Partizánska Lúka + Železná Studnička

Urban & Architecture Vision

Aleksandar Daniel I 2023/2024

STU FAD
SLOVAK UNIVERSITY OF TECHNOLOGY IN BRATISLAVA
FACULTY OF ARCHITECTURE AND DESIGN

BIG
BJARKE INGELS GROUP

INFLOW

AD

Partizánska Lúka +Železná Studnička - Urban & Architecture Vision

The proposition for an increase in the Urban Forest Park's capacity is rooted in a thorough analysis and assumptions derived from user profiles. With a current approximate capacity of 2680 users per day, considering only 40% utilization, the daily usage is projected to amount to 804 users. This analysis suggests a potential growth in visitors, projecting an increase from 3664 to 4468, representing a significant 20% expansion. Considering comfortable capacity, the maximal increase could be as much as 50%. Addressing the challenges and opportunities associated with this projected increase, the project introduces solutions such as a new bike path, adjustments to existing roads, and the implementation of new functions designed to accommodate the anticipated growth.

The proposed architectural framework for this extensive project is designed in three distinct phases to address its inherent large scale and complexity. The three phases include Infrastructure Enhancement, Service Infrastructure and Amenities, and Attractions and Larger Structures. These phases aim to streamline the development process, enhance project manageability, and ensure a systematic progression toward the successful completion of the entire venture.

Phase 1: Infrastructure Enhancement
The initial phase focuses on fundamental elements such as paths, road adjustments, and foundational infrastructure components. This sets the groundwork for subsequent phases by establishing a robust framework for connectivity and accessibility within the project site. Activities within this phase include path design and construction, road adjustments, and foundational utilities.

Phase 2: Service Infrastructure and Amenities
The second phase shifts the focus towards service-oriented infrastructure and amenities, including service objects, restaurants, and recreational spaces. This phase integrates service infrastructure with the foundational elements established in Phase 1 to create a cohesive and functional environment.

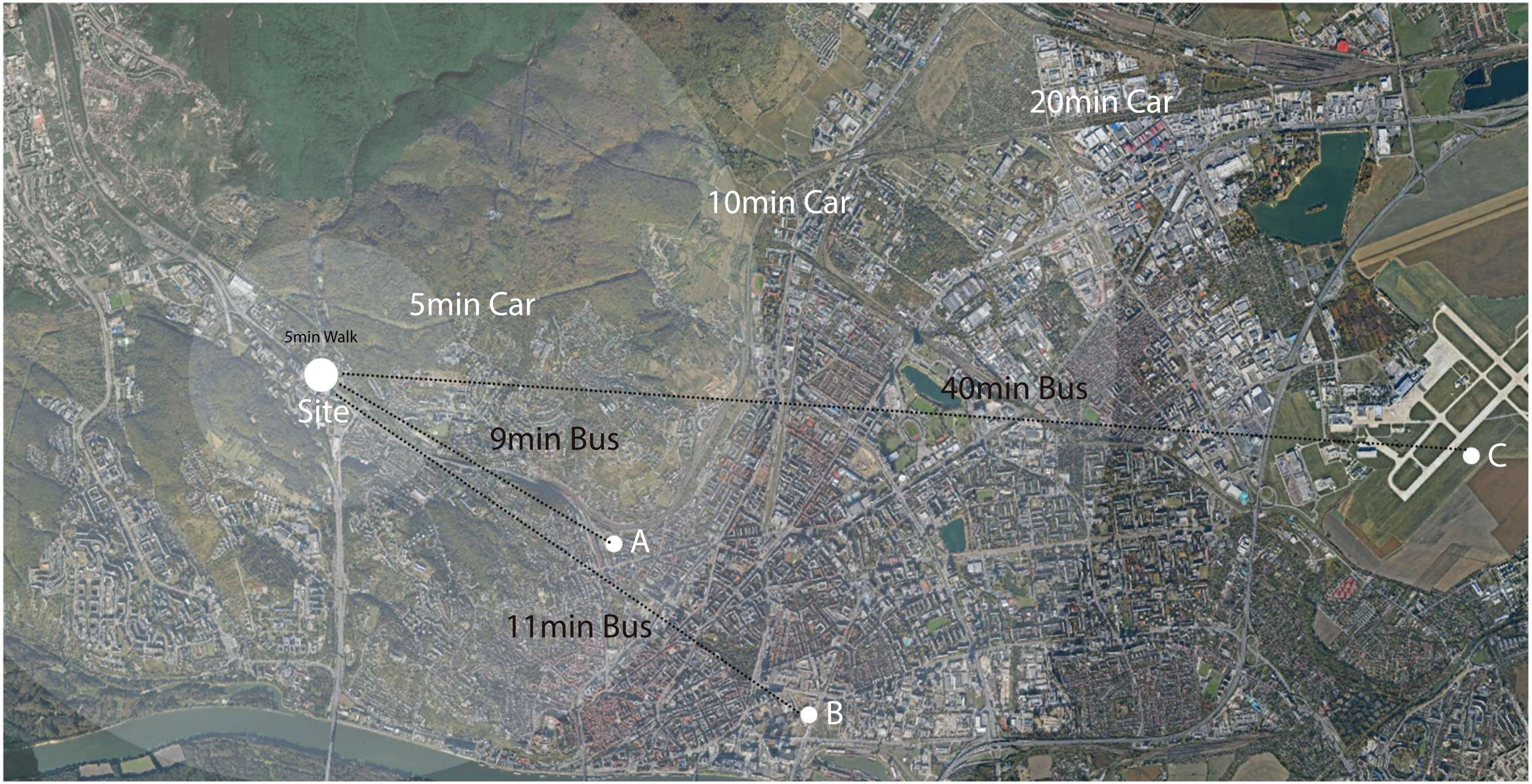
Phase 3: Attractions and Larger Structures
The final phase focuses on the development of attractions and larger structures, adding finishing touches to the project. This includes landmark attractions, recreational facilities, and thorough quality assurance checks to ensure seamless integration of all components within the project.

Additionally, the project emphasizes ecological sensitivity, natural landscaping, and sustainable practices throughout its development. The incorporation of community spaces, sensory engagement, and a commitment to sustainability through natural shapes, materials, and colors further enhances the project's overall appeal.

To support secondary entries and improve overall park accessibility, a strategy is outlined, including improving signage, enhancing infrastructure, promoting park connectivity, introducing new attractions, and creating rest areas.

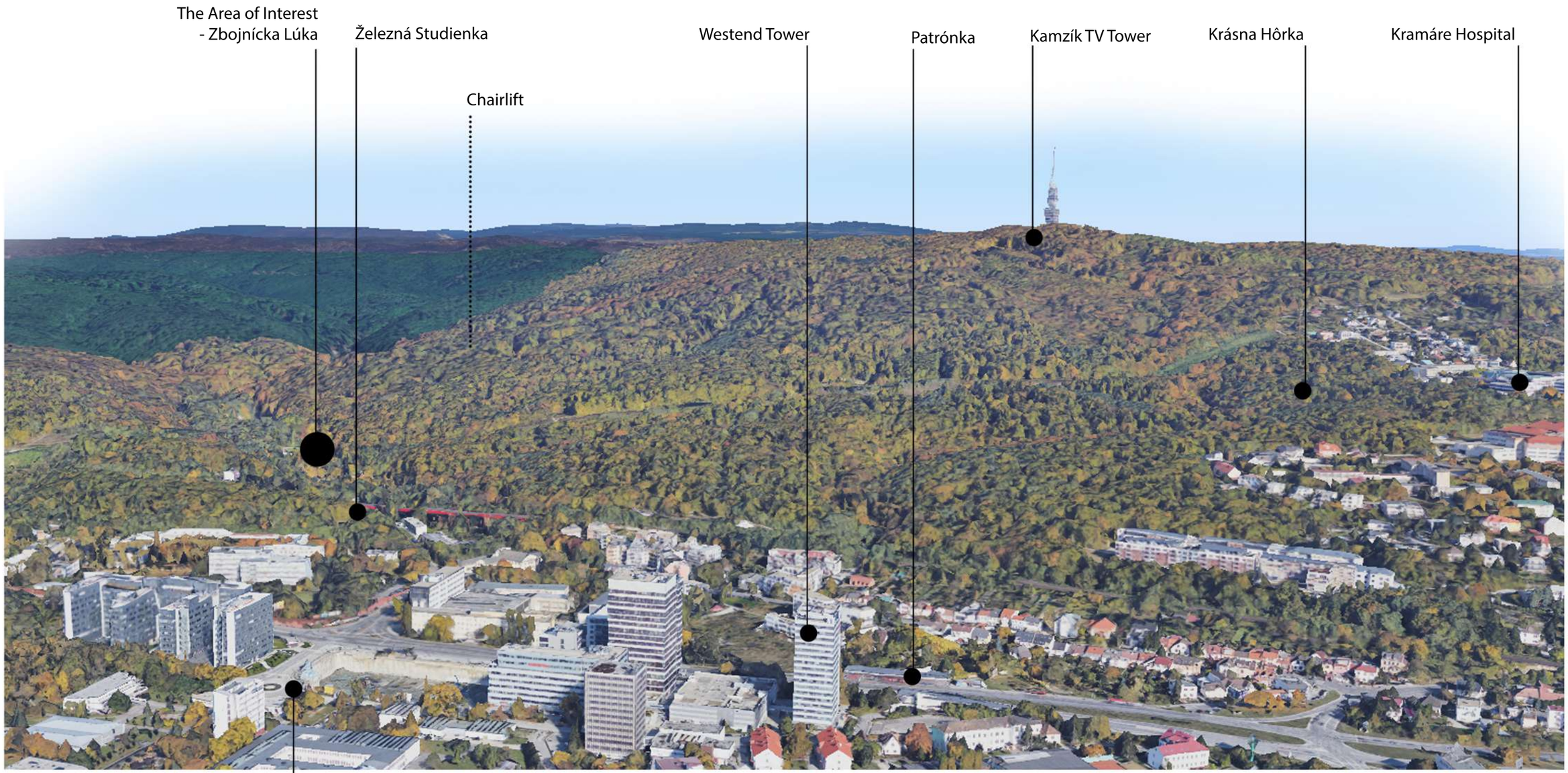
The project also introduces several multifunctional objects within the park, such as a Information Center, Bike Rental facility, Medical Emergency structure, Restaurant, and Kayak Club. These structures seamlessly blend sustainability with functionality, contributing to the overall well-being and enjoyment of park visitors.

Introduction to the Project



A - Main train Station B - Main bus Station C - International Airport

Connections



Relations to the Site in 3D

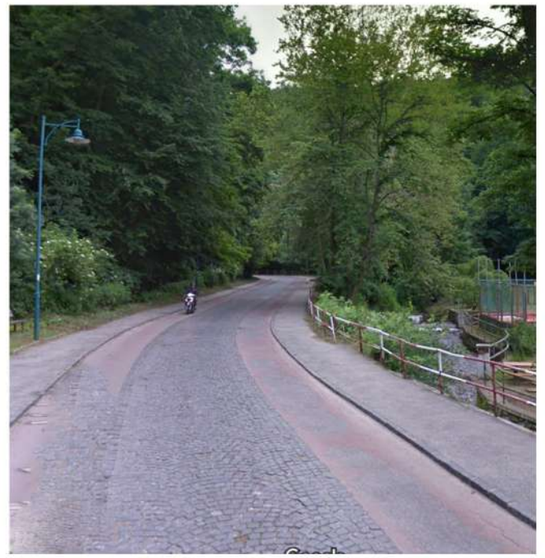
Cars in the entrance / no entrance at all

Bad infrastructure in most areas

No shelter for public transport users

Several Brownfields in the area

Some paths are uninclusive

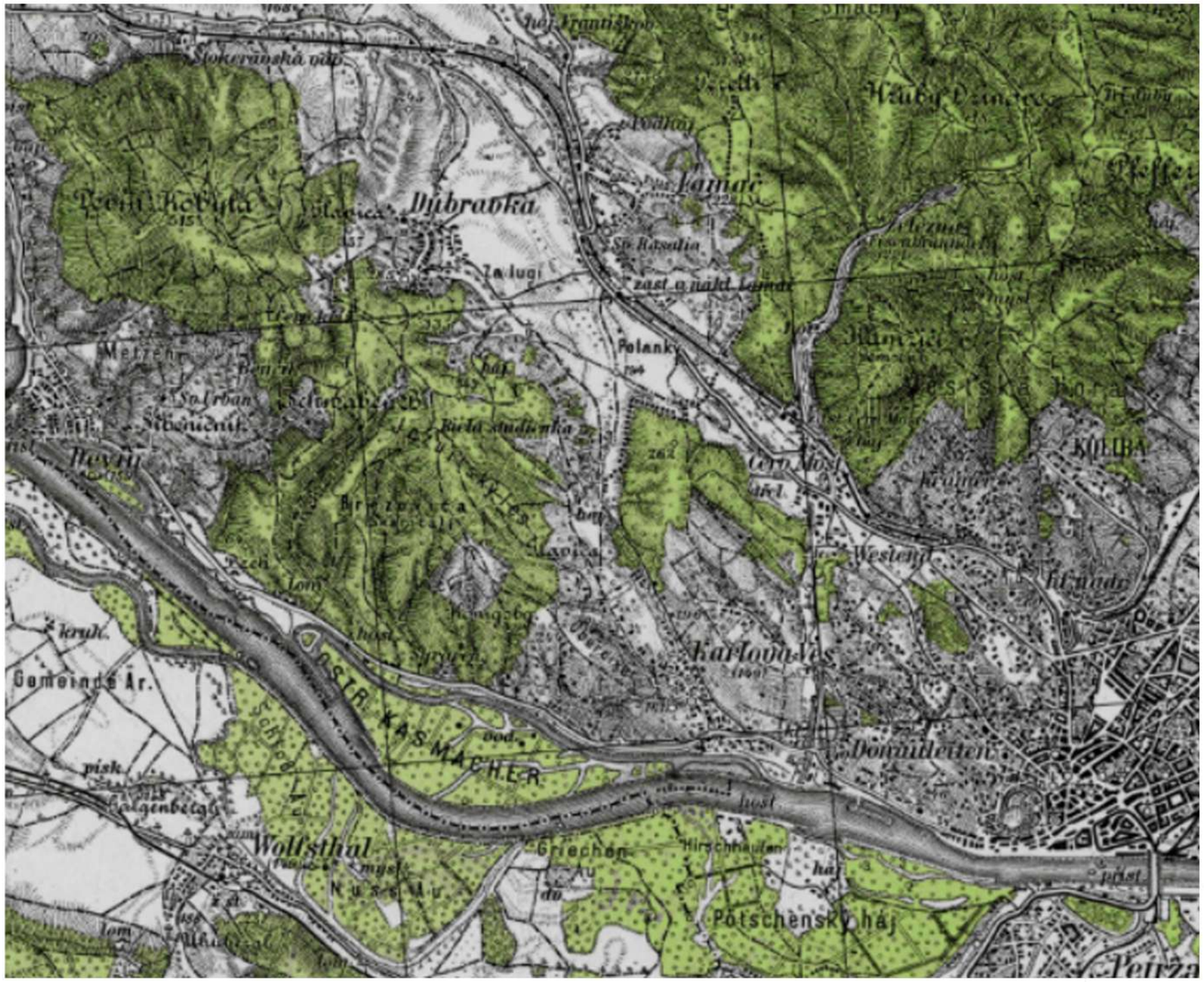


Conflicting paths of public transport and bikes / roadst too narrow for current public transport use

\+ Unequally distributed crowds, Smoke from grills in some qey areas, Lakes are not adequatelly connected to eachother, Lakes are not used within their full potential, Lack of shops

Immediate Pain Points

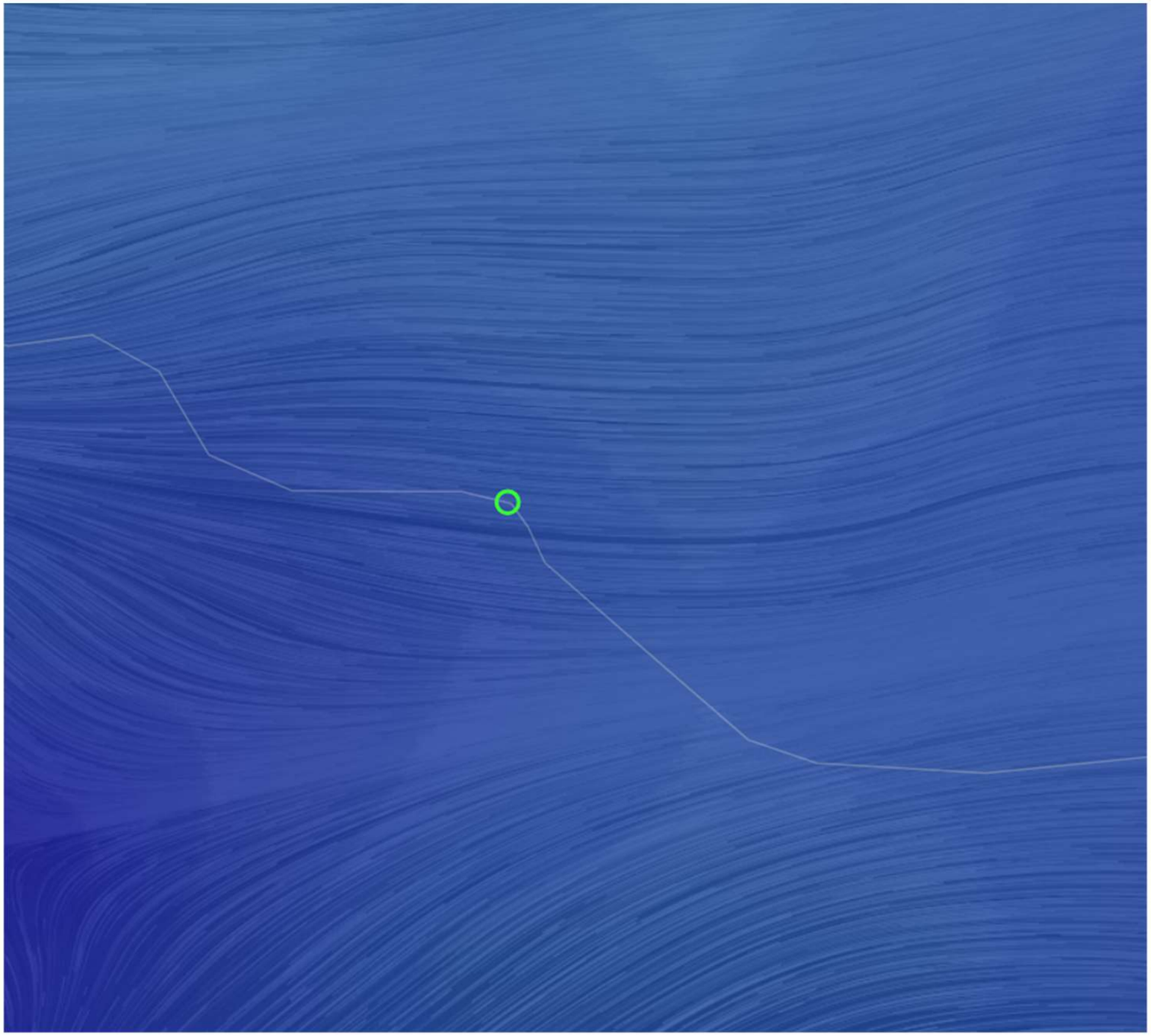
- 1450s: 9 Mills are being mentioned in historic documents
- 1786: The first baths are built in the area.
- 1846: Ponds are being built
- 1848: The original Red bridge is built
- 1904: The current train station is established
- 1930s: The area of Partizánska lúka is first developed as a recreational area
- 1940s: During World War II, the area is used by the Slovak Resistance
- 1950s: The area is developed as a socialist housing estate
- 1972: The chairlift was opened
- 1980s: The area begins to decline as people move to newer housing estates
- 1990s: The area is privatized and begins to be revitalized
- 2000s: The area continues to be revitalized
- 2023: Partizánska lúka is a popular recreational area

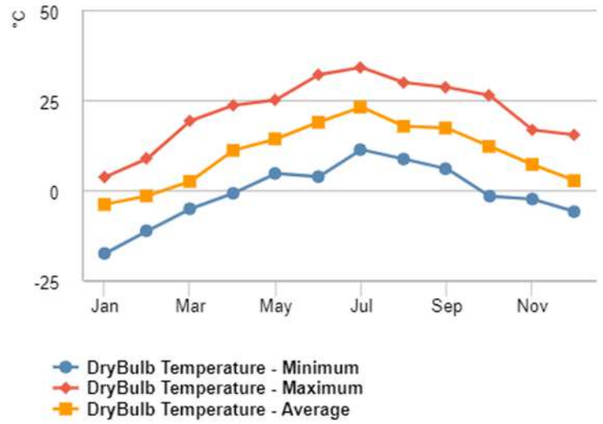




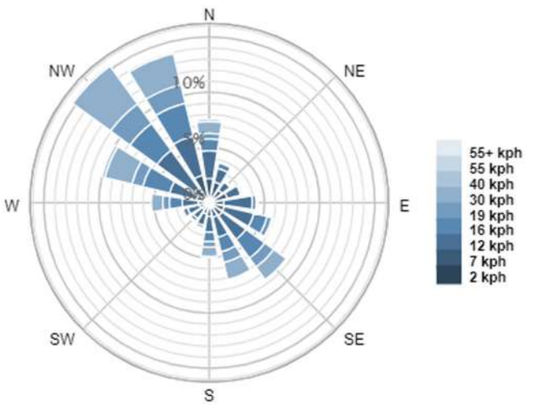




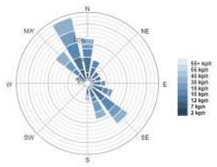




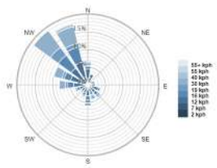
Monthly Temperature



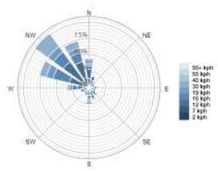
Windrose Annual



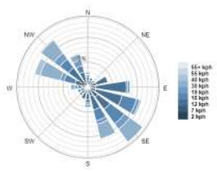
Windrose Speed Dec-Feb



Windrose Speed Mar-May



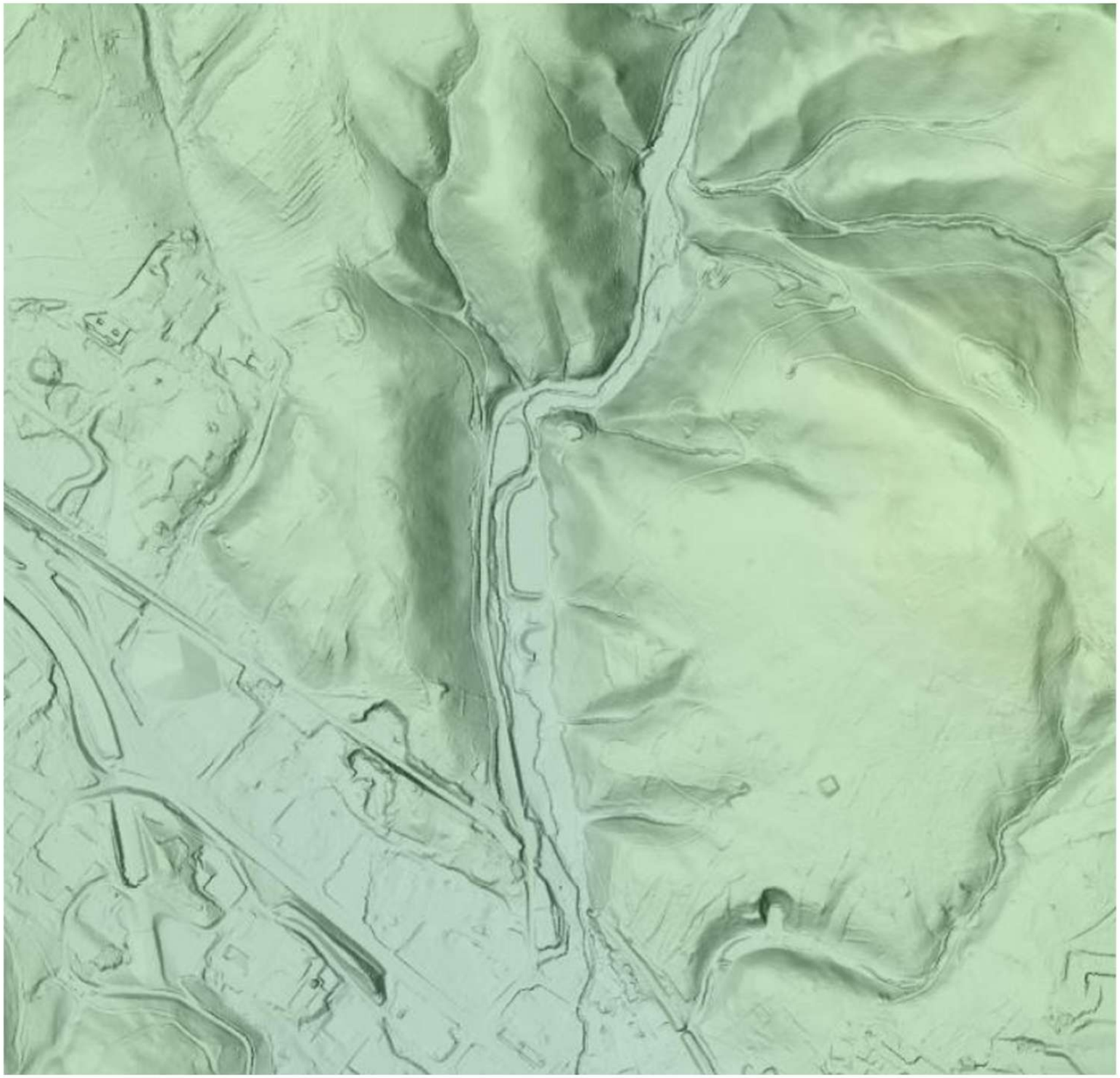
Windrose Speed Jun-Aug

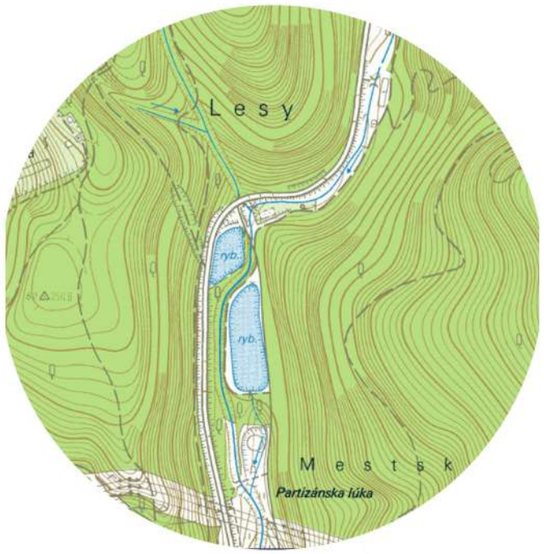


Windrose Speed Sep-Nov

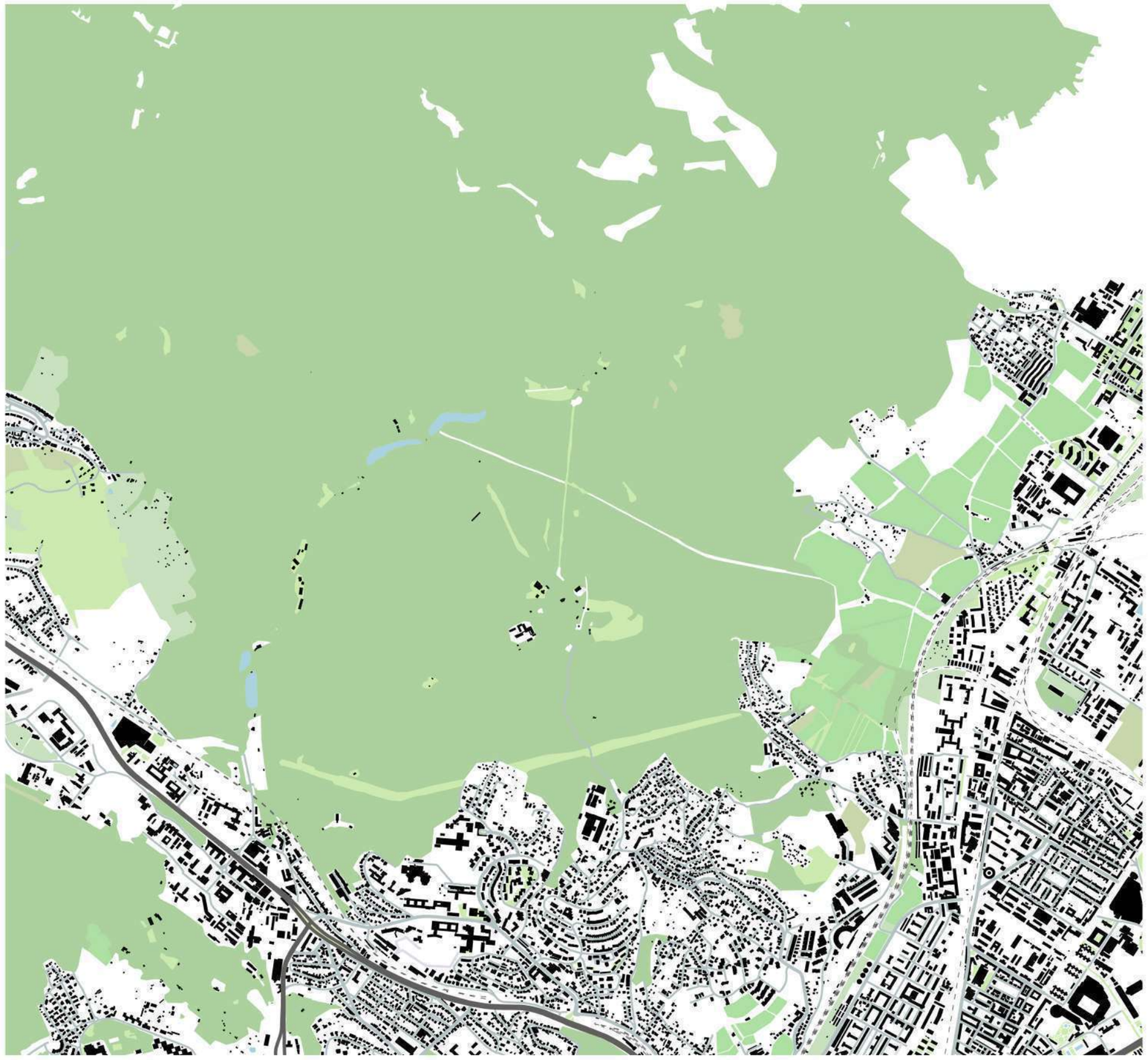
Bratislava experiences a temperate continental climate with cold winters, warm summers, and occasional strong winds, particularly in autumn and winter. There should be focus on insulation, heating, and snow load considerations in winter, while in summer,, cooling strategies like shading and ventilation should be considered. Overall, designing buildings that can handle temperature fluctuations and occasional strong winds is essential for comfort and energy efficiency in Bratislava.

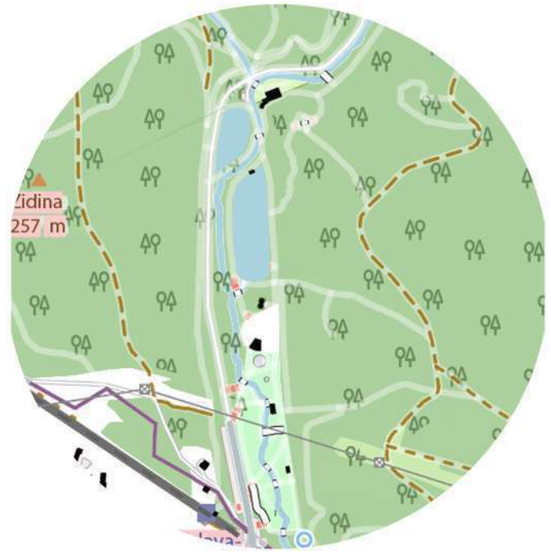
Temperature and Wind analysis



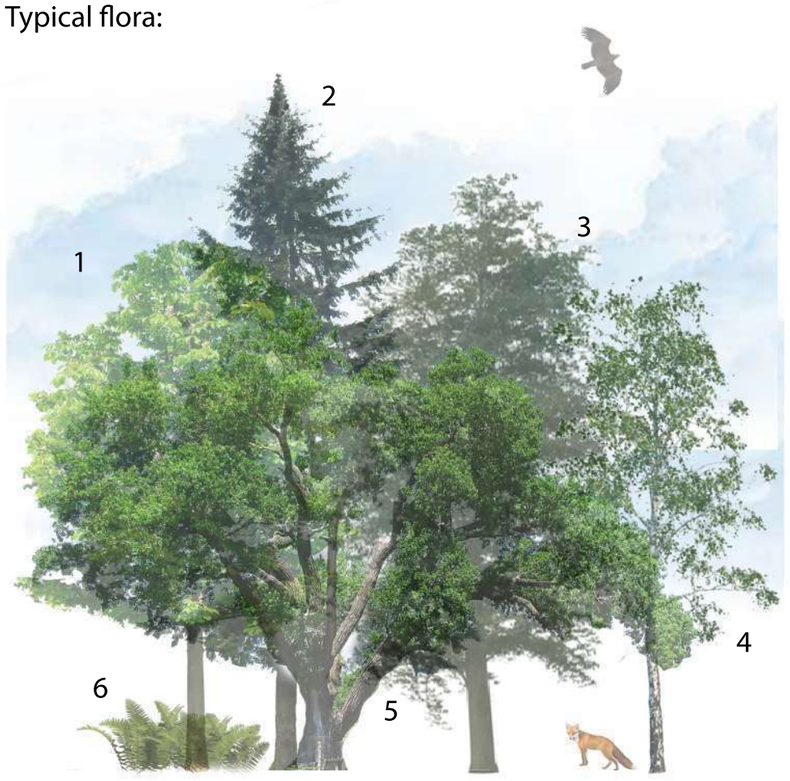


Terrain analysis





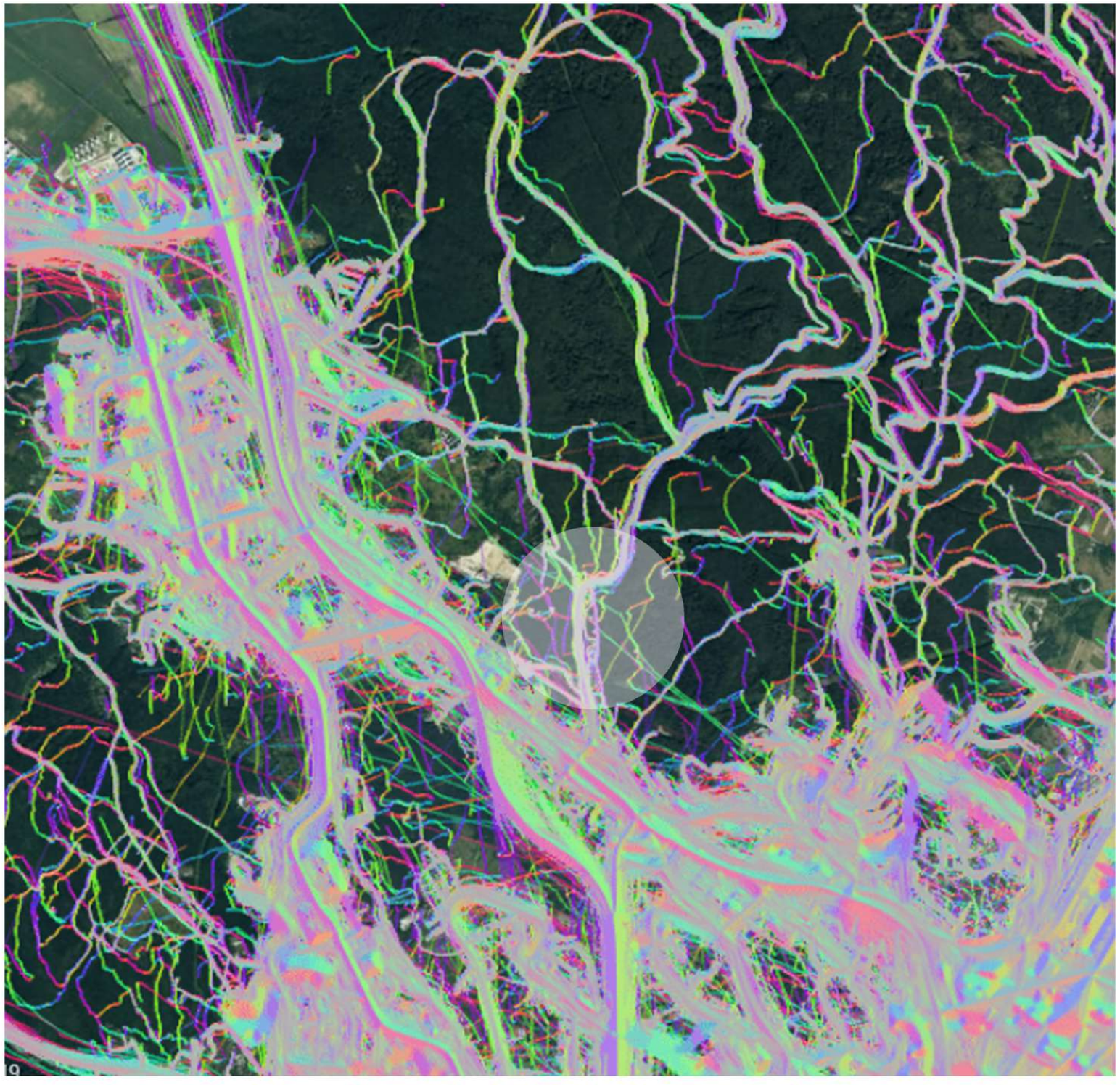
Typical flora:

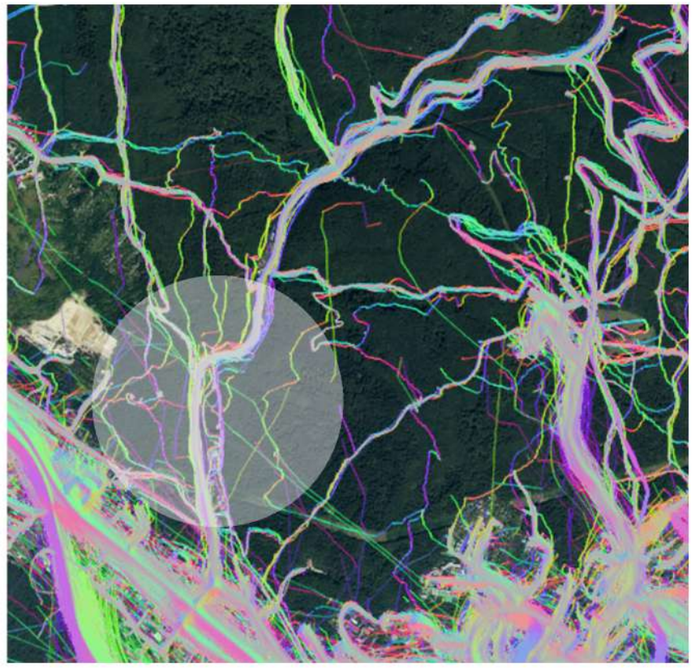


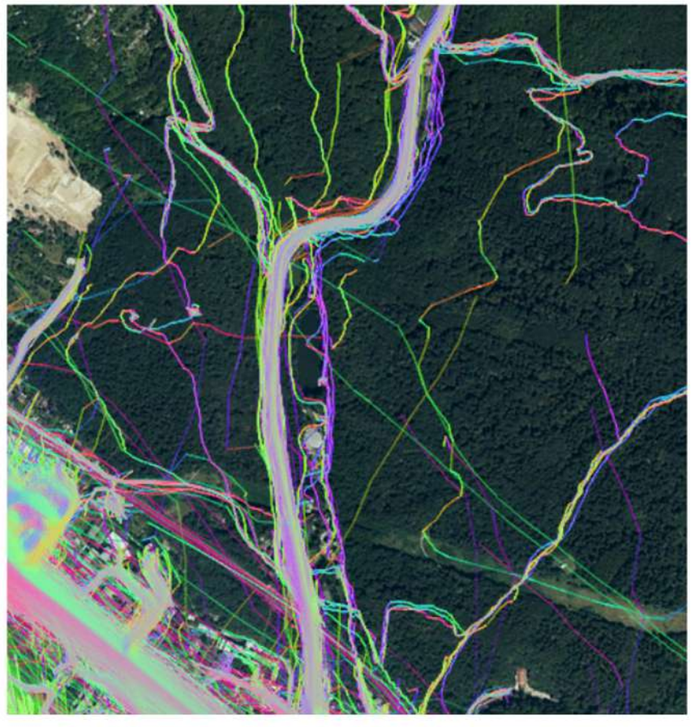
Forests Meadows Public Greenery Private Greenery Sport Areas

1 Chestnut 2 Pine tree 3 Beech 4 Silver Birch 5 Oak 6 Ferns

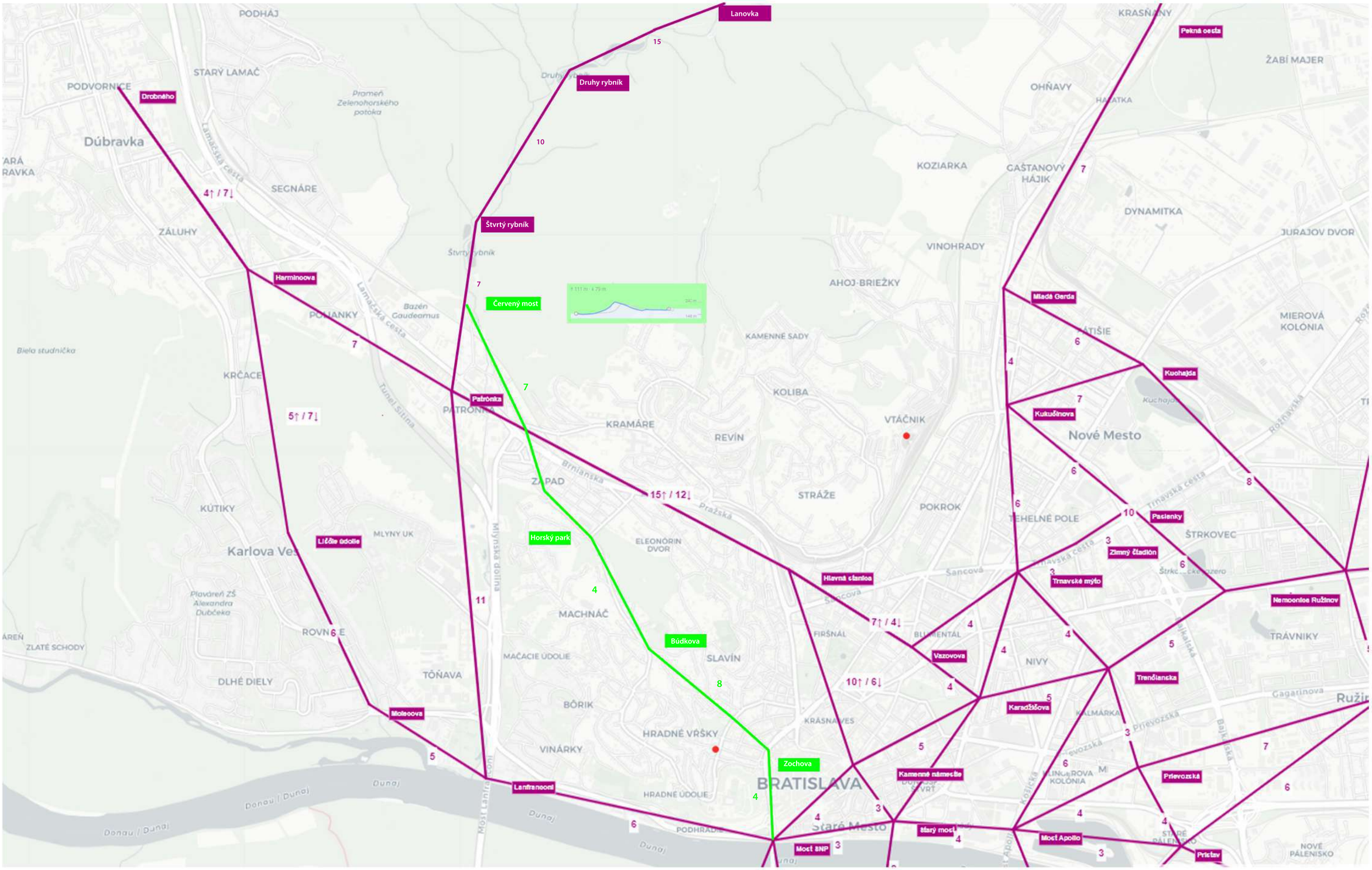
Greenery analysis







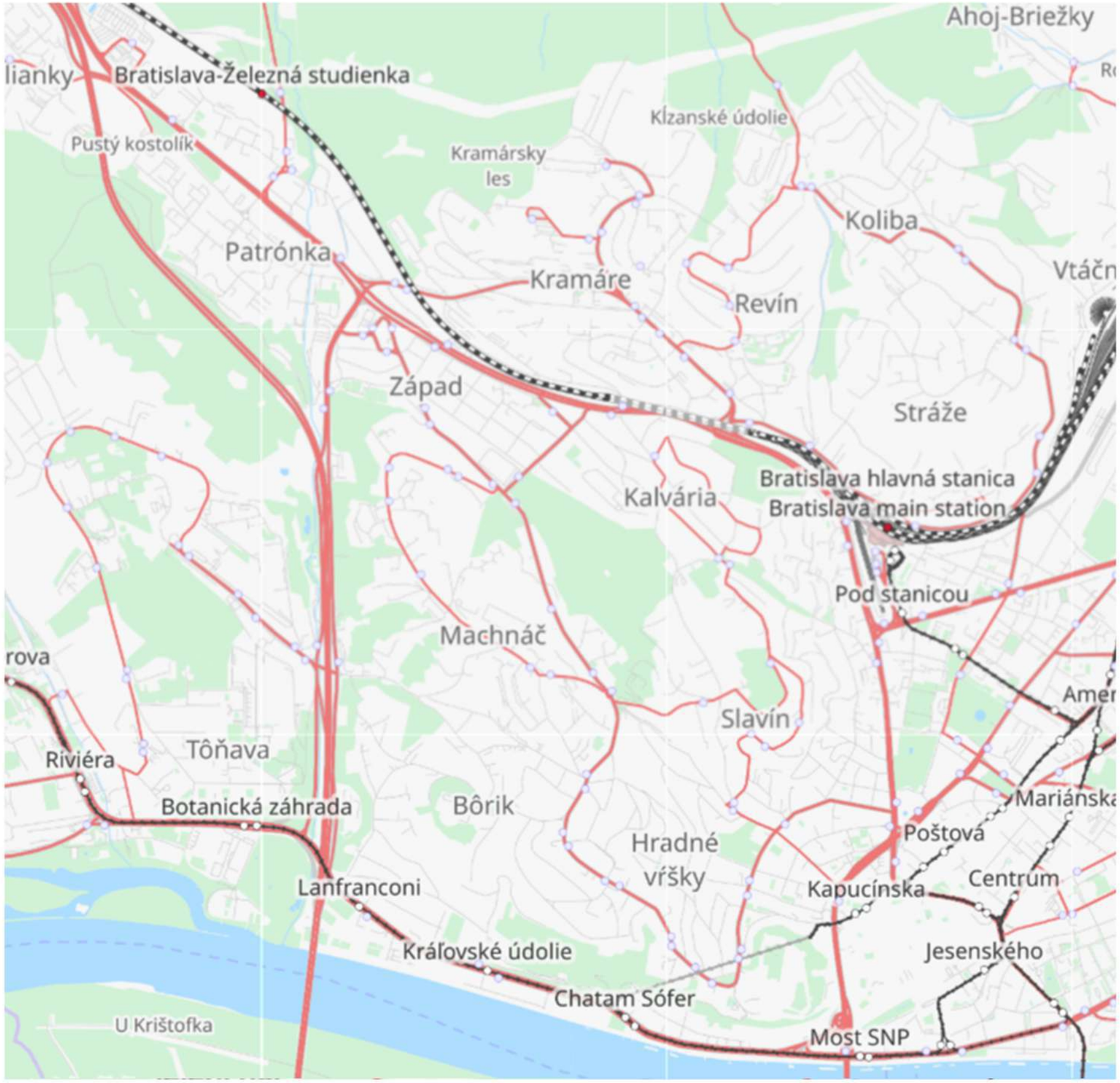
GPS activity

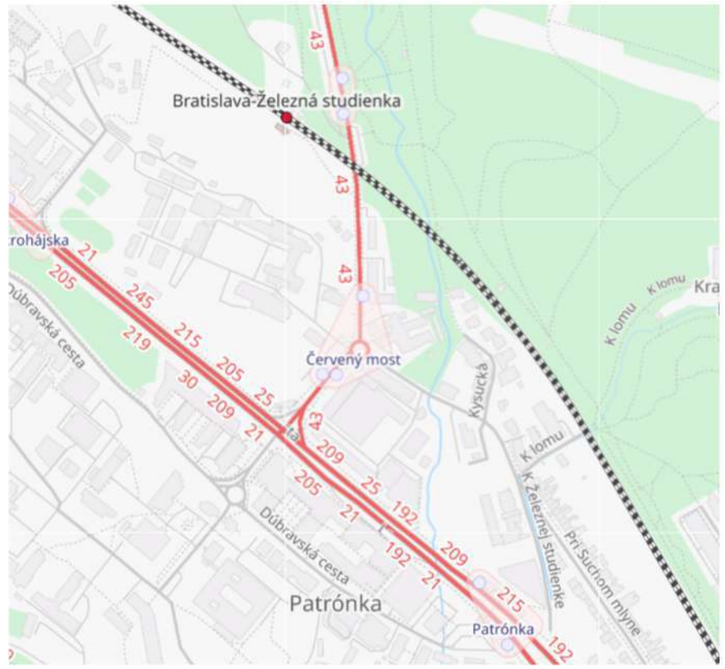


Distances between bike points in minutes

Suggested Existing

01





Distances to point D

A Patrónka = 750m

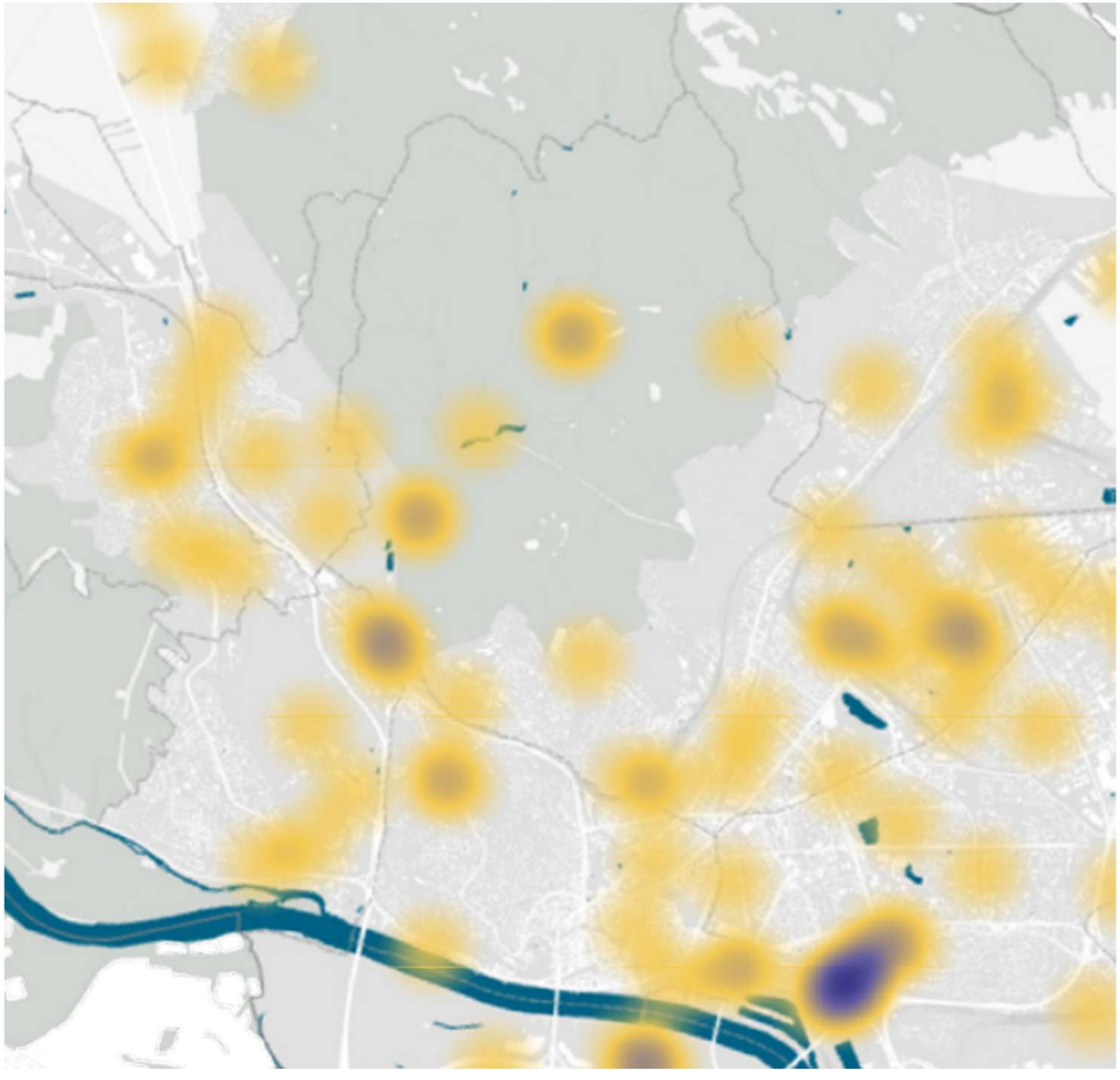
B Č. Most = 325m

C ESET = 490m

Legend:

- Proposed
- Existing

Public Transport



Významné brownfieldy

Veľké areály - zóny a bloky

Brownfieldy nad 0,5ha

Hranice mestskej pamiatkovej rezervácie a pamiatkovej zóny

227

224

225

226

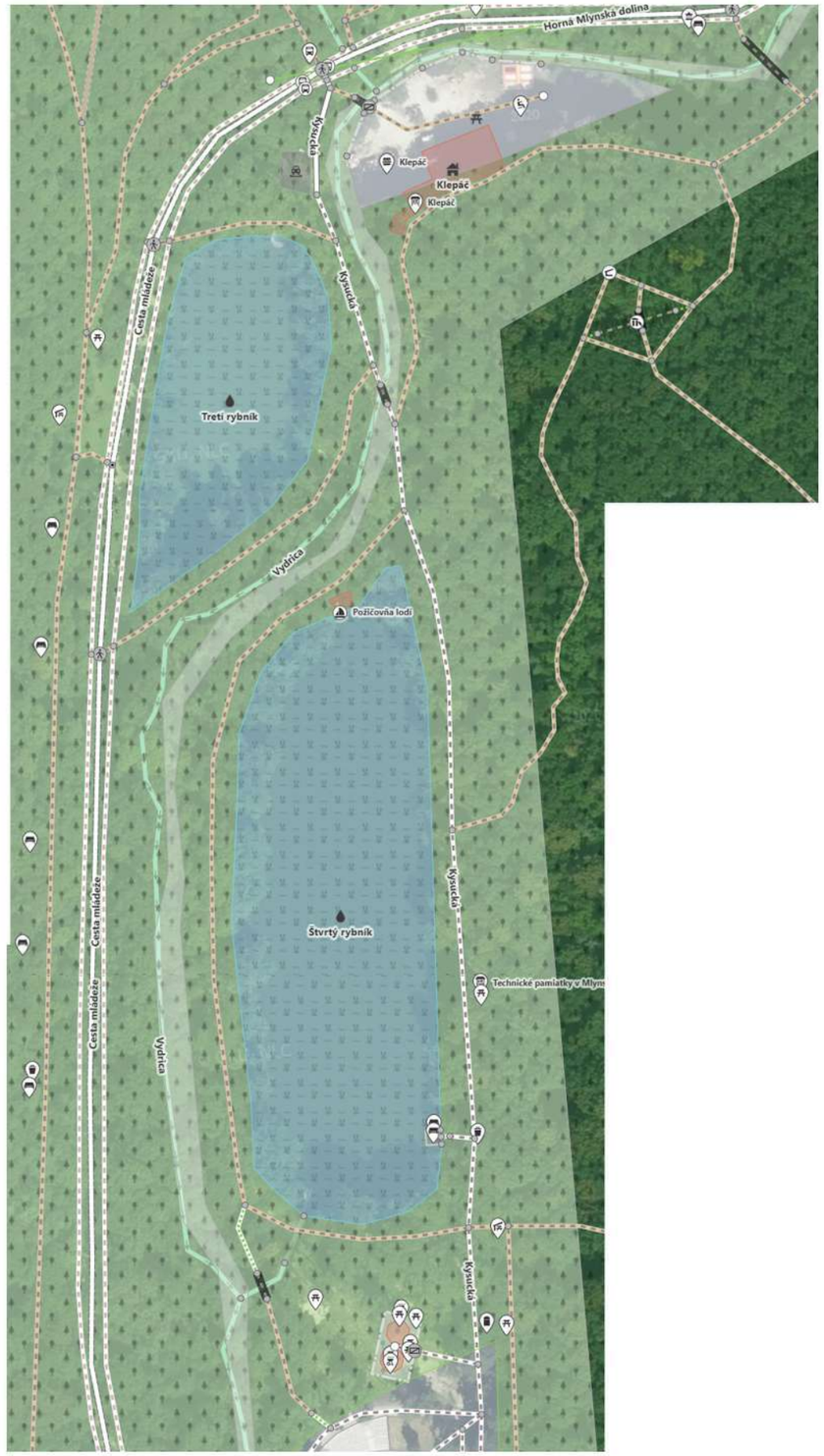
222

223

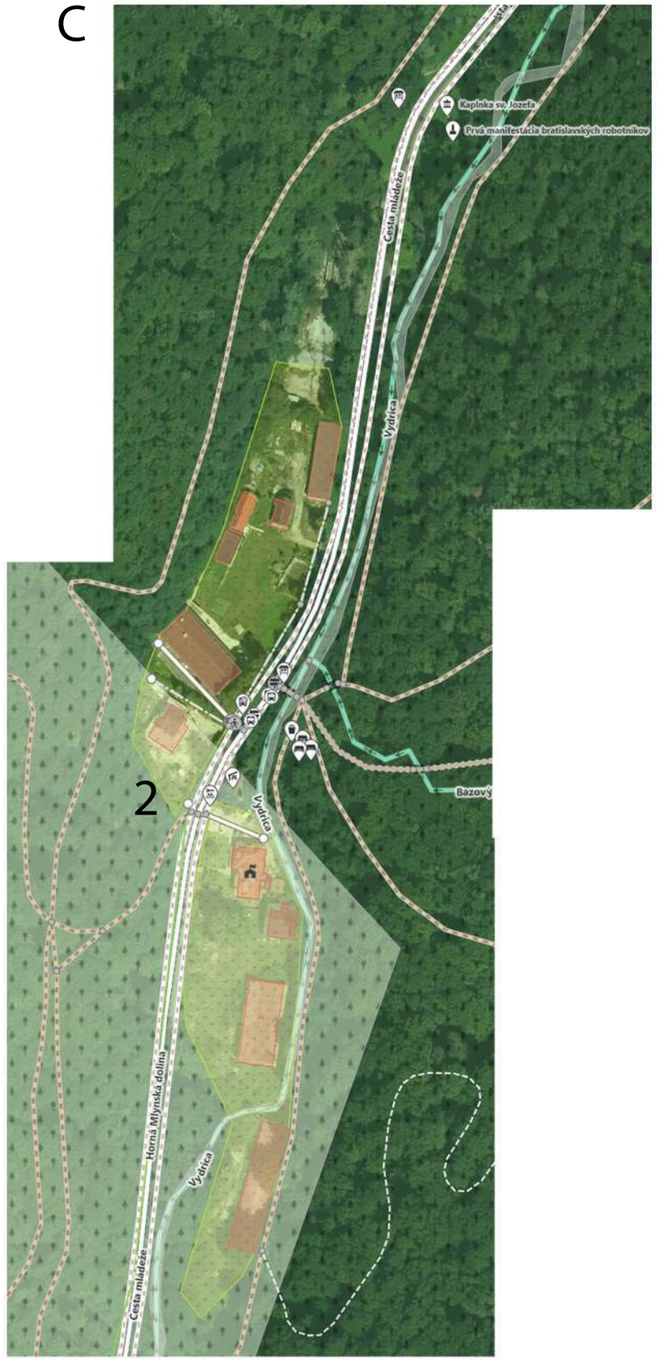
Brownfields

A

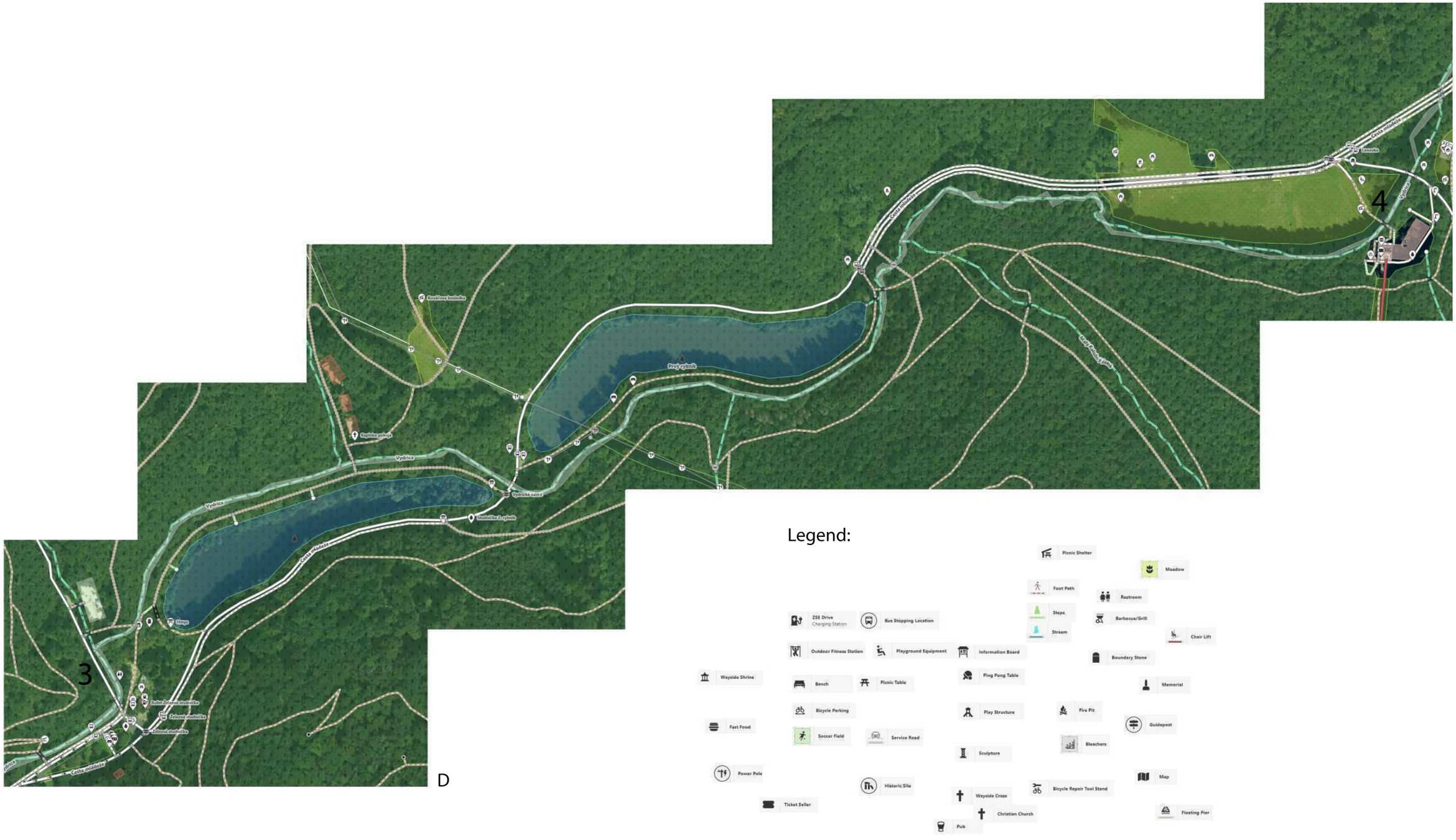
B



C



Detailed map of all paths, functions and attractions in the location 1/2



D

Legend:

Detailed map of all paths, functions and attractions in the location 2/2

2011

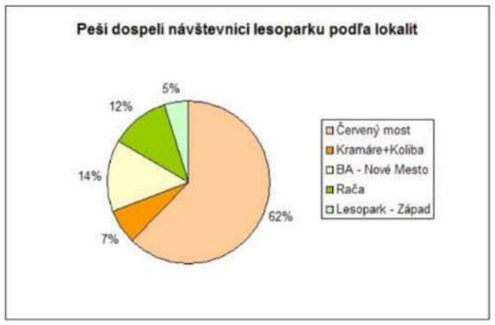
Porovnanie - Partizánska lúka (celkovo) vs. Lesopark							
Lokalita	osoby		autá	cyklisti	psi	bus	Súčty osôb
	dosp.	deti	vstup				
Partizánska lúka	2117	530	784	282	95	735	3664
LESOPARK - ostatné vstupy	1294	142	764	651	121		3651
SUMA	3411	672	1548	933	216	735	7315

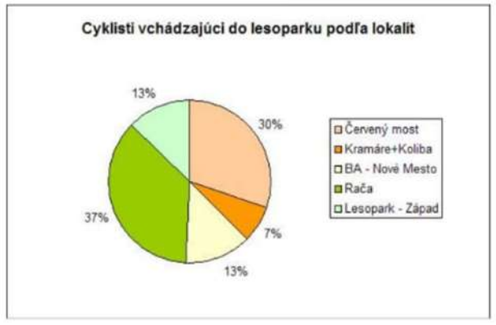
Partizánska lúka spolu (všetky vstupy)

Dospelí: 2117
Deti: 530
Autá: 784
Cyklisti: 282

SPOLU osôb: 3664 (za deň)

Psi: 95





2022

A. Výsledky z reálnych (skutočných) dát z prieskumu

Počty návštevníkov v členení na kategórie

LOKALITA VSTUPU	2021/2022	PEŠÍ	PSÍČKARI	BEŽCI	CYKLISTI
Cesta mládeže	20159	13505	1079	1260	4315
Partizánska lúka	13608	11323	928	629	728
Kamzík	10383	6905	1383	474	1621
Horáreň Krasňany	11436	7337	1183	538	2378
Potočná ulica	6097	2987	786	267	2057
Rozcestie pred Kačínom	8434	3891	1085	1140	2318
Biely kríž	10851	3471	533	443	6404
Spolu	80968	49419	6977	4751	19821
Percentuálny pomer		61%	9%	6%	24%

33764 (za mesiac)

Percentuálny pomer kategórií návštevníkov na vstupných lokalitách do Lesoparku

LOKALITA VSTUPU	2021/2022	PEŠÍ	PSÍČKARI	BEŽCI	CYKLISTI
Cesta mládeže	20159	67%	5%	6%	21%
Partizánska lúka	13608	83%	7%	5%	5%
Kamzík	10383	67%	13%	5%	16%
Horáreň Krasňany	11436	64%	10%	5%	21%
Potočná ulica	6097	49%	13%	4%	34%
Rozcestie pred Kačínom	8434	46%	13%	14%	27%
Biely kríž	10851	32%	5%	4%	59%

B. Kvalifikovaný odhad (dopočítanie) celkovej návštevnosti Lesoparku v mesiacoch

OBDOBIE	priemerná teplota v BA (° C)	max. teplota v BA (° C)	2021	priemerná teplota v BA (° C)	max. teplota v BA (° C)	2022
Január				1,7	13,5	20000
Február				4,9	17	40000
Marec				6,4	21,1	80000
Apríl				9,4	22,2	93483
Máj				17,4	29,4	87000
Jún				21,6	35,3	117866
Júl				22,4	36,8	110000
August				22,7	36,3	110000
September	17,4	28,6	87622			
Október	10,4	23,9	86988			
November	5,2	14,9	42340			
December	1,6	15,8	20000			
Spolu			236950			660371
Spolu za obdobie			897321			

zdroj údajov teploty lokality Koliba: SHMÚ

červenou – kvalifikovaný odhad

374 182 P.L.+C.M.
150 749 P. Lúka

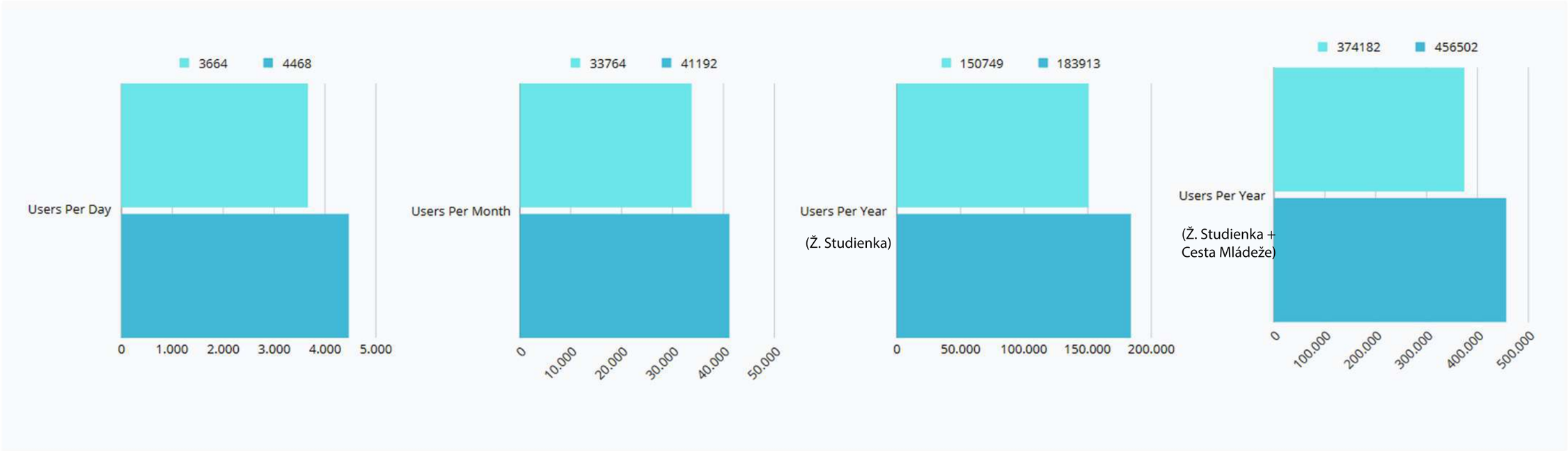
Capacity and User Category Analysis

User Profile	Specific Needs	
1. Nature Enthusiast	Peaceful trails, bird-watching spots, photography	
2. Family with Young Kids	Playground, picnic areas, easy trails	
3. Jogger/Runner	Well-maintained running paths, water fountains	
4. Cyclist	Bike-friendly trails, bike racks, repair station	
5. Dog Owner	Dog-friendly areas, waste disposal, dog water stations	
6. Yoga Enthusiast	Open spaces for yoga, tranquility, peaceful ambiance	
7. Elderly Visitor	Benches, gentle walking paths, accessible facilities	
8. Wildlife Observer	Information about local fauna, observation platforms	
9. Botanical Enthusiast	Botanical garden, plant identification resources	
10. History Buff	Interpretive signs, historical markers, guided tours	
11. Birdwatcher	Bird blinds, spotting scopes, guided bird tours	
12. Adventure Seeker	Climbing areas, ziplines, adventure courses	
13. Picnic Lover	Picnic tables, BBQ grills, scenic picnic spots	
14. Book Lover	Reading nooks, libraries, quiet corners	
15. Artist/Creative	Inspiring scenery, art workshops, sketching spots	
16. Fisherman	Fishing spots, equipment rental, fish cleaning area	
17. Kayaker	Kayak rentals, calm water bodies, launch points	
18. Nature Educator	Interpretive programs, teaching resources	
19. Outdoor Photographer	Scenic viewpoints, golden hour suggestions	
20. Foodie	On-site cafes or food trucks, diverse cuisine options	
21. Environmentalist	Conservation programs, recycling bins	
22. Stargazer	Dark sky area, star maps, telescope rentals	
23. Culture Lover	Cultural events, amphitheater, Museums	
24. Fitness Enthusiast	Outdoor fitness equipment, workout stations	
25. IT professional	Wi-Fi Access, Quiet Workspaces, Shaded tables	
26. Sport lover	Sport facilities, courts, locker rooms, toilets, showers	
27. Archery Enthusiast	Archery range, equipment rental, safety guidelines	
28. Watercolor Painter	Calm water bodies, artistic inspiration	
29. Meditation Practitioner	Tranquil meditation spots, guided meditation sessions	
30. Nature Scientist	Research facilities, biodiversity data, lab access	

Typical User and Needs Met

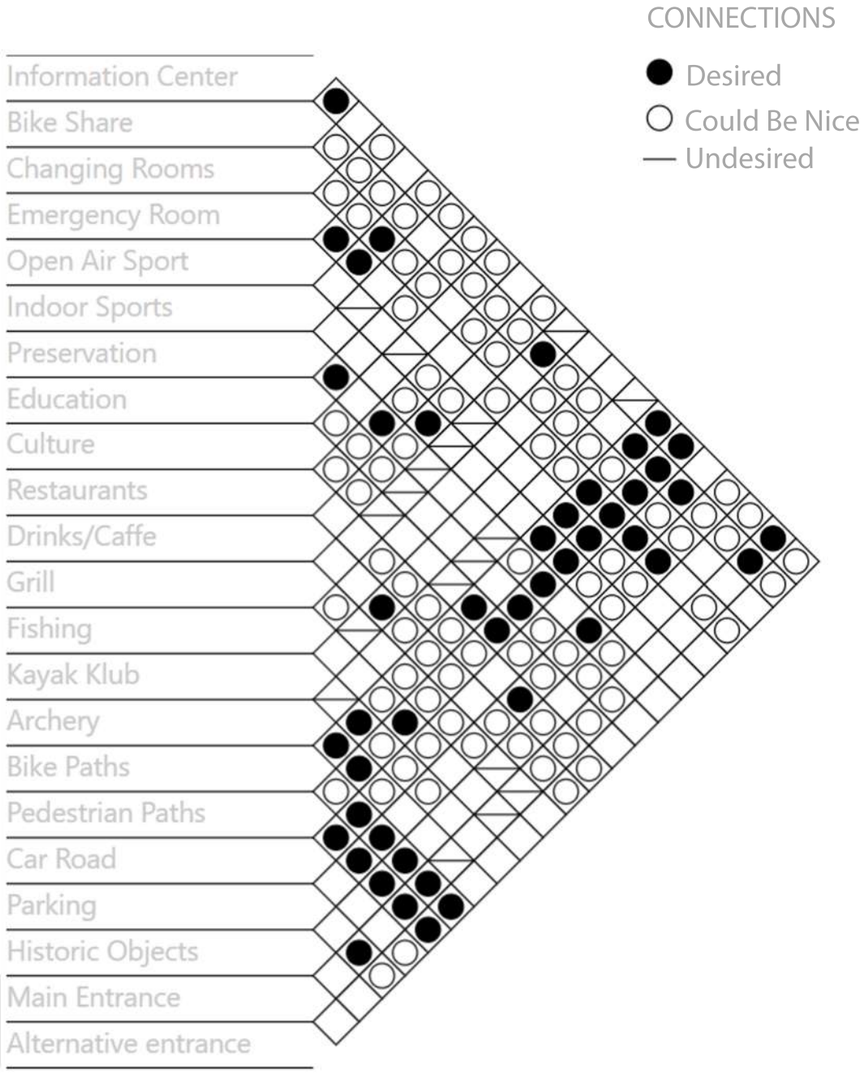
Capacity Calculation

The proposition for an increase is based on an analysis and assumption derived from user profiles. With a total **capacity of 2680 users** per day, considering only **40% utilization**, the daily usage would amount to **804 users**. This analysis suggests a potential growth in visitors, projecting an **increase from 3664 to 4468**, representing a significant **22%** expansion. Due to calculating only compfortable capacity, maximal capaciy increase can be as much as 50%



The challenges and opportunities associated with the projected increase in users from 3664 to 4468 can be addressed through proposed solutions.
These include the implementation of a new bike path, adjustments to existing roads, and the introduction of new functions designed to support and accommodate the anticipated growth. These infrastructure and functional enhancements aim to alleviate resource strain, improve operational efficiency, and create a more user-friendly environment, ultimately fostering a positive experience for the expanding and current user base.

	Number	Meters Sq.	Capacity	Privacy	Note
Information Cente	1	200	50 pax	No	
Bike Share	6-8	100	10-30 bikes	No	
Changing Rooms	min 1	50	2x25 pax	Yes	
Emergency Room	min 1	100	1 room	Yes	
Open Air Sport	+ min 5	Variable	Variable		Tenis, Futsal, Ice Skating...
Indoor Sports	+ min 2	Variable	Variable		Tenis, Climbing
Preservation	1	ca 5000		Yes	
Education	min 1	150	50 pax	No	
Culture	Existing	600	200 pax	No	
Restaurants	+ min 2	300-500	30-50 pax		
Drinks/Caffe	+ min 2	150-300	15-30 pax		
Grill	Min 10	100	10 pax p. grill	Yes	
Fishing	Min 6	50		Yes	Designated areas for fishing
Kayak Klub	1	250	25 pax	Yes	
Archery	1	1000	10 stations	Yes	
Bike Paths	+ min 1				
Pedestrian Paths					Inclusive Paths
Car Road	1				
Parking	1				
Historic Objects	Existing				
Main Entrance	1				
Alternative entr	6				



Family Daytrip
11h-18h

- Park a Car 11.00h
- Rent a Bike 11.15h
- Drive a Bike on Parh A 11.30h
- Park a Bike Next to a Bird Sanctuary 11.35h
- Spend Time in Bird Sanctuary 12.35h
- Have a Lunch 13.40h
- Rent a Bike 13.45h
- Drive to the Ponds 14.00h
- Park a Bike 14.05h
- Have a Walk Around Ponds 14.35h
- Relax on Floating Platforms 15.05h
- Feed Ducks 15.25h
- Have a Caffe by the Pond While Kids Play 16.30h
- Have a Walk in the Nature 17.10h
- Visit Playground by the Exit 17.50h
- Walk to the Car 17.55h
- Head Home 18.00h

Tourist / Explorer
14h-19h

- Get to the Patronka 14.00h
- Walk to the Infocenter 14.15h
- Get Information and Coffe 14.45h
- Walk to the Ponds 15.00h
- Relax on the Platforms 15.20h
- Rent a Bike 15.25h
- Drive to the Back Ponds 15.40h
- Park a Bike 15.45h
- Have a Wallk by the Ponds and Head to the Liftchar 16.00h
- Get a Liftchair 16.05h
- Spend Time at Kamzik 17.35h
- Get a Bus 17.40h
-Get to the Mlyn 9 17.30h
- Have Dinner 18.30h
- Walk to the Exit 18.40h
- Get a Bus on Patronka 18.55h
- Head Home 19.00h

Distance Worker
8.30h-18.30h

- Ride a Bike From City Center 8.30h
- Get to Cowork Restaurant 8.55h
- Get a Caffe and Start Working 9.00h
- Get a Lunch 12.00h
- Continue Working 12.30h
- Get Second coffe 13.00h
- Work Untill 17.00h
- Bike to Ponds and Relax 17.30h
- Head Home 18.00h
- Get Home 18.35h

Phase 1: Infrastructure Enhancement

The initial phase of the project focuses on fundamental elements, such as paths, road adjustments, and other foundational infrastructure components. This stage sets the groundwork for subsequent phases by establishing a robust framework for connectivity and accessibility within the project site. Activities within this phase include:

Path Design and Construction: Implementing pathways to facilitate smooth movement across the project area. This includes pedestrian walkways, cycling paths, and vehicular roads.

Road Adjustments: Existing roads optimization and plan adjustments to accommodate the anticipated traffic flow and transportation needs. This involves assessing traffic patterns, ensuring safety measures, and integrating smart traffic management systems where applicable.

Foundational Utilities: Groundwork for essential utilities such as water supply, electrical infrastructure, and telecommunication networks to support future development phases.

Phase 2: Service Infrastructure and Amenities

The second phase shifts the focus towards service-oriented infrastructure and amenities. This includes the integration of service objects, restaurants, and other facilities essential for the well-being and convenience of project users. Key components of Phase 2 include:

Service Objects: Design and construction of service-oriented structures such as administrative buildings, utility centers, and emergency service stations to ensure the efficient operation of the project.

Restaurants and Recreational Spaces: Dining establishments, recreational areas, and communal spaces to enhance the overall experience of users and visitors.

Infrastructure Integration: Integration of the the service infrastructure with the foundational elements established in Phase 1 to create a cohesive and functional environment.

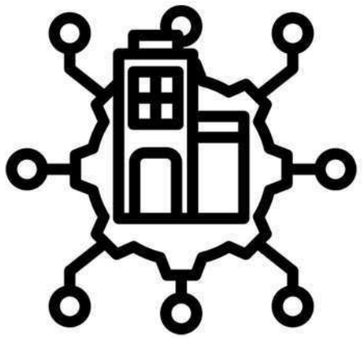
Phase 3: Attractions and Larger Structures

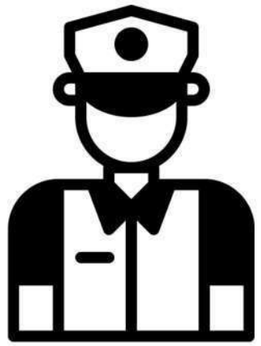
The final phase of the architectural framework focuses on the development of attractions and larger structures, adding the finishing touches to the project. This phase encompasses the creation of landmarks, recreational attractions, and other large-scale structures, including:

Landmark Attractions: Design and building of prominent landmarks that contribute to the identity and character of the project.

Recreational Facilities: Introducion of recreational amenities such as parks, entertainment venues, and cultural spaces to enhance the overall experience of the project area.

Quality Assurance and Integration: Conducting thorough quality assurance checks and ensure seamless integration of all components within the project, optimizing for both functionality and





The proposed architectural framework for this expansive project is designed to address its inherent large scale and complexity by dividing it into three distinct phases. This phased approach aims to streamline the development process, enhance project manageability, and ensure a systematic progression towards the successful completion of the entire venture.

Project Phases

1. Natural Landscaping:

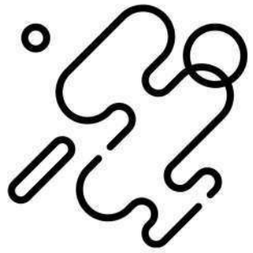
- **Native Vegetation:** Native plants and trees to promote biodiversity and support local ecosystems.
- **Natural Water Features:** Natural water elements, such as ponds or streams, to enhance the ecological balance and provide a calming effect.

2. Ecological Sensitivity:

- **Wildlife Habitats:** Spaces that attract and support local wildlife, providing habitats for birds, insects, and other fauna.
- **Sustainable Practices:** Sustainable practices like rainwater harvesting, composting, and use of environmentally friendly materials to minimize the ecological footprint.

3. Daylight and Natural Ventilation:

- **Open Spaces:** Open areas that allow ample daylight to penetrate, creating a pleasant and inviting atmosphere.
- **Wind Patterns:** Natural wind patterns to enhance natural ventilation, creating a comfortable and refreshing environment.

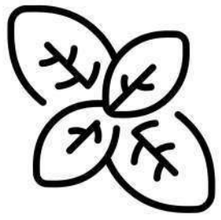


4. Natural Shapes and Forms:

- **Organic Design:** Organic and flowing shapes in pathways, seating areas, and other features to mimic natural forms found in the surrounding environment.
- **Landform Integration:** Integrate the natural topography of the land to create varied elevations and landforms.

5. Colors and Materials:

- **Natural Color Palette:** Color palette inspired by nature, incorporating earth tones, greens, and blues to create a visually harmonious environment.
- **Sustainable Materials:** Materials that are locally sourced, sustainable, and environmentally friendly to promote responsible resource use.

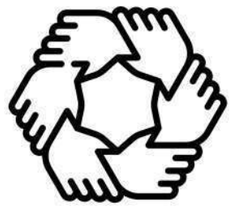


6. Sensory Engagement:

- **Aromatic Plants:** Fragrant plants and flowers to engage the sense of smell.
- **Tactile Elements:** Textures in paths, seating, and surfaces to provide a tactile connection with nature.

7. Multi-Sensory Experiences:

- **Soundscapes:** Natural sounds like running water, wind rustling through leaves, or birdsong to enhance the auditory experience.
- **Seasonal Variation:** Seasonal changes in vegetation, ensuring a dynamic and ever-evolving park experience.



8. Community Spaces:

- **Gathering Areas:** Communal spaces that encourage social interaction and community engagement.
- **Educational Elements:** Interpretive signage and educational displays to raise awareness about the local ecology and the importance of biodiversity.

Design Principles - Biophilia

Pine Tree Wood

- Structural: beams, columns, and framing due to its strength and durability
- Landscaping: elements like pergolas, trellises, or outdoor seating, integrating nature into urban environments.

Mate Black Metal

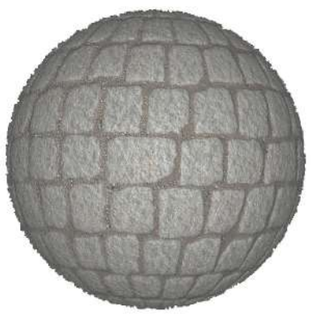
- Facade and Cladding: building facades and exterior cladding, providing a modern and sophisticated look.
- Signage and Branding: Matte black aluminum is utilized in signage and branding elements, offering a contemporary and professional appearance

Oak Tree Wood

- Flooring: timeless beauty, resilience, and ability to add warmth in interior spaces.
- Furniture: offering a blend of robustness and a classic appearance.

Local Granite

- Paving and Sidewalks: stone's resistance to wear and tear makes it an ideal choice for surfaces that experience heavy foot traffic.

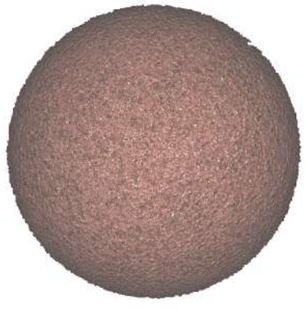


Original Materials

- Granite: stone's resistance to wear and tear makes it an ideal choice
- Asphalt: periodic maintenance to address issues like cracking and wear.

White Oak

- Paving and Sidewalks: White oak is a hardwood with good natural resistance to decay.
It's sturdy and has a beautiful appearance, making it suitable for outdoor use.



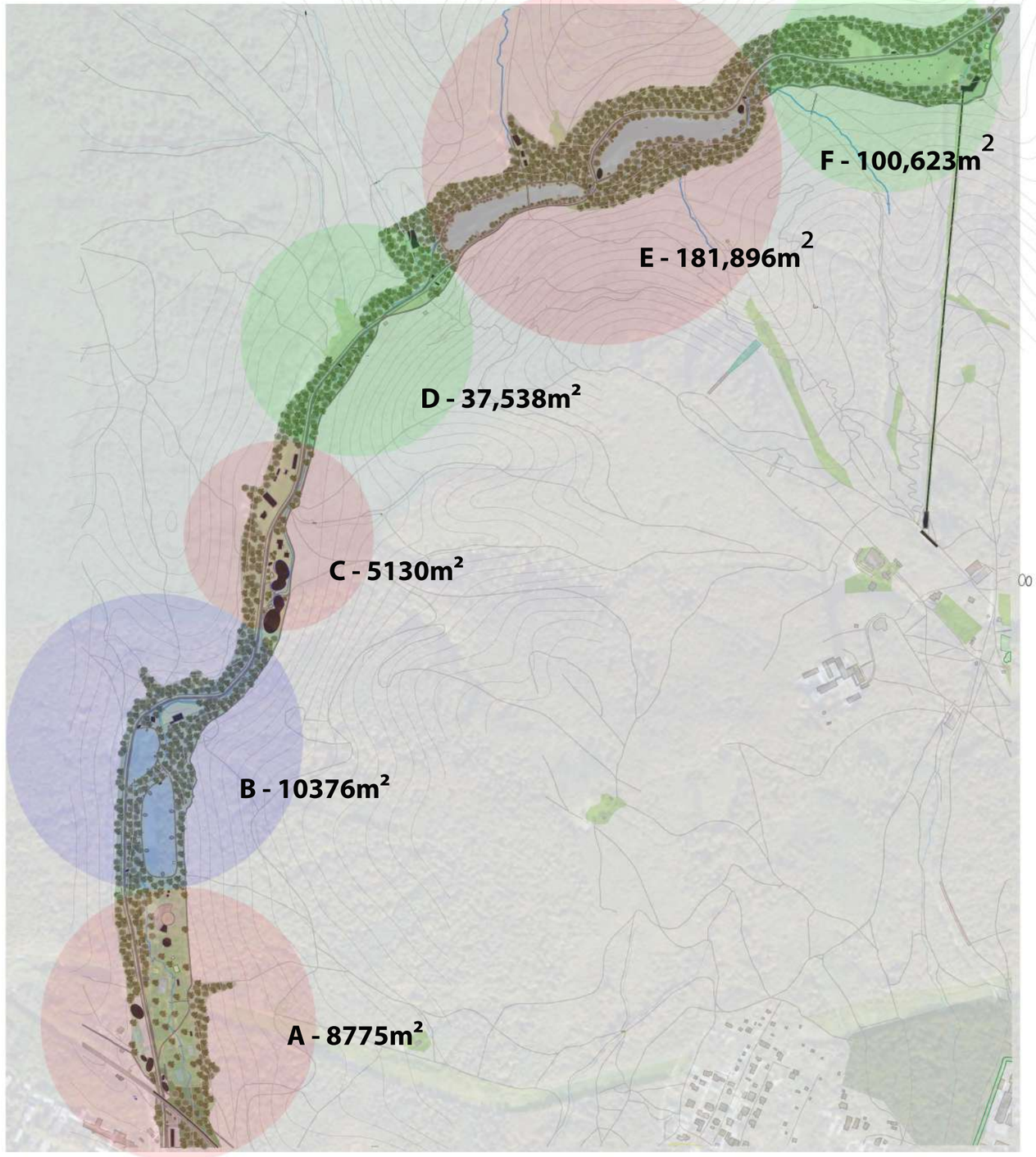
Red Asphalt

- Visual Clarity: clear visual distinction, making it easy for cyclists and pedestrians to identify and follow their intended route.
- Safety Enhancement: reducing the risk of users unintentionally veering onto the wrong path.

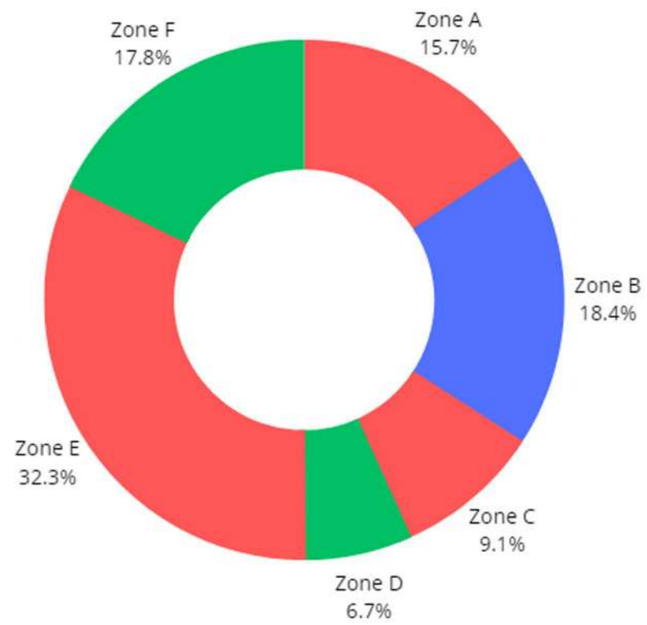
Green Asphalt

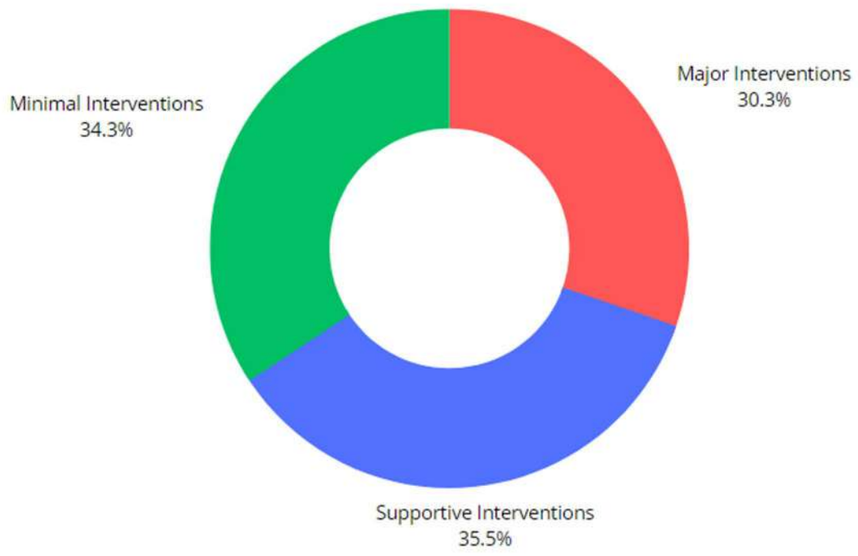
- Environmental Harmony: Green, being associated with nature, can visually connect the path with the forest environment.
- Low Maintenance: low-maintenance solution compared to painted markings.

Main Materials



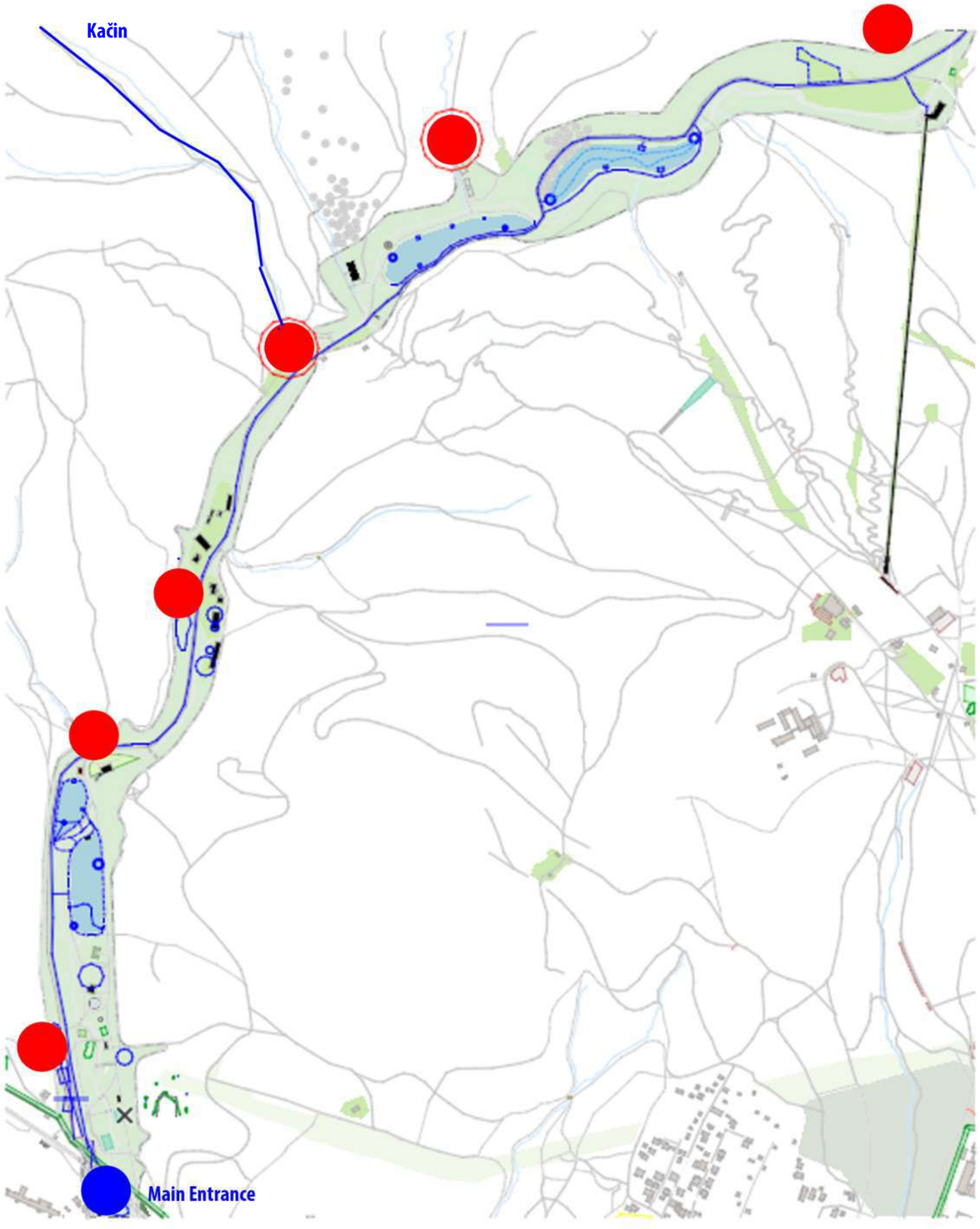
Total Area: 577,720m²





Zone Division Of The Site

Phase 1



Strategy to Support Secondary Entries

Ensuring accessible and efficient entry points to the urban forest park is crucial for managing visitor flows and enhancing overall park accessibility. Here are some strategies to support the secondary entries, taking into account their usage by pedestrians and cyclists:

1. **Improving Signage and Wayfinding:** Clear and visible signage at the secondary entries to guide pedestrians and cyclists toward the park. Additionally, integrating the park entrances into local GPS navigation systems for easy accessibility.

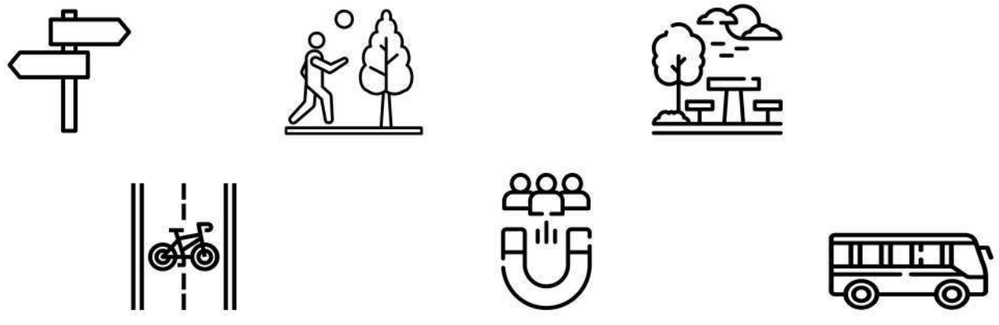
2. **Enhancing Pedestrian and Cycling Infrastructure:** Well-maintained and designed pedestrian and cycling paths leading to and from secondary entries, ensuring safety and convenience for park visitors. Implement bike racks and pedestrian-friendly features to encourage alternative transportation methods.

3. **Promoting Park Connectivity:** Attractive walking and cycling trails that connect the secondary entries to prominent attractions within the park, making these alternative entry points more appealing for visitors

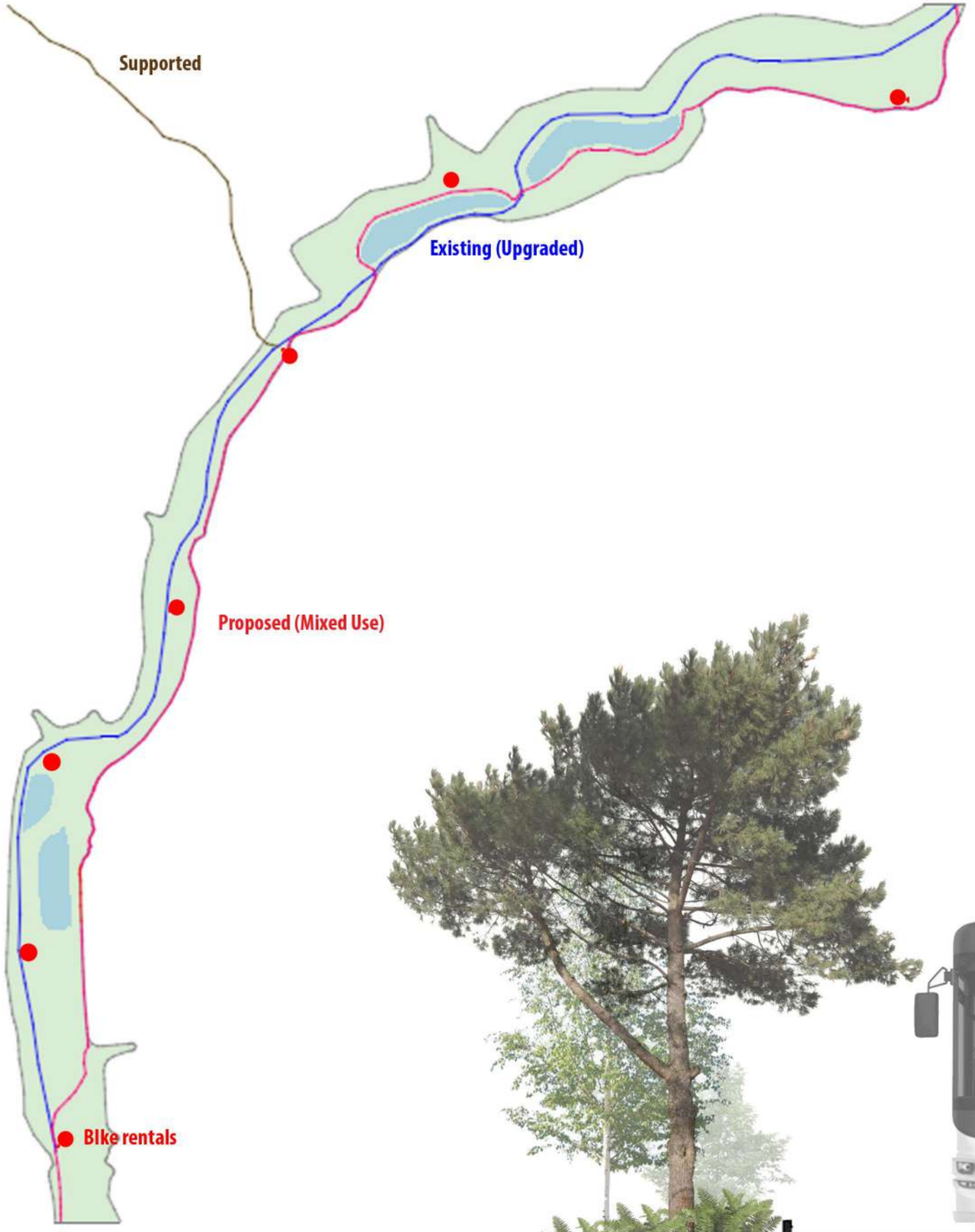
4. **Introducing New Attractions:** Strategically placing new attractions or recreational facilities, such as nature observation points, picnic areas, or educational centers, near the secondary entries would encourage visitors to explore these areas of the park.

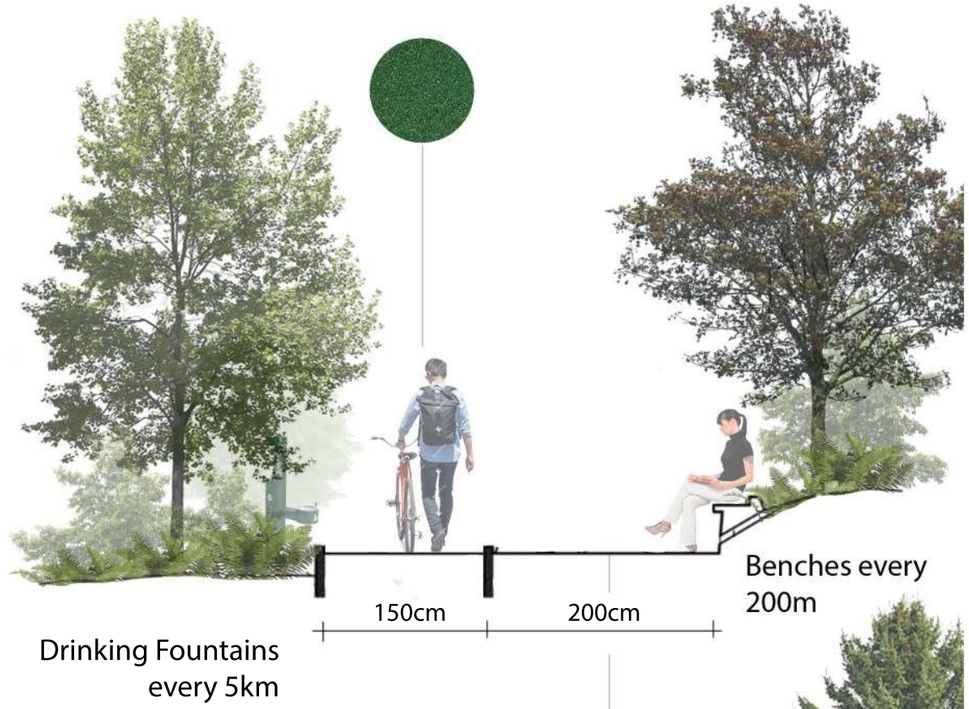
5. **Creating Rest Areas and Amenities:** Installing rest areas, benches, and water fountains along the paths leading the secondary entries, providing opportunities for visitors to rest and enjoy the natural surroundings.

Regarding public transportation, supporting the bus line that connects Kačin to Železna Studienka would contribute to improved accessibility. Increasing the frequency of the bus service during peak visiting hours and promotion of the park as a destination accessible via public transportation.

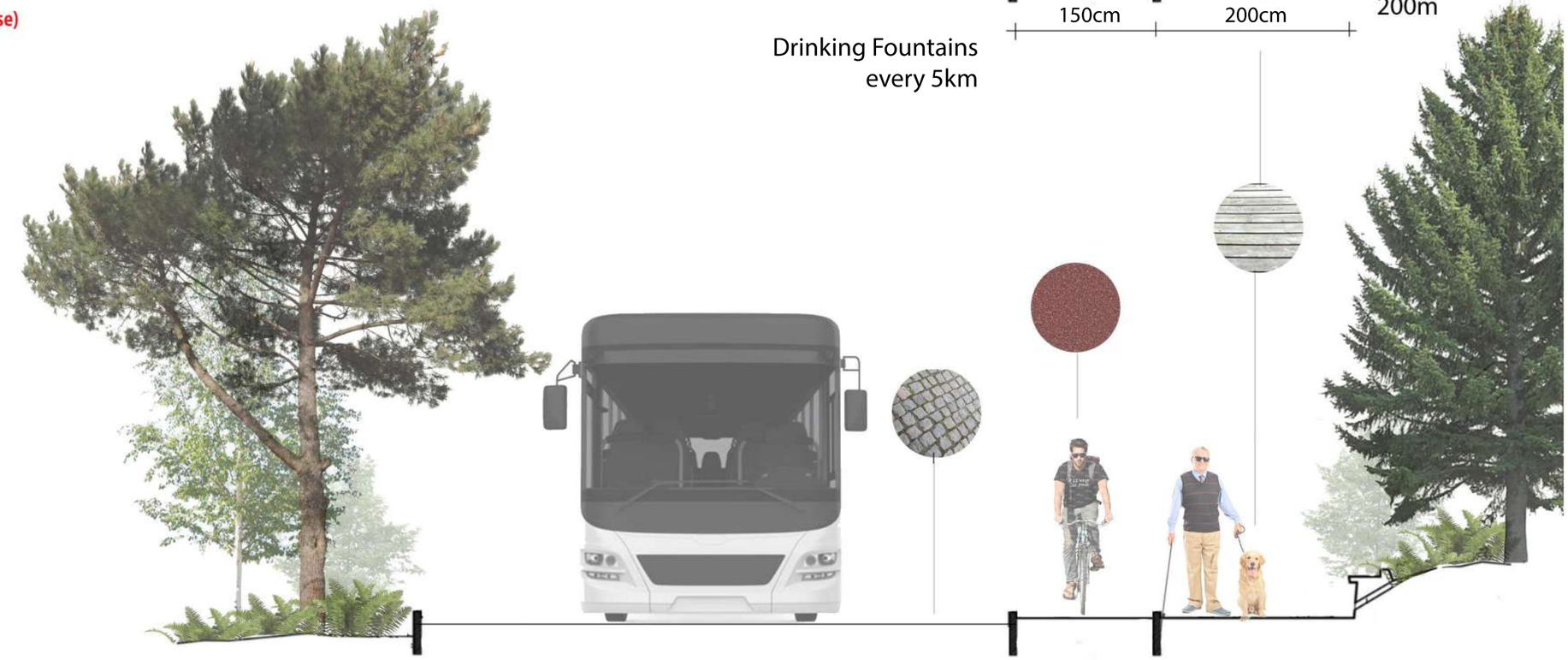


Entries To The Site





Drinking Fountains every 5km



Bike Paths + Proposal

Mixed Path A Render

MIxed Path B Render

Aerial View

S

-Main Entrance

-Rich Programme

-Good Infrastructure

- Close Proximity to all Major Transp.

- Rich Greenery

- Use of Waterbodies

- Propr. for All Age

W

- Noice Pollution

- Smoke Pollution

- Crowds

- Cars in Entry

- Underservice

O

- Enhancing Existing Development

- New Services

- Hiking Entry Points

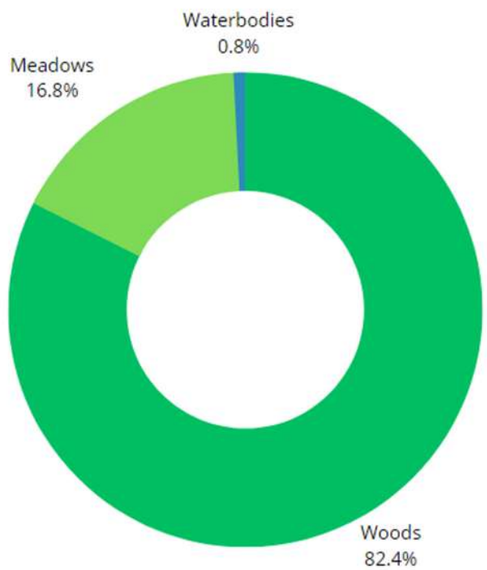
T

- Excessive Urban-isation

- Nature Disrupt.

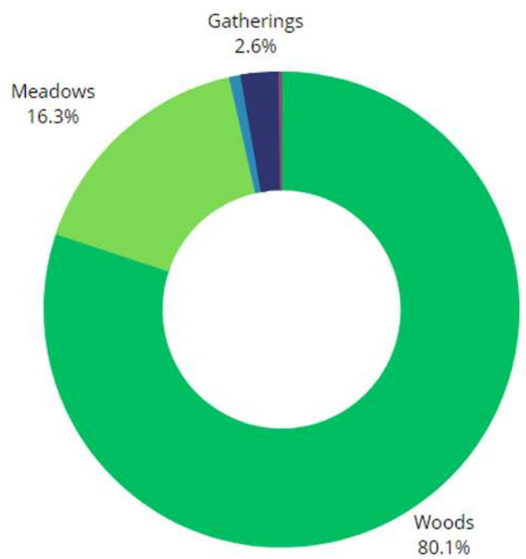
Current Use

Infrastructure: Roads: 500m Bike Paths: 500m Paths: 2322m
Functions: Sport, Culture, Childplay, Gastro, Grill, Parking



Proposed

Infrastructure: Roads: 500m Bike Paths: 1060m Paths: 2415m
Functions: Sports, Culture, Childplay, Gastro, ER, Info, Rentals



Zone A Analysis and Proposals 01

Legend: **1** Parking **2** Mini Football **3** Basketball **4** Tenis A **5** Futsal **6** Babz Pond **7** Amphitheater **8** Road 9 Mixed Path A 10 Bike Path B 11TRain Rail 12 Existing Paths

Area A - Park Entrance M1:2000

S

-Waterbodies

-Close Prox. to Main Entrance

-Historic Landmarks

- Existing Developm.

- Rich Network of Paths

W

- Noice Pollution

- Paths in Bad Shape

- Brownfields

O

- Enhancing Entry Pt.

- Enhancing Waterb.

- Hiking Entry pt.

T

- Crowds

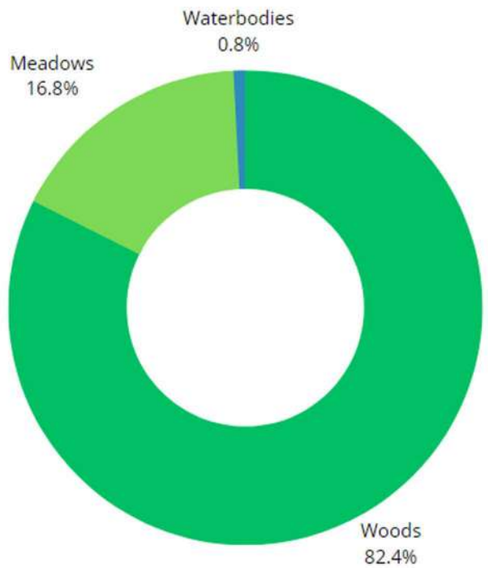
- Dry Waterbody

Zone B Analysis and Proposals 01

Aerial View

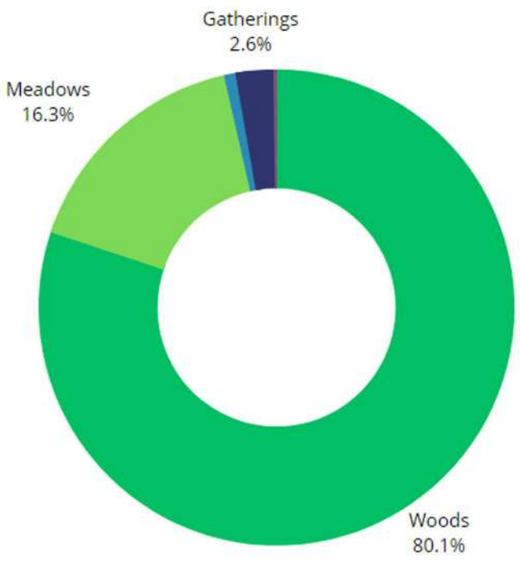
Current Use

Infrastructure: Roads: 815m Bike Paths: 815m Paths: 2715m
Functions: Leisure, Restaurants



Proposed

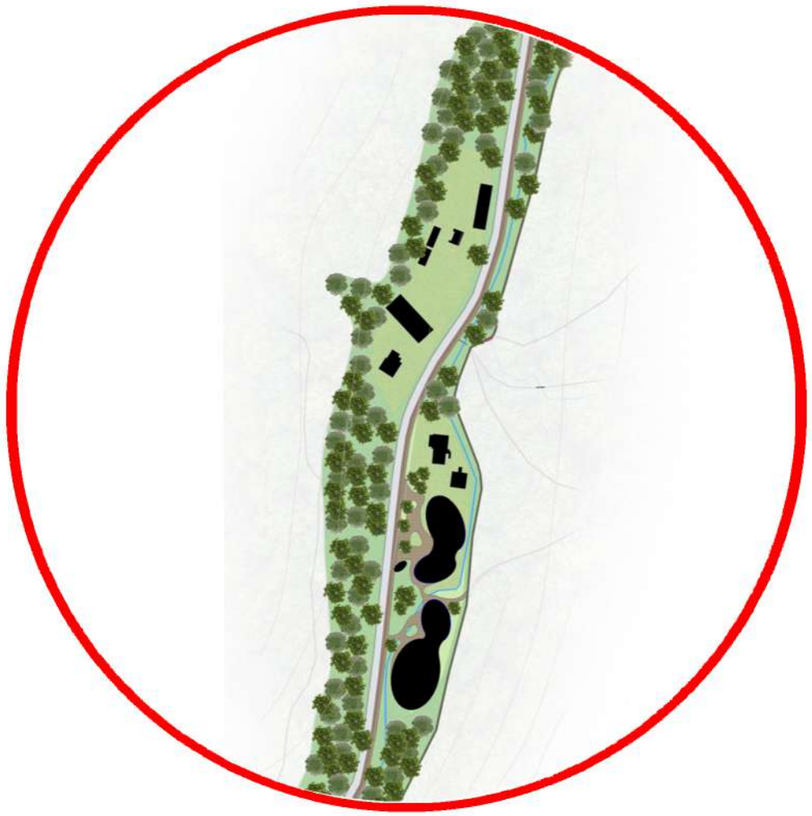
Infrastructure: Roads: 815m Bike Paths: **1430m** Paths: 2915m
Functions: Leisure, Restaurants, **Education**



Legend: **1** First Pond **2** Second Pond **3** Road **4** Mixed Path A **5** Bike Path B **6** Existing Paths **7** Paths **8** Ponton

Area B - Fish Observatory M1:2000

Ponton Render **01**



Aerial View

S

-Meadows

-Central Location

-Historic Object

- Existing Infrastr.

- Connecting Path from Lamač to Kamz,

W

- Noice Pollution

- No Attractions

- Transit Area

- Brownfields

- Narrow Area

O

- Strong Connection

- Sports

- Preservation

-Education

- Stream Use

- Hiking Entry Points

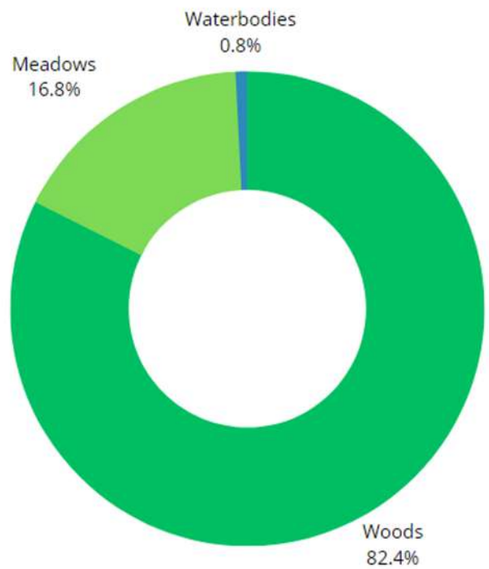
T

- Crowds

- Nature Distrupt.

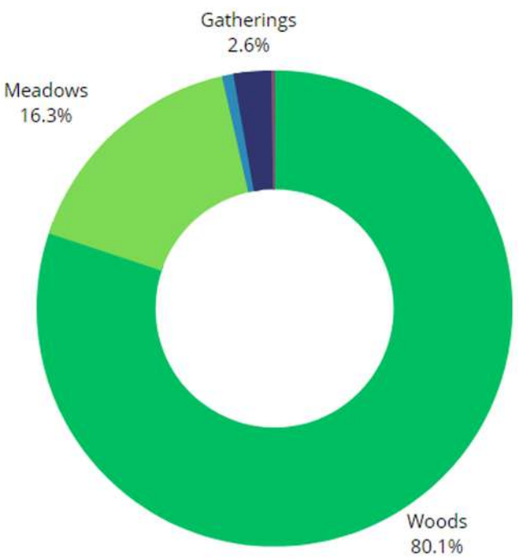
Current Use

Infrastructure: Roads: 487m Bike Paths: 487m Paths: 1103m
Functions: Open Space, Buerocratic, Brownfields

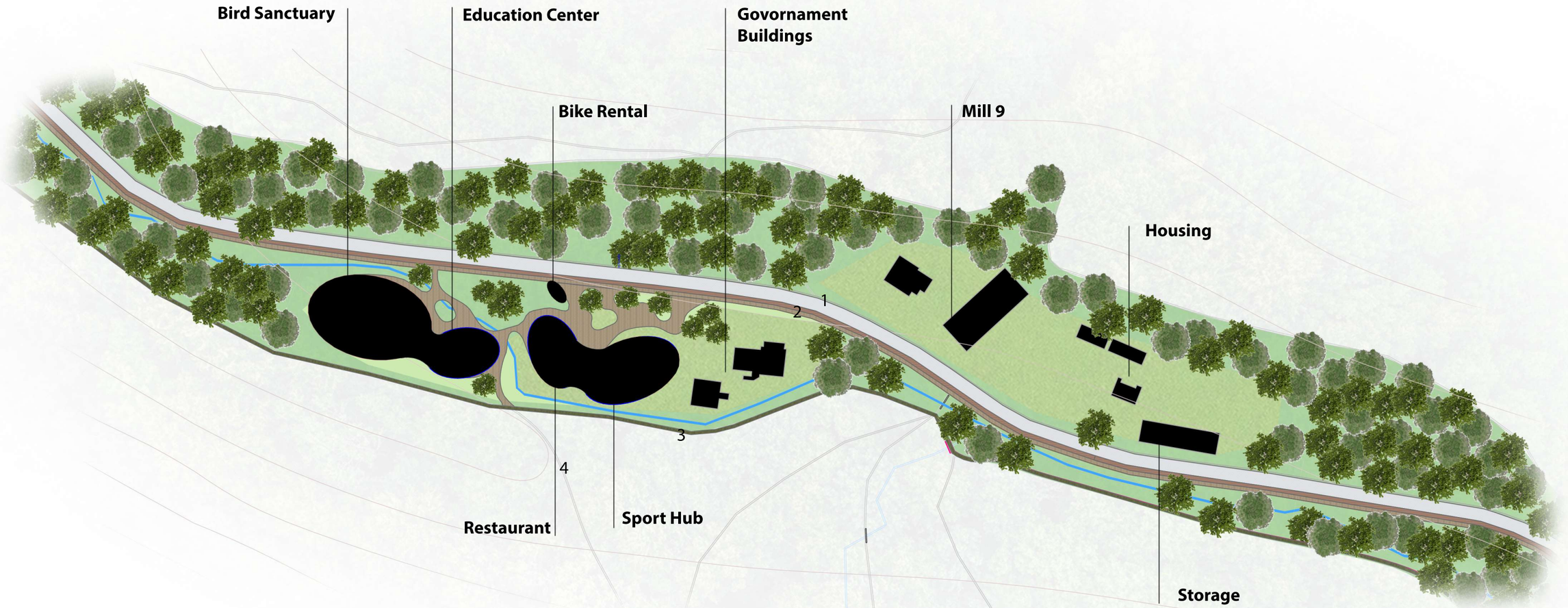


Proposed

Infrastructure: Roads: 487m Bike Paths: 998m Paths: 1309m
Functions: Burocratic, Leisure, Sports, Preservation, Productivity



Zone C Analysis and Proposals



Legend: **1** Road **2** Mixed Path A **3** Bike Path B **4** Existing Paths

Area C - MultiHub M1:2000

Aerial View

S

-Secondary Entry to the Site

-Rich Greenery

-Central Location

- Good Existing Pts to the Woods

W

- Noice Pollution

- No Attractions

- Transit Area

O

- Enhancing Entry Pt.

- Bike Paths

- Grill Area

-Pet Area

- Stream Use

- Hiking Entry Points

T

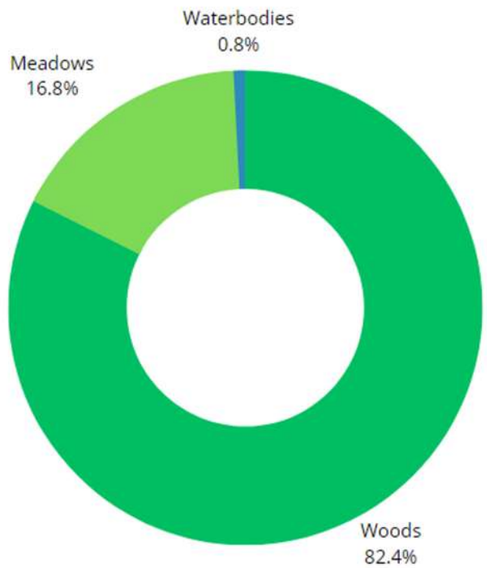
- Smoke Pollution

- Nature Distrupt.

- Low Dvlpmnt

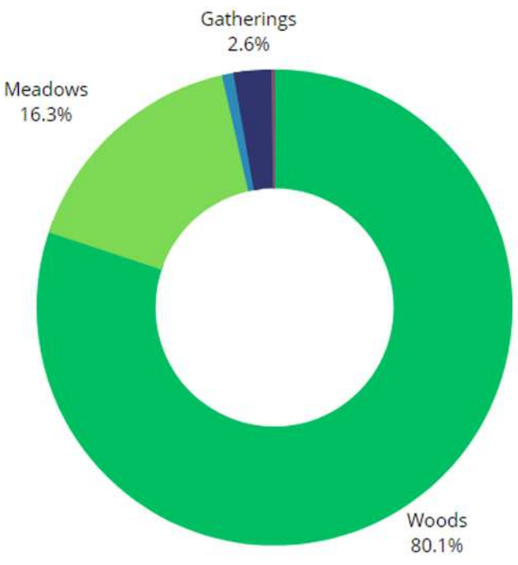
Current Use

Infrastructure: Roads: 52m Bike Paths: 52m Paths: 81m
Functions: Open Space



Proposed

Infrastructure: Roads: 52m Bike Paths: 106m Paths: 81m
Functions: Open Space, Grill Areas, Dog Areas

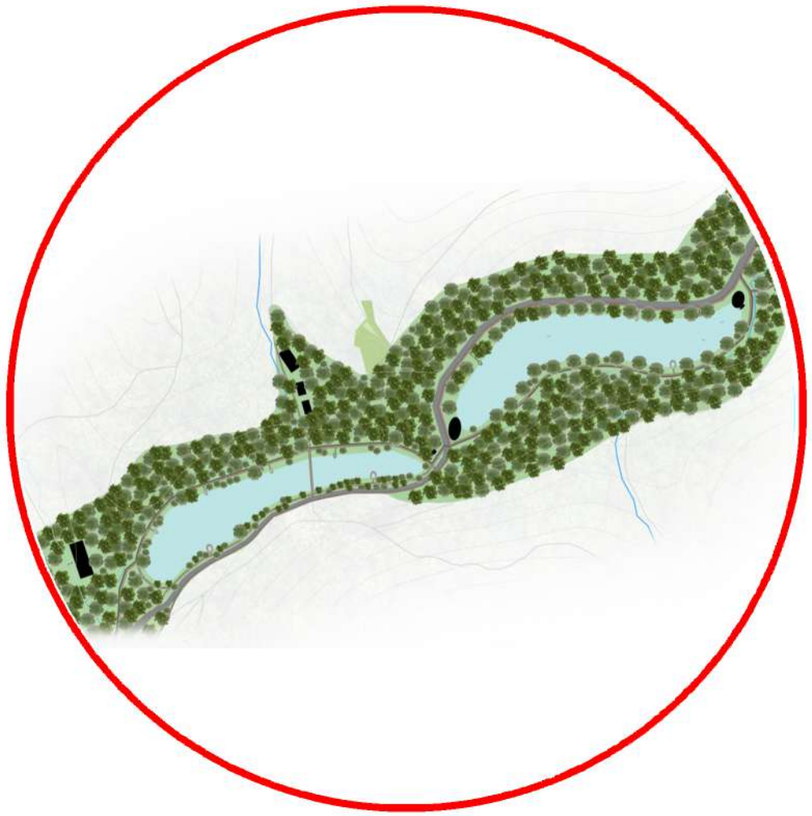


Zone D - Grill Analysis and Proposals

Legend: **1** BBQ Meadow **2** Meadow **3** Road **4** Mixed Path A **5** Bike Path A **6** Bike Path B **7** Existing Path **8** Mixed Path B **9** Path

Area D - BBQ Meadow M1:2000

Sunbath Meadow Render



Aerial View

S

-Large Waterbodies

-Rich Greenery

-Wide Site

- Existing User Paths

- Some Infrastruct.

-Rich Path Networks to the Woods

- Secondary Entr.

W

- Underdevelopment

- Brownfields

- Paths in Bad Condit.

- Relatively Far From the Main Entrance

- Roads In Attractive Areas

O

- Waterbody Activation

- Bike Paths

- Fisherman Platforms

-Pedestrian Paths

- Fish Restaurant

- Kayak Club

- Bike Rentals

- Brownfield

T

- Noice Pollution

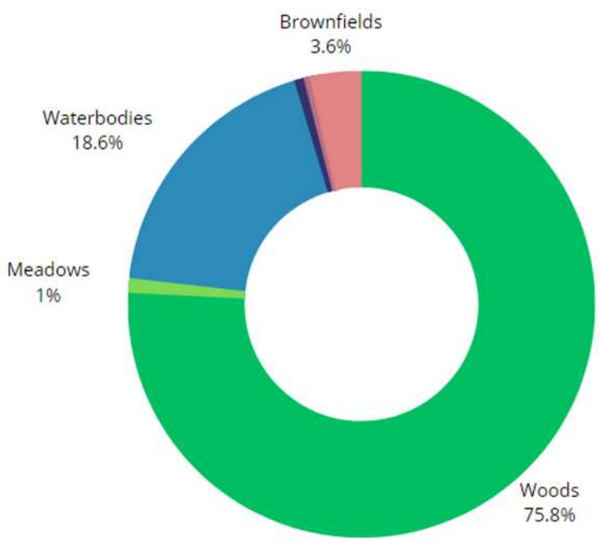
- Nature Distrupt.

- Low Dvlpmnt

- Distance From Main Entrance

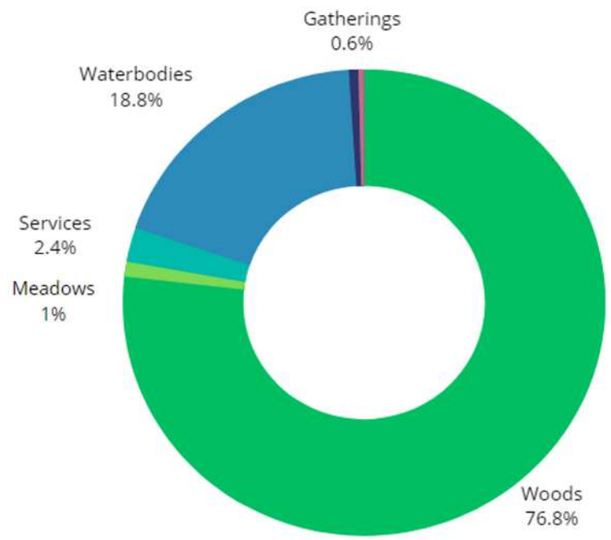
Current Use

Infrastructure: Roads: 1045m Bike Paths: 1045m Paths: 2244m
Functions: Fishing, Bike + Ped. P.,



Proposed

Infrastr: Roads: 1045m Bike P: **2121m** Paths: **2615m Bidge: 57m**
Functions: Fishing, Bike + Ped. P., **Kayaking, Restaurant, Caffe**

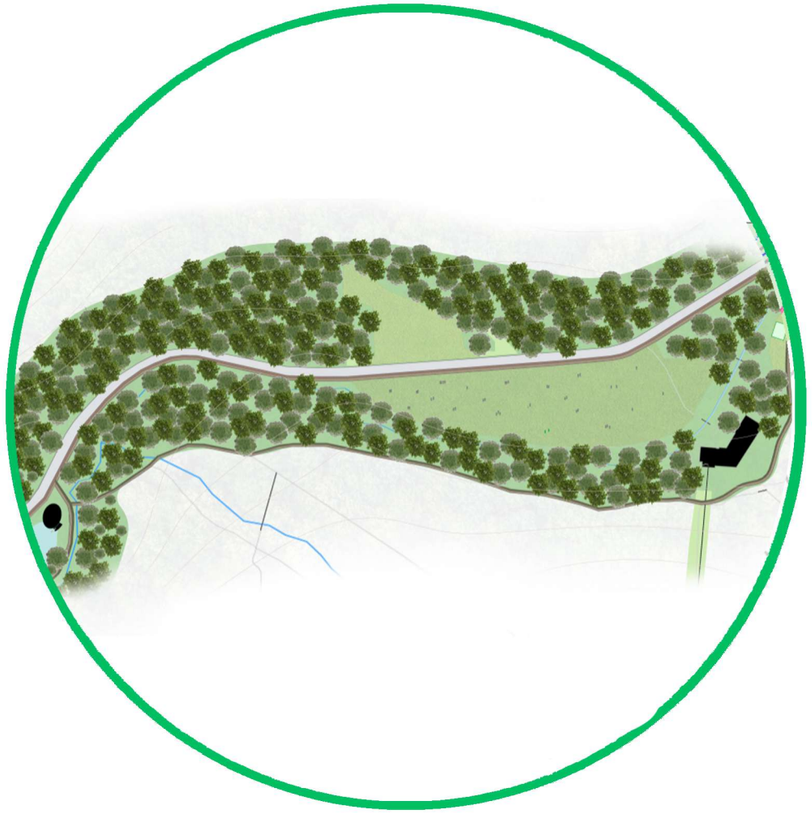


Zone E Analysis and Proposals 01

Legend: **1** Third Pond **2** Fourth Pond **3** Meadow **4** Pedestrian Bridge **5** Ponton **6** Road **7** Mixed Path A **8** Mixed Path B **9** Path **10** Existing Path

Area E - Water Retreat M 1:2500

01

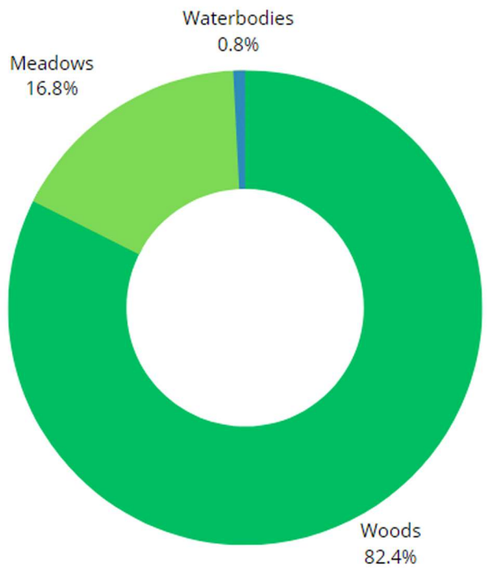


Aerial View

S	W	O	T
-Liftchair	- Bad Shape of infr.	- Enhancing Entry Pt.	- Noice Pollution
-Meadows	- Unused Space	- Sports	- Low Infrastructure
-Rich Greenery	- Transit Area	- Pet Area	- Low Dvlpmnt
		-Hiking Entry Pt.	

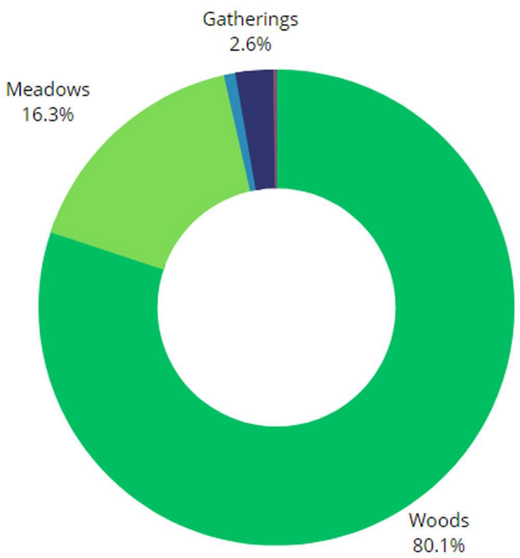
Current Use

Infrastructure: Roads: 614m Bike Paths: 614m Paths: 1024m
Functions: Open Space, Liftchairs



Proposed

Infrastructure: Roads: 614m Bike Paths: 1395m Paths: 1024m
Functions: Open Space, Liftchair, Archery



Zone F Analysis and Proposals 01

Legend: **1** Meadow **2** Sunbath Meadow **3** Fourth Pond **4** Road **5** Mixed Path A **6** Mixed Path B **7** Existing Path

Area F - Sunbath Meadow M 1:2000

Sunbath Meadow Render **01**

Phase 2

Supporive Intervention

A

B

C

D

Renovation Intervention

E

F

G

H

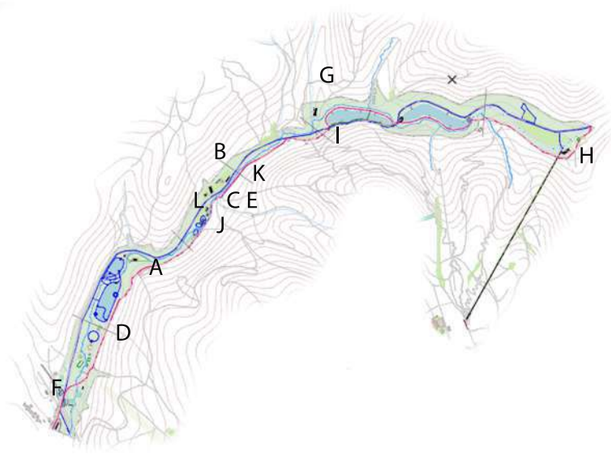
I

Redefinition

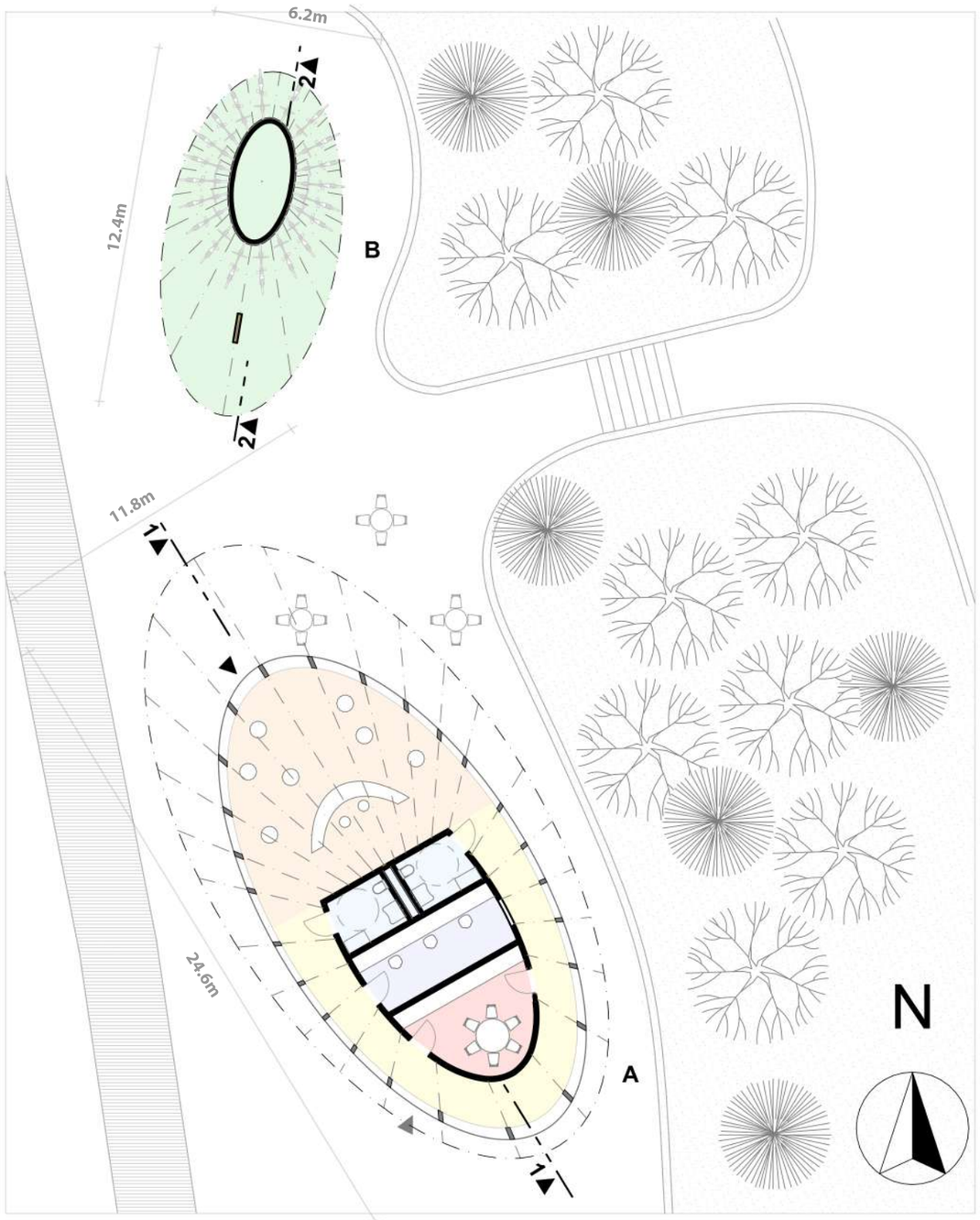
J

K

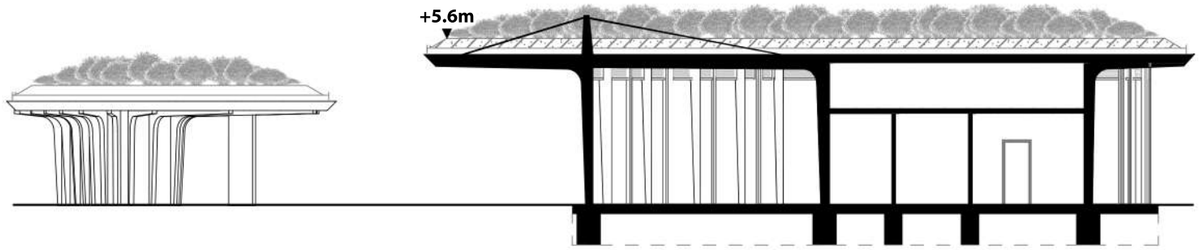
L



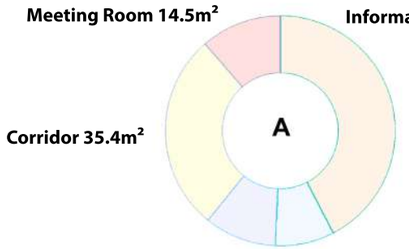
Existing Objects + Level of Interventions

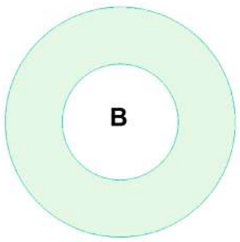


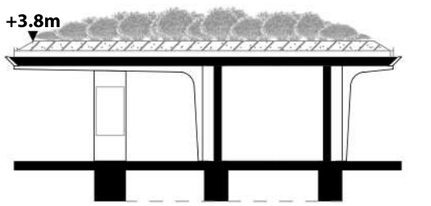
Ground Floor 1:200



1 - 1 Elevation 1:200







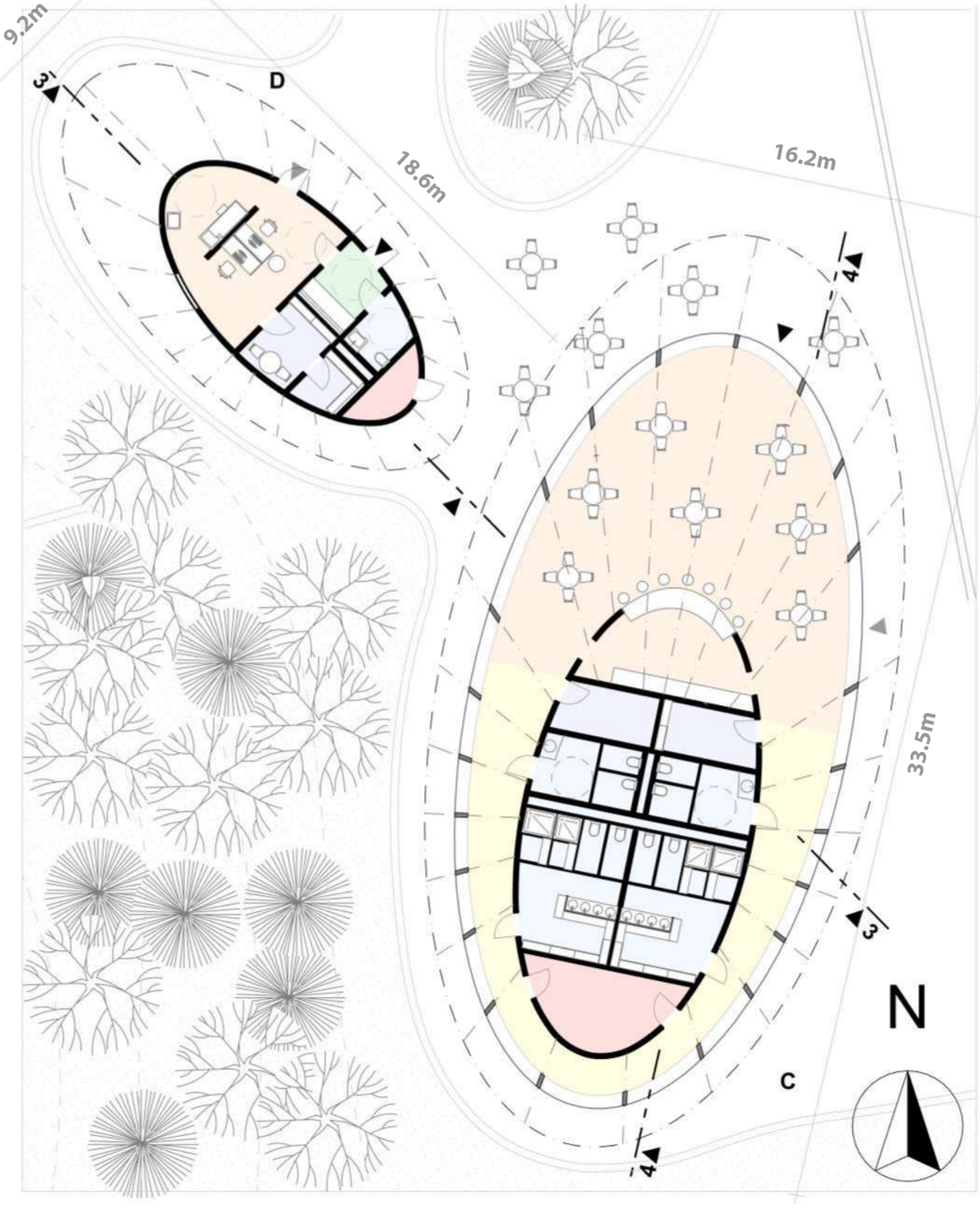
2 - 2 Elevation 1:200

Object A - Information Center
The Information Center at the entrance of the Urban Forest Park is a meticulously designed central hub that seamlessly integrates sustainability with functionality. Crafted with the same eco-friendly principles as larger park structures, the building harmonizes with the green surroundings through large windows and biophilic design, creating a visual connection to nature while optimizing natural light.
Inside, the center offers an information desk for guidance, a cozy coffee corner for relaxation, and well-maintained toilets for visitor comfort. The office space caters to park administration needs and includes a meeting room for collaborative discussions.

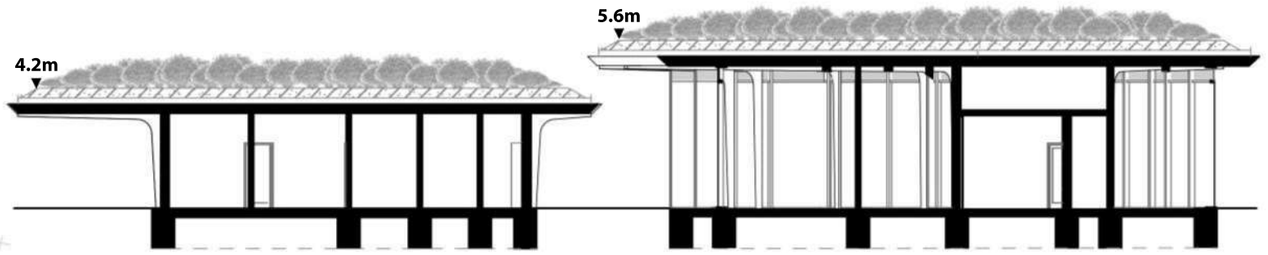
Object B - Bike Rental
Adjacent to the Information Center at the entrance of the Urban Forest Park, a bike share facility enriches the park experience. Crafted from reused and recycled materials, this amenity aligns with the park's sustainability ethos, encouraging eco-friendly transportation and outdoor exploration. Visitors benefit from easy access to bikes, promoting a greener mode of transportation. The strategic location near the Information Center ensures convenience and supports a healthy, active lifestyle. The design seamlessly integrates with the overall aesthetics of the park, contributing to a cohesive and visually appealing entrance area.

Objects A, B

Objects A, B Render



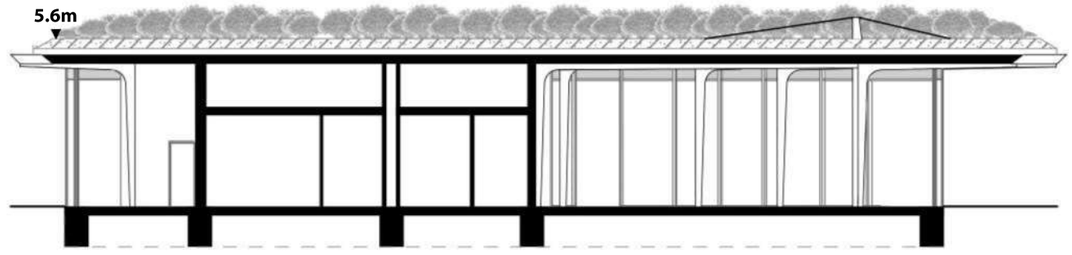
Ground Floor 1:200



3 - 3 Section 1:200

Object C - Multifunctional Object

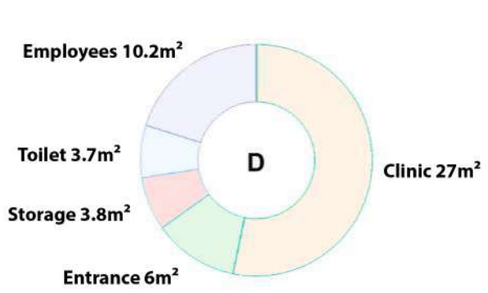
Multifunctional hub embodies sustainability, seamlessly blending with nature through locally-sourced wood and biophilic design. Large windows offer panoramic views and optimize natural light, reducing reliance on artificial lighting. The interior accommodates diverse needs with a restaurant, sports facilities, and storage. The green roof enhances aesthetics and energy efficiency. Smart ventilation systems prioritize fresh air circulation, fostering a comfortable and community-oriented environment, reinforcing the hub's integration within the park's natural setting.

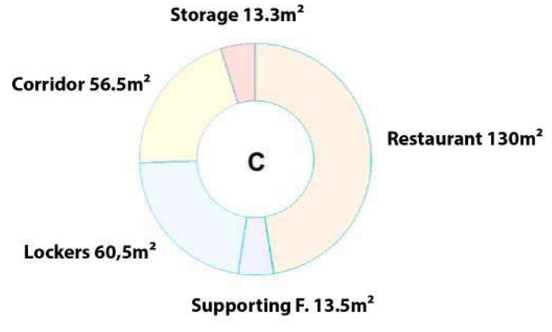


4 - 4 Section 1:200

Object D - Medical Emergency

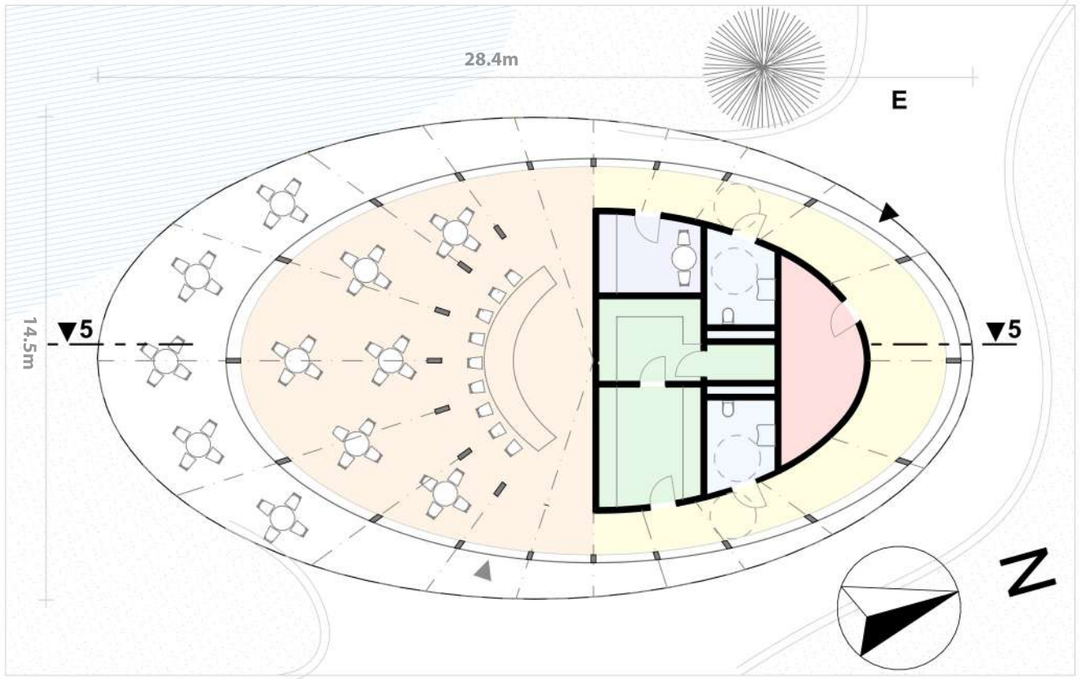
Aligned with the commitment to visitor well-being, a compact medical emergency structure in the park harmoniously integrates with the landscape, sharing sustainable materials with the larger hub. The unit, designed with wood and local elements, blends seamlessly into the park's aesthetic. Equipped with cutting-edge technology, the interior prioritizes efficiency for swift responses to health crises. Surrounding landscaping is thoughtfully curated, creating a serene environment that provides solace to individuals in need of medical assistance. This smaller structure exemplifies a commitment to both functionality and visual cohesion within the park.

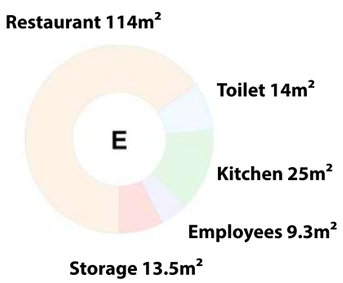


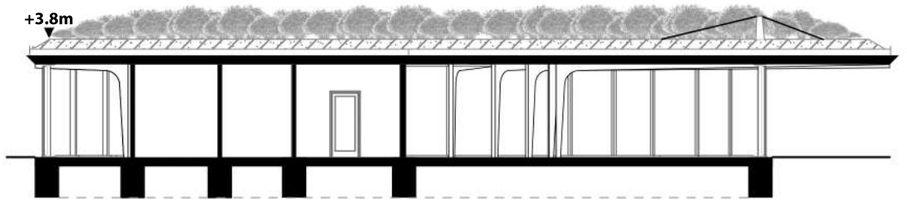


Objects C, D

Objects C,D Render





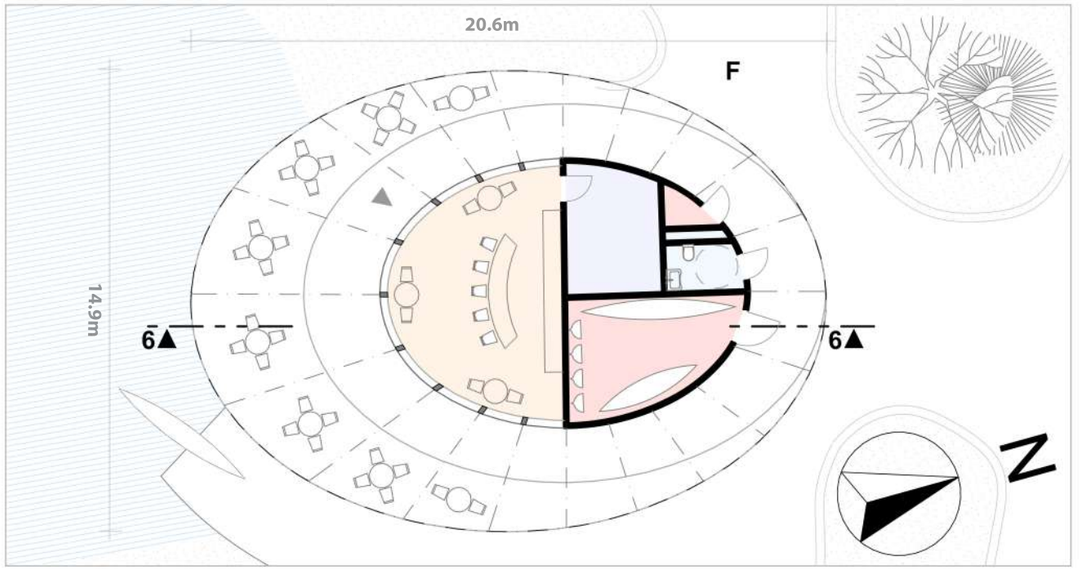


5 - 5 Section 1:200

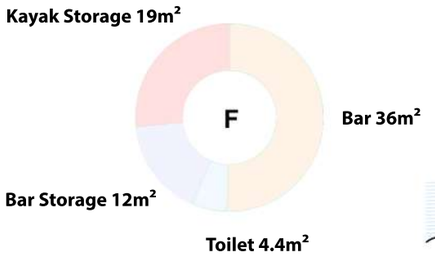
Object E - Restaurant

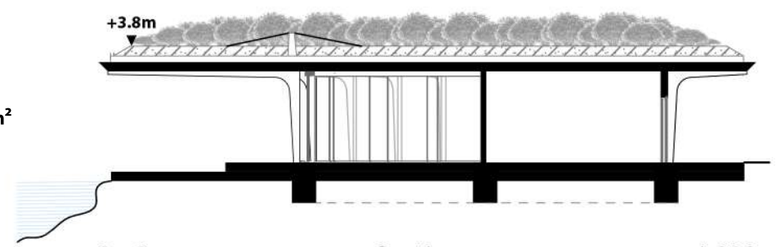
On the pond, the restaurant is a culinary haven, celebrating the region's aquatic bounty. Constructed with an eco-friendly ethos, the building mirrors the surrounding greenery through large windows that offer panoramic views of the water. Biophilic design principles enhance the connection with nature, while the structure's foundation reflects a commitment to sustainability.

Inside, patrons indulge in a gastronomic journey featuring locally sourced fish. The restaurant's design prioritizes an immersive dining experience, accentuating the reflections on the pond's surface. This aquatic dining destination becomes a symbol of responsible consumption, as the menu is curated to support local fishermen, minimizing environmental impact.



Ground Floor 1:200





6 - 6 Section 1:200

Object F - Kayak Club

Adjacent to the restaurant on the pond, the kayak club and café create a synergistic pair enhancing the park's aquatic charm. Crafted from recycled and repurposed materials in alignment with the park's sustainability goals, these structures feature large windows that seamlessly merge indoor and outdoor spaces, offering unobstructed pond views.

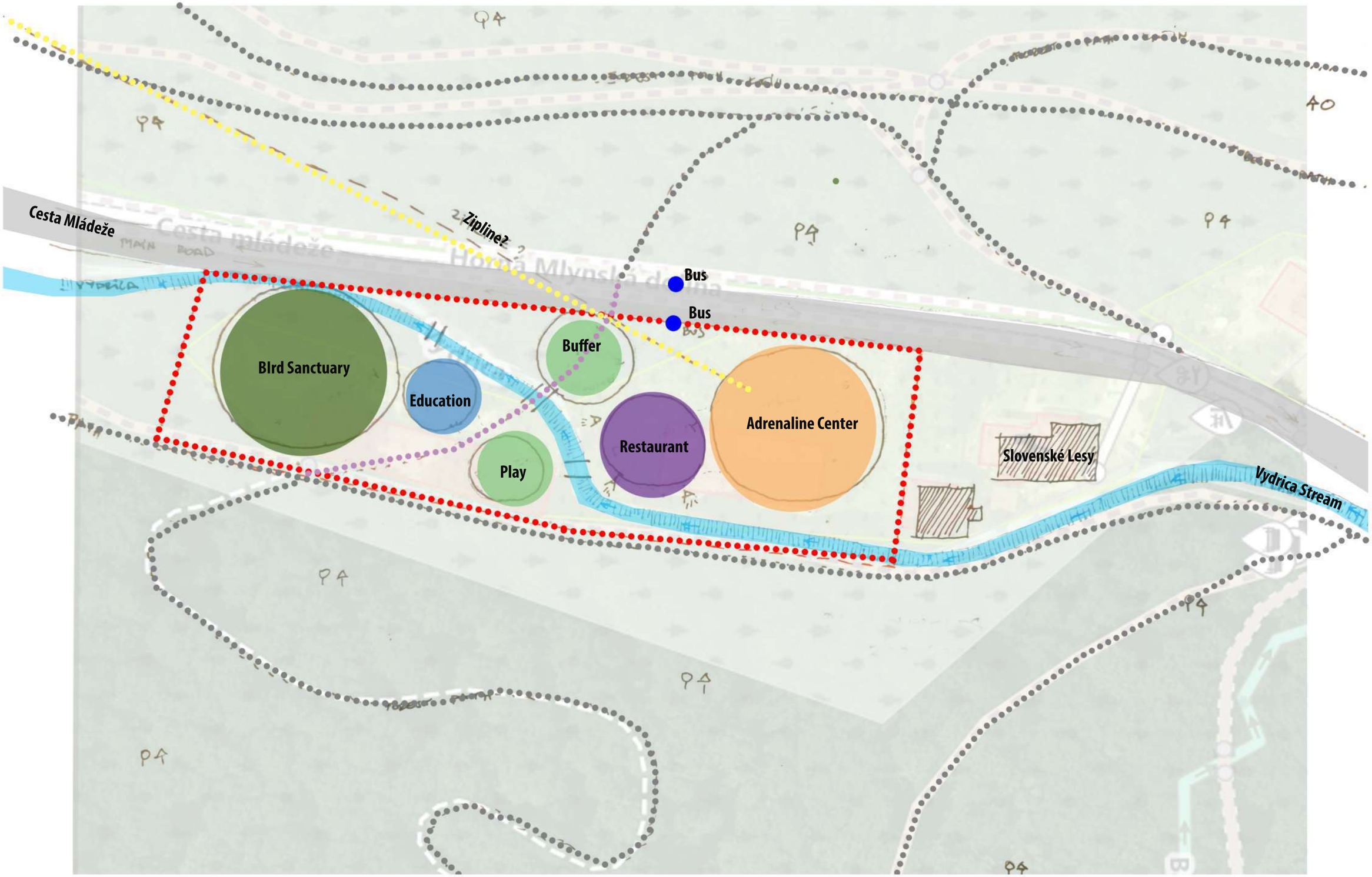
The kayak club invites water enthusiasts with easy access to kayaks and a launching point into the pond, promoting water-based recreation. The café complements the experience by providing a tranquil space for refreshments, fostering a deeper connection with the water environment. The design promotes a sense of community and outdoor camaraderie, encouraging a healthy, active lifestyle in an idyllic setting.

Objects E, F

Object E Render

Object F Render **01**

Phase 3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Play
Restaurant
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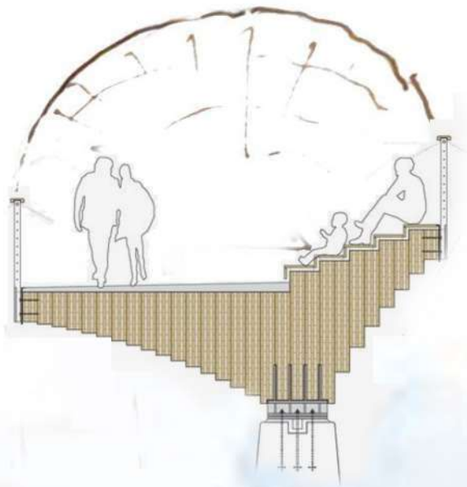
Slovenské Lesy
Vydrica Stream

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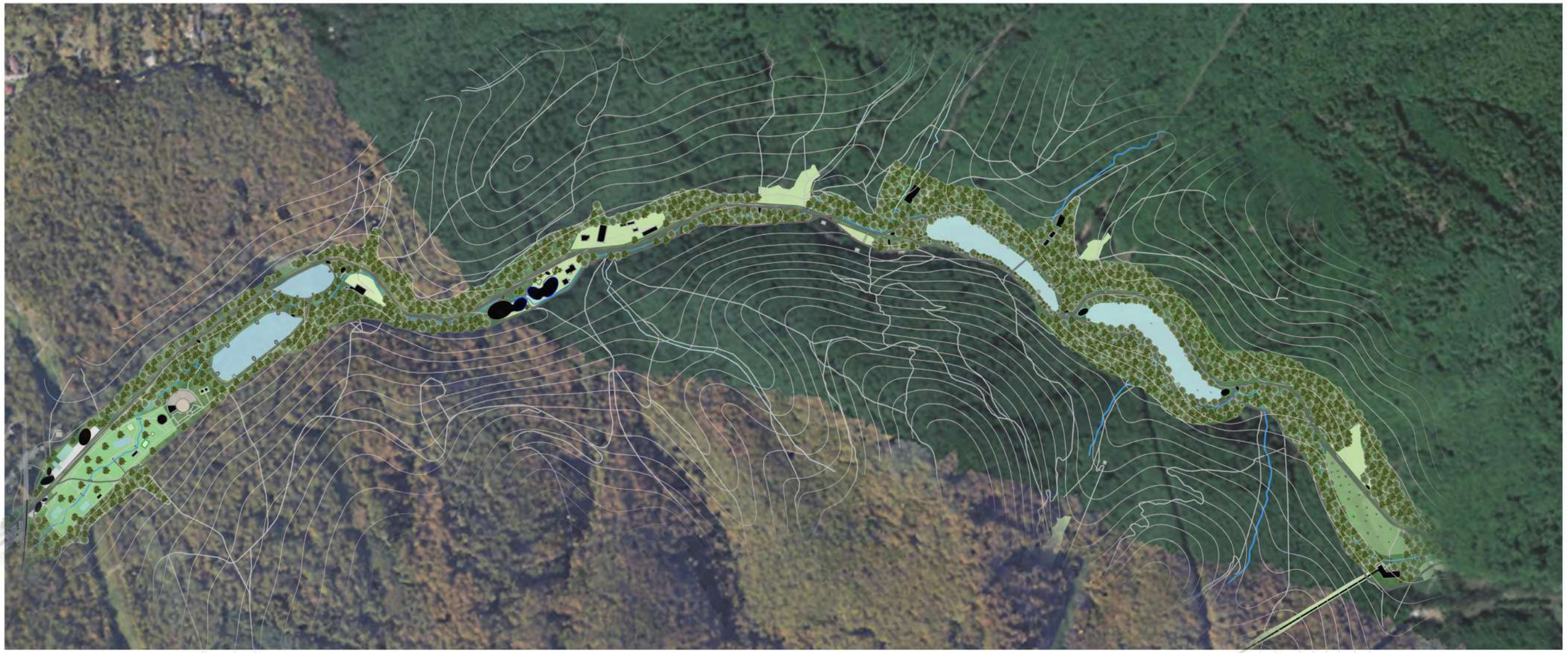


Aerial View M 1:10000

World Without Cars - Superconductor Suits

In the ever-evolving landscape of urban development and transportation, the concept of Superconductor Suits emerges as a beacon of innovation, promising to revolutionize the way we move within our cities. With its roots in cutting-edge superconductor technology, these suits present a vision of frictionless, efficient, and sustainable mobility. As we delve into the possibilities and challenges associated with Superconductor Suits, we explore how this transformative technology could reshape the urban fabric and redefine the very essence of commuting. From the visionary city of NEOM to the complexities of implementing such innovation in traditional urban landscapes, this exploration aims to shed light on the promises and hurdles of a transportation future that seems straight out of science fiction.

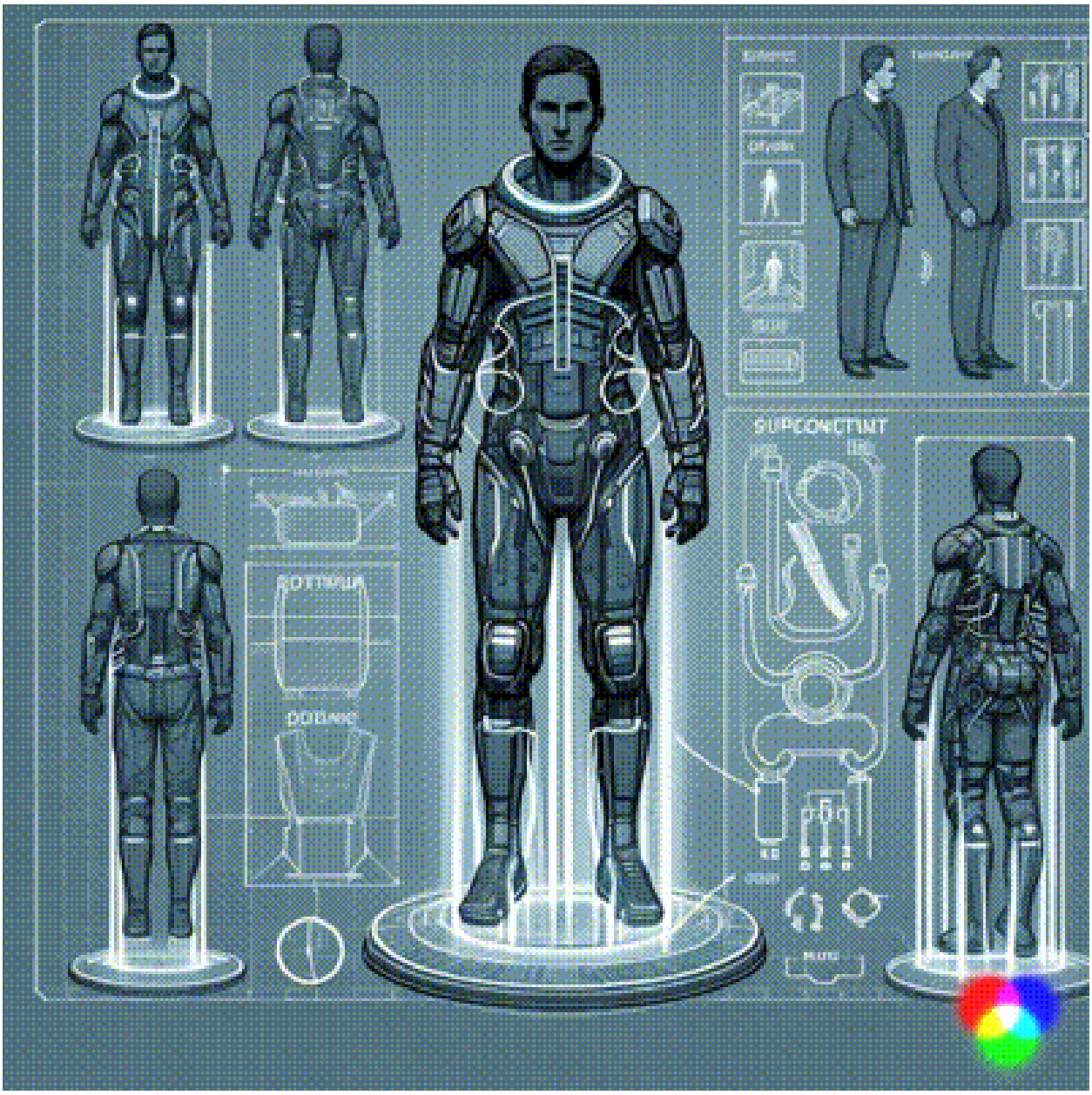
Super Conductor Suits

Superconductors are materials that can conduct electricity with zero resistance when cooled to extremely low temperatures. In the context of transportation, this technology is harnessed to create sleek and lightweight suits for individuals. These suits are equipped with an array of superconducting materials that enable magnetic levitation, allowing wearers to glide effortlessly above specially designed tracks.

1. Magnetic Levitation: The suits generate a strong magnetic field, causing repulsion between the suit and the conductive tracks below. This repulsive force lifts the wearer above the ground, eliminating friction and enabling high-speed travel.

2. Precision Control: Advanced sensors and gyroscopes in the suits provide precise control over speed and direction. Wearers can navigate seamlessly through the urban landscape, making sharp turns and adjustments with ease.

3. Energy-Efficient: The superconductor technology ensures minimal energy loss, making these suits an eco-friendly and sustainable mode of transportation. The power needed to maintain the superconducting state is supplied by compact, high-capacity batteries integrated into the suits.



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Transformative Impact on Society: Superconductor Suits in Cities

The integration of Superconductor Suits in citz such as NEOM goes beyond mere transportation; it transforms the very fabric of society, offering a host of benefits that extend far beyond the realm of mobility.

1. Time Efficiency: Superconductor Suits redefine the concept of commuting. With the ability to reach high speeds and navigate through the city swiftly, individuals can reclaim valuable time that would otherwise be spent in traditional transportation modes. This newfound time can be channeled into personal pursuits, work, or leisure, contributing to an overall increase in productivity and well-being.

2. Reduced Traffic Congestion: The adoption of Superconductor Suits significantly alleviates traffic congestion, a common challenge in modern cities. By introducing elevated tracks and dedicated lanes, citz would ensure a seamless flow of people, minimizing the need for expansive roadways. This reduction in traffic congestion not only enhances the efficiency of the transportation system but also mitigates environmental impacts associated with traditional vehicular traffic.

3. Urban Design and Architecture: The implementation of superconductor technology allows for innovative urban design and architecture. Citz like NEOM can embrace a more fluid and dynamic cityscape, with elevated pathways crisscrossing the skyline. The city's aesthetic appeal is elevated, creating an environment that reflects the harmonious integration of technology and nature.

4. Accessibility for All: The inclusive nature of Superconductor Suits ensures that mobility is no longer a barrier. These suits are designed to be user-friendly, allowing people of all ages and physical abilities to navigate the city effortlessly.

5. Economic Growth: The efficiency and speed of Superconductor Suits contribute to economic growth. Businesses can thrive as employees and goods move seamlessly across the city. Cities allowing this technology becomes a magnet for innovation and investment, attracting talent and fostering a vibrant economic ecosystem.

6. Environmental Sustainability: Commitment to sustainability is further reinforced by the eco-friendly nature of Superconductor Suits. With zero emissions and minimal energy consumption, these suits align with green initiatives, creating a city where technological progress coexists harmoniously with environmental stewardship.

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Drawbacks of Superconductor Suits

While Superconductor Suits offer numerous advantages, they also come with certain drawbacks when compared to traditional transportation methods such as cars. Additionally, implementing this technology in existing traditional cities may face several challenges.

1. Limited Cargo Capacity: Superconductor Suits are primarily designed for individual transportation, limiting their capacity for carrying goods or multiple passengers. This could pose a challenge for those who require larger cargo capacities, such as businesses involved in logistics or families with significant belongings.

2. Infrastructure Investment: Implementing the necessary infrastructure for Superconductor Suits, including elevated tracks and dedicated lanes, requires significant investment. Traditional cities may find it financially challenging and logistically complex to retrofit existing infrastructure to accommodate this innovative technology.

4. Safety Concerns: The integration of magnetic levitation technology raises safety concerns, particularly in densely populated urban areas. Accidents or malfunctions could have severe consequences, and ensuring the safety of both users and pedestrians is a critical consideration.

5. Initial Adoption Challenges: Introducing a novel mode of transportation may face resistance from a populace accustomed to traditional methods. User adoption could be a gradual process, and skepticism or hesitation might arise due to concerns about technology reliability, personal safety, and the learning curve associated with using the suits.

Challenges in Implementing Superconductor Suits in Traditional Cities

1. Existing Infrastructure: Retrofitting existing cities with the infrastructure required for Superconductor Suits is a monumental task. Integrating elevated tracks or dedicated lanes may disrupt established urban layouts and require significant modifications, leading to logistical challenges and community resistance.

2. Cost Implications: The cost of implementing a citywide system of Superconductor Suits, including the necessary tracks, maintenance infrastructure, and regulatory adjustments, could be prohibitively high for traditional cities with limited budgets.

3. Interoperability: Coordinating the integration of Superconductor Suits with existing transportation systems, such as roads and public transit, poses a considerable challenge. Ensuring seamless connectivity and interoperability is essential for the success of the technology but may be difficult to achieve in established urban environments.

4. Regulatory and Legal Frameworks: Adapting existing regulatory and legal frameworks to accommodate a new mode of transportation requires time and careful consideration. Safety standards, traffic regulations, and liability issues need to be addressed to ensure a smooth and secure transition.

Conclusion

In conclusion, Superconductor Suits represent a futuristic and innovative solution to urban transportation challenges, promising increased efficiency, sustainability, and a redefined urban experience. However, the transition from traditional transportation methods, particularly in existing cities, comes with notable drawbacks and challenges.

The limitations of Superconductor Suits, such as their restricted cargo capacity, infrastructure demands, safety concerns, and the need for widespread user adoption, must be carefully addressed. Additionally, implementing this technology in traditional cities raises issues related to the existing infrastructure, financial implications, interoperability with other transportation modes, and the adaptation of regulatory frameworks.

While the vision of embracing Superconductor Suits showcases the potential for transformative societal benefits, achieving such a vision in traditional cities requires meticulous planning, substantial investment, and community engagement. Overcoming these challenges demands a multidisciplinary approach, involving urban planners, engineers, policymakers, and the public to navigate the complexities associated with integrating this groundbreaking technology into established urban environments.

In the quest for sustainable and efficient urban living, Superconductor Suits present an exciting prospect, but their successful implementation hinges on addressing and mitigating the identified drawbacks and challenges. As technology continues to advance, the future may hold solutions to these challenges, paving the way for the widespread adoption of innovative transportation systems that redefine the way we navigate and experience our cities.

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