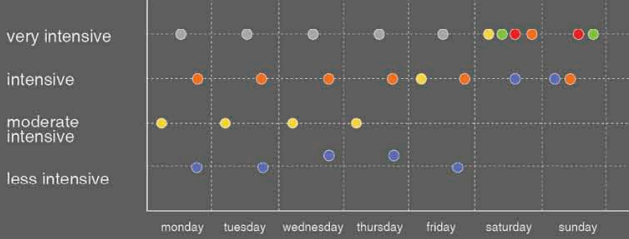


siteplan 1: 5000



inspiration biotope



levels of activity

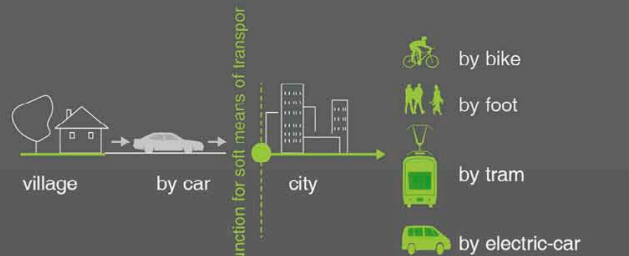


diagram CO₂ - free mobility



public infrastructure/ mobility

The Terrain

The terrain for the project is located in the southern part of the city of Graz, at the border between the city center and the suburbs. The terrain has an exceptionally important strategic position due to its being located at the main access artery to the city, at a point, which unifies various functions and rhythms of mobility. The heterogenic density of construction encompassing a number of functions, like the central city stadium and city square, office buildings, a villa area and communal blocks of flats, is intersected by a street with heavy traffic and railway lines. The city structures function each on its own and have been created over time with no common concept, and because of that they are not interconnected.

Tasks and Objectives

The major objective of the project is the creation of a new urban element which, enforced by new functions, should unify the existing separate urban structures in one entire architectural concept. The newly created architectural ensemble should serve as initiation for the further development and urbanization of this city part, which is so very important in view of its location and function, and which is actually the entrance gate to the city.

Urbanization Concept. Biotope

In an environment dominated by concrete, asphalt, sheet iron, vehicle noise, and the stink of petrol fumes and beer, a new biotope is being created, where all so far existing elements lose their significance and make way for nature and healthy way of life. The tree (the skyscraper) as a symbol of life becomes a starting point for development of the unifying "missing" element. The tree roots (the upper landscape) spread over the terrain, pass above streets and thus connect the functions, which have so far been isolated from one another. The grid developed in that way is densified at the tree base and spreads to the stadium in the south and to the city center in the north.

Functions

New functions are encompassed beneath and above the newly created raised landscape, which reasonably provide completeness and unite the architectural ensemble. The lower level comprises the following functions: a city square with changing functions, a fitness centre with spa, and a sports hotel. The square has been defined by two closed sides, which house fast food establishments open to the south. To the south, the square opens diffusely and is connected to the already existing space before the stadium. Thus, the now urbanized city square is converted into a place, which a person would like to see, but also a place where a person would like to be seen. It is a place both interesting and entertaining, and provides space for various temporary functions as the gray naschmarkt, football games and various public events. The upper level of the raised park is connected to the lower level by platforms and vertical links. Thanks to the large openings, both levels are visually interconnected. The upper level serves the function of a city park, which in itself is with changing intensity of use: during football matches it becomes a place for meetings and provides access to the stadium and on weekdays it is a place for relaxation and walks.

Automobile and public transport

From the crossroads between Ulrich-Lichtenstein-Gasse and Johann-Sebastian-Bach-Gasse to the end of the terrain for the project, the speed of transport vehicles along Conrad-von-Hötzendorf-Straße is limited to 30 km/hour. Conrad-von-Hötzendorf-Straße is being turned into a boulevard where, in parallel to the street lanes fitted with tramway tracks, from left to right new functions shall be integrated, as follows: side road parking (K&R) combined with green areas and trees, bicycle lanes and broad pedestrian sidewalks. The newly created city square is connected to the existing city square before the stadium. The street crossing both squares is being turned into a semi-pedestrian area with regulated traffic. The tramway stops are integrated beneath the newly created ground car park. A three-level underground parking lot is to be constructed beneath the street level. On the inside, the underground parking lot is divided into 3 areas for P&R, the hotel and the residential part of the skyscraper. Access to the garage is provided from Conrad-von-Hötzendorf-Straße and Johann-Sebastian-Bach-Gasse. In this way there will be no automobile traffic on the entire area of the terrain.

Pedestrians, bicyclists and electromobility

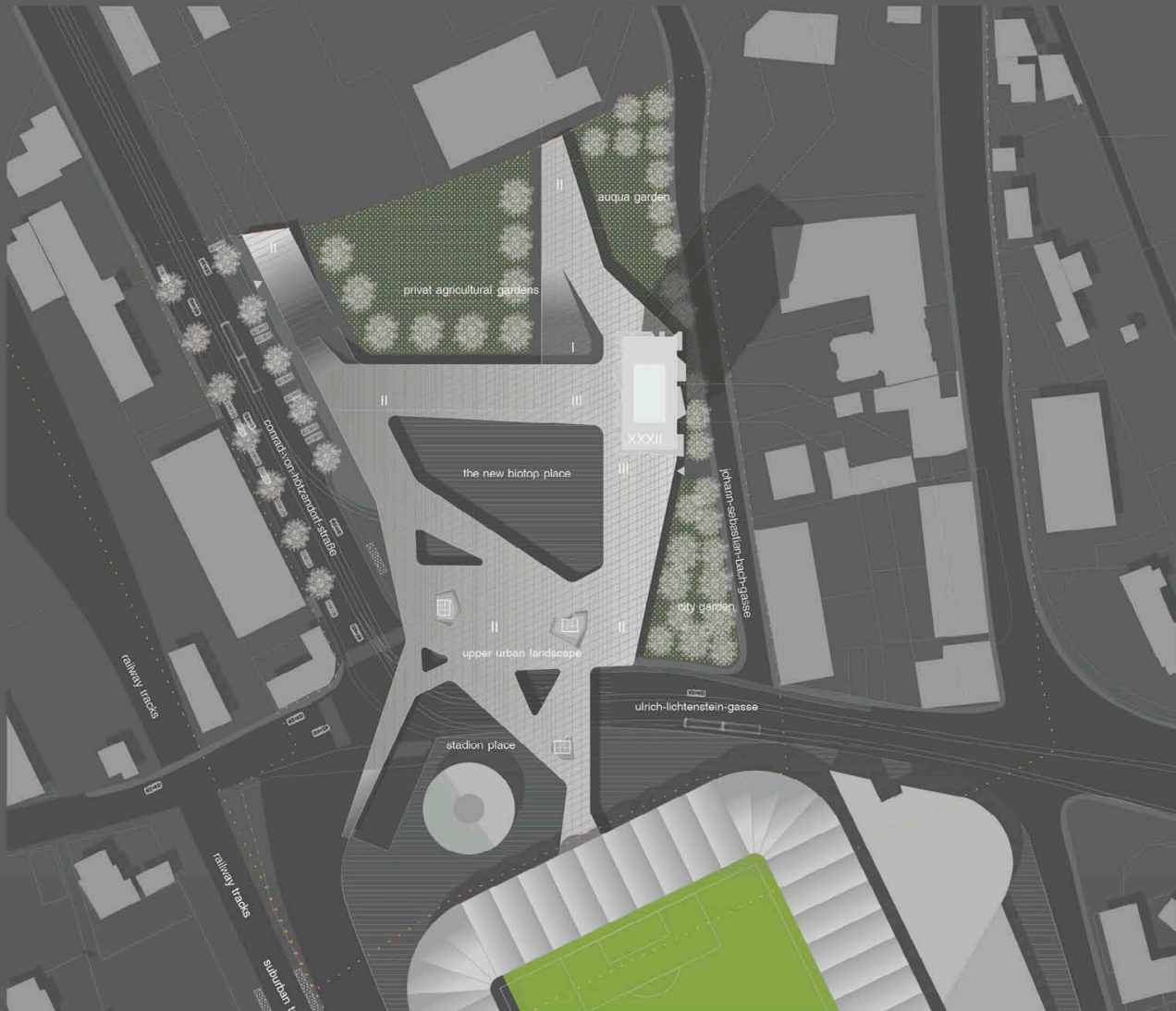
Along Conrad-von-Hötzendorf-Straße, an underground level one is located a new park for bicycles and electromobility. The park for bicycles and its service rooms have visual vertical connection to the street and the square. Thus, they are illuminated by natural day light. Thanks to the horizontal and vertical visual connections the exchange of one's personal car for electromobility, bicycle or public transport can be done smoothly. Due to the almost nonexistent automobile traffic on the territory of the project, passenger and bicycle traffic is unobstructed. The level of the square and the park is free from hazardous emissions and available for use by citizens, visitors and random passers-by.

Green areas

The architectural designs are complied with the already existing green areas. The built-up structures are situated so that the existing greening along the Johann-Sebastian-Bach-Gasse has been entirely preserved. The built-up structures divide the terrain into four free spaces of differing urbanity character where each free space belongs to the one of the major functions in the project. To the southwest is the new city square; to the southeast is the small corner park with dense planting towards the hotel; to the northeast is greening towards the spa complex, and to the northwest is greening with the option of tilling the land by the residents of the skyscraper.



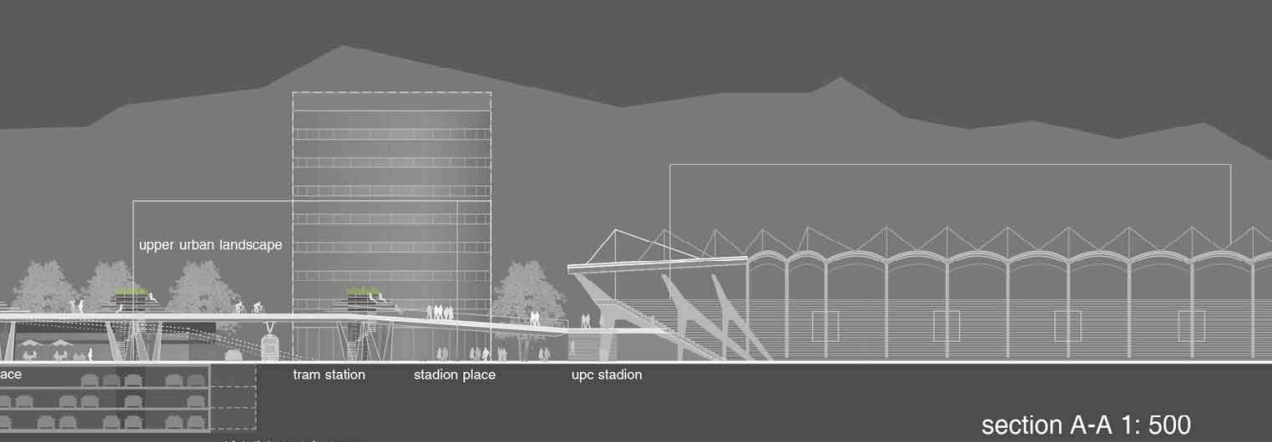
new biotope square



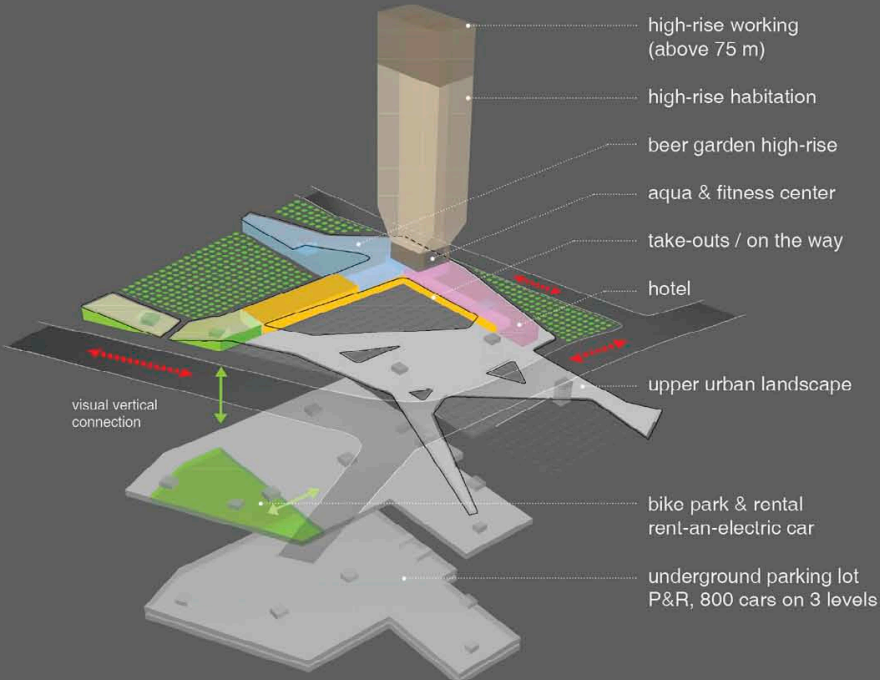
site plan 1: 1000



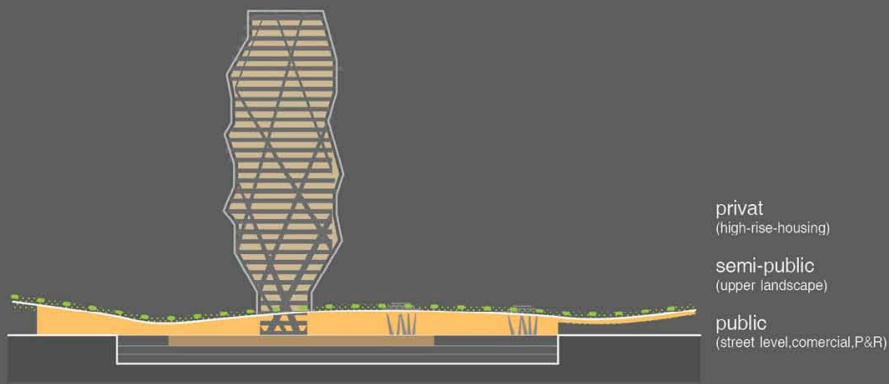
aerial view



section A-A 1: 500



organisation- corresponding elements



layers of functional use

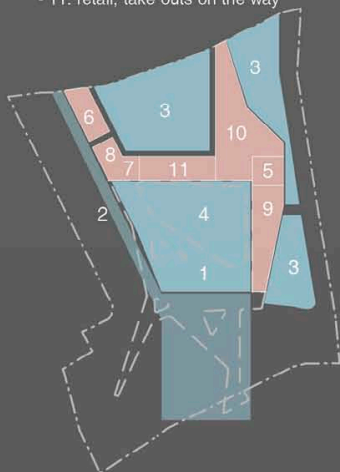
- local authorities and state:
- 1. biotop square
 - 2. infrastructure
 - 3. green spaces
 - 4. naschmarkt

- the new biotop square
- extention to the stadion square
- city public garden
- aqua garden
- privat agricultural gardens
- upper landscape on the top

- private investors:
- 5. high-rise
 - 6. underground parking lot P&R
 - 7. bike park & rental
 - 8. rent-an-electric-car
 - 9. hotel
 - 10. aqua & fitness centre
 - 11. retail, take outs on the way



network of gardens

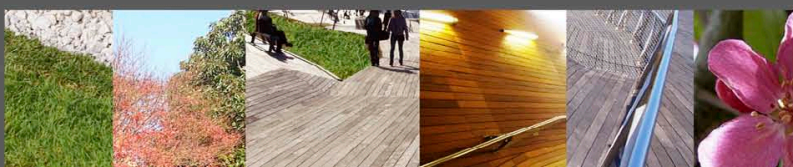


strategy of project development



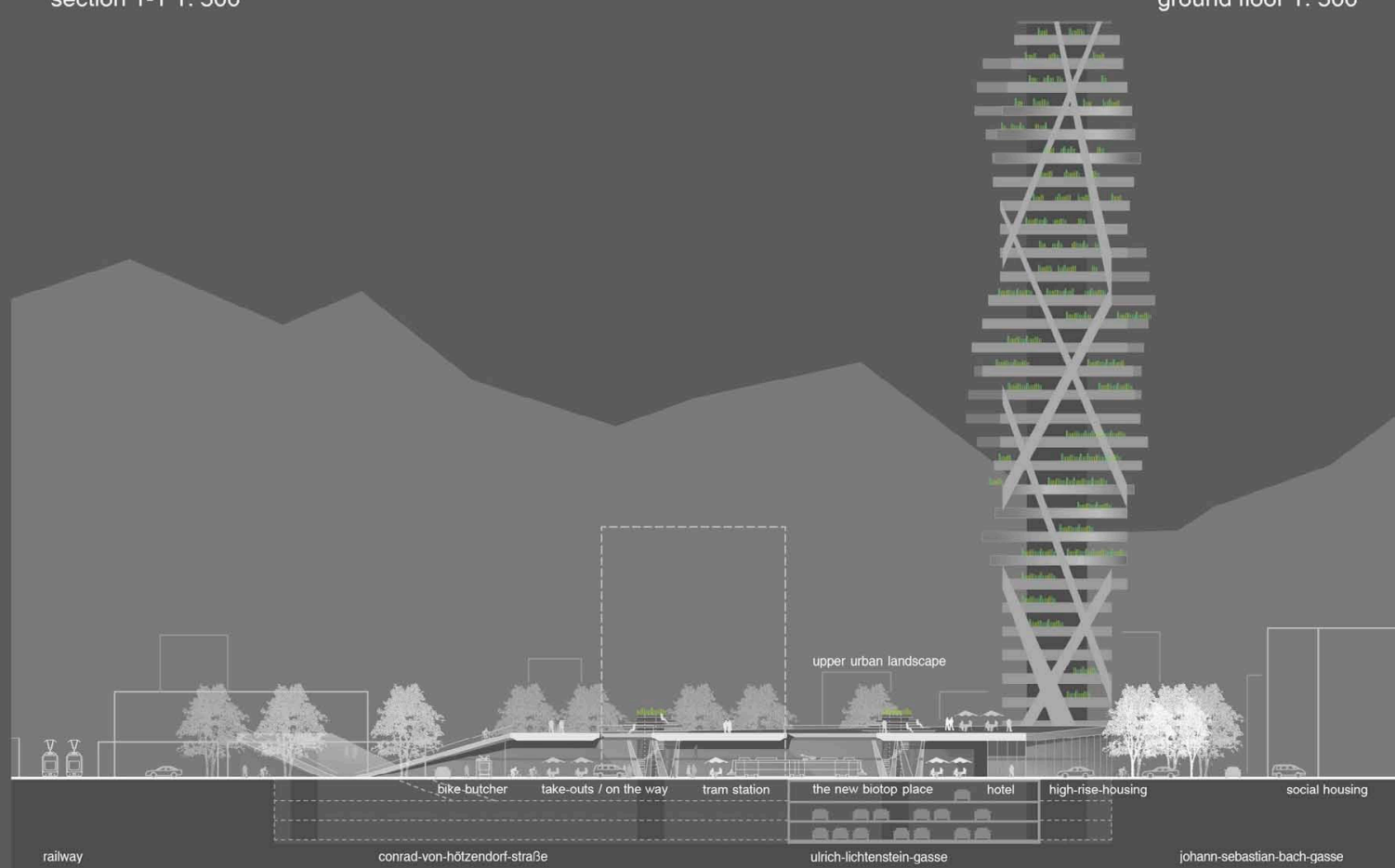
first underground floor 1:1000

surfaces and materials



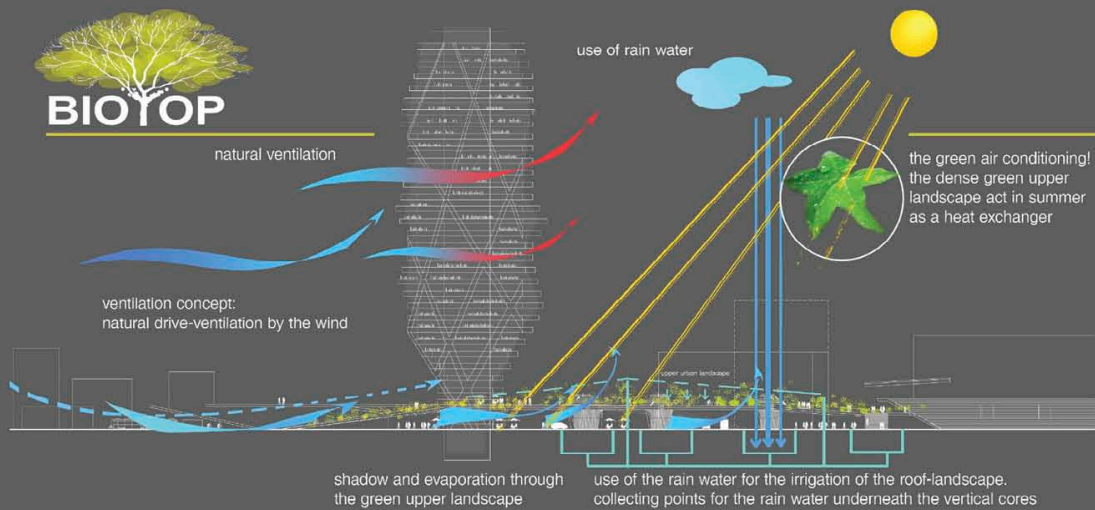
section 1-1 1: 500

ground floor 1: 500

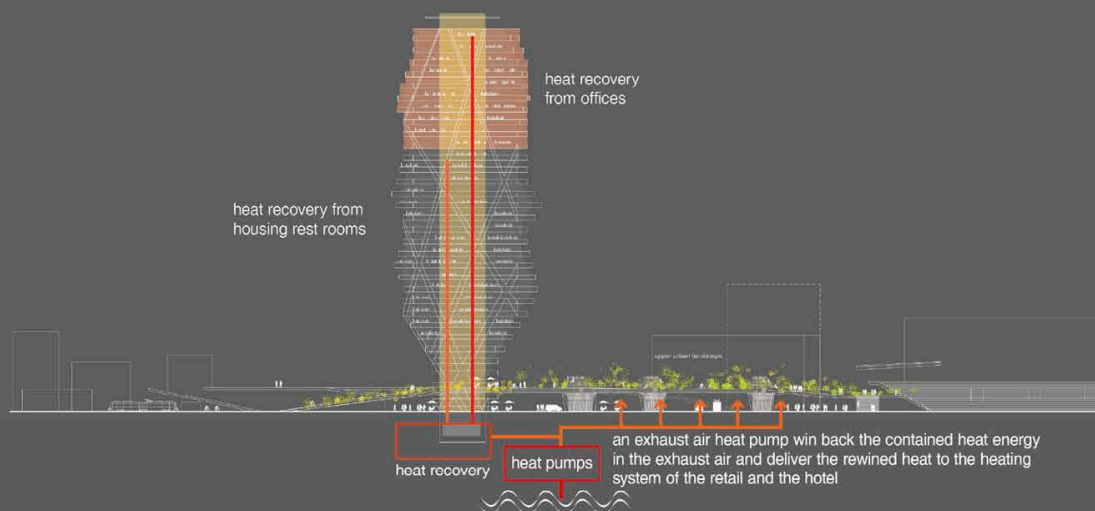




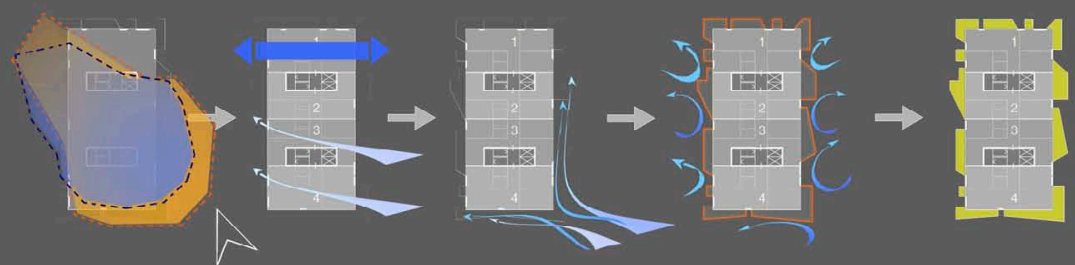
renewal of the street as an urban boulevard



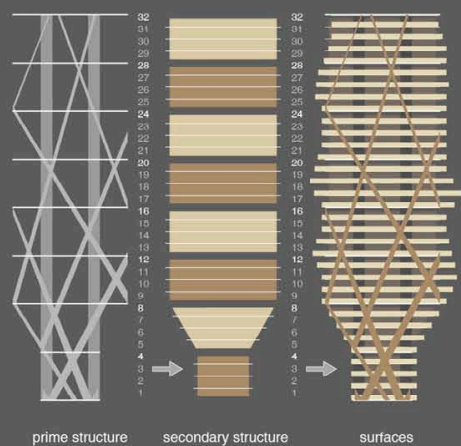
climate-concept summer-use



climate-concept winter-use



high-rise climate-concept



layer 1: prime structure
(material: reinforced concrete)

double core, reinforced concrete floor each fourth storey, diagonal columns on the facade

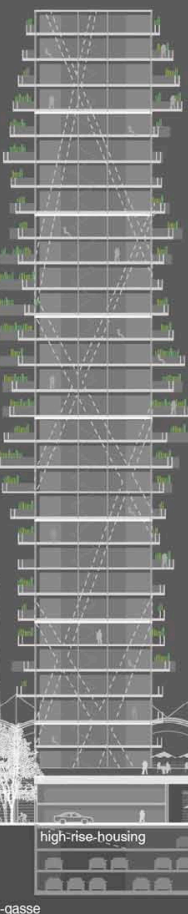
layer 2: secondary structure
(material: wood)

four-storey timber units between the reinforced concrete floors have been hold by the prime structure. the unit structure itself made by timber is light and self supporting.

layer 3: finishings, surfaces
(material: wood)

all the surfaces on the facade are covered by wooden elements. the building receive a unique wooden envelope that makes a visual statement for the whole BIOTOP: an achievement of sustainable material use and high level of technology.

section 2-2 1: 500



upper floor (link to stadion) 1: 500



section (link to stadion) 1: 200

high-rise, layers of construction



high-rise, flexible plan organization 1:500

