

Regeneration Of Babina Rijeka

FC Zenica

Description of study area

The area covered by the Regulation Plan "Crkvice" is located on the East side of the city, on the right bank of the river Bosna, about 1 km from the city centre. The settlement was formed along the Babina River.

The coverage area of the Regulatory Plan is 35.85 ha with a population of 4.355, population density is 122 inhabitants/ha.

Existing green area within the scope of the Plan is 131,101.00 m² (13.11 ha) equivalent of 30.10 m²/inhabitant of the neighbourhood. The green areas need to be improved and enriched by planting new trees, and creating hiking trails, urban furniture, and adequate lighting.

Local planning framework (urbanistic regulations) or relevant legislation

Local/ National legislation:

- Detailed Regulation Plan "Crkvice" represents the relevant legislation for all future interventions on public space.
- The area is integrated into the Cycling Study of the City of Zenica. No specific legislation or framework exists.

International legislation:

- European Landscape Convention
- EU biodiversity strategy to 2020

Site challenges

Public procurement procedures, financial resources

Project indicative: Z6.2

Project type: complex project

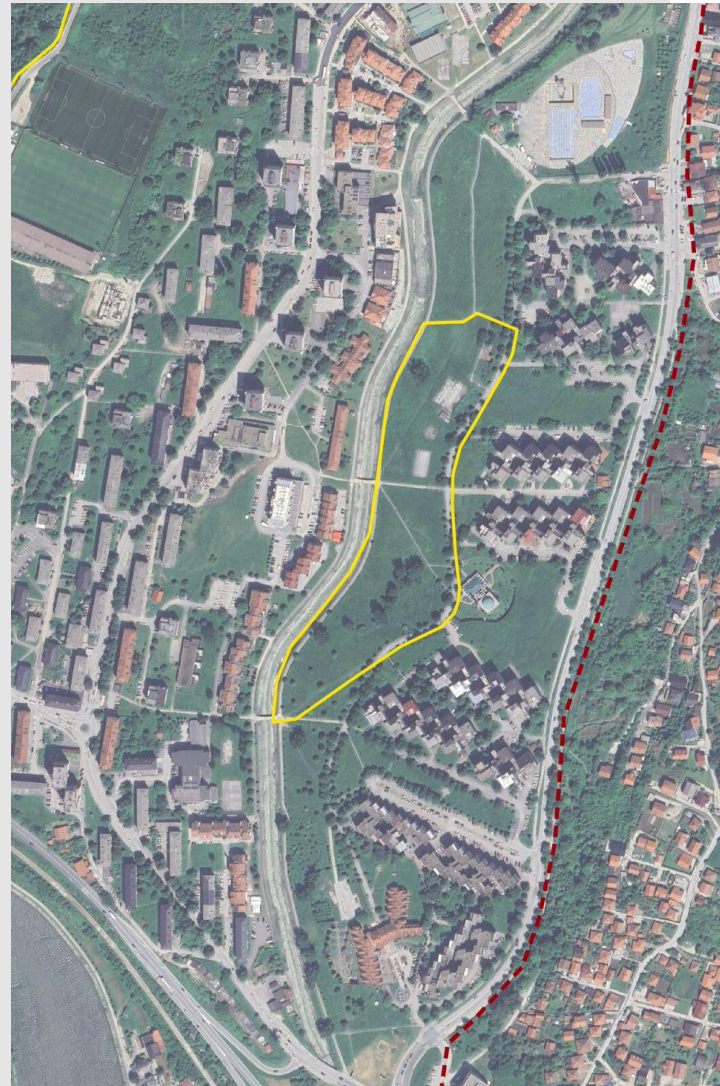
Project starting point: 0-5 y

Project ending point: 10-15 y

Estimated costs: n.d. (can vary depending on complexity of final design – NBS6 has to be integrated with the regeneration of the entire area)



NBS 6





Photos existing situation. Source: Mirza Skiric



Existing Situation

The area has a high population density. Available green space is poorly landscaped and maintained, which makes it unattractive and insufficient for leisure activities. Creation of new green corridors along the water area and related to main pedestrian pathways will improve the environmental and landscape components, allowing for simple adaptation of future leisure and sports activities within the new green network.

Vision



Do-it-all (best-case)

Firstly, the Municipality will allocate funds for preparatory activities (assessing the current situation, evaluating connections with other green infrastructure investments, stakeholder scanning). An Action Plan will be developed to describe the specific steps, activities, projects, responsibilities, timeframes, and financial resources for the implementation of the various activities and projects).

Participative processes will be launched from the beginning of the project. Next steps will involve carrying out public procurement procedures and implementing the works. Existing green areas will be improved and enriched by planting new trees,

installing new urban furniture and adequate lighting. The regeneration of the entire area, including the former bowling alley and connections of the river Babina banks with the main roads will significantly improve the quality of life in this residential area. The above-described interventions represents the first phase of the regeneration process. The green corridors will generate open (but well shaded and protected) spaces that can adapt different sport and leisure activities.

Do-something-meaningful (extract)

Prepare project documentation, continuing the participatory approach started in proGREG. Advocate with local stakeholder for financing the investments. Implementation can be done in stages if the local funds are not enough.

NBS intervention specifics

Typology of NBS⁶

Accessible green corridors and green infrastructure for:

- redeveloping Babina Rijeka into a community park with supporting green infrastructure
- green rehabilitation of the road junction.

Description of planned interventions

The implemented NBS contributes to improved green corridors, connecting citizens with the regenerated public space Babina Rijeka. The area will be developed into a recreation area frequently visited e.g., to walk, jog, watch birds or enjoy the scenery. The NBS implementation consists of a barrier-free 5m wide and 1000m long foot and bike paths that will connect the river Bosna waterfront with paved pedestrian paths as a first step to improve the overall path network around Babina Rijeka. Adjacent drainage will be constructed to lead the collected rainwater of the path into the Bosna River. Around 300-500 trees will be planted creating new green corridors within the site design. Slopes will be sowed with biodiversity-friendly seeds. Benches will be installed close to the river promenade. The planned road junction near the main entrance takes into consideration the proximity to the waterfront and the connections to the rest of the Babina Rijeka Green Infrastructure, without hindering pedestrian accessibility.

The open area in between the planned/proposed green corridors axes will be further defined to create a dynamic spaces.

- introducing green corridors to form the structural framework of the park: 1 – green promenade along the river; 2 – green corridors on the informally created pathways; 3 – green corridors perpendicular to the wind directions – connecting the park with other GI elements.

Operational Objectives, Targets & Indicators

Operational Objectives for implementation

Objective is to create an integral solution for the entire area; can be implemented in phases by introducing green infrastructure with diversified content.

- facilitate car circulation while considering walkability aspect and soft mobility measures – creating a new road junction.
- ensuring accessibility of pedestrians to the river Bosna by updating the existing pathways with 1km of new routes.
- Foster public participatory processes and awareness through field research (professionals working with local inhabitants), co-design workshop of the detailed landscape plan, and co-implementation measures.
- Developing a sense of community, spatial belonging, and co-ownership to ensure partial co-maintenance by residents together with the city administration.
- Create green infrastructure ecosystem (while developing links with existing mobility and green infrastructure networks)

Targets

- Plant min. 300 trees.
 - Develop 1000 m (linear) of promenade along the river.
 - Develop 500 m (linear) of pervious surface pathways.
 - Develop 1000m (linear) of running paths.
 - Develop 1000m (linear) of cycling paths.
- Bicycle path:
- Develop green infrastructure (1km).
 - Connect existing pathways and bicycle. paths with 1km of new route.
 - Plant min. 150 trees providing shade to the bike path.

Development stages

- **0 – 5 years:** conduct a public call for ideas, involve citizens in voting on the best solution and conduct public procurement for the contractor (in phases)
- **5 – 10 years:** perform rehabilitation and building with new facilities
- **10 – 15 years:** perform works and maintain the site

Partners/Stakeholder

Beneficiaries

Municipality

Stakeholders

Service providers - developer & planning professionals, ecologist, contractor, hydrology/drainage expert, public agencies, or departments— maintenance of green infrastructure (e.g., landscaping or maintenance staff, fire, and rescue services, planning and zoning departments), NGOs.

Users

Community residents, local business owners

Actions

1. Continue the co-creation work started in proGleg for better defining the design theme of the area.
2. Start an integrated project related to the Babina Rijeka Area encompassing possibilities of developing and connecting bike paths to the existing infrastructure and future infrastructures, integrating informal routes.
3. Elaborate an Action Plan to describe specific steps, activities, projects, responsibilities, timeframes, and financial resources for the implementation of the various activities and projects.
4. Conduct a public call for ideas, involve citizens in voting on the best solution.
5. Carry out public procurement procedures.
6. Obtain all necessary permits, settle property related aspects.
7. Implement solutions and develop a maintenance plan.
8. Organize various activities, events and visits to facilitate local residents' connection to the site (promote a sense of identity to stimulate community ownership) - i.e. planting sessions.
9. Monitoring and dissemination activities.

Design requirements

Accessibility

- Create pervious pathways but not hinder accessibility of all future users.
- Highlight access points to the park.
- Connect pedestrian and bike paths to the city's green infrastructure (bicycle network as described in the Cycle Study of the City of Zenica).
- Make space accessible for vulnerable groups (physical disabilities, visual impairment, etc).

Bike path:

- Ensure proper connections to local streets.
- Consider road usage typology: arterial and collector roads

Security/safety

- Use of lighting and other design elements to create a comfortable atmosphere day and night.

Annexed functions and activities

- Multifunctional sports field.
- Multipurpose open space that can host outdoor events.
- Open air gym.
- Relaxation areas.
- Picnic areas.
- Pavilions can be built to host activities.
- Community gardens.

Aesthetics/ambiance

- Placing landmarks/ signs for providing information of the site
- Take advantage of the waterfront, by introducing facilities in its proximity (create panoramic viewpoints)

Landscaping

- Connection to the waterfront of the river Bosna (South) and the green infrastructure networks
- Line vegetation nearby transport routes and streets (roadside greenery), rail side greenery, "green" railways.
- Develop water bodies to improve microclimate.
- Wetland planting.
- Using native vegetation.
- Integrate green infrastructure components such as rain gardens, attenuation ponds and tanks, bioretention swales, wetland filtration beds, enhanced green space, porous hard surfaces, floating planting and aeration systems are proposed to form the green infrastructure network, which will enhance the biodiversity.
- Increase biodiversity by planting pollinator friendly species.

Urban furniture and equipment

- Terraces to the riverbanks.
- Provide comfortable places for visitors (such as benches and sitting places), waste and recycling buckets, bicycle parking and supporting racks (promote alternative transport methods and promote sustainability).
- Inclusion of affordable contents (toilets and fountains and fountains for drinks, with functions such as handrails and adjustable elements to adjust to different needs).

Sustainability/Maintenance

- Develop maintenance and sustainability plan.
- Elements of green infrastructure for rainwater infiltration, man-made wetlands and retention ponds, plant root wastewater treatment plants, green infiltration strips, permeable paving infiltration strips.
- Use sustainable and long-lasting materials.
- Regular cleaning, pruning and re-planting as needed.

Landscape design example: creating a dense and coherent network of green corridors

