



NUCLEUS  
HEALING AS A COMMUNITY

# NUCLEUS

Healing as a Community | A medical clinic for the Malamulo Hospital  
Blantyre, Malawi

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Project presented to the Faculty of the Department of Architecture

College of Architecture and the Built Environment | Philadelphia University

In partial fulfillment of the requirements for the degree of

BACHELOR OF ARCHITECTURE

Design 9: Research and Design Faculty  
Chris Harnish and Kim Douglas

Philadelphia Pennsylvania

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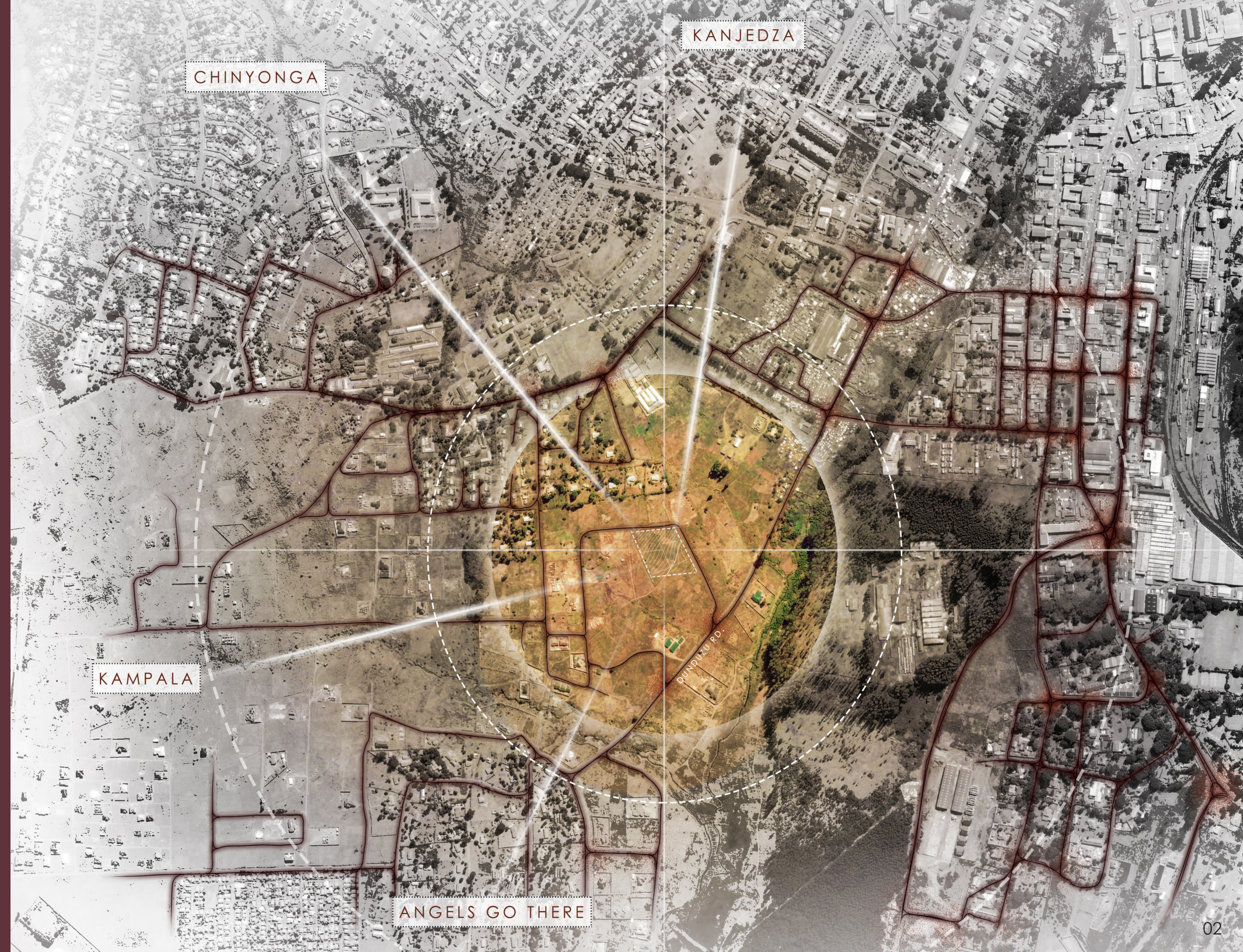
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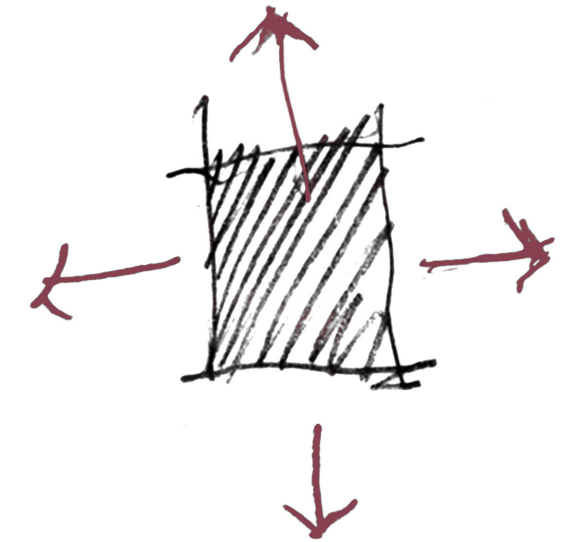
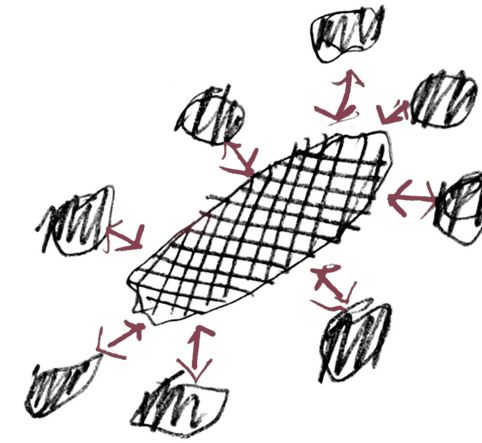
[ centralization ]

With the site being at the midpoint with relative adjacencies to the surrounding towns, communities, and the urban center, the project serves as a catalyst for its users that will have access to a centralized medical clinic for holistic healing.

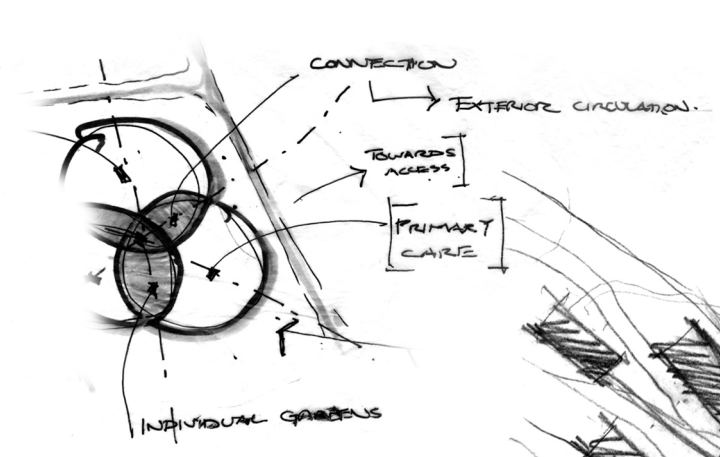
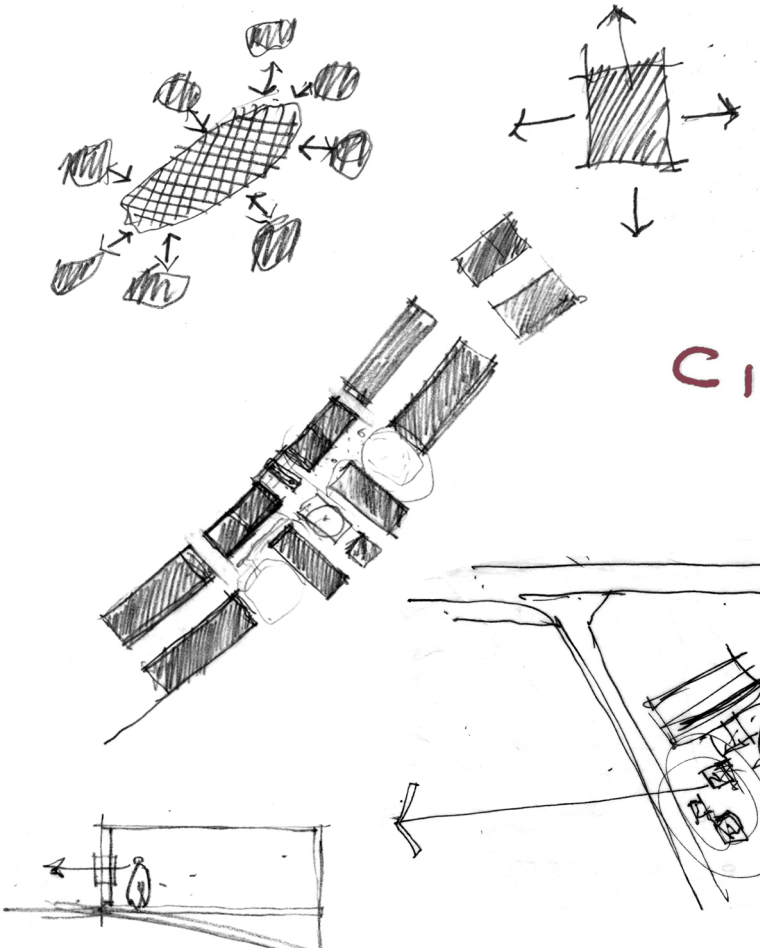


**[ healing as a community ]**

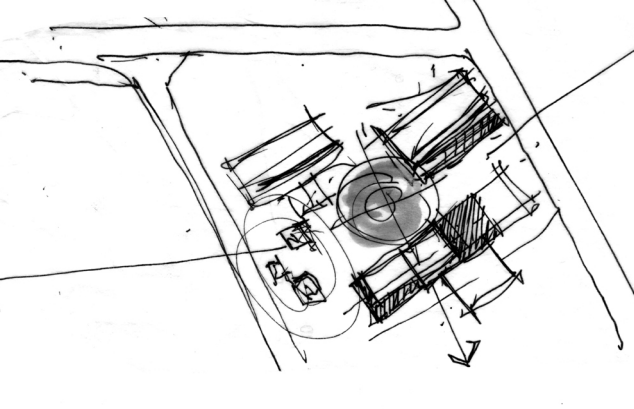
Healing in Malawi is defined as the connection of community, family, nature, and self that leverages social and cultural justice as well as to provide human dignity.



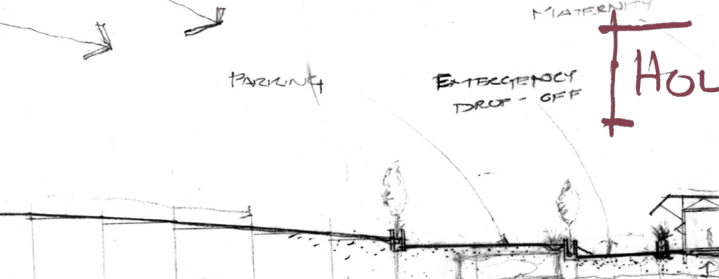
# COMMUNAL HEALING



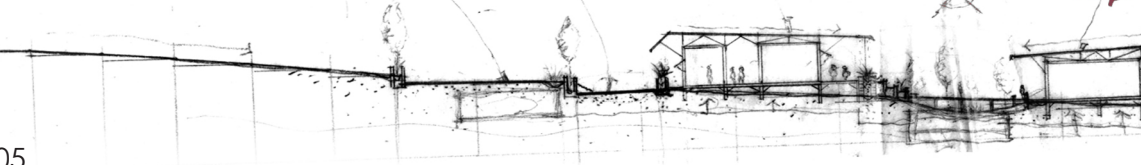
# CIVIC PRIDE



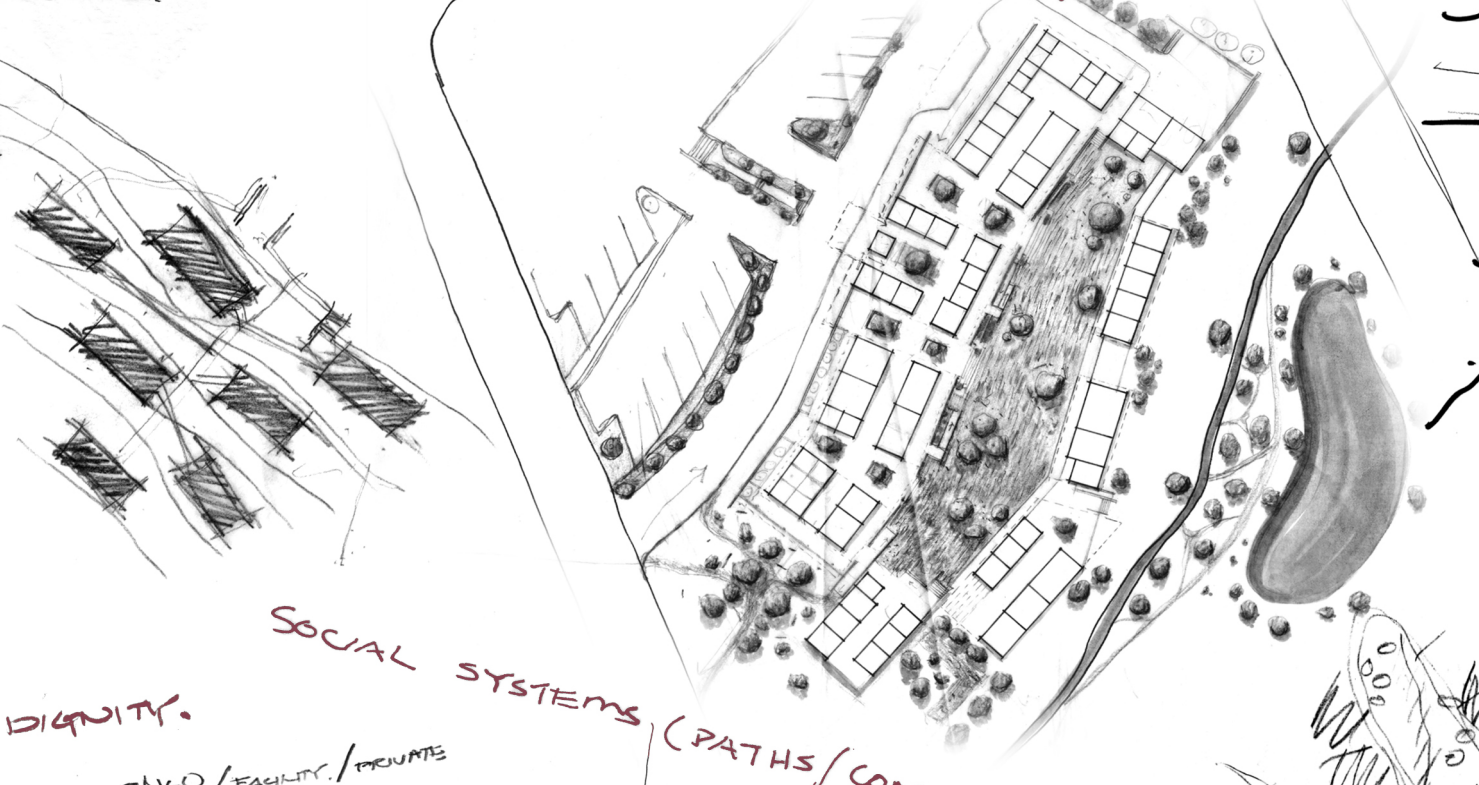
# CENTRALIZED LOCATION



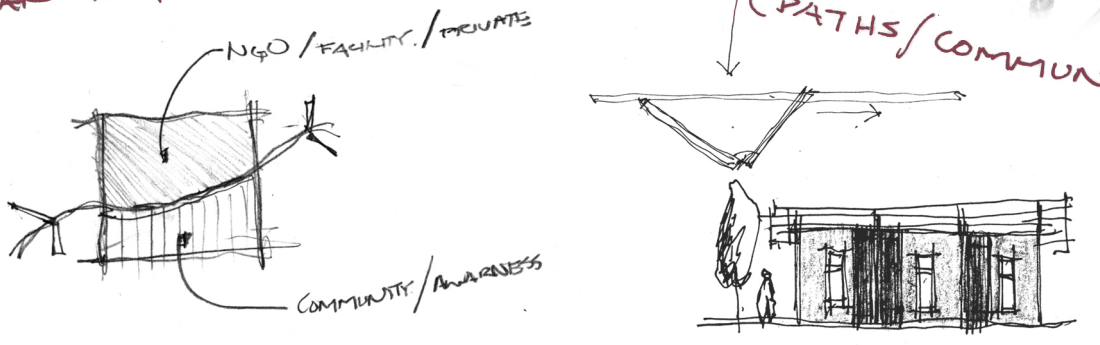
# HOLISTIC HEALING



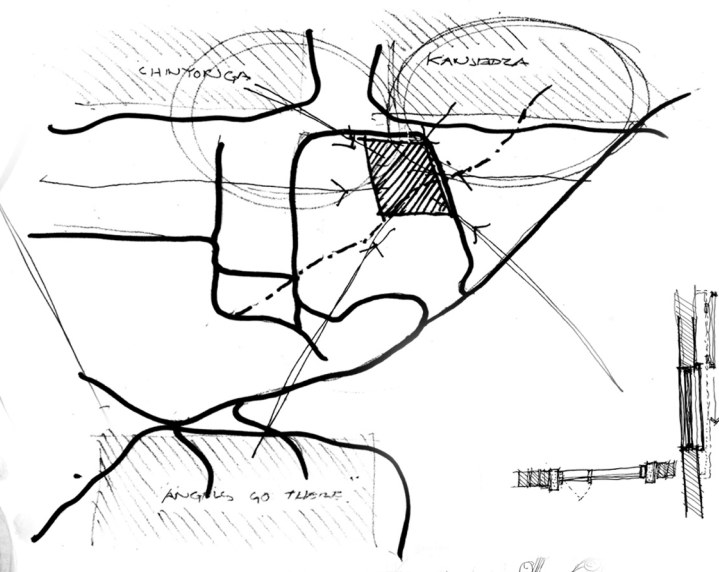
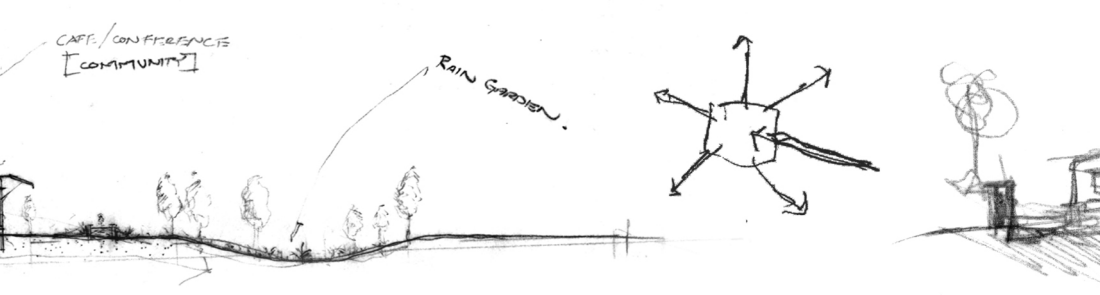
# CULTURAL HEALING



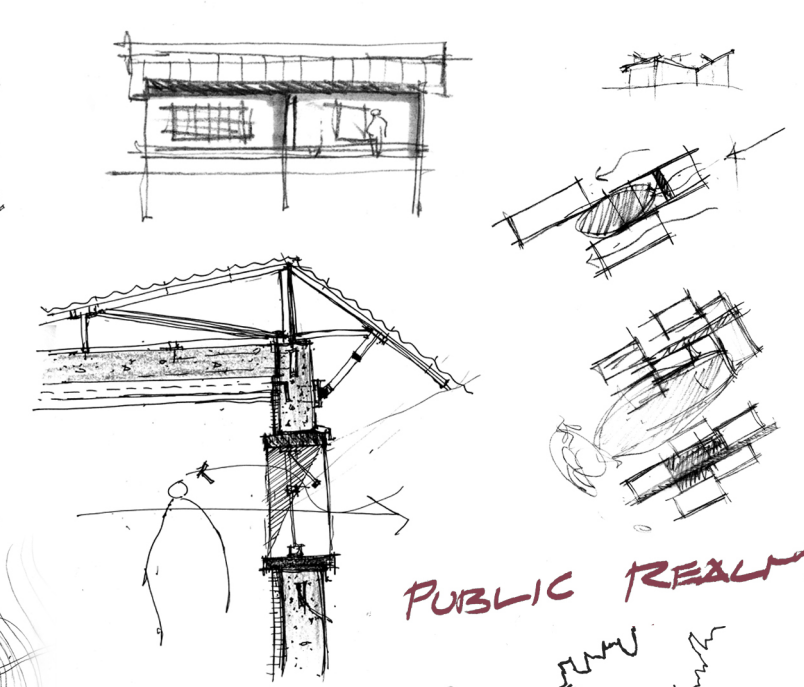
# SOCIAL SYSTEMS (PATHS/COMMUNITY GATHERING)



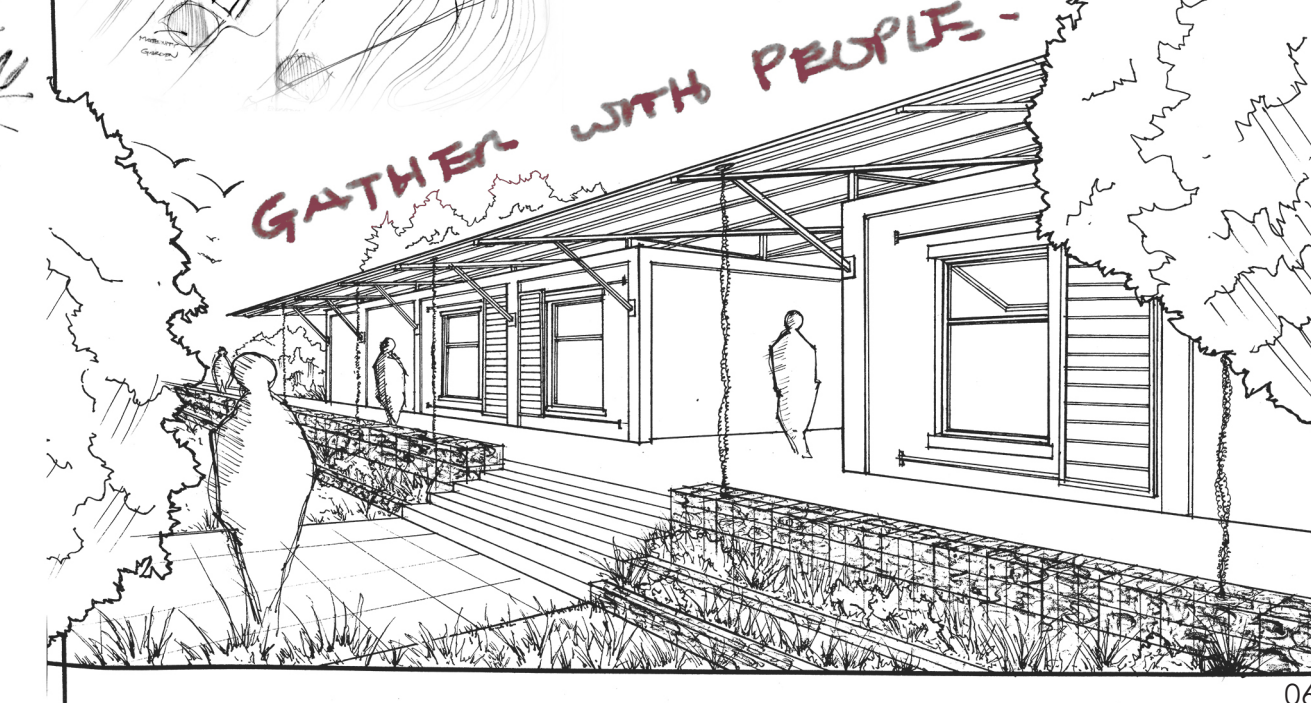
# CULTURAL INTERCONNECTIVITY



# [CONNECTION] TO COMMUNITY, FAMILY, NATURE, AND SELF



# GATHER WITH PEOPLE



## [ the design ]

A centralized public realm is derived from a concept of spiritual gathering spaces in which would relate to the culture, community, and the experience of healing, at the site scale.

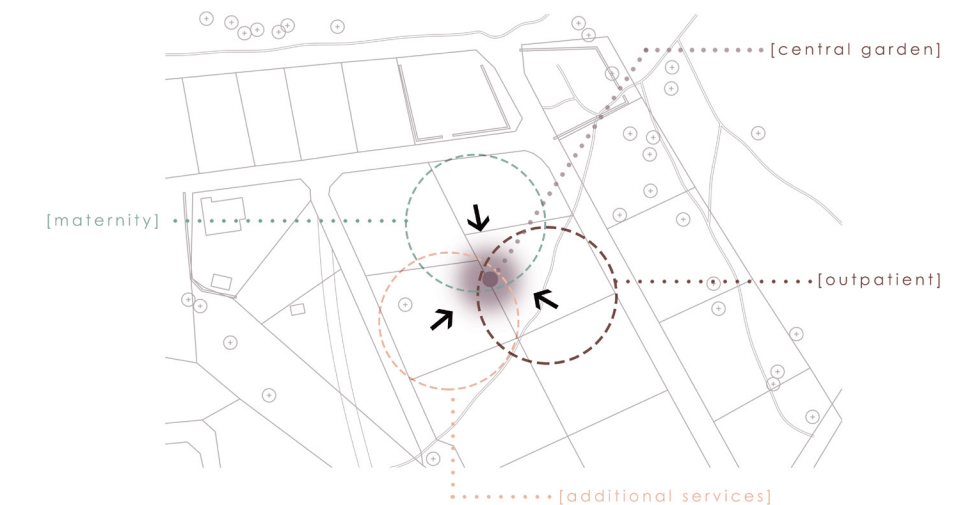
The idea of a communal gathering space is composed of healing gardens that serves as the core of the clinic. Primary and secondary circulation throughout the site becomes the overall driving force of the design and the amalgamation between building and landscape.

## [CONCEPT]



### [centralization]

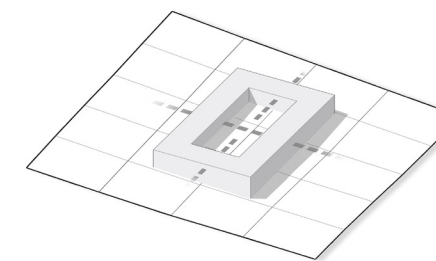
connection to the district scale as the site becomes the threshold to adjacent communities



### [communal garden]

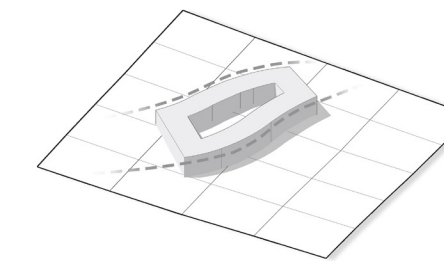
each of the program groups orient around a centralized garden that addresses the culture and the notion of communal healing in malawi

## [FORM]



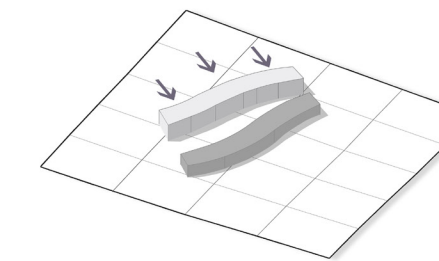
### [program]

program orients around a communal courtyard that allows for optimal daylight as well as cross ventilation from the prevailing winds



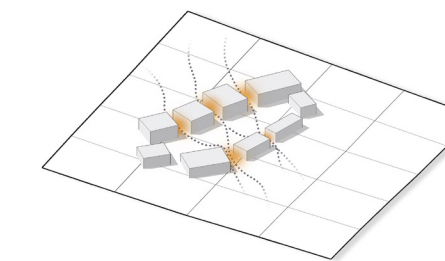
### [site relation]

the medical complex follows the contours of the sloping site to allow for a more sustainable and easier construction approach



### [treatment vs. service]

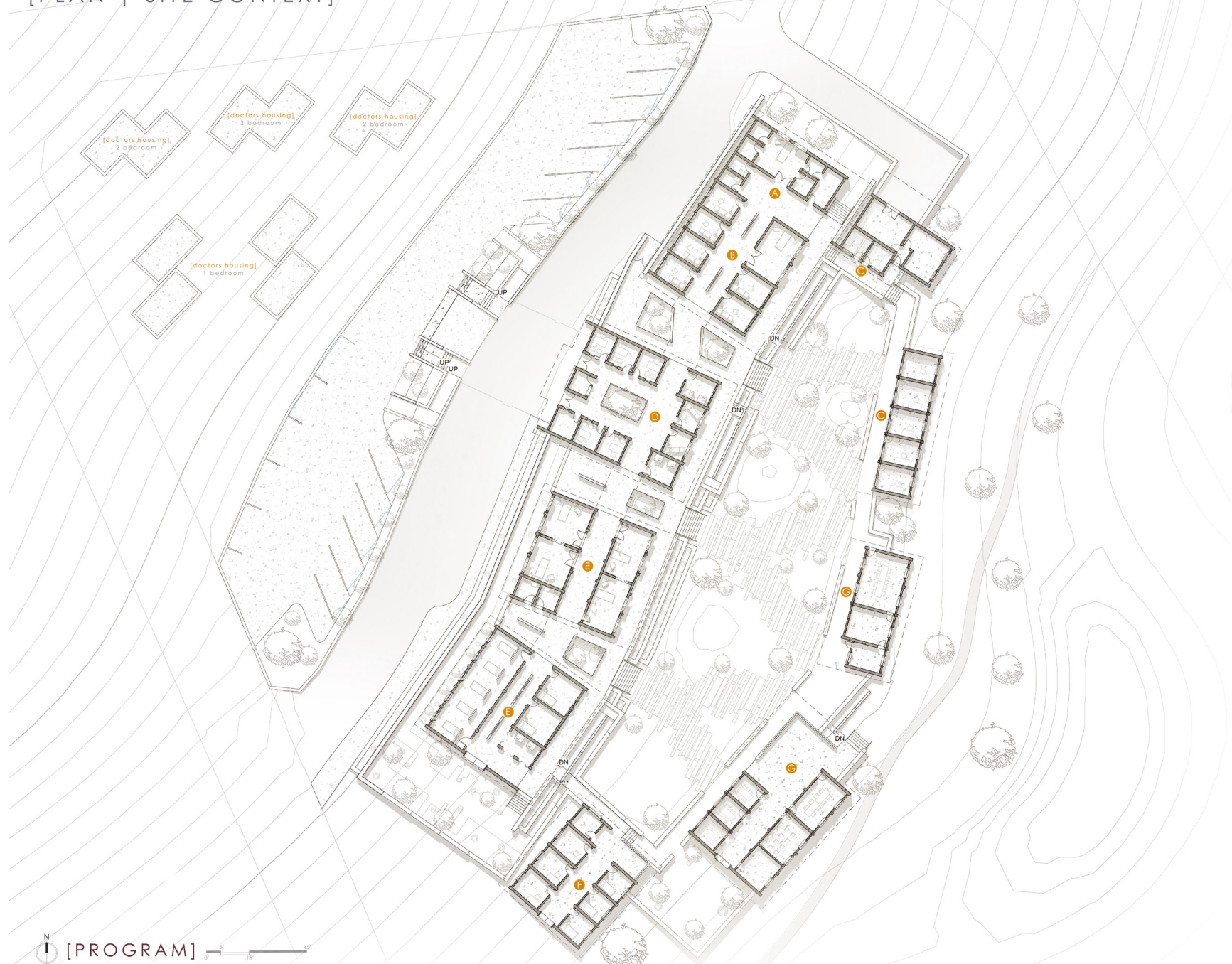
treatment wing is placed at a more elevated point of the site that becomes the primary component to a patients arrival sequence as a means of efficiency



### [division]

the program is divided to allow for more daylight and ventilation. the nodes in between become waiting areas and circulation as well as to address stormwater run-off

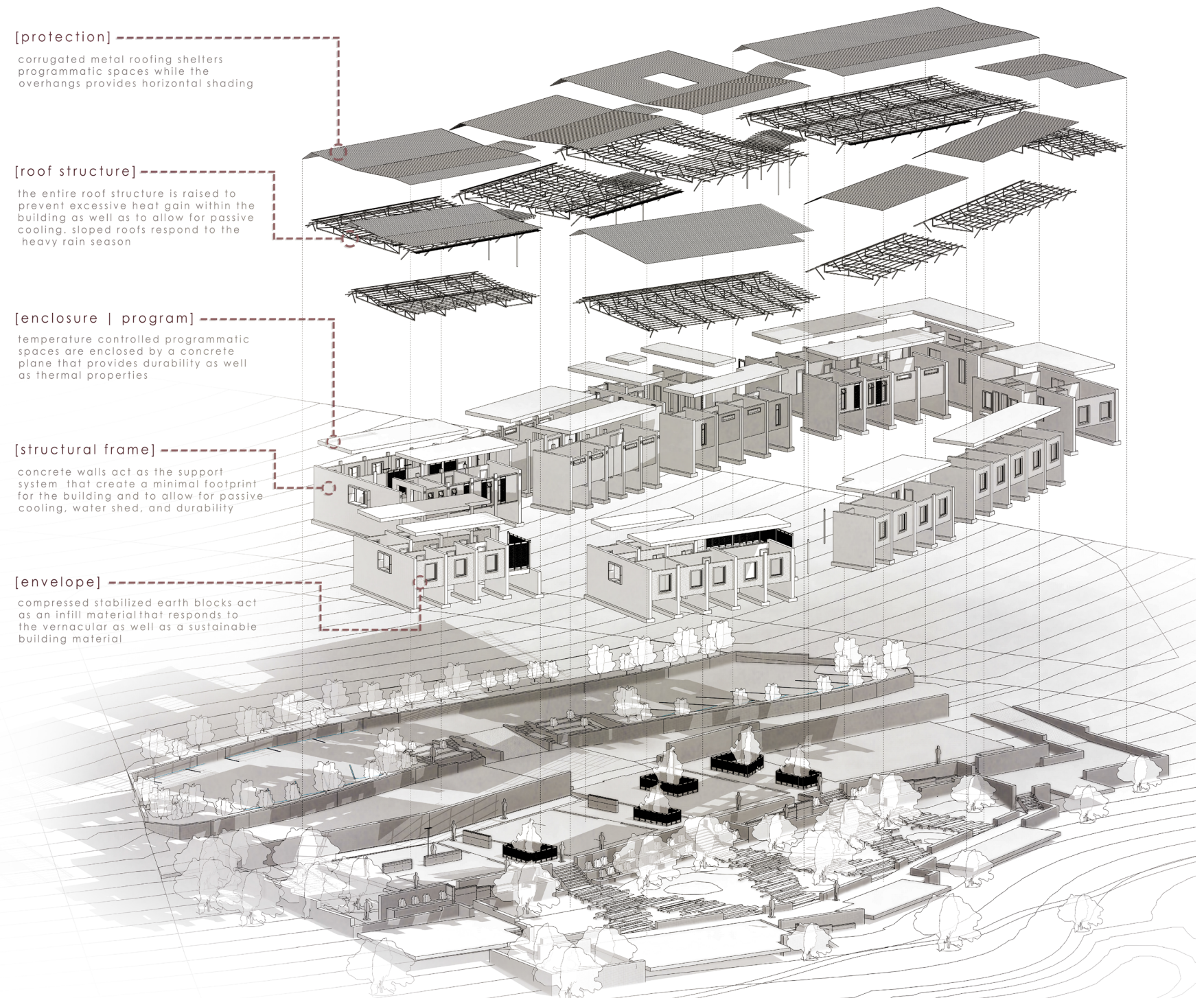
[PLAN | SITE CONTEXT]



[PROGRAM]

- A [surgery theater]**  
doctors changing  
sterile wash  
operating room  
sterile storage  
cleaning  
sterilization packing
- B [outpatient]**  
observation  
examination  
minor operation  
restrooms
- C [lab | services]**  
lab | research  
offices  
medical storage
- D [admin. | nurse]**  
admin. office  
cashier  
health services  
health management  
offices
- E [maternity]**  
delivery  
operating room  
restrooms  
maternity ward  
maternity care  
nurses station  
maternity garden
- F [dental | vision]**  
examination  
doctor offices  
admin. office  
cashier
- G [health and wellness]**  
conference  
cafe | kitchen  
multipurpose room  
classroom  
consultation

[EXPLODED AXON]



**[protection]**  
corrugated metal roofing shelters  
programmatic spaces while the  
overhangs provides horizontal shading

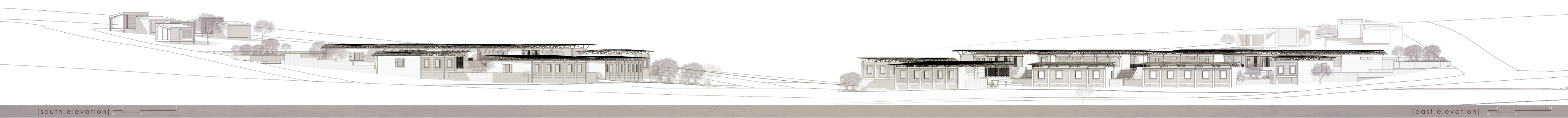
**[roof structure]**  
the entire roof structure is raised to  
prevent excessive heat gain within the  
building as well as to allow for passive  
cooling. sloped roofs respond to the  
heavy rain season

**[enclosure | program]**  
temperature controlled programmatic  
spaces are enclosed by a concrete  
plane that provides durability as well  
as thermal properties

**[structural frame]**  
concrete walls act as the support  
system that create a minimal footprint  
for the building and to allow for passive  
cooling, water shed, and durability

**[envelope]**  
compressed stabilized earth blocks act  
as an infill material that responds to  
the vernacular as well as a sustainable  
building material

[ELEVATIONS]



[SECTIONS]





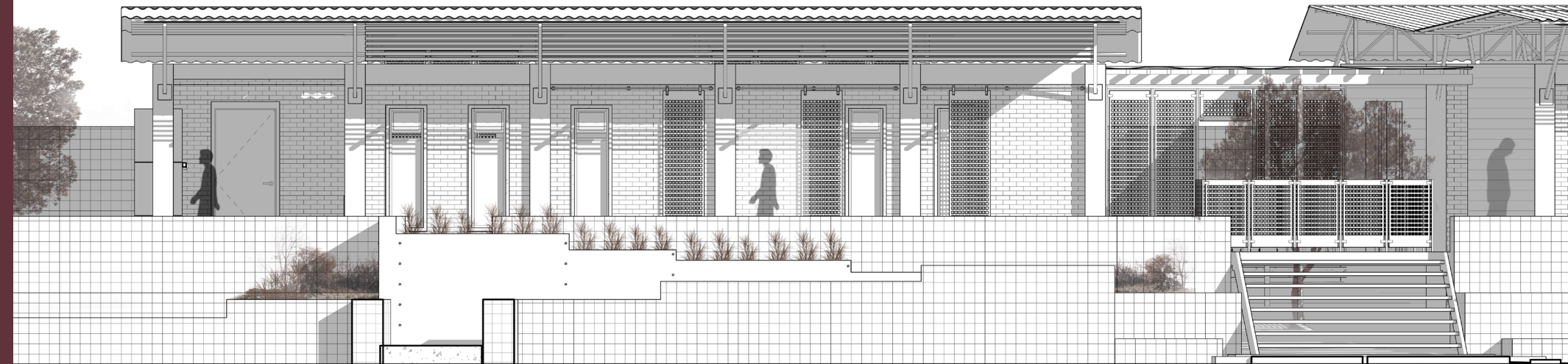
[ detail ]

Focusing on the maternity ward, the language of the building is expressed through the material selection that relates to the vernacular of the area as well as the contrast between the stereotomic structural walls and the filigree steel roof.

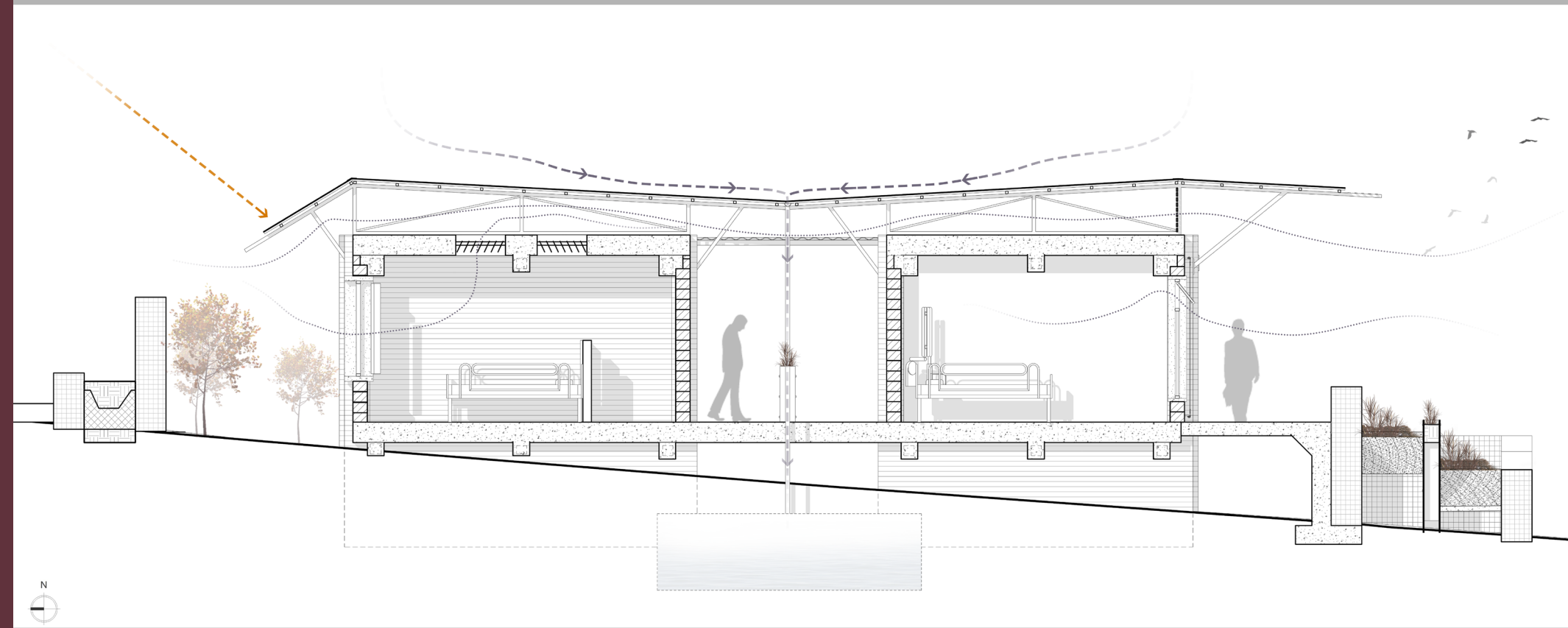
Passive strategies become a design opportunity to enforce cross ventilation as well as to control daylight with the use of overhangs and perforated screens.

Nature becomes the focus on both sides of the building as well as blurring the line between inside and out.

[MATERNITY WARD]



[north elevation] 0' 5' 15'



[cross section | maternity] 0' 5' 15'



