. The features are highly unlikely to be contemporary and there will be episodes of over-building and modification of earlier features by later occupation. Therefore, without extensive subsurface archaeological investigation, it would be erroneous to interpret the visible archaeological/cultural landscape as a representation of a single, large and intensive settlement.

### 3.3 Current condition

There have been modifications to the landform and hence to the archaeological evidence of human occupation and use in the Park. The successive phases of occupation are also likely to have resulted in the partial loss of physical features from earlier phases of occupation. Following the abandonment of the pa, further modifications have occurred as a result of natural and human processes. Processes and actions which have resulted in the physical modification of features at the Park include:

- Modification, destruction or loss of features due to overbuilding or landscape modification in subsequent occupation phases,
- Erosion and water action,
- Livestock grazing and trampling,
- Pastoral farming activities, including fencing, farm vehicle track formation and installation of stock water facilities (dams etc),
- Vegetation growth and tree root action (including forestry plantation),
- Tree felling and other forms of vegetation clearance (including forestry plantation),
- Trampling and compacting caused by human foot traffic,
- Quarrying.

The overall condition of archaeological/cultural features within the Park is remarkably stable. There is a robust ground cover of pasture grasses over the majority of the Park and the pastoral farming activities are being well managed. There are some minor adjustments to the farming operation, mainly in relation to the placement of fences, which should be made in order to further enhance and stabilise the condition of archaeological/cultural features.

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12 Boffa Miskell. 2003. Cultural and Archaeological Assessment: Papamoa Hills Cultural Heritage Regional Park (‘Te Rae o Papamoa’). p 72.



FIGURE 5: “DESIRE LINE” TO TRIG, TRAVERSING ARCHAEOLOGICAL FEATURES ON KARANGAUMU PA.

The main area of the Park which requires intervention in order to stabilise the condition of the archaeological/cultural features is on Karangaumu Pa. The pa is a key destination point of visitors to the pa, and it appears that the condition of the pa has deteriorated since the Park was established.

Damage to the archaeological/cultural features caused by existing stock tracks on the pa is being exacerbated by the high number of visitors walking over the site. The grass sward on tracks cannot be maintained due to the density of the foot traffic and archaeological deposits are being exposed and subjected to erosion. Coupled with this is the damage that walkers are causing by using direct routes to destination points – such as taking a direct line up to the trig point on the summit of Karangaumu (Figure 5). These “desire lines” are often up steeper, and hence more erosion prone, slopes. The severely eroded areas on the scarp are slippery and as the centre cut deepens the edges collapse inwards. The steepness of the track and the slipperiness increases the erosive effect of foot traffic.

Measures to address these condition issues, and to stabilise the affected archaeological/cultural features are set out within this conservation plan.

## 4. SIGNIFICANCE

Proposed Change No. 1 to the Bay of Plenty Regional Policy Statement (Heritage Criteria) incorporates policies, methods and criteria for assessing heritage values and places. Of the twenty two criteria, seventeen are considered relevant to the Park. These criteria are applied in Table 1 to assess the significance of heritage places in the Park. The full list of criteria, with explanatory text, is provided in Appendix 1.

TABLE 1: ASSESSMENT OF HERITAGE SIGNIFICANCE

<b>Criterion</b>	<b>Application</b>
Period	The archaeological/cultural features within the Park represent occupation of the area over a period of several hundred years. The features are highly unlikely to be contemporary and are likely to include episodes of over-building and modification of earlier features by later occupation.
Rarity or Special Features	The concentration of pa within a relatively small area is uncommon in the Bay of Plenty and is a special feature of the Park.
Integrity	There has been little modification of the archaeological/cultural features in the Park. The integrity of the physical features therefore has not been comprised.
Representativeness	Individually the archaeological features, such as terraces, ditches and banks, are highly representative examples of these classes of archaeological phenomena. Collectively, the pa are representative of the form and function of Maori defensive sites in the Bay of Plenty.
Context or Group Value	As a group the archaeological/cultural features within the Park strongly contribute to the overall heritage values of the place. Together they represent a substantial component of the surrounding archaeological and cultural landscape. This landscape is an important element of the character of the Park and surrounds and contributes to the expression of the Maori heritage and history of the area.
Diversity (Form and Features)	The archaeological/cultural features within the Park, such as terraces, ditches and banks, exhibit diversity of form, size and complexity.
Fragility or Vulnerability	The archaeological/cultural features within the Park are vulnerable to natural processes, farming and forestry operations and visitor impacts. However, management of the Park is directed towards the conservation of heritage places.
Information	The archaeological/cultural features within the Park have the potential to provide important information (see below).

Research	The archaeological/cultural features in the Park are a component of an archaeological and cultural landscape which extends along the Papamoa foothills, across the former wetland areas to the Papamoa dune-plain and on to the coast. Features in the Park are substantially unmodified and archaeological evidence of these remains intact. Some elements of the archaeological and cultural landscape beyond the Park boundaries have been lost or substantially modified. The archaeological/cultural features within the Park possess the potential to provide information about settlement patterns, economy and environment in the past and contribute to our understanding of the archaeology and history of the region.
Recognition or Protection	The NZ Archaeological Association Site Recording Scheme includes thirty eight sites within or straddling the Park boundaries. There are numerous archaeological sites as defined by the Historic Places Act within the Park. It is unlikely that all the sites in the Park have been recorded
Sentiment	The Park is culturally significant for Tauranga Maori (see below). The McNaughton family also have a long standing association with the land.
Identity	The area has seen complex and at times confrontational settlement phases and represents the genealogical ties that link local iwi and hapu. Those who have participated in the shifting patterns of occupation of the Papamoa Hills include Ngamarama, Waitaha, Ngati Ranginui, Ngaiterangi, Ngati Pukenga, Nga Potiki and Ngati He. The Park is a tribute to the descendants of the Takitimu, Mataatua and Te Arawa waka who share the commonality of occupation and intermarriage of the area. <sup>13</sup>
Amenity or education	The Park possesses considerable potential for public interpretation and education. People can learn about the Maori history of Papamoa and the wider area, the way of life of the people and also archaeology and heritage conservation.
Associative Value	Archaeological/cultural features within the Park are associated with important Maori ancestral figures.
Historical Pattern	The archaeological/cultural features within the Park are closely related to the Maori history of the region. The changing land tenure of the Park also demonstrates the effect of European colonisation on Maori land holding.
Information	See Research criterion.
Technical achievement	The pa in the Park demonstrate technical achievements in the development and construction of fortified places.

<sup>13</sup> Draft Papamoa Hills Regional Park Management Plan, November 2006. p 11.



## **5. INFLUENCES ON CONSERVATION POLICY**

### **5.1 ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value**

The most appropriate conservation standards for use in New Zealand are those set out in the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value. (ICOMOS stands for the International Committee on Monuments and Sites.) The charter is acknowledged in government policy for heritage management, and has been formally adopted by the Historic Places Trust and a number of territorial authorities. Important standards for conservation processes relevant to the Park contained in the charter are explained below and the full text of the charter is provided in Appendix 2.

#### ***Degrees of Intervention***

Conservation may involve, in increasing extent of intervention: non-intervention, maintenance, stabilisation, repair, restoration, reconstruction or adaptation. Where appropriate, conservation processes may be applied to parts or components of a structure or site.

#### ***Non-intervention***

In some circumstances, assessment may show that any intervention is undesirable. In particular, undisturbed constancy of spiritual association may be more important than the physical aspects of some places of indigenous heritage value.

#### ***Maintenance***

A place of cultural heritage value should be maintained regularly and according to a plan, except in circumstances where it may be appropriate for places to remain without intervention.

#### ***Stabilisation***

Places of cultural heritage value should be protected from processes of decay, except where decay is appropriate to their value. Although deterioration cannot be totally prevented, it should be slowed by providing stabilisation or support.

#### ***Repair***

Repair of material or of a site should be with original or similar materials. Repair of a technically higher standard than the original workmanship or materials may be justified where the life expectancy of the site or material is increased, the new material is compatible with the old and the cultural heritage value is not diminished. New material should be identifiable.

#### ***Restoration***

Restoration should be based on respect for existing material and on the logical interpretation of all available evidence, so that the place is consistent with its earlier form and meaning. It should only be carried out if the cultural heritage value of the place is recovered or revealed by the process.

The restoration process typically involves reassembly and reinstatement and may involve the removal of accretions.

### ***Reconstruction***

Reconstruction is distinguished from restoration by the introduction of additional materials where loss has occurred. Reconstruction may be appropriate if it is essential to the function or understanding of a place, if sufficient physical and documentary evidence exists to minimise conjecture, and if surviving heritage values are preserved. Reconstruction should not normally constitute the majority of a place. Generalised representations of typical features or structures should be avoided.

### ***Adaptation***

The conservation of a place of cultural heritage value is usually facilitated by it serving a socially, culturally or economically useful purpose. In some cases, alterations and additions may be acceptable where they are essential to continued use, or where they are culturally desirable, or where the conservation of the place cannot otherwise be achieved. Any change, however, should be the minimum necessary and should not detract from the cultural heritage value of the place. Any additions and alterations should be compatible with original fabric but should be sufficiently distinct that they can be read as new work.

### ***Interpretation***

Interpretation of a place may be appropriate if enhancement of public understanding is required. Relevant protocol should be complied with. Any interpretation should not compromise the values, appearance, structure or materials of a place, or intrude upon the experience of the place.

## **5.2 Draft Papamoa Hills Regional Park Management Plan**

Environment Bay of Plenty has prepared a draft management plan for the Park<sup>14</sup>. The purpose of that plan is to set out how Environment Bay of Plenty, tangata whenua and the community intend to manage the Papamoa Hills Regional Park over the next ten years. The plan will guide the day-to-day and long term management of the Park, in accordance with the resource consent granted for its operation, and sets the context for the future use and conservation of the natural, heritage and cultural resources found within the Park.

The draft management plan includes the following vision for the Park “The outstanding cultural, heritage and landscape values of the Papamoa Hills Regional Park are protected and enhanced through sustainable management. This means that the Regional Park’s wairua can be enjoyed by all, through passive activities, now and into the future.” The vision statement is followed by outcomes for the three key values. The outcome for heritage values is “The Park is a prominent feature in an environment where urban growth constantly changes historical records of our landscape. The Park offers a unique opportunity to protect values that have been

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<sup>14</sup> Draft Papamoa Hills Regional Park Management Plan, November 2006.

damaged elsewhere in the region. Archaeological sites and features are actively protected and enjoyed by many.”<sup>15</sup>

Although the management plan was in draft form at the time of writing this Conservation Plan, the vision for the Park and the stated outcome for heritage value were taken into account during the conservation planning process.

### **5.3 Historic Places Act 1993**

The Park contains numerous recorded and unrecorded archaeological sites which are subject to the provisions of the Historic Places Act 1993 (HPA). The NZ Historic Places Trust administers the HPA. The HPA contains a consent process for any person intending to carry out work that may affect an archaeological site. The HPA defines an archaeological site as:

Any place in New Zealand that –

(a) either –

- (i) Was associated with human activity that occurred before 1900; or
- (ii) Is the site of the wreck of any vessel where that wreck occurred before 1900; and

(b) is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand (section 2, Historic Places Act 1993).

Any person intending to undertake work that may damage, modify or destroy an archaeological site must first obtain an authority from the New Zealand Historic Places Trust for that work. An authority is required for work on public and private land, and even if the activity is permitted under a District or Regional Plan or a resource or building consent has been granted.

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<sup>15</sup> Draft Papamoa Hills Regional Park Management Plan, November 2006. p 5.

## 6. THREATS TO HERITAGE

### 6.1 Threats identification

A key aspect of the management of heritage places is the identification of threats to heritage values and the implementation of appropriate actions to remove or ameliorate any potential or actual damage. The principal categories of threat at the Park are summarised below. The management of these threats is addressed by the policies in Section 7 and specific work recommendations in Section 8 and relevant appendices.

### 6.2 Natural processes

Vegetation, fire and weathering from sunlight, rainfall and variations in ground moisture can all have a detrimental impact on heritage places.

The physical threats to heritage places within the Park arising from natural processes include fire, vegetation growth, erosion, drought and wind. These processes may act independently, e.g. vegetation growth, or in combination, e.g. a period of drought may lead to a vegetation fire and the subsequent fire control actions may result in damage to the archaeological/cultural features. The damage to the site may occur quickly, e.g. an intense period of rainfall, or over a long period of time e.g. wind buffeting an exposed feature.

Erosion can damage or destroy archaeological/cultural features and is a result of some previous action, e.g. run-off from heavy rainfall or slipping following earthworks etc. Careful site management can minimise erosion risks.

There is some risk to heritage places posed by fire. While a fire may not initially affect the archaeological/cultural features, subsequent rainfall could expose those features to damage by erosion or, alternatively, strong winds and continuing fine weather following a fire could lead to subsequent wind erosion. The major risk of damage to the heritage places comes from fire-fighting operations. Machinery or fire fighting tactics used in rural fire suppression, e.g. earthmoving machinery and hand construction of fire lines, will damage archaeological/cultural features.

Deep rooted plants, particularly large trees can damage both the surface and sub-surface archaeological/cultural features. There is a range of vegetative cover throughout the Park and much of the existing vegetation provides ideal protection of the surface and sub-surface archaeological/cultural features.

The grazed pasture covering most of the Park provides a good surface cover that limits erosion and fire risk and allows the surface features to be clearly seen. If this cover can be maintained, the detrimental impacts of vegetation can be minimised. Threats to the grass cover (and subsequently, the archaeological/cultural features) include erosion, woody weed invasion, over grazing, livestock trampling and fire. Most of this risk can be minimised by having a prescribed grazing regime for the Park and ensuring that it is adhered to through regular monitoring.

The secondary scrub and shrub-land vegetation that covers much of hill slopes of the Park is also suitable cover for archaeological/cultural features as the shallow root systems will not significantly disrupt the sub-surface features or significantly alter the appearance of surface features.

The areas of tall forest, including the large single pines within the grazed areas, are a significant threat to the heritage features of the Park. The root systems of tall trees will penetrate deeply into the ground, damaging both the surface and sub-surface features. In addition, when these trees are blown over by strong winds, the roots will be pulled out of the ground and may severely damage the archaeology. If the trees are felled, considerable care must be taken to minimise ground disturbance. If the trees are extracted from the site after felling, there is considerable potential to exacerbate the ground disturbance.

### **6.3 Park management and visitor activities**

Activities within the Park associated with Park management and visitors have the potential to cause damage to heritage places, and hence have a detrimental effect on heritage values. This risk should be managed to minimise the potential for adverse effects on archaeological/cultural features.

#### ***Park management actions***

Inadequate quality of management at the Park may constitute a threat. This includes poor planning, delays in commencing work, undertaking inappropriate remedial work or maintenance, the erection of inappropriate new structures and the failure to act on known threats.

Archaeological/cultural features within the Park are most likely to be threatened by the consequences of inappropriate Park management that may be undertaken without specialist archaeological advice. The establishment of tracks, the placement of interpretation panels and structures, inappropriate planting or removal of vegetation, and cultural use by tangata whenua may all inadvertently damage surface or sub-surface archaeological/cultural features within the Park.

Avoiding unwarranted and undesirable modification of archaeological/cultural features within the Park is the major objective of this plan. Effort must be concentrated on the stabilisation of features wherever practicable and the avoidance of management actions which may result in the loss of archaeological information. In order to accurately assess the rate of deterioration baseline survey and regular monitoring of the condition of features is required. These issues are discussed in more detail in Section 8.

#### ***Visitor impacts***

Visitor activities have the potential to damage the archaeological/cultural features of the Park. The Park is popular as a recreational area. Current visitor numbers have been assessed as approximately 20,000 per annum, based on data from track counters and vehicle counts. Visitor numbers are likely to increase in the future due to local

and regional population growth and the further promotion of the Park as a visitor destination.

Managed recreational use of the Park is compatible with the conservation of heritage places. However, many visitor activities have the potential to damage archaeological/cultural features. Damage is currently being caused by the impact of foot traffic on ground surfaces and informal tracking. Activities that are not permitted in the Park but which may potentially cause damage to features in the future include vandalism, digging or excavation, recreational use of four wheel drive vehicles, motorbikes and horse riding.

Activities that may be perceived as having a low impact can in fact cause significant damage to archaeological/cultural features if they occur in inappropriate areas. Such activities include mountain biking, camping and events that concentrate large groups of people at specific points, such as gatherings and school visits.

## **6.4 Land use operations**

### *Farming*

Grazing of livestock, to maintain a protective grass cover on archaeological/cultural features, has the potential to seriously damage the features through trampling and tracking. Nevertheless, grazing is the most appropriate regime to maintain the majority of the Park in a vegetation cover that offers the best protection to archaeological/cultural features while also providing for public viewing and appreciation of the surface features. The risk to archaeological/cultural features posed by livestock grazing must be carefully balanced against the potential damage caused by a change in the existing vegetation cover.

Management of the grazing and associated fencing is a key requirement to stabilise archaeological/cultural features and reduce the rate of deterioration of features in the Park. A degree of ground damage due to stock trampling and tracking is always going to occur as a consequence of using grazing animals to maintain a pasture sward. This risk should be managed to restrict damage to areas where archaeological/cultural features are not affected.

Animal husbandry and welfare are also important issues. Livestock condition must be able to be maintained or improved. This is particularly important in the Park due to the high number of visitors, the visibility of the livestock, and likely public concerns about animal welfare.

Damage to archaeological/cultural features can be avoided if livestock are managed carefully and monitored closely. Factors that must be considered when grazing livestock on archaeological/cultural features include:

- The age, number and species of animals used,
- seasonal influences,
- the duration and timing of grazing,
- placement of fences, gates, stiles, and water troughs,

- animal behaviour (congregation of stock, resting or camping, trampling, tracking),
- length of grazing rotations,
- animal welfare and husbandry.

Principles for farming operations in the Park are discussed in Section 8 and contained in Appendix 5 of this conservation plan.

### ***Forestry and revegetation programme***

Activities associated with the management and harvesting of exotic forestry plantations within the Park have the potential to adversely affect archaeological/cultural features. In addition, the root action of trees, both within the forestry plantation areas and areas proposed for revegetation with indigenous species, may modify or destroy subsurface archaeological information.

Specifications for forestry operations and the revegetation programme in the Park are discussed in Section 8 and contained in Appendices 6 and 7 of this conservation plan.

## **6.5 Information loss**

The loss of archival information such as documents and photographs or unrecorded oral history constitutes a threat to heritage values. This material provides a link with the past and is an integral component of the history of the heritage place.

## **6.6 Loss of Park integrity**

Changes in land use adjacent to the Park may threaten its integrity and setting. More intensive land use or the establishment of residential housing may cause loss of, or damage to, archaeological/cultural features that are outside the current Park boundaries, but which form part of the cultural landscape. There is also a threat to the visual integrity of the heritage places in the Park, through the loss of the current setting, which allows for expansive views of key heritage places. Activities on adjacent properties that may threaten the integrity and setting of the Park include: quarrying, forestry and residential housing development.

## **7. CONSERVATION POLICIES**

### **7.1 Standards**

*For all planning and work on historic heritage places, Environment Bay of Plenty will ensure that accepted international and national conservation standards are met.*

All conservation work undertaken in the Papamoa Hills Regional Park will be guided by a plan consistent with the principles of the ICOMOS New Zealand Charter (1993) (Appendix 2).

Environment Bay of Plenty will seek the advice of the NZ Historic Places Trust on the management of items entered in the Trust's Register of Historic Places, Historic Areas, Wāhi Tapu and Wāhi Tapu Areas/Rārangi Taonga, on archaeological sites, and on places subject to a heritage order or a requirement for a heritage order notified by the Trust.

### **7.2 Maori heritage**

*The relationship of tangata whenua with their ancestral lands, water, sites, wāhi tapu and other taonga at the Papamoa Hills Regional Park will be recognised and provided for by Environment Bay of Plenty in the management of the Park. Participation by tangata whenua in the management of Maori heritage places at the Park will be facilitated.*

The archaeological/cultural features in the Park have cultural, traditional, spiritual and social values closely associated with tangata whenua. The Park must be conserved and managed in a manner consistent with the protection of their cultural values.

### **7.3 Skills**

*Environment Bay of Plenty will ensure that appropriately qualified conservation professionals, conservators and trades people are involved in all aspects of the management of heritage places within Papamoa Hills Regional Park. Planning and implementation will involve all relevant disciplines and all work will be supervised.*

Specific projects and work within the Park will require input from people with specialist skills. Skills of particular relevance include; archaeology, tikanga Maori, archival research, visitor management, interpretation, pastoral farming management, structural and geophysical engineering, and plant ecology (including a knowledge of invasive weeds).

### **7.4 Documentation**

*Environment Bay of Plenty will research, assess, document and record changes to heritage places at Papamoa Hills Regional Park. Access to such records may need to be restricted in line with iwi or hapū requirements or for functional reasons.*

All work, except for minor general maintenance, will be documented with notes and photographs and retained on file by Environment Bay of Plenty. A document



bank should be established to hold information relating to the conservation and management of heritage places at the Park.

## **7.5 Approved use**

*Management and use proposals for Papamoa Hills Regional Park shall be consistent with the approved use under the Draft Papamoa Hills Regional Park Management Plan.*

The primary purpose of the Park is the conservation of heritage places, with opportunities for passive enjoyment of those places. Farming, forestry, and recreational activities should not be inconsistent with this purpose. Management of the Park should recognise that the protection of the archaeological/cultural landscape takes precedence over all other uses.

## **7.6 Archaeological/cultural features**

*All management actions and programmes, and new developments and structures in the Park shall be designed to avoid or minimise adverse effects on archaeological/cultural features. All archaeological/cultural features subject to any disturbance or intervention should be fully recorded using current best practice archaeological standards.*

In the event that archaeological sites (as defined by the Historic Places Act 1993) will be affected, compliance with the provisions of the Historic Places Act 1993 will be required.

## **7.7 Heritage landscape**

*All management programmes and new developments and buildings in the Park shall acknowledge and build on the special character of the heritage landscape and the relationship between heritage places within the Park and the wider landscape – such as the connection with the Papamoa dune plain, the Kaituna River and other pa such as Wharo Pa, Tamapahore and Mauao.*

## **7.8 Monitoring, maintenance and repair**

*Environment Bay of Plenty will care for places of heritage value in the Park by monitoring their condition, maintaining them, and, where required, repairing them.*

Regular maintenance is essential to the long life of heritage places. Regular inspection and maintenance ensures that minor faults are identified early, thus avoiding the need for major repairs in the future; a well maintained historic place will be better used and enjoyed than one that is neglected, and is less likely to suffer damage in the event of a natural disaster. Where threats have been allowed to manifest over a long period, heritage fabric may have deteriorated to the point where significant remedial work may be required.

## **7.9 Disaster**

*The risk of damage posed by disasters such as fire, flooding and storms will be analysed, and where possible, action will be taken to eliminate or minimise the damage that might be caused by such events.*

## **7.10 Visitor facilities**

*Visitor facilities will maximise the quality of the visitor experience while avoiding any adverse effects on archaeological/cultural features and the historic and cultural values of the Park. Any new structures will be designed to fit comfortably within and enhance the general environment and setting, be placed in appropriate locations and be the minimum necessary.*

## **7.11 Interpretation**

*Interpretation of heritage places within the Park will be designed to maximise the quality of visitor understanding and enjoyment. This in turn will encourage visitors to respect the place and therefore assist with the conservation and general maintenance of heritage places through appropriate behaviours.*

## **7.12 Public awareness**

*Environment Bay of Plenty will support initiatives to raise public awareness of the heritage values of Papamoa Hills Regional Park, for example, public education programmes, school visits, registration under the Historic Places Act 1993, listing on district plans and World Heritage nomination.*

## **8. WORK RECOMMENDATIONS**

A summary of work recommendations is provided in Appendix 3.

### **8.1 Park administration**

The archaeological/cultural features within the Park are a non-renewable resource, and they cannot be rebuilt or repaired if damaged or lost. Archaeological/cultural features on adjacent land in private ownership are also an integral part of the historic and cultural setting of the Park and are vulnerable to disturbance.

#### Action points

Environment Bay of Plenty should advocate for the protection of archaeological/cultural features that are currently in private ownership, adjacent to the Park.

Farming, forestry and recreational activities within the Park should be managed to ensure archaeological/cultural features are protected from adverse effects.

### **8.2 Documentation**

All work undertaken at the Park, except for minor general maintenance, should be documented. This includes work recommended within this conservation plan, plus any additional work that may be carried out at the Park. Any area being worked on should be fully photographed before work begins and all work documented in writing, and photographed. Any subsequent remedial work should be similarly documented. A monitoring form is included in Appendix 8. Documentation should be kept on file by Environment Bay of Plenty.

The establishment of a document bank could effectively combat the loss of information associated with the history and management of the Park. This document bank should be the repository for all written information accumulated during any management action within the Park.

#### Action point

A document bank should be established to hold information relating to the conservation and management of heritage places within the Park.

### **8.3 Remedial work**

Remedial work should be undertaken where necessary and in keeping with the conservation principles of this plan, to stabilise features and slow the rate of deterioration. Remedial work considered in this section of the plan relates only to archaeological/cultural features, and relates primarily to work required on Karangaumu Pa to address the affects of stock trampling and visitor traffic.

Any remedial work must be well planned, introduced material must be clearly identified, repairs must be reversible and all remedial work must be monitored to

ensure that it is achieving the desired result. A suitably qualified archaeologist, with previous experience of the required repair works, must supervise and record all remedial works involving archaeological features. The work must be discussed and agreed with the NZHPT prior to work commencing, and an authority obtained if necessary. Specifications for remedial work are provided in Appendix 4.

#### Action point

Complete remedial work as specified in Appendix 4.

### **8.4 Regular maintenance**

Regular maintenance should be carried out to maintain the Park in good condition, noting that different parts of the Park may be maintained to quite different standards according to their character and management regime. Regular maintenance work relating to overall vegetation management and visitor facilities is discussed in the relevant sections. These aspects of Park management will impact on the stability of archaeological/cultural features if recommended regular maintenance work is not undertaken.

#### Action point

Carry out regular maintenance as specified in Appendices 5, 6, 7 and 8.

### **8.5 Farming operations**

Farming operations within the Park should be carried out in a manner that facilitates the conservation and management of the archaeological/cultural features. The operational requirements of the farming activity necessitate ground disturbance from time to time. Principles to guide grazing management, fencing and farm access track and water control maintenance are included in Appendix 5 of this conservation plan.

#### Action point

Undertake farming operations in accordance with the principles contained in Appendix 5.

### **8.6 Vegetation management**

In some parts of the Park, where continued livestock grazing is not desirable for archaeological/cultural site protection or other Park management purposes, it is necessary to establish alternative forms of vegetation cover. In some areas, continued grazing is having a detrimental effect on slope stability and is contributing to the loss of archaeological/cultural features.

Vegetation such as indigenous species will provide a more robust ground cover in erosion prone areas and the removal of livestock from these areas will reduce the probability of ground surfaces being exposed to water and erosion action. This will act to increase the stability of visible archaeological/cultural features. While establishment

of alternative vegetation cover may lead to some loss of subsurface archaeological information, on the whole that loss will be less than that caused by on-going erosion. Plant species established in areas likely to contain buried archaeological/cultural features should however be shallow rooting (such as grasses and scrub species) to minimise any subsurface disturbance from root action.

Pine trees growing on archaeological/cultural features within the forested portion of the Park should be removed, and the area should not be replanted in large tree species.

Individual large trees growing on archaeological/cultural features within the grazed portion of the Park require careful management and monitoring to ensure they do not cause catastrophic damage through wind throw or collapse. They should be removed if assessed as being at risk of collapse, and not replaced.

#### Action points

Carry out regular condition monitoring and soundness assessment of large trees on archaeological/cultural features within the Park. Individual trees should be managed or removed if assessed as being at risk of collapse.

Implement specifications for forestry operations and the revegetation programme contained in Appendices 6 and 7 of this conservation plan.

### **8.7 Fire**

Vegetation fire risk is influenced by a combination of climate, topography, vegetation and ignition sources. The accepted approach to rural fire management is for rural fire authorities to minimise risk of fire while retaining sufficient resources to rapidly extinguish any outbreak of fire that does occur.

The risk of an outbreak of fire at the Park can be minimised by accurately assessing the daily fire risk and then reducing ignition sources during periods of high fire danger (e.g. limiting public access, publicity about the risk, restricting management activities etc.).

Reducing the fuel loadings of vegetation can significantly reduce the intensity of a fire, thus making it easier to control and reducing the risk of it spreading to neighbouring properties. Reduction of fuel loadings within the Park can best be achieved by maintaining a robust, short grass sward.

Pre-planning of fire control can help reduce the risk of damage to archaeological/cultural features during fire fighting operations by developing tactics that reduce or eliminate the need to use earthmoving machinery or to construct fire lines through archaeological/cultural features.

#### Action point

Consideration should be given to obtaining advice from a fire control specialist regarding the development of a fire control plan for the Park.

## 8.8 Park management actions

Archaeological advice should be sought prior to any proposed management activity commencing to ensure that the archaeological/cultural features in the Park are not placed at risk. The sorts of activities that should be discussed with a suitably qualified archaeologist are such things as planting, vegetation clearance, the establishment of new tracks, or the maintenance of existing tracks, the placement of track markers and the erection of new signs or structures, or maintenance of existing signs or structures. If there is any doubt about the effects of a proposed activity, archaeological advice should be sought.

### Action point

Seek archaeological advice during planning and design of management programmes involving ground disturbance.

## 8.9 Visitor impacts

Monitoring of visitors and visitor impacts should be undertaken and this is discussed in 8.10 Monitoring.

Rules should be implemented to exclude mountain bikes, motorbikes, recreational four wheel drive vehicles and horse access from all areas of archaeological/cultural features within the Park. These should be publicly advertised and enforced. Signs outlining these restrictions should be placed at all entrance points and be regularly maintained. Faded, dilapidated or defaced signs have little impact on visitors.

The risks associated with these activities being permitted anywhere within the Park should also be acknowledged. Archaeological/cultural features may have no visible surface evidence, so areas of the Park that appear devoid of surface features may nonetheless contain significant subsurface features. Those features can be exposed and damaged by ground disturbance that occurs as a result of activities such as mountain biking.

The opportunity should be provided for tangata whenua to undertake guided walks for large groups of visitors, including school children. This will enhance the visitor experience, provide a valuable learning experience and help reduce visitor damage. This will also help to affirm the tangata whenua role as kaitiaki.

### Action point

Implement Draft Papamoa Hills Regional Park Management Plan policies on Park access and use.

## 8.10 Monitoring

Monitoring is required as part of the management of Papamoa Hills Regional Park to assess the effectiveness of the existing management regime and to determine if vegetation, site management or visitor impacts are having a detrimental effect.

A walk-through survey can be used to monitor both management and visitor impacts. A monitoring form is provided in Appendix 8. The form includes elements that should be regularly monitored like weed growth, graffiti/vandalism damage, damage to archaeological/cultural features by vehicles used in Park management, damage caused by informal tracking, deterioration or damage to structures and safety issues related to features or structures.

The form includes a section to record remedial action required and who will be responsible for the action. Walk-through surveys should be undertaken at specified intervals and following any severe storm event or fire. In addition to these surveys, informal monitoring should be undertaken during any site visit or after specific management actions. Environment Bay of Plenty should hold copies of the completed inspection form on file.

#### Action point

Implement a Park management and visitor monitoring programme.

### **8.11 Visitor facilities**

Good visitor facilities should maximise the quality of the visitor experience while avoiding any adverse impacts to archaeological/cultural features.

Existing visitor facilities within the Park are minimal. There are toilet facilities located at the car park. Interpretation panels are located at the entrance to the Park from the car park. There is a main walking access track and a network of less formal grass tracks within the Park. The existing tracks within the Park are defined as walking tracks catering for visitors seeking an experience in a natural setting with a sense of space (Standards New Zealand – Tracks and Outdoor Visitors Structures – SNZ HB 8630:2004). Seating is provided at vantage points along the main access track.

The Draft Papamoa Hills Regional Park Management Plan includes consideration of proposals for walking tracks, interpretative and directional signs, camping, a visitor shelter and barbeque area.<sup>16</sup>

It is highly likely that archaeological cultural features will be encountered during ground disturbance associated with any new development within the Park. All work must be undertaken in accordance with the requirements of the Historic Places Act and the principles of this conservation plan. Construction techniques used for visitor facilities should avoid or minimise impact on archaeological/cultural features. For example, tracks should be constructed as elevated artificial surfaces which have hard surfaces to resist wearing. Track routes should be carefully planned to ensure they provide a logical flow through the site which reduces the desire for visitors to create informal tracks. Visitors should be strongly encouraged, by appropriate explanation within interpretation material which draws attention to site conservation needs, to remain on designated tracks. New visitor facilities should be located in previously

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<sup>16</sup> Draft Papamoa Hills Regional Park Management Plan, November 2006. p. 29-33.

disturbed areas of the Park wherever possible. Informal tracks and redundant sections of existing tracks should be blocked or screened by vegetation.

#### Action point

Implement specification for track maintenance and visitor facilities contained in Appendix 8.

### **8.12 Interpretation**

Interpretative information can improve visitor appreciation and understanding of the Park. Although high visitor numbers may present a potential threat to archaeological/cultural features in the Park, appropriate management of those visitors will minimise that threat. High visitor use of the Park presents an opportunity to increase awareness of historic heritage values in general.

An effective and appropriate way for information about the historical and cultural significance of the Park to be conveyed to visitors is by direct contact with tangata whenua (see discussion in section 8.9).

The Park also provides an ideal opportunity for the development and use of a self guiding pamphlet and a historic, cultural and ecological educational resource kit. These should be developed for the Park.

#### Action point

Design and upgrade interpretative information.

### **8.13 Integrity of setting**

The landscape qualities of the setting and views to and from the Park are integral to the authenticity of the Park and should be identified and conserved. Together they constitute the heritage setting.

There is a significant contrast between the protected Park landscape and the open cast quarry to the south. The quarry can not be effectively screened; however it provides an interpretive opportunity to dramatically highlight the potential for loss of the heritage setting.

#### Action points

Maintain following lines of sight:

- Visual contrast between bush in gullies and grassland on ridges,
- Visual connection to other landmark pa in the area (Mauao, Maketu etc),
- Visual connection to coastal landscape.

Implement the Draft Management Plan actions relating to landscape values, including the identification of key sight lines.



## **8.14 Publicity**

Appropriate publicity opportunities, in local and national media, should be utilised as a method of heightening public awareness, and appreciation, of the significance of the Park.

### Action point

Media coverage should be sought for all conservation works carried out at the Park.

## REFERENCES

Boffa Miskell Ltd. September 2003. Cultural and archaeological assessment for Te Rae o Papamoa. Papamoa Hills Cultural Heritage Regional Park.

Environment Bay of Plenty. March 2006. Papamoa Hills Regional Park Revegetation Plan Working Draft.

Draft Papamoa Hills Regional Park Management Plan. November 2006. Environment Bay of Plenty Environmental Publication 2006/18.

Standards New Zealand – Tracks and Outdoor Visitors Structures – SNZ HB 8630:2004.

*The Illustrated Burra Charter*. 2004. Australia ICOMOS.

## APPENDIX 1: Heritage Criteria (Proposed Change No. 1 to the Bay of Plenty Regional Policy Statement)

<p><b>Period</b> The development sequence of a place or area, the likely age, duration of use or chronology of a place or area.</p>
<p><b>Rarity or Special Features</b> The unique, uncommon or rare features of a place or area</p>
<p><b>Integrity</b> The condition, quality and state of original features of a place or area. Comparison with other examples of its class. The quality of any restoration, addition or modification of the place or area.</p>
<p><b>Representativeness</b> The characteristics and relationship of the place or area to other places or areas in its class, for example in respect of design, type, features, technology, use, activity, location or origin.</p>
<p><b>Context or Group Value</b> Association with other places, areas or elements of its context. Association with and illustration of broad patterns of history. Places or areas in which evidence of the association or event survives in situ, or in which the settings are substantially intact.</p>
<p><b>Diversity (Form and Features)</b> The characteristics, diversity and pattern of a place or area. The cultural influences which have affected the form and components of the place or area. Form, scale, colour, texture and materials. The historical content of the place or area with particular reference to the ways in which it has been influenced by historical forces or has itself influenced the course of history.</p>
<p><b>Fragility or Vulnerability</b> The components, form and structure of the place or area and the effect of this on its survival. Its vulnerability to deterioration or destruction. The degree to which it is threatened and its context in terms of protection and services.</p>
<p><b>Information</b> The potential of the place or area to define or expand knowledge of earlier human occupation, activities or events through investigation using archaeological methods.</p>
<p><b>Research</b> The potential of the place or area to provide evidence to address archaeological research questions.</p>
<p><b>Recognition or Protection</b> The place or area is registered by the New Zealand Historic Places Trust for its archaeological values, or is recorded by the New Zealand Archaeological Association Site Recording Scheme, or is an archaeological site as defined by the Historic Places Act 1993.</p>
<p><b>Style or Type</b> The style of the building or structure is representative of a significant development period in the region or the nation. The building or structure is associated with a significant activity (for example institutional, industrial, commercial or transportation).</p>
<p><b>Design</b> The building or structure has distinctive or special attributes of an aesthetic or functional nature. These may include massing, proportion, materials, detail, fenestration, ornamentation, artwork, functional layout, landmark status or symbolic value.</p>
<p><b>Construction</b> The building or structure uses unique or uncommon building materials, or demonstrates an innovative method of construction, or is an early example of the use of a particular building technique.</p>
<p><b>Designer or Builder</b> The building or structure's architect, designer, engineer or builder was a notable practitioner or made a significant contribution to the region or nation.</p>

<b>Sentiment</b>
The place or area is important as a focus of spiritual, political, national or other cultural sentiment.
<b>Identity</b>
The place or area is a context for community identity or sense of place, and provides evidence of cultural or historical continuity.
<b>Amenity or education</b>
The place or area has symbolic or commemorative significance to people who use or have used it, or to the descendants of such people. The interpretative capacity of the place or area and its potential to increase understanding of past lifestyles or events.
<b>Associative Value</b>
The place or area has a direct association with, or relationship to, a person, group, institution, event or activity that is of historical significance to Bay of Plenty or the nation.
<b>Historical Pattern</b>
The place or area is associated with broad patterns of local or national history, including development and settlement patterns, early or important transportation routes, social or economic trends and activities.
<b>Information</b>
The potential for the place or area to contribute information about an historic figure, event, phase or activity.
<b>Potential Scientific Research</b>
The degree to which the place or area may contribute further information and the importance of the data involved, its rarity, quality or representativeness.
<b>Technical achievement</b>
The place or area shows a high degree of creative or technical achievement at a particular time or is associated with scientific or technical innovations or achievements.

## APPENDIX 2: ICOMOS New Zealand Charter

### ICOMOS NEW ZEALAND

#### Charter for the Conservation of Places of Cultural Heritage Value

##### Preamble

New Zealand retains a unique assemblage of places of cultural heritage value relating to its indigenous and its more recent peoples. These areas, landscapes and features, buildings, structures and gardens, archaeological and traditional sites, and sacred places and monuments are treasures of distinctive value. New Zealand shares a general responsibility with the rest of humanity to safeguard its cultural heritage for present and future generations. More specifically, New Zealand peoples have particular ways of perceiving, conserving and relating to their cultural heritage.

Following the spirit of the International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter 1966), this charter sets our principles to guide the conservation of places of cultural heritage value in New Zealand. It is intended as a frame of reference for all those who, as owners, territorial authorities, tradespersons or professionals, are involved in the different aspects of such work. It aims to provide guidelines for community leaders, organisations and individuals concerned with conservation issues. It is a statement of professional practice for members of ICOMOS New Zealand.

Each section of the charter should be read in the light of all the others. Definitions of terms used are provided in section 22.

Accordingly this charter has been adopted by the New Zealand National Committee of the International Council on Monuments and Sites at its Annual General Meeting on 4 October 1992.

##### 1. The Purpose of Conservation

The purpose of conservation is to care for places of cultural heritage value, their structures, materials and cultural meaning. In general, such places:

- i. have lasting values and can be appreciated in their own right;
- ii. teach us about the past and the culture of those who came before us;
- iii. provide the context for community identity whereby people relate to the land and to those who have gone before;
- iv. provide variety and contrast in the modern world and a measure against which we can compare the achievements of today; and
- v. provide visible evidence of the continuity between past, present and future.

##### 2. Indigenous Cultural Heritage

The indigenous heritage of Maori and Moriori relates to family, local and tribal groups and associations. It is inseparable from identity and well-being and has particular cultural meanings.

The Treaty of Waitangi is the historical basis for indigenous guardianship. It recognises the indigenous people as exercising responsibility for their treasures, monuments and sacred places. This interest extends beyond current legal ownership wherever such heritage exists. Particular knowledge of heritage values is entrusted to chosen guardians. The conservation of places of indigenous cultural heritage value therefore is conditional on decisions made in the indigenous community, and should proceed only in this context. Indigenous conservation precepts are fluid and take account of the continuity of life and the needs of the present as well as the responsibilities of guardianship and association with those who have gone before. In particular, protocols of access, authority and ritual are handled at a local level. General principles of ethics and social respect affirm that such protocols should be observed.

### 3. Conservation Practice

Appropriate conservation professionals should be involved in all aspects of conservation work. Indigenous methodologies should be applied as appropriate and may vary from place to place. Conservation results should be in keeping with their cultural content. All necessary consents and permits should be obtained.

Conservation projects should include the following:

- i. definition of the cultural heritage value of the place, which requires prior researching of any documentary and oral history, a detailed examination of the place, and the recording of its physical condition;
- ii. community consultation, continuing throughout a project as appropriate;
- iii. preparation of a plan which meets the conservation principles of this charter;
- iv. the implementation of any planned work; and
- v. the documentation of any research, recording and conservation work, as it proceeds.

## GENERAL PRINCIPLES

### 4. Conservation Method

Conservation should:

- i. make use of all relevant conservation values, knowledge, disciplines, arts and crafts;
- ii. show the greatest respect for, and involve the least possible loss of, material of cultural heritage value;
- iii. involve the least degree of intervention consistent with long term care and the principles of this charter;
- iv. take into account the needs, abilities and resources of the particular communities; and
- v. be fully documented and recorded.

### 5. Respect for existing evidence

The evidence of time and the contributions of all periods should be respected in conservation. The material of a particular period may be obscured or removed if assessment shows that this would not diminish the cultural heritage value of the place. In these circumstances such material should be documented before it is obscured or removed.

### 6. Setting

The historical setting of a place should be conserved with the place itself. If the historical setting non longer exists, construction of a setting based on physical and documentary evidence should be the aim. The extent of the appropriate setting may be affected by constraints other than heritage value.

### 7. Risk Mitigation

All places of cultural heritage value should be assessed as to their potential risk from any natural process or event. Where a significant risk is determined, appropriate action to minimise the risk should be undertaken. Where appropriate, a risk mitigation plan should be prepared.

### 8. Relocation

The site of an historic structure is usually an integral part of its cultural heritage value. Relocation, however, can be a legitimate part of the conservation process where assessment shows that:

- i. the site is not of associated value (an exceptional circumstance); or
- ii. relocation is the only means of saving the structure; or
- iii. relocation provides continuity of cultural heritage value.

A new site should provide a setting compatible with cultural heritage value.

### 9. Invasive Investigation

Invasive investigation of a place can provide knowledge that is not likely to be gained from any other source. Archaeological or structural investigation can be justified where such evidence is about to be lost, or where knowledge may be significantly extended, or where it is necessary to establish

the existence of material of cultural heritage value, or where it is necessary for conservation work. The examination should be carried out according to accepted scientific standards. Such investigation should leave the maximum amount of material undisturbed for study by future generations.

#### 10. Contents

Where the contents of a place contribute to its cultural heritage value, they should be regarded as an integral part of the place and be conserved with it.

#### 11. Works of Art and Special Fabric

Carving, painting, weaving, stained glass and other arts associated with a place should be considered integral with a place. Where it is necessary to carry out maintenance and repair of any such material, specialist conservation advice appropriate to the material should be sought.

#### 12. Records

Records of the research and conservation of places of cultural heritage value should be placed in an appropriate archive. Some knowledge of place of indigenous heritage value is not a matter of public record, but is entrusted to guardians within the indigenous community.

### CONSERVATION PROCESSES

#### 13. Degrees of Intervention

Conservation may involve, in increasing extent of intervention: non-intervention, maintenance, stabilisation, repair, restoration, reconstruction or adaptation. Where appropriate, conservation processes may be applied to parts or components of a structure or site.

Re-creation, meaning the conjectural reconstruction of a place, and replication, meaning to make a copy of an existing place, are outside the scope of this charter.

#### 14. Non-intervention

In some circumstances, assessment may show that any intervention is undesirable. In particular, undisturbed constancy of spiritual association may be more important than the physical aspects of some places of indigenous heritage value.

#### 15. Maintenance

A place of cultural heritage value should be maintained regularly and according to a plan, except in circumstances where it may be appropriate for places to remain without intervention.

#### 16. Stabilisation

Places of cultural heritage value should be protected from processes of decay, except where decay is appropriate to their value. Although deterioration cannot be totally prevented, it should be slowed by providing stabilisation or support.

#### 17. Repair

Repair of material or of a site should be with original or similar materials. Repair of a technically higher standard than the original workmanship or materials may be justified where the life expectancy of the site or material is increased, the new material is compatible with the old and the cultural heritage value is not diminished. New material should be identifiable.

#### 18. Restoration

Restoration should be based on respect for existing material and on the logical interpretation of all available evidence, so that the place is consistent with its earlier form and meaning. It should only be carried out if the cultural heritage value of the place is recovered or revealed by the process. The restoration process typically involves reassembly and reinstatement and may involve the removal of accretions.

#### 19. Reconstruction

Reconstruction is distinguished from restoration by the introduction of additional materials where loss has occurred. Reconstruction may be appropriate if it is essential to the function or understanding of a place, if sufficient physical and documentary evidence exists to minimise conjecture, and if surviving

heritage valued are preserved. Reconstruction should not normally constitute the majority of a place. Generalised representations of typical features or structures should be avoided.

#### 20. Adaptation

The conservation of a place of cultural heritage value is usually facilitated by it serving a socially, culturally or economically useful purpose. In some cases, alterations and additions may be acceptable where they are essential to continued use, or where they are culturally desirable, or where the conservation of the place cannot otherwise be achieved. Any change, however, should be the minimum necessary and should not detract from the cultural heritage value of the place. Any conditions and alterations should be compatible with original fabric but should be sufficiently distinct that they can be read as new work.

#### 21. Interpretation

Interpretation of a place may be appropriate if enhancement of public understanding is required. Relevant protocol should be complied with. Any interpretation should not compromise the values, appearance, structure or materials of a place, or intrude upon the experience of the place.

#### 22. Definitions

For the purposes of this charter:

*adaptation* means modifying a place to suit it to a compatible use, involving the least possible loss of cultural heritage value

*conservation* means the processes of caring for a place so as to safeguard its cultural heritage value

*cultural heritage value* means possessing historical, archaeological, architectural, technological, aesthetic, scientific, spiritual, social, traditional or other special cultural significance, associated with human activity

*maintenance* means the protective care of a place

*material* means physical matter which is the product of human activity or has been modified by human activity

*place* means any land, including land covered by water, and the airspace forming the spatial context to such land, including any landscape, traditional site or sacred place, and anything fixed to the land including any archaeological site, garden, building or structure, and any body of water, whether fresh or seawater, that forms part of the historical and cultural heritage of New Zealand

*preservation* means maintaining a place with as little change as possible

*reassembly (anastylosis)* means putting existing but dismembered parts back together

*reconstruction* means to build again in the original form using old or new material

*reinstatement* means putting components of earlier material back in position

*repair* means making good decayed or damaged material

*restoration* means returning a place as nearly as possible to a known earlier state by reassembly, reinstatement and/or the removal of extraneous additions

*stabilisation* means the arrest of the processes of decay

*structure* means any building, equipment, device or other facility made by people and which is fixed to the land.



### APPENDIX 3: WORK RECOMMENDATIONS

1. Environment Bay of Plenty should advocate for the protection of archaeological/cultural features that are currently in private ownership, adjacent to the Park.
2. Farming, forestry and recreational activities within the Park should be managed to ensure archaeological/cultural features are protected from adverse effects.
3. A document bank should be established to hold information relating to the conservation and management of heritage places within the Park.
4. Complete remedial work as specified in Appendix 4.
5. Carry out regular maintenance as specified in Appendices 5, 6, 7 and 8.
6. Undertake farming operations in accordance with the principles contained in Appendix 5.
7. Carry out regular condition monitoring and soundness assessment of large trees on archaeological/cultural features within the Park. Individual trees should be managed or removed if assessed as being at risk of collapse.
8. Implement specifications for forestry operations and the revegetation programme contained in Appendices 6 and 7.
9. Consideration should be given to obtaining advice from a fire control specialist regarding the development of a fire control plan for the Park.
10. Seek archaeological advice during planning and design of management programmes involving ground disturbance.
11. Implement draft management plan policies on Park access and use.
12. Implement a Park management and visitor monitoring programme.
13. Implement specification for track maintenance and visitor facilities contained in Appendix 8.
14. Design and upgrade interpretative information.
15. Maintain following lines of sight:
  - Visual contrast between bush in gullies and grassland on ridges,
  - Visual connection to other landmark pa in area (Mauao, Maketu etc),
  - Visual connection to coastal landscape.
16. Implement the Draft Management Plan actions relating to landscape values, including the identification of key sight lines.
17. Media coverage should be sought for all conservation works carried out at the Park.

## APPENDIX 4: REMEDIAL WORK SPECIFICATIONS

4A: Remedial work specification for eroding sections of bank within Papamoa Hills Regional Park

4B: Remedial work specification for eroding midden exposures within Papamoa Hills Regional Park – including walking track surfaces

## 4A: Remedial work specification for eroding sections of bank within Papamoa Hills Regional Park



EXAMPLE OF ERODING BANK

### *1. Purpose of work*

Repair of eroding sections of the bank or scarp where informal tracking or livestock trampling has exposed the underlying ground surface.

The scope of the remedial work should be minor. The aim is to reinstate an intact ground surface and to establish robust vegetation cover on the repaired area, and to deter use of the bank as an access point.

### *2. Description of process*

An application under section 11 of the Historic Places Act (1993) must be made, and an authority granted by the NZ Historic Places Trust prior to the commencement of any remedial work involving ground disturbance or modification.

The authority application should include this remedial work specification, and the conservation plan, as supporting documents. Evidence of consultation with tangata whenua will also be required to accompany the application. Tangata whenua should be advised prior to the commencement of remedial work involving ground disturbance. Tangata whenua may wish to have a representative present during this work.

All remedial work involving ground disturbance or modification must be completed under the direct supervision of a suitably qualified and experienced archaeologist. This person must be approved by the NZHPT as part of the authority process.

The work must be well planned, introduced material must be clearly identified, repairs must be reversible and all remedial work must be monitored after completion to ensure that it is achieving the desired result.

The existing erosion surface should be capped by a marker layer (such as geotextile fabric and fine grade gravel). It may be desirable to form a slightly elevated 'crown' on the repaired area to allow for settling of material. Some minor modification of the surface may be required to securely anchor the marker layer.

Clean fill must be used for the repair work which must be imported from an area outside the reserve boundary. Particular care should be taken to ensure that no archaeological site is disturbed in the process of gathering the material. The accidental importation of archaeological material from another site to the Park during the course of the repair work must be avoided.

Following the repair work, the area should be sown in grass and the ground surface protected by plastic mesh while the grass cover establishes. The plastic mesh can then be carefully removed. Alternatively, cut grass turf strips could be laid over the repaired area and anchored in place with plastic mesh until the grass roots become established.

The remedial work should be documented through photographs and a written report. The information should be added to the document bank established for the Park (as recommended within this conservation plan).

### *3. Specification summary*

1. Apply to NZHPT for, and receive, an archaeological authority for the repairs.
2. Work must be carried out under the supervision of the approved archaeologist.
3. Cap eroding surface with marker layer, repair with clean fill.
4. Establish grass cover over the repaired area.
5. Document work and add to document bank.

#### 4B: Remedial work specification for eroding midden exposures within Papamoa Hills Regional Park – including walking track surfaces



EXAMPLE OF ERODING HORIZONTAL SURFACE (CRUSHED SHELL EMBEDDED IN SURFACE).



EXAMPLE OF SHELL MIDDEN ERODING FROM VERTICAL SECTION

## *1. Purpose of work*

Stabilisation of midden exposures caused by informal tracking, livestock trampling, stock resting or camping, or slump erosion.

The scope of the remedial work should be minor. The aim is to reinstate an intact ground surface and to establish robust vegetation cover on the repaired area, and/or to armour the reinstated ground surface to prevent further exposure of the underlying archaeological/cultural deposits.

## *2. Description of process*

The minimum intervention possible in order to achieve stabilisation is the most desirable course of action. Therefore, if the exposure can be stabilised simply by preventing further trampling of the affected area, in order to allow vegetation to become established on the eroding surface, this method should be applied as the preferred course of action.

If, however, the erosion surface is extensive or has become compacted by trampling, the likelihood of an effective vegetation cover becoming established without intervention is reduced.

If the exposed midden is eroding from a vertical section an effective vegetation cover may be more easily achieved without significant intervention than when the erosion is occurring on a horizontal surface. This is because the vertical section is likely to be less compacted, so vegetation will become established more easily and also because it is easier to prevent further disturbance through trampling on a vertical surface. Exposed vertical sections may; however be particularly vulnerable to the drying affects of wind which may hamper the establishment of vegetation.

Infilling or reshaping of overhanging or hollowed out vertical sections, usually caused by stock camping, should not be attempted. Livestock should be provided with alternative areas for shelter. Livestock access to damaged areas should be blocked.

An application under section 11 of the Historic Places Act (1993) must be made, and an authority granted by the NZ Historic Places Trust prior to the commencement of any remedial work involving ground disturbance or modification.

The authority application should include this remedial work specification, and the conservation plan, as supporting documents. Evidence of consultation with tangata whenua will also be required to accompany the application. Tangata whenua should be advised prior to the commencement of remedial work involving ground disturbance. Tangata whenua may wish to have a representative present during this work.

All remedial work involving ground disturbance or modification must be completed under the direct supervision of a suitably qualified and experienced archaeologist. This person must be approved by the NZHPT as part of the authority process.

The work must be well planned, any introduced material must be clearly identified, repairs must be reversible and all remedial work must be monitored after completion to ensure that it is achieving the desired result.

#### *a. Vertical section*

The application of a hydro-seeding mix is an effective and low intervention method of establishing vegetation cover on vertical sections (including overhanging sections). The species of grass used should be suitable to the local site conditions, and advice should be sought to ensure that the optimum mix of species is used. Ideally there should be no modification or disturbance to the section prior to the application of the hydro-seeding mix. Repeat applications may be required, so the section should be checked within ten days of the initial application to assess whether there has been a successful seed strike.

Livestock and visitors must be prevented from accessing any section that has been hydro-seeded in order to allow the vegetation to become well established without any interference or disturbance. Temporary barriers, which extend beyond the re-sown section, should be erected using waratah stakes and plastic mesh. The use of more robust vegetation to create permanent barriers may also be considered, if appropriate species are already present in the Park.

#### *b. Horizontal surface*

If the existing erosion surface is not going to be subject to further trampling, such as in areas where existing informal tracks are to be closed, establishing a robust vegetation cover should be sufficient to prevent further erosion. In this situation the compacted surface should be broken up by vigorous raking or by hand cultivation with a spade. This disturbance should not, however, extend to a greater depth than the compacted surface.

The surface can then be sown with appropriate grass species. Livestock and visitors must be restricted from the area in order to allow the vegetation to become well established. This can be achieved by erecting temporary barriers using waratah stakes and plastic mesh.

If the eroding horizontal surface is going to be subject to on-going trampling, for example it forms part of the established track route and diversion of the track is not appropriate, it will be necessary to construct an artificial surface in order to 'armour' the archaeological/cultural deposit and prevent further disturbance.

The eroding archaeological/cultural layers should be capped by a marker layer (such as geotextile fabric and fine grade gravel). It may be necessary to modify the surface in order to establish a flat basal layer and to securely anchor the marker layer.

The track should then be built up using appropriate construction and track surfacing materials. It may be desirable to form a slightly elevated 'crown' on the track surface to allow for settling of material. Tracks should be regularly checked and maintained to ensure that the marker layer is not exposed by ongoing use and wear on the track

surface. Specialist advice on appropriate track standards and construction methods should be obtained.

All remedial work should be documented through photographs and a written report. The information should be added to the document bank established for the Park (as recommended within this conservation plan).

### ***3. Specification summary***

1. Determine appropriate repair method, as set out in this section, depending on circumstances of erosion.
2. Apply to NZHPT for, and receive, an archaeological authority for the repairs.
3. Carry out work under the supervision of the approved archaeologist.
4. Document work and add to document bank.



## **APPENDIX 5: PRINCIPLES FOR FARMING OPERATIONS**

5A: Grazing principles

5B: Fencing principles

5C: Farm access track and water control maintenance

## 5A: Grazing principles



EXAMPLE OF GOOD PRACTICE FOR PASTURE COVER.



EXAMPLE OF PROBLEM WITH BARE GROUND AROUND GATE WAYS.

### *Objective*

The objective of the livestock grazing regime within the Park should be to achieve continuous ground cover with a robust pasture sward. This is a key requirement in order to stabilise archaeological/cultural features and reduce the rate of deterioration of features in the Park. This can be achieved by the following methods.

## *Methods*

- A degree of ground damage due to stock trampling and tracking is going to occur as a consequence of using grazing animals to maintain a pasture sward. This risk should be managed to restrict potential damage to areas where archaeological/cultural features will not be affected.
- Ground damage can be minimised by using species and classes of livestock that are appropriate to the site features and conditions. Cattle should not be grazed in areas of the Park that contain concentrations of archaeological/cultural features, particularly the recognised pa areas which contain visible surface features such as scarps, ditches, banks, pits and midden.
- Animals could be provided with access to shade and shelter in areas where archaeological/cultural features are not affected. The stock should be rotationally grazed, and moved regularly, so that the pasture sward is maintained by even grazing appropriate to the seasonal conditions. Stock numbers should be monitored and adjusted to suit seasonal variations in grass growth. Large or heavy cattle should not be grazed on areas where there is a high concentration of archaeological/cultural features.
- Gateways and water troughs should not be placed in areas where archaeological/cultural features are present. Artificial ground hardening, using shingle or cement, could be considered in areas where congregation of stock occurs – for example, gateways and around water troughs.
- A short pasture sward creates a favourable habitat for rabbits. Rabbits may damage archaeological features by burrowing. When grass is dense and rank the rabbit population tends to decrease. Rabbit numbers in the Park should be monitored by observation and, if population increase is observed, control operations should be undertaken.
- Uniform length of pasture sward is not required. Scarps should be maintained with a long sward than horizontal terrace surfaces (refer to photograph showing the example of good practice for pasture cover).

## 5B: Fencing principles



EXAMPLE OF FENCE ALIGNMENT THROUGH ARCHAEOLOGICAL/CULTURAL FEATURES.

### *Objective*

Fences should be designed and placed to have minimal effects on archaeological/cultural features. This can be achieved by ensuring that fence alignments avoid visible features or areas likely to contain buried archaeological deposits wherever possible. The following methods are recommended.

### *Methods*

- Fence alignments should be established in consultation with an archaeologist familiar with the management of large earthworks sites within a pastoral context.
- Existing fences, and gateways, which are concentrated on archaeological/cultural features, should be progressively removed or realigned.
- Ground disturbance associated with the establishment of fences should be minimised by the use of driven posts where-ever possible.
- Persons undertaking fencing work should be informed of the probability of encountering archaeological deposits and should be briefed by the supervising archaeologist prior to commencing any site works. It is recommended that a fencing contractor with some familiarity and experience of working in and around archaeological/cultural features is used.

- The holes resulting from the removal of existing fence posts should be marked in the ground with a layer of fine gravel placed in the base of the holes prior to backfilling. This will ensure that these fence post holes are not confused with earlier archaeological/cultural features, if the area is archaeologically investigated in the future.
- All ground disturbance associated with the fencing programme should be subject to direct archaeological supervision, monitoring and recording.

## 5C: Farm access track and water control maintenance

### *Objective*

Regular maintenance of water run-off systems and track formations will minimise the risk of accidental damage to archaeological/cultural features resulting from land slips. The primary function of regular maintenance is to ensure early identification and remedying of problems. Machinery used for the maintenance of access tracks, water control work, dam maintenance and land slip clearance within the Park, however, also has the potential to damage archaeological/cultural features. The following methods are recommended in order to minimise the risk of damage occurring:

### *Methods*

- The permitted routine works for the maintenance of farm track surfaces are currently levelling of existing tracks and adding new material. This work is undertaken by a small grader, an excavator and rollers. The clearance of slips from the tracks is also permitted routine work. If any ground disturbance is likely to occur in any area that is not already clearly part of the established farm track and water control network – for example, the establishment of additional culverts – the proposed work should be discussed with the NZ Historic Places Trust in order to determine if an Archaeological Authority is required.
- Culverts and water tables should be regularly checked and cleared. This work is currently carried out by 2 or 7 tonne excavators. The excavators should be restricted to established tracks and work should be monitored by Park staff. Material removed from culverts should not be spread on archaeological/cultural features.
- Water needs to be diverted off tracks at regular intervals. The velocity of the water when it exits the culverts should be monitored to ensure that run-off does not cause localised channelling and erosion of archaeological/cultural features. Reducing the velocity of the run-off ensures that water is dissipated over the ground surface, thus preventing channelling. This can be achieved by placing rocks or geotextile near the culvert exits. The results of such intervention would need to be monitored closely, to ensure that scouring does not occur around any new velocity 'barrier'.
- Dams and silted waterways are periodically cleaned out using a 7 tonne excavator. The excavator should be restricted to the established farm track network as far as practical in order to undertake the task. Material removed during waterway and dam clearance should not be spread on archaeological/cultural features.

## APPENDIX 6: WORK SPECIFICATION FOR FORESTRY OPERATIONS

### *1. Purpose of work*

The purpose of the work specification is to ensure that archaeological/cultural features are not adversely affected by any forestry operations involving ground disturbance that may be carried out within the Park. The work specification has also been prepared to ensure that any forestry operation carried out in the Park complies with the requirements of the Historic Places Act 1993.

### *2. Description of process*

An application under section 11 of the Historic Places Act (1993) must be made, and an authority granted by the NZ Historic Places Trust, prior to the commencement of any forestry operations within the Park involving ground disturbance where there is the potential to encounter archaeological/cultural features. This is a requirement regardless of whether those archaeological/cultural features have been previously identified or have visible surface features.

The authority application should include this work specification, and the conservation plan, as supporting documents. Evidence of consultation with tangata whenua will also be required to accompany the application. Tangata whenua should be advised prior to the commencement of remedial work involving ground disturbance. Tangata whenua may wish to have a representative present during this work.

All ground disturbance where there is the potential to encounter archaeological/cultural features must be supervised by a suitably qualified and experienced archaeologist. This person must be approved by the NZHPT as part of the authority process.

A 'Site Instruction' document should be prepared prior to the commencement of any work that will involve soil disturbance (such as earthworks and harvesting) on or adjacent to archaeological/cultural features. The Instruction must be prepared by the contractor/operator in consultation with the archaeologist.

The Site Instruction must consist of a site plan with archaeological/cultural features and areas marked, take into account local conditions and safety standards and provide specific agreed procedures for the removal of trees in archaeologically sensitive areas.

After the removal of trees growing on archaeological/cultural features within the forested portion of the Park, the area should be converted to pasture. Archaeological/cultural features should not be replanted in any large tree species.

## APPENDIX 7: WORK SPECIFICATION FOR REVEGETATION PROGRAMME

### *1. Purpose of work*

The purpose of the work specification is to ensure that archaeological/cultural features are not adversely affected by the planned revegetation programme within the Park. The work specification has also been prepared to ensure that the revegetation programme complies with the requirements of the Historic Places Act 1993.

### *2. Description of process*

A field inspection should be undertaken by a suitably qualified and experienced archaeologist prior to any ground disturbance for planting purposes. The inspection should identify any surface features or areas that should be excluded from planting in order to avoid impacting on archaeological/cultural features.

An application under section 11 of the Historic Places Act (1993) should be made, and an authority granted by the NZ Historic Places Trust, prior to the commencement of any revegetation planting within the Park where there is the potential to encounter archaeological/cultural features. This is a requirement regardless of whether those archaeological/cultural features have been previously identified or have visible surface features.

The authority application should include this work specification, and the conservation plan, as supporting documents. Evidence of consultation with tangata whenua will also be required to accompany the application. Tangata whenua should be advised prior to the commencement of remedial work involving ground disturbance. Tangata whenua may wish to have a representative present during this work.

All ground disturbance where there is the potential to encounter archaeological/cultural features must be supervised by a suitably qualified and experienced archaeologist. This person must be approved by the NZHPT as part of the authority process.

The archaeologist should also be present during planting operations to record the location and extent of any in-situ archaeological deposits encountered, as considered appropriate by the archaeologist.

The time required by the archaeologist to record any archaeological evidence uncovered during planting operations should be allowed for in the planting programme and in any contract documents, if appropriate. Provision should also be made for planting operations to cease in the vicinity of any archaeological work.



## **APPENDIX 8: WORK SPECIFICATIONS FOR VISITOR FACILITIES**

8A: Public access track formation and maintenance

8B: Visitor facilities (installation of signs and Park furniture)

## **8A: Public access track formation and maintenance**

### ***1. Purpose of work***

The purpose of the work specification is to ensure that archaeological/cultural features are not adversely affected by the provision of public access within the Park. The work specification has also been prepared to ensure that any ground disturbance associated with the operation or maintenance of walking tracks within the Park complies with the requirements of the Historic Places Act 1993.

This specification should be read in conjunction with the Appendix 4 specification for the repair of horizontal eroding surfaces.

The draft Management Plan states, "Walking tracks will generally be unformed. Visitors will be directed by appropriate markers, signage and track maintenance (such as mowing). Steps, small timber boardwalks and timber bridges will be provided as required. These may include formal sealed, concrete, timber boardwalks, timber ladders or compacted gravel surfaces at arrival zones or where damage to cultural or archaeological sites is occurring or has the potential to occur" (Papamoa Hills Regional Park Draft Management Plan March 2006:40).

### ***2. Description of process***

The majority of the walking track access in the Park is provided along established farm tracks which are maintained with a grass surface. Generally the grazed pasture surface is sufficiently robust to withstand visitor usage, but the condition of the grass track surfaces should be regularly monitored, particularly in the vicinity of gateways or viewing points where there is the potential for people to congregate. If eroding or compacted surfaces begin to develop remedial action should be taken as specified in Appendix 4.

Access through archaeological/cultural features should be restricted to one designated route, which ideally operates as a circuit through the site. Artificial surfaces, including boardwalks and/or 'floating steps' should be used wherever it is not possible to avoid crossing archaeological features. Alternative, informal routes should be closed and actively discouraged by barriers and signage. Wherever artificial surfaces are established the condition of that surface should be regularly monitored and maintained. If compacted gravel surfaces are established additional material should be added regularly to maintain a robust surface.

An application under section 11 of the Historic Places Act (1993) must be made, and an authority granted by the NZ Historic Places Trust, prior to the commencement of any ground disturbance associated with track formation or maintenance where there is the potential to encounter archaeological/cultural features. This is a requirement regardless of whether those archaeological/cultural features have been previously identified or have visible surface features.

The authority application should include this work specification (including Appendix 4), and the conservation plan, as supporting documents. Evidence of consultation

with tangata whenua will also be required to accompany the application. Tangata whenua should be advised prior to the commencement of remedial work involving ground disturbance. Tangata whenua may wish to have a representative present during this work.

All ground disturbance where there is the potential to encounter archaeological/cultural features must be supervised by a suitably qualified and experienced archaeologist. This person must be approved by the NZHPT as part of the authority process.

## **8B: Installation of signs and Park furniture**

### *1. Purpose of work*

The purpose of the work specification is to ensure that archaeological/cultural features are not adversely affected by the installation of signs and Park furniture within the Park. The work specification has also been prepared to ensure that any ground disturbance associated with that installation complies with the requirements of the Historic Places Act 1993.

### *2. Description of process*

Interpretation panels, directional signs, seats and other Park furniture should not be placed on archaeological/cultural features. There is the potential to encounter buried archaeological/cultural features throughout the Park, so ground disturbance associated with the installation of such facilities should be kept to the minimum possible by the use of appropriate construction and anchoring techniques.

As a matter of best practice it is recommended that an application under section 11 of the Historic Places Act (1993) is made, and an authority granted by the NZ Historic Places Trust, prior to the commencement of any ground disturbance associated with the installation of signs or Park furniture because there is always the potential to encounter archaeological/cultural features.

The authority application should include this work specification and the conservation plan, as supporting documents. Evidence of consultation with tangata whenua will also be required to accompany the application. Tangata whenua should be advised prior to the commencement of remedial work involving ground disturbance. Tangata whenua may wish to have a representative present during this work.

All ground disturbance where there is the potential to encounter archaeological/cultural features must be supervised by a suitably qualified and experienced archaeologist. This person must be approved by the NZHPT as part of the authority process.

## APPENDIX 9: MONITORING FORM

# Papamoa Hills Regional Park

## Park Management and Visitor Monitoring Form

Inspection Done By		Date	
Maintenance Done By		Date	

Attach a Plan of the Site and annotate if required.

AREA / ITEM	CHECK		TICK IF PROBLEM & NOTE DATE FIXED
<b>1. Consultation</b>			
	- Tangata whenua involvement in work that needs to be done		
	- Any Tangata whenua concerns		
Comments			
<b>2. Surrounds</b>			
Security	- broken fences/gates		
	- gate latches functional		
	- vandalism		
Groundcover	- trees		
	- weeds		
	- fire danger		
Lines of sight (if obscured)	- contrast between bush in gullies and grassland on ridges		
	- screening of adjacent housing where possible.		
Comments			
<b>3. Condition of archaeological features</b>			
The sites should be inspected methodically i.e. use consistent route through Park.			
Pa	- ditch / banks		
	- platforms		
	- scarps		
	- surface around visitor facilities, interpretation and fences		
	- erosion beside tracks		
	- grazing heights		

Archaeological Sites continued			
Pa	- pest damage		
	- vegetation/ root damage		
	- protection from weather/lack of vegetation		
Other features in grassed areas	- grazing heights		
	- track edges		
Other features in forestry / reveg areas	- windthrow damage		
	-erosion/ slip		
Comments:			
<b>4. Visitor Facilities</b>			
	- road condition		
	- parking conditions		
	- toilets: drainage, doors, etc		
	- water		
	- rubbish		
	- picnic tables		
	- ground cover		
	- weeds		
	- safety and maintenance of structures (eg. steps)		
	- Use: visitor impacts		
	- Use: visitor numbers		
Comments:			
<b>5. Interpretation</b>			
Signs	- signs in good order or need repairs		
	- info needs to be updated		
	- sign surrounds ok or require work		
	- location appropriate		
	- any new signs needed		
Comments			

<b>6. Tracks</b>			
	- location: appropriate or need re-routing		
	- gradient appropriate		
	- material appropriate		
	- erosion		
	- being used or informal tracking		
	- directional signs: condition		
	- directional signs: location		
Comments			
<b>7. Surface cover maintenance</b>			
	- grazing management		
	- vegetation management		
	- any specific treatment required		
Comments			
<b>8. Threats</b>			
	- insects		
	- grass grub		
	- rabbits		
	- mountain bikers		
	- horses		
	- motorbikes		
Comments			



# Photopoints

Locations to be determined in conjunction with local staff, eg. Repairs to banks on Karangaumu Pa, view shafts, interpretation panels, grazed areas.

<b>Photopoint One</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						
<b>Photopoint Two</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						
<b>Photopoint Three</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						
<b>Photopoint Four</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						

<b>Photopoint Five</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						
<b>Photopoint Six</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						
<b>Photopoint Seven</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						
<b>Photopoint Eight</b>						
Description						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Date						
Time						
Weather						