

THE KARAVAN

Multi-functional market and residential building



BIRD'S EYE VIEW OF PROJECT

LOCATION

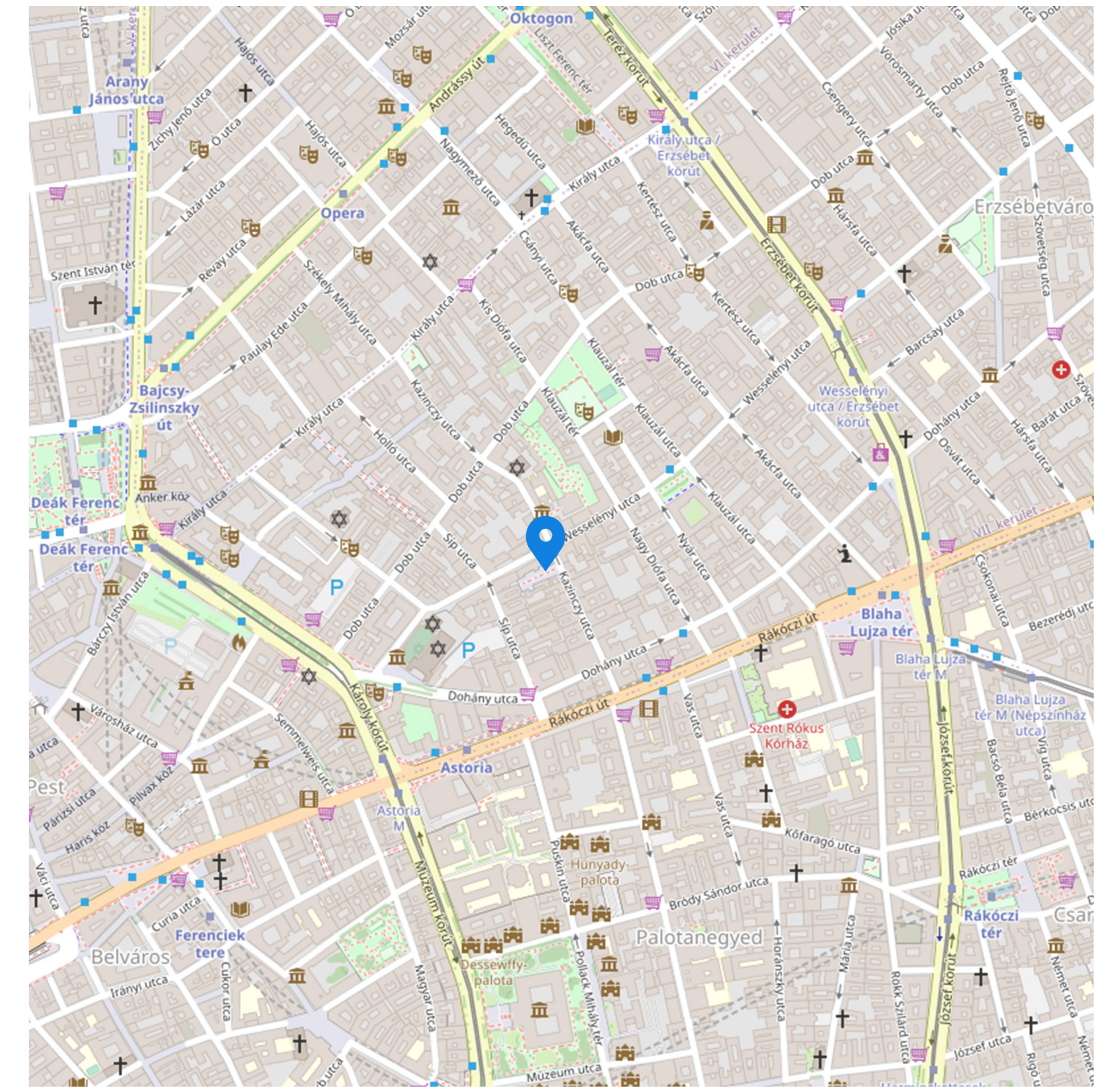
DISTRICT 7

The selected site for development is an undeveloped plot situated in Budapest, Hungary, precisely located on Kazinczy Street 18. This area presents a unique opportunity for potential development.

The Jewish Quarter is historically significant, bearing the marks of a rich Jewish heritage. It was once a thriving center for Jewish life, culture, and commerce. The district is adorned with synagogues, including the majestic Great Synagogue, which stands as one of the largest in Europe. Exploring the streets of the Jewish Quarter reveals a tapestry of narrow alleys, eclectic architecture, and a palpable sense of history.

Kazinczy Street 18 is positioned in District 7, which is renowned for its distinctive blend of history, culture, and vibrant urban life. The district encompasses the Jewish Quarter and the Party District, creating a dynamic and multifaceted environment that holds particular importance.

In recent times, District 7 has evolved into the renowned Party District, drawing locals and tourists alike with its lively nightlife and trendy establishments. The comparison of historical landmarks with contemporary bars, clubs, and cafes creates a unique atmosphere that appeals to a diverse range of people. The district comes alive in the evenings, transforming into a hub of social activity.



SITEPLAN // 1:500

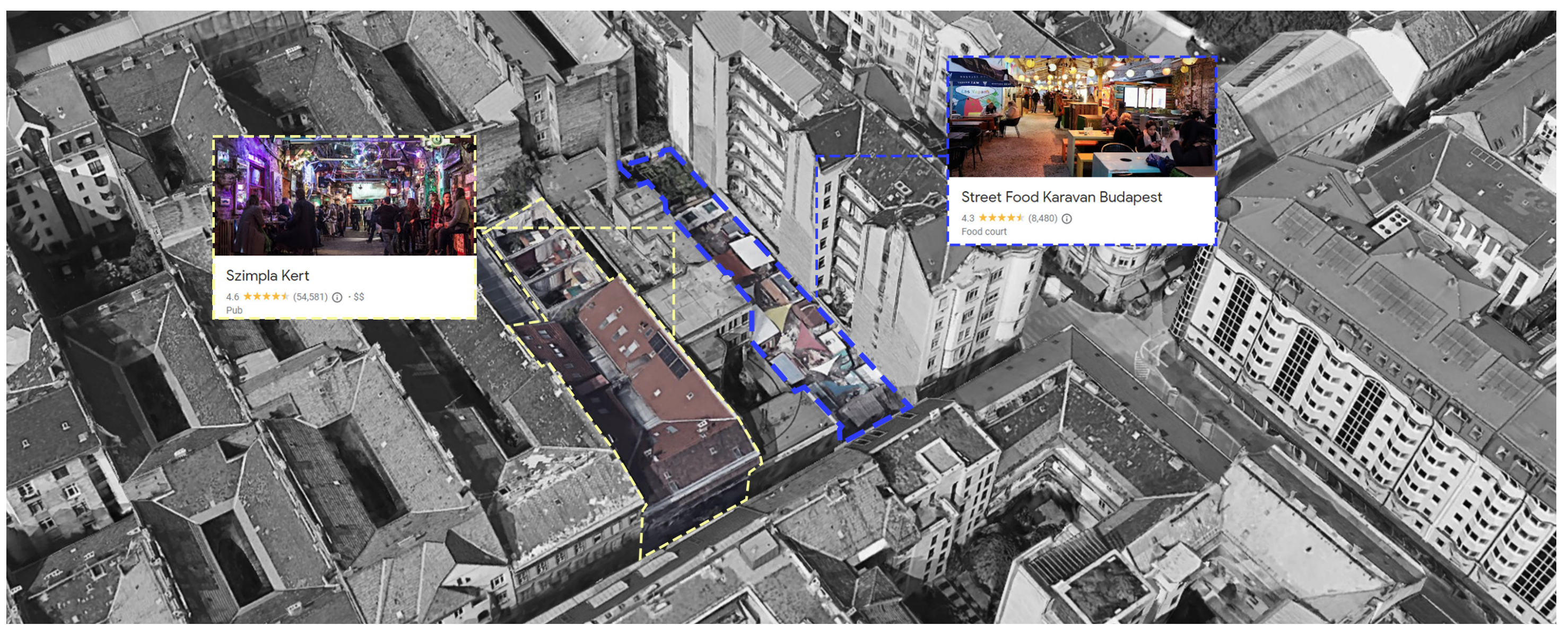


ROAD ANALYSIS

HEIGHT ANALYSIS

FUNCTIONAL ANALYSIS

GREEN SPACE ANALYSIS

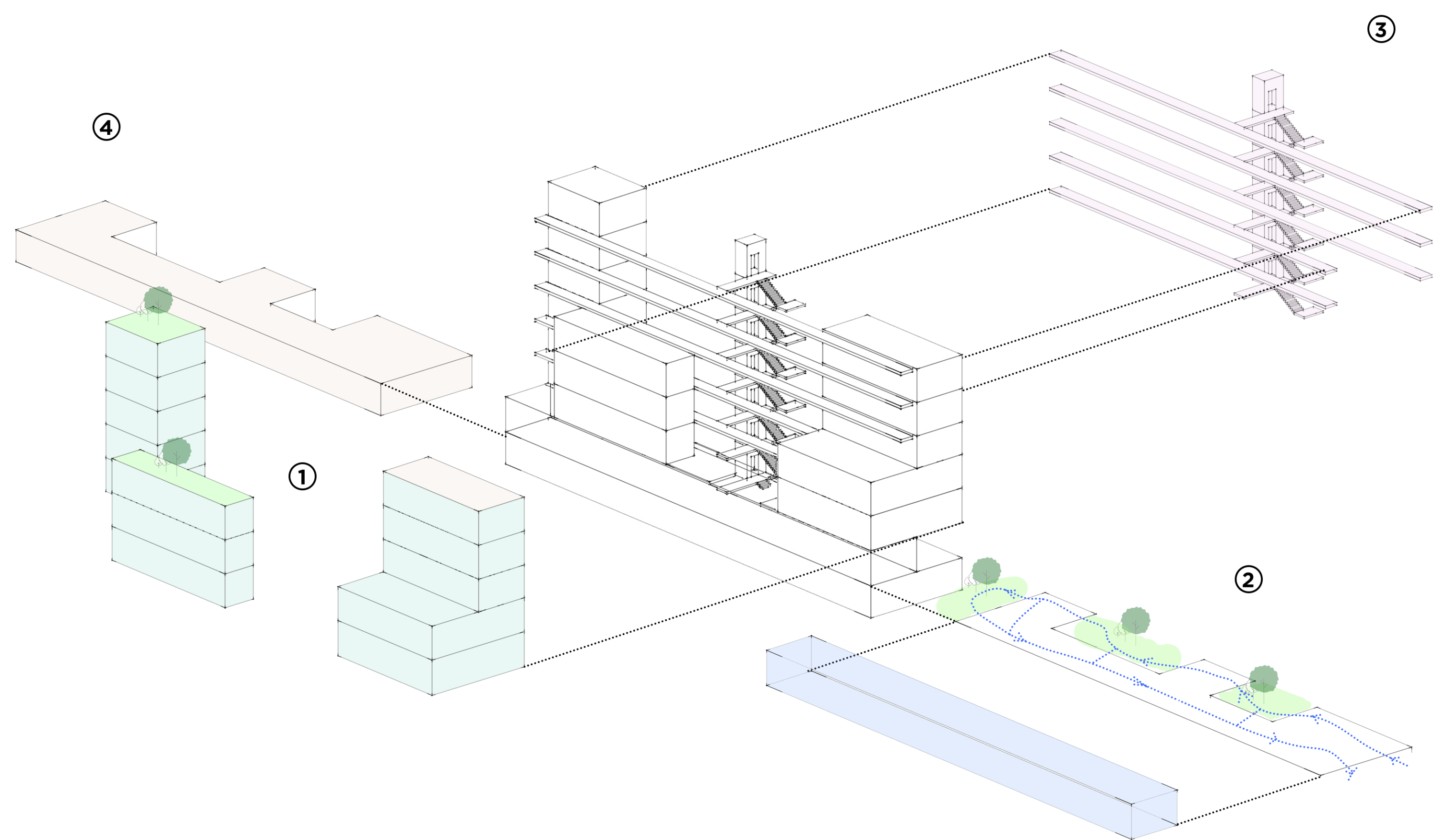


District: VII
Location: Budapest, Kazinczy u. 18, 1075

Current function: Karavan street food
Plot size: 589.6m²
Current structure: Temporary



Concept



1. RESIDENTIAL BLOCKS

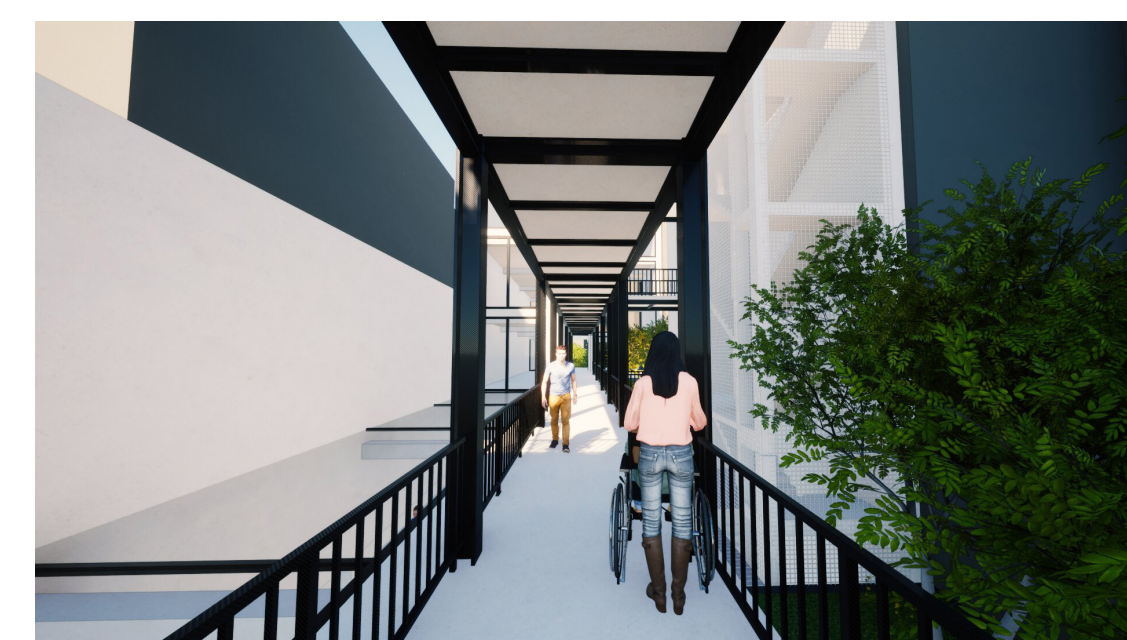
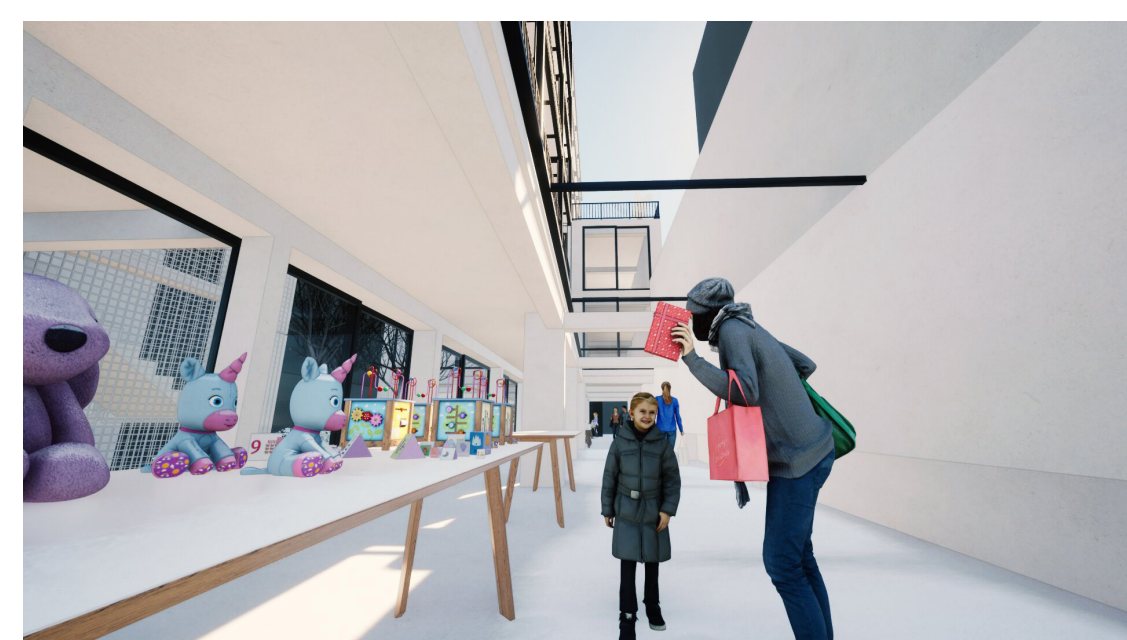
The design features a residential block above a lively market, connected by a corridor with stairs and an elevator. The residential blocks have openable glass facades, prioritizing passive heating, sunlight, and natural ventilation. This transparency fosters a connection with green spaces and provides residents with a view of market events. Varying floor levels respond to neighboring buildings, allowing for green spaces on lower block roofs, visible from multiple floors. The top floor is dedicated to solar panels and a rooftop garden, emphasizing sustainable design and providing residents with a panoramic retreat and eco-friendly amenities.

2. GROUND FLOOR

The ground floor features a market that opens towards a dynamic courtyard at specific hours, creating a unique environment for residents and visitors. The adaptable market can be temporarily closed for scheduled events. The courtyard is a versatile space, open to the public at designated hours and transforming into a private oasis for residents at other times. This flexible design enhances the overall appeal of the development, meeting diverse needs and creating a vibrant and adaptable community space.

3. CIRCULATION CORRIDOR

The circulation corridor, spanning the length of the 60-meter plot, is intentionally left unheated. To accommodate thermal expansion and contraction, the corridor is divided into sections. The design prioritizes the use of lightweight and compact materials for efficiency, ensuring that the construction consists of small, modular steel units. This approach not only addresses practical concerns related to thermal expansion but also emphasizes a cost-effective and sustainable design for the circulation corridor.



4. BASEMENT

The basement floor serves as a centralized hub encompassing essential support functions for both residential and market spaces. All residential blocks are integrated into a unified system for heating, water, and electricity, streamlining efficiency and maintenance. Additionally, the basement accommodates dedicated spaces for market staff, including a common room, storage facilities, cleaning storage, and public toilets. This comprehensive approach ensures optimal functionality, shared resources, and a cohesive infrastructure supporting both the residential and market components of the development.

HISTORIC CONFLICT: The Transformation of the district

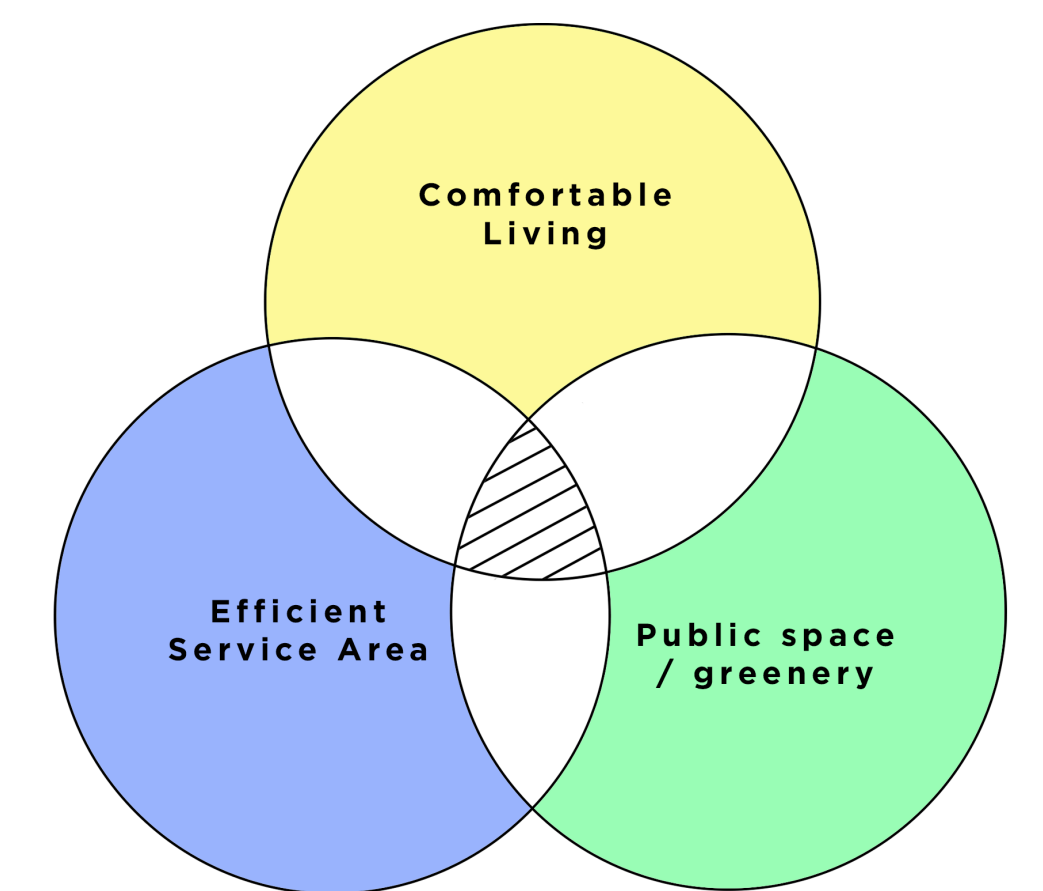
The Party District wasn't always a bustling nightlife hub. It has a complex history, with one of its key elements being the transformation of abandoned buildings and factories into the vibrant nightlife spots seen today. This transformation was a response to the city's declining industrial sector and the need for urban renewal in the early 2000s. This led to the birth of the ruin bar culture, turning dilapidated spaces into thriving venues, symbolizing the district's resilience and adaptability.

Despite the evident economic benefits in District 7, a concerning trend of residents leaving the area for residential purposes has emerged, posing a challenge to the district's intended goals. The reasons are disturbances from the vibrant nightlife, insufficient green spaces and inadequate infrastructure.

AIM OF THE DISTRICT

Citation: OPEN HERITAGE: Heritage Szimpla Budapest Observatory Case

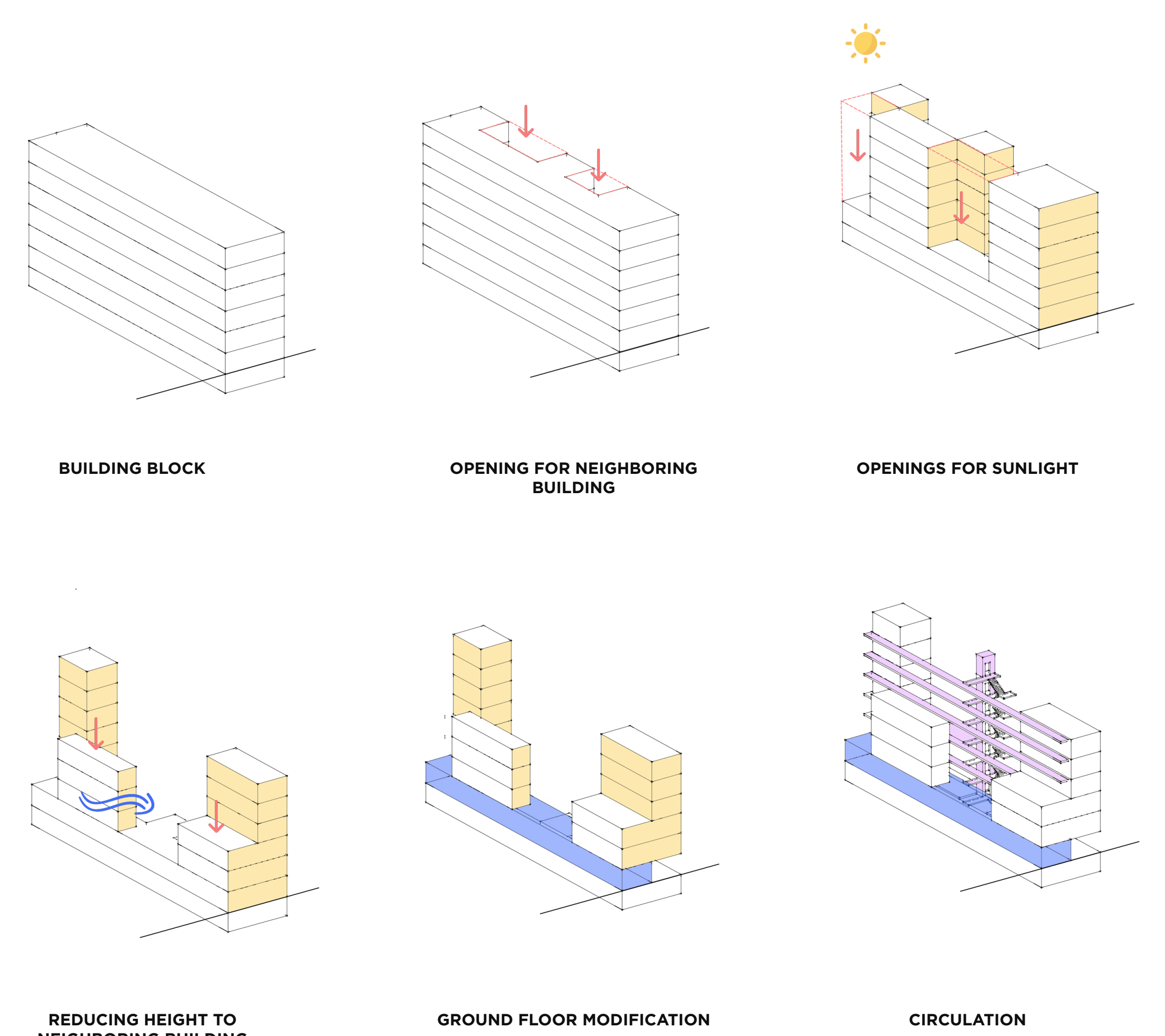
"In 2015, the district municipality issued a long-term Settlement Development Concept for 2014-2030 and a mid-term Integrated Settlement Development Strategy for 2014-2020 to address all the historic issues such as process of gentrification, "hands-off approach" or "non-planning" strategy, demolition of historical buildings. They defined vision of the municipality about the district as an area providing high-quality life conditions, urban services, and favorable environmental conditions for various generations, with a touristic offer based on its rich built and intangible heritage. Cooperation, climate consciousness, and solidarity are defined as the main values."



PROJECT CORE AIM

The core aim of my project is to craft a lively multi-function structure that harmoniously weaves together three essential domains: comfortable residential spaces, a bustling market space, and a lush, inviting green spaces.

CONCEPT MASS DIAGRAM



BUILDING BLOCK

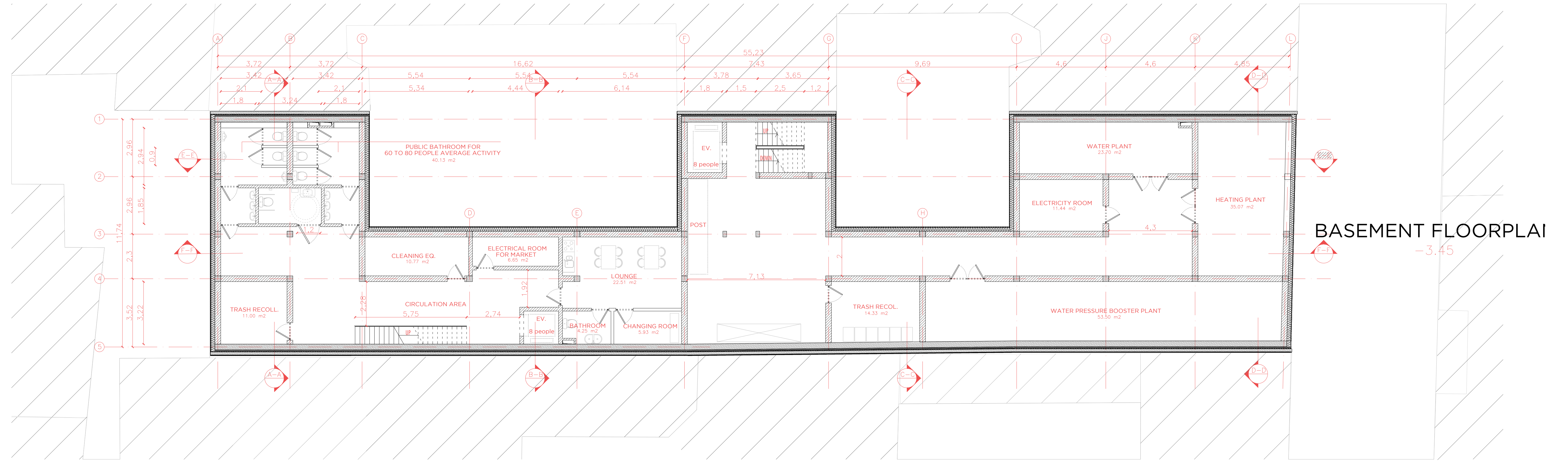
OPENING FOR NEIGHBORING BUILDING

OPENINGS FOR SUNLIGHT

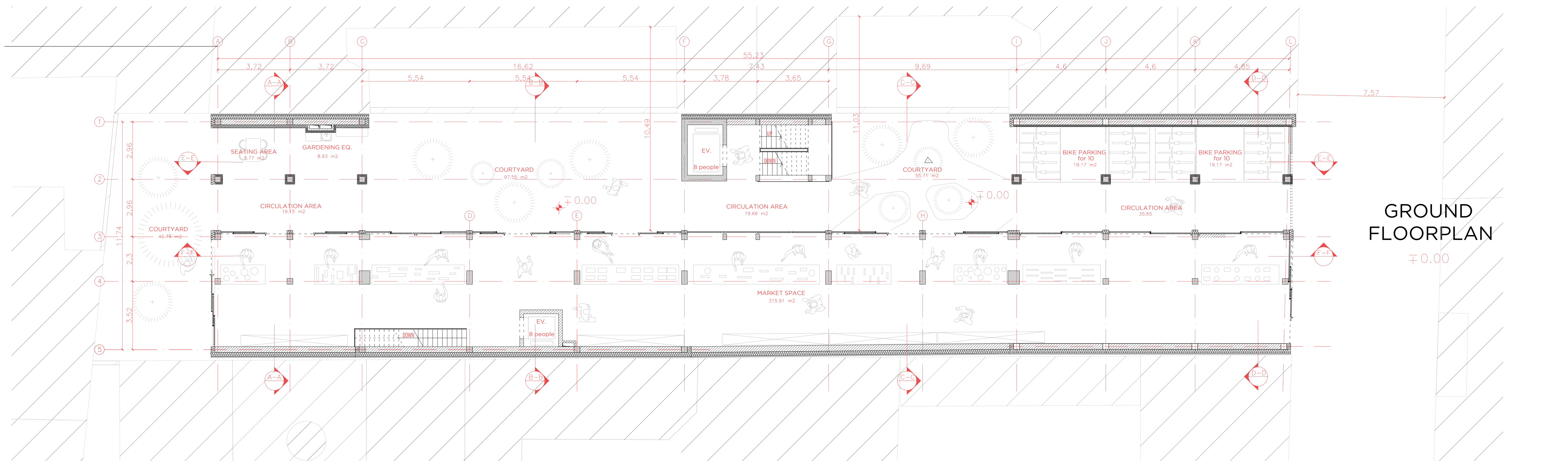
REDUCING HEIGHT TO NEIGHBORING BUILDING

GROUND FLOOR MODIFICATION

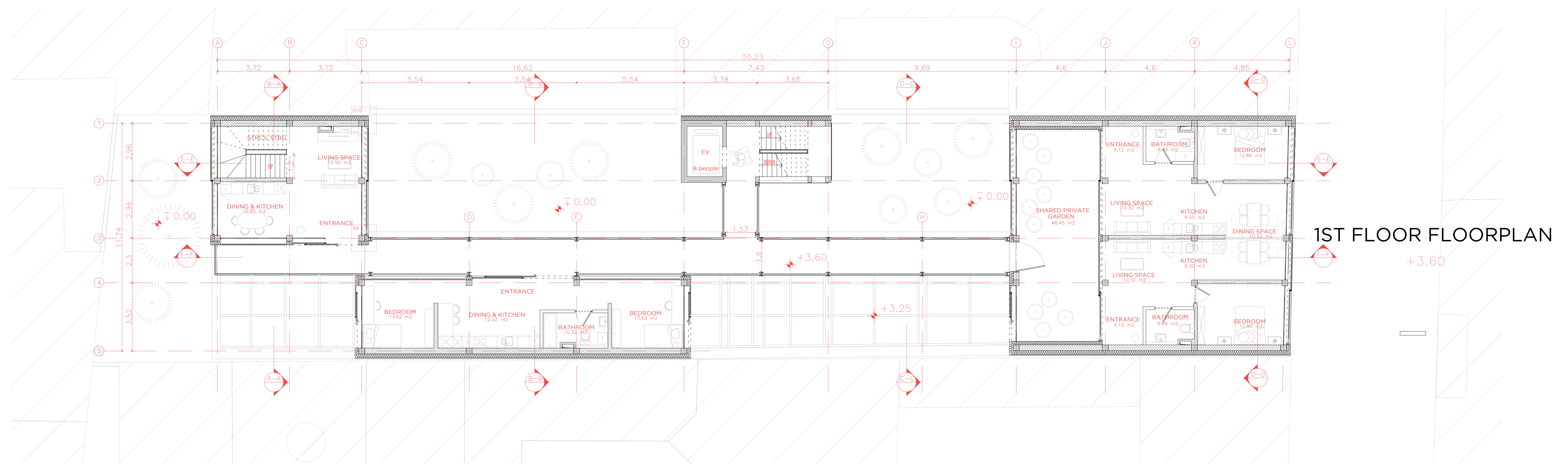
CIRCULATION



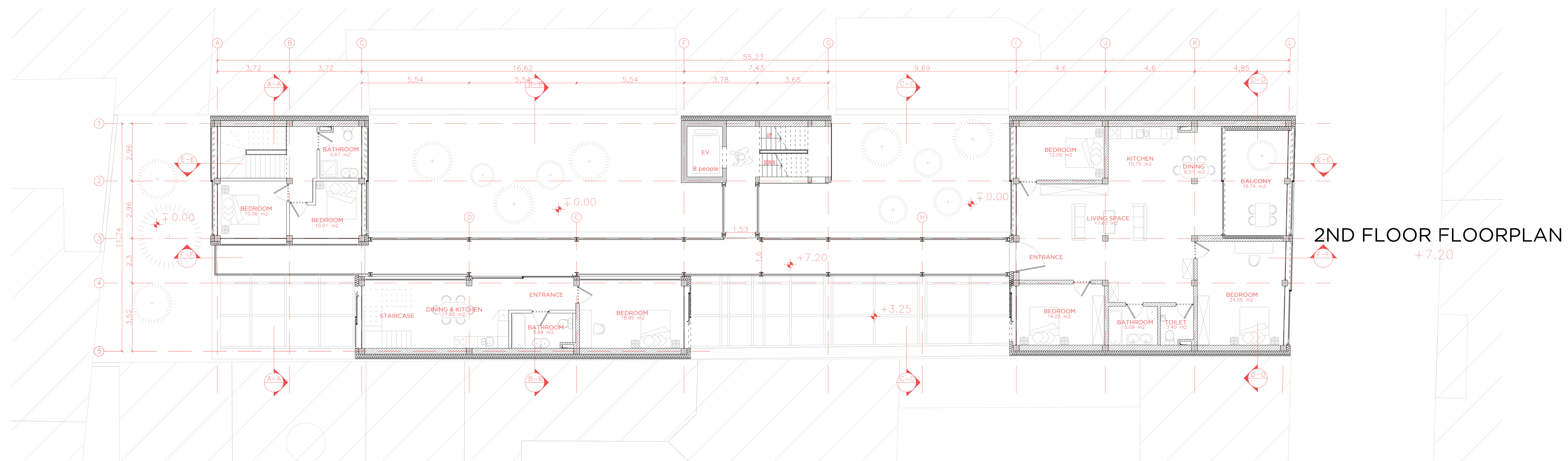
BASEMENT FLOORPLAN
-3.45



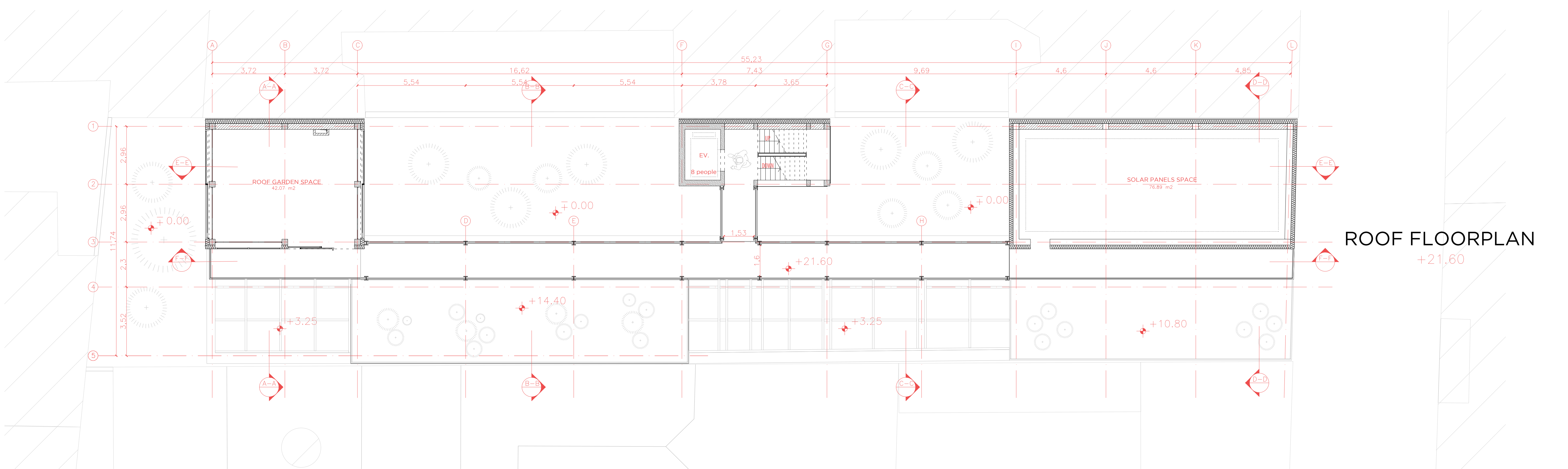
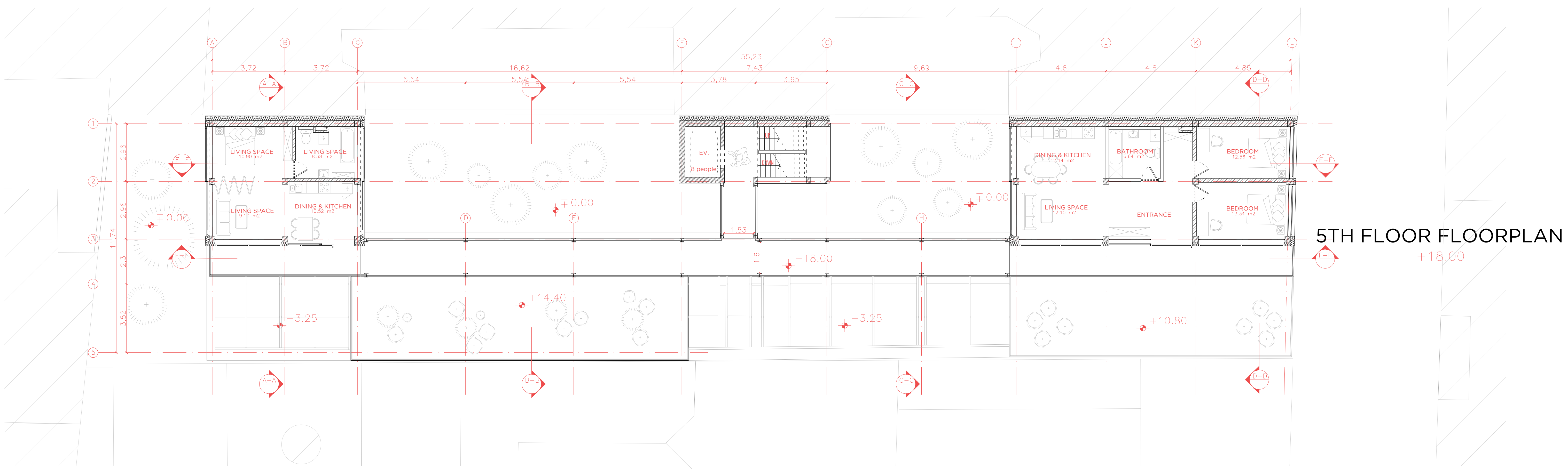
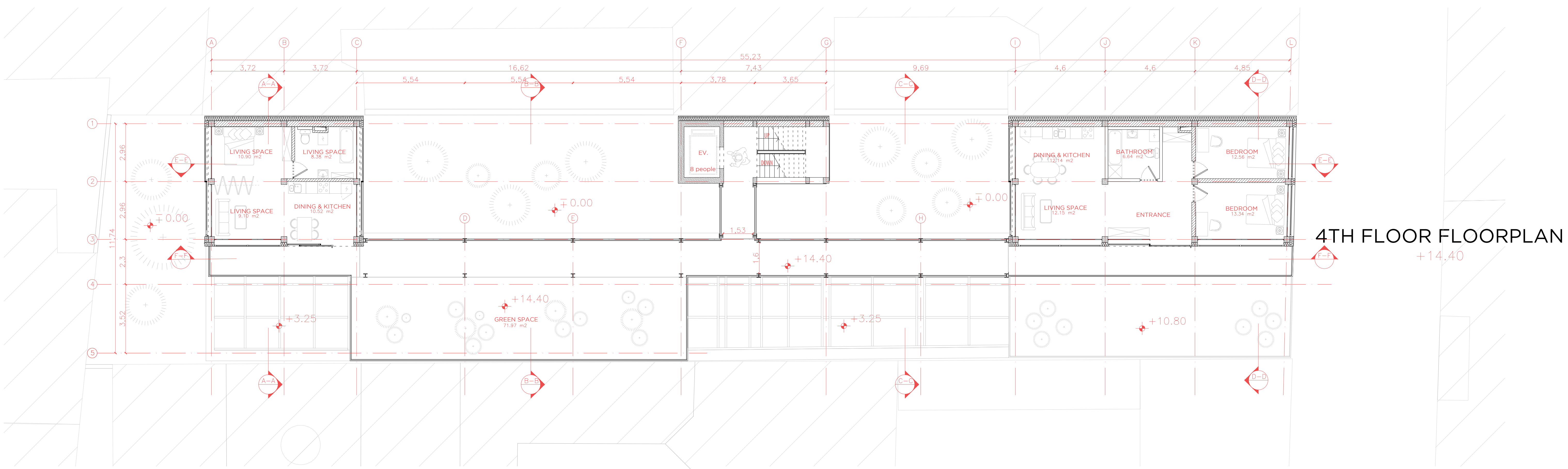
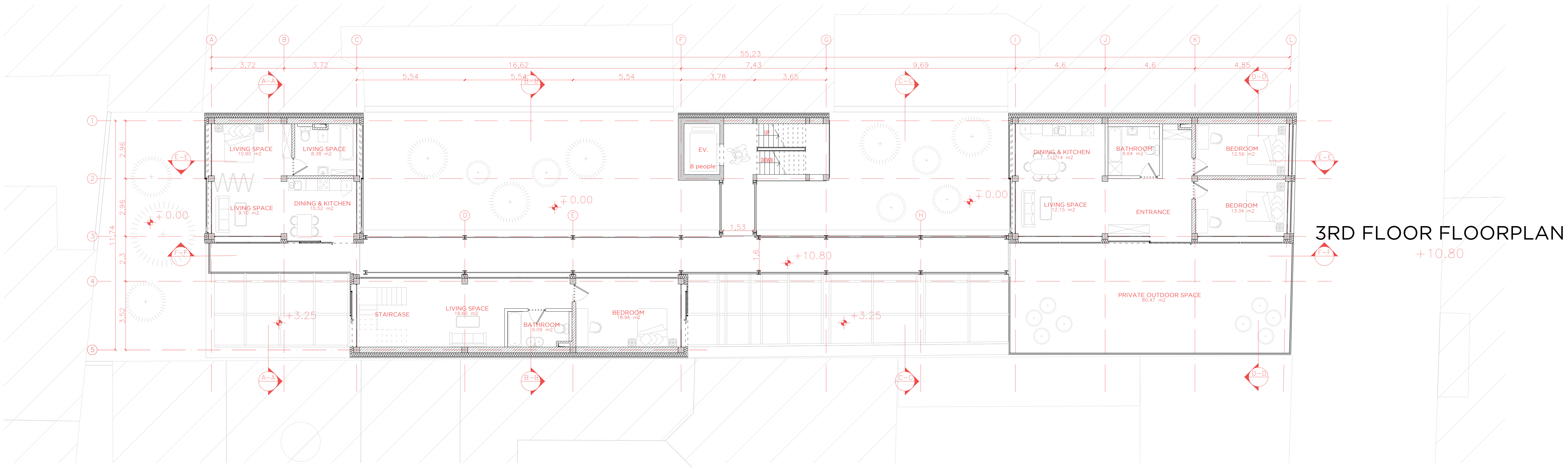
GROUND FLOORPLAN
± 0.00



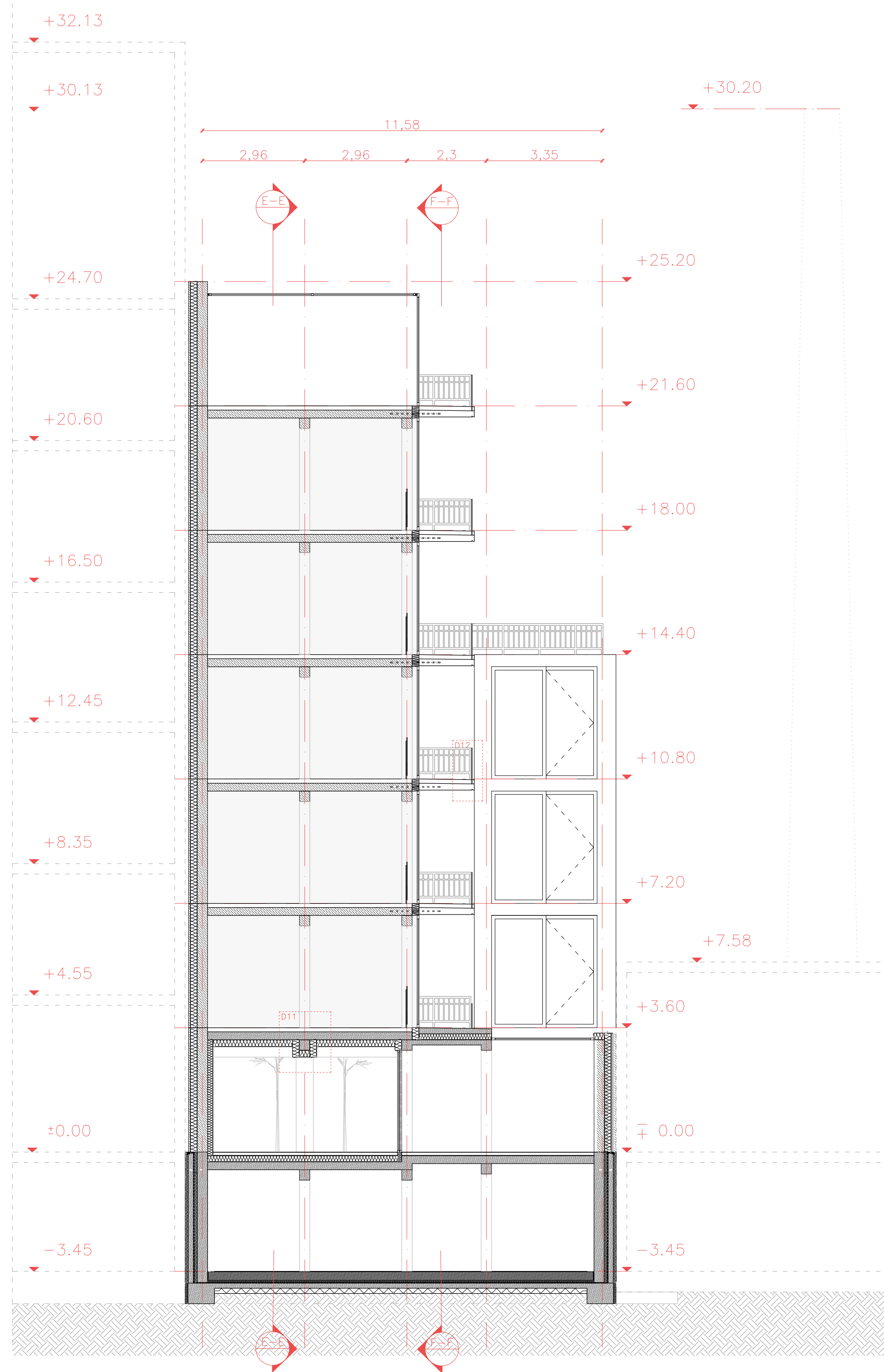
1ST FLOOR FLOORPLAN
+3.60



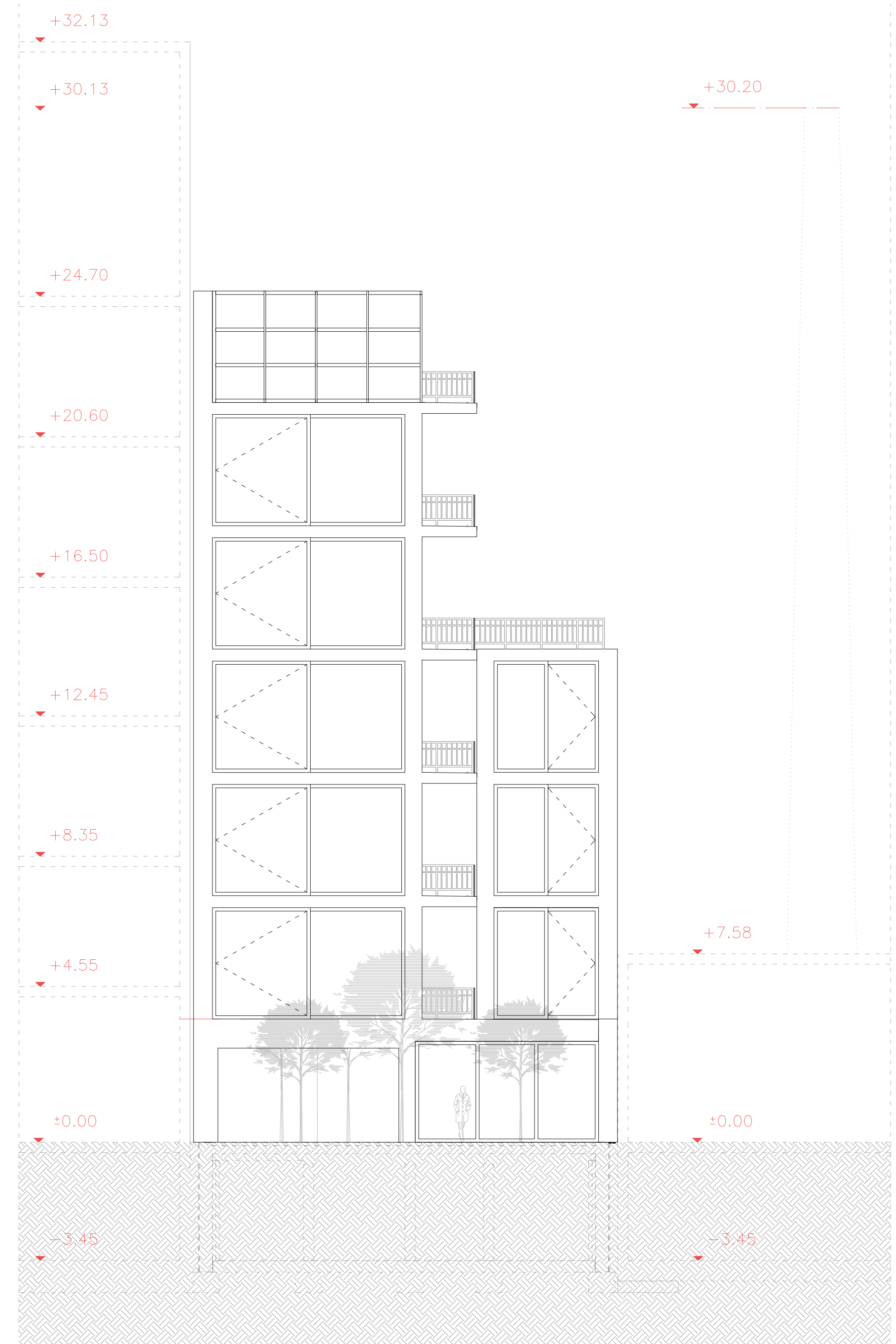
2ND FLOOR FLOORPLAN
+7.20



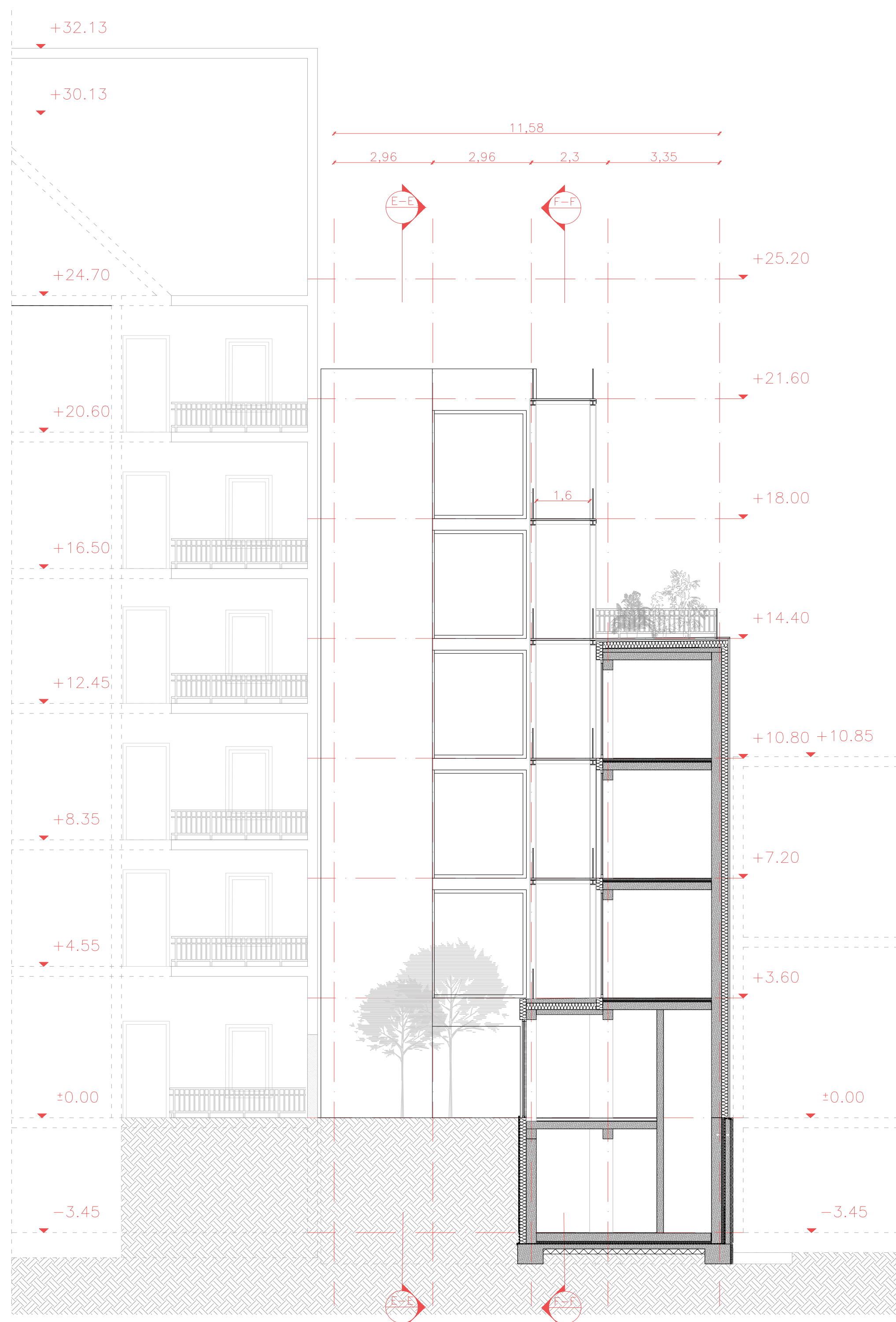
SECTION A-A



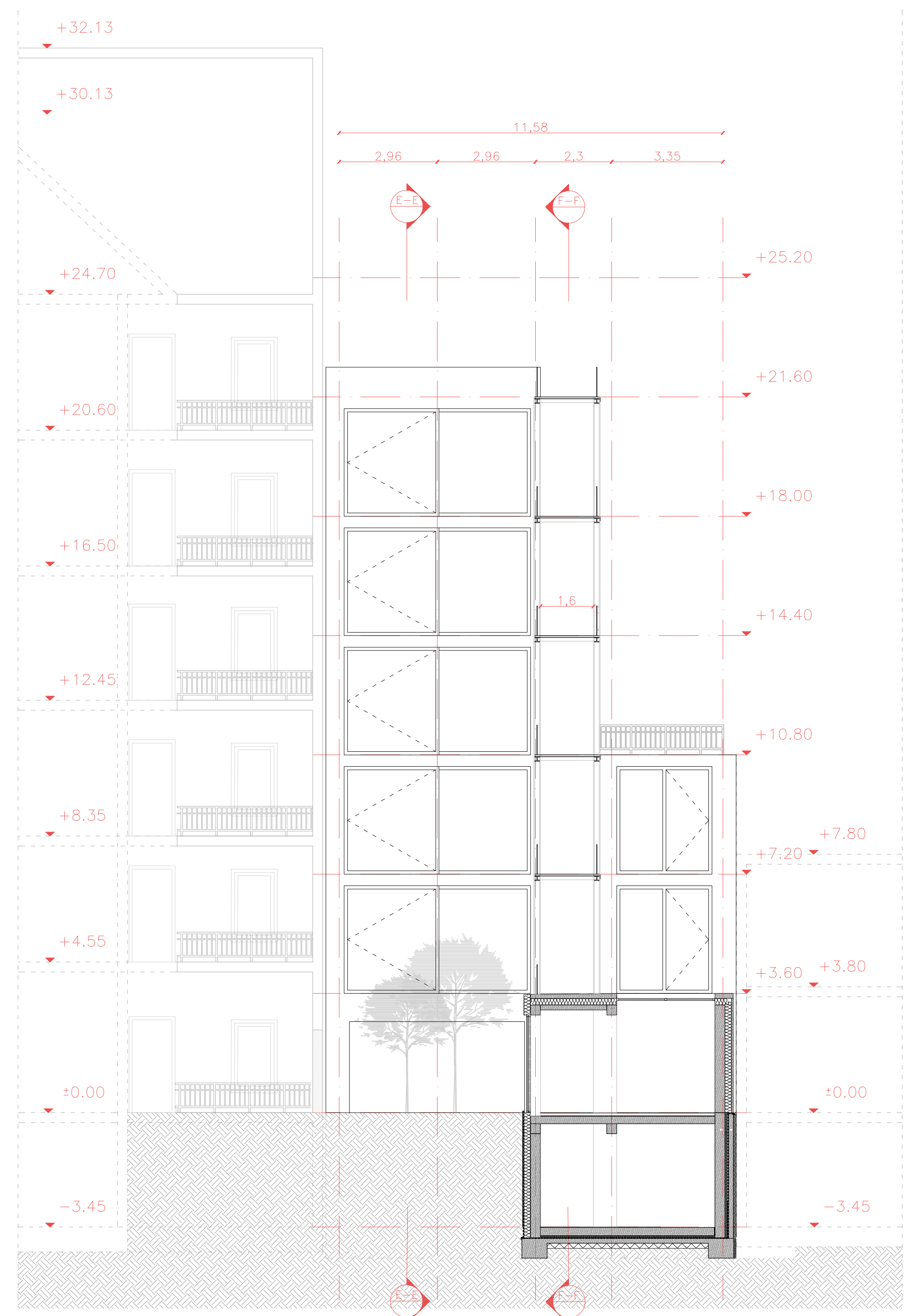
FACADE (GRID A)



SECTION B-B



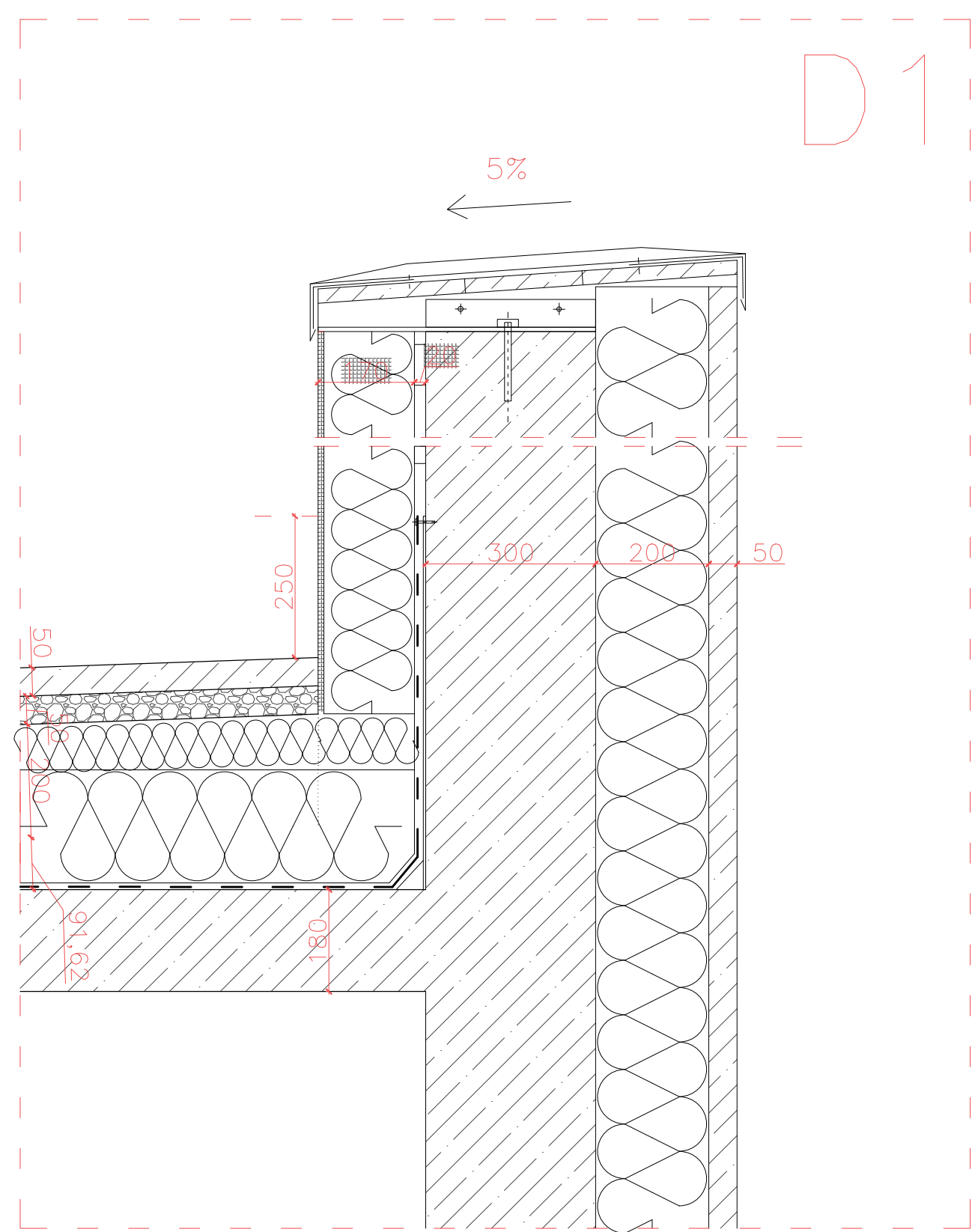
SECTION C-C



FACADE (GRID L)



DETAILS 1-4



D1. Firewall and flat roof detail

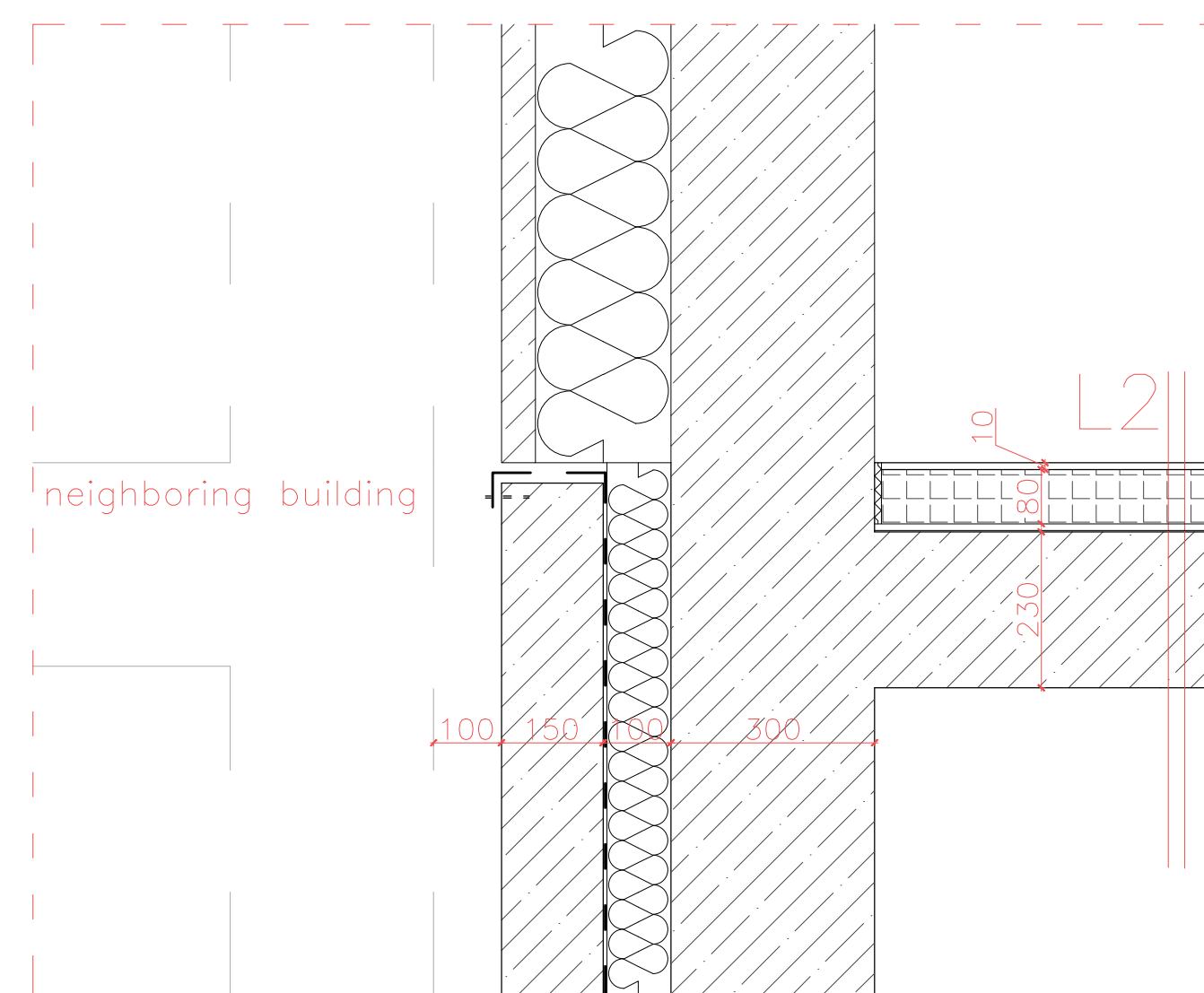
Perimeter wall layer

- 50 mm RC formwork
- 200 mm mineral wool thermal insulation
- 300 mm insitu RC wall
- bitumin waterproofing membrane
- 170 mm XPS thermal insulation with external protecting layer

Roof slab layer

- 50 mm concrete paving
- 50 mm gravel ballasting
- 1 layer synthetic filter layer
- 1 layer PVC waterproofing
- 1 layer separation layer
- 20 mm expanded polysterene foam (EPS) inclined, substructure
- 200 mm expanded polysterene foam (EPS) thermal insulation
- 1 layer bitumen vapour barrier membrane
- 180 mm in situ RC slab

D3



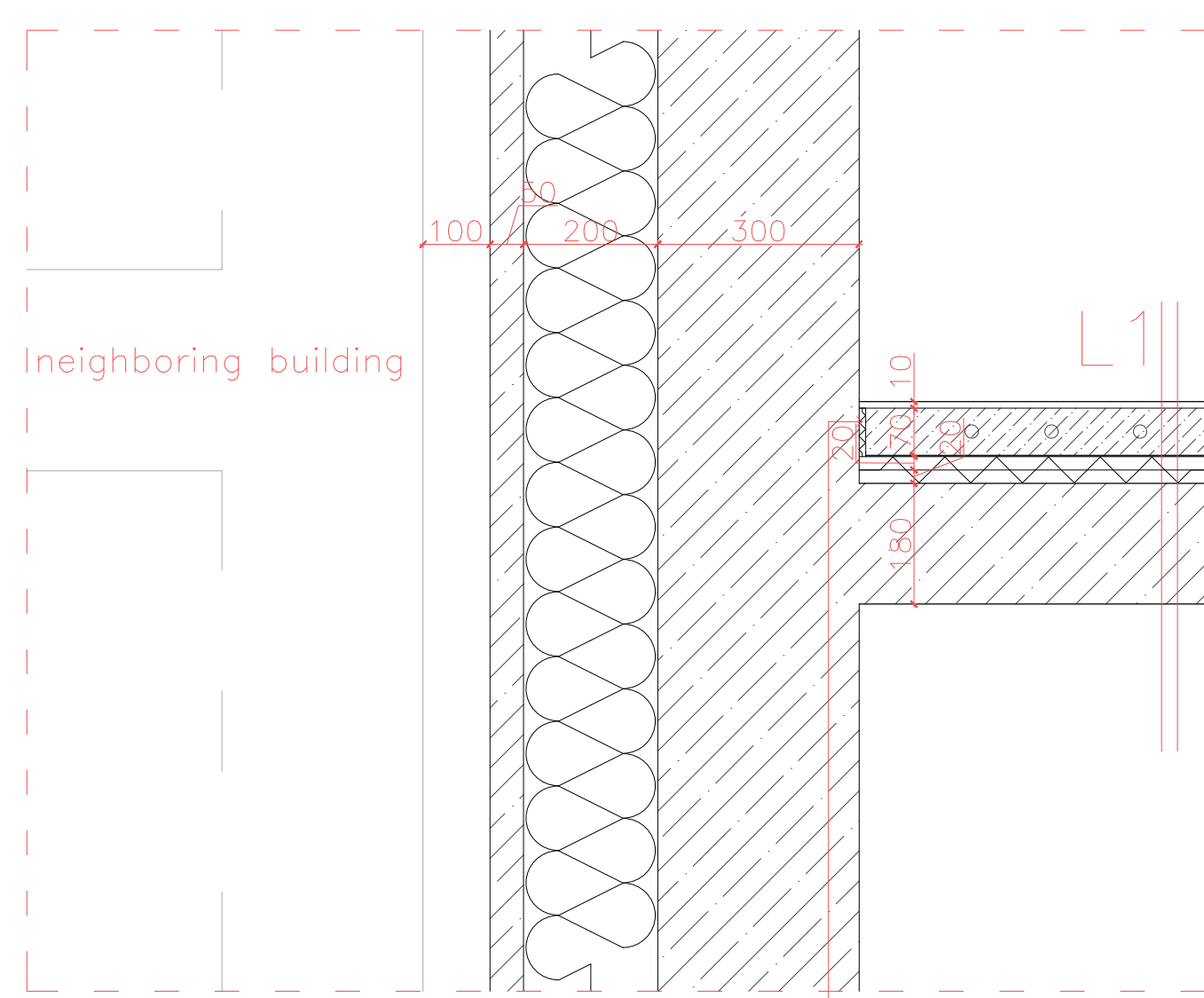
D2. Firewall and apartment flooring detail

- 100 mm safety spacing
- 50 mm RC formwork
- 200 mm mineral wool thermal insulation
- 300 mm insitu RC wall

L2. Market floor layer

- 10 mm recycled rubber finishing
- 80 mm RC screed 1% to falls
- 230 mm insitu RC slab

D2



D2. Firewall and apartment flooring detail

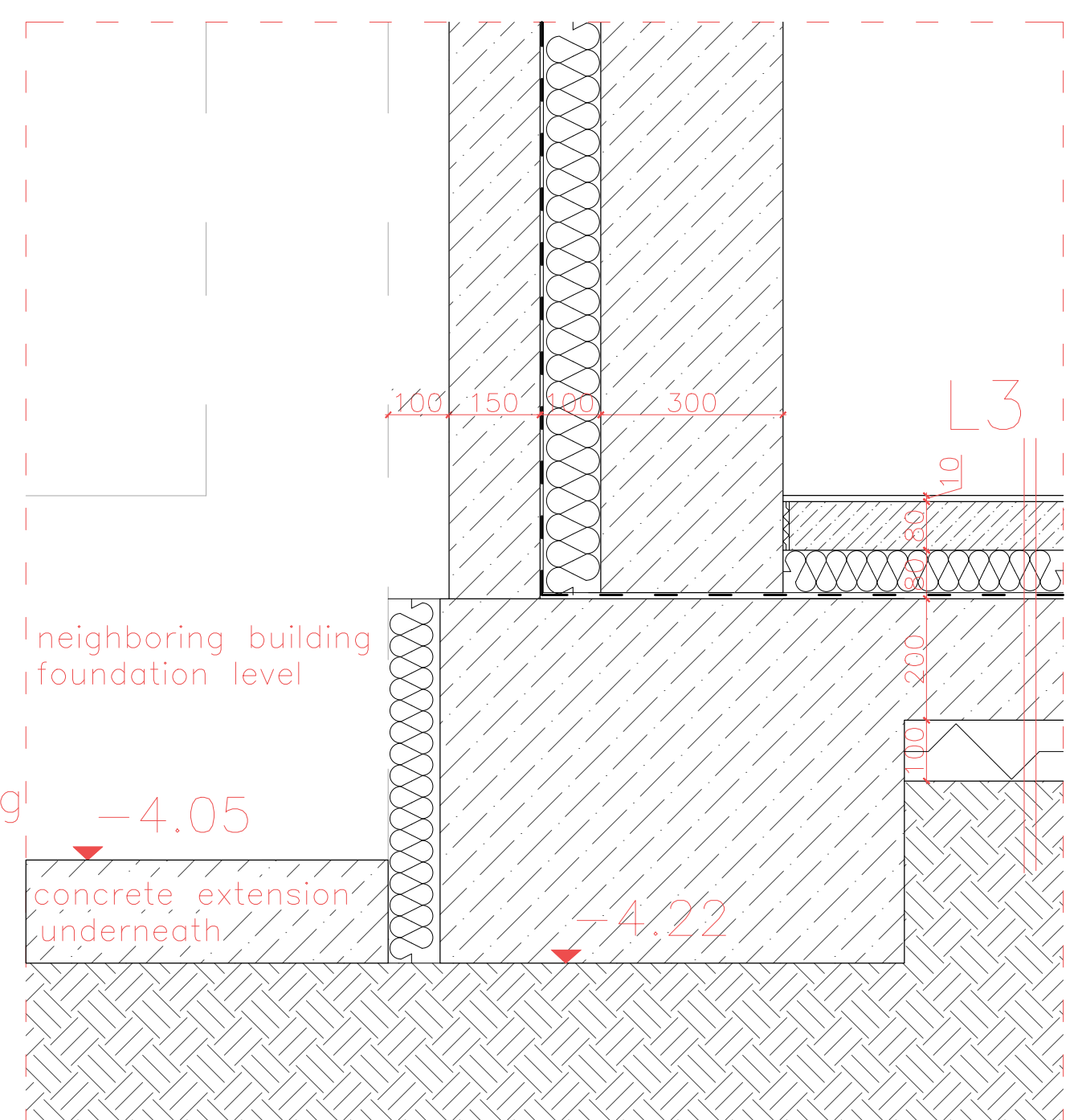
- 100 mm safety spacing
- 50 mm RC formwork
- 200 mm mineral wool thermal insulation
- 300 mm insitu RC wall

L1. Residential floor layer 350mm

- 10 mm cement-bound filler
- 70 mm anhydrite screed with underfloor heating
- polyethylene film
- 20 mm acoustic insulation
- 20 mm thermal insulation
- 230 mm insitu RC slab

10 mm expansion gap with EPS

D4



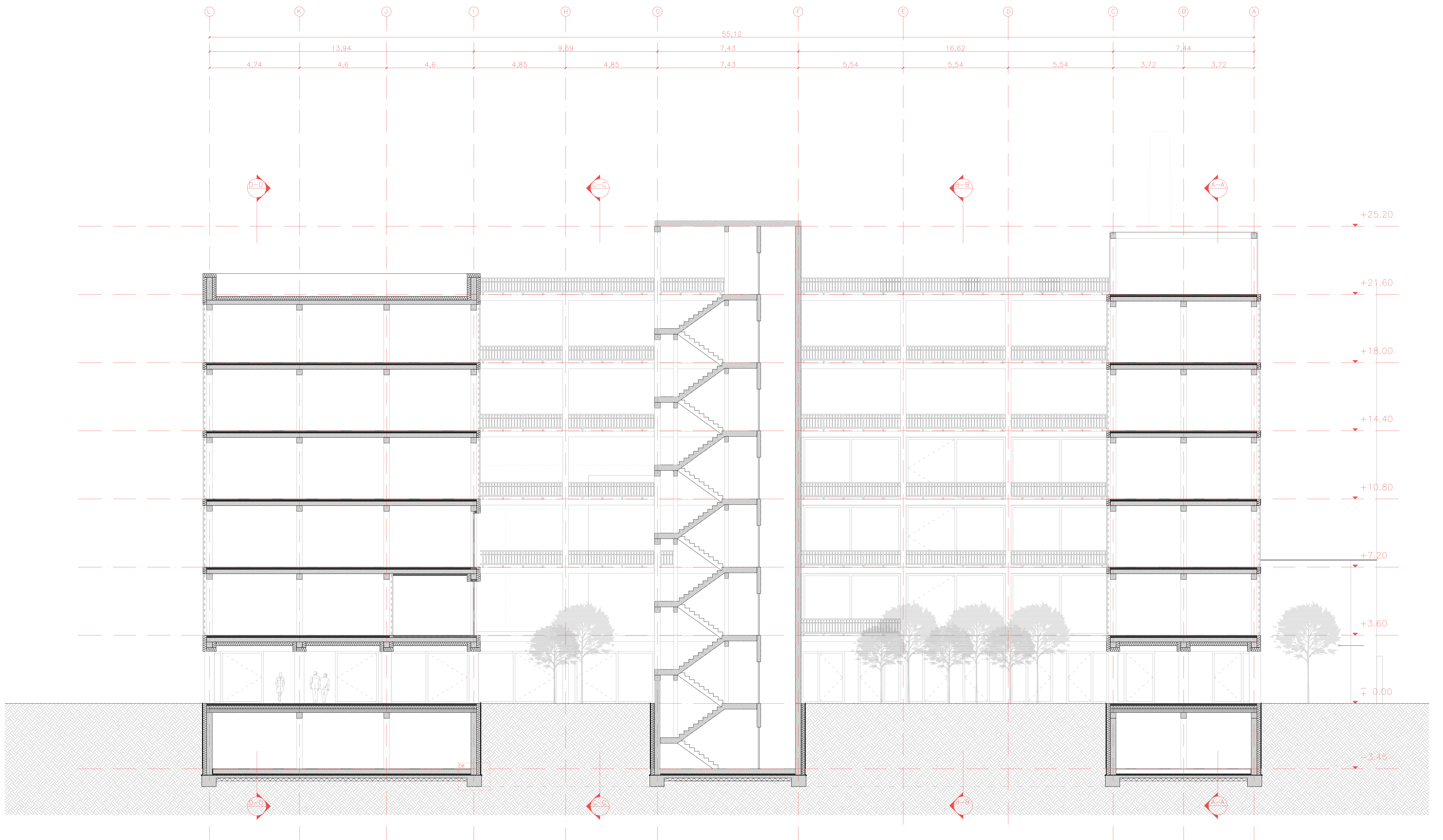
D4. Heated basement foundation detail

- 100 mm safety spacing
- 150 mm RC supporting wall
- 2 layer DPC waterproofing
- 100 mm mineral wool thermal insulation
- 300 mm insitu RC wall

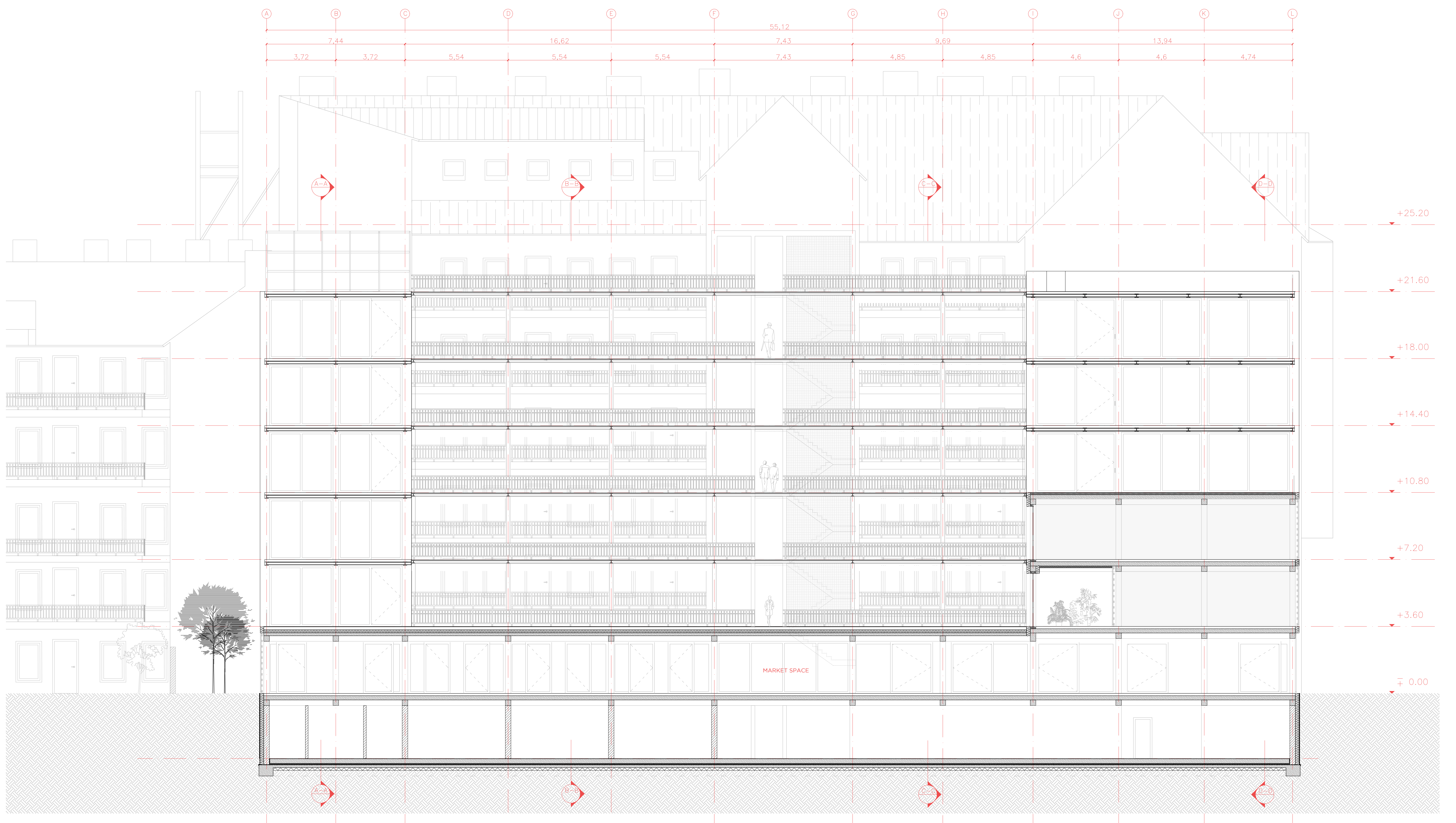
L3. Foundation floor layer

- 10 mm recycled rubber finishing
- 80 mm screed
- 1 mm plastic sheet separating layer
- 80 mm mineral wool thermal insulation
- damp-proof membrane
- 1 layer bituminous sheet waterproofing membrane
- 200 mm concrete ground slab
- 100 mm cushion for uplift effect

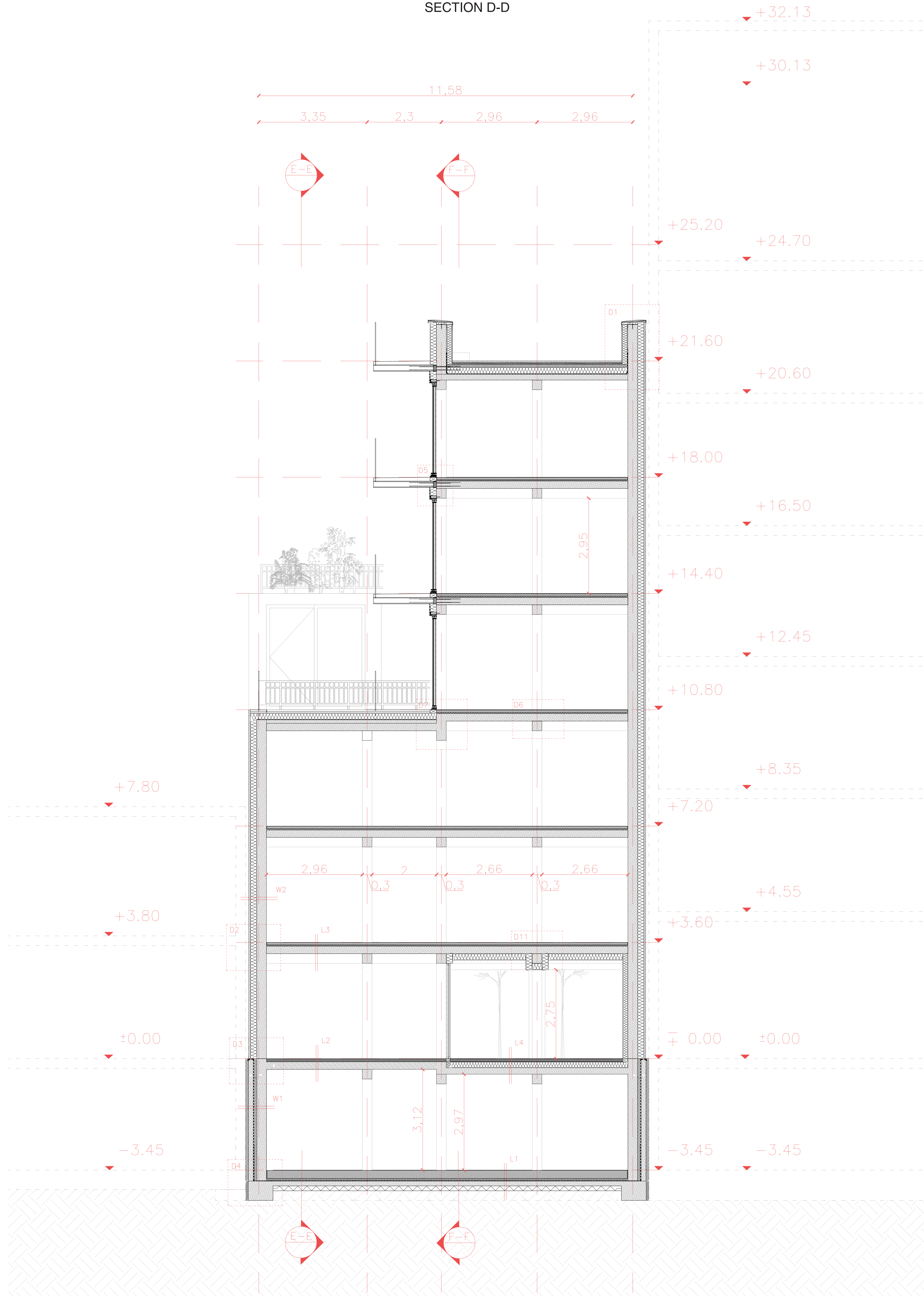
SECTION E-E



SECTION F-F



SECTION D-D



L1. BASEMENT FLOOR LAYER (500 mm)

10 mm recycled rubber finishing
80 mm screed
1 layer plastic sheet separating layer
80 mm mineral wool thermal insulation
1 layer damp-proof membrane
2 layer bituminous sheet waterproofing membrane
200 mm concrete ground slab
100 mm cushion for uplift effect

L2. INTERIOR MARKET FLOOR LAYER (thermally enclosed) (320 mm)

10 mm recycled rubber finishing
80 mm RC screed
30 mm service layer
200 mm insitu RC slab

L3. RESIDENTIAL FLOOR LAYER (310 mm)

10 mm cement-bound filler
70 mm anhydrite screed with underfloor heating
1 layer polyethylene film
20 mm acoustic insulation
20 mm thermal insulation
180 mm insitu RC slab

L4. HEATED FLAT ROOF SLAB LAYER (530 mm)

50mm concrete paving
50 mm gravel ballasting
1 layer synthetic filter layer
1 layer PVC waterproofing
1 layer separation layer
-20 mm inclined layer EPS thermal insulation
200 mm EPS thermal insulation
1 layer bitumen vapour barrier membrane
180 mm insitu RC slab

W1. BASEMENT WALL LAYER (650 mm)

100 mm safety spacing
150 mm RC supporting wall
2 layer DPC waterproofing
100 mm mineral wool thermal insulation
300 mm insitu RC wall

W2. WALL TO NEIGHBORING BUILDING LAYER (650 mm)

100 mm safety spacing
50 mm RC formwork
200 mm mineral wool thermal insulation
300 mm insitu RC wall

W3. FACADE WALL LAYER (520 mm)

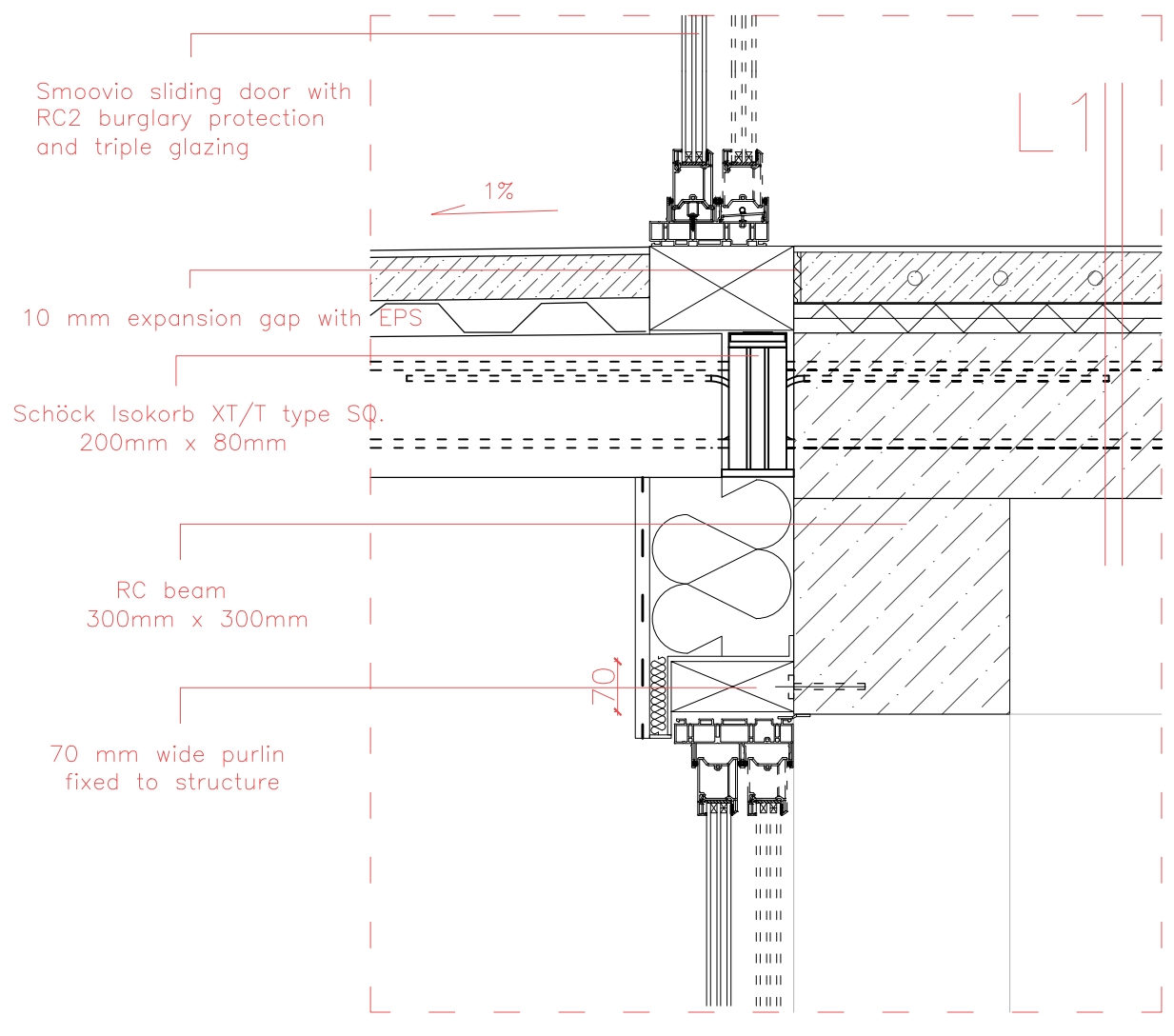
10 mm plastering
10 mm reinforcement layer (base coat with glass fiber mesh embedded)
200 mm mineral wool thermal insulation anchored to the structural components
1 layer adhesive
300 mm RC beam

W4. INTERNAL WALL LAYER (150 mm)

25 mm*2 12.5 mm fire retardant plasterboard
100 mm CW100 rib frame with mineral wool filling
25 mm*2 12.5 mm fire retardant plasterboard

THE KARAVAN

D5



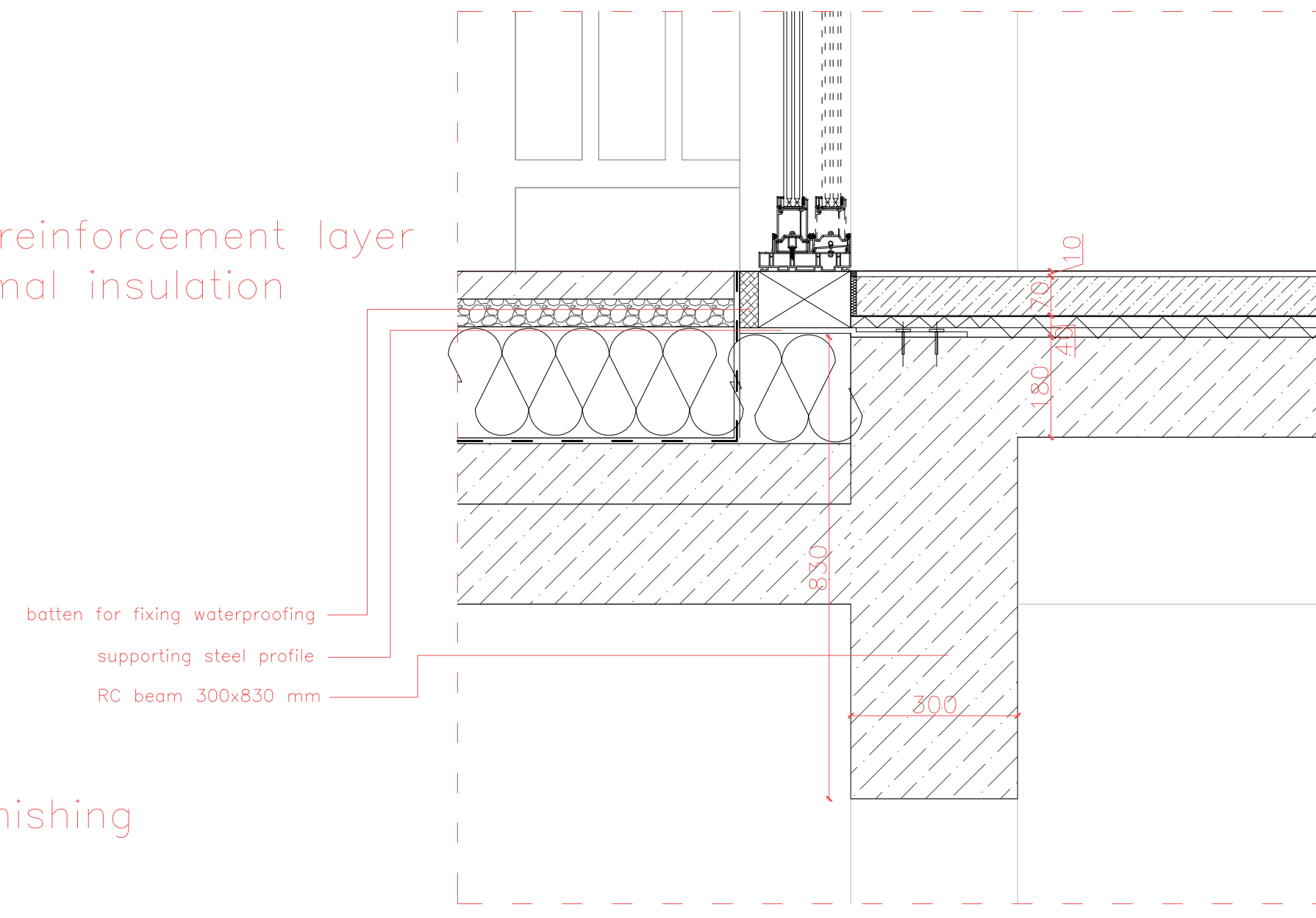
W4. Facade wall layer

- 10 mm plastering
- 10 mm glass fiber mesh reinforcement layer
- 200 mm mineral wool thermal insulation
- 1 layer adhesive
- 300 mm in situ RC beam

Cantilever slab layer

- 10 mm recycled rubber finishing
- 60 mm RC screed
- 1 layer adhesive
- 50 mm steel deck
- 200 mm steel beam

D7



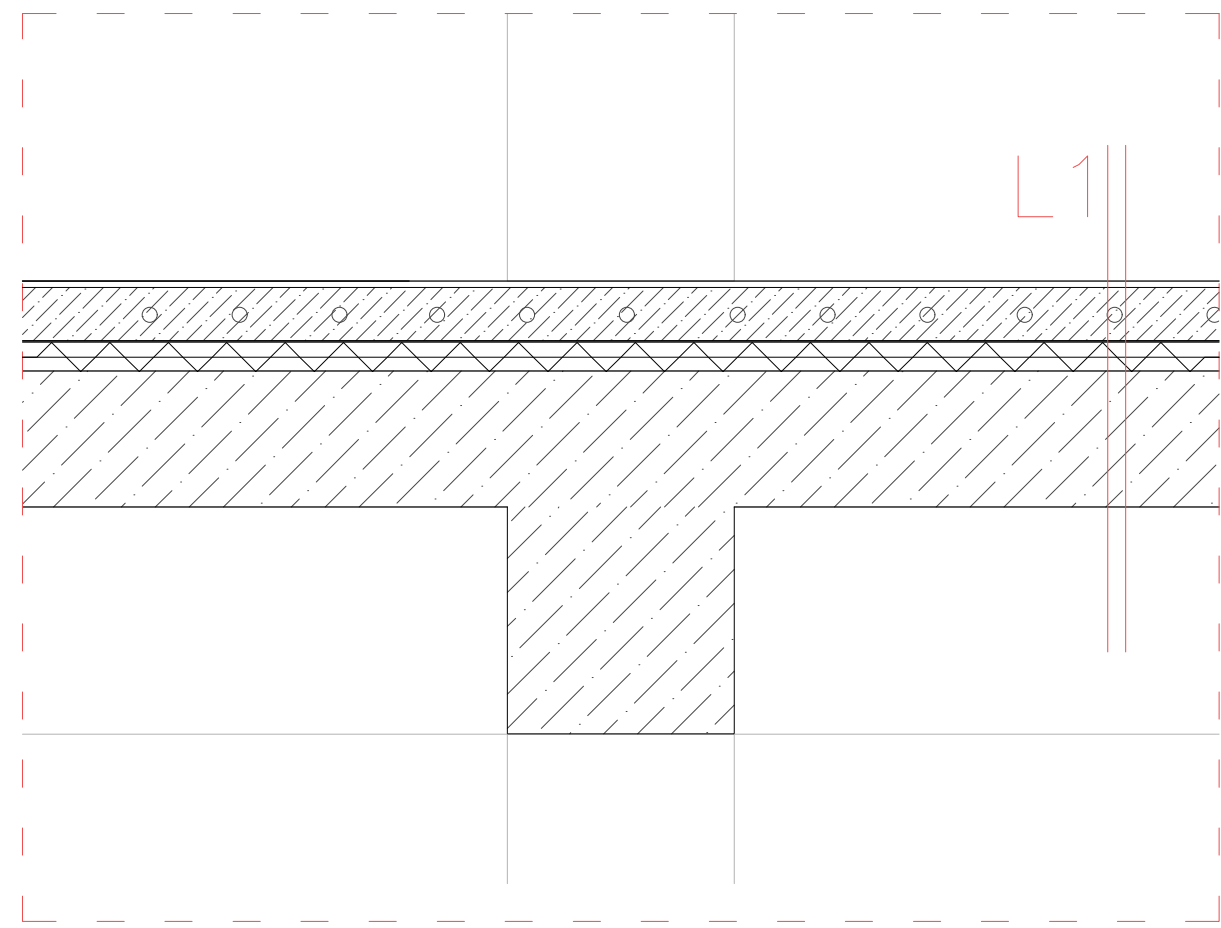
L4. Roof slab layer

- 50 mm concrete paving
- 50 mm gravel ballasting
- 1 layer synthetic filter layer
- 1 layer PVC waterproofing
- 1 layer separation layer
- 20 mm expanded polystyrene foam (EPS) inclined, substructure
- 200 mm expanded polystyrene foam (EPS) thermal insulation
- 1 layer bitumen vapour barrier membrane
- 180 mm in situ RC slab

L1. Residential floor layer 350mm

- 10 mm cement-bound filler
- 70 mm anhydrite screed with underfloor heating polyethylene film
- 20 mm acoustic insulation
- 20 mm thermal insulation
- 180 mm insitu RC slab

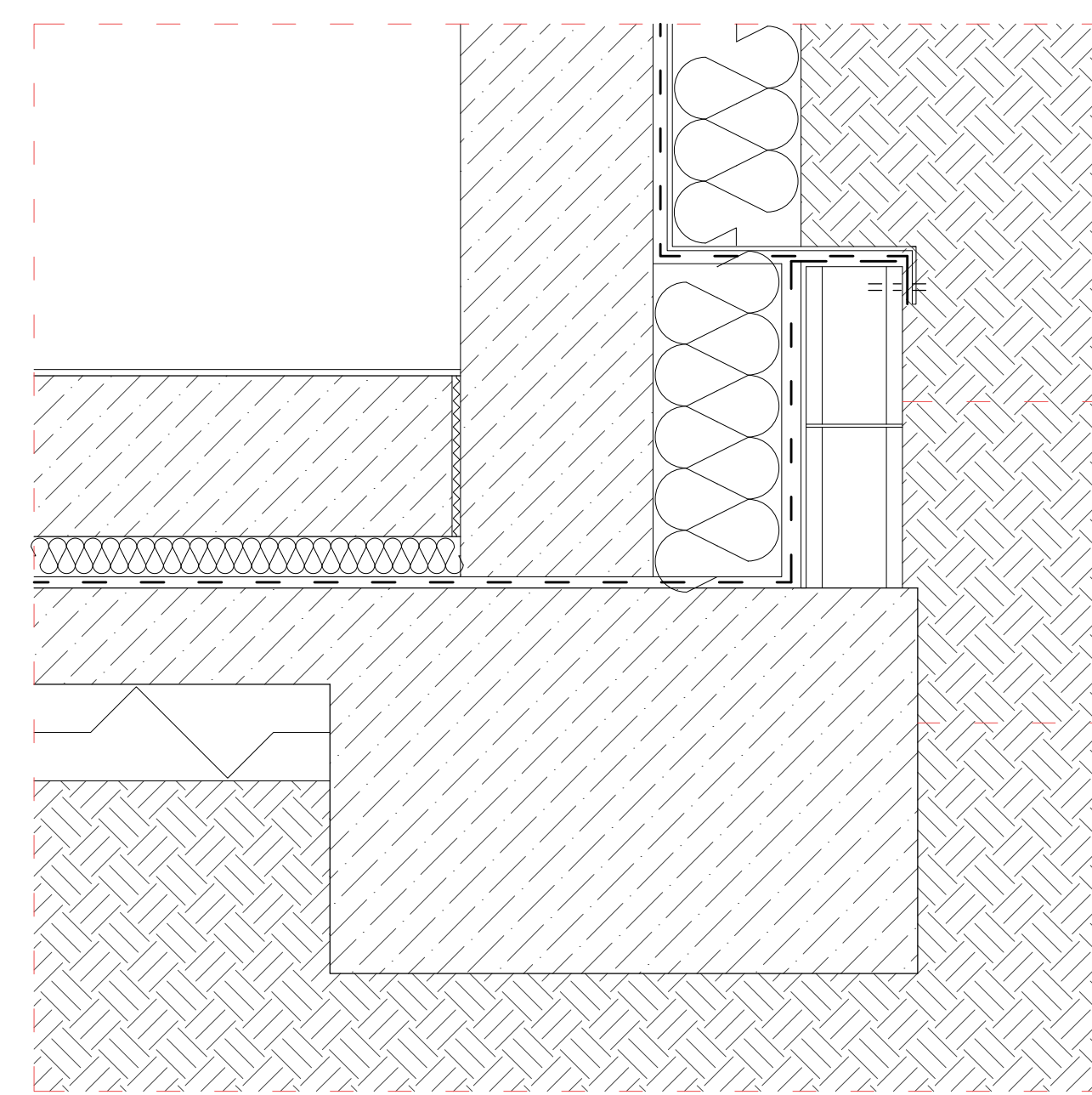
D6



L1. Residential floor layer 350mm

- 10 mm cement-bound filler
- 70 mm anhydrite screed with underfloor heating polyethylene film
- 20 mm acoustic insulation
- 20 mm thermal insulation
- 180 mm insitu RC slab

D8



L3. Foundation floor layer

- 10 mm recycled rubber finishing
- 80 mm screed
- 1 mm plastic sheet separating layer
- 80 mm mineral wool thermal insulation
- damp-proof membrane
- 1 layer bituminous sheet waterproofing membrane
- 200 mm concrete ground slab
- 100 mm cushion for uplift effect

soil water level

W5. Basement wall layer 2

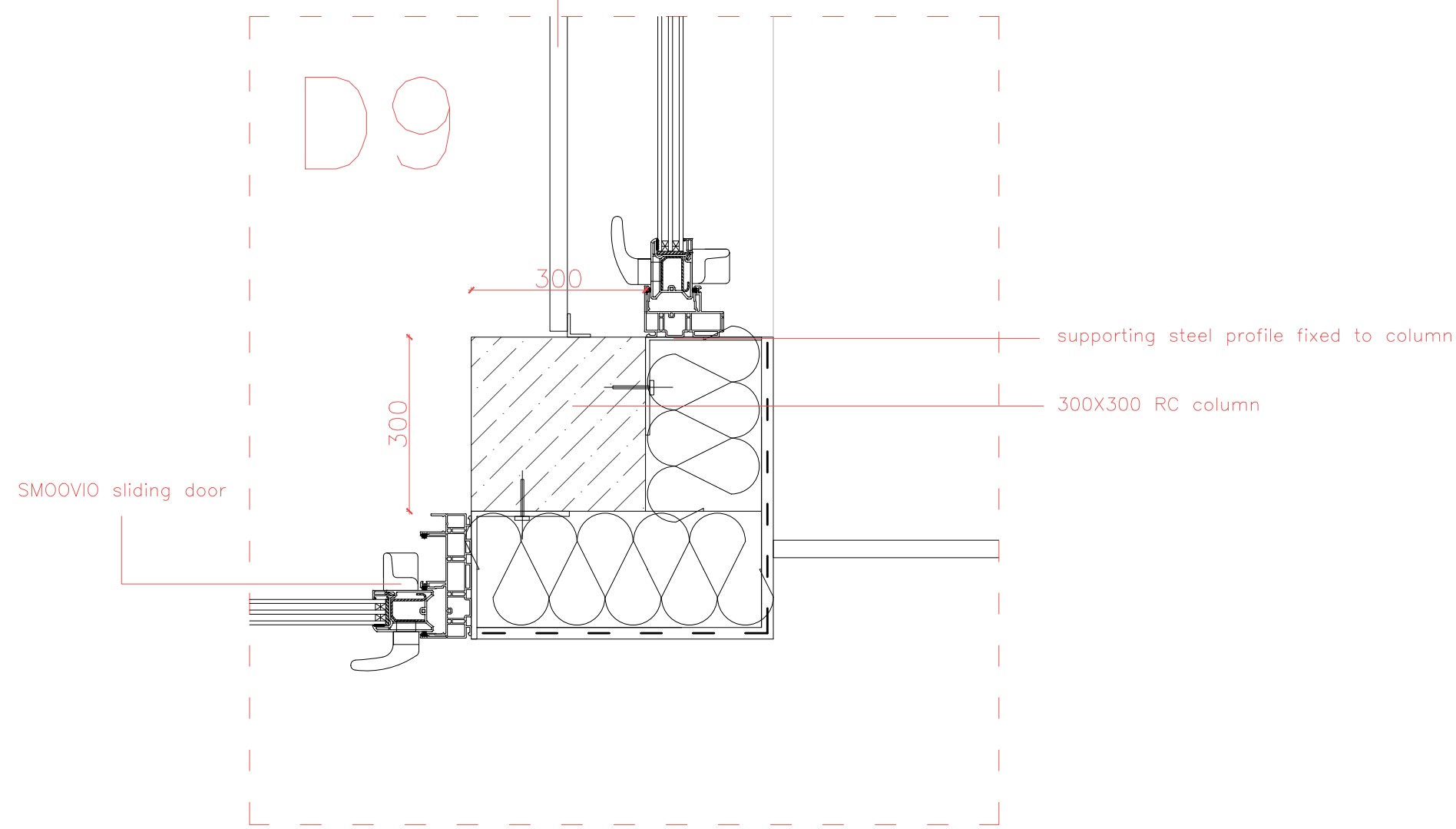
- 300 mm in situ RC wall
- 1 layer bituminous layer
- 2 layer SPS bituminous sheet waterproofing membrane
- 200 mm XPS thermal insulation layer with synthetic external protection layer

W5. Basement wall layer 2

- 300 mm in situ RC wall
- 200 mm XPS thermal insulation layer
- 1 layer bituminous layer
- 2 layer SPS bituminous sheet waterproofing membrane
- 150 mm concrete block protecting wall

GRP railing as safety barrier

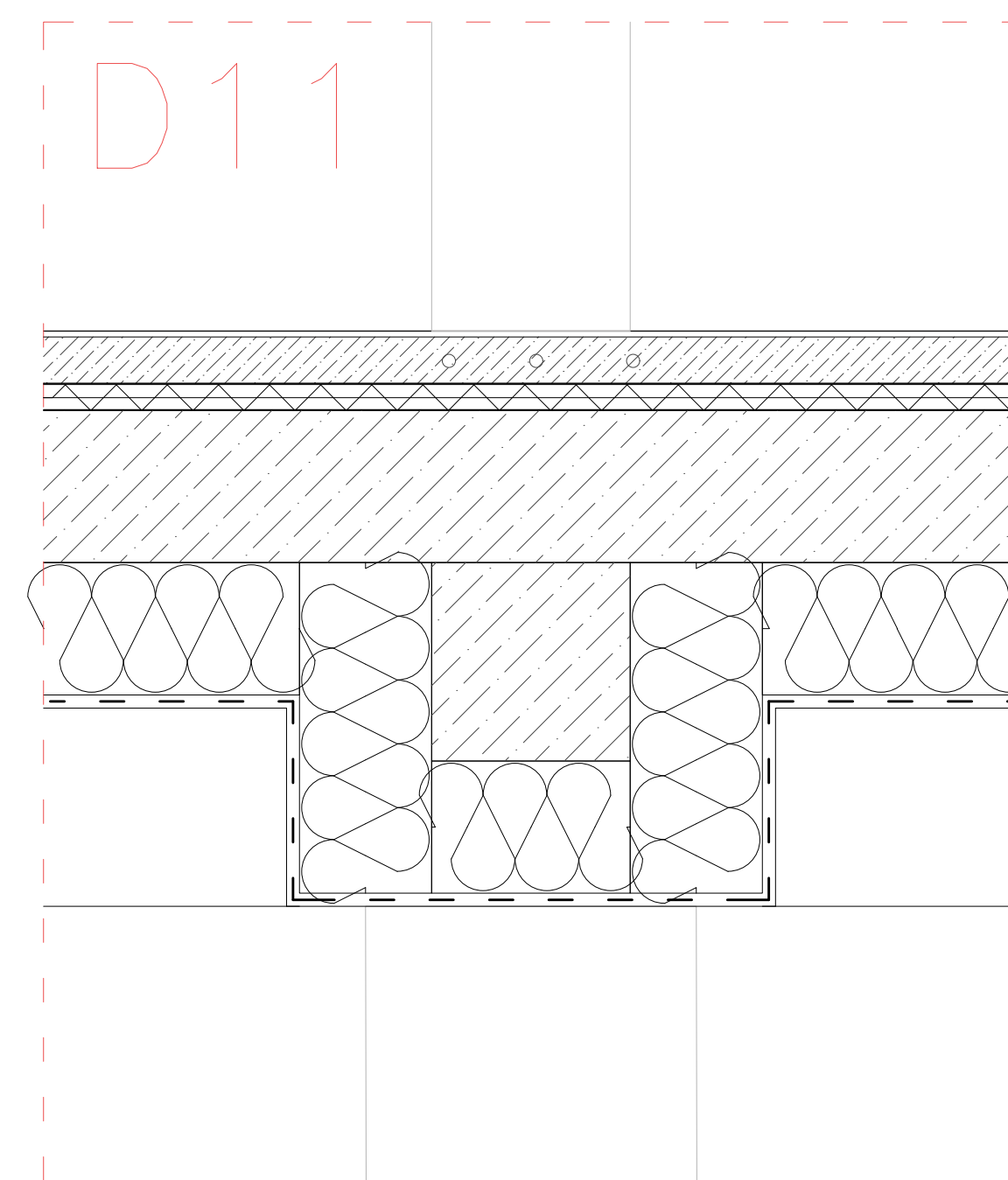
D9



W4. Facade wall layer

- 10 mm plastering
- 10 mm glass fiber mesh reinforcement layer
- 200 mm mineral wool thermal insulation
- 1 layer adhesive
- 300x300 in situ RC column

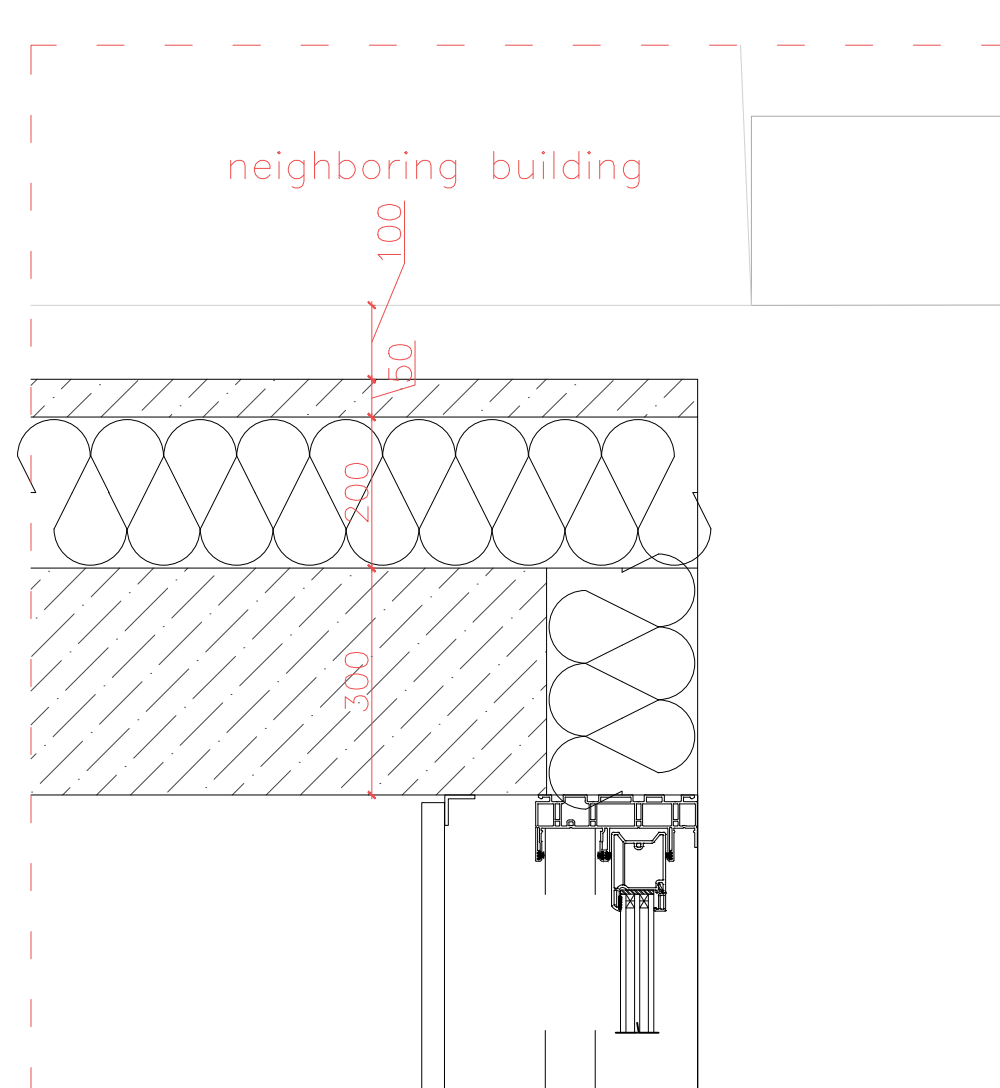
D11



L1. Residential floor layer 350mm

- 10 mm cement-bound filler
- 70 mm anhydrite screed with underfloor heating polyethylene film
- 20 mm acoustic insulation
- 20 mm thermal insulation
- 180 mm insitu RC slab
- 200 mm mineral wool thermal insulation
- 10 mm glass fiber mesh reinforcement layer
- 10 mm plastering

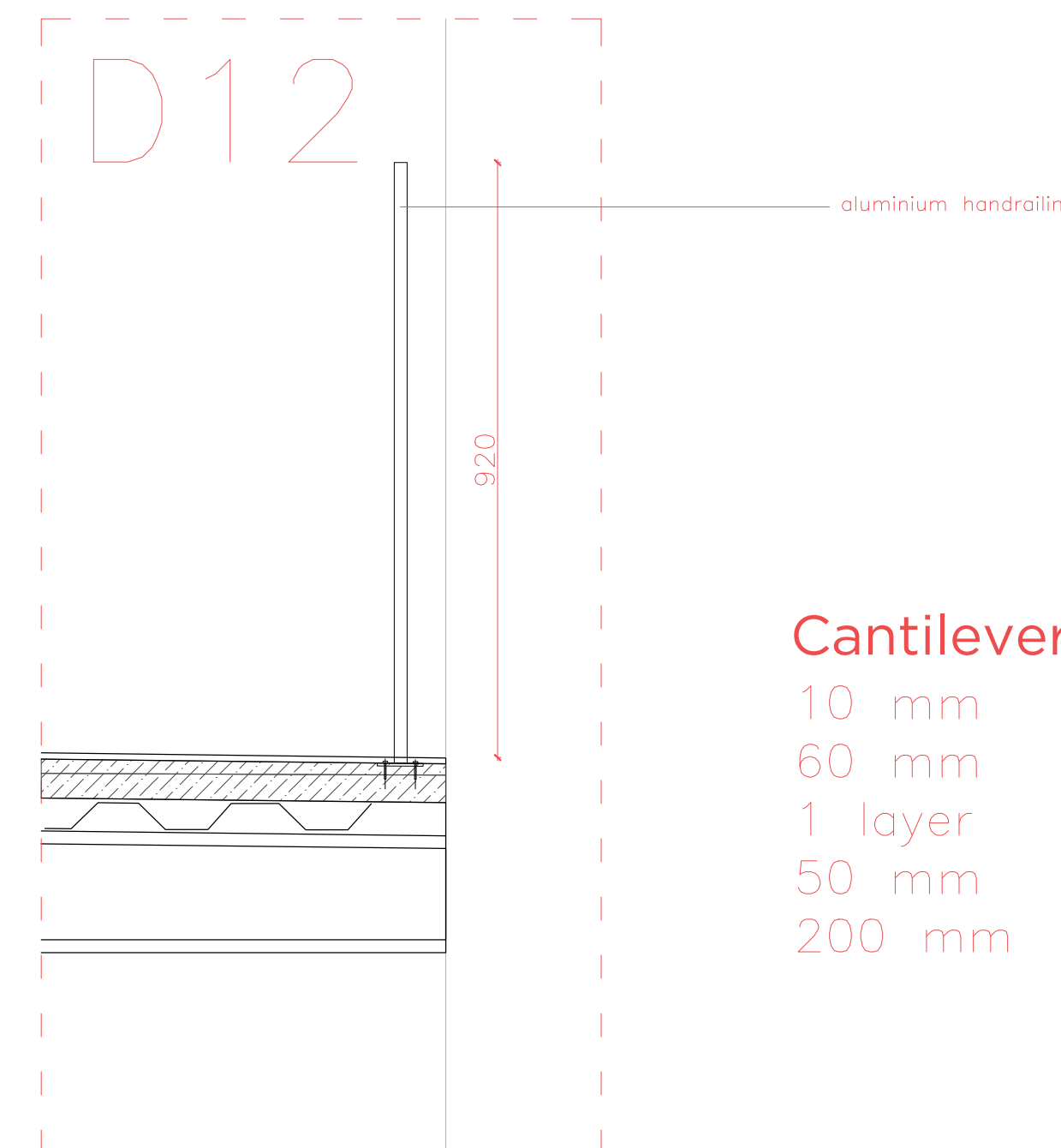
D10



D2. Firewall and apartment flooring detail W1. Firewall layer

- 100 mm safety spacing
- 50 mm RC formwork
- 200 mm mineral wool thermal insulation
- 300 mm insitu RC wall

D12



Cantilever slab layer

- 10 mm recycled rubber finishing
- 60 mm RC screed
- 1 layer adhesive
- 50 mm steel deck
- 200 mm steel beam cantilever