

" Sustainable Survivor's Village "

SITE

In the center of Cameroon, on the outskirts of Yaoundé, a small village called Nkoloulou is home to our project. Yaoundé being a large metropolis, we were interested in its outskirts in order to move stroke survivors away from the stress, noise and pollution of the urban center, to create a calm and peaceful space with the benefits of nature. In addition, Nkoloulou has a wide range of natural materials, including its red lateritic earth, bamboo, stone, and wood that are used in traditional local construction.

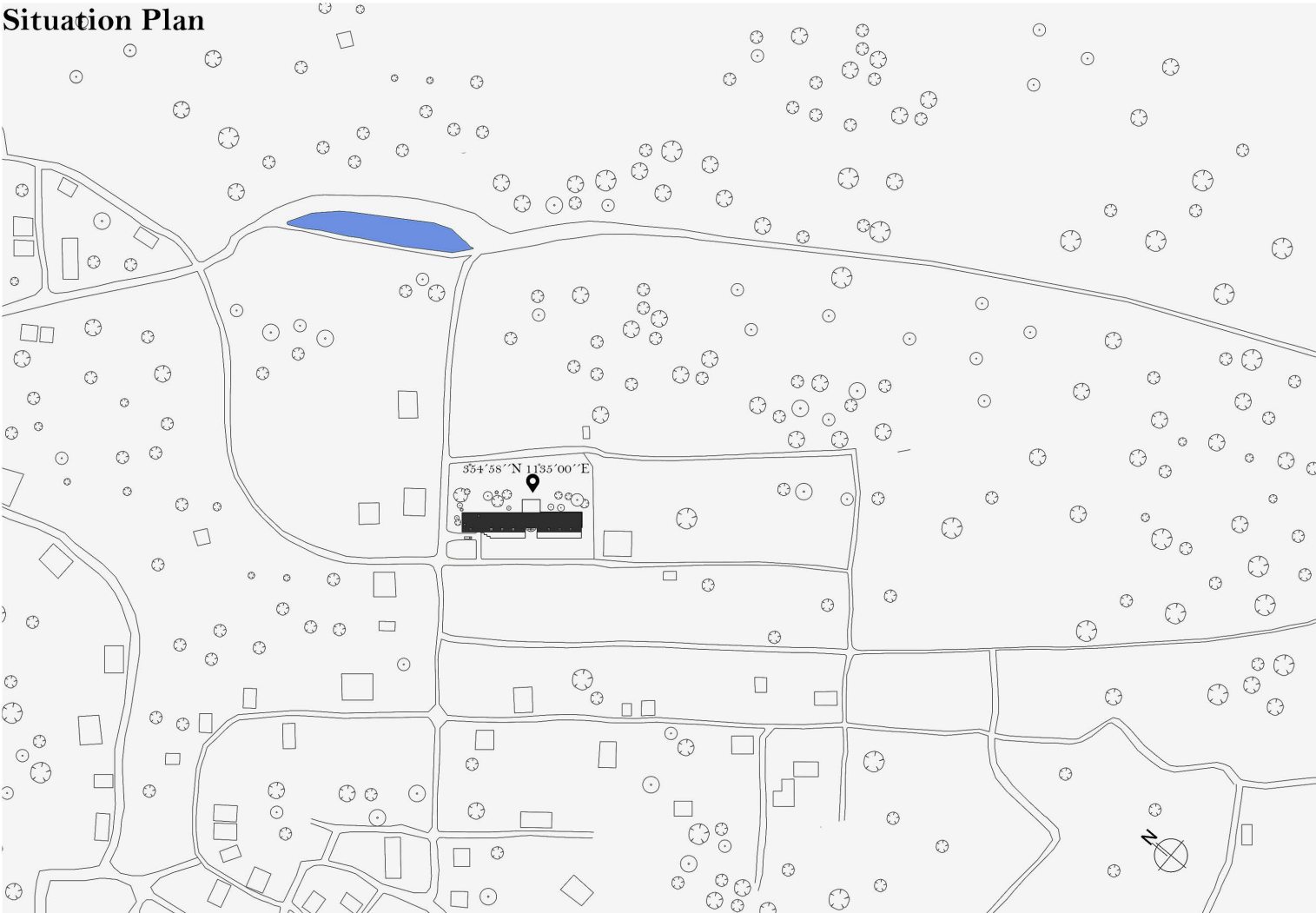
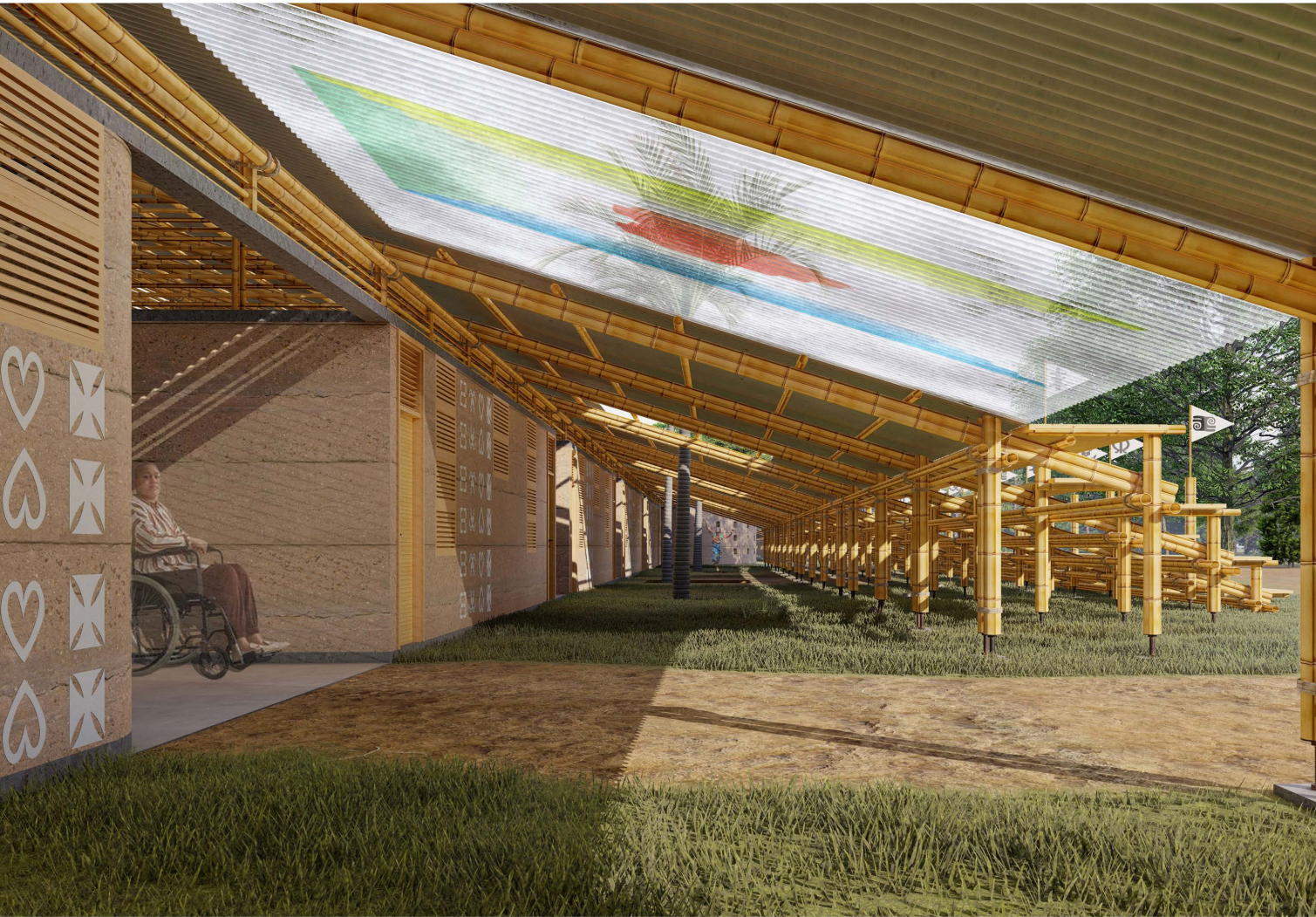
DESIGN IDEA

Walking, playing, dancing,... These small everyday activities have become cherished accomplishments for stroke survivors. Yet, conventional rehabilitation centers have been flawed in their ability to combine medical assistance with interaction with the outside world. In order to solve this problem, we visualized a space that would help restore physical, psychological, and spiritual health: the "Sustainable survivor's village" (SSV). A simple, modular and sustainable project made of local materials that takes into account the interaction between stroke survivors and their natural environment in the healing process. Our center is planned according to the architecture of the Bamileké villages of West Cameroon; the living spaces are arranged along a central promenade. The separation between the survivors' space and the administrative space allows the inhabitants to have full control over their living space. The SSS is made modular and versatile by a two-person co-location that can be split in the event of a health crisis. Symbols carrying messages related to traditional wisdom are represented on the walls by the survivors in order to integrate them into the realization of their living space while optimizing the rehabilitation process. The roof extends into a public terrace to simulate a climbing area for the residents and serve as a link to the outside environment.

MATERIALS AND TECHNIQUES

The use of local materials in the construction is privileged. The stone foundation allows an optimal distribution of the loads and participates in the reduction of the rise by capillarity. The rammed earth for the walls contributes to maintaining a comfortable indoor climate. The openings with louvers, the ceilings and the curtain walls made of woven bamboo promote good natural ventilation and air filtration in the building. The corrugated metal sheet roof, chosen for its lightness, ease of installation and durability, is supported by a bamboo frame. The choice of bamboo here is motivated by its technical abilities and its capacity for rapid regeneration in nature. Rainwater is collected and stored in tanks and will be used for agricultural activity. The energy needs of the center are managed by photovoltaic panels placed on the roof to capture the maximum amount of sunlight. The installation of skylights on the roof allows for the optimization of natural lighting in order to reduce energy costs.





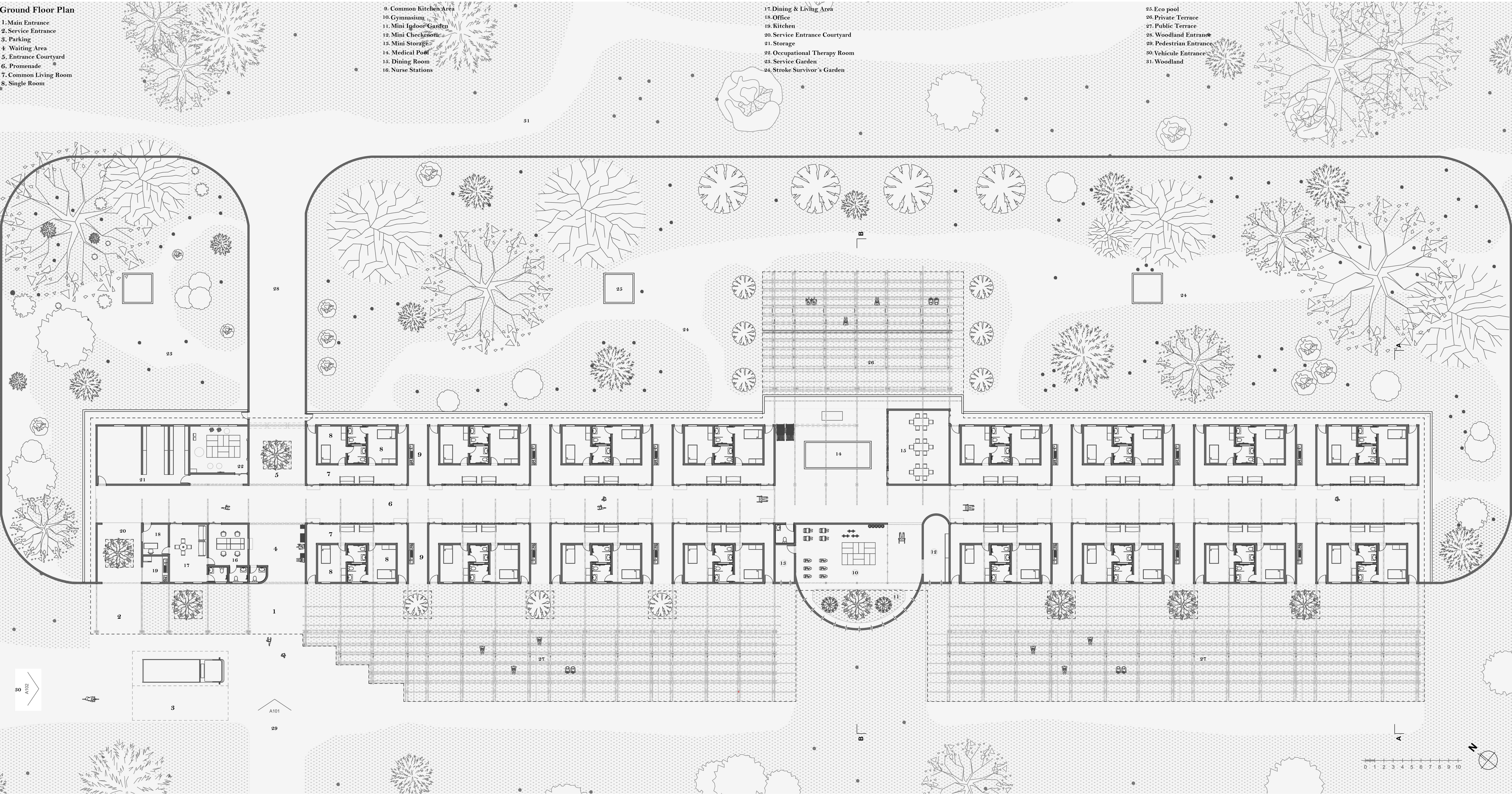
Ground Floor Plan

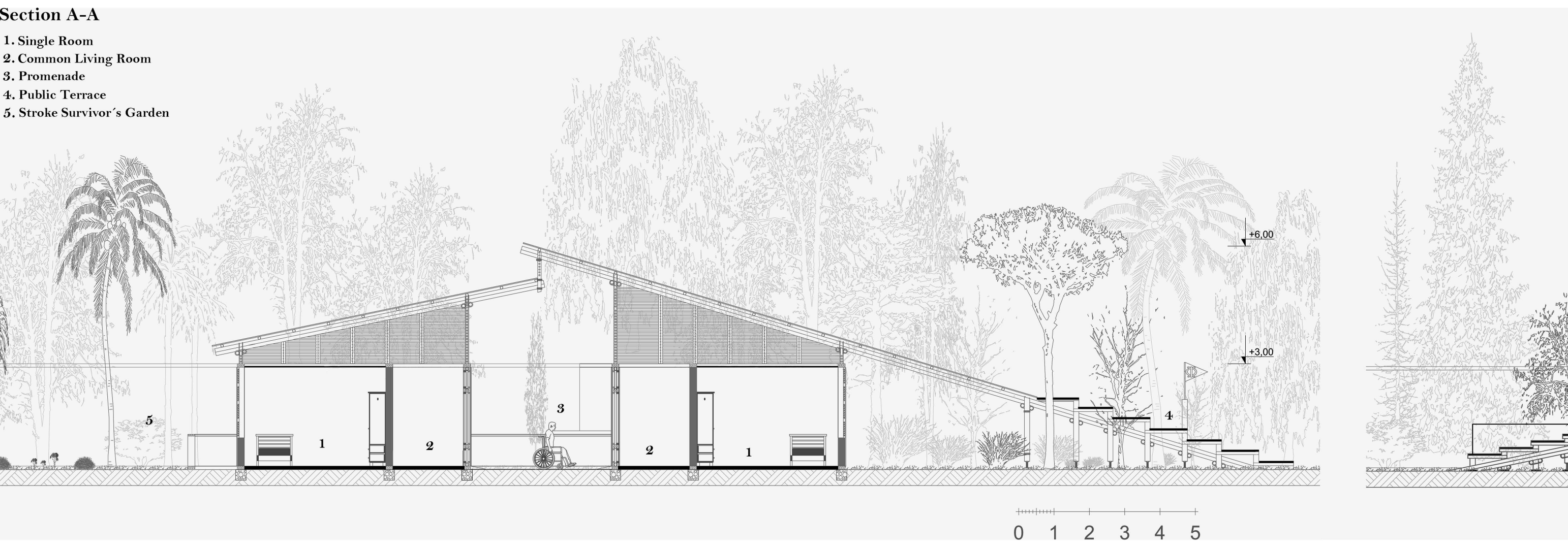
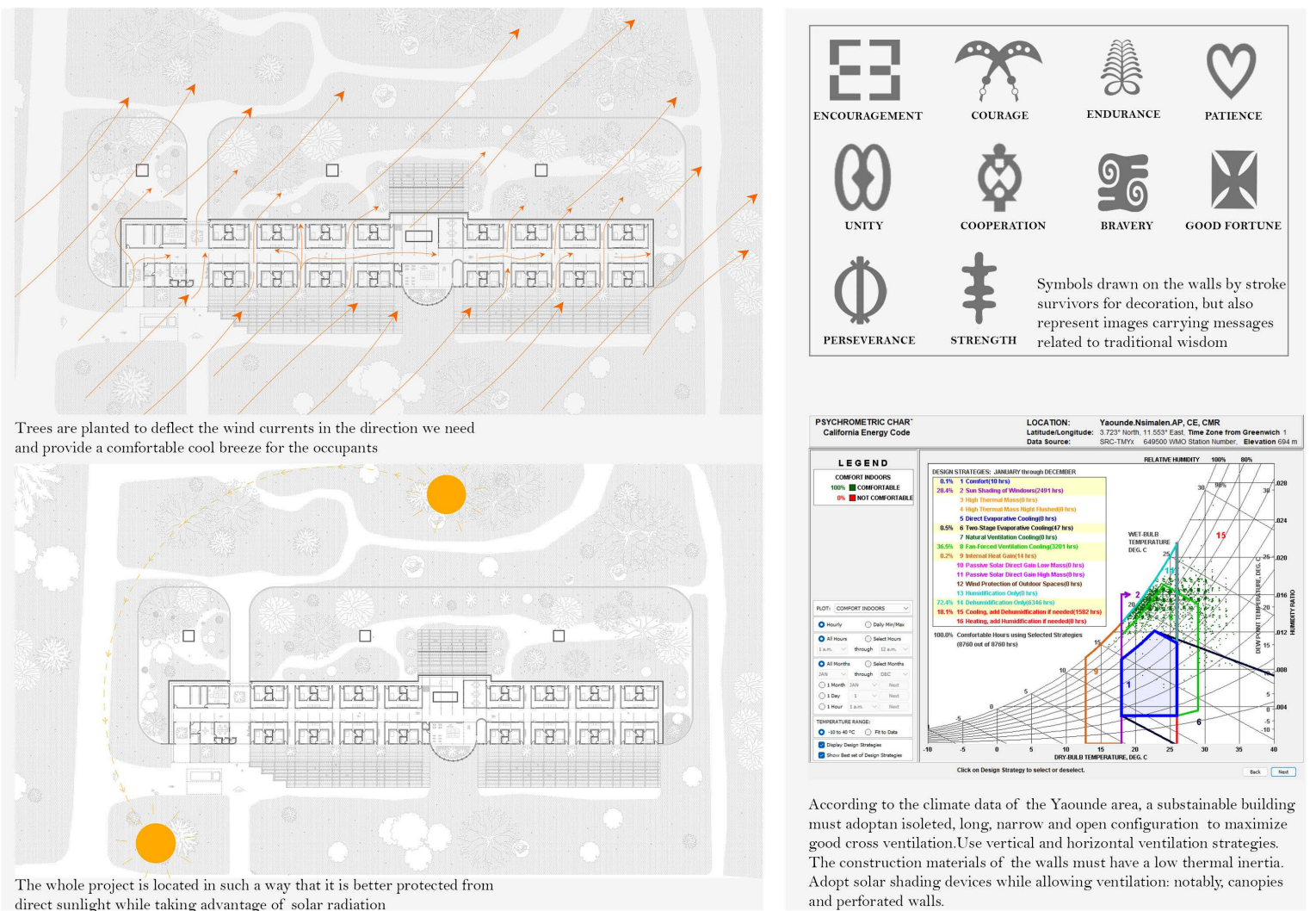
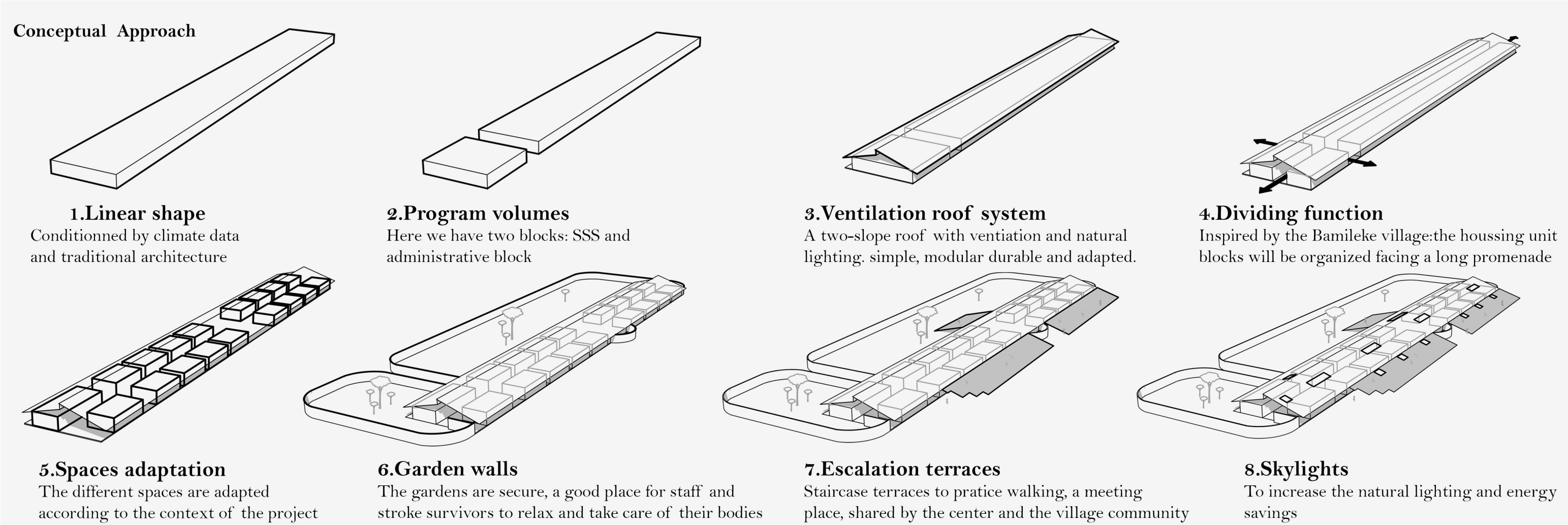
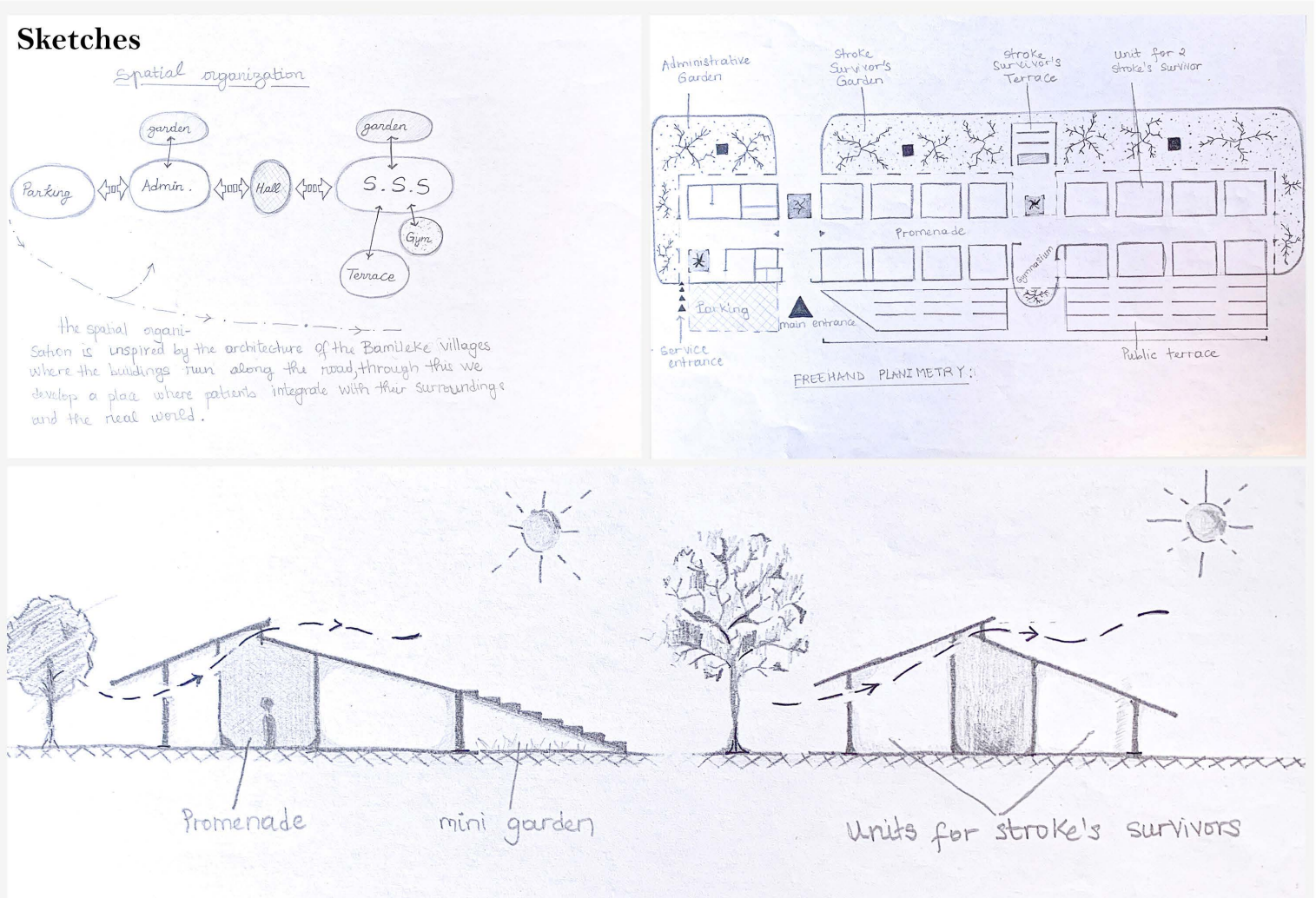
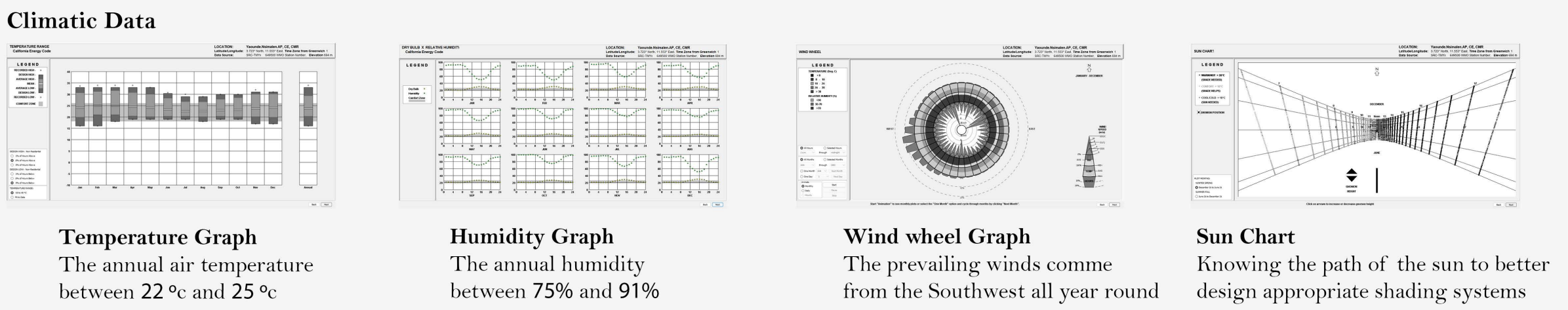
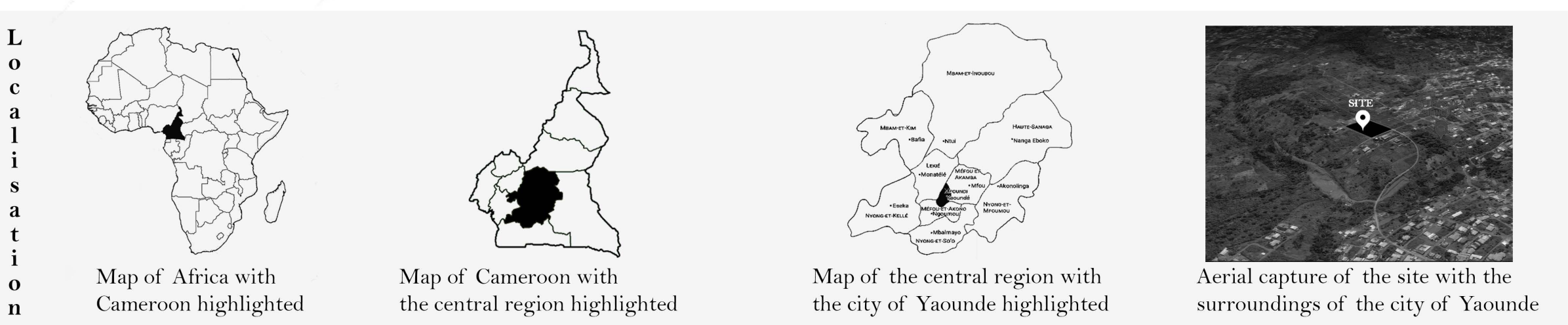
- 1. Main Entrance
- 2. Service Entrance
- 3. Parking
- 4. Waiting Area
- 5. Entrance Courtyard
- 6. Promenade
- 7. Common Living Room
- 8. Single Room

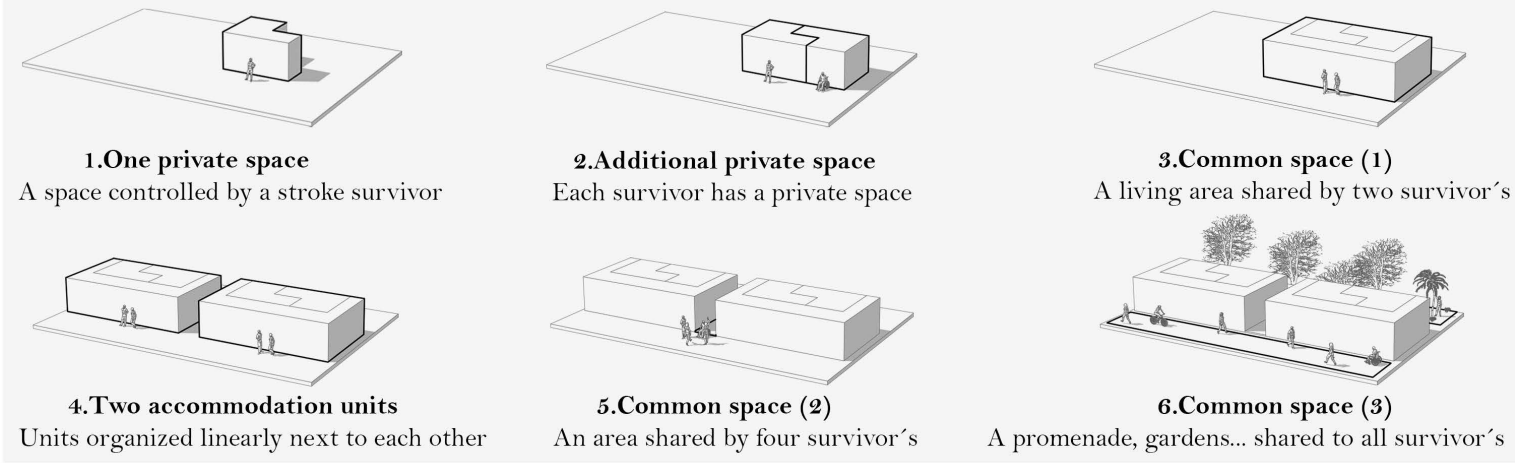
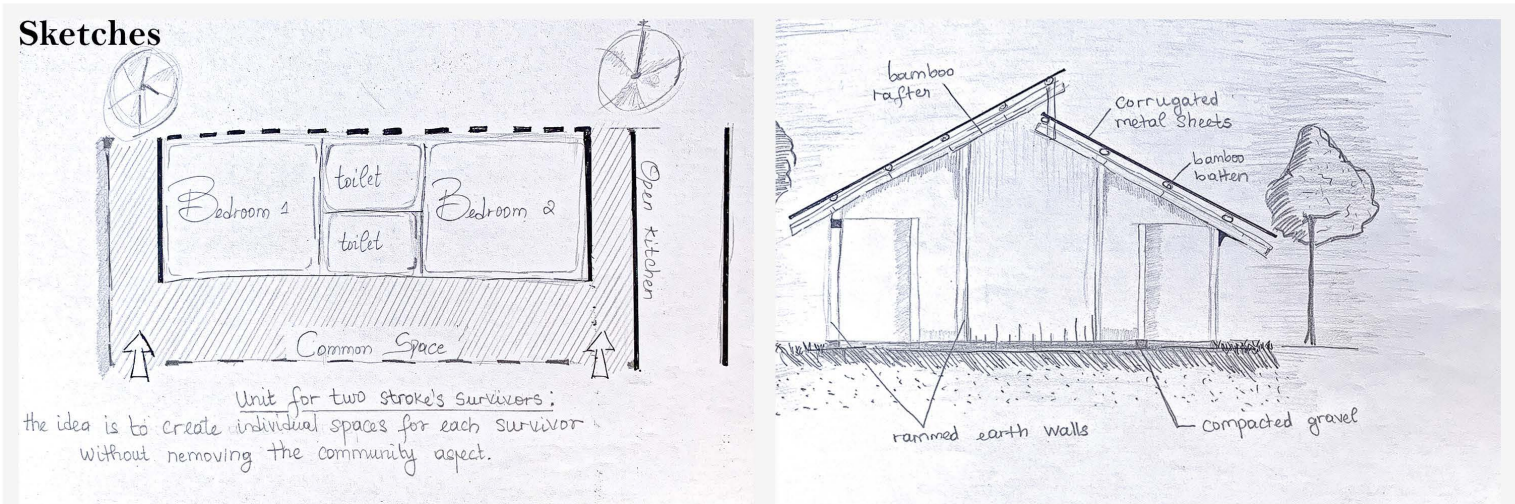
- 9. Common Kitchen Area
- 10. Gymnasium
- 11. Mini Indoor Garden
- 12. Mini Checkroom
- 13. Mini Storage
- 14. Medical Pool
- 15. Dining Room
- 16. Nurse Stations

- 17. Dining & Living Area
- 18. Office
- 19. Kitchen
- 20. Service Entrance Courtyard
- 21. Storage
- 22. Occupational Therapy Room
- 23. Service Garden
- 24. Stroke Survivor's Garden

- 25. Eco pool
- 26. Private Terrace
- 27. Public Terrace
- 28. Woodland Entrance
- 29. Pedestrian Entrance
- 30. Vehicle Entrance
- 31. Woodland







-
- Architectural floor plan of a residential building, showing two floors. The plan is symmetrical, with a central corridor (3) connecting two wings. Each wing contains two bedrooms (1), two bathrooms (2), and a living area (4). The building is surrounded by landscaping, including trees and a lawn. A scale bar at the bottom indicates dimensions from 0 to 10 meters.

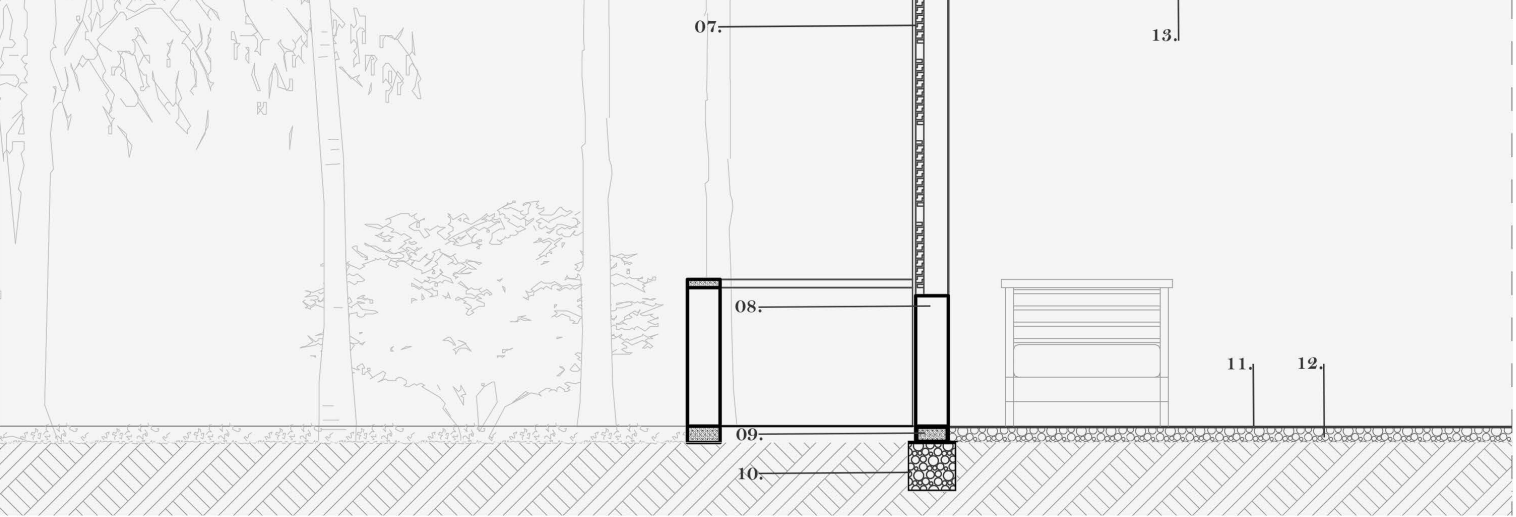


-
- The SSS consists of units designed for two occupants and common areas: promenade, gardens, terrace, gymnasium, dining room, medical pool... It is a positive, adaptive, multi-purpose space controlled by the survivor's



Detail Cross Section

01. Corrugated metal sheet 2mm
02. Bamboo batten 08cm
03. Bamboo rafter 2012cm
04. Bamboo beam 010cm
05. Bamboo vein lattice and wood frame
06. Top base in reinforced concrete 25cmx10cm
07. Adjustable louvered wood window 100cmx200cm
08. Rammed earth wall 25cmx3m
09. Lower base in reinforced concrete 25cmx10cm
10. Rock footing 35cmx35cm
11. Concrete floor finish
12. Tamped earth and gravel
13. Woven bamboo ceiling

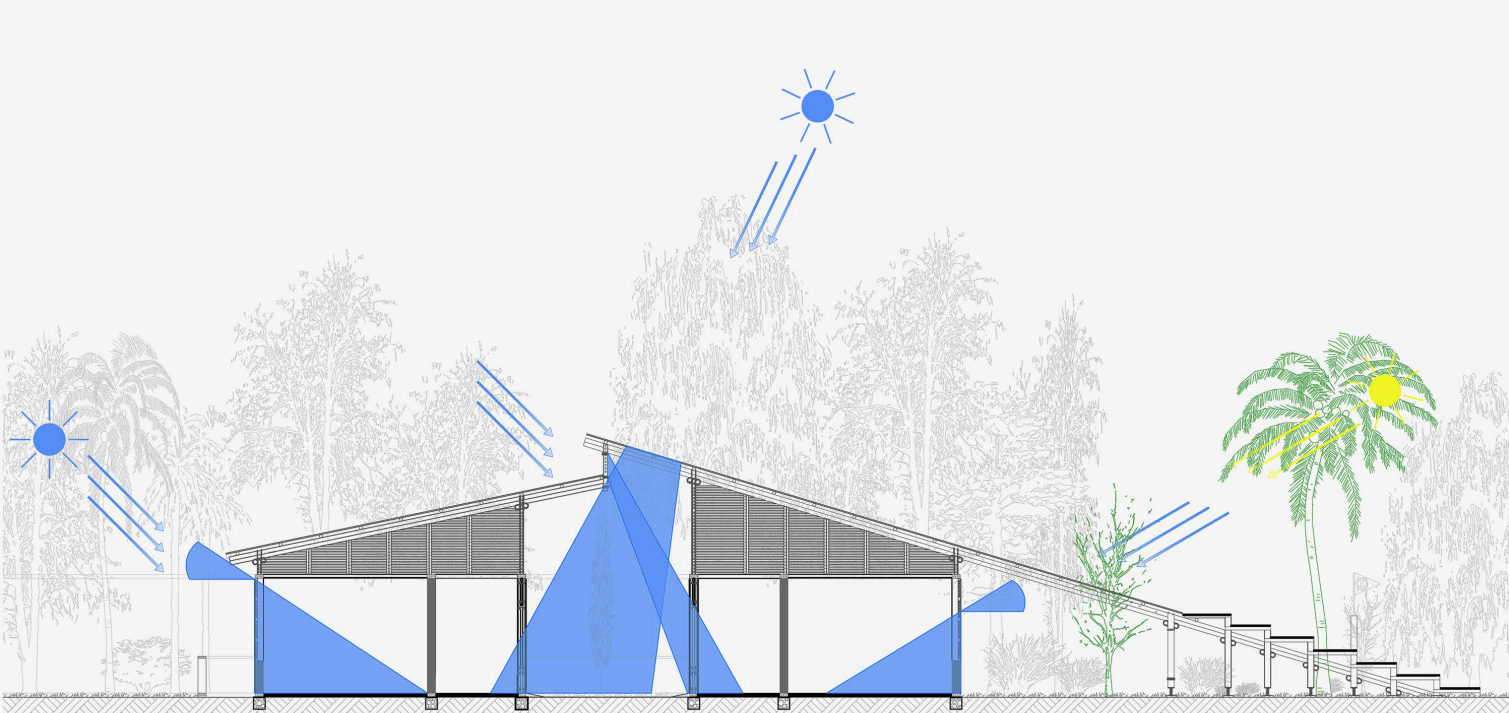


This architectural section drawing illustrates a building with a prominent sloped roof. The structure is supported by several vertical columns. On the right side, a series of steps or a ramped platform is visible, leading up to the building. The background features a dense line of palm trees, suggesting a tropical or coastal environment. The drawing is rendered in a technical style with clear lines and shading.

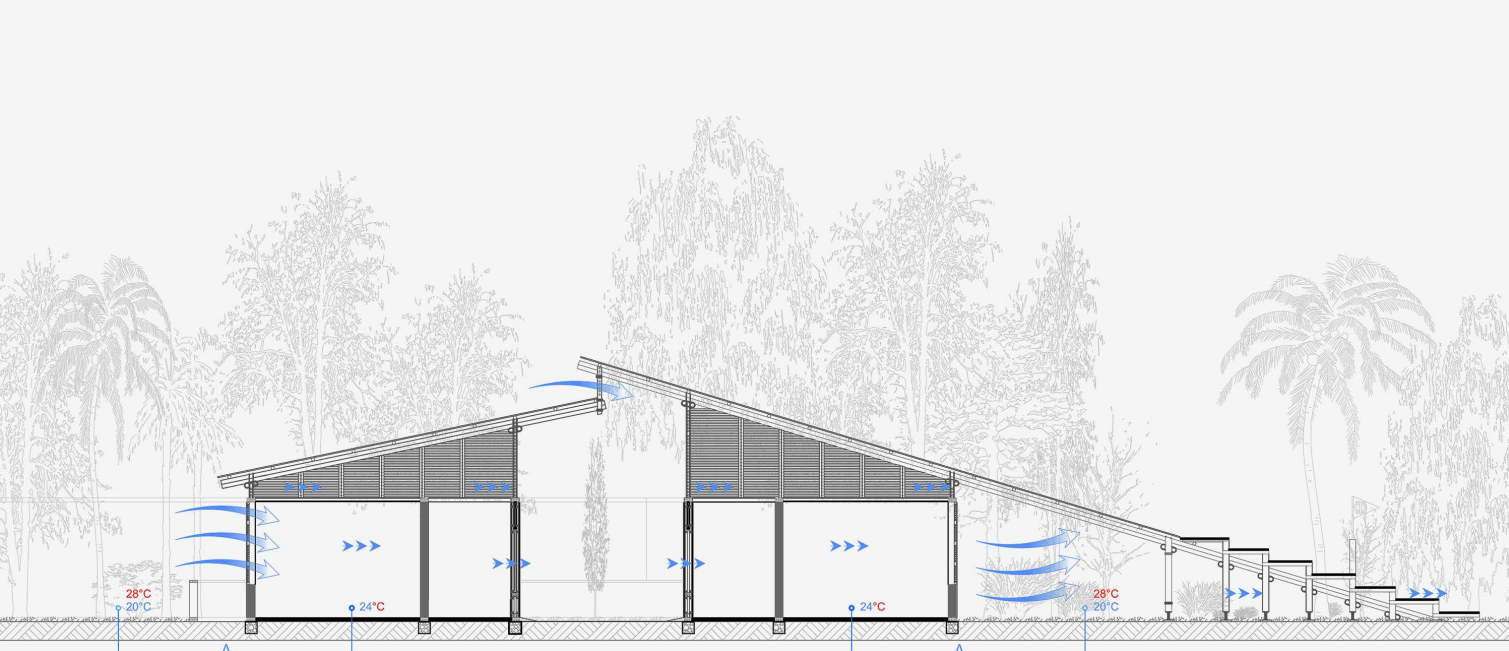
A wooden window system, rammed earth walls and woven bamboo ceiling reduce road traffic noise and filter bird song



The rammed earth walls plays a role of natural air conditioner in all seasons. They store the ambient heat during the day and release it at night. Insulated wood windows and a roof space contribute to the improvement of thermal comfort.



The zoning of the rooms and the orientation of the building are based on the path of the sun. The living spaces are well lit thanks to the optimization of the openings on the facades and the skylights.



The rooms are cross-ventilated. The woven bamboo ceiling provides and filters the air. All this leads to a better health of the occupants.