## Park B Student Campus Borongaj Zagreb

In October 2010 the University of Zagreb launched a competition for a new educational campus on the site of the former military complex Borongaj. The jury comprised of notable national and international experts such as Julien De Smedt, Joan Busquets, Kees Christiaanse, Nikola Popić, Ivan Rupnik, Milan Pavlinić, Mikala Holms Samsoe, Ivan Dadić and others. The results were announced in February 2011. - njiric+ arhitekti won the first prize.

We entitled our entry "Park B" expressing our vision of contributing the public realm, questioning the urgent implementation in the same time. In our introductory text we have written : "However, it would be wise to take advantage of the available site and preserve it for the future in the form of a public park. And eventually to build some houses ?"

In July 2012, the Urban Development Plan (UPU) has been approved by the city assembly as the official planning document. Eversince, njiric+ arhitekti are waiting on the commission for the first faculty building which should serve as a prototype for all future actions.

## A. General issues

Instead of fixed buildings, a 21st century park of a new breed is proposed. The whole site is treated as a continuous park of different densities. It advocates the public interest and envisages an antihyerachical network of multiple ingredients and species, mixing the opposites such as urban agriculture with global educational standards.

Design : form and function follow climate. Can ecology provoke invention of forms and patterns that will provide new social cultural and political interpretation ?

Time-biased landscaping : 1. Soil preparation 2. Pathway construction 3. Formation of voids - stripes and clearings.

Urban farming : empty clearings for the future faculty lots and free stripes cut through the forest serve as test-beds for experimental urban occupation. We propose to diversify flora and fauna, empower people, manage whole systems and maximize long-term benefits.

Merging campus and the city : the road net provides efficient connections between the local community and the campus. Pedestrian paths are intertwined in a dense network as well. The suburban structures of high density/low rise penetrate the perimeter of the campus as well as the residential towers for the public sale. All of these contribute to the well-tuned mix of private residents and students what guarantees their presence on the site 24/7.

The clustering of related activities : more programmatic congestion will bring areas of various intensities, frequencies and occupation.

Hybrids : a series of complementary activities is proposed. Zoo park enters the hub and the campus site, as well as the popular science amusement park and ZET transportation museum, the orphanage, the recycle units...

No design : the houses are not designed or shaped - it is a mere system - simple, efficient and straightforward. However, later on the faculties and dorms can be articulated in any "contemporary" manner.

The cluster : incorporates all related student activities under the same roof. It offers a new learning and socializing experience (similar to the Schools of Architecture in Winterthur or Nantes). It is highly

adaptable – all "implants", 2 or 3-storey bars within the glasshouse envelope can be dismantled according to the altered future pedagogic demands.

Master Rules : instead of the "master plan", we proposed a set of simple guidelines which provide freedom and variety of interpretations for the future designers.

Social sustainability : as important as the technical aspects of sustainability. Articulated by various organisational patterns such as :

## **B.** The Ecological concept

The Ecological concept of Borongaj Campus Project is based on the following principle:

The use of the natural energies and forces, new development to coexist as a part of natural living Organism, avoiding conflicts with the nature – achieve maximum gain from the Nature at minimal cost, and in return, secure minimal disturbance of the Natural Environment.

To achieve this goal project will be developed in the following disciplines:

a. Achieve minimal disturbance of the site during the construction process by pollution prevention by controlling soil erosion, waterway sedimentation and airborne dust generation.

b. Particular attention shall be devoted to the site development after construction, restoration of the habitat and development of the new areas conducive to the cohabitation of different flora and fauna spices.

- c. Storm water controls.
- d. Constructed Wetlands

e. The Water use reduction shall be introduced throughout the campus to increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

f. Construction Waste Management

g. The use of Regional Materials

h. Alternative Transport

## C. The Energy concept

The energy concept is based on the following strategies:

1. The reduction of heating and cooling loads – introduction of sustainable measures at Urban and Building level;

2. The use of natural synergies - store surplus of energy underground, to use it when required;

3. Use renewable energies from sun and ground;

- 4. Recover waste energy;
- 5. The use the most efficient systems within the building.