The Colville Project Trust

ARCHITECTURAL/ENGINEERING DESIGN SERVICES

BRIEF

Project: Design of the Wellbeing and Education Centre and Land Management Plan of The Colville Project

Purpose:
This brief provides a concise description of The Colville Project. The entire content of this document has been drawn/extracted from the Programme. For more detail please refer to the "Programme" document.

TABLE OF CONTENTS

1. INTRODUCTION

1. PROJECT STAGES

The Colville Project is a community initiative to develop an integrated health/wellbeing and education centre in Colville in the Northern Coromandel Peninsula. Land has been purchased and preliminary site investigation and conceptual design work done by BECA. For more detail see the "Programme".

The proposed development involves four main components:

 Stage 1 Wellbeing & Education Centre	 Stage 2 Accommodation options for the elderly and those needing supported living/care; and for visiting professionals and students	 Stage 3 Youth recreational facilities and skills training	 Stage 4 Housing for families wanting to live and work in the area

2. SCOPE OF THE TENDER

The tender includes in its scope:
i. an overall land management plan for the property, incorporating allowances for all four stages of the project (see above) as sketches.
ii. the preliminary design of the Wellbeing and Education Centre as defined in the existing Beca concept plan. (see further information below).

Land Management Plan

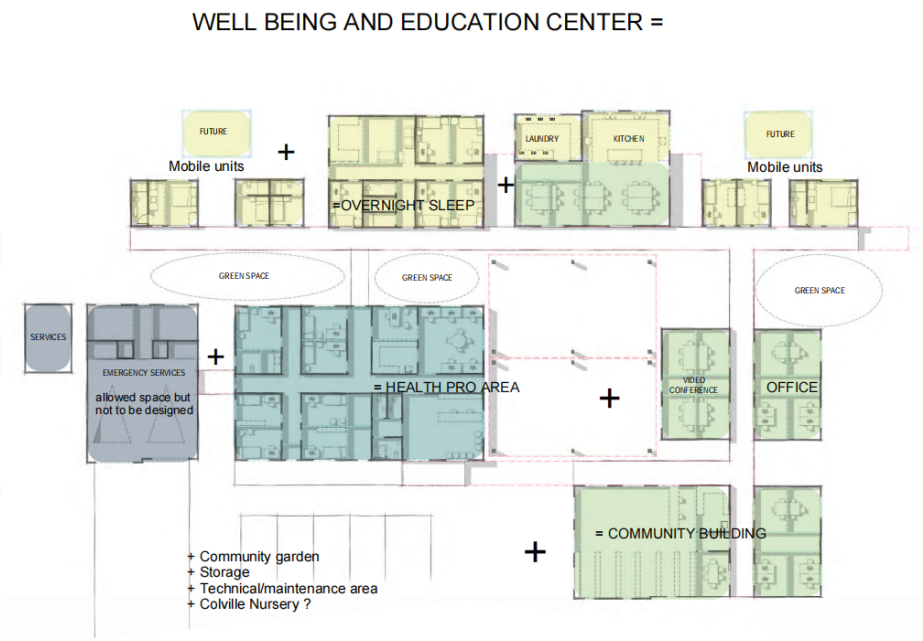
It is the wish of TCPT that the resource consent process include broad site planning for the total project development.
The land management plan should incorporate all four stages of the development (see also: 4 Key Concepts, Facility Spatial Aspirations, below).
It should also preserve the regenerating kauri, be mindful of both obligations under the Emission Trading Scheme framework and core permaculture principles, and allow for the relocation and expansion of the existing Colville Harbour Care Nursery.

It should also treat the paa site and swamp areas as culturally sensitive sites.

Wellbeing and Education Centre

The Wellbeing and Education Centre includes at least:

1. 'Spaces' for health professionals
2. "Video conference"/media space, education learning/workshop spaces and office areas
3. A 'Community House' (multifunctional overnight sleep spaces, shared "Kitchen" and "laundry" areas)
4. A "Community Building" (Library, Opportunity shop, services…)
5. Other flexible accommodation units (Stage 2 of TCP)
6. Storage
7. Technical Zone
8. Possible Community Garden
9. Possible Nursery (CHC)



These areas are the minimum required. This tender doesn't limit the scope of the Wellbeing and Education Centre. Tenderers can propose other uses that fit with the TCP aspirations and that may be seen to be missing in the concept design.

It is noted that existing concept design is an interpretation of the first stage of the project's needs and aspirations. The way that the facilities are displayed in the concept design (eg: creating separate buildings for different purposes) is one option amongst others. Tenderers may present other interpretations, but these need to be explained in the tender.

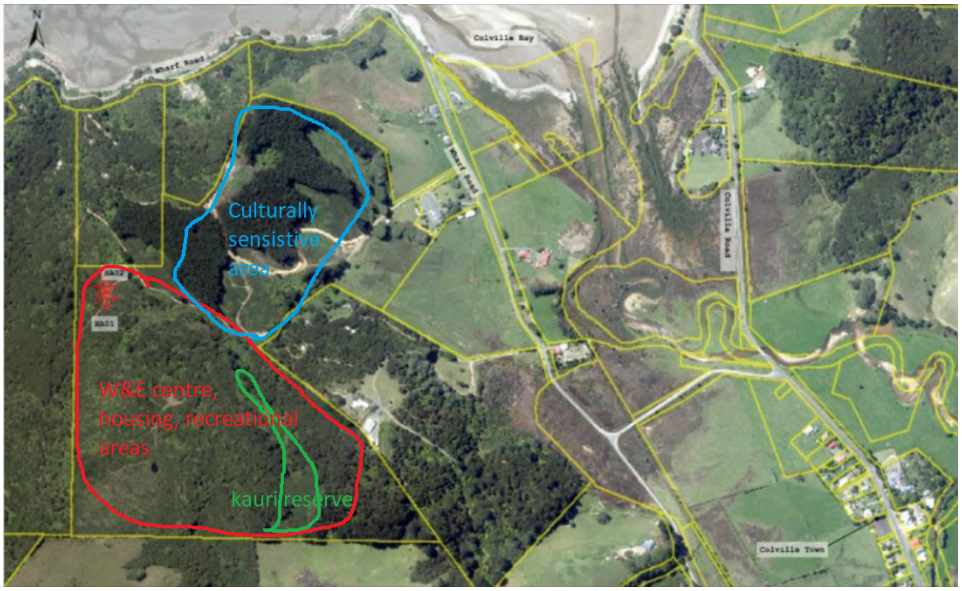
Further consideration should be given to the provision of storage, a technical zone, maintenance buildings, and community garden space/s. See also: 4 Key Concepts, Facility Spatial Aspirations (below).

2. SITE

Location

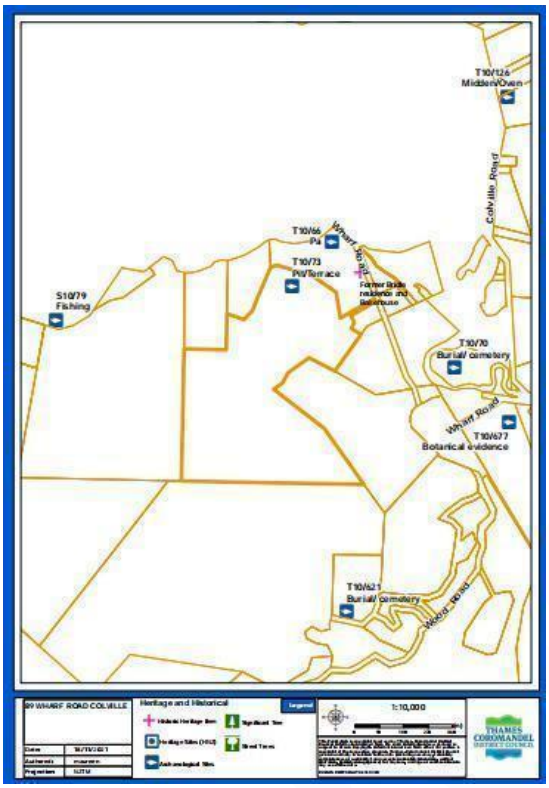
- 89 Wharf Road, RD4, Coromandel, 3584, New Zealand.
- 35 hectare property
- Situated 1.4 km north-west of Colville Village and the Colville Sawmill, the site is a coastal and rural area with moderately sloping hillsides.
- Being outside the recognised flood and tsunami zones, the site can accommodate the project vision now and into the future.

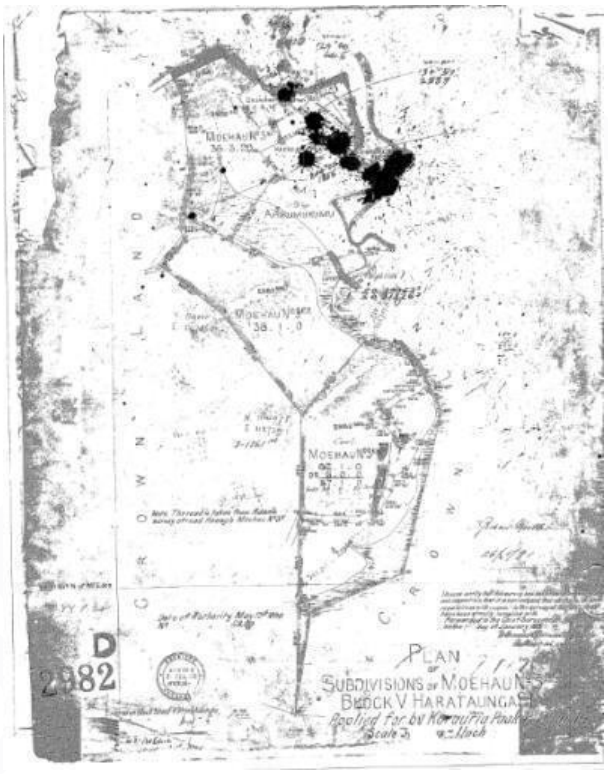
The Land Management Plan will include the four stages of TCP and consider the whole site. It will also need to indicate the culturally sensitive areas whose potential development will follow in consultation with iwi; areas of native kauri reserve; area for the Colville Harbour Care nursery; and be cognisant of responsibilities under the Emissions Trading Scheme.



Heritage, culture and resources

- The land includes some high interest bush areas, and an area of regenerating kauri.
- The property is registered under the Emission Trading Scheme.
- The property has some cultural heritage significance.





See LIM report for more planning information.

Water and Geotechnical report

- The stream on the property is the current water source for neighbouring properties and it is not envisaged that this would be the water source for TCP. (A new water supply could need to be allowed for.)
- See Geotechnical report annexed.

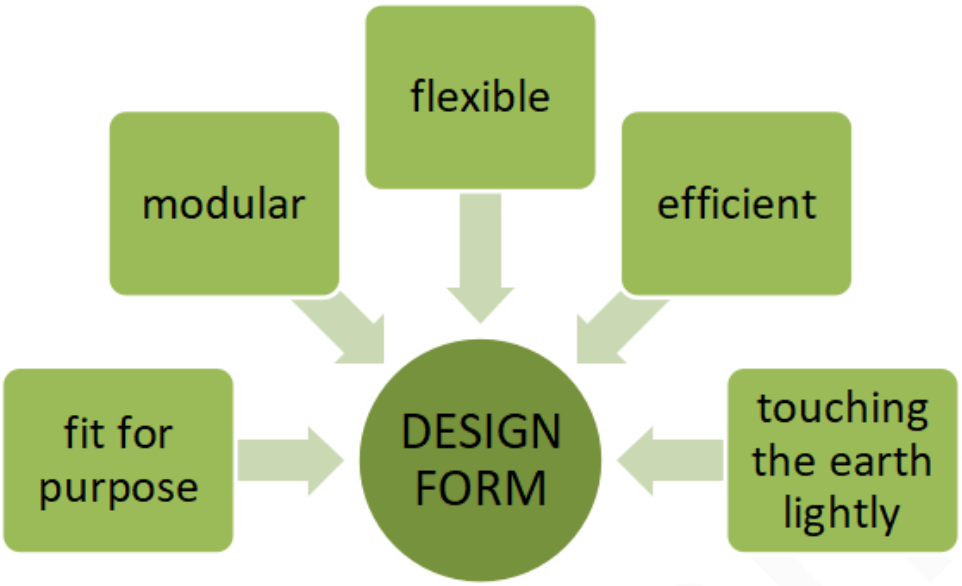
Landscape and materiality

3. LOCAL RESOURCES

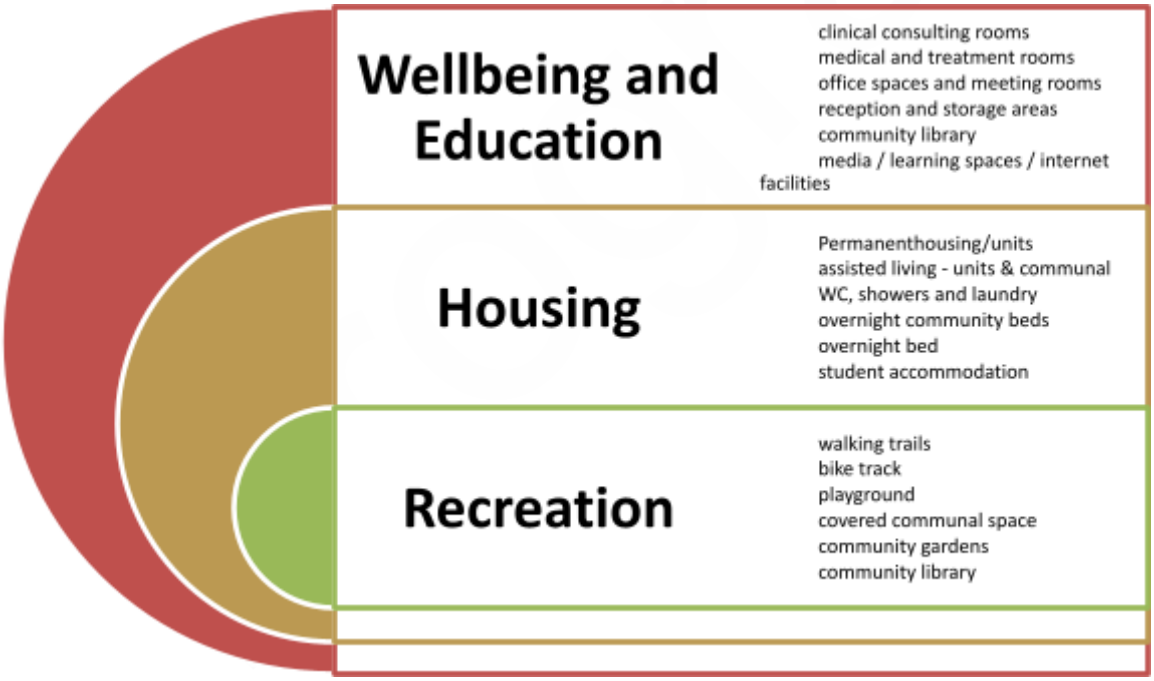
- Trees on site with ETS restrictions + Regenerating native bush
- Culturally significant areas including Pā site (Resources in term of public and iwi interest)
- Colville Sawmill
- Local experts (in a range of areas including but not limited to Iwi representatives, energy efficiency, waste management, water management, architecture, building, 'alternative' energies, permaculture)
- TCP Advisory Groups
- Alternative local materials, and construction methods (sawdust, lime, clay, straw…)

4. KEY CONCEPTS

Requirements
The Colville Project is based on these requirements:



Facility Spatial Aspirations



Included or may be included as part of Wellbeing and Education Centre

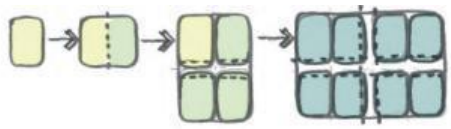
5. CONCEPT PLAN

TABLE OF SURFACE /AREAS

From existing Concept Plan:

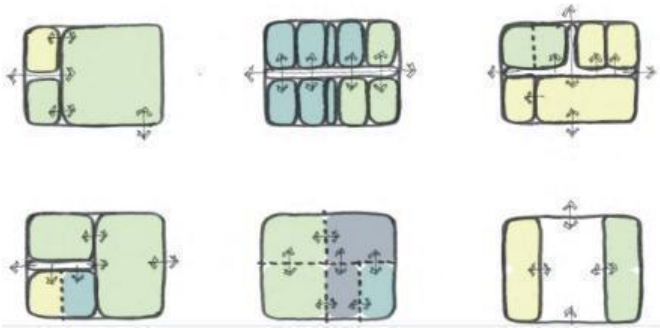
Item Description	Estimated Footprint / Approximation (m2)
Clinic	265.00
Video Conference	53.71
Conference 1	53.71
Conference 2	53.71
Library	122.32
Unit 1	22.68
Unit 2	22.51
Office	22.59
Twin Unit	22.72
Kitchen/Laundry	123.18
Housing	120.88
Emergency Services	123.04
Shelter	234.42
Covered Footpaths	231.82
External Works	-
Temporary Generator	-
Alternative energy production	-
Security in energy production	-
Allowance for Major Earthworks/Retaining	-
Water management	-
Waste management	-
Surface of regenerative bush	-
Roading	-
TOTAL	35 Hectares land, around 1472 sqm to build or less if the areas can be combined or dual purpose

SPATIAL CONNECTIONS

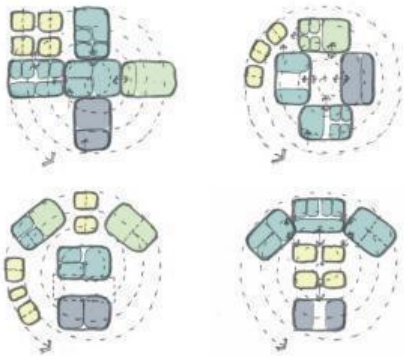


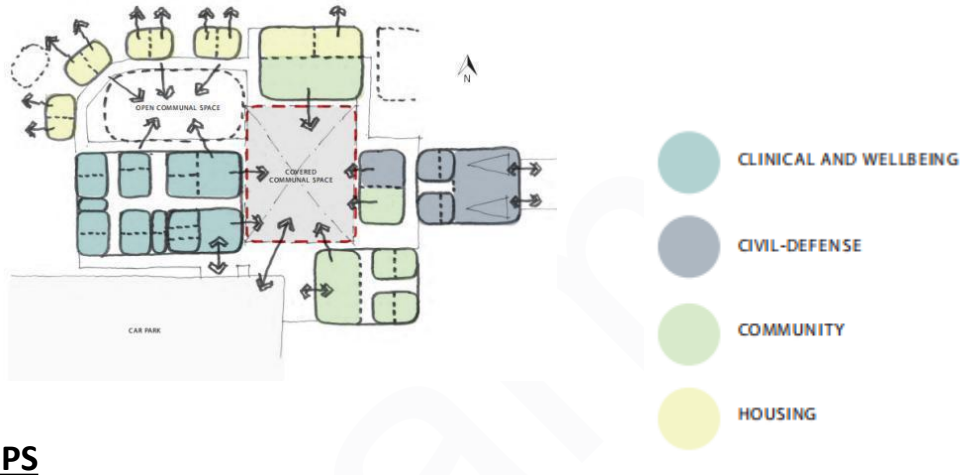
Project aspirations:

- maximum flexibility
- combination can be modified to be larger or smaller depending on activity over time.
- high level spatial arrangement shows how various spaces / buildings might relate to



one another. This also shows the linking of communal exterior spaces in between.





See more information in the existing Concept Design Options Report .

6. TCP ADVISORY GROUPS

TCP is a community led project. This includes:
> working closely with its communities and utilising their skills and strengths.
> liaising with TCP Advisory Groups.

Examples of Advisory groups could include: Sustainability, Energy, Alternative Power, Waters, Air, Resources and Materials, Building Waste, Waste management, Consideration of the climate - environmental crisis - global issues - emergency, Biodiversity, Well-being in and out of the facilities, Urban and social integration, Innovation & artificial intelligence, Nuisance and pollution, Cultural Heritage, Certification, Marketing, Communications.

7. TECHNICAL REQUIREMENTS

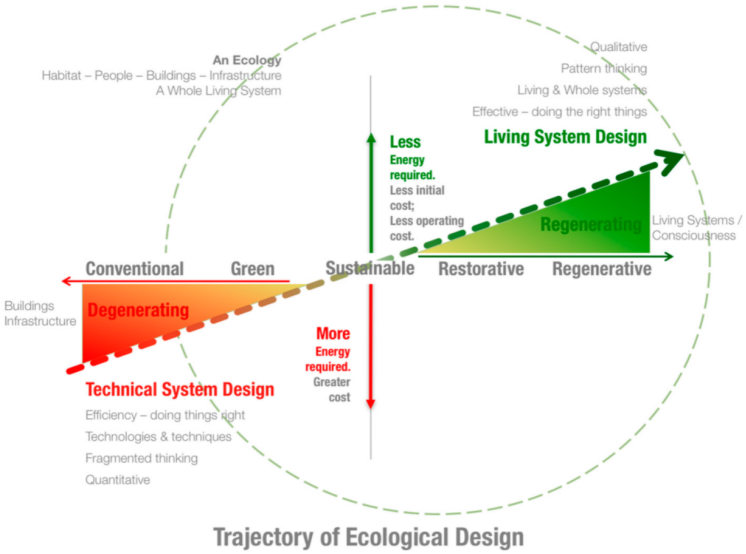
The Colville Project will be drawing on a host of other, specific disciplines.
The design of TCP will take into account these aspects:

National NZ standards

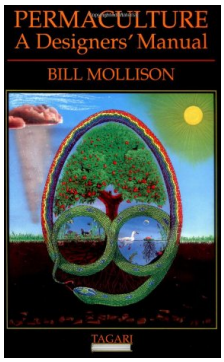
- Latest national standard or above.
- NZ building code and fits other rules and regulations
- Alternative solutions are accepted
- Regulation around buildings receiving and open to the public.

Technical perspectives
The Tenderers should consider:

- architectural design, structural engineering, heating, ventilation, power systems, sanitation, fluid distribution and lifting equipment;
- urban planning, landscaping and heritage;
- acoustics (soundproofing, reverberation, natural acoustics and room acoustics);
- air and water quality;
- wellbeing, comfort (climatic, visual, olfactory and noise-related), accessibility, ergonomics and health);
- safety and security;
- facility commissioning, operation and maintenance;
- networking of technical facilities;
- water and air regeneration;
- nuisances and pollution (greenhouse gases, air, water, soil, light and noise)
- use and sustainable production of energy;
- bioclimatic design principles as regards adapting to geographical circumstances, solar orientation, exposure to wind, weather resistance, external and internal comfort, climate neutrality, maximum use of sunlight, making use of the topography for siting the building, etc
- biodiversity (fauna and flora);
- cost analysis, planning and methods;
- life cycle analysis, forecasting models, certification;
- circular, social and inclusive economy;
- environmental -friendliness is a central concept for the entire project: Regenerative building
- positive impact on the environment and on communities font
- re-forge links between the urban and the natural

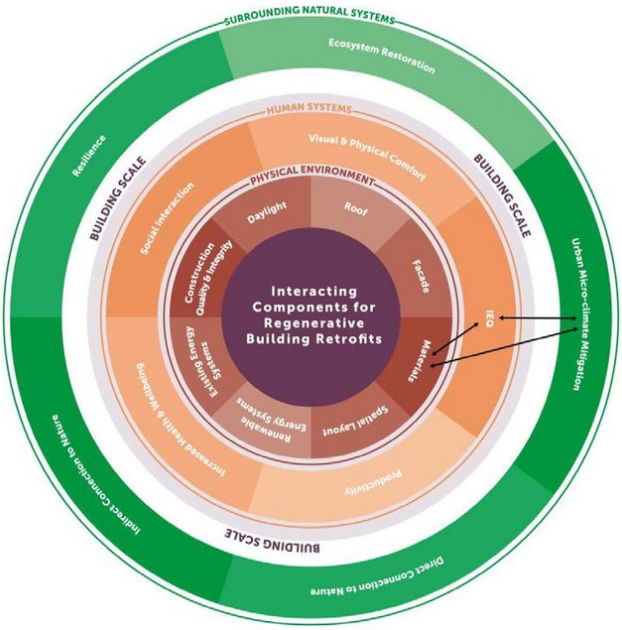


Trajectory of Ecological Design



- Reduce overall consumption (IT, room facilities, kitchen, water, energy, waste etc.) and not only comfort-related consumption;

- Reference : Bill Mollison, Permaculture - A Designer Manual (Chapter 14 in particular)

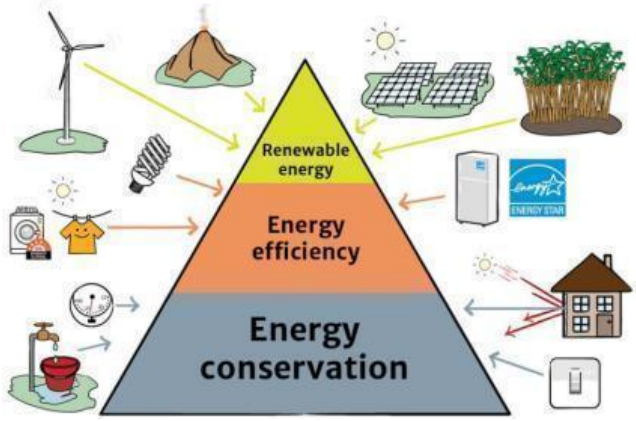


Certifications

Tenderers could consider potential environmental certification (like DGNB, BREEAM, LEED, WELL or other). The project needs to achieve an equivalent of 5 stars rated under NZGreen Building Council certification.

Energy efficiency

- Best level of energy efficiency should be achieved.
- Temperature inside between 18°C and 26°C.
- Running cost on a 20 year basis.
- Measurable performance (eg: International Performance Measurement and Verification Protocol IPMVP / CMVP).



Building conception

- Natural based solutions, and be inspired by bioclimatism.

- Two different construction processes have been considered to date: prefabricated cabins and building from scratch on site. Other approaches may be feasible or desirable.

Material, resources and waste

- Possibility of using reused, recycled and upcycled material.
- Attention to natural and local material resources (economical context in New Zealand in 2022)
- Using the Circular economy.
- Minimised Waste.
- Minimised building site waste. Or building site waste will provide resources for locals.
- "DE-constructibility" or "reversibility": key aspect of the design.
- Material inventory (See Building as Bank Material or "Passport of materials", Trace & Track by BIM etc)
- Flexibility in use, modularity and adaptiveness: to cope with technological and social changes and developments. Future-proof design for maximum resilience / design for change (in connection with climate change, changes to legislation and changes in purpose for particular areas).
- The standardisation in the building process and material allowed to reduce the long term waste and the maintainability of the building.

Three waters

- Reduce consumption, reuse where possible,
- Different levels of potability for different usages (e.g. plant nursery)

Social Innovation and local resources

- Social innovation and creating local work.
- Potential collaboration with universities or research centres.

Biodiversity

- An inventory of the natural environment will be established by TCPT.
- The ecosystems will be preserved or restored (there is much local knowledge).

Design for all, e.g. utilising the principles of Life Time Design

- Easily accessible for people of all types of (dis)abilities.
- Inclusiveness, Openness, Intergenerational solidarity
- Elderly friendly, child and family friendly

Wellbeing

- Quality of spaces (Lansing and Marans (1969) stated that "an environment of high quality conveys a sense of well being and satisfaction to its population through characteristics that may be physical, social or symbolic")

- Natural light will be always preferred
- Air quality, acoustics should be considered
- Comfort: individual needs, social needs, health
- Nourishment (a key aspect in permaculture is the availability of fruits and vegetables and nutritional transparency, encouraging the creation of food environments where the healthiest choice is the easiest choice)
- TCP will promote movement (physical activity and active living) and discourage sedentary behaviours through environmental design strategies, programs and policies
- Contemplation of the landscape and surrounding nature will be considered, quality of views will be considered
- TCP will be a "third place"

Technology accessibility

- Installations that are straightforward to operate and run – open source
- Low Tech systems are preferred.
- Enabling / supporting the remote community, to access educational and training opportunities and employment information.

Mobility

- Access will be carefully chosen.
- Soft transport will be preferred.
- Re-forge urban, environmental and social links (vegetation, mobility, biotope).

8. Information from Thames Coromandel District Council

Council planning department indicates the following information needs considering:

- Proposed TCP activity is not provided for in the zone > Resource consent will be necessary (may not need to be notified, dependent on neighbours' support).
- Traffic assessment: access via both Wharf Road and from Wharf Rd to the site itself
- Noise from the activity
- Geotech matters (including waste water management and provision of power and phone services)
- Effects for neighbours and wider public
- Historical / cultural significance/aspects of site