



MILE OF EDUCATION

Latvian University is one of the largest Universities in Latvia and the Campus location in Torņakalns is located on so called Mile of Education - an axis on the left bank of the River Daugava where all main Latvian Universities and National Library are located.

The Campus location is strategically very close to the Riga city center and in several years the connectivity to the surrounding areas will increase.

GREEN STRUCTURES

Campus site connects and expands the existing green and blue structure in Torņakalns.

The surrounding parks connects with the proposed park inside the Campus and creates a continuous green structure for recreation. The green structure allows to open up the Campus site for local inhabitants and creates inclusive environment for other non-academic activities.

The Campus territory is planned as a park zone mainly for pedestrians. All territory is planned to be bike and car free - except for delivery and emergency. This creates safe and calm environment for studies and recreation.

BLUE STRUCTURES

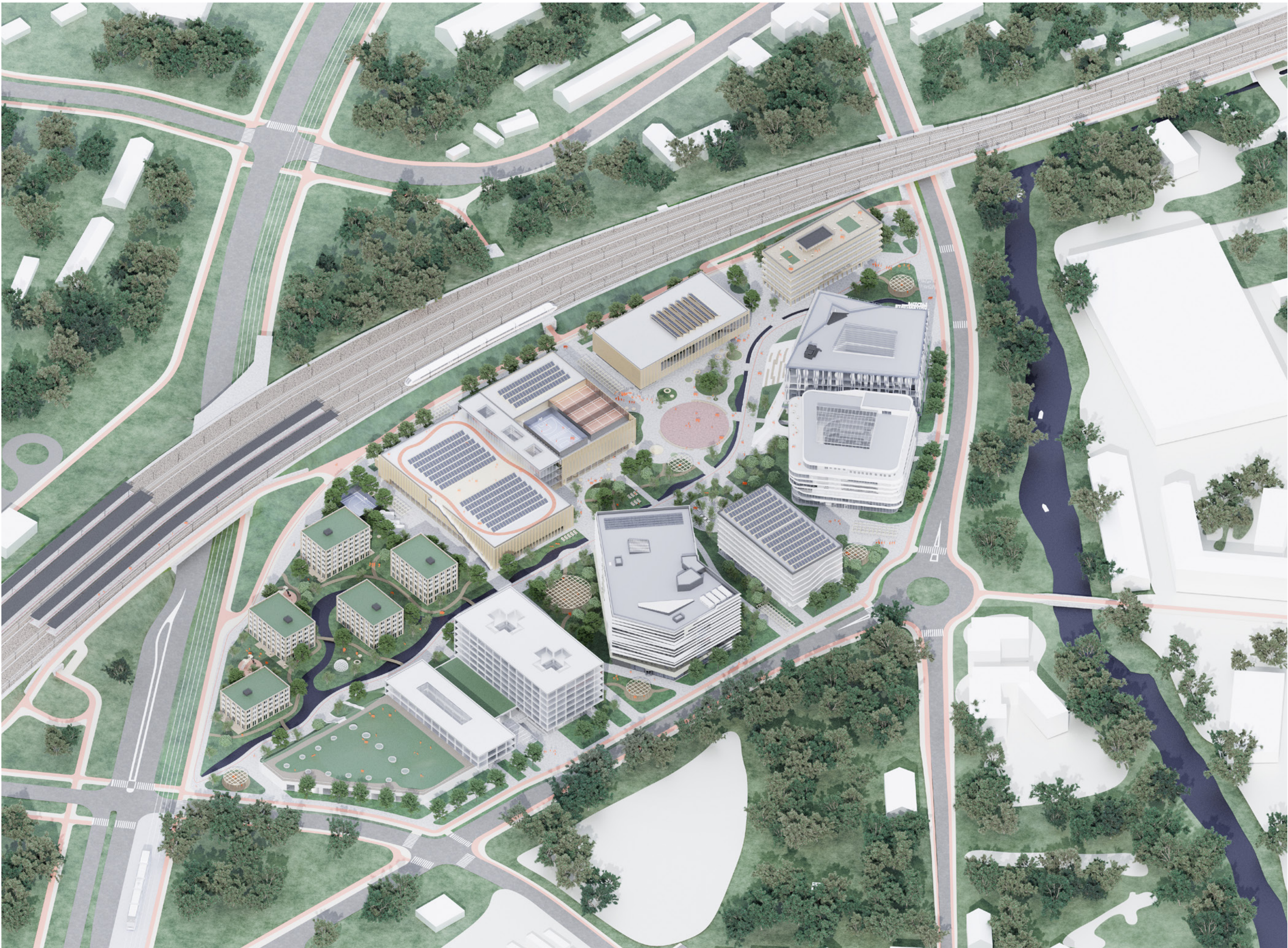
The existing blue structure of the surrounding area provides great opportunities for recreation, climate regulation and functionality. Currently the Campus territory is not connected to the surrounding water structure. This has created several problems in the territory - high groundwater levels that has created waterlogged area on the Southern side of the territory.

A new water stream is proposed to connect the site to the Kileveina ditch. The water stream changes from natural water bed in the Southern side of the Campus to a canal on the Northern side reflecting on the surrounding area.

The water stream serves as sustainable rainwater collector from all territory and roofs.









# ZINĪBU SALAS



## PARKING AND SERVICE ROADS

Parking solutions differ stage by stage of the territory development. When the territory is fully developed we propose to keep the maximum space for natural vegetation and do not build underground parkings – as it will allow to use the ground level for rainwater collection and groundwater level reduction as well as better climate in the area and more vegetation.

Our solution is to build separate parking building that will provide car parking for entire territory. If in the future the parking building is not necessary because of well-developed mobility of the entire territory it can be transformed to office/administrative/etc. building as the height of the ceiling is planned suitable for transformation.

## BICYCLE CONNECTIONS

The planned bike infrastructure will connect Campus site to the City Center and other districts. Bicycle highway on the new Rail Baltica bridge over Daugava will be one of the most important connections that will connect both sides of Daugava river as well as various districts in Riga.

In future the area is encircled by bike lanes – we use this advantage to create bike free Campus site as it will be very well connected from all sides of the city. Bike parkings are located around the territory at the entrance zones. This will create safe and slow park environment inside the Campus.

## PEDESTRIAN AND PUBLIC TRANSPORT CONNECTIONS

Currently the site is well connected as it is located near the City center but the connections are rather uncomfortable for pedestrians – the existing tunnel on Northern side is narrow and dangerous and there is lacking a safe connection to the Torņakalns station. In close future connectivity to the city will improve because of several new transportation connections.



## EXISTING SITUATION



## STAGE - 1 (HOUSE OF SPORTS)



## STAGE - 2 (HOUSES OF STUDENTS AND GUESTS + PARKING)



## STAGE - 3 (HOUSE OF HEALTH, HOUSE OF TECHNOLOGY)



## STAGE - 4 (HOUSE OF RESEARCH AND BUSINESS)







TECHNICAL PARAMETERS	
PLOT AREA	89334m²
GREEN AREA	29185m²
ROADS/PAVEMENTS/WALKWAYS	26856m²
THE NUMBER OF CAR PARKING SPACES	468
THE NUMBER OF BICYCLE STANDS	3734
TOTAL FOOTPRINT OF NEW BUILDINGS	26154,3m²
TOTAL FOOTPRINT OF ALL BUILDINGS	35970,5m²
TOTAL AREA OF NEW BUILDINGS	36241,5m²
TOTAL AREA OF ALL BUILDINGS	360800,7m²
TOTAL VOLUME OF NEW BUILDINGS	412267m³
INTENSITY	180%

BUILDING	FOOTPRINT (m²)	TOTAL AREA* (m²)	BUILDING VOLUME (m³)	STOREYS
HOUSE OF NATURE	2909,1	18540,4	-	8
HOUSE OF SCIENCE	2692,1	20018,9	-	8
HOUSE OF LETTERS	4215	26000	-	8
HOUSE OF SPORTS	11195,1	36092	167651	4
HOUSE OF TECHNOLOGY	5859,3	8765,5	41697	3
HOUSE OF HEALTH	3250,9	18708,4	81121	7
HOUSE OF RESEARCH AND BUSINESS	1218	5843,5	27489	5
HOUSE OF STUDENTS AND GUESTS 1	551	3306	10640	6
HOUSE OF STUDENTS AND GUESTS 2	551	2204	7448	4
HOUSE OF STUDENTS AND GUESTS 3	551	2755	9044	5
HOUSE OF STUDENTS AND GUESTS 4	551	2755	9044	5
HOUSE OF STUDENTS AND GUESTS 5	551	2755	9076	5
PARKING GARAGE	13076	43057	48557	7
TOTAL	35970,5	160800,7	412267	-

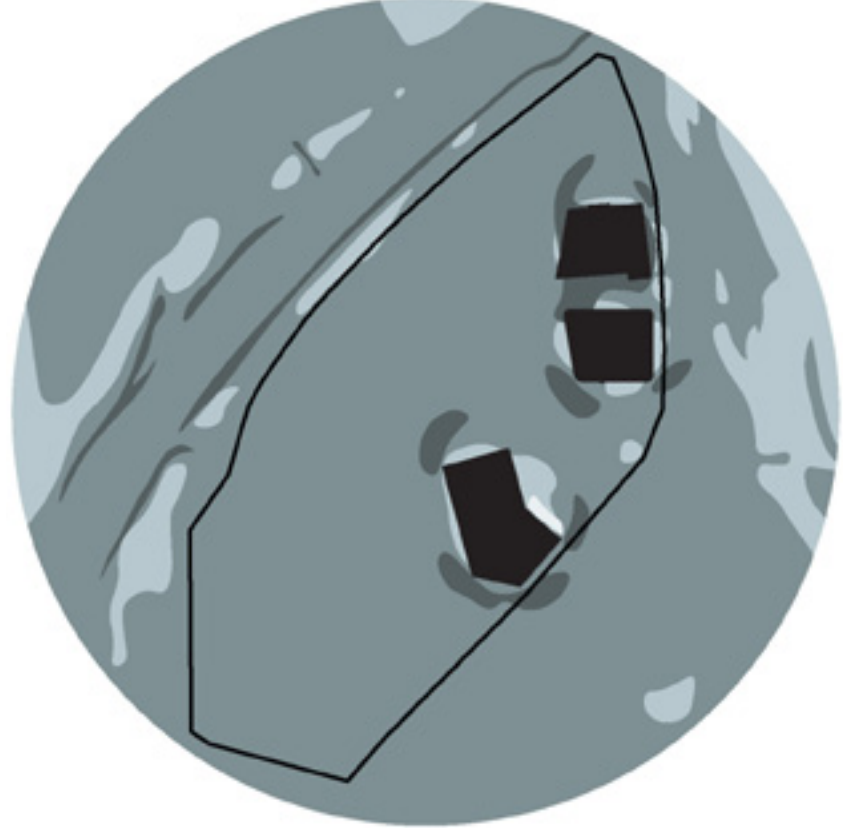
\*Total area of all storeys above ground (5-Floor area is measured along the exterior walls outer contour of each floor)





WIND

The building site is mostly empty and without vegetation or other buildings. Wind analysis shows that most part of the site is only comfortable for strolling and not comfortable for other activities.



SOUND

The Campus site is surrounded by heavy traffic - regional train line from the western side and active streets all around it creates an impact on the site.



PROPOSED BUILDING ZONE

Proposed building zone creates a ring around the site to provide comfortable climate in the University Campus.



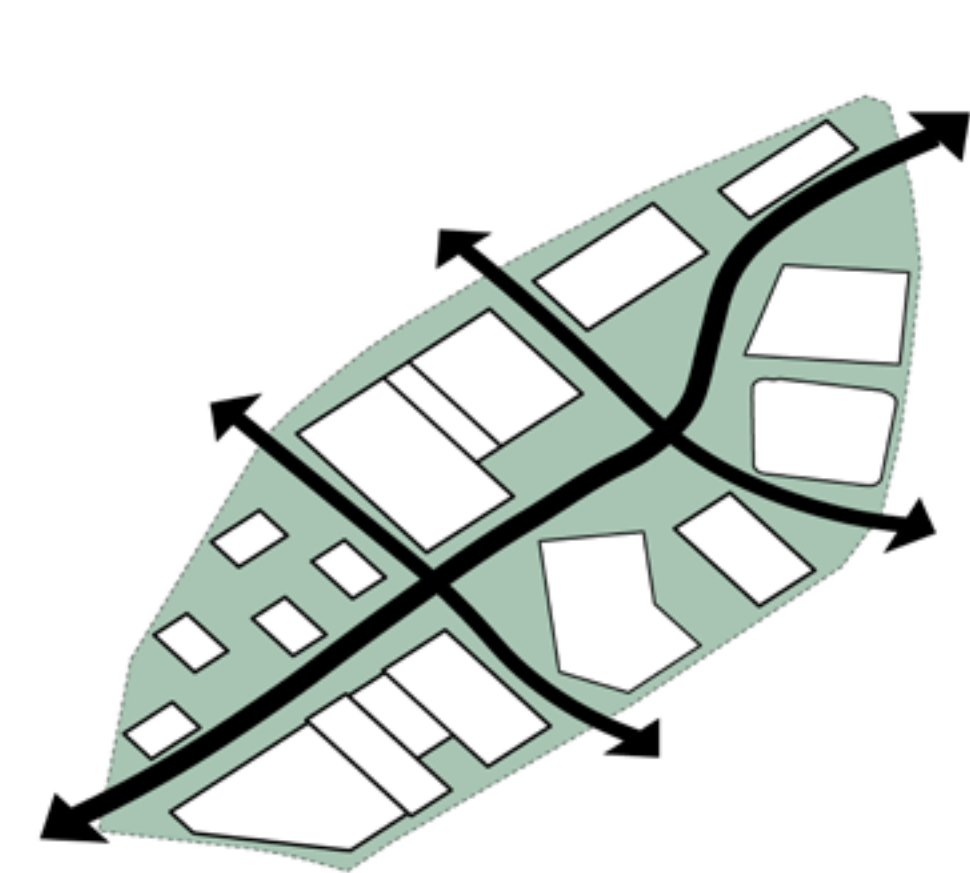
LINK TO THE CITY

Connections are created to provide a link between the campus and the surrounding area.



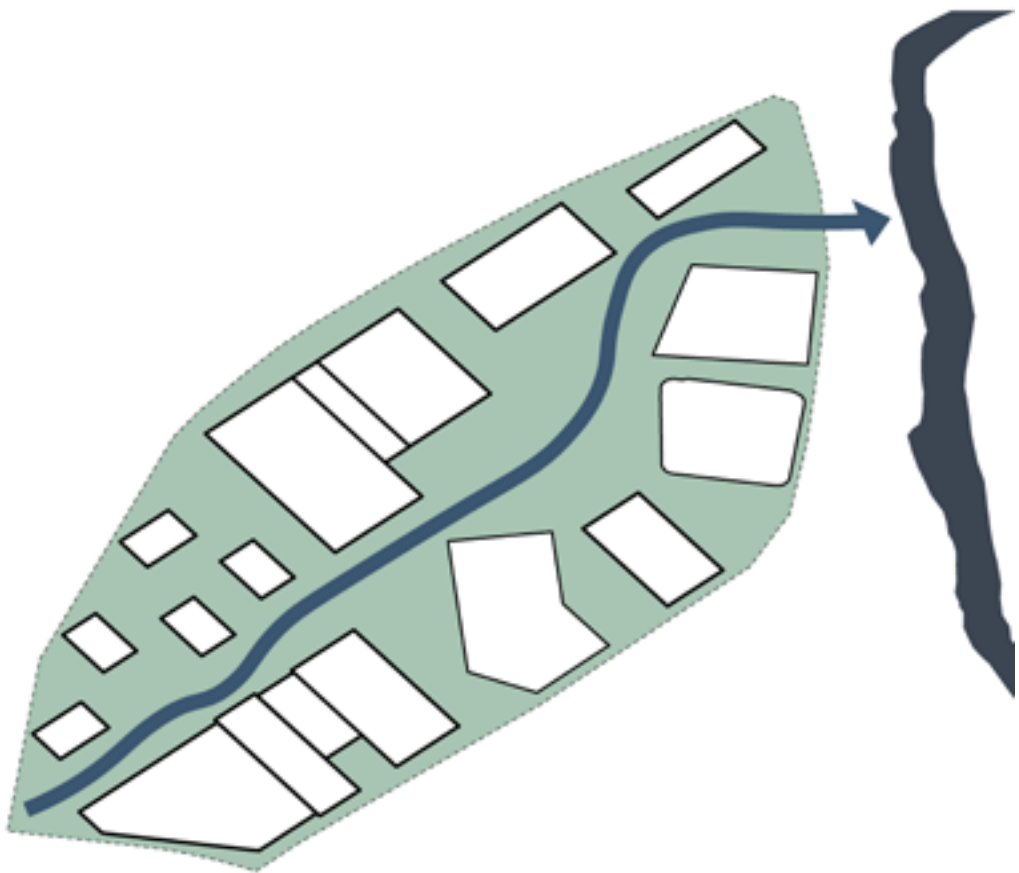
CONNECTIONS TO THE SURROUNDINGS

Spaces between buildings opens territory to the surrounding streets and invites local community to enjoy the recreational area of the Campus. Each gap provides a direct visual link to the park inside the Campus and makes territory more open and connected.



URBAN STRUCTURE

The Campus site continues the surrounding green park structure. The site connects to the main nodes with pedestrian paths. Pedestrian paths create the main structure of the Campus territory creating simple backbone of the territory necessary because of well-developed mobility of the entire territory it can be transformed to office/administrative/ etc. building as the height of the ceiling is planned suitable for transformation.



WATER STRUCTURE

The existing blue structure of the surrounding area provides great opportunities for recreation, climate regulation and functionality. Currently the Campus territory is not connected to the surrounding water structure. This has created several problems in the territory – high groundwater levels that has created waterlogged area on the Southern side of the territory. A new water stream is proposed to connect the site to the Kileveina ditch. The water stream changes from natural water bed in the Southern side of the Campus to a canal on the Northern side reflecting on the surrounding area. The water stream serves as sustainable rainwater collector from all territory and roofs.



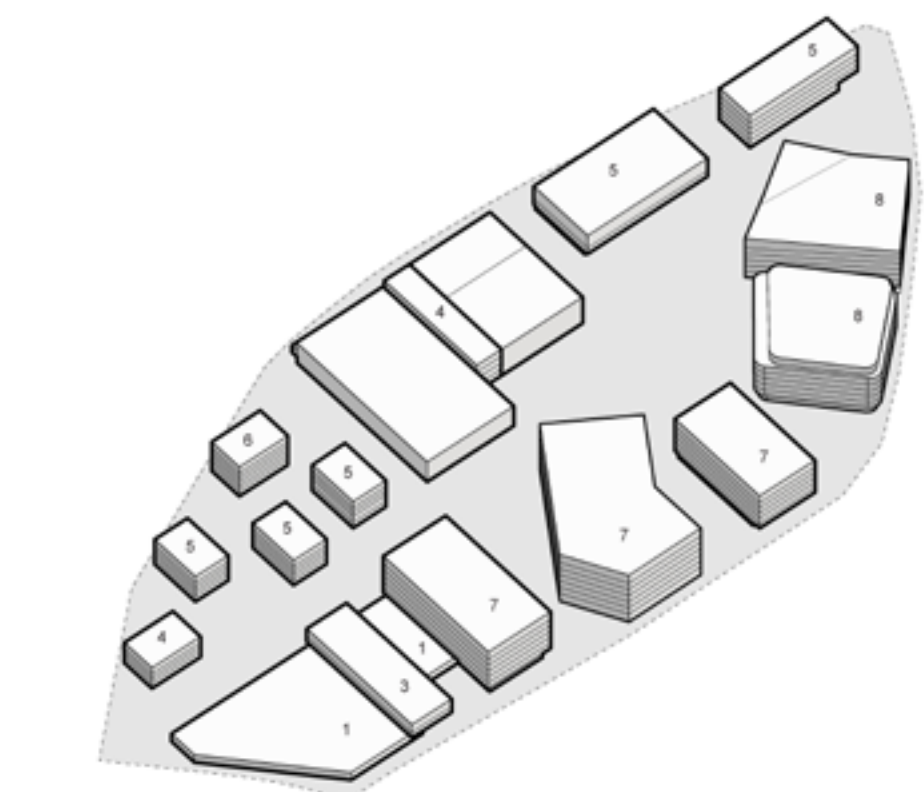
LANDSCAPE ACTIVITIES

Various landscape activities are located around the path structure creating diverse and playful experience. The site character together with various activities changes from green and natural on the Southern side to more academic and urban on the Northern side. Simple and unifying design for all elements makes the Campus site distinctive and easily recognizable.



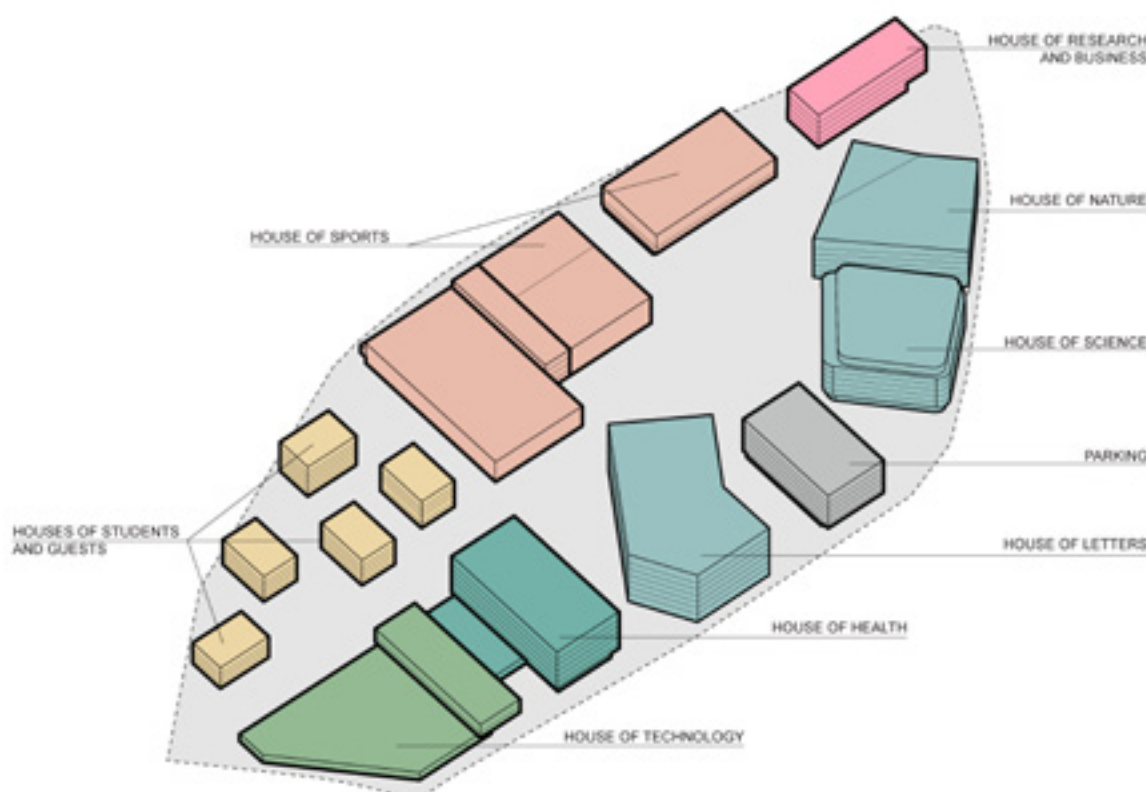
LANDSCAPE FUNCTIONAL DESIGN

The heart of the Campus is the Academic Plaza that is easily connected to the whole territory as it is located in the very heart of it. The whole structure of the site is designed to be functionally comfortable, excessively green and low maintenance. The territory level is even with the street level to create no barriers between street and the Campus site. This will make territory more connected to the Tornakalns surroundings and make it accessible.

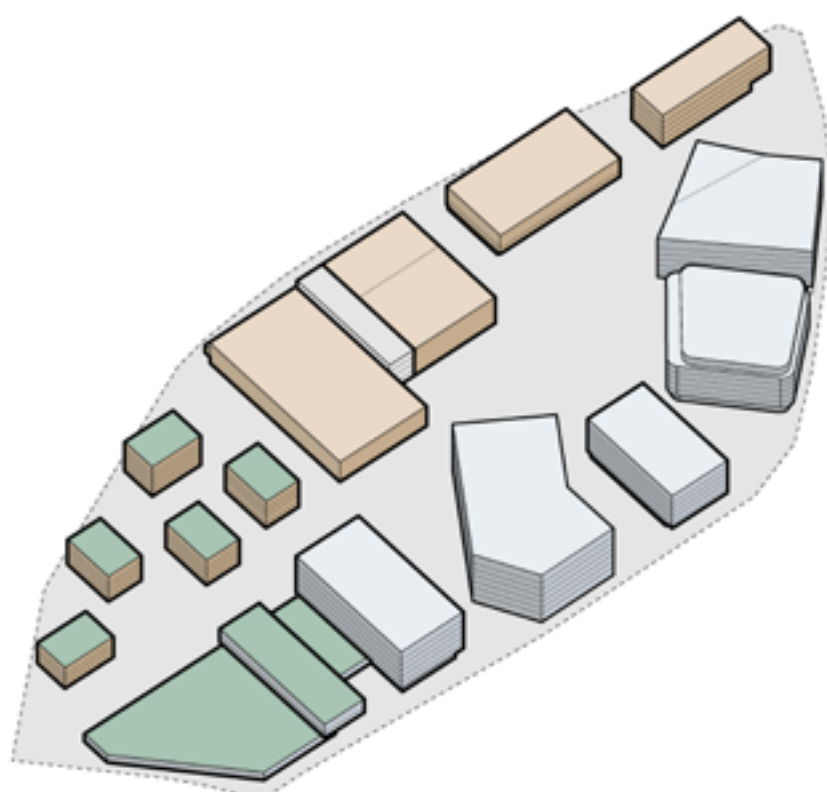


BUILDING HEIGHTS

Proposed building height varies, but overall the existing main corner of the House of Nature is the highest point. The buildings by the Vientbas gate and Jelgavas street are higher as they create the street front. They are the buildings near the railway are lower as they are the 'courtyard buildings' of the site. Overall the building height reduces towards Southern side of the Campus creating more park-like feeling.

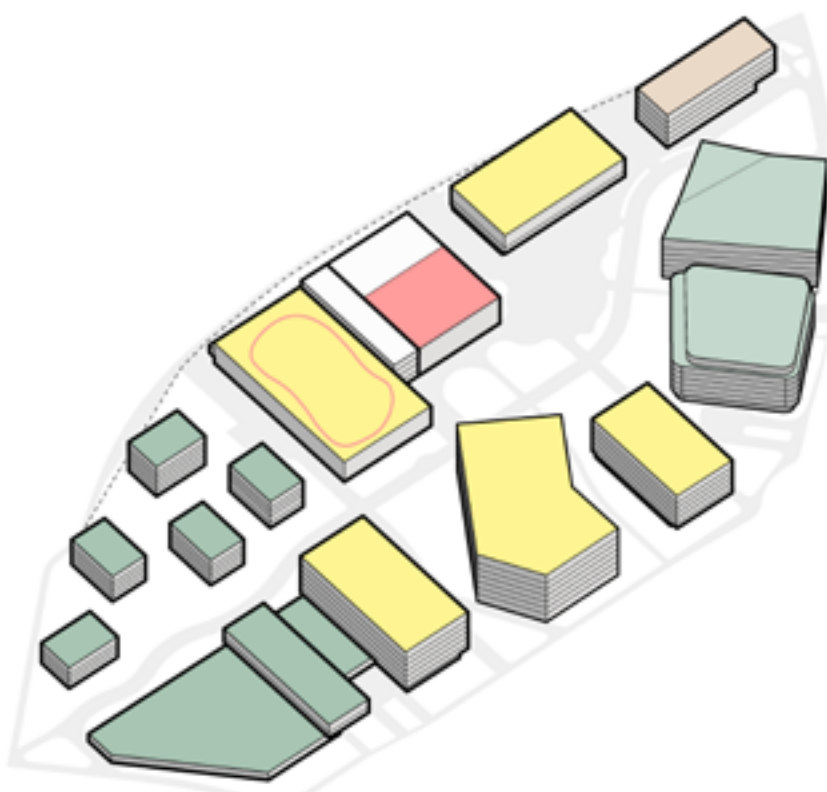


BUILDING FUNCTIONS



ARCHITECTURAL CONCEPT

The buildings by the Vientbas gate and Jelgavas street create the street front and the urban side of the territory. Their architecture reflects on the industrial architecture of the surrounding Mūkusalas area and more technological building and façade materials are used – metal cladding, aluminium etc. The buildings near the railway are the 'courtyard buildings'. These buildings are significantly lower and their architecture reflects on Tornakalns timber architecture – buildings are proposed in timber structure and with timber cladding to encourage local traditions. Green roofs are located on lower buildings to create diverse roofscape.



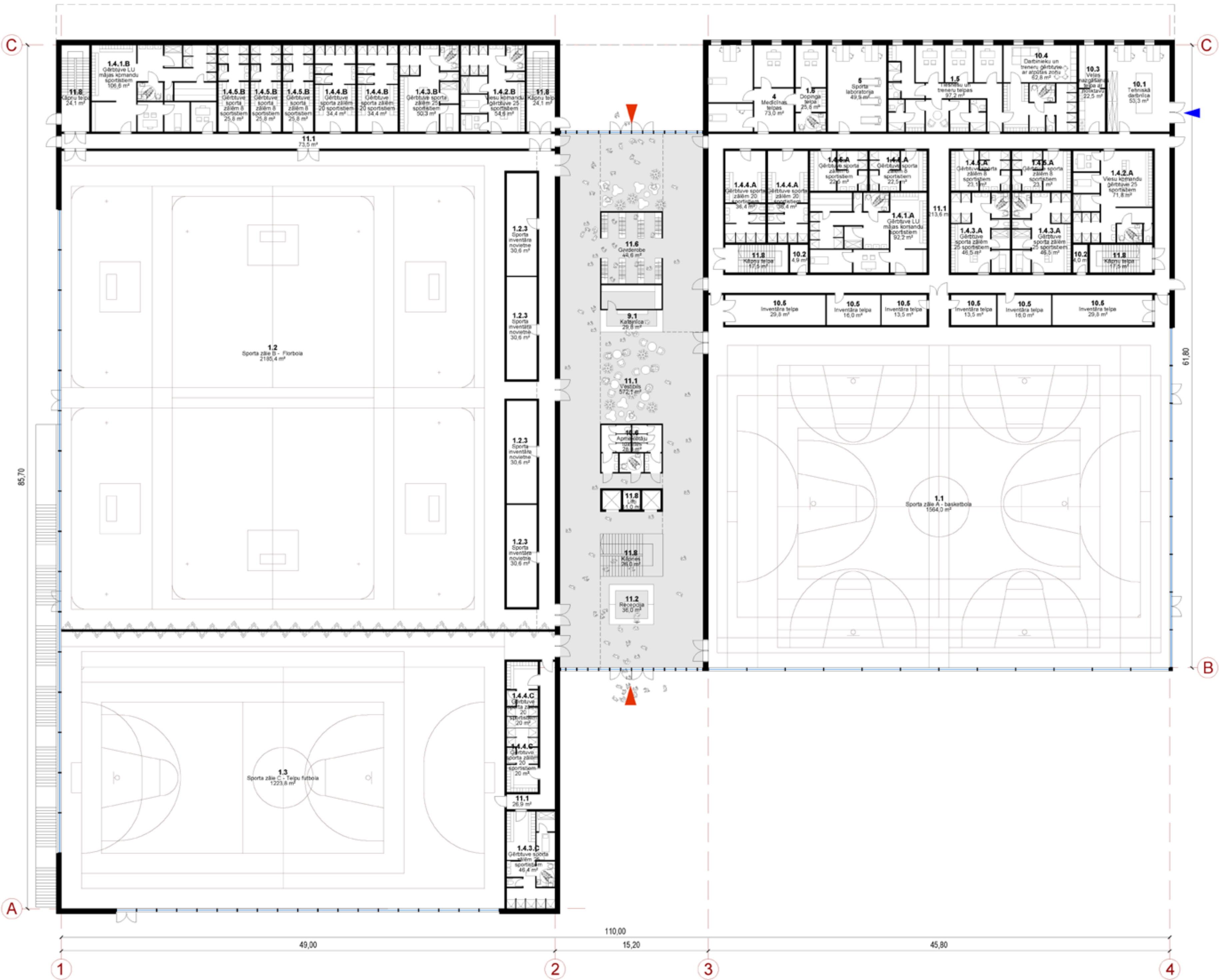
ROOFSCAPE

Building roofscape is used for various functions and integrated in overall territory. On roofs there are proposed to use green roofs for lower buildings, solar panel roofs for solar energy use during daytime as the University functions mainly during the daytime. On House of Sports the roof is used for sports activities and leisure, as well as solar panel use. The roof of House and Research and Business is with public roof terrace to encourage meeting each other in many levels.





SPORTS HALLS  
1st FLOOR PLAN 1:250



SWIMMING POOL  
1st FLOOR PLAN 1:250

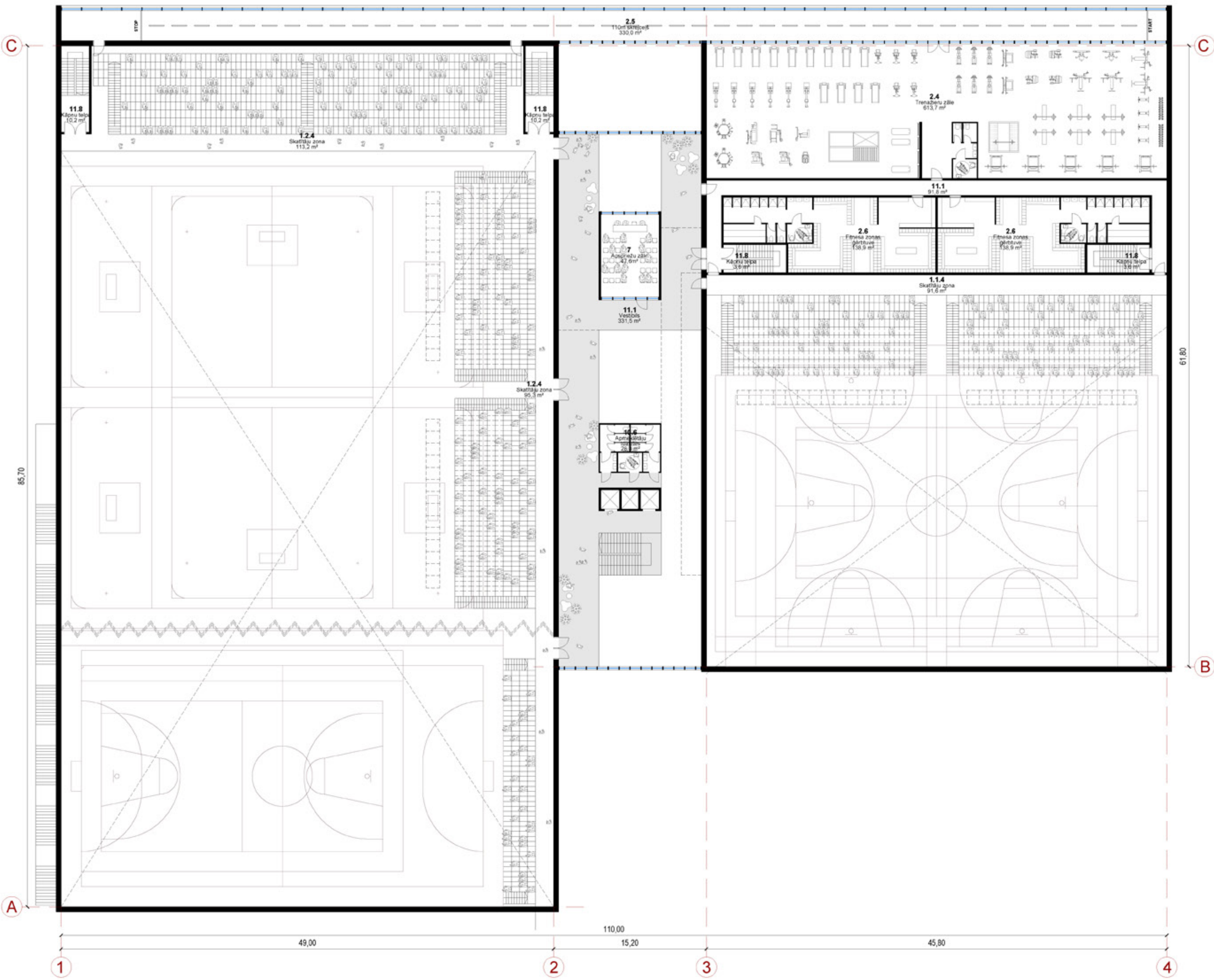


1st floor	
Building	m <sup>2</sup>
HOUSE OF SPORTS	7613,80
SWIMMING POOL	1139,10
TOTAL	8752,90

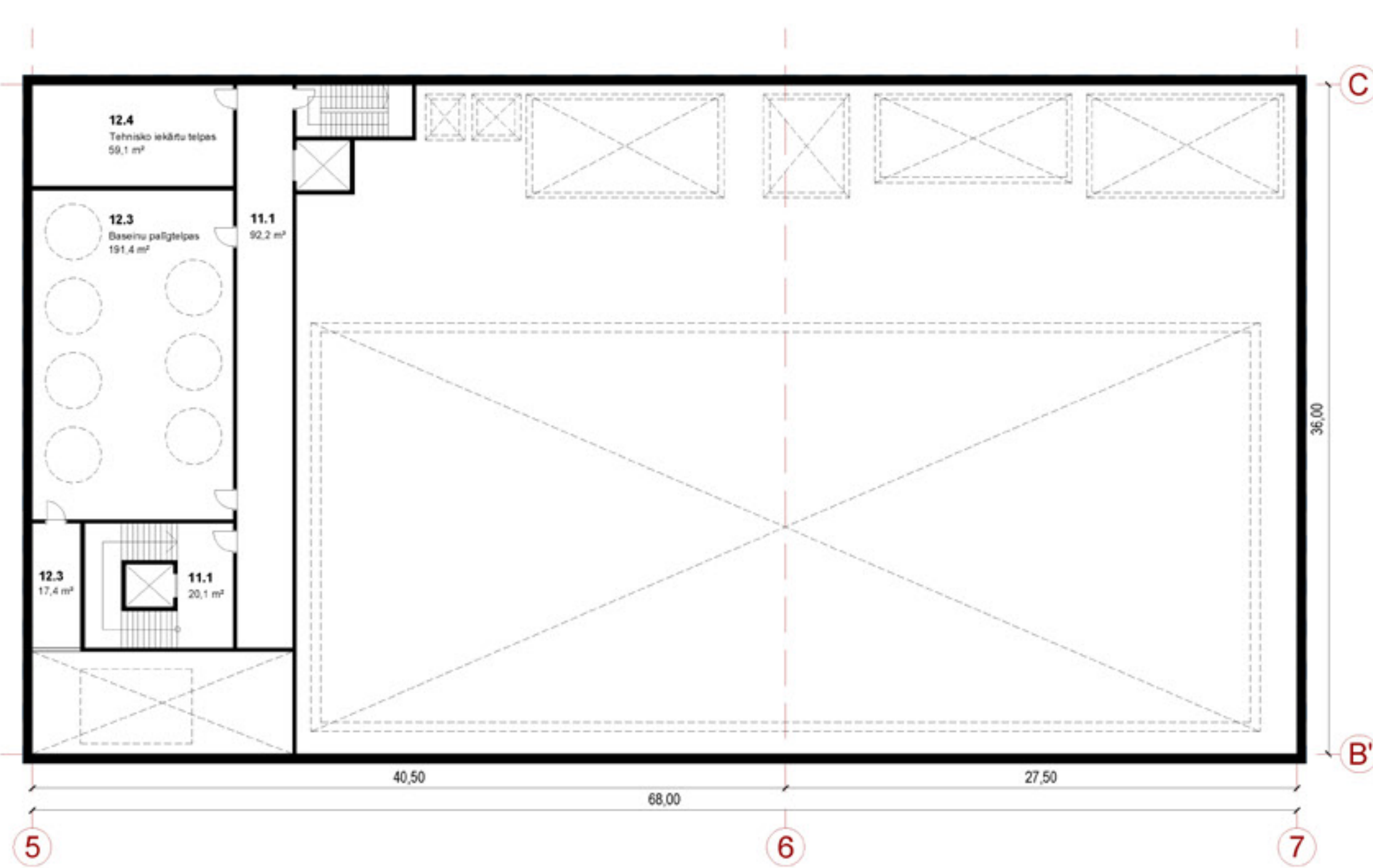




SPORTS HALLS  
2nd FLOOR PLAN 1:250

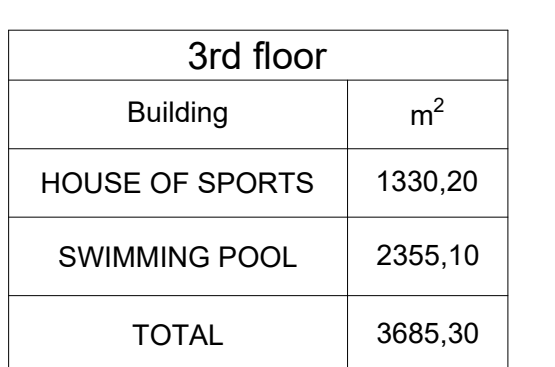


SWIMMING POOL  
2nd FLOOR PLAN 1:250

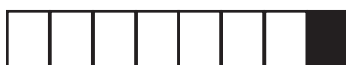


2nd floor	
Building	m²
HOUSE OF SPORTS	2048.60
SWIMMING POOL	380.20
TOTAL	2428.80









HOUSE OF SPORTS

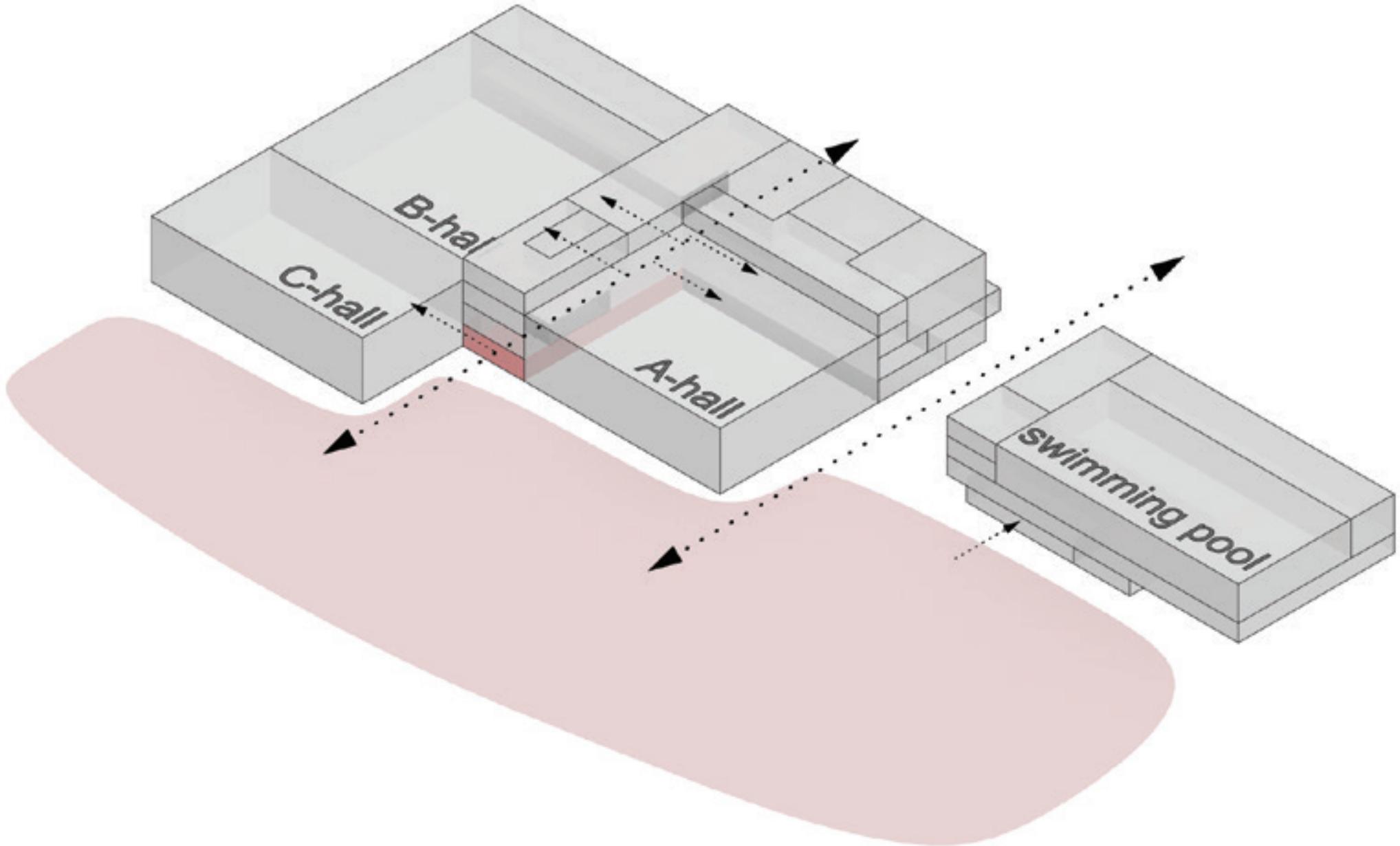
The Sports building is designed to be one of the connecting elements between many faculties of the Latvian University and to create a lively and active environment in the new University Campus.

House of Sports integrates sports facilities with other elements such as academic spaces, community resources, and urban design. Its architecture is designed in harmony with the surrounding campus and urban environment to create a cohesive and functional space that meets the needs of both athletes and the wider community.

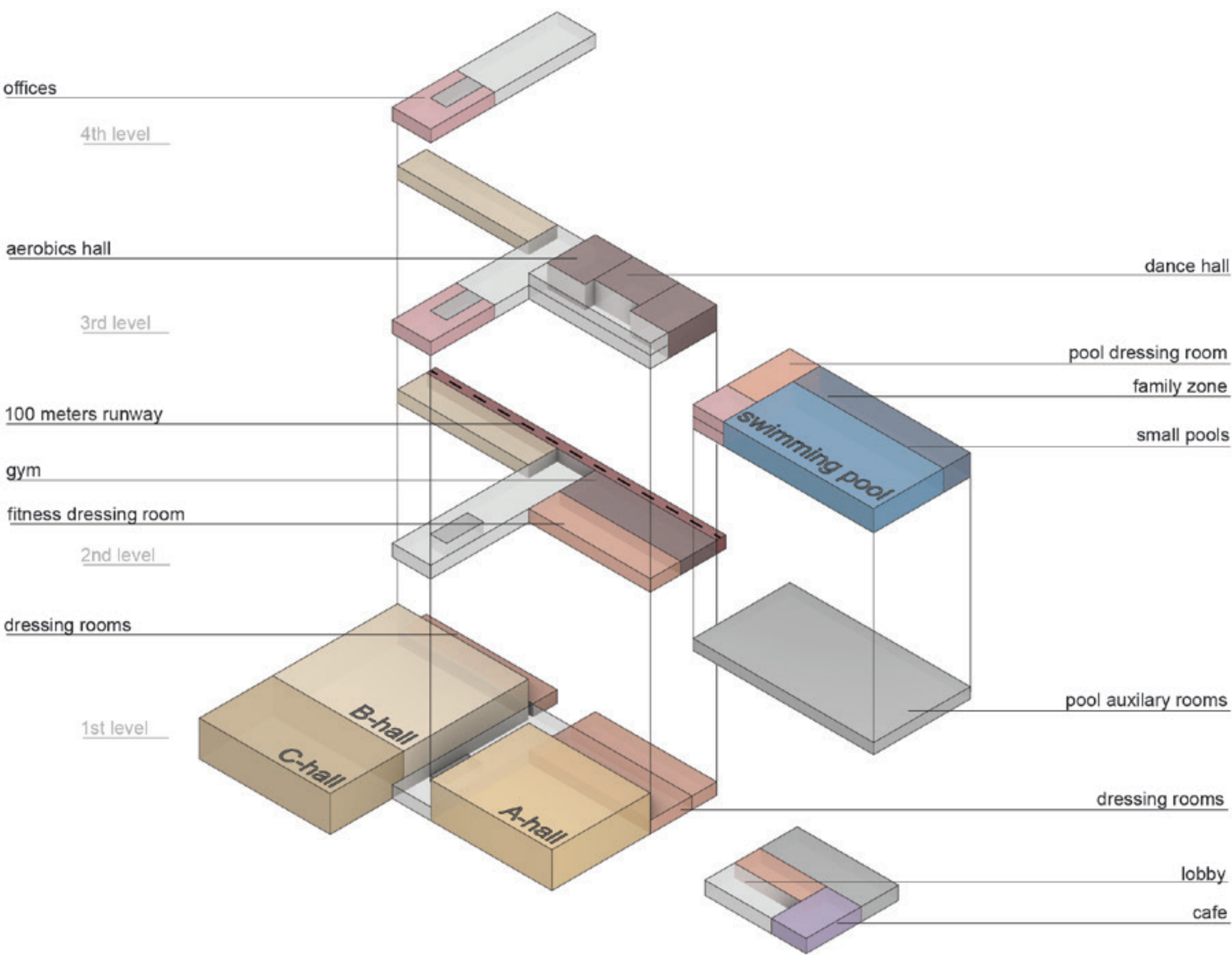
The House of Sports buildings accommodate various team sports, as well as gym, aerobics, athletics, dance and swimming. To open the territory to the surrounding area and the new pedestrian tunnel under the railway, the swimming pool building is designed as a separate volume as its functions are rather separate from the other sports activities.

Large sports halls are located on the first level to provide barrier-free accessibility to all team sports. B and C halls can be used together for any larger event or any science project University might have. All dressing rooms of athletes are located next to each hall. The halls are provided with stationary and extendable stands for visitors.

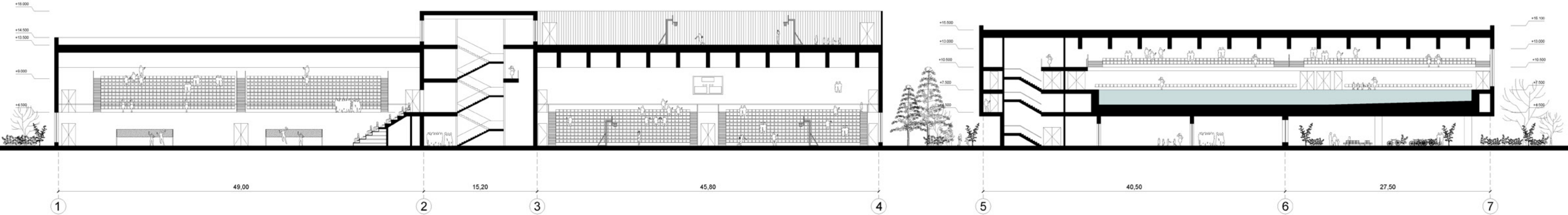
Central atrium connects all functions and directs flows of athletes and audience. It is created as an open, light, multi-functional space for athletes and other visitors. Entrance, café and dressing rooms of visitors is located on the first level. On upper levels offices and administration is located.



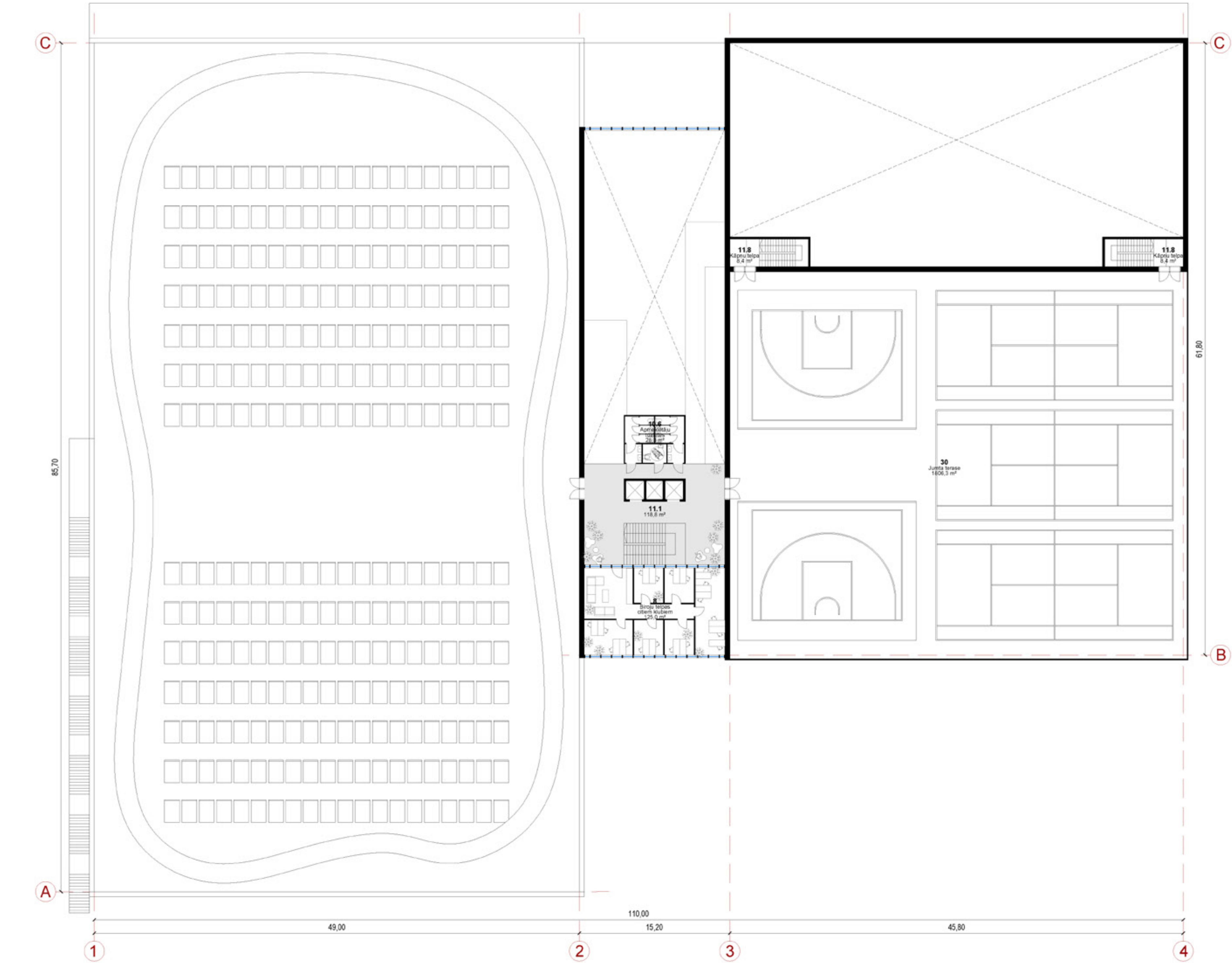
FUNCTIONAL DIAGRAM



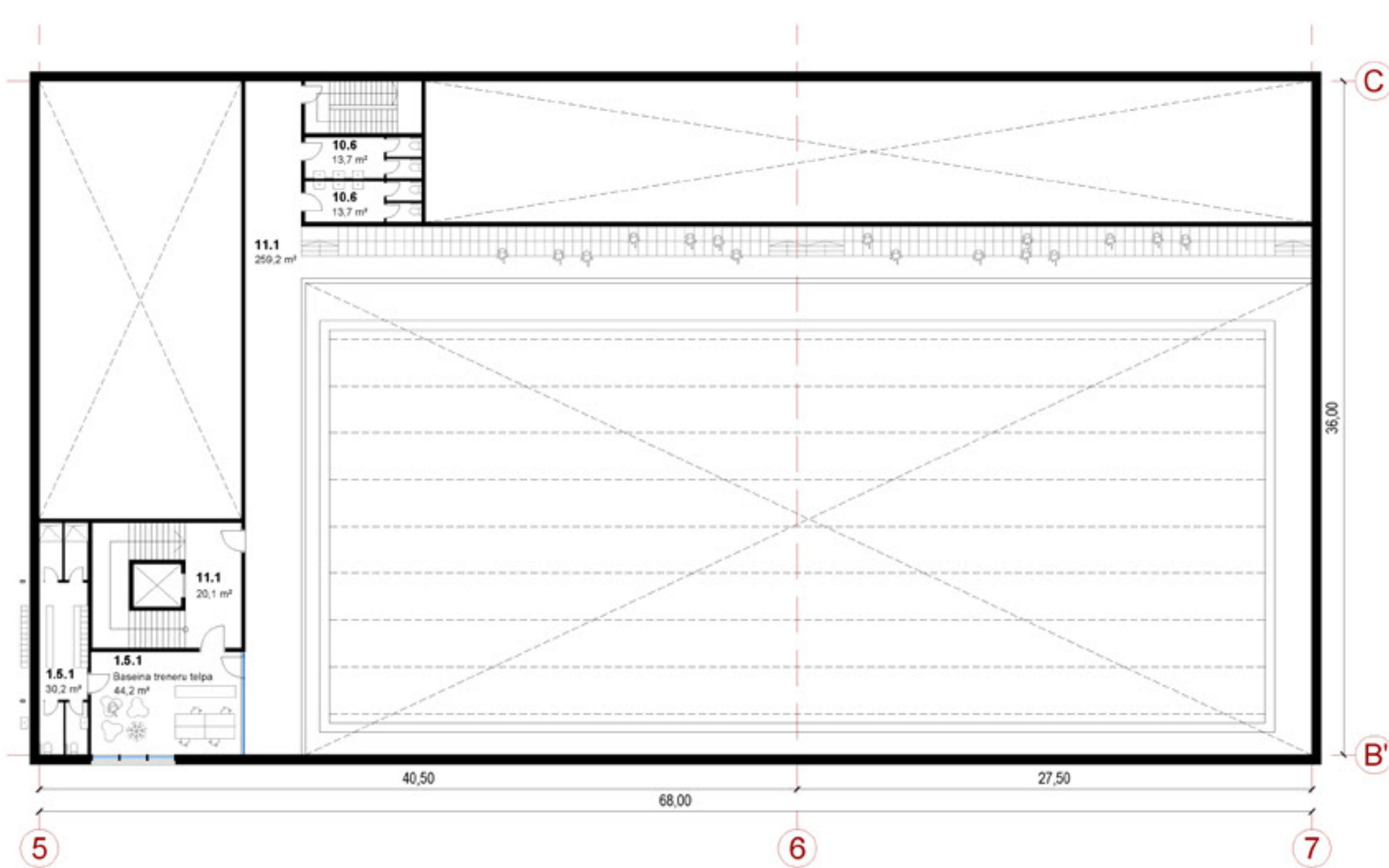
SECTION 1:250



SPORTS HALLS  
4th FLOOR PLAN 1:250



SWIMMING POOL  
4th FLOOR PLAN 1:250



4th floor	
Building	m²
HOUSE OF SPORTS	274.50
SWIMMING POOL	381.10
TOTAL	655.60

TOTAL	
Building	m²
HOUSE OF SPORTS	11267.10
SWIMMING POOL	4255.50
TOTAL	15522.60