

競爭救

EQUANIMITY

2023

BRIANNAH WHEELER

EQUANIMITY

A C K N O W L E D G E M E N T S

At the pinnacle of my academic career, I realize I did not get here on my own. Without the enduring love of those around me, I could not have accomplished this project or these goals. **To my parents**, thank you for your unending support + love throughout the years and always pushing me to do my best because you truly believed in me. **To Drew, my little brother**, since the day you were born you have challenged me, outsmarted me, inspired me, and made me a better human being. **To my friends**, thank you for the laughter and late night talks during our most difficult weeks. **To Will**, my rock, thank you for always being in my court, being my shoulder to cry on and my great love through it all.

EQUANIMITY

e q u a • n i m • i t y

a state of psychological stability and composure which is undisturbed by experience of or exposure to emotions, pain, or other phenomena that may cause others to lose the balance of their mind



STUDIO PROFESSOR

MARCEL ERMINY

Thank you to my committee for your time, your guidance, and for teaching me the possibilities of architecture. I could not have gotten here without your support.



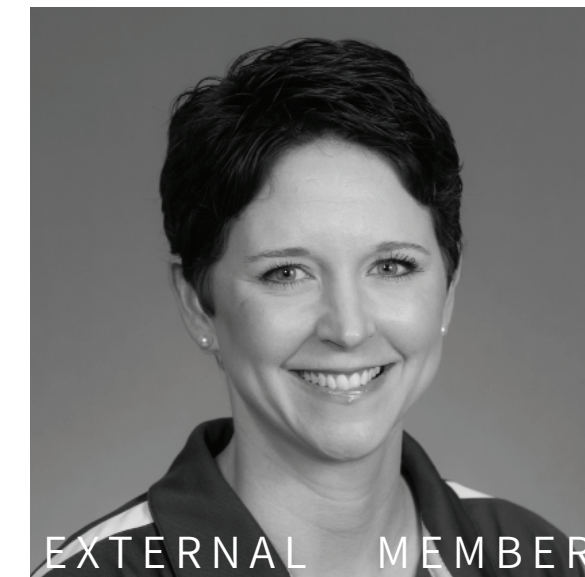
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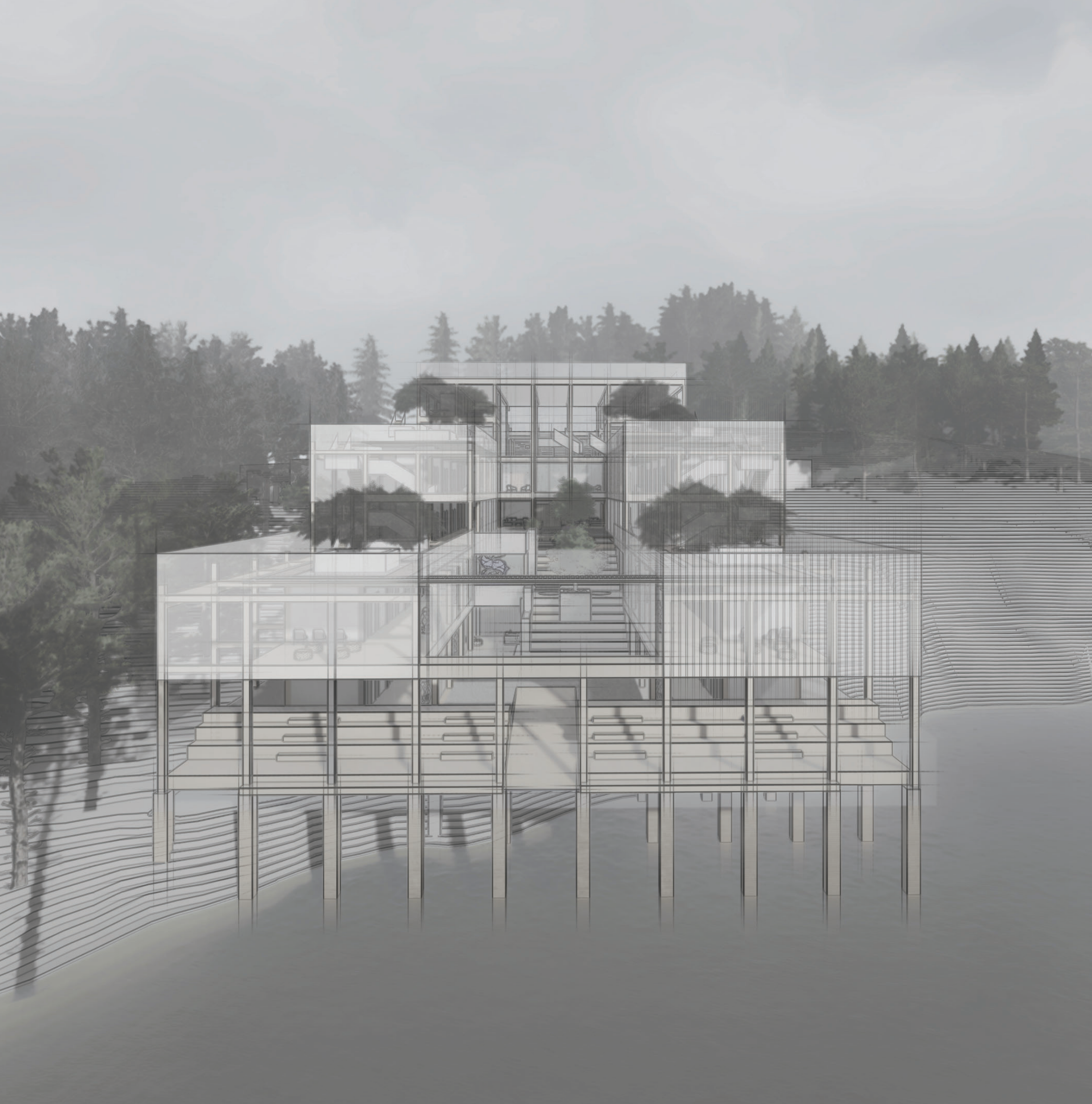


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HEALTH AWARENESS

18 24

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A N A L Y S I S - AS A HEALING TOOL

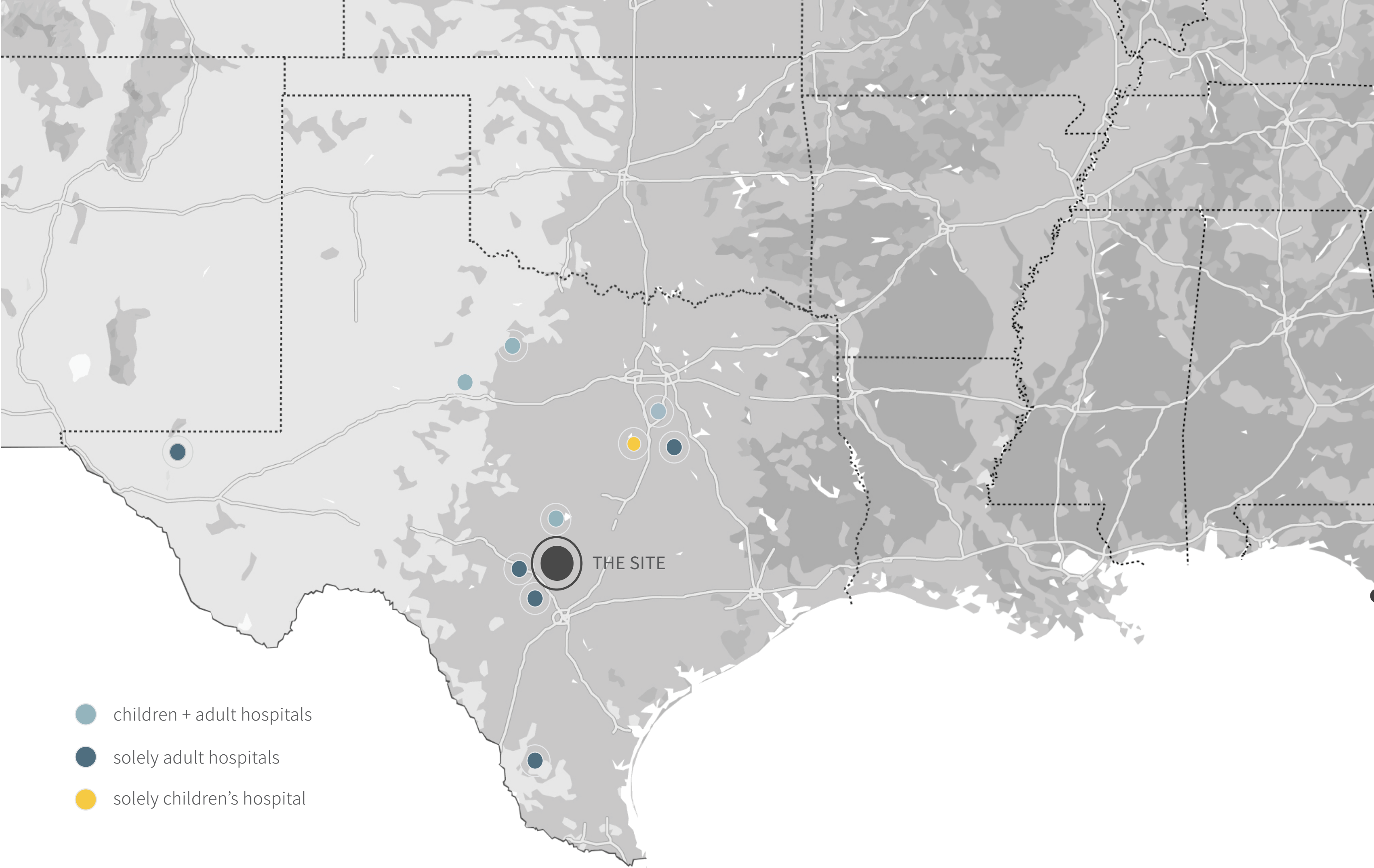
56 76

H A B I T A N T C O N C L U S I O N
E X P E R I E N C E

問 い か け

T H E W H Y





- AUSTIN
- BIG SPRING
- EL PASO
- KERRVILLE
- NORTH TEXAS
- RIO GRANDE
- RUSK
- SAN ANTONIO
- TERRELL
- WACO

10

state hospitals **in Texas**

- children + adult hospitals
- solely adult hospitals
- solely children's hospital

After a child attempts suicide in the state of Texas, they are required by law to spend time (whether that be days, weeks or months) in a state psychiatric facility. There are only 10 hospitals in the entire state that currently provide these state services, and only one of those is dedicated to serve just minors.

METRICS

04x

THE SUICIDE RATE HAS GONE UP 4X SINCE 2020

10

10 IN-PATIENT STATE HOSPITALS IN TX

2ND

TEXAS, 2ND HIGHEST AMOUNT OF SUICIDES IN 2020 WITH 4,000

01

ONLY 1/10 SERVE AS A RESIDENTIAL FOR ONLY CHILDREN

1813

PEOPLE CURRENTLY WAITING FOR A BED

78

THERE ARE ONLY 78 TOTAL BEDS @ WACO'S FACILITY

STATISTICS FROM 2020
AGES 5-24

1.2 MILLION
PEOPLE IN
AMERICA
ATTEMPTED
SUICIDE IN 2020,
180,000 OF THOSE
WERE CHILDREN



During the Covid-19 pandemic, mental health was an at all time low, especially for our youth. suicide rates quadrupled in children between the ages of 5-18. adolescent mental crises have become their own widespread pandemic. following a traumatic event such as an attempt on taking one's life, these children are required to spend time at an in-patient state psychiatric hospital. the dramatic increase in patients for these facilities has resulted in a severe shortage of beds, meaning that children can spend days, weeks or months on a wait list. Once placed at a hospital, they are welcomed by cinder block walls, overgrown weeds and landscape, small windows, low light and an environment that conveys that they are essentially trapped. these conditions can be especially difficult for a child who maybe has never stayed away from home for more than a sleepover.

These same at-risk children share the same spaces as adults and criminals, and are not spared of the harshest realities. adolescents in crisis need their own place of refuge. I cannot change the stigma around mental health, but I can ask the question of what role architecture plays in the process of their healing.

how can the architecture of an in-patient facility, itself, work as an effective form of treatment in improving the mental well-being of adolescents in crisis?

敷地分析

SITE ANALYSIS





- 01** residential neighborhood
- 02** walking trails / park
- 03** hydroelectric dam
- 04** marina + restaurants
- 05** lions municipal golf course

The site of the project is located in the heart of downtown Austin, Tx. This location is not only crucial for its centrality in the state but also the dire need of the youth living in the surrounding areas. It was important to this project that the young in-patients did not feel as though they have been removed or shamed by society and placed at a remote location. Keeping this new facility in the city for views, activities and proximity to hospitals was crucial.



the site

private wooded area. lake travis

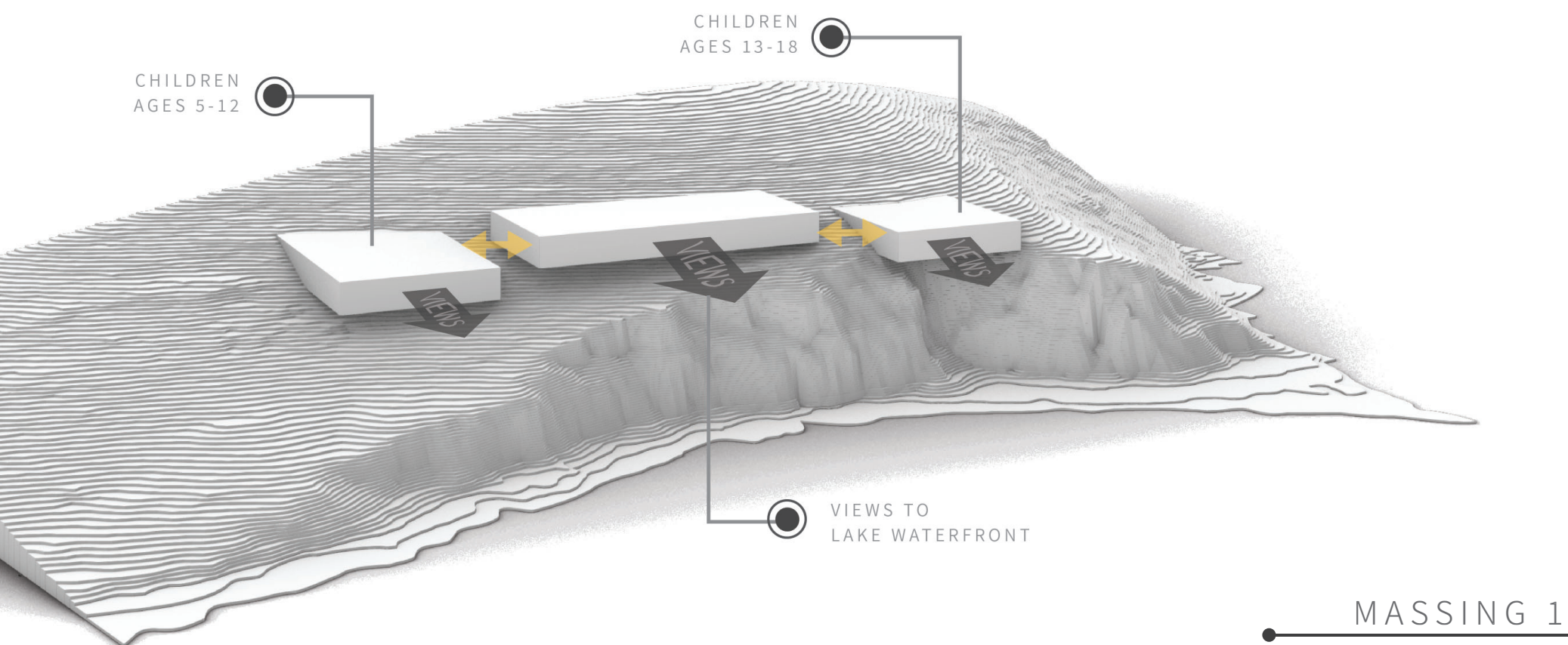
The site itself sits atop a beautiful, heavily wooded bluff that overlooks the city, marina, Lake Travis and captures sunlight all throughout the day. Being somewhat off the busy area of Lake Travis in a canal in a no wake zone, made the site desirable for both its tranquility and views. The topography of the bluff experiences a w40' steep drop on the Northern end, which became essential to the design process and final massing.



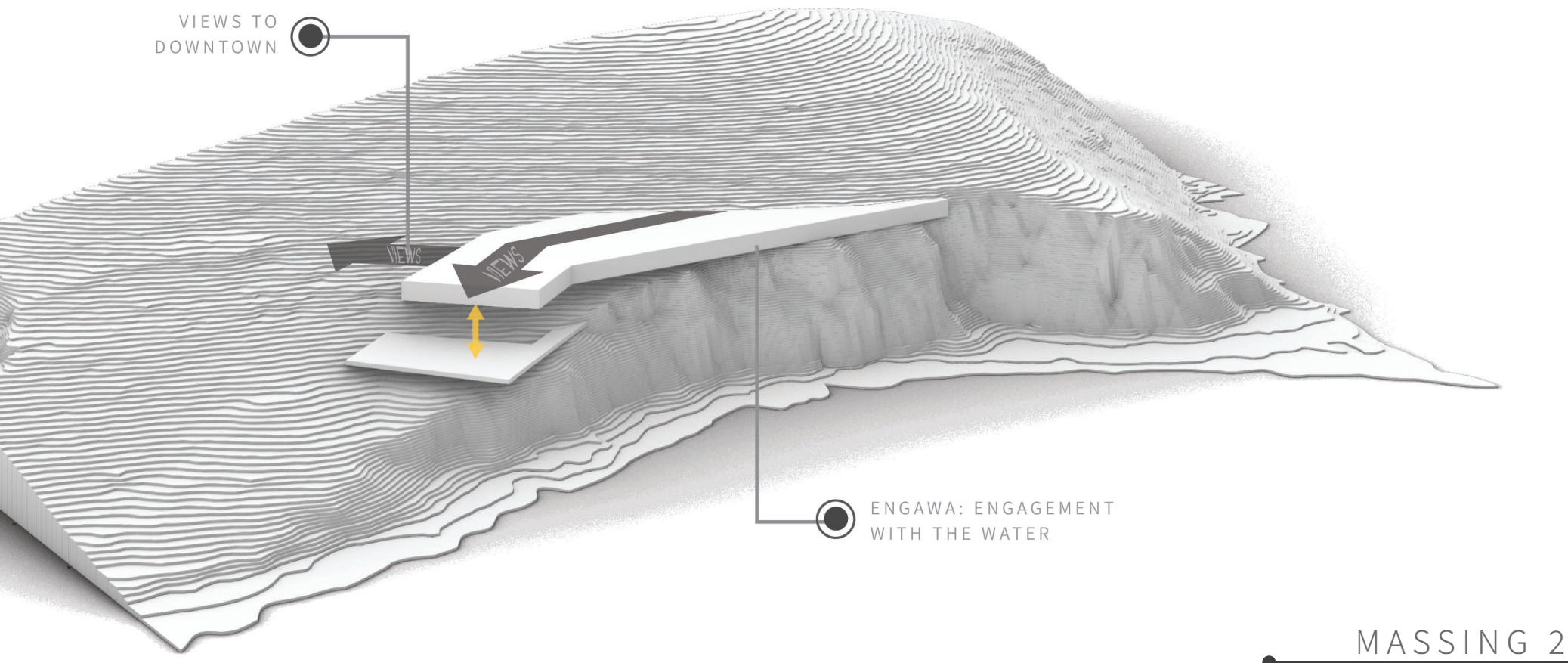
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THE ARCHITECTURE





MASSING 1

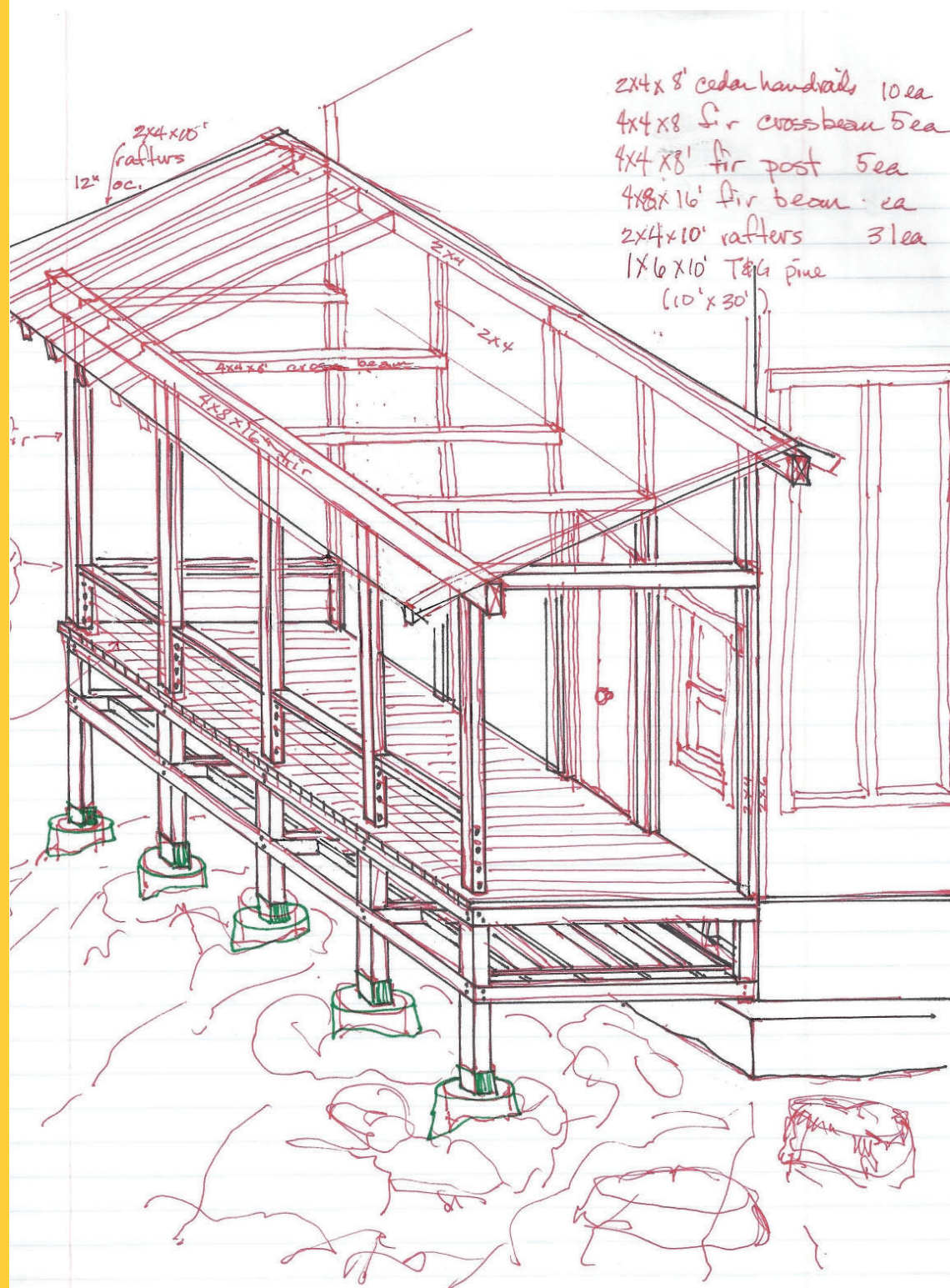


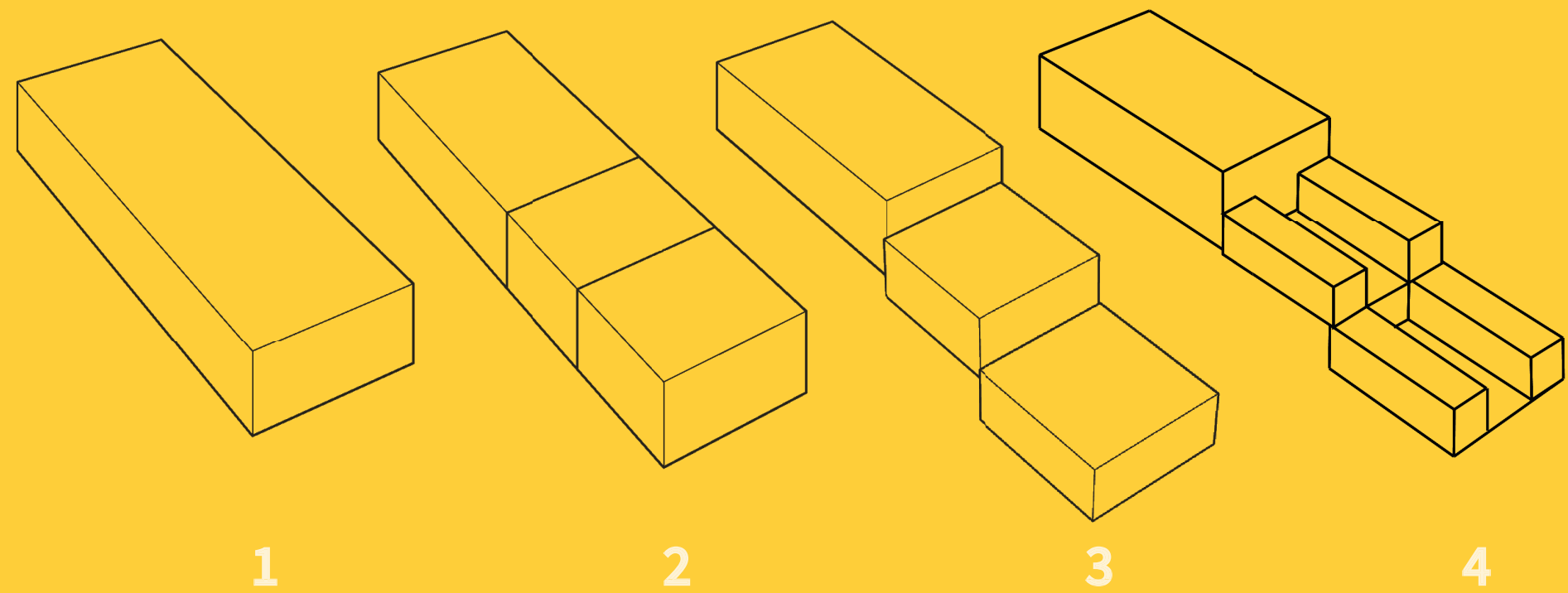
MASSING 2

the process

engawa

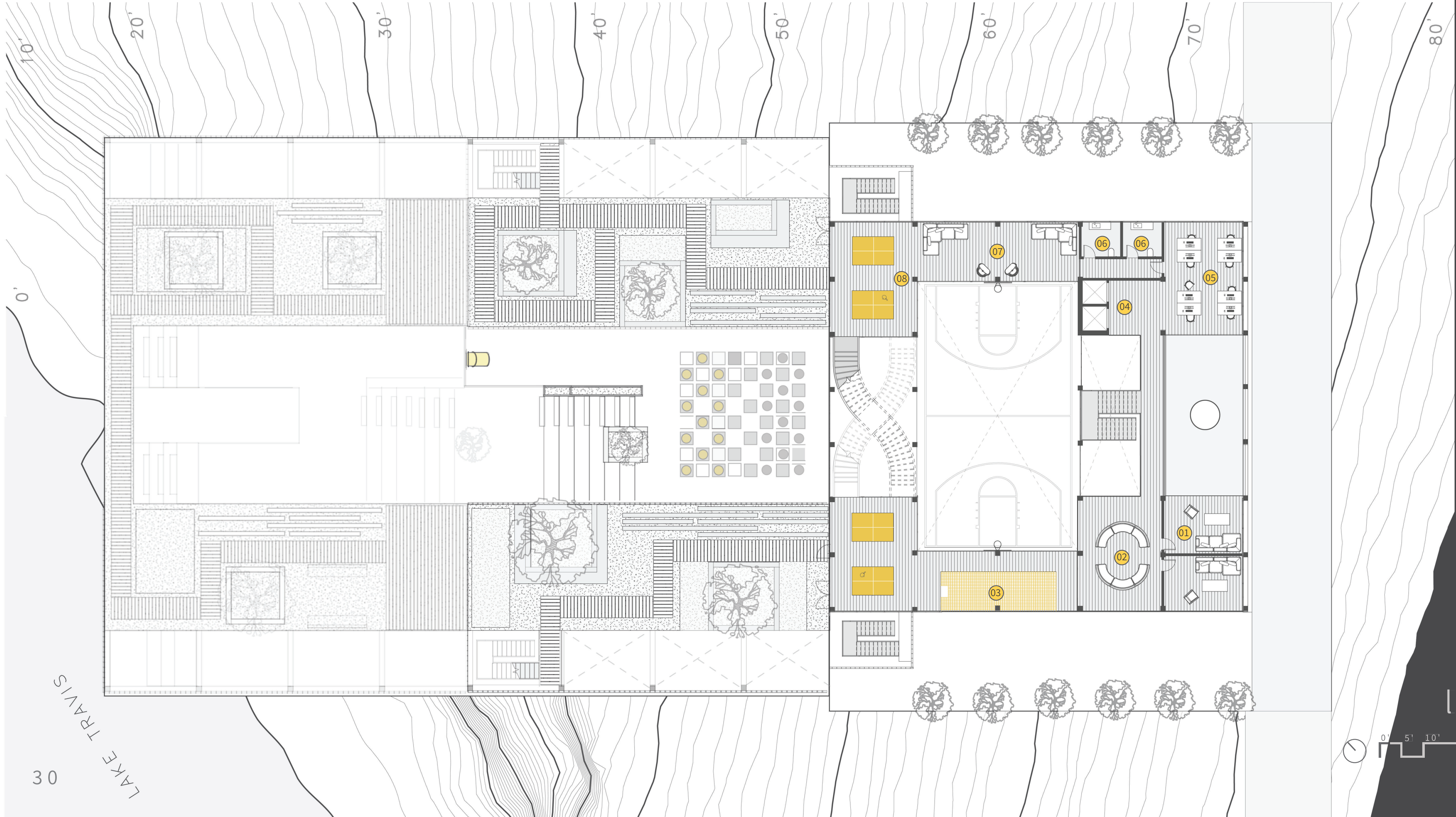
The facility and its form are heavily based in Japanese fundamentals + materiality. For centuries, the Japanese believed that a stable mind could be achieved by existing in harmony and balance with nature. The concept of Engawa engages a user with their surroundings through an overhanging porch space that protrudes over water.





the final mass

The final massing for the building was first established by beginning with a rectangular prism that was oriented to the best views and light on the site. Then the mass was separated based on program; the largest uppermost mass being administration and staff spaces for security, then the next two being separated into the residential areas based on age group (5-12 and 13-18). I then adjusted the residential masses to the topography of the site, allowing for clear sitelines and security from the staff area at all times. Lastly, in order to create safe outdoor spaces and engage the most daylight, I carved out a large void space down the central axes. This last step allowed for residential wings and more access to views and a closeness to the water below.



- 1 therapy room
- 2 group therapy
- 3 play nets
- 4 elevator lobby
- 5 staff desks
- 6 staff restrooms
- 7 community lounge
- 8 ping pong tables

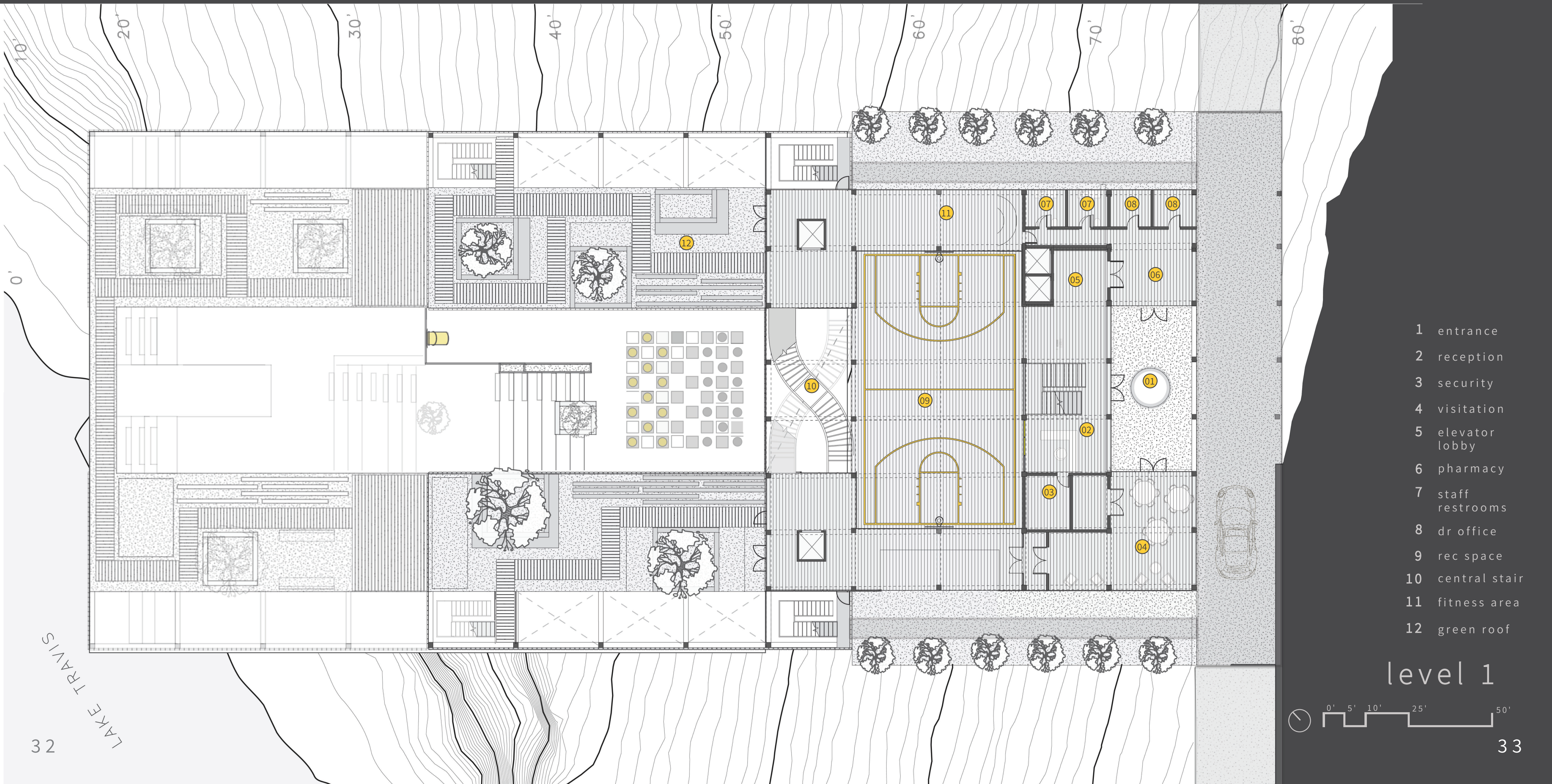
level 2



LAKE TRAVIS

30

31

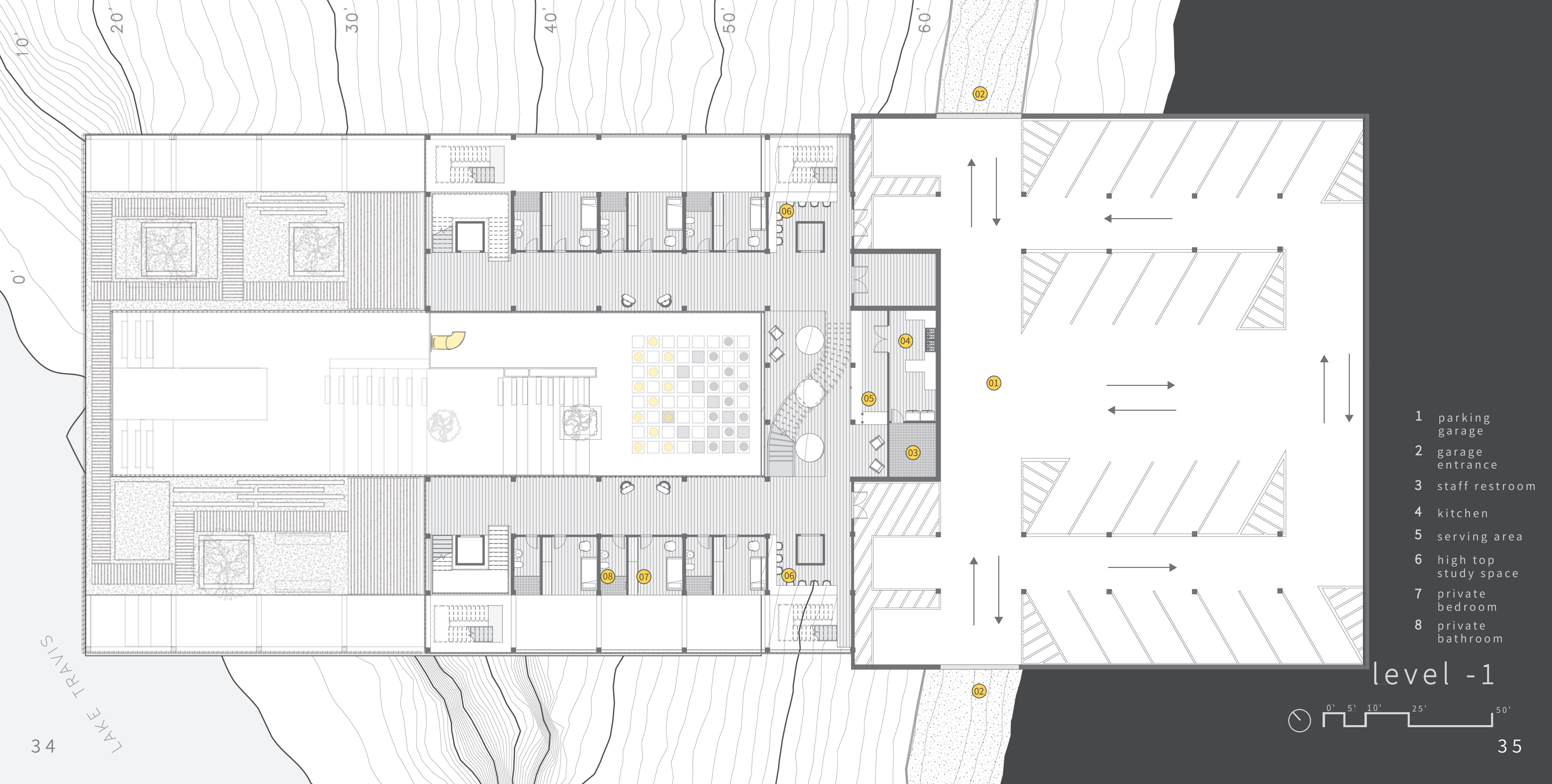


- 1 entrance
- 2 reception
- 3 security
- 4 visitation
- 5 elevator lobby
- 6 pharmacy
- 7 staff restrooms
- 8 dr office
- 9 rec space
- 10 central stair
- 11 fitness area
- 12 green roof

level 1



LAKE TRAVIS



- 1 parking garage
- 2 garage entrance
- 3 staff restroom
- 4 kitchen
- 5 serving area
- 6 high top study space
- 7 private bedroom
- 8 private bathroom

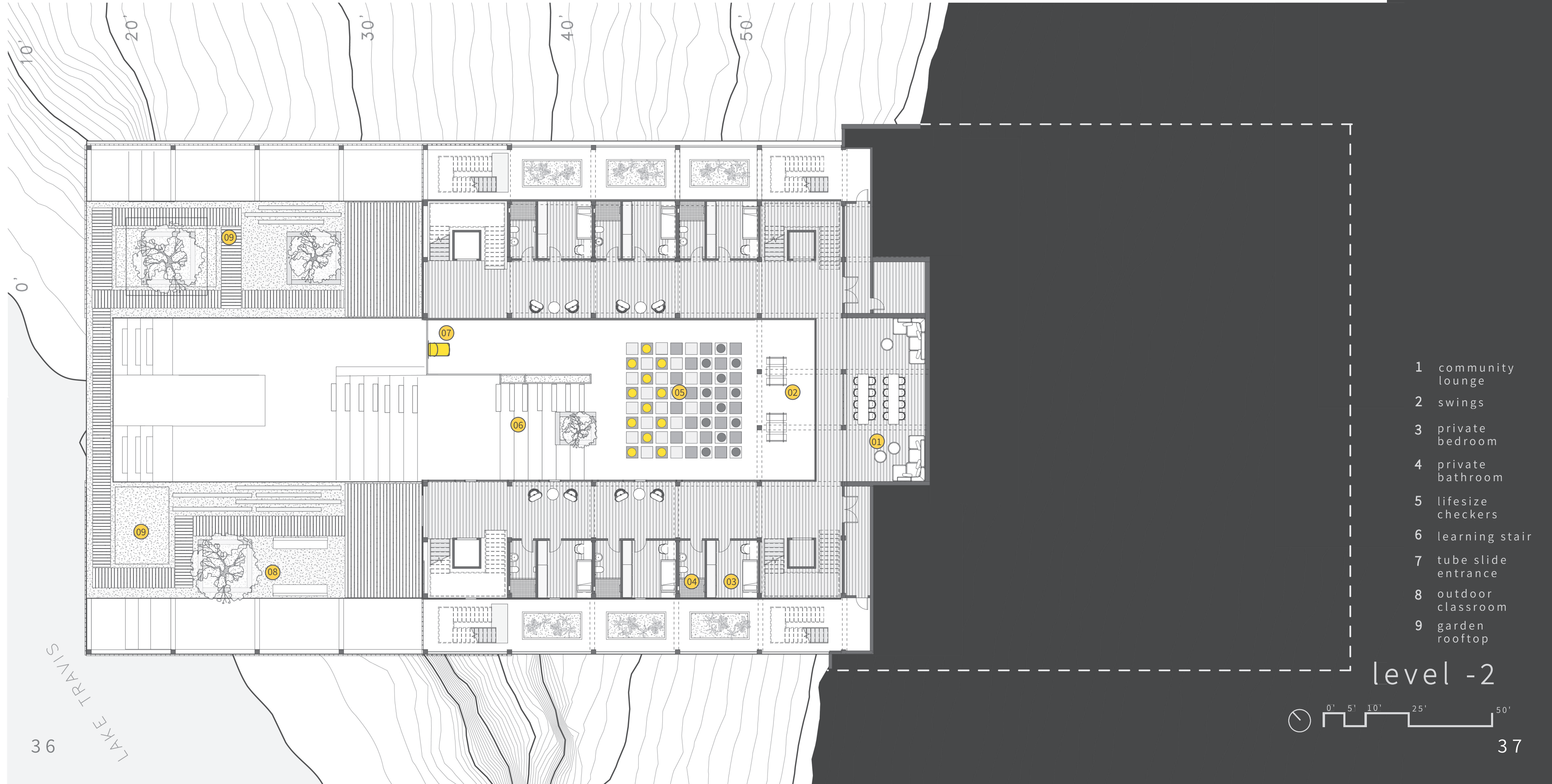
level -1



LAKE TRAVIS

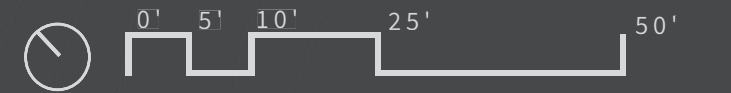
10'
20'
30'
40'
50'
60'

0'



- 1 community lounge
- 2 swings
- 3 private bedroom
- 4 private bathroom
- 5 lifesize checkers
- 6 learning stair
- 7 tube slide entrance
- 8 outdoor classroom
- 9 garden rooftop

level -2



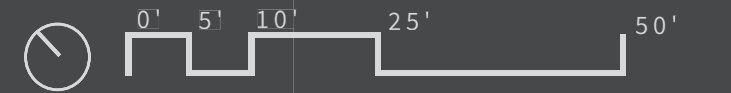
LAKE TRAVIS

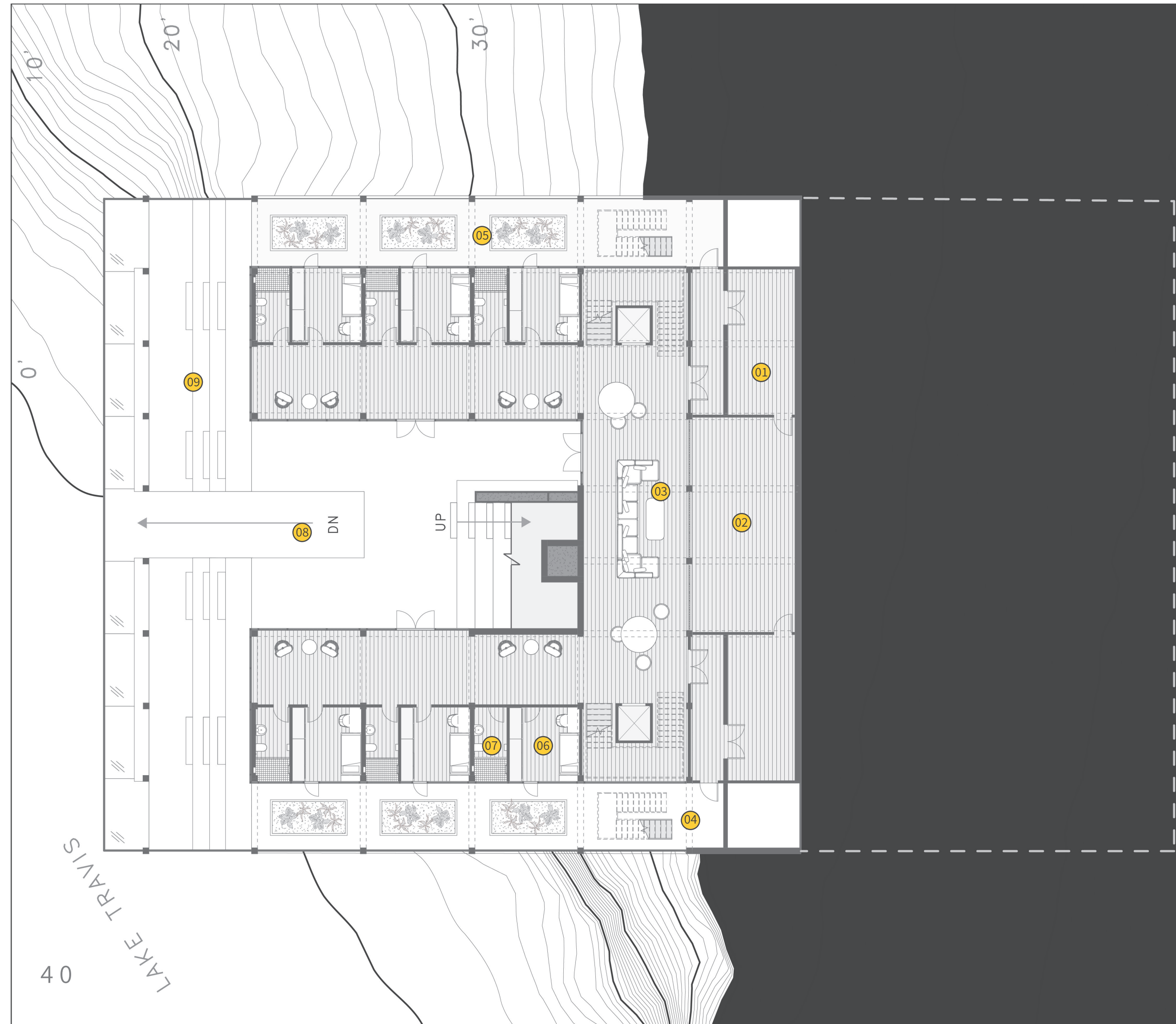
10'
20'
30'
40'
50'



- 1 fire stairs
- 2 tube slide
- 3 skylight
- 4 learning stair
- 5 lounge area
- 6 private bedroom
- 7 private bathroom

level -3



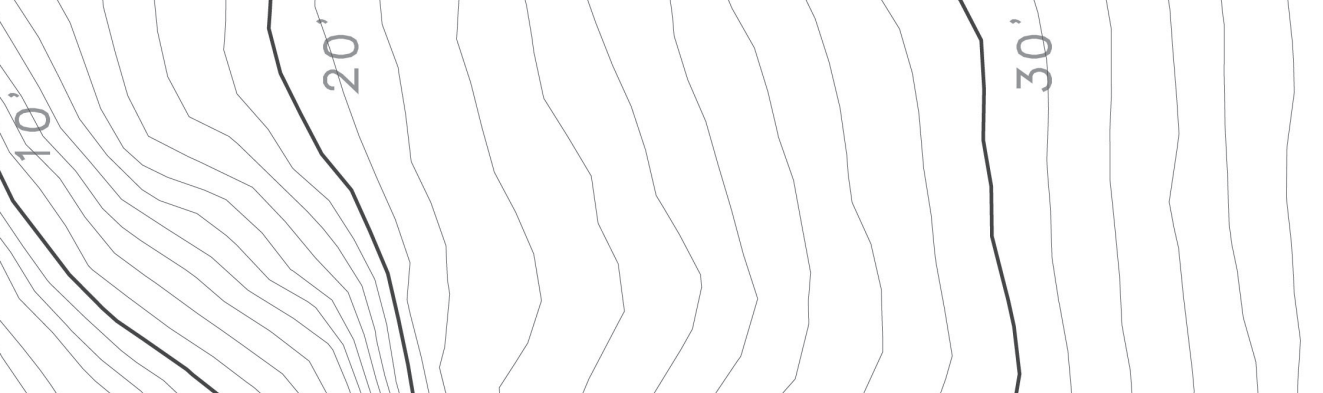


- 1 mechanical
- 2 storage
- 3 community room
- 4 fire stairs
- 5 zen garden
- 6 private bedroom
- 7 private bathroom
- 8 ramp
- 9 engawa

level -4



LAKE TRAVIS



08 DN

UP

09

05

01

02

03

07

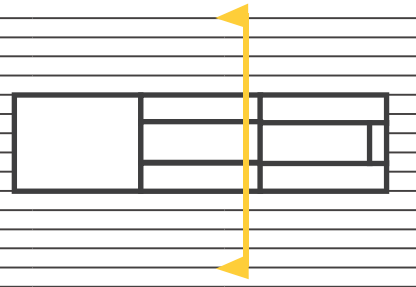
06

04

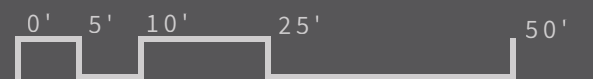
sections

longitudinal + latitudinal

The South and East sections, showcase the central courtyard and stairs from different angles. In the South section, the egress stairs, slide and internal circulation stairs are highlighted. In the East sections, the parking garage and full length of building can be seen.

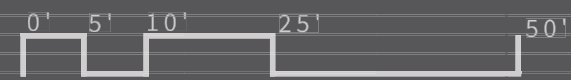


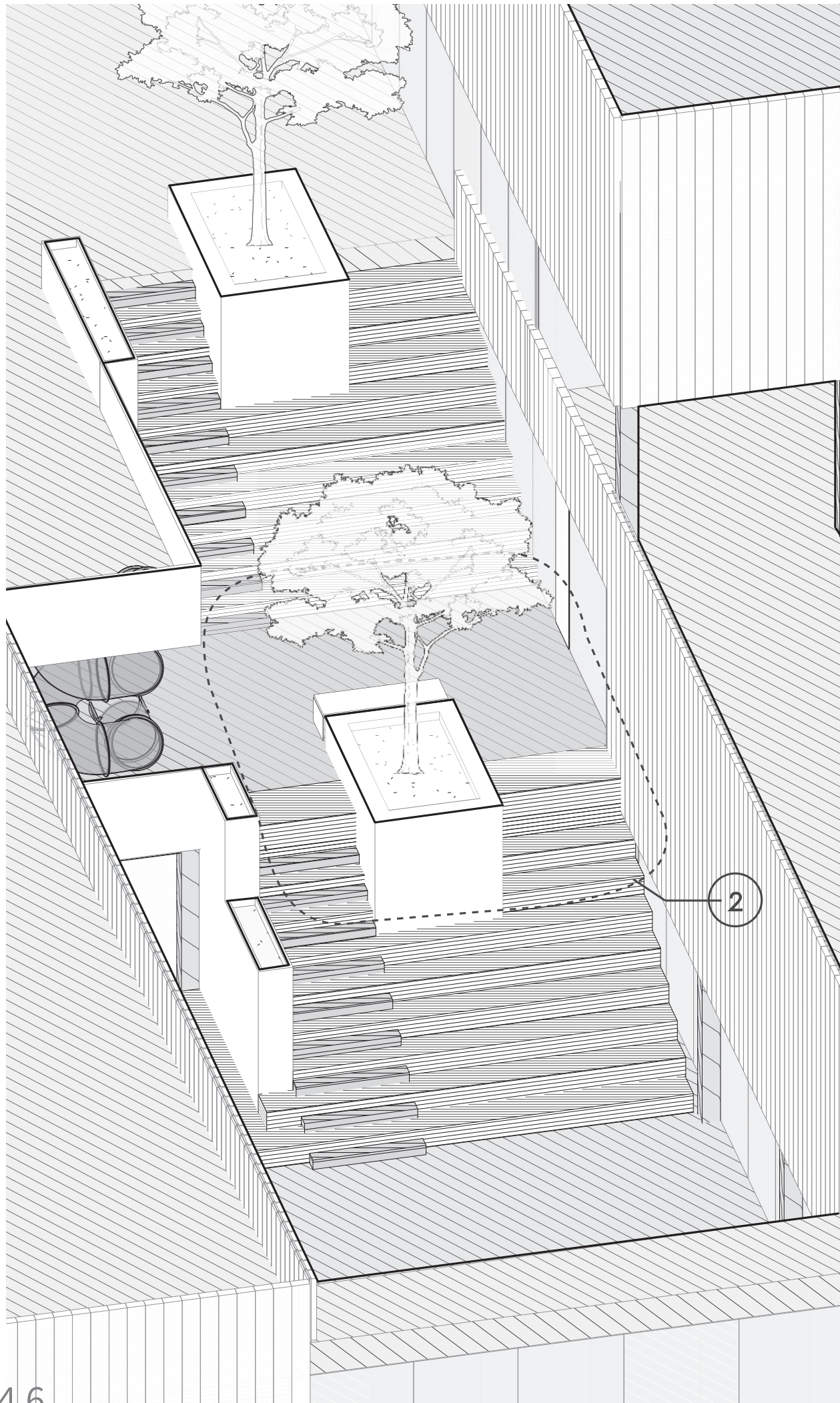
⊙ south





⊖ east



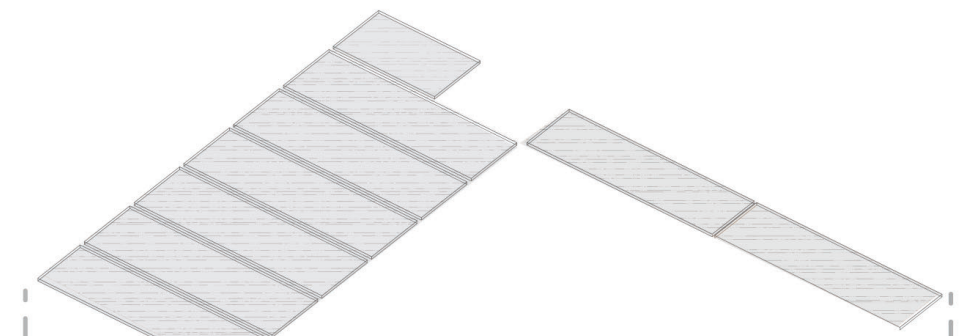


the structure

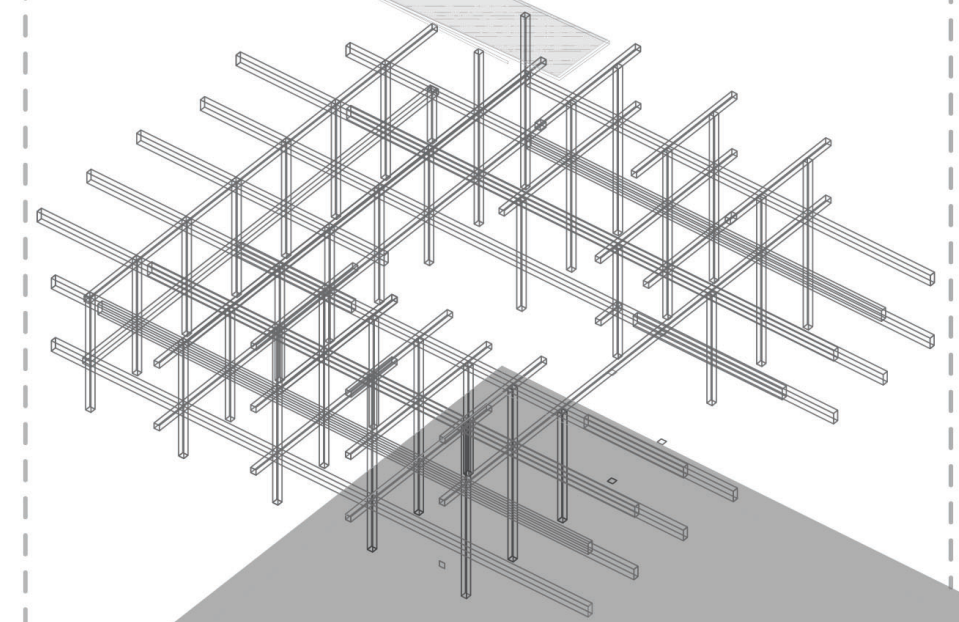
mass timber

The structure of the building is mass timber construction set up in structural bays of 12' x 18'. Within each of these bays fits one module of the private bedroom/ bathroom combination. I chose mass timber for its sustainable benefits and so that children may experience calm from walking barefoot on the wood floors; a traditional Japanese practice.

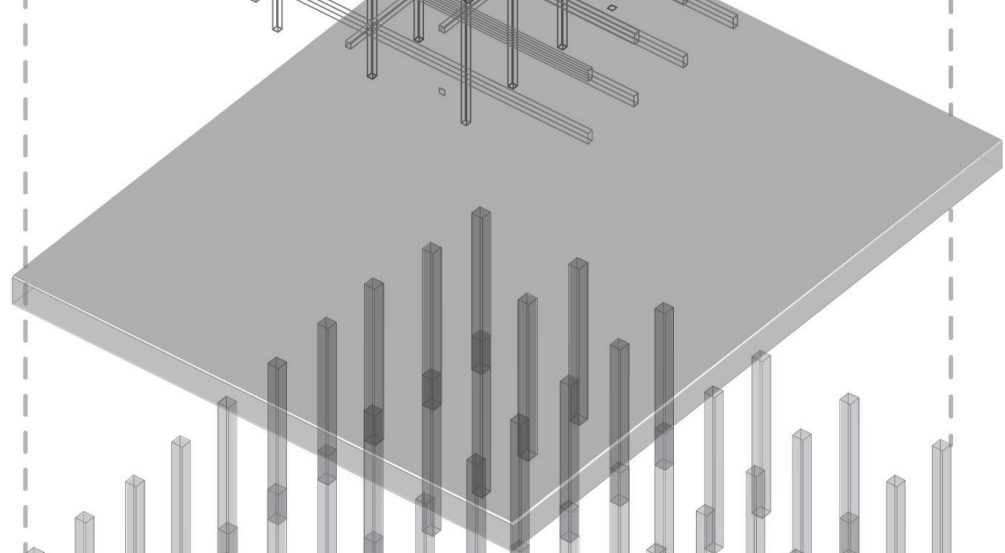
04



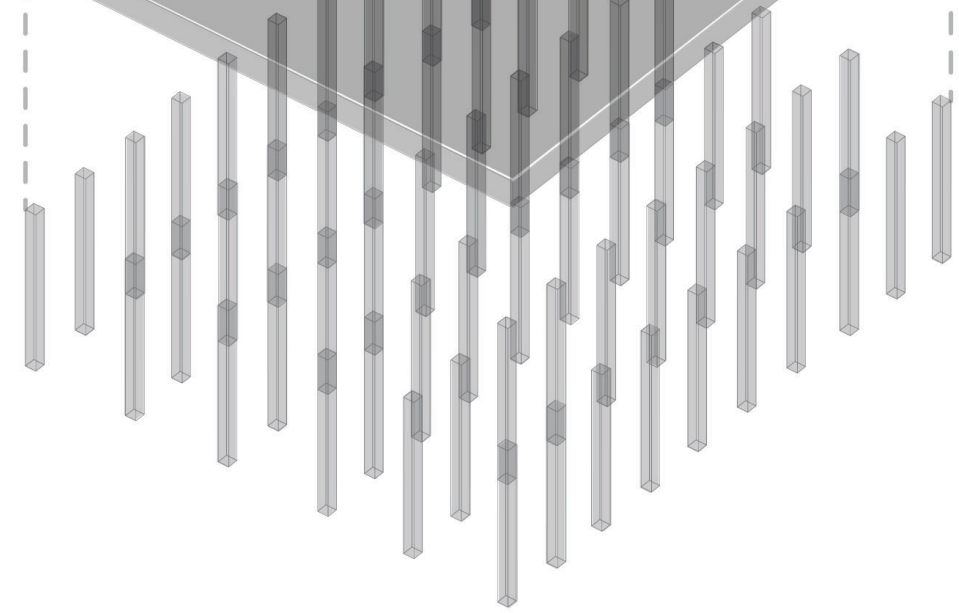
03



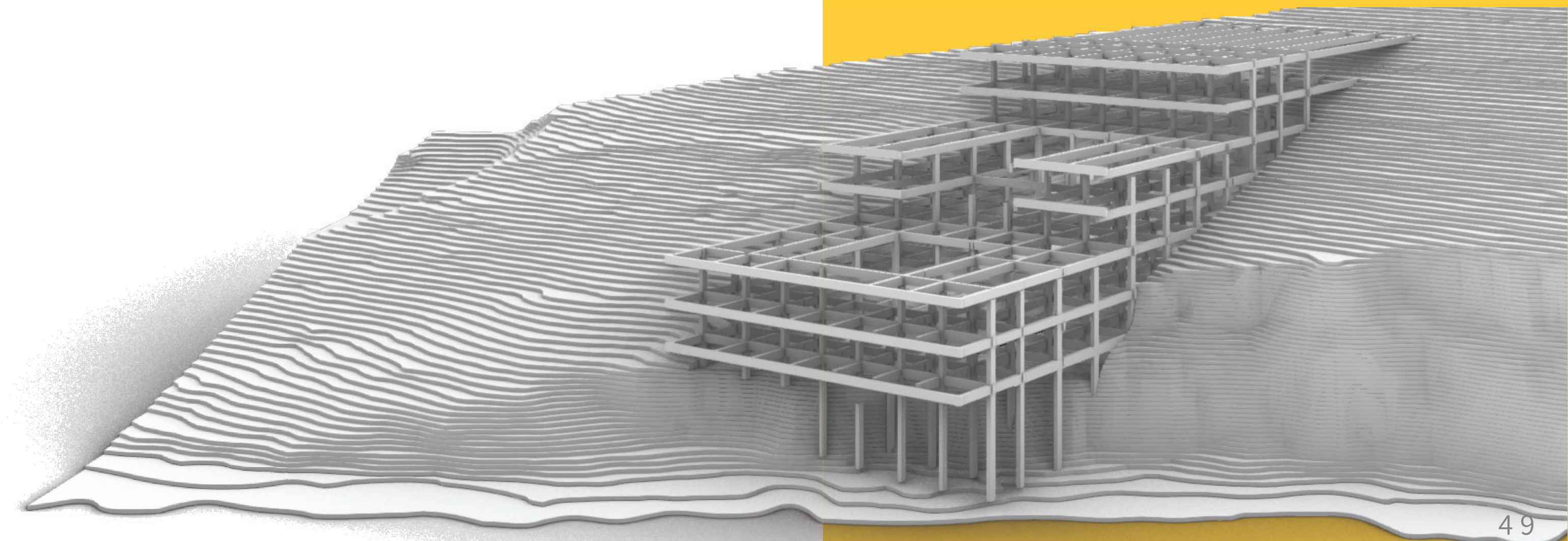
02

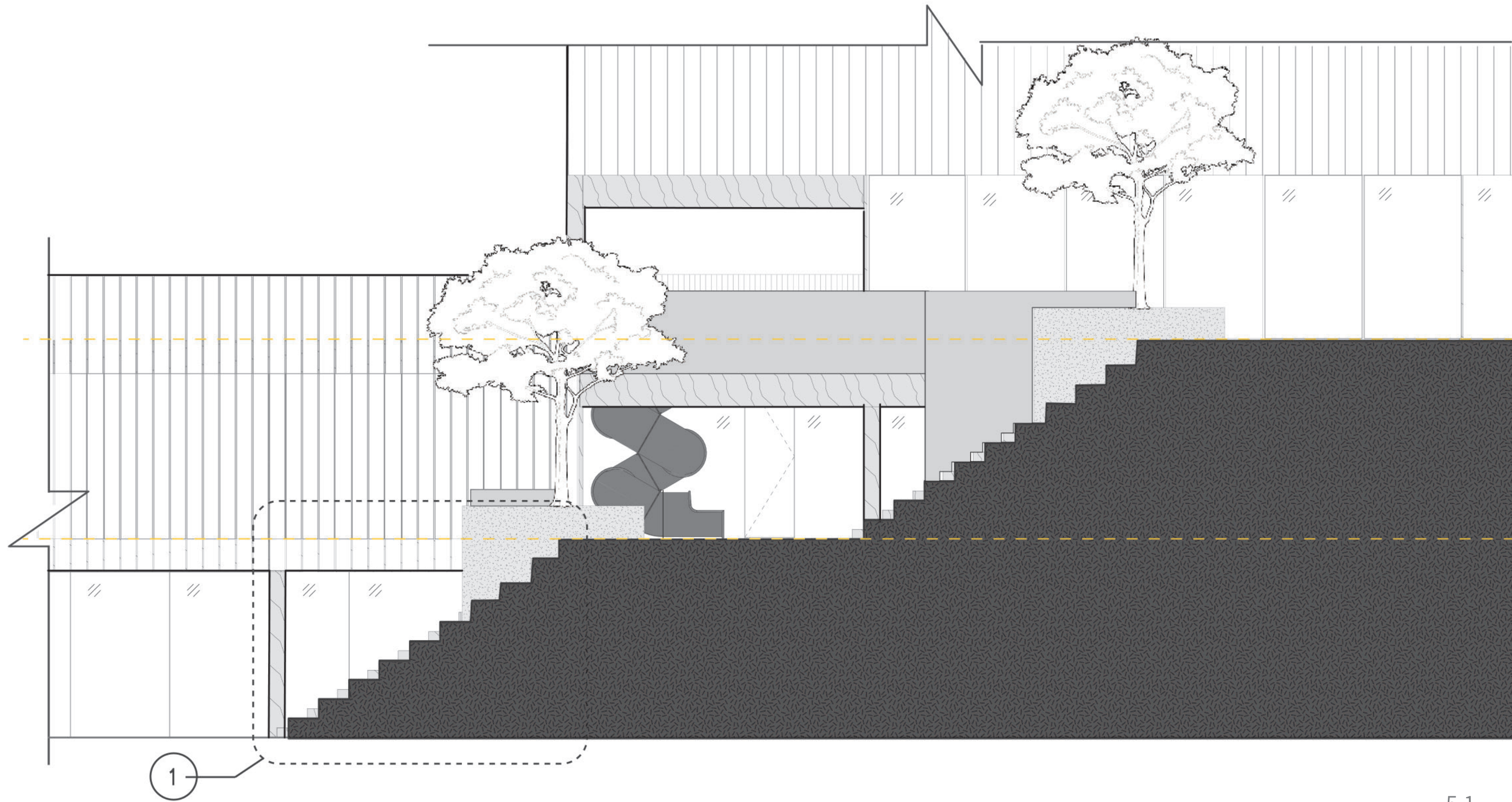


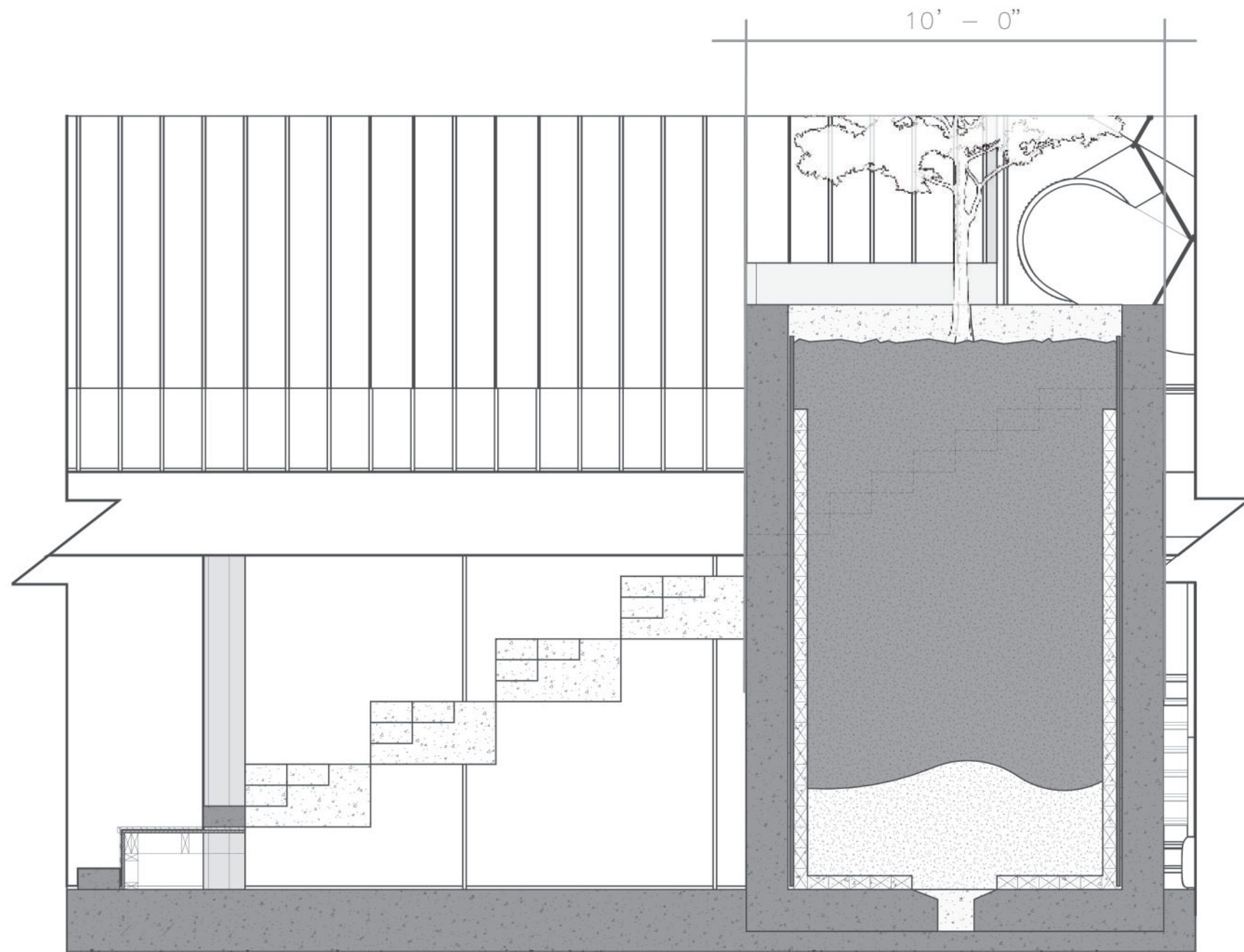
01



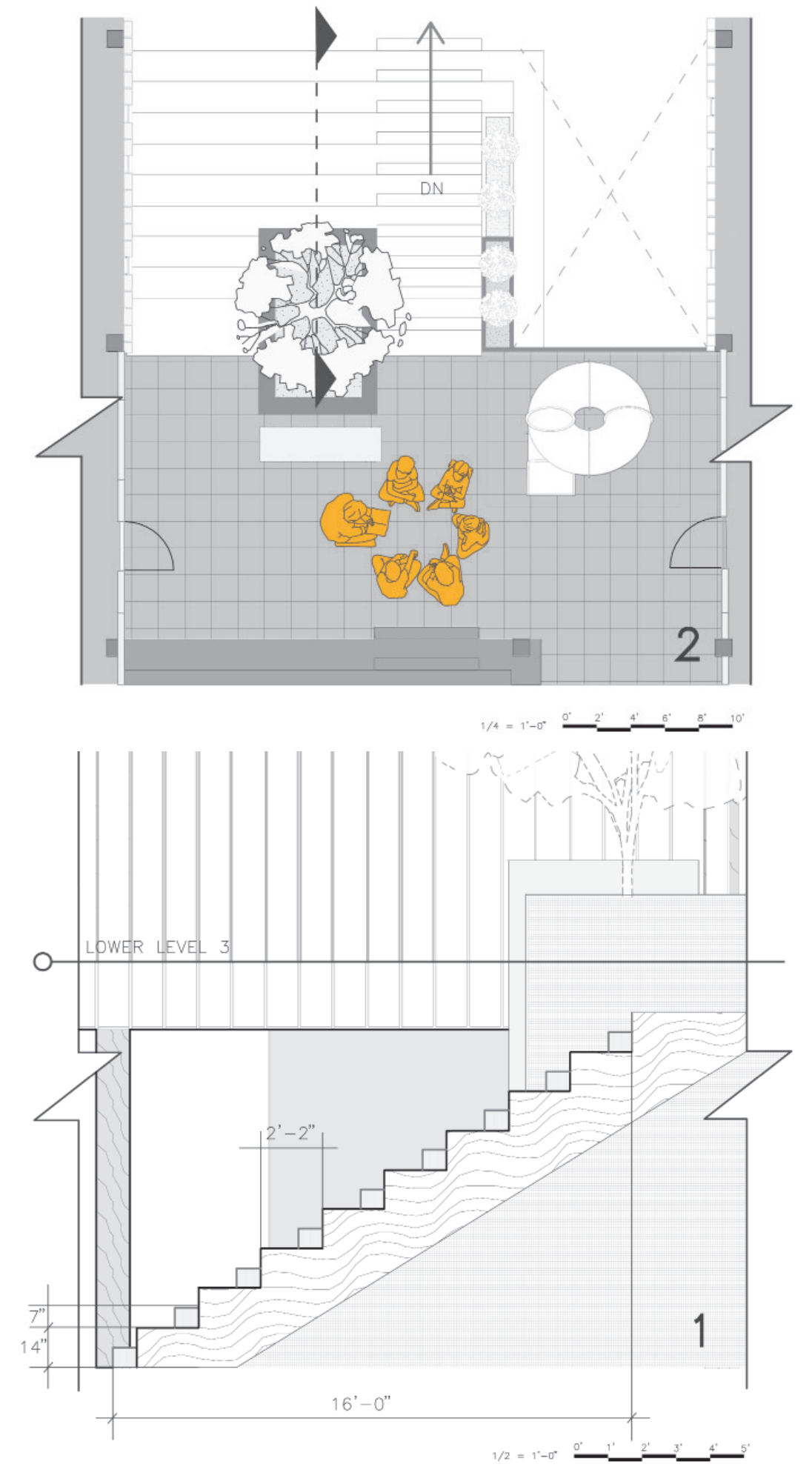
- 1 concrete piers
- 2 raised floor system
- 3 mass timber columns + beams
- 4 mass timber floor panels

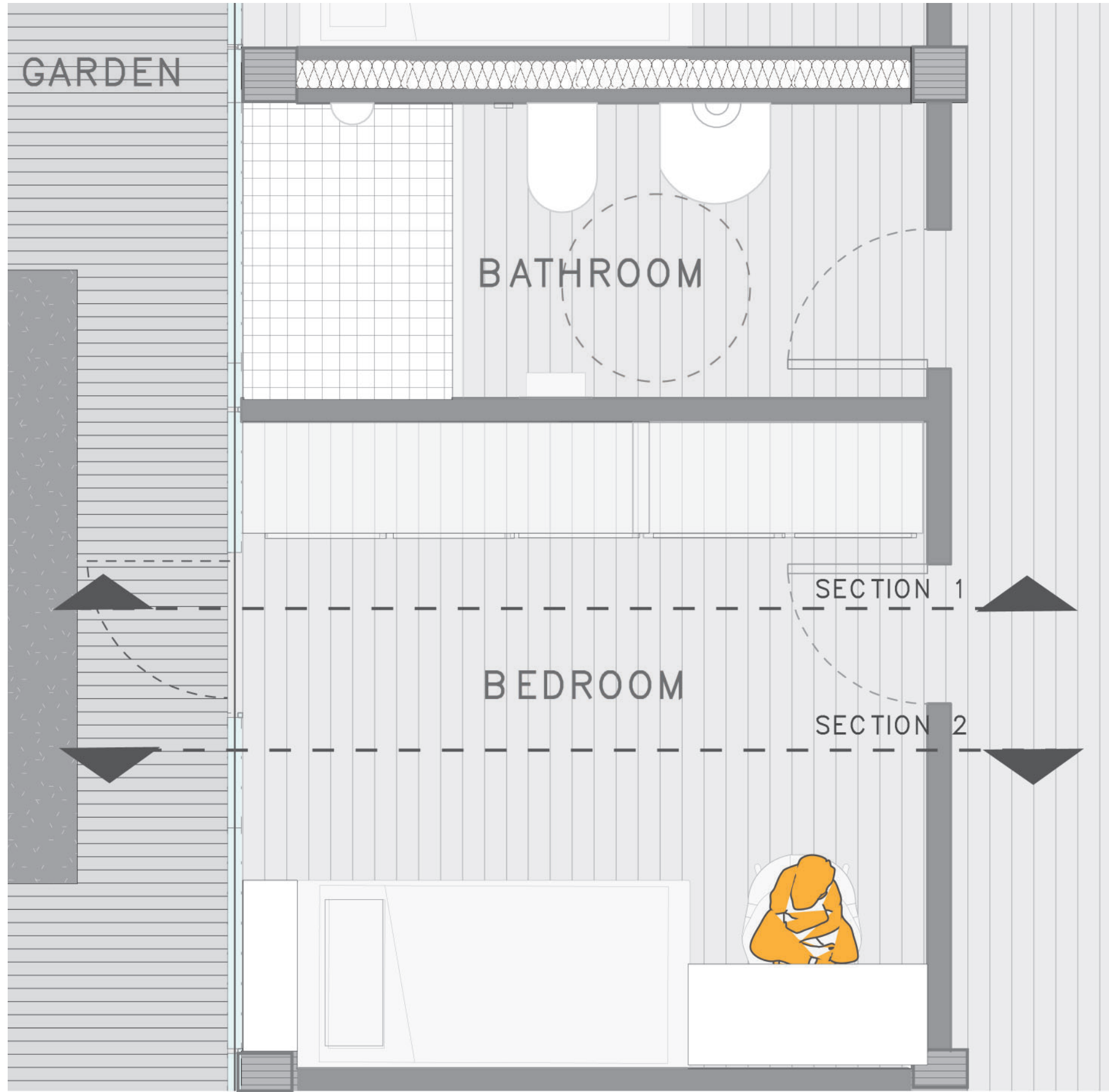




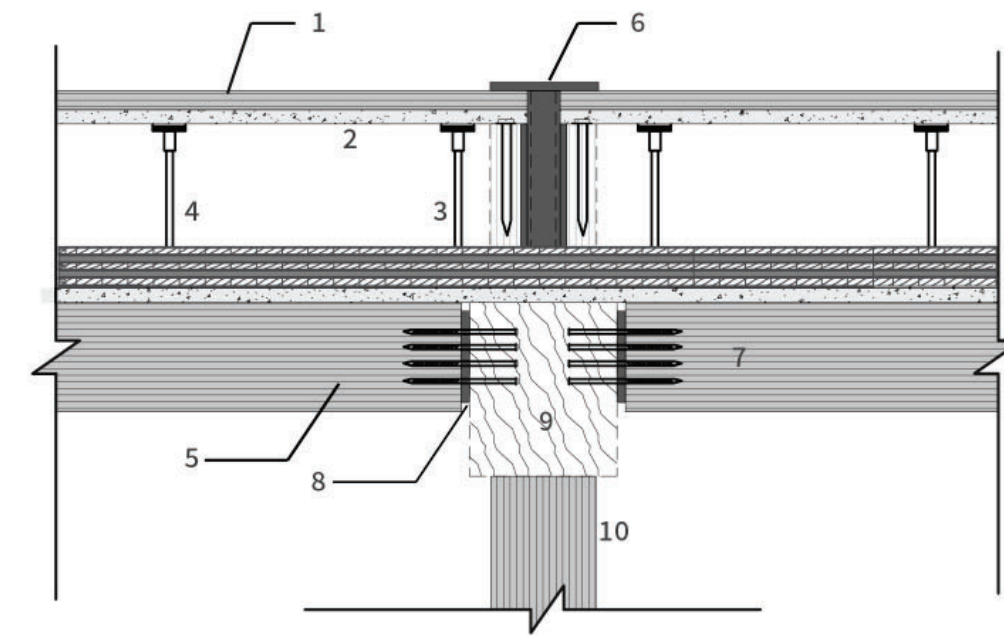


The sections and enlarged plans are representative of significant microspaces within the greater landscape of the building. For instance, the mezzanine area of the courtyard (featured on right) and its relationship to the central staircase and to the residential wings that frame it.

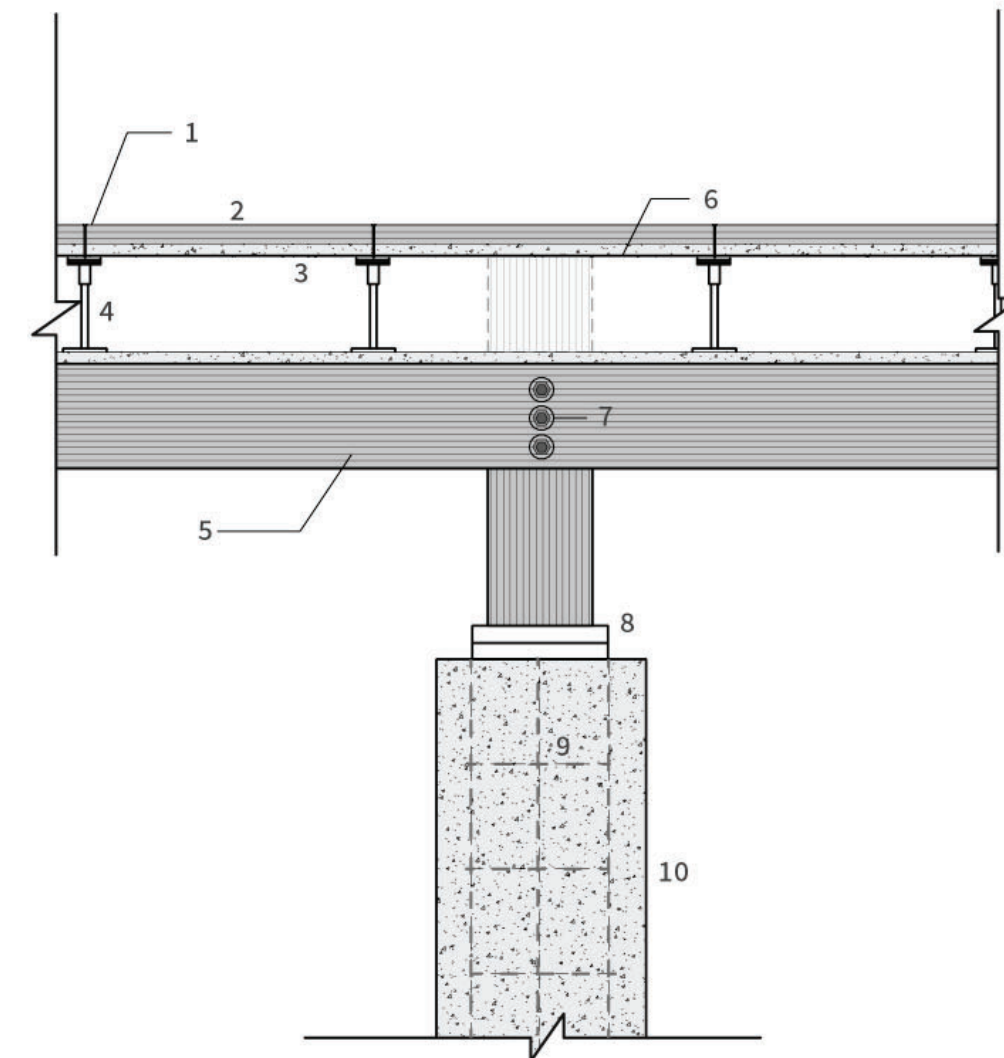




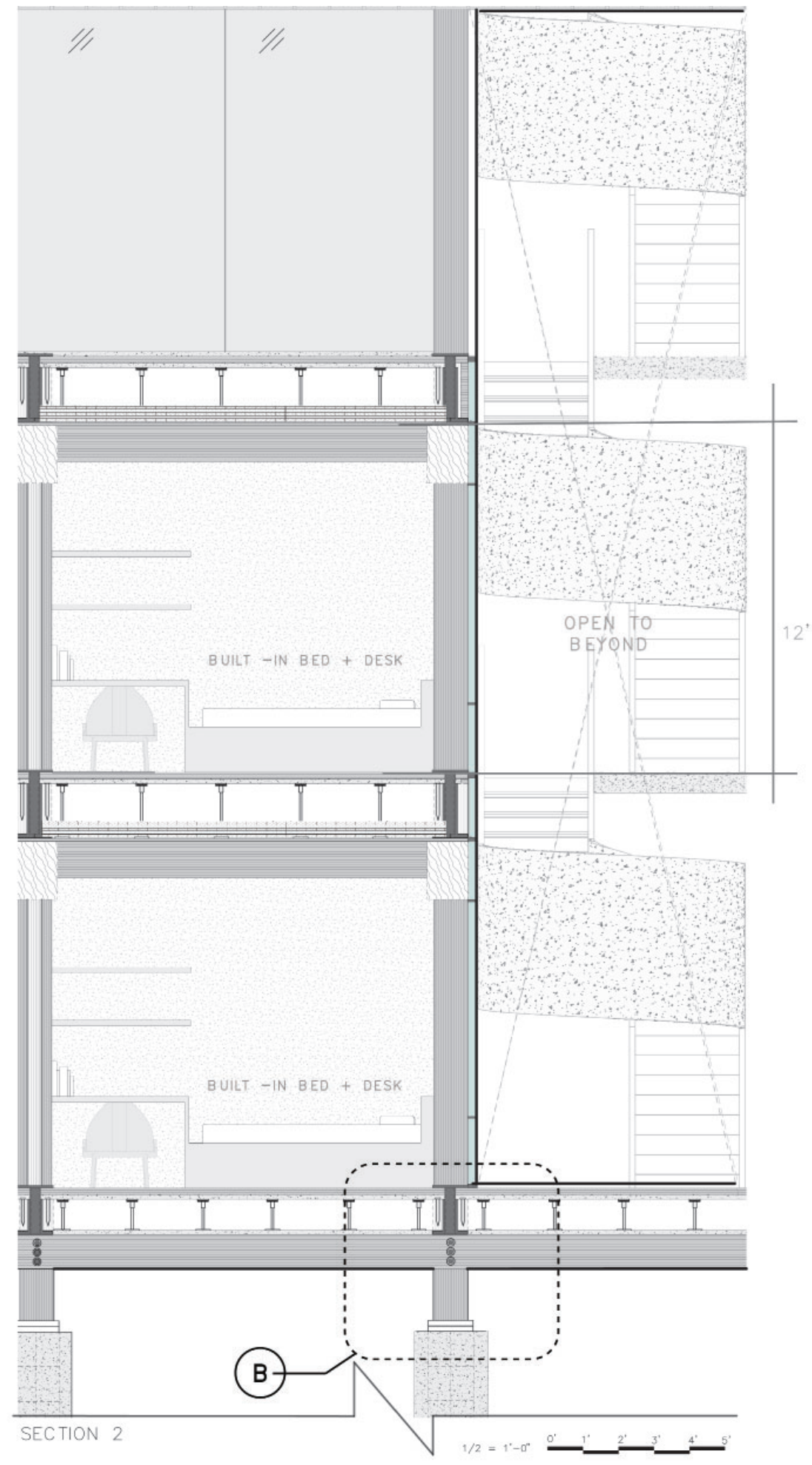
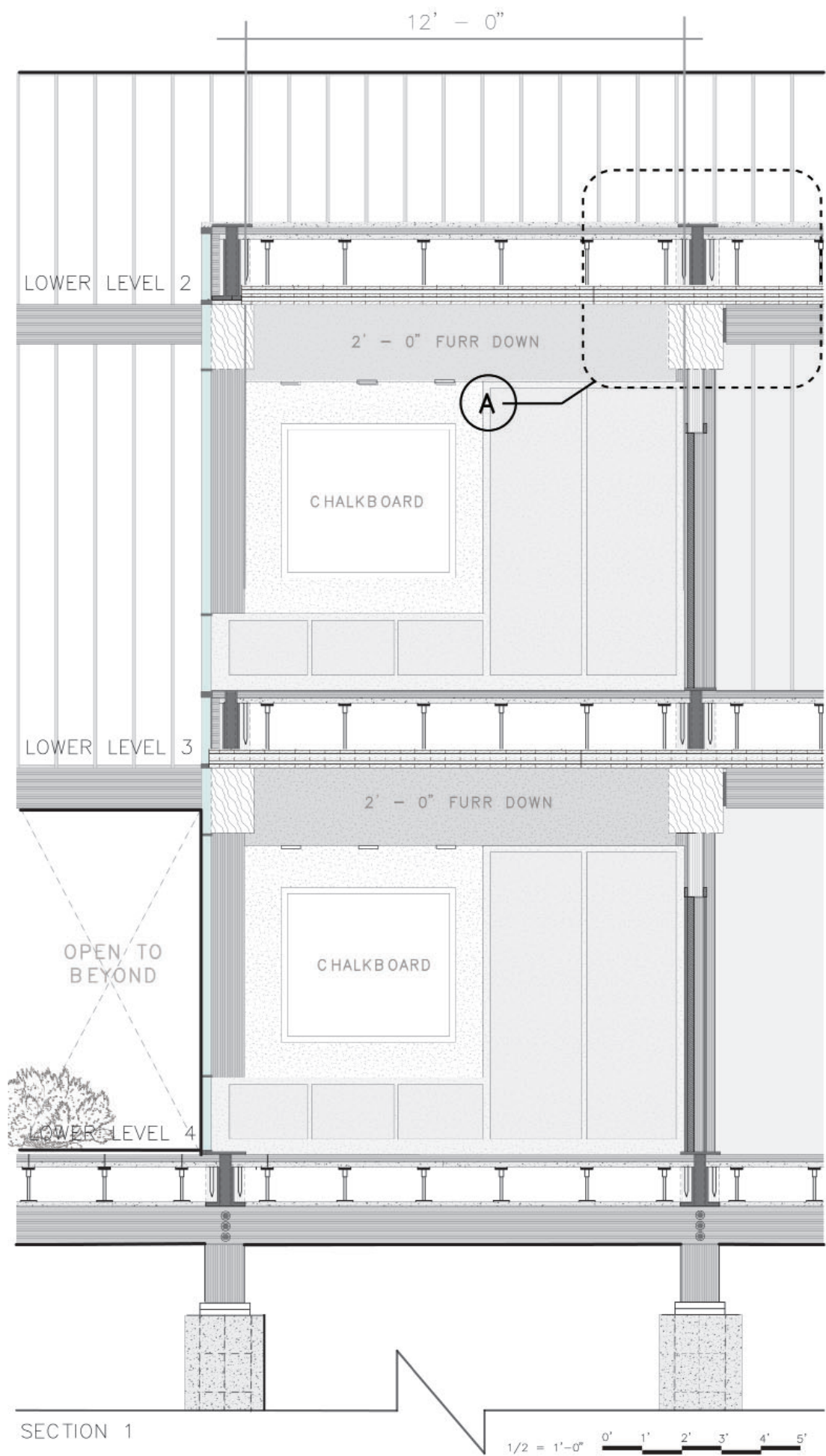
1/2" = 1'-0"
 0' 1' 2' 3' 4' 5'



- 1 mass timber panel
- 2 concrete topping
- 3 steel bolts
- 4 alpha III riser + pedestal cap
- 5 mass timber beam
- 6 steel I-beam connection
- 7 steel bolts
- 8 ricon style connector
- 9 mass timber girder
- 10 mass timber column



- 1 riser panel openings
- 2 mass timber panel
- 3 concrete topping
- 4 alpha III riser + pedestal cap
- 5 mass timber beam
- 6 steel sheet
- 7 screws
- 8 steel shims
- 9 rebar reinforcement
- 10 concrete cast-in-place pier



患者の経験

HABITANT EXPERIENCE





experiencing the form

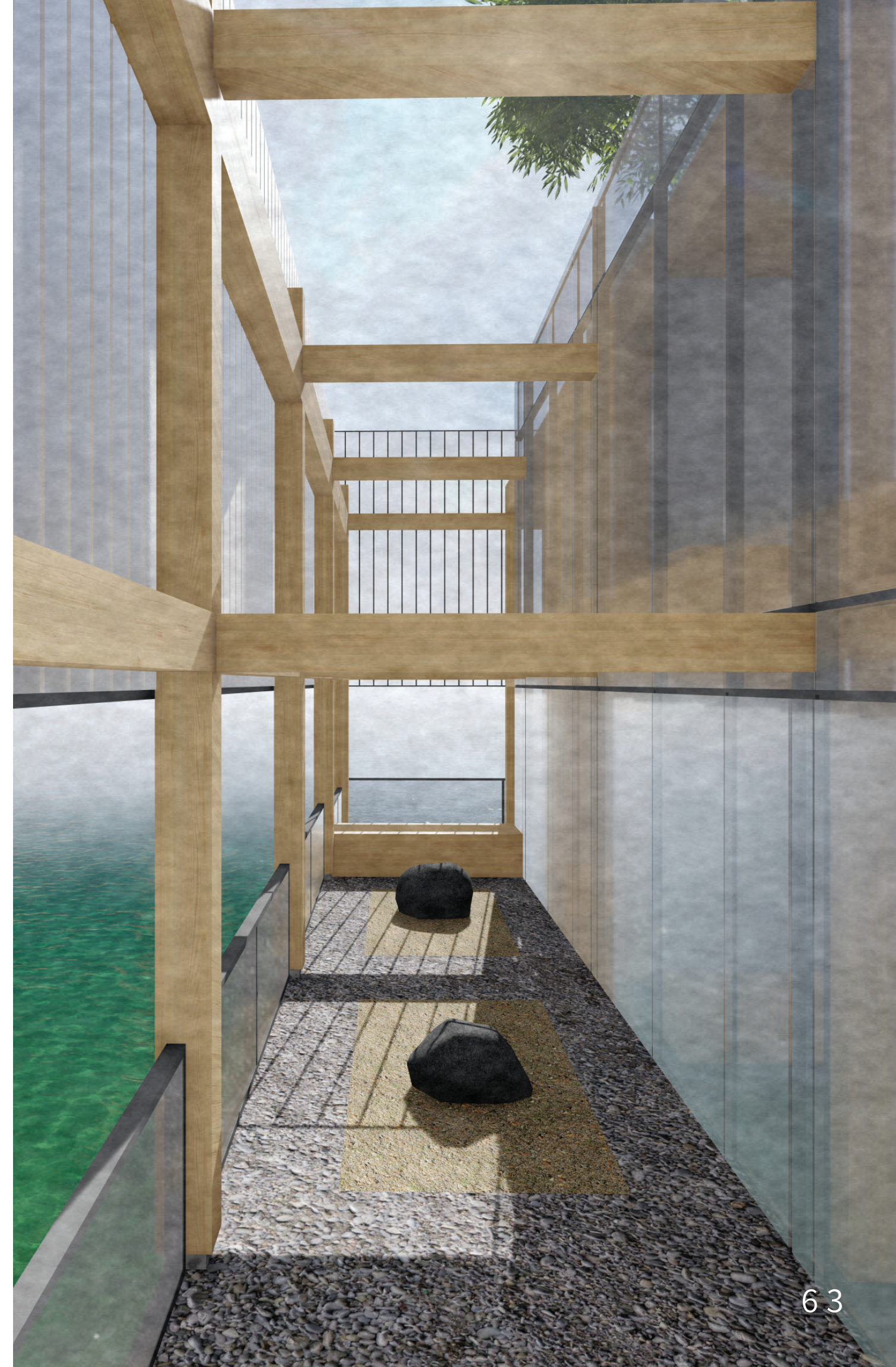
through outdoor spaces

The main courtyard connects each part of the building and each age group and shared community play space. Each corridor and each room of this building has views and connections to outdoor spaces, thus fostering time outside and time interacting with others and nature in a safe + visible way. The central axes make wayfinding easier for the children and staff alike.

ENGAGING ENGAWA
AT THE WATER'S EDGE



Engawa is engaged at each of the edge conditions around the building. Featured in the left image is the main engawa space that hosts tiered seating overhanging the lake. The overhang allows for closeness to the sounds and senses of rushing water through the glass floor and glass walls around it. Featured in the right image is the edge condition outside of each set of bedrooms. The upper level rooms are enclosed by a polycarbonate panel skin that gives both privacy and still allows light to penetrate through. The lower level rooms look out onto the water and into the zen gardens.



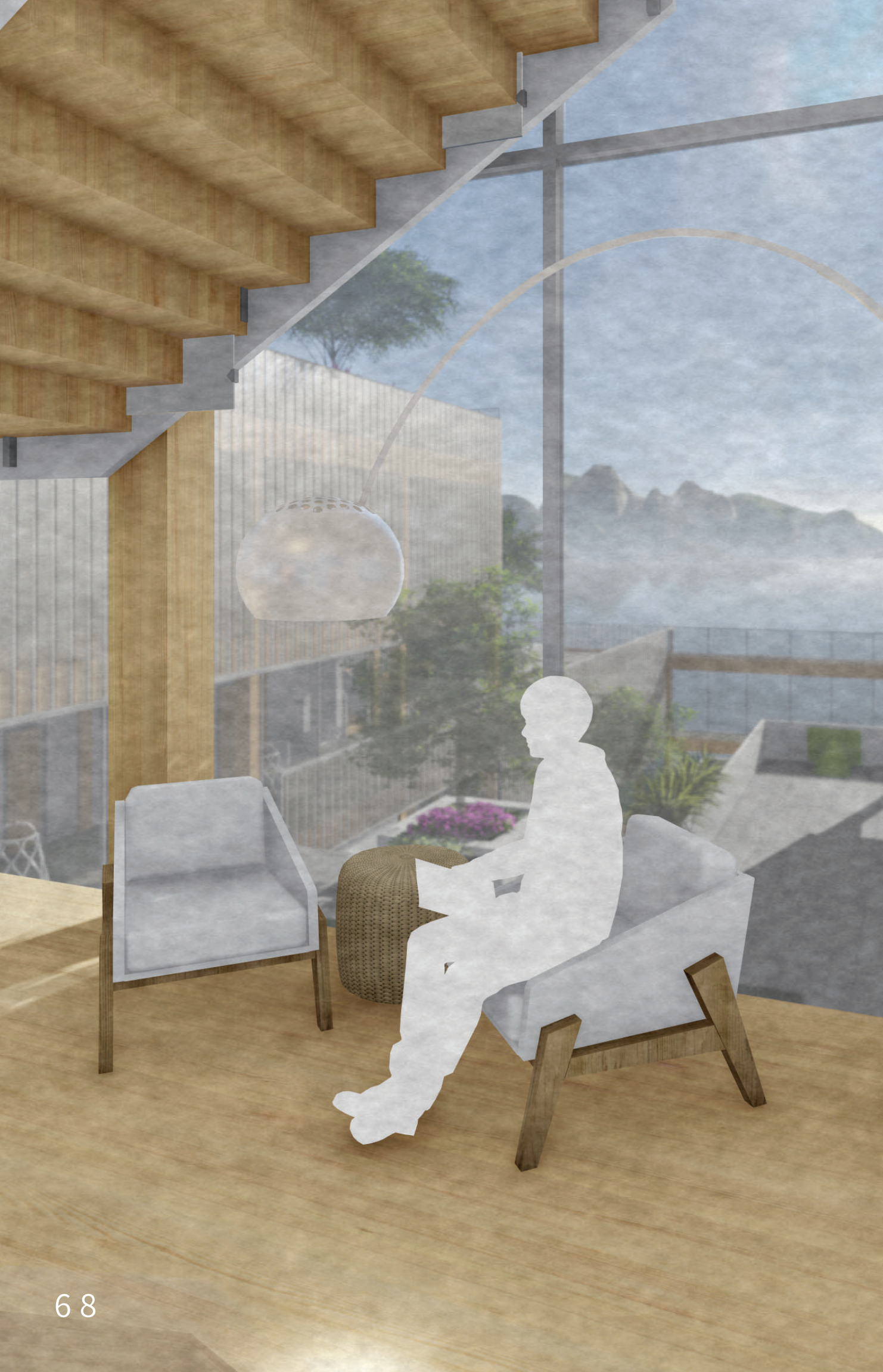
OUTDOOR SPACES GREEN ROOF ACCESS



From the beginning, it was essential that in order to create the balance between the habitants and nature; that there was to be an almost equal amount of indoor space to outdoor space. These safe green roofs are accesible to the children for garden- ing skills, outdoor class- es and outdoor loung- ing. Enclosed by the 5' tall polycarbonate skin around them, the roof- tops are safe and keep the children in views of staff at all times.

MAIN COURTYARD
LIFESIZE CHESS





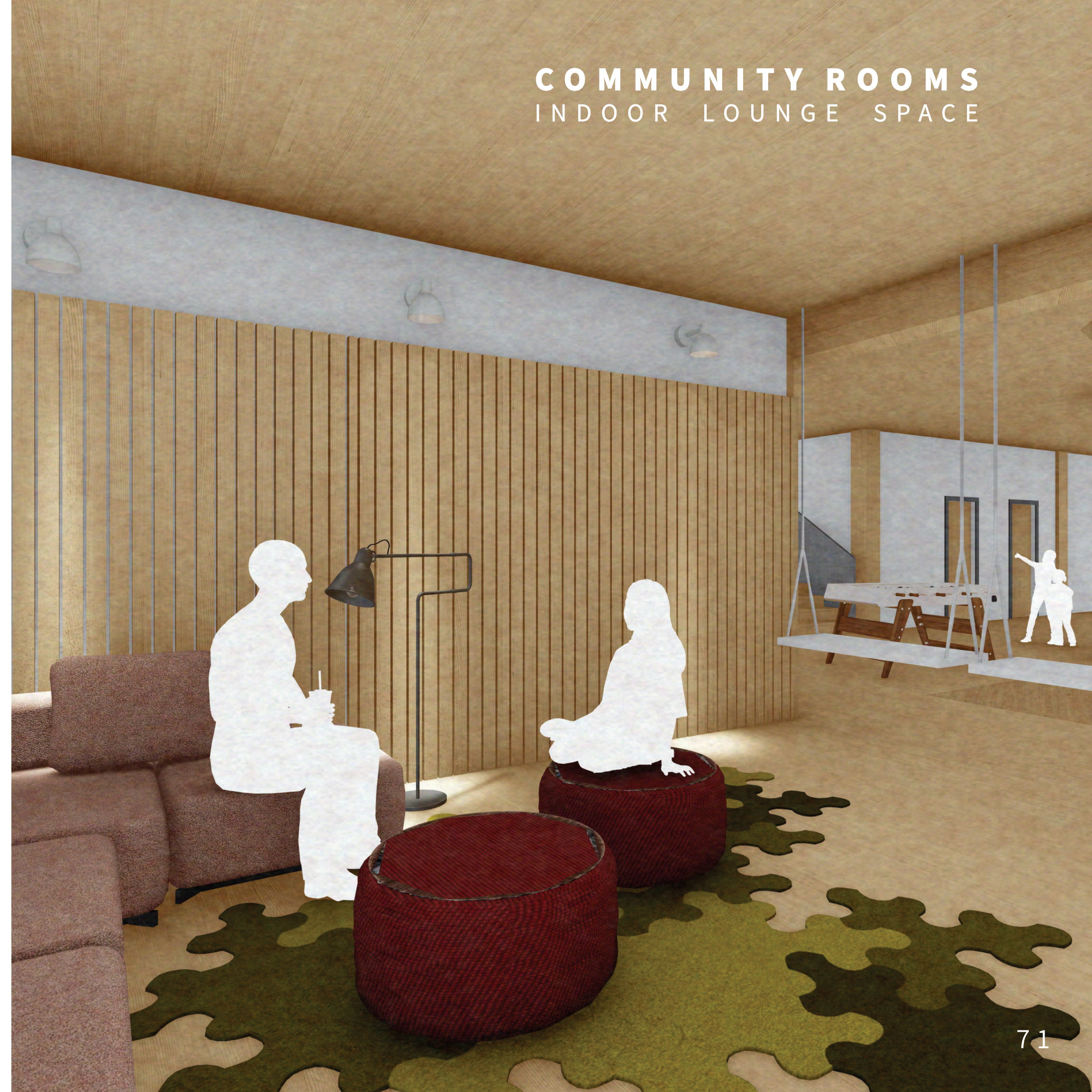
Influenced by Japanese architecture and soothing cool colors, the interior materials of the building allow for the feeling of a fresh space and a clean slate. Off of each corridor, the views and access to outdoors are made apparent so that the children feel a sense of autonomy.



QUALITY OF SPACE INTERIOR CORRIDORS

Each floor of the residential areas of the building has two wings of bedrooms with a central community space shared between them. The image featured showcases one of the community spaces and features sitting area, games, study space, swings and direct access to the central courtyard.

COMMUNITY ROOMS INDOOR LOUNGE SPACE





The indoor gym is adjoined to the lobby, visitors area, therapy rooms and doctors offices so that the space can be used for programmatic functions as well. The gym features, workout equipment, ping pong, climbing nets, and upstairs lounge areas.

Safety is of the utmost importance in this facility. While the entire property has been designed as anti-ligature, the private areas such as the bedrooms and bathrooms had to be especially thoughtful in this way. Each child receives their own private bedroom and bathroom, however their individual bathrooms are only accessible through the hallway so that staff may know when a child is in the bathroom for safety assurances.

- 01** anti-ligature paper towel dispenser
- 02** anti-ligature shower grab bar
- 03** fogged privacy windows
- 04** anti-ligature multi-height shower head
- 05** anti-shatter mirror
- 06** anti-ligature sink
- 07** wall-mounted toilet

BATHROOMS INDIVIDUAL



- 01 anti-ligature built-in bed
- 02 fogged windows for privacy
- 03 textured seating
- 04 built-in bench
- 05 built-in casework/ closet space

結 論

IN CONCLUSION



Through this project I have come to realize the capability we have as architects to not just design but to design for change. Architecture is more than just a building with four walls, it can shape our mood, our memories and our discourse. It was my goal to establish a place that could actually shift our current psychiatric facility typology into something more dynamic. A place that does not just house the tools we need for healing but functions as the tool itself through layout, daylighting, play, materiality, location and the engagement of our senses. During this process, my own perspective has changed. Our career does not need to be separate from our values, instead we can use our architecture to advocate for what it is we care about. Architecture is not intended for lifeless design, it has the ability to change the lives of those who inhabit it.

A R C H I T E C T U R E A S A D V O C A C Y

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