

# Te Hira Whanau BACH 101 Case Study Rangitoto Island

Te Hononga - UNITEC Dept of Architecture



# Te Hononga – Centre for Maori Architecture & Appropriate Technologies

- ❖ Established in 1999 at the Unitec Department of Architecture, Auckland, Aotearoa / New Zealand
- ❖ Intension to provide opportunities for students to connect with Maori community architectural needs and aspirations
- ❖ Annual design studio project located within the Maori community
- ❖ Hands on build component ( 50 – 100hrs)
- ❖ Te Hononga Process: Client engagement, Research, Design, Construction, ongoing Relationship.....

# Whare Raumati 2002



Te Hononga Projects



# Whare Raupo 2003



Te Hononga Projects

# Whare Nikau 2006



Te Hononga Projects



# Pungarehu Marae 2007



Te Hononga Projects

# Pukeruru 2009



Te Hononga Projects

# Te Hira Whanau Bach

- ❖ Bach originally built on Rangitoto Island in 1919 by Bill Davidson and Bill Dawson
- ❖ Te Hira Whanau lease since 1936 – through uncle Bill Dawson
- ❖ 60m<sup>2</sup> – 2 bedroom, bunk room porch
- ❖ Cooking in kitchen lean to & cave
- ❖ Current lease to Minnie Te Hira nee Dawson – now 93 years
- ❖ Historic Places Trust Category B
- ❖ Department of Conservation restriction on alterations and additions



# The Sentry - Islington Bay



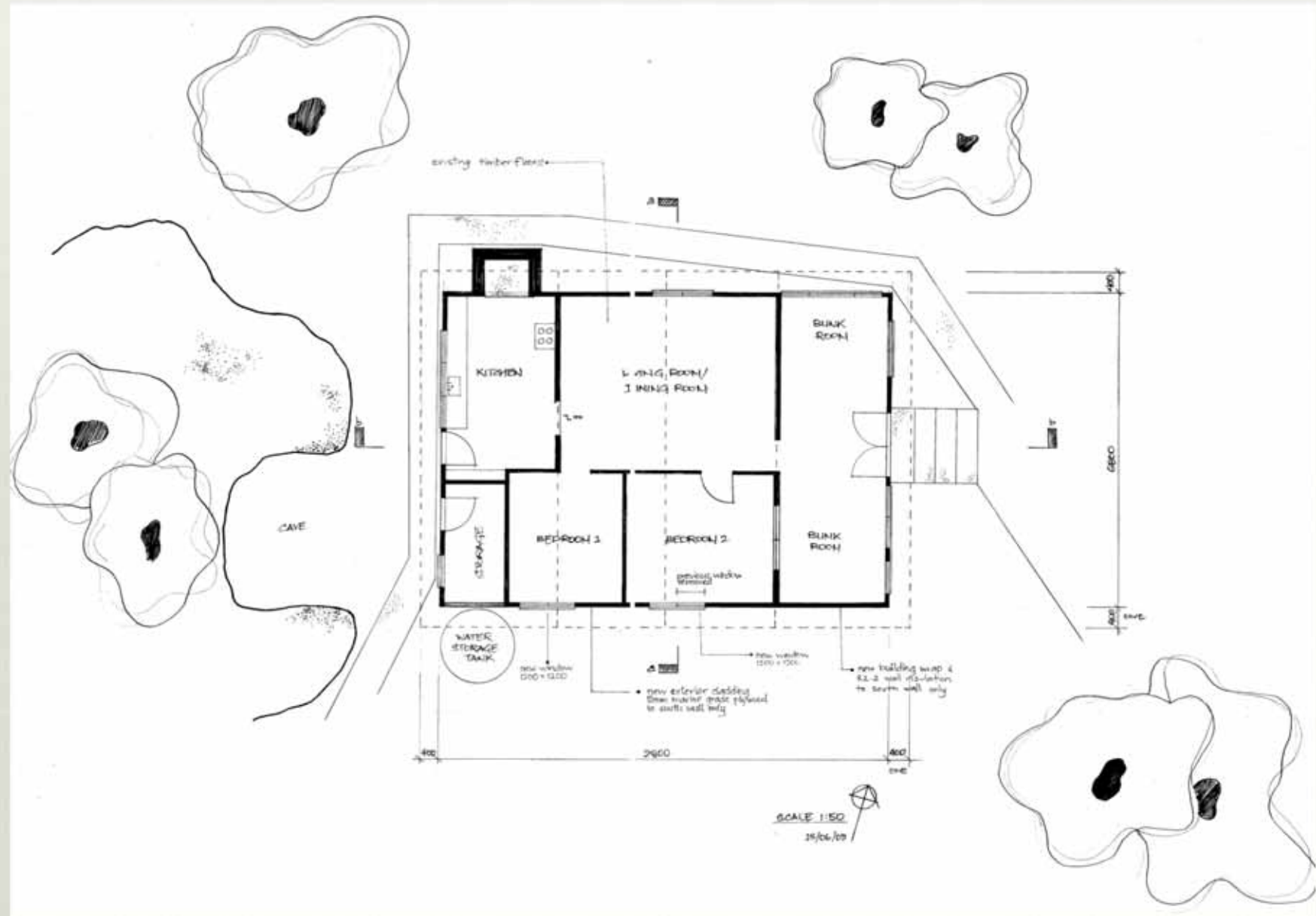
90 years on...

1950s aerial photo of  
Islington bay Bach  
community

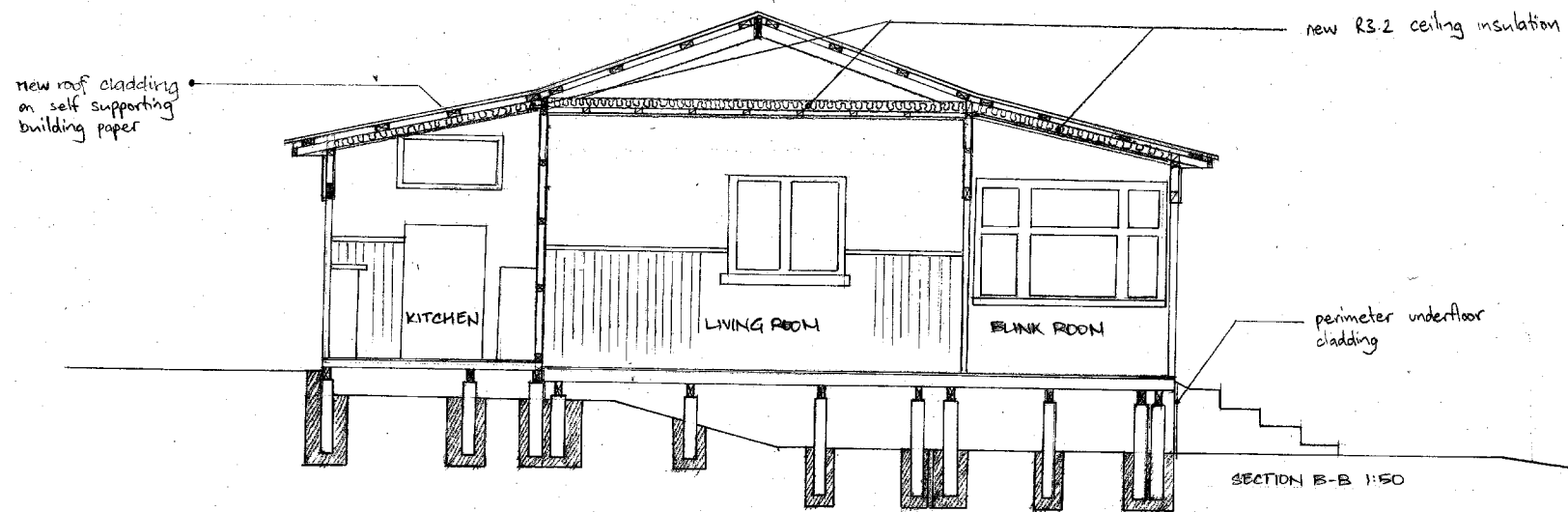


Te Hira Whanau gathering





## Site Plan / Floor Plan



Section West to East



# Whanau restoration priorities

- ❖ South wall deteriorated, rotten window frames & weather boards
- ❖ 300m walk / run to public toilet at wharf or brave the 'short drop'
- ❖ Rusted / leaking roof
- ❖ Cave roof structural restoration required
- ❖ Lighting – need to move away from Candles & lamps (use of naked flame and fossil fuels)

# Bach 101





# Team Process

- ❖ 11 x 2<sup>nd</sup> year Architecture Students - July – September 2008
- ❖ Historical Research of Rangitoto Island
- ❖ Bach research
- ❖ Whanau meetings / site visits
- ❖ Planning the build elements
- ❖ Sourcing & costing materials / sponsorship
- ❖ Arranging shipping
- ❖ 1 week build 1-6 September 2008

# Sustainability?

## Focus on:

- ❖ Sustainability of the bach itself – deferred maintenance had left the bach in poor shape
- ❖ Sustainability of the bach typology (under threat due to gentrification of coastal areas and removal of bachs on Public land)
- ❖ Sustainability of the Te Hira Whanau tenure on the Island
- ❖ Sustainability of a true bach lifestyle
  - Very low water supply controls demand
  - Photovoltaic lighting system – safety
  - Composting toilet – no water use
  - Insulated south wall and ceiling

# Minnie Te Hira – lease holder





# Bach Interior



# The Cave





# The true kiwi bach now an endangered species





# Sustaining the unique Rangitoto bach typology is absolutely crucial



## Prior to Build





# The Big Build - Roof





# The Big Build - Roof





# The Big Build – South Wall



# The Big Build – South Wall





# The Big Build – Composting Toilet



# The Bio-loo





# The Big Build – Composting Toilet





# Team, Whanau & SHaC Judges



... and Bach 101 endures for future generations  
of the Te Hira Whanau

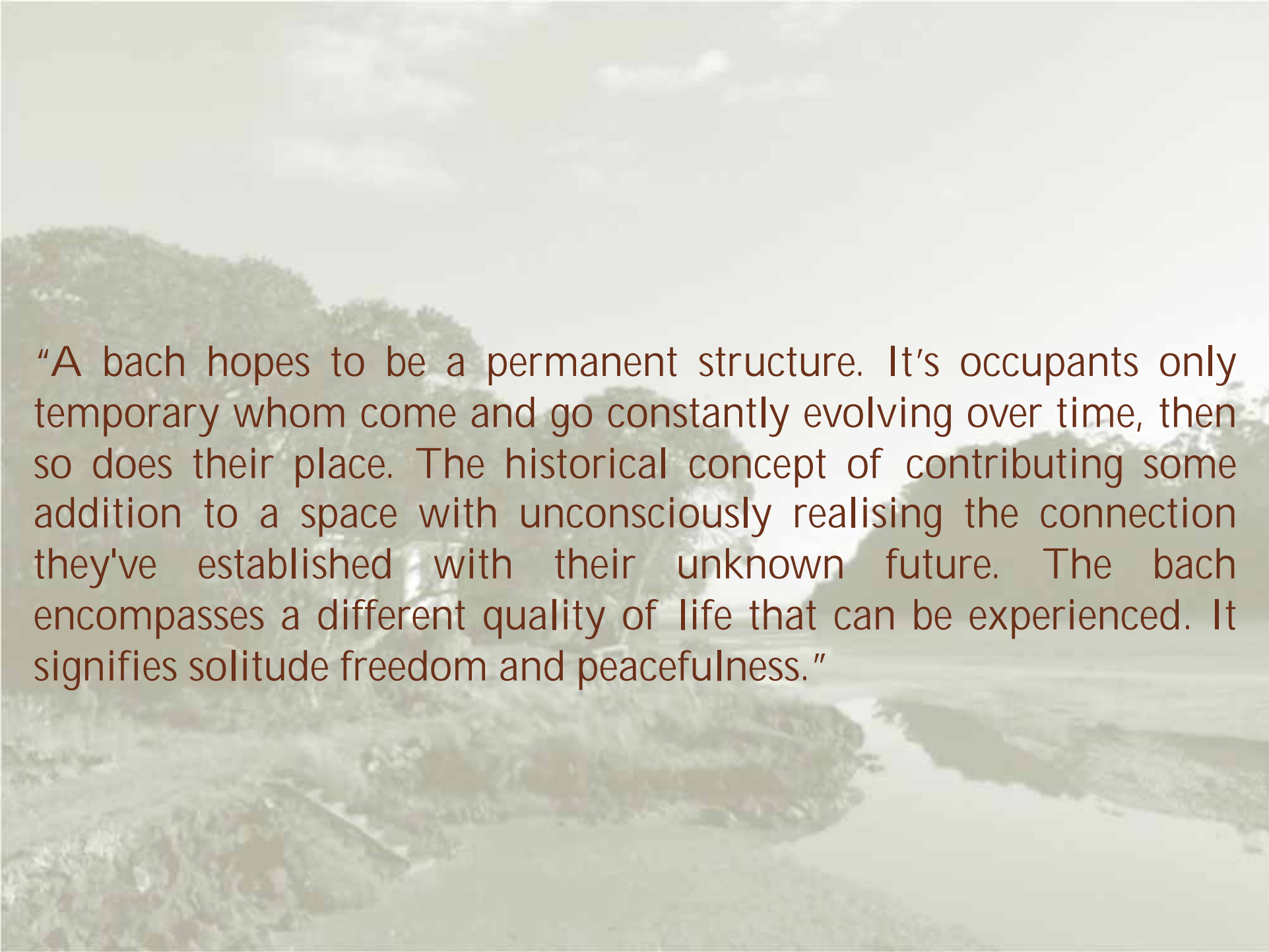




## Team Bach 101





A faded background image of a river flowing through a forested landscape. The river is in the foreground, winding towards the right. The banks are covered in dense green trees and foliage. The sky is overcast with soft, grey clouds. The overall tone is muted and atmospheric.

"A bach hopes to be a permanent structure. It's occupants only temporary whom come and go constantly evolving over time, then so does their place. The historical concept of contributing some addition to a space with unconsciously realising the connection they've established with their unknown future. The bach encompasses a different quality of life that can be experienced. It signifies solitude freedom and peacefulness."

# Key findings

- ❖ Strategic interventions sufficient to increase comfort, usage and sustainability
- ❖ Modest budget \$16,500 incl GST
- ❖ Whanau engagement with renovations / interventions post build
- ❖ Part of the success of the project is what we didn't do to the bach!