

Prefix

In order to design A Project for Ljubljana, The New Gate to the City, it is crucial to enucleate the design principles throughout its history and political concept. Moreover, to enucleate their prototypical character, not to be directly implemented, but to understand the idea of the city and the narrative argumentation of the project that is reflected in it.

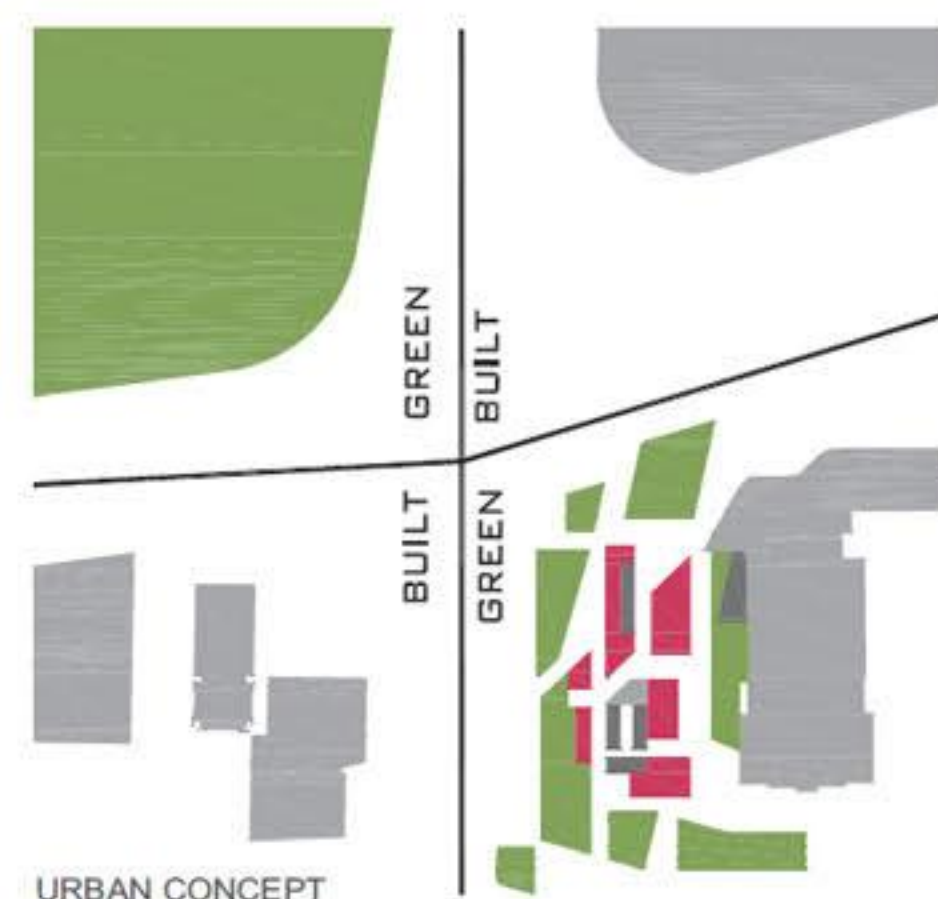
First we have to reveal common theoretical ground on the city, which is our architectural ground zero for the Project for Ljubljana. The main principles are introduced in following chapter.

City and Human Interactions

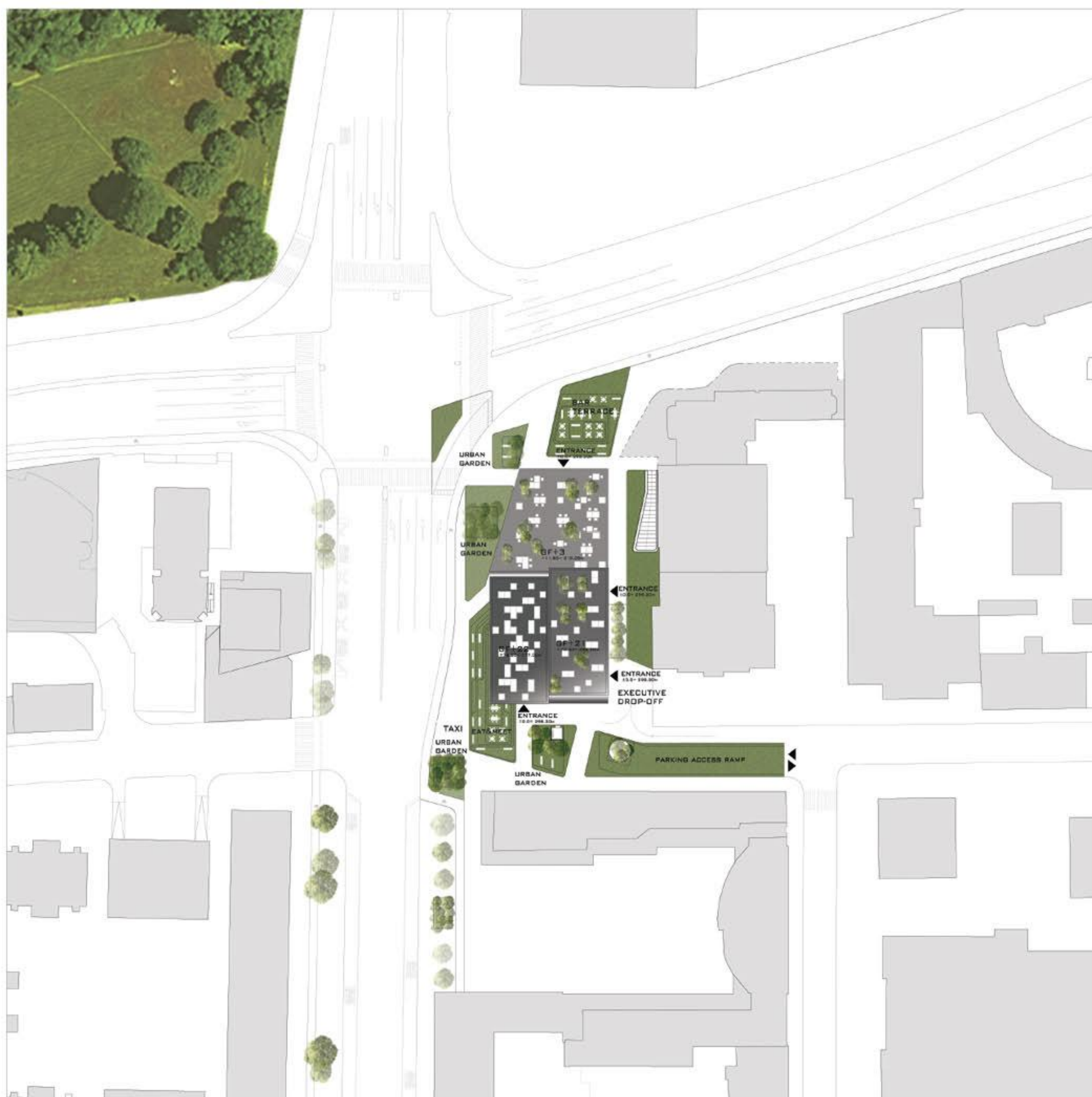
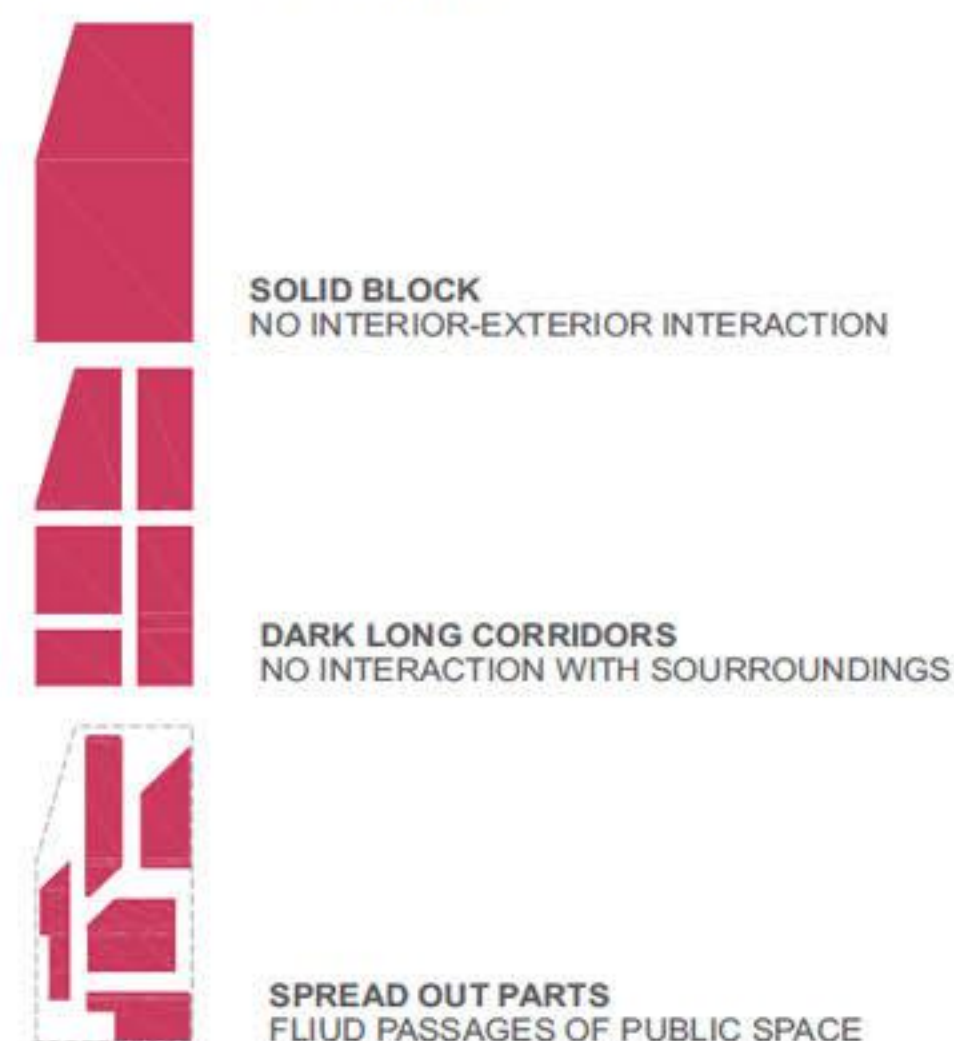
The city is not merely a quality that emerges once certain urban infrastructure is placed, it should reflect and should be built on the idea of a space that contains and promotes identity and belonging and of citizenship.

The political - a concept not to be confused with politics - is exclusively human and establishes the notion that human concentration does not only serve merely survival and functional ends but that it also intends to prepare the arena for decisions, differences, conflicts and agreements to be produced in a civic manner.

The idea of political human interactions implies a common ground, a shared space between individuals that is different from that where activities for subsistence purposes take place.



URBAN CONCEPT
GROUP DESIGN PRINCIPLE



SITUATION PLAN / URBAN CONCEPT, 1:500

Learning from Ljubljana

In the City of Ljubljana, there is not a denial of the existence of both, of the city and of urbanization, as two expressions of urban form that are characterized by an irreducible difference and a struggle between them. An understanding of the political as a space of confrontation where it is possible to read differences and be aware of them, where part and counter part can be defined and collective dimension can reclaim its importance.

It is possible to formalize the Idea of the city which has been latent, into a future strategy for city development. That is only within one architectural body? A Pilot architectural body, that leads towards new Capital. This Idea is not new. It was introduced with Josef Plecnik. He believed in development of Ljubljana based on antique architectural principles. Principles which were establish on triangular composition with diagonals (Greeks) and longitudinal axial composition (Romans). He introduced diagonal connection of the city, which has not been fully implemented. We take this principle as a conceptual design driver for the project for Ljubljana. Considering City Design to be working only in horizontal plane is not considering the architectural body to be part of it. Therefore the ideological mirroring of City Design into a horizontal one within the body is a must to achieve existence of both. As such, working together and body not to be left over as self referential one.

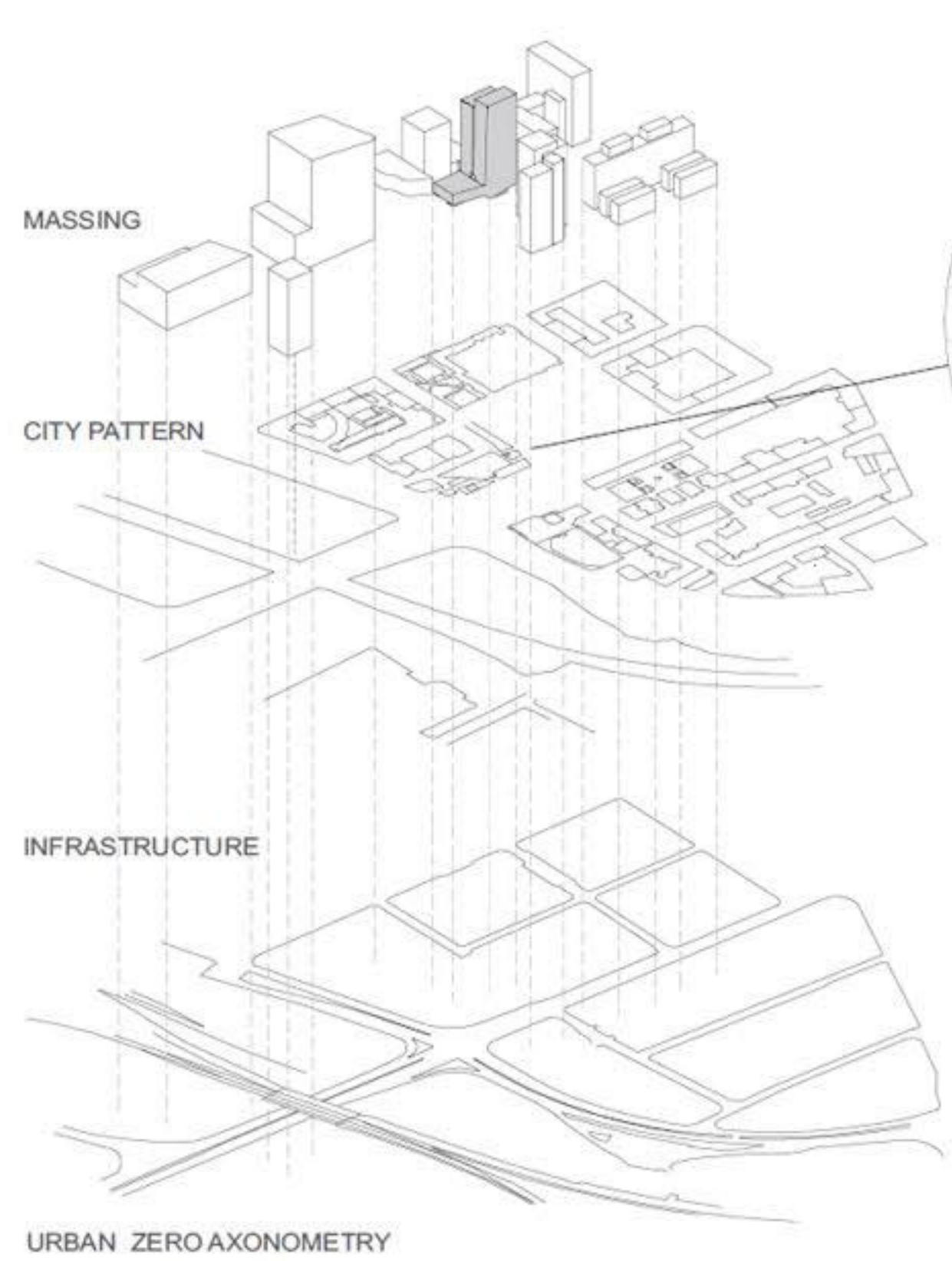
From the Project for Ljubljana it is inevitably necessary to extract the definition of what is essential to express the idea of civitas. Architect working with the architecture to construct the project of the void, intended to be the public space. In fact the in-between space is the place of sharing, the expression of urban cohabitation. Civitas enhances the confrontation between multiplicities as a space of irreducible differences.



DIAGONAL PASSAGE TOWARDS BANK BRANCH



ENTRANCE TO THE SHOPPING MALL THROUGH ESCALATORS



PROGRAMMATIC PLATFORM : BUILDING VS. CITY IN-BETWEEN SPACE FOR REFLECTION



SITE READING: GREEN VOIDS, MASSING, INFRASTRUCTURE

Site Reading

We understand city as a political form. As space of confrontation and action among people, this is celebrating cohabitation and civitas. The struggle between conurbation and open space is evident also in Ljubljana. The site specific geometry of adjacent buildings is revealing its hidden principle of duality. Duality in a sense of forming the composition with interplay of empty and built up spaces. It is also readable in the volumes contrast from elevation views. This duality principle is used to create and design a site specific building. Since the diagonality is also present in the horizontal plane of post office annex building and with urban diagonal appropriation of the city, the translation to vertical plane occurs in the proposed building.

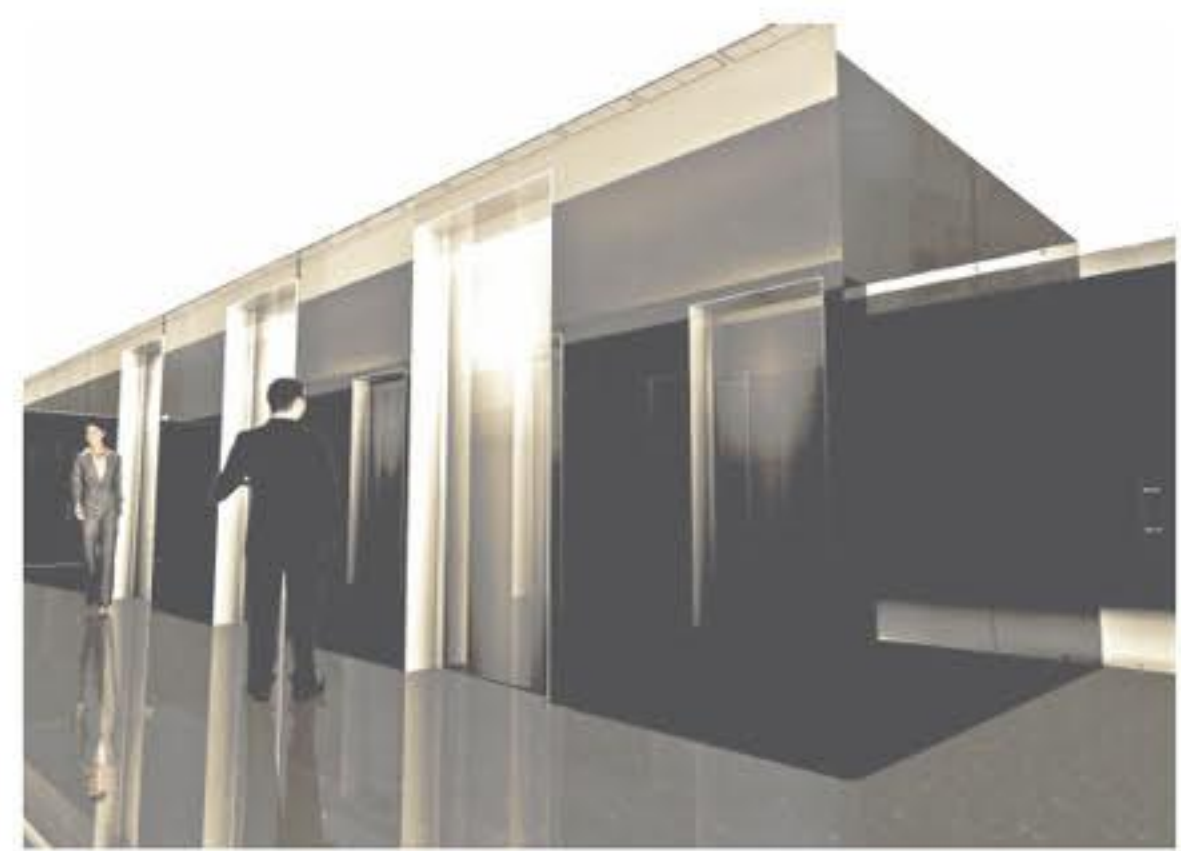
Initial idea was to form a building out of two elements. Out of two volumes: of base and tower. The proportion of them according to the urban regulations is out of scale. With the intent to balance the scale, the unification of the two is implemented. For achieving the aesthetics for the new building the tower splits, so the duality can develop in the formalisation of the towers skin - two volumes meeting at the Plato - idea connected with the surrounded building is so shown in volumetric composition as in the envelope conception - duality at work.

Urban Gardens

In Ljubljana pockets of green spaces are present at every step. With that notion we declare nature as a second design principle for the project. Moreover the idea of civitas is conceptualised with the notion of urban "theatres", captured within the project itself. The garden itself is composed by a Cartesian grid of trees that form the space inside. According to the particularities of adjacent park and landscape behind it, the garden confronts the density of the grid as well as the type of trees - extended, quiet, spacious and widely extended place for reflection.



OFFICE INTERIOR / OPEN TYPE OFFICE



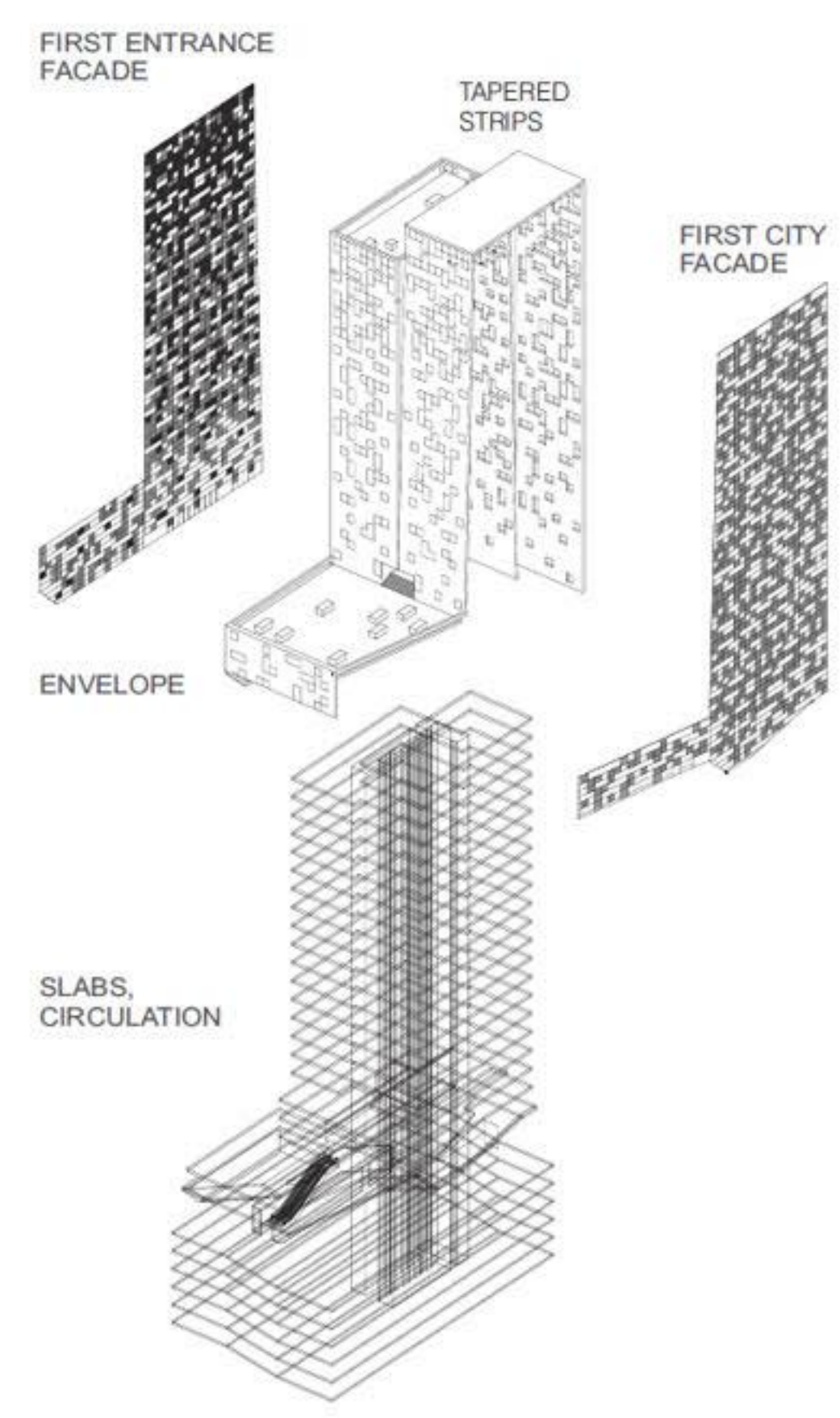
LOBBY - OFFICE ENTRANCE



OFFICE INTERIOR / CONFERENCE ROOM



LOBBY - TOWARDS ELEVATORS



EXPLODED AXONOMETRY / STRUCTURE AND FACADE

Components

The Intelligent container architectural body with relation to others, also within shows its capacities towards city ecologies. Its skin is shaded towards eastern and western side where it is opened towards the exterior. Each window raster has internal chamber for air circulation which is computer controlled. Microclimatic air conditions can be achieved for particular office individually. With this system, building also saves costs for cooling and heating. Such systems are already used on projects in Spain, Germany and elsewhere in Europe. Sun radiation is so controlled, but not the views. Contact with the external environment is presented at

highest level. External shadings are equally mirroring natural light on the ceiling inside producing light, illuminated space till the core. Mobile storage partition walls are also great sound barriers. With its depth and sound insulated compact plates are disabling peak sounds to penetrate neighbouring office units.

Good creative atmosphere is reaching out through entire building. In office space levels in form of quiet working space with the strong notion of the collective, in the plinth and base strata with shifted slabs for possible vertical to diagonal visual connection, thus creating the open monumental experience of the city lobby inside. Shifted slabs are continuation of underground parking arrangement

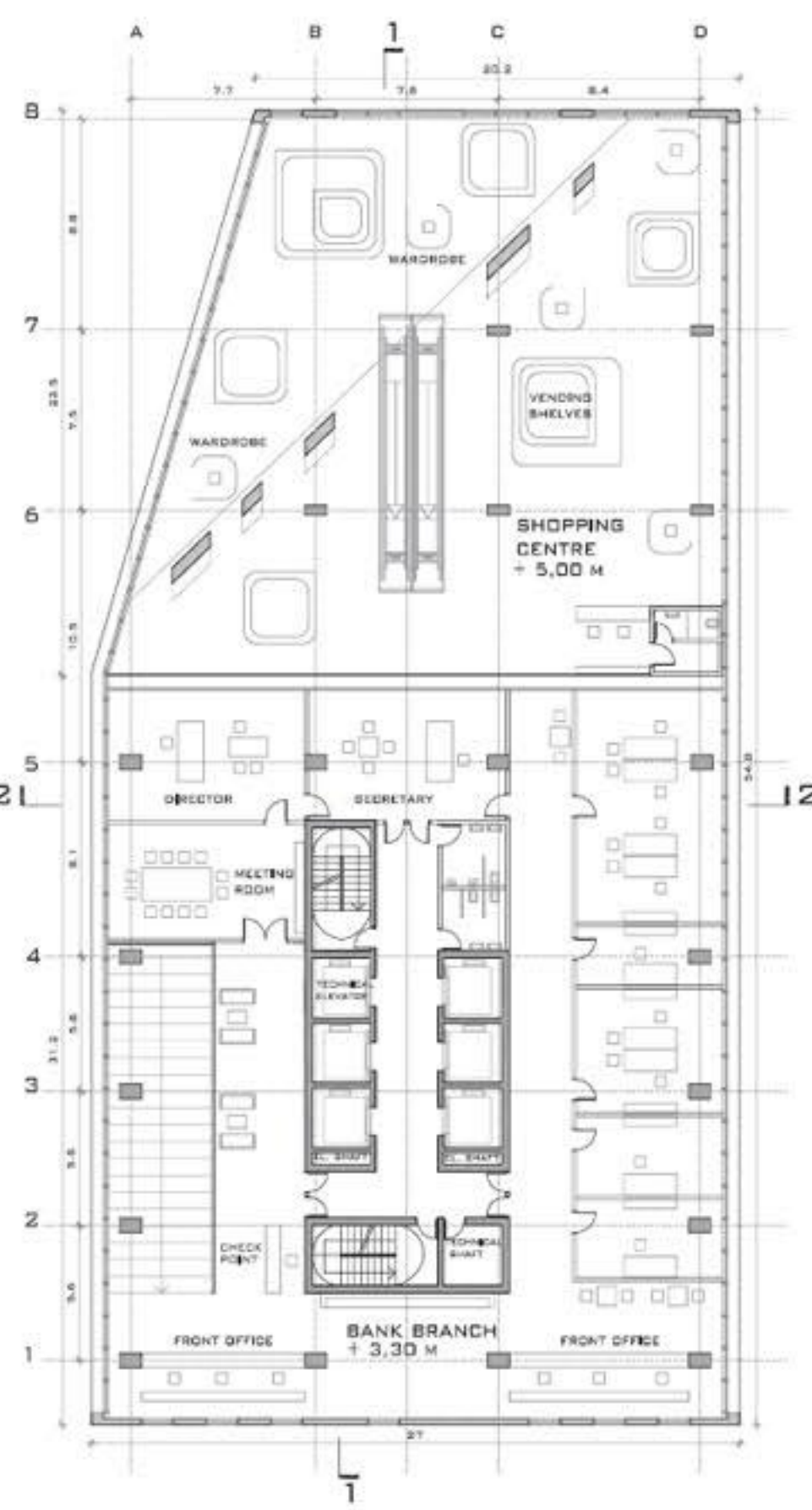
which is with this organisation the most efficient and rational one. The main picture of the proposal is embedded into the city tissue with the plinth, expressed with collective shopping islands. It is able to accommodate mix use of functions necessary for the city. Since the whole plinth is operating independently of the tower, a different time regime of use is possible. With this action the city cultural liveliness is linked with it after the working hours. The city lobby as first picture of the city with plinth sunken plazas and designed gardens has its counter part at the top of the towers. There at the apex the panoramic terrace restaurant is positioned with its sky-bar, inviting you to experience the belonging to the city at highest level.



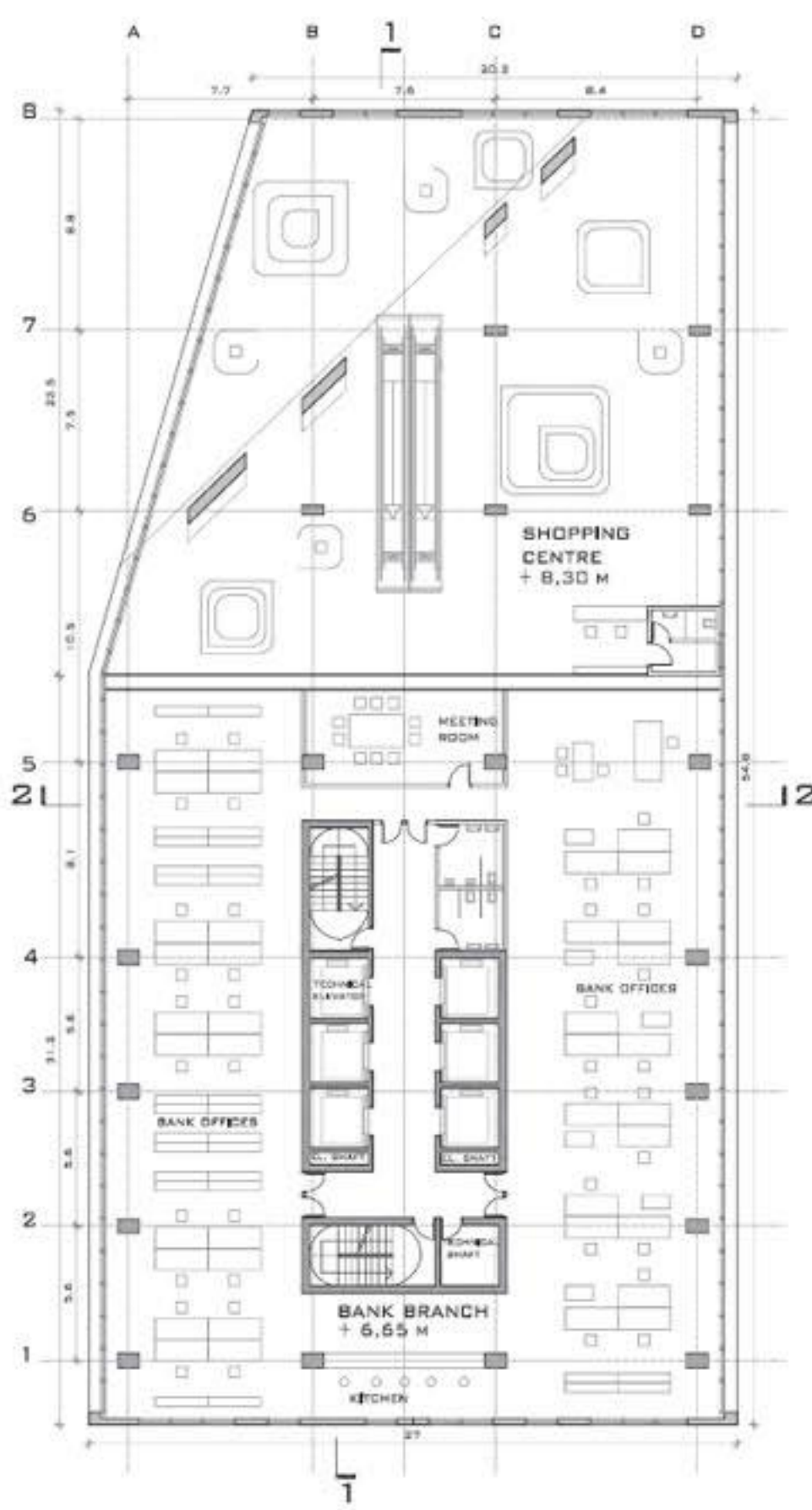
Application

Strategic position of the plot, on one side on the edge of city centre at departure and on the other side on its entrance on arrival to the City Centre, is a prior issue to investigate. Since it is situated next to the crossing with the future new train station, the over flux of people will be inevitable. Therefore the design of ground floor has to follow principles of mobility. Those principles are combined with the urban design principle of duality between open and built up space. In order to instrumentalize the two principles in one plane, a new device has to be implemented. The programmatic surface for plinth development is introduced. Composition of islands in form of sunken plazas and designed gardens are directing people flows through the building enabling livelier atmosphere inside. Bicycles flows are directed around the plot on its perimeter aligned with the crossing. People flows are directly taken under cantilevered part and transported to the bank branch office up with diagonal escalators. Once inside the building the ritual movement up passing through shopping islands and experiencing the ceremonial steps to the first level is completing the idea of in-between space necessary for civitas of the Capital City of Ljubljana. The primal public space street is developed up to the elevated plaza Plato of the base. With this notion the Slovenska street does not merely operate any more in strict horizontal way with no interruptions, but also in diagonal way. A new centrality is grafted into the city in a human scale and thus operating with it as a plastic organism. Therefore it is not only a mere generic technocratic container, but an intelligent one, politically produced.

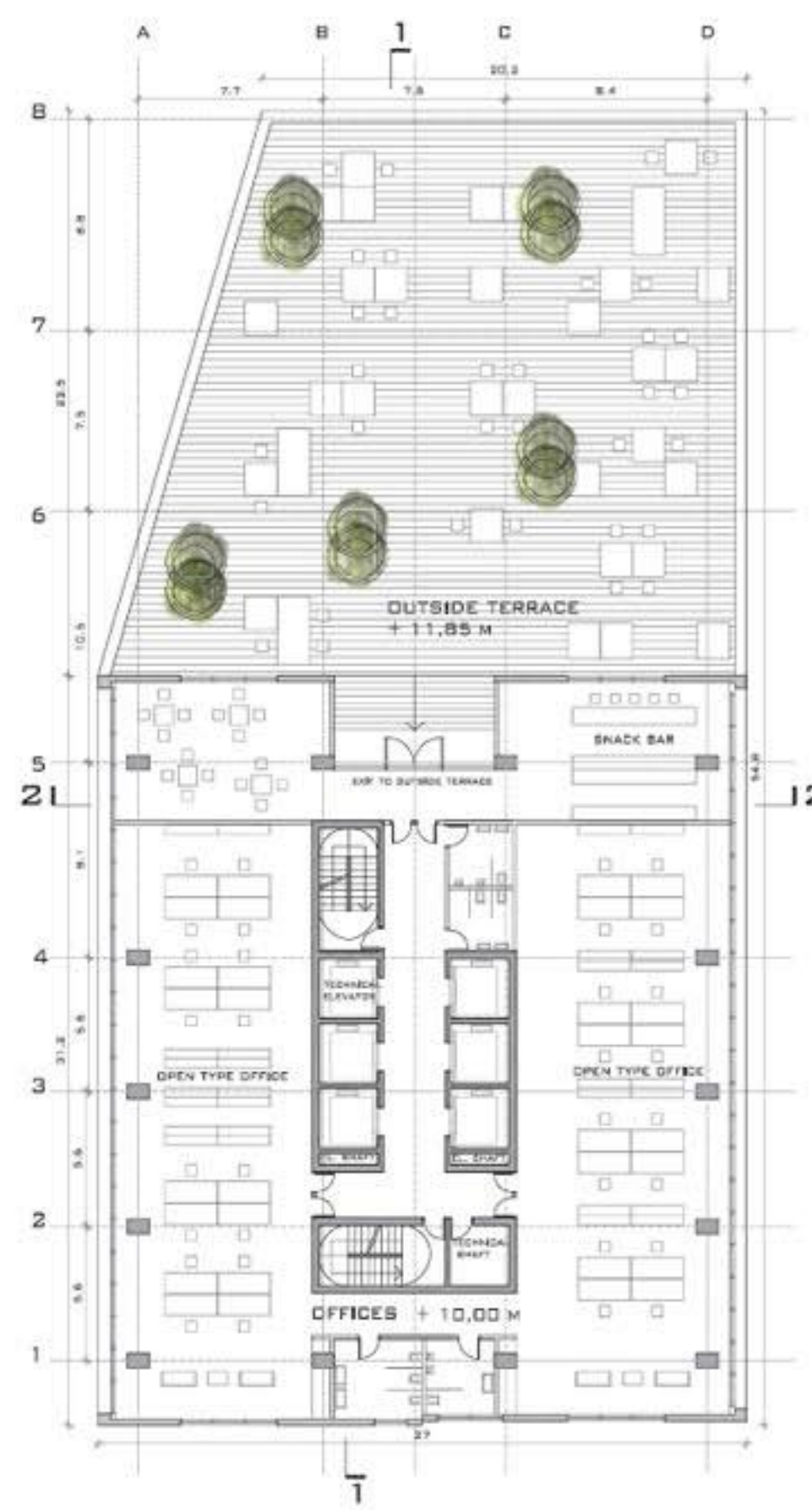
ENTRANCE STOREY / GROUND FLOOR WITH EXTERIOR ARRANGEMENT, 1:200



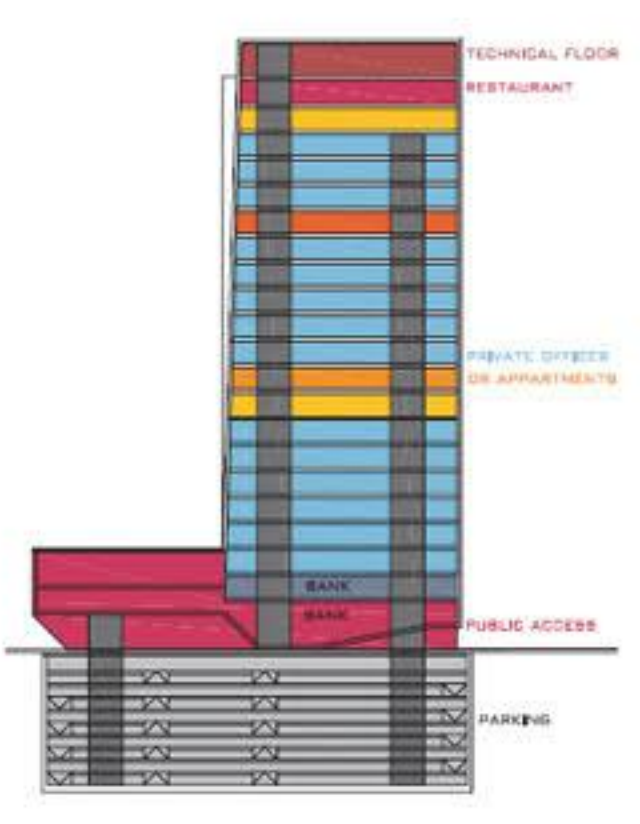
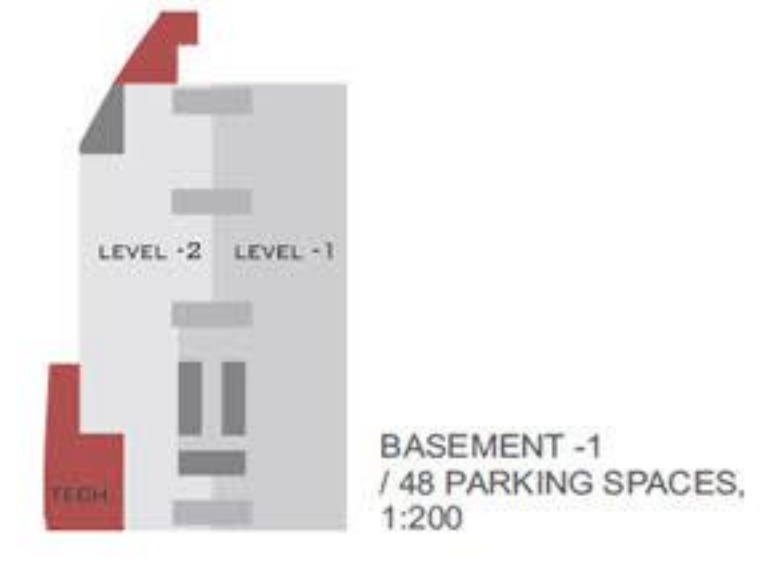
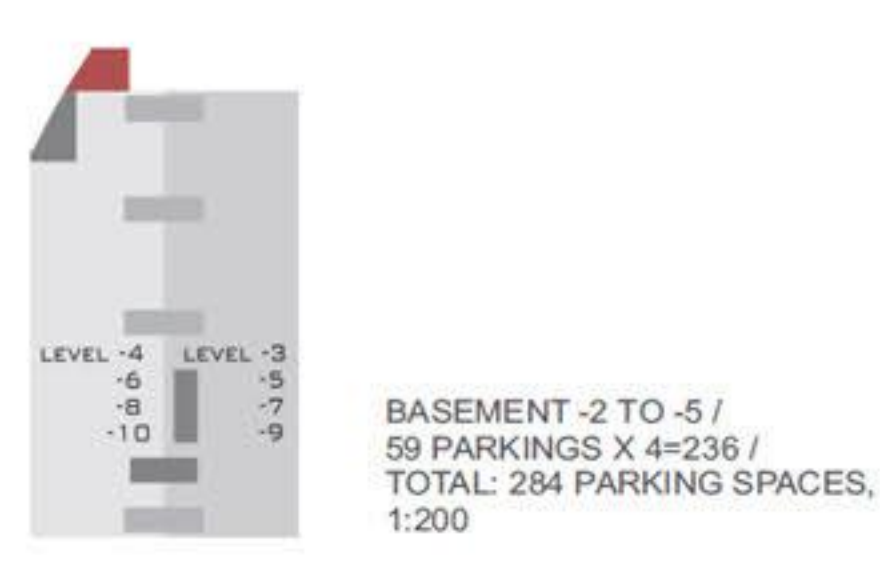
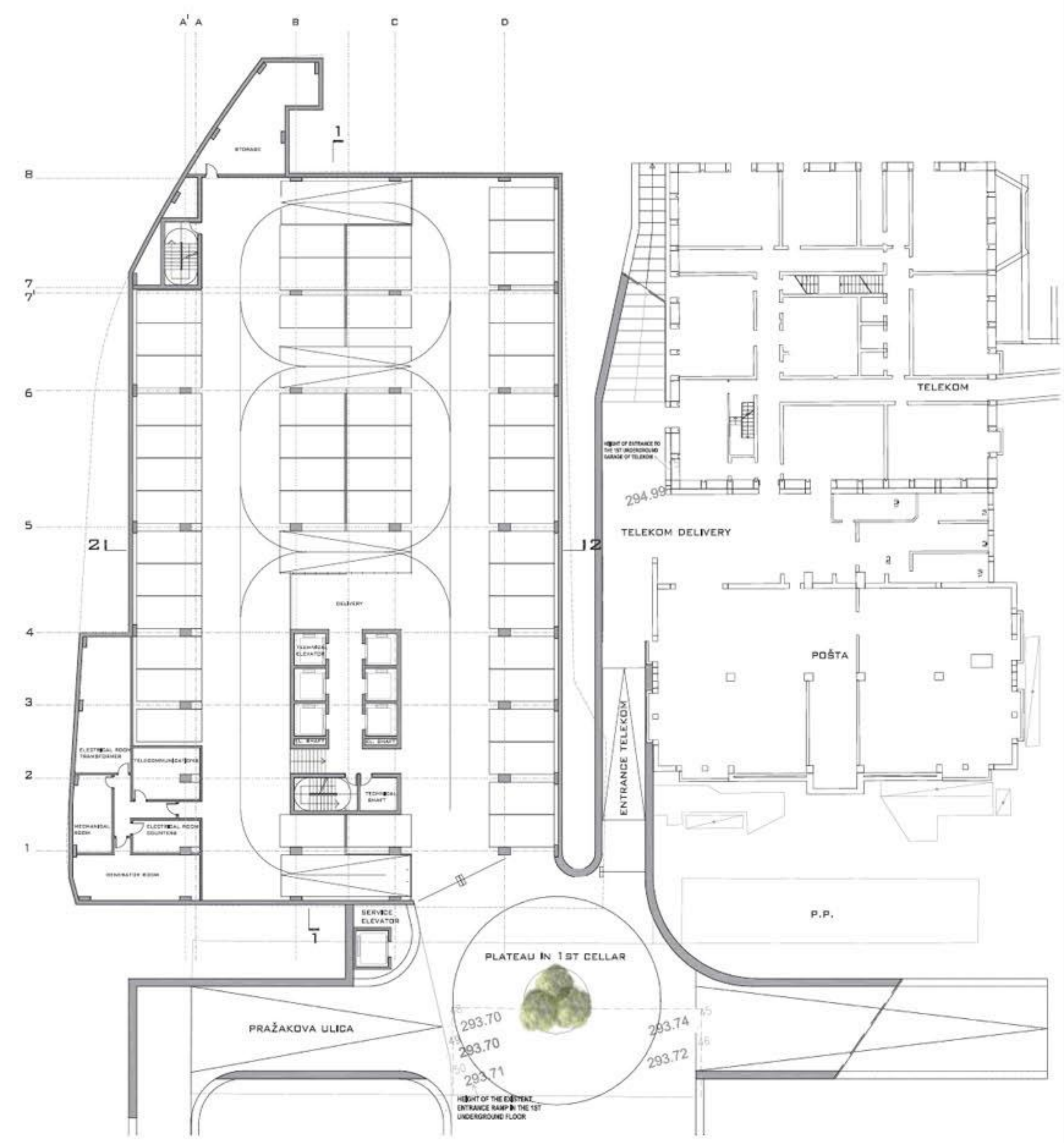
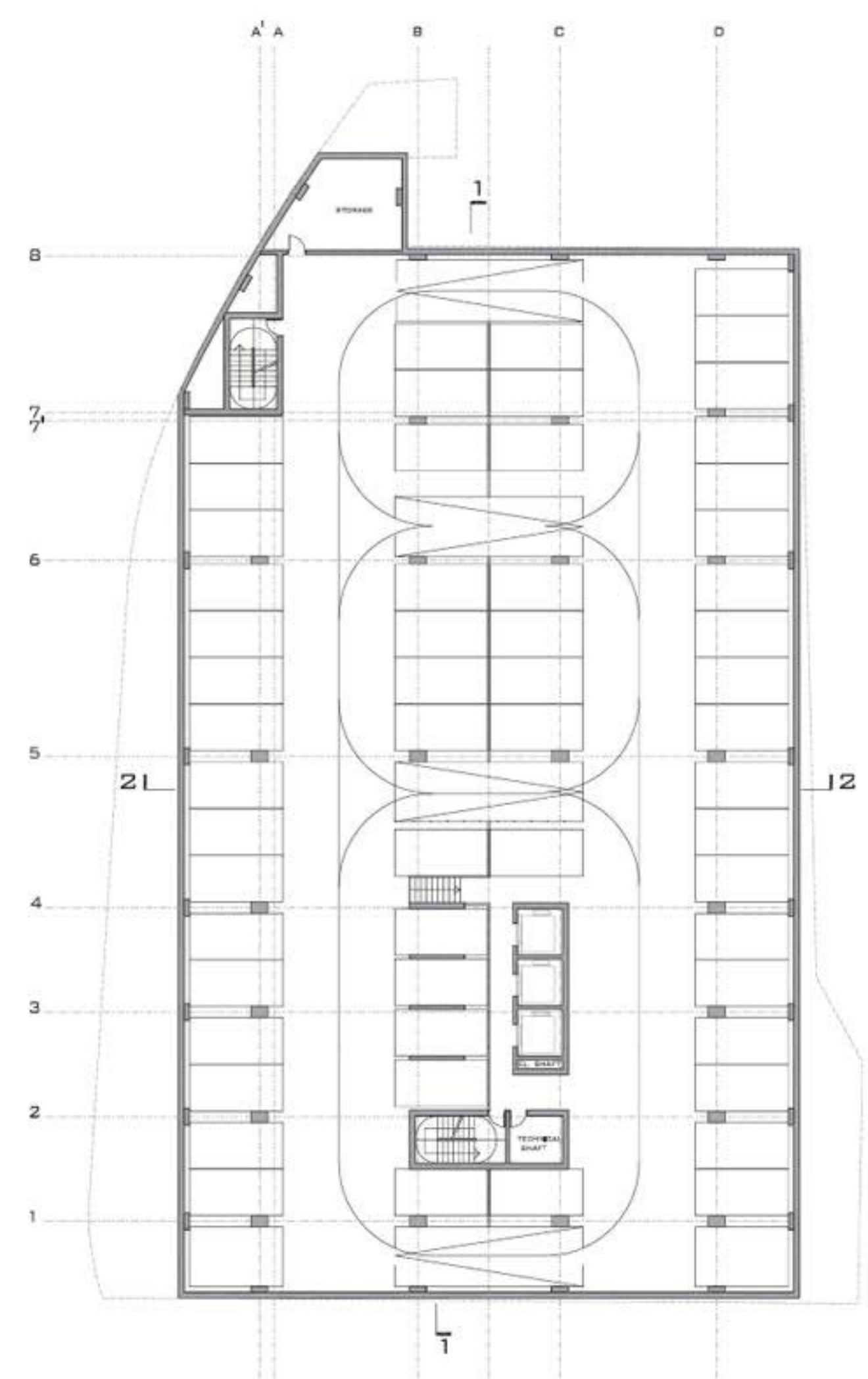
1ST FLOOR / BANK BRANCH, SHOPPING CENTRE, 1:200



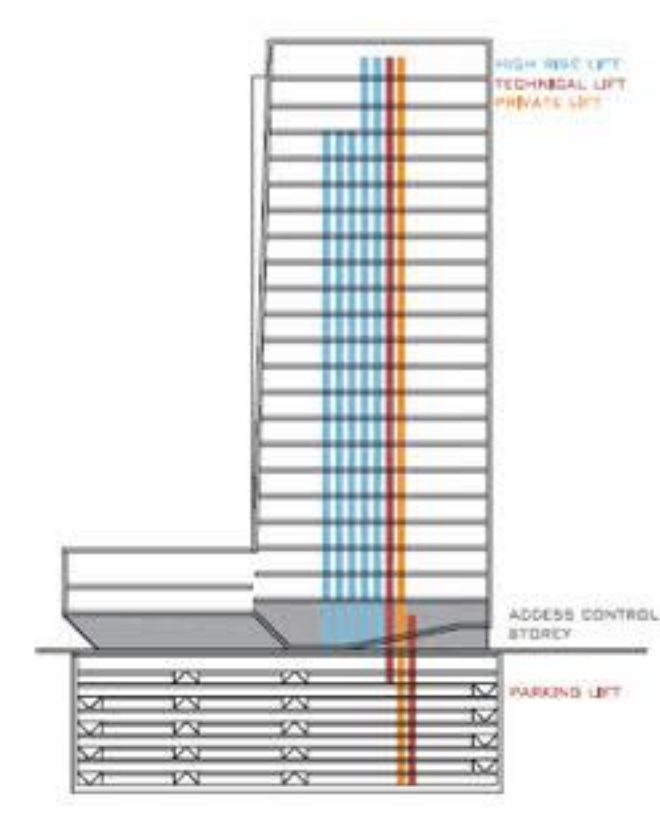
2ND FLOOR / BANK BRANCH, SHOPPING CENTRE, 1:200



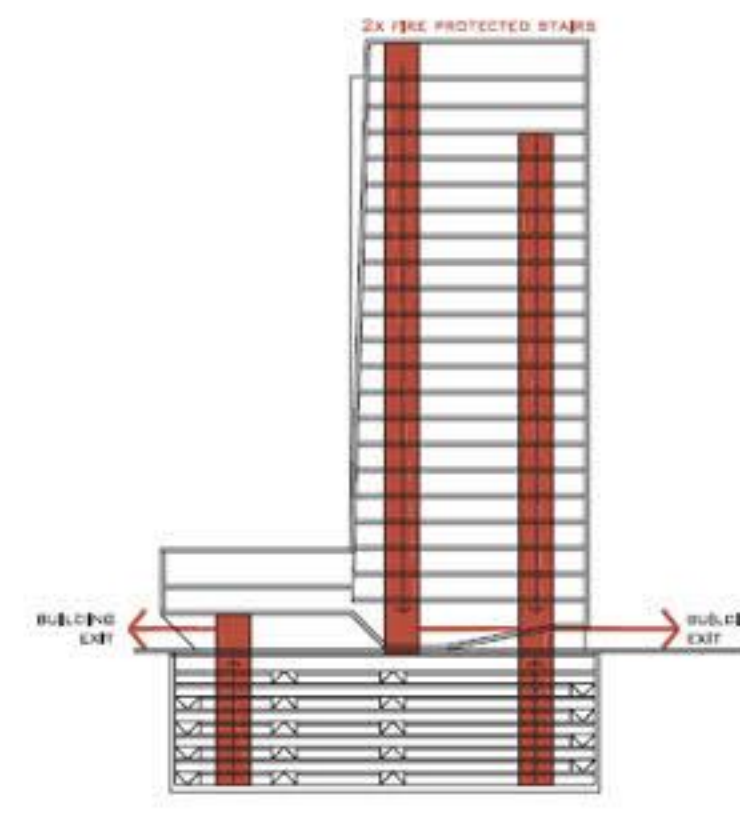
4TH FLOOR / OFFICES, TERRACE, 1:200



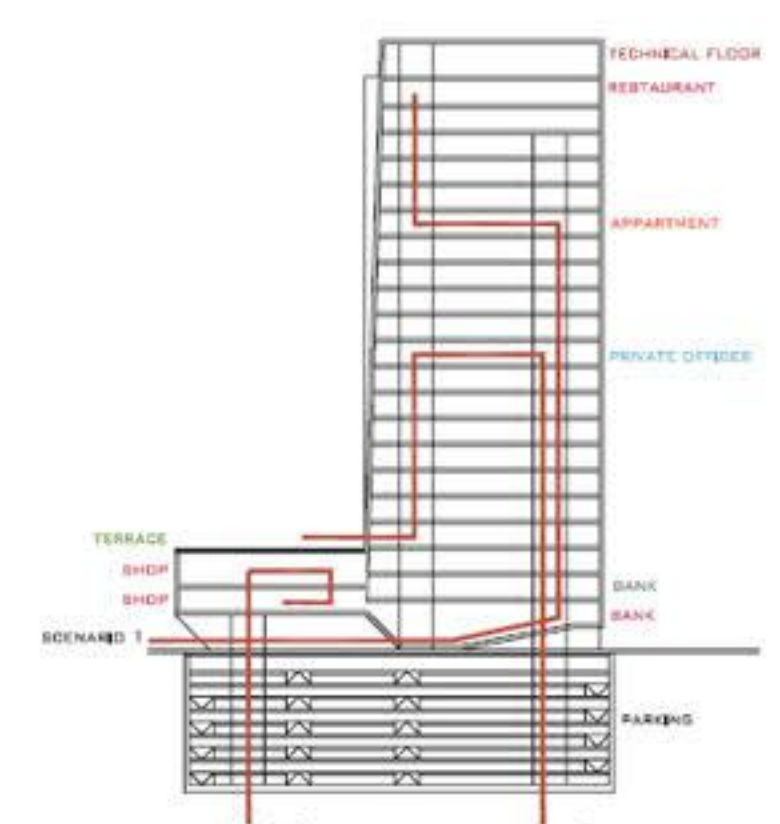
PROGRAMME SCHEME



ELEVATORS SCHEME



FIRE STAIRCASES SCHEME



USER SCENARIOS

- SCENARIO 1:**
 - WALKING HOME
 - STOPPING IN THE BANK
 - GOING TO THE APPARTMENT
 - EATING IN THE RESTAURANT
- SCENARIO 2:**
 - PARKING IN THE GARAGE
 - SHOPPING
- SCENARIO 3:**
 - PARKING IN THE GARAGE
 - GOING TO THE OFFICE
 - HAVING SNACK IN THE TERRACE

Accessibility

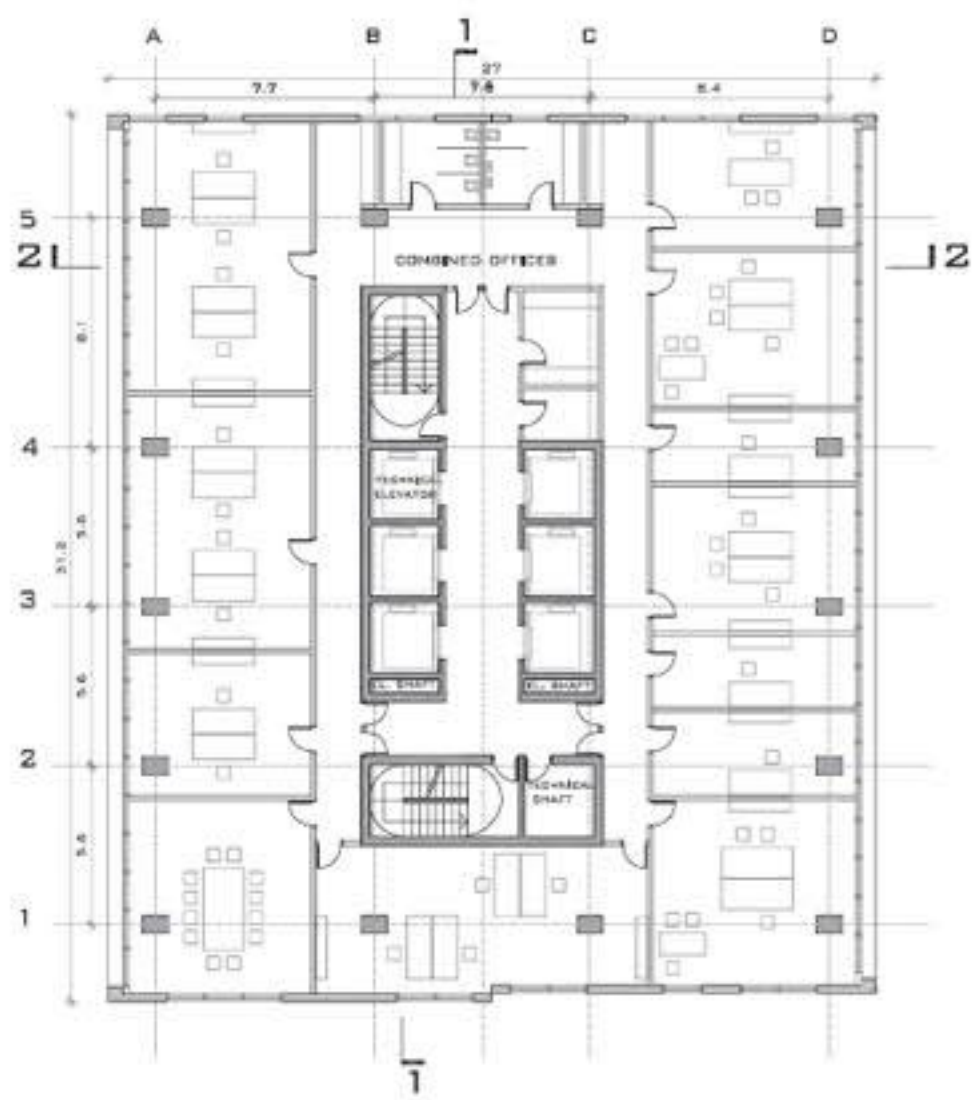
Due to various future user flows, fast and slow and from dynamic condition at crossing to static conditions on eastern plot side, more precise and very particular way of connecting underground levels with plinth and base level is needed. Cars are completely taken away from the street level by the means of existing re-designed ramp. The allocated roundabout at the conjecture underground point, smoothly directs traffic to the first private and delivery cellar, to adjacent Telekom delivery corridor and to first and second cellar of Elektro Slovenia and A-Bank building accommodating 284 parking places. With this action the main façade is not limited only to westerns side but it is also activating the space of Prazakova Street. Therefore it is highly inappropriate to sacrifice the in-between space on eastern side facing Telekom Building for a mere infrastructural access point. We urge to reconsider this space as quality one and to be occupied with people working in Telekom building. Instead of the entrance ramp, we create designed Garden for making the in-between space of confrontation, reflection and cohabitation among citizens working together.

Elevators

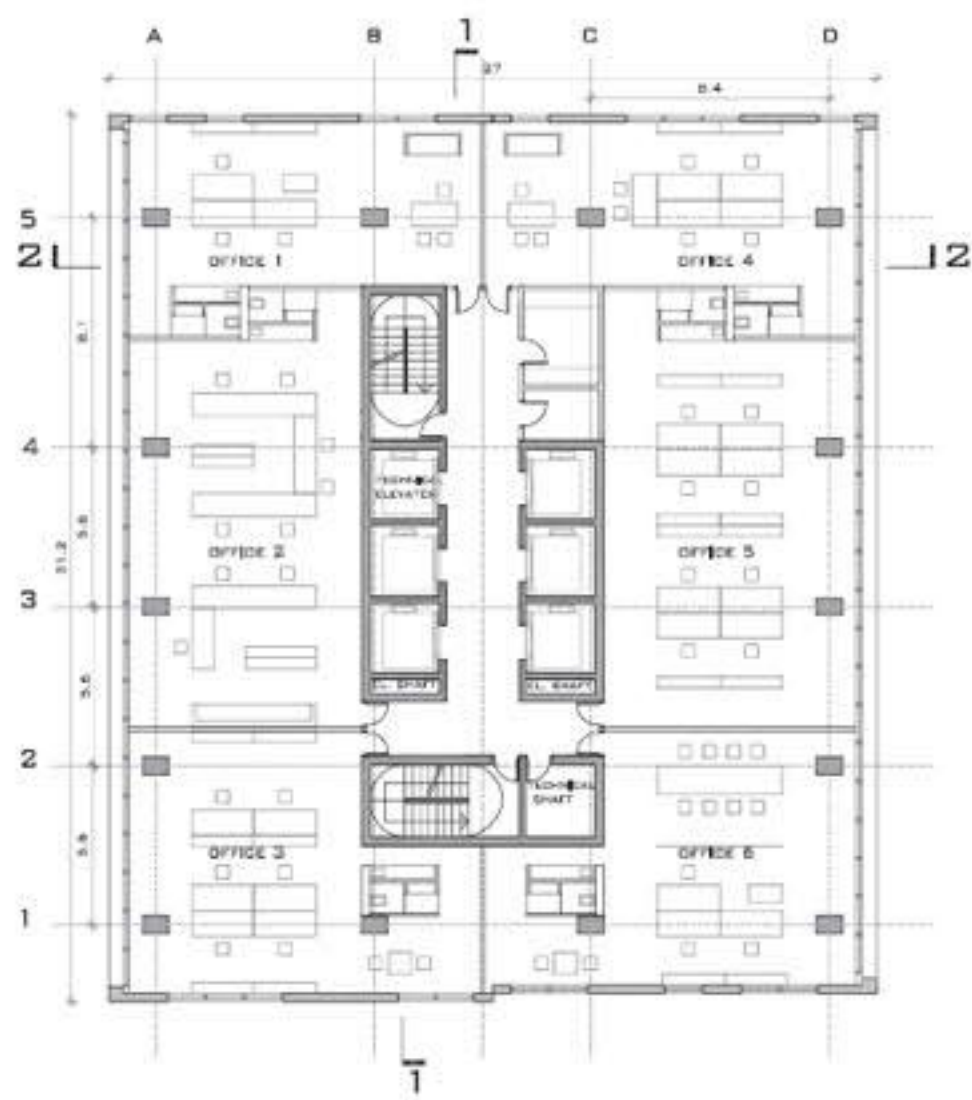
Due to safety reasons the arrangement of the elevators to basement storeys is limited to one elevator. This elevator is considered to be used for the people that will work or live there, having the control through an electromagnetic card system. Visitors will use the other two elevators, located in the basement, which will take them to the ground floor, where the control and surveillance system will be located.

Surveillance

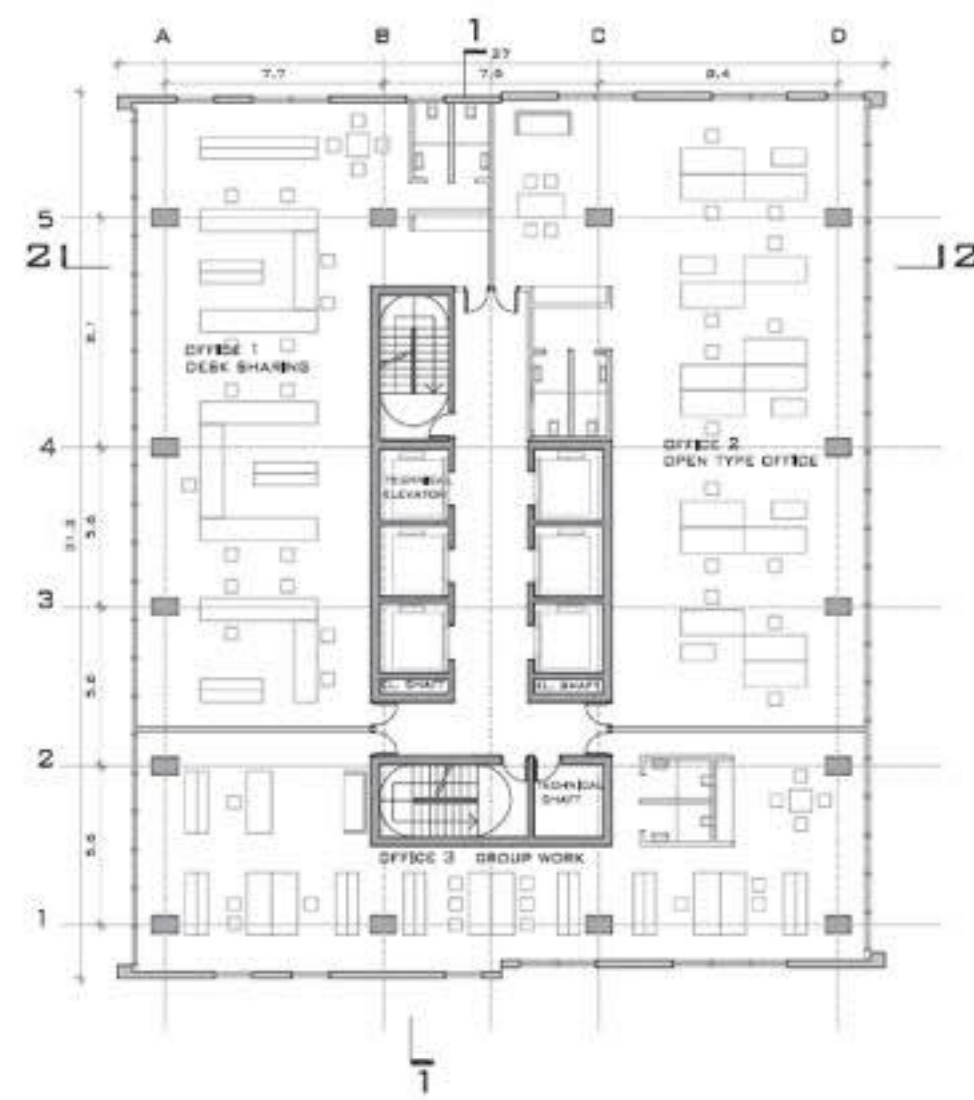
There will be a control system to access to the offices, at the floor where the high rise starts with the private area, and the base ends with the public area. This control point shall have tv screens connected to the external surveillance, it shall have security screening consisted of metal detectors and bag scanners to control visitors as well as deliveries for offices.



TYPICAL OFFICE FLOOR / COMBINED OFFICES, 1:200



TYPICAL OFFICE FLOOR / PRIVATE OFFICES WITH PRIVATE ENTRANCE AND MAXIMUM DIVISION, PRIVATE COMPACT BOX, 1:200

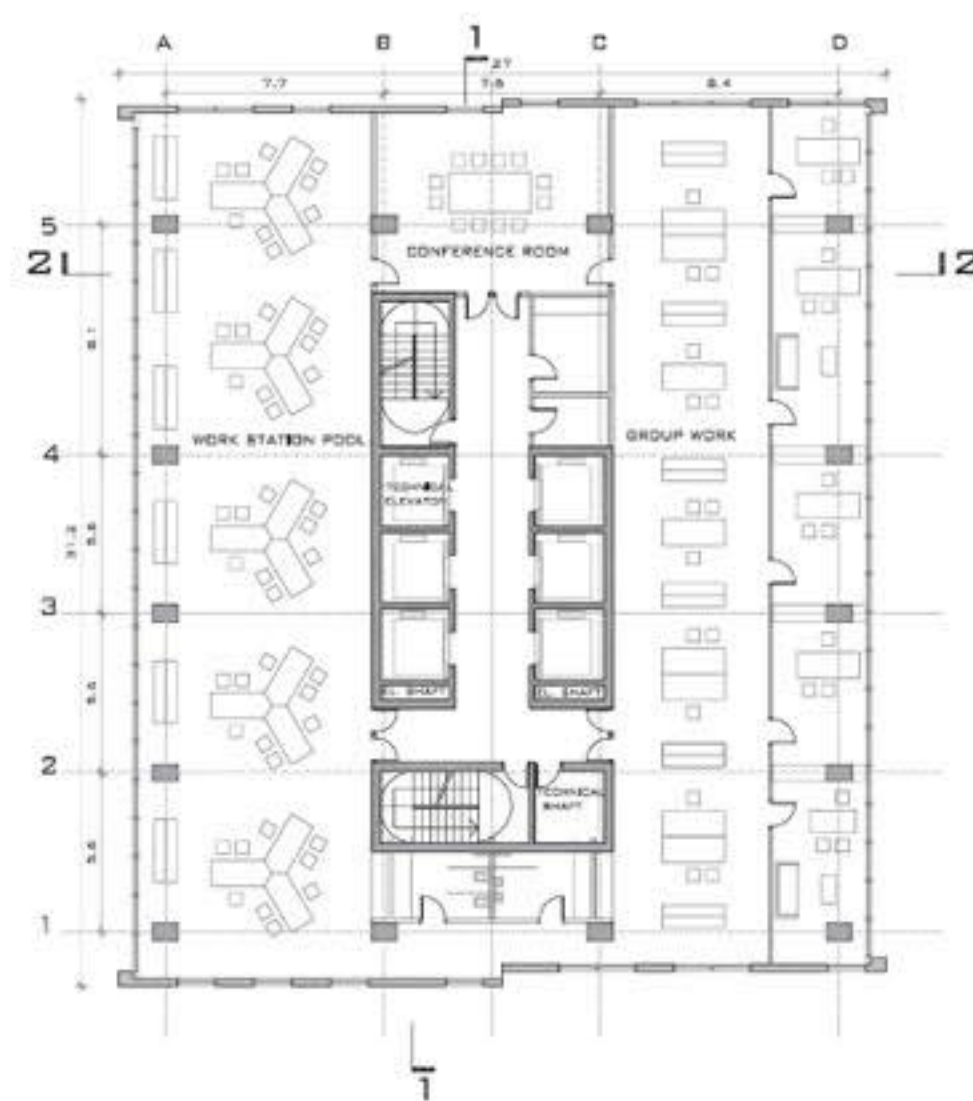


TYPICAL OFFICE FLOOR / PRIVATE OFFICES WITH TWO PRIVATE ENTRANCES, PRIVATE COMPACT BOX, 1:200

Office types

Since the Age of technological society is coming to an end, the raise of informational society is taking over. What this means? This means people are not working, living and mainly have higher education as generations before. Therefore working place has to change in order to achieve more creative environment. In this sense, proposed floor plan composition is following the already establish one of duality. Now the workplaces are not set in repetitive rows with no differences, though remaining the rational space use. It is not only technical. It is not planned, it is designed. The four by four composition of working places is composed with the additional element for storage. By rotating the added part, sequence is changing according to the specific need of the current user. Learning from building blocs of

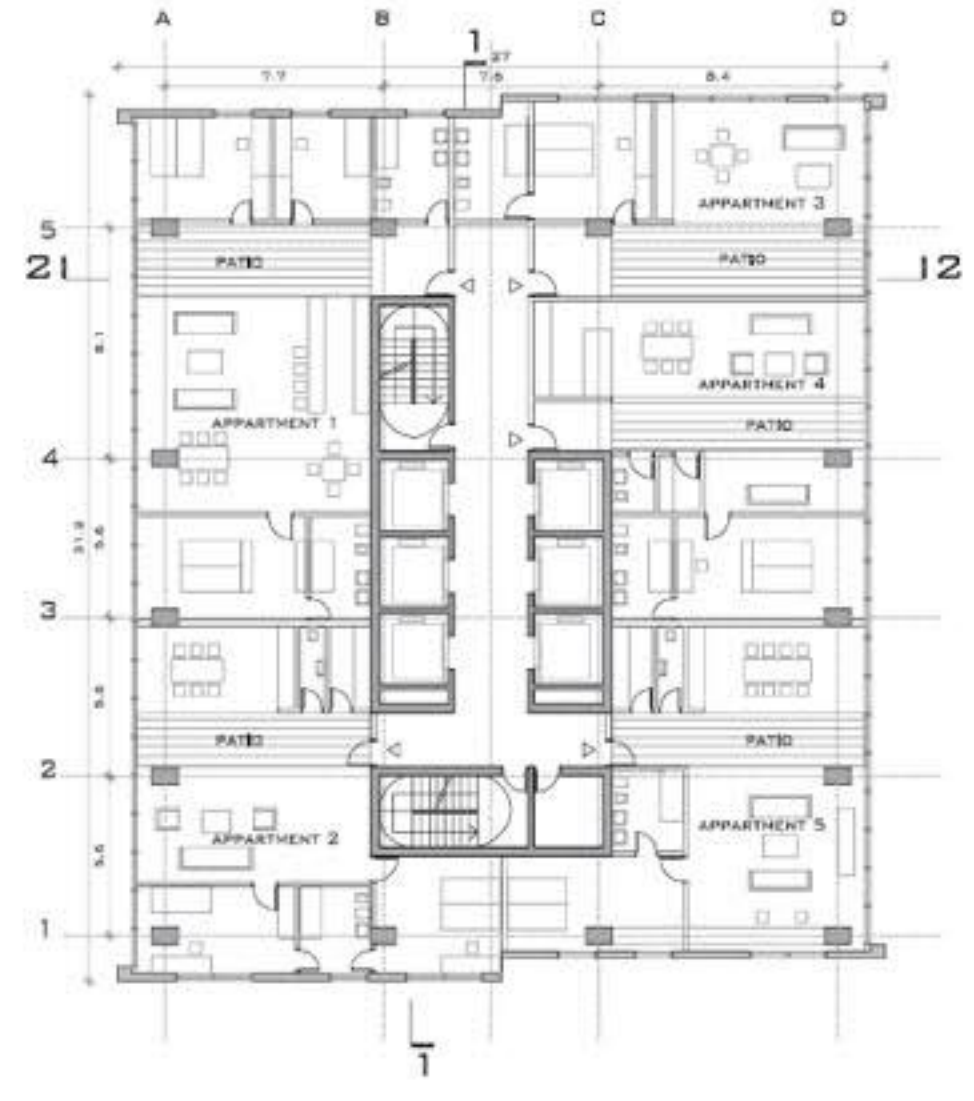
modernism, where repetition and segregation of programme occurred due to serial mode of production, now proposed working place units are set to welcome the multitude - Modern society of multiplicity. For almost unpredictable future users and their spatial needs, the constructional system can be very easily adopted. Core with integrated staircases operates as a distributor of people to the offices. It is a main collective space as such. Floor plans with smaller office units have additional corridor for circulation. With mobile partition storage walls the reversibility of office design is possible. Partition storage walls as a main office space design principle is not only liberating office space from closets with stacked file piles, but it is creating the free office plan, able to accommodate concluded office spaces, closed offices and of course open ones with desk sharing, too.



TYPICAL OFFICE FLOOR / SHARED OFFICES, 1:200



TERRACE APARTMENTS, 1:200

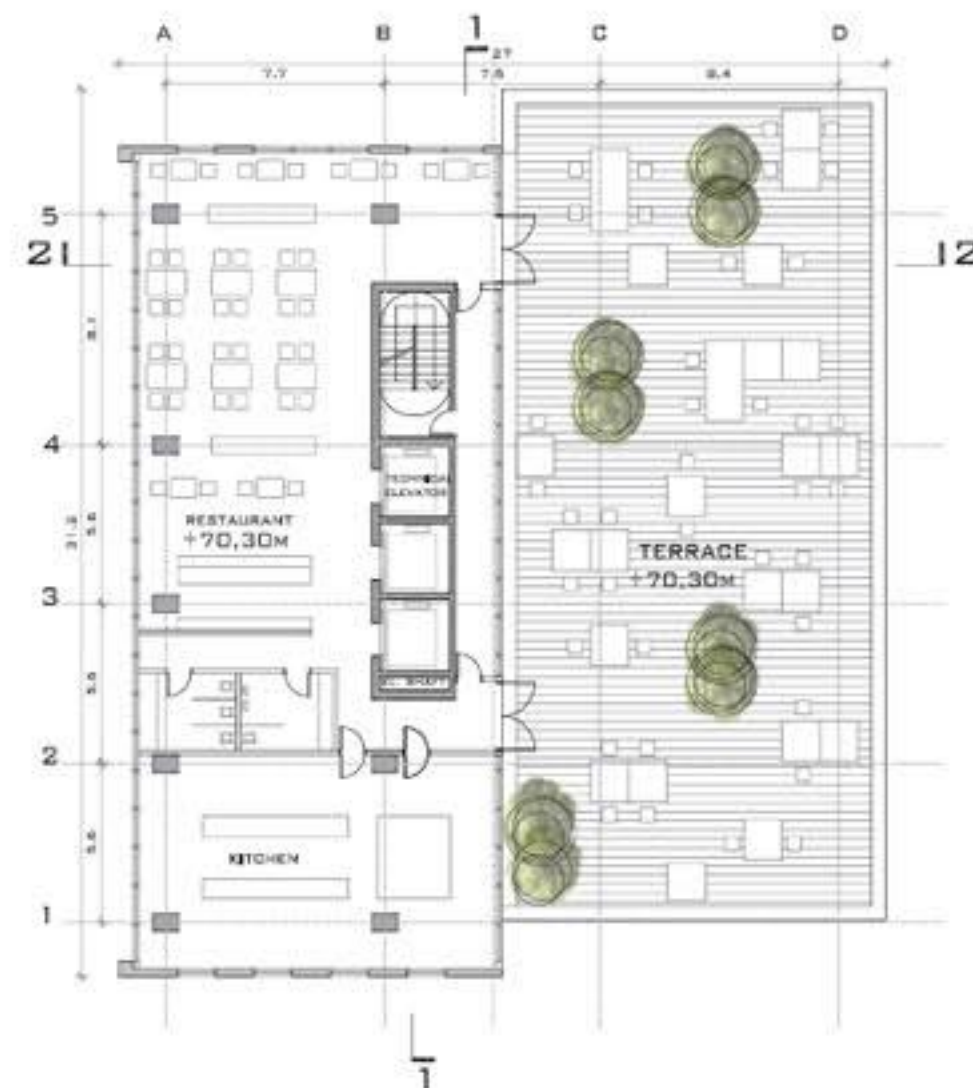


PATIO APARTMENTS, 1:200

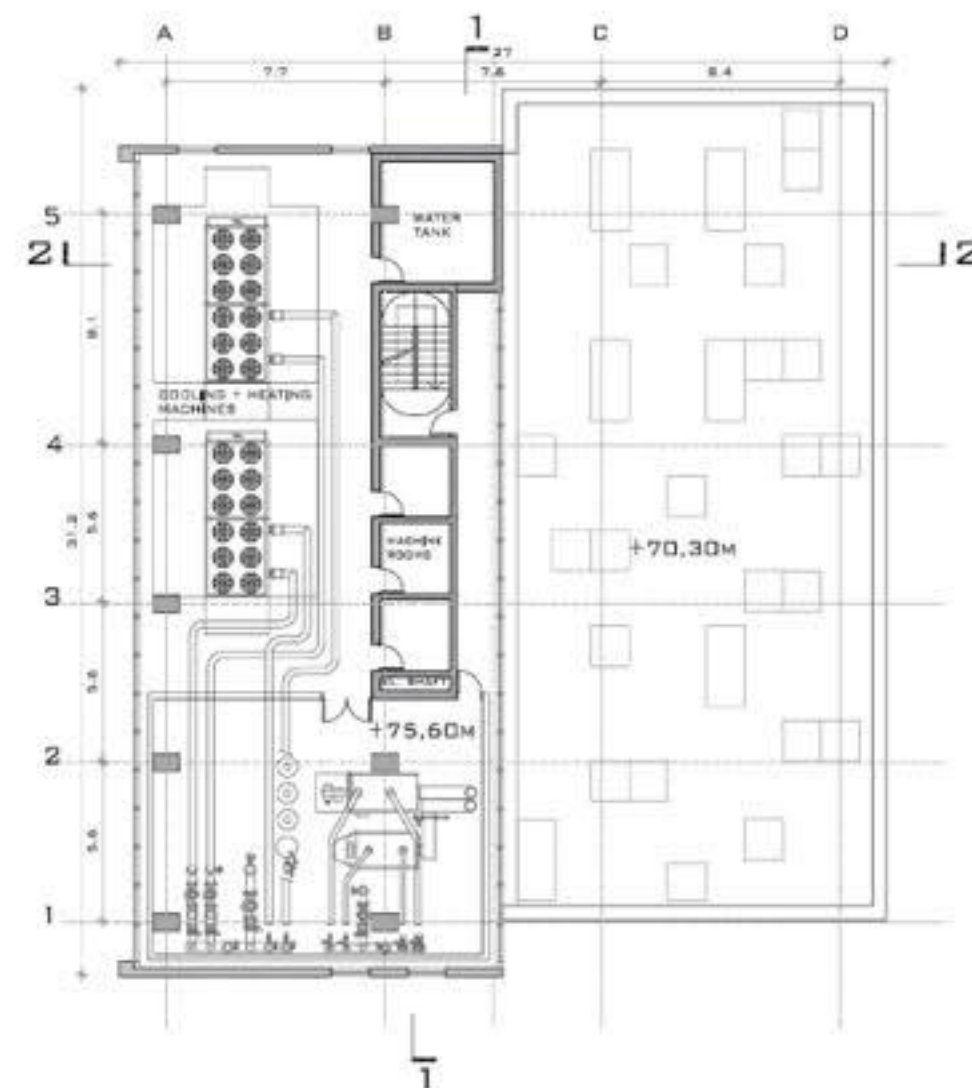
Residential units

Since future client is not known the façade with its full and empty formalisation is able to respond to multiple future usage scenarios. Even the accommodation of residential floor organisation is

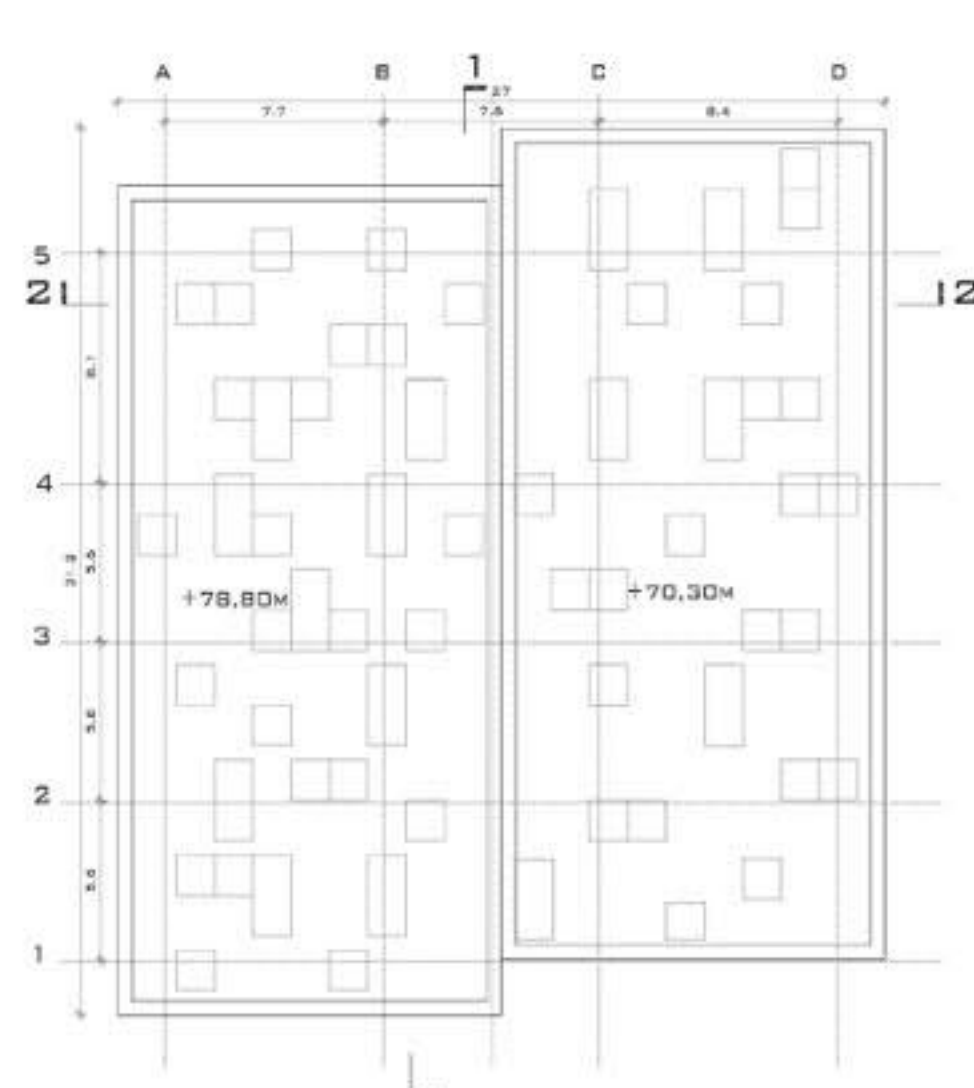
possible. Full façade with its openings has capacity of accommodating apartments entered via patios. Apartments are separated by patios, thus enabling the social interaction among future residents. It can be composed in various ways since lavatory mobile compact boxes are envisaged around the core. This is doable with the steel load-barring floor construction.



TERRACE RESTAURANT WITH SKY BAR, 1:200



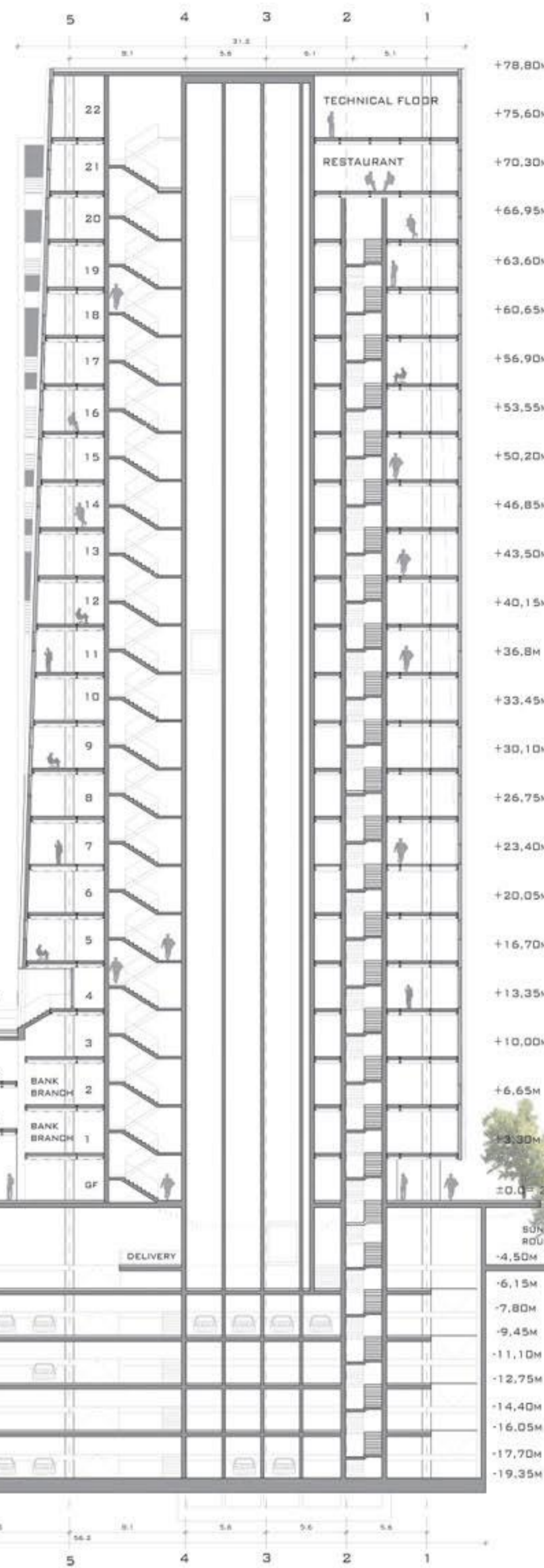
TECHNICAL FLOOR, 1:200



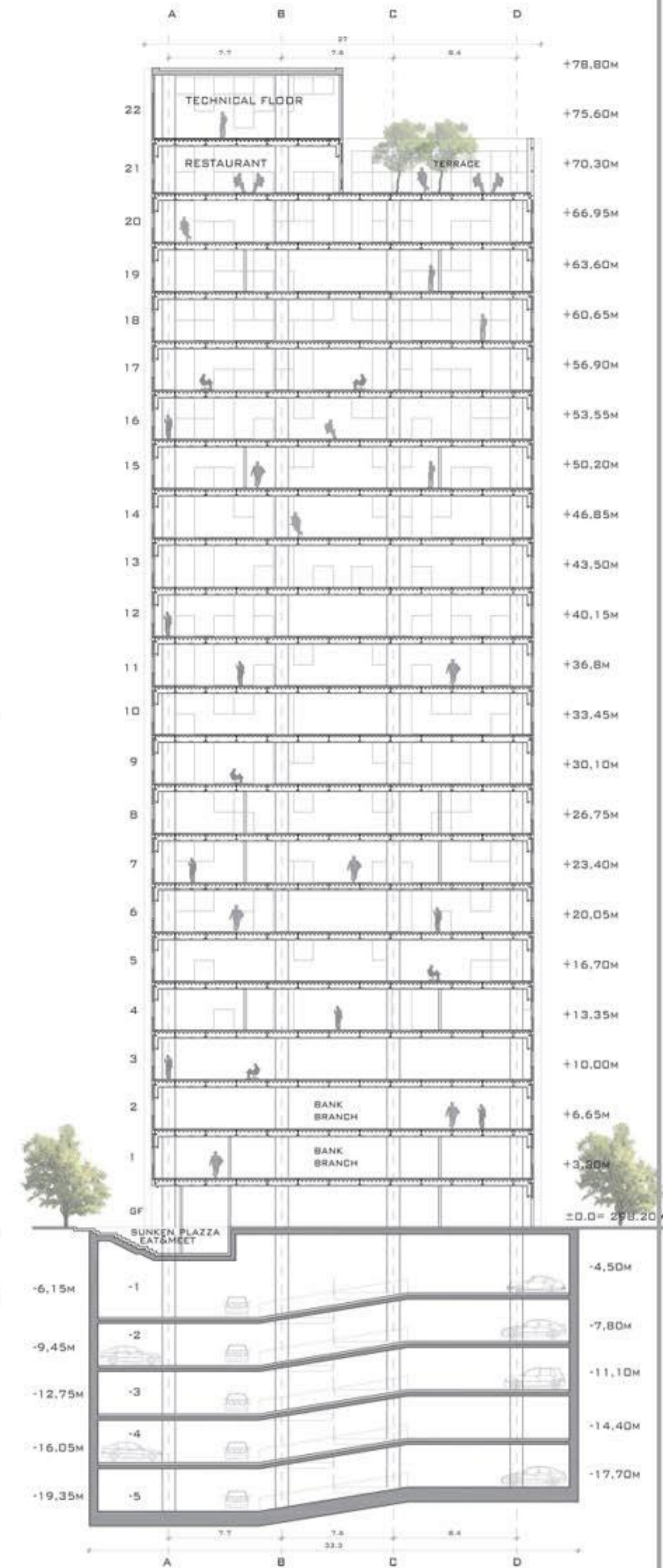
ROOF FLOOR, 1:200

Construction concept

Structure by its definition is segregating people in vertically stacked levels. We are using structure to embrace people to feel collective experience. Dual envelope coming down from tower volume is guiding people inside the city lobby and towards the Plato. Capital City of Ljubljana now has the main passage colonnade. Introducing one of the urban simple forms, which celebrate the civitas. This public space is by means of shifted slabs gently transformed into semi-public space of the bank branch office reachable also with escalators to the private space of Apartments Villas and offices. Access restriction is set with programmable elevators. All city lobby entrances to the towers are controlled by centrally positioned reception office.



LONGITUDINAL SECTION 1-1, 1:200

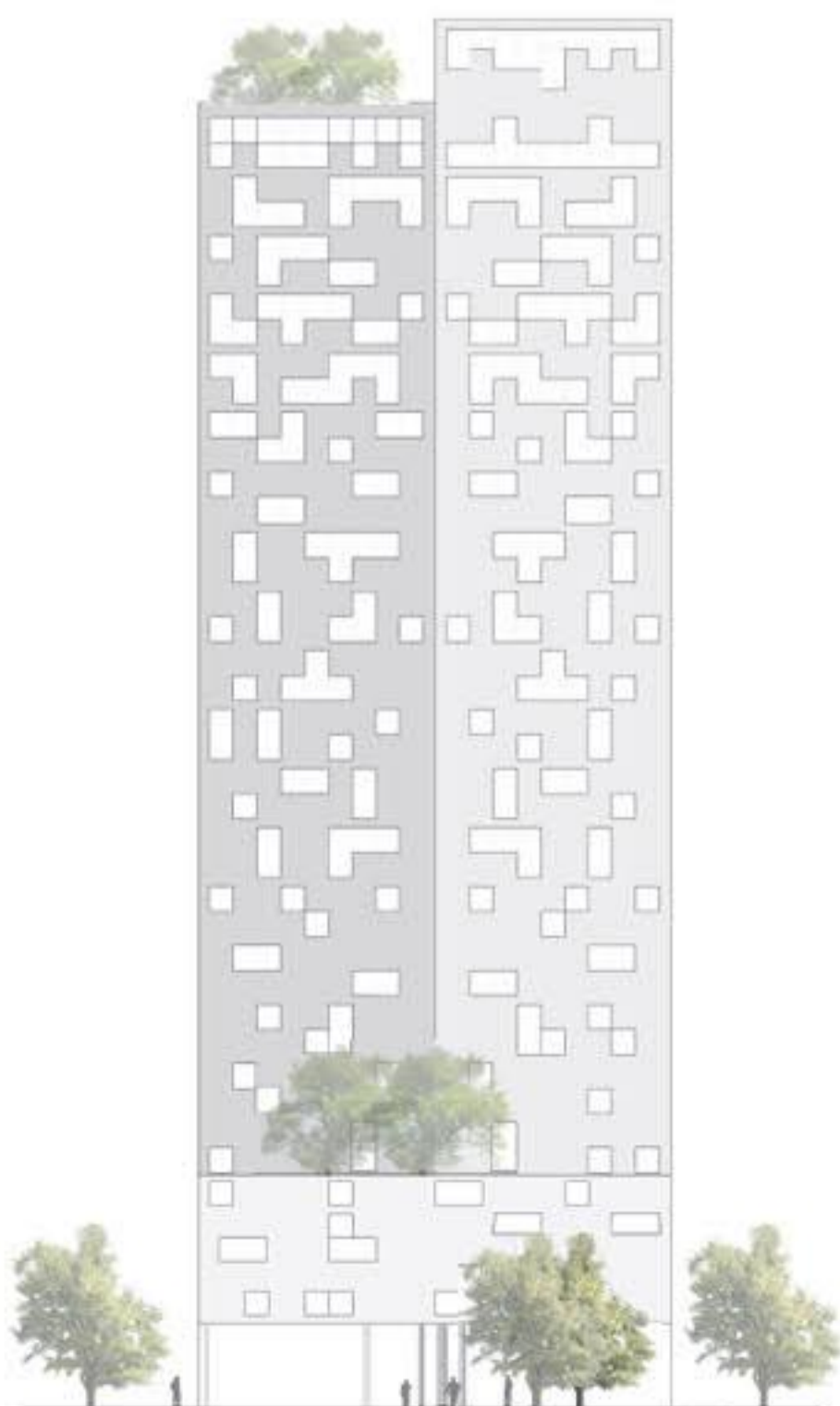


CROSS SECTION 2-2, 1:200

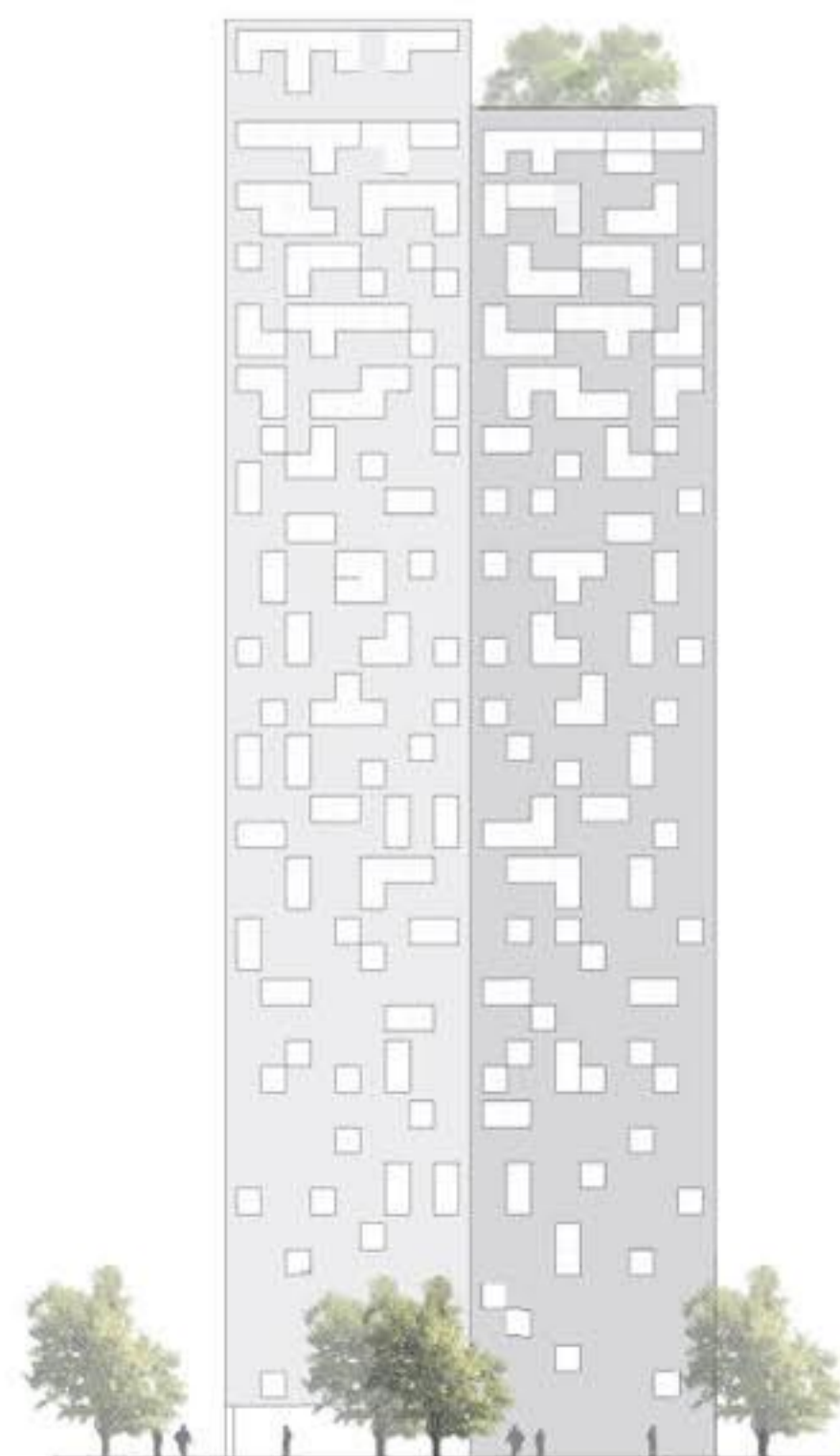
Façade

In interior design the duality concept is also evident. Not only that we utilize constitutive principles on different scales of the project, we understand façade to be the main office and space atmosphere provider. Therefore the image of the outer façade is mainly caused because of the multiple purpose of it. It is multifunctional device reacting on city ecologies on outside and enabling the storage space for offices where needed.

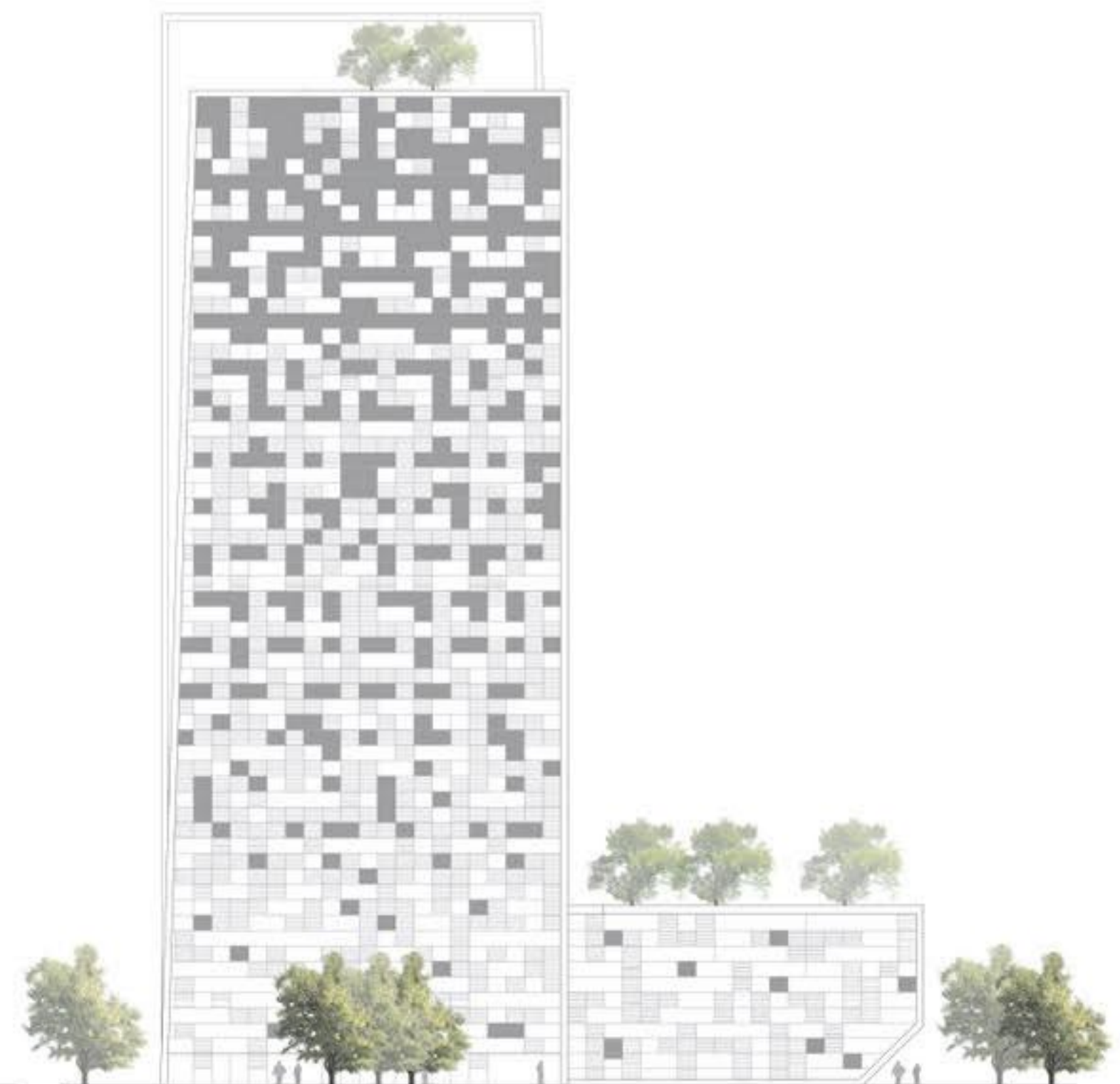
Façade Materials will be done with a very simple technical solution that will respond to the environmental requirements, in order to reduce energy consumption. The façade is adapted to the orientation, the western façade will be integrated principally by two materials, steel and glass, whereas windows will have inside shade solution to respond to the western sun. Other more opaque quadrants on the façade will have compact sandwich structure of fibreglass micro-reinforced concrete and printed glass with a white dot pattern.



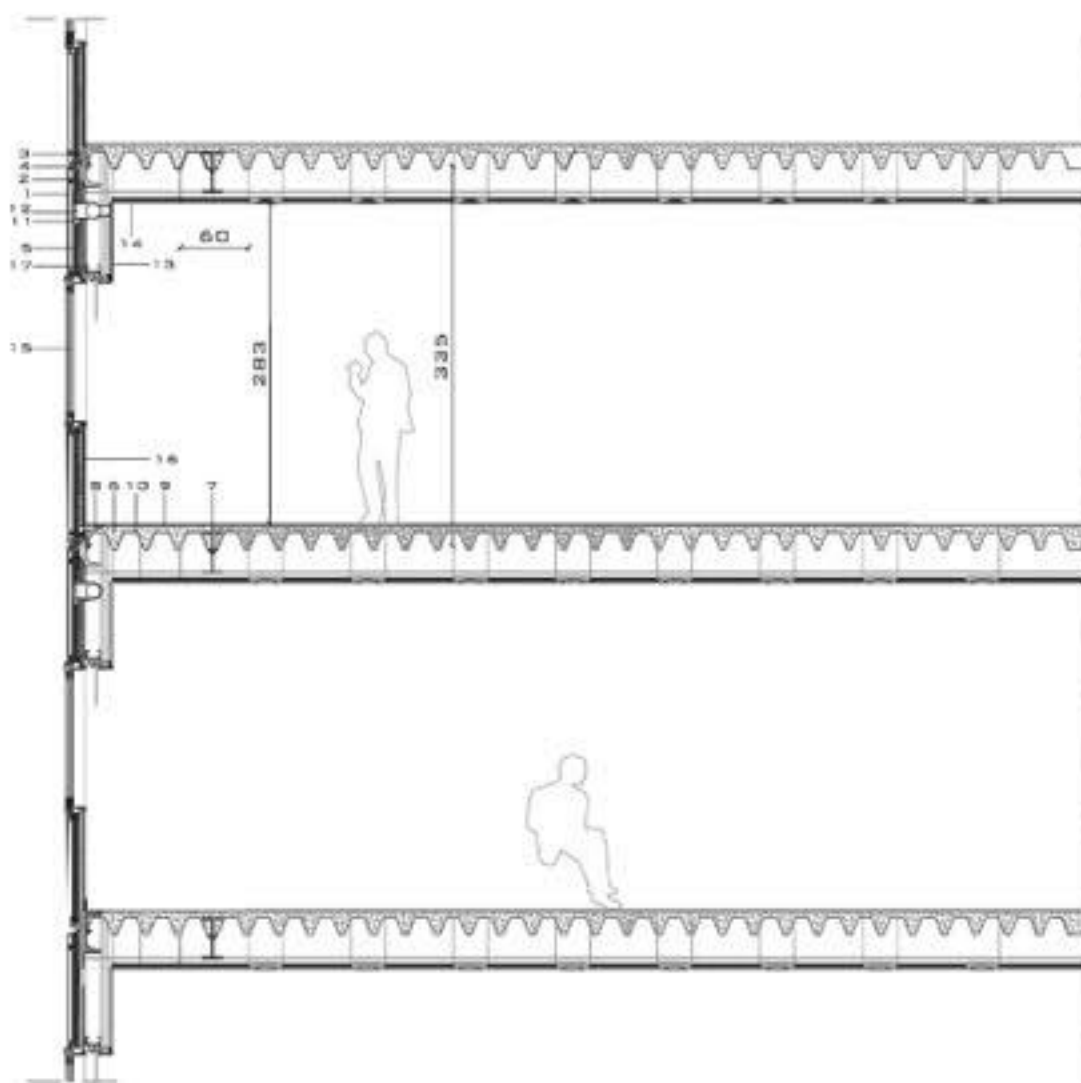
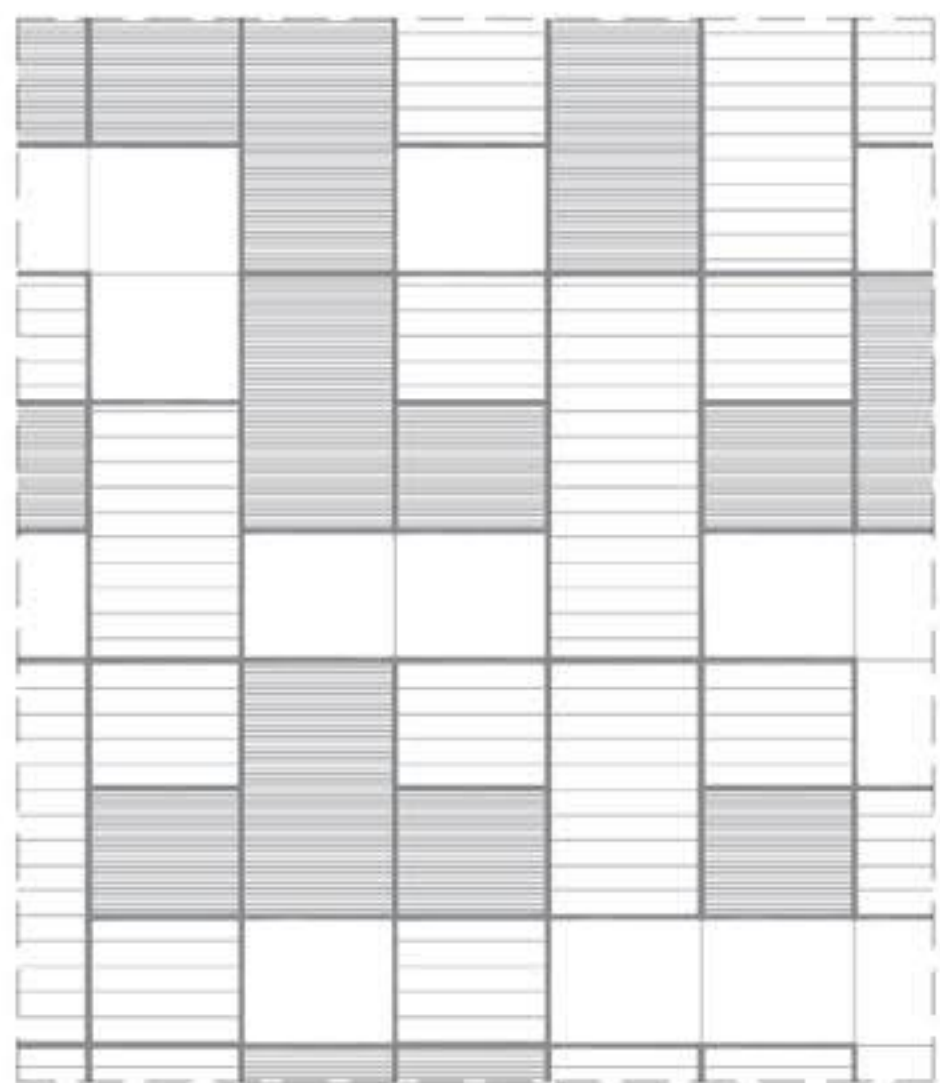
NORTHERN ELEVATION, 1:300



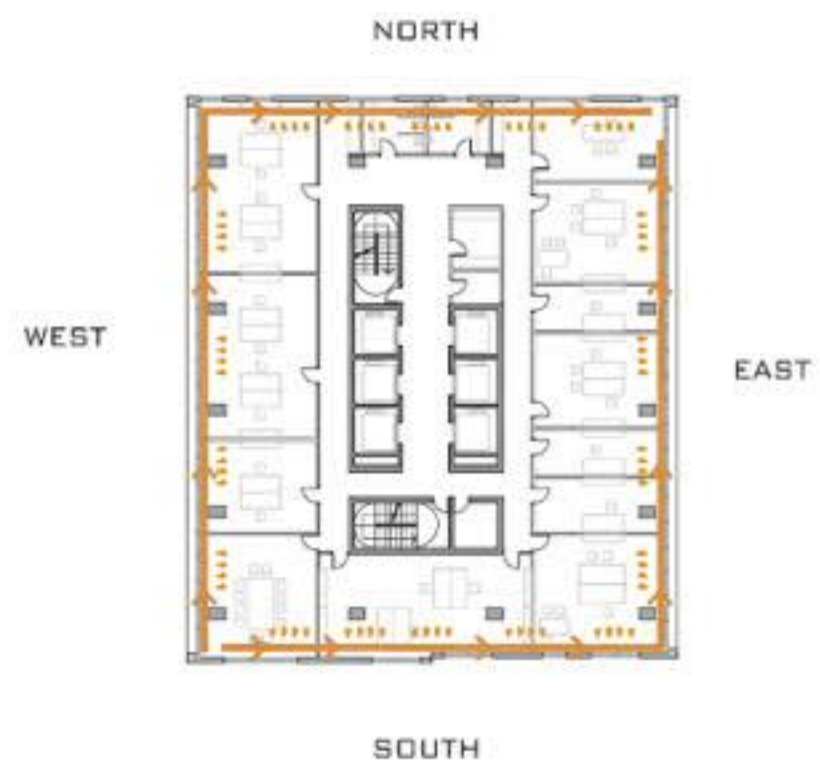
SOUTHERN ELEVATION, 1:300



EASTERN ELEVATION - pixel printed glazing, 1:300

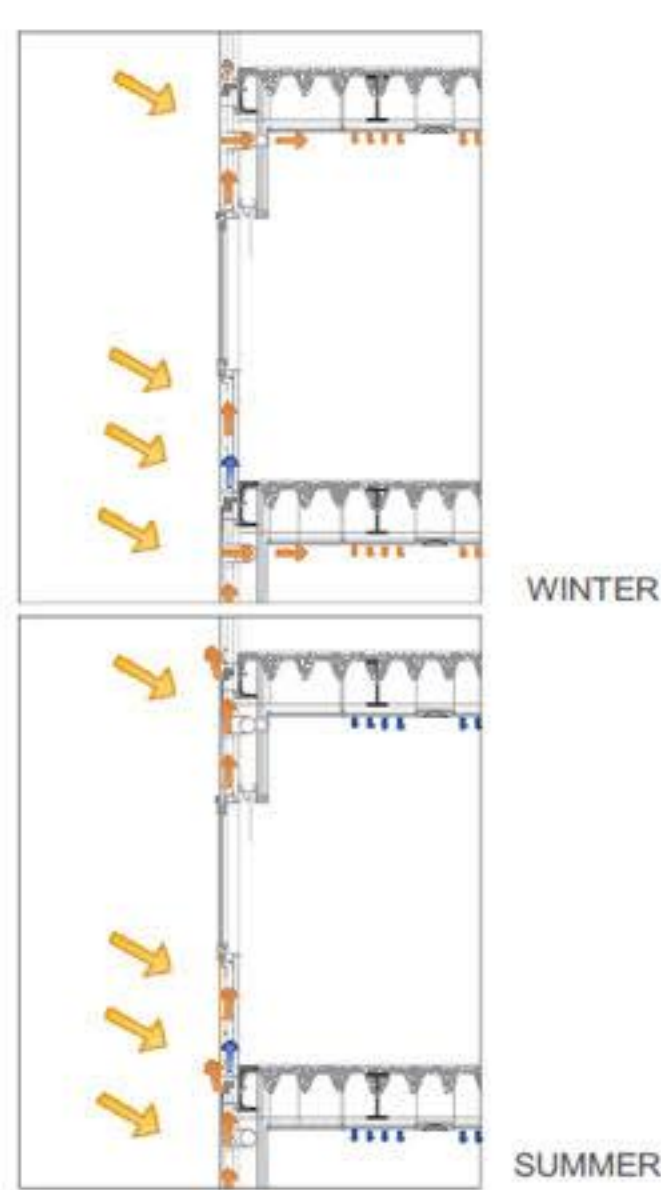
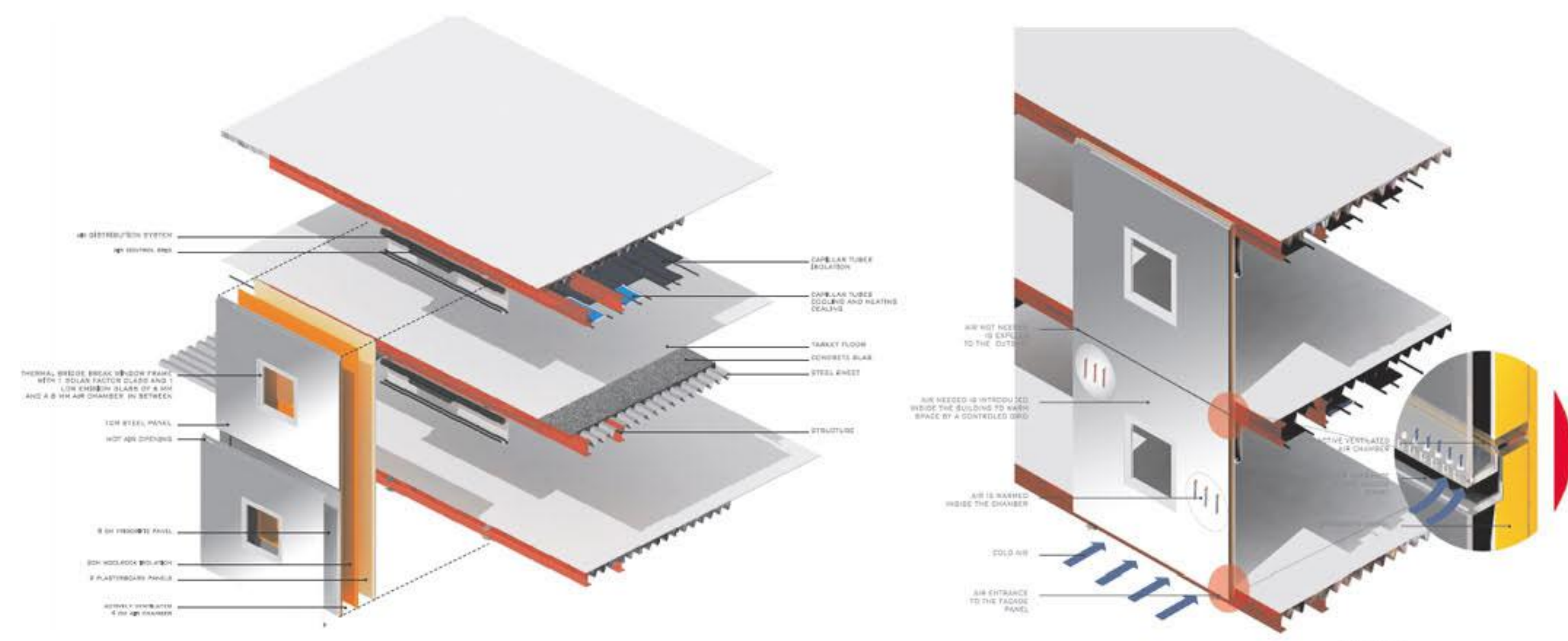


- 1- 1CM STEEL PANEL
- 2- SUPERIOR ANCHORING FOR PREFABRICATED PANEL
- 3- INFERIOR ANCHORING FOR PREFABRICATED PANEL
- 4- ACTIVELY VENTILATED 4CM AIR CHAMBER
- 5- 6CM FRIGORIFIC PANEL
- 6- 5CM CONCRETE SLAB
- 7- STEEL JOIST IPE 360 WITH FIREPROOF PAINTING
- 8- STEEL JOIST UPN 350 WITH FIREPROOF PAINTING
- 9- TARKET FLOOR
- 10- STEEL SHEET PROFILE 153.280.840 HR
- 11- THERMAL SENSOR
- 12- ELECTRICAL AIR CONTROL GRID
- 13- REGISTERABLE PLASTERBOARD FOR THE ALUMINIUM SHADE AND THE AIR CONTROL GRID
- 14- CAPILLAR TUBES COOLING AND HEATING CEALING. 60CM X120CM
- 15- THERMAL BRIDGE BREAK WINDOW FRAME WITH 2 LOW EMISSION GLASSES OF 5MM AND A 6CM CHAMBER WITH SHADES
- 16- 2 PLASTERBOARD PANELS
- 17- 2CM WOOLROCK ISOLATION



FACADE BELT AND PARTIAL VIEW, 1:50

FLOOR PLAN, WINTER HEATING / SUMMER COOLING



FACADE / 3D SCHEME

WINTER HEATING / SUMMER COOLING

Energy/ecology concept as a systems solution

The building design has considered with a special emphasis in the environmental design. The building design reflects all the ecology concepts and achieves in the same way an aesthetical solution. Several aspects have been taken into consideration: the materials used in all its manufacture process; the heating and cooling system, the energy consumption and the bioclimatic aspect.

Heating and Cooling System a Façade Solution

The solution adopted for the façade for this building, comes from all the knowledge achieved in different constructed buildings as well as different studies developed through years.

System solution

All the panels' works in a systematic way, all the panels work as an active ventilated façade. The system works as following:

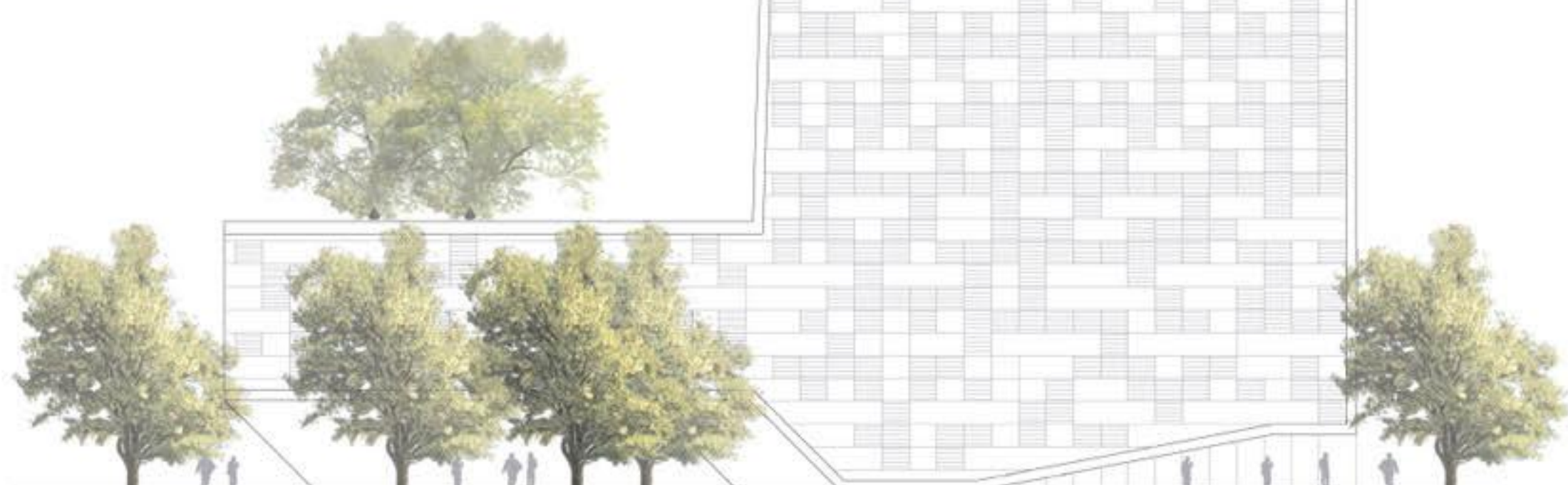
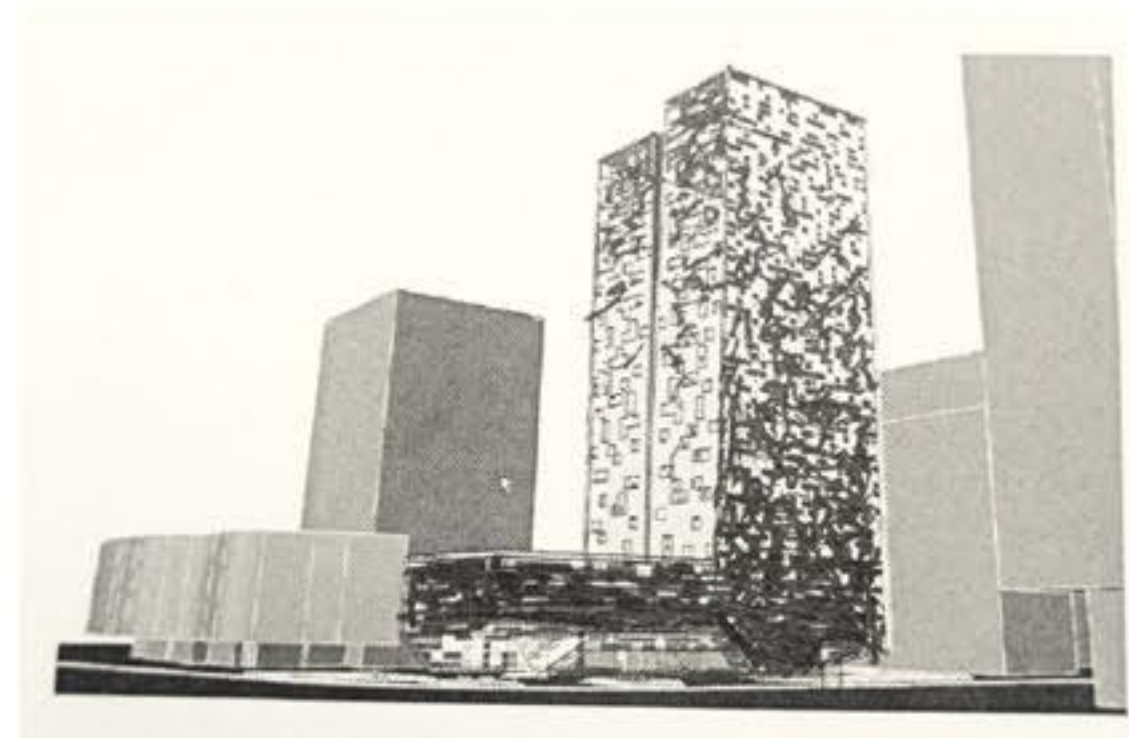
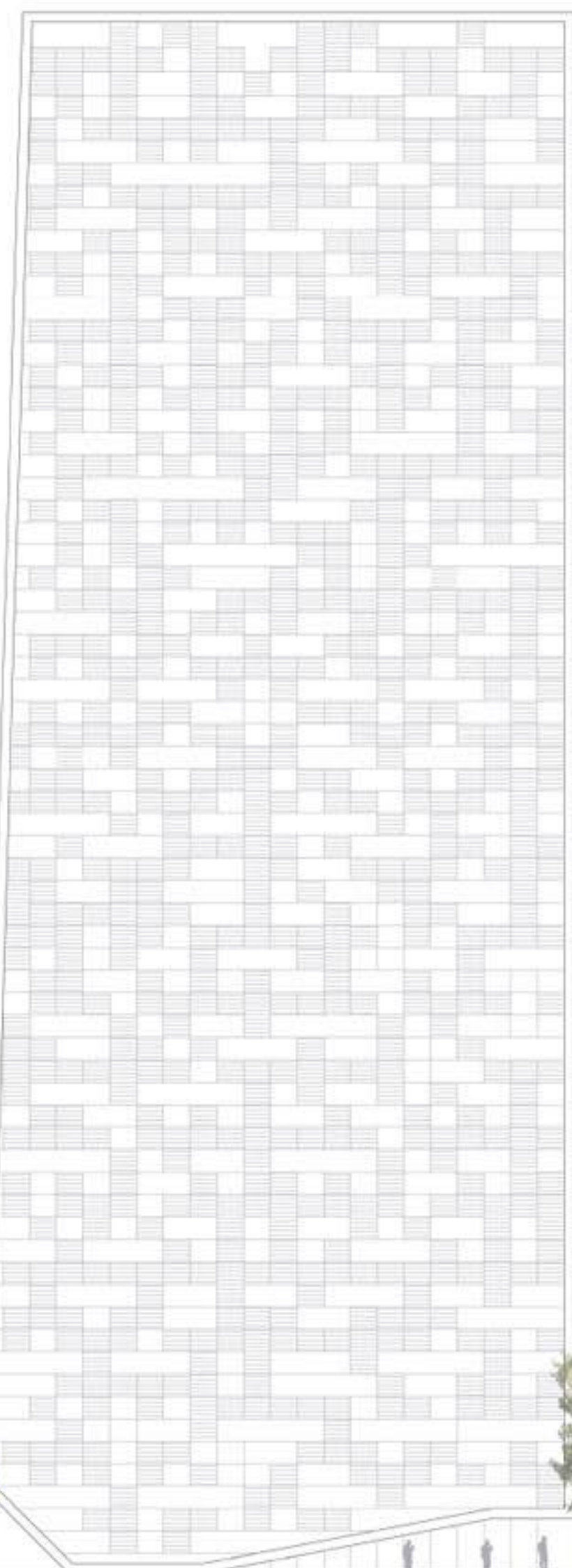
Air enters to the air chamber (between the steel sheet and the frigorific panel) through an opening in the bottom of the panel.

The steel sheet is warmed by the sun radiation and by convection the air inside the ventilated chamber is warmed. The air density decrease and the air tends to go to the upper part, during winter it's possible to introduce this warmed air to the offices through a electrical control grid that will let pass through the air, allowing air renewal and saving energy in the heating system. During summer the electrical control grid will be closed and the air will find its way out in the upper part of the panel where it is designed an opening.

Flexibility of the system

This system is not only designed as a solution per façade, where the western and southern façade will work perfectly while the northern and eastern façade will have problems during winter. The system will catch warmed air from western and southern façades and shall distribute it to northern and eastern spaces, in order to unify the heating system.

During the summer the panels shall work as an isolating wall, to conserve inside cooling and prevent the heating from outside. The isolating wall will be composed of the frigorific wall inside the panel, and a woolrock isolating wall, with 2 plasterboard panels. This solution achieves the project demands of the buildings outer layer.



ISO PERSPECTIVE - envelope perforation

WESTERN ELEVATION - shaded glazing, 1:200



PHOTOMONTAGE / VIEWPOINT 1, VIEW FROM MASARYKOVA STREET



PHOTOMONTAGE / VIEWPOINT 4, VIEW FROM DUNAJSKA STREET



PHOTOMONTAGE / VIEWPOINT 2, CORNER OF MASARYKOVA AND SLOVENSKA STREET



PHOTOMONTAGE / VIEWPOINT 3, VIEW FROM SLOVENSKA STREET



PHOTOMONTAGE / VIEWPOINT 5, VIEW FROM NORTH