

An aerial photograph of a vast, green mountain range. The mountains are densely forested and stretch across the horizon. The sky is filled with large, white, fluffy clouds. The overall scene is bright and natural.

UDZUNGWA MOUNTAIN NATIONAL PARK

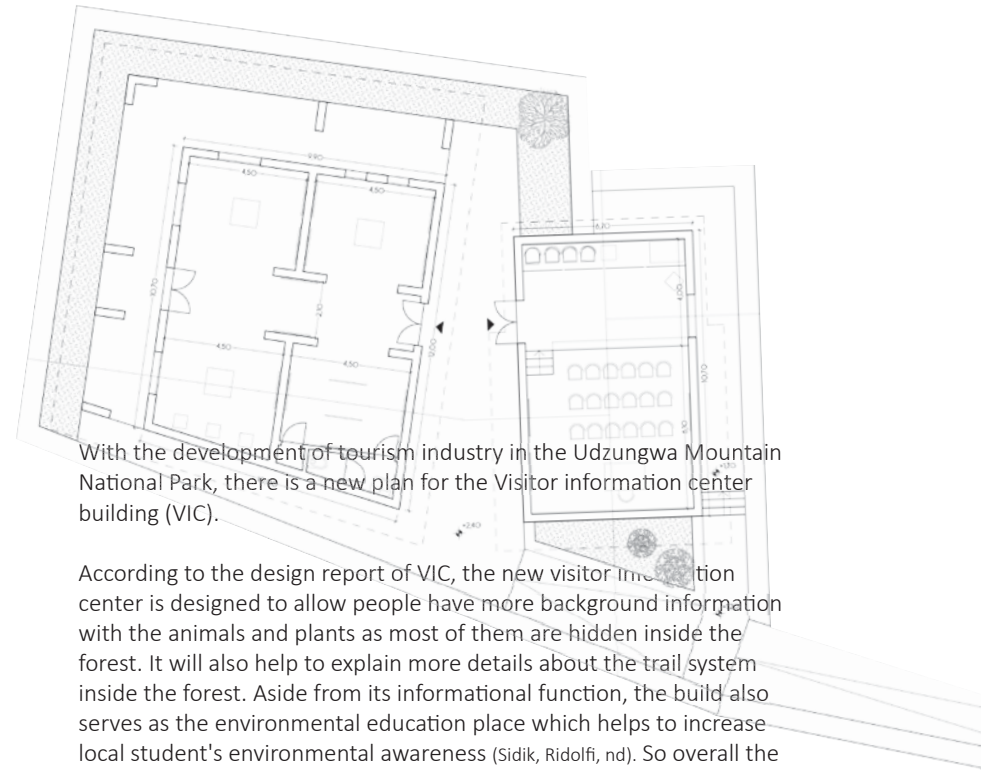
VISITOR INFORMATION CENTER LANDSCAPE DESIGN PROJECT

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EXISTING SITE CONDITION



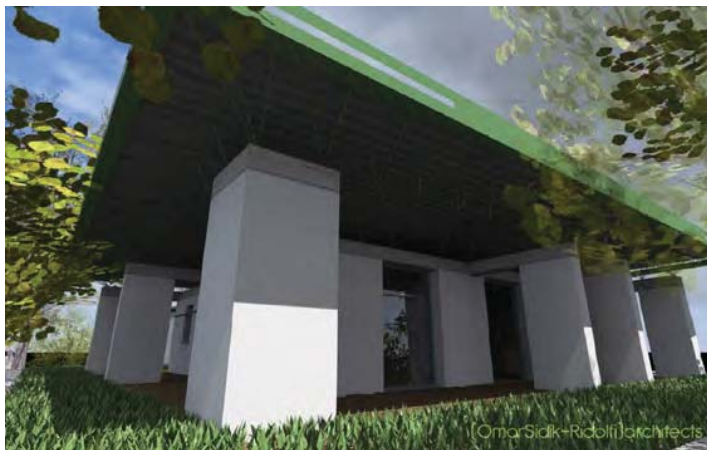
With the development of tourism industry in the Udzungwa Mountain National Park, there is a new plan for the Visitor information center building (VIC).

According to the design report of VIC, the new visitor information center is designed to allow people have more background information with the animals and plants as most of them are hidden inside the forest. It will also help to explain more details about the trail system inside the forest. Aside from its informational function, the build also serves as the environmental education place which helps to increase local student's environmental awareness (Sidik, Ridolfi, nd). So overall the design of VIC focus both on providing information and education.

VIC is already under construction now, however there is not a new exterior plan and the existing landscape condition in the site has many weakness, so my project will complemented with the design of VIC to provide visitors a more involving and educating experience when they are in the visitor center.

Reference: Sidik Dalia, Ridolfi Flavio. "Udzungwa Mountains National Park Visitor Information Centre Design Report". Accessed on June 16, 2016.

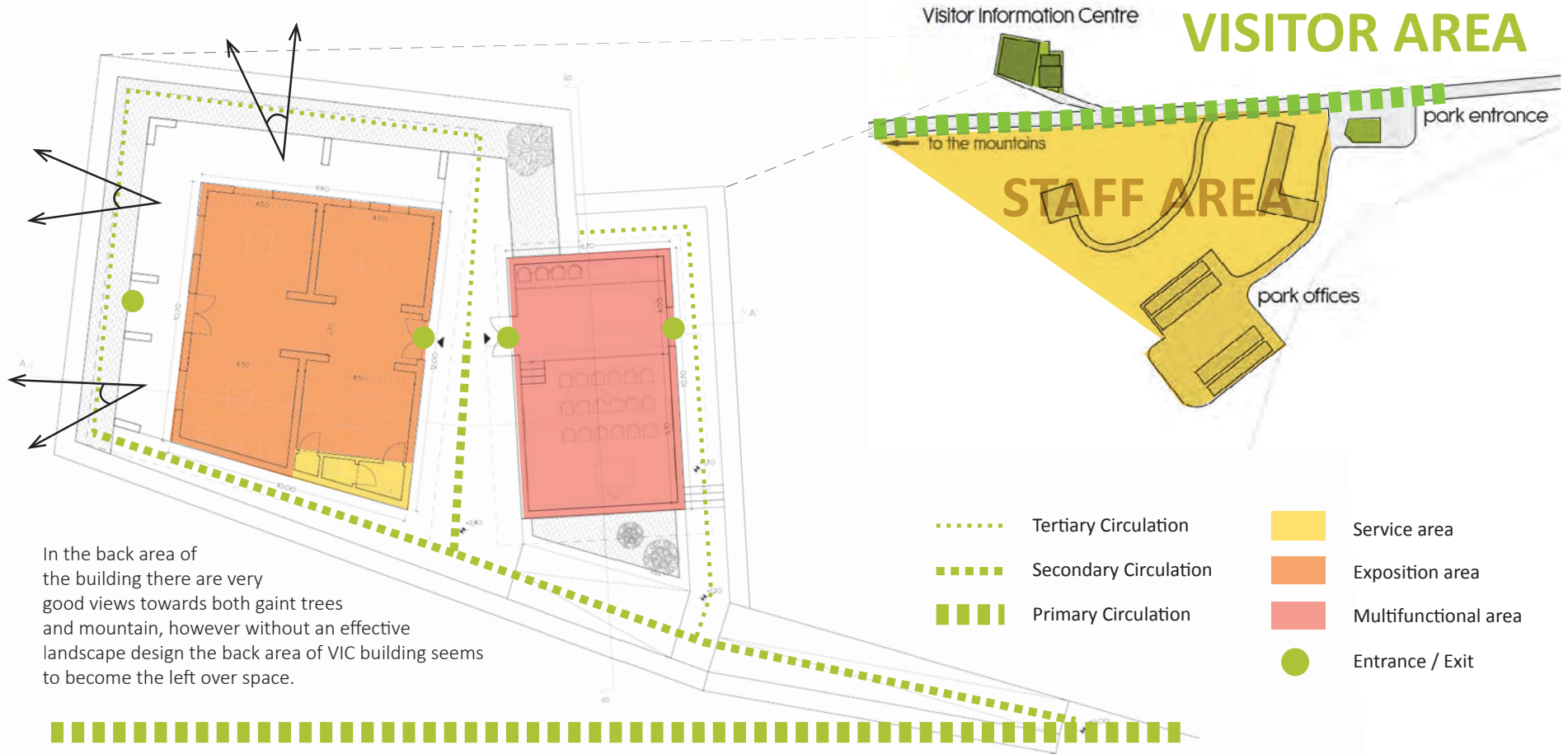
VIC BUILDING



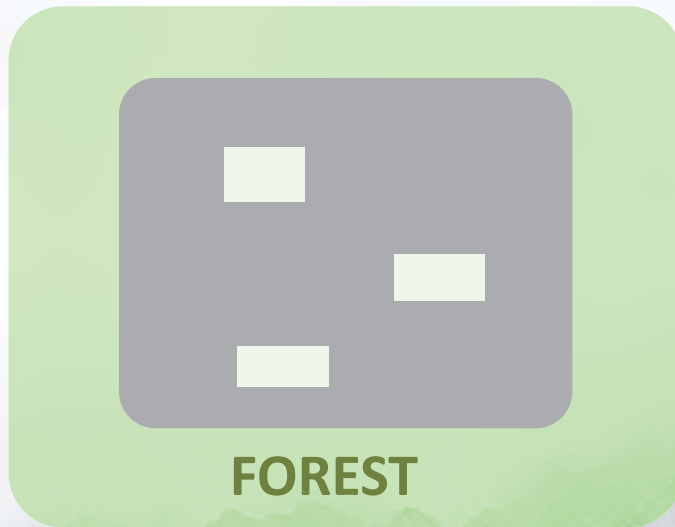
Reference: OmarSidik + Ridolfi architects

VIC BUILDING ANALYSIS

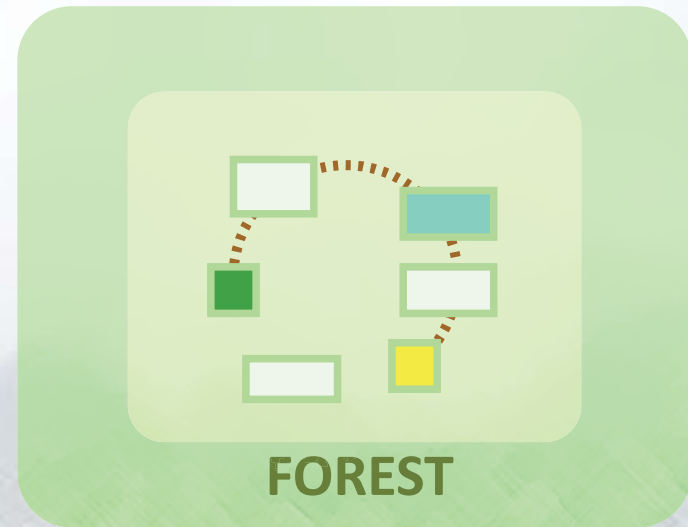
The existing site does not have an effective landscape design which might influence the future performance of the new visitor information center. As the diagram shows that now the main path to the mountain cuts right in the middle of staff area and visitor area which causes the problem the visitor's circulation will intersect with staff's circulation.



DESIGN CONCEPT



This diagram shows that existing site condition: a lot of empty areas, and the buildings are lack of connection. This condition makes the visitor center itself loses the connection with the surrounding forest setting. Now all the vacant lots are mainly used as the parking area which makes the whole site feel a little messy and lose of focus.



New proposal landscape design focus on creating the connection between buildings for visitors in the visitor center and creating multiple sub-areas in the vacant lot for different activities. The design will also focus on create spatial separation for staff area and the visitor area.

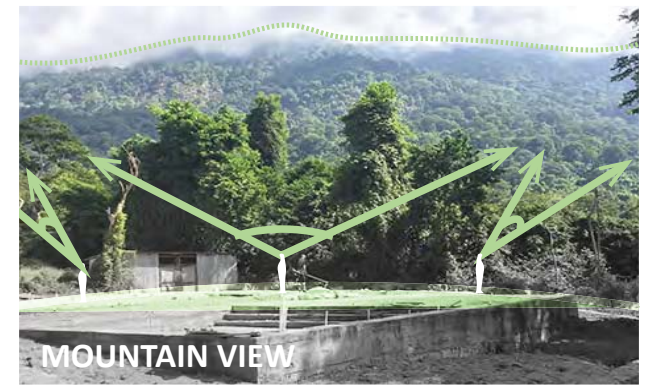
INSPIRATION



The path lead towards the visitor center has very strong axis form, and this axis also exist inside the visitor center. The strong axis path enhances the view towards the mountain.



On the way to the visitor center the canopies along the path create the "Tunnel" form structure, and also inside the Udzungwa mountain forest the vines with trees creates a lot of tunnel on trails.



In the back area of the VIC building there is a obvious vegetation clear area which allows a very board view towards the mountain. Design in this area needs to help enhance this special view.

STAGE THREE

Considering of the future development of tourism market in the Udzungwa Mountain National park the landscape development of new visitor center can have multiple stages. The first stage is the main landscape design inside the visitor center area.

STAGE ONE

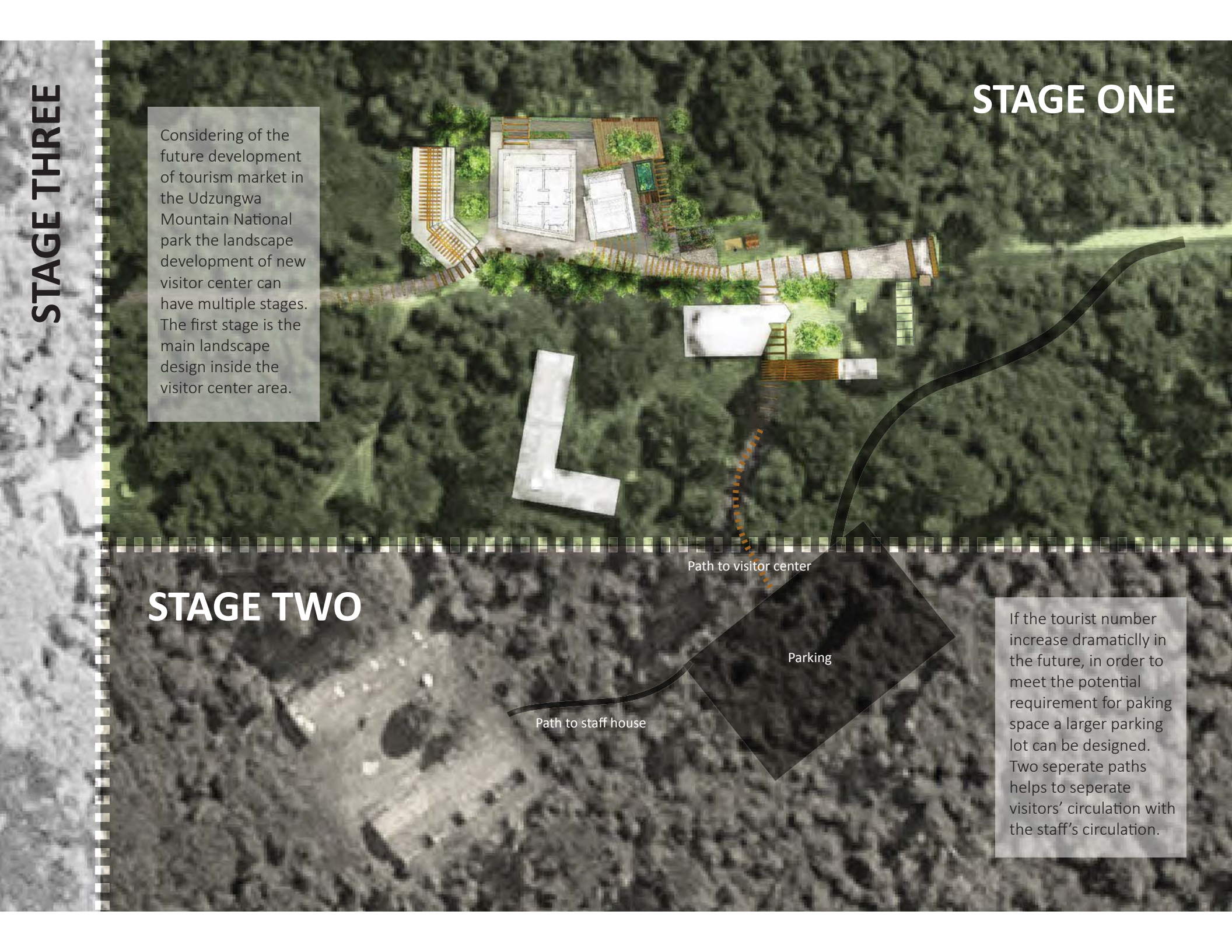
STAGE TWO

Path to visitor center

Parking

Path to staff house

If the tourist number increase dramatically in the future, in order to meet the potential requirement for paking space a larger parking lot can be designed. Two separete paths helps to separete visitors' circulation with the staff's circulation.





WHOLE SITE SECTION



Amphitheater (Education & Mountain View)

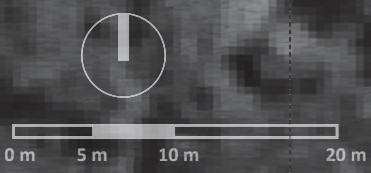
Raised platform (primary for Mountain view)

Outdoor sitting garden

Primary Garden walk for VIC

Visitor center courtyard

WHOLE SITE ZONING PLAN



Tunnel structure

VIC Welcoming garden

Butterfly garden

Culture garden

Outdoor sitting gallery

Service parking



Concrete platform (view towards the east side of Udzungwa Mountain and giant trees)

Shading structure for amphitheater

Lawn & amphitheater together create outdoor education area

Ramp for ADA accessing to raised platform

Concrete platform (view towards the extension of mountain)

Stairs towards the path between buildings to attract visitors to the back building area

Boardwalk provides different walking experience

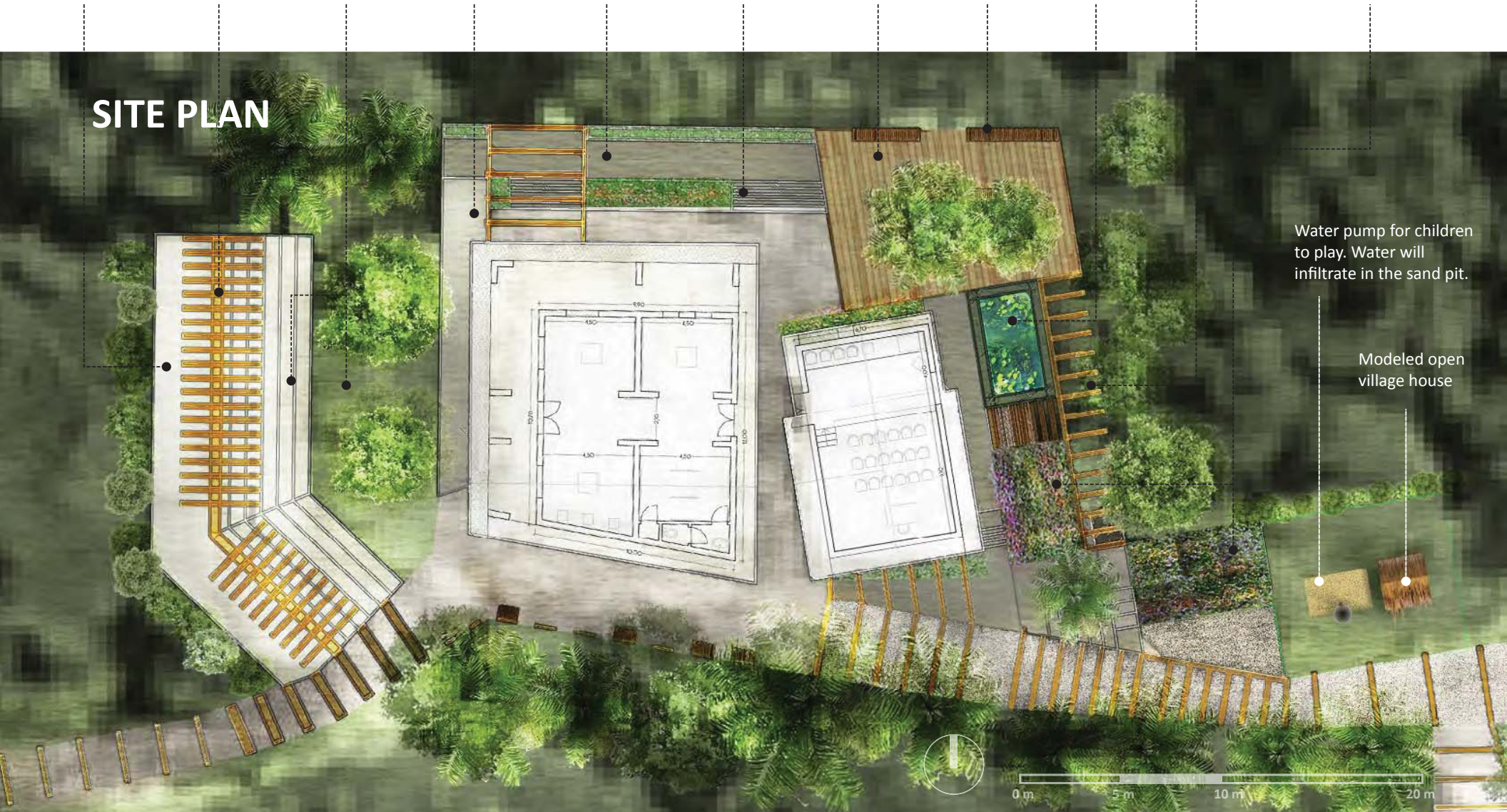
Wood outdoor bench

Water pond

Tunnel structure connects front and back area of the building.

Stepped butterfly garden allows visitors to have close interaction with butterflies.

SITE PLAN



Water pump for children to play. Water will infiltrate in the sand pit.

Modeled open village house

0 m 5 m 10 m 20 m

SOUTH SIDE SECTION

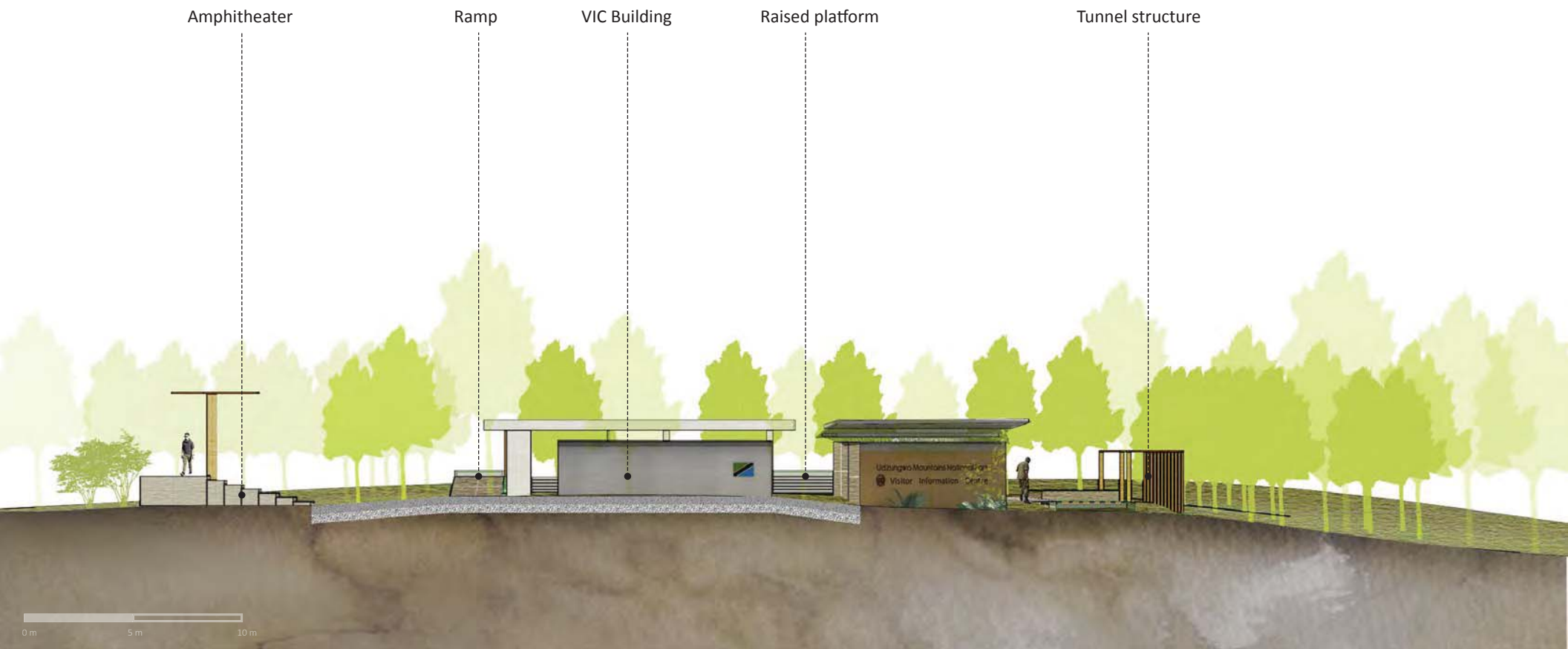
Amphitheater

Ramp

VIC Building

Raised platform

Tunnel structure



EAST SIDE SECTION

Two important existing trees

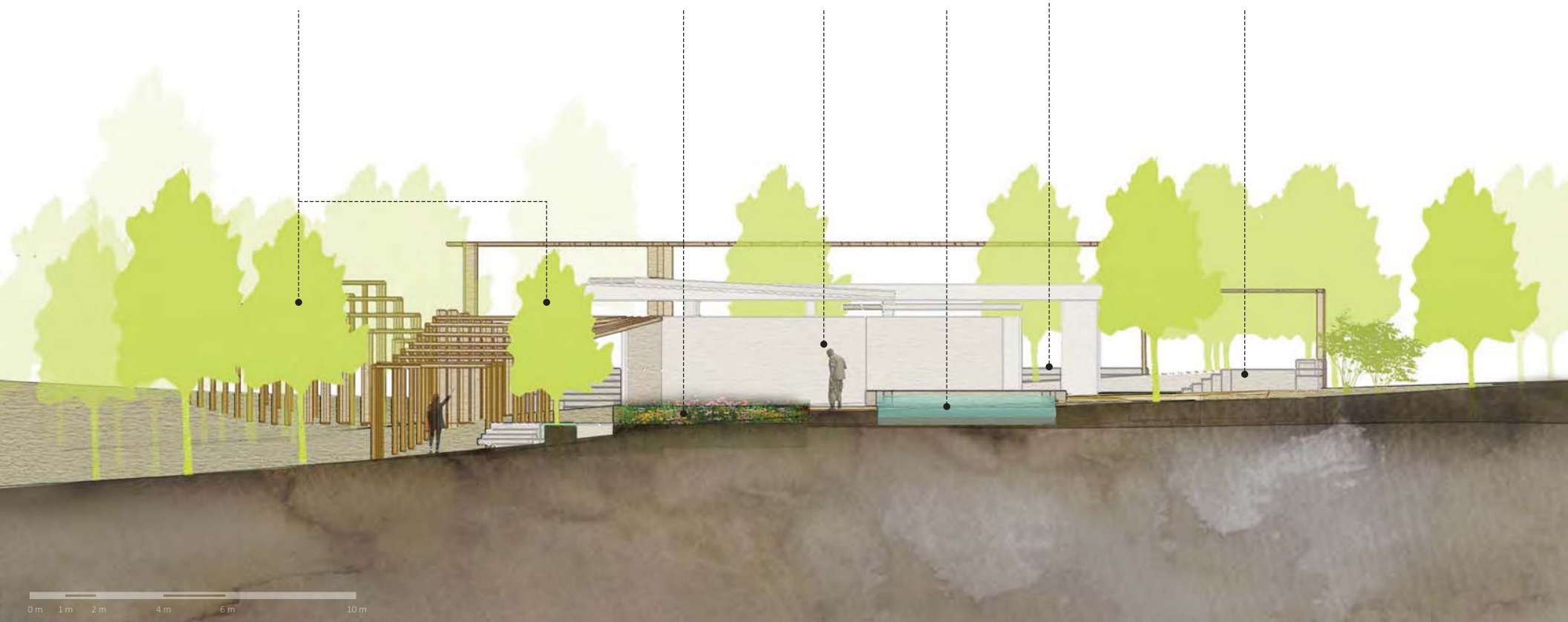
Butterfly garden

VIC Building

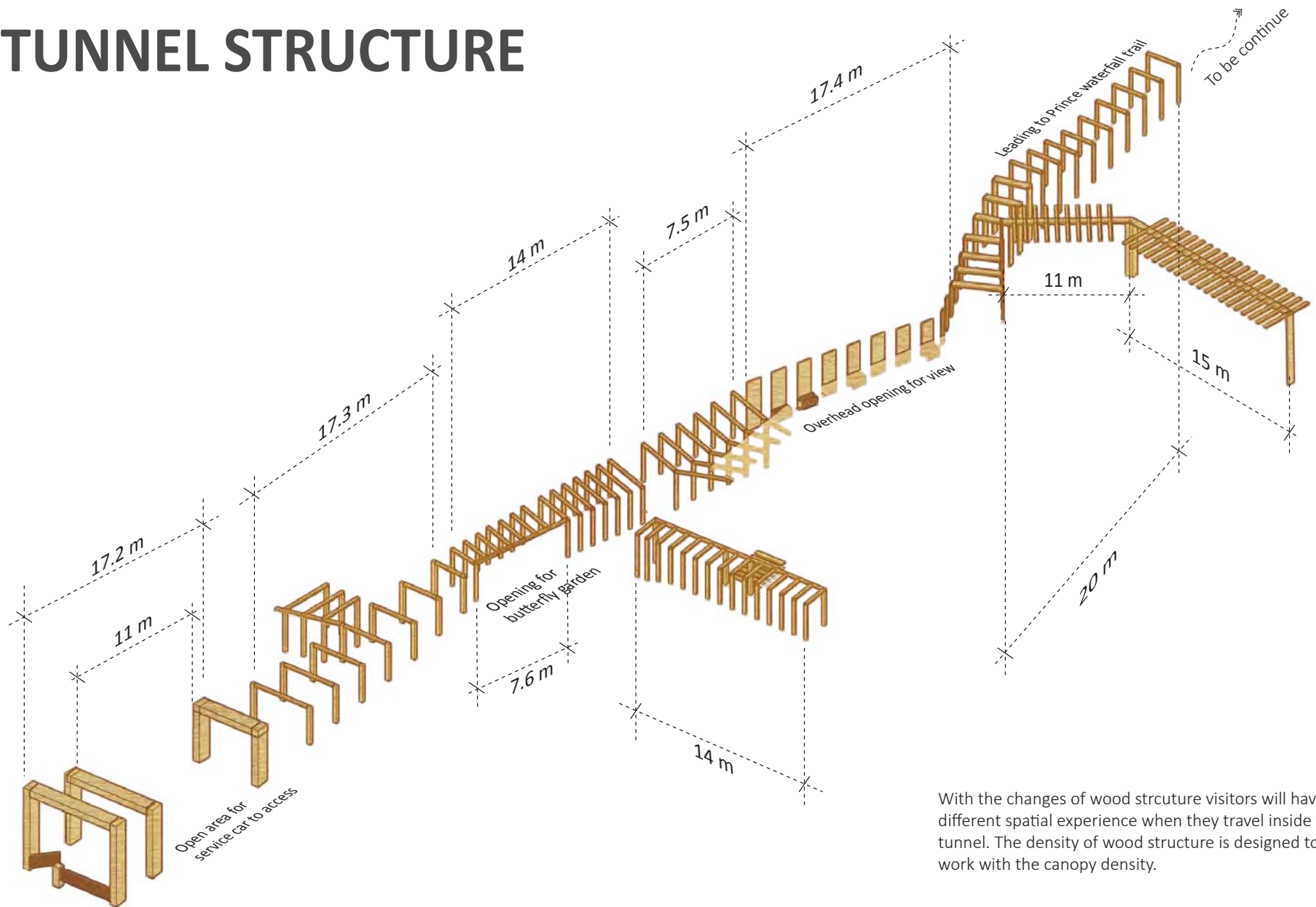
Water pond

Amphitheater

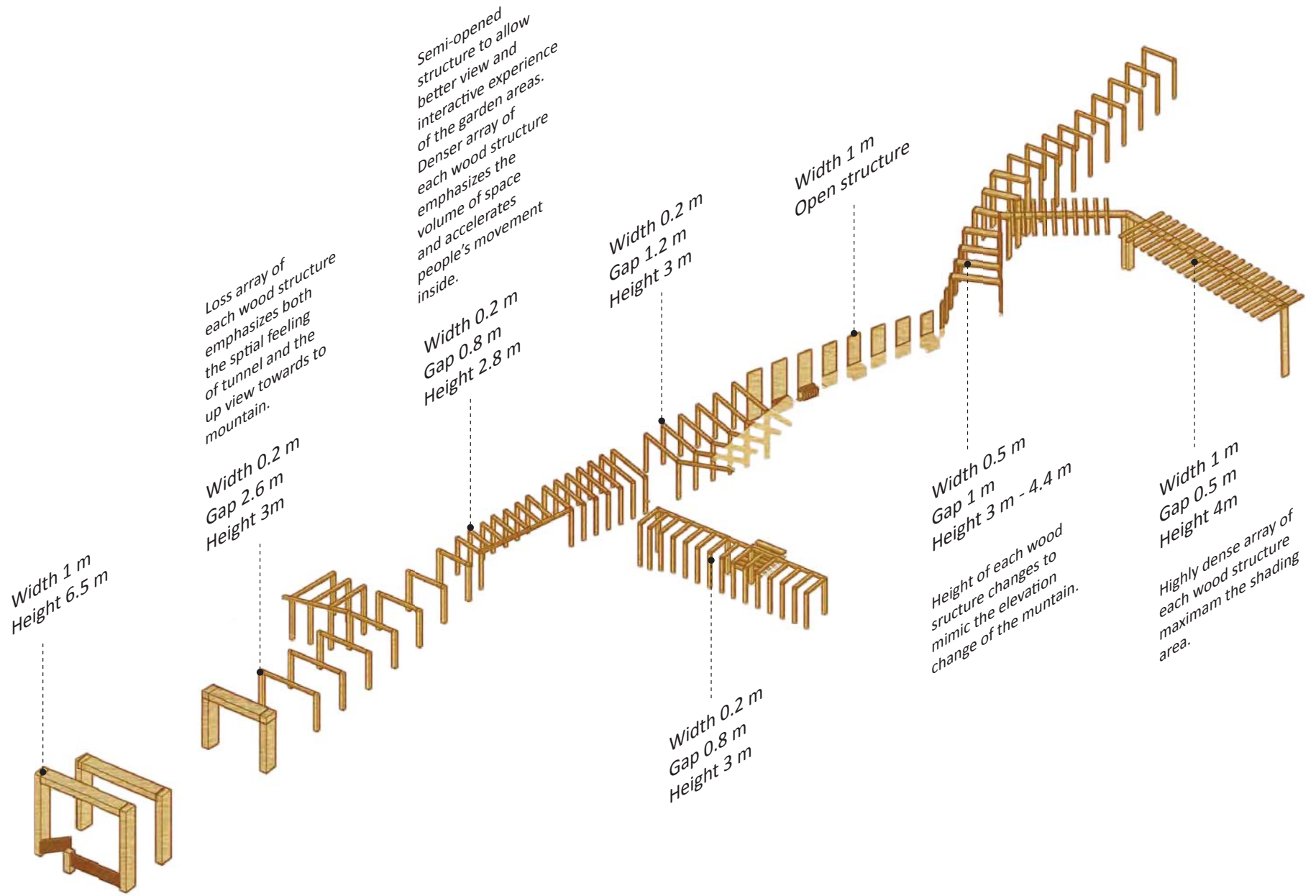
Raised platform

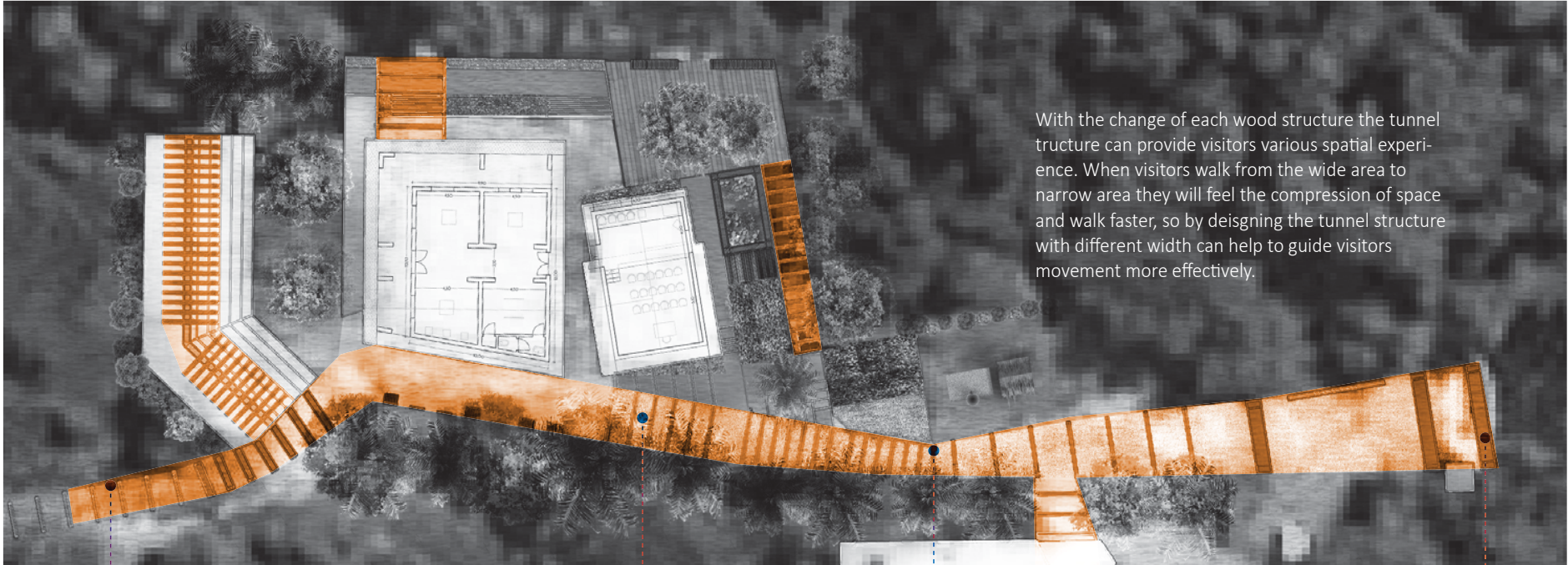


TUNNEL STRUCTURE



With the changes of wood structure visitors will have different spatial experience when they travel inside the tunnel. The density of wood structure is designed to work with the canopy density.





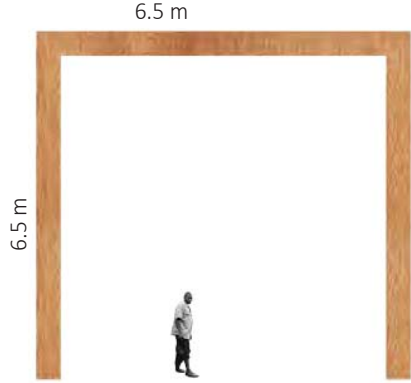
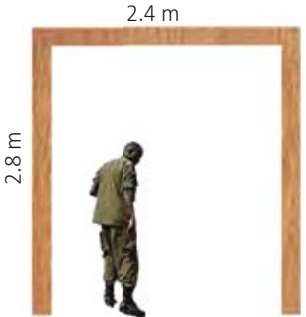
With the change of each wood structure the tunnel tructure can provide visitors various spatial experience. When visitors walk from the wide area to narrow area they will feel the compression of space and walk faster, so by deisgning the tunnel structure with different width can help to guide visitors movement more effectively.

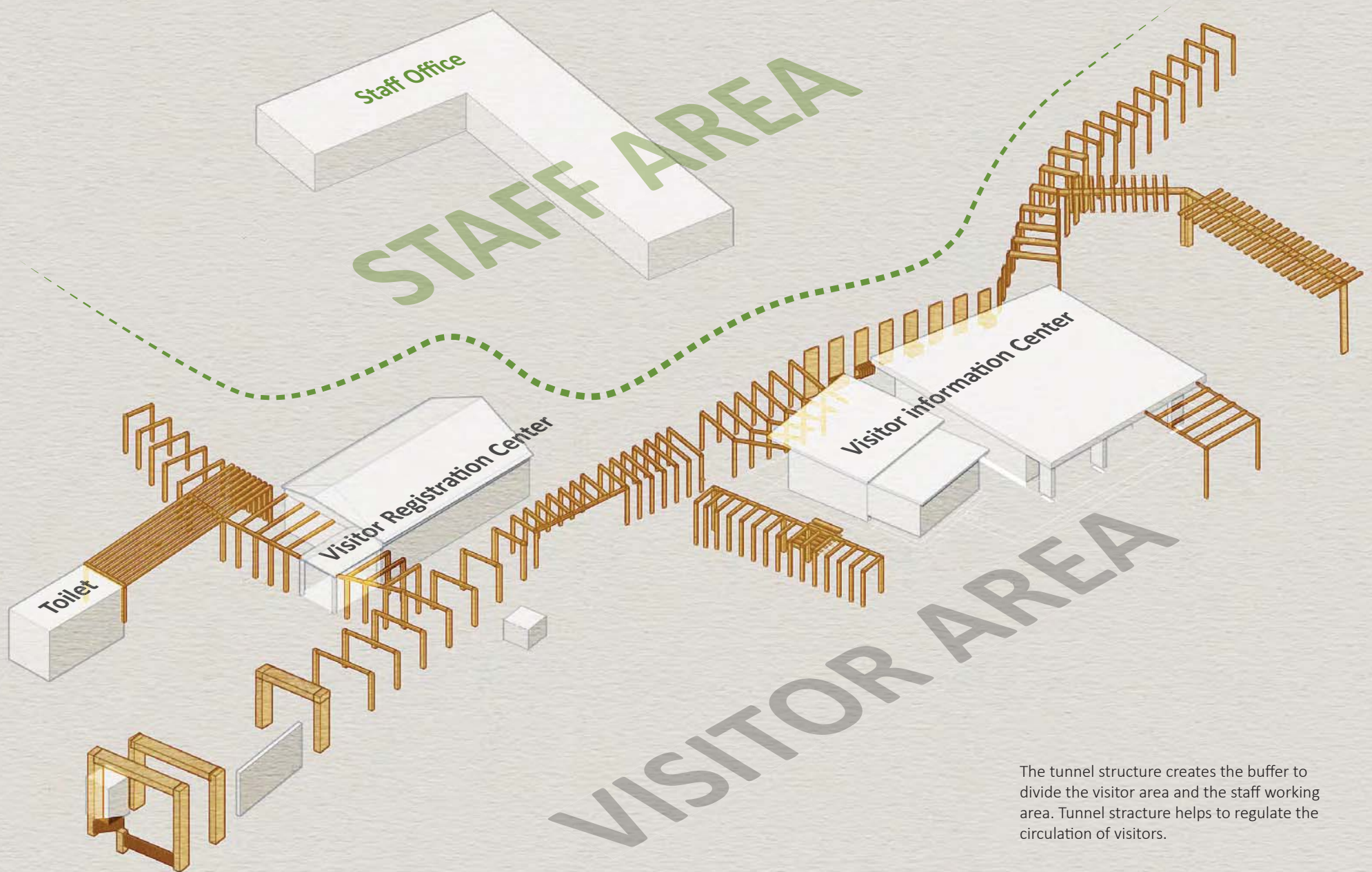
WIDTH 2.5 M

WIDTH 5 M

WIDTH 2.4 M

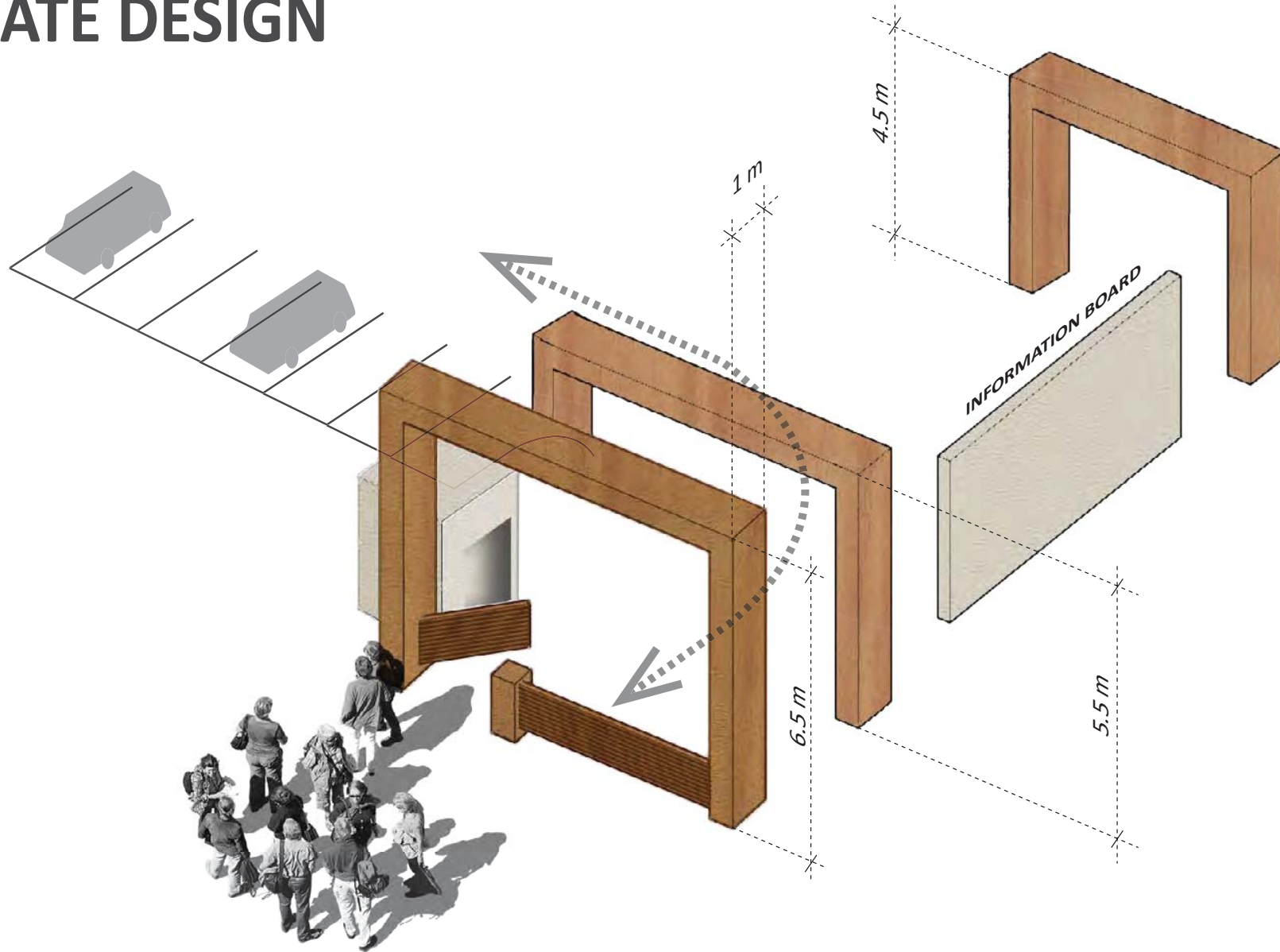
WIDTH 6.5 M





The tunnel structure creates the buffer to divide the visitor area and the staff working area. Tunnel structure helps to regulate the circulation of visitors.

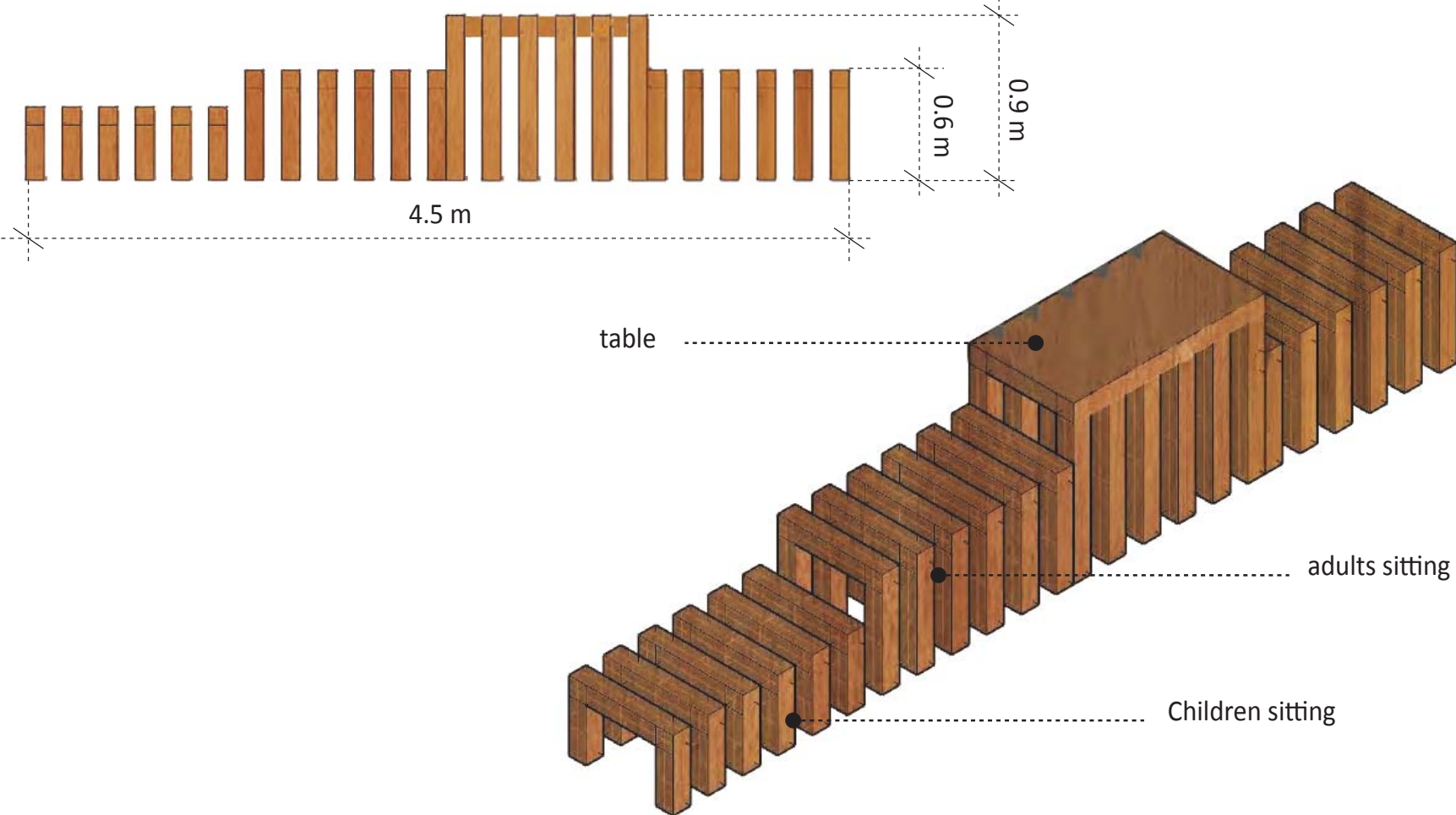
GATE DESIGN



SITE FURNITURE DESIGN



SITE FURNITURE DESIGN



CULTURAL GARDEN

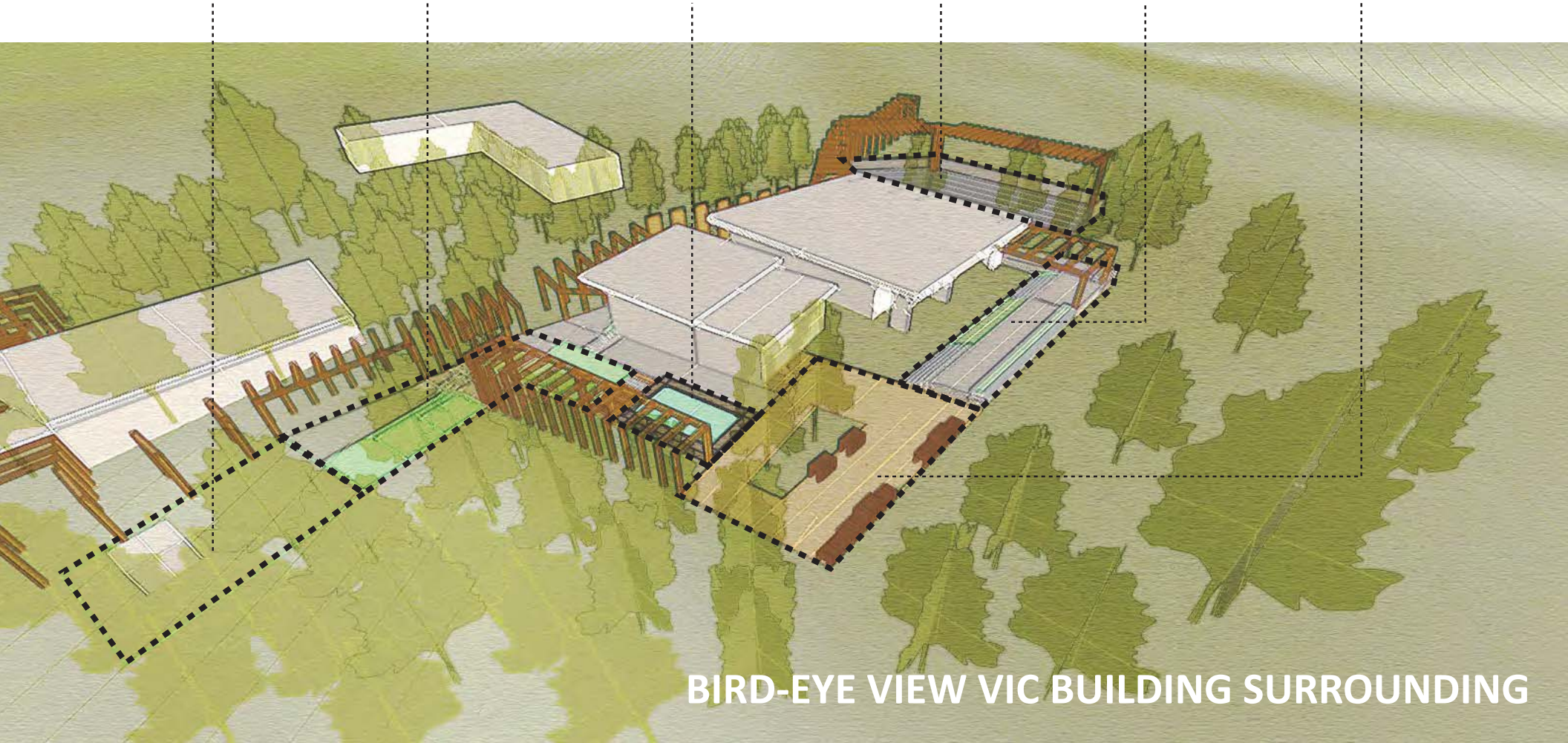
BUTTERFLY GARDEN

WATER POND

AMPHITHEATER

RAISED PLATFORM

OUTDOOR SITTING AREA



BIRD-EYE VIEW VIC BUILDING SURROUNDING



FRONT GATE

New gate design aims to work harmony with the surrounding environment





FRONT GATE

New gate design still keep the similar function with the old gate like the security room, visitor accessing gate and vehicular accessing gate. New information board is designed to provide visitor important information about the park.





CULTURAL GARDEN

Cultural garden provides opportunity for visitors to experience the traditional village culture.





BUTTERFLY GARDEN

With more than 350 species of butterfly in Udzungwa Mountain, a butterfly garden can provide more opportunities for visitors to have interactive experience with butterfly before they enter the mountain.





FRONT VIC BUILDING

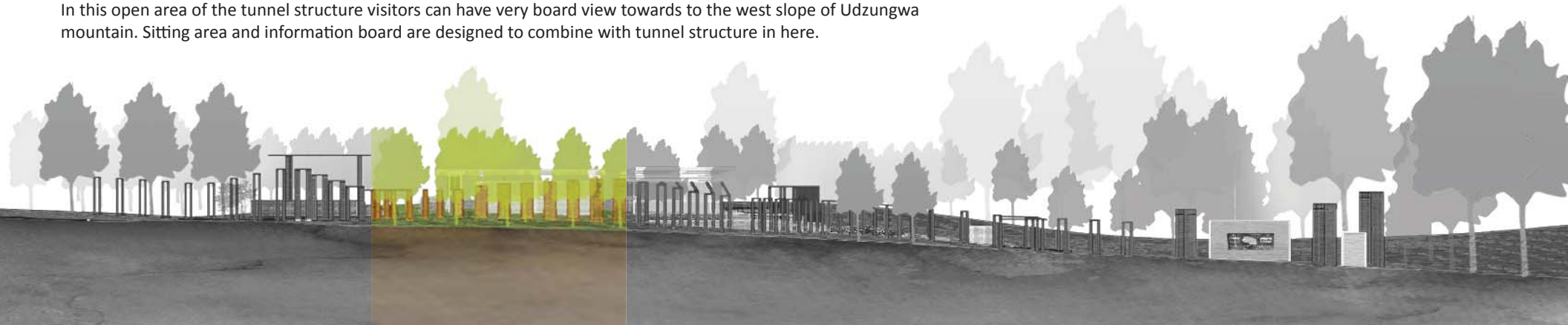
Tunnel structure divides the two spaces in front of the VIC building.





OPEN TUNNEL AREA

In this open area of the tunnel structure visitors can have very board view towards to the west slope of Udzungwa mountain. Sitting area and information board are designed to combine with tunnel structure in here.





AMPHITHEATER

Amphitheater provides outdoor studying area while at the same time allow people to have open view to the mountain. Looking outside from the building the terrace structure and the natural environment will be connected together to emphasize the layers of plants and mountain.





PAINTED TUNNEL

Around the area that lead to Prince Bernard trail the tunnel structure can be painted by local students to have more interesting transition to the forest setting. Painting festival can also be held each year during the earth protect day to raise local awareness of conservation.





OUTDOOR SITTING AREA (back building)

Small garden like outdoor sitting area with special designed benches.



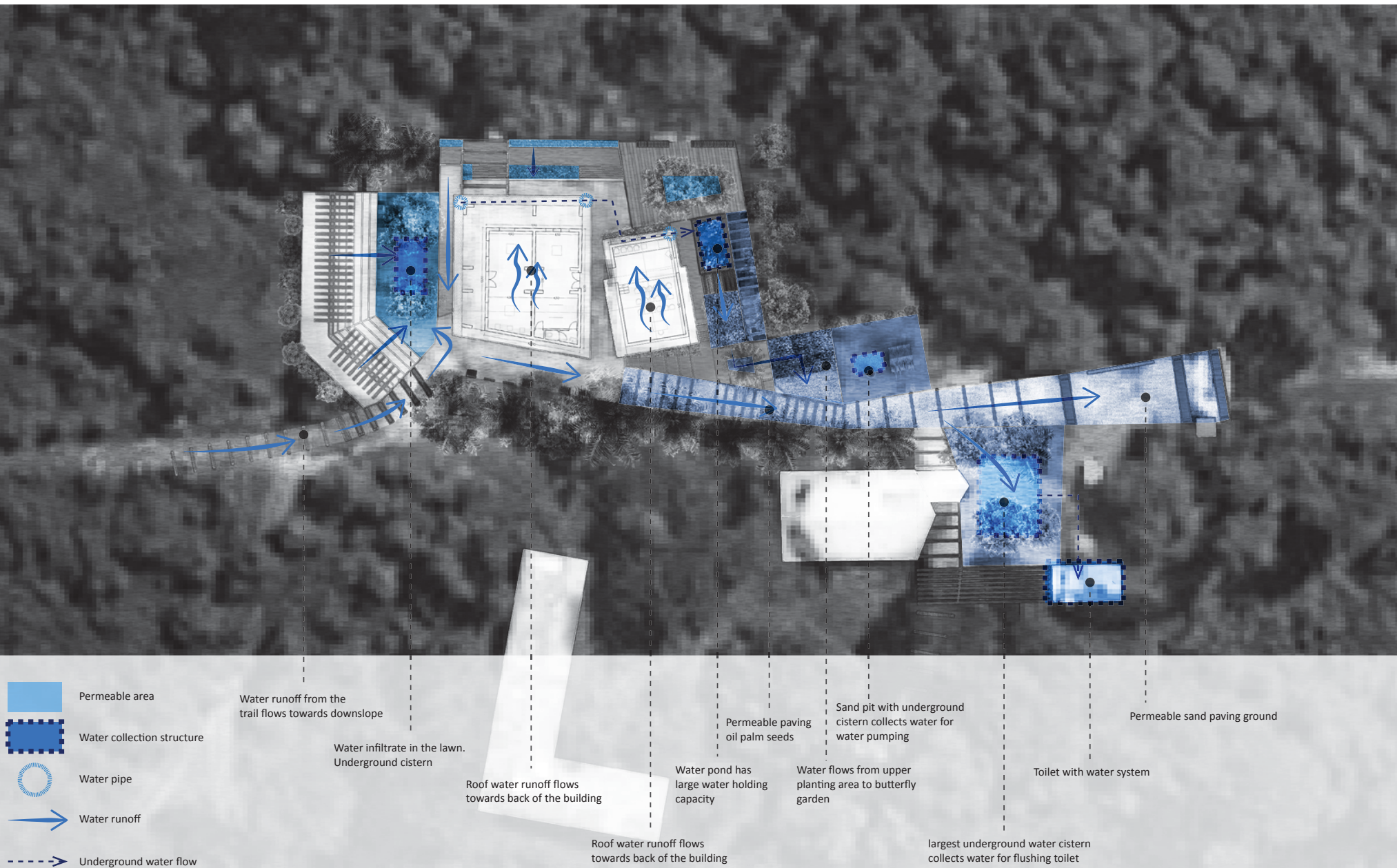


RAISED PLATFORM (back building)

Raised platform provides people a good view towards to the extension area of the mountain.



STORMWATER MANAGEMENT



BUTTERFLY GARDEN PLANT LIST

Legumes family

Lacunae curnta (sunga)

Gurtenbergia cordifolia

Comelius bengalensis (Ng'olowoga)

Msosokole

Unwimwi

Matwewe

COLOR PALETTE FOR BUTTERFLY GARDEN PLANT



ONSITE TREE SPECIES LIST

Tabernaemontana odoratissima

Saba florida

Entada spp.

Erythrophleum suaveolens (Mwahie tree)

Albizia gummifera (Mtanga tree)

Polyalthia verdcourtii (Mkovati tree)

Ficus lutea

Mwkamis obtusifolia

Voacanga Africana

Sorindeia madagascariensis

Markamis obtusifolia

Reccnodendron heudelotii

Harisonic abysinica

Grewia spp.

Ttema orientalis

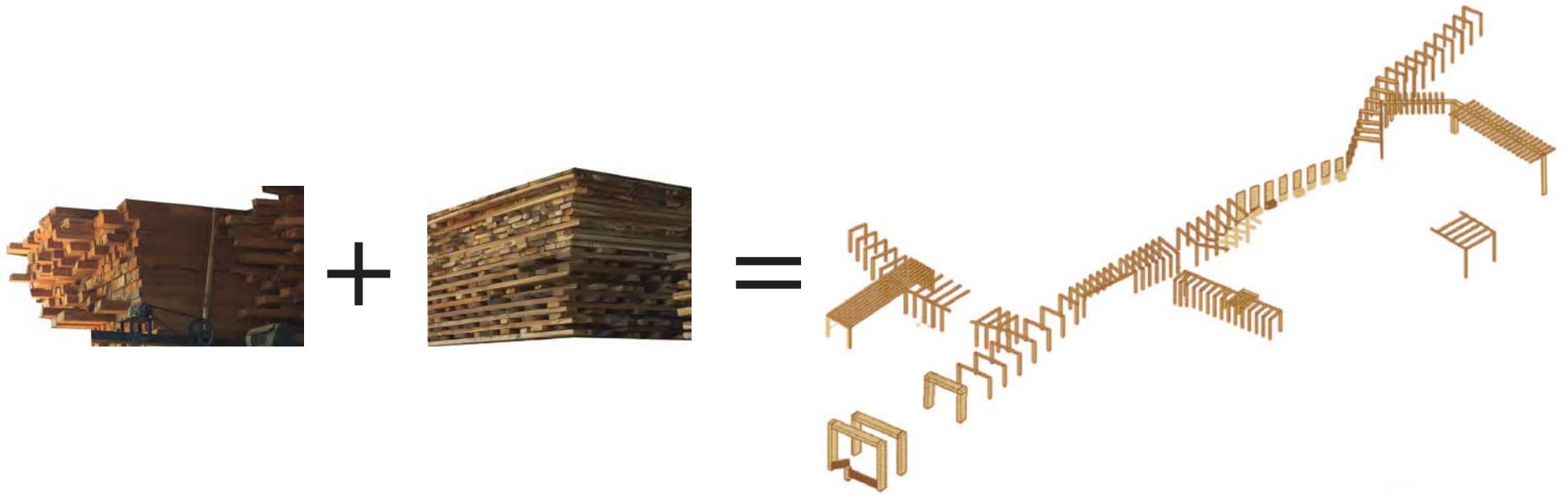
Albizia gumifera

Euclea diinorum

Dracaena maanii (African blackwood)

Reference: Ruben Mwakisoma, Mohamed Kambi, Aggrey Uisso

LOCAL MATERIALS TEAK WOOD



LOCAL MATERIALS

SAND, OIL PALM SEED



MAINTENANCE

Tunnel structure & Site furniture:

All the wood structures will be painted with antiseptic paint so they can have better resistance to the weather.

Common maintenance for these structures will mainly be:

- Cleaning
- Getting avoid of ants
- Getting avoid of climbers.

Plants:

Most of the plants includes in this project are existing plants, so the plants do not need specific different maintenance than usual.

However, staffs need control the grow of climbers around the wood structure.

Water pond:

During the rainy season, water pond need to be carefully maintained to get avoid of the mosquito.