



SHHA HOUSE +

a solution to housing shortage in Botswana

the idea

the issue

Right now around 70 % of the population in Botswana live in cities and the cities are still growing. There is an urgent **need for more living spaces.**

In the inner city multi-storey homes can be built to create more living space and to increase the population density. Whereas in the suburban area where people mostly live in single-family homes we need to find a different solution.

the solution

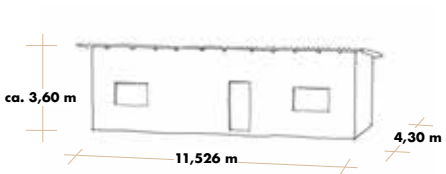
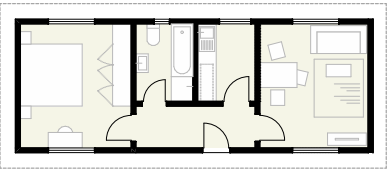
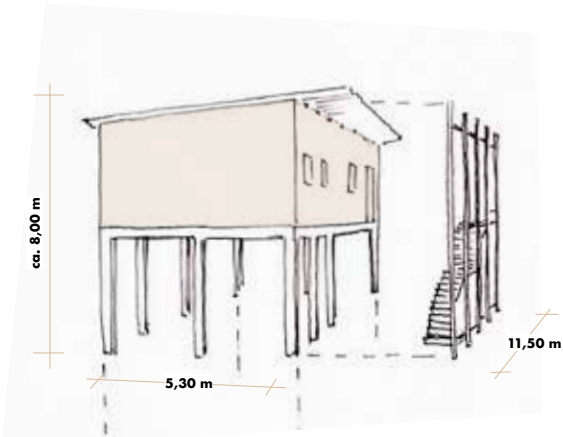
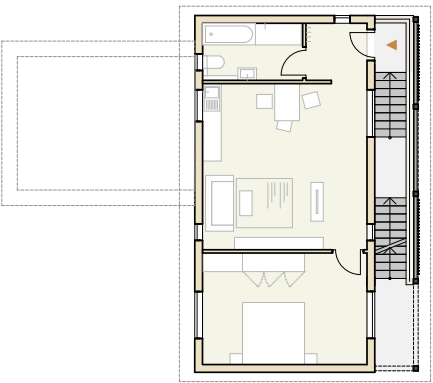
The free plots are getting are and prizes for plots will rise. So the idea of the prototype **SHHA HOUSE +** is to build new SHHA single-family homes on top of existing SHHA houses. Hence two families can live in their single-family home on the very same plot.

how it works

A family who owns a SHHA house on a plot will built a SHHA+ house either for their children to move with their family to the upper floor or rent the space to a different family. The remaining space on the plot will be used collectively.

adding a SHHA+ house

two families on one plot

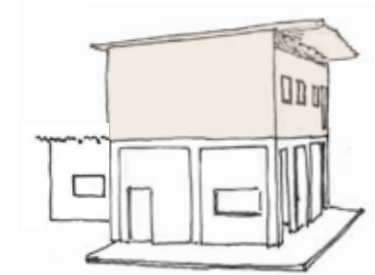
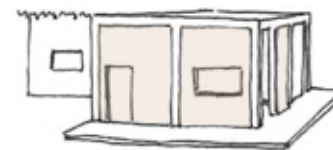
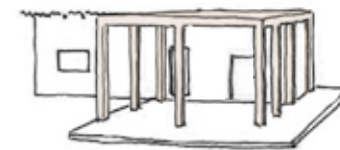
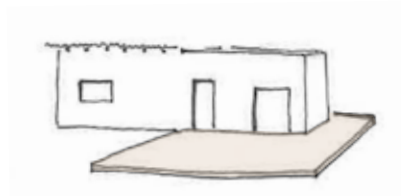


ordinary SHHA home

one family



steps of construction



analyze the existing situation
on the plot

add a ferroconcrete base plate
and foundations

build a ferroconcrete bearing structure
for the second living unit

add stiffening brick walls

place the upper living unit
on top of the ferroconcrete floor

add stairs and shading
(and optional: verandah)

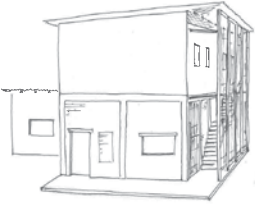
creating an individual SHHA+ house

as every family's need and also every plot looks different
there is a variety of options for the SHHA+ house to choose from...

1

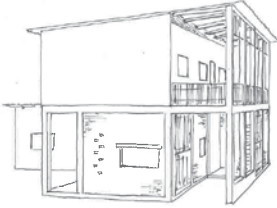
choosing between 2 SHHA+ options

consider **size** of plot + **budget** !



**SHHA HOUSE +
small version**

or



**SHHA HOUSE +
large version**

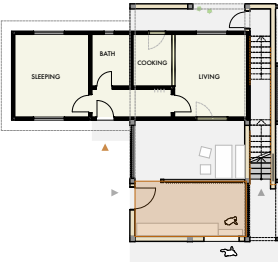
same size of living space on upper floor
in both versions

large version incl. veranda for upper living unit

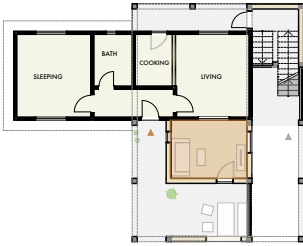
2

choosing a layout for the ground floor

consider **infrastructure** + **location** of plot,
the direction of **sunlight**
and the **needs** of the dwellers!



option A:
adding a **small tuck shop**



option B:
adding **living space**
for the ground floor home

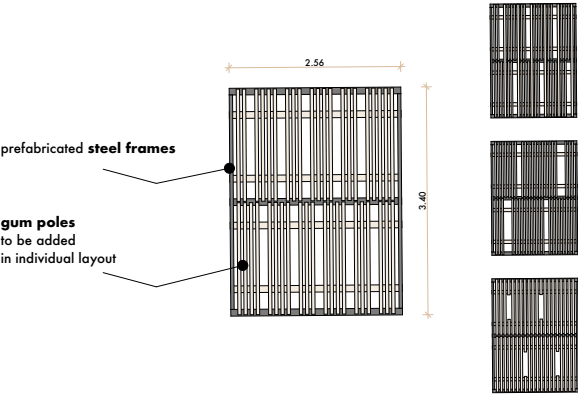


option C:
adding an **outdoor hut** (for storage/as a work space)
+ an outdoor kitchen

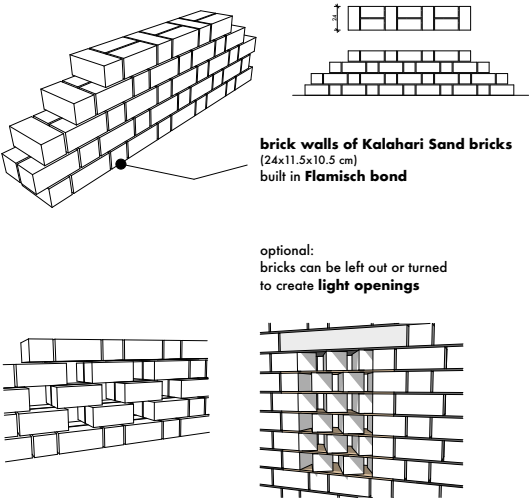
3

choosing an individual design for shading and brick walls

let the dwellers take part in designing
their **individual home**!



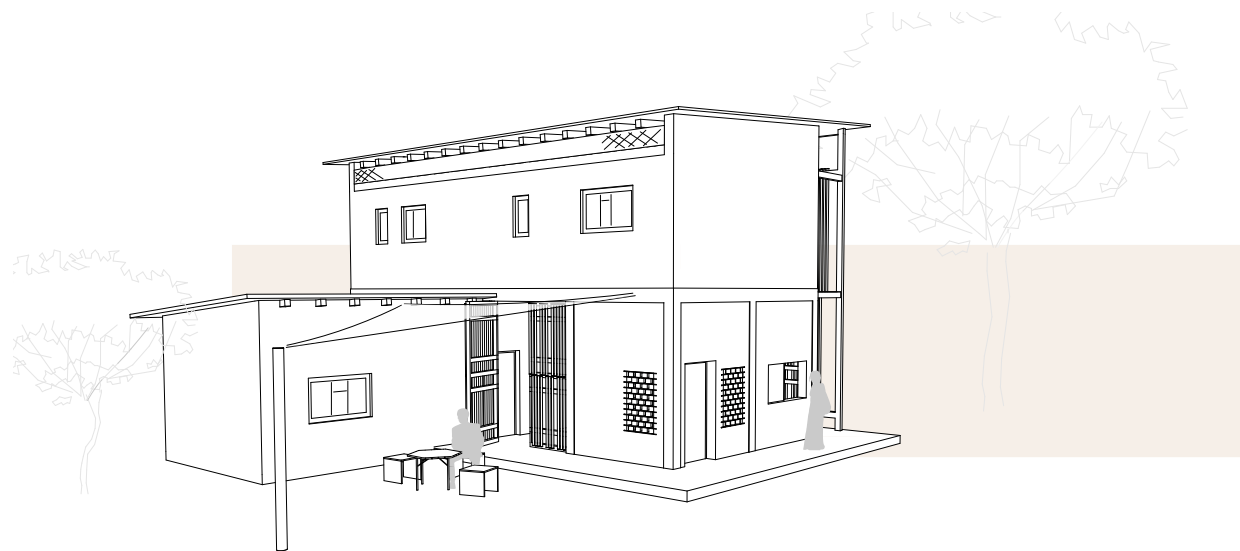
shading



brick walls

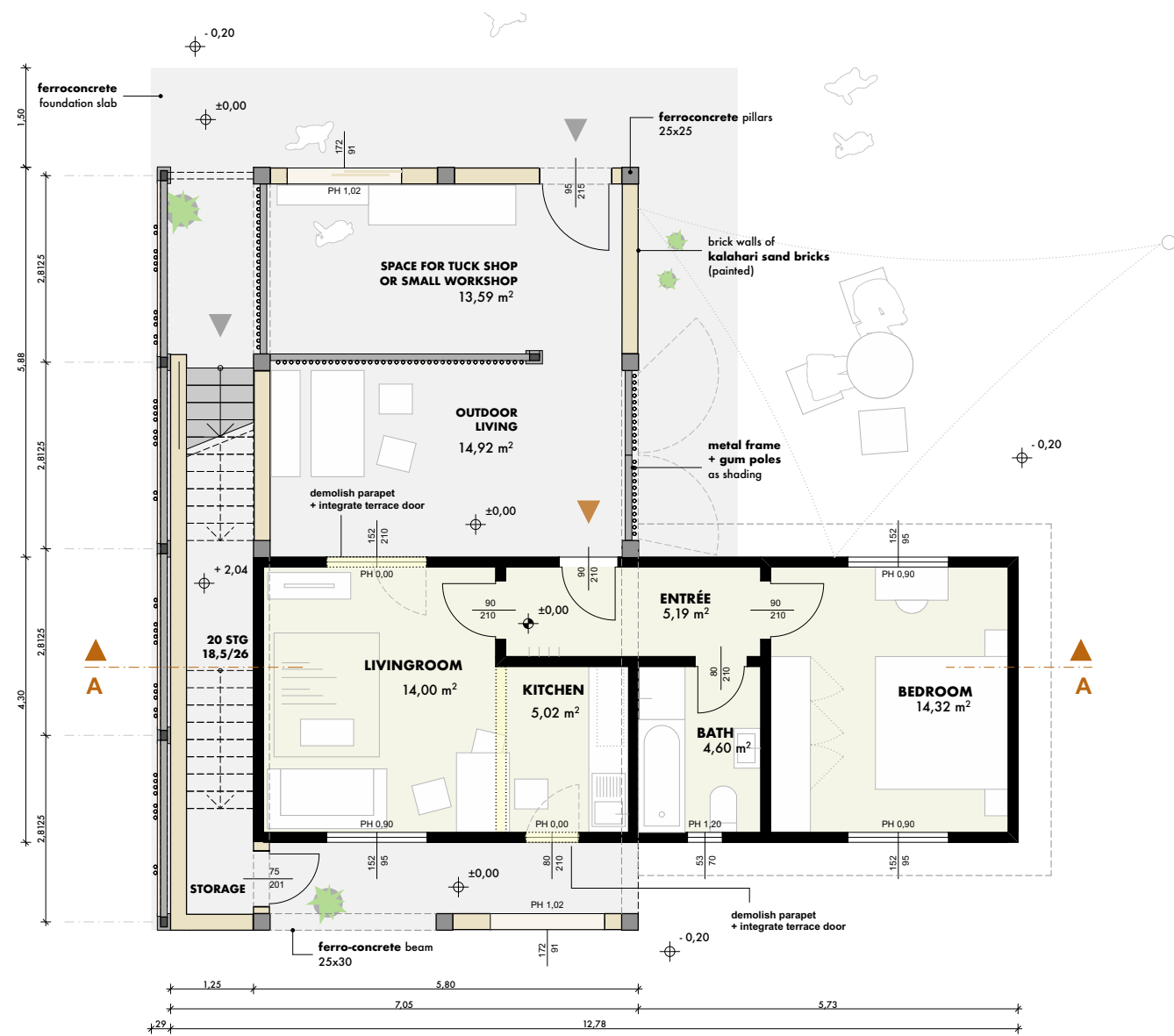
SHHA HOUSE +

small version

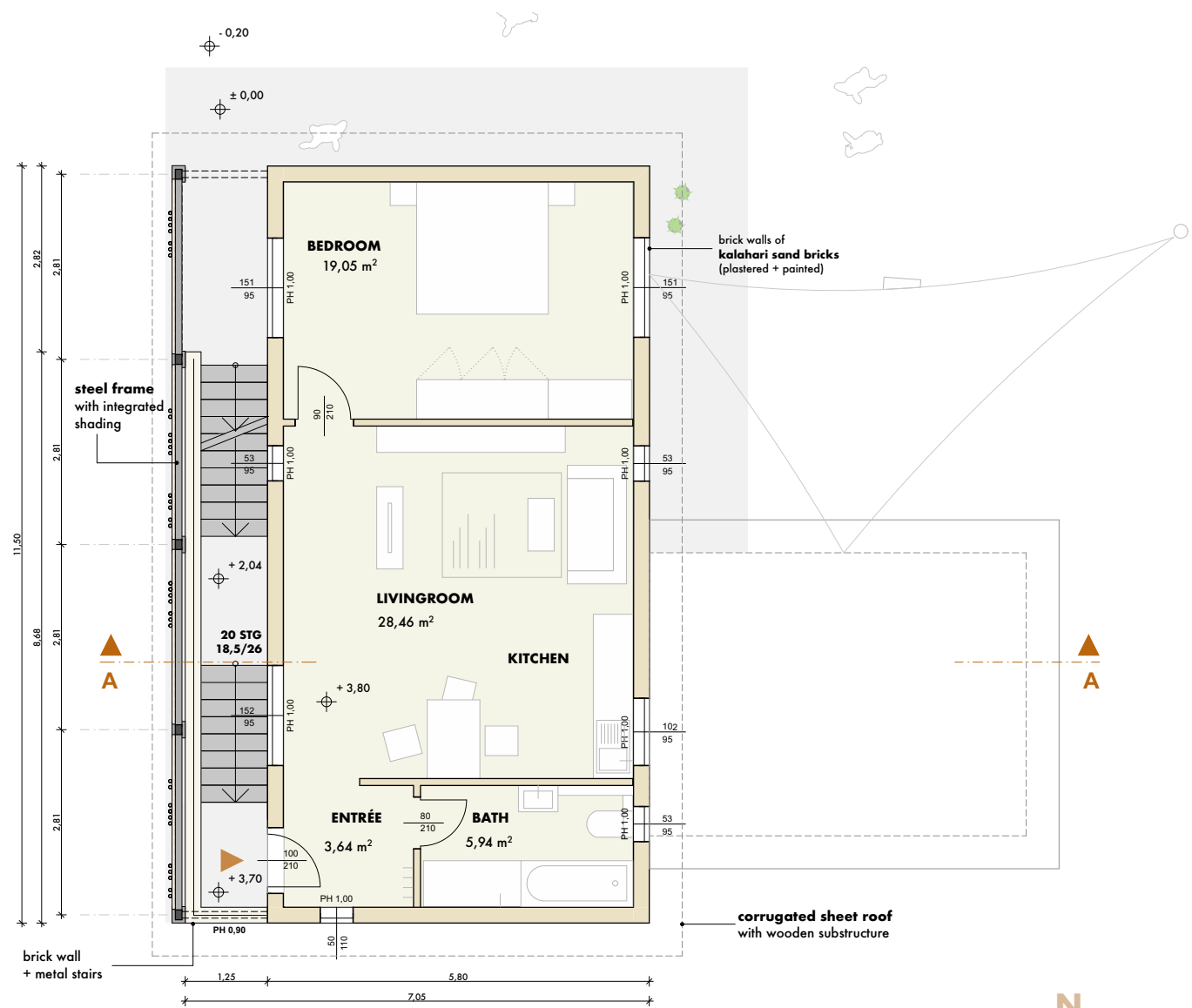


SHHA HOUSE + small version

M 1:100



ground floor
43 m² + 15 m²(outside) + 14 m²(shop)

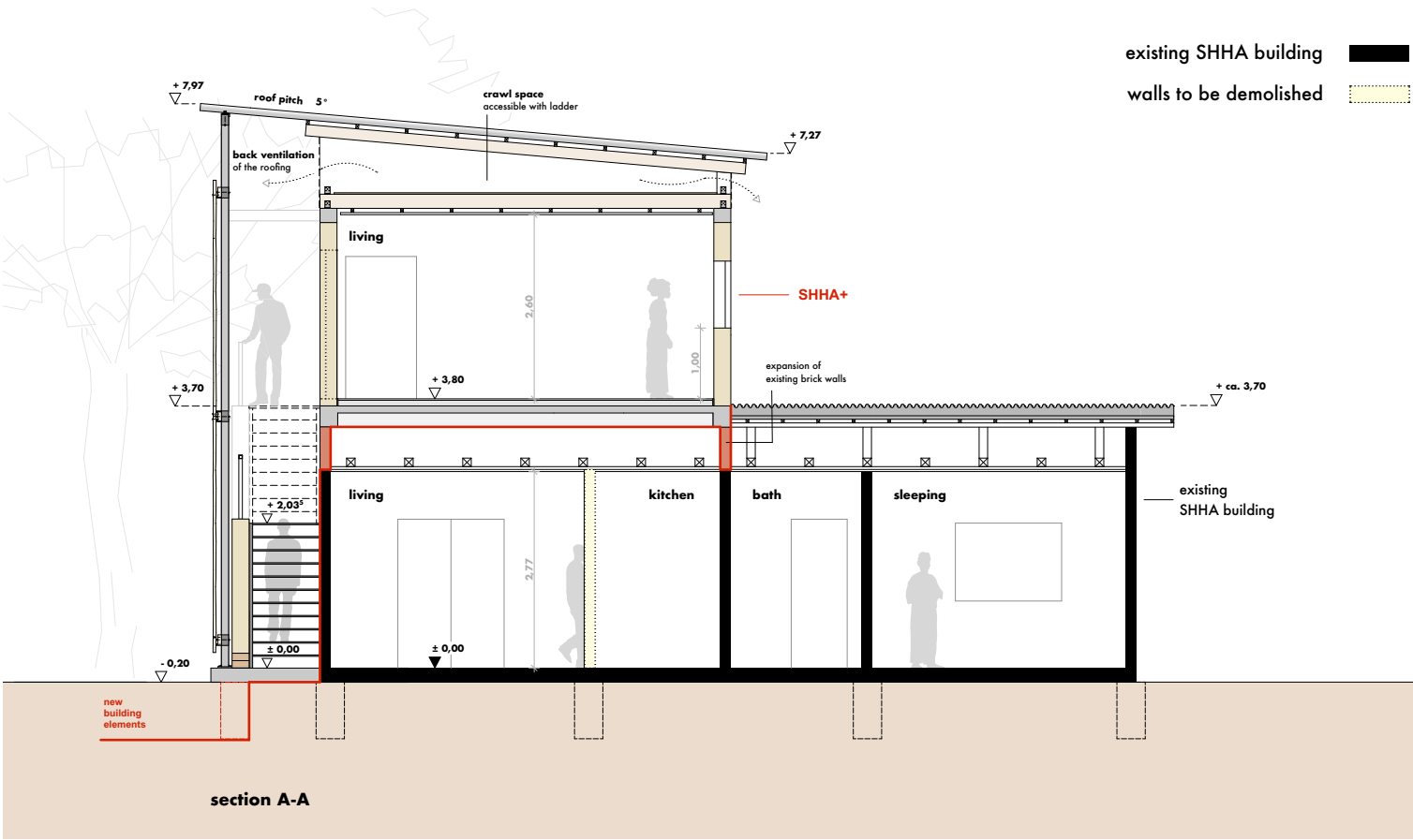


upper floor
57 m²

existing SHHA building
walls to be demolished

SHHA HOUSE + small version

M 1:100



M 1:200



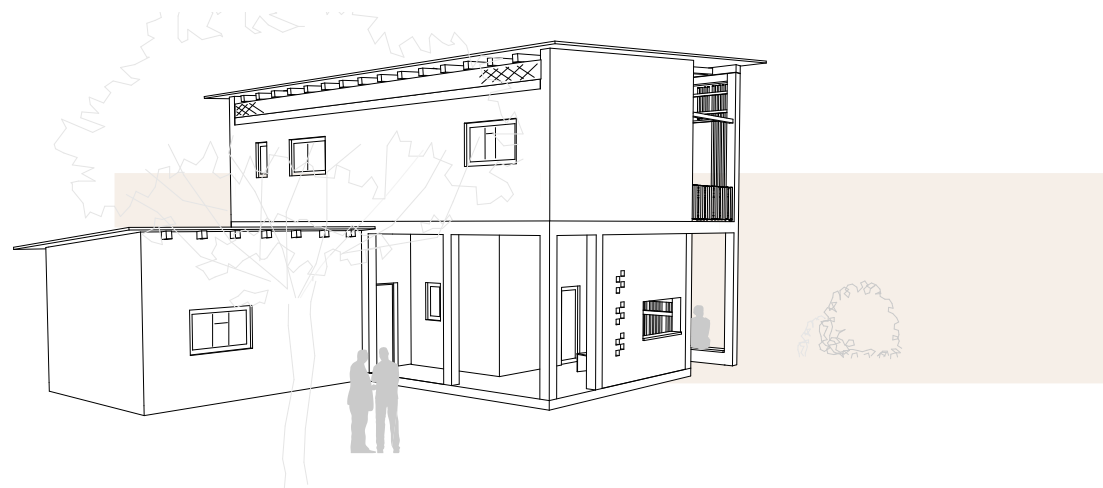
SHHA HOUSE + small version



SHHA HOUSE + small version

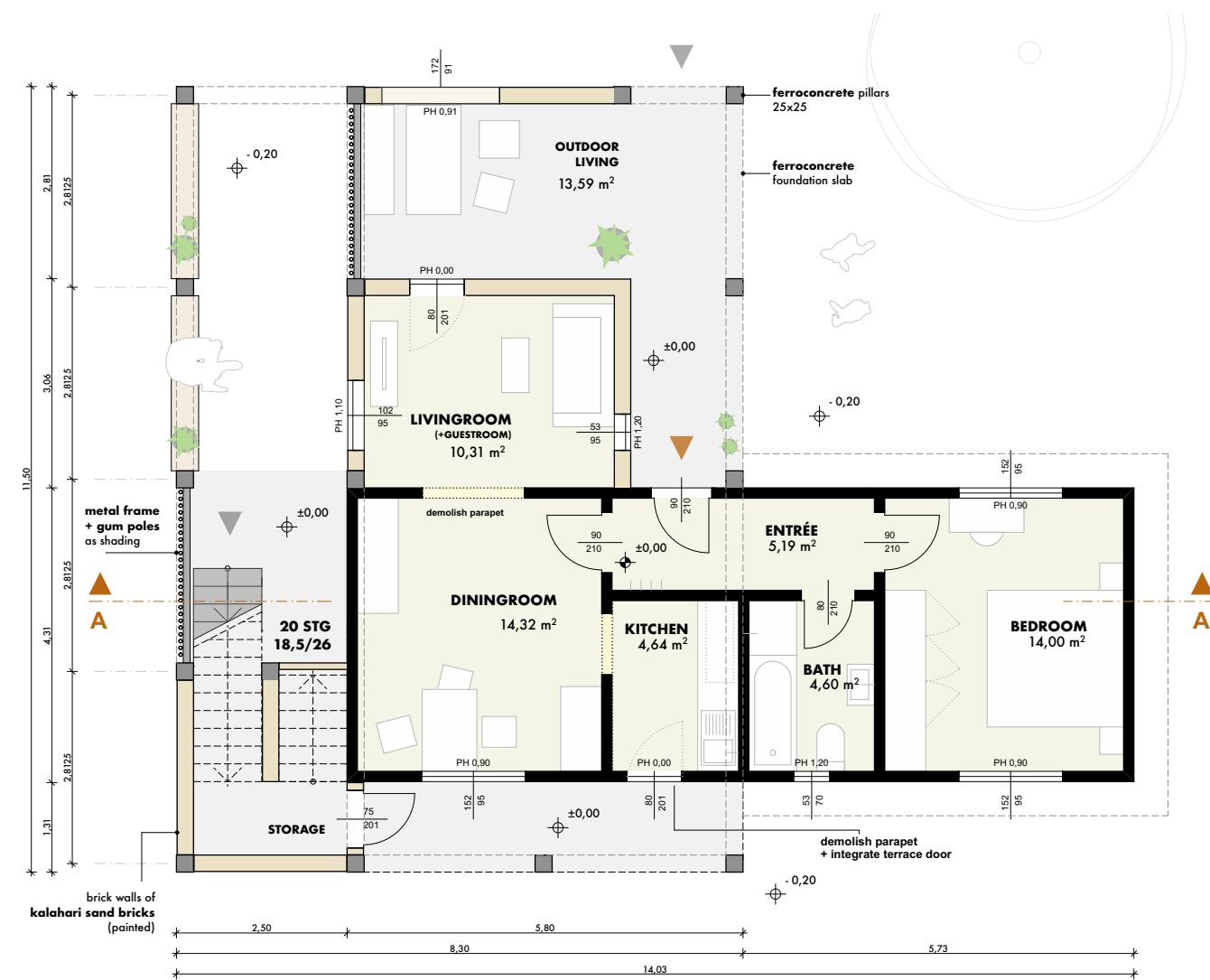


SHHA HOUSE + large version

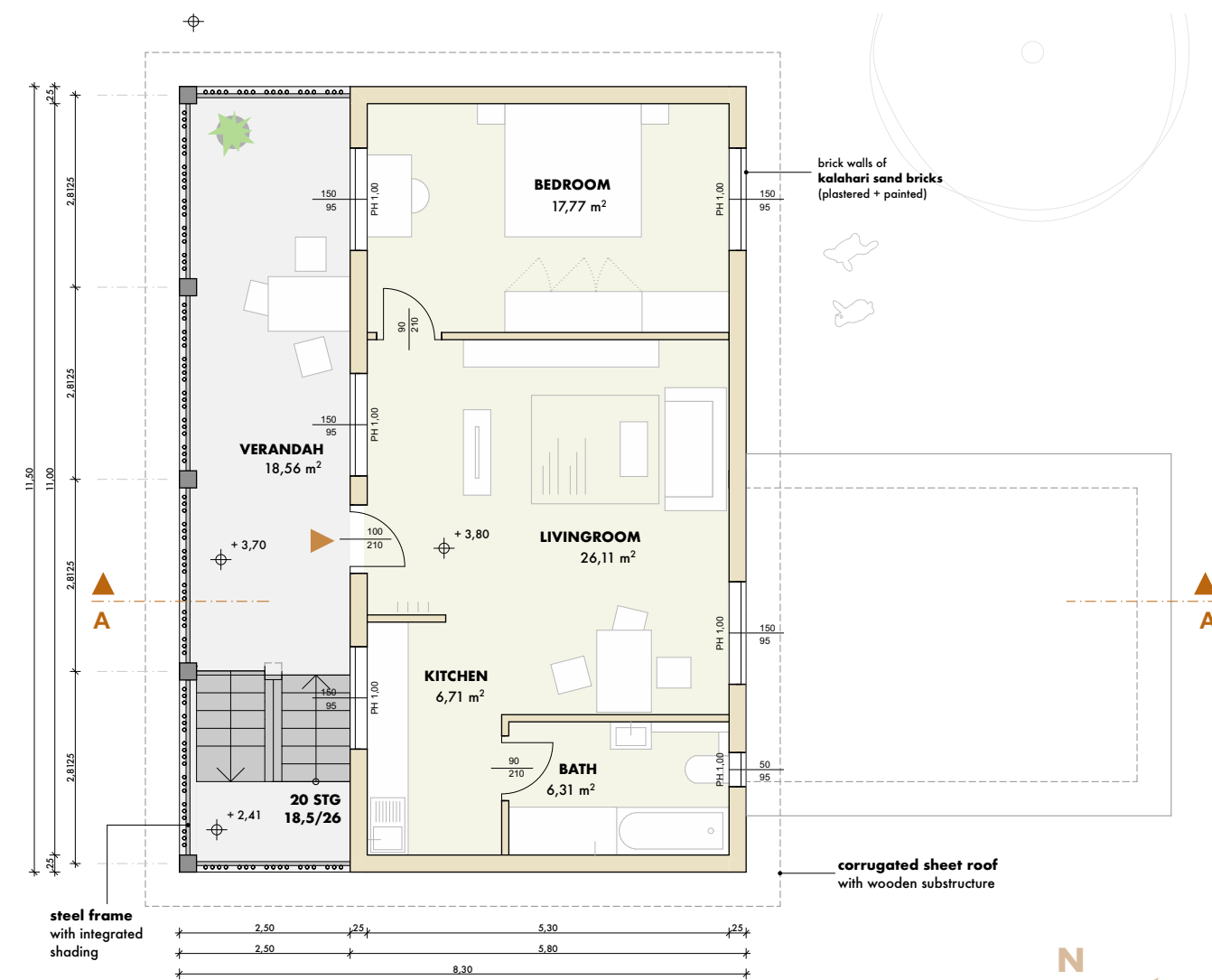


SHHA HOUSE + large version

M 1:100



ground floor
53 m² + 14 m²(outside)

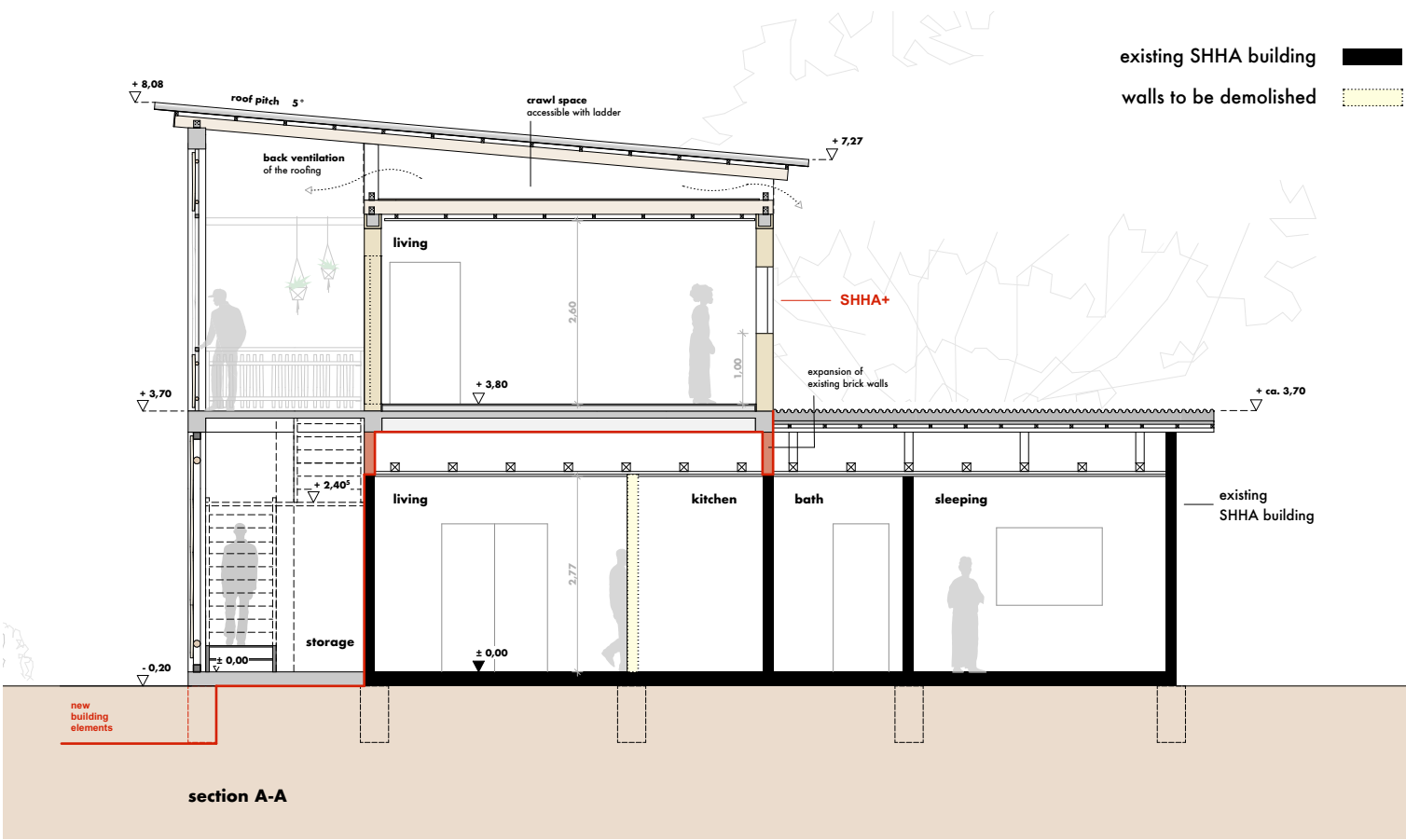


upper floor
57 m² + 19 m²(outside)

existing SHHA building
walls to be demolished

SHHA HOUSE + large version

M 1:100



M 1:200



SHHA HOUSE + large version



SHHA HOUSE + large version



critique

during presentation of the project

by
Arch. Moemedi Gabana & his wife Lady
Prof. Sigi Atteneder
Flavia Matei
Elisa Engel

suggestions for revision and improvement of the design of the SHHA+ House:

When walking towards the building one sees a blank facade.
The most interesting / decorative facade is the facade to the side of the building.

There should at least be a window opening in the upper floor
(maybe a big one where you can sit in on the bench of the window).

Considering the construction:

The upper floor could be moved a bit further down to reduce the height and therefore the mass of building material of the whole construction.

The overall design of the house should draw more attention to the yard as this is an essential part of the house. (At the moment the shading of the stairs at the side of the building draws the most attention.

Consider using more bricks for the railing instead of gum poles. Families who build a SHHA house may see the integration of gum poles as a less important element and might leave these elements out in order to reduce the costs.

Considering the original SHHA house on the ground floor:

Adding a second sleeping room is essential and not just an option.

Consider also to redo and improve the roof structure of the building and integrate cross ventilation.

The veranda on the upper floor should not be an option but an essential part of the design. So improve the overall design and focus on one prototype.

(Maybe the stairs could be L-shaped so that the dwellers walk over the veranda when entering the building.)

dividual

homely

communal



let's keep in touch.

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