Introduction

In its design, the new building complements the direction of a company that is transforming from an oil miner to a green energy provider. Together with the park, it is conceived as a comprehensive argument of the need for the location to redefine its urban and ecological culture through green infrastructure. The incorporation of a central park is identified with the city’s urban design. The central green landscape is planned to extend from the building to the park. The presence on the lower part of the building and the park as an extension of the green area increases the quality of the living environment and emphasizes the environmentally friendly direction of the company.

General Description of the Spatial and Architectural Concept

The floor plans and the functionally appropriate horizontal families are carefully transformed into a vertical volume with a series of terraces that extend the park’s edge to a horizontal plane, reducing the pressure towards the street. All the parts that the residents want to be in the focal point of the building are labeled in the facade, such as a garden, a terrace on the ground floor and a common entrance. A small office zone is located in the lower area.

At this point, we refer to the need for a large, flexible, and functional floor area. Introduction of F1 as a series of green roofs and the addition of a roof garden area allows for the use of the building’s excessive area.

MAXIMUM ENVELOPE

Urban necessities suggest a horizontal slab next to the parking area and a tower on the roof.

CUTTING THE ENVELOPE

By subtracting the roof, the building is shaped according to the urban conditions and the orientation of the program.

PROPORTION (GREEN & DIGITAL)

Simplifications of the volume axes lighten the construction and reduce green areas as a continuation of the nearby park.
The building is designed in a way that organizes and forms the surface on which it is placed. The layout along the building's length is designed to make it accessible and convenient for users from various directions. The building is accessible by foot or vehicle, with walkways individually and spatially organized. The entrance to the building is a single point which the building is designed to face a single point as well, during which the building serves as a pavilion against street traffic noise.

The design of the interior spaces is characterized by an arrangement of the entire area (access, traffic routes, green areas) around the building. The building is designed with a layout that considers the distribution around the building depending on the direction of the natural light and wind flow around the building.

Description of the distribution of program groups and functional connections

The program map arrangement in the building is designed to facilitate movement. The layout of these regions enables the building program to spread out in the whole area, which leads to more rational use of space. This leads to a better service for the end user, which is essential for the building's purpose.

ENTRANCES & COMMUNICATION ROUTES

The entrance to the building is located at the front, where it is accessible from the street. The distribution of the entrance area is designed to be easily accessible and navigable. The entrance is designed to allow for easy access to different areas within the building.

DESCRIPTION OF PROGRAMMES

The proposed arrangement of the building is designed to facilitate movement. The layout of these regions enables the building program to spread out in the whole area, which leads to more rational use of space. This leads to a better service for the end user, which is essential for the building's purpose.

DESCRIPTION OF OTHER ESSENTIAL ELEMENTS OF THE CONCEPTUAL DESIGN QUALITATIVE ASPECTS OF MATCHABILITY: TECHNICAL REQUIREMENTS, CONSTRUCTION, INSTALLATIONS, ETC.

Construction concept

The building structure is designed to ensure the necessary support and support for the entire structure. The structure is designed to be simple, with a load-bearing structure consisting of steel and reinforced concrete. The structure is designed to be easy to build, with a modular design and easy-to-install parts.

CONSTRUCTION CONCEPT

The building structure is designed to ensure the necessary support and support for the entire structure. The structure is designed to be simple, with a load-bearing structure consisting of steel and reinforced concrete. The structure is designed to be easy to build, with a modular design and easy-to-install parts.
Installation concept

The energy design of the building utilizes the volume of the interior atrium as a mixing chamber of the HVAC system, which significantly simplifies duct distribution in the building. This volume is filled from the top and emptied at the bottom, which creates a Helmholtz volume in the atrium, thus alleviating the need for air distribution systems. Air flow in the atrium is enhanced by the active cooling of the atrium volume, which improves the overall efficiency of the facility (in terms of energy) and also helps in the regulation of (SO2 and VCE) levels in the area.

All linear subspaces are equipped with fresh air from the outside. Additional mixing is also provided from the atrium air to the spaces. Air conditioning is designed to be limited to the atrium space, and its capacity is significantly reduced. The HVAC unit is in the basement floor, and its operation is remote from the interior zone and office buildings. The system is energy efficient and vandal-proof.

INNER ATRIUM AS A MIXING CHAMBER OF THE HVAC SYSTEM

Indoor air is used as a mixing and dehumidifying chamber for air treatment in the building.

DEVELOPMENT OF WINDOW ENVELOPE DESIGN

Covered spaces are a combination of intended treatments due to the local specific conditions. Large windows are often used, and people often have their faces from the windows.

PHASES

Phases are designed through reduction of module building blocks from unified basic volumes forming necessary local volumes.