the coast of NAVITI ISLAND

Naviti Island is a mountainous island of several vibrant communities and great natural beauty. This is part of the 20 islands which comprise the Yasawa Group archipelago. Rising from the Pacific Ocean, the archipelago was formed by volcanic activity. This design submission is inspired by the strong prescence of island landscape and the Marou Village community.

MAROU VILLAGE

Marou Village of 67 households is on east face of Naviti Island. In recent years, the community is seeing the affects of climate change on the Island. The competition with Marou Village and LAGI provides possible solutions to address sustainable energy generation and water capture.

ENVIRONMENTAL IMPACT ASSESSMENT

To 'lightly touch' the site is the design approach of de la terra. It is to minimize the disturbance of the development area and preserve the natural and ecological features. The proposed design covers roughly 20% of the total site area.

The guiding principles include:

- **Preservation of Existing Trees**: The design intent is to retain the existing trees. The proposed site layout and building placement will work around existing major natural features.
- **Minimal Land Disturbance**: Development footprint is deliberately minimized to protect soil structure, flora, and fauna.
- **Use of Local Materials**: Maximize use of building materials that are readily available and locally sourced such as stone, timber, and soil. This will also help simplify the logistics and need for transportation off of the island.

Additional site strategies include:

- **Balanced Cut and Fill**: With the new berms, the grade will be raised to accommodate new infrastructure and amenities. The design intent is to balance the site with equal amounts of cut and fill. This strategy reduces additional off-site materials, the need for hauling, and minimizes emissions.
- **Low-impact Construction Techniques**: Minimized excavation and root-zone protection measures will be enforced.
- **Integration of Photovoltaic (PV) System**: The structural posts that support the photovoltaic solar array will be incorporated into berms to address uplift requirements but also to minimize site disturbance.
- **Integration of Stormwater Collection**: Slight elevation of bermed areas will ensure proper drainage without major reshaping of the site and landscape. The collection areas may be a more naturalized system such as bioswales. If required such as the flooded site area, a site drain and gravel under may be required. At the new support buildings, rainwater harvesting cisterns will be placed for agricultural irrigation.
- **Utility and Drainage Routing**: Routing of conduits for the PV system and storm piping for the stormwater collection is proposed to be placed to minimize trenching and ecological disturbance.

This project aims to provide a sensitive, environmentally responsible approach. By preserving the existing trees and significant plantings, balancing site grading, and integrating sustainable systems, the development minimizes its ecological footprint and fosters long-term environmental health.

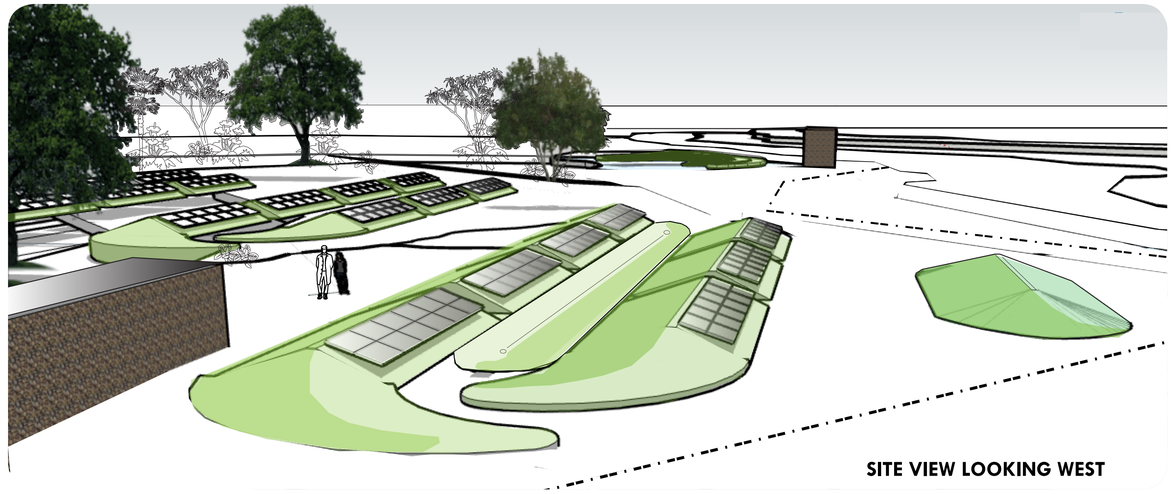
DESIGN CONCEPT NARRATIVE

LAGI 2025 Fiji calls for the design of installations that will supply clean and reliable electricity and drinking water to the coastal village of Marou for 67 households. Inspired by the natural beauty and resilient spirit of the Village, this submission is titled *de la terre* - meaning "of the land" in French translation. The design concept embodies a deep connection to place and draws from the strong presence of nature and the local environment—the island's topography, geology, and village culture.

The architectural response for *de la terre* embraces the island's natural contours and scale. It is grounded upon it, sitting low to the earth to preserve the visual and ecological integrity of the site. This approach seeks harmony with its surroundings while addressing practical solutions: to provide resilient infrastructure and shelter to the community while minimizing potential uplift in the event of storms or cyclones. **The bermed form is a symbol and strategy reflecting resilience and strength in the face of climate change.**

A Sense of Place
A key element of *de la terre* is the topographic mounds or 'berms' that house the proposed infrastructure systems for electricity and drinking water. The berms are envisioned as functional, flexible and poetic forms, weaving together the built form and the cultural fabric of Marou Village community. They are **aesthetically expressive and practically essential**, blurring the boundaries between infrastructure and landscape. They offer a layered framework of topography and support infrastructure with community uses to provide a sense of place – a destination for gathering, learning, working and celebrating.

The berms support:
- Photovoltaic panels for renewable energy generation,
- Stormwater collection systems for clean water, and
- Seating, gardening, and play zones for flexible community use



SITE VIEW LOOKING WEST

SITE ORGANIZATION

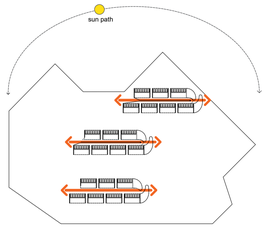


DIAGRAM: Layout of Solar Array

The berms support the photovoltaic panel arrays. They are oriented along an east-west axis to maximize northern exposure.

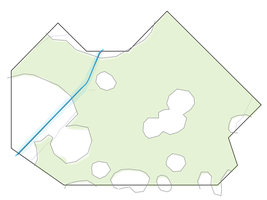


DIAGRAM: Existing Site Area

Energy Design Site Area: 14,620-m²
Area of existing tree coverage: 27%

To maintain existing trees and large landscape, this area is taken out of the potential buildable area.

The remaining buildable site area is approximately 10,620-m²

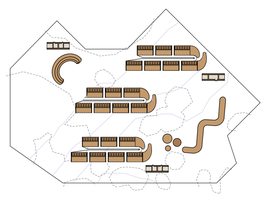


DIAGRAM: Development Footprint

The proposed design encompasses approximately 15% or 2,200-m² of the total site.

The majority of this area is permeable surfaces, which allows water to percolate into the soil and recharge the water table.

The support buildings are not; they are roughly 2% of the development footprint.

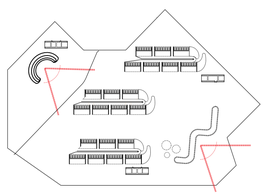
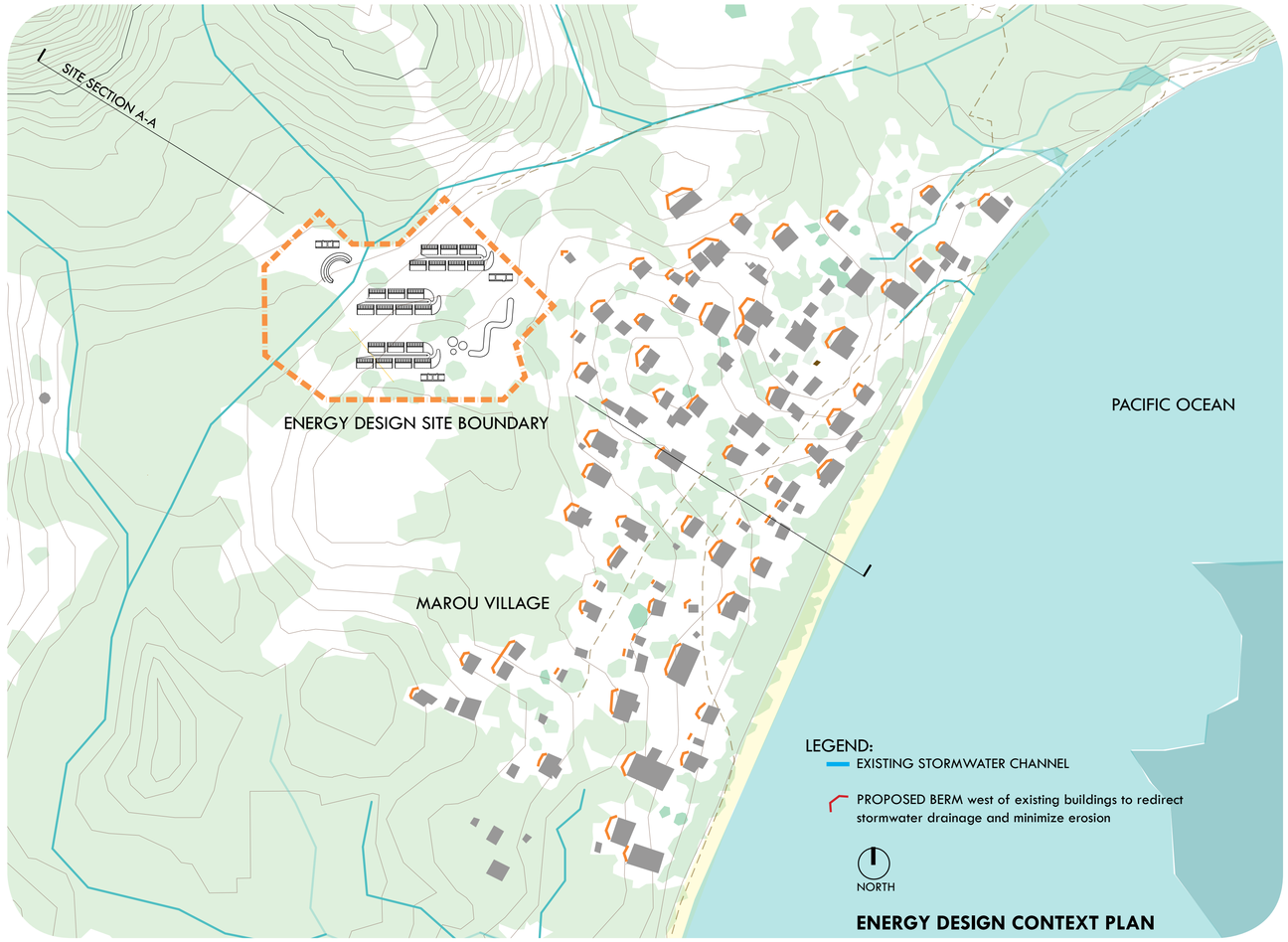


DIAGRAM: Views

Programmed spaces for community gatherings, large and small, have views to the Village and ocean beyond.



ENERGY DESIGN CONTEXT PLAN

this design is inspired by the **stratifications** or the layers of sediments in geological formation. The Site Section imagines this distinct layering or formation

Geology: The geological formation of Naviti Island is the Wainimala Group. The Wainimala Group is a series of shallow water deposited rocks, including volcanic and sedimentary facies including sandstones and siltstones.

SITE SECTION A-A