The specificity of the training in the 5-year Master's program "Landscape Architecture and Landscape Planning" at UACEG is the in-depth and specialized study of Special Use Parks (zoos and botanical gardens, sport and attraction parks, thematic parks, open area museum park complexes, historical parks, cemeteries and etc.), as well as Protected Areas with cultural and natural heritage. The training focuses on sustainable forms of planning, design and maintenance with the application of technologies that save resources and energy, as well as enhancing biodiversity and ecological balance.

The criteria for the evaluation of projects are as follows:

1. Presentation of a well-developed original concept for the organization and design of the park area in accordance with the specificity of the site;

2. Application of modern principles for the organization of expositions, development of priority functions for modern special parks such as educational, ecological, nature conservation, scientific research, cultural, educational, etc;

3. Designing with respect to natural features - plant and animal societies, water and relief features, inclusion of new elements to enhance preservation and increase of biodiversity of the territory;

4. Recreation of ecosystems and biomes in their integrity and harmonious unity to educate respect for ecosystem unity and balance; application of the principles of landscape and cultural immersion;

5. Creation of high-quality park spaces with a richness of functions and uses, stimulating efficient and full use during all of the year by the widest possible range of users, stimulating social cohesion and cultural exchange.
Creation of a high-quality environment for animals;

6. Demonstration of quality graphic techniques and presentation of the project.



Country/city - Sofia, Bulgaria

University - UACEG - University of Architecture, Civil Engineering and Geodesy

Academic year - 2024-2025

Title - Special Use Parks Projects

Authors - Viara Petkova Slavova, Lia Yankulova, Nikol Spasova, Kristiana Karneva, Sofia Stamenova

BIOPARK 'SANTO INACIO'

Transformation and Modernization
of an Existing Zoo



View from East Asian cultural thematic area

Country/City	Sofia, Bulgaria
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy
Academic year	2025
Title of the project	Biopark Santo Inacio- Transformation and Modernisation of an Existing Zoo
Authors	Viara Petkova Slavova

TECHNICAL DOSSIER

Title of the project	Biopark Santo Inacio- Transformation and Modernisation of an Existing Zoo
Authors	Viara Petkova Slavova
Title of the course	Special Use Park Project
Academic year	2025
Teaching Staff	Assoc. Prof. Dr. Arch. L. Arch. Env-Eng. Ml. Tanov, Assist. Prof. L. Arch. D. Dimitrov
Department / Section / Program of belonging	Department of Urban Planning, Landscape Architecture and Landscape Planning Master Program
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy

13

Written statement, short description of the project in English, no more than 250 words

This project reimagines the Santo Inácio Zoo near Porto as a modern biopark where nature and culture meet. Based on the concept of biomes, the animal habitats are reorganized into ecological zones that reflect global biodiversity. Barriers between animals and visitors are removed to create a stronger sensory experience and support wildlife conservation.

The park experience takes place on four levels: ground-level paths alongside nature, elevated walkways offering views from above, underground routes for quiet discovery, and a cultural layer where themes connect local history, symbols, and ruins through storytelling. Cultural immersion is part of every zone, inspired by both nature and the human cultures linked to it. Each area becomes a themed space, blending plants, land, and built forms in a way that feels real and sensory, not artificial. The historic estate and gardens enrich the park's cultural story.More than just a zoo, the park becomes a living dialogue between species, landscapes, and cultures. It's a place where architecture blends into nature, and culture makes the natural world feel even more meaningful.

BIOPARK 'SANTO INACIO'

Transformation and Modernization of an Existing Zoo

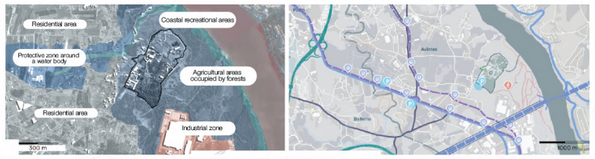
Area: 20 ha

Porto, Portugal

LOCATION AND SCOPE



CONTACT ZONES



CULTURAL AND NATURAL VALUES



ZONING



GENERAL PLAN

Existing elements:

1 historic estate Quinta de Flares
2 historic gardens of the estate
3 chapel "Santo Inácio"

Project elements:

4 main entrance
5 public service and artisan ensemble "Portugal"
6 rope park
7 children's playground
8 tropicarium with café and rain simulation
9 cascading ponds
10 service zone with isolation units, veterinary area and water purification through bio-pools
11 rice fields – thematic element
12 rock complex with restaurant and hidden viewing platforms
13 thematic observation tower with monkey interaction zone
14 underground route "In the Cat Shelter"
15 thematic East Asian complex
16 elevated connection above ponds – access to lemur island
17 research trail through rocks "Ancient Remains"
18 hidden ancient jaguar viewing platform
19 interaction zone
20 parking
21 suburban park – historic forest with valuable species
22 water filtration, waste processing, and composting zone
23 orchard

Public service hubs

I East Asian Hub
II Indonesian Hub
III South Asian Hub with observation platform
IV South American Hub
V Tropicarium
VI Andean Mountain Hub
VII Portugal entrance zone
VIII African rock complex
IX Mongolian Steppe



CONCEPTION

Tropical forests along the main path

Goal :
-A sense of dynamism and spatial variety throughout the zoo
-Clear signage and orientation marking the main visitor route
-Shaded areas providing cooling and comfort

Elements :
-Tropical vegetation under existing trees
-Misting systems
-Aviaries with paradise and tropical birds
-Permeable (drainage) concrete



4 levels of perception

1 Ground level
-Tropical understory vegetation beneath existing trees
-Misting systems for microclimate control
-Aviaries featuring birds of paradise and other tropical species
-Permeable drainage concrete for sustainable surface water management



2 Elevated level
-Rope structures / rope-based installations
-Metal bridges over the habitats
-Aerial connections reaching across the hills
-Stilted pathways / boardwalks on stilts
-Elevated sections of the main route, designed to meet accessibility requirements



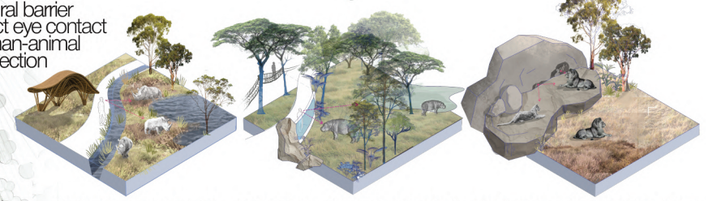
3 Underground level
-Tunnels with visual connection to the habitats, aimed at establishing direct eye contact with the animals



4 Level – cultural immersion
-integration of ancient cultural markers, architecture, objects, ruins, etc., into the landscape



Habitat types
- no barriers
-natural barrier
-direct eye contact
-human-animal connection



Habitat for the Black Rhinoceros is situated within the Tropical Asian Forest biome, utilizing a water moat as a natural barrier, while enabling direct visual contact through the landscape immersion.

The habitat of the Pygmy Hippopotamus is set within the African Savanna biome. This animals are exhibited through specially designed glass panels embedded in artificial rock formations, along with an underwater viewing area accessible via a subterranean tunnel, allowing visitors to observe the animals both above and below the water.

The habitat of the Lion, located within the African Savanna biome, allows for discreet observation through camouflaged viewing hatches built into a rock-structured visitor complex. The use of two-faced (one-way) glass ensures that the animals remain undisturbed, as visibility is granted only to the visitors.









Biome: Bamboo forests

The habitat hosts pandas and monkeys, with a visitor pathway made of decking, dynamically cutting through natural rock formations to enhance spatial experience.
The design incorporates cultural immersion elements, enriching the educational and emotional engagement of visitors.
The planting scheme includes tall tropical and subtropical species such as Cecropia spp., Bamboo, Albizia saman, and Acer spp., while the understory is composed of ferns, orchids, and shade-tolerant herbaceous plants, ensuring a lush and immersive environment.

Biome: African savana

The habitat brings together a diverse range of African savanna animals, including lions, giraffes, antelopes, okapi, zebras, meerkats, camels, and others. Visitors move along metal grating pathways that traverse a sculptural rock complex housing both public facilities and discreet observation points.
The landscape design immerses visitors in a culturally rich savanna experience, with tree species like Acacia senegal and Terminalia sericea, alongside dry sculptural trunks resembling Baobabs.
The shrub layer features Combretum spp., Grewia spp., Ziziphus mucronata, and Senegalia meillfera, while the ground layer is covered with drought-adapted grasses, creating an authentic and educational environment.

Andean mountain steppe

This Andean-inspired habitat features alpacas, llamas, guanacos, vultures, and Andean flamingos, offering visitors a unique blend of fauna and cultural storytelling. A contact zone with llamas allows for safe, up-close interaction. The "Ancient Remains" exploration route guides visitors along stone-paved paths, simulating an archaeological journey through the high Andes. The design incorporates cultural immersion, with authentic vegetation from the region:

Biome: Amazon Tropical Forests

"Bird paradise"

Bird Paradise is a second-level zone featuring metal-grid flooring and aviaries enclosed with metal mesh that allow visitor access. Paradise birds move freely throughout the space, while water mist devices maintain high humidity, simulating the atmosphere of tropical rainforests. The vegetation is rich and diverse. The tree layer includes species such as Ceiba pentandra, Bertholletia excelsa (Brazil nut), Eschweilera coriacea, and Dipteryx odorata. In the understory and among the epiphytes and vines grow Philodendron spp., Monstera spp., members of the Bromeliaceae family, as well as Heliconia spp., Passiflora spp., and Ficus spp.. The ground layer features herbaceous plants such as Calathea spp., Maranta spp., and Costus spp., all contributing to the lush and authentic feel of this tropical environment.

Visualisation:
Habitat of smoked leopard
-glass barrier
-direct eye contact
-hiding places for the leopard





Country/City	Sofia, Bulgaria
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy
Academic year	2024
Title of the project	SIMULACRUM - Park Development of a coastal area - Bratislava
Authors	Lia Yankulova

TECHNICAL DOSSIER

Title of the project	SIMULACRUM - Park Development of a coastal area - Bratislava
Authors	Lia Yankulova
Title of the course	Special Use Park Project
Academic year	2024
Teaching Staff	Assoc. Prof. Dr. Arch. L. Arch. Env-Eng. Ml. Tanov, Chrief Assist. Prof. L. Arch. D. Manolova
Department / Section / Program of belonging	Department of Urban Planning, Landscape Architecture and Landscape Planning Master Program
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy

13

Written statement, short description of the project in English, no more than 250 words

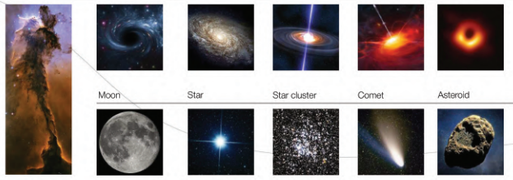
The project proposes the creation of parkland as part of a waterfront regeneration megaproject with offices, residential, buildings etc., while creating new recreational features and experiences unique to the area. The park concept develops two thematic lines- showcasing the natural beauty by recreating the natural appearance of the riverside from the past in order to stimulate the public's interest in nature and the city's history and integrating high-tech attractions - simulations and simulacra (attempting to recreate a non-existent reality) of different aspects of modern life, recreating the present. The second element of this are the mirrors in the art installations. They represent the unreal reality they reflect and are a meaningful buffer between what we see and what the park offers through technology.Today, simulated reality is more real than actual reality, which we no longer seek because of the time we spend behind entertainment screens. Hyperreality is born from the merging of media reality with our own without being able to distinguish our “real” worldview from the false one. The combination of vegetation, water, new technologies and mirrors creates a balanced environment despite the meaningful contrast between past and present, and real and unreal. The different natural and functional zones are simulations of sorts, interweaving into simulacra and uniting into one large simulacrum.

Location



Theme of the office capsules

The Nebula | Dark matter | Galaxy | Pulsar | Quasar | Black hole



Moon | Star | Star cluster | Comet | Asteroid

GENERAL PLAN

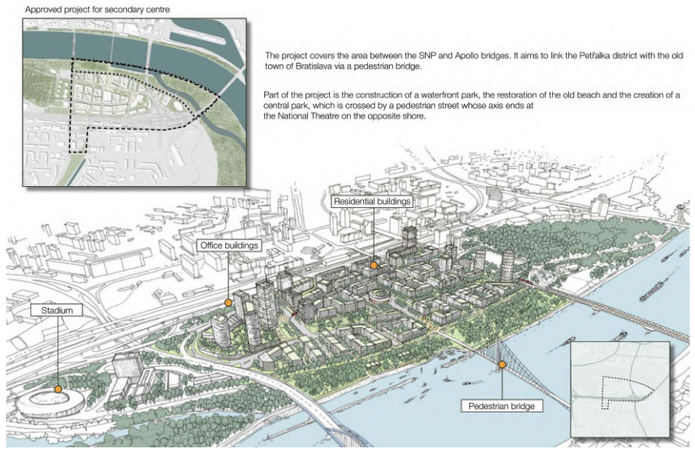


SIMULACRUM

Section



Approved project for secondary centre



Fragment



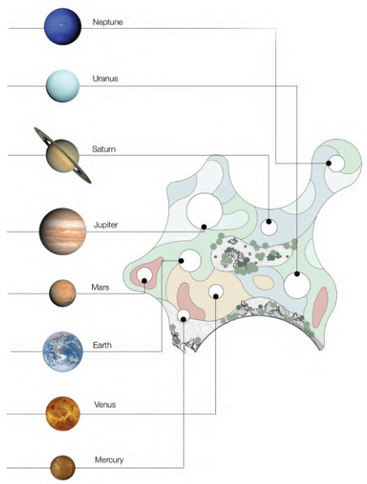
LEGEND

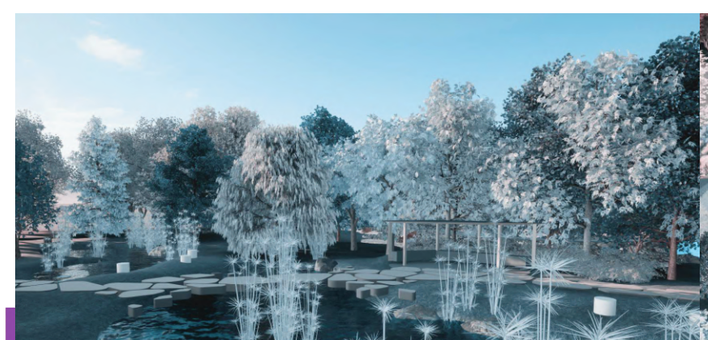
1. Planetarium
2. Tunnel - simulation in space
3. Pergola
4. Gazebo
5. A greenhouse-museum showing the history of plants on Earth and holograms of plants living in the conditions of other planets
6. Zodiac route with signs on the western zodiac
7. Representation of the solar system through planets in the form of mosaic art installations of mirrors
8. A playground with rocket facilities and 180-degree interactive constellation wall
9. Outdoor event space, permanent info-boards for space bodies and outdoor offices (office capsules)

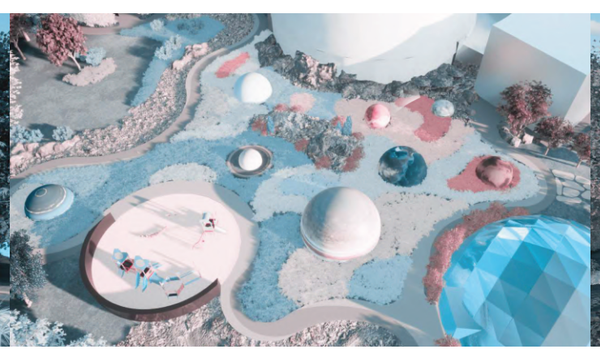
Platanus x acerifolia | Salix matsudana | Paulownia tomentosa | Acer saccharinum

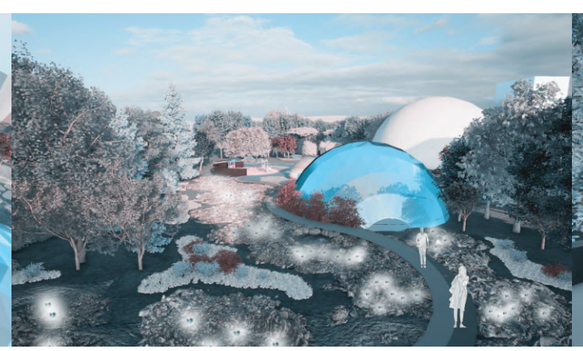
Populus alba | Salix babylonica | Sorbus aria | Salix integra 'Hakuro nishiki'

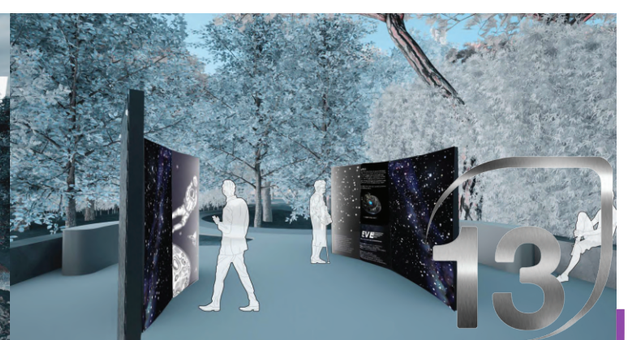
A representation of the Solar system













Country/City	Sofia, Bulgaria
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy
Academic year	2024
Title of the project	Green Regeneration of Railways Areals In Sofia
Authors	Nicol Spasova

TECHNICAL DOSSIER

Title of the project	Green Regeneration of Railways Areals In Sofia
Authors	Nicol Spasova
Title of the course	Special Use Park Project
Academic year	2024
Teaching Staff	Assoc. Prof. Dr. Arch. L. Arch. Env-Eng. Ml. Tanov, Assist. Prof. L. Arch. D. Dimitrov
Department / Section / Program of belonging	Department of Urban Planning, Landscape Architecture and Landscape Planning Master Program
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy

13

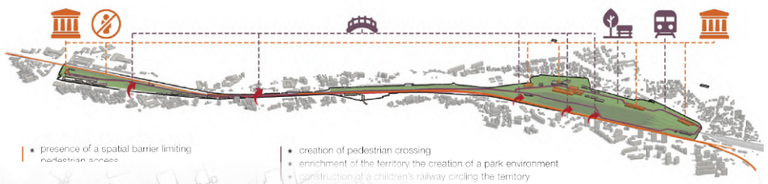
Written statement, short description of the project in English, no more than 250 words

The development is a project for green regeneration of the railway area between two railway stations in the Bulgarian capital Sofia. Considering the role of the area as a former important transport, logistics and industrial centre, the main task of the project is to create a multifunctional thematic park for recreation and services related to the history of the industrial development of Sofia. Another important task is to overcome the spatial barrier of the railway infrastructure and transform the area into a linking element for the surrounding residential areas.
The concept of the park is developed as a historical narrative of man's achievements from the past through to the present with an eye to the future with museum exhibitions, technology laboratories and cultural and art facilities in the open air and in the old halls. The main routes in the park follow this narrative and reveal successive displays of machinery, equipment and vehicles from the industrial age, laboratories and installations of modern eco-technologies and sustainable practices, as well as environments for self-discovery and self-improvement, and for art and culture.
At the level of form-shaping, a contrasting opposition between linearity and landscape is expressed, symbolizing the two opposing elements of industry and nature.

LOCATION



Concept of the whole territory



- presence of a spatial barrier limiting pedestrian access
- creation of pedestrian crossing
- enrichment of the territory the creation of a park environment
- construction of a children's railway circling the territory

Functional zoning of the whole territory



- event areas
- public workshops
- skateboard and graffiti
- markets
- playgrounds
- gallery for chilcer's art
- yoga and meditation centre
- an urban laboratory with a centre for innovation and urban agriculture
- outdoor museum exhibitions

Legend for facilities:

1. autocinema
2. urban agriculture
3. dining pavilions
4. hydroponics and organic farming
5. bio-basins
6. solar panels, filtration tank and wind turbines
7. gantry crane
8. skate park
9. playfrounds
10. children's railway
11. children's railway stop
12. mine depot
13. gold mining pool
14. boat building workshop
15. mills
16. Archimedean turbine
17. an operating railway line
18. passarelles for railway relocation
19. an operating railway stop
20. public transport stop
21. bike lane

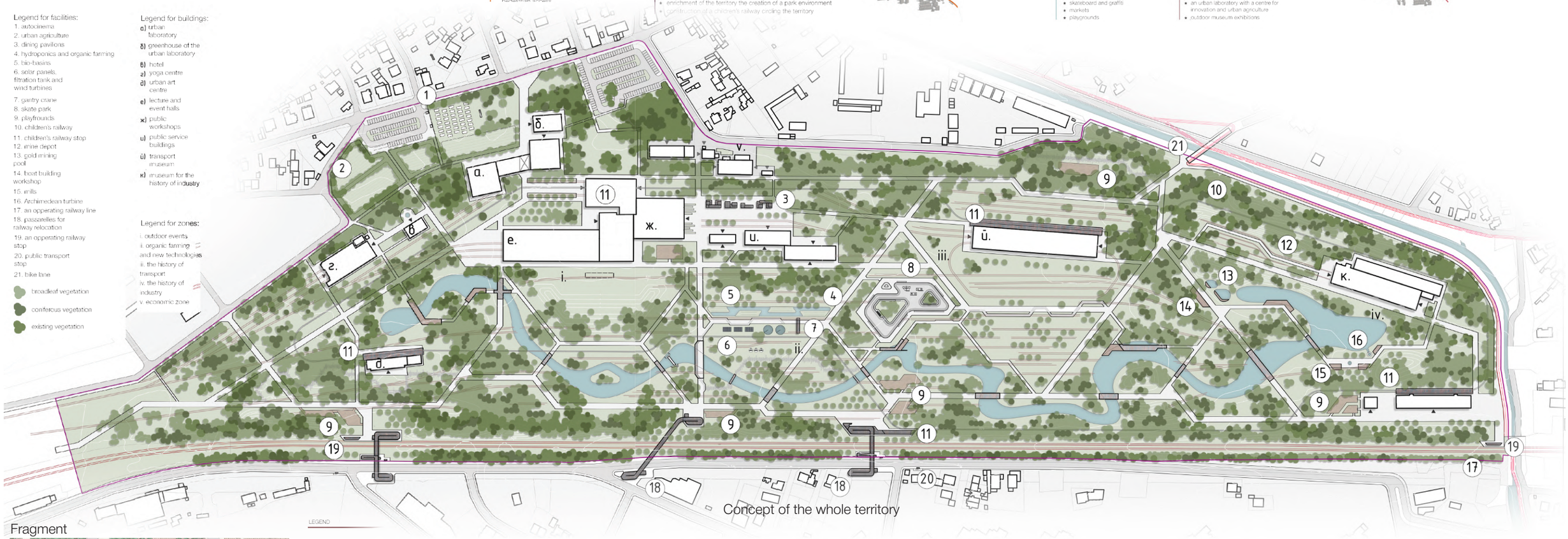
- broadleaf vegetation
- coniferous vegetation
- existing vegetation

Legend for buildings:

- а) urban laboratory
- б) greenhouse of the urban laboratory
- в) hotel
- г) yoga centre
- д) urban art centre
- е) lecture and event halls
- ж) public workshops
- и) public service buildings
- й) transport museum
- к) museum for the history of industry

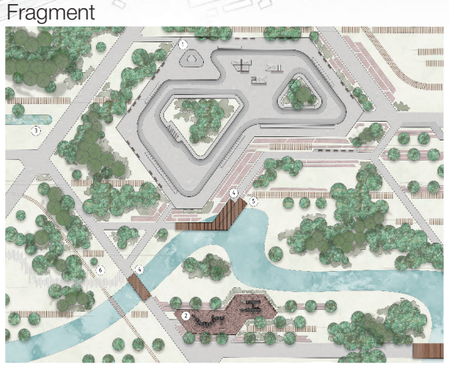
Legend for zones:

i. outdoor events
ii. organic farming and new technologies
iii. the history of transport
iv. the history of industry
v. economic zone



Concept of the whole territory

Fragment



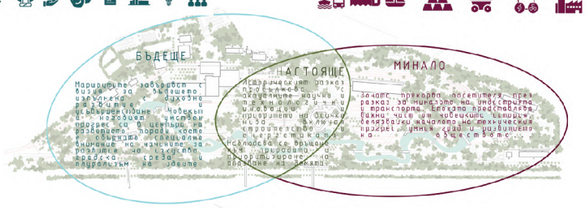
LEGEND

1. skate park
2. playground
3. biobasin
4. wooden bridge
5. decking
6. children's railway

TIME CONCEPT

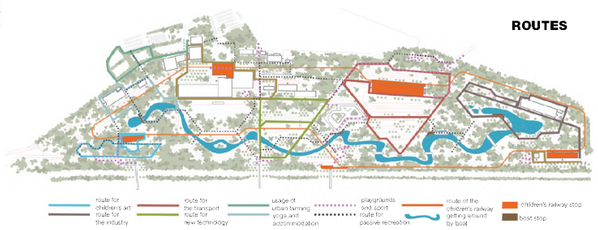
FUTURE - self-discovery, culture and art

PAST - exposition of industry and transport

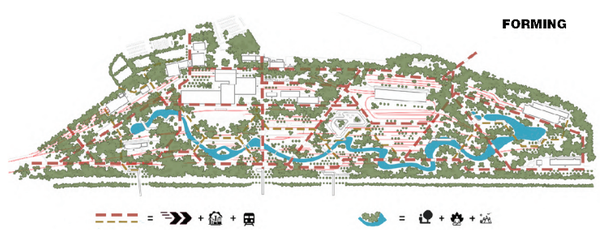


PRESENT - presentation of eco-technologies and sustainable

ROUTES



FORMING













Country/City	Sofia, Bulgaria
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy
Academic year	2025
Title of the project	Zoolimpia
Authors	Kristiana Karneva, Sofia Stamenova

TECHNICAL DOSSIER

Title of the project	Zoolimpia
Authors	Kristiana Karneva, Sofia Stamenova
Title of the course	Special Use Park Project
Academic year	2025
Teaching Staff	Assoc. Prof. Dr. Arch. L. Arch. Env-Eng. Ml. Tanov, Assist. Prof. L. Arch. D. Dimitrov
Department / Section / Program of belonging	Department of Urban Planning, Landscape Architecture and Landscape Planning Master Program
University / School	UACEG - University of Architecture, Civil Engineering and Geodesy

13

Written statement, short description of the project in English, no more than 250 words

Zoolympia is a modern zoo project that merges ecological diversity with Greek mythology to create an immersive, educational journey. The zoo unfolds as a looping path through biomes representing global ecosystems—each paired with a Greek deity symbolizing its spirit and values. Visitors begin at a small „Greek" village, where Aphrodite, goddess of beauty and harmony, presides over a space of artisanal shops and handmade products. The route continues to the Coastal Biome, under Poseidon, featuring water-loving birds. The Tropicarium, governed by Dionysus, showcasing species from South America, Africa, and Asia. Next, the Prairie and Wetlands, under Hera, focus on biodiversity and harmony in grassland and marsh environments. The Savanna Biome, ruled by Zeus, features a Safari zone with iconic grazing species, but Desert Biome, under Ares, emphasizes resilience and survival. In the Mountain Biome Hermes guides visitors along elevated paths and scenic lookouts through alpine vegetation. There lies the Underworld, governed by Hades, housing reptiles and amphibians in cave-like enclosures. The journey concludes in the Forest, watched over by Artemis, where shaded paths and a petting zone offer gentle interaction with wildlife. Public service hubs with traditional architecture for the respective regions have been created in all biomes.

ZOOOLYMPIA

Location



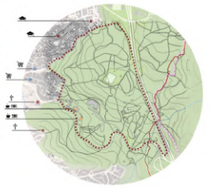
Public transport connectivity



Existing vegetation



Site Analysis



General plan



Section 1

Section 2

Design Concept

