

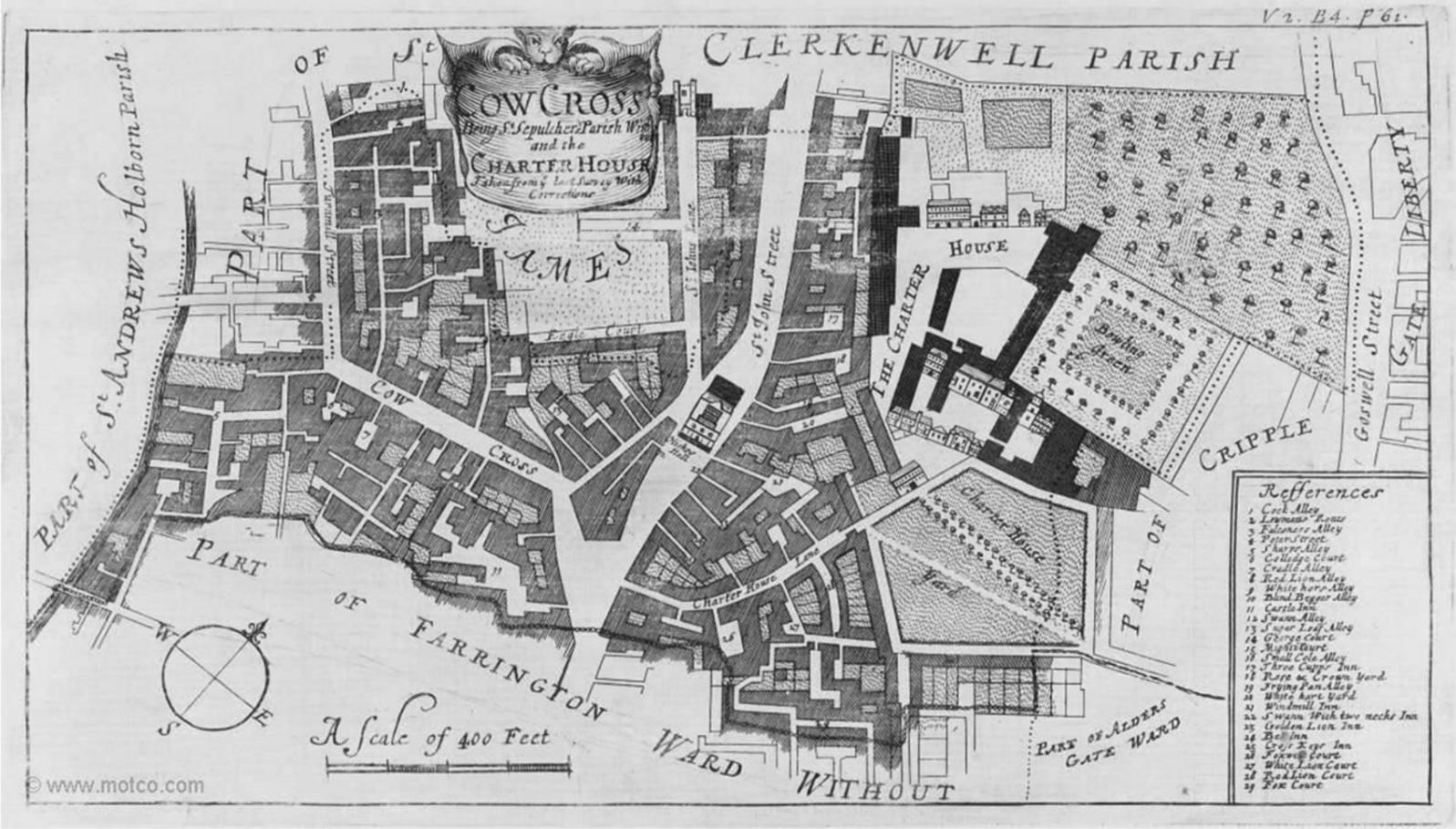
Healing Hotel

Platform Interior Future

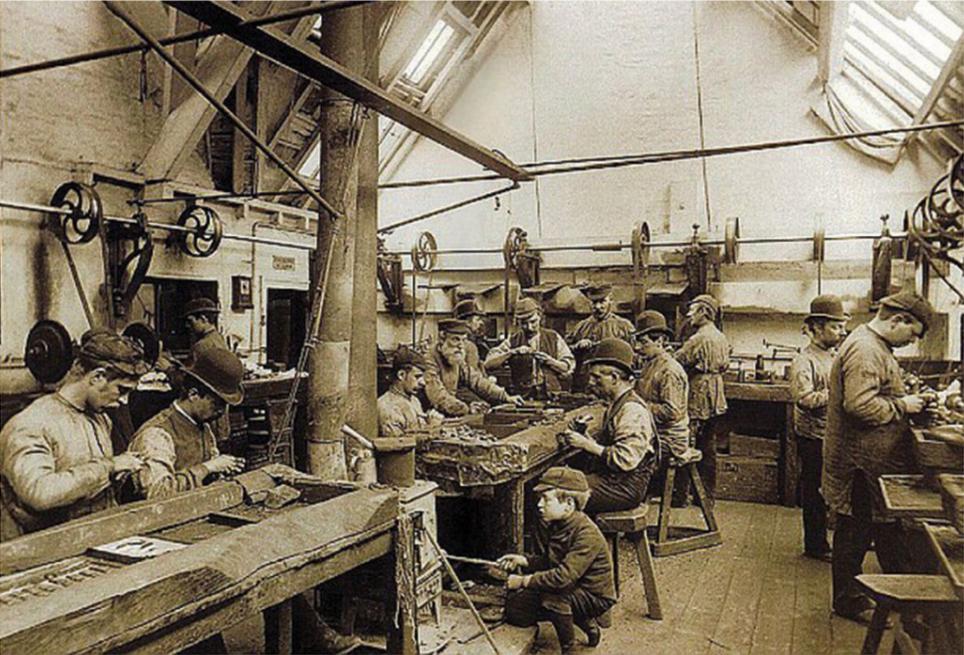
Tutor Jenny Jones

Name Jixiao Wang

Clerkenwell history



Since the beginning of the 18th century, Clerkenwell was the centre of clock- and watch-making.

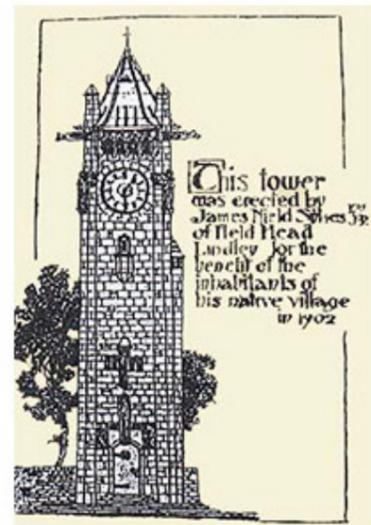


Watch development

C. 1500. BC



Before 18 century



18 - 21 century

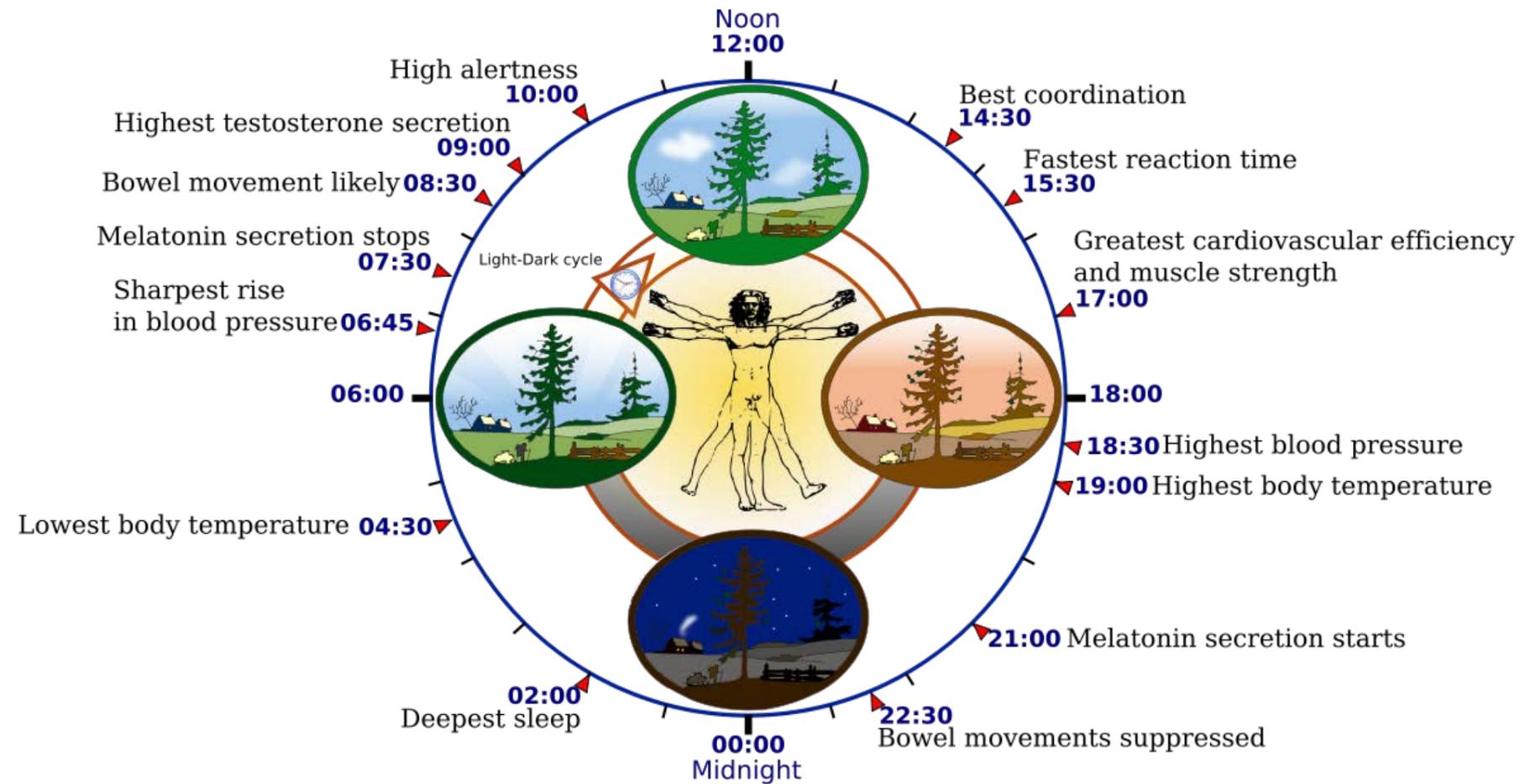


21 century - future



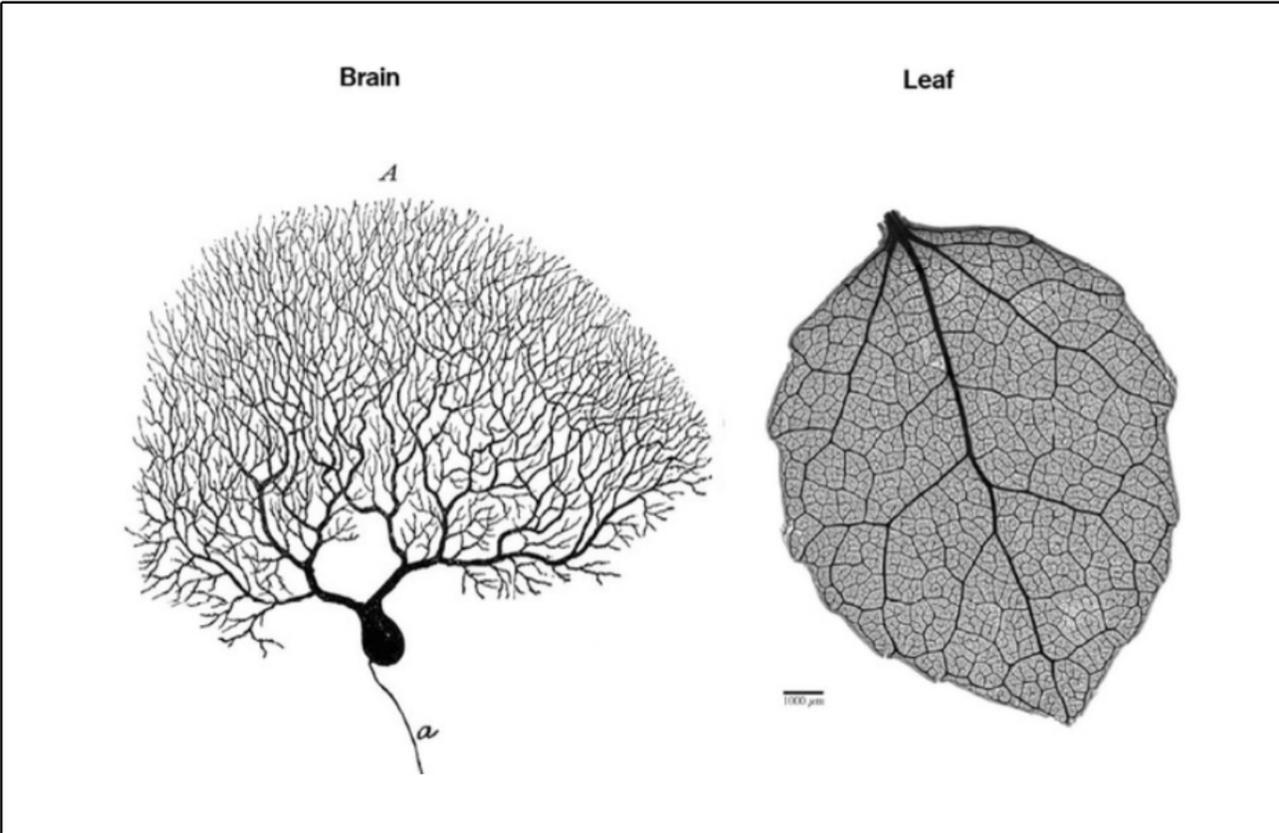
The meaning of time measurements would not be only numbers and pointers, it is about healthy routine and positive productivity.

Healthy routine and circadian rhythm

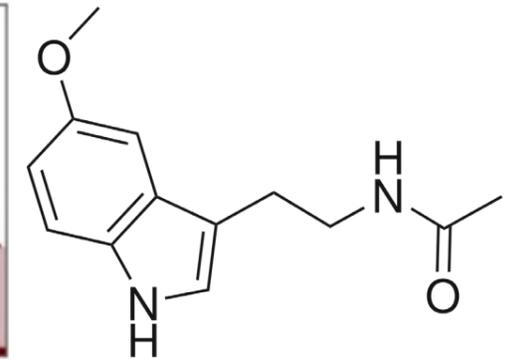
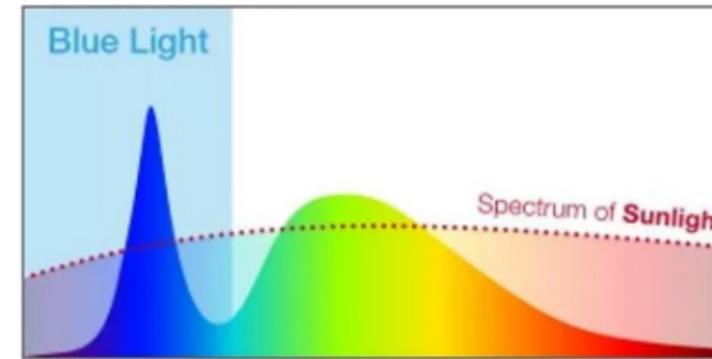
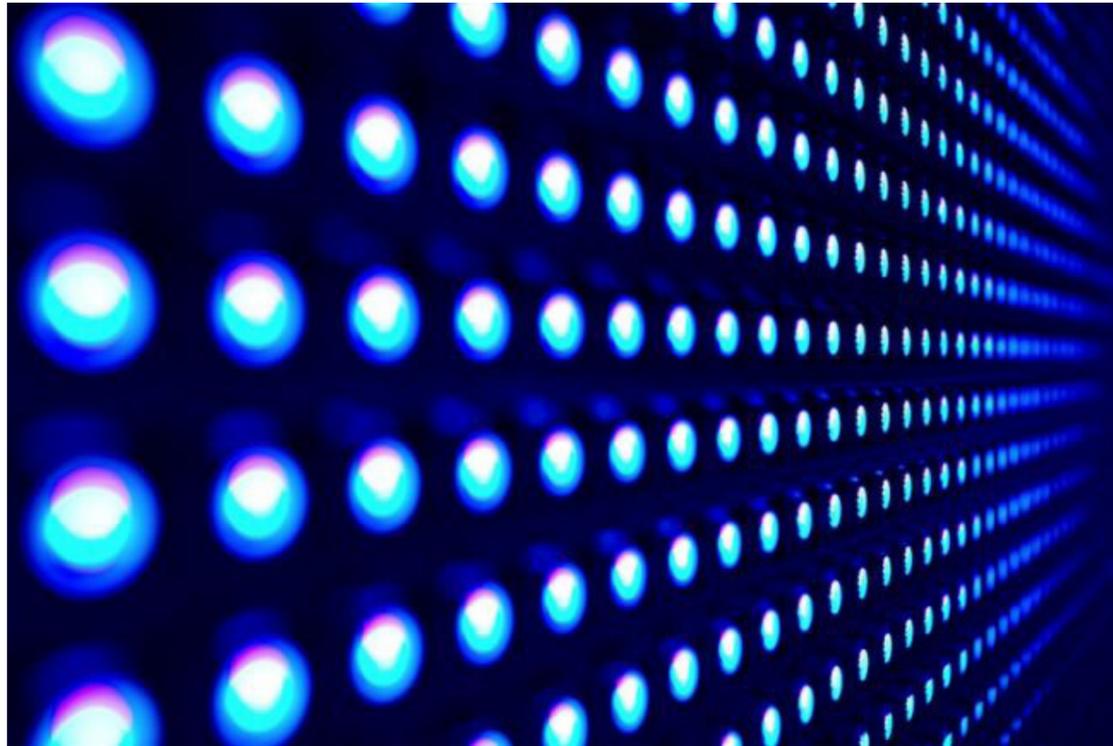


Circadian rhythm are physical, mental, and behavioral changes that follow a daily cycle. It control the timing of many physiological processes. They determine sleeping and feeding patterns, as well as brain activity, hormone production and cell regeneration.

Living environment

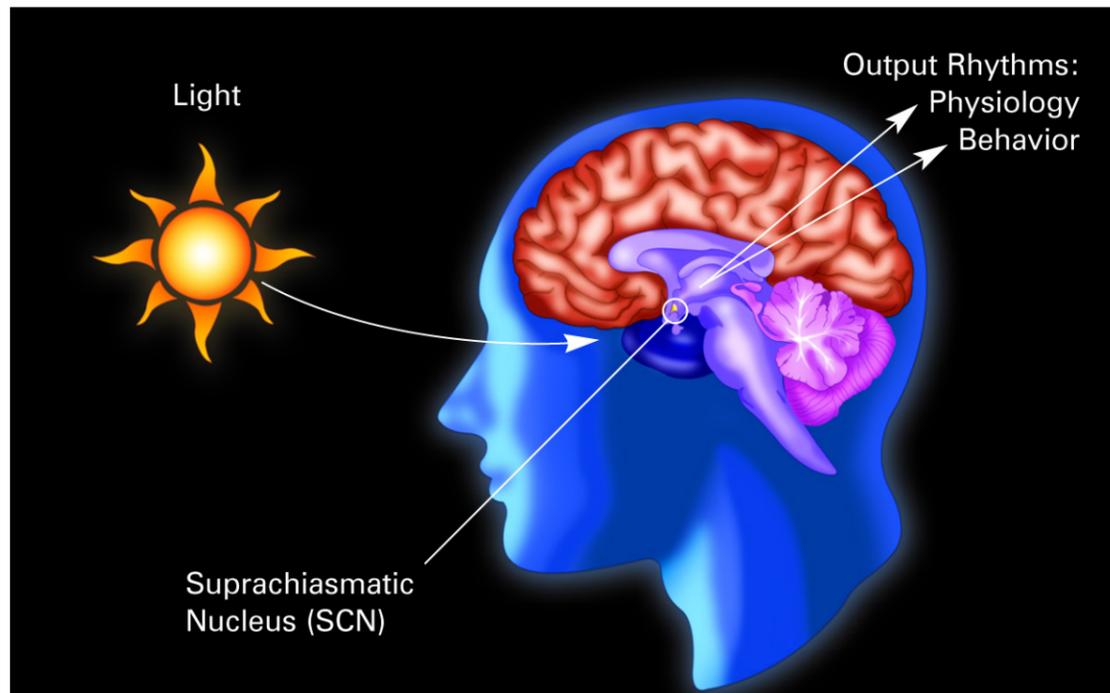


Lighting and Circadian Rhythm Sleep Disorder

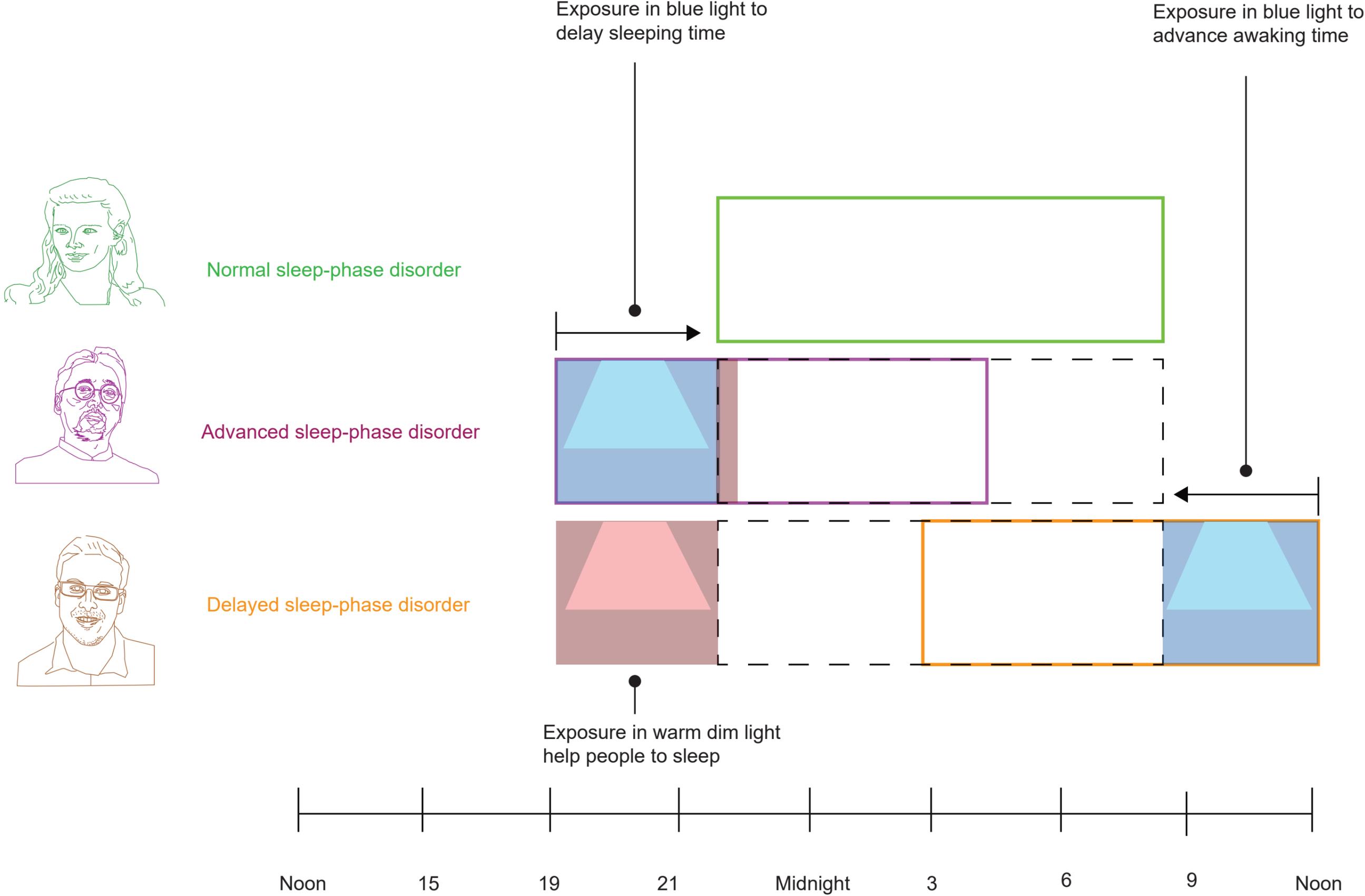


All artificial light, including LEDs, fluorescent bulbs and incandescent bulbs, can interrupt normal sleep patterns. Blue and green light will stop body produce melatonin, which is the key element for sleeping system.

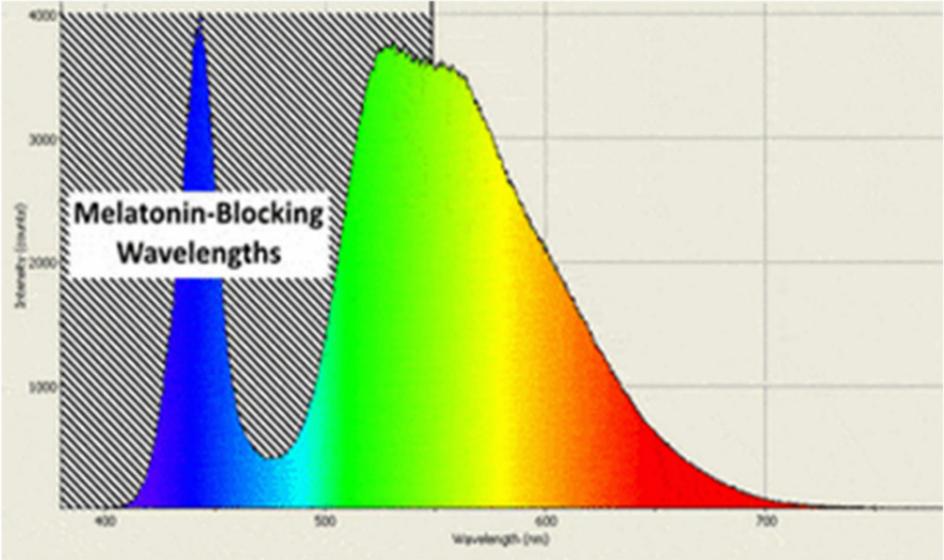
Our Circadian rhythms synchronise with the physical environment over a 24-hour period. They are influenced by social and work schedules and by various photic and nonphotic stimuli. When misalignment occurs (jet lag, shift work, “out of synch”) a diagnosis of CRSD- Circadian Rhythm Sleep Disorder can be made after extensive testing and recording of sleep patterns. CRSD can lead to cognitive impairment, mood disturbances, and increased risk of cardiometabolic disorders.



Lighting therapy for CRSD

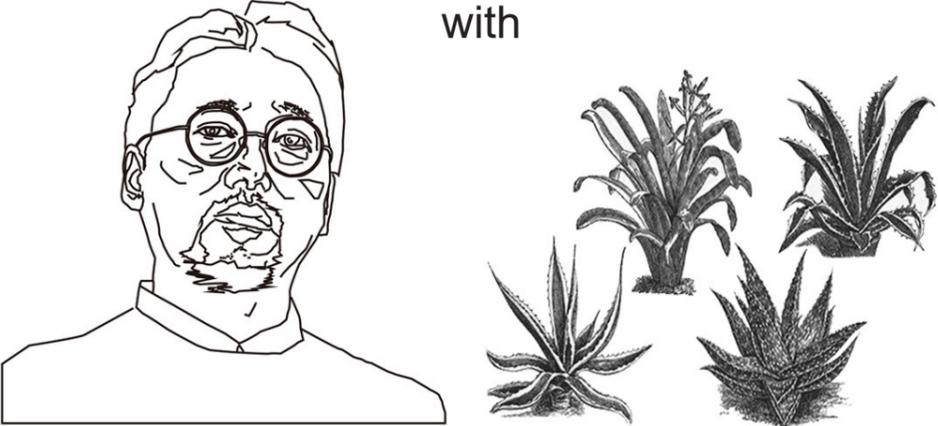


Indoor light between human and nature



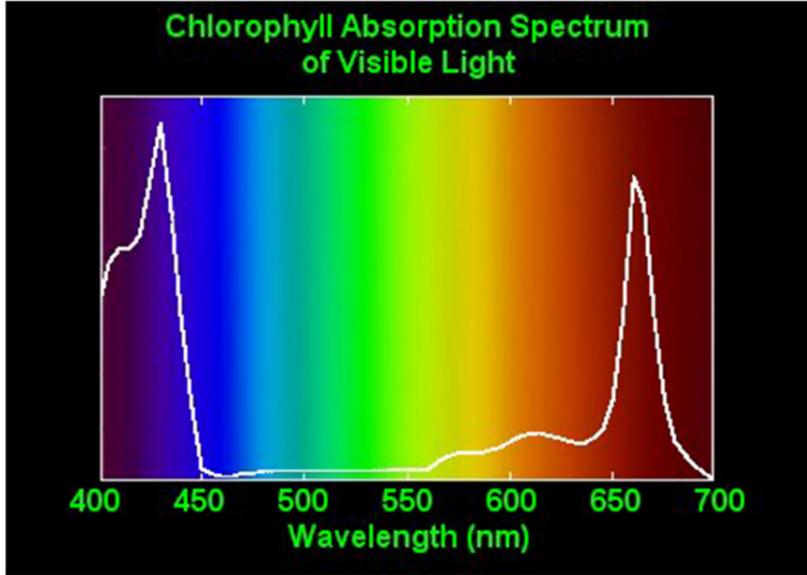
LIGHT

with



HUMAN

PLANT



Indoor light between human and nature



Image from Rasa Smite



Making therapy for changing sense of time

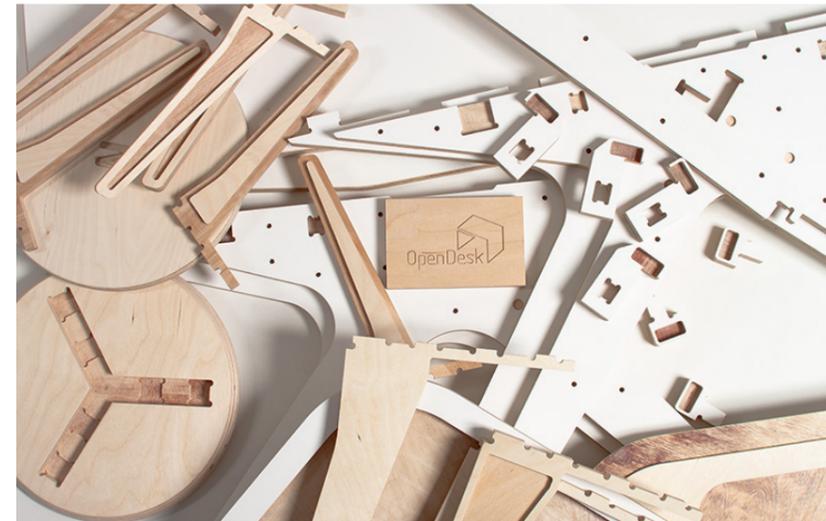
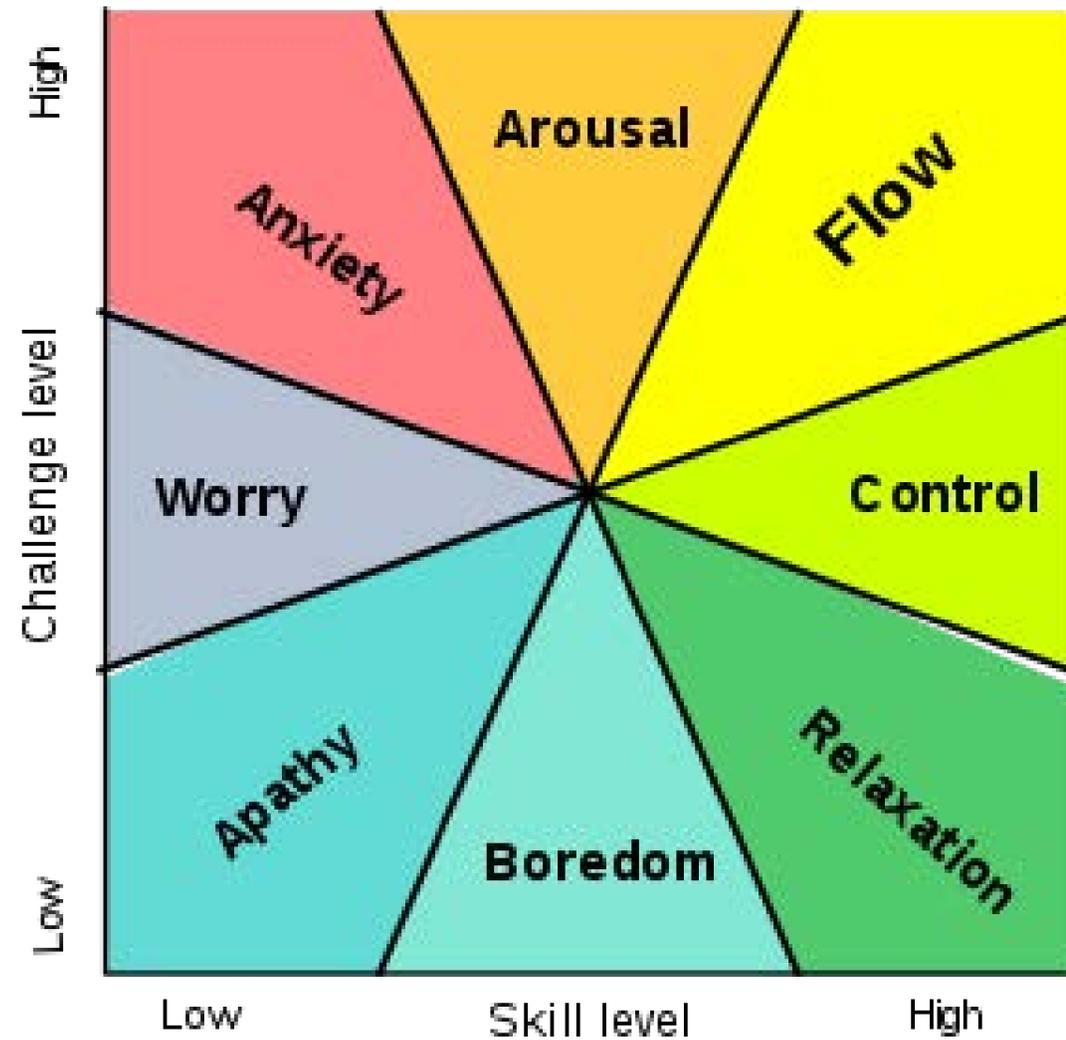


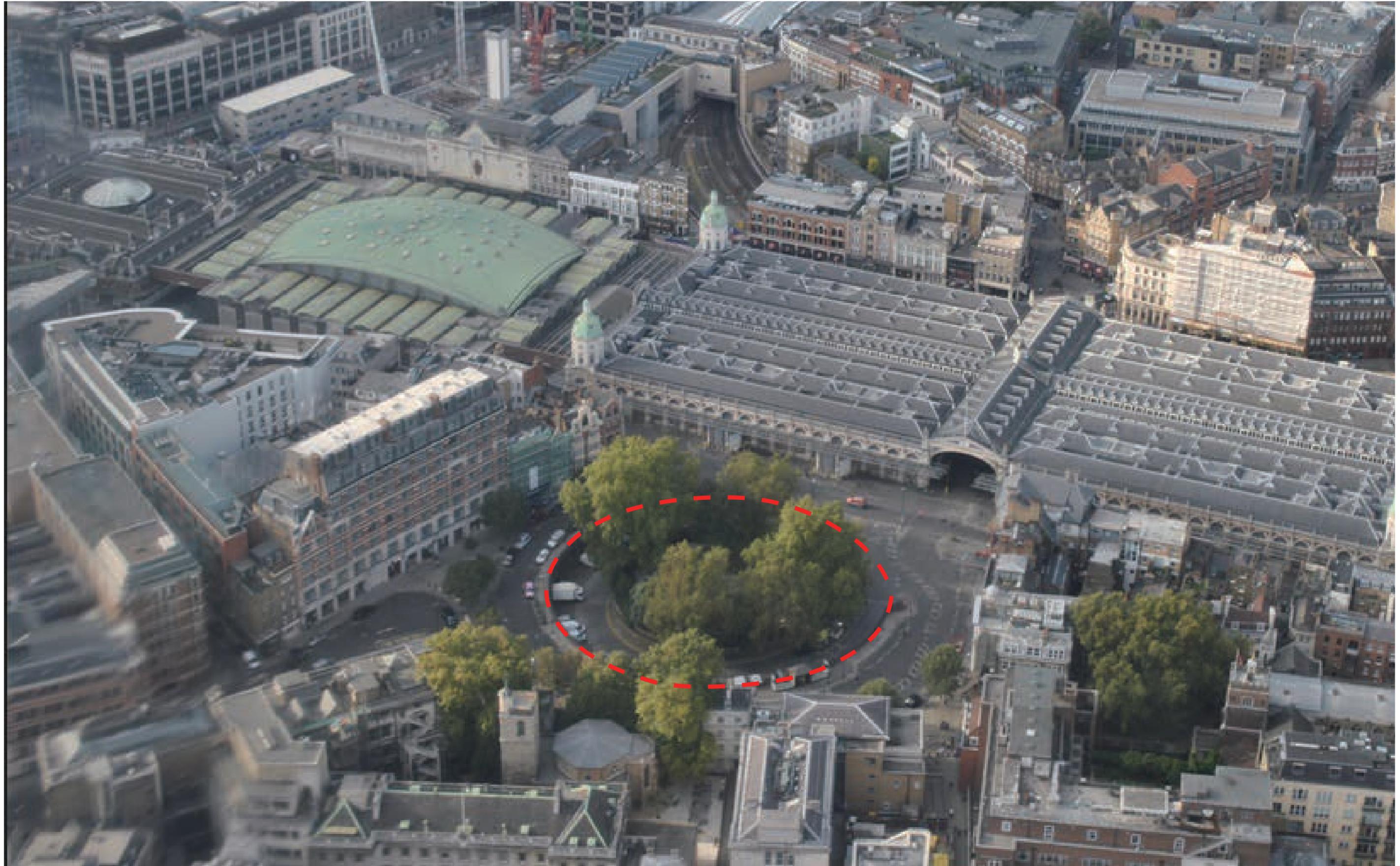
Image from Open desk



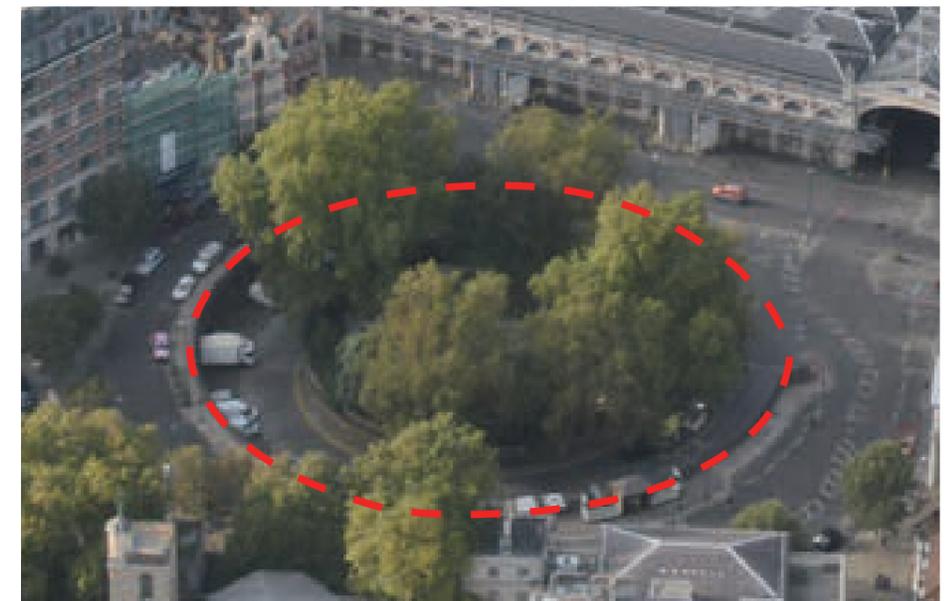
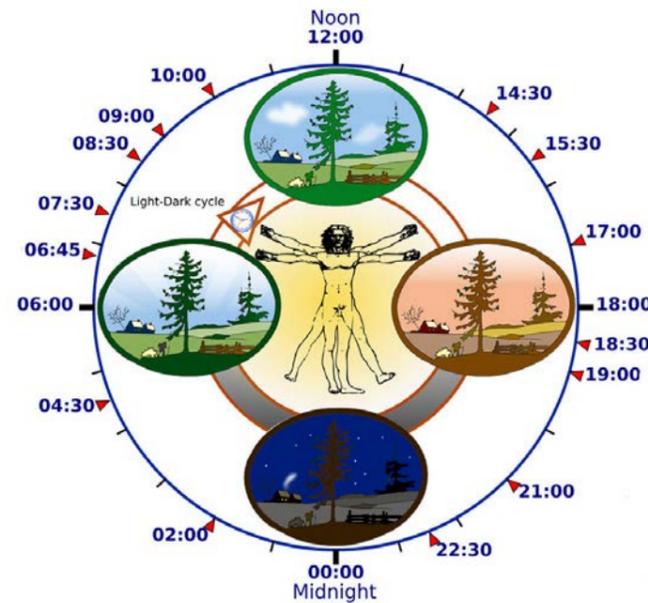
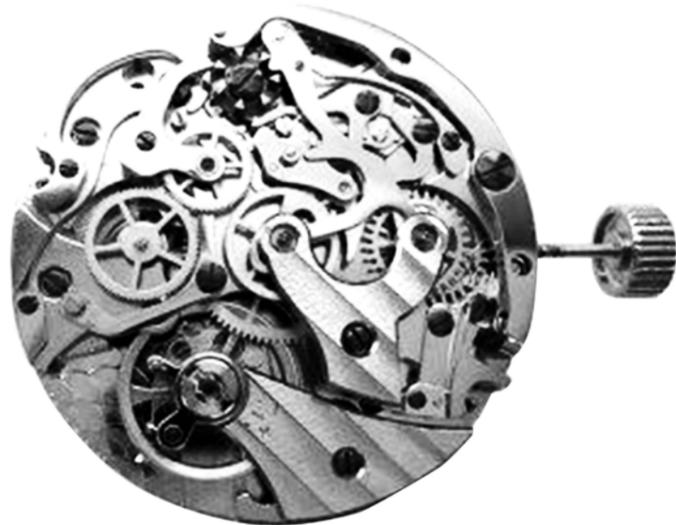
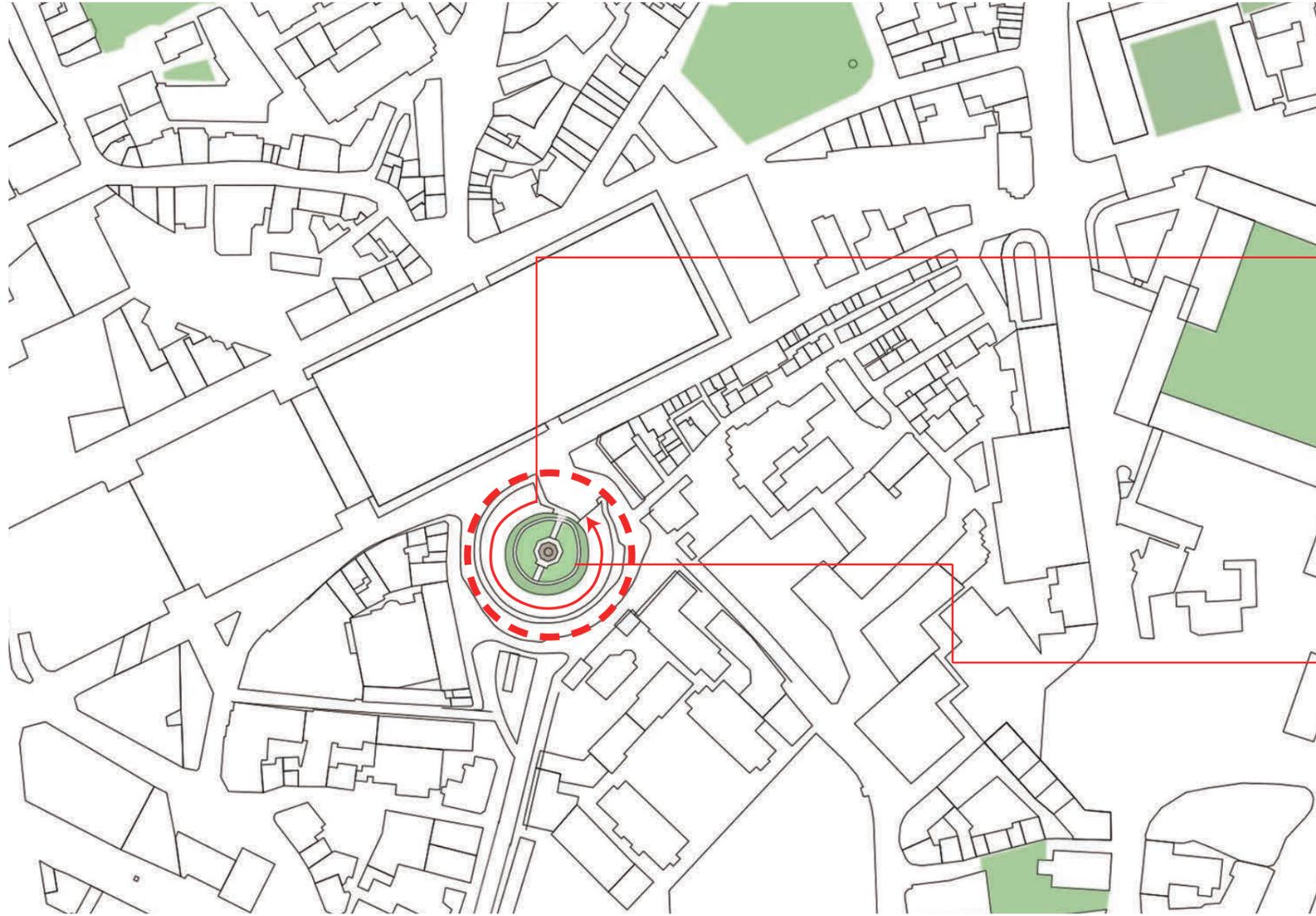
Image from tech save us

Flow is a positive psychology, a flow state is a mental state in which a person performing an activity is fully immersed in a activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity.

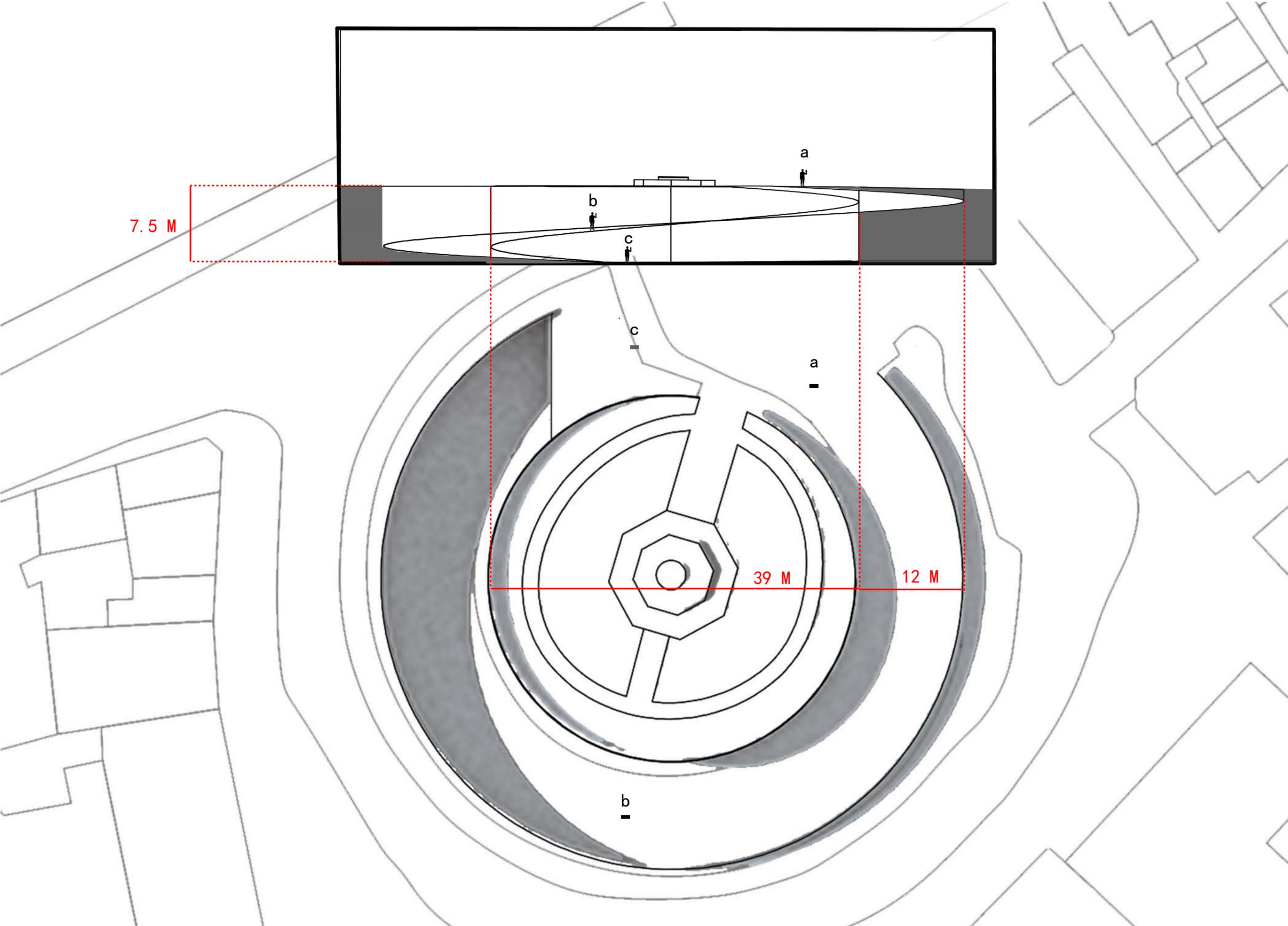
Site. Clerkenwell Smithfield. Rotunda garden



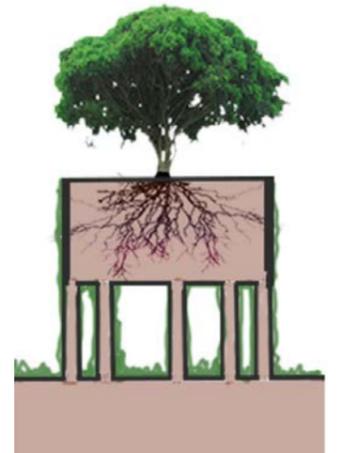
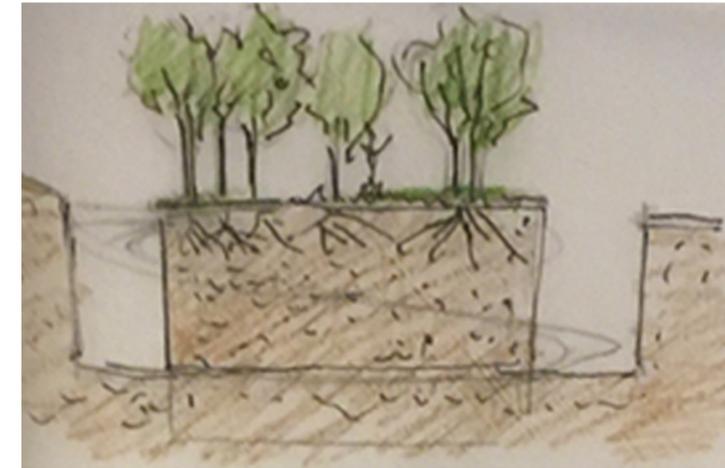
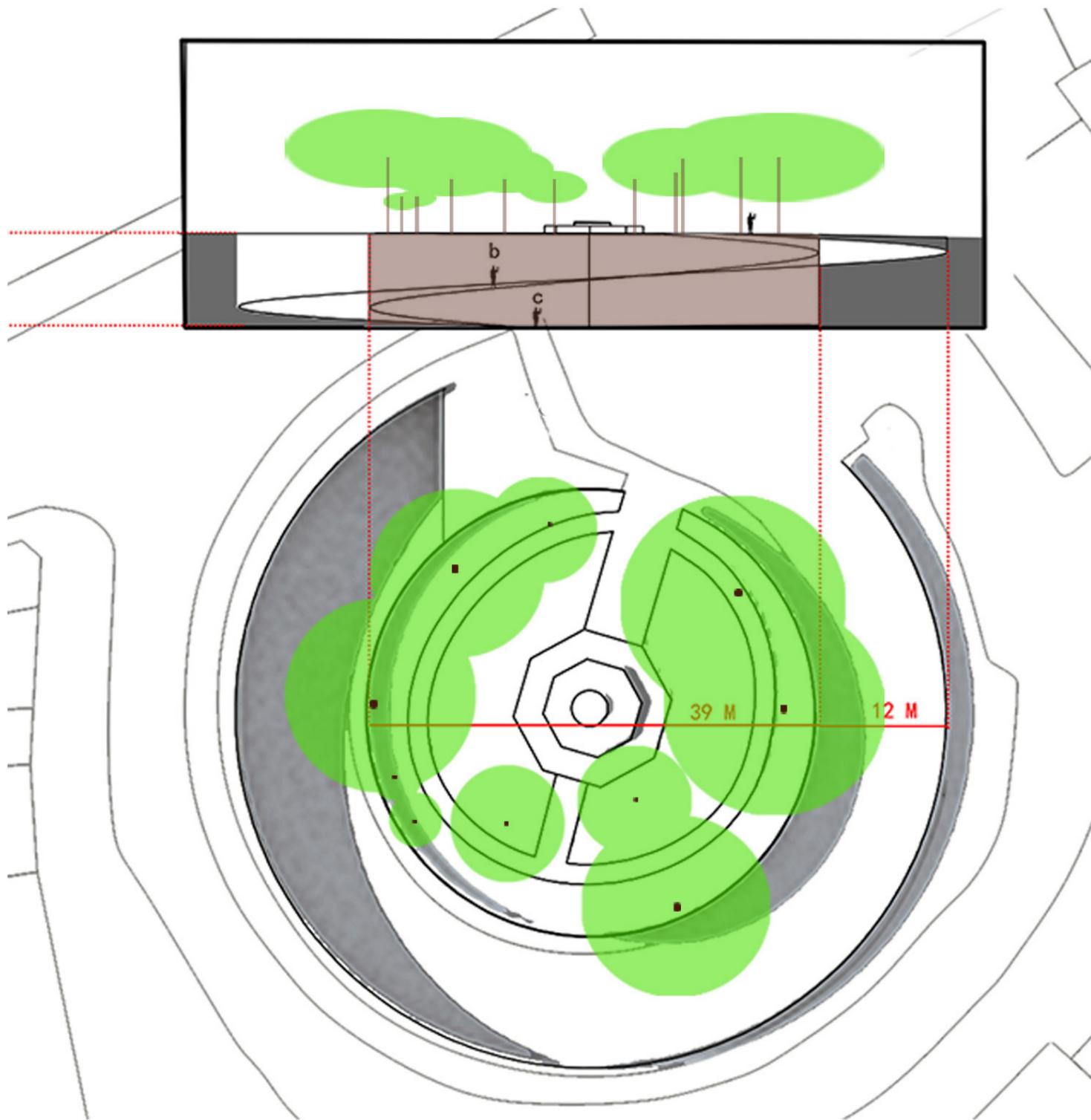
Site analyze



Site dimension



Keeping trees of park



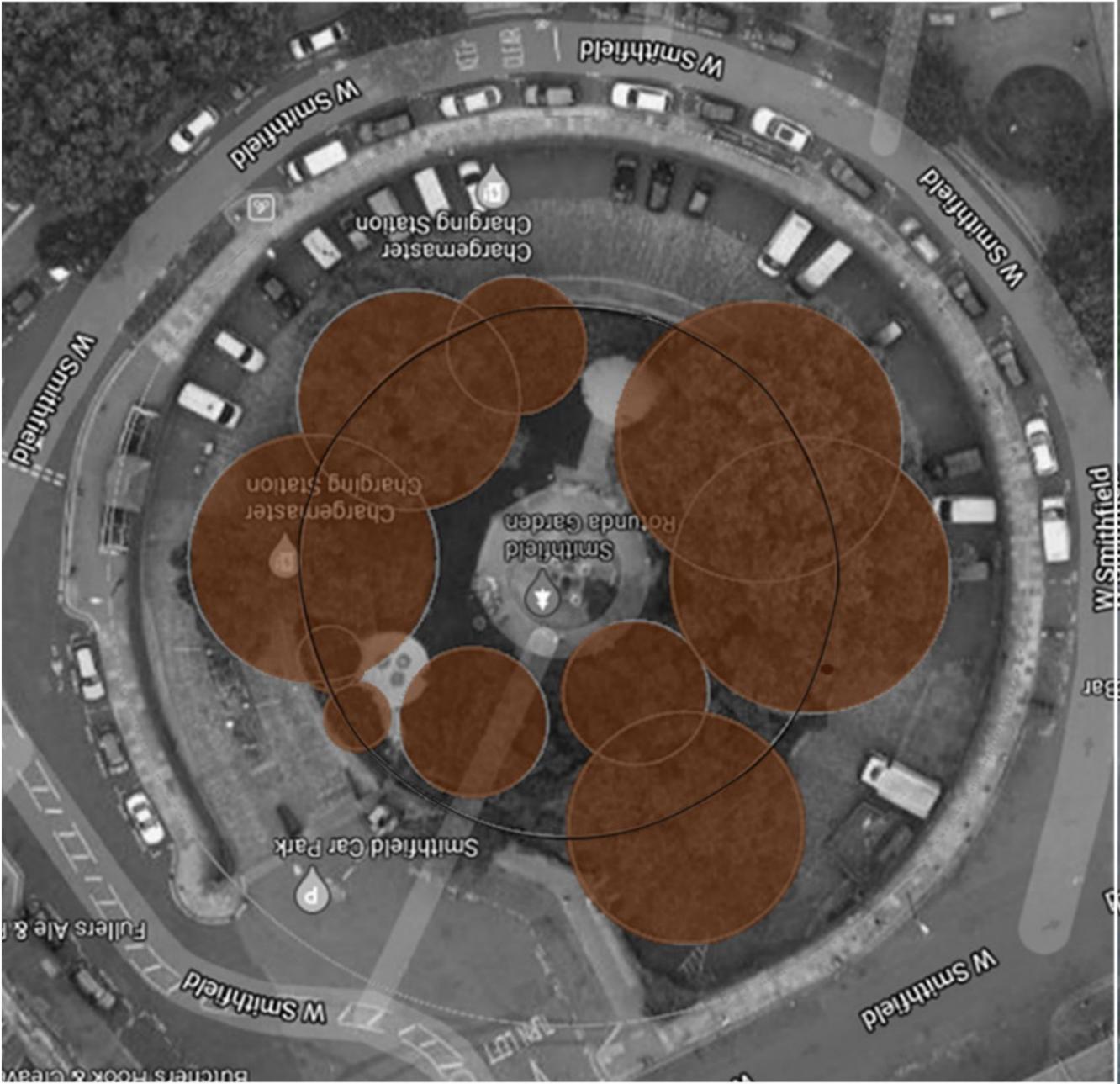
I use the space under the park, and create containers for roots for keeping original trees in the park.

Design generation



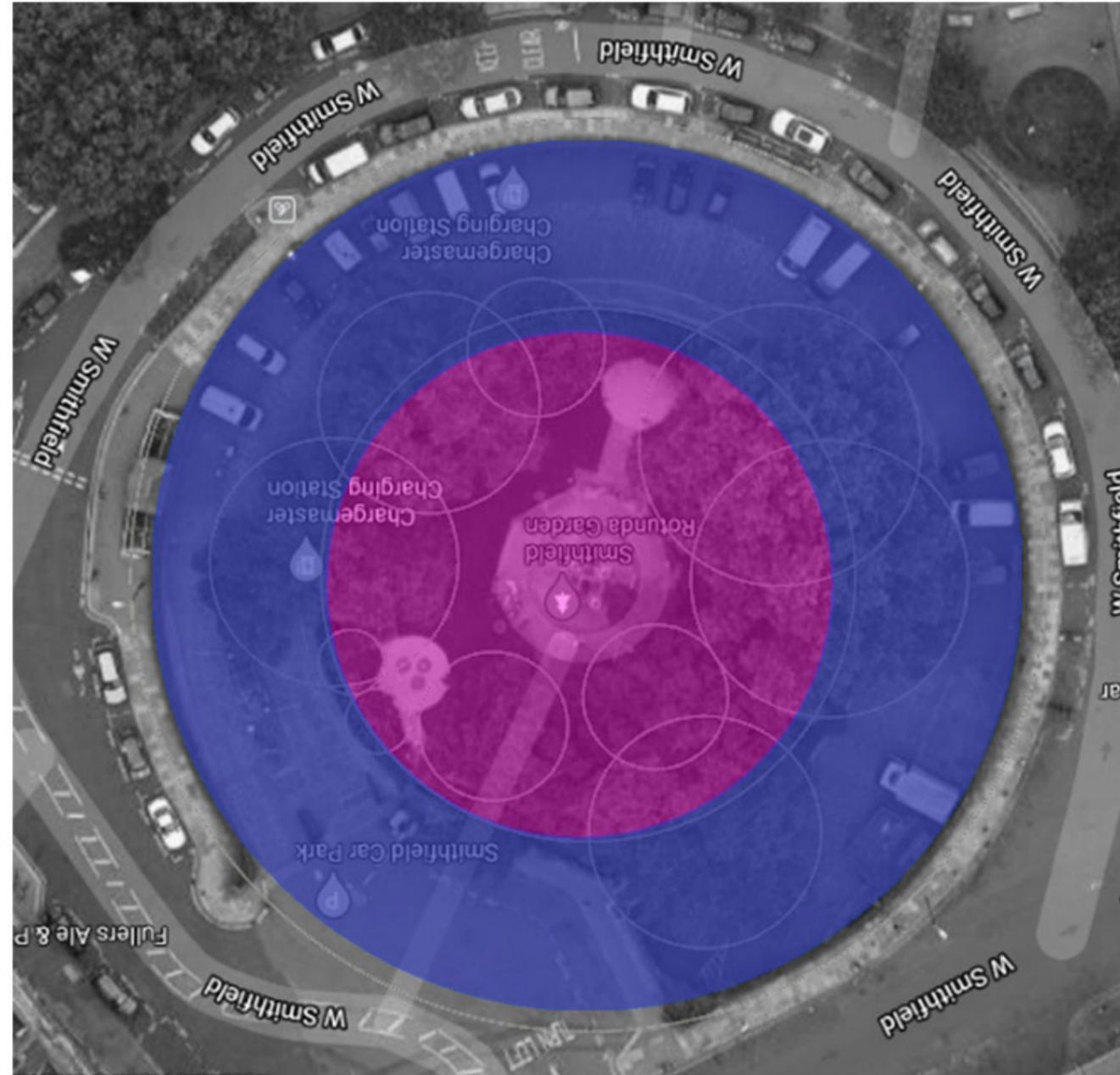
Drawing crown area

Design generation



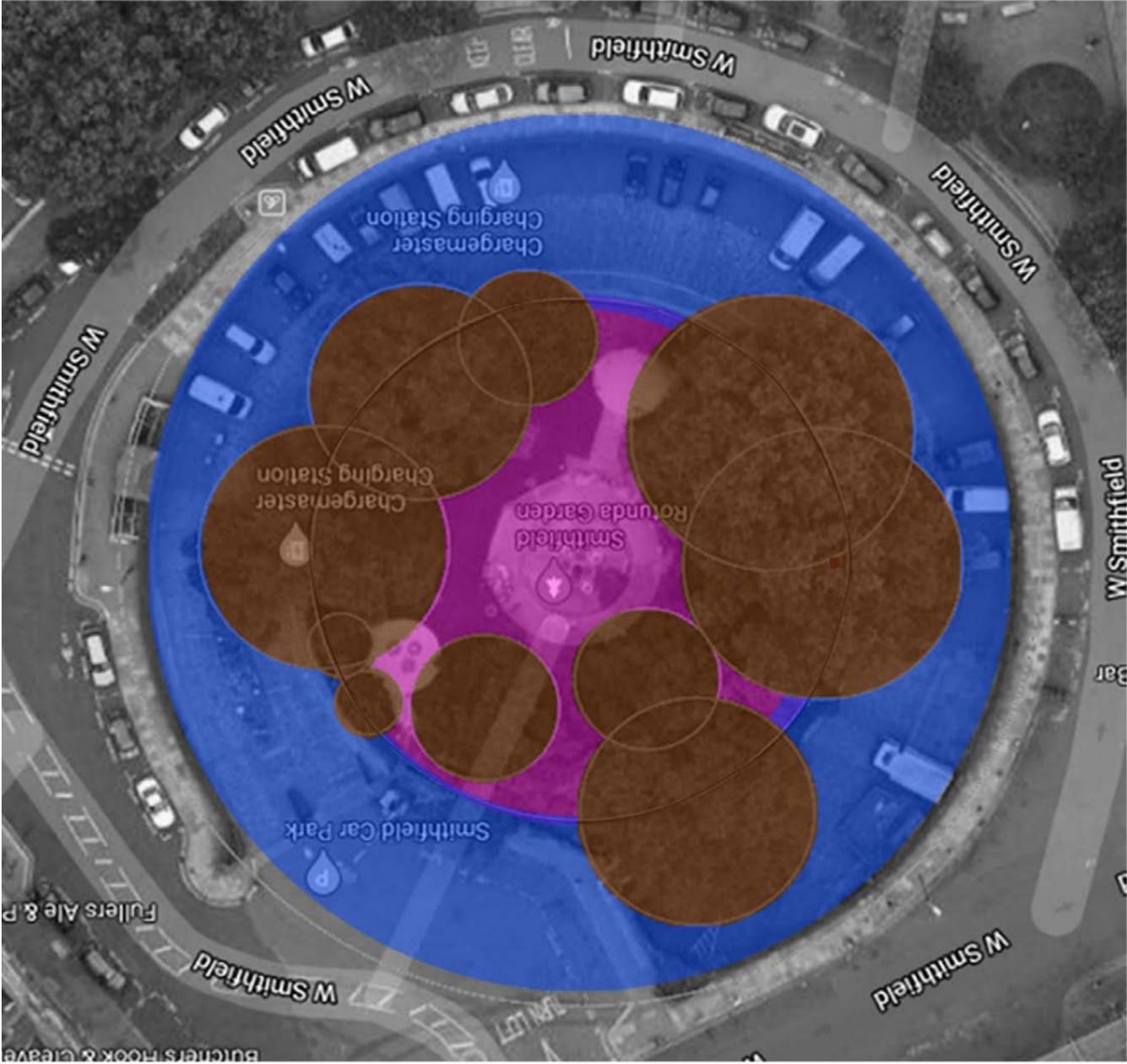
Estimating roots area

Design generation



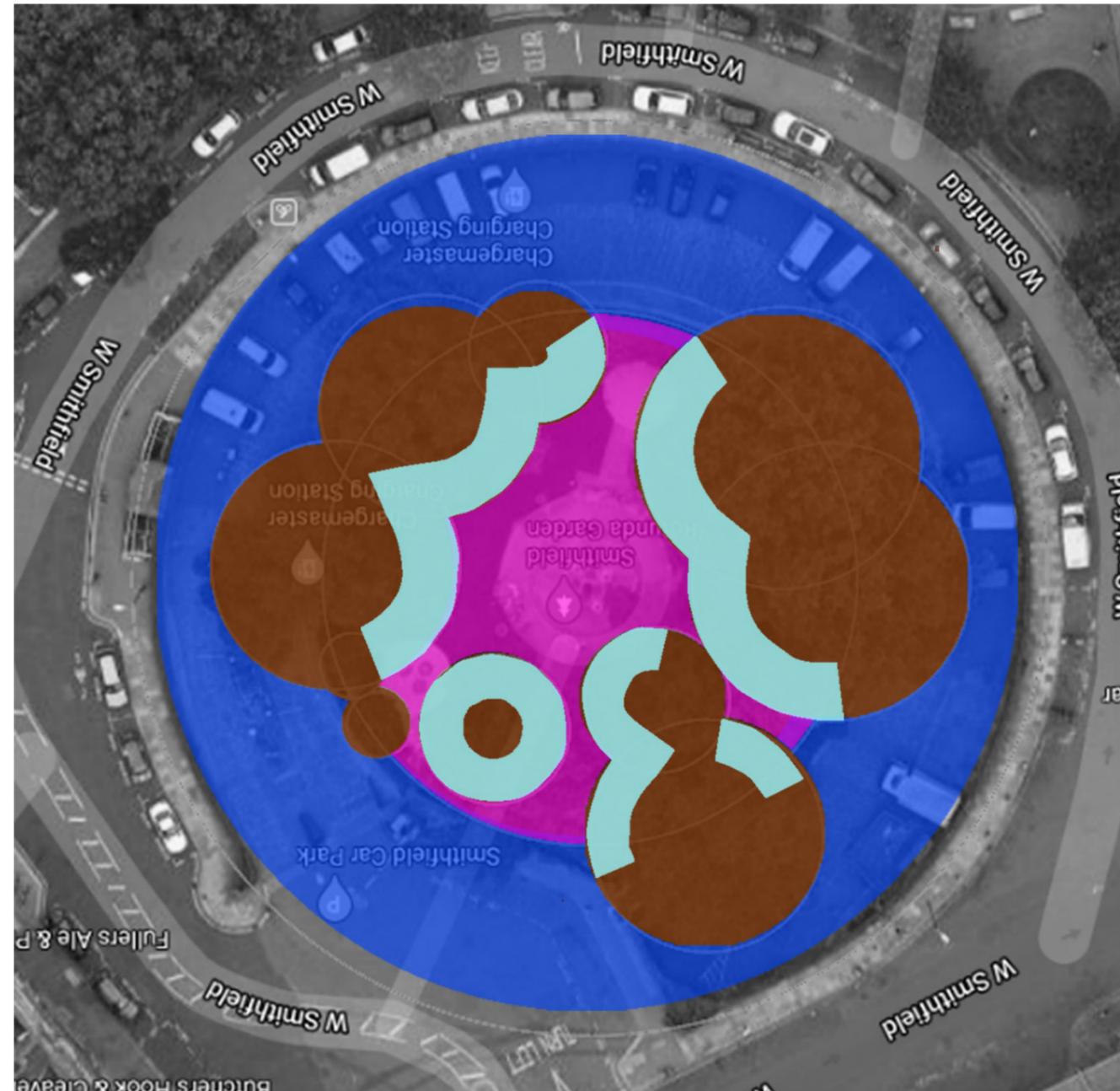
Central part is sleeping area, people sleep under the park. Eating and working spaces are arranged on ramp.

Design generation



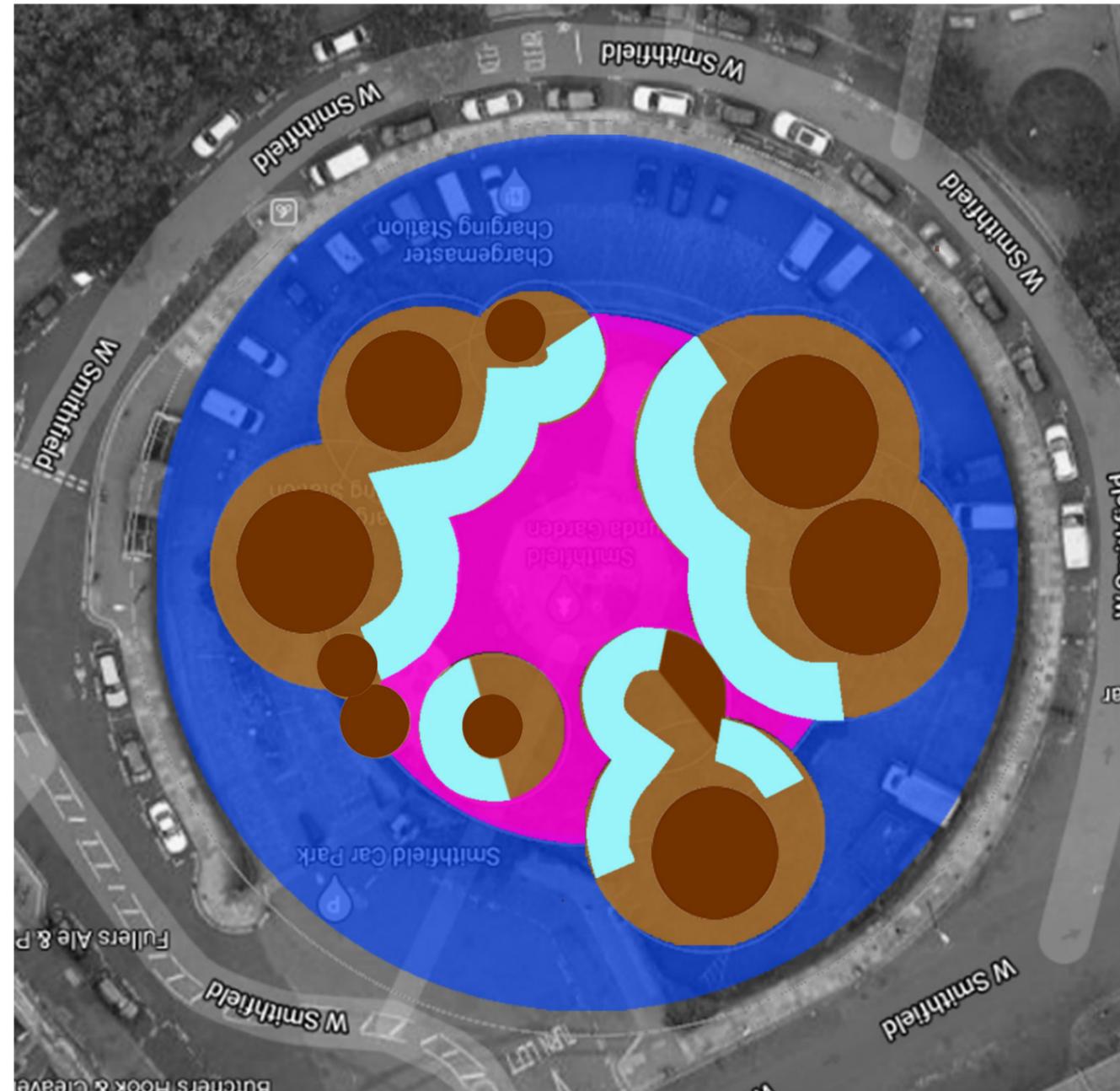
Main functions with trees area

Design generation



Creating the bedrooms following the inside edges of tree areas. People can sleeping under the trees, and enjoy the nature light.

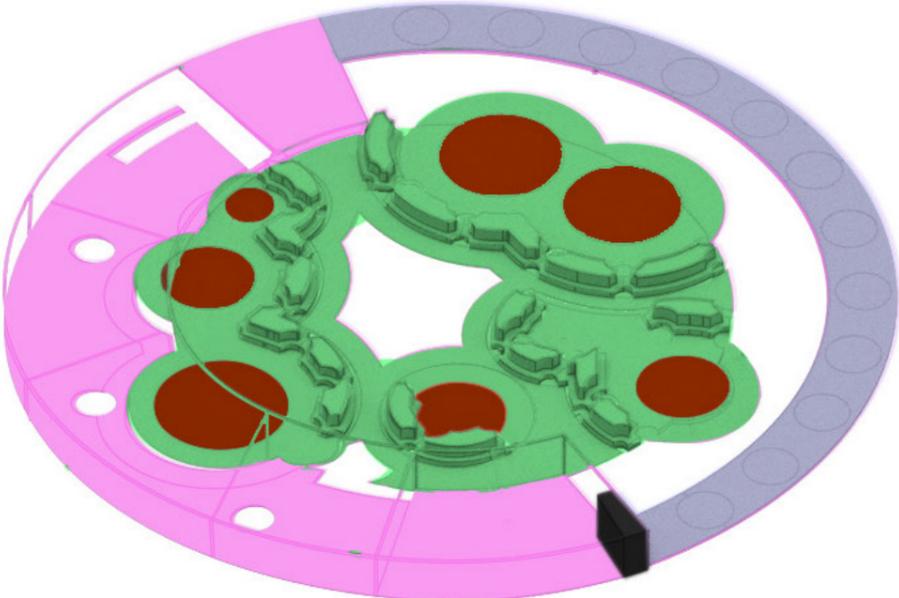
Design generation



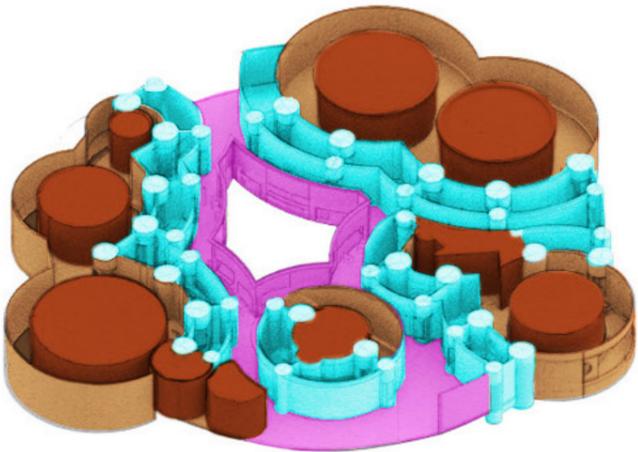
Creating the mudbaths between the bedrooms and roots, mud is nature element which can connect people and trees.

Function

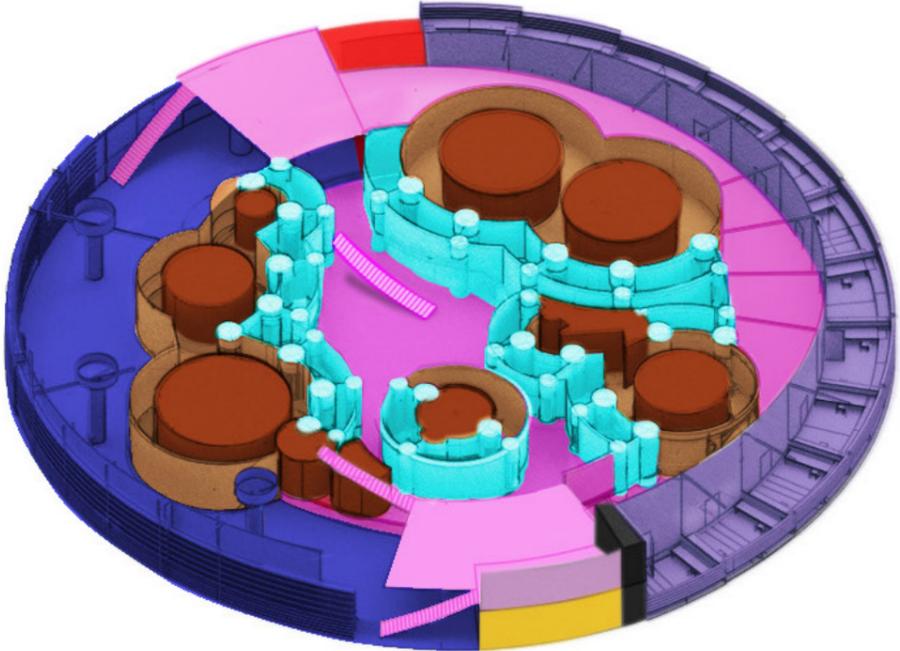
F1



F-1



F-2



circulation

soil, root

park

mudbath

bedroom

making space

eating space

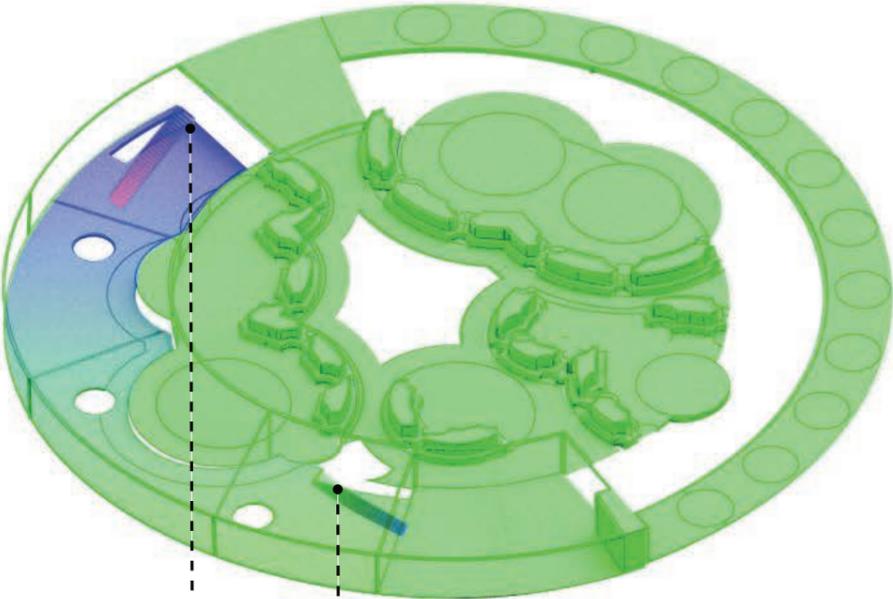
lift

wc

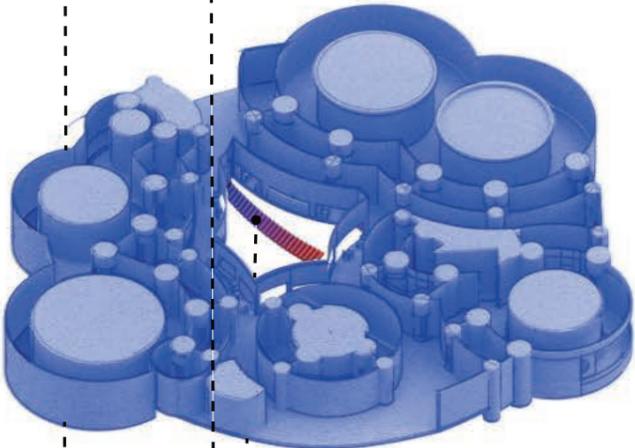
reception

Circulation

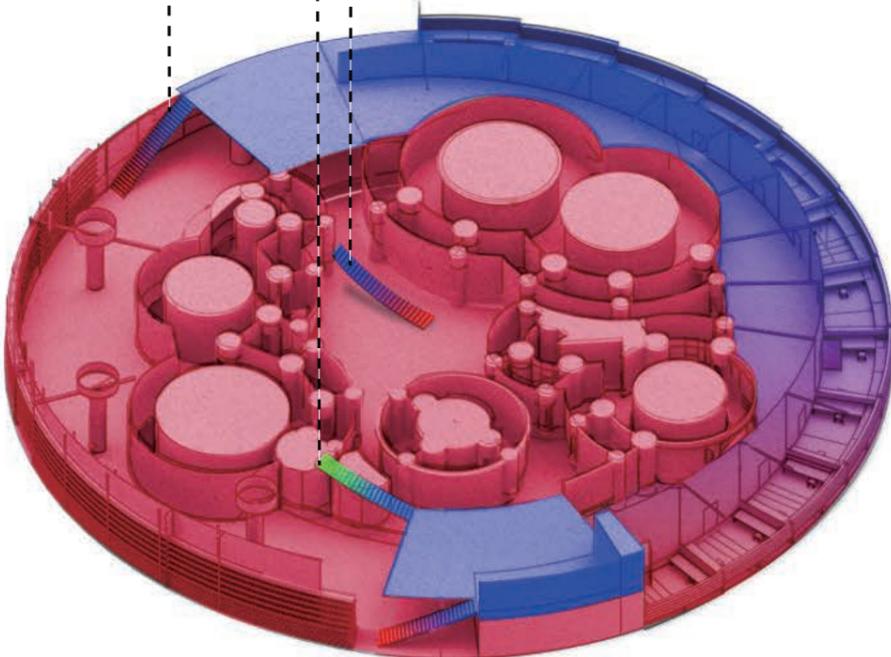
F1



F-1

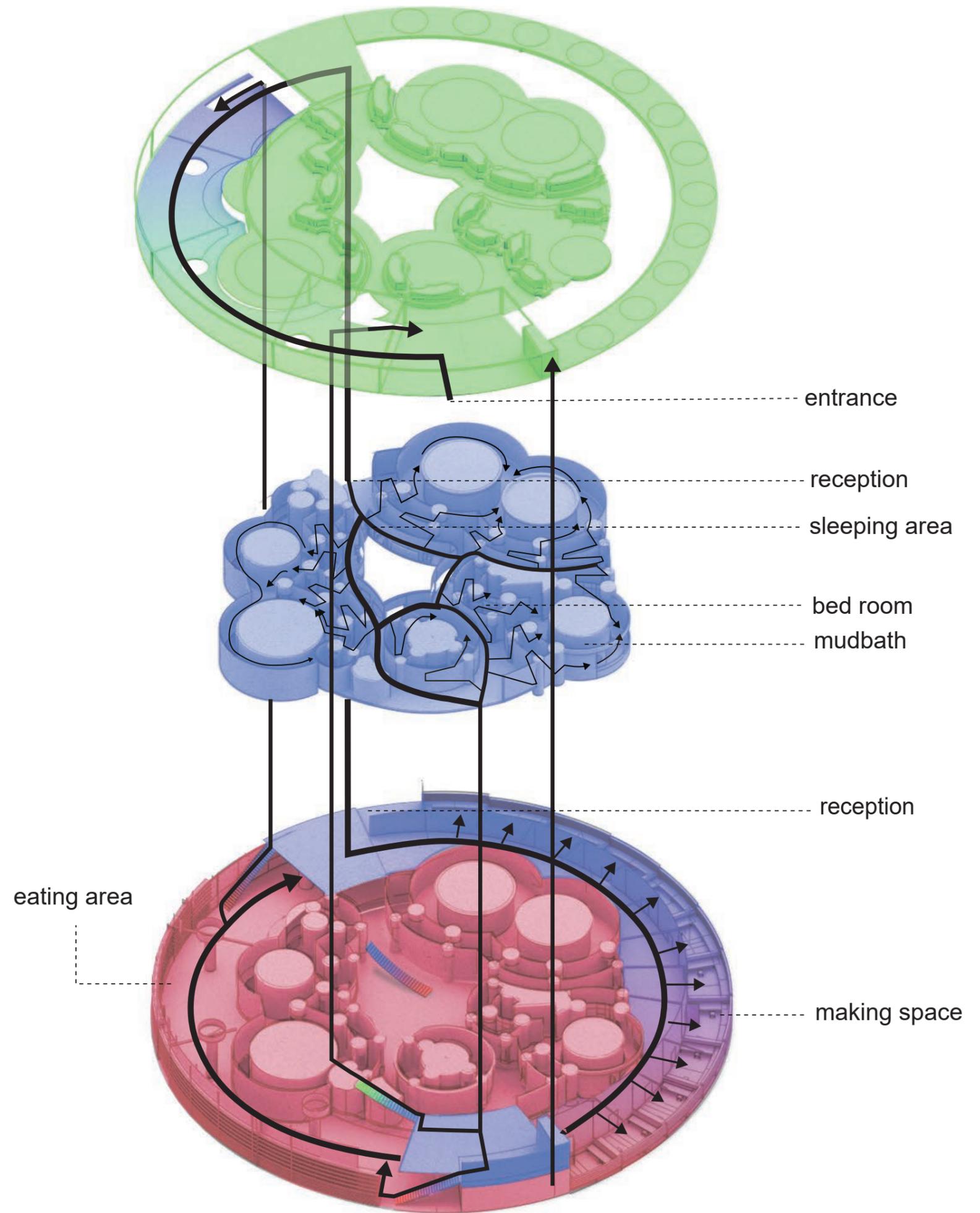
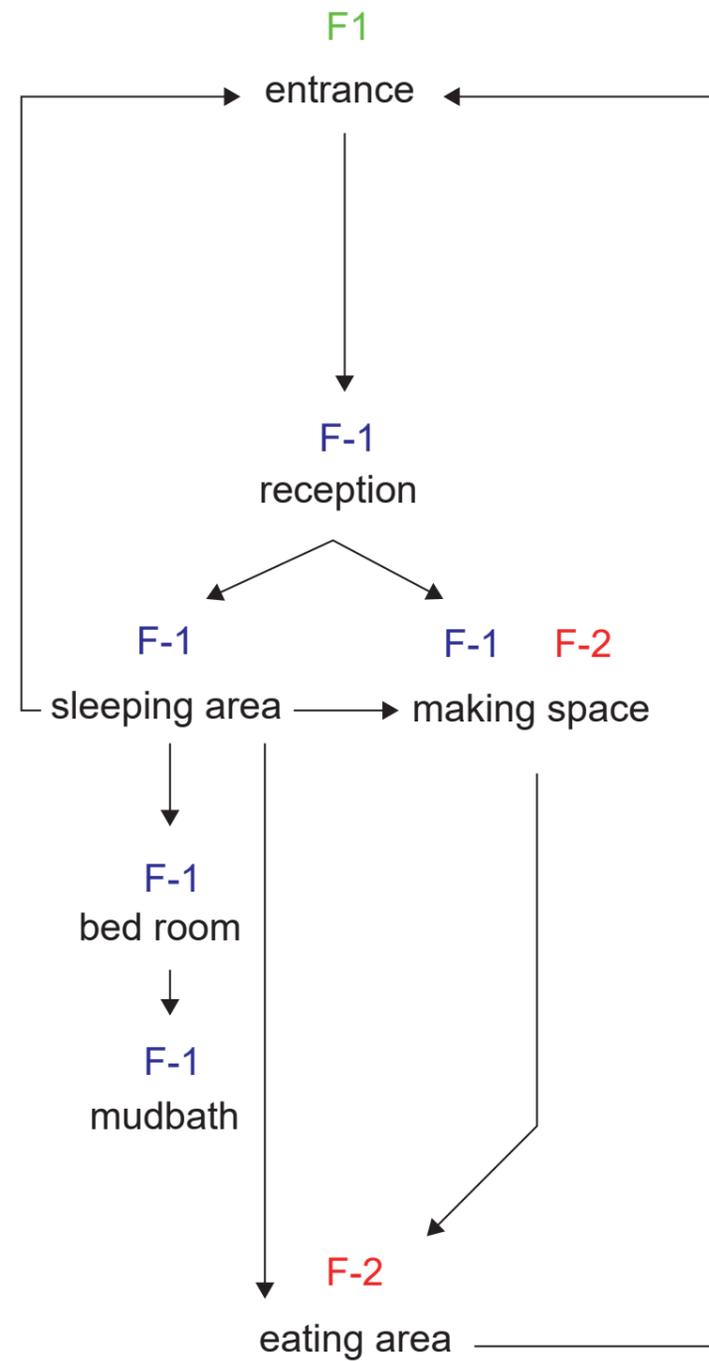


F-2



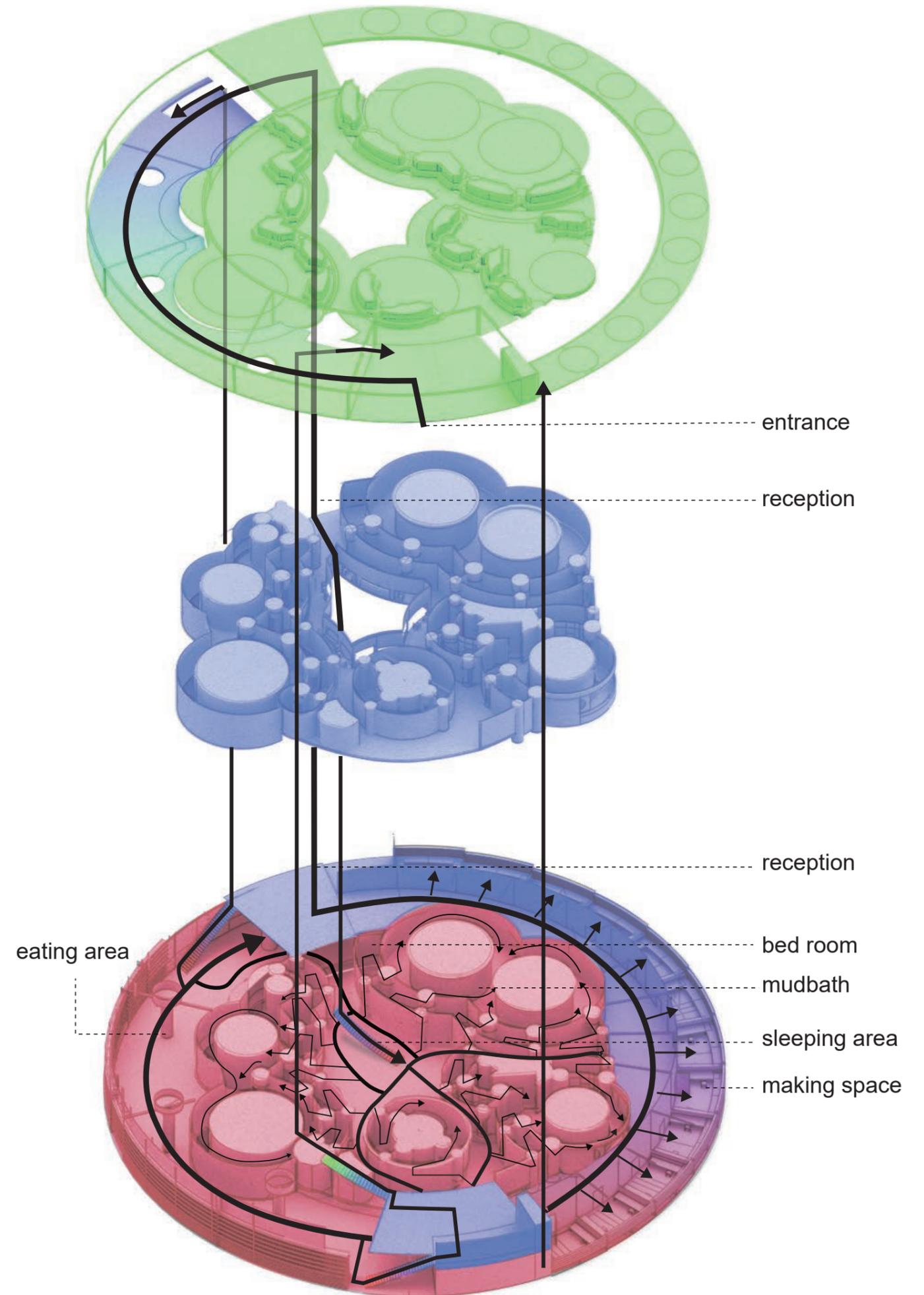
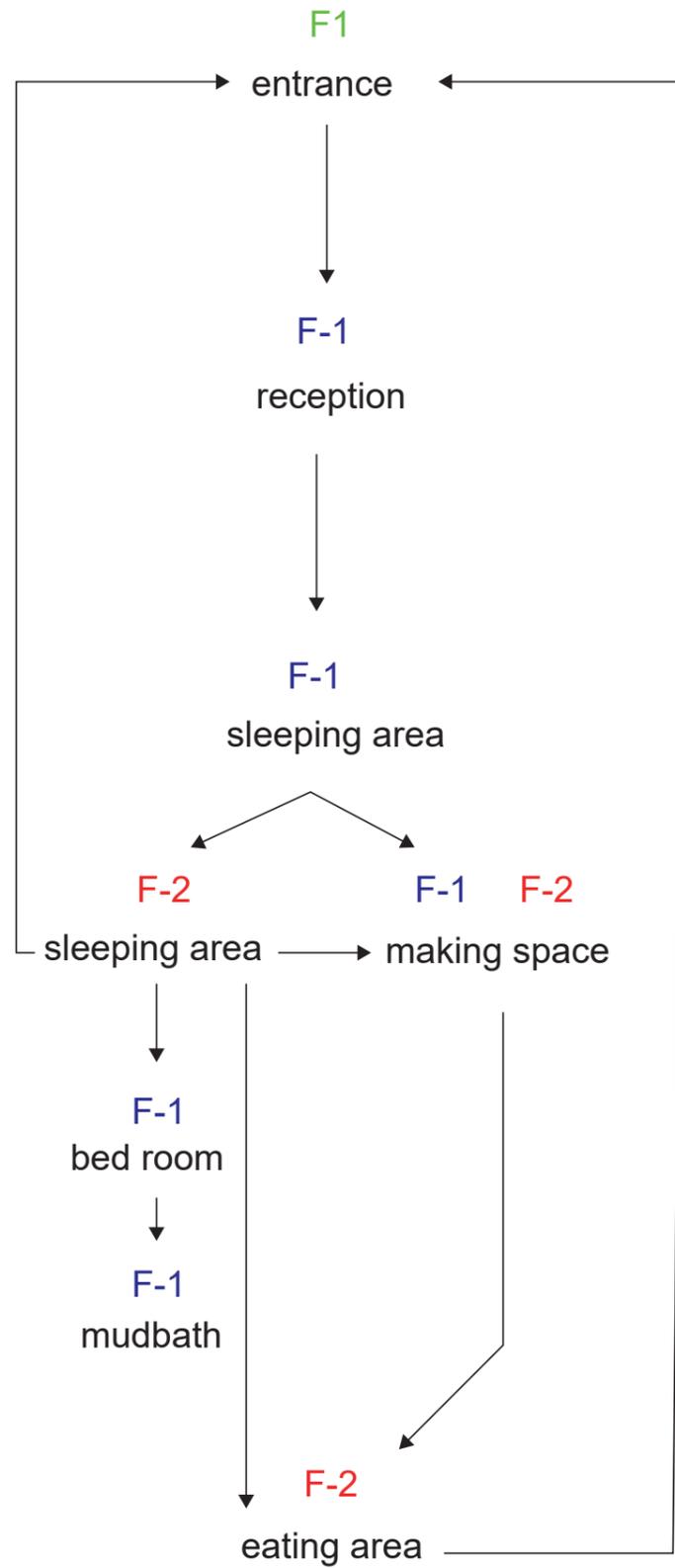
Circulation 1

This is for light CRSD people, who can sleep with nature light and calibrate their circadian rhythm.



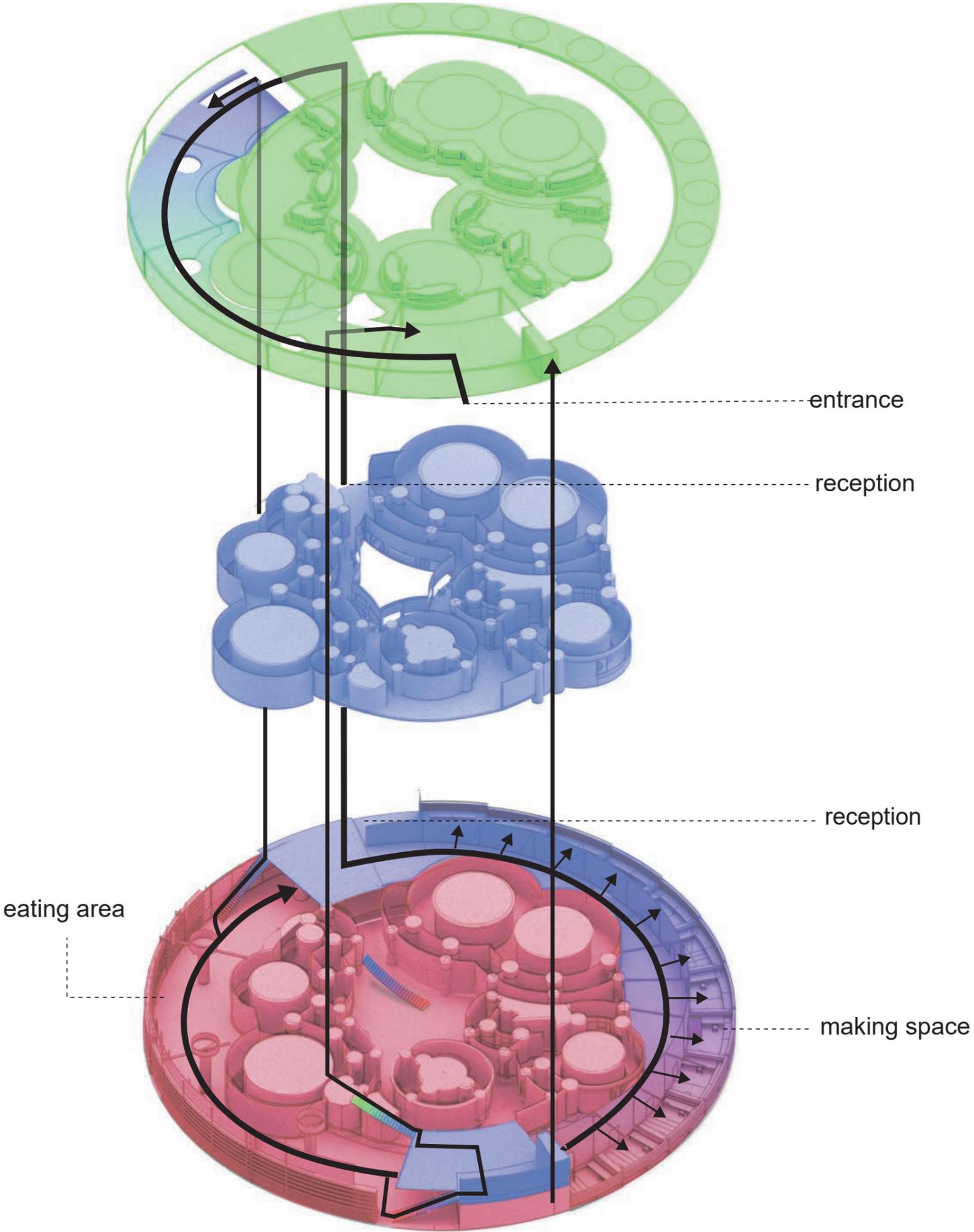
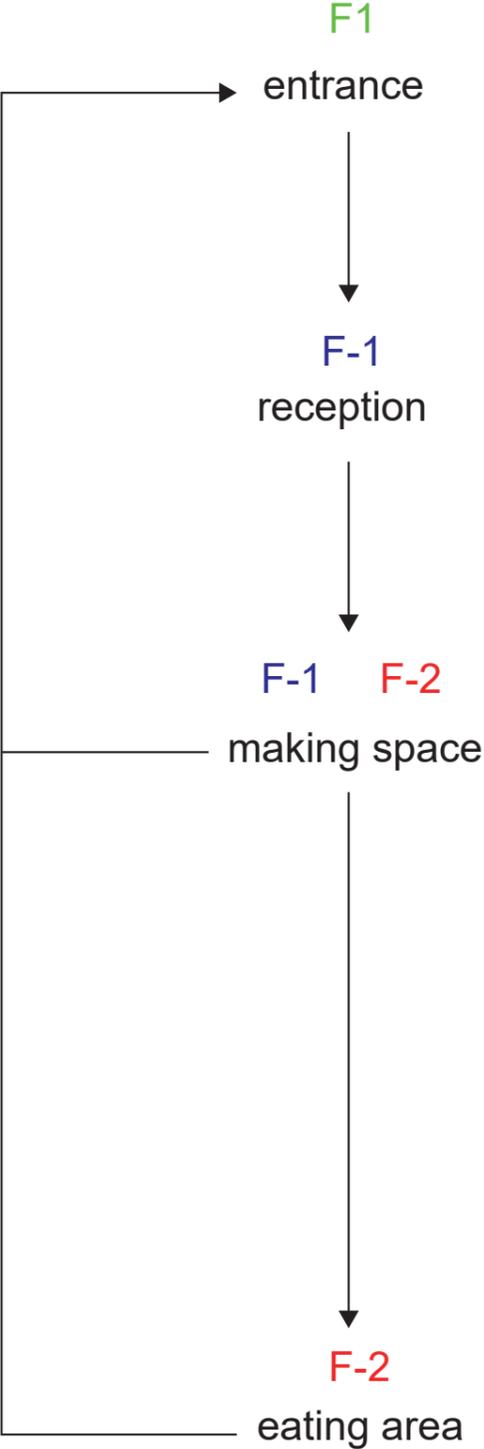
Circulation 2

This is for serious CRSD people, who sleep with programmable LED light and change circadian rhythm according personal diagnose.

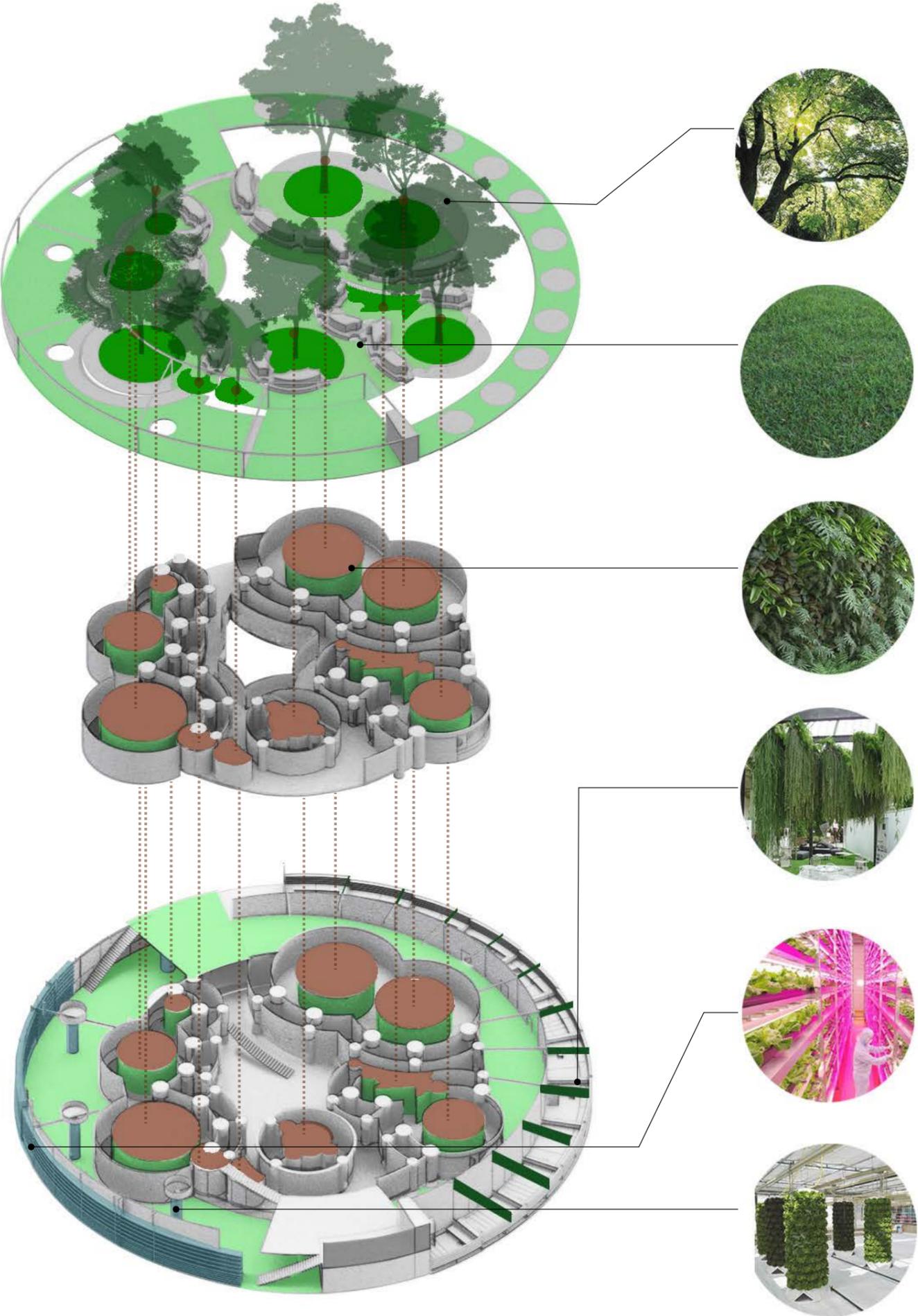


Circulation 3

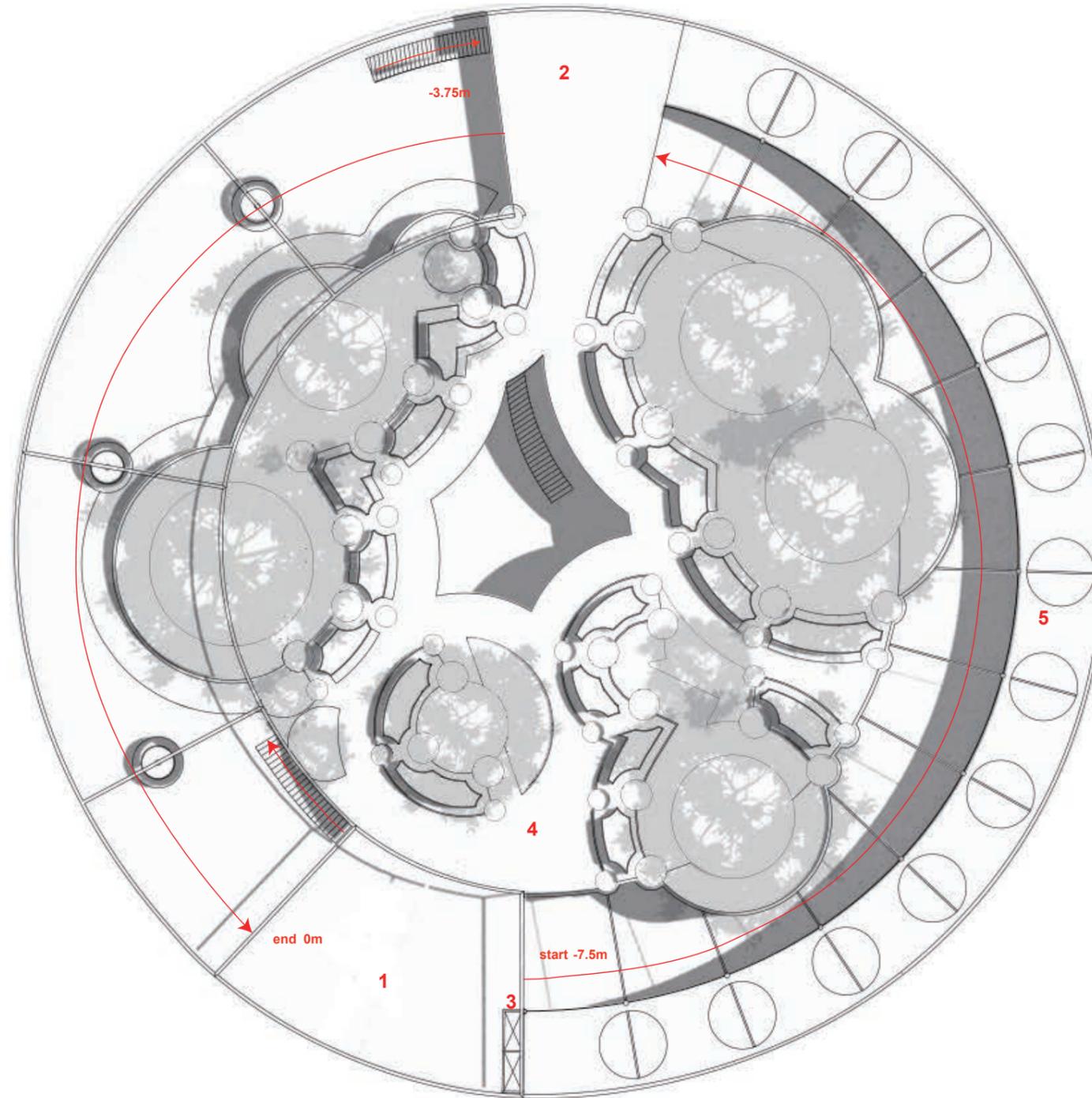
This is for normal visitors.



Growing plants



F1



1.main entrance

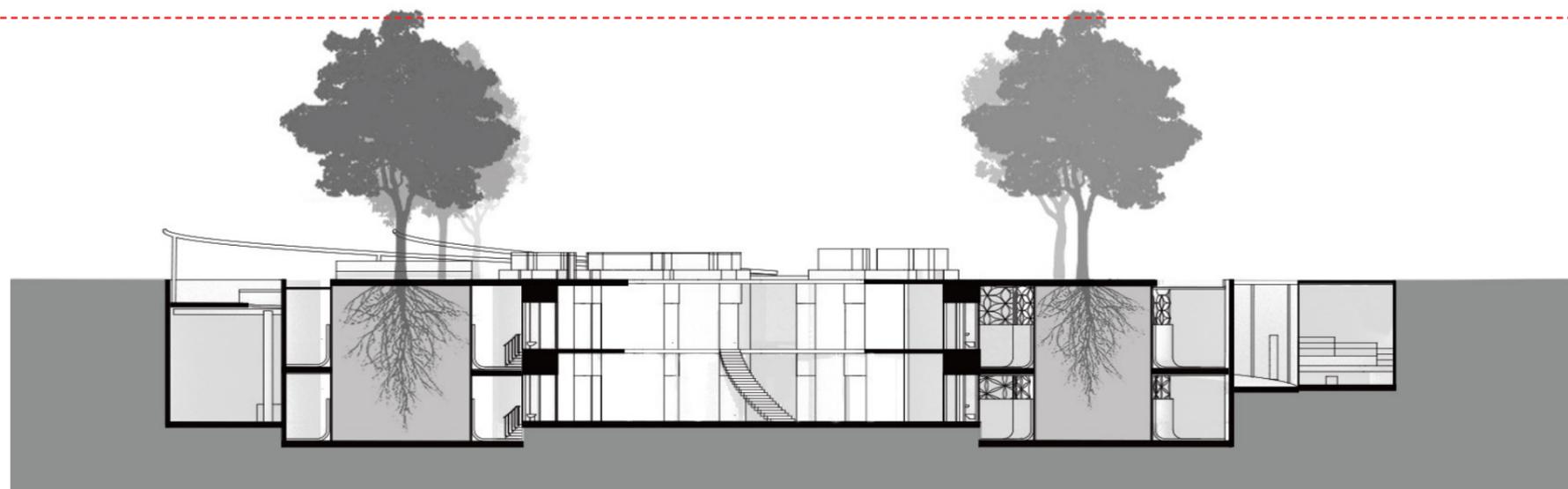
2.entrance

3.lift

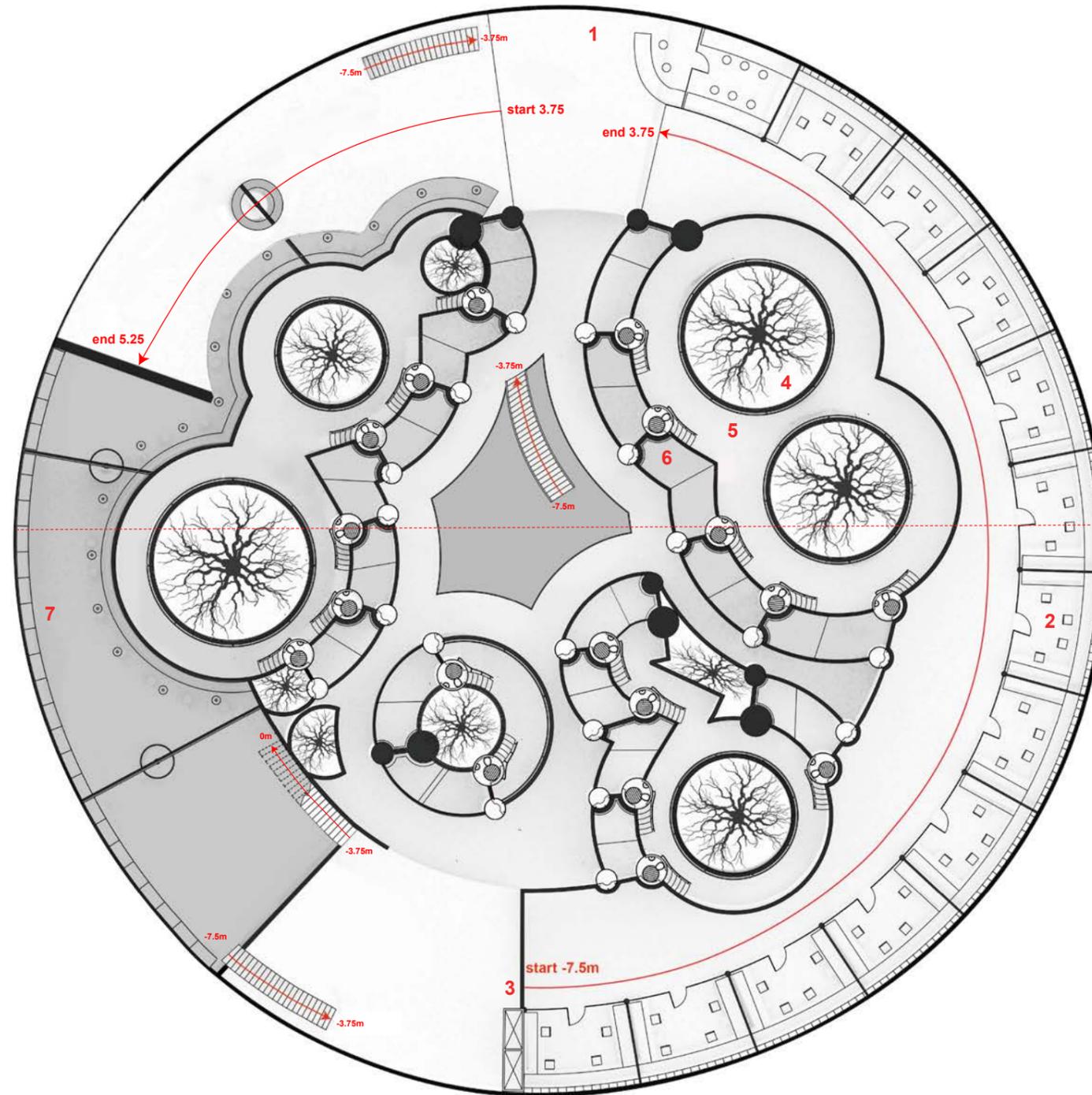
4.park

5.making space

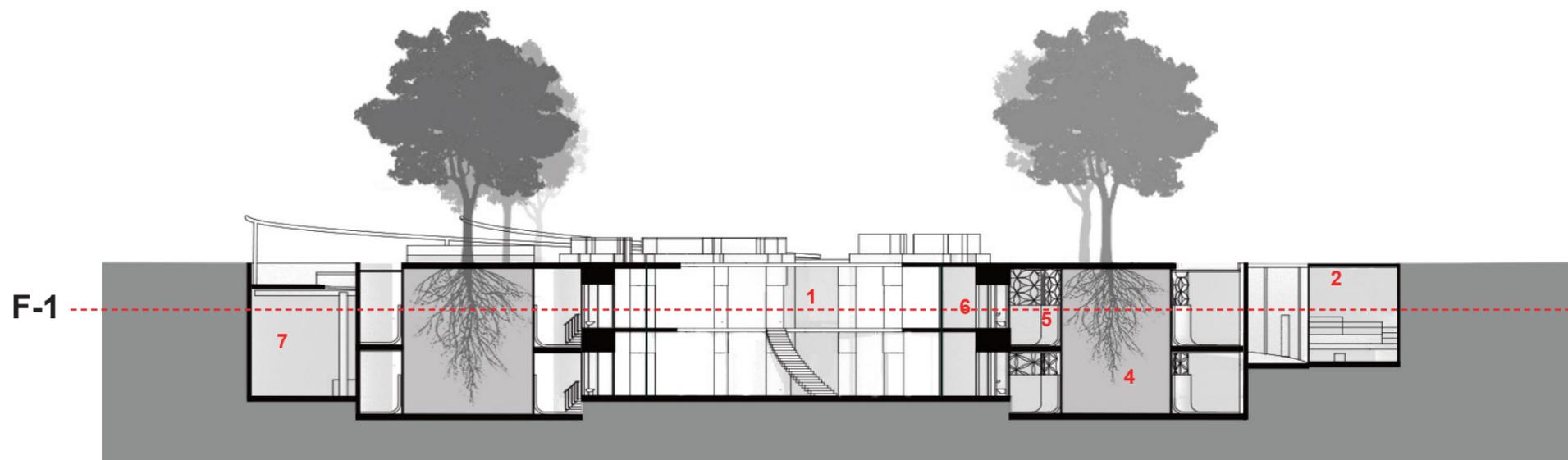
F1



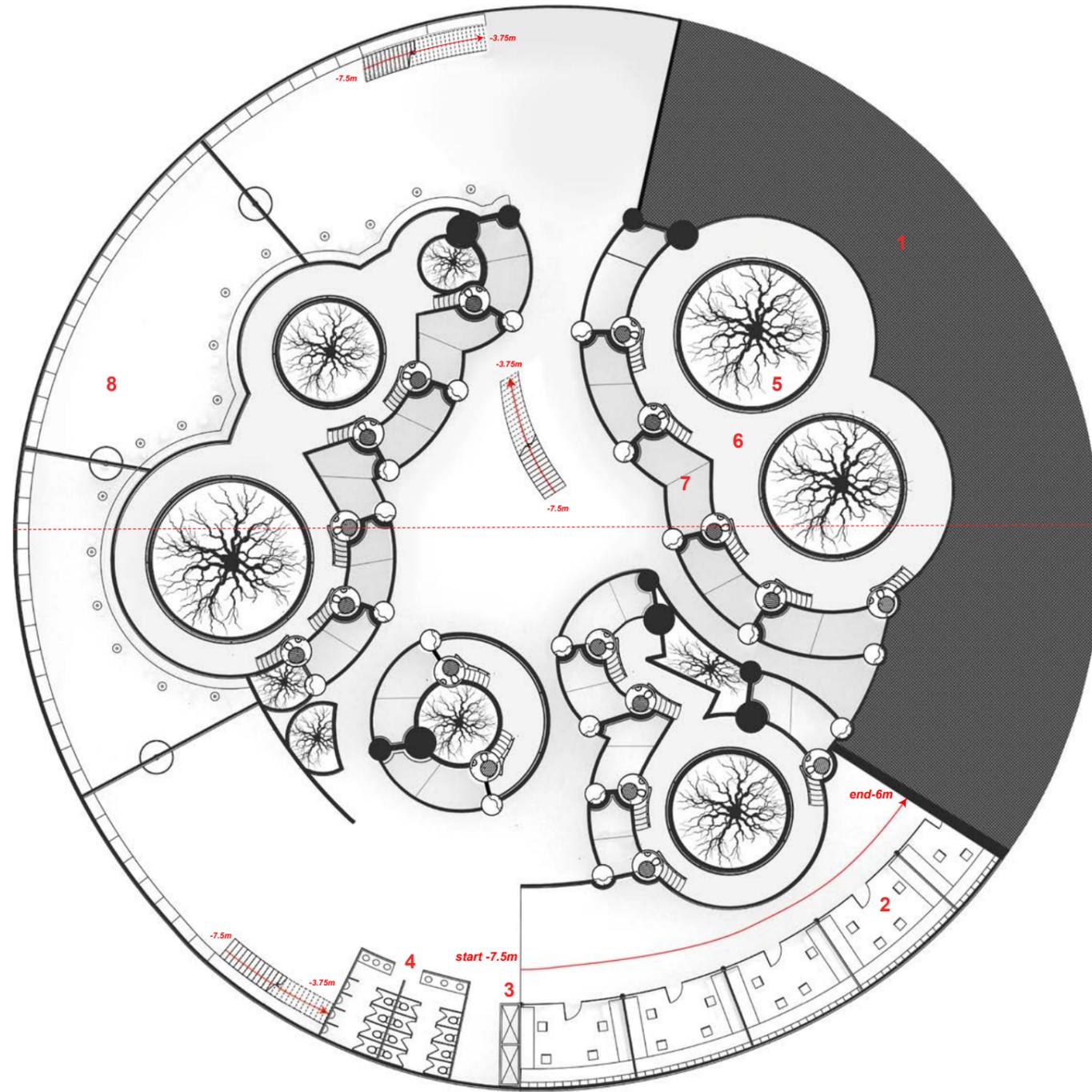
F-1



- 1.reception
- 2.making space
- 3.lift
- 4.root
- 5.mud bath
- 6.bedroom
- 7.eating space

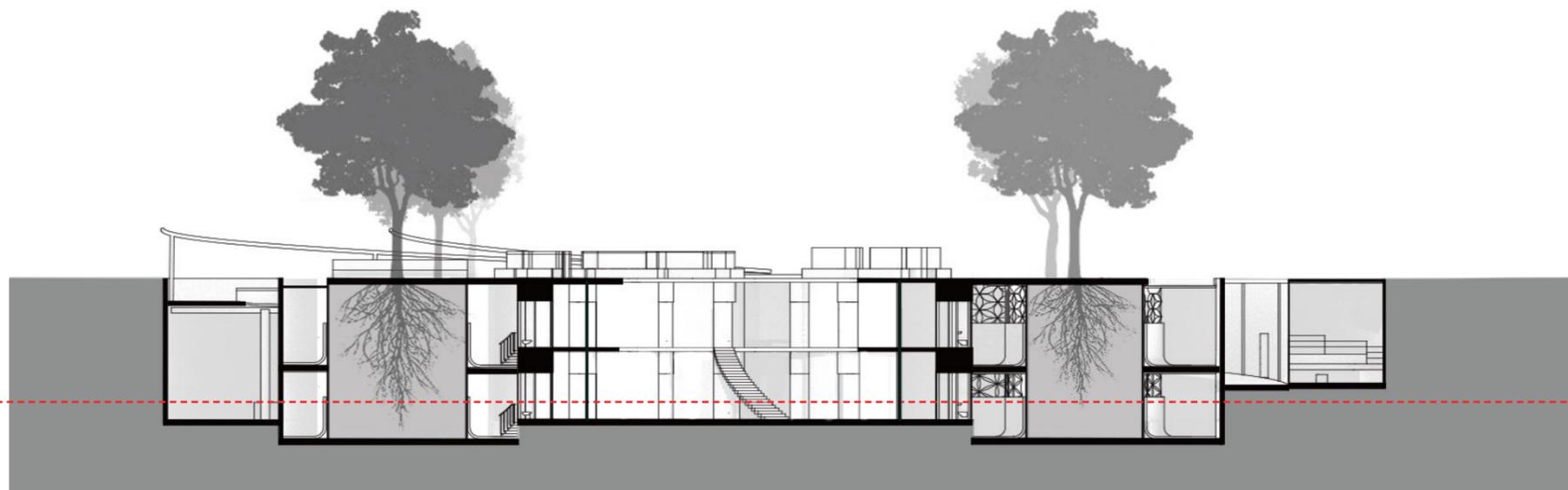


F-2



- 1.soil
- 2.making space
- 3.lift
- 4.wc
- 5.root
- 6.mud bath
- 7.bedroom
- 8.eating space

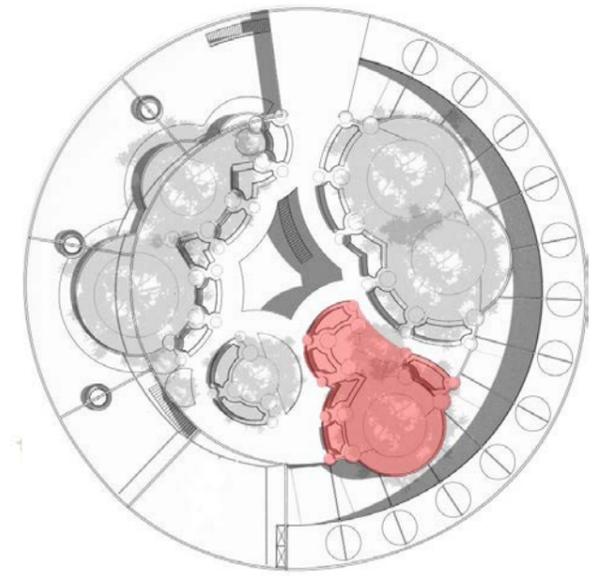
F-2

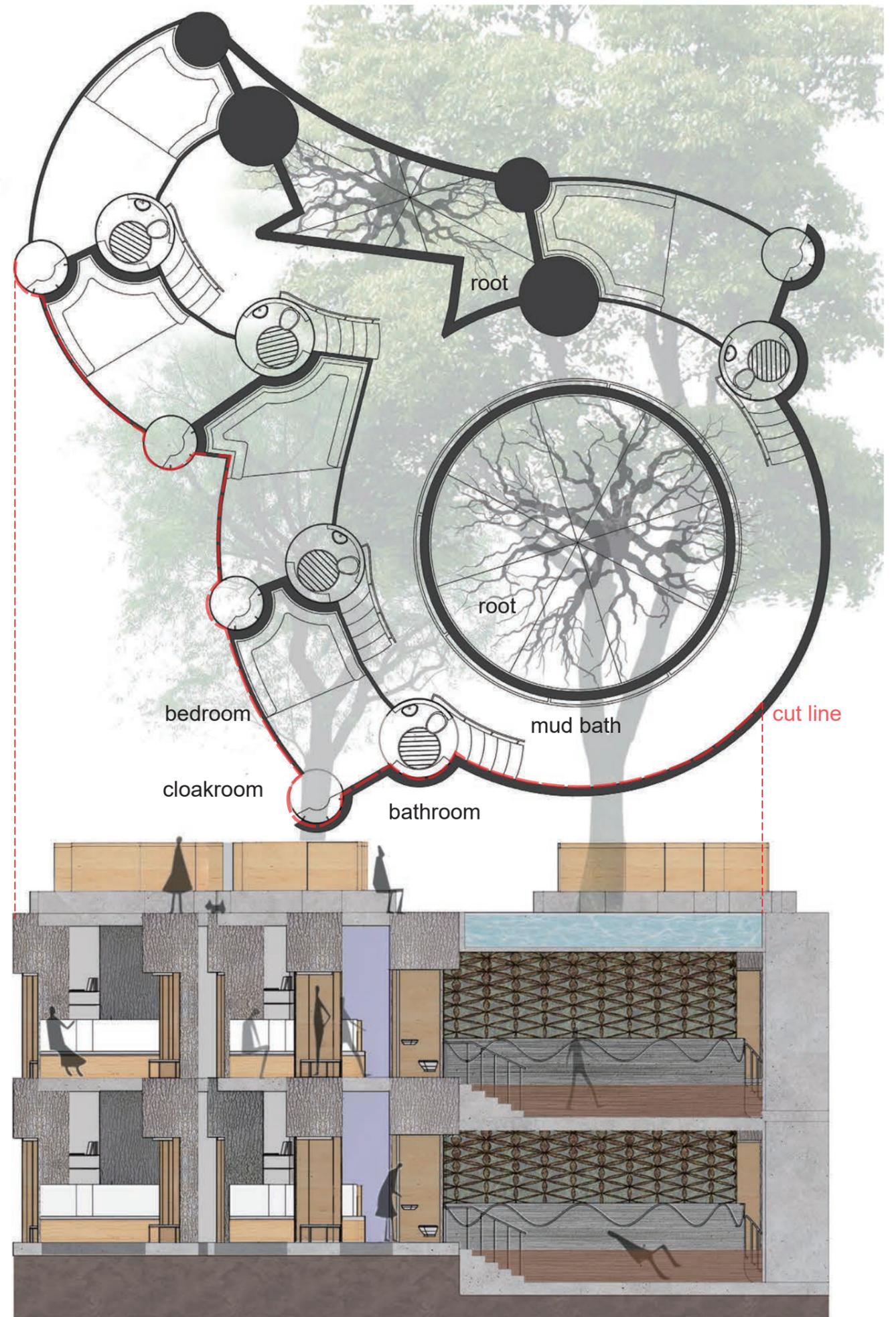
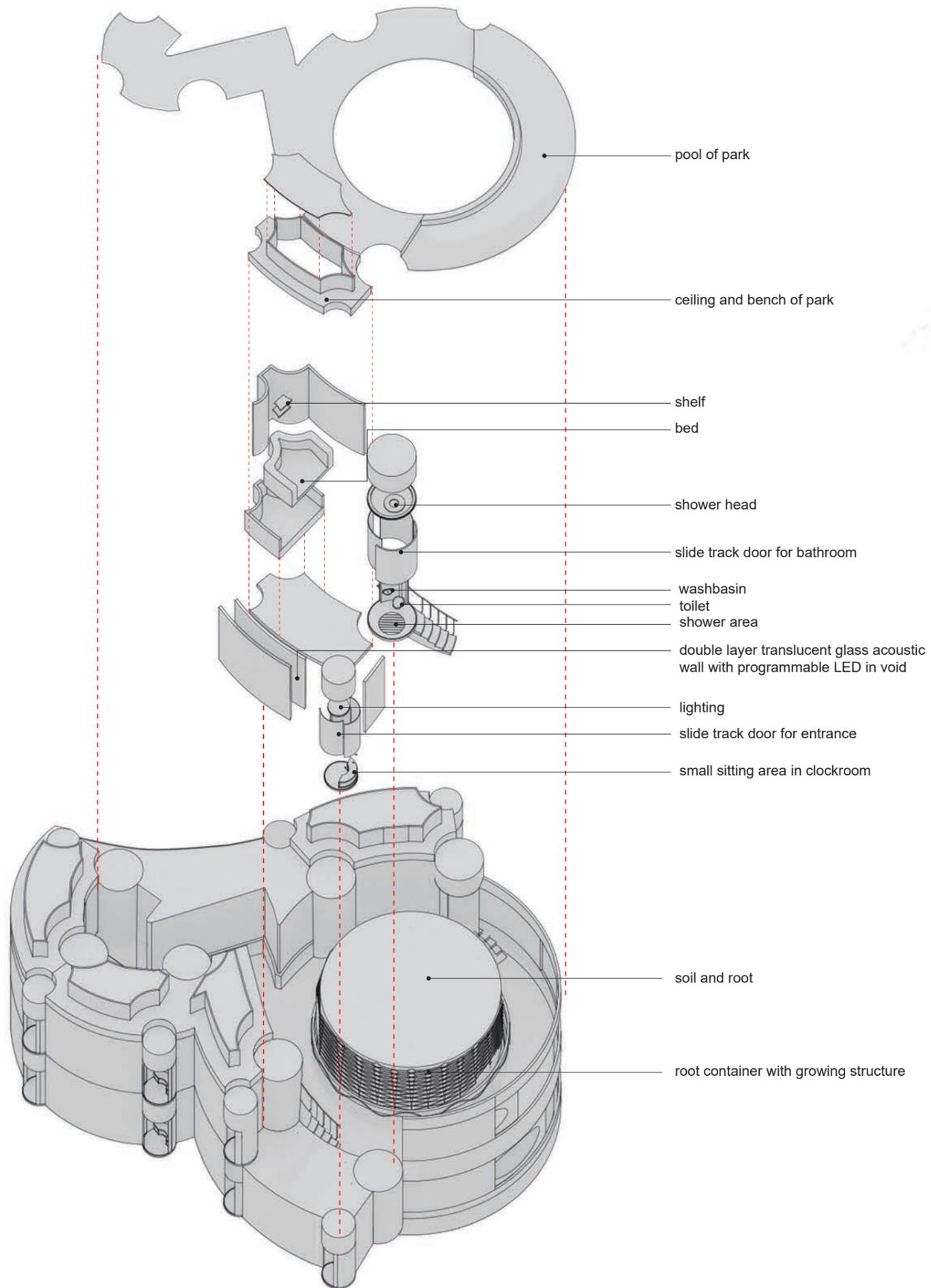


Sleeping under trees

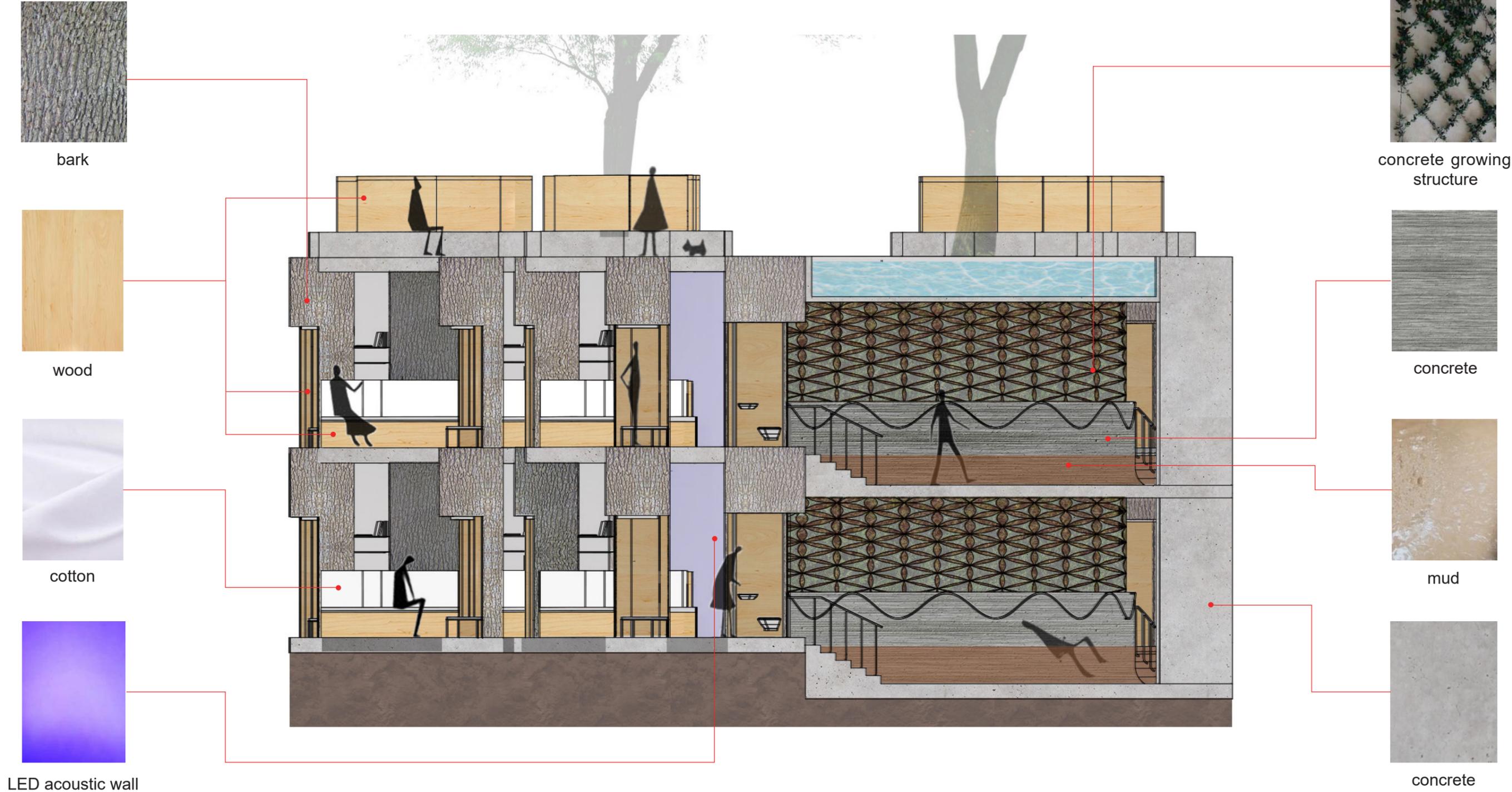


Single unit analyze





Materiality



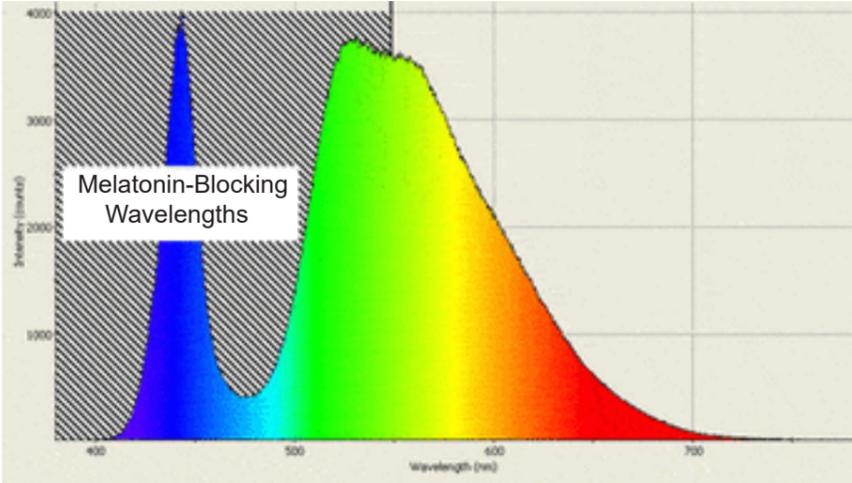
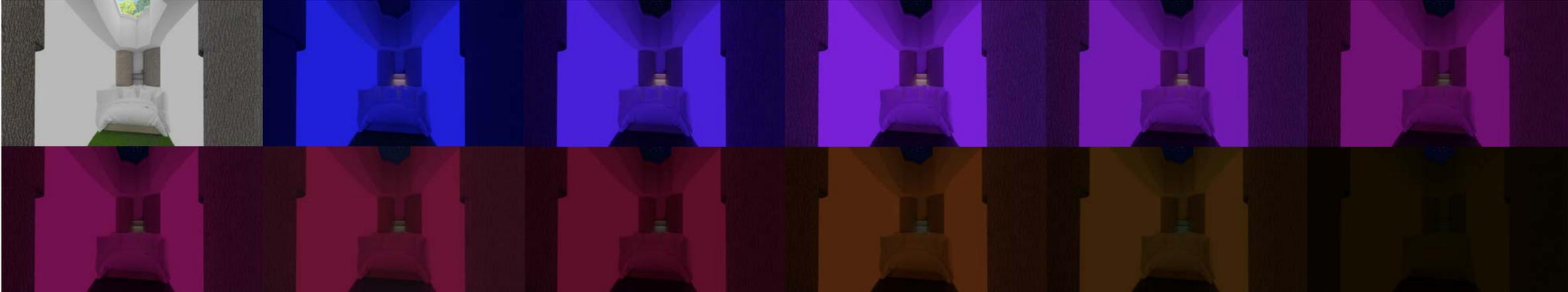
Bedroom



Immersive lighting at night

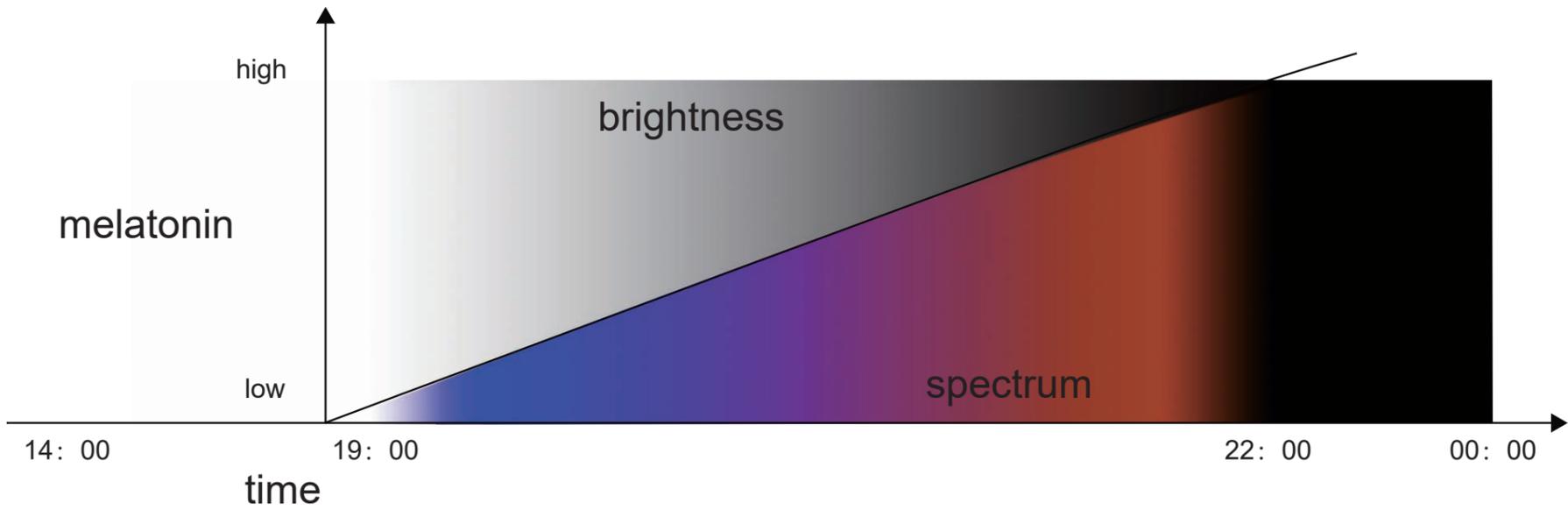


Light and circadian rhythm

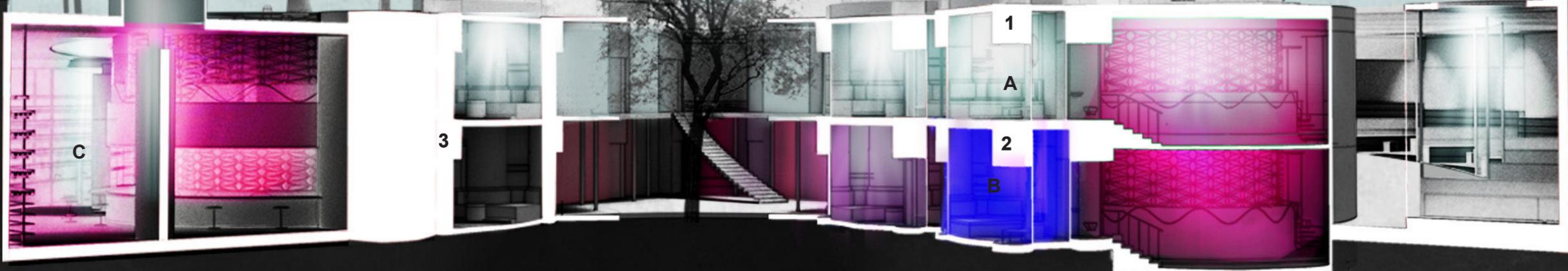
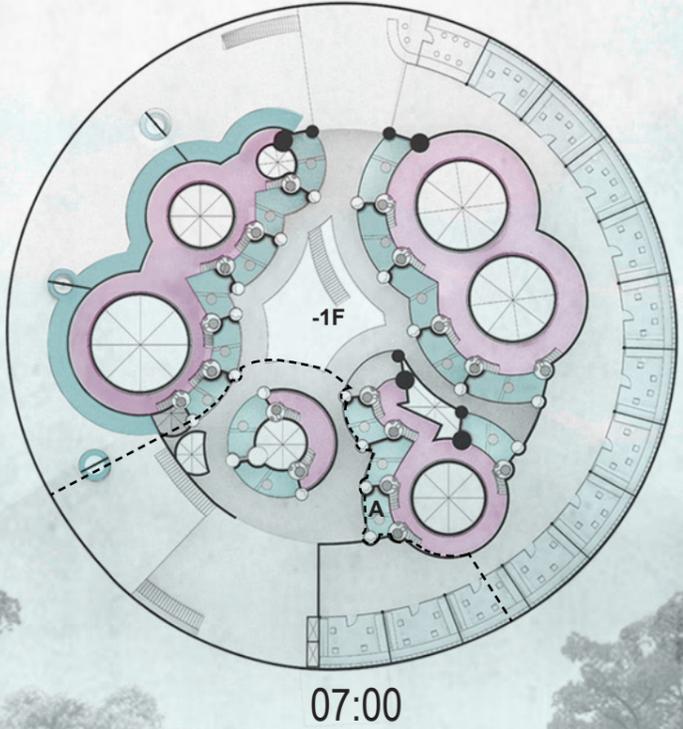


There are two groups variables in bottom linear graph; brightness and color spectrum ,melatoin and time. According to previous research about LED light color changing and body melatonin producing, people's sleeping habit could be changed through this rule, people's circadian rhythm could be rebuilt by sleeping time changing .

Bedroom light therapy analyse

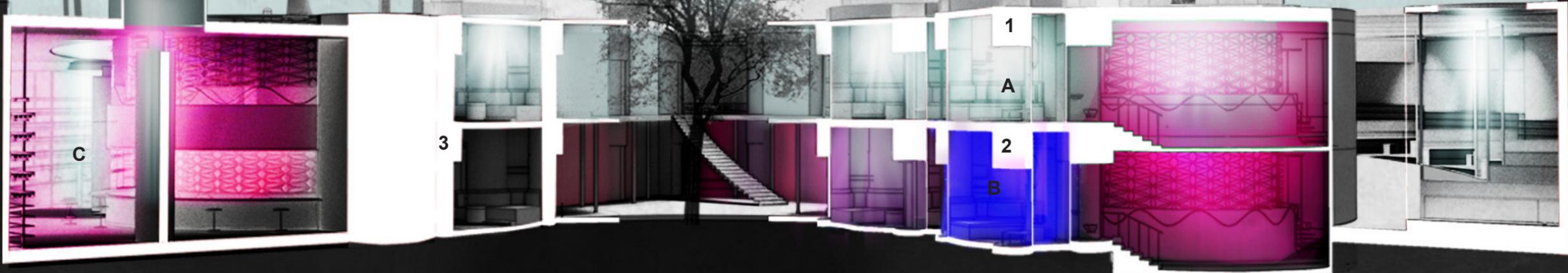
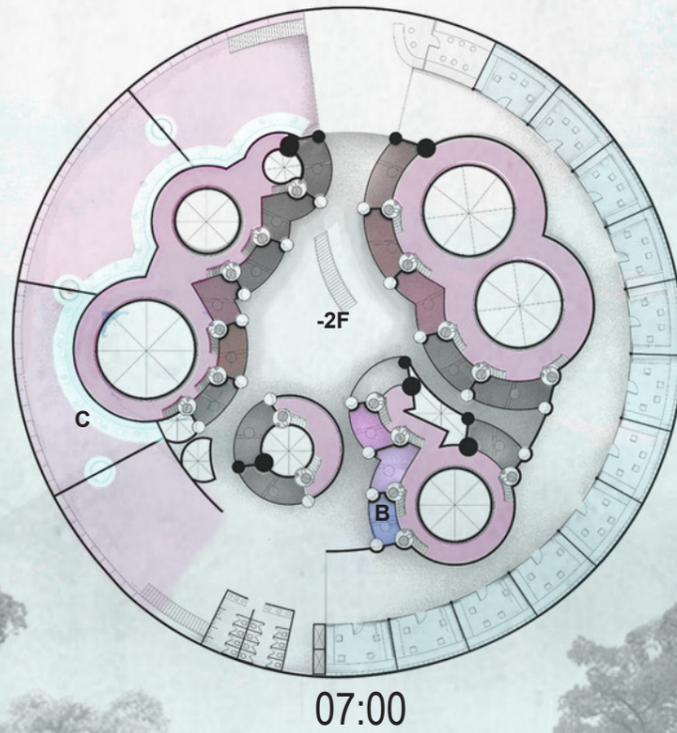


Narrative of light



Visitor A sleeps in room 1 in -1F bedroom. She is a light CRSD-Circadian Rhythm Sleep Disorder patient. Her internal clock is almost synchronized with natural time. At 7 am she is waken up by natural light.





Visitor C sleeps in room 3 in -2F bedroom. he has jetlag. His internal clock is advanced seriously. He sleeps at 17 pm, and wakes up at 1 am in the local time. At 7am local time his internal clock is 13 pm , so he is in eating space.

C



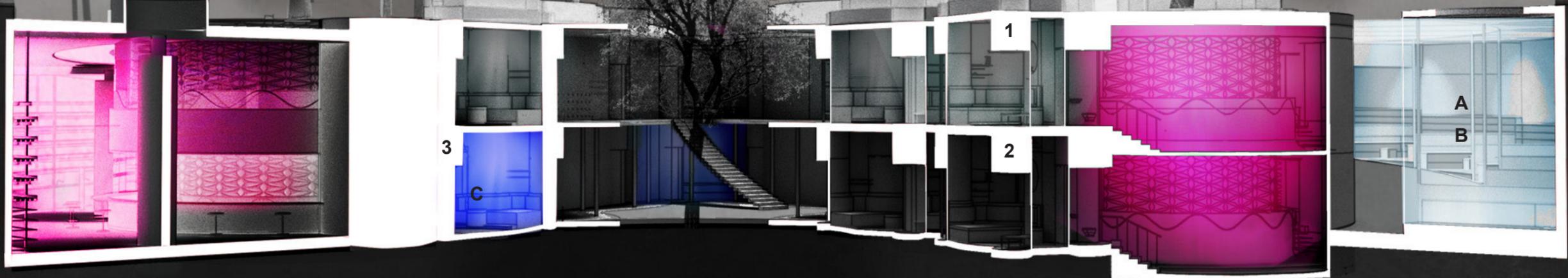
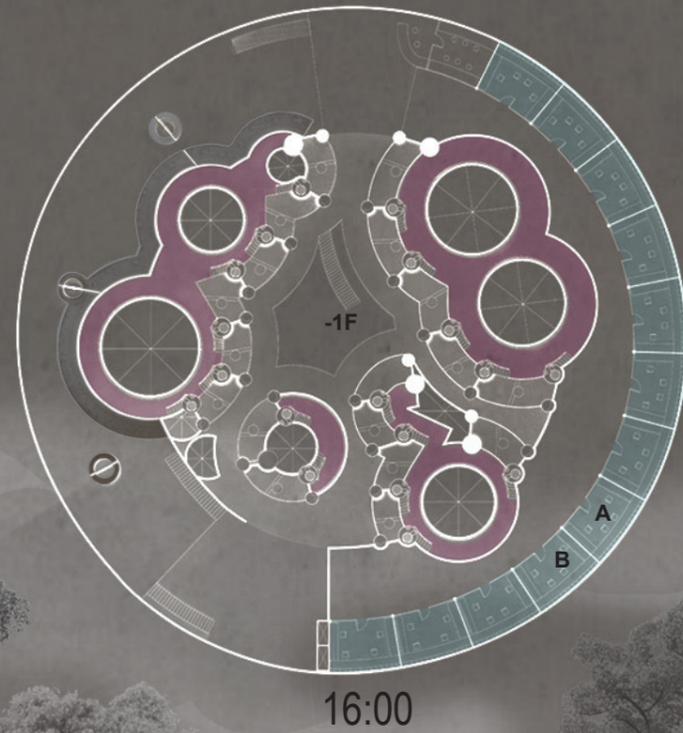
Visitor A sleeps in room 1 in -1F bedroom. She is a light CRSD-Circadian Rhythm Sleep Disorder patient. Her internal clock is almost synchronized with natural time. At 7 am she is waken up by natural light.

A



Visitor B sleeps in room 2 in -2F bedroom. he is a medium level CRSD patient. His internal clock is delayed about 3 hours. He usually sleeps at 1am, and wakes up at 10 am. so at 7 am he is waken up by blue light to advance his internal clock.

B



C



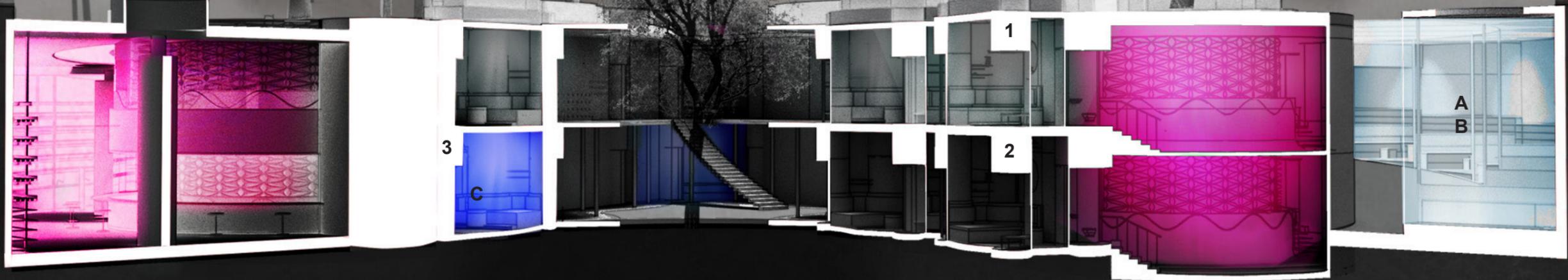
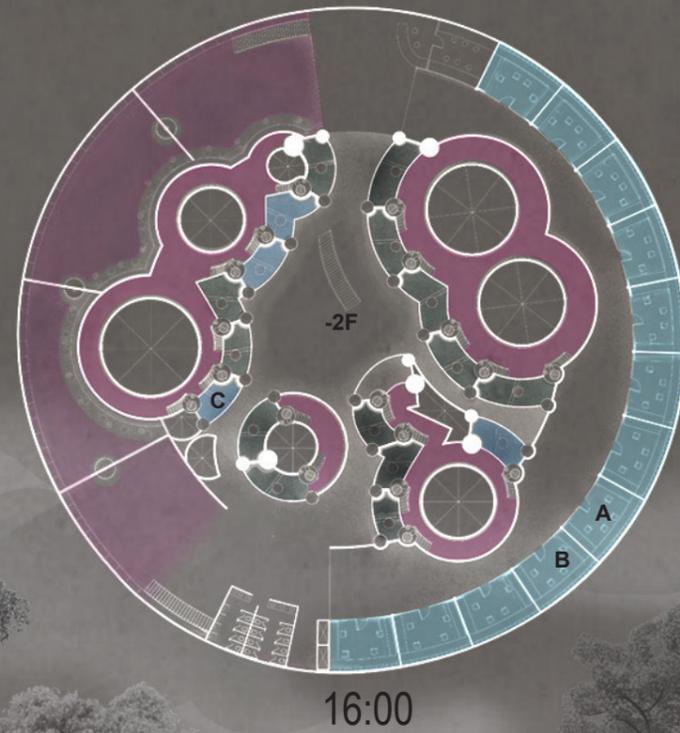
A

A is in making space, she tries to make a simple furniture, and she will bring it to home.



B

B feels tire, because he is awaked 3 hours earlier than his previous time. Now he is concentrating on making some gadgets. Instead of nap, he is attracted by making.



9 hours later, natural time is at 16 pm afternoon, but C internal clock is 22pm. He comes back to the bedroom, according his therapy the light of bedroom is changed to blue to suppress melatonin producing. His sleeping time is deleyed.

C



A is in making space, she tries to make a simple furniture, and she will bring it to home.

A



B feels tire, because he is awaked earlier than his previous time. Now he is concentrating on making some gadgets. Instead of nap, he is attracted by making.

B



21:00



C

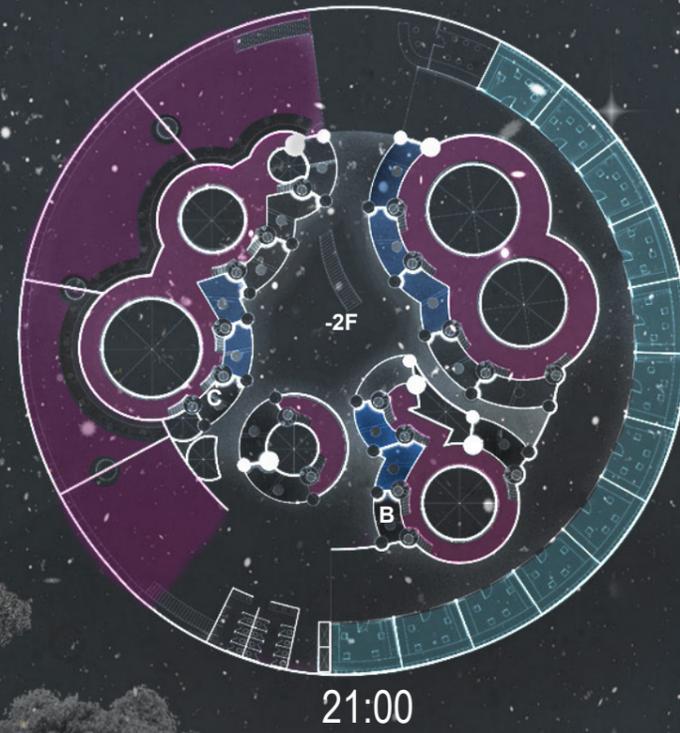


A

It is at 21pm, A is in mud bath with dim warm light. She feels comfortable and a bit sleepy.



B



C has been slept 3 hours ago. Because his internal clock is 6 hours earlier than natural time, so his internal clock can not be changed to be normal in one day. He needs to live in hotel two day and delay his internal clock 3 hours per day.

C



It is at 21pm, A is in bedroom with dim warm light. She feels comfortable and a bit sleepy.

A



B sleeps at 21 pm, he will be awoken at 7 am tomorrow, and his treatment will be finished.

B

Bedroom to mud bath at night



Bedroom to mud bath at night



Eating space



Making space

