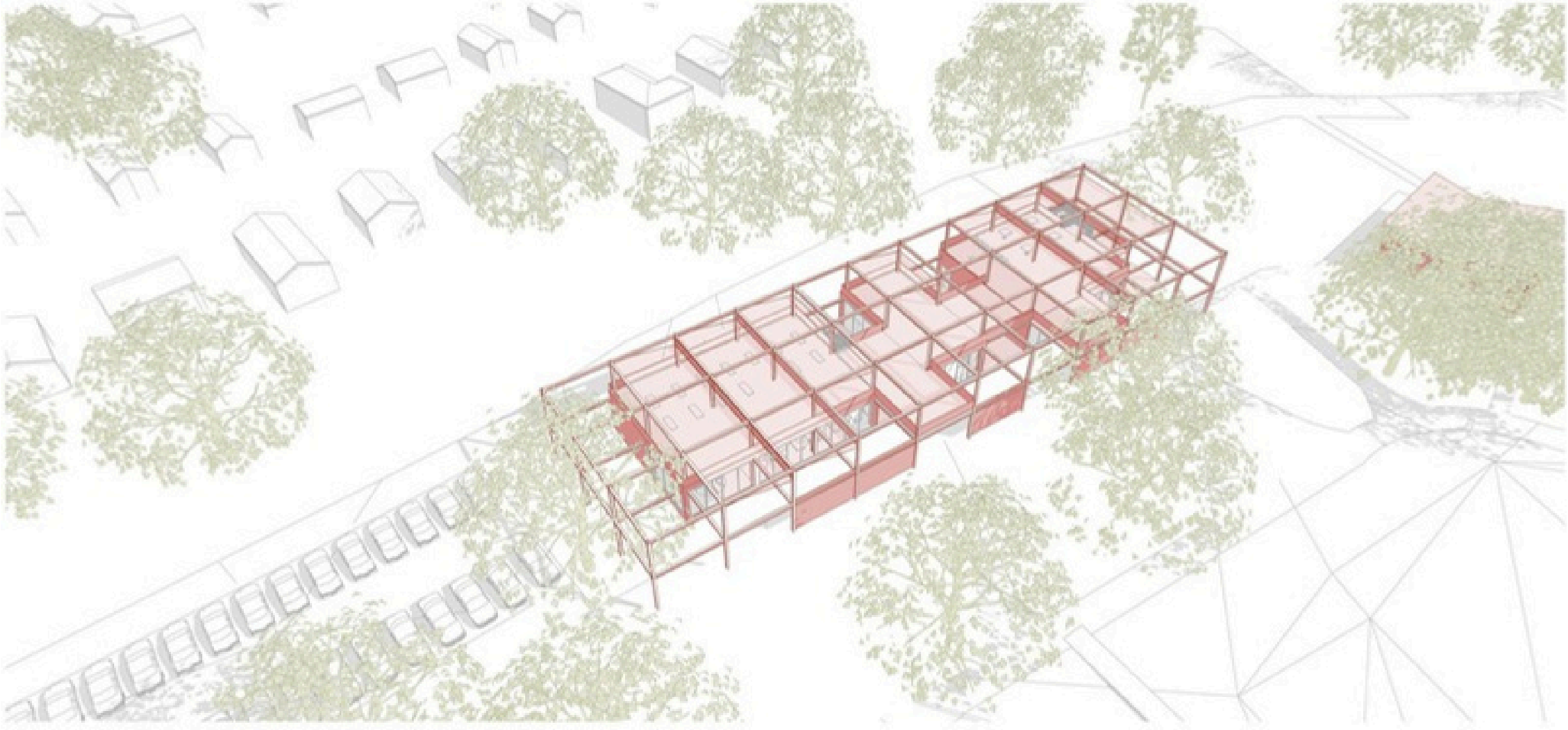
UNIVERSITY OF PECS,
PECS, HUNGARY

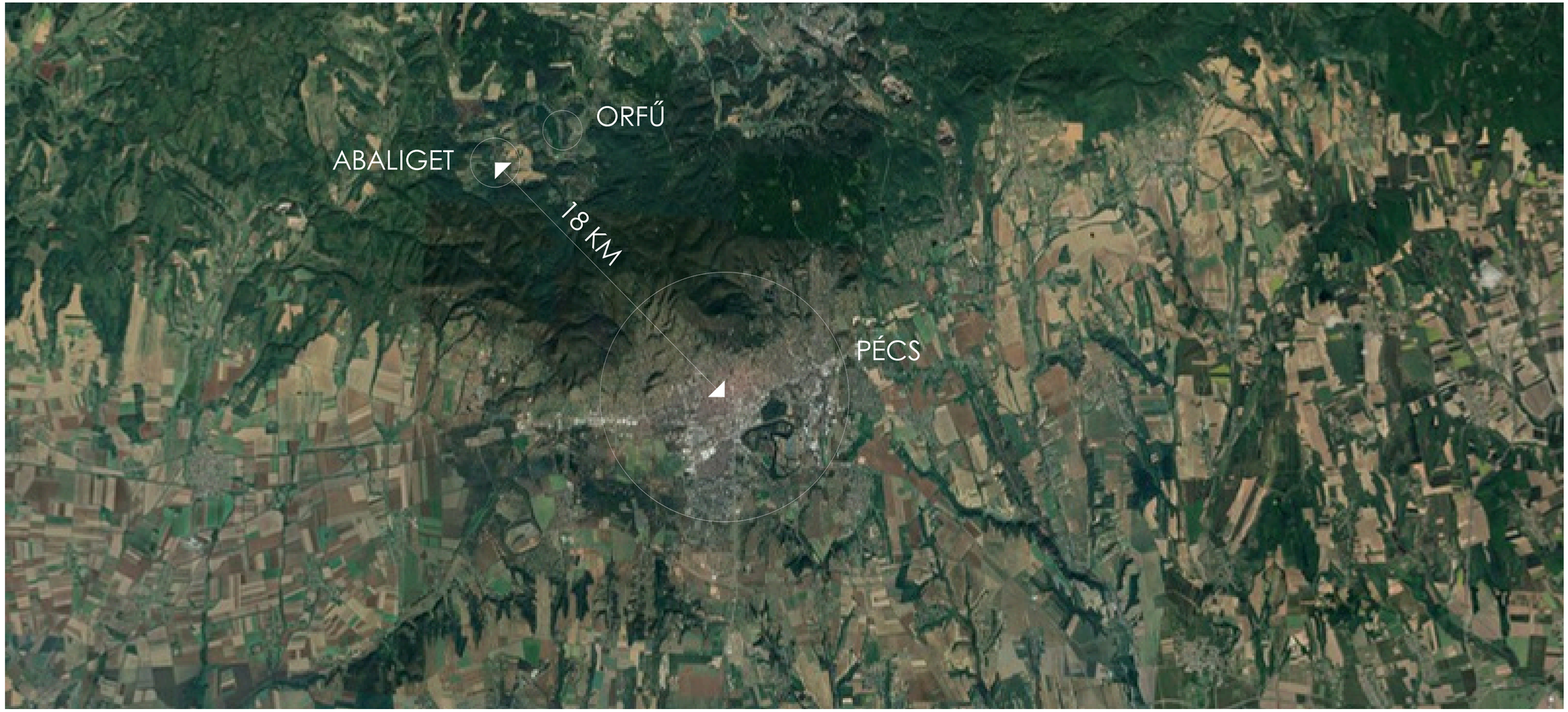
SUPERVISOR: DR. AKOS HUTTER
STUDENT: ALTYNAI KALMURATOVA

PROJECT NAME: STEELNEST HUB

STEELNEST HUB



ABALIGET, HUNGARY



CONTEXT OVERVIEW

REGION DESCRIPTION

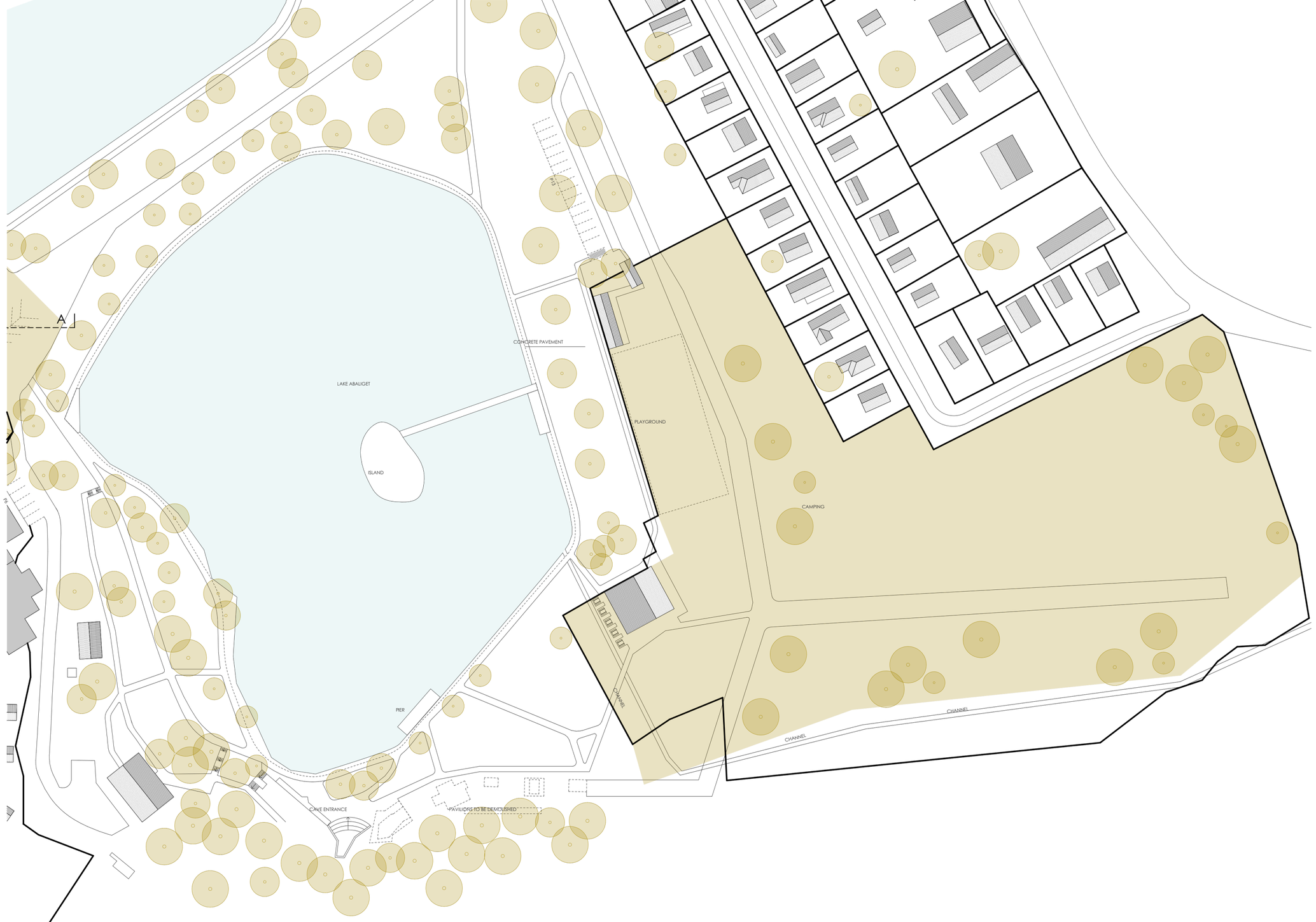
ABALIGET IS A SMALL SETTLEMENT IN SOUTHERN HUNGARY, SURROUNDED BY FORESTED HILLS AND A NATURAL LAKE LANDSCAPE.

IT OFFERS A VARIETY OF OUTDOOR ACTIVITIES, INCLUDING SWIMMING, FISHING, HIKING, AND EXPLORING NEARBY TRAILS THAT CONNECT TO THE SURROUNDING NATURE.

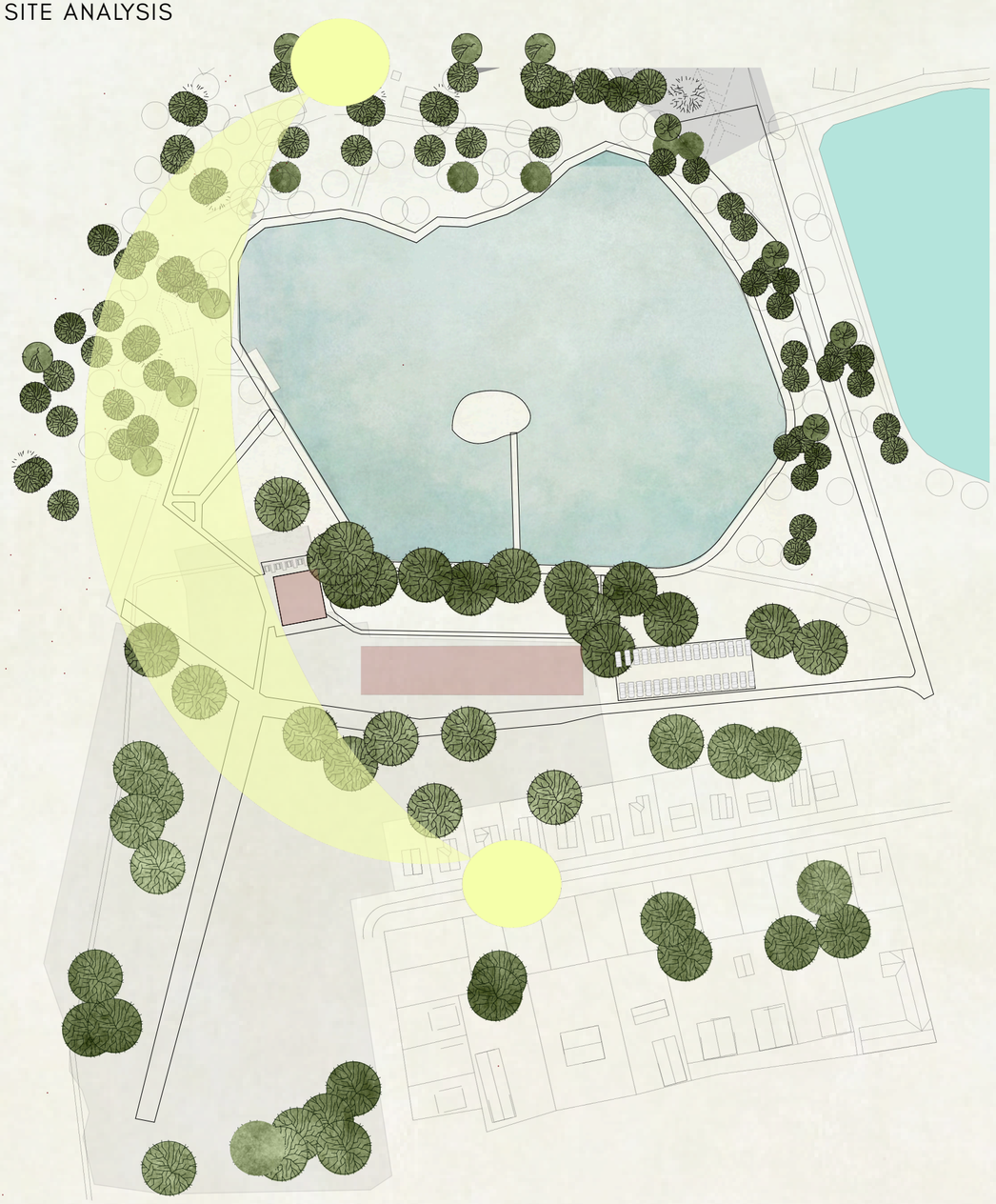
ABALIGET IS ALSO ASSOCIATED WITH CULTURAL AND COMMUNITY EVENTS, SMALL-SCALE FESTIVALS, AND LEISURE TOURISM, SUPPORTED BY LOCAL CAFÉS, A MUSEUM, AND CAMPING FACILITIES.

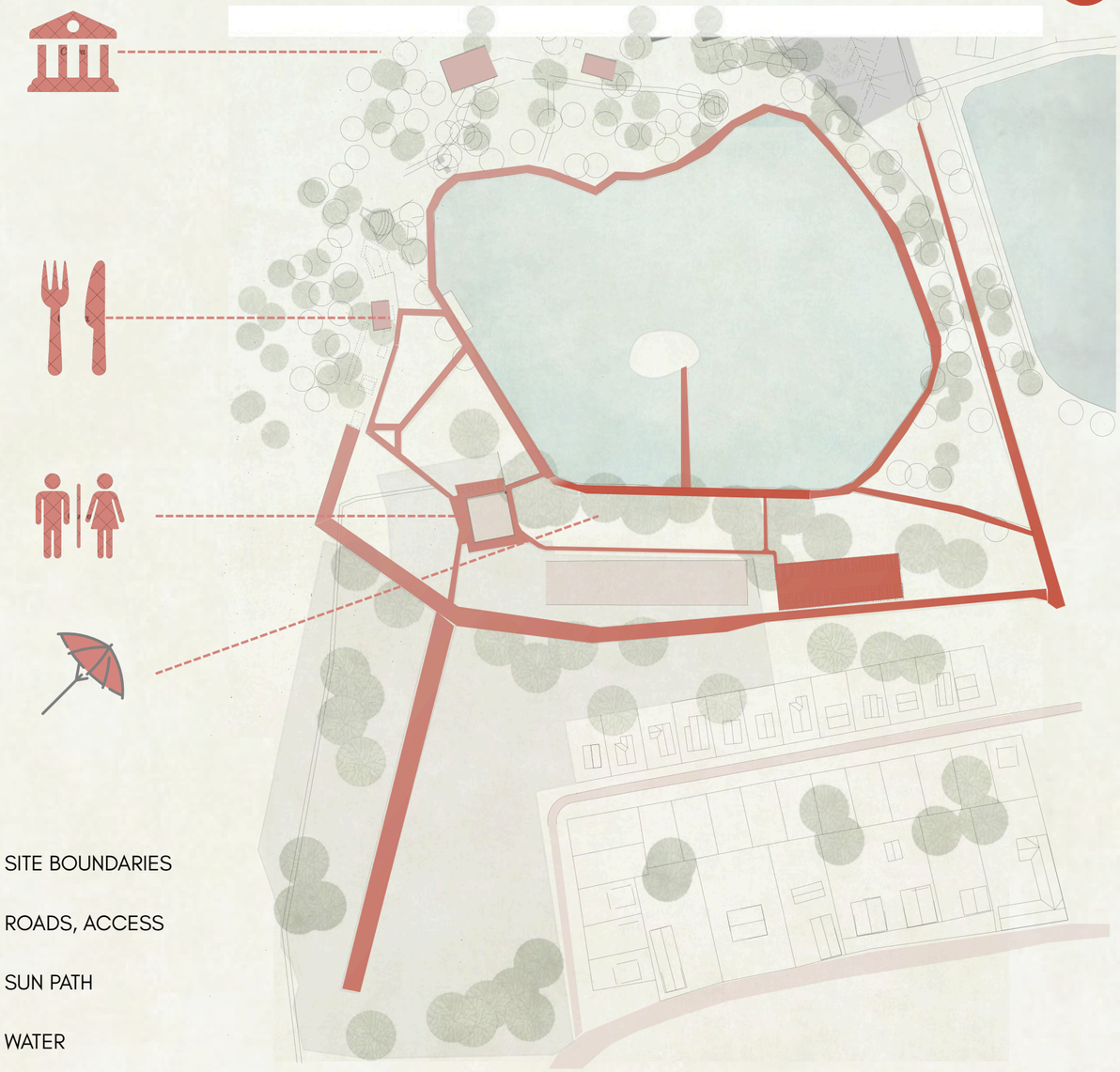
THE SITE FUNCTIONS AS A GATEWAY TO NATURE-BASED EXPERIENCES, WHERE INFRASTRUCTURE REMAINS MINIMAL AND CLOSELY INTEGRATED WITH THE LANDSCAPE, MAKING IT AN IDEAL CONTEXT FOR FLEXIBLE, LIGHTWEIGHT ARCHITECTURAL INTERVENTIONS.

SITE PLAN


N
A
A
CONCRETE PAVEMENT
LAKE ABALIGET
ISLAND
PLAYGROUND
CAMPING
PIER
CHANNEL
CHANNEL
CHANNEL
CAVE ENTRANCE
PAVILIONS TO BE DEMOLISHED

SITE ANALYSIS





SITE BOUNDARIES

ROADS, ACCESS

SUN PATH

WATER

EXISTING VEGETATION

N

PROJECT DESCRIPTION

THE PROJECT IS A MODULAR PAVILION DESIGNED AS A FLEXIBLE PUBLIC HUB FOR A CAMPING ENVIRONMENT, RESPONDING TO CHANGING SEASONAL USE AND TEMPORARY VISITOR FLOWS.

THE BUILDING IS BASED ON A LIGHTWEIGHT STEEL STRUCTURAL SYSTEM COMBINED WITH SANDWICH PANEL ENVELOPES, ALLOWING FOR FAST ASSEMBLY, ADAPTABILITY, AND EFFICIENT SPATIAL ORGANIZATION.

IT INTEGRATES A RECEPTION AREA, WAITING LOUNGE, COWORKING SPACE, AND CAFÉ ON THE GROUND FLOOR, SUPPORTING BOTH OPERATIONAL NEEDS AND PUBLIC USE.
THE UPPER LEVEL IS DESIGNED AS AN OPEN MULTIFUNCTIONAL TERRACE FOR EVENTS, INFORMAL GATHERINGS, OUTDOOR ACTIVITIES, AND A TERRACE BAR WITH PANORAMIC VIEWS.

OVERALL, THE PROJECT EXPLORES A MODULAR AND ADAPTIVE ARCHITECTURAL APPROACH, CREATING A VERSATILE SPACE THAT COMBINES INFRASTRUCTURE, SOCIAL INTERACTION, AND LEISURE FUNCTIONS WITHIN A SINGLE COHERENT SYSTEM.

SITE PLAN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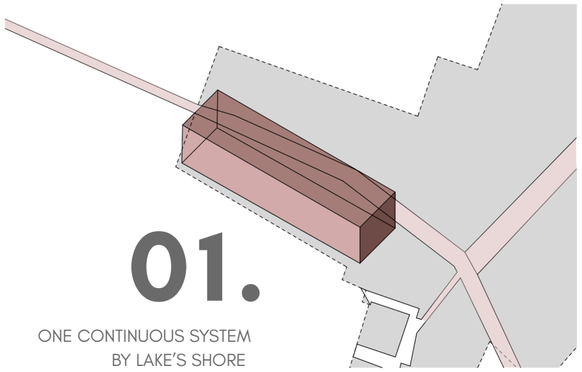
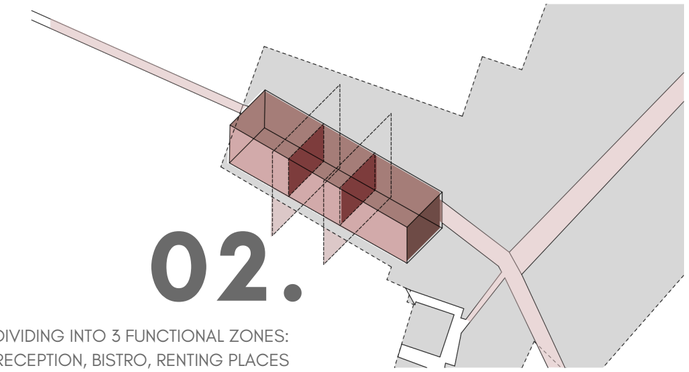
MASS FORMATION



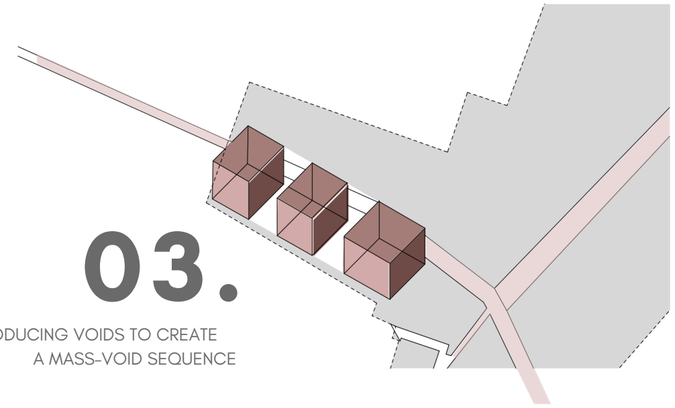
01.

ONE CONTINUOUS SYSTEM
BY LAKE'S SHORE



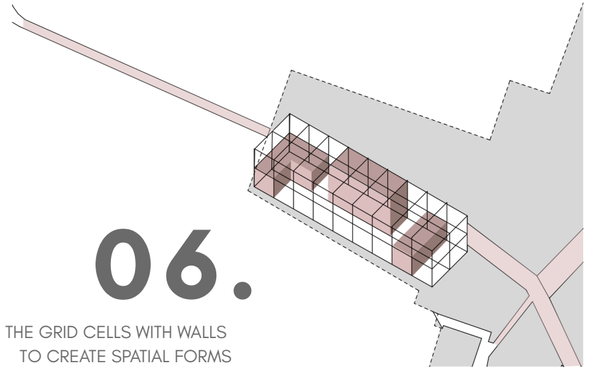
02.

DIVIDING INTO 3 FUNCTIONAL ZONES:
RECEPTION, BISTRO, RENTING PLACES



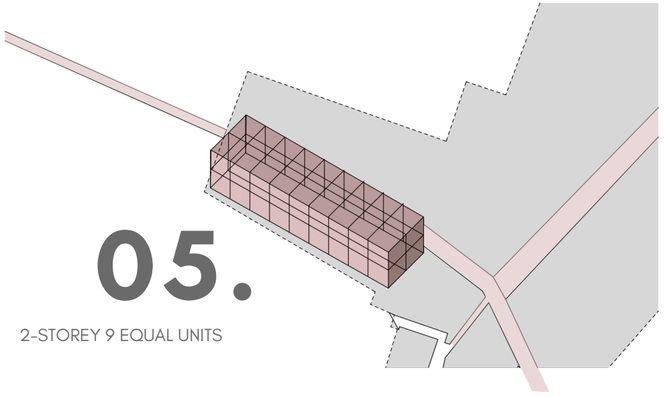
03.

INTRODUCING VOIDS TO CREATE
A MASS-VOID SEQUENCE



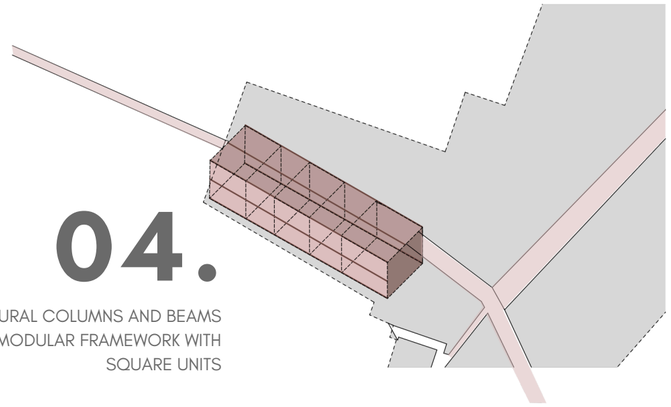
06.

FILLING THE GRID CELLS WITH WALLS
TO CREATE SPATIAL FORMS



05.

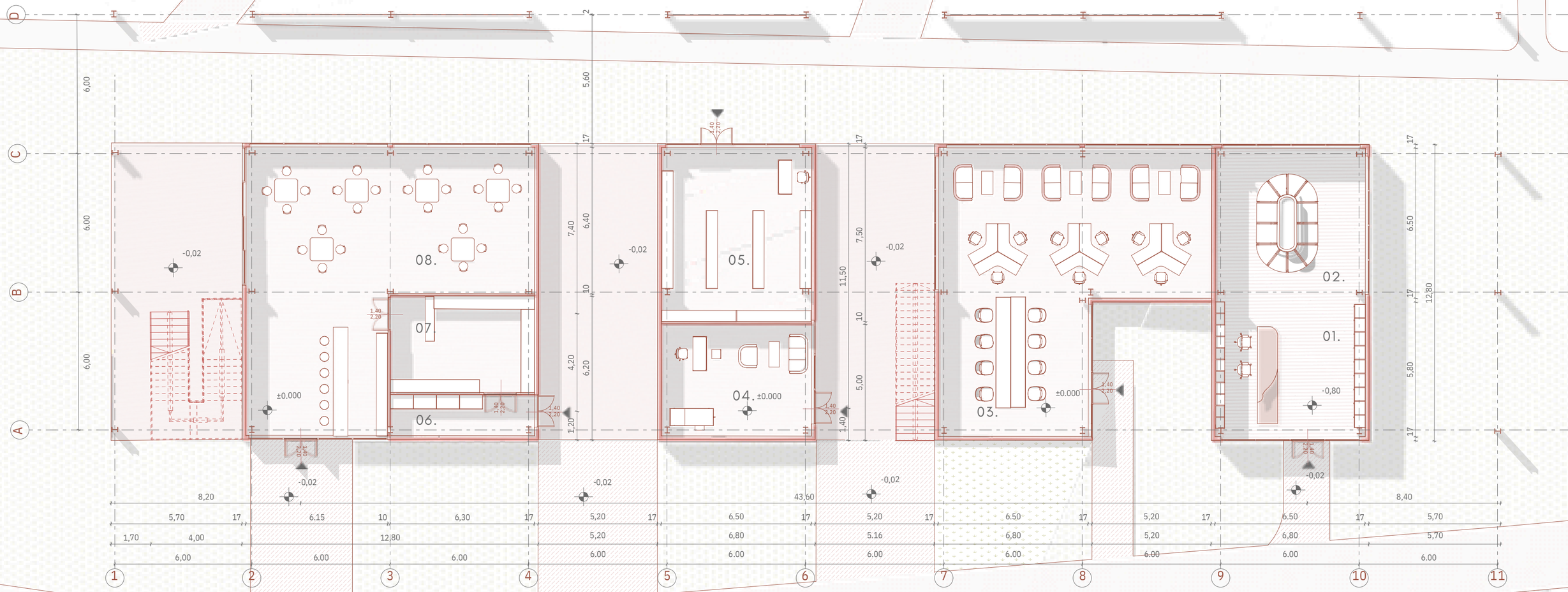
2-STOREY 9 EQUAL UNITS



04.

STRUCTURAL COLUMNS AND BEAMS
CREATE A MODULAR FRAMEWORK WITH
SQUARE UNITS

GROUND FLOOR PLAN



01.

RECEPTION ZONE
40,50 M2
TIBMER FLOORING

02.

WAITING AREA
40,50 M2
TIMBER FLOORING

03.

COWORKING
ZONE /
CHARGING
STATION
121,10 M2
TIBMER FLOORING

04.

FIRST AID
32,40 M2
TIBMER FLOORING

05.

SOUVENIR SHOP
50,20 M2
TIBMER FLOORING

06.

KITCHEN STORAGE
12,50 M2
TIBMER FLOORING

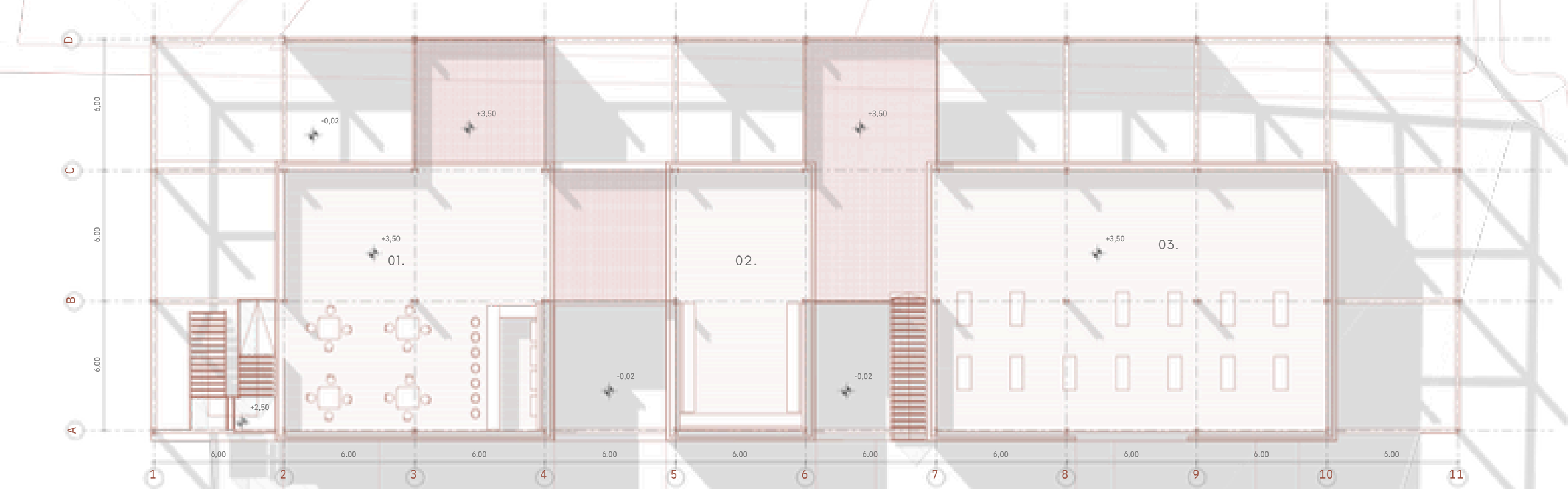
07.

KITCHEN
26,80 M2
TIBMER FLOORING

08.

BISTRO
120,20 M2
TIBMER FLOORING

FIRST FLOOR PLAN



01.

TERRACE BAR
148,20 M2
TIBMER FLOORING

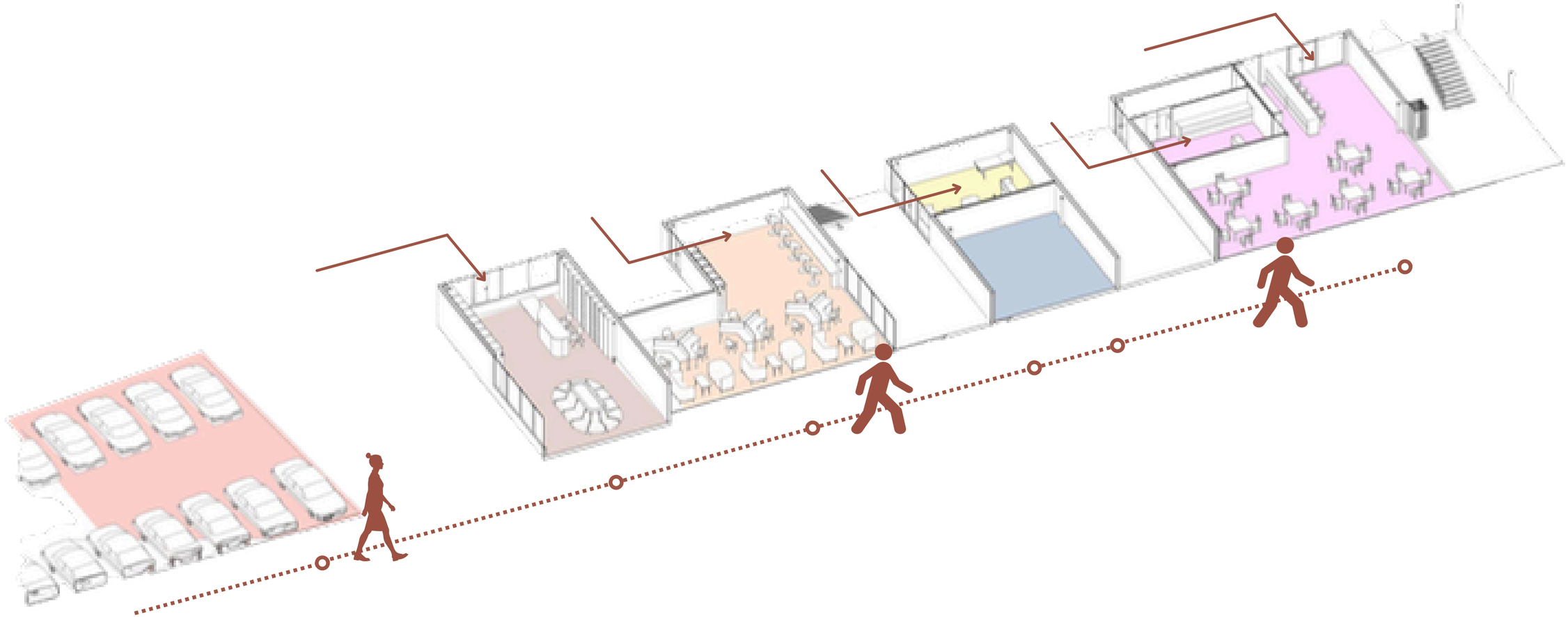
02.

CHILL ZONE
73,80 M2
TIBMER FLOORING

03.

OUTSIDE SPORTS ZONE
220,10 M2
TIBMER FLOORING

SCHEMA DRAWINGS



01.
ARRIVING TO
THE PARKING

02.
CHECKING IN

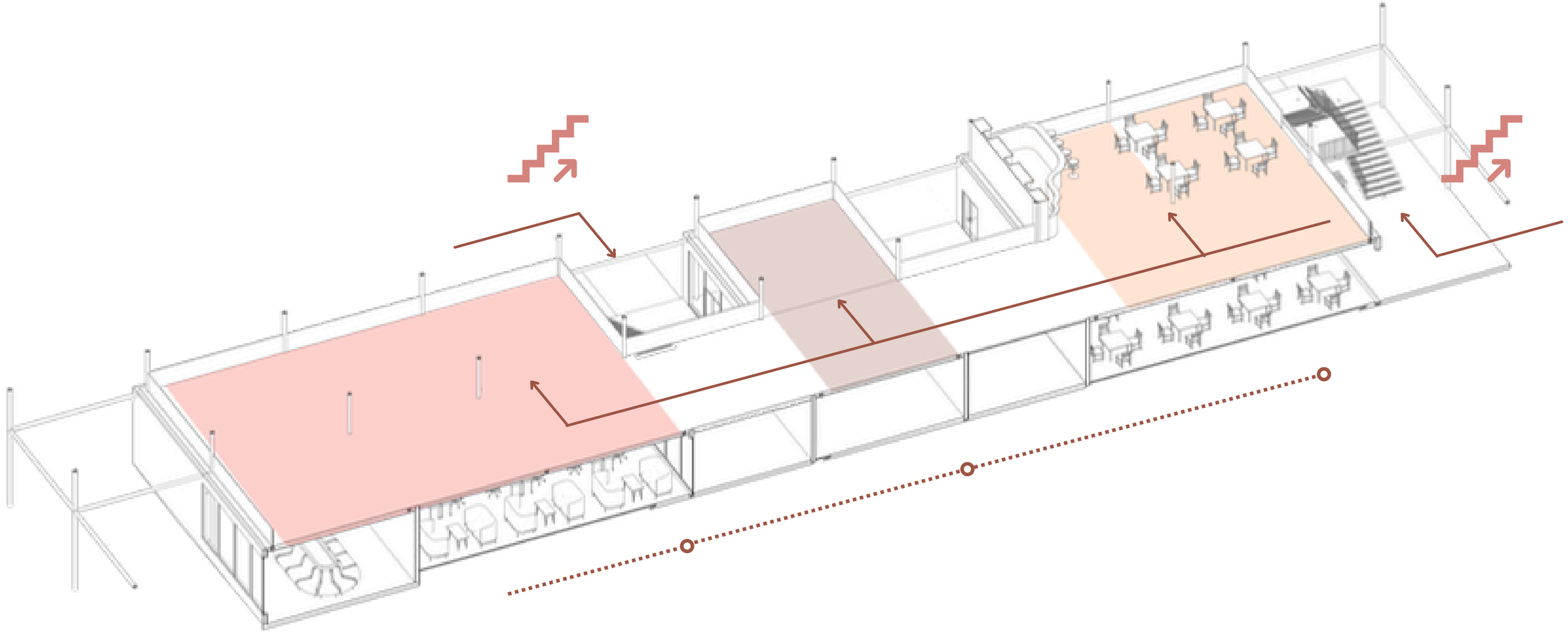
03.
BATTERY
STATION
COWORKING

04.
FIRST AID

05.
SHOPPING

06.
DINING

SCHEMA DRAWINGS



01.
STRETCHING
EXCERCISING

02.
COMMUNICATING
CHATTING

03.
BAR
DANCING

SECTION A - A

L1.

SLAB
WOODEN PLANKS - 5 CM
METAL LEGS - 5 CM
THERMAL INSULATION XPS - 10 CM
WATERPROOFING PVC - 2 LAYERS
REINF CONCRETE - 7 CM
STEEL TRAPEZOIDAL SHEETS - 5 CM
STEEL IPA BEAM - 20 CM

L2.

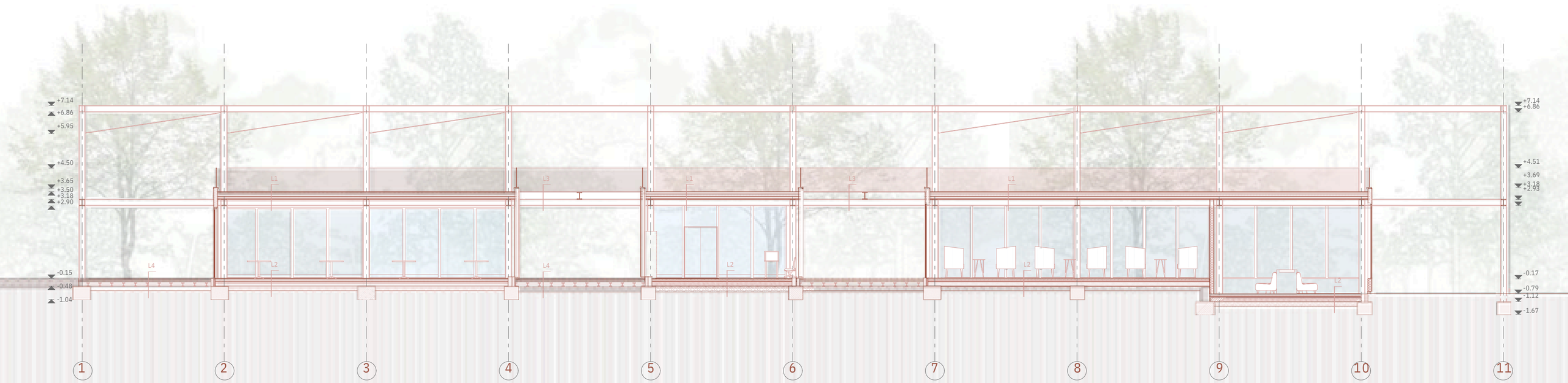
FLOORS
TIMBER FLOORING + GLUE - 1,5 CM
SCREED - 5 CM
SEPARATION LAYER
THERMAL INSULATION EPS - 6 CM
WATERPROOFING PVC - 2 LAYERS
R C SLAB - 20 CM
GRAVEL - 20 CM
SOIL

L3.

TERRACE FLOORING FIRST FLOOR
PERFORATED METAL SHEETS - 2 CM
STEEL IPA BEAM - 20 CM
STEEL IPA BEAM - 20 CM

L4.

TERRACE FLOORING GROUND FLOOR
TIMBER PLANKS - 5 CM
TIMBER STRUCTS - 10 CM
METAL LEGS - 15 CM
GRAVEL - 20 CM
ORIGINAL SOIL



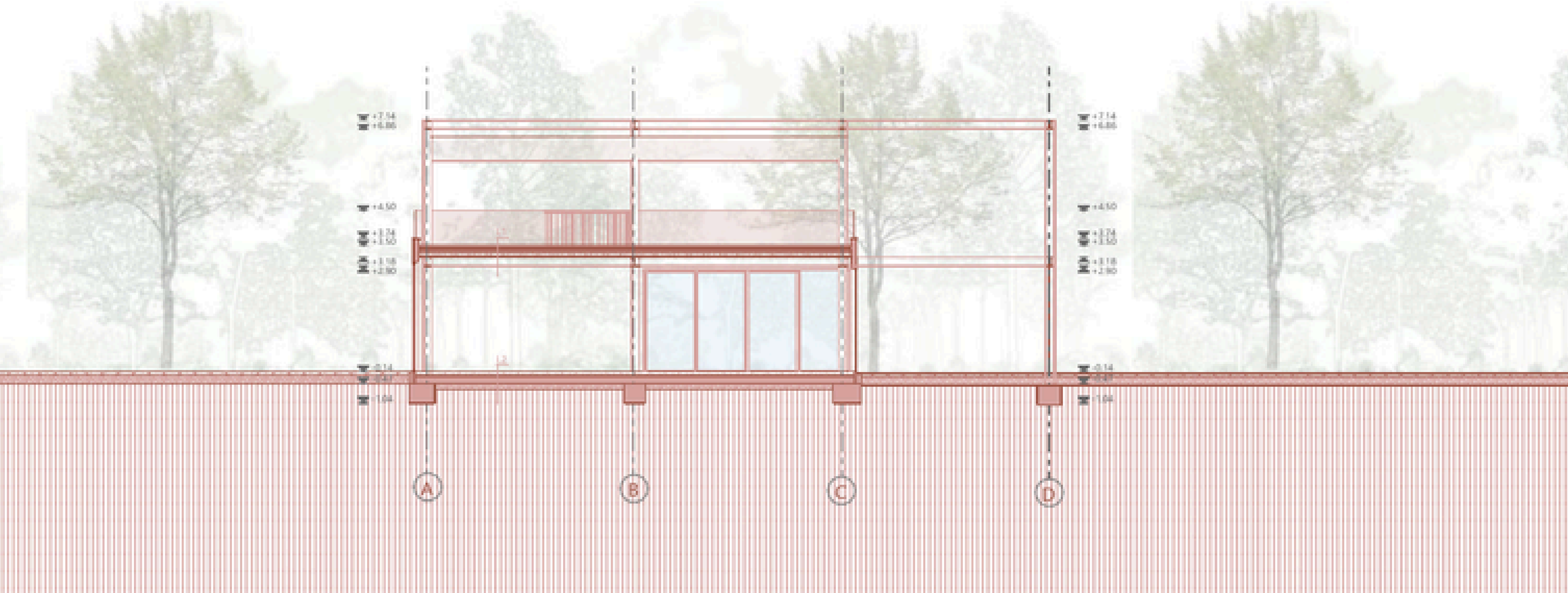
SECTION B - B

L1.

SLAB
WOODEN PLANKS - 5 CM
METAL LEGS - 5 CM
THERMAL INSULATION XPS - 10 CM
WATERPROOFING PVC - 2 LAYERS
REINF CONCRETE - 7 CM
STEEL TRAPEZOIDAL SHEETS - 5 CM
STEEL IPA BEAM - 20 CM

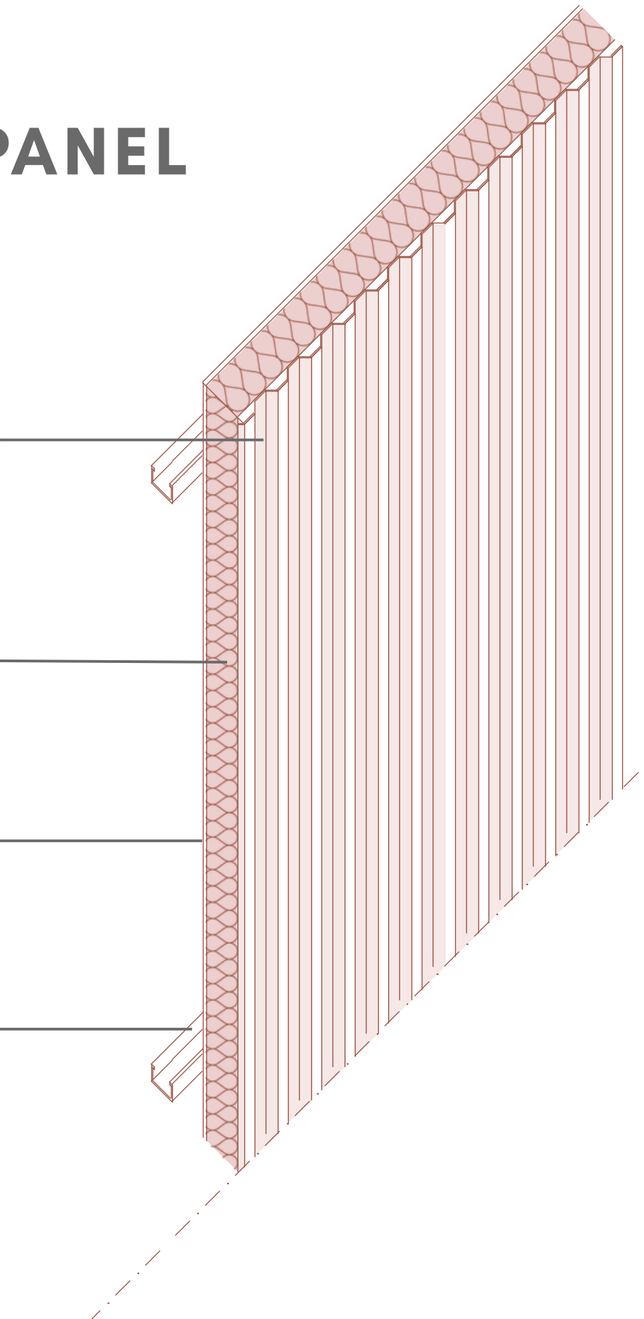
L2.

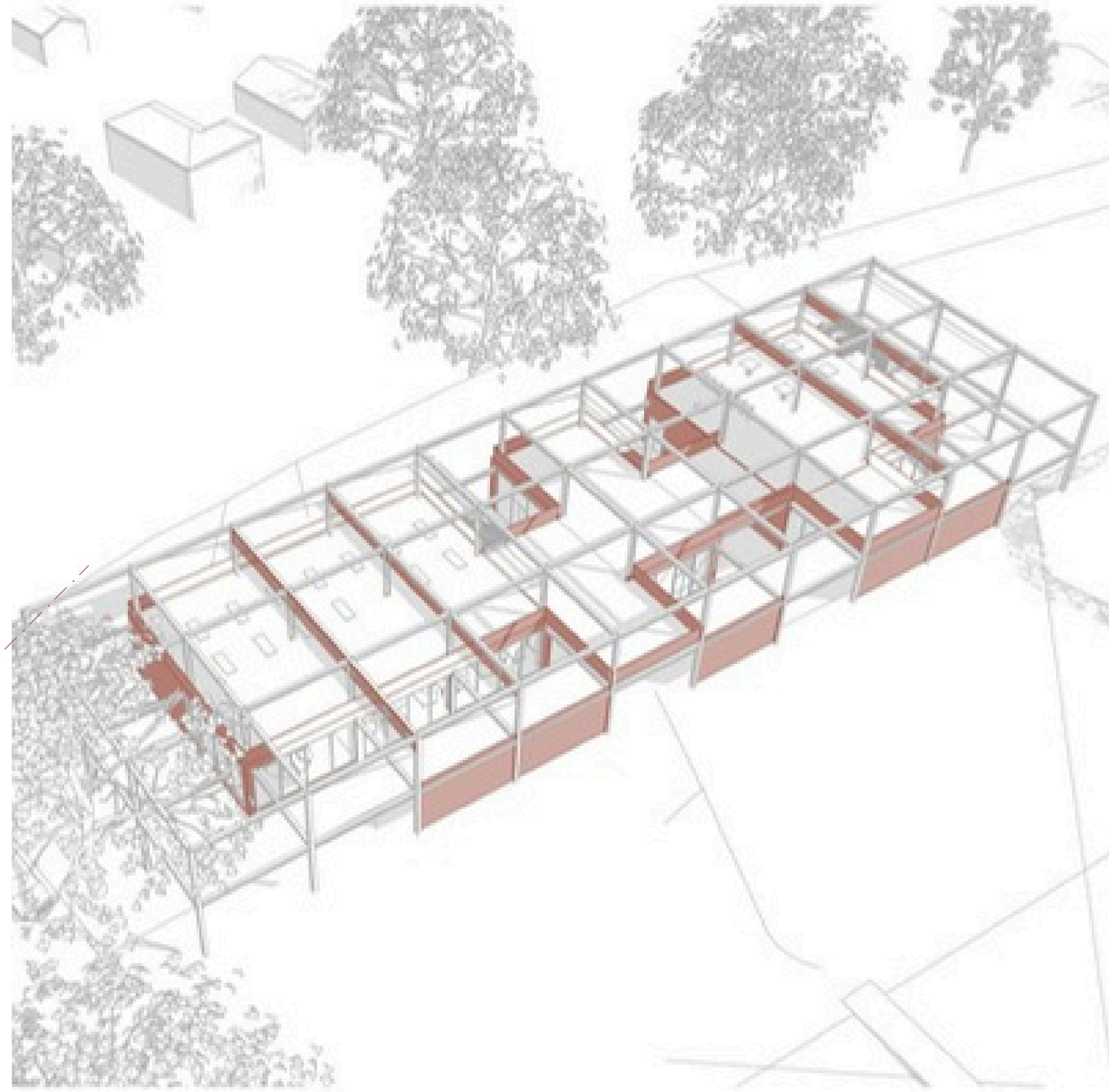
FLOORS
TIMBER FLOORING + GLUE - 1,5 CM
SCREED - 5 CM
SEPARATION LAYER
THERMAL INSULATION EPS - 6 CM
WATERPROOFING PVC - 2 LAYERS
R C SLAB - 10 CM
GRAVEL - 10 CM
SOIL



STRUCTURAL SCHEMA

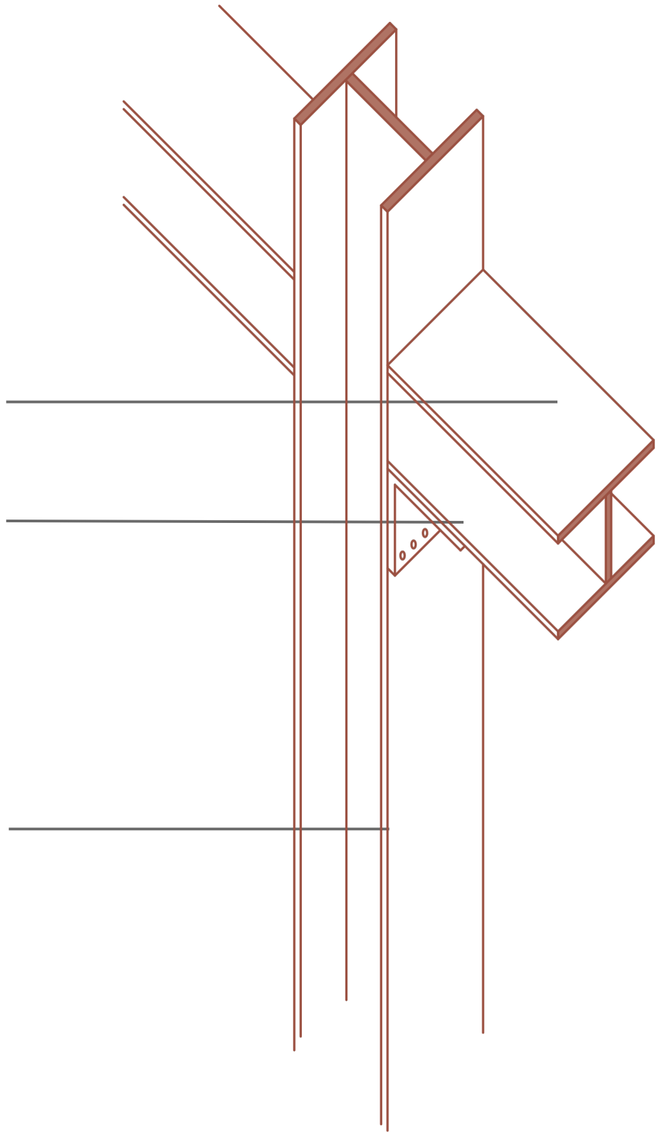
KINGSPAN SANDWICH PANEL





STRUCTURAL SCHEMA

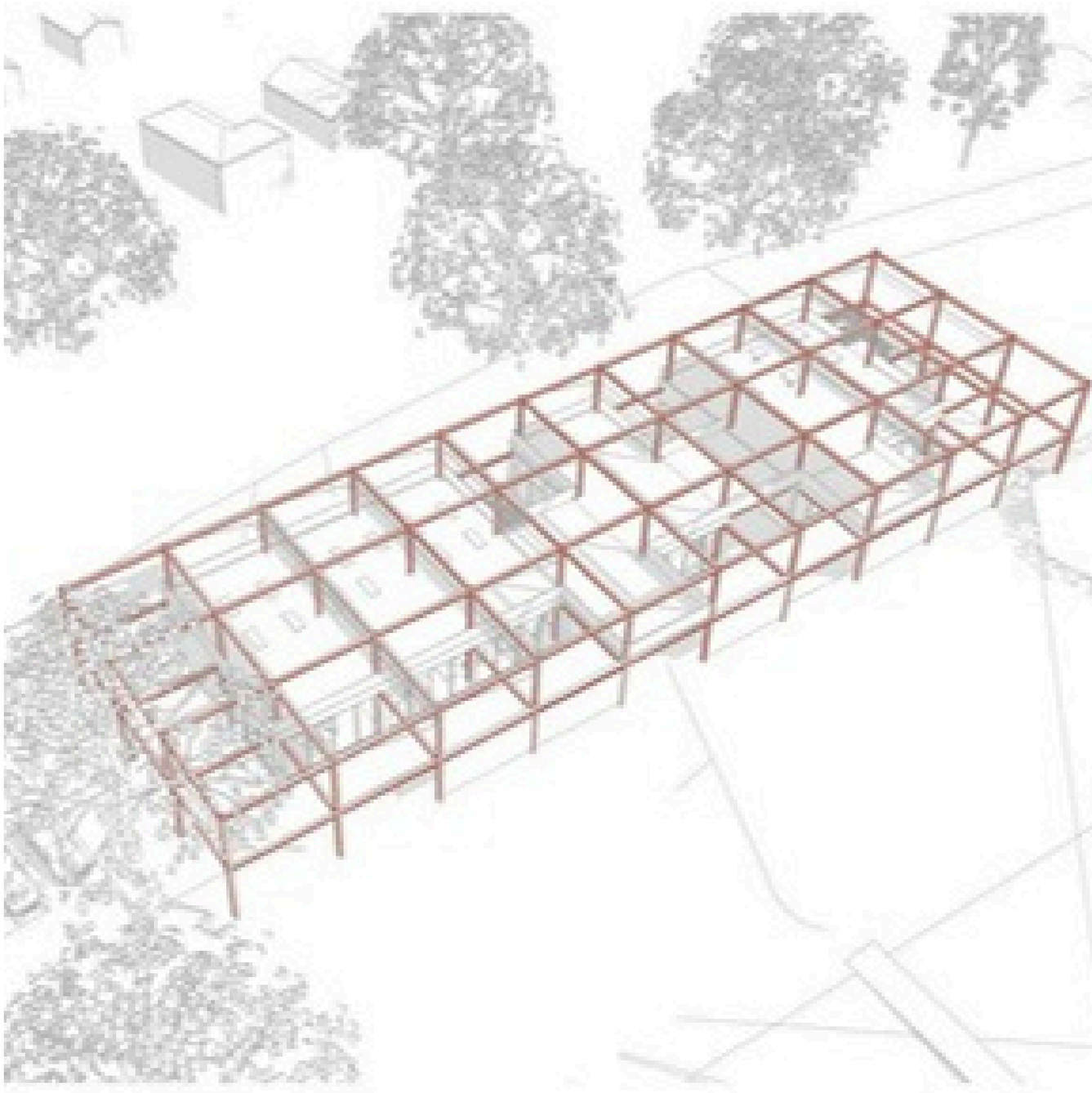
BEARING STRUCTURE



IPA BEAMS 210 MM

STEEL CONNECTION PLATES

HEA COLUMNS
210 MN X 270 MM

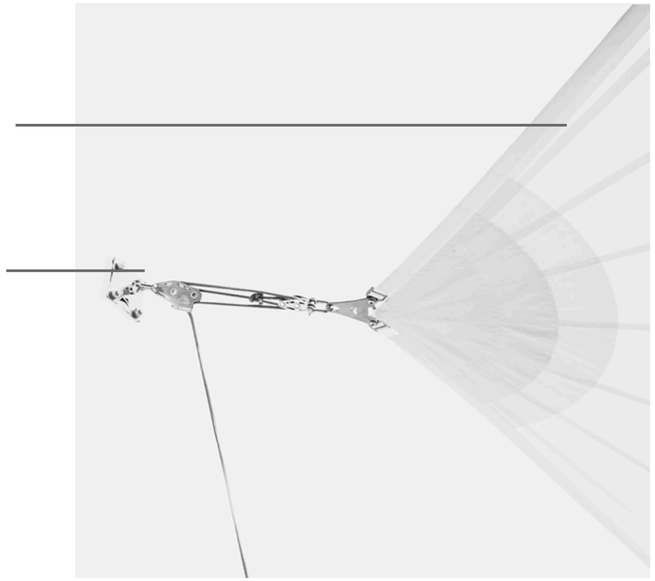


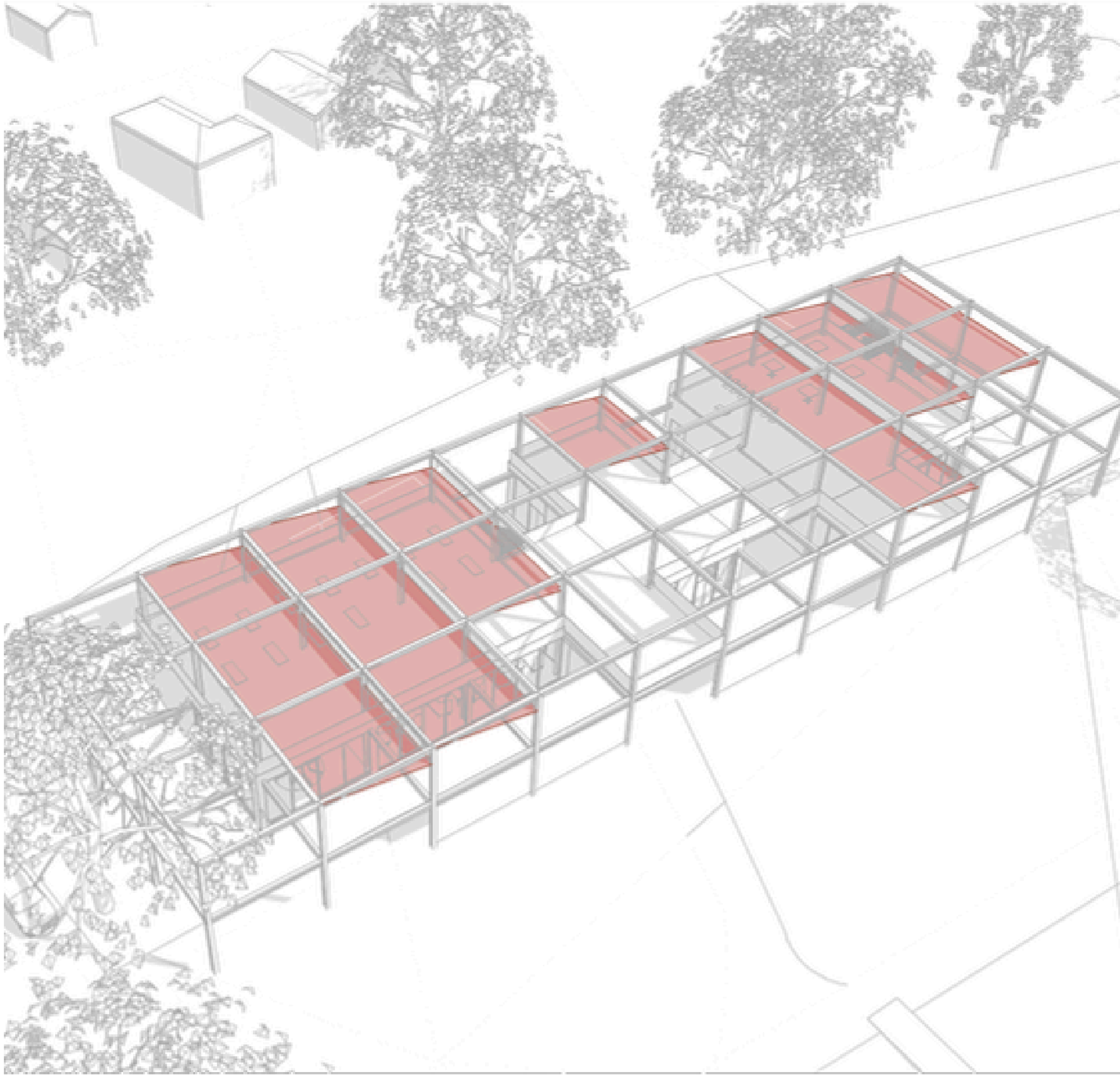
STRUCTURAL SCHEMA

ROOF COVERING

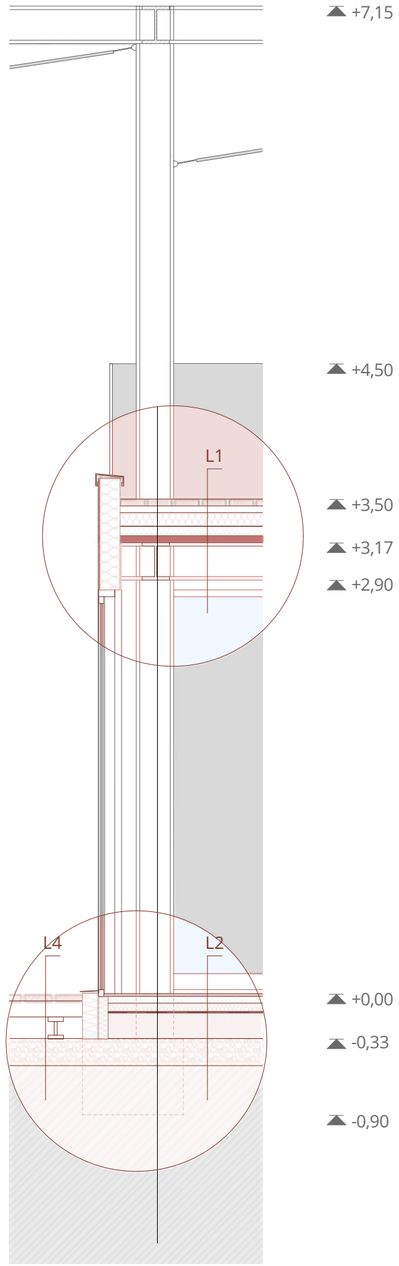
ETFE ROOF MEMBRANE

HOOK CONNECTION

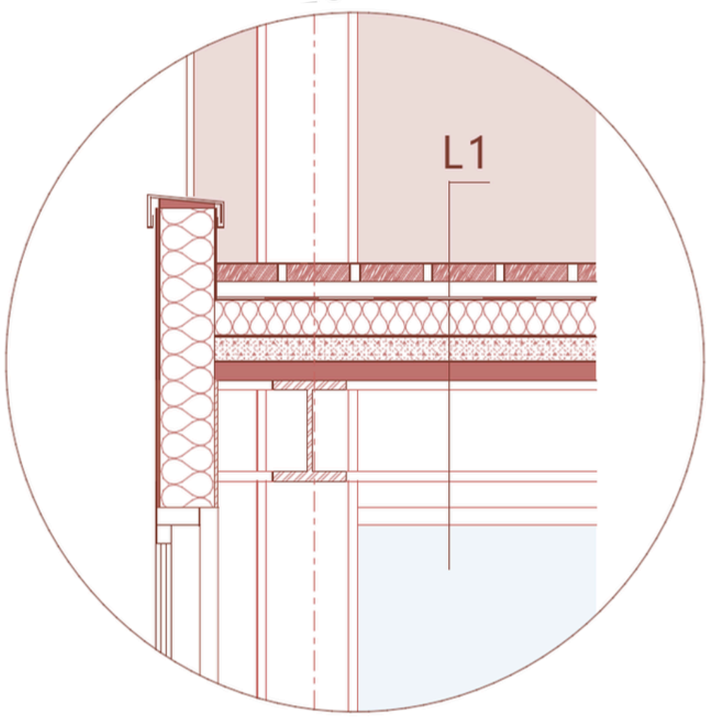




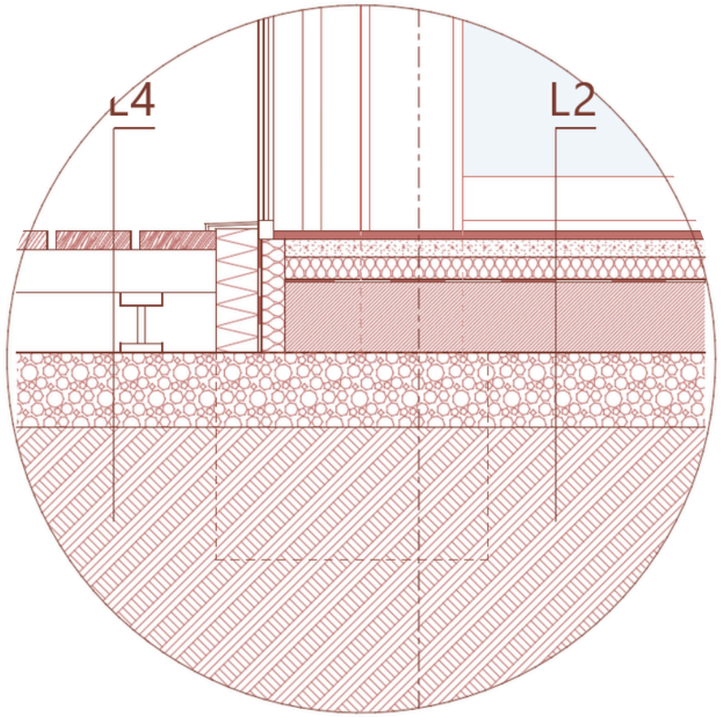
WALL DETAIL



PARAPETH WALL



FOOTING



L1.

SLAB
WOODEN PLANKS - 5 CM
METAL LEGS - 5 CM
THERMAL INSULATION XPS - 10 CM
WATERPROOFING PVC - 2 LAYERS
REINF CONCRETE - 7 CM
STEEL TRAPEZOIDAL SHEETS - 5 CM
STEEL IPA BEAM - 20 CM

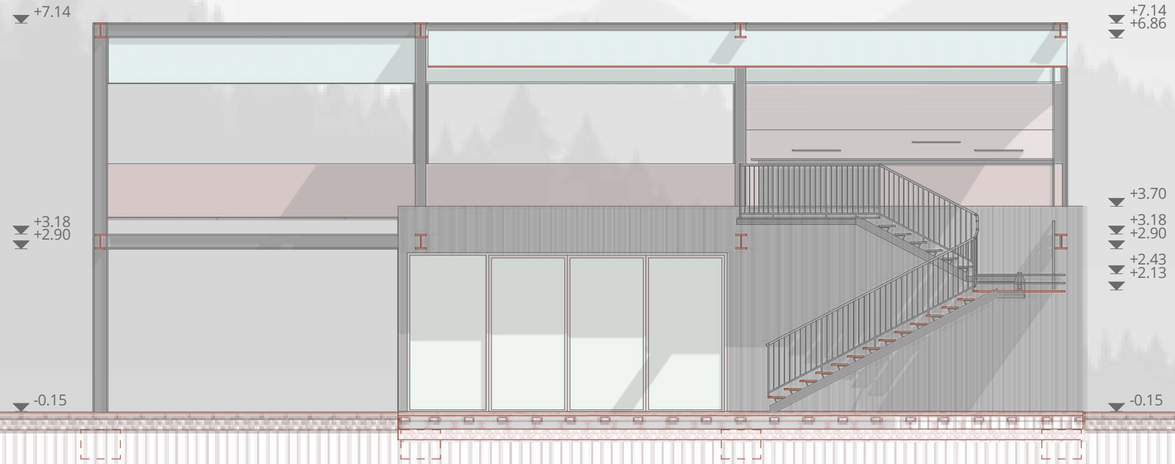
L2.

FLOORS
TIMBER FLOORING + GLUE - 1,5 CM
SCREED - 5 CM
SEPARATION LAYER
THERMAL INSULATION EPS - 6 CM
WATERPROOFING PVC - 2 LAYERS
R C SLAB - 20 CM
GRAVEL - 20 CM
SOIL

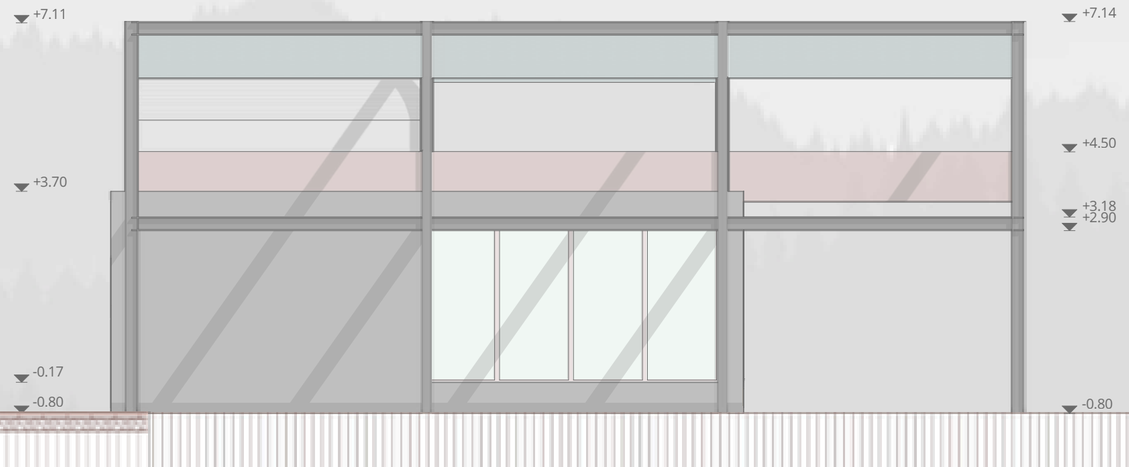
L4.

TERRACE FLOORING GROUND FLOOR
TIMBER PLANKS - 5 CM
TIMBER STRUCTS - 10 CM
METAL LEGS - 15 CM
GRAVEL - 20 CM
ORIGINAL SOIL

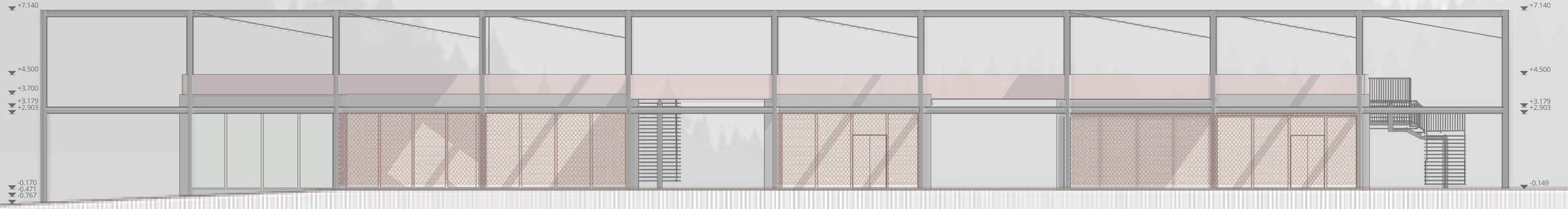
SOUTH ELEVATION / SECTION C - C



NORTH



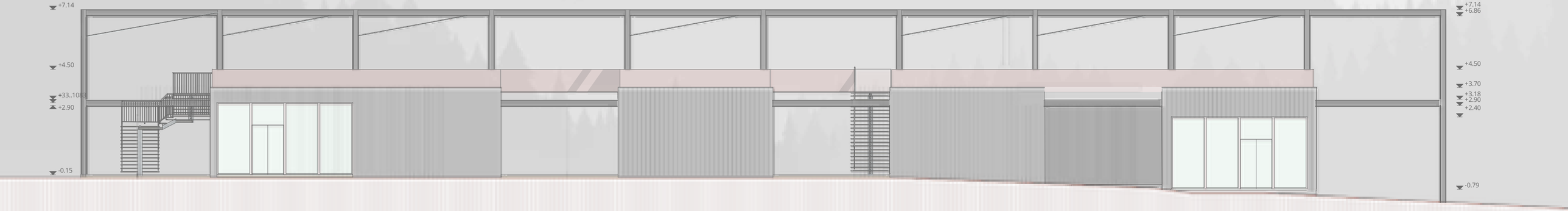
WEST ELEVATION

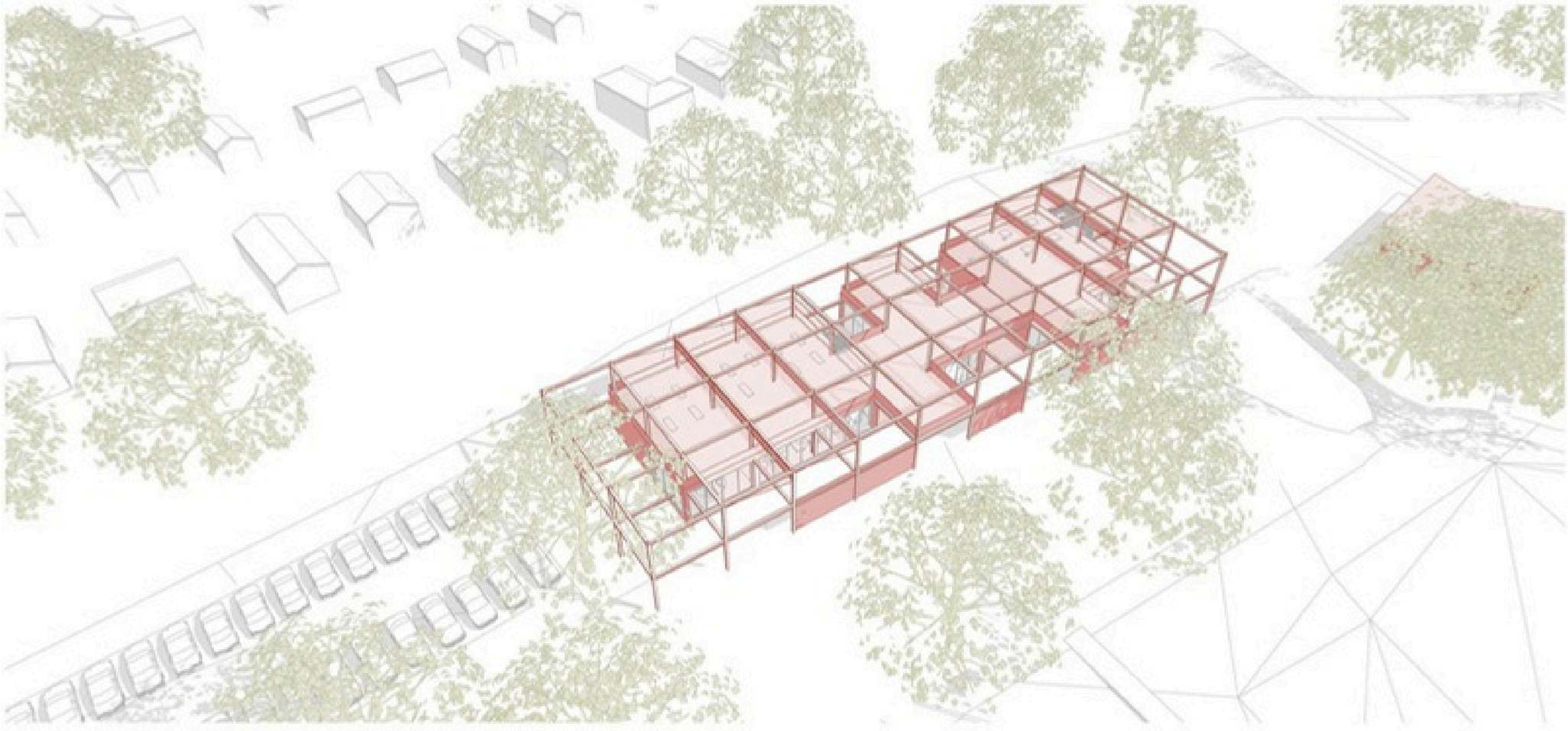


ALTYNAI KALMURATOVA JOSO02

DR. HUTTER AKOS

EAST ELEVATION





THANK YOU!