Papakainga te whau o te matauranga
Hei ronaki wa i te ao Māori ki a puawai he oranga hou hei kitenga tangata

The Garden of Knowledge
Sustainable Contemporary Māori development-Creating new frontiers with a clear rear view mirror

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Master Thesis Explanatory Document

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Whaia te pae tawhiti kia tata, Whaia te pae tata kia mau

One eye on the work immediately before us, and the other on the distant horizon
Abstract

This project titled ‘The Garden of Knowledge’ presents a holistic exploration of a sustainable contemporary Māori urban design solution. The location is the ipukarea (ancestral lands) of the hapū (sub-tribe) Ngāti Whātua o Orakei at Orakei (Bastion Point) in Tamaki Makaurau (Auckland).

The research question posed is how can Architecture inform the sustainability of contemporary urban Māori development? The project presents an alternative ‘belonging-based approach’ (‘he ara mana motuhake’) to urban design and architecture, and assumes a perspective of the land as a lived cultural reality which necessitates an understanding the whenua (land) and the communal layers of meaning and narratives imbued within it.

It is argued that the dominance of the values of individualism, private property rights, and our addiction to the motor vehicle and other technocratic solutions is resulting in unsustainable urban design approaches that perpetuate these norms and fail to address the fundamental problems around our relationships with our resources and each other. Māori are kaitiaki (guardians) of their ancestral lands, and have a matrix of cultural understandings and practices inherited by their tūpuna (ancestors) that form a comprehensive sustainability ethic. This project presents a challenge to acknowledge the dominance of western cultural values infused in our practice of ‘sustainable’ urban design and architecture in Aotearoa/New Zealand, and offers an example of how examining the issue from a Māori cultural context results in radically different outcomes.

The design outcomes are directed by these values and include many features such as: housing solutions that meet intergenerational needs and fluctuating populations; inspiration sought from traditional Maori land developments including Pa sites; a focus on horticultural gardens for economic sustainability and food sovereignty; inclusion of communal values through collaborative living solutions; and using a platform of tikanga Maori (values and practices) to direct the spatial layout.

For Ngāti Whātua o Orakei, and Māori nationally this project represents a design solution embedded in the holistic wellbeing of the people and the whenua, and for Architecture this project contributes to the diversity of design generators and approaches that seek to move beyond the status quo.
Mihi & Acknowledgements

Kotahi te rarauwahe ka whati, engari ki te kapuia e kore tatou e whati

To all my tūpuna, together we are eternal.
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1 All photos and images produced by Terry Badham unless stated otherwise.
Chapter 1 - Introduction

1.1 Introduction

Māori, as the indigenous people of Aotearoa (New Zealand), have a unique relationship with the land which encompasses physical, historical, cultural and spiritual dimensions. These interwoven relationships form a distinctive ‘worldview’ which shapes and dictates the way tangata whenua (people of the land) live as a community and interact with their natural resources. This project has been formed to understand and explore how sustainable architectural design fits within a holistic Māori worldview, and how the interface can create a successful and culturally appropriate urban community development.

The location of the proposed urban development is the ipukarea (ancestral land) of Ngāti Whātua o Orakei (a hapū/subtribe of the iwi/tribe Ngāti Whātua) located at Orakei/Bastion Point. This unique site enveloped by suburban sprawl that has come to represent the growth of Tamaki Makaurau (Auckland) (see figure 1). Aside from a small remnant population from the hapū performing an important role as ahi kā (keeping the home fires burning) that reside on the land, it is a primarily undeveloped area. The area is referred to is ipukarea (ancestral land) which is “…a place that represents the history and emotional attachment of the tribe…central to the identity of the people [and]… represents the hopes and aspirations of the people, the life giving waters from
which they drink.”\(^2\) The importance of this land to the survival and identity of its people, positioned in a central urban location in our most populated city amongst high end real estate creates a unique, complex and multi-layered context in which this project sits.

Given that many *iwi* and *hapū* have already, or are in the process of having, their resources returned through the Treaty Settlement process, exploring Māori development particularly in an urban setting is a pertinent and contemporary issue. This research seeks to investigate the topic through an innovative lens, critiquing current understandings of ‘sustainability’ when applied as a homogenous architectural solution driven by technological advances, private landownership and individualism; and moving towards a Māori-based paradigm of urban ‘sustainable’ development.

1.2 Overview of Content

This thesis will begin by introducing the research question and objectives, followed by a discussion of the methodology and its three research components: Literature, Analysis of *hui* notes, and Design. Chapter 4 presents key concepts around Māori relationships to land. This leads into the ‘Historical Background’ in Chapter 5 which gives key information necessary for understanding the location and its people. Chapter 6 addresses the interface between mainstream ideas around sustainable urban development and Māori understandings and values of sustainability. These conceptually focussed chapters then culminate in the design outcomes of Chapter 7 and 8, before the thesis is concluded in Chapter 9, including the wider implications of the research, and recommendations for future research in this area. Found within appendix 1, a critical segment of research explores the second research method of analysing the *hui* notes which is crucial in terms of understanding the ‘people’ who are at the core and the drivers of the development.

1.3 Research Question and Objectives

The following key research question and four objectives have shaped this research project.

Question

How can Architecture inform the sustainability of contemporary urban Māori development?

Objectives

1. To explore the relationship Māori have to the land and the values that shape a Māori urban development proposal.

2. To understand the history of Ngāti Whātua o Orakei hapū and the land to which the proposal relates (ipukarea).

3. To develop a proposed master plan of the site based on examination of objectives 1 and 2.

4. To design a housing platform that identifies as Māori and utilises intergenerational values expressed through two typologies of housing; the kaumatua (elder) and the whanau (family).
Chapter 2 - Methodology

The body of research is comprised of three integrated components: a literature review; an analysis of a series of hui notes orchestrated by Ngāti Whātua o Orakei pertaining to the papakainga initiative; and designs for the creation of architectural outcomes for the project.

2.1 Literature Review

A core component of this project is the research into the Māori understandings and values concerning the ownership and relationship with the land, tūpuna (ancestors), and concepts of how to exist as kaitiaki (guardians) of the environment. Also, an historical background of the Tamaki Isthmus (Auckland) as well as the īwi Ngāti Whātua and Ngāti Whātua o Orakei hapū is integral to portraying the significance of the ipukarea. While the traditional form of knowledge transmission in Māori culture is through oral accounts, given the scope and constraints of this project, the primary method for completing this research will be through secondary sources. An extensive literature review has been conducted which has drawn widely from many disciplines and sources including Māori studies, Architecture, Development and Environmental studies, governmental policy and Ngāti Whātua o Orakei documents. The literature based research informs the entire project, but features most prominently in Chapters 4: ‘Māori Connection to the Land’, 5: ‘Historical Background’, and 6: ‘Māori Values and Their Connection with Contemporary Understandings of Sustainability’.

2.2 Analysis of Hui Notes

Urban design development is often conducted by designers, disconnected from the people on a human level; the people become a statistic to be analysed and typified through a design brief. The development of the ipukarea at Orakei directly affects a wide range of Ngāti Whātua tangata whenua and, due to the cultural norms of consensus and transparent decision making, a series of hui (gatherings) were held. The objective of these hui was to gain a vision of how to develop the ipukarea in an effective and appropriate way.
The people are the most important ingredient of any community development and, particularly within the Māori context, an extensive and rich cultural heritage informs an understanding that moves well beyond the conventional design brief. Therefore, a detailed analysis through a thematic table supported by personal comments expressed in the *hui* forms an integral part of this research (Appendix 1 ‘*Hui* Notes’).

2.3 Design

The design component through concept drawings, models and plans comprises the third central component of this research. Given the culturally situated nature of this research and, therefore, its holistic integration of cultural, physical, spiritual and historical dimensions, it is appropriate that the architectural response recognises the diversity of this understanding and attempts to use these dimension generators for design outcomes. Accordingly the design outcomes will be understood in a different way to the conventional. However, there will inevitably be similarities with the current modes of shelter and urban development due to issues of practicality and necessity (such as a roofing, furniture and roading). The main point of difference is the uniquely Māori, and in particular Ngāti Whātua o Orakei, identity which the architectural design represents. The design component comprises Chapter 7: ‘Site Design and Relations’.
Chapter 3 - A Māori Worldview

In order to create a holistic, sustainable urban Māori community it is the intention of this project to gain an understanding of the way in which Māori belong to the land, exist within the present, past and future of the physical, cultural and spiritual paradigm. Intertwined within this objective is research into the foundations of these communal beliefs that create a Māori ‘worldview’ and the unique understanding of how to exist as a community that can symbolise sustainable Māori principles.

It is important to note that before the arrival of Europeans, Māori did not have a term for themselves as a collective group of people, but rather a number of tribal groups with diverse traditions and views. While there is a danger of homogenising the diverse beliefs and approaches of different iwi, hapū and even whanau by referring to a ‘Māori worldview’, it is still useful as a point of reference and difference to the hegemonic ‘Western worldview’.

Māori narratives generally highlight that the world was created through the union of the Sky Father, Ranginui, and the Earth Mother, Papatuanuku, who were the parents of all creation. All elements within the natural world are interrelated through the concept of whakapapa (genealogical connection), which provides Māori with their own identity within the tribal

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structure and links to the Atua (Gods), humankind and all things both animate or inanimate (see Figure 2).  

Māori see the world as an interconnected ‘web’, everything being traceable back to the common ancestral source of the Atua and because all things contain mauri (active life force/energy) which is the essential element that connects the fabric of the universe. Kaitiaki (guardians) are delegated mana (power) and the responsibility from the Atua to ensure the protection of the world and its resources for future generations. This all encompassing view of the environment means that Māori see themselves as belonging to nature rather than owning it, or being a separate and dominant entity.

The overarching intent of this research is to translate these unique Māori principles into a new direction for contemporary sustainable urban Māori development by asking the question ‘What is the relevance of current sustainable design principles to different cultural contexts outside the realm of the homogenous sphere of society.’ The next chapter will examine in more depth the specific relationships, values and concepts that the people of Ngāti Whātua o Orakei hold in relation to the ipukarea and the papakainga project.

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7 While all Māori terms are defined initially in text, please refer to the Glossary on page 65.
Chapter 4 - Māori Relationships, Values and Concepts

4.1 The Tūpuna- Ancestors

To Māori tūpuna are regarded as the substance of their descendants, their very being. This relationship moves beyond a close bond into a need for continuity of existence. Orbell describes this further;

‘It was believed that individuals had participated in the lives of their ancestors, so that their own lives went backward in time to early events. An orator describing an early event in his people’s history might speak as though he himself had been present at the scene. At the same time, it was thought that people behave as they do because of the presence within them of the ancestors: that they owe their identity to the men and women who have preceded them. These two ideas were inseparable. People were present in their ancestors and their ancestors were present in them’

Not only will the residents of the ipukarea be residing in the present development, they will be revered by the future and past generations who live or have lived upon the whenua (land). In the Māori context of sustainability the people are more than ‘residents’, they have the responsibility to act as kaitiaki (guardians). The potential for the future, and depth of the past are directly impacted by way the tangata whenua exist in the contemporary context. This communal responsibility to all the generational dimensions of time (past, present and future) often comes into conflict with the dominant cultural understanding (and architectural context), which generally views sustainability as embedded in the present and future, hence denigrating or omitting the past and our ancestors.

4.2 The Marae- Tumutumuwhenua

The marae (meeting house) acts as the epicentre for the existing Ngāti Whātua o Orakei community and serves as an important connection to the ancestors and the past. The Orakei marae is named after the eponymous ancestor of the Ngāti Whātua iwi, Tumutumuwhenua, and,

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like ancestors who are revered as living beings in the present, the *marae* is also celebrated as a living being to the *iwi*. The meeting house depicts the *tūpuna* (ancestors) of Ngāti Whātua through carved features which echo the genealogies associated with Tamaki, during *hui* the myriad of ancestors watch over the discussions.\(^9\)

![Figure 3: Tumutumuwhenua and the location on site.](image)

When developing a holistic, sustainable community on the ancestral lands of Ngāti Whātua o Orakei at Orakei, respect for the cultural and spiritual importance of the *marae* is fundamental. Not only is Tumutumuwhenua a significant landmark in the area of Orakei, but it also connects and sustains the *tangata whenua* relationship with their *tūpuna*. In the creation of a Māori community the *marae* needs to act as the communal mouth of the people and a place where the seed of inspiration is planted and nourished.

### 4.3 The Whenua- Māori Connection to the Land

Traditional Māori society was composed of communities living cooperatively with spiritual, emotional, cultural and genealogical connections to the *whenua*.\(^11\) The word *whenua* has two meanings- its most common translation is ‘land’, however, the same word is used for the

\(^9\) Ibid. 9.  
placenta. In Māori culture it is customary to bury a new born child’s placenta in the ground and plant a tree above. As the placenta sustains the child in the womb, so the land continues to sustain the child beyond birth. The greatest gift of birth is connected to the land, thus, a rebirth and presence beyond death is signified by the growth of the tree.  

Specific trees planted for children of rank became known landmarks and reference points for rohe (boundaries) of tribal land. These rohe were attached to the mana of an iwi and acknowledged the people living within the frontiers of a tribal area as the tangata whenua. The whenua is so important to Māori that any loss of their rohe would directly impact the mana of a Rangatira (chief) and those who formed the hapū and whanau around him/her.

### 4.3.1 Land Ownership

The relationship Māori have with the land and land ownership is often in opposition to the conventional, westernised concepts of land ownership. In the Western worldview of landownership the drive to exist in the urban environment and within society is primarily formed around private landownership and individualism, compared with the Māori view of landownership, particularly relating to ancestral lands, where it is understood within a communal paradigm of belonging.

As Walker summarises:

> ‘In the beginning land was not something that could be owned or traded. Māori’s did not seek to own or possess anything, but to belong. One belonged to a Whanau that belonged to a hapū that belonged to an iwi. One did not own land. One belonged to the land’.

It is these beliefs that provide an insight into the collective/communal view of Māori land ownership, which is opposed to the current drive by society to privatize resources and lifestyles. The concept of ‘belonging to the land’ is entwined in the Māori story of creation and the

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eponymous matriarch, Papatuanuku (earth), who embodies the physical environment we live in (as shown in figure 2).

While these different cultural understandings of land ownership can cause conflict, in the case of urban Māori communities the unique relationship and sense of belonging to the land provides a strong platform from which to generate sustainable outcomes.

### 4.3.2 Tūrangawaewae- A Place to Stand

Tūrangawaewae is a term used by Māori to acknowledge the individual level on which the land can be utilised as a place to stand. This gave one the opportunity to speak without being challenged, granting a sense of sanctuary and equality.

Māori people have long revered their footing in ancestral land as their tūrangawaewae which had to be retained if they wished to preserve their right to speak on matters of local interest. If they left they could never again speak freely without the real fear of being told to 'sit down and keep quiet – you are nobody. You have no footing here. Your rights have been sold. Your fire has gone out.' If a Māori left his ancestral land to live elsewhere this fire on the ancestral hearth was considered to have gone out. The longer he stayed away the colder the ashes became. He lost his ‘ahi kāroa’ which became ‘mātaotao’. The same thing happened when a piece of land was sold."

Due to the many colonial forces such as assimilation, urbanisation and resource confiscation, Māori became increasingly disconnected from their ancestral lands and many became disenfranchised from, or lost entirely, their tūrangawaewae. As the city expanded around Ngāti Whātua o Orakei, it was the callous confiscation and speculation of their ancestral lands that mostly caused this disconnection. The forced dispersal of hapū members away from their tūrangawaewae has disenfranchised many tangata whenua from their cultural heritage, beliefs and stable social structure. The repopulation of Ngāti Whātua o Orakei ancestral land opens a

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15 See kaitiakakanga section p.25 for full explanation pertaining to papatuanuku and the Māori narrative of creation.
16 Mead, Tikanga Maori : Living by Maori Values. 272.
18 See ‘History of Tamaki Isthmus’ chapter for explanation.
platform where the community can reinforce their identity and stand together, enhancing the mana of the hapū and the community.

### 4.4 Māori Social Structure

Māori communities are organised according to a particular type of system which is also found in other parts of Polynesia.\(^\text{19}\) The foundation of these communities is the social unit, whanau (extended family) headed by a kaumatua (elder). When a series of whanau united a hapū (sub-tribe) was formed and the ability to perform greater cooperative tasks such as horticulture, waiata (song) and warfare was reinforced. A number of hapū with a common tūpuna formed an iwi (tribe).\(^\text{20}\)

This social structure is the key factor in the cohesion of traditional Māori society and has the potential to become the backbone of contemporary Māori urban developments. The intergenerational relationships that weave together whanau, hapū and iwi create a uniquely Māori setting from which the community can grow, centred on a holistic approach, embracing the knowledge of young and old. This knowledge base augments the ability of members of the community to educate, monitor and encourage the social, cultural and environmental sustainability of the community.

In a contemporary urban context the kaumatua is no longer the sole kaitiaki of knowledge. Advances in communications and the digital age give the youth the ability to exchange knowledge and skills with the kaumatua. This can reinforce the intergenerational community as youth can also share in the transmission of knowledge and skills.

### 4.5 Papakainga- Housing

In recent times technology has made dramatic advances affecting the way we live as a community. Citizens of New Zealand and the world have become increasingly private. The need to socialise with those who live in proximity has become much less of a priority for society and

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\(^{19}\) Janet Davidson, *The prehistory of New Zealand*, (Auckland: Paul Longman LTD, 1987) 149  
now it is all too common to live vicariously through mediums such as television and the internet. Social interaction as a holistic community has become an oddity in large metropolises like Auckland, but the housing platform (papakainga) on the ipukarea offers a pivotal opportunity to provide residents with a different way to live, a Māori way.

As groupings of whanau, Māori communities lived in papakainga (villages) close to food sources such as the sea and their horticultural lands. Living off the land as a series of families with common ancestors has been progressively dissolved by the western concepts of personal land ownership and land speculation.\(^{21}\) As the cities have grown and New Zealand has become more diverse culturally, urban development is typically driven by the need to rapidly provide for the expansion of the population. This has often forced the focus of housing developments into a homogenous platform, not identifying with the particular cultural backgrounds of inhabitants, rather the personal status and wealth of particular communities is seen as a priority. The success of the development and, therefore, the sustainability of the ipukarea requires a housing design centred on the communal aspirations and intergenerational values of Ngāti Whātua o Orakei. This is opposed to much of the current Architecture within the urban environment, which is based around the aspirations of the individual.

The ‘baby boomer’ generation also needs to be accommodated, and housing platforms that acknowledge an aging population are essential to the sustainability of a Māori urban community development. By 2026 the 65+ population of Māori is going to grow by 174%.\(^{22}\) Kaumatua housing must also provide a high quality housing model that encourages social interaction with one another, the wider community and the marae. Kaumatua influence is crucial to the development of youth; they act as conduits to the past ways of the land and people. They are a reflection of what the youth will become and the community can help nurture this development and its wider identity.\(^{23}\)

The sustainability of housing solutions requires Architecture that allows for the fact that Māori accommodate larger families and have other members of whanau stay for varying periods of

\(^{23}\) Ibid. 30.
Finding a balance of repopulation in quality housing and limiting the impact on *papatuanuku* and resources on the *ipukarea* will stimulate holistic housing concepts with applicable densities. Environmental architectural technologies and passive design will also aid in the overall economic and environmental sustainability of the housing development.

### 4.6 Māori Development

The term ‘Māori development’, often used in this research and also needs to be briefly defined. What differentiates Māori development from hegemonic/western understandings of development is in the worldview within which it is embedded. Māori development is centred in unique and diverse cultural aspects including *matauranga* (knowledge), *te reo* (Māori language), *tikanga* (customs), in historical circumstances (such as experiences of colonisation), and is founded on the notions of self-determination/*tino rangatiratanga*. Māori development is essentially a move away from ‘…aping our colonisers’ towards ‘giving life to Māori worldviews in a contemporary context.’

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24 Ibid. 30.  
25 See the housing density section of the paper for more detailed explanation.  
Chapter 5 - Historical Background

5.1 History of the Pre-European Māori of the Tamaki Isthmus

The founding platform of this thesis in relation to Māori urban design and achieving sustainable architectural outcomes is embedded in the Māori worldview, which considers the past to be integral to the present. Hence, this section will briefly examine the history of Ngāti Whātua occupation in the physical and socio-political landscape.

The Tamaki Isthmus (Auckland) has a rich and tumultuous history of Māori occupation. Evidence shows the area was inhabited and cultivated extensively by pre-European Māori. Around the beginning of the 18th Century, mana of the Tamaki Isthmus was held by the Waiohua iwi and their Rangatira Kiwi Tamaki who was responsible for ‘The Era of Kiwi.’ During this period the inhabitants of the Tamaki region where famed throughout Aotearoa for their plentiful food resources, numerous hillside pa (fort) sites and vast fleets of waka (canoe) for war and fishing. Given this prosperity, the Tamaki region was one of the most populated and desired areas by Māori at the time and the Māori name for Auckland Tamaki Makaurau reflects this in its translation into English: “The bride sought by a hundred suitors.”

Ngāti Whātua were originally a Far North based iwi, descendants of the Mahuhu ki ti rangi waka (ancestral canoe/boat), who moved south under the leadership of Rangatira Kawharu and established an ascendancy over the Kaipara region north west of Auckland. As the expansion of the iwi moved further south, so the iwi grew in strength as it absorbed members of other hapū. The arrival of the Ngāti Whātua iwi as contenders for the coveted Tamaki Isthmus came via conquest by Tuperiri Rangatira of the Ngāti Whātua hapū Te Taou around 1740. Tuperiri (the eponymous ancestor of the hapū Ngāti Whātua o Orakei) and his forces defeated the Waiohua iwi and Rangatira of the Waihoa iwi, Kiwi Tamaki, in battle, gaining ascendency and mana over the Tamaki Isthmus. Tuperiri settled at the stronghold of Maungakiekie (One Tree Hill) first

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established by Kiwi Tamaki. It is after this event that the hapū Ngāti Whātua o Orakei was formed by the amalgamation of several Ngāti Whātua hapū and absorption of members of the Waihoa iwi.  

5.2 Alliances with the British

In 1840 Te Tiriti o Waitangi/The Treaty of Waitangi was signed by Te Kawau, Te Tinana and Te Reweti, all Rangatira of Ngāti Whātua. Shortly after Te Kawau made land available for settlement on the Waitemata Harbour and the idea to encourage European settlement on the

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Figure 4: An indication of the journey around Aotearoa taken by the Mahuhu ki ti rangi waka. Source: http://www.teara.govt.nz/en/canoe-traditions/2/6 accessed 6/12/10

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Ibid. 7.
Waitemata began. It took a prophecy by Te Kawai’s *Tohunga* (priest/expert), Titai, to gain consensus amongst members of the *iwi* for allowing the British to settle. His words are remembered in a prominent *waiata* of Ngāti Whātua o Orakei (named: *He aha te hau*):

*He aha te hau, e wawara mai*
*He tiu, he raki nana ia mai te Puputarakihi ki uta*
*E tikina atu e au te kotiu*
*Koia te pou, te pou whakairo ka tu ki Waitemata*
*I oku wairangi e*
*Kokiri!*

What is this wind that softly blows
’Tis the warm wind from the north
That blew the nautilus shell ashore
I will go and fetch the carved post
And establish it in the Waitemata
Our desire will then be fulfilled!\(^{31}\)

![Figure 5: Pou from the Unitec marae depicting the vision of Titai and the waiata ‘He aha te hau’](image)

\(^{31}\) I would like to acknowledge Lyonel Grant, the weavers, his support team and Te Noho Kotahitanga for allowing me to use images of the whare.

This prophecy was taken as an indication that if the centre of government could be established on the Waitemata Harbour the survival of Ngāti Whātua would be ensured. During this period Governor Hobson was invited to shift New Zealand’s capital from Russell to Auckland. He accepted the offer and 3,000 acres of what is today the heart of Auckland city came under British control for £56 and various trade goods. This peaceful move by Ngāti Whātua also had defensive advantages in that the security of having a large European base nearby lessened the chance of harassment by rival iwi.

In 1869 an area of 700 acres under Ngāti Whātua control around the Orakei area was declared by Chief Judge Fenton of the Land Court as ‘...Absolutely inalienable to any person in any matter what so ever.’ However, in 1898 it was the retired Fenton who suggested to Premier Seddon that the position taken by the Crown be reconsidered. Fenton wrote to Premier Seddon that:

“I see by the papers that the block of land called Orakei has just been cut up by the Native Land Court and awarded to individual natives. This block contains about 600 acres, and is of great value. When I held the first Court upon it many years ago, it was valued at 50,000. I think I am warranted in saying that if let alone it would gradually fall into the hands of speculators, in the form of mortgagees and others (by the way, the power of mortgaging by Māoris ought to be prohibited). I feel strongly that this block in its entirety ought to go to the Government and should be laid out by them as a town, for it is in fact, by its position etc, part of Auckland. I do not profess to understand the Native Lands Acts, as they are at present, but surely there must be some power for the Government to intervene in a case like this.”

5.3 Broken Promises

With opinions like those expressed by Fenton, the 1869 Orakei declaration of inalienable Māori land did not remain true as the Crown acquired virtually all the land over the next 90 years. Only the Okahu area was left under the authority of Ngāti Whātua o Orakei. In 1951 the Crown controversially took the final segments of papakainga at Okahu, leaving only the marae, chapel

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33 Kawharu, Orakei: A Ngati Whatua Community, 6.
34 Ibid., 7.
35 Waitangi Tribunal, "Report of the Waitangi Tribunal on the Orakei Claim."
and cemetery.\textsuperscript{36} However, in December of 1951 the \textit{marae} at Okahu was burnt to the ground, causing much anguish amongst Ngāti Whātua and Ngāti Whātua o Orakei, and, to add salt to the wounds, the courts moved to evict the \textit{iwi} proper from the Okahu site. Members of the \textit{hapū} were relocated to the nearby Kitemoana Street, where 27 dwellings were built, for which they were required to pay rent to the Crown. This pushed the inhabitants away from their traditional forms of subsistence, including cooperative fishing and gardening, forcing them to seek paid work.\textsuperscript{37} The Crown also put a sewage plant at Okahu which ruined the area as a prime source of food for the \textit{iwi}. Thus, during this tumultuous period Ngāti Whātua o Orakei was reduced from a substantial \textit{hapū} with significant ancestral lands, to a dispersed \textit{hapū} without their \textit{tūrangawaewae} or the control of their ancestral lands as assured by the Crown in 1869.

### 5.4 Eviction proper

The small remainder of the \textit{hapū} Ngāti Whātua o Orakei at Okahu existence as a community living on their ancestral lands was threatened further in 1977 and 1978 as the Crown sought to remove the remaining \textit{papakainga} at Kitemoana Street for high end housing developments. Members of Ngāti Whātua o Orakei disagreed with the Crown’s attempts to sell the land to the highest bidder and, under the leadership of Joseph Parata Hawke, a section of Ngāti Whātua o Orakei protested by occupying Orakei/Bastion Point for 506 days. This key moment in New Zealand history culminated on the 25\textsuperscript{th} May 1978 with the forceful removal of the protestors and their temporary housing, conducted by 800 members of the New Zealand police force and the New Zealand army (figure 6). The result was 220 arrests for trespassing on their ancestral lands, however, they were successful in diverting the desired course sought by the Crown and commercial affiliates. In the 1980’s the Government formally apologised to Ngāti Whātua and returned a small portion of the original 700 acres promised in 1869 (the \textit{ipukarea}).\textsuperscript{38} Finally Ngāti Whātua o Orakei rebuilt their \textit{whare tūpuna} (ancestral house/\textit{marae}) at Orakei/Bastion Point in 1991, named Tumutumuwhenua, providing a connection for the \textit{tangata whenua} with the \textit{tūpuna} and reclaiming their \textit{tūrangawaewae}.

\textsuperscript{37} Ibid., 13.
Auckland has evolved into New Zealand’s ‘super city’ and Tamaki Makaurau now has in excess of 1 million admirers. Due to the stoic actions by a myriad of tūpuna (some still alive today) Ngāti Whātua o Orakei have maintained their presence in the Tamaki Isthmus and the resistance to the final eviction in 1978 has secured a small portion of Ngāti Whātua o Orakei ancestral lands (ipukarea) for the tangata whenua. The architectural challenge now becomes the way in which to repopulate the ipukarea with more Māori in a sustainable manner that embraces the tūpuna of the past and future.

5.5 The Resurgence of Māori Culture

Developed nations’ global infatuation with capitalism and consumerism has been interfering with many of the planets’ indigenous cultures and creating an amorphous cultural grounding toward which much of society has become centred. This is generally geared towards the concepts of ‘Westernisation’ and often compelled by individualism rather than communal cooperation.

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39 By this I mean the adoption of the elements of Western culture including political systems, food habits, English language, Christianity, technology and other values.
and cultural identity. Since colonisation the Māori people have suffered a continual undermining of their culture. This has happened via constitutional, legislative oppression, poor housing, poor community developments, oppression of Te Reo and rapid societal transformation.

Māori culture has long suffered under the oppression of the colonial net and, in a more contemporary context, the boundless appetite of globalisation. This manipulated disconnection from the Māori cultural paradigm created serious anomie and a plethora of negative offshoots which are ever apparent in statistical information and all too often quoted in the media: family violence, incarceration, education, living standards, wealth, employment, home ownership, drug and alcohol abuse are several examples where Māori perform poorly when compared to non-Māori, and it is argued these reflect the long term oppression of cultural values and traditional community structure.

However, Māori have not let this extinguish their fires. A cultural renaissance, which began in the 1960’s, has been building and breaking into the public realm. One example is around the Māori language. Te Reo Māori was banned from New Zealand schools in 1900 and children were punished for speaking Te Reo. This continued for the first half of the 20th century. In 1979 a pivotal hui was held with regard to reviving Te Reo in New Zealand, spawning the Kohanga Reo (Māori language nests) movement. The determinations of such ideas have helped to transform the number of competent Māori speakers in New Zealand from around 60,000 in 1975 to 150,000 in 2002. Furthermore, New Zealand’s national anthem is now sung in the two ‘official languages of New Zealand’ first Te Reo and then English, also there are now two free-to-air Te Reo focused television stations and Te Reo is now a compulsory part of the curriculum of early schooling. Te Reo is one of the cornerstones of Māori culture/identity and the growth of public knowledge informs the resurgence and cross-cultural potential of the Māori culture and potentially sustainable Māori urban design.

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41 Ibid. 4.
43 Caroline L. Miller, Implementing Sustainability the New Zealand Experience (Oxon: Routledge, 2011). 147.
Financially many of the *iwi* and *hapū* that represent the Māori presence in New Zealand are gaining wealth, assets and political influence. Ngāti Whātua o Orakei is a prime example of how Māori are ‘making it happen’. The Ngāti Whātua o Orakei corporate arm which acts for the interests of the *hapū* and therefore communal assets of its members has grown the value of Ngāti Whātua o Orakei property holdings from $44 million in 1999 to $277 million in 2009, parts of which have been distributed to the *tangata whenua* via grants in areas such as education and home insulation projects.\(^4^5\)

*Papakainga* developments are becoming more prominent within New Zealand (at this point in time primarily in the rural settings), creating a shared base on the communally owned land of *hapū* and *iwi*. Several councils have created specific *papakainga* housing policies to accommodate strategies on a territorial level.\(^4^6\) This shows the desire of Māori to solidify their link with their ancestral lands and also the facilitation by local government. On an urban level very few *papakainga* of a large scale exist, particularly on the ancestral lands of an *iwi* or *hapū*, the development of the *ipukarea* has the ability to create new ground for Māori urban development.

Riding the crest of the wave of Māori cultural resilience and resurgence will strengthen the *mana* of a re-population of Ngāti Whātua o Orakei ancestral land. The financial ability of Ngāti Whātua o Orakei to finance part of the development increases the feasibility of such a large scale project and the acceptance of *papakainga* projects by local government shows the will to facilitate Māori development. The fact that the ancestral lands of Ngāti Whātua o Orakei are immersed in New Zealand’s largest urban fabric provides a key opportunity to offer a different model from which to derive contemporary urban development in a sustainable manner.

\(^4^6\) See Whangarei district council website and also western bay of plenty council website
Chapter 6 - A Māori View on Sustainability

The definition put forward in the Brundtland Report 1987 is often quoted when referring to Sustainable Development:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Since its entry into mainstream discourse many different disciplines and understandings have emerged around this idea of ‘sustainability’. However, our current understandings and rhetoric around it have been shaped and dominated by the Western cultural milieu. Māori have their own concepts and practices developed over centuries of living on these lands that form a matrix of sustainable resource use. This chapter will explore and critique the notions of ‘Social Sustainability’ and ‘Environmental Sustainability’ and present a discussion around Māori concepts and understandings of these ideas.

6.1 Social Sustainability

Urban planning has long been fixated on the community’s physical form. Luxuries such as motor vehicles, individuality and architectural styles have dictated the ways modern communities and urban environments are created. This has spawned countless community developments that fail as social units, prioritise the individual through the creation of excessive privacy and create Architecture that has no connection to the landscape or the diversity of inhabitants.

Guy Briggs in his chapter ‘The Intelligent City: Ubiquitous Network or Humane Environment?’ recognises that in order to achieve sustainable outcomes in urban developments and cities, we need to reconsider how we (re)create our cities. Briggs explains the notion of ‘the intelligent city’ and how it has ‘social equity as its focus’. Briggs states: ‘that one of the greatest hurdles in achieving sustainability within the community lies neither in the environmental or economic

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49 Social equity implies fair access to livelihood, education, and resources; full participation in the political and cultural life of the community; and self-determination in meeting fundamental needs.
spheres but in the social'.\textsuperscript{50} The term ‘Urban intelligence’ an offshoot from the ‘intelligent city’ is explained by Briggs as ‘...put[ting]the people back at the centre of the urban agenda. By definition urban intelligence has social sustainability as its focus.’\textsuperscript{51}

For the development of the ipukarea and sustainable Māori urban development ‘urban intelligence’ can be likened to the Māori values of ‘manaakitanga’ and ‘whanaungatanga’, which inherently have social sustainability as their focus.

### 6.1.1 Manaakitanga

Hirini Moko Mead explains manaakitanga as:

‘Nurturing relationships, looking after people, and being very careful how others are treated... It cannot be stressed enough that manaakitanga is always important no matter what the circumstances might be.’\textsuperscript{52}

Manaakitanga encourages the inhabitants of the community to respect and live as whanau, hapū and iwi. The personal relationships formed by knowing your neighbours and members of a community derived from whanau, hapū and iwi, combined with the presence of tūpuna will stimulate a more holistic community.

### 6.1.2 Whanaungatanga

Mead also explains whanaungatanga as:

‘...embrac[ing] the whakakapapa and focuses upon relationships. Individuals expect to be supported by their relatives near and distant, but the collective group also expects the support and help of its individuals. This is a fundamental principal.’\textsuperscript{53}

For Ngāti Whātua o Orakei it is on a cultural basis that the real social strength and, therefore, social sustainability exists. Māori are tangata whenua and their fires burn with the fuel of their

\textsuperscript{51} Ibid, 45.
\textsuperscript{52} Mead, \textit{Tikanga Maori : Living by Maori Values}.27.
\textsuperscript{53}Ibid, 29.
tūpuna and the brightness of their futures. Papatuanuku provides sustenance, and Ranginui provides energy, warmth, light and stars. There is a traditional social structure, still in existence today, from which to grow the community, whanau, hapū, iwi, and guidance is provided by the wisdom of the kaumatua, the cultural guardians and teachers. Also the presence of Tumutumuwhenua as the marae provides a cultural/spiritual presence which in itself embodies the identity of the community and the sustainability of Ngāti Whātua o Orakei development.

6.2 Environmental Sustainability

Achieving environmental sustainability across many disciplines is quickly becoming one of the great challenges of our time. Much of the westernised world often finds itself torn between the current way we live our lives under the culture of consumerism, and the well published problems with the environment. This is not entirely the fault of individuals, as a very large portion of blame for the current crisis can be attributed to the way cities, communities and Architecture are designed.

As stated earlier, the Māori worldview of ‘belonging to the land’ is in diametric opposition to the westernised view of private ownership of the land. For contemporary urban Māori development the holistic potential of a community that is focused towards belonging to the land and, therefore, understanding their position as katiaki of the environment, not owners, ignites a different basis to achieve aspects of environmental sustainability. The basis of this is explained by the principal of kaitiakitanga (guardianship).

6.2.1 Kaitiakitanga

Māori have a holistic view of the environment and its resources derived from their creation narratives. The Māori creation narrative tells of an embrace by Ranginui, the Sky Father, and Papatuanuku, the Earth Mother. Their selfish embrace resigned the world to an existence of perpetual darkness, their numerous offspring dwelled in this world and they were not humans but gods. Unhappy with their existence, the decision to separate the parents was made by their

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55 Miller, Implementing Sustainability the New Zealand Experience. 95.
children. It was Tane Mahuta, the Father of all forests whom said ‘Let our father stand high above us and our mother remain close to us below and continue to be our nursing mother.’ Thus Tane Mahuta over an immense length of time grew as the mighty Kauri tree and separated his parents creating the environment we all inhabit. This is why the sky to Māori is considered as Ranginui and the earth we stand on, eat from and raise our children upon, Papatuanuku.

The principle and practice of kaitiakitanga (guardianship) relates to caring and providing for Papatuanuku. It forms the basis of the Māori environmental ethic; it also incorporates a strong social dimension involving the provision for, and management of, people. Kaitiakitanga gives Māori the ability to enhance their environment on a communal level this has been displayed by Ngāti Whātua o Orakei with the extensive native plant rejuvenation of the ipukarea. Since 2000 Ngāti Whātua o Orakei have planted approximately 16,000 native trees and plants per annum on the ipukarea (See figures 7 and 8).

Figure 7: Images displaying the extensive planting by Ngāti Whātua o Orakei. Source: Google Earth.

The kaitiakitanga initiative has involved creating a nursery onsite, from which the seedlings are germinated and nurtured ready for planting. This provides an educational platform from where members of the community can learn how to care for and respect Papatuanuku. From an

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57 Ibid, 6.
environmental sustainability stance the reclamation of the kingdom of *Tane Mahuta* on such a scale will help to counter much of the carbon produced by the development. Also, the natural ecosystem can re-establish the presence of more wildlife (particularly birds) and cross fertilisation of plant species. In what is New Zealand’s largest city a forest teeming with bird life will become the backyard of Ngāti Whātua o Orakei and the residents of the surrounding communities will also share this benefit through an enhanced vista and cleaner air.

![Figure 8](image-url)

*Figure 8: An onsite example of the Ngāti Whātua o Orakei community nursery. Cared for by members of the existing community. A fine example of the initiative of kaitiakitanga. Also an image displaying the already planted forest groves, quite impressive and a far different use for land, which has the potential to be some of the most expensive real estate in New Zealand. Papatuanuku and the kingdom of Tane Mahuta take precedence over expensive sought after ‘views’. Kaitiakitanga creates an environmental obligation for Māori, caring for the whenua and, therefore, Papatuanuku is a unique approach, one derived from not owning the land but belonging to it. Any architectural design directly relating to Māori needs to embrace the idea of inhabitants viewing themselves as guardians of the environment, not only in the present context, but also in the past and future. Their tūpuna are present in them and they will be present in the tangata whenua whom will follow.*

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Chapter 7 - Site Design and Relations

7.1 Understanding the Ipukarea.

When creating a conceptual basis from which the holistic community could grow, respect for Papatuanuku is paramount. Papatuanuku sustains the tangata whenua, allowing us to grow and exist. Today in our secular society the tendency of architects is to remain disconnected from any sense of belonging to the earth. The earth is generally viewed as a resource to be exploited to humankind’s advantage, a personal possession, a sign of wealth - not as a living being. If we become kaitiaki of Papatuanuku, we become kaitiaki of our combined destinies and together emulate sustainability. Current exploitations of Papatuanuku by urban developments are certainly unsustainable and disrespectful to the environment, Papatuanuku, as well as past and future generations.

To obtain my objective of sustainable contemporary Māori urban development, when initially approaching the way to analyse the site, I paid respect to beings of creation as per the Māori worldview. The way my site analysis began is different to the current drive to understand a site by ‘conventionalized themes and terms.’ Iris Arovat recognises the importance of exploring a site with a different approach in her journal article ‘Narrative-Mythology and Urban Design’:

‘All urban environments are studied in similar, professionally conventionalized themes and terms. We expect maps and figures to express the differences. But maps and figures are already normalized and only partial representations of urban reality. They fail to grasp the actual authenticity of the urban place. It might be said that they fail to come to terms with the genius loci of the city... Genius loci is a mythological term. In Latin, it refers to both the guardian spirit of a place and to the special atmosphere of that particular place: ‘Ancient man experienced his environment as consisting of definite characters. In particular he recognized that it is of great existential importance to come

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59 See kaitiakitanga section for an explanation of the story of creation.
to terms with the genius of the locality where his life takes place... Survival depended on a 'good' relationship to the place in a physical as well as a psychic sense. ’61

Arovat’s literature describes a different approach to urban design and indicates ways to understand the city/site in a ‘mythical’ context. This view has a relationship to the Māori worldview and the plethora of narratives that surround creation of the Universe, Aotearoa, whenua, tūpuna and tangata whenua. Granted that the core of my research focuses on the traditional beliefs and structure of Māori society and their application in a contemporary urban context with the aim of achieving sustainability, I felt it essential to the essence of my scheme to analyse the site as Papatuanuku.

A series of early sketches were used to view the connection between Papatuanuku and Ranginui, also depicting Tane Mahuta dis-lodging the lovers and the revealing of the earth. I sketched this over an aerial plan of the site (see Figure 9 on the following page).

From this sketch I was inspired to extend the narrative concept to a larger scale site image 1:2000 and redrew the form of Papatuanuku over the ipukarea. An indication of the specific outcomes is displayed in Figure 10 (present on page 31).

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62 I find the term ‘myth’ has negative connotations of being mere ‘fables’. These ‘myths’ are in fact essential and living stories through which Māori whakapapa (draw lineage) through their ancestors to the Atua (Gods). In lieu of ‘Mtyhs’ I use the more appropriate concept of ‘narrative’ which has bonds with history and stories.
Figure 9: Creation narrative sketch:
Figure 10: Site conception
1. Here the mouth of Papatuanuku and Tumutumuhenua and the many tūpuna that form the whakakapapa of Ngāti Whātua o Orakei is depicted/recognised. The mouth’s physical embodiment is within the marae, it is from this point that the identity of Ngāti Whātua o Orakei is spoken and revered. Essentially from the marae the community can grow, founded on the mana of the many tūpuna who preceded and will follow the current tangata whenua. The outlook of the marae to the north east should not be obstructed by architecture, the marae should remain the leader of the community and not be challenged by other forms of architecture.

2. This area in close proximity to the marae is where the knowledge base needs to be housed. In the drawing this area represents the cranium of Papatuanuku and the knowledge of being Māori, the knowledge of the past ways and beliefs. Here is where the kaumatua will be housed and act as kaitiaki of our cultural values/knowledge, teachers to youth and manuhiri (guests) about what it is to be Māori and to enhance the mana of the holistic development.

3. The hair of Papatuanuku grows from the scalp and head; I see the hair as the ‘garden of knowledge’ a place where the main vessel of the community can grow. Here is where the whanau can be housed. The kaumatua can become the gardeners of knowledge, teaching why it is important to maintain our cultural identity and to adhere to the principals of kaitiakitanga, whanaungatanga, manaakitanga, te reo, tikanga and tino rangatiratanga. From this sphere of cultural identity, values and intergenerational community, the holistic sustainability of Māori development and Māori urban development can strengthen. Hair grows, the hair/community has the potential to grow beyond the current boundary of the ipukarea and into the wider/larger community that is Tamaki/Auckland.

4. One arm of Papatuanuku extends toward the northern horizon and the Waitemata Harbour where the Ngāti Whātua o Orakei tohunga Titai saw into the future of Ngāti Whātua o Orakei and the coming of the British. This arm signifies the importance of looking beyond the horizon to new ways in which to advance the direction of Ngāti Whātua o Orakei, Māoridom and New Zealand.

5. The second arm acknowledges the connection that Māori have with the wider community that encompasses it. Many Māori have diverse ethnic heritage and it is important to respect all cultures that form the city of Auckland and New Zealand. It is important to welcome the
wider community to interact with Māori to maintain a balance of interaction and avoid the mistakes of racially segregated communities, such as the ghettos of America.63

6. Here there is reference to the importance of the tūpuna of Ngāti Whātua o Orakei and from whence they came. The arrow is pointed toward Maungakiekie and the pa of Kiwi Tamaki later occupied by Ngāti Whātua o Orakei Rangatira Tuperiri.64 It is important that the visual link with Maungakiekie is not severed by over development, as we develop our ipukarea we must be cautious of this.

7. The breasts of Papatuanuku are points from which to nourish the community. The first breast represents the importance of trade and economic development.

8. The second breast represents the need to nourish the education of the community (particularly the youth). It is one of the key elements of the community and needs to be catered for- not only Māori need use these facilities also manuhiri (guests) should be welcome.

9. Here the large empty lands of the ipukarea embodied within the puku (belly) of Papatuanuku. During my research this paragraph was found in the book ‘Whispers of Waitaha Traditions of a Nation’, it embodies what is intended for with this large 15 hectares of land:

‘Let us move into the tides of the universe, with the greatest gift of birth and rebirth as the pattern to follow. Let us heed the old information of planting not one but many to replace that which we have use for. Let us return to the tilling of the land for the joy and happiness that comes with sustaining those of our families with the produce of our own sweat and knowledge.’65

From the puku of papatuanuku a large scale horticultural venture can grow and feed the community.

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64 Waitangi Tribunal, "Report of the Waitangi Tribunal on the Orakei Claim."
7.2 Site position

The *ipukarea* is by location and presence within the urban fabric of Auckland, extremely valuable both in a monetary value sense, but more importantly in terms of upholding the *mana whenua* status of the Orakei hapū. The suburb of Orakei derived from the disenfranchised tribal lands of Ngāti Whātua, is ironically one of Auckland’s most affluent places to live; littered with large individual mansions which become status symbols of personal success and excess across the landscape.

The physical form of the *ipukarea* is an elevated site with East, North and West facing slopes. The total land area (approximately 80 hectares of predominantly empty land) is embedded in the cityscape. It exists in the present form as a unique feature and if it were not under the protection of Māori it would certainly look no different to the sprawl that surrounds it (see figure 11 and 12 for visual explanation).

Given the site qualities of the *ipukarea*, a large scale Māori settlement will inevitably evoke controversy amongst the wider community that exist in proximity. Therefore, embodied in the Māori response a powerful statement needs to resonate, represented by the many *tūpuna* who existed on the *whenua*. The Architecture and sustainable development must evoke a representation of Māori development, reclaiming a part of the urban context, re-establishing the Ngāti Whātua o Orakei presence en masse once more.
Figure 11: Site montage

Figure 12: Site images
Chapter 8- Design

8.1 Site plan

Displayed below in Figure 13, is a working drawing explaining the site planning. Specific areas are numbered and described.

Figure 13: Working drawing explaining the site planning of the papakainga and development of the whenua.
1. The layout of the site plan was heavily inspired by the site analysis and hui notes (see appendix 1), the site analysis in turn informed the way the housing and community should represent the hair of Papatuanuku and the ‘garden of knowledge’. The kaumatua housing is placed within the conceptual cranium of Papatuanuku, performing the task of Awhi te Marae (embrace the marae) as identified by the participants involved in the series of hui. In order to perform as katiaki (guardians) of the cultural values and beliefs and to teach those who are manuhiri (guests) to the marae about Ngāti Whātua and what it means to be Māori, this powerful architectural placement responds accordingly. In the hierarchy of the development the kaumatua sit second only to tumutumuwhenua (marae) and at the highest elevation of the development of any of the papakainga. They are the gardeners of knowledge. A total of 72 dwellings are allowed for and respond to the baby boomer generation and the ageing population. There is capacity if the demand by kaumatua to occupy these dwellings is lessoned, for them to be available as 2 bedroom apartment style dwellings for small families or couples. A full explanation of the design, function and form will be explained in The Gardeners (final kaumatua designs p.52).

2. The ‘garden of knowledge’ and the cluster housing that form the core of the papakainga, Inhabits the slopes of the site, the dwellings sit in proximity to the kaumatua so they influence one another and encourage interaction, enhancing stability and identity of the community. There are 120, 4 bedroom or 3 bedroom with office space units. An intention of the design is that when whanau ascend to the marae they do so by filtering through the permeable spaces in between the kaumatua housing. A full explanation of the design of the whanau housing will be explained in the ‘the Gardens’ (final whanau housing designs p.50).

3. The 15 hectares of communal horticultural land explained in detail in the ahuone (Horticulture p.53) section.

4. Harnessing the contours of the site allows for these water catchment points to become storm water collection ponds. Storing water for the maintenance of the ipukarea and watering of the many gardens. Also the ability to introduce eels for eating can provide another food source.

5. This area of the ipukarea from where educational developments can be designed. The location in proximity to Kupe Street and the marae allows the potential for interested

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66 See hui notes Appendix 1
persons from outside the community to also participate in the knowledge shared from these facilities. Early childhood education combined with the allowance for a carving, weaving, kapa haka, Te Reo and Māori arts facilities will enhance the *mana* of the overall development. Whilst this specific area allows the placement of Architecture housing the educational aspects, in the Māori community the educational qualities are present throughout and within the development, the *kaumatua*, the *marae*, the *horticultural* venture and above all *Te Ao Māori* (Māori world view) teach on a level that does not require a specified or mixed use buildings, education permeates from their existence and *wairua* (spirit).

6. Here is the potential position for a series of small commercial ventures, perhaps in the form of a Ngāti Whātua o Orakei dairy, fish n chip/boil up/hangi food store, mechanic and the like.

7. Kupe Street and the 4.7 hectares of Ngāti Whātua o Orakei land, identified for potential high density development in the future when required by the demand of the *hapū* to expand the current *papakainga*.67

8. A large 200m2 hard surface primarily designed as a point of trade where a public market can be held at the discretion of Ngāti Whātua o Orakei and goods sold to the wider community and tourists, it will also have other uses such as a temporary netball court and hard surface for the school in proximity and extra car parking for large events such as *matariki*.

9. The position of a park of reflection and important point for residents to contemplate the future and the past. This may be adorned by *pou* (carved post) representing the many *tūpuna* such as Titai, Tuperiri and Sir Hugh Kawharu.

10. The recently built houses on the *ipukarea* will remain, as attached to these houses is part of the new direction of developing the *papakainga*. There are no reservations removing/ or relocating the old houses on Kitemoana street as they were built by the crown as part of the eviction of the original *papakainga*. The current residents will be offered first choice on the new *papakainga* as this happens.

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67 See the hui notes in Appendix 1.
8.2 The Interface between Concept and Architecture

An objective of the project is to create a development that identifies as Māori and embraces the drive for contemporary Māori development. The way the Architecture represents the community should be attached to Māori housing and community developments. Similar to the way the site was analysed/understood in an unconventional methodology, the approach to the development of housing platforms was heavily driven by the representation of the many tūpuna who have preceded the tangata whenua and are still present spiritually and physically within the landscape, tangata whenua and Architecture. The tūpuna have walked the path before us, their footprints tell a story, and we can sustain the environment and the wellbeing of our people by tracing these footprints once more and uplifting them into a contemporary context.

8.3 Conceptual Basis of Housing Designs

When developing the housing platform from which the ‘garden of knowledge’ could grow, I recognised the importance of living as whanau, hapū and iwi and the need for an intergenerational community. To accommodate the whanau unit, cluster housing provides a method of living that reflects the cultural strength of the project, coupled with maximising the available land for development and the repopulation of more members of Ngāti Whātua o Orakei.

An important step in the initial conception of design is sketching, conveying the visions from one’s mind, bring them to life on paper. The first major sketch drawn was derived from the outrigger style waka upon which our ancestors travelled to Aotearoa (see Figure 14). The sketch took the form of a housing development and was conceptually supported by the bones of our tūpuna, represented in the

Figure 14: Conceptual sketch

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68 See Chapter 4 for further discussion on the physical and present presence of Tūpuna, particularly the placenta and tree connection.
structure of the housing. There was no specific placement on site, just a spark to ignite the fire.

The next step in the housing design process extended the idea of living supported by the bones of our tūpuna. Unitised blocks of four bedroom housing were conceptualised (see Figure 15); the design included private internal garages. The development of this idea showed that the floor area was very large and the idea of personal internal garages destroyed the communal space. A positive outcome was the presence of structure representing the bones of our tūpuna as well as the potential of achieving a higher density of population when designing a three storey unitised cluster housing proposition.

The next substantial move looked to create a housing solution based on dual units inhabiting the slopes of the site (see Figure 16). The lessons learnt were that the designs did not utilise the site to an adequate density as the looseness of the housing design created a ratio of 19 dpha (dwelling per hectare) and the concept of the tūpuna existing within the Architecture was lost. The importance of the spaces in between the Architecture and the ascent/descent through the development and how this might be experienced were, however, explored.

Figure 15: Development sketch
The presence of the tūpuna within the houses was revived and enhanced during development of what was to become the basis of the final housing form. The ascent and descent from ground floor to second floor was identified as an opportunity to connect inhabitants with the sky father Ranginui (see Figure 17). The gesture within the Architecture was represented by a glass roof atop the stairwell directing one’s line of sight upward upon ascent, and also providing a point from which to overlook the mighty Waitemata and Tamaki Makaurau.
A further intention of the design of the circulation space was, from the external view, to respond to the gift to the world of the environment we inhabit (made possible by *Tane Mahuta* separating his parents, revealing the world of light). Upon the approach to the dwellings the architectural intention is to pull one’s view up the ramp of glazing to *Ranginui* (see Figure 18). This glazing can also be adorned with Māori designs. As has been discussed throughout this research, for Māori our *tūpuna* are regarded as the substance of their descendants, their very being.

![Figure 18: Development drawing of the perspective ramp effect of the architecture](image)

As the design developed there was an evolution from living upon the bones of our ancestors to our ancestors being actually present within the entire building just as they are present within us. This was an important generator for the formal and spiritual design of the Architecture. As the housing units were composed of a series of connected dwellings, the presence of the many *tūpuna* were also viewed as connected. This proved to be powerful when creating an architectural form for the development and there was a feeling that it remained true to the intentions of creating a design outcome that was Māori (see Figure 19).

The eponymous ancestor of Ngāti Whātua, Tumutumuwhenua, was described by Orbell as being ‘*not of this world but ...up from the ground.*’69 It was intended to harness this belief with the way the Architecture was derived from the site. It should appear to be organic and to have grown

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from *Papatuanuku*. On the end of each housing unit the circulation vessel was allowed to remain as a formal representation of *tumutumuwhenua* (see Figure 20).

**Figure 19:** The representation of the presence of the many *Tūpuna* within the Architecture.

**Figure 20:** Centre of view is the expression of the Architecture representing *Tumutumuwhenua*
8.4 Inhabiting the slopes

Learning from the earlier explorations into housing design, a way in which to utilise the contours of the land grew. Born from study of Maungakiekie (One Tree Hill) and the way traditional Māori inhabited the many hill sites around Auckland, this was a pivotal step in understanding how to complement the slopes identified for housing development. Traditional Māori inhabitation was achieved via terracing the slopes of a mountain or hill. This is present in an aerial photo of Maungakiekie (See Figure 21). Maungakiekie was a large pā mainly inhabited as a point of defence from enemies. In a contemporary context, particularly in Auckland, the hillsides are sought after for their spectacular views.

![Figure 21: Maungakiekie (One Tree Hill) and the footprints of traditional Māori development](http://www.summitpost.org/maungakiekie-one-tree-hill/153187) Accessed 20/5/2011.

The Māori pā harnessed what was a difficult environment to inhabit by creating platforms for their dwellings, forming an interconnected community, with the underlying task of defence. Another invention of the pā was the trench, an example of the pā and defensive layout is displayed in the image below.\(^\text{70}\)

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To maximise the potential of the *ipukarea* a housing form was devised that could adapt to the sloping nature of the *papakainga* land. An integral part of this development was to create a three storey dwelling that did not stand too high upon the site. A key tool in achieving this was the inclusion of a trench style concourse at the rear of the dwelling (see Figure 23).

This concourse provides a different point of access for residents which is sheltered from the elements and creates an alternative communal surface that can become a social point for interaction with neighbours and guests. It also lessens the building’s impact as one descends the development, making the Architecture appear as two stories in height and emulating the concept of the Architecture growing from the ground (see Figure 24).
The colours red, white and black have come to represent Māori culture and are present within many of the Māori art forms. When choosing a colour to represent the Architecture of the whanau housing development it was felt to be an appropriate representation that the colour scheme of the housing consist primarily of red, white and black. It is intended that it should be apparent from opposite and lower vantage points that this development is Māori (figure 25).
In order to understand the complexities of the sloping site an extensive model aided in the final layout of design (see Figure 26).

![Figure 26: Large model used to aid design outcomes](image)

8.5 *Kaumatuia* housing development/concepts- The Gardens (final whanau housing design)

Initial concepts of the *kaumatuia* housing were inspired by an ambition for the *kaumatuia* to act as the ‘gardeners of knowledge’, receiving *manuhiri*, and being the *kaitiaki* of cultural values. Within the analysis of the *hui* notes, the *tangata whenua* recognised the importance of the *kaumatuia*. It is important to;

‘locate kaumatuia housing near the whare tūpuna (marae) so they can be close to the marae and sit on the paepae (threshold of the house) or be the kaikaranga (ceremonial caller); spiritually and physically close proximity to the marae; being welcoming of manuhiri (guests) and respectful to tourists’\(^{71}\)

\(^{71}\) See Hui notes Appendix 1.
A response to this statement informed the location of the *kaumatua* housing near the *marae*. This assumed the form of a curved housing complex embracing the *marae*, consisting of two bedroom dwellings. Exploration into the way the complex may become permeable for members of the community and guests was developed through a separation of the dwellings, acting as a sheltered communal space.

In order to maximise what is a tight space the decision was made to create a complex that was dual story and dual bedroom. If a *kaumatua* was single there became a spare bedroom for *whanau* member or office space and, also, if the population of *kaumatua* varied there is also opportunity to utilise the space as a two bedroom, apartment style dwelling. The final conceptual step looked at the *kaumatua* housing as the vessels from which the knowledge travels. Accordingly the final form represents the *ihu* (bow) of the *waka* upon which that knowledge arrived in *Aotearoa*.
8.6 The Gardens (near final whanau housing design)

The near final design for the whanau housing platform created a series of 4 bedroom units attached, standing strong as a whanau/hapū/iwi (see figure 30). There is flexibility within the design of spaces to encourage interaction amongst residents and there is an intentional design strategy to encourage this sense of community via communal outdoor space.

The ground floor plan functions as bedrooms, storage, and a bathroom (see figure 29). Of note is the red arrow in the drawing which by the reflected design of the units allows the potential for an access point if a series of whanau wish to have access to the neighbours dwelling. The advantage of childcare and maintenance is enhanced.

The first floor acts as a central space for family interaction with a large (72m2) open plan layout focused toward a generous deck, storage is also provided for materess and extra bedding. This is a response to the way Māori often have extra guests stay and can increase the capacity of ‘the garden of knowledge’ to house a large population during tangi and the like. The second floor is in effect the master bedroom and has the potential to perform as an office space. Atop of the stair way the views will be stunning.

Figure 29: Floor plans

Figure 30: Site plan and cross section
The stairwell also has the design intention to act as ventilation point for the whanau houses. Hot air can be expelled through louvers indicated by the blue arrows in the cross section. Also by creating a thermal mass wall out of concrete block the heat from Ranginui can be stored and transmitted through the building during winter.
8.7 The Gardeners (near final *kaumatua* designs)

As mentioned the importance of the *kaumatua* housing to act as *kaitiaki* heavily informed the final design. Living as a unit of housing reinforces the ability to embrace the *marae*. In between the two storey dwellings a communal space has been created (see Figure 33). This will encourage the community to move thorough the housing and interact with the elders and exchange knowledge. This is apparent in the ground floor plan and represented by the blue arrows (see Figure 32). Allowance has been made for wheelchairs in the houses and a ramp is provided for access to the upper floors.

On the second story a large communal deck is placed between the two dwellings, providing a space for pot plants and to survey the *whenua* and community. Dual access options are in the form of stairs and a ramp. A small personal deck allows for a point to enjoy the views of the Tamaki isthmus.


8.8 Ahuone (Horticulture)

The movement by Ngāti Whātua o Orakei to enhance the natural environment of the ipukarea sets the tone as the community is increased to establish many of the Northern and Eastern slopes as large horticultural grounds. A communal effort to produce food for the community will help the strain on resources, such as oil, as food produced onsite can be consumed by inhabitants and harnessed as a potential economic resource. In the master plan the allocated area for horticulture is 15 hectares of arable land and, on a community garden scale, it is potentially the largest scheme in the world. A system of gardens for specific clusters of housing will empower the residents with the tools to provide themselves with vegetables and fruit, combined with chicken roosts and pig pens. Not only can the younger generations gain knowledge of ways to provide for themselves and their families, the financial burden of ever inflating food prices will be countered by this form of self-sufficiency.

The positive benefits for the community of having an urban garden are explained by Lawson:

_The hands-on, participatory quality of gardening has made the garden a self-help resource. The garden is a low-cost and direct means to obtain one of life’s basic needs—food. An individual or a community can make use of an underutilized resource such as a vacant lot and, with a little sweat and nurturing, grow food with minimal outside assistance. Beyond feeding the gardeners, the act of gardening provides evidence of self-effort—that the gardeners are taking matters into their own hands and doing everything possible to improve their situation._

8.9 Urban Density

When designing a sustainable urban community the issue of housing densities becomes a key element in achieving a sustainable outcome, especially as low density suburbia is partially responsible for many of Auckland’s current problems, including high traffic congestion, loss of community cohesion, high infrastructure requirements and maintenance, increased pollution and

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72 See 8.1 Site plan for image.
less space for conservation and parks. A greater population living closer to amenities, public transport, food sources, whanau and work places aids in establishing a sustainable direction for urban development. For the Ngāti Whātua o Orakei community on the ipukarea aiming for a higher housing density provides an opportunity for Māori to create a model which not only responds to the needs of the city, but also the needs of Māori as the Māori population becomes increasingly urbanised.

To measure the developed community on the ipukarea a density calculation was applied and relayed as a series of statistics. These consist of; dwellings per hectare (Dp/Ha), population per hectare (Pop/Ha) and habitable rooms per hectare (Hr/Ha).

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The total area of the *papakainga* development equalled 6.3 hectares. This is displayed in Figure 34. A total of 194 new dwellings occupy the 6.3 hectare area, of which 74 are 2 B/R, 120 are 4 B/R or 3 B/R + office space. The total population is 868 people. This figure assumes that all rooms are inhabited and, in the four bedroom dwellings, that one room is occupied by two adults. This figure can be higher if the fact that Māori often have visitors stay for long periods of time\(^76\) is considered. The outcomes are displayed below:

- 30.4 Dw/Ha (medium density)
- 137.7 Hr/Ha
- 137.4 Pop/Ha

The concept of communal space can be utilised by residents if the housing platform is designed to embrace the space. Vistas from kitchens can allow parents and *whanau* to monitor children when playing.\(^77\) Communal approaches not dominated by driveways and private garages will encourage more interaction as one enters or leaves the dwelling, an enhanced level of security is also a by-product of higher density living in a Māori communal setting.

### 8.10 The Motor Vehicle

The motor vehicle has become one of the cruxes of contemporary civilisation and owning more than one vehicle a sign of prosperity. New Zealand has the third highest vehicle ownership rates in the world.\(^78\) Unfortunately this status afforded to the motor vehicle has come in many cases at the expense of the quality of the living environment, in particular the relationship of houses to the outdoors and communal spaces which form a community (these are all too often separated by driveways and roads). For children to play, to decrease pollution and noise, to allow space for flower beds and flax, the motor vehicle must not choke the spaces that create the *papakainga* of Ngāti Whātua o Orakei.

An intention of the design of the garden of knowledge is to allow a car parking ratio of 1:1 per dwelling, this intentional move will limit the ability for residents to own or operate more than

\(^{76}\) Ibid. 30.  
\(^{77}\) See hui notes appendix 1 for request by participants.  
\(^{78}\) Cars and SUV. *New Zealand third in worldwide vehicle ownership figures.*  
one vehicle and a system of carpooling, public transport, combined with communal vehicles to be borrowed will help accommodate the current addiction with private transport. It is important that Māori and Ngāti Whātua o Orakei lead the way in weaning society from the dependence of the motor vehicle. The strong communal basis of *whanau, hapū, iwi* creates a solid platform from which to promote communal transport. Large car park spaces have been allowed for in proximity to the *marae* to accommodate guests and excess vehicles, however an intention of these car parks is for them to not be occupied by long-term resident’s vehicles and the location in close proximity to the *kaumatua* housing will give them to also become *kaitaki* of the car park.  

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79 See 8.1 site plan for example
Chapter 9 – Conclusion

The central aim of this project has been to critically explore the relationships between Architecture, sustainable urban design, and Māori cultural identity. The intersection of these elements of culture, development, sustainability has resulted in several significant key findings and further questions for enquiry.

The research was structured around four core objectives, the first of which was to explore the relationship Māori have to the land and the values that shape a Māori urban development proposal. This required a literature analysis drawing on both broad discussion of ‘Māori’ beliefs and concepts, as well as the specific tikanga (protocols/values) of the hapū Ngāti Whātua o Orakei. Some of these findings included the relationship to the tūpuna who exist continuously through space and time; the importance of marae (Tumutumuwhenua) as the epicentre of the community; the deep connection to the whenua expressed and maintained through many practices; views of ‘belonging’ rather than ‘owning’ land; concepts of traditional housing (papakainga) and communality. This exploration of such concepts which arise from a different worldview, often in stark contrast to western understandings, fundamentally shaped my research.

The second objective is to understand the history of Ngāti Whātua o Orakei hapū and the land to which the proposal relates (ipukarea). Chapter 5 provided a dedicated examination into this tumultuous history of the hapū in Tamaki Makaurau (Auckland) from pre-European contact, to colonial confiscations, to the Māori renaissance and political protests resulting in Treaty Settlement, to the present when Ngāti Whātua o Orakei are in a position to consider such housing development options. The key theme from this objective has been that attempting to develop the land requires a fundamental understanding of these many historical layers and the political struggles which surround the whenua (land) and its people.

The key role of the term ‘sustainability’ in my overarching research aim necessitated an exploration of what this means in a Māori context. Chapter 6 exams Māori based understandings of the hegemonic concepts of ‘social’ and ‘environmental’ sustainability through the concepts of Manaakitanga, Whanaungatanga, and Kaitiakitanga, all of which contribute to the matrix of a Māori sustainability ethic.
The third objective took my understandings gained into the design phase in order to develop a proposed Master Plan of the site. The nature of the project called for an innovative approach to the site analysis based firmly in the land and its stories. I found a strong metaphor in the narrative of Papatuanuku and Ranginui, and used this as a vehicle for understanding the land. I used this metaphor to explore the appropriate spatial positioning of areas dedicated to different purposes, as well as the development’s relationship to the surrounding community.

One of the key findings from Objective 3 was the need for two typologies of housing - one for the kaumatua (elders) who act as the knowledge keepers or ‘gardeners’; and one for the wider whanau acting as ‘the gardens’. Chapter 8 builds on this finding to address the final objective to design a housing platform that identifies as Māori and utilises intergenerational values. The design process was fluid and informed strongly by the desire to create distinctly Māori development based on a foundation of cultural values. Some of these include using different muses for the design of the houses such as the tūpuna and waka; exploring traditional land development structures such as pa sites; using colour schemes that identify as Māori; understanding the fluctuating need for space for manuhiri (guests) at occasions such as tangi and marriages; and communal clusters of housing for shared living opportunities. The design also builds on the need for sustainability and autonomy by reducing the need for car dependency and building community gardens.

This project is an attempt to define the principles on which a distinctly ‘Māori’ sustainable urban development project could be based, and what such a development would look like within the context of the ancestral lands of Ngāti Whātua o Orakei at Orakei/Bastion Point. The investigation of a ‘Māori worldview’ has made it clear that it is in fact the ‘point-of-view’ that lies at the heart of this research. At the fulcrum of this point-of-view is Ngāti Whātua o Orakei and more broadly the Māori cultural context. Understanding the values, relationships and history that the Ngāti Whātua o Orakei hapū have with the whenua has been given paramount space in this project. Without this foundation of understanding the whenua and the communal layers of meaning imbued within it - as a place of birth, as a source of food, as a contested site of warfare and protest - in the mind of the architect it becomes merely a piece of land to be developed. With
feet firmly planted in the alternative perspective of the land as a cultural reality, the next layer of ‘sustainability’ is addressed to yield very different results.

Chapter 7 discussed and summarised most of the mainstream understandings and approaches to the utopic quest for sustainability, particularly in the field of architecture and urban design, which are shaped by the traditions and priorities of western cultural values. The most explicit of these are the foundations of private property rights, individualism and technocratic solutions. Māori have concepts and practices developed over centuries of living on these lands that form a matrix for the sustainable use of resources; however, a closer analysis suggests that these understandings have been given marginal space as influences on policies intended to shape the ‘sustainable urban development’ of Aotearoa/New Zealand.

This critical lens on sustainability and the need for culturally situated understandings of the land and its people have led me to adopt an alternative approach to site analysis. The creation narrative of Papatuanuku (earth mother) and Ranginui (sky father) used as a metaphor has been a useful and appropriate tool for design. This contrasts significantly with the western convention of a status quo ‘top-down’ approach to site analysis, as it starts with a fundamental understanding of the people and the stories that are embedded in the land. This platform led me to many design features, including using the concept of ‘ancestors’ as a generative base for structures and forms; creating collaborative living solutions as units of whanau, hapū, iwi; and using horticultural projects to enhance knowledge, provide sustenance and economic opportunities. The architecture developed into the form of two interconnected housing typologies; the first, relating to kaumatua acknowledging their role as the ‘gardeners of knowledge’, and the second, whanau, representing the ‘garden’ of the family, from which the community can flourish.

This methodology is embedded in the concept of belonging and being ‘of’ a place. Therefore I have argued that there is a need for a new approach to urban design which embraces this alternative view - a conceptual method that recognises a ‘belonging-based approach’, or in a Māori context ‘he ara mana motuhake’. 80 Embedded in this is the understanding that it is the tangata whenua who have the tacit knowledge and expertise to explore solutions to development and urban design, based within our own tikanga (values and customs) and who have an

80 Phrases have been translated by Chance Taylor- Matauranga Māori Lecturer/MAIA Māori Development Centre.
established socio-cultural-political and spiritual context, and of course notions of architecture and sustainability. This is not to say that such a model has no relationship to or relevance to the wider discipline and practice of architecture. On the contrary, the connections and possibilities for cross-pollination are far reaching to both the New Zealand’s mainstream western society and to other international indigenous communities.

For Ngāti Whātua o Orakei this project represents a *kete* (basket) filled with the seeds of ideas which may be selected to sow the lands of Orakei. This metaphor is an important one, as it acknowledges the input of many beyond myself as a single entity, and upholds the importance of the *kete* as the vessel of knowledge as constructed by our *tūpuna* (ancestors), and as an inclusive place for others to continue to contribute. This project has therefore developed a transformative strategy from a platform of wellbeing for the *hapū* of Ngāti Whātua o Orakei to propose sustainable housing solutions built to high standards of design. The project is underpinned by an intention to consolidate and to enhance our function as the principal *kaitiaki* (guardians) of the lands. Through these proposals and the argument of the thesis I invite Ngāti Whātua o Orakei to treat this as an on-going dialogue, and to have the courage to define and create approaches that fit within Māori realities, and to continue our tradition of challenging, critiquing, extending, and stepping beyond the conventions of housing architecture.

In conclusion the current models of Architecture and urban design are merely answering the questions the dominant mainstream society is posing, and hence arrives at solutions which perpetuate the status quo. This project provides a challenge to these norms, and more importantly an example of how asking different questions based in another cultural worldview can result in design solutions with radically distinctive and innovative outcomes.
## Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>Aotearoa</td>
<td>New Zealand</td>
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<tr>
<td>Ahi kā</td>
<td>Keeping the fire burning</td>
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<tr>
<td>Atua</td>
<td>Māori gods/deities</td>
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<td>Awa</td>
<td>river</td>
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<tr>
<td>Hapū</td>
<td>sub-tribe</td>
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<td>Hui</td>
<td>assembly, gathering</td>
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<td>Ihu</td>
<td>Bow</td>
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<td>Ipukaeara</td>
<td>Ancestral land</td>
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<td>Iwi</td>
<td>tribe</td>
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<td>Kaimoana</td>
<td>seafood</td>
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<td>guardians</td>
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<td>Mana</td>
<td>status, prestige, dignity, authority</td>
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<td>Mana whenua</td>
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<td>meeting house</td>
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<td>Mauri</td>
<td>life force</td>
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<td>Mihi</td>
<td>speech of greeting, official welcome speech</td>
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<tr>
<td>Pākehā</td>
<td>New Zealander of European descent</td>
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<tr>
<td>Papatuanuku</td>
<td>Earth Mother</td>
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<tr>
<td>Puku</td>
<td>Belly</td>
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<tr>
<td>Rangatira</td>
<td>Chief, supervisor</td>
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<td>Rangatiratanga</td>
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<td>Ranginui</td>
<td>Sky Father</td>
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<td>Tangata whenua</td>
<td>literally people of the land, local people</td>
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<td>Tangi</td>
<td>funeral</td>
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<td>Tapu</td>
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<td>Taonga</td>
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<td>Tikanga</td>
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<td>Tino rangatiratanga</td>
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<td>Tohunga</td>
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<td>Tūrangawaewae</td>
<td>A place to stand</td>
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<td>Waiata</td>
<td>song</td>
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<tr>
<td>Term</td>
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<td>Wairua</td>
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<td>Whanau</td>
<td>family</td>
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Bibliography


Miller, Caroline L. *Implementing Sustainability the New Zealand Experience*. Oxon: Routledge, 2011.


Patterson, John “Respecting nature: the Maori way” The Ecologist, 29 no.1 (1999)


Appendix

Analysis of the Hui Notes

As stated in Chapter 2, a core component of the research is the analysis of the *hui* notes in order to gauge the community aspirations for the *Papakainga* development.

*He aha te mea nui o tea ao?*

*He tangata! He tangata! He tangata!*

What is the most important thing in the world?

It is people! It is people! It is people!82

*Hui* is a significant part of the Māori culture, it presents a forum where people may speak their mind and may continue for a long time. Many of the urban developments that form today’s cities in New Zealand are constructed and designed at a frenetic pace. The result is all too often an outcome dictated by the developer’s ability to make profit and has no real connection to the inhabitants that live there. In effect the people become an afterthought. The process of *hui*, used by Ngāti Whātua o Orakei, brings the people into the development of the scheme, they are the developers, they belong to the land and it is due to the sacrifices and vision of their *tūpuna* this is possible.

The following section pertains to analysis of a series of seven *hui* held by Ngāti Whātua o Orakei over a period from November 2005 to 2006.

During the second *hui* the discussion focused on ‘Turning the value into a feature and ask why that feature will benefit the *papakainga*.’

These values are analysed in the table below:

82 A well-known and often recited Māori proverb of unspecified origin.
<table>
<thead>
<tr>
<th><strong>Value</strong> (participant comment)</th>
<th><strong>Discussion</strong> (personal comment)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education = the old ways; more hapū wananga (learning); be multi-cultural – invite other ethnic groups to learn in our institutions.</strong></td>
<td><strong>Tikanga Māori</strong> (Māori traditions) is referred to as “the old ways”. It is of importance to re-establish identity for young and old members of the hapū. Allowing for facilities that can educate other cultures about what it is to be Māori such as te reo centre, carving clinic, gardening traditions, cooking and weaving etc… this will help connect with the wider communities that live in close proximity and beyond. Breaking cultural stigmas and inviting all to learn about Te Ao Māori.</td>
</tr>
<tr>
<td><strong>Identity: our marae and whare tūpuna is a physical and spiritual expression of our identity and whakapapa; the way our papakainga looks is an expression of our identity; our street signs could all be carved like at Nga oho Street; Heaps of pou (carved post) everywhere.</strong></td>
<td><strong>Tumutumuwhenua</strong> is the marae at Orakei, the level of detail in this building identifies it as Ngāti Whātua and of utmost importance to the tangata whenua as a tūrangawaewae. The marae tells many stories of the ancestral connections with the land and journey to get here. When looking for inspiration to generate design outcomes and details there is a rich source of knowledge within all marae which can embrace and educate the community. Carvings are like the pages of a book and can be used to identify aspects of the papakainga. The reference to pou can be incorporated into the structure of the houses, used to identify who lives there and ancestral links. It can also generate work for apprentice carvers (See Figure 35).</td>
</tr>
</tbody>
</table>

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84 Personal comment’ refers to my own analysis.
Self-sufficiency: jobs on the papakainga; recycling; composting; Ngāti Whātua owned and run shops and retail; tourism ventures that are sustainable-authentic and express our culture and create jobs.

As the community grows there will be many jobs created as the land is caressed with gardens and papakainga. Traditional Māori always lived in a self-sufficient way, loving and living off the land. Trading with one another and later with the pākehā (Europeans). As we give to the land it will sustain us with jobs, food, knowledge and protection. Careful tourism options can generate jobs, but caution over where this directive falls in the priority of development should be expressed, as housing the people comes first. A market onsite would be a good way to encourage the wider community to trade once more with Ngāti Whātua, selling the productions of the community, like vegetables and traditional goods such as weaving, carving and Māori art etc. This will generate jobs and income and may also break some cultural boundaries that exist throughout the Auckland region and beyond, letting people know it is alright to interact with Māori in a business and social
<table>
<thead>
<tr>
<th><strong>Freedom; maintaining open spaces; our kids need room to move – not like at Nga Oho Street – it’s all for cars; need open areas for the oldies too to meet and greet and exercise.</strong></th>
<th>Cars have become the dominant feature of many contemporary urban developments, they destroy useful open space and limiting the impact of vehicles on the <em>papakainga</em> will generate a freer community for young and old. Choosing a car ratio of 1 car per dwelling and providing community vehicles for day trips and work delivery will help combat this current reliance society has on the motor vehicle today. Exclusion of private garages near or within houses will also enhance the open space, opting for communal carports will be better.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Future; we may need to build apartments to use less land to fit more whanau in the future; build other papakainga.</strong></td>
<td>As the demand to live at the <em>papakainga</em> increases higher density apartments can be located on Kupe Street (see figure 6 below). Kupe Street is on a ridge, this will allow for less obtrusive multi storey buildings. However, the need to create a high density style living that relates culturally with Māori will be a challenge as it is often disconnected from the land and people. Caution over the necessity to make such an extreme move should be expressed and dictated by demand.</td>
</tr>
</tbody>
</table>
Beautification; taking pride in our appearance; gardening competitions like our aunties once did to beautify the street; funding is needed to do up older houses at Kitemoana Street’ – it’s hard to get mortgages to upgrade the homes because we don’t own them.

Gardening competitions is a brilliant way to enhance beautification of the land and personal landscapes. The kaumatua can become the judges and also advisors to the community on ways to garden.

To increase the density on what land is allowed to be developed (by the council) it is most likely that many of the existing houses at Kitemoana Street will have to be removed. They currently exist at a 11 DW/PH ratio, identifying them as very low density. The concept of personal ownership of the land does not relate to the Māori worldview of ‘belonging to the land’. The principal of equity is acknowledged, but there are extremely intelligent leaders at the corporate level and, perhaps in order to remain true, the cultural value and respect for the land, the large communal wealth of Ngāti Whātua o Orakei can form a strategy of financial leverage. The houses that sit upon the land, however, can be owned and sold at an inflationary rate (in effect the

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<table>
<thead>
<tr>
<th>Whanaungatanga(relationship); Recreation is important – we need to play together like our kids do; play sports together at local clubs e.g. netball, rugby, league, touch, softball etc; We need room to play; our kids play areas should be safe and be able to be seen from our kitchen windows; our own sports club so we can have a place to socialise under our tikanga and so that funds can go back into our kaupapa and we don’t have to apply for funding from other Trusts all the time; have a communal Laundromat so I can talk to my cousin and catch up while I do my chores – then it don’t feel like work and we get to korero (talk); put our housing in the right place so we don’t get too angry with each other; have papakainga rules to maintain whanaungatanga.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaces for the community to be physically active encourage fitness and wellbeing of the people. Also kinship will be multiplied as there is no longer the need to form taua (war parties) to defend or gain more rohe (boundaries) the taua can be reformed on the sports field. As the population increases so does the mana of these teams and supporters. At the Okahu reserve there is ample space to practice and play en masse. Currently the Okahu bowls club is being touted for development into a larger sports facility catering for Ngāti Whātua as well. The idea of shared laundry facilities is fantastic as it can free up more space within the housing scheme for other uses, however, exactly how the power usage, water usage and cost of machines is divided may cause problems. But a pay as you use facility like typical Laundromats today may offer a solution.</td>
</tr>
<tr>
<td>Tikanga; Having te reo o Ngāti Whātua classes; Learning and living our tikanga; Cultural training for future leadership; Carving and weaving whare; arts whare; kapa haka; Employment and training centres both Māori and Pakeha; We need to be competitive in both worlds.</td>
</tr>
<tr>
<td>The passing of knowledge throughout the community will enhance the mana of the tangata whenua. Leadership is a key point identified, Ngāti Whātua has become a strong force in territorial decision making throughout Auckland. The creation of future leaders who are adept in tikanga Māori and political directives will stand in good stead for the future direction of the iwi. These future leaders can be developed whilst growing up in the papakainga.</td>
</tr>
<tr>
<td>Awhi te Marae (embrace the marae); locate kaumatua housing near the whare tūpuna so they can be close the marae and sit on the paepae (threshold of the house) or be the kaikaranga (ceremonial caller); spiritually and physically close proximity to the marae; being welcoming of manuhiri (guests) and respectful tourists;</td>
</tr>
<tr>
<td>The kaumatua presence is of extreme importance in Māori culture. They are the keepers of knowledge and living in close relation to the marae will allow them to keep their fires burning as they teach the youth about tikanga Māori. They can also act as kaitiaki of the marae teaching visitors about the whakapapa of Māori and Ngāti Whātua.</td>
</tr>
</tbody>
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80 As the epynomus ancestor of NWoO a decent of tuperiri is referring to members of the NWoO hapu.
During the first hui 3 groups of whanau were formed and asked ‘What does papakainga mean to you?’ Below is a table stating responses from whanau involved and the way these can be incorporated into a brief for the development of Orakei/Bastion Point.

<table>
<thead>
<tr>
<th>Hui 1 comments</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past and existing housing strategies and plans are devoid of the main thing – US! This project is to put the people back into the plans – Flax-roots planning.</td>
<td>The people are of the upmost importance. Design outcomes should consider what they feel would enhance their community.</td>
</tr>
<tr>
<td>Being kaitiaki (guardian) of our whenua and moana – not polluting it and stuffing it up; walking the walk of being kaitiaki and not just talking it or leaving it to others; maintaining our existence as Ngāti Whātua – keeping our claims to the land warm if not burning;</td>
<td>A role as guardians can become all who reside at Orakei/Bastion Point and echo to the surrounding communities as the way to live/belong with the land. One does not own land. One belongs to the land. The land can define residents as Ngāti Whātua and become once more the turangawaewae for many.</td>
</tr>
<tr>
<td>‘Who should the papakainga be for?’</td>
<td>The unavoidable question when there is not enough space for all members of the hapū to reside in the papakainga. How to allocate houses? What amount can be provided maintaining quality housing solutions not over developing the land so it can no longer sustain and feed the people?</td>
</tr>
<tr>
<td>o ‘everybody’</td>
<td>Suggested all decedents of Tuperiri, this will embrace the majority of Ngāti Whātua members whom have whakapapa (genealogy) links to the Tamaki isthmus.</td>
</tr>
<tr>
<td>o ‘whoever we embrace’</td>
<td></td>
</tr>
<tr>
<td>o ‘For the beneficiaries of that land’</td>
<td></td>
</tr>
<tr>
<td>o ‘Everyone under the banner of Apihai Te Kawau’</td>
<td></td>
</tr>
<tr>
<td>o ‘All the descendants of Tuperiri. And invited guests’</td>
<td></td>
</tr>
<tr>
<td>o ‘We need to be clear who it is for and who it isn’t for’</td>
<td></td>
</tr>
<tr>
<td>o We need to be flexible in deciding who it’s for as the future always changes’</td>
<td></td>
</tr>
<tr>
<td>We need different types of housing e.g. for kaumatua (elders), singles, young professionals. There should be equity in housing opportunities across income levels and life-styles.</td>
<td>Multiple housing types will be required, not having to purchase the land on which the houses sit will allow flexibility over the affordability of construction. The possibility of owning the house but not the land could gain equity for finacical investment within the hapū. A clause will most likely be written that houses must be sold to people with whakapapa links to Ngāti Whātua at an inflationary adjusted price structure. This will stop property speculation from external sources and ensure that the properties remain affordable.</td>
</tr>
<tr>
<td>We need to preserve Orakei, its openness, the freedom for our kids to run around on their whenua. Keep the cranes in the city they are getting closer all</td>
<td>Fears about over populating the landscape are well grounded. Already substantial retirement villages have been built by Ngāti Whātua o</td>
</tr>
</tbody>
</table>

87 Look to Chapter ‘Māori connection to the land’ for detailed explanation of turangawaewae.
the time. Change is occurring to fast e.g. marina, Te Pa, the Retirement village and Rest home. There needs to be better communication between the Trust Board and the papakainga.

Orakei on the mana whenua approved by the trust board. Whilst providing spectacular views for retirees with wealth, many of the kaumatua of Ngāti Whātua can only but dream about what it would be like to live on their own ancestral lands. It is of great importance they are enabled to dwell and pass on their knowledge to the community.

During the third hui customary principals became the focus of discussion. Firstly the values principals were addressed and then translated into built and non-built features that may form.

<table>
<thead>
<tr>
<th>KOTAHITANGA (Unity)</th>
<th>The creation of an amphitheatre in the gully has many issues. Attach image of gully and intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values principles</td>
<td>– ‘unity’ – ‘cohesion’ – ‘working together’</td>
</tr>
<tr>
<td>Built or natural features or actions</td>
<td>- build an amphitheatre in the gully where can have whanau concerts of kapa haka, music, plays, awards nights – there would be more freedom and room there away from the marae and we can celebrate ourselves; wananga for our reo, tikanga, mau rakau, whakapapa, waiata, karakia, moteatea so that we can represent ourselves when we are challenged on the marae by other iwi or the Crown; create areas where our kids can play and grow up together; actively attract whanau to live on the papakainga and engage them in hapū life and responsibilities;</td>
</tr>
</tbody>
</table>

<p>| WAIRUATANGA (spirituality) | Mauangakiekie (one tree hill) is of great significance to Ngāti Whātua attach air view mauangakiekie, it is where the conquering Te Tauo (hapū of Ngāti Whātua ) Rangatira Tuperiri choose to inhabit after defeating Kiwi Tamaki and the Waiohua iwi. Mauangakiekie was one of the largest examples of pa in New Zealand and the archaeological evidence still remains today in the form of terraces carved up the volcano. Allocation of an open space to reflect both on the past and into future is vital for the Wairua (spirit) of the scheme. Just like Te Kawau’s Tohunga (priest) Titai did when he advised on the coming of the English. |
| Values principles | - ‘freedom to be ourselves’ – Ngāti Whātua tanga |
| Built or natural features or actions | - build quiet areas where whanau can contemplate or chill out; I want to see Maungakiekie from my future house; align entrance to the pa to acknowledge Maungakiekie; maintain open spaces – not all buildings; Restore old springs and streams so there is water flowing again so we can hear and see it and it not be in pipes; create better connection with our moana which has been blocked by Tamaki Drive; arts and drama facilities for artistic expression and release; |</p>
<table>
<thead>
<tr>
<th>MANAAKITANGA (hospitality)</th>
<th>The way guests approach and transition into the scheme will be important. They should know that they are entering a community that is different, but welcoming. Security will increase as more hapū live on the mana whenua and look out for each other. Palisading around the land is a good way to mark the rohe of Ngāti Whātua o Orakei and also introduce identity through carving details. Look for image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values principles – ‘look after manuhiri’ – ‘look after each other’ – ‘look after yourself and your own family’ - ‘safety’</td>
<td></td>
</tr>
<tr>
<td>Built or natural features or actions - More security- palisading around our land – a Ngāti Whātua security group; design houses so we can see out kids; health services; drug re-hab services for whanau; teach our young ones respect for tribal property and rules e.g. no drinking at the marae – no tagging etc;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>RANGATIRATANGA (ownership)</td>
<td>The option to up skill the younger generation is an opportunity to build a greater knowledge by working on the land. There is no reason why motivated youths and adults cannot be trained and become part of the building process of the required housing, earth works, landscaping, teaching, healthcare and tourism. When selecting a contractor to build an agreement to employ members of Ngāti Whātua can be brokered, In the future the iwi may look to form a Ngāti Whātua construction company, tourism firm, law firm, architectural practice etc…</td>
</tr>
<tr>
<td>Values principles ‘identity’ – ‘leadership’ – ‘self-sufficiency’</td>
<td></td>
</tr>
<tr>
<td>Built or natural features or actions - Ngāti Whātua art and Architecture – people will know this is a Ngāti Whātua place; employment - work or sell your goods on the street floor live on the 2nd floor; have trade apprenticeships for rangatahi (younger generation) to gain a qualification when houses are built and reduce labour costs – link up with UNITEC-MIT etc; whanau owned shops; authentic flax-roots tourism not ‘Disney land tourism’ e.g. guided walks – waka – arts - korero;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>WHANAUNGATANGA (kinship)</td>
<td>For the community to prosper one must get to know his/hers neighbours and interact. Encouraging people to be involved in community activities like sporting events and mass gatherings will help in allowing people to know one another. The idea of community owned vehicles such as a boat is very good and it can be paid for by fundraising events or selling the produce grown on the land. As a unit the members can afford better assets rather than individually. A cycle of usage formed and takings such as kai moana shared around the community.</td>
</tr>
<tr>
<td>Values principles – ‘loving each other’ – I belong somewhere – ‘inter-generational’</td>
<td></td>
</tr>
<tr>
<td>Built or natural features or actions - communal Laundromat; recreation areas for our oldies too ‘we need to play to play together like our kids do’; sports club for our teams and to develop more sportspeople and use to raise funds instead of sinking our money into other sports bars; having people nearby and prepared to staff the marae when we need to for tangi (funeral); ensure there is private space for households too; have papakainga rules; have hapū events like fishing in a hapū owned boat and share out the catch;</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>KAITIAKITANGA (guardianship)</td>
<td>Community gardens can act as the bread basket of the scheme. The eastern slopes of the mana whenua provide perfect lye of land for terraced gardens</td>
</tr>
<tr>
<td>Values principles - ‘guardianship’ – ‘te mutunga kore’ – ‘sustainability’</td>
<td></td>
</tr>
</tbody>
</table>
Built or natural features or actions whanau gardens – village sewage treatment plant instead of sending it to our whanau Ihumatao – catch and use roof water instead of having to take from Waikato; village composting and recycling centre; build higher density housing which uses less land; build apartment towers to generate income for housing – uses little land like they have on the Remuwera ridge and Ponsonby – build on the Kupe ridge as doesn’t impact views; layout housing to make most of sun and reduce our power bills; include solar panels for housing; reduce our storm water run-off – less concrete and protect Okahu Bay; establish nursery and give out plants and knowledge to those that seek it; from which vegetables and fruit can be harvested. Free range areas for chickens can be established to help with the removal of food scraps and food production. Allotments to each cluster of houses can feed the people and excess can be sold through a farmers market. All water from the many roofs can be collected and stored in tanks and storm water ponds. Solar hot water power can also be generated by placing them atop of the roofs and on the whenua. Wind generation is also an option but the impact on the visual environment should be considered.

Trying to build apartments with less concrete may prove a problem, the development of papakainga can be in stages and higher density housing applied when the demand is apparent.


As a result of these Hui Ngāti Whātua o Orakei produced a report in 2006 Ngāti Whātua o Orakei called ‘Te Aho ki Hikurangi- Orakei papakainga towards 2030’. A statement of intent is represented in this sentence from an unreferenced source:

‘Past and existing housing strategies and plans are devoid of the main thing – US! This project is to put the people back into the plans – Flax-roots planning.’\(^8\)

A basic outline of ‘Te Aho ki Hikurangi’ is stated in the abstract below:

‘Te Aho ki Hikurangi’ will create a plan and strategy for Ngāti Whātua o Orakei to develop a sustainable papakainga (village) on our tribal landholdings at Orakei, in Auckland. Ngāti Whātua o Orakei have set their sights on achieving the vision outlined in this document by the year 2030. Ngāti Whātua o Orakei have significant land holdings at Orakei, more than 80 hectares, and has a goal to attract as many tribal members as possible back to their ancestral lands. Ngāti Whātua o Orakei recognises as part of its traditional culture its right to develop and manage the land in a sustainable manner with as few impacts on Papatuanuku as possible……… The purpose of the paper is also to

\(^8\) Ngarimu Blair, ”Te Aho Ki Hikurangi Hui Notes,” (Auckland: Ngati Whatua o Orakei, 2006).
indicate conceptually how our lands may be developed to cater for a growing tribe in a sustainable and culturally appropriate manner.\textsuperscript{89}

\textsuperscript{89} Ngarimu Blair, "Te Aho Ki Hikurangi – Orakei Papakainga Towards 2030," (Auckland2005).
Ethics Approval

Ethics Approval Number 1058: Approved.

1 October 2009

To whom it may concern

Re: Terry Badham Research

Terry Badham has made us aware of his proposed topic of research and its relationship with Ngati Whatua o Orakei. We welcome such insight into the future developments of our iwi and grant Terry permission to pursue this topic further during the course of his postgraduate study.

We look forward to being involved in the development of this interesting topic of research and are pleased Terry is applying his knowledge gained through his architectural education toward the development of his iwi.

Ngarimu Blair

HERITAGE AND RESOURCE MANAGER