

Harmonizing Architecture and Nature: Concept and Realization of the AMANOO District

The task was to design and implement a residential district that would not only provide residents with comfortable housing, but also create an environment that is fully human-centered and designed for people. The key idea was to establish a residential neighborhood in the very heart of Nork Gardens, enriched with green spaces, water features, and a dense forest. This concept began to take shape from the very first day of construction: active landscaping and tree-planting efforts were carried out throughout the area, resulting in the planting of around 1,100 large and small trees by the time construction was completed.

The project site initially consisted of a landscape completely devoid of vegetation. It was therefore necessary to apply strategies that would restore the natural environment and ensure balanced development—an environment enriched with oxygen and shielded from dust and wind. After assessing the existing conditions, it became clear that architecture and nature had to be harmonized, and biomimetics was chosen as the guiding method for addressing this challenge.

The master plan of the «AMANOO» residential district, as well as the structure and function of its buildings, is inspired by the natural growth pattern of ivy leaves. In this concept, the nourishing stem of the ivy is represented within the master plan as a river. The four elements present in both nature and the human experience—water, earth, air, and fire—were also incorporated throughout the residential complex to further enhance harmony and complete the integration of natural patterns and the golden ratio into the design.

The section of the «AMANOO» residential district presented here consists of an ensemble of four residential buildings. When developing the master plan, these four buildings were positioned according to the principles of the golden ratio. As a result, the structure of the ivy leaf arrangement gradually emerged in the layout of the master plan, influencing both the placement and the form of the buildings.

A closer study of ivy reveals that the spacing between its leaves along the stem follows the system of the golden ratio. Each leaf growing on the right or left side of the stem maintains a golden ratio relationship with the next leaf. Although this concept was challenging to bring to life, the methods and

principles applied yielded remarkable results. The outcome is a truly balanced development, where significant work was dedicated to restoring vegetation and re-creating a natural environment.

The architectural setting resulting from this project enriches and complements the existing natural landscape. Implementing projects based on such principles is especially important in Yerevan, where the balance between green spaces and construction volume has been significantly disrupted. By emphasizing natural restoration in the design process, 65% of the planned land area was allocated to tree-planting and landscaping.

The main challenge was to achieve the maximum functional surface area within the available land—an understandable priority from the standpoint of business profitability. However, the architects' responsibility was to convey to developers that large-scale construction alone does not define a successful business project. Rather, success lies in creating the right architectural environment. In the end, residential development is intended for people—human beings who are part of nature and require a balanced natural environment for a healthy and fulfilling life.