



THESSALONIKI CONFEX PARK
AERIAL PERSPECTIVE



ELEVATION FOR WHOLE SITE



THE MAIN IDEA

The proposal provides Thessaloniki with a world class conference centre and a contemporary architectural landmark by combining the two main elements of the city in an innovative way. In Thessaloniki the historical, thriving urban areas with their humane scale and historical layers are contrasted with impressive rolling hills and sea views. The architecture of the new Confex Park is built with these two scales. The large exhibition halls form a sequence of landscape-scale hills with accessible rooftops, defined not as urban blocks or crude blank buildings but rather as built three dimensional landscapes. These are contrasted by the hotel, conference and business centre functions which are defined as high quality buildings inspired by the scale, materiality and texture of the existing cityscape.

THE LANDSCAPE STRATEGY

The mountain and the sea

The natural landscape of the Thermaic Gulf is dominated by two elements: the Mediterranean Sea and the mountains. Thessaloniki is situated in between these two features, separating them with its dense urban fabric. In our vision Confex park unifies the two key natural elements and invites the people to enjoy them. A grand axis runs from the peaks to the water, passing through the urban fabric towards the Mediterranean. Confex Park is a meeting ground for the mountain, the sea and the city.

Mindset

Since the heydays of the Byzantine Empire, the site was an area beyond the city walls, outside of the daily life of the people of Thessaloniki. It was defined by military facilities, cemeteries and the roads leading up the gates. After the great fire of 1917, the city's ambition was to transform the area into a great park with public buildings. It would have been a pause in the urban fabric, creating an opportunity for recreation and connecting with nature. Today's urban grid system, that dominates the layout of the area is based on the paths and roads drawn up in the proposal.

In the early years, the Helexpo exhibition grounds were an open space with buildings placed as pavilions in the main park. These light structures were embedded in a harmonic and natural manner. The growth of the exhibition and the increased needs for shelter from the sun resulted in a series of new buildings on the expo grounds. Through these interventions the area lost its park character and became a grey, enclosed and introverted space sealed off from the other parts of Thessaloniki. It disrupts both green-blue and urban connectivity.

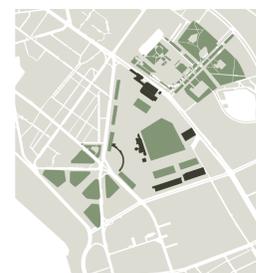
This task gives us a unique opportunity to rethink the place and role of the fairgrounds in the urban fabric. Confex Park is a green and lively piece in the urban puzzle composed of a high quality public park, a strong axis and iconic, welcoming buildings.

Our statement is clear - the buildings should either be part of the green park or a sculpturally formed pavilion carefully fitted in it. With sustainability in mind, we renew the area in a way that lets nature and city life flourish in the same place.



1918 - HÉBRARD'S PLAN

VISION - OF A PUBLIC PARK



1955 - HELEXPO

PAVILIONS IN OPEN SPACE



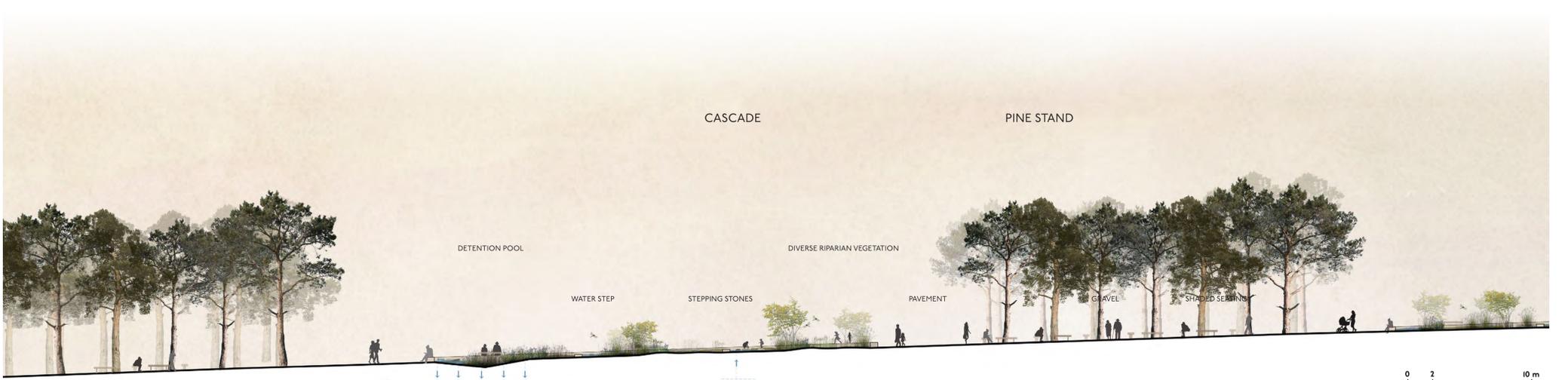
1968 - 2004

UNCONTROLLED DEVELOPMENT



2023 - CONFEX PARK

A SUSTAINABLE PUBLIC PARK



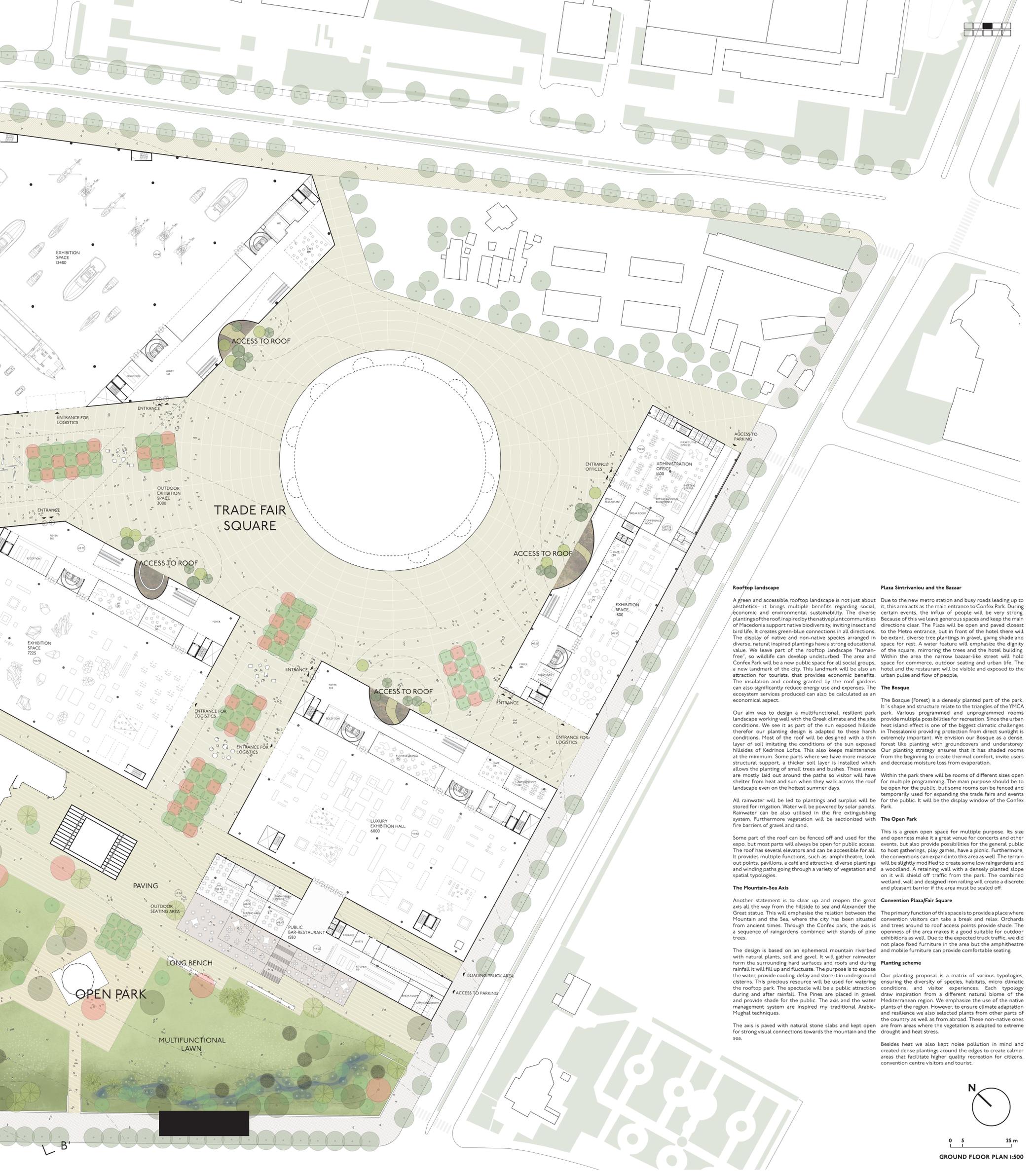
CISTERN



WATER FLOWING IN FROM NEIGHBOURING AREAS

0 2 10 m

A-A' SECTION - THE MOUNTAIN RIVERBED 1:50



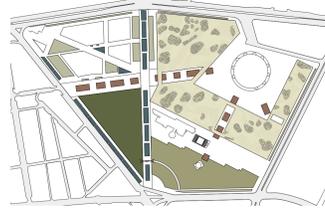


PERSPECTIVE FROM PARK



ROOF LANDSCAPE 1:750

Planting scheme



Our planting proposal is a matrix of various typologies, ensuring the diversity of species, habitats, microclimatic conditions and visitor experiences. Each typology draws inspiration from a natural biome of the Mediterranean region. We focused on native species but also used drought and heat tolerant adventives.

Roof I. Meadow



Drought tolerant grasses and succulents. Important role in fire protection. Key species: Various grasses, annuals, and perennials as well as: Agave americana, Opuntia ficus-indica, Sedum sp., Yucca sp.

Roof II. Phrygana



Low, scrubby vegetation. Adapted to the dry Greek Mountain sides. Key species: Asparagus acutifolius, Cistus creticus, Coridothymus capitatus, Hypericum empetrifolium, Lavandula stoechas, Myrtis communis, Salvia triloba

Roof II. Groves



Wooded patches along the main path to provide shade for visitors. Small and multi-stem trees. Key species: Acer sempervirens, Arbutus unedo, Cercis siliquastrum, Fraxinus ornus, Olea europaea, Phoenix canariensis, Pinus halapensis, Quercus calliprinos

Riparian vegetation



Water-logging tolerant plants usually found along rivers. Placed in the raingardens and the wet parts of the mountain river. Key species: Populus sp., Alnus glutinosa, Cyperus sp., Fraxinus angustifolia, Iris sp., Phragmites australis, Platanus orientalis, Salix sp., Ulmus minor

Planting strategy for the Bosque

Since the urban heat island effect is one of the biggest climatic challenges in Thessaloniki providing protection from direct sunlight is extremely important. We envision our Bosque as dense, forest like planting. Our planting strategy ensures that it has shaded rooms from the beginning to create thermal comfort, invite users and decrease moisture loss from evaporation.



Year 0
Planting of masses of native pioneers and a lower number of climax species. They won't cast significant shade but will create rooms. Temporary pergolas with vines shelter visitors from sunlight.



Year 25
The densely planted trees grow fast upwards. Pioneers can be thinned out to grow larger canopies and to provide space for the climax. Pioneers are large enough to provide shade, many pergolas can be removed.



Year 50
Climax species are mature and provide shade. By this time the pioneers are outcompeted and start to age so most of them can be cut down. The pergolas are removed.

Open forest



Dense plantings in the south for noise shielding, scattered clumps on the open surface for shading. Water logging tolerant taxons in the detention basin. Key species: Carpinus orientalis, Castanea sativa, Cedrus atlantica, Cupressus sempervirens, Fraxinus angustifolia, Platanus orientalis, Ostrya carpinifolia, Populus sp., Ulmus minor

Bosque



Dense, forest like planting with openings in it. Provides shade and thermal comfort even on hot summer days. Key species: Acer campestre, Cupressus sempervirens, Magnolia grandiflora, Ostrya carpinifolia, Platanus orientalis, Populus sp., Pinus sp., Quercus pubescens

Tree stands and allés



Multi species plantings in gravel inspired by traditional forms. Area under canopies can be use for recreation. Key species: Celtis australis, Fraxinus ornus, Gleditsia triacanthos, Platanus orientalis, Tilia tomentosa

Orchard

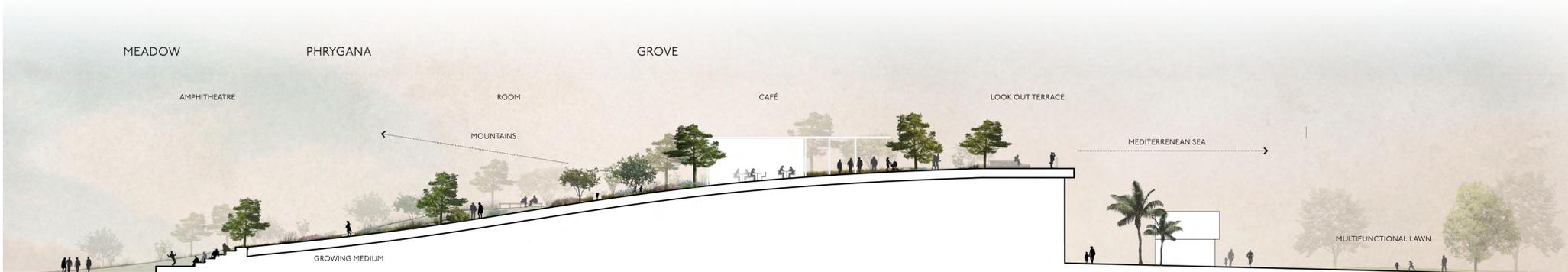


Grid plantings of various fruit bearing trees. Key species: Arbutus unedo, Citrus limon, Citrus x sinensis, Eriobotrya japonica, Ficus carica, Juglans regia, Mespilus germanica, Olea europaea, Phoenix dactylifera, Prunus dulcis, Prunus persica, Punica granatum

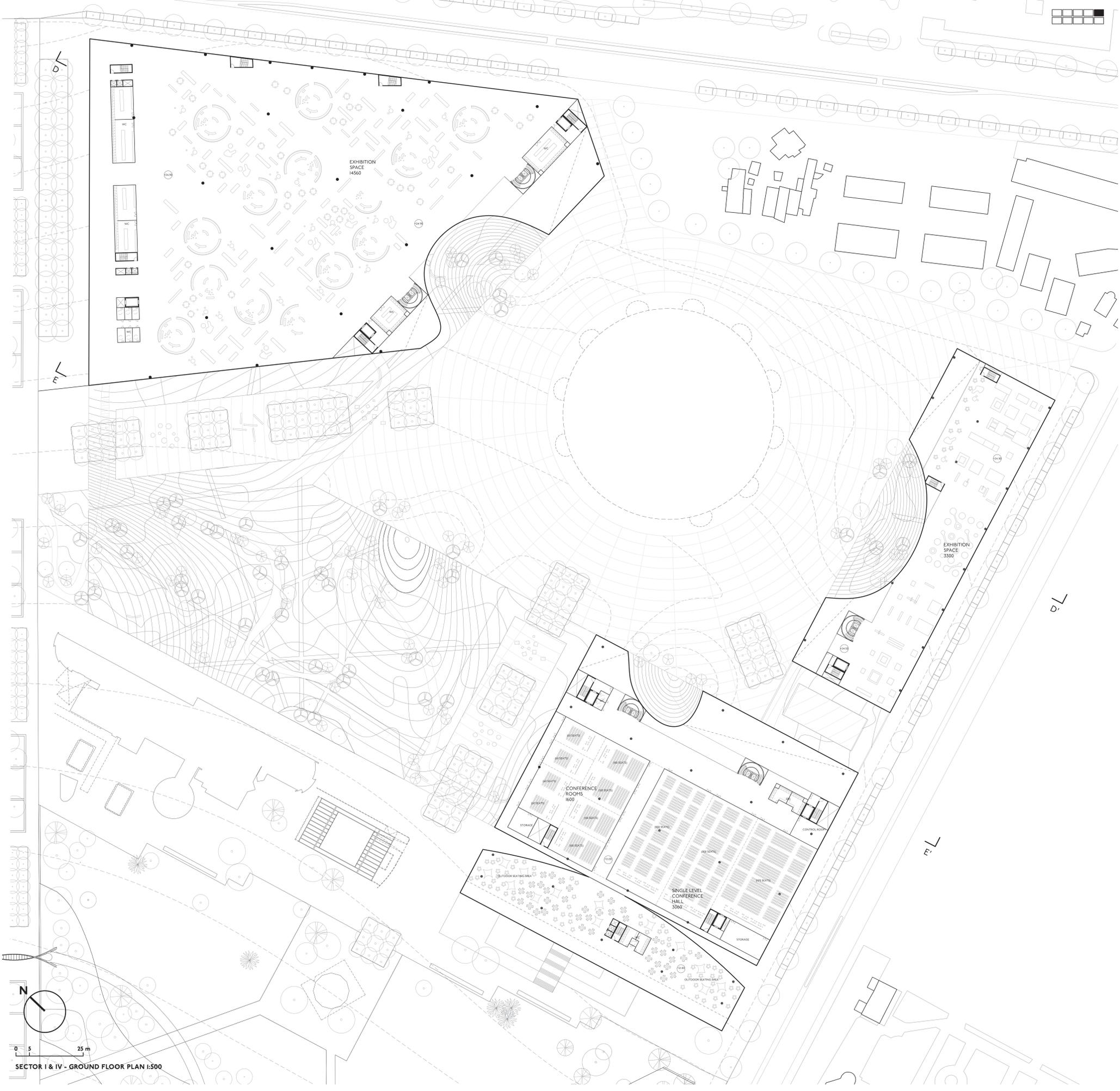
Pine stands



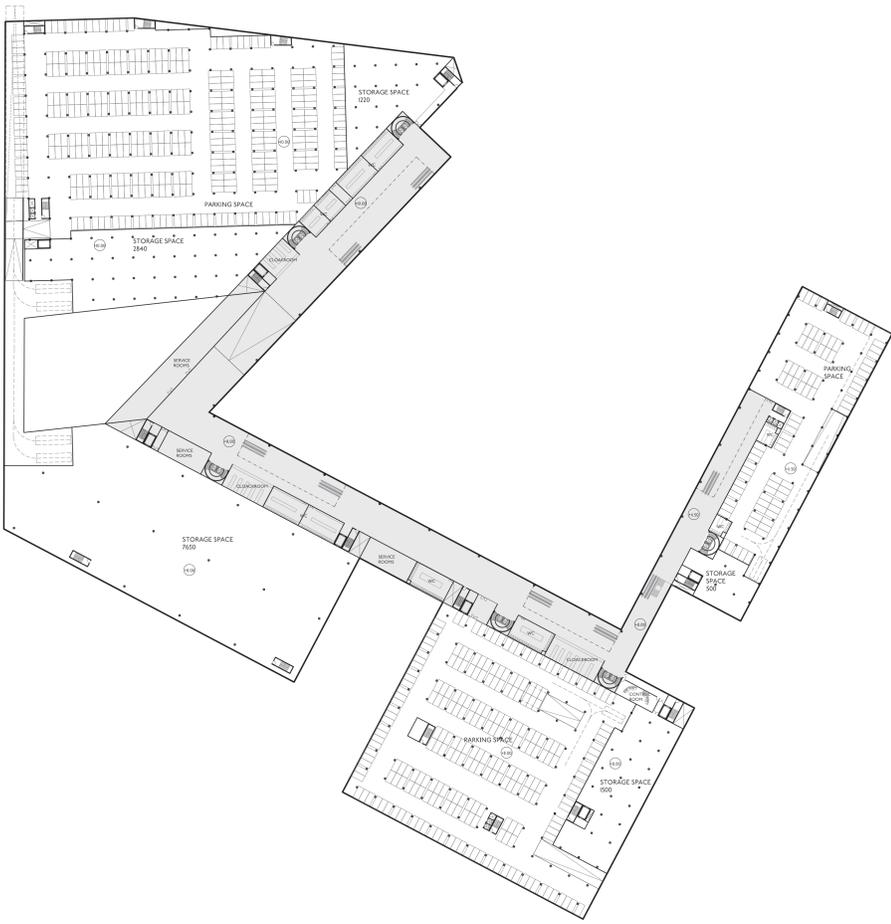
Dense, varied plantings of pines in gravel. Placed in the dry parts of the mountain river. Reference to the pines of Kedrinos Lofos. Key species: Pinus brutia, Pinus canariensis, Pinus halapensis, Pinus nigra, Pinus pinaster, Pinus pinea.



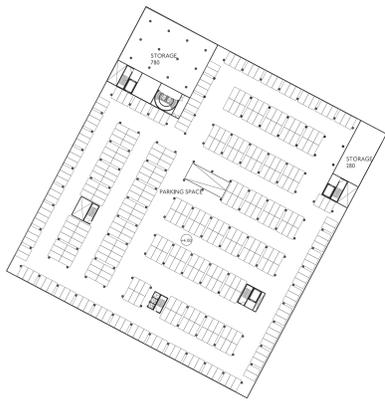
C-C' SECTION - THE ROOF LANDSCAPE 1:50



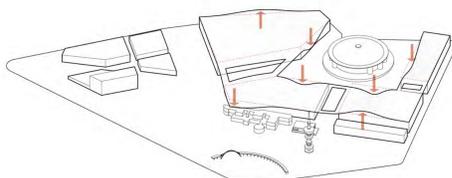
EXHIBITION HALL ROOFTOP PERSPECTIVE



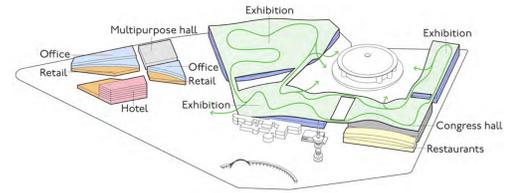
SECTOR I & IV - BASEMENT 1F PLAN I:1000



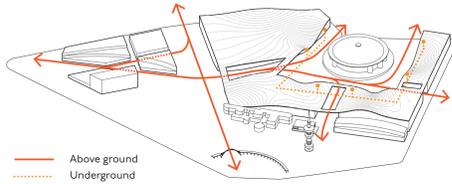
SECTOR I & IV - BASEMENT 2F PLAN I:1000



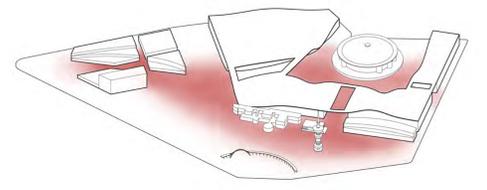
1. SHAPE FORM



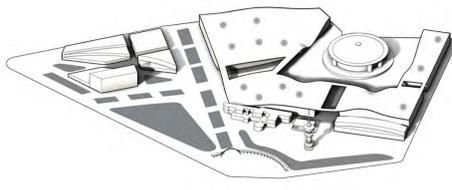
2. PROGRAM DIVISION AND ROOF LANDSCAPE



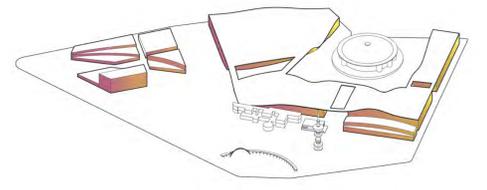
3. PUBLIC ROUTES



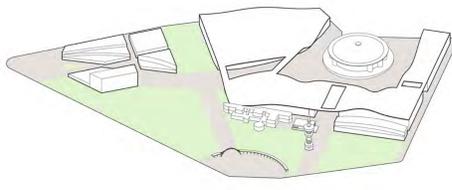
4. INTENSIVE URBAN AREAS- MEETING POINT



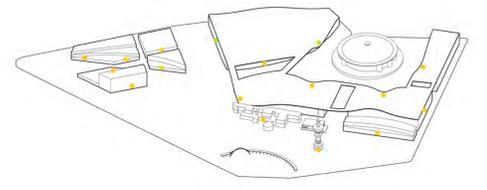
5. SHADED & COMFORTABLE OUTDOOR AREAS



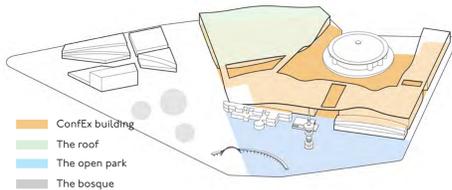
6. SOLAR EXPOSURE - FACADE



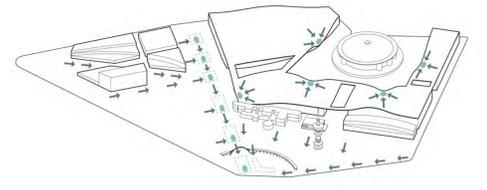
7. HARD SURFACES vs SOFT SURFACES



8. MAIN ENTRANCES



9. EVENT STRATEGY



10. RAINWATER COLLECTION

THE ARCHITECTURAL STRATEGY

Functionality

The main functional layout of the complex follows and implements the guidelines given in the area masterplan. The hotel and business centre block expands the city centre eastward with a considered composition of normal, high quality buildings, laid around a bazaar-like intense public space which creates a path towards the heart of the expo area from the city centre and the nearby metro station.

The main exhibition halls are defined as clear and multifunctional open spaces under an undulating and beautiful landscaped roof. While the halls themselves are often divided into several ticketed events with specific user groups and strict access control, the roof landscape can remain open to all and act as an informal extension of the outdoor event areas on ground level.

The access zone with entry functions and public amenities of each expo hall is facing the inner expo yard built around the circular sports arena. The roof of each hall bends down towards the expo yard, creating a recognizable orientation feature inside the exhibition spaces.

The expo halls are linked with an underground street, which provides the most efficient indoor connection between the separate buildings, and links with the subterranean parking and logistics routes. The subterranean route for the expo visitors is designed as an experimental virtual display technology showcase, where a transition from one hall to the next can be a living part of the expo visit experience.

The main floors of the expo halls are directly on the ground level, providing easy and flexible logistics for updating exhibitions quickly and efficiently. It is possible to set up an exhibition while other events are running, because the complex has multiple access points. All halls contain a very large door for bringing in boats and other maximum size items in easily.

The high-end expo hall is located next to the existing art museum and the tower, facing the public park and plaza area south of the expo halls. The gently curving hall, clad with a beautiful ceramic rod façade, peeks from behind a smaller scale restaurant and event building, with multiple terraces and outdoor areas offering majestic sea views.

Sustainability

The ConfEx park buildings are going to be some of the most ecological and energy efficient real estate in Greece. The project has fundamental reasons and motivations to showcase sustainable city building and the use of renewable, carbon neutral materials and solutions.

The architecture and the design are based on energy-efficient and rational building forms and sustainable use of construction materials. The shape factor of the building has been optimized during the design phase, which lowers the heat loss of the building and reduces the carbon footprint of the construction materials.

The buildings are equipped with an efficient intelligent energy system, which adapts to the different types of energy consumption profiles depending on the time of the day. Exhibition and conference spaces are mostly occupied during daytime, but the hotel rooms and evening venues and restaurants are occupied in the evening and night-time hours. The energy system has the capacity to store and recycle energy between these different usage phases, which reduces the need for purchased energy.

The energy recovered from different spaces in the complex is combined with locally produced energy. Laminated photovoltaic panels are integrated on the building facades, and large areas of solar panels are placed on the flat roofs and as part a themed part of the accessible roof landscape, located and oriented where the energy production is optimal.

The building's solar and anti-glare protection are among the main drivers in the façade and architectural design. The large facades of the expo halls are clad with sun-shading ceramic tile patterns, creating delightful and earthy materiality, and allowing for a controlled amount of natural light to enter the buildings.

Materials and maintenance

The hotel, business centre and restaurant buildings are built simple, elegant and durable local materials, continuing and complementing the themes and moods of older Thessaloniki buildings. Stone facades with simple, sharply detailed windows and timber & plaster interiors create a comfortable and humane layer around the more dramatic expo halls.

The curving roofs of the expo halls are supported by massive timber beam and column structures, reinforced and complemented by steel components as necessary. This layer of timber is clad with timber-steel hybrid decks supporting the weight of the roof garden.

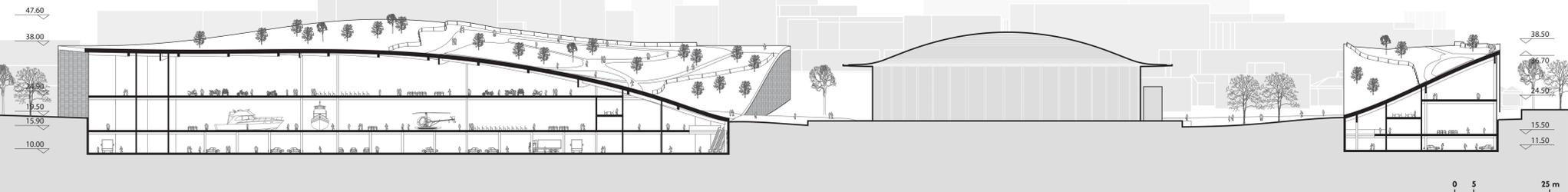
The heaviest loads created by the landscaping are landing on the columns, which can be made of concrete where necessary. The interior walls of the exhibition halls are clad with ceramic tiles, echoing the hues of the Greek landscapes.

The exterior walls of the expo halls are clad with ceramic rod grilles with varying scales, tones and geometries, optimized according to the solar exposure and potential for natural light, and set up to reduce glare inside. There are normal windows and solid lightweight walls hidden behind the ceramic layer, which lifts up to accentuate the public entrances.

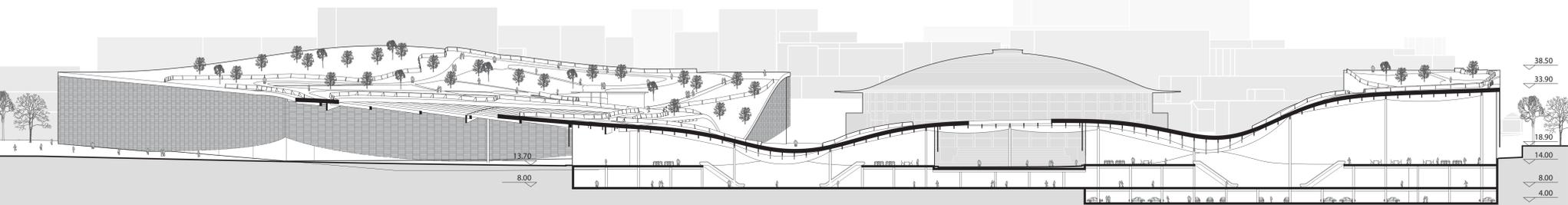
Structure

In the business area a structural grid system is smaller in the basement, and it can be optimized to parking usage. Parking floor structure is post tensioned slab and beam structure and concrete columns. On the first floor a grid is 16x18, 30 m. Roof structure consist of primary steel trusses spanning from 18 to 30 m and secondary glue laminated timber beams spanning 18 m. Columns are glue laminated timber. Lateral force resisting system relies on the diagonal bracings and concrete cores where available. Roof level is horizontally stiffened with trusses.

In the exhibition and congress center area a structural grid for parking level can also be denser than in other areas in order to achieve structurally economical solution. In medium scale halls a structural grid for one story height space can be 25x25 m or 8.3x50 m to achieve very open space for exhibition usage. In the largest exhibition hall, a structural grid is 35x35 m. Basic structural system is similar with the business area consisting primary steel trusses and glulam secondary beams and columns. Lateral force resisting system relies on the diagonal bracings and concrete cores where available. Roof level is horizontally stiffened with trusses.



SECTOR I & IV D'- SECTION I:500



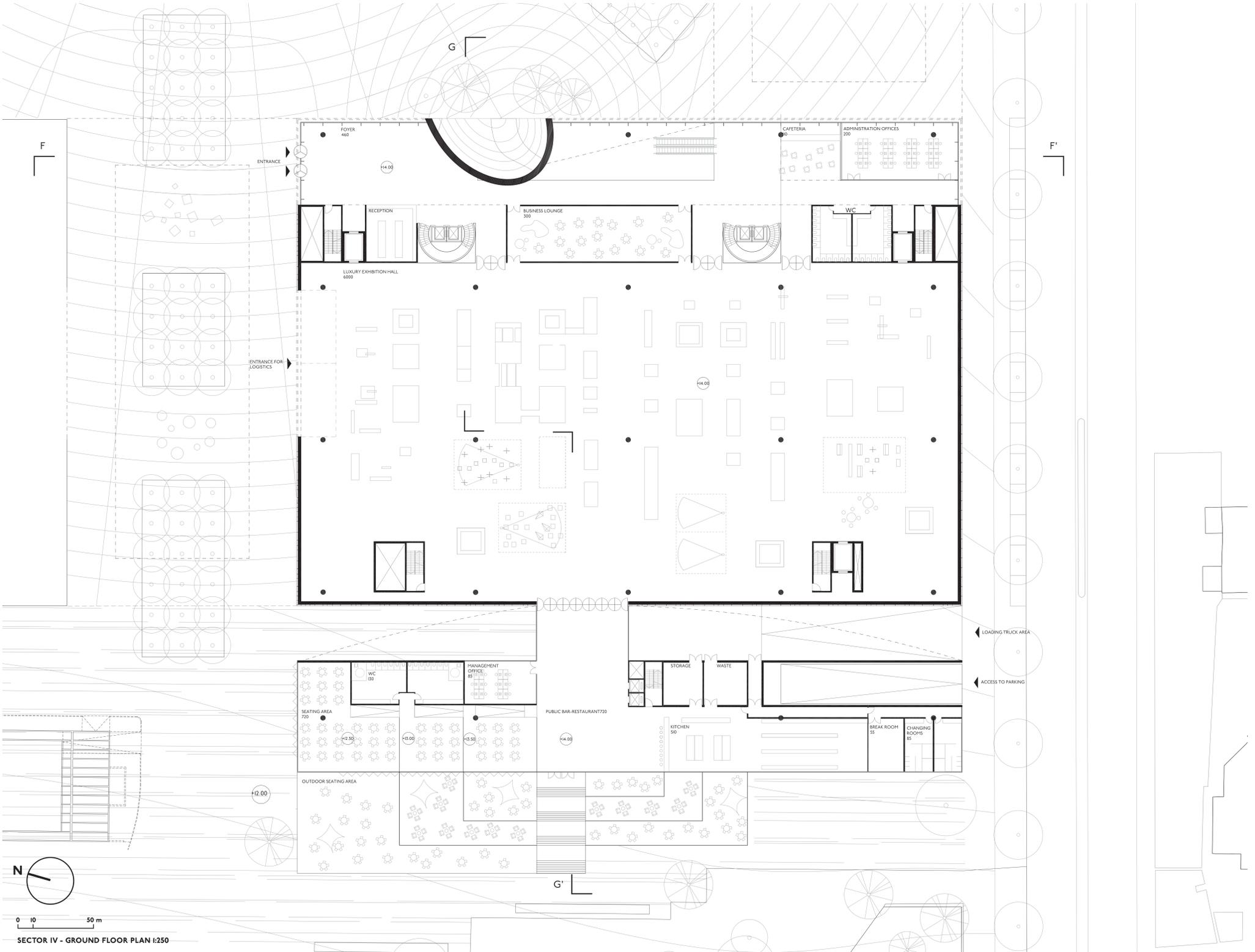
SECTOR I & IV E'- SECTION I:500



CONGRESS HALL AND RESTAURANT PERSPECTIVE



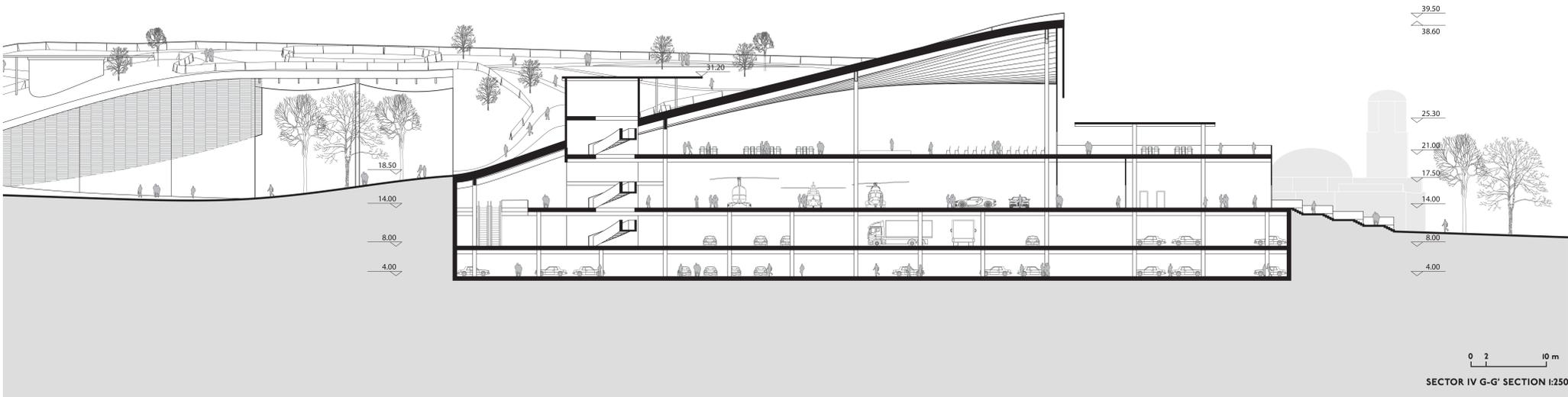
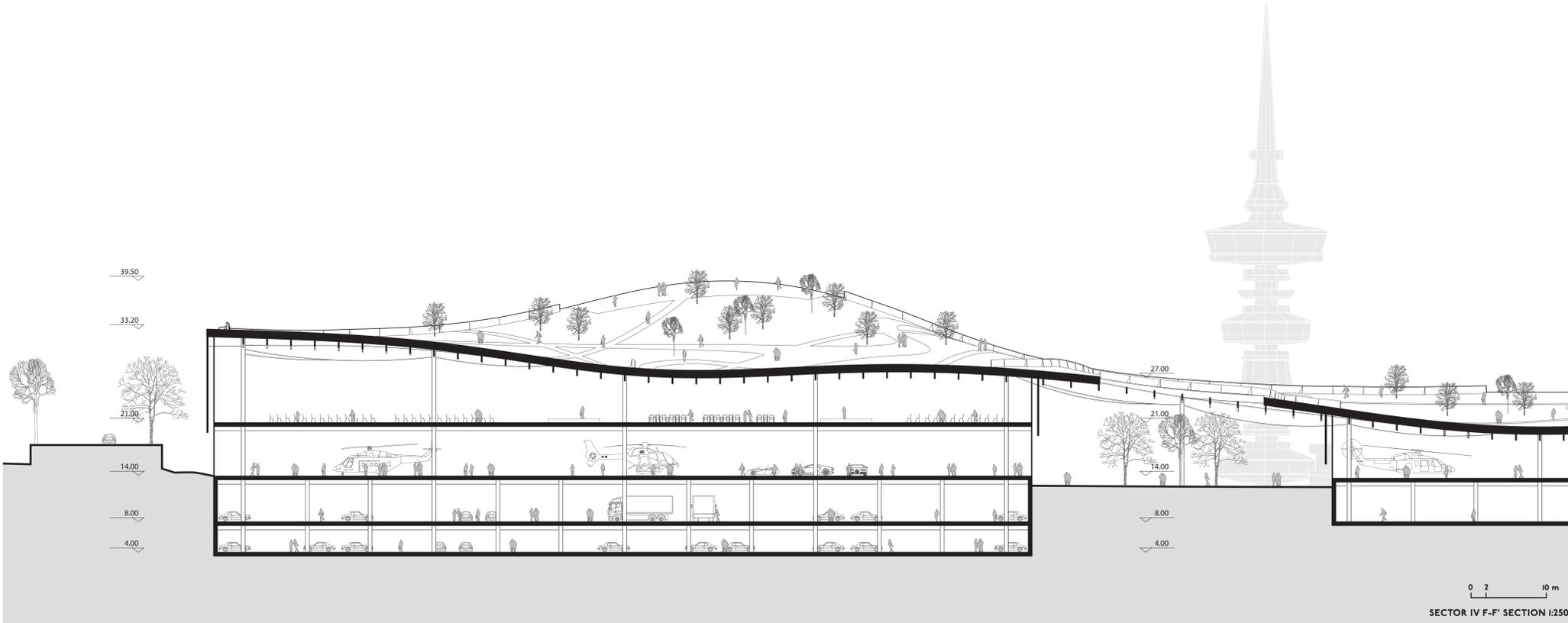
SECTOR I & IV ELEVATION



SECTOR IV - GROUND FLOOR PLAN 1:250

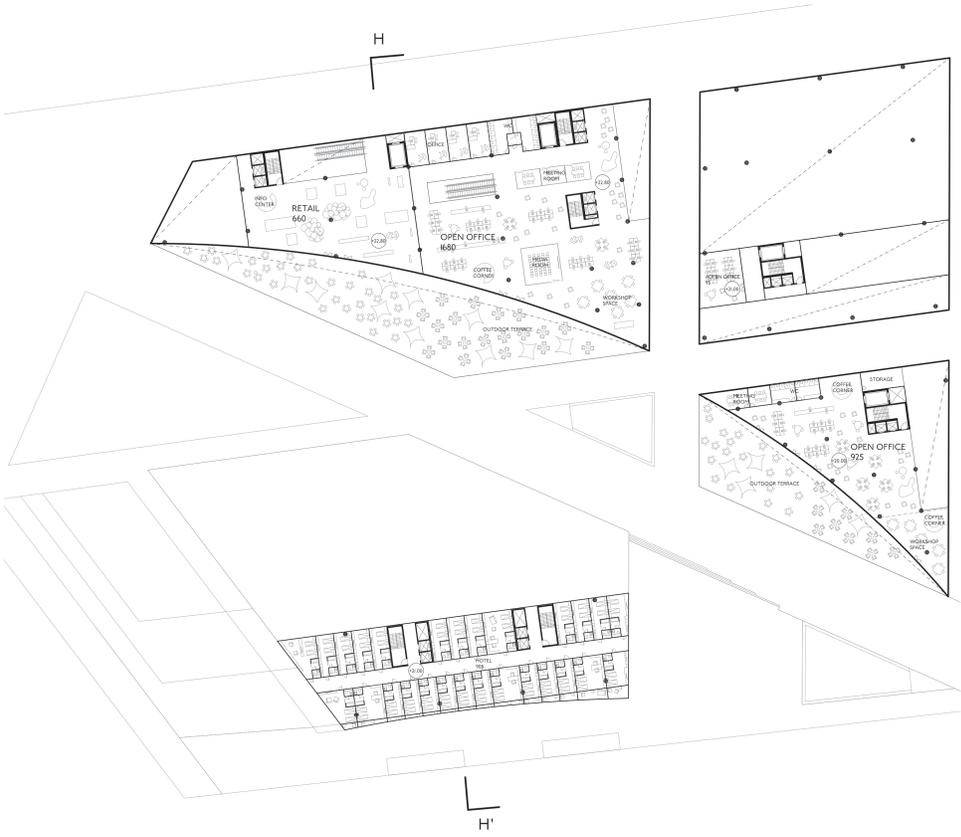


SECTOR I & IV ELEVATION

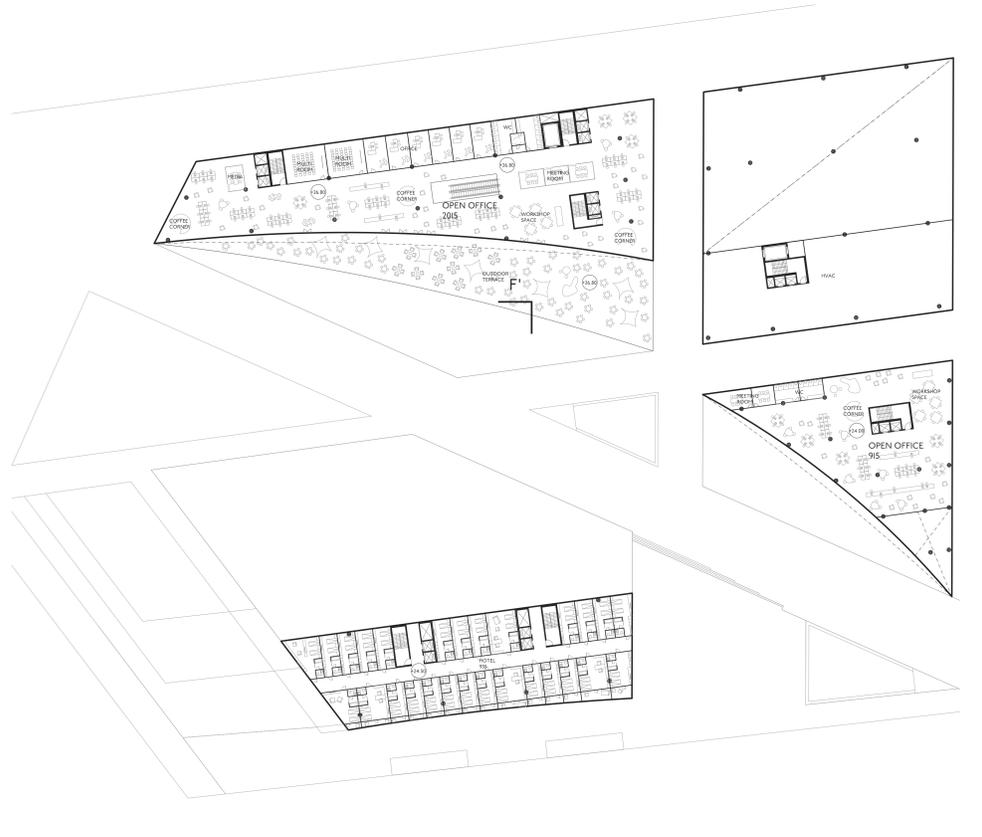




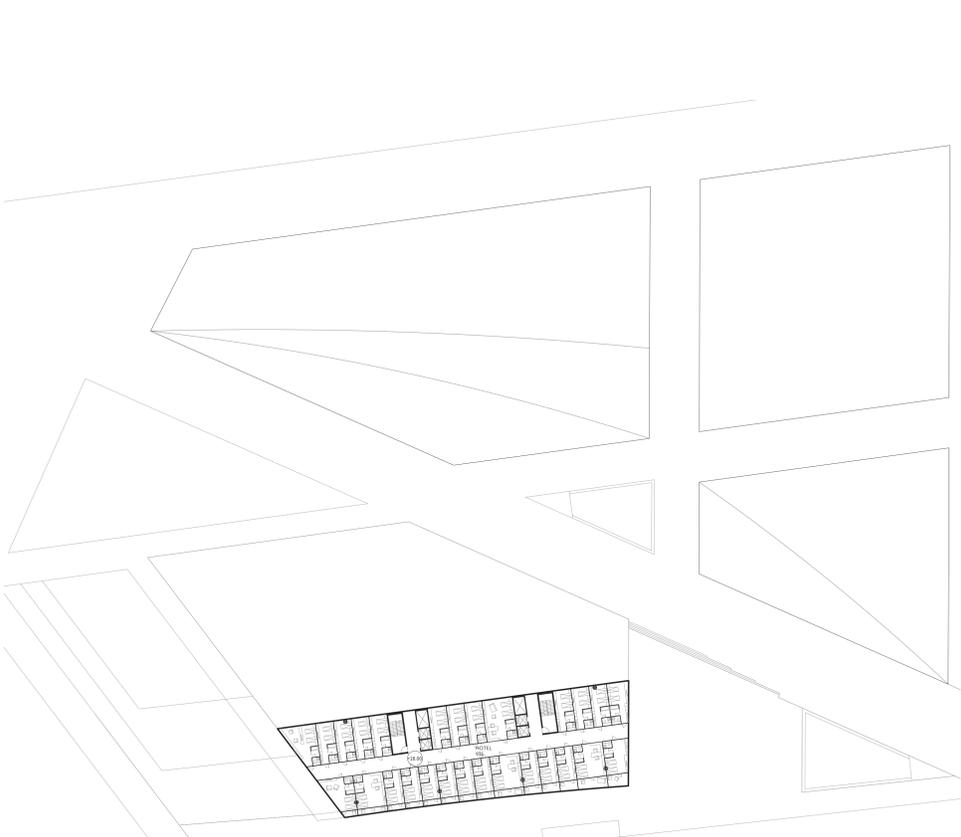
BUSINESS AREA STREET VIEW



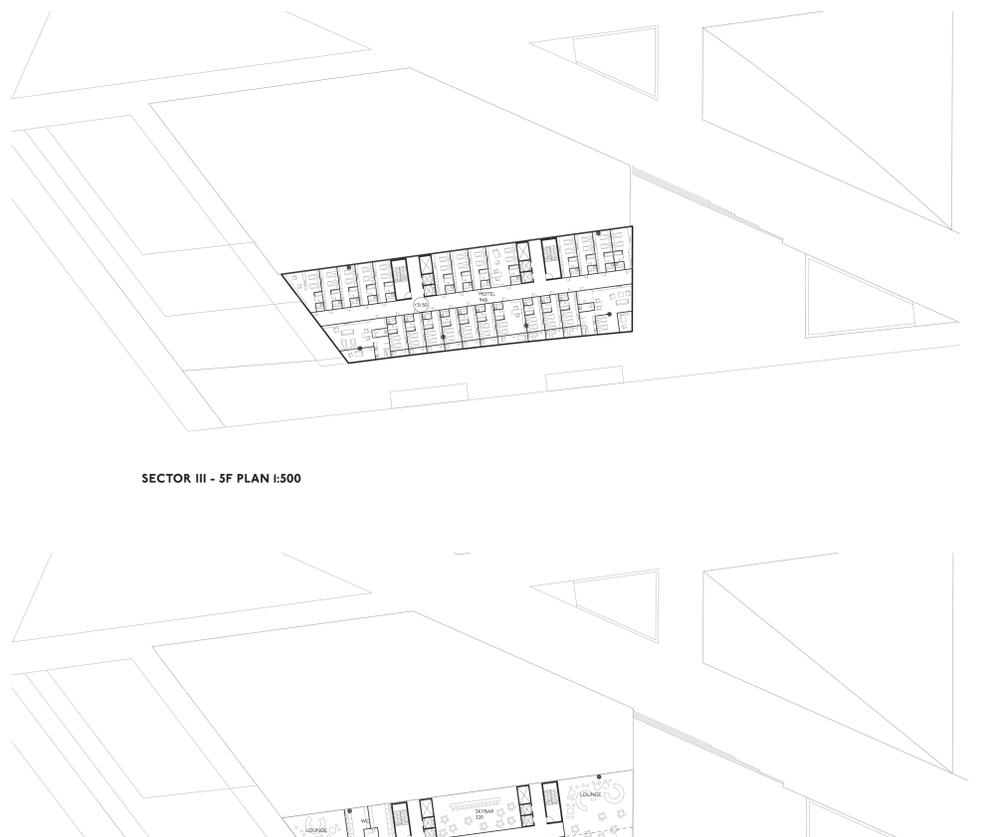
SECTOR III - 2F PLAN 1:500



SECTOR III - 3F PLAN 1:500



SECTOR III - 4F PLAN 1:500



SECTOR III - 5F PLAN 1:500



SECTOR III - 6F PLAN 1:500



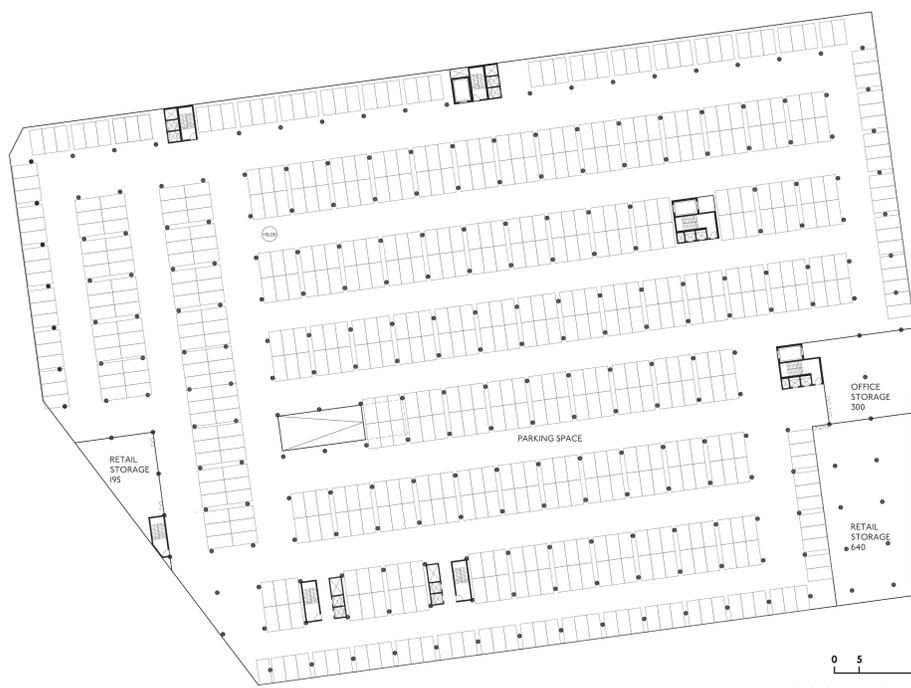
0 10 50 m



BUSINESS AREA NIGHT VIEW



SECTOR III - BASEMENT 1F PLAN 1:500

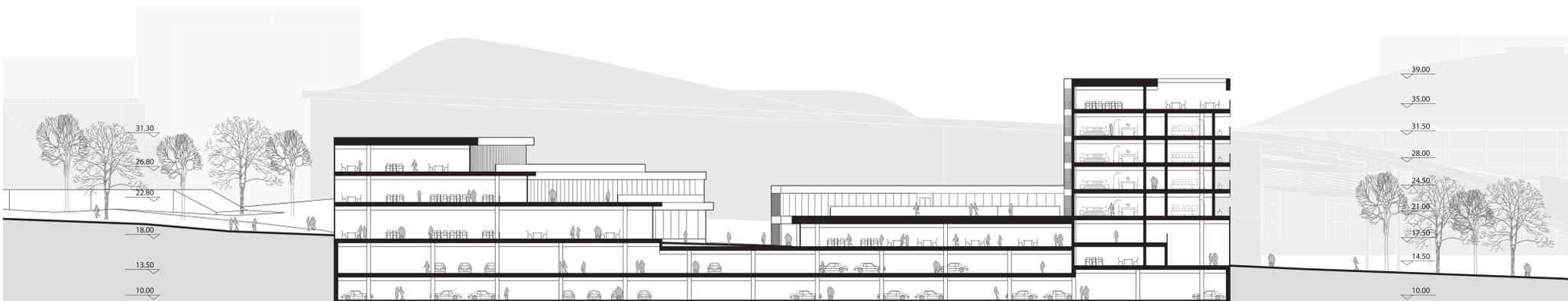


SECTOR III - BASEMENT 2F 1:500

0 5 25 m



SECTOR III ELEVATION



0 2 10 m

SECTOR III H-H' SECTION 1:250