The Green Haven

A Communal Retreat For Mental Wellness



P5 Presentation

By Rushil Raj Kapoor

Architecture: Elke Miedema PhD

Building Technology: Drs.ing. Jos W. Lafeber

Research: Frederique van Andel


AWARENESS
WELLNESS
THERAPY
BENEFITS
RISK
RESEARCH
GRIEF
STIGMA
WORRIED
RELATIONSHIPS
MENTAL
TRAUMA
IQ
POSTPARTUM
CRISIS
SUICIDE
PSYCHOLOGY
SELF HARM
POST-TRAMATIC STRESS
DEPRESSION
PSYCHOLOGICAL
HEALTH
EMOTIONS
ANEXORIA
CLINICAL
DRUGS
BIPOLAR
PHOBIA
ATTITUDE
COGNITIVE
UNHAPPY
STRESS
GENETIC
TREATMENT
OPTIMIST
GRIEF
ANXIETY

The Problem

1 in 7

adolescents experience a mental disorder



Adolescent sexual health. Home. (n.d.). Retrieved November 2022, from https://www.aap.org/en/patient-care/adolescent-sexual-health/

48%

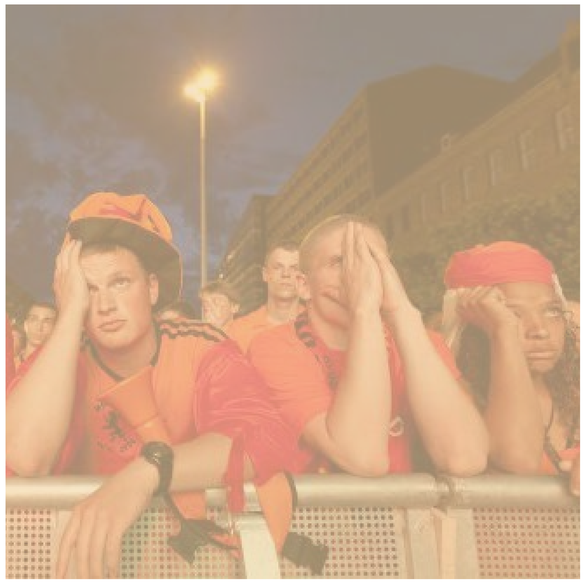
of young adults up up until the age of 25 years have mental health challenges



Adults 18-24 years old. CT.gov. (n.d.). Retrieved November 2022, from https://portal.ct.gov/DPH/Health-Education-Management--Surveillance/Tobacco/Adults-18-24-years-old

Dutch Youth

have higher rates of mental illnesses than rest of Europe



willhunt32. (2012, July 13). The Dutch demise. A Great Advert For The Game. Retrieved November 2022, from https://agreatadvertforthegame.wordpress.com/2012/07/01/the-dutch-demise/

Possible Causes

Pandemic

and societal burdens have indirect effects on mental health issues



Maqsood, N. (2021, April 7). The world is opening back up - are we ready for it? Teen Vogue. Retrieved November 2022, from https://www.teenvogue.com/story/return-to-normal-coronavirus-anxiety-excitement

Social Media

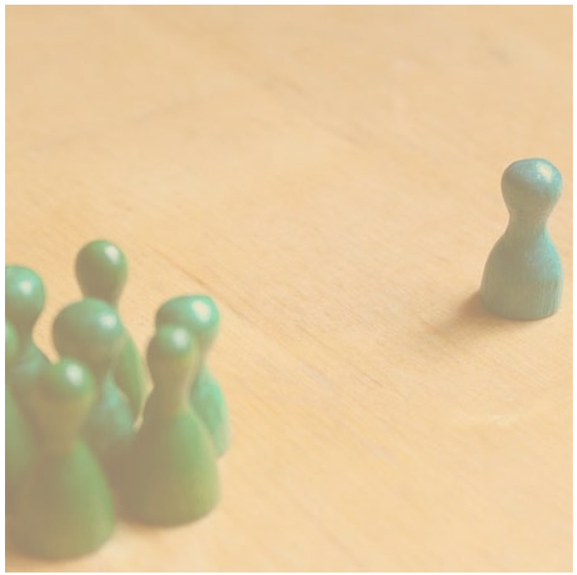
heightens risk of mental health problems



Posted on June 11, 2018 by C. E. R. T. S. G.- P. E. C. (2018, June 11). Social Media use and addiction. CERTS Group. Retrieved November 2022, from https://certsgroup.com/social-media-use-addiction/

Stigmatisation

of mental illnesses is a leading cause to the expanding mental health gap



Lutter contre la stigmatisation et les violences envers les personnes vivant avec un problème de Santé Mentale. Retour à la page d'accueil. (2020, December 18). Retrieved November 2022, from https://www.paca.ars.sante.fr/lutter-contre-la-stigmatisation-et-les-violences-envers-les-personnes-vivant-avec-un-probleme-de



Name: Jan de Jong

Age: 23

Height: 180 cm

Ethnicity: Dutch

Occupation: Student



Childhood



Standard Education



Phone Addiction

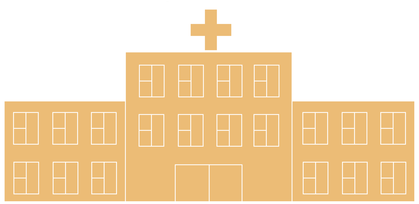


Pandemic



Early Signs of Sickness

Patient Journey of Average Young Adult



Hospitalization



Long Waiting Times



Worsening of Situation



Ignorance

Research Question

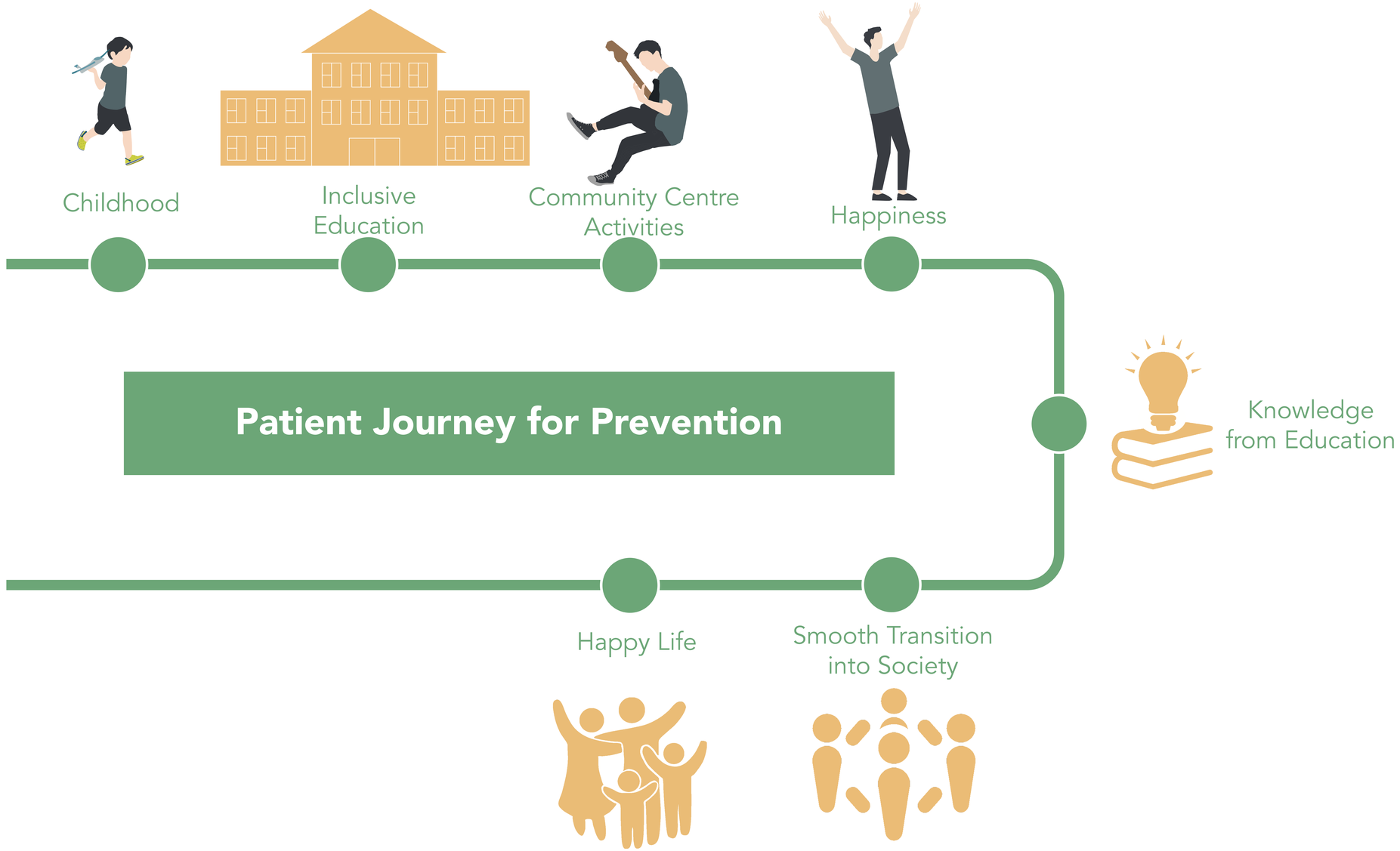
What architectural and built environment solutions can support the prevention of mild to moderate mental health illnesses among young adults, in The Netherlands?

Research Question

What architectural and built environment solutions can support the prevention of mild to moderate mental health illnesses among young adults, in The Netherlands?

Literature Research

Fieldwork


Childhood
Inclusive Education
Community Centre Activities
Happiness
Knowledge from Education
Patient Journey for Prevention
Happy Life
Smooth Transition into Society



Childhood



Inclusive Education



Early Signs



Residential Retreat

Patient Journey for Early Treatment



Interactions
+
Communal Living

Happy Life



Smooth Transition into Society



Happiness

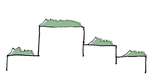


Design Principles

Natural Systems


Interior Biophilic Elements


Views To Nature

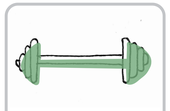

Rooftop Gardens

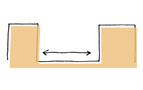

Parks To Escape The Urban


Gardening-Vocational Training

Physical Activity

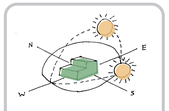

Outdoor Activities


Indoor Exercise Space

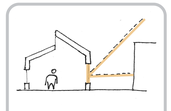

Wider Streets For Activities

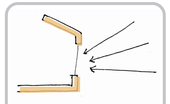

Good Connection To Facilities

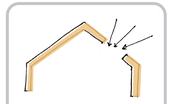
Environment Quality



Good Building Orientation

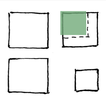

Shadow Considerations


Large Windows For Daylight


Roof Windows For Daylight

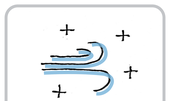

Ergonomic Artificial Lighting

Safety & Control


Adaptable Spaces


Favourable Indoor Temperature


User Privacy

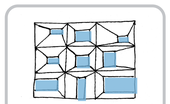

Natural Ventilation/ Fresh Air

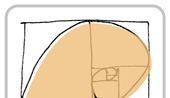

Personalisation Of Spaces

Sensory Environments

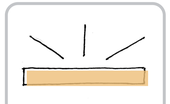

Use Of Colours Wisely


Creating Moments Of Joy


Avoiding Visual Monotony

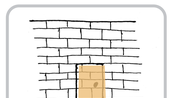

Use Of Right Proportions

Social Connectedness

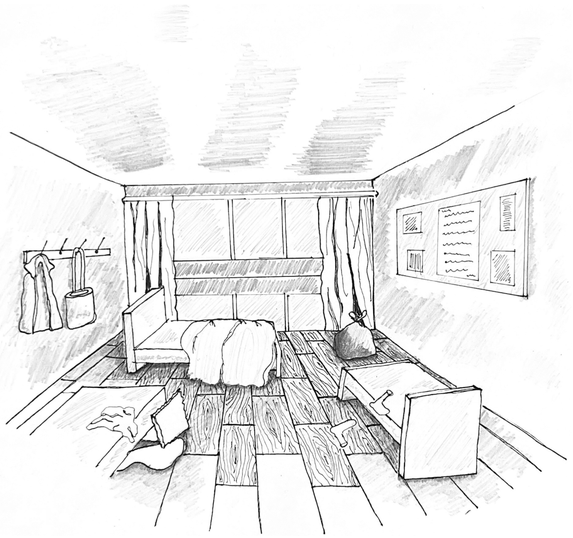

Textured Materials


Noise Free

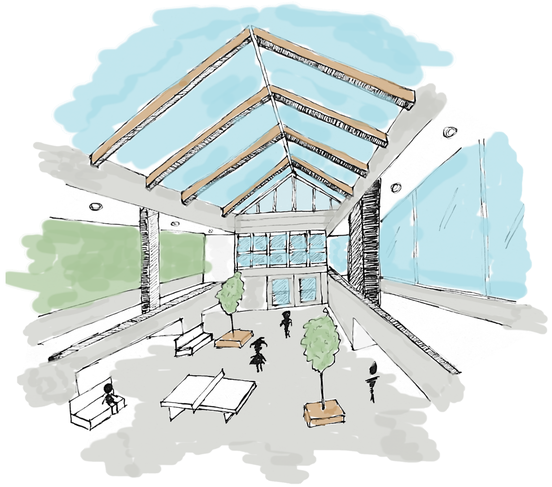

Open Plans


Customisable Entrances

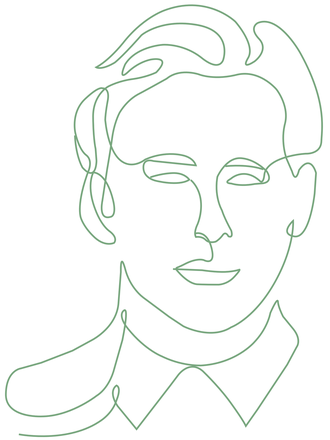
Fieldwork



HVO Querido



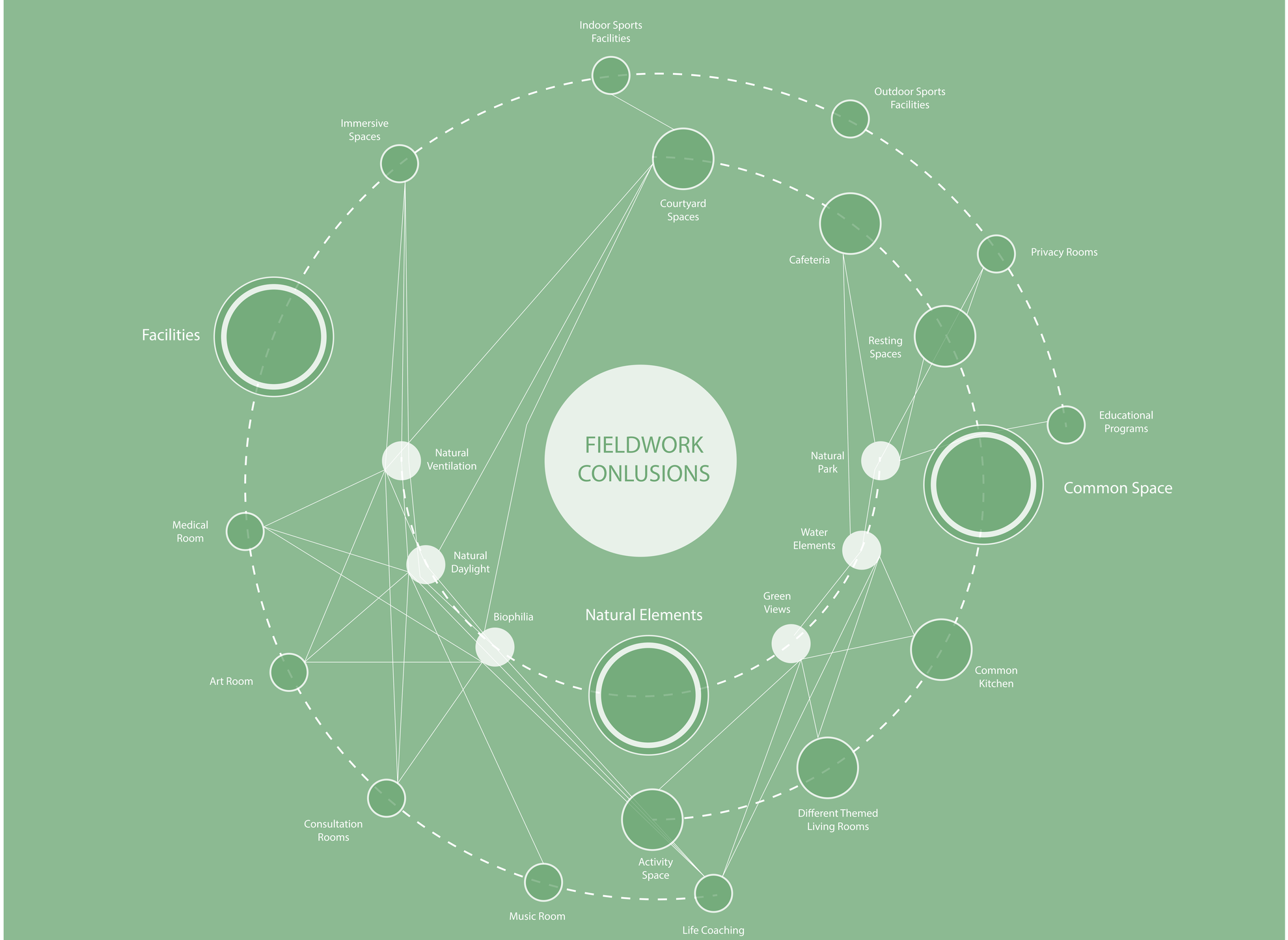
Yulius



Architect

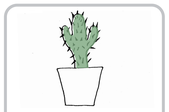


Psychologists

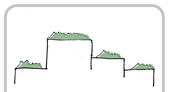

Indoor Sports Facilities
Outdoor Sports Facilities
Immersive Spaces
Courtyard Spaces
Cafeteria
Privacy Rooms
Facilities
Resting Spaces
Educational Programs
Natural Ventilation
FIELDWORK CONLUSIONS
Natural Park
Common Space
Medical Room
Water Elements
Natural Daylight
Biophilia
Natural Elements
Green Views
Common Kitchen
Art Room
Consultation Rooms
Activity Space
Different Themed Living Rooms
Music Room
Life Coaching

Final Design Principles

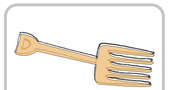
Natural Systems


Interior Biophilic Elements


Views To Nature

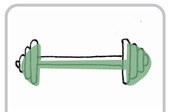

Rooftop Gardens

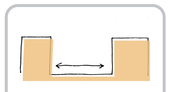

Parks To Escape The Urban


Gardening-Vocational Training

Physical Activity

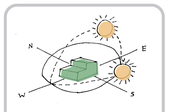

Outdoor Activities


Indoor Exercise Space

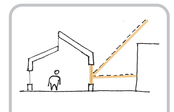

Wider Streets For Activities

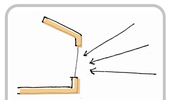

Good Connection To Facilities

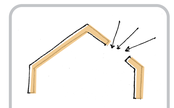
Environment Quality



Good Building Orientation

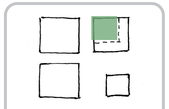

Shadow Considerations

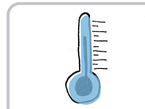

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Roof Windows For Daylight

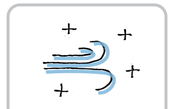

Ergonomic Artificial Lighting

Safety & Control


Adaptable Spaces


Favourable Indoor Temperature


User Privacy

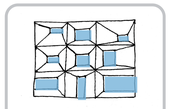

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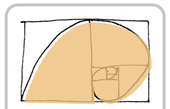

Personalisation Of Spaces

Sensory Environments

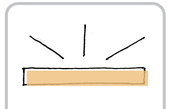

Use Of Colours Wisely


Creating Moments Of Joy

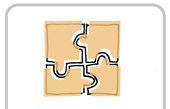

Avoiding Visual Monotony

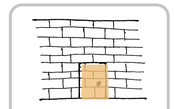

Use Of Right Proportions

Social Connectedness


Textured Materials

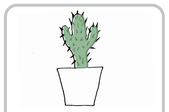

Noise Free


Open Plans

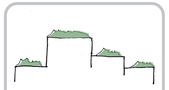

Customisable Entrances

Final Design Principles

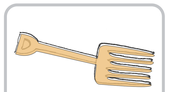
Natural Systems


Interior Biophilic Elements


Views To Nature

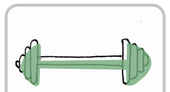

Rooftop Gardens

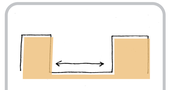

Parks To Escape The Urban


Gardening-Vocational Training

Physical Activity

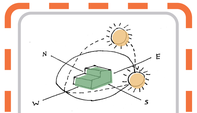

Outdoor Activities

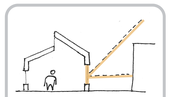

Indoor Exercise Space

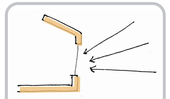

Wider Streets For Activities

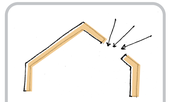

Good Connection To Facilities

Environment Quality


Good Building Orientation

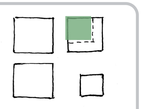

Shadow Considerations

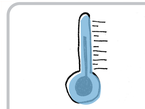

Large Windows For Daylight


Roof Windows For Daylight

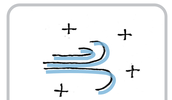

Ergonomic Artificial Lighting

Safety & Control


Adaptable Spaces

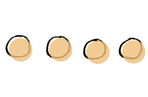

Favourable Indoor Temperature


User Privacy

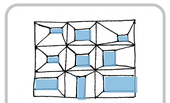

Natural Ventilation/ Fresh Air

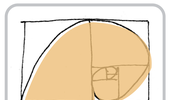

Personalisation Of Spaces

Sensory Environments

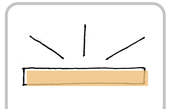

Use Of Colours Wisely


Creating Moments Of Joy


Avoiding Visual Monotony

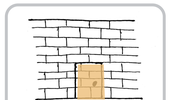

Use Of Right Proportions

Social Connectedness


Textured Materials


Noise Free


Open Plans


Customisable Entrances

Main Themes for Design Program

Community Centre



- Prevention
- Activity Hub
- Informing, Helping and Spreading Awareness

Social Connectedness Through Community Based Living



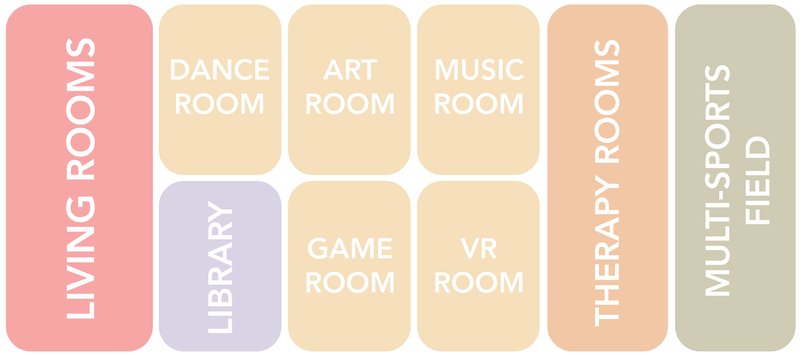
- Socialising and Interacting
- Creating Connections
- Inclusivity

Natural Environments & Biophilic Design in an Urban Context



- Day Light and Natural Ventilation
- Indulging in Outdoor Activities
- Natural Healing

COMMUNITY CENTRE



COMMUNITY CENTRE 2500 m2

FUNCTION	SIZE	AMOUNT
ART ROOM	40 m2	1
MUSIC ROOM	150 m2	1
GAME ROOM	4.5 m2	1
DANCE ROOM	8 m2	1
MULTI-SPORTS FIELD	15 m2	1
LIBRARY	40 m2	1
LIVING ROOM	150 m2	2
TOILET	4.5 m2	6
THERAPY ROOM	8 m2	2

LIVING 4000m2

BEDROOM	40 m2	50
LIVING ROOM	150 m2	5
TOILET	4.5 m2	50
ACCESS TO GARDENS	8 m2	50
COMMON TOILET	15 m2	5

LEASURE 1500m2

MUSIC ROOM	100 m2	1
ART ROOM	100 m2	1
ACTIVITIES	1000 m2	1
DANCE ROOM	100 m2	1
GYM ROOM	100 m2	1
VR/ IMMER-SIVE ROOM	100 m2	1

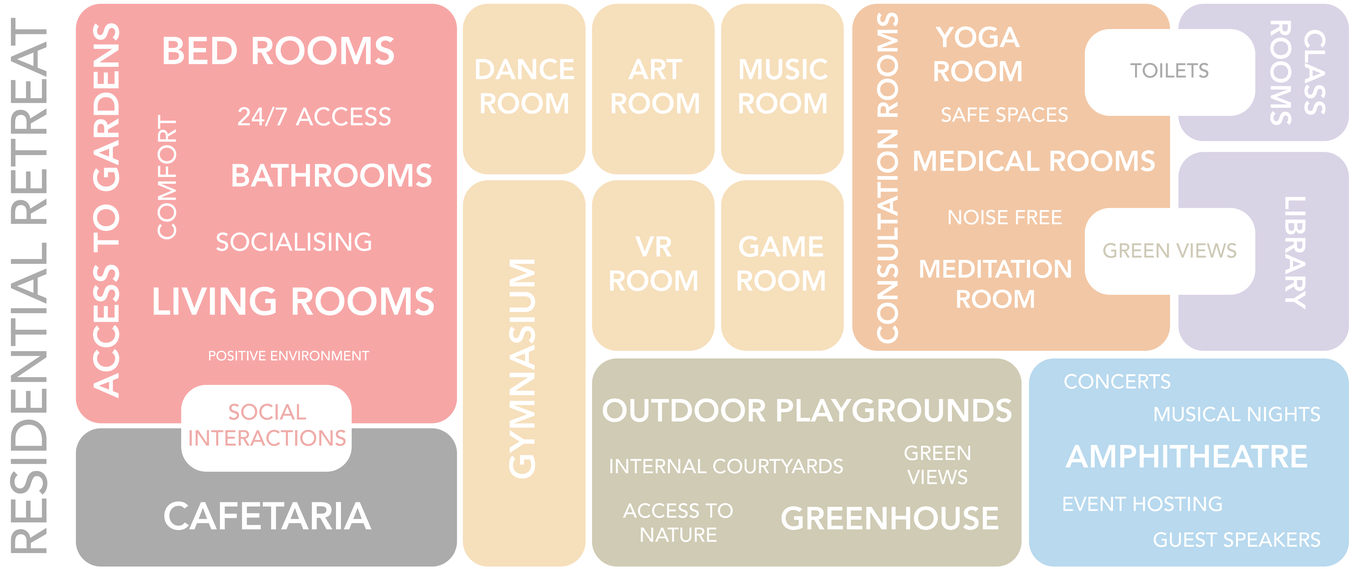
HEALTH 1200m2

CONSULTA-TION ROOM	20 m2	10
MEDICAL ROOM	20 m2	6
MEDITATION ROOM	100 m2	2
YOGA ROOM	100 m2	2

EDUCATION 300m2

CLASSROOMS	50 m2	4
LIBRARY	300 m2	1
AMPHITHE-ATRE	500 m2	1
TOILETS	15 m2	2
GREENHOUSE	50 m2	1

LIVING LEASURE HEALTH EDUCATION



Site Analysis

Potential Locations



Megastores Shopping Mall



Juliana Park

Site Maps

Mobility Map



- Den Haag HS train stataion
- Bus lane
- Bus stop
- Tram lane
- Tram stop

Functions Map



- Residential
- Multi Functional High Rise
- Mixed Use
- Office
- Social Amenities
- Retail

Site Maps

Education Map



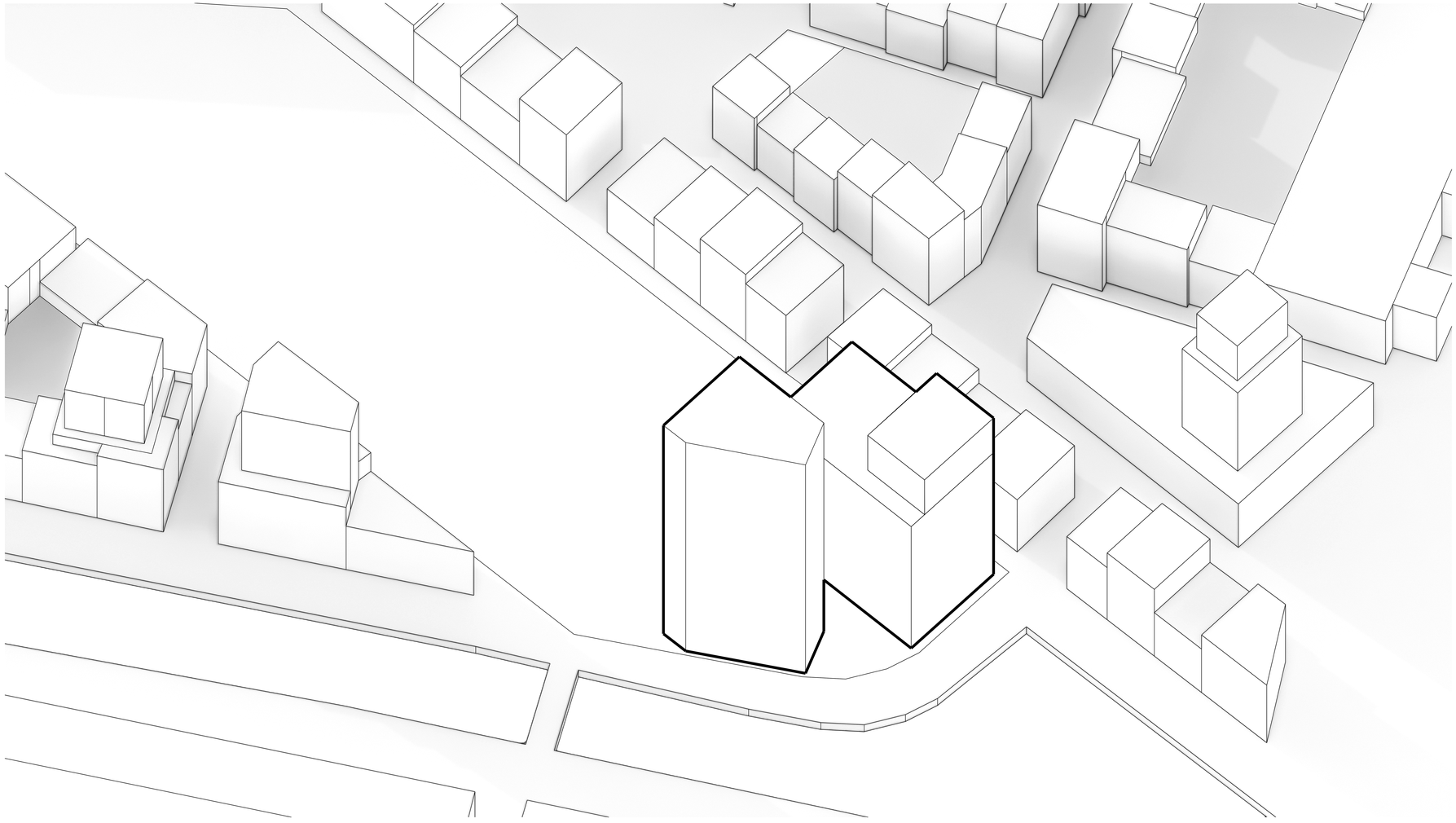
- Higher education, college
- Children daycare
- Leisure centers for youth
- Playground & play area
- Recruitment
- Primary & secondary schools

Medical Map

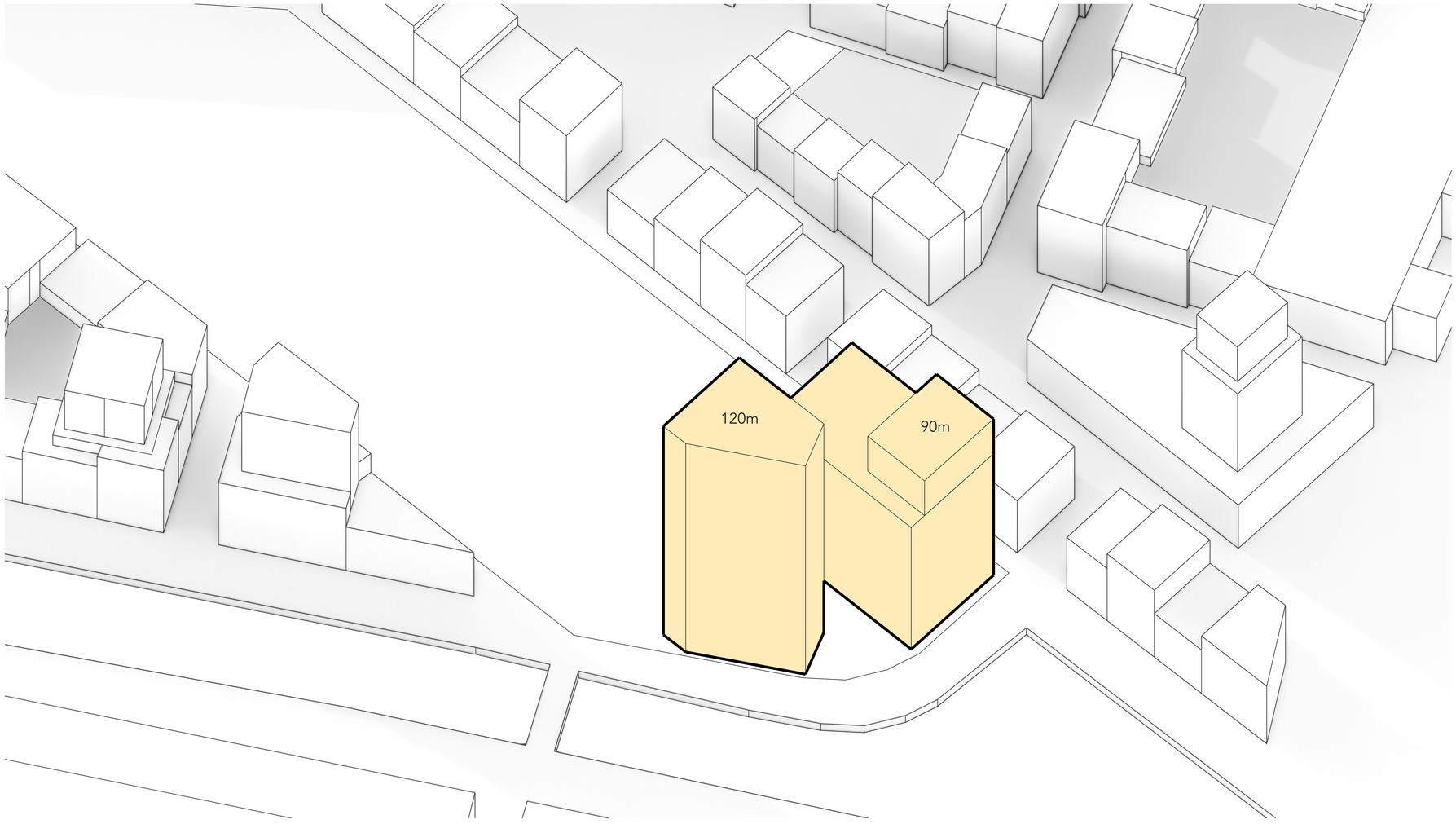


- Nursing Home
- Home Care
- Dentist
- Pharmacy
- Clinic
- Obstetrician
- Community Center
- Alternative Care
- Family Doctor
- Physio
- Elderly Care

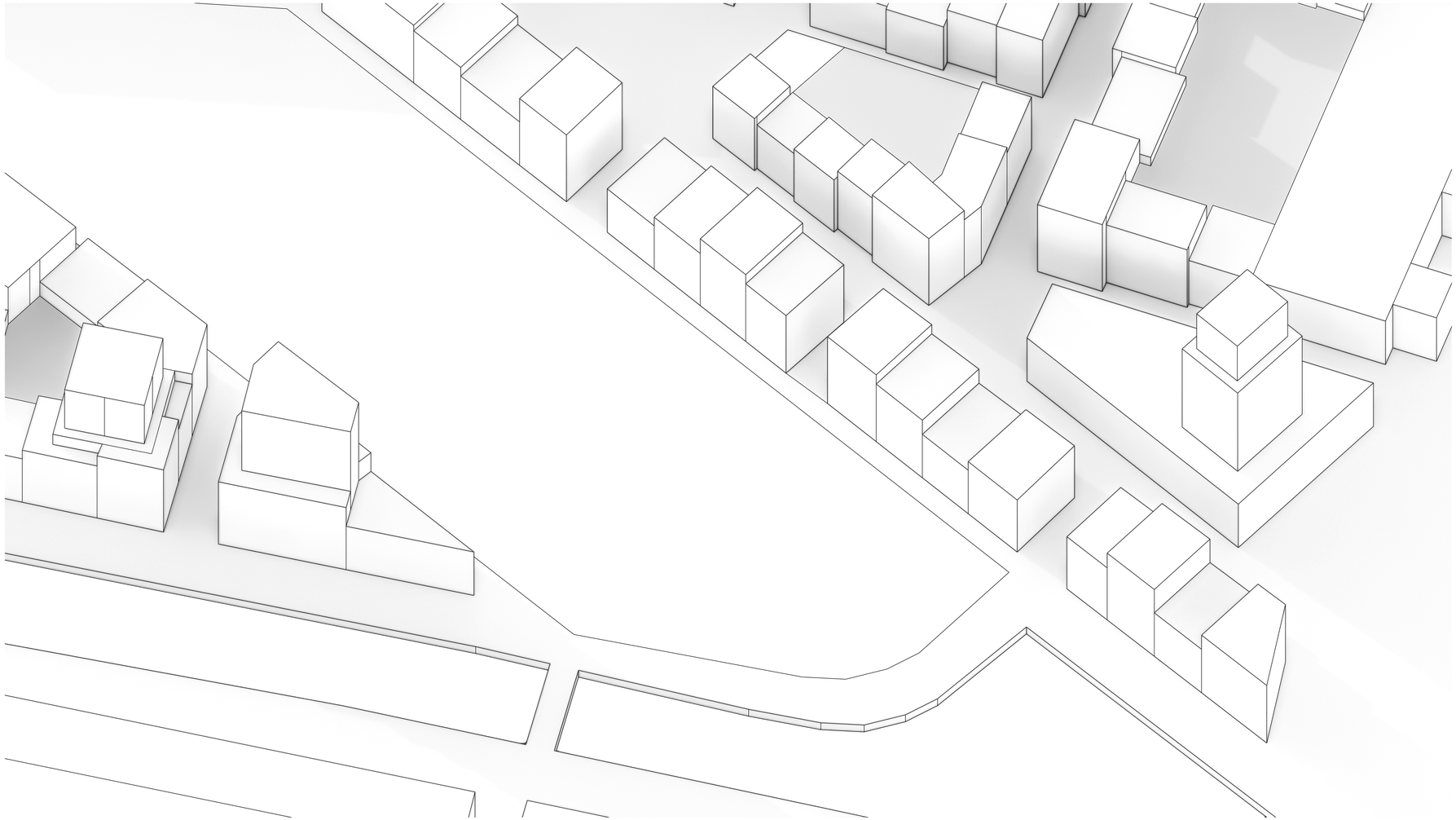
Future Development



Making Adjustments



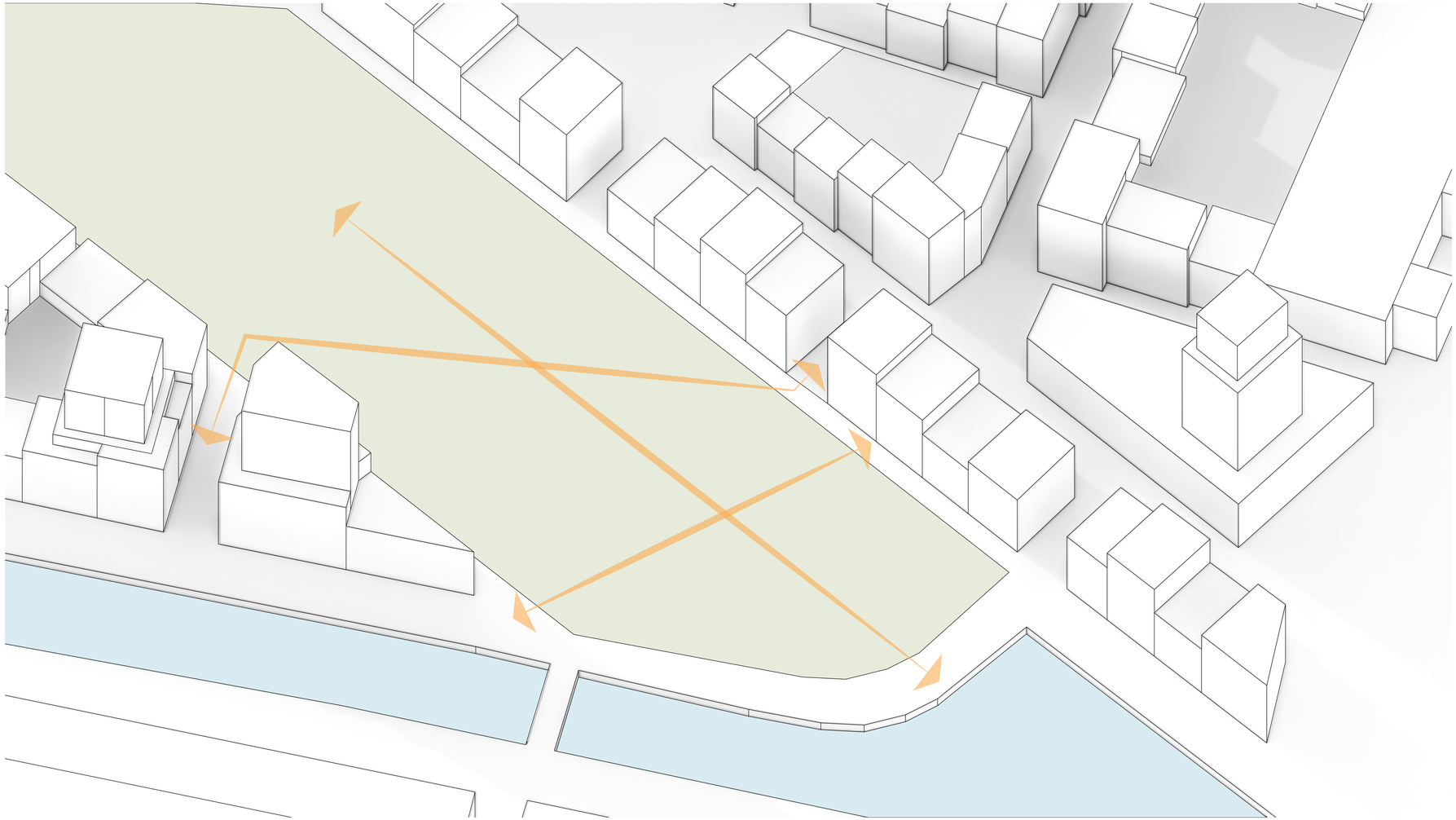
Opening Up The Site



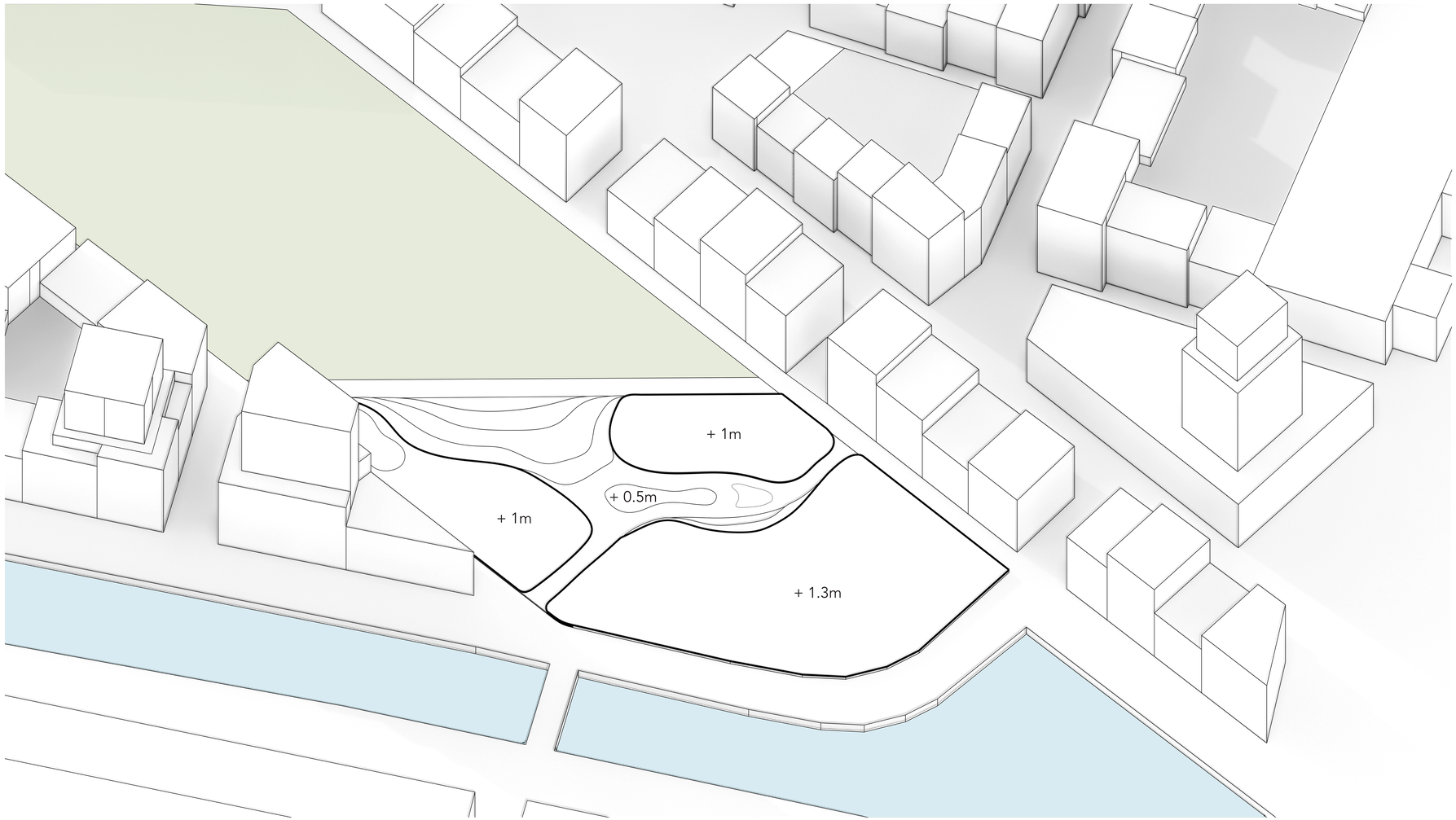
Connecting The Natural Valley



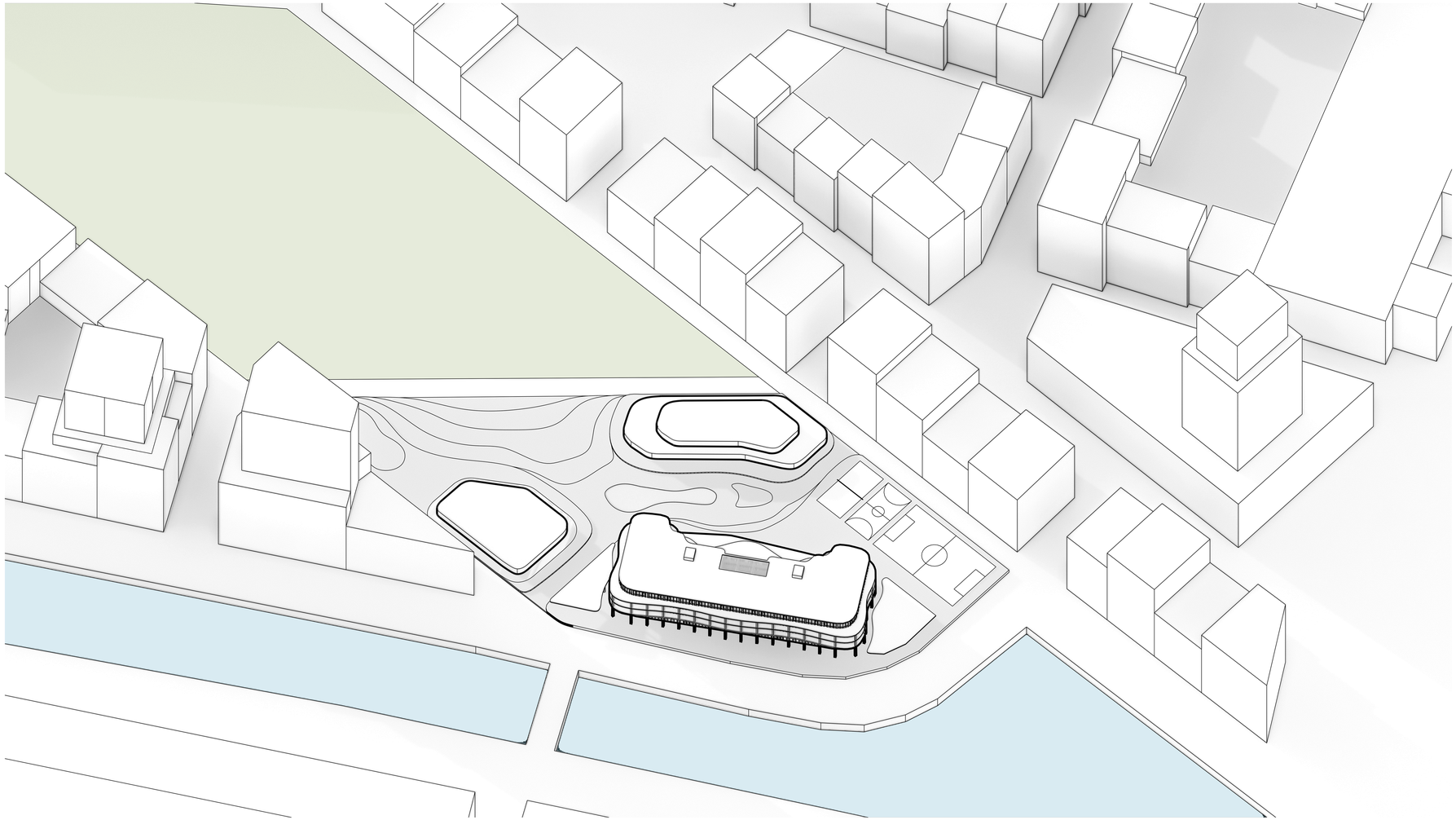
Creating Axis Points



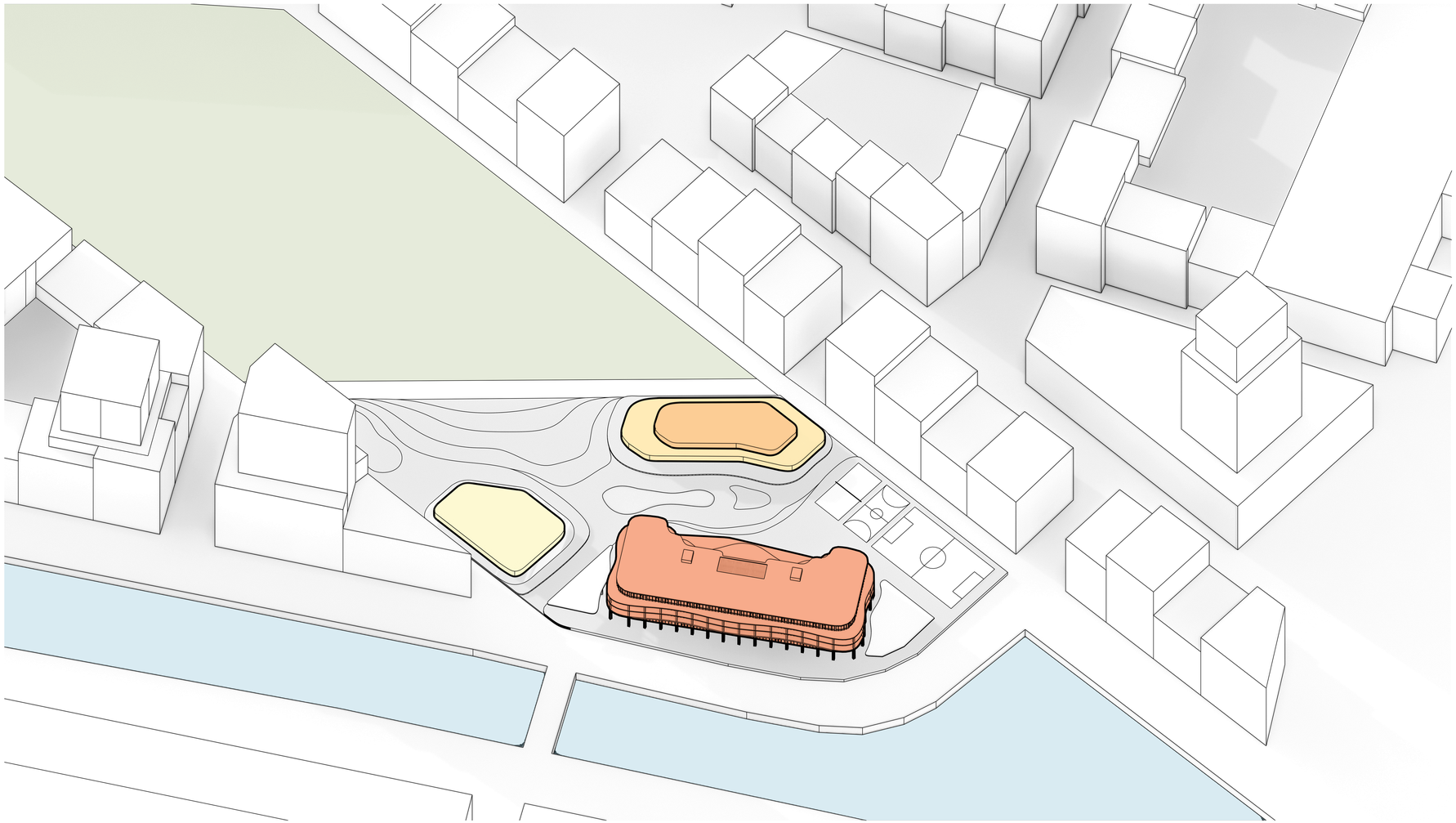
New Site Plan



Site Plan With Buildings



Building Functions



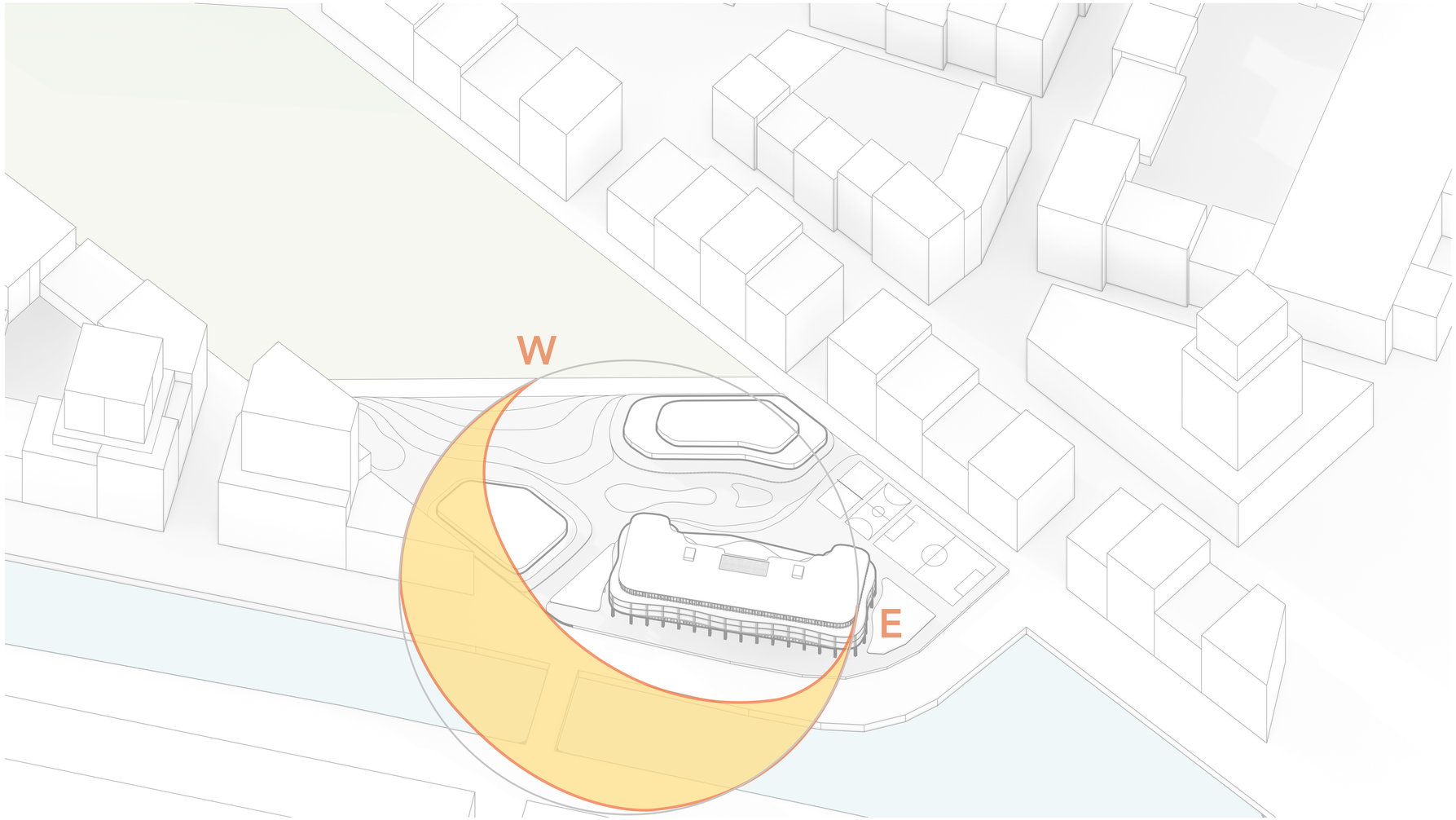
Community Centre

Educational Facility

Medical Facility

Residential Retreat

Sun Path Diagram



The Architecture

Masterplan



Scale 1:1000

Ground Floor Plan



Scale 1:200

Ground Floor Plan Functions



Retail Spaces

Library and Meeting

Lounge Space

Postbox Room

Restaurant

Bike Storage

Admin Office

Theatre/ Lecture Room

Scale 1:200

Ground Floor Residents and Guests Circulation



Scale 1:200

Ground Floor Outsiders Circulation



Scale 1:200

Main Entrance



Communal Library



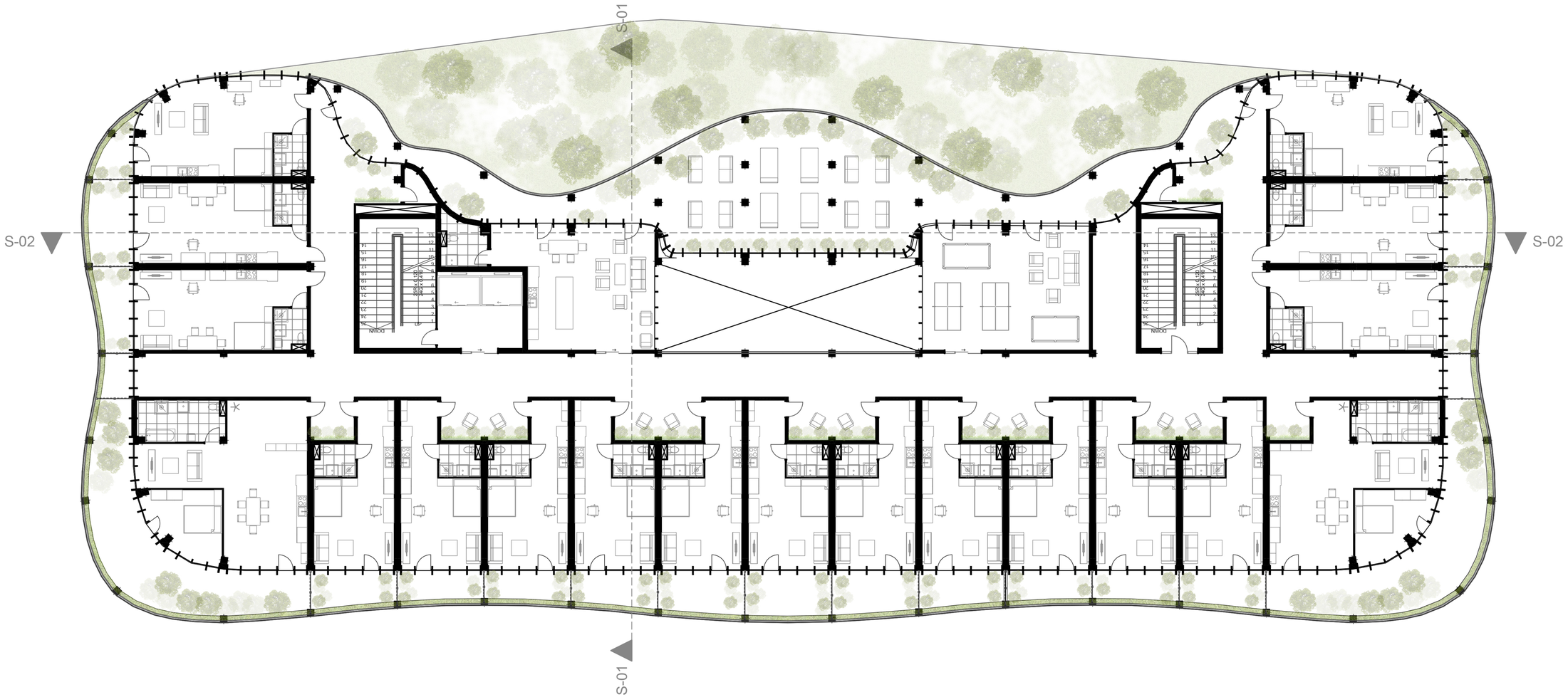
Local Supermarket



Communal Cinema Room

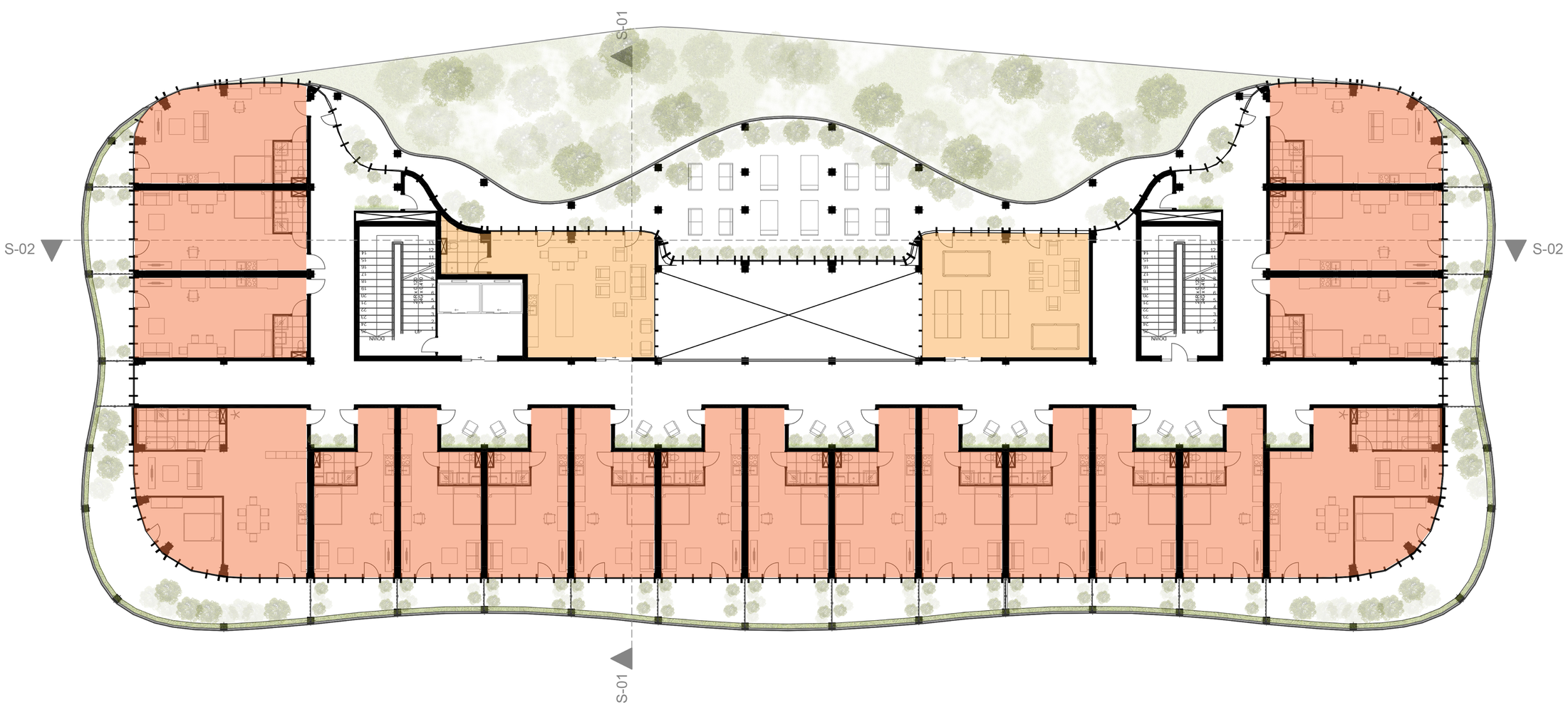


First Floor Plan



Scale 1:200

First Floor Plan Functions

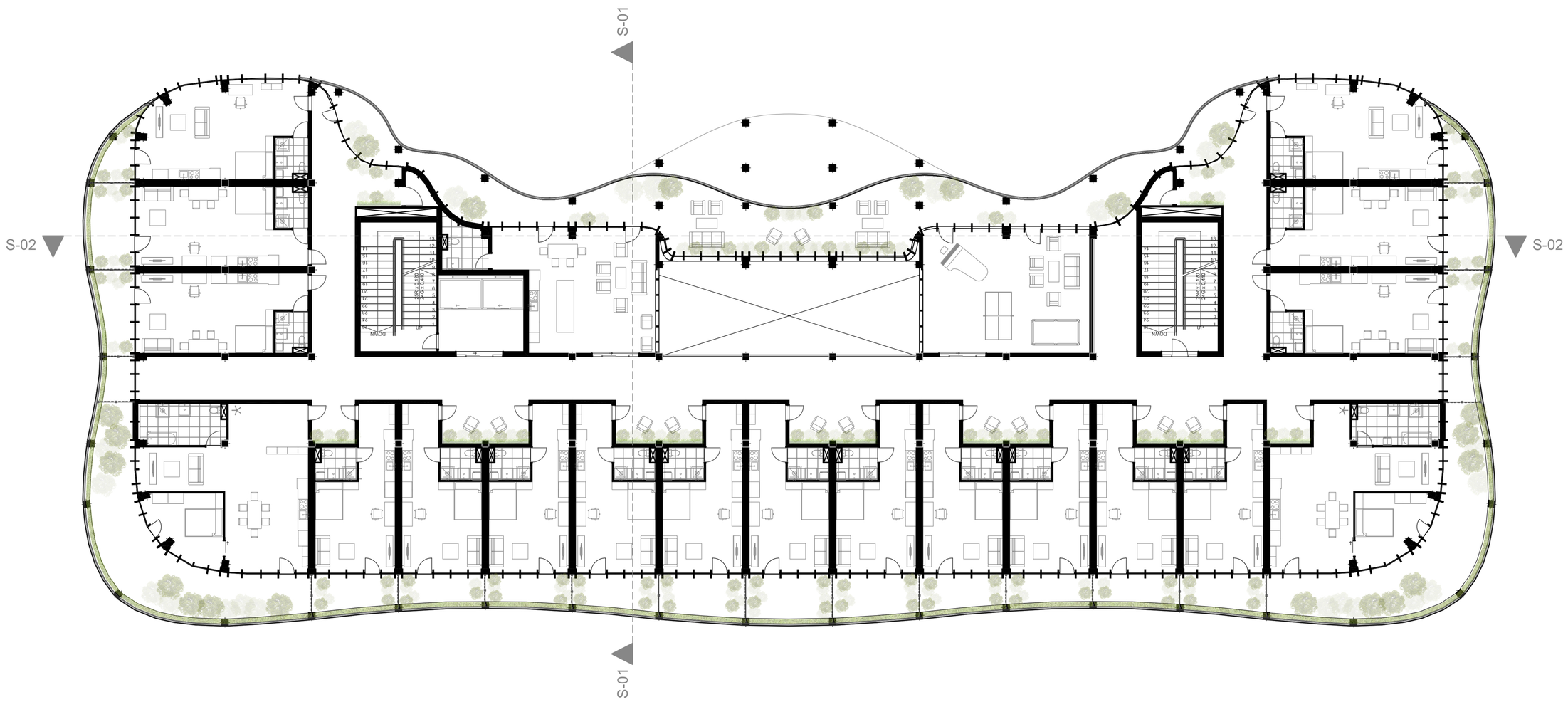


Living Rooms

Studios

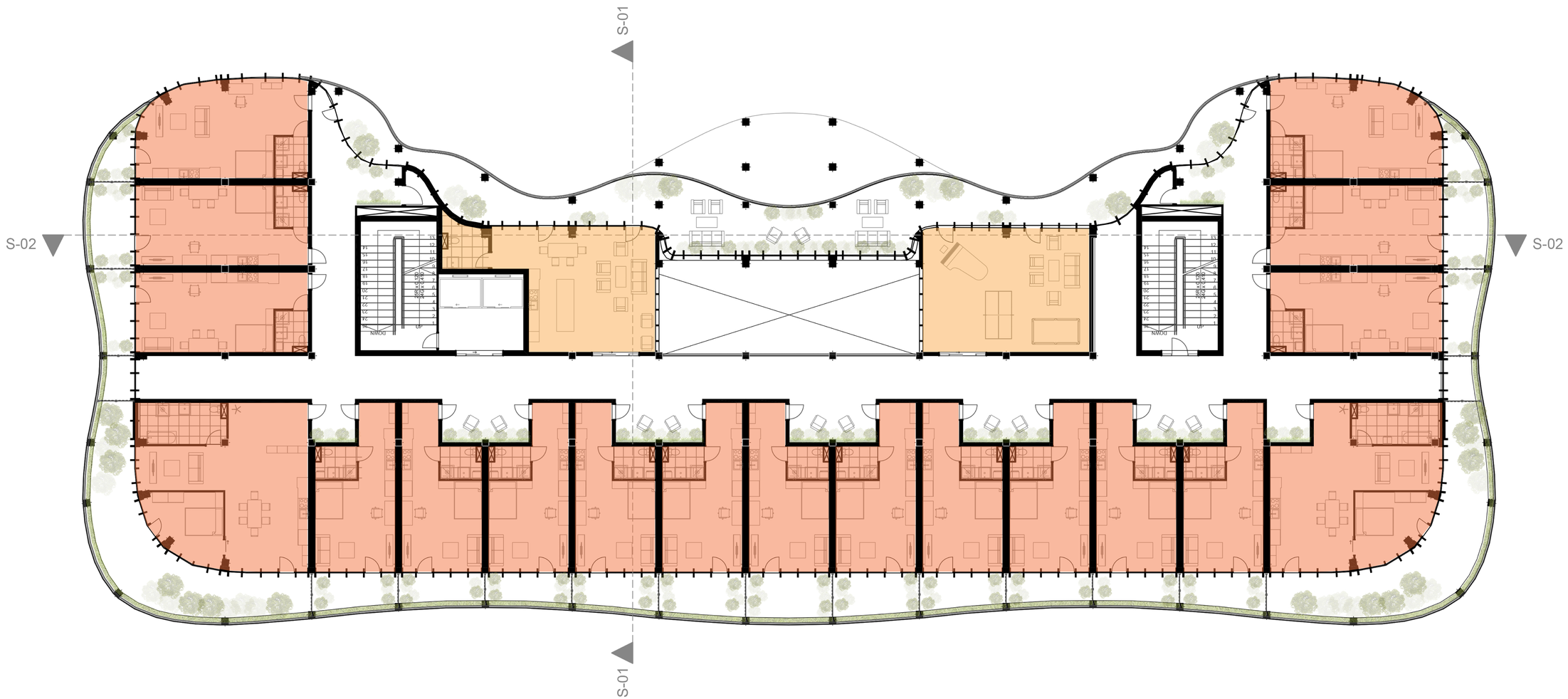
Scale 1:200

Second Floor Plan



Scale 1:200

Second Floor Plan Functions

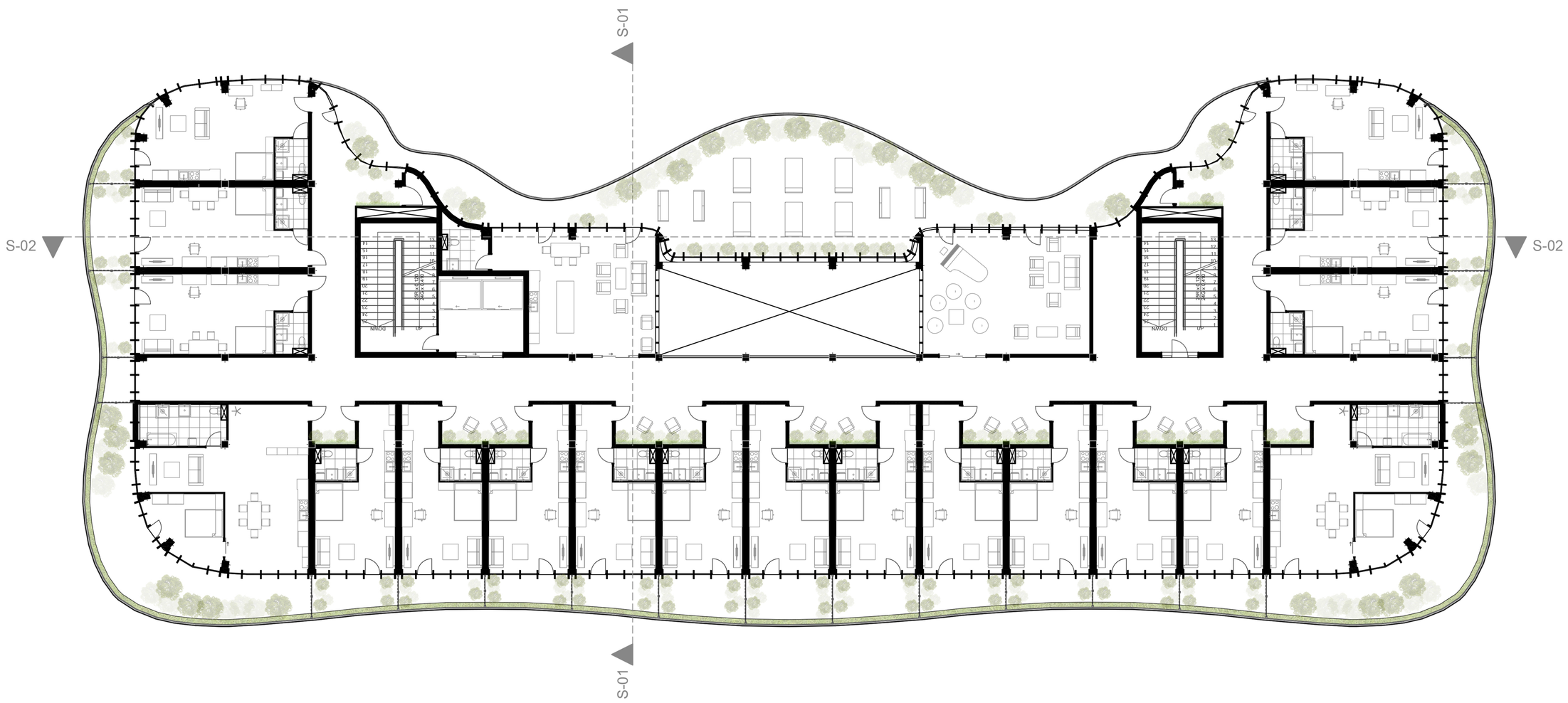


Living Rooms

Studios

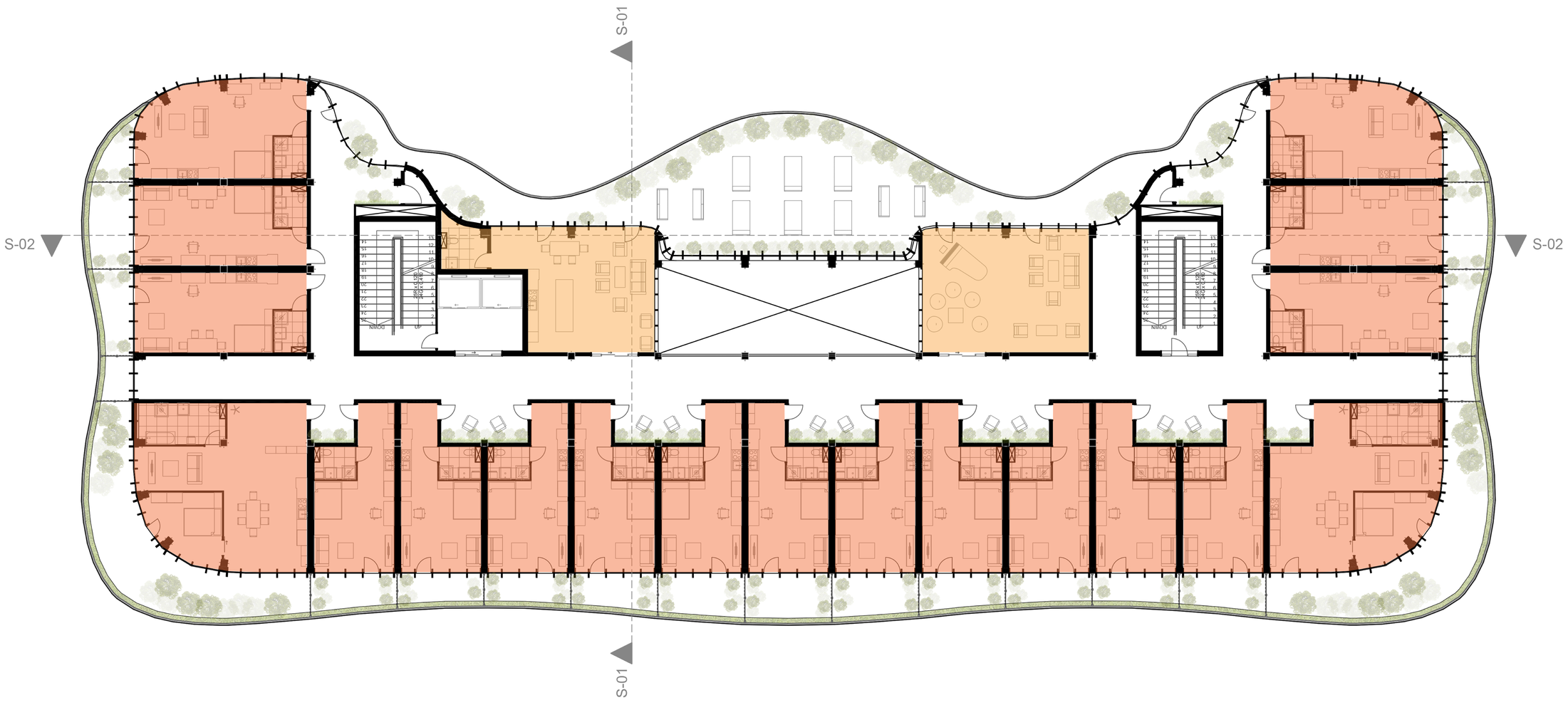
Scale 1:200

Third Floor Plan



Scale 1:200

Third Floor Plan Functions



Living Rooms

Studios

Scale 1:200

1st Floor Living Room



2nd Floor Living Room



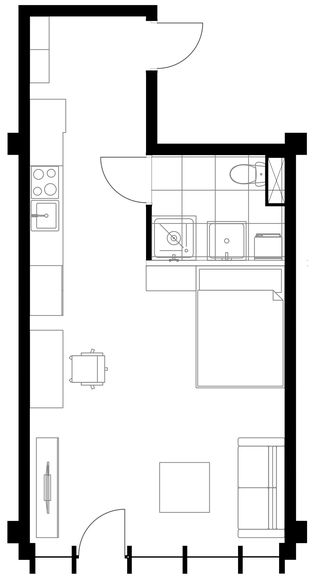
3rd Floor Living Room



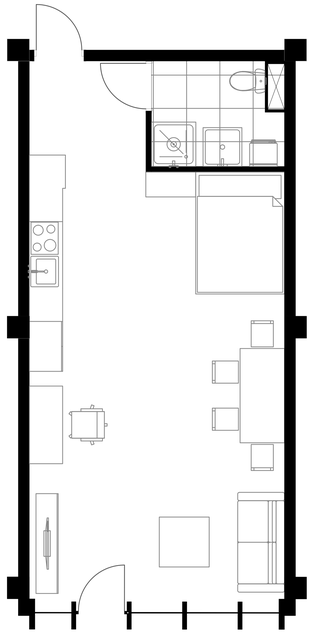
Communal Kitchen



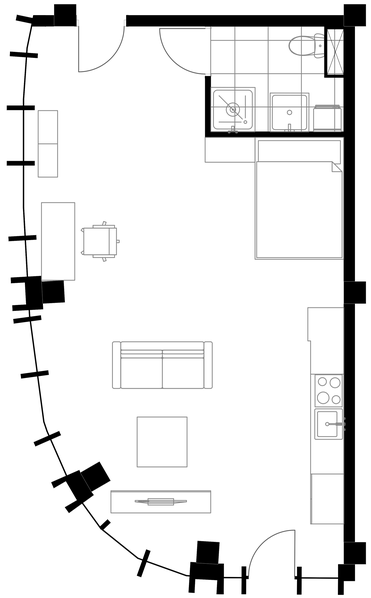
Studio Types



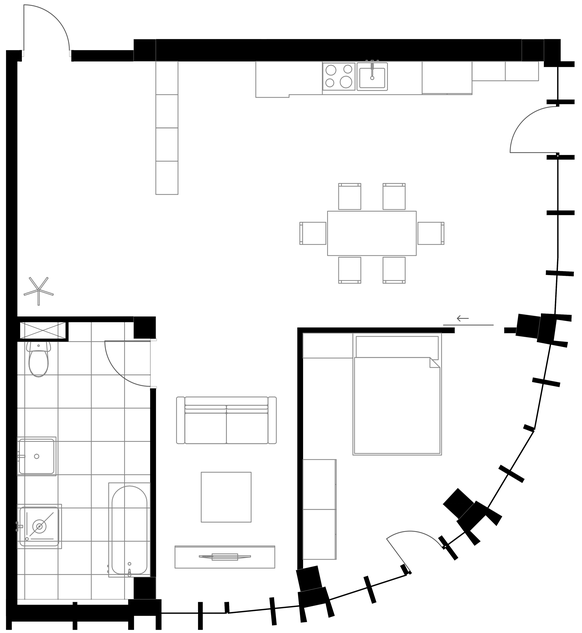
Studio A
Area: 38m2



Studio B
Area: 45m2



Studio C
Area: 52m2



Studio D
Area: 90m2

Scale 1:50

Studio Type A Render



South Elevation



Scale 1:200

North Elevation



Scale 1:200

North Section



Scale 1:200

East Elevation



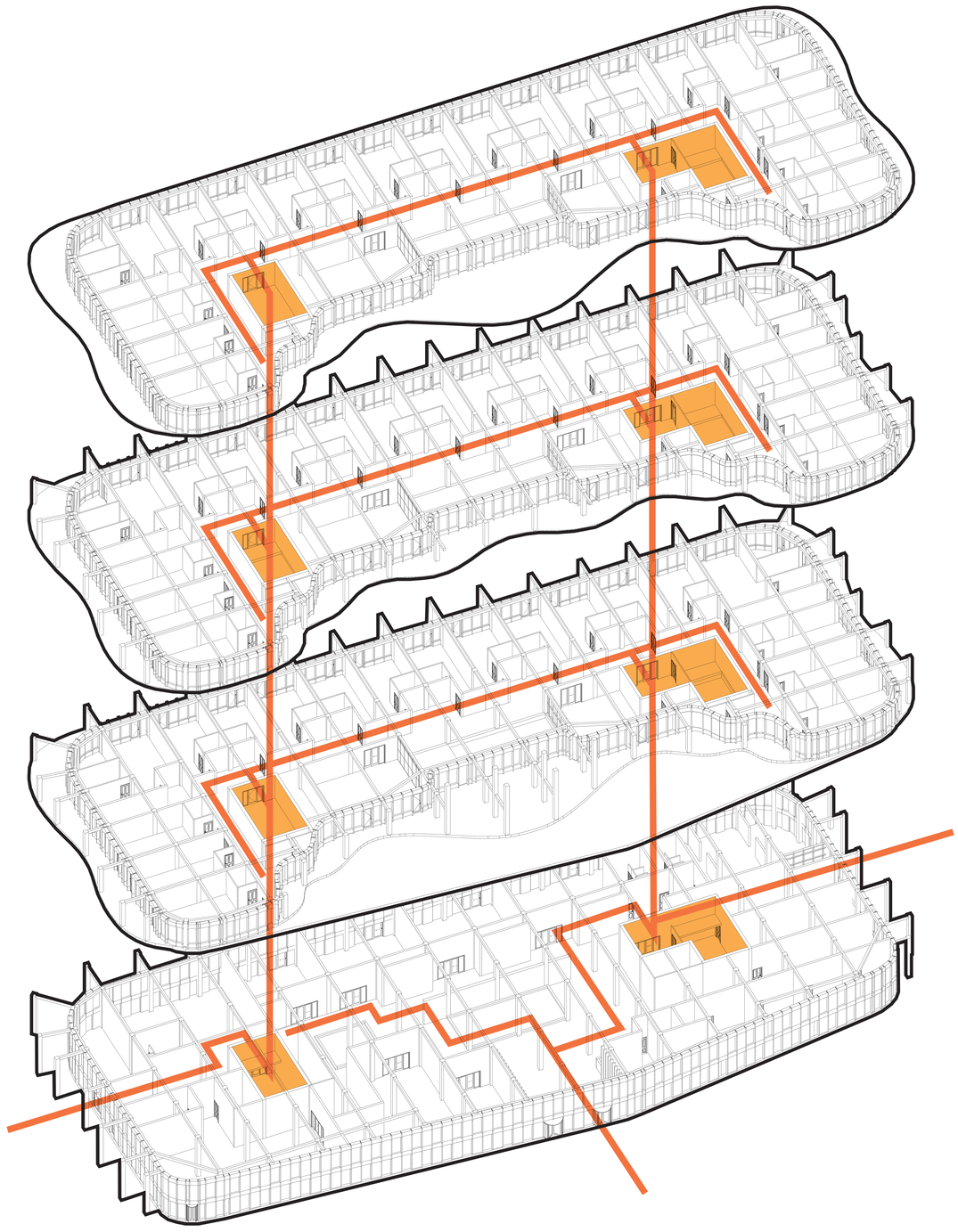
Scale 1:200

East Section



Scale 1:200

Building Diagram
Circulation



Horizontal Circulation

Vertical Circulation

Building Diagram Functions



Studios

Living Rooms

Internal Amenities

External Amenities

Building Diagram
Greenery



Green Spaces

The Building Technology

Materiality



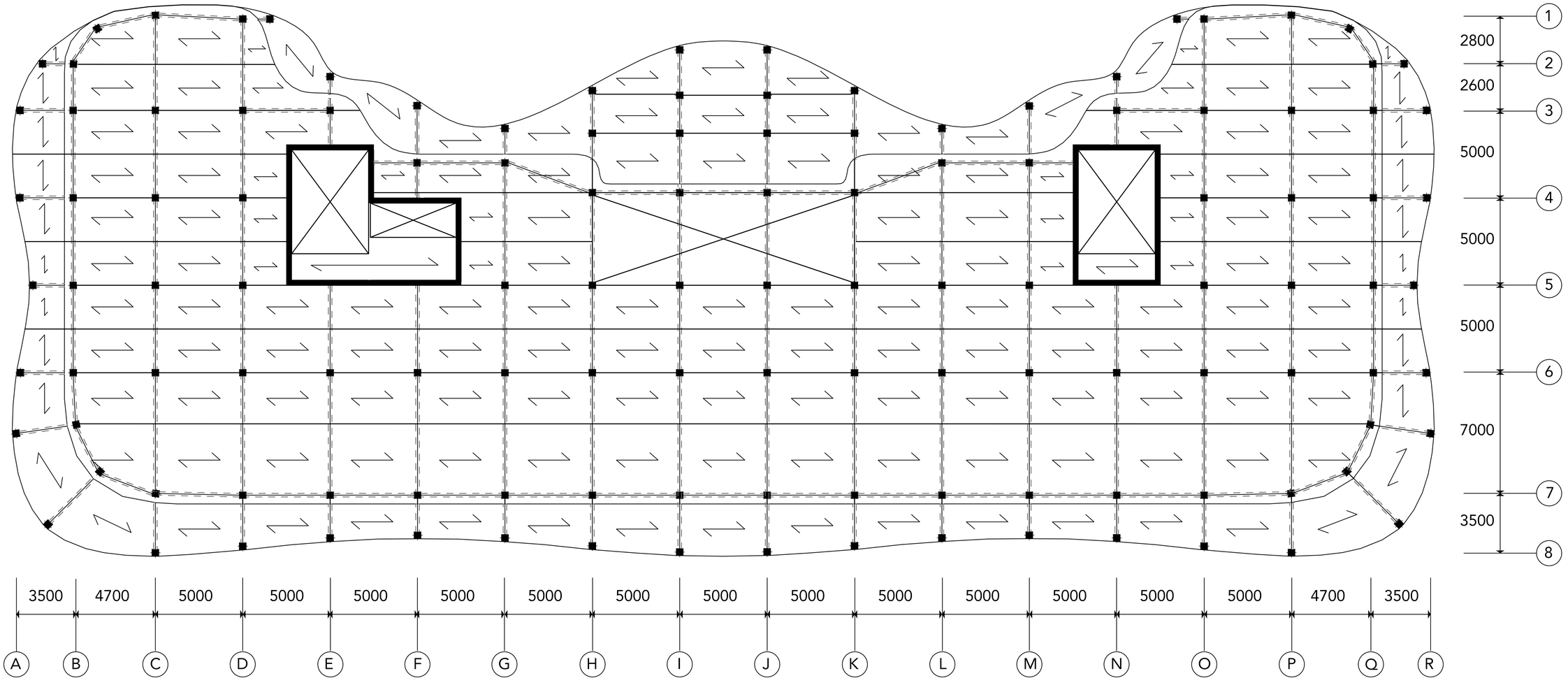


Cross Laminated Timber

Reinforced Concrete

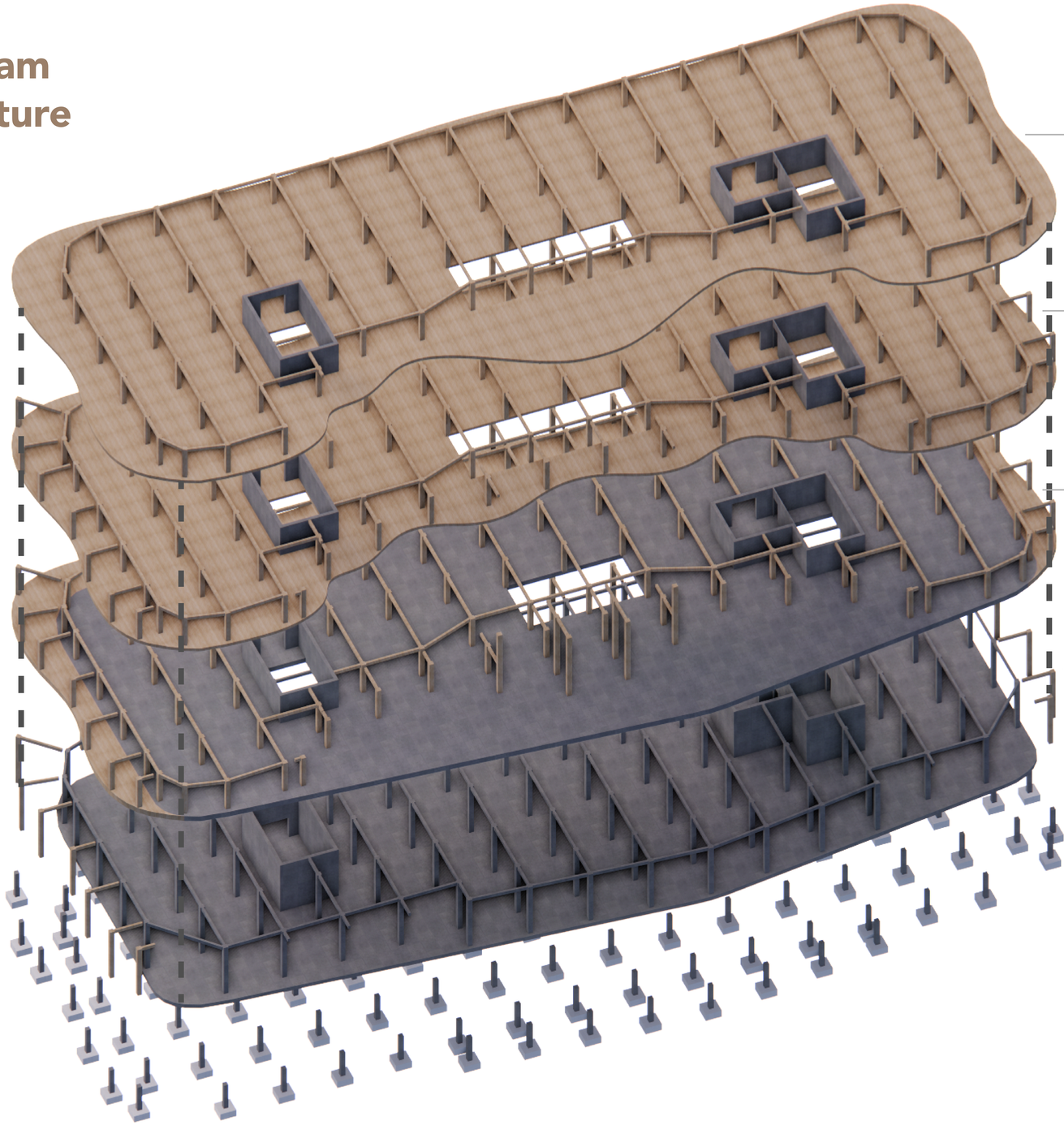
Double Glass Window

Structural Scheme



Scale 1:200

Building Diagram
Exploded Structure



3rd Floor: CLT Columns, Beams and Floor plate; Concrete Core

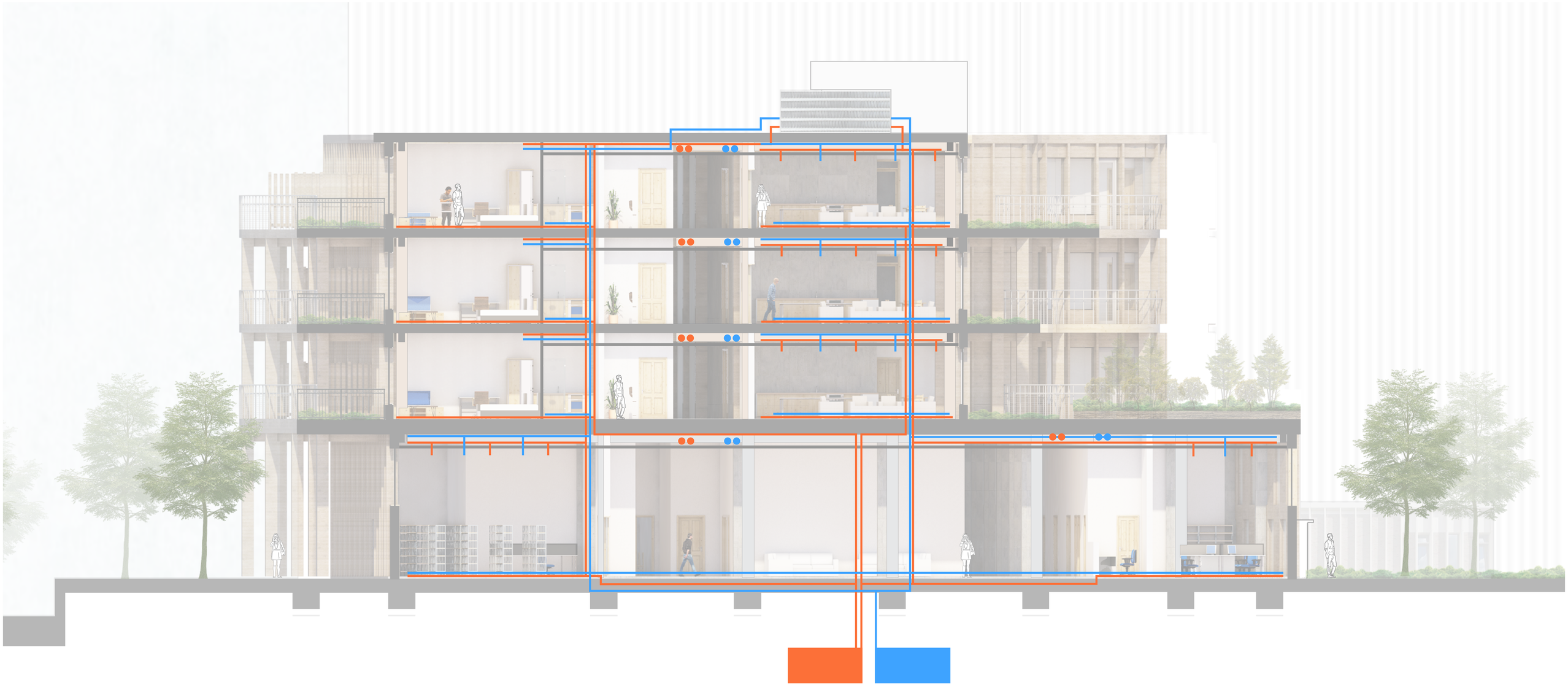
2nd Floor: CLT Columns, Beams and Floor plate; Concrete Core

1st Floor: CLT Columns, Beams and Balcony Floor plate; Concrete Core and Pre-Fabricated Floor plate

Ground Floor: CLT Balcony Columns and Beams; Concrete Core, Columns, Beams and Reinforced Floor plate

Underground: Reinforced Concrete Footings

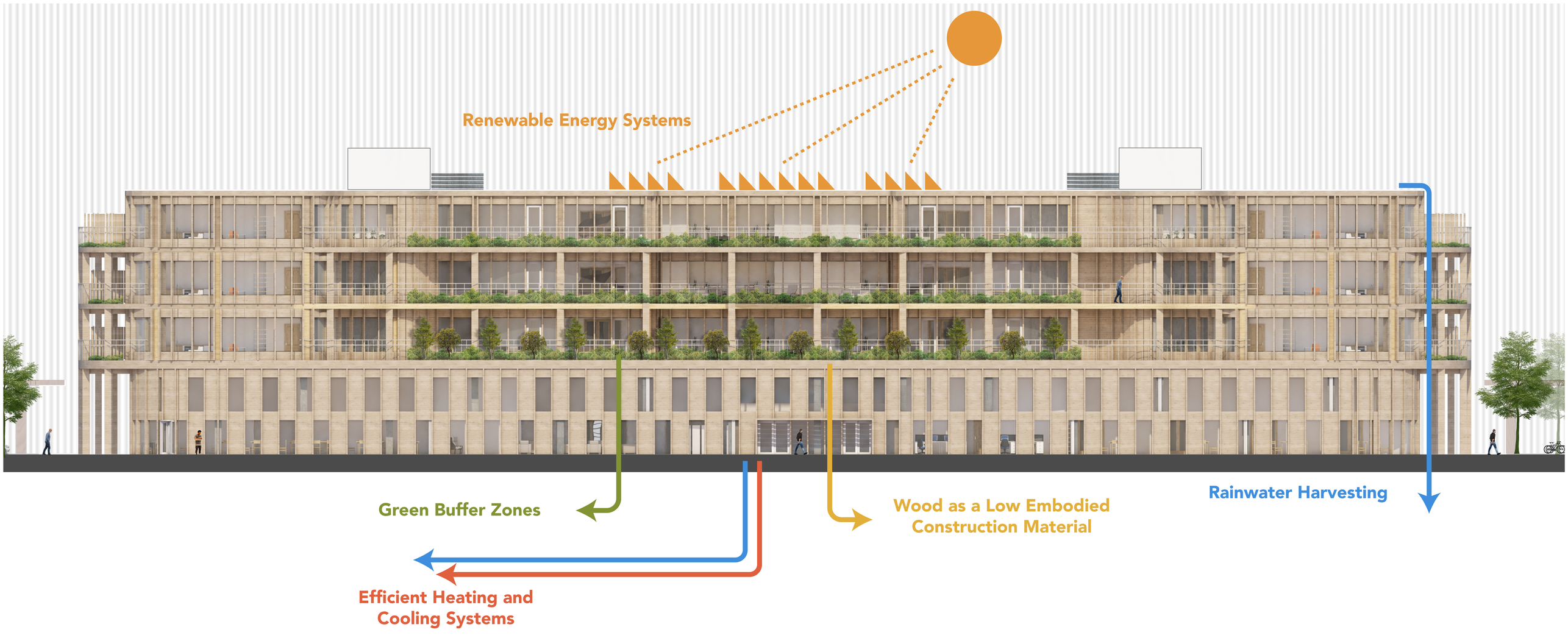
Climate Diagram



Heating & Exhaust

Cooling & Ventilation

Sustainability Diagram



Stimulating Wellbeing

Final Design Principles

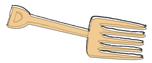
Natural Systems


Interior Biophilic Elements


Views To Nature

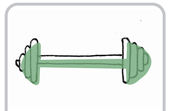

Rooftop Gardens

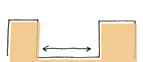

Parks To Escape The Urban


Gardening-Vocational Training

Physical Activity

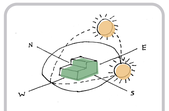

Outdoor Activities


Indoor Exercise Space

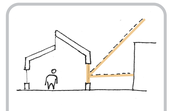

Wider Streets For Activities

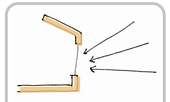

Good Connection To Facilities

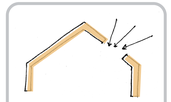
Environment Quality



Good Building Orientation


Shadow Considerations


Large Windows For Daylight


Roof Windows For Daylight

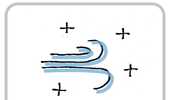

Ergonomic Artificial Lighting

Safety & Control


Adaptable Spaces

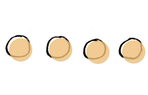

Favourable Indoor Temperature


User Privacy

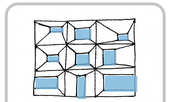

Natural Ventilation/ Fresh Air


Personalisation Of Spaces

Sensory Environments

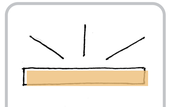

Use Of Colours Wisely


Creating Moments Of Joy


Avoiding Visual Monotony

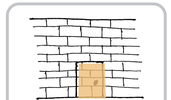

Use Of Right Proportions

Social Connectedness

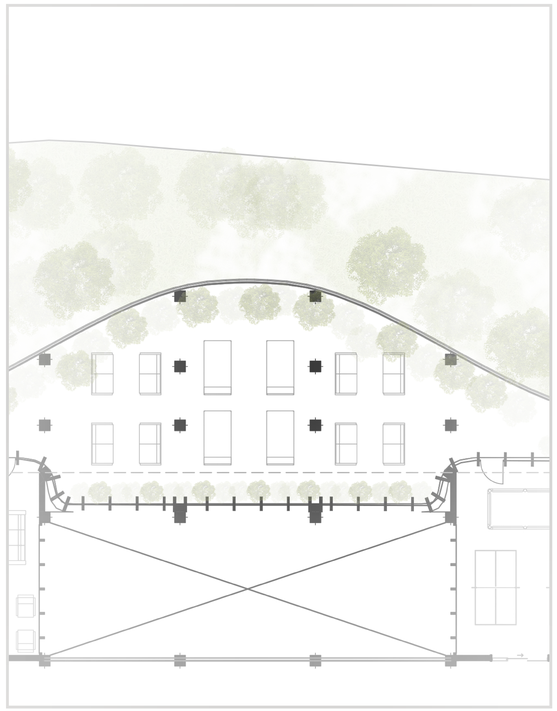

Textured Materials


Noise Free


Open Plans

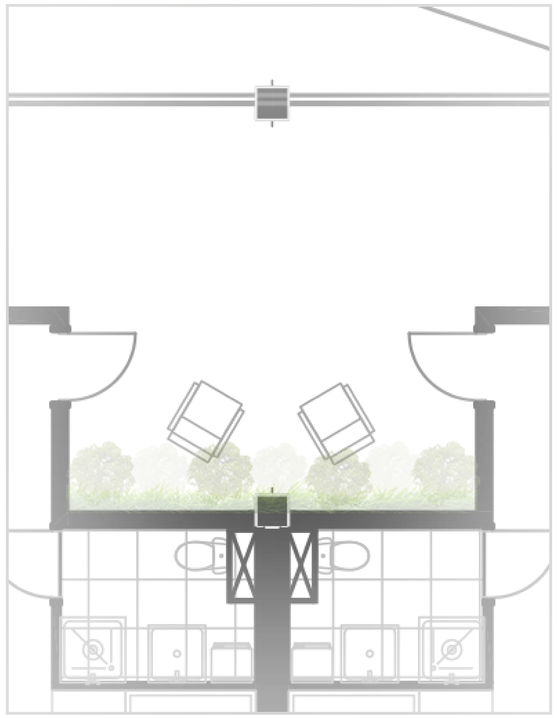

Customisable Entrances

Nature on Different Scales



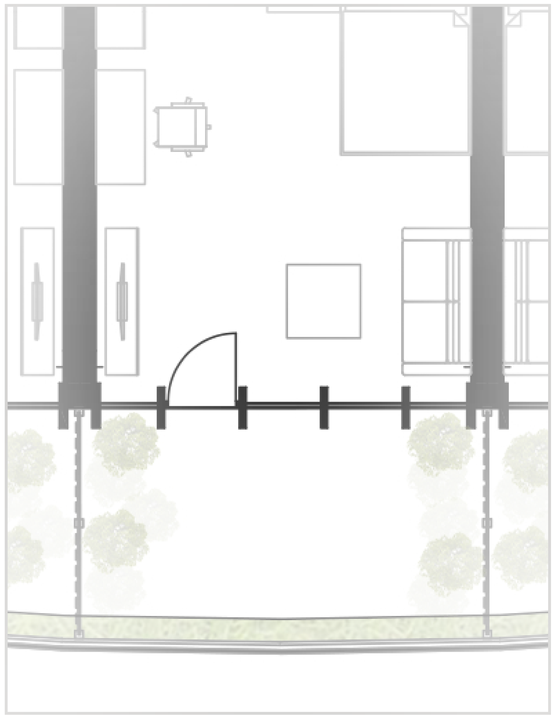
Building Scale

Views to Nature



Floor Scale

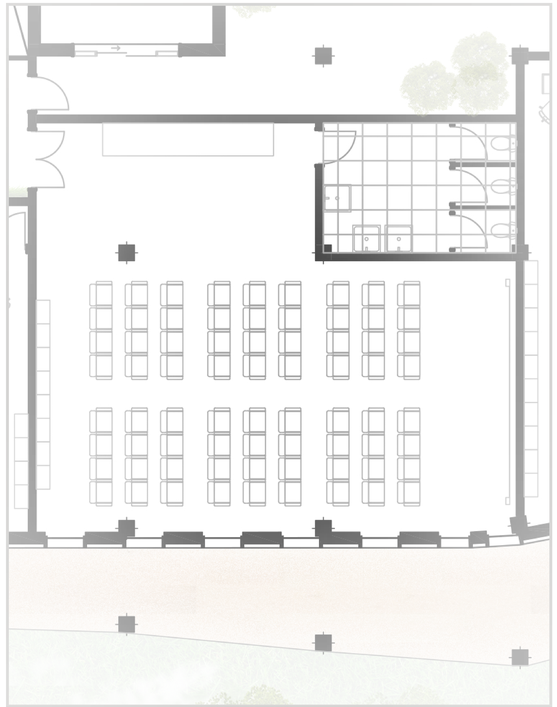
Green Shared Spaces



Studio Scale

Green Balconies

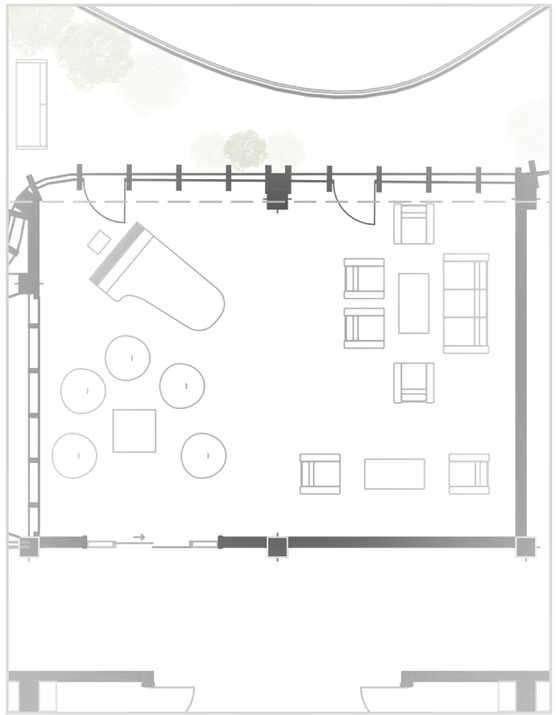
Community on Different Scales



Building Scale

Entertainment

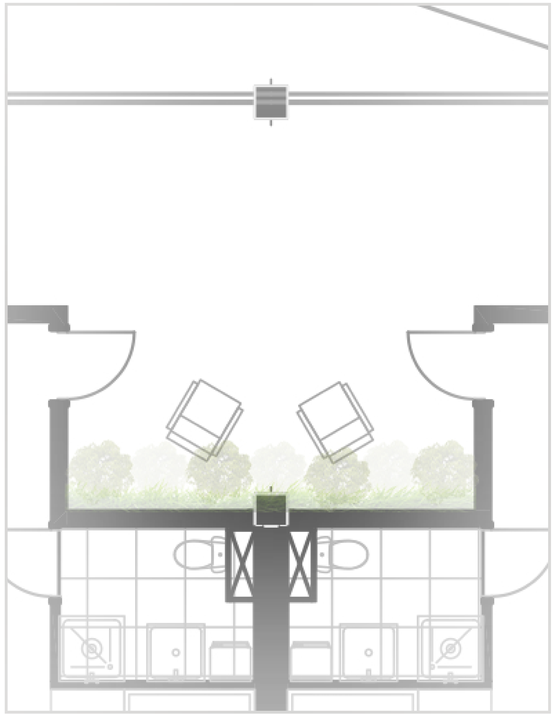
Amenities



Floor Scale

Themed Living

Rooms

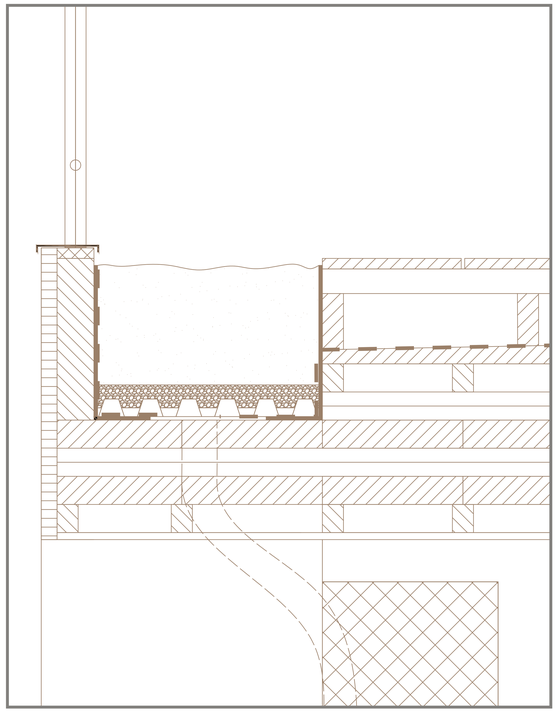


Studio Scale

Encouraging Interac-

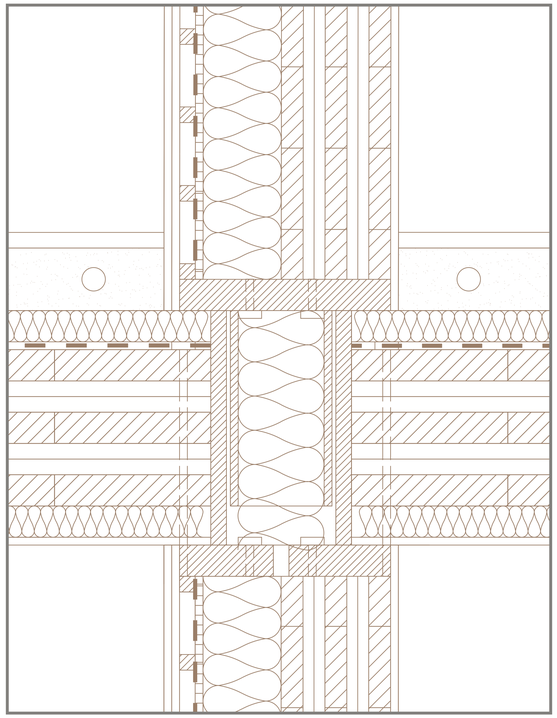
tions Between Rooms

Additionally



Privacy

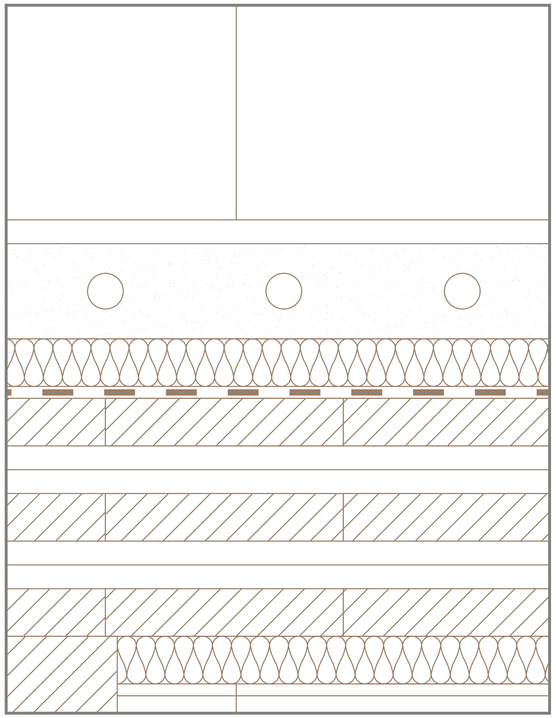
Green Buffer Zone



Noise Control

Double Insulation

Floors



Temperature Control

Floor Heating

A Playful and Dynamic Building for the Residents

During Monsoon Season



During Summer Season



During Fall Season



During Winter Season



The Green Haven

A Communal Retreat For Mental Wellness

