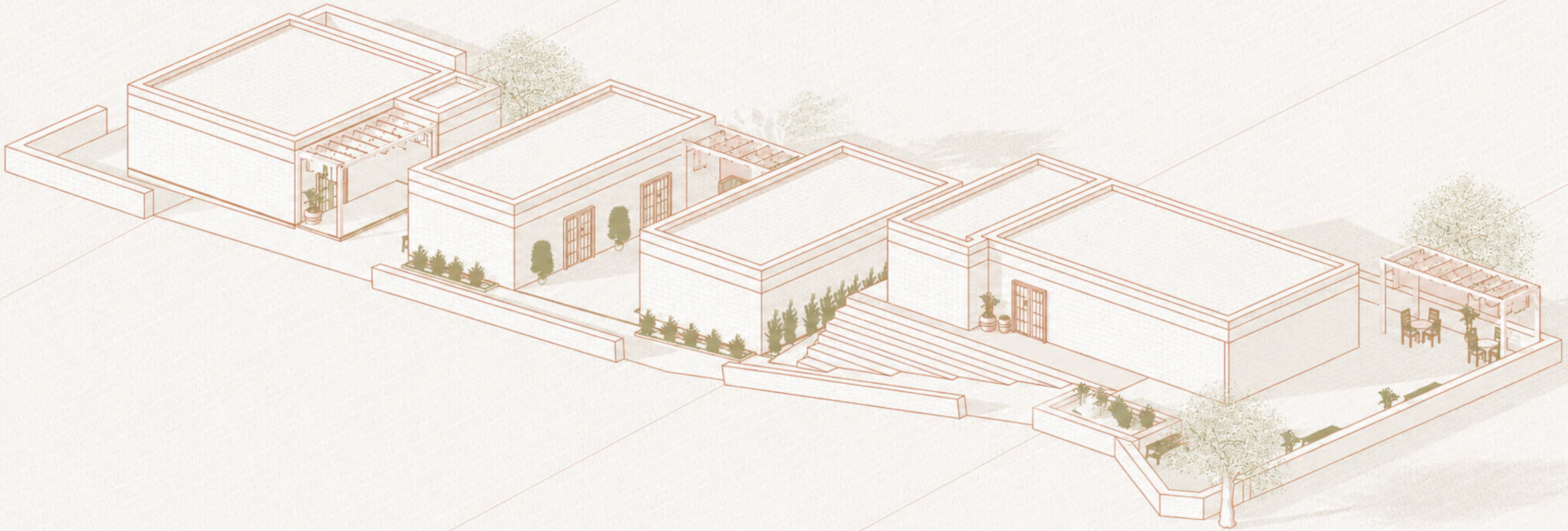
Community Health and Reconstruction Center in the Moroccan High Atlas

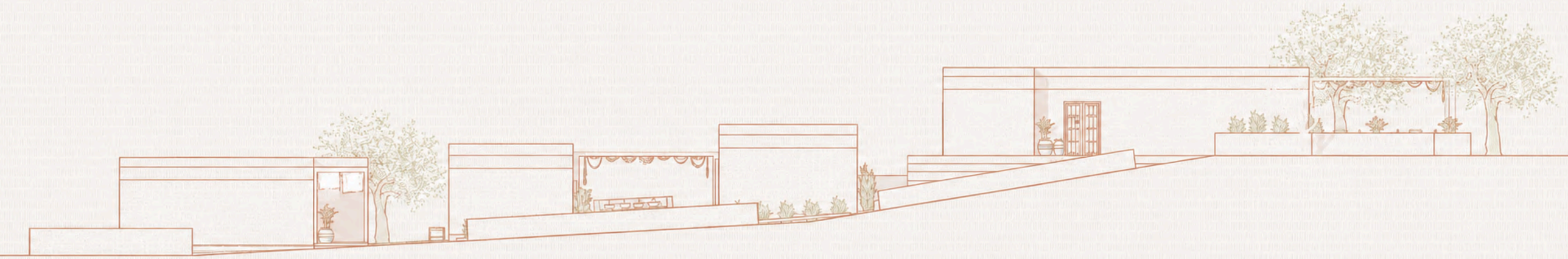
BREATH OF THE EARTH

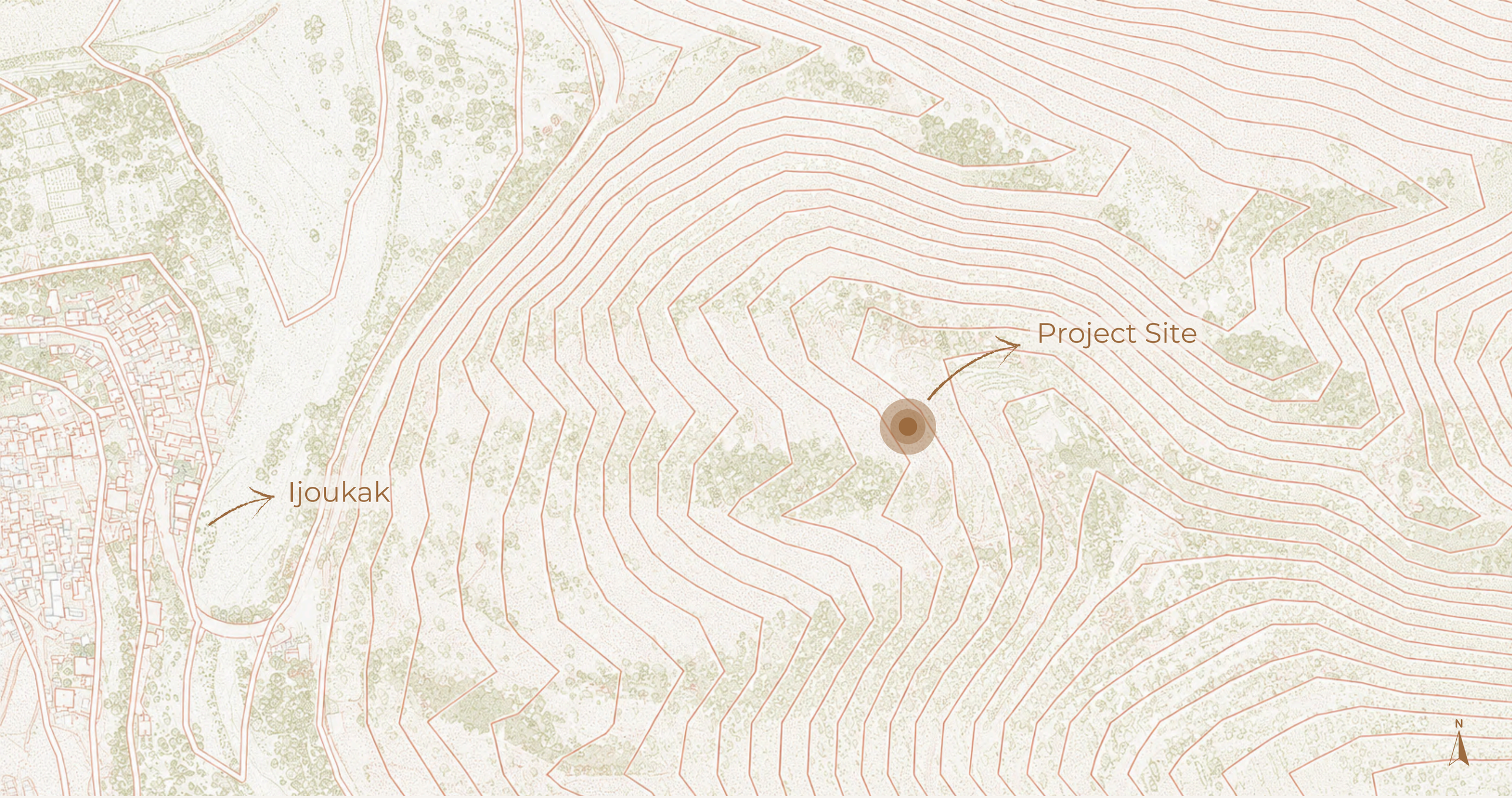
Reconstruction does not begin when a building is erected, but when a community is able to recognize itself once again in the land it inhabits.



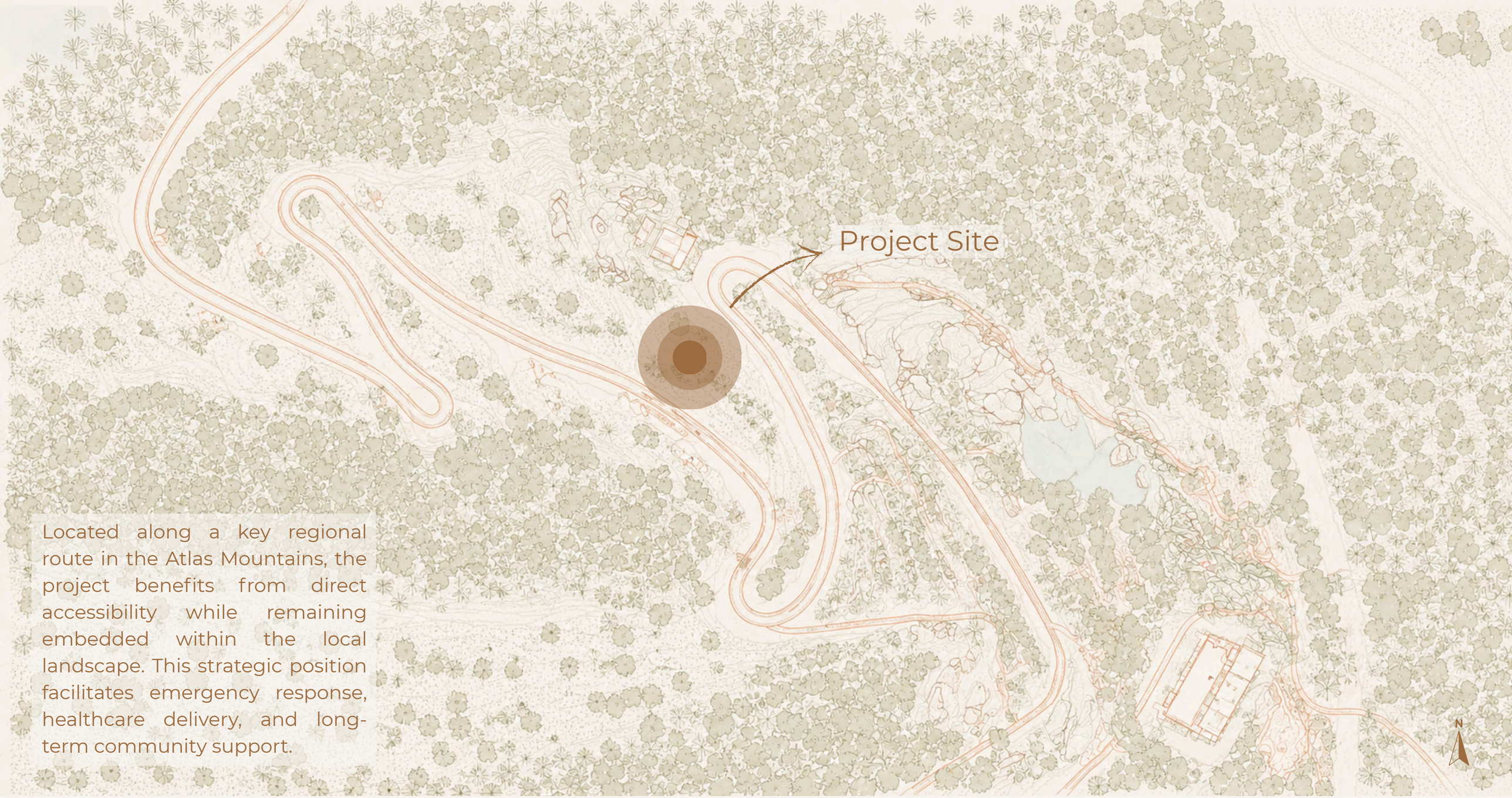
BREATH OF THE EARTH

Breath Of The Earth proposes a new approach to post-earthquake reconstruction in the Moroccan High Atlas. By integrating vernacular rammed-earth construction techniques with contemporary seismic resilience strategies, the project transforms healthcare infrastructure into a space for healing, gathering, and community empowerment. More than rebuilding structures, the proposal seeks to restore the bonds between people, place, and culture.





Ijoukak, High Atlas, Morocco



Located along a key regional route in the Atlas Mountains, the project benefits from direct accessibility while remaining embedded within the local landscape. This strategic position facilitates emergency response, healthcare delivery, and long-term community support.

Ijoukak, High Atlas, Morocco

BREATH OF THE EARTH

Community Health and Reconstruction Center

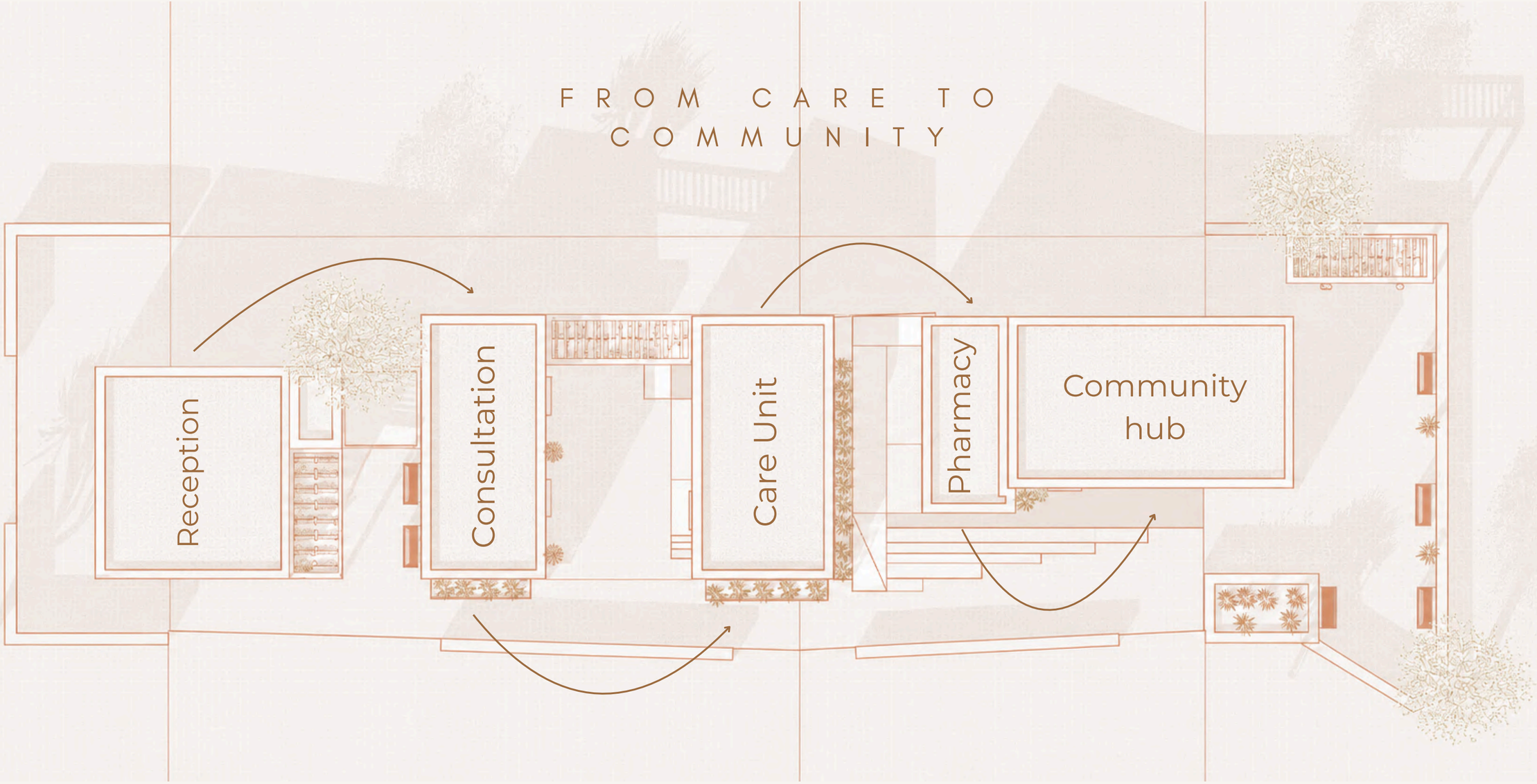
The complex is integrated into the site's natural topography, minimizing earthworks while preserving the dialogue between architecture and landscape.

Ijoukak, High Atlas, Morocco

The project is organized as a linear sequence of healthcare units interconnected by three landscaped courtyards that structure circulation, promote natural ventilation, and strengthen the relationship between architecture and landscape. Access begins at the reception and triage area, followed by medical consultation rooms and observation and recovery spaces, including dedicated areas for maternal and child healthcare, neonatal care, and clinical support. A pharmacy and support services complement the healthcare infrastructure, ensuring the facility’s operational autonomy.

At the end of the complex, the Community Wing extends the clinic’s role beyond medical care, providing spaces dedicated to training, social interaction, and the strengthening of community ties. The courtyards function as extensions of the interior spaces, creating areas for reflection, rest, and gathering, where physical and emotional recovery takes place in close connection with local culture and the landscape of the High Atlas.

FROM CARE TO COMMUNITY



A progressive journey from healthcare, recovery and community reintegration.


HEALING
JOURNEY


RECEPTION
AND TRIAGE


CONSULTATION


OBSERVATION &
RECOVERY ROOM


CLINICAL SUPPORT
AREA


MATERNAL
CARE ROOM


NEONATAL
CARE ROOM

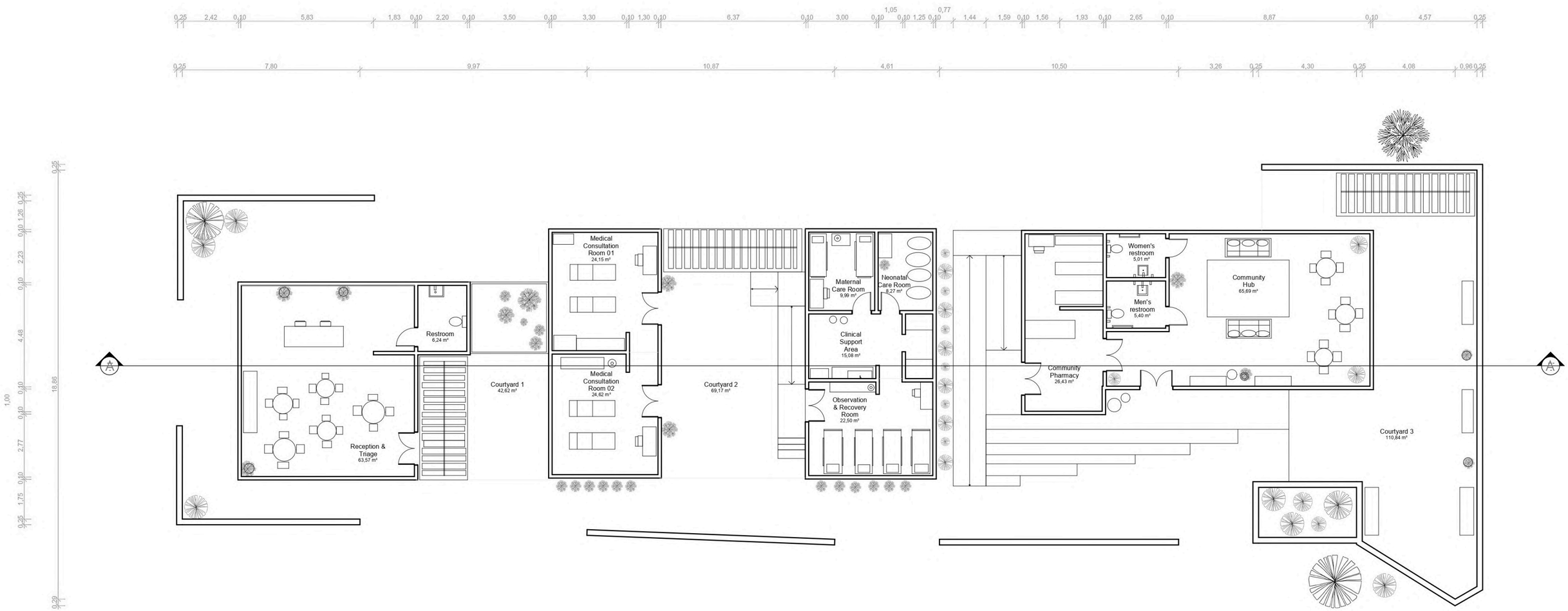

COMMUNITY
HUB


CUMMUNITY
HUB

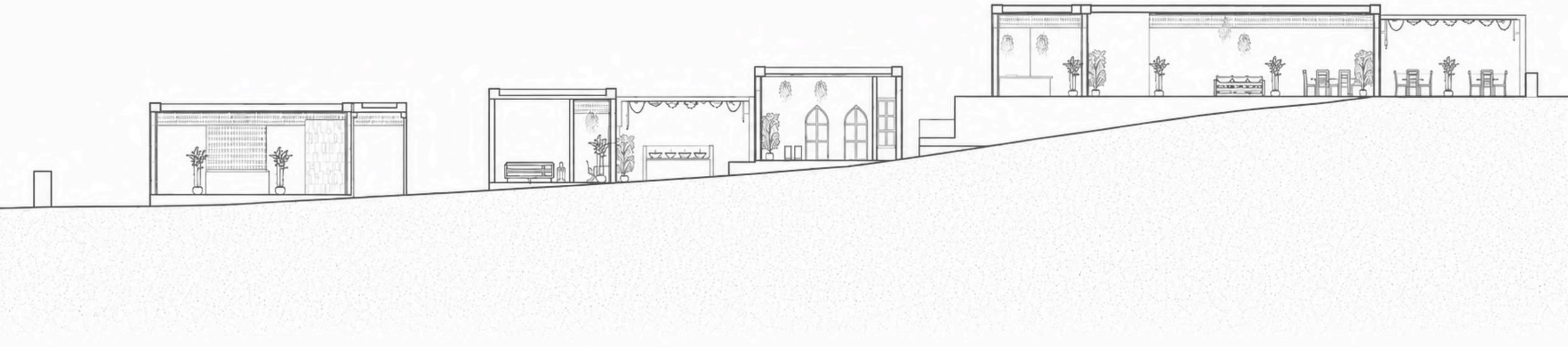

PHARMACY


COURTYARD /
COMMUNITY HUB

Rather than concentrating healthcare functions within a single building, the project adopts the logic of a village. Independent volumes are connected through courtyards and outdoor pathways, transforming movement into an experience of healing, encounter and connection with nature.

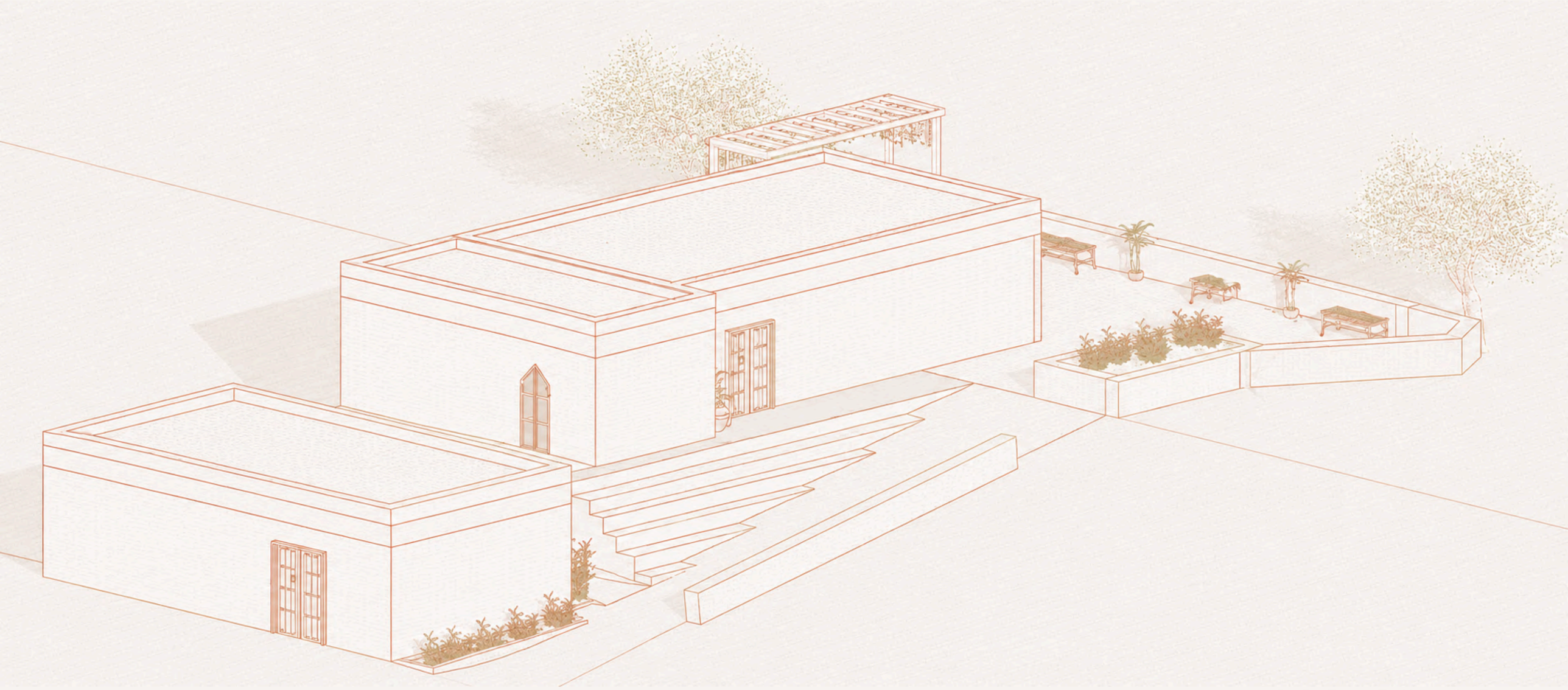

Reception & Triage
63,57 m²
Restroom
6,24 m²
Courtyard 1
42,62 m²
Medical Consultation Room 01
24,15 m²
Medical Consultation Room 02
24,62 m²
Courtyard 2
69,17 m²
Maternal Care Room
9,99 m²
Neonatal Care Room
8,27 m²
Clinical Support Area
15,08 m²
Observation & Recovery Room
22,50 m²
Community Pharmacy
26,43 m²
Women's restroom
5,01 m²
Men's restroom
5,40 m²
Community Hub
65,69 m²
Courtyard 3
110,84 m²

FLOOR PLAN

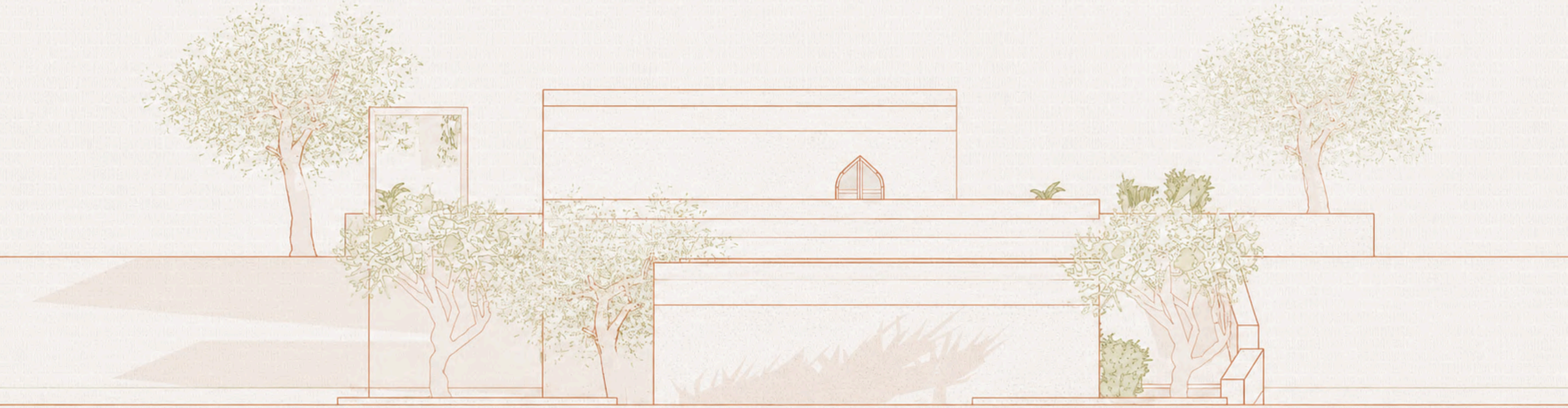


SECTION A-A

The same earth that crumbled during the earthquake becomes the foundation for rebuilding the community.



BREATH OF
THE EARTH



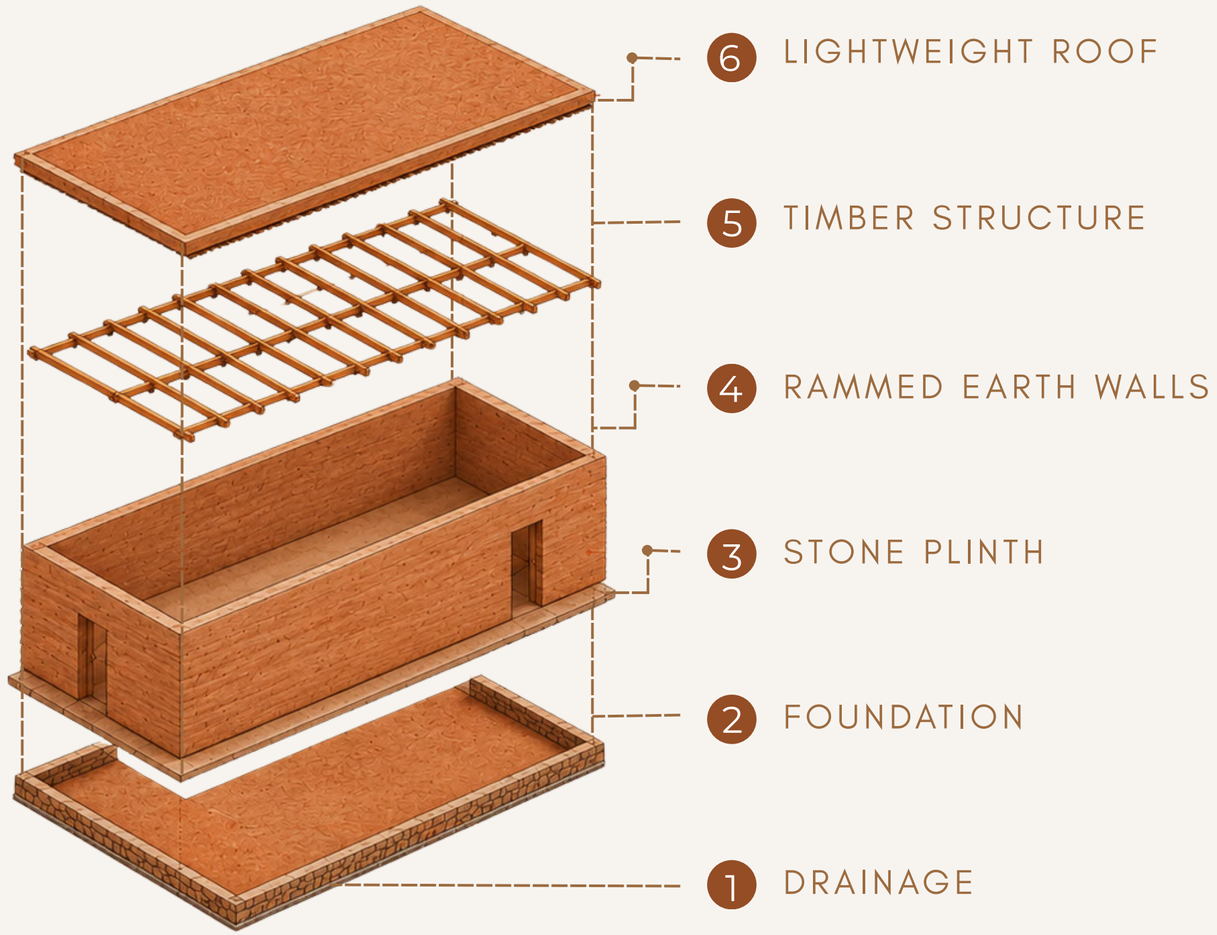
BREATH OF
THE EARTH

BREATH OF
THE EARTH

Image used for local architectural context generated by AI.

TRADITIONAL MOROCCAN ARCHITECTURE

FROM EARTH TO RESILIENCE



6 A gravel layer protects the waterproof membrane over thermal insulation and a bamboo mat. Finished with stabilized earth or rolled gravel, ensuring thermal comfort and roof protection.

5 Locally sourced treated timber beams and joists with metal connections. Lightweight and flexible, improving seismic performance.

4 Walls 25 - 35 cm thick provide thermal mass, comfort, and durability. The earth is sourced directly from the site.

3 The stone base elevates and protects the rammed-earth walls from ground moisture. Finished with lime mortar.

2 Reinforced concrete strip footings with seismic tie beams distribute loads and improve structural stability.

1 A gravel layer and perimeter drainage prevent water accumulation and foundation moisture.

FROM EARTH TO RESILIENCE

CONSTRUCTION SYSTEM

The project employs vernacular building techniques adapted to contemporary seismic requirements, combining local materials, regional labor, and passive environmental comfort strategies.

THERMAL COMFORT
The thermal mass of rammed earth keeps interiors cool during summer and protected during winter.

NATURAL VENTILATION
Courtyards and strategically placed openings promote continuous cross-ventilation.

DIFFUSED DAYLIGHT
Courtyards and high-level openings provide soft, comfortable natural lighting.

LOCAL MATERIALS
The use of locally available materials reduces environmental impact and strengthens the regional economy.

CONSTRUCTION PHASES

01. EARTH PREPARATION
Local soil is mixed with a small amount of water and gravel.

02. FORMWORK
Wooden formwork is assembled to define the wall thickness.

03. RAMMING
The earth is compacted in layers of 10–15 cm using manual or mechanical rammers.

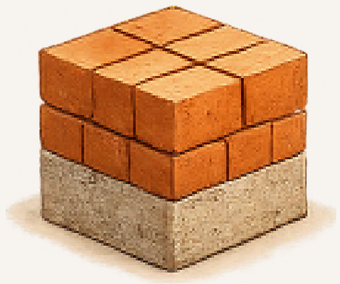
04. WALL CONSTRUCTION
After removing the formwork, the rammed-earth wall remains exposed and ready for finishing.

05. ROOF ASSEMBLY
Lightweight timber structure with waterproof membrane and compacted earth or rolled gravel finish.

FROM EARTH TO RESILIENCE

SEISMIC RESISTANCE

A lightweight and flexible system designed to perform effectively under seismic forces.



TIMBER OR CONCRETE TIE BEAMS

Distribute structural loads and improve overall seismic performance.

THICK YET LIGHTWEIGHT WALLS

Provide stability, safety, and controlled flexibility.

WALL-TO-ROOF CONNECTIONS

Ensure monolithic behavior and prevent structural separation during earthquakes.

LIGHTWEIGHT ROOF

Reduces seismic loads acting on the structure.

ARCHITECTURE THAT PROTECTS, HEALS, AND REBUILDS

Spaces designed to provide healthcare services while strengthening community resilience and supporting post-disaster recovery.

FROM LIGHT AND AIR TO WELL-BEING

Morning Sun
Natural light enters gently through the openings of the cobogó.

Cobogó
A perforated architectural element that allows ventilation, indirect lighting, and privacy.

Diffused Light
The openings break up direct sunlight, creating pleasant natural lighting without glare.

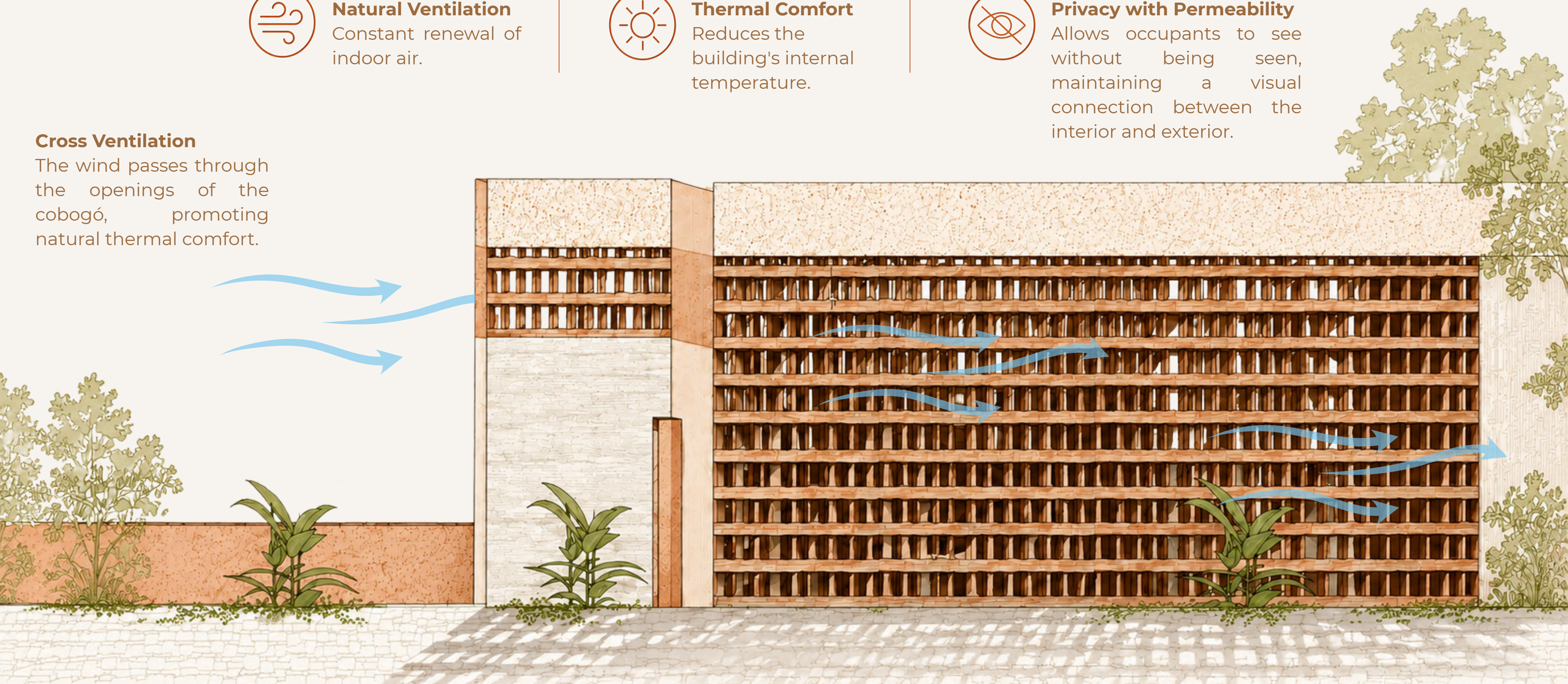
FROM LIGHT AND AIR TO WELL-BEING

Natural Ventilation
Constant renewal of indoor air.

Thermal Comfort
Reduces the building's internal temperature.

Privacy with Permeability
Allows occupants to see without being seen, maintaining a visual connection between the interior and exterior.

Cross Ventilation
The wind passes through the openings of the cobogó, promoting natural thermal comfort.



2023 Earthquake

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Loss of Healthcare Infrastructure

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Community Reconstruction

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Breath of the Earth

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