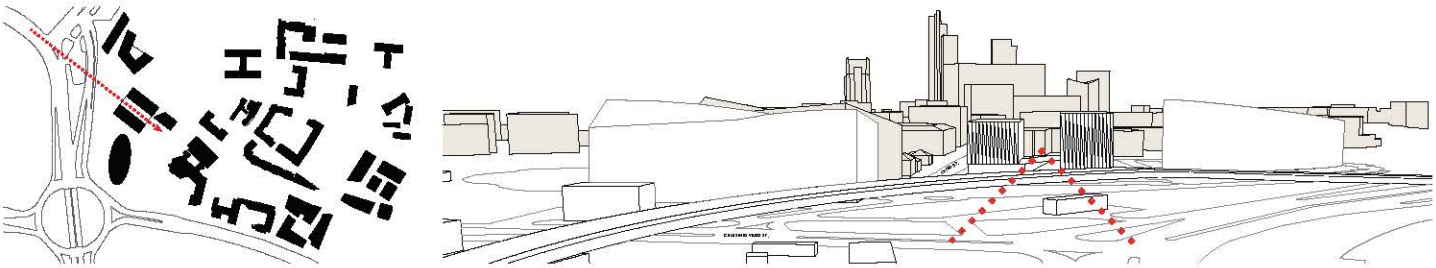
INTERNATIONAL INVITED DESIGN CONTEST OF BUSINESS CENTRE LVIVO G. 68A, VILNIUS

EXPLANATORY NOTES

CONTENT

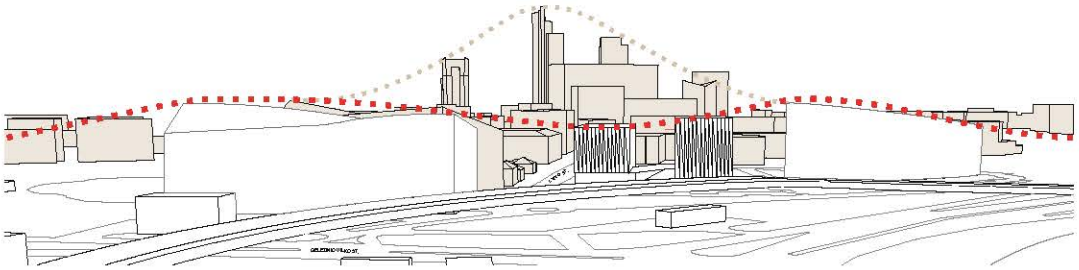
URBAN IDEA

VISUAL CONNECTION



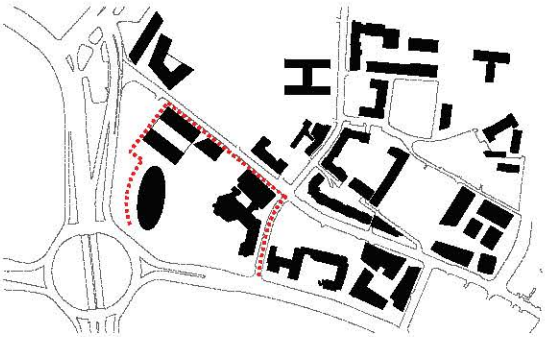
The urban idea of the project is based on the visual connection with the silhouette of the urban-architectural hill of the New Vilnius city center. Considering existing urban tissue, the complex is divided into parts not to dissonate disturbingly in terms of scale with the existing PARKTOWN and K29 office buildings. Viewed from Ukmerges street, the complex would not block but complement the panorama of the south-eastern city, the same as the visual connection with the urban-architectural hill of the New Vilnius city center.

CONNECTION WITH A CONTEXT



The height of the buildings is levelling down according to the context. The highest part (7 story height) of the building is designed close to the K29 office building, which is 9 story height. Then building height is levelling down to 6 story height towards PARKTOWN building height. In this way, the wave silhouette is created.
Gelezinio Vilko Street elevation is being formed as an urban hill element: the foothill of the urban-architectural hill of the New Vilnius city center. It extends the general concept of the urban spaces on the right bank of the Neris in Vilnius.
In the Lvivo Street elevation, the designed building is levelling down from 6 to 5 story building towards the Lithuanian Children and Youth Centre which is 3 story height.

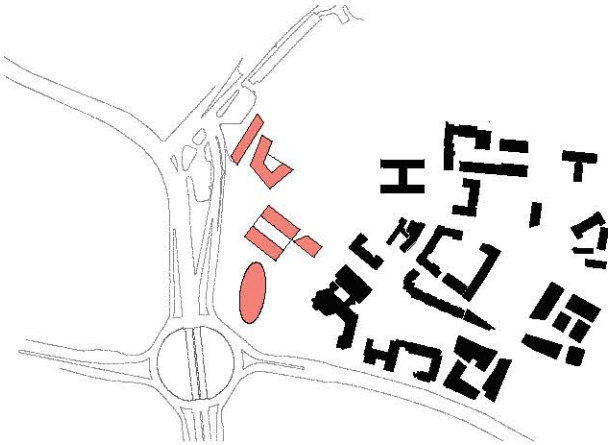
PERIMETER BLOCK



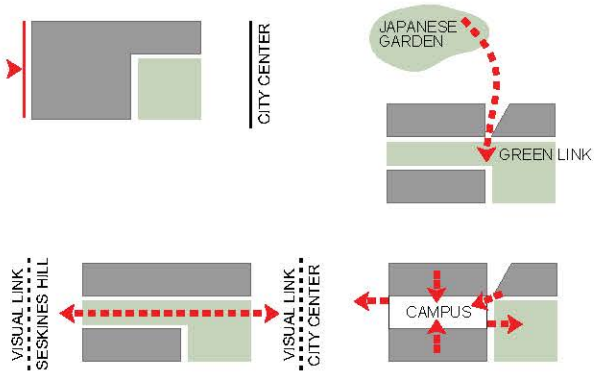
The designed building is a connection between the existing PARKTOWN and K29 office buildings. This connection forms a perimeter block along Gelezinio Vilko street viaduct.
In terms of Lvivo street elevation, the designed buildings finish the urban block perimeter from Gelezinio Vilko street viaduct to the Lithuanian Children and Youth Centre.

ARCHITECTURAL IDEA

BUILDING VOLUME

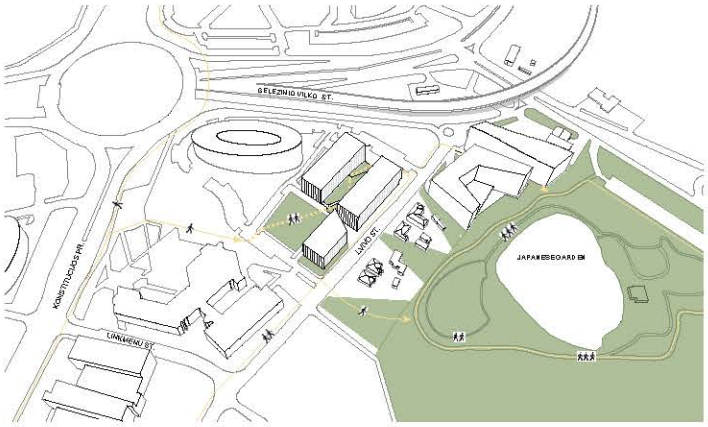


The volume of a complex is divided into parts not to dissonate disturbingly in terms of scale with the existing context and to create a modern connection between the PARKTOWN and K29 administrative buildings on the Gelezinio Vilko Street viaduct elevation.



The spatial and functional configuration of the complex is created by joining three horizontal parts with a stylobate, on which the public space is designed. This public space offers panoramic views of Seskine Hill and the New Vilnius city center.
Volumes of the buildings create links between the inside and outside spaces of the complex as well as a connection to other city spaces - a Japanese garden and a park next to the site.
The division of the complex into three parts helps to meet competition program requirements and increase rentability of the office space. It also creates the office campus atmosphere.

PUBLIC SPACES



Different volumes of a complex create an inner courtyard that is visually and architecturally connected to surrounding public spaces. Designed green space on the stylobate of the building offers a panoramic view of Šeškinė hill and the buildings of the New Vilnius city center. This space is filled with the same architectural elements as a park on the southern part of the site. The system of paths is created between the designed buildings in order to allow pedestrians to get to the Lvivo Street crossing, which leads to the existing path between the buildings of the Park Town Business Center towards the Japanese Garden. The connecting part of the buildings connects both external and internal public spaces. The courtyard, the park, the passage with cafes, the commercial premises, the halls of the administrative buildings, and the conference premises form an integral system of public space.

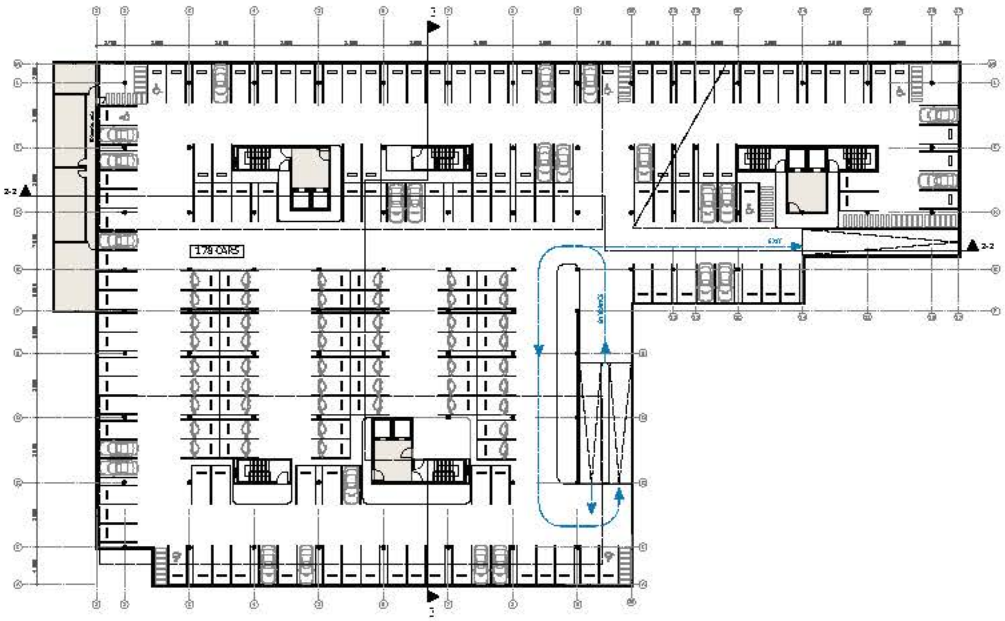
BUILDING

The graphics and division of the facades are dominated by verticals, which creates the slenderness and lightness in the volumes. In between verticals, the light-reflecting glass is designed, which is also used to cover blind parts of the building between floors. Neutral-colored glass with a light reflection will "absorb", reflect the environment and will not dissonate with existing buildings. The vertical division of the facades is favorable for the internal planning possibilities of administrative buildings by arranging the premises in the desired manner.
The first-floor façade towards Lvivo street is covered only in glass in order to enliven Lviv Street with the commercial premises in the building.

FUNCTIONAL PALNNING OF THE BUILDINGS

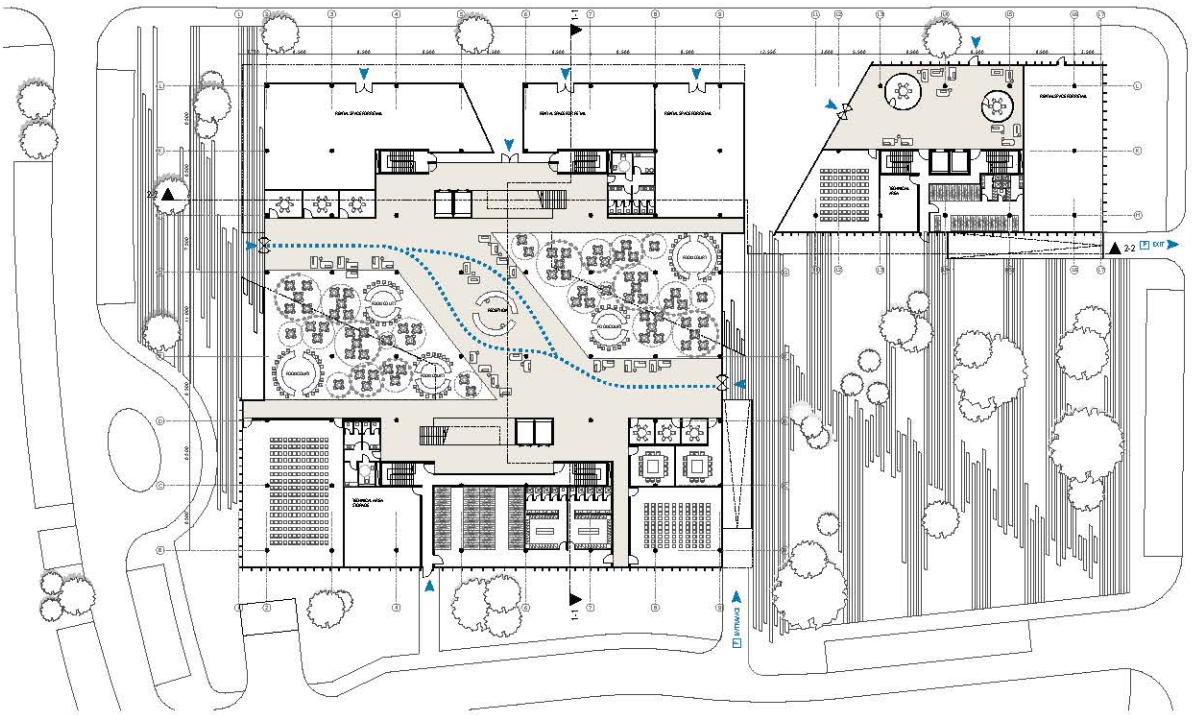
The complex consists of three office buildings (7, 6 and 5 story height) that are connected with a single-story stylobate, which provides vertical connections, commercial premises, public space, and technical premises. The complex has three groups of elevators (consisting of two lifts) and six staircases that ensure comfortable movement between the floors and evacuation if needed.

UNDERGROUND PARKING



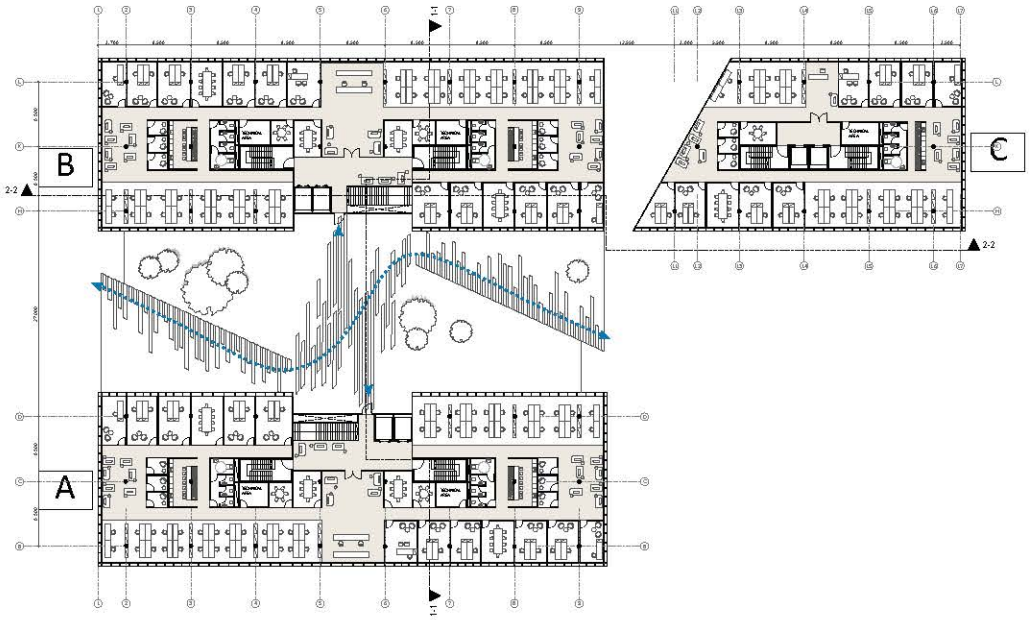
A parking for workers, and visitors is designed on two underground floors (-1 and -2) of the complex. Its capacity is 360 parking spaces. Technical premises are also located on the underground floors. The parking space area is calculated for 16640 sq.m. office area (1 car space per 25 sq.m and multiplied by 0,5 car parking coefficient). The total estimated parking need is 333 car spaces.

GROUND FLOOR PLAN



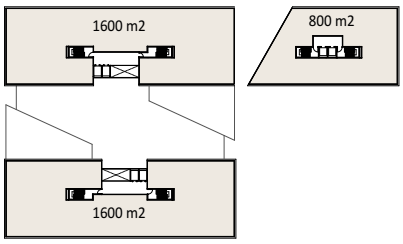
The building has several entrances. The main entrance is designed on Gelezinio Vilko street side where street car parking has been already located. Next to the street parking the pull in and drop off space for guests is designed. Other entrances for those coming from the city centre and Lvivo street are located on a park side. All entrances lead to an inside public space on the ground floor that is filled with cafes, restaurants and recreation areas. All those zones have a connection to the outside or the rooftop green space. The first floor also has panoramic elevators and staircases to reach administrative premises.
Facing Lvivo street, the building locates commercial premises for rent. The less busy side of the building towards K29 locates conference halls and meeting rooms for the offices above. In this part of the building, bicycle storage, changing rooms, showers and public bathrooms are designed for office workers.

2-7 FLOORS PLAN

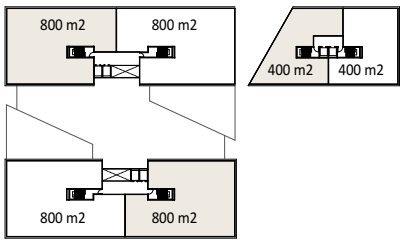


On the 2nd to 7th floors of the three buildings (ABC) office premises are designed. The total floor area of the two buildings (AB) is - 1600 sq. m., and the total floor area of the third building (C) is 800 sq. m. Additionally, every floor inhabits technical and sanitary premises.
Dividing the required floor area into separate volumes allows natural light to maximally illuminate the workspaces of all administrative premises. All workplaces are located on the perimeter of the building, near the windows, to maximize the distribution of the natural light source.

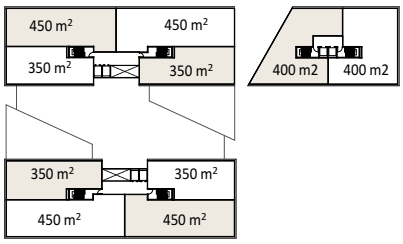
The structural layout of the building allows arranging open space offices as well as cabinet system. The floors of the building can be divided into different sizes of rent space.



1 OFFICE PER BUILDING PER FLOOR



2 OFFICES PER BUILDING PER FLOOR

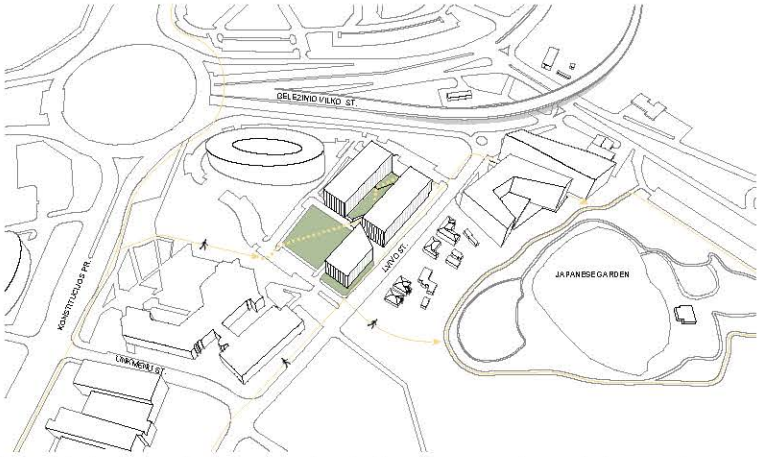


2/4 OFFICES PER BUILDING PER FLOOR

BUILDING MATERIALS

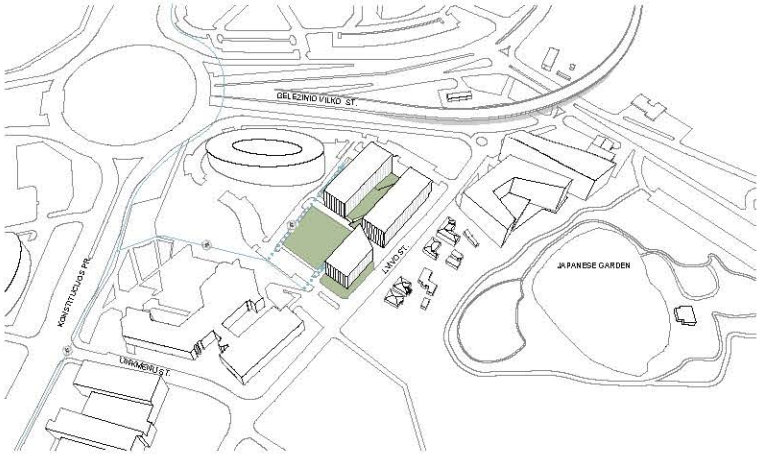
The façade elements are made of aluminum verticals (40cm depth), diagonal decorative profiles, clear glass panels, and thermal insulation filling in between floors. Automatic blinds are installed inside, which serve as protection from direct sunlight. The relief of the facade will help to save the building's cooling energy.
The facades of the first floor entrances, commercial premises and public spaces are glazed with a large-plane frameless glass system.
On the roof of the connecting part between the buildings, green public space is designed. All the surroundings are covered with decorative plants, the greenery is interrupted with the concrete tiles for pathways.

PEDESTRIAN FLOW



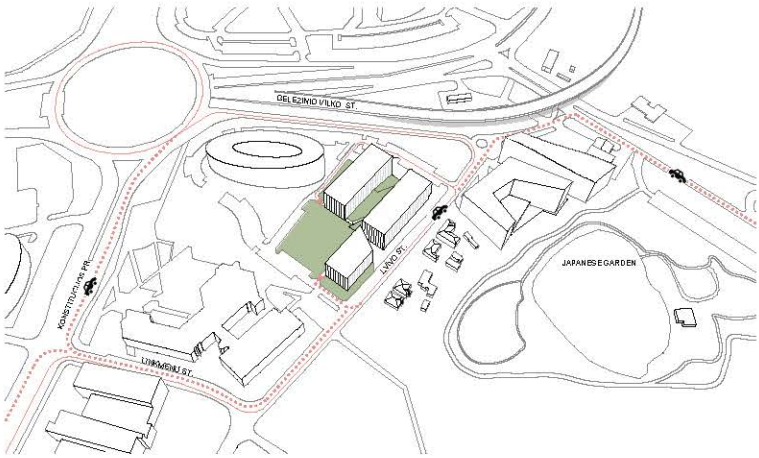
Taking into account the site and the prevailing pedestrian infrastructure, the existing paths are maintained and connected with the newly designed buildings. A green courtyard for public use is being designed between the buildings, which will attract pedestrians to climb on the roof and offers a view of Seskine Hill and the New Vilnius city center. The green space is physically connected to the designed park on the south side of the plot. From the park, pedestrians can reach Lvivo Street crossing, which leads towards the Japanese Garden, either through the public space on the roof or commercial passage inside of the building. From the north-west side, pedestrians can access buildings through the car park. From the south side, the buildings could be accessed through the park or Lviv street. Thus, the complex and its public space create a connection between Lviv street and the Japanese garden.

CYCLING NETWORK



People can reach the complex by bike using the existing bike lane in Konstitucijos Avenue to which newly designed bike lanes along the park in the southern part of the plot are attached. On the ground floor of the buildings, bicycle storage facilities with changing rooms, showers and toilets are designed.

TRANSPORT FLOW



Car access is designed from Lvivo str. in the north-eastern part of the site. Access to the underground parking is designed on the existing connecting street in the south-western part of the plot between the designed buildings and the Business Center K29. The underground parking capacity is 360 parking spaces. Short-term parking for guests is located in front of the main entrance on the parallel street of Gelezinis Vilkas street. For service transport, short-term stops are provided on the existing connecting street in the south-western part of the site.

USE OF SOLUTIONS FOR THE BUILDING A++ ENERGY CLASS, ENERGY-SAVING SOLUTIONS, RENEWABLE ENERGY SOURCES, GREEN (SUSTAINABLE) SOLUTIONS

Sustainable, energy-efficient, environmentally friendly solutions are implemented in building design. In terms of overheating, the building has its narrow edges facing south to get as little direct sunlight as possible. Additionally, the façade system (diagonal and vertical profiles 40cm depth) will help to save the building's cooling energy as well as automatic blinds installed inside, which serve as protection from direct sunlight.
The building has a smart conditioning system that responds to the number of people. The ventilation system of the building is designed to be autonomous for each floor, so the roofs of the building, visible from the adjacent high-rise buildings, act as the fifth façade. Roofs are equipped with exits, minimal engineering equipment and photovoltaic cells. Solar power could be used for lighting building facades and other decorative lighting.

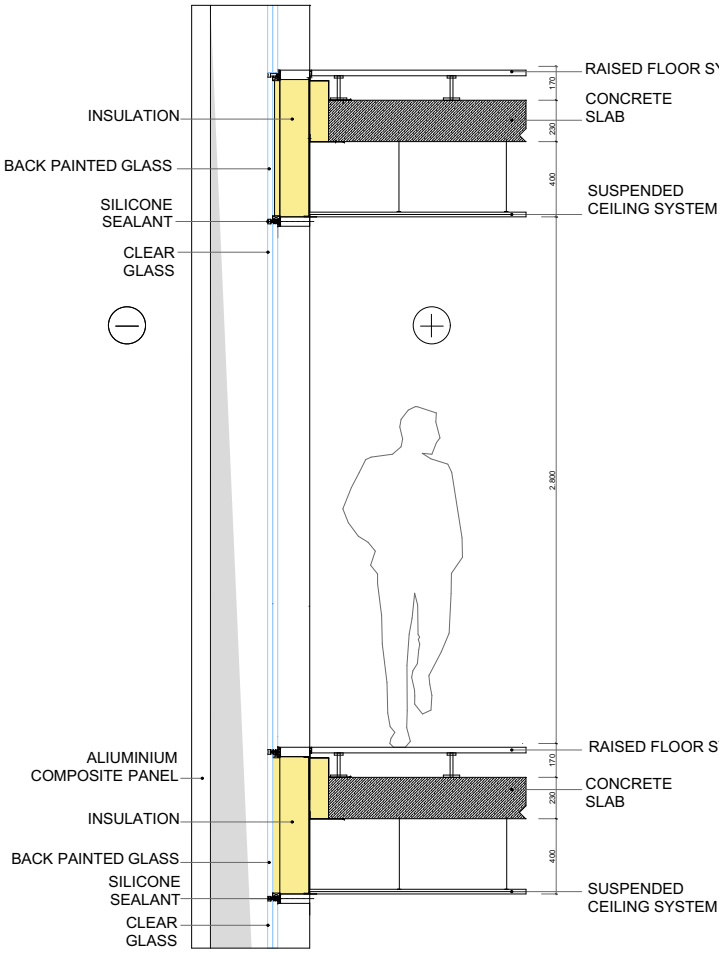
The raised floor system is implemented in the building for the engineering systems mobility.

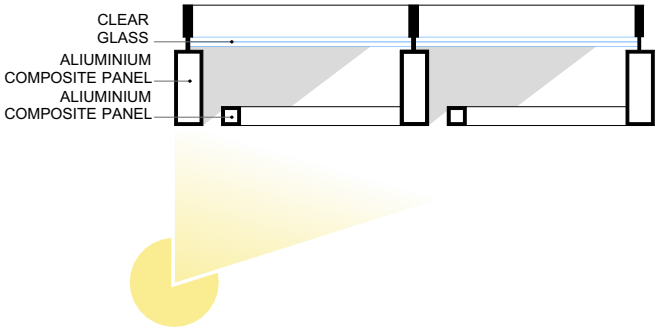
Rainwater collection is used for irrigation and domestic purposes.

Such solutions will ensure the building's A ++ energy class and international environmental standards.

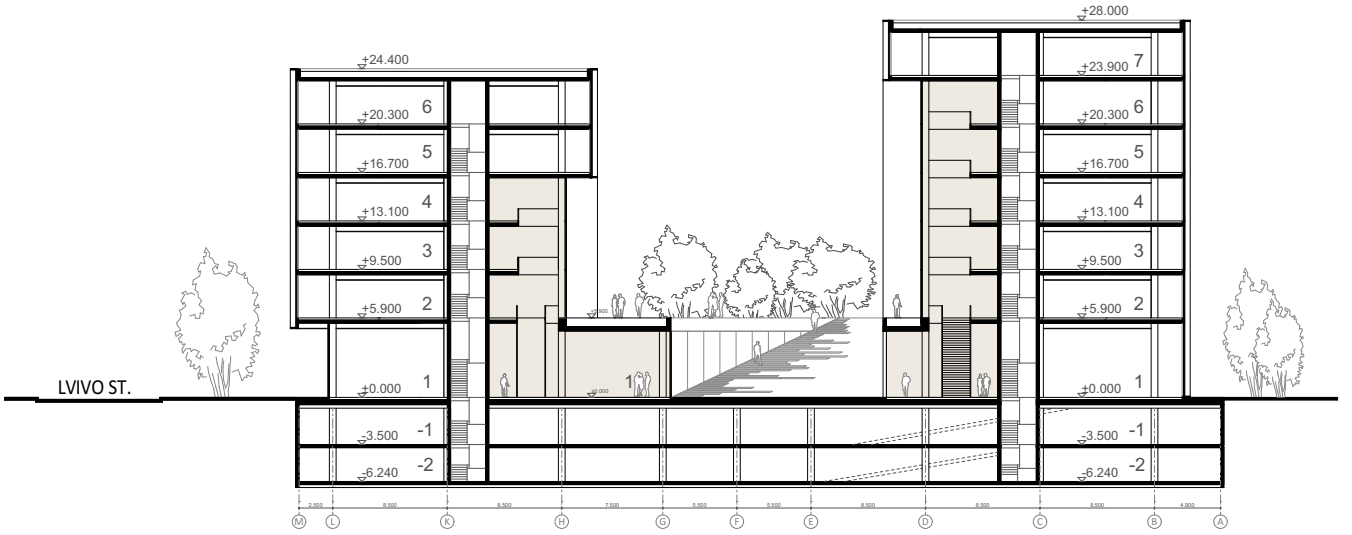
Minimal and compact building design and structural solutions contribute to the economical use of materials and sustainable solutions. The building has a logical and rational structure that promotes minimum energy consumption and minimal negative impact on the environment.

There are electric vehicle charging stations inside underfloor parking. Additionally, there is a possibility to integrate car sharing system. Bicycle parking is designed in easily accessible locations inside the building.
Accessible design of the outside public space will encourage people to walk and cycle. The rest areas have minimal hard coverings, leaving room for greenery and trees.





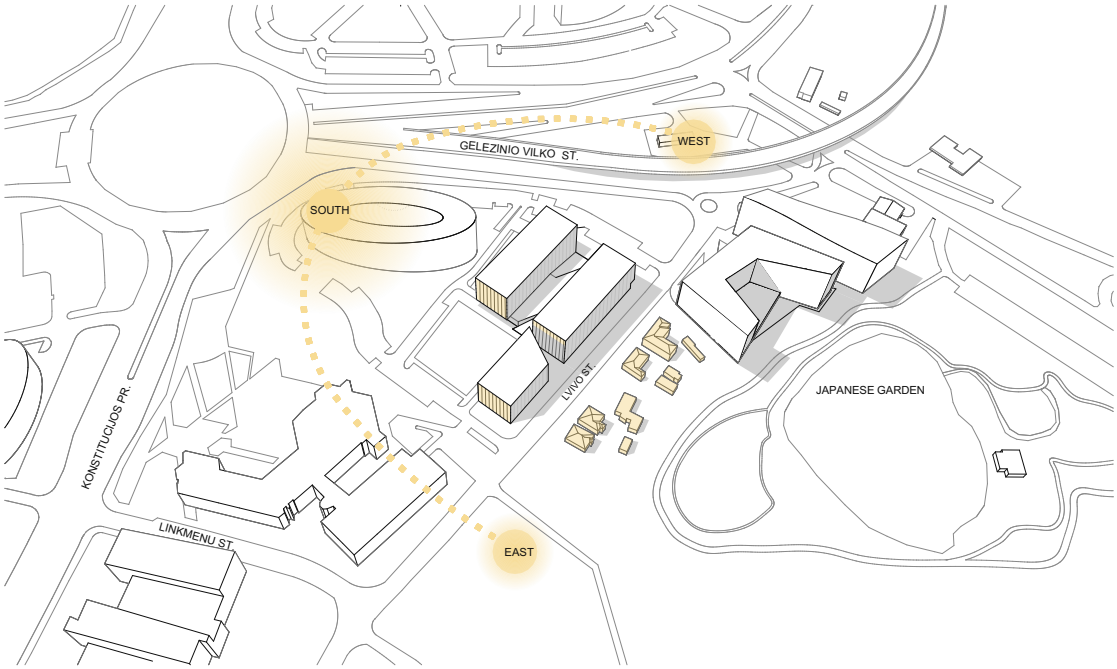
BUILDING STRUCTURAL SOLIUTIONS



SECTION 1-1

The proposed structure of the building is a monolithic concrete frame. The spacing between columns is 8.5 m in both directions. The walls of the staircases and vertical shafts are made of monolithic reinforced concrete and serve to ensure the rigidity of the building. Stair marches are made of prefabricated reinforced concrete. Stairs in the common areas of the building are made of light steel. An alternative structural solution for the building is prefabricated a reinforced concrete frame.

INSOLATION




VAIKAI

	TECHNICAL AND ECONOMIC INDICATORS	
	GENERAL INDICATORS	
No.	Title	Quantity
1.	Area of site	7 911 m^2
2.	Built-up area	5 292 m^2
3.	Building density	67%
4.	Building intensity	3,22
5.	Use of the building	Administrative
6.	Total overgorund area	25 500 m^2
7.	Total underground area	11 630 m^2
8.	Total area of building	37 130 m^2
9.	Volume overgorund	104 338m^3
10.	Volume underground	38 617m^3
11.	Area of office premises	20 800 m^2
12.	Area of commercial premises (ground floor)	4 700 m^2
13.	Number of cars in the underground parking lot	360
	INDICATORS OF BUILDING A	
14.	Height of building A	28 m
15.	Number of floors of building A	7
16.	Total area of building A (2-7 floors)	9 600 m^2
17.	Volume of building A (2-7 floors)	36 594 m^3
	INDICATORS OF BUILDING B	
18.	Height of building B	24.40 m
19.	Number of floors of building B	6
20.	Total area of building B (2-6 floors)	8 000 m^2
21.	Volume of building B (2-6 floors)	29 765 m^3
22.	Total area of buildings A+B (ground floor)	3 900 m^2
23.	Volume of buildings A+B (ground floor)	21 960 m^3
	INDICATORS OF BUILDING C	
24.	Height of building C	20.80 m
25.	Number of floors of building C	5
26.	Total area of building C (ground floor)	800 m^2
27.	Total area of building C (2-5 floors)	3 200 m^2
28.	Volume of building C	16 019 m^3

NOTE: The area of administrative premises can be increased or reduced due to building volume.