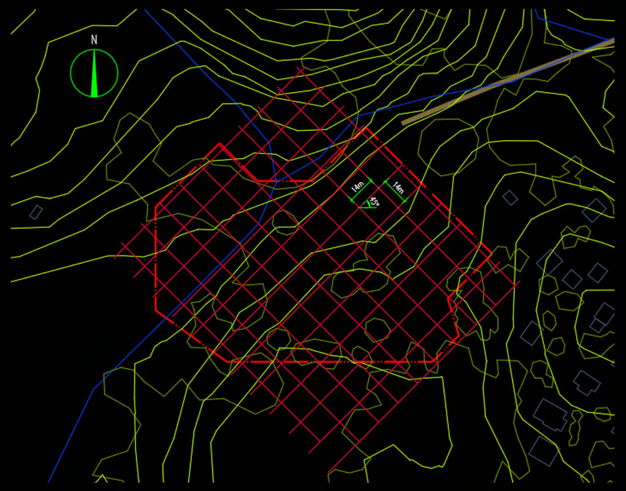
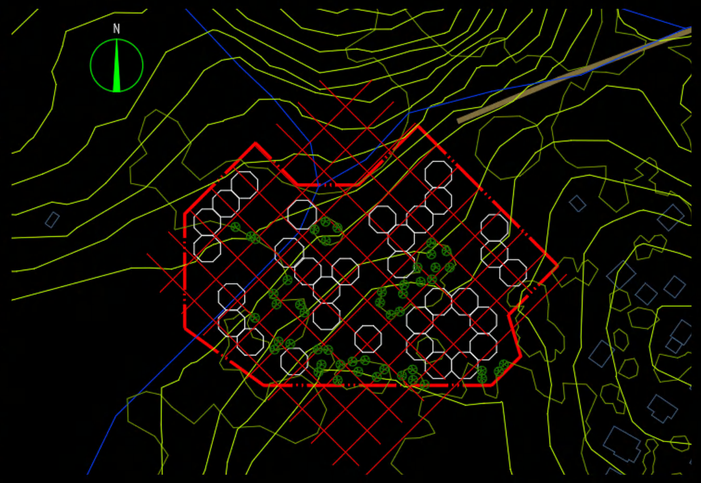
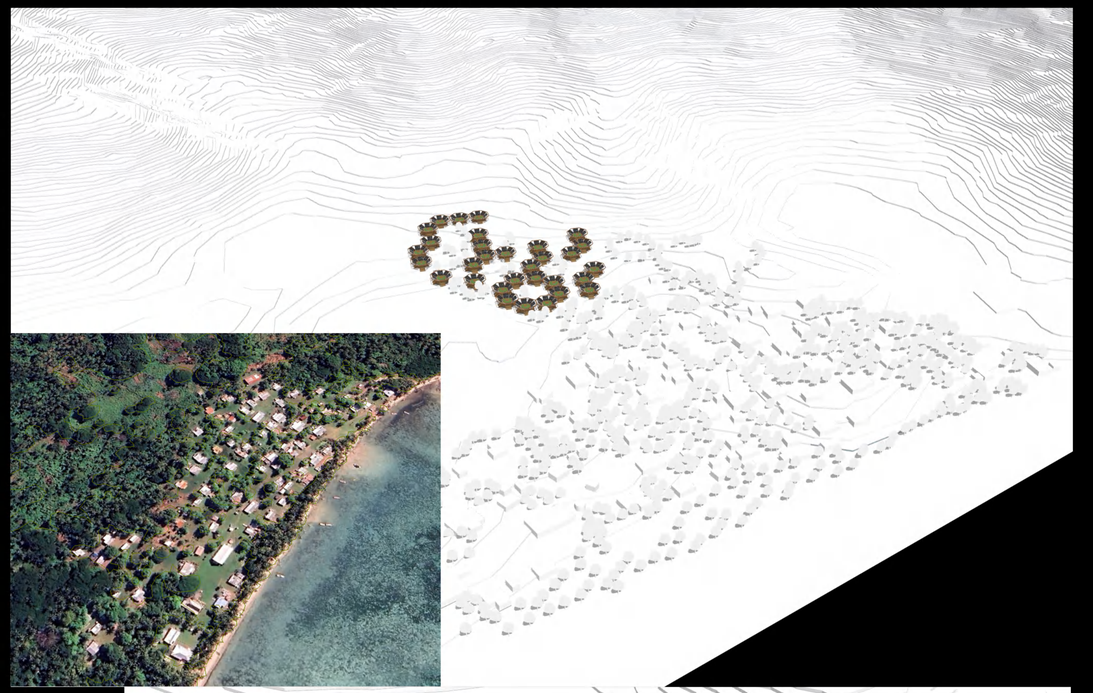




The overall layout is based on the boundary direction of the land use red line.
At the same time, in accordance with the development of modularization, a 14m*14m axis network is set up,
and it forms a 45-degree Angle with the horizontal direction

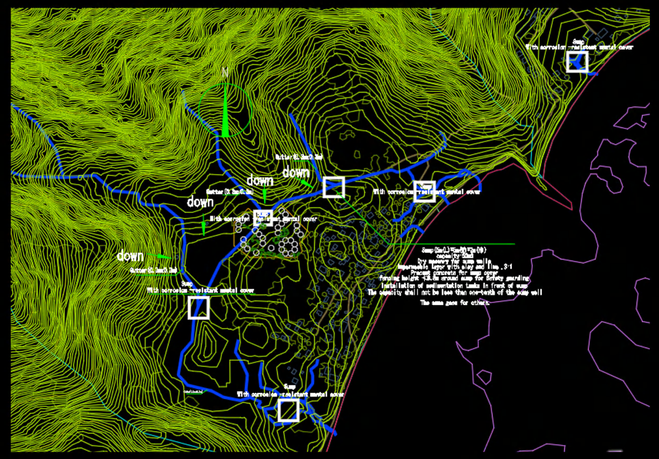


Key Design Highlights :"Fijian Cultural Photovoltaic Garden"

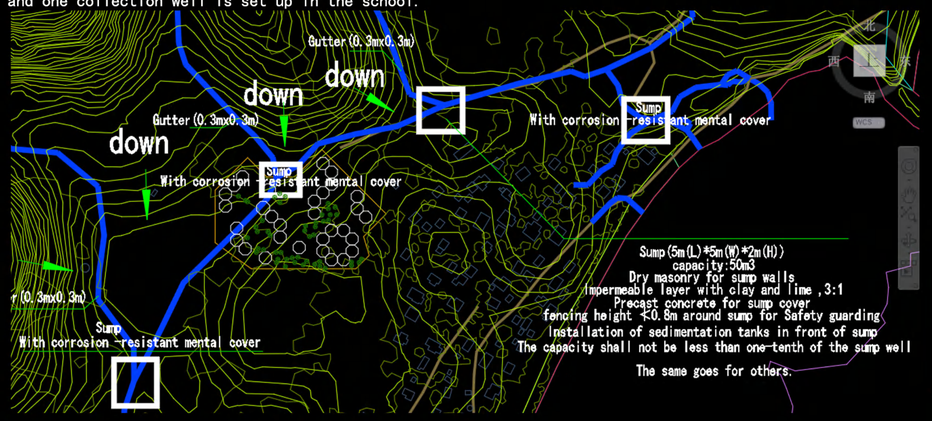
1、Aesthetic-Function Balance: Precise efficiency calculations
demonstrate the artistic design meets minimum power generation requirements
2、3D Energy Optimization: 8-directional string independence maximizes energy harvesting
3、Climate Resilience: Anti-corrosion design + wind supplementation
for Fiji's marine environment
4、Implementation Flexibility: ±20% component adjustability without structural compromise

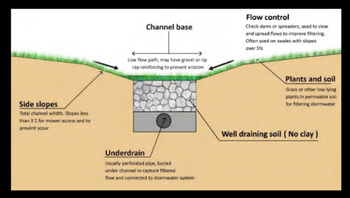
Critical Design Features

Form-Function Equilibrium: Verified through rigorous efficiency modeling
that artistic configuration satisfies 75kW baseline
Multiaxial Power Management: Independent MPPT control for each octant grouping
Environmental Hardening: Salt-resistant engineering with hybrid wind backup system
Modular Scalability: Configurable 24-36 modules (±20%) with
maintained structural integrity

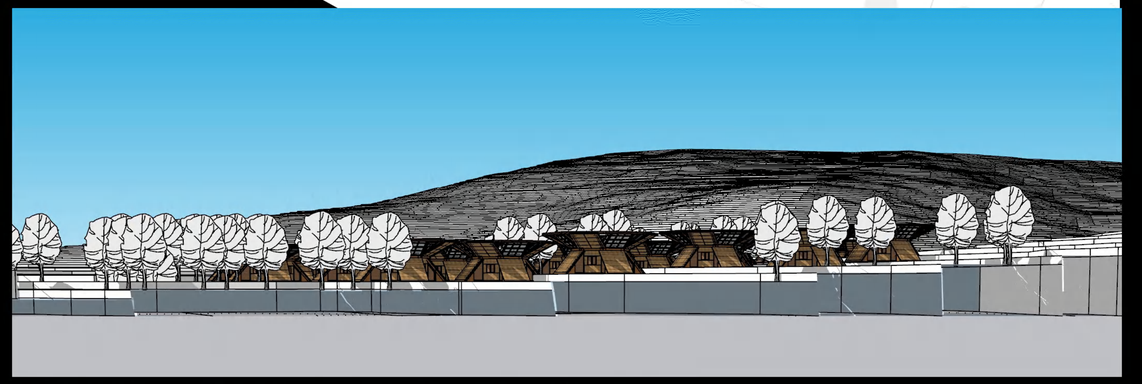


According to the contour lines of the site terrain and the existing drainage channels,
five collection Wells are set up in the village at the confluence of the drainage ditches,
and one collection well is set up in the school.





Based on the water consumption of the village during the dry season,
through calculation, the size of each collection well is (5m(L)*5m(W)*2m(H)),with a volume of 50 Cubic meter, and it is set underground.
The construction method is as follows: Impermeable layer with clay and lime ,3:1,
Precast concrete for sump cover, fencing height ≥0.8m around sump for Safety guarding ,
Installation of sedimentation tanks in front of sump, The capacity shall not be less than one-tenth of the sump well。



The overall layout of the photovoltaic power generation device is flexible.
At the same time, the original trees in the site are retained as much as possible.
The overall indoor and outdoor space can be used for people to rest, entertain, chat, work, etc.