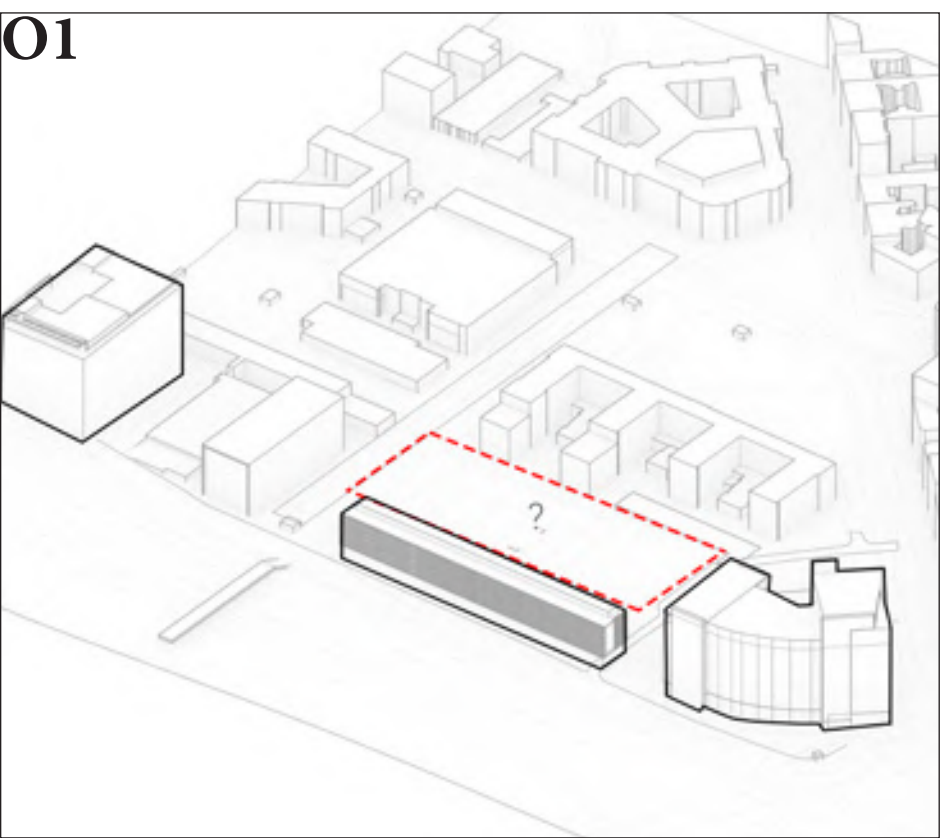


01 Idea

The proposed project is envisioned as a contemporary architectural landmark for the Warsaw University of Technology-a new urban dominant reinforcing the visibility and identity of the institution within the city of Warsaw. The initial design intention emerged from the observation that, despite its historical significance and academic prestige, the university currently lacks a strong architectural presence within the metropolitan skyline. The project addresses this absence through the introduction of a vertical structure that not only accommodates advanced educational and research facilities but also acts as a visible symbol of scientific innovation and academic excellence. The building is conceived as a contemporary gateway to the university campus, emphasizing the transition between the urban fabric of Warsaw and the academic environment. Simultaneously, Rectorska Street is imagined as a potential green pedestrian axis, strengthening spatial continuity within the campus. The architectural form establishes a conscious relationship with the most recognizable structures in its immediate surroundings, specifically the PWC Building, the Focus Building, and the Main Building of the Warsaw University of Technology. Rather than functioning as an isolated object, the project positions itself within an existing urban composition, continuing the rhythm of surrounding heights and reinforcing Warsaw's vertical cityscape. The proposed massing responds directly to neighboring proportions while introducing a contemporary institutional identity. Particular attention was dedicated to visual and pedestrian connectivity. The project responds to the main movement corridors generated by Plac Politechniki, the Politechnika metro station, and the green landscape of Pole Mokotowskie. These urban flows informed both the orientation of entrances and the shaping of the building volume.



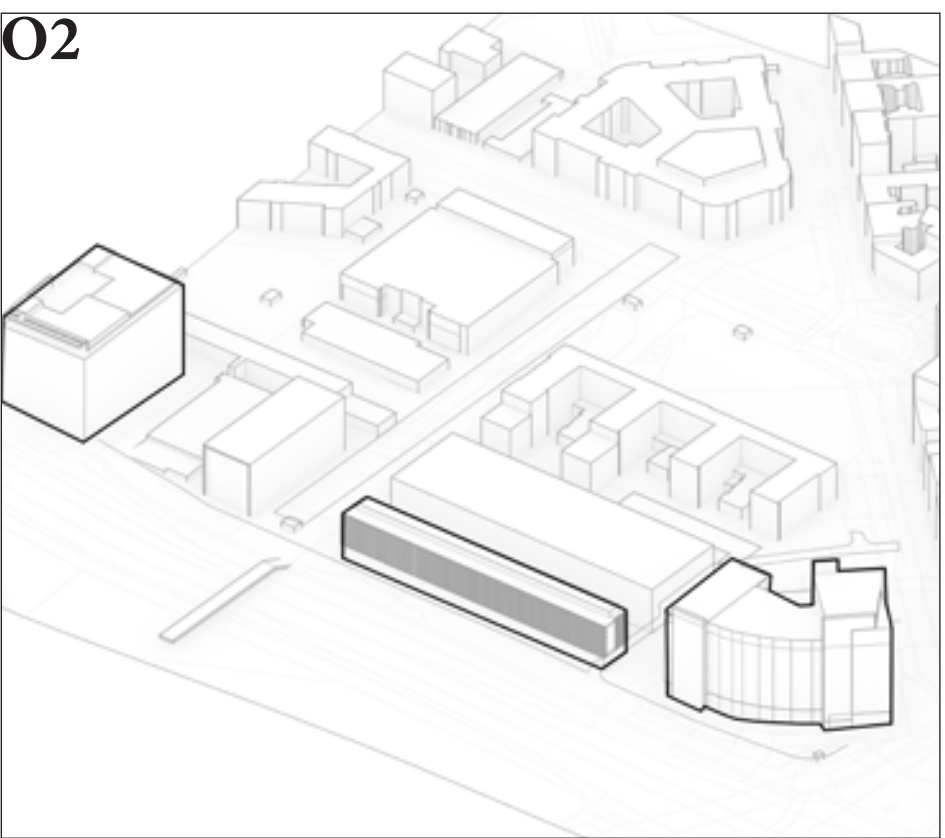
02 Step story



Absence of a University Landmark

The design process began with the identification of a critical urban condition: the insufficient visual representation of the Warsaw University of Technology within the city skyline.

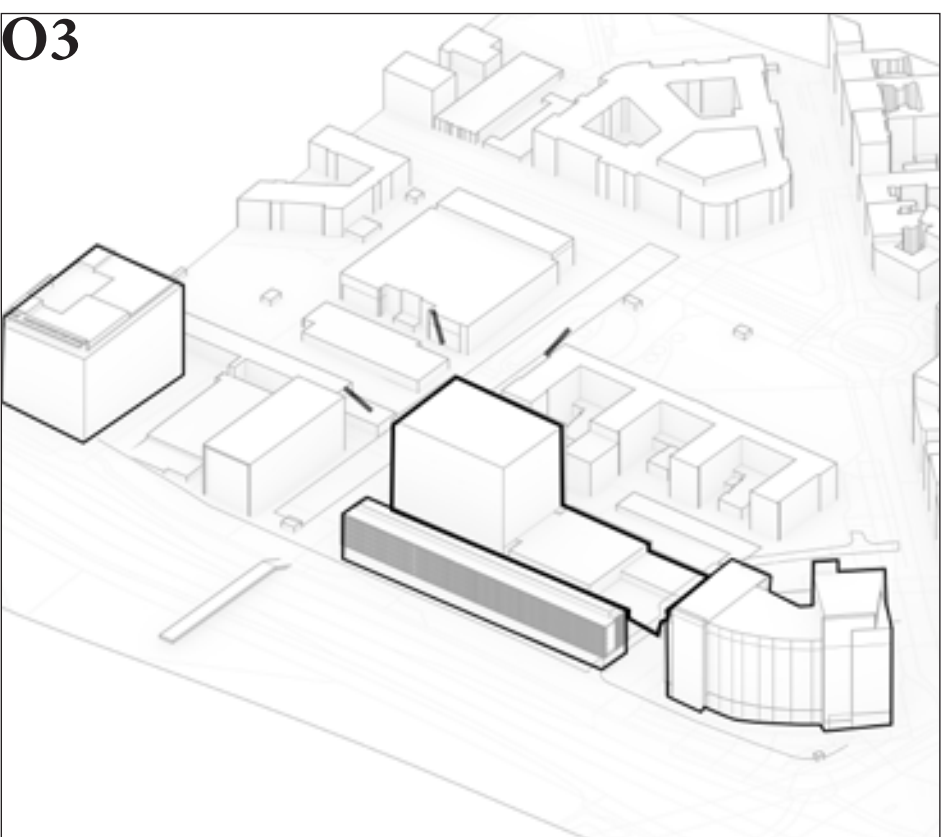
Despite the institutional importance of the university, its architectural visibility remains limited when compared to neighboring commercial and office structures. The project therefore introduces a new vertical dominant intended to become a recognizable urban marker and institutional symbol.



Context of Three Architectural Anchors

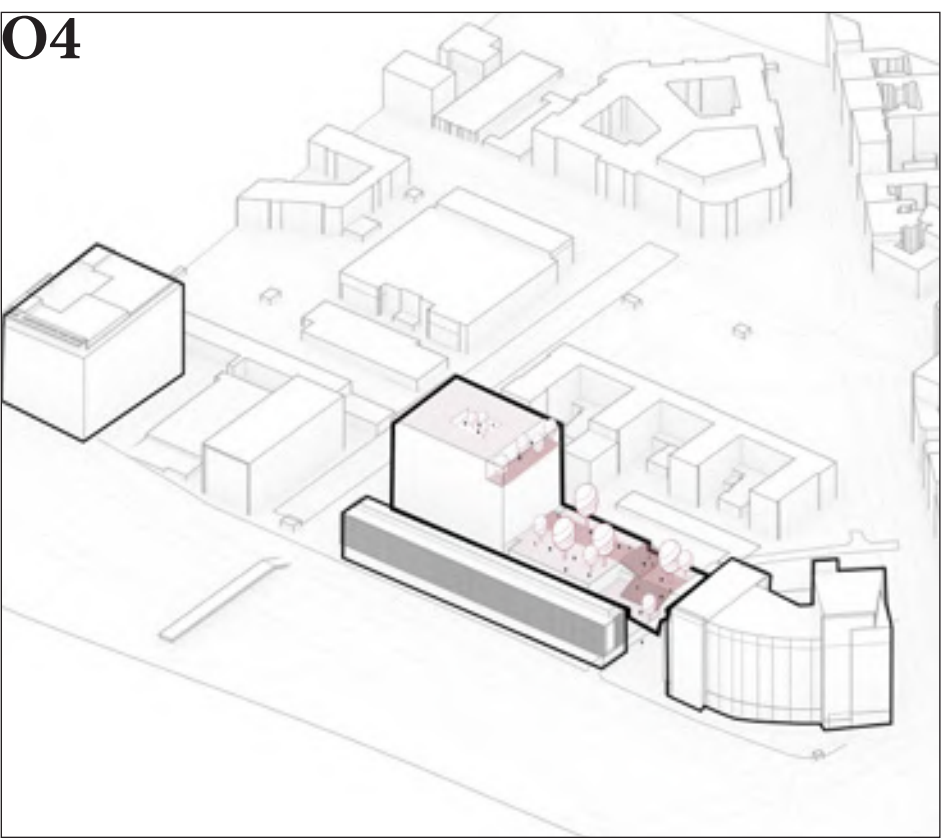
The second stage focused on the analysis of the surrounding architectural context and the relationship between three major neighboring structures: the PWC Building, the Focus Building, and the Main Building of the Warsaw University of Technology.

This contextual study informed the overall proportions, scale, and urban positioning of the proposal. The resulting volume establishes continuity with adjacent high-rise structures while simultaneously introducing a distinct institutional expression.



Dialogue with Existing Urban Dominants

Rather than functioning as an isolated object, the project positions itself within an existing urban composition, continuing the rhythm of surrounding heights and reinforcing Warsaw's vertical cityscape. The proposed massing responds directly to neighboring proportions while introducing a contemporary institutional identity.

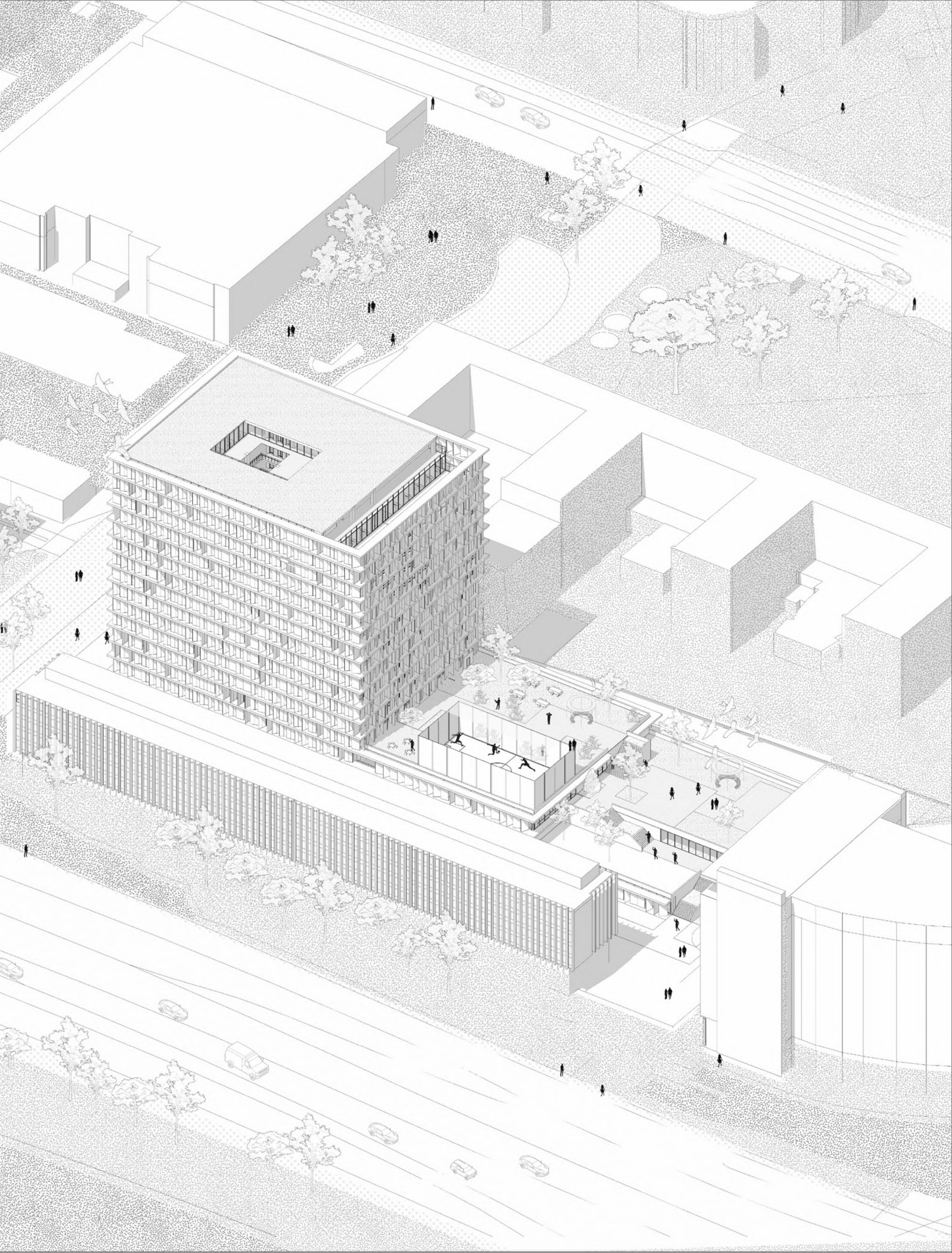


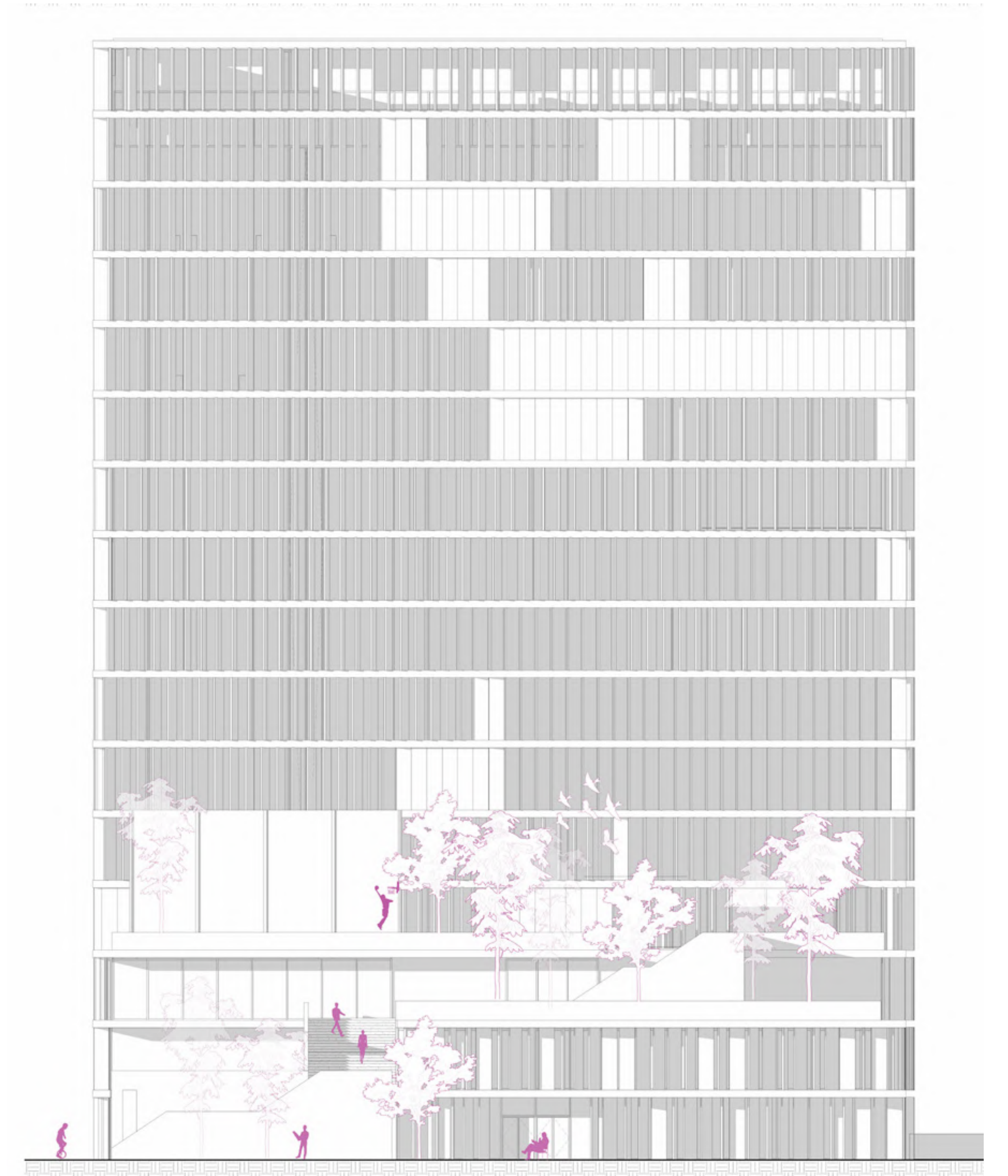
Terraced Spatial Strategy

The subsequent stage involved the articulation of the building mass through terraced setbacks.

This operation responds simultaneously to contextual, environmental, and social conditions. Architecturally, the terraces soften the scale of the high-rise structure and strengthen visual relationships with surrounding urban and green areas. Programmatically, they generate spaces dedicated to student activity, social interaction, recreation, and informal learning.

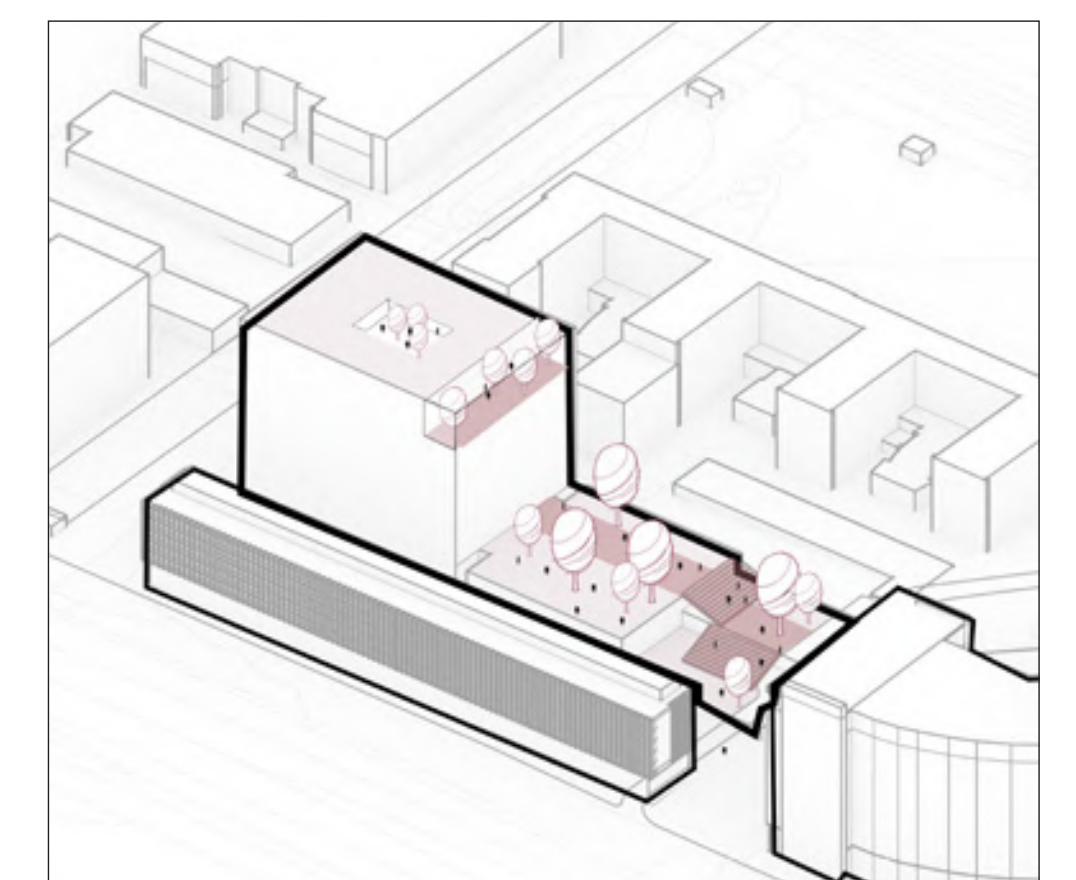
The terraces become active platforms for everyday academic life, enabling students to study, relax, gather, and engage in sports activities.



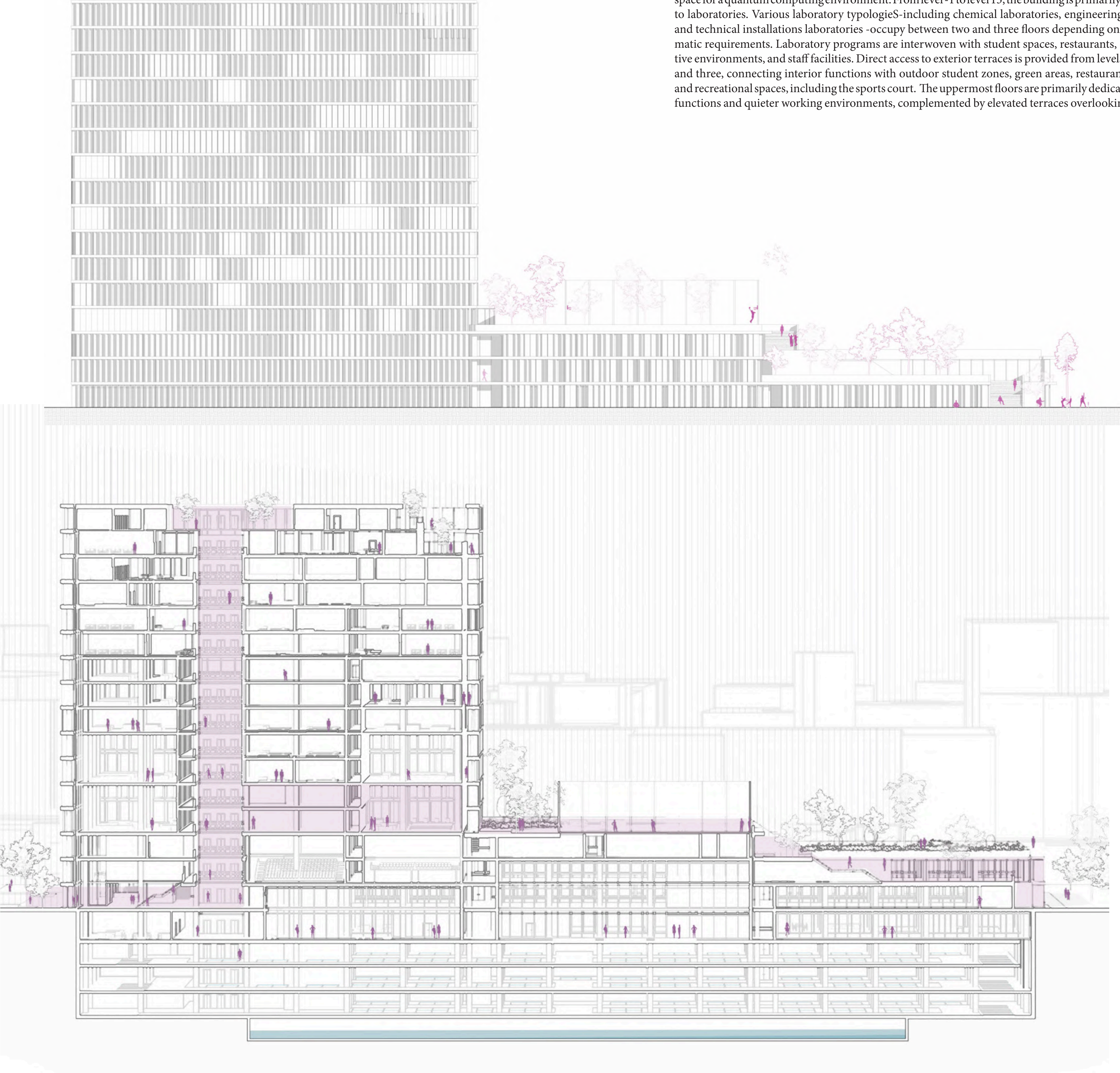
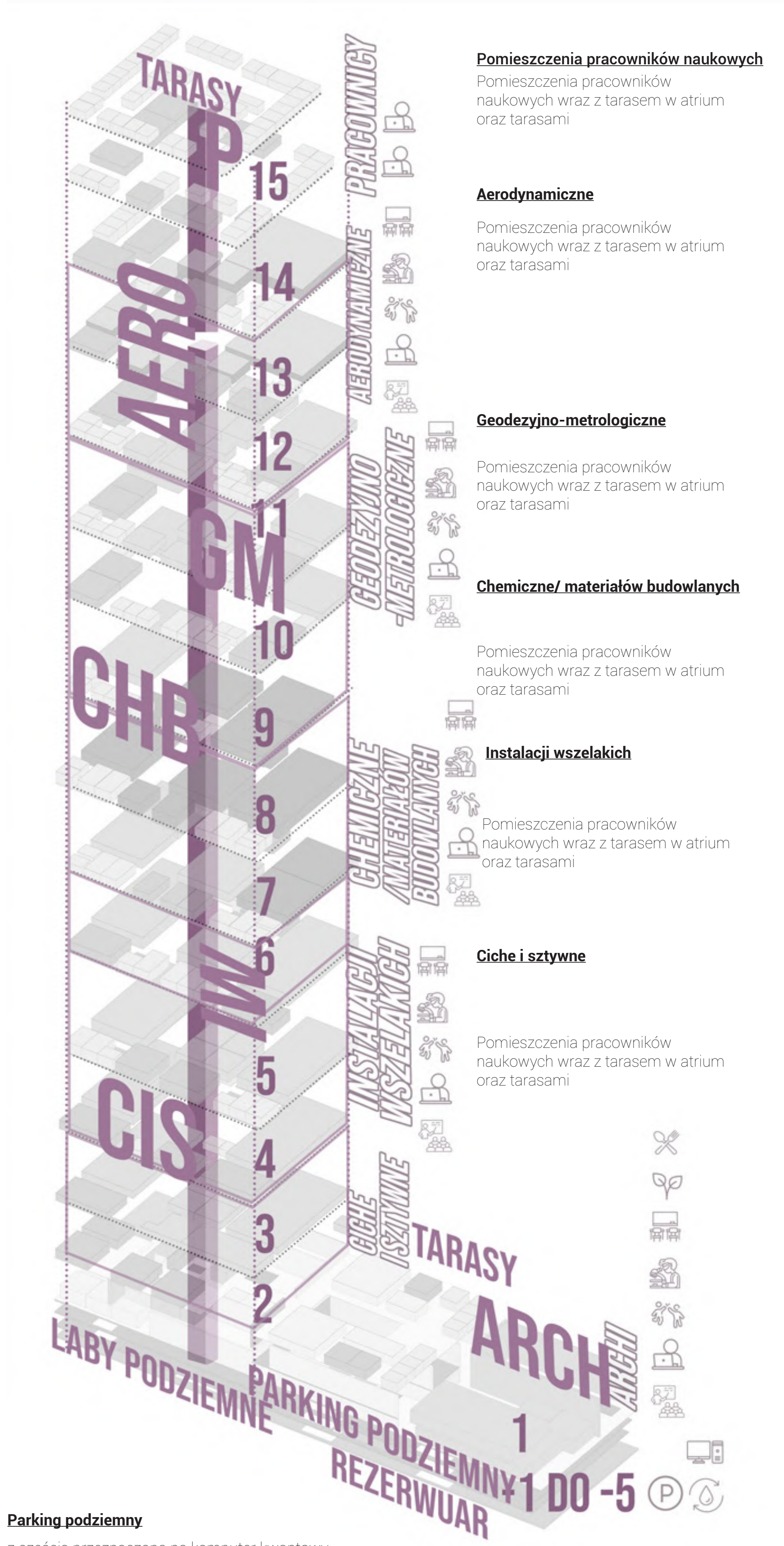


03 Terraces as Extensions of Academic Life

The terraced composition of the building emerges as both an urban and social response to its context. Designed primarily for students, the terraces function as informal educational landscapes that support studying, collaboration, relaxation, and recreation. Several terraces accommodate green recreational zones, informal study environments, and outdoor seating areas. One of the principal interventions is the introduction of a multifunctional sports court, creating opportunities for physical activity within the university environment.



04 Building programme



The building is composed of 15 above-ground levels and 5 underground floors, organized according to a clear functional hierarchy. The lowest underground level, level -5, accommodates the building's water reservoir infrastructure, integrated as part of the environmental systems strategy. Three underground parking levels are introduced above, while simultaneously allowing for the possibility of future shelter infrastructure and advanced technological facilities, including dedicated technical space for a quantum computing environment. From level -1 to level 13, the building is primarily dedicated to laboratories. Various laboratory typologies including chemical laboratories, engineering facilities, and technical installations laboratories occupy between two and three floors depending on programmatic requirements. Laboratory programs are interwoven with student spaces, restaurants, collaborative environments, and staff facilities. Direct access to exterior terraces is provided from levels one, two, and three, connecting interior functions with outdoor student zones, green areas, restaurant terraces, and recreational spaces, including the sports court. The uppermost floors are primarily dedicated to staff functions and quieter working environments, complemented by elevated terraces overlooking the city.

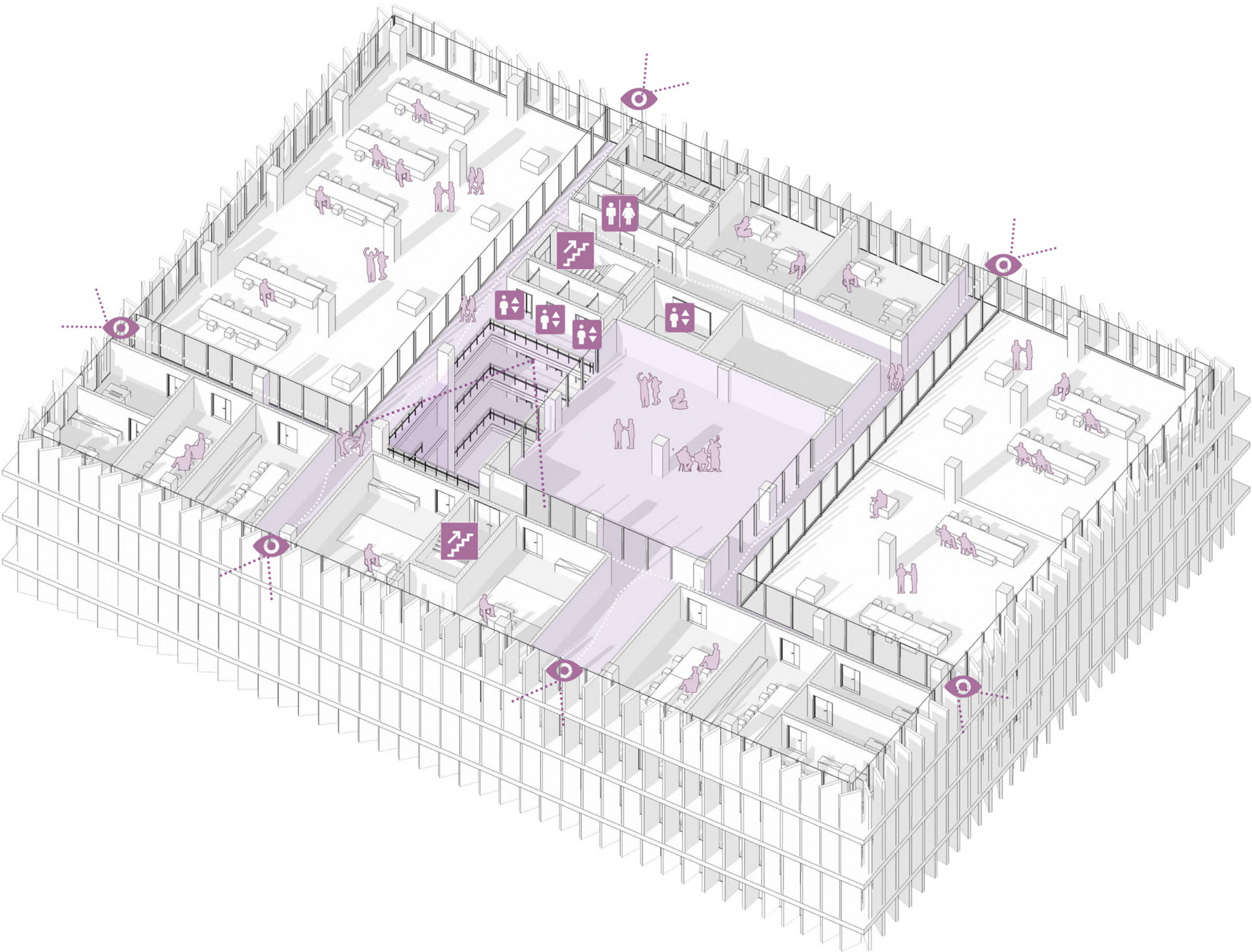
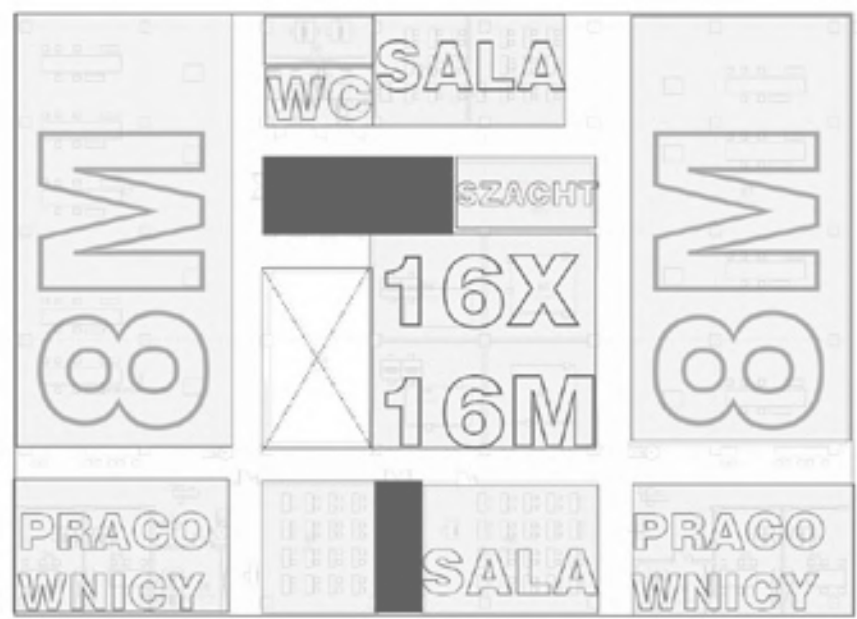
Floor Typology

Each laboratory level follows a consistent architectural logic derived directly from functional requirements.

The proportions of the tower are generated by the dimensional needs of laboratory spaces. Wider floor sections accommodate larger laboratories with approximately eight-meter structural spans, enabling flexible research environments.

Narrower portions of the plan contain smaller laboratories, educational support spaces, lecture rooms, and staff offices, creating a diversified spatial ecosystem across each level.

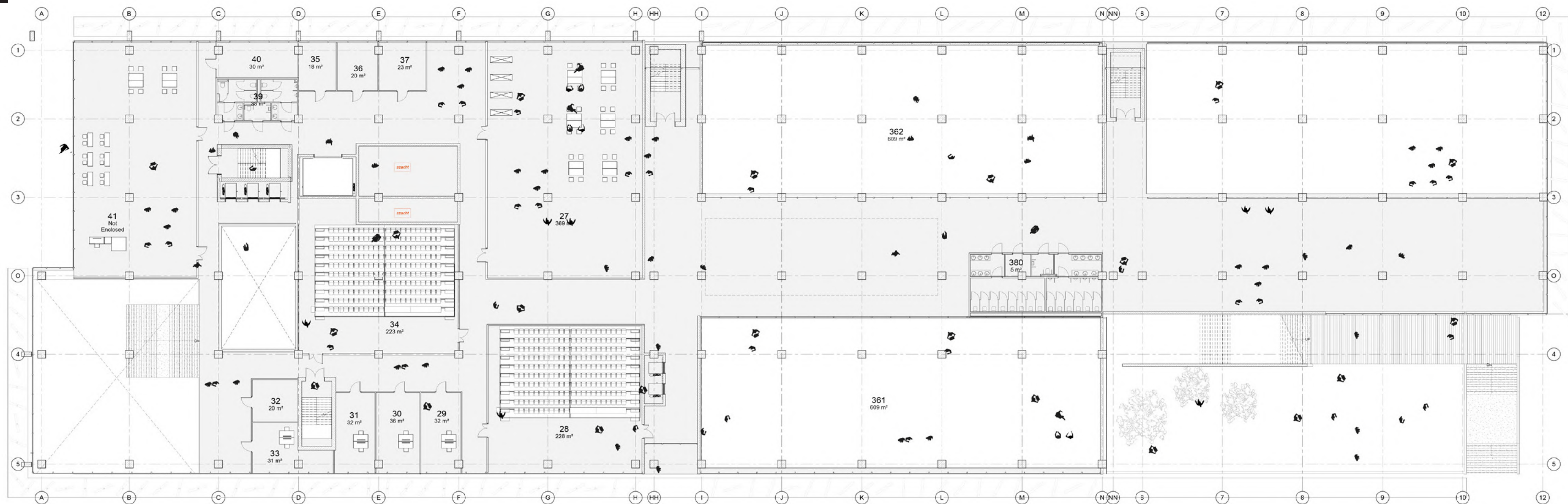
Each floor integrates dedicated sanitary facilities, technical shafts, and vertical circulation cores. The circulation system includes three passenger elevators and one freight elevator, ensuring operational efficiency throughout the building.



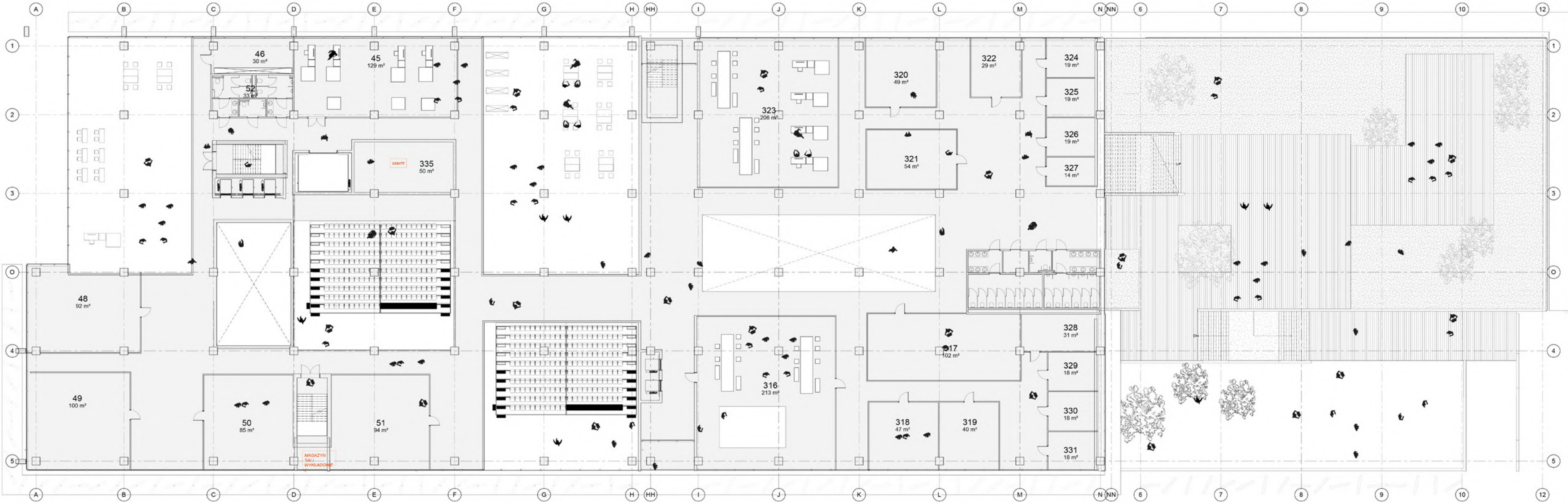
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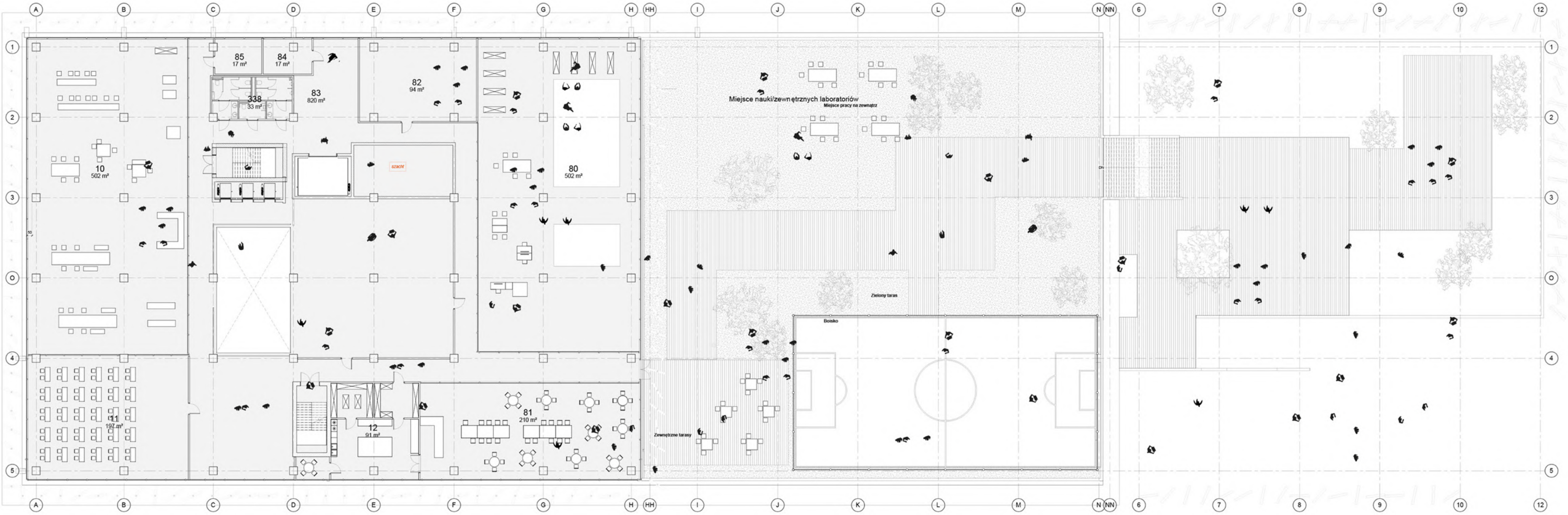
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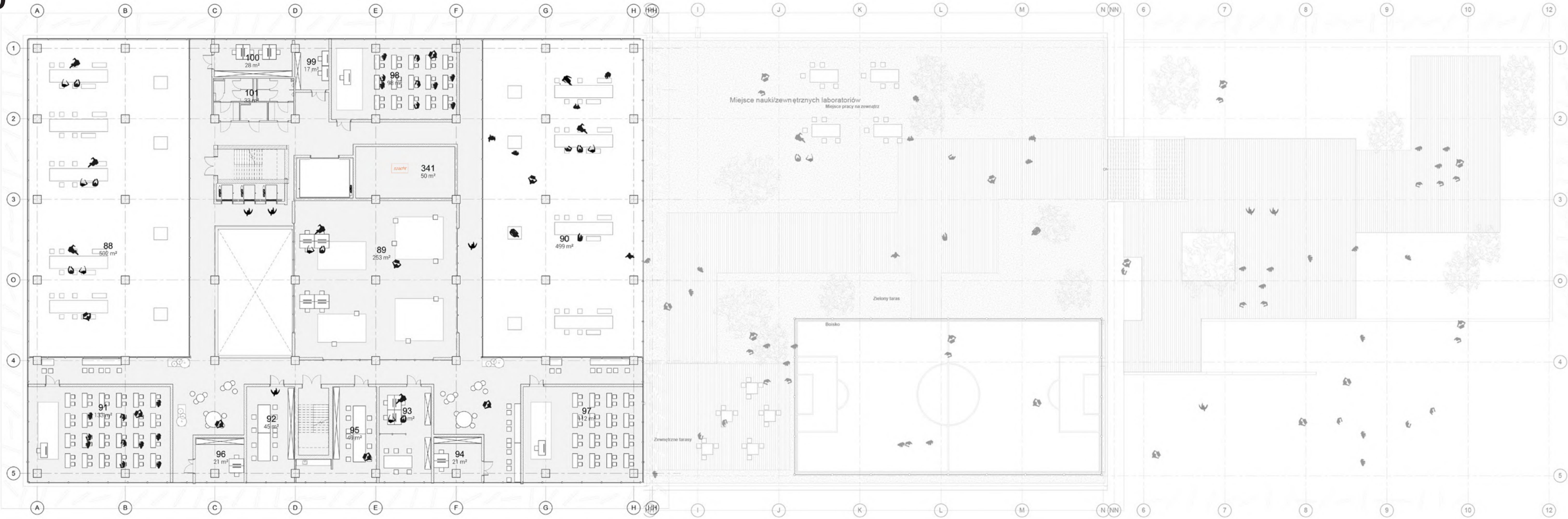
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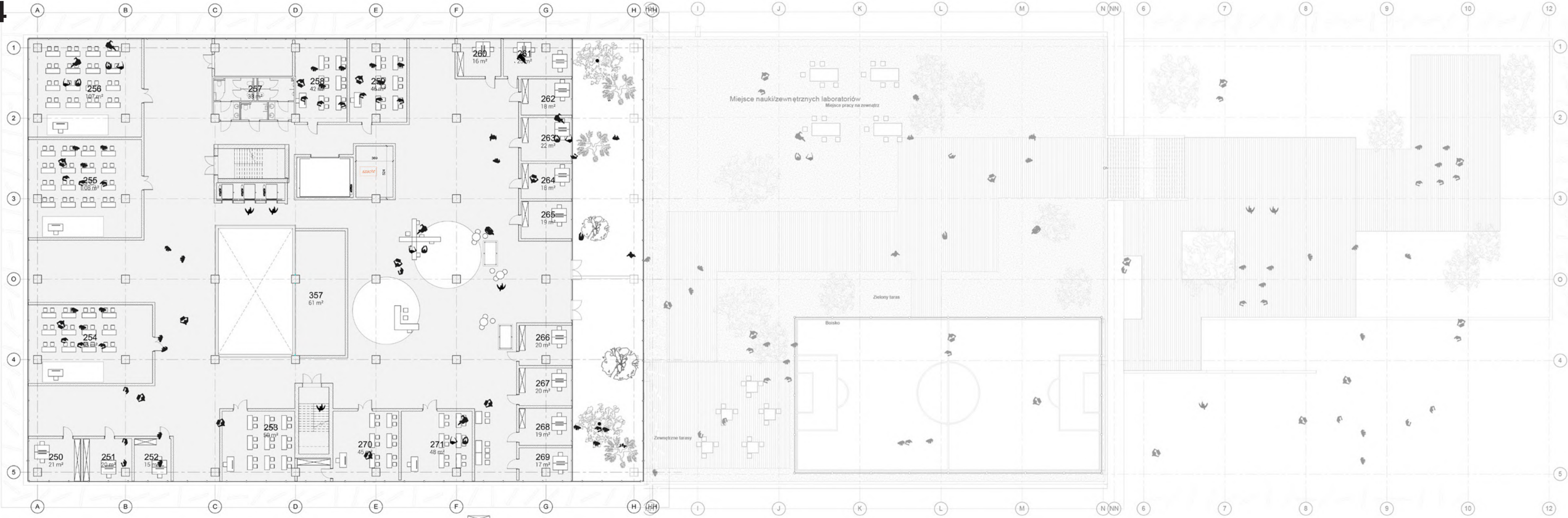
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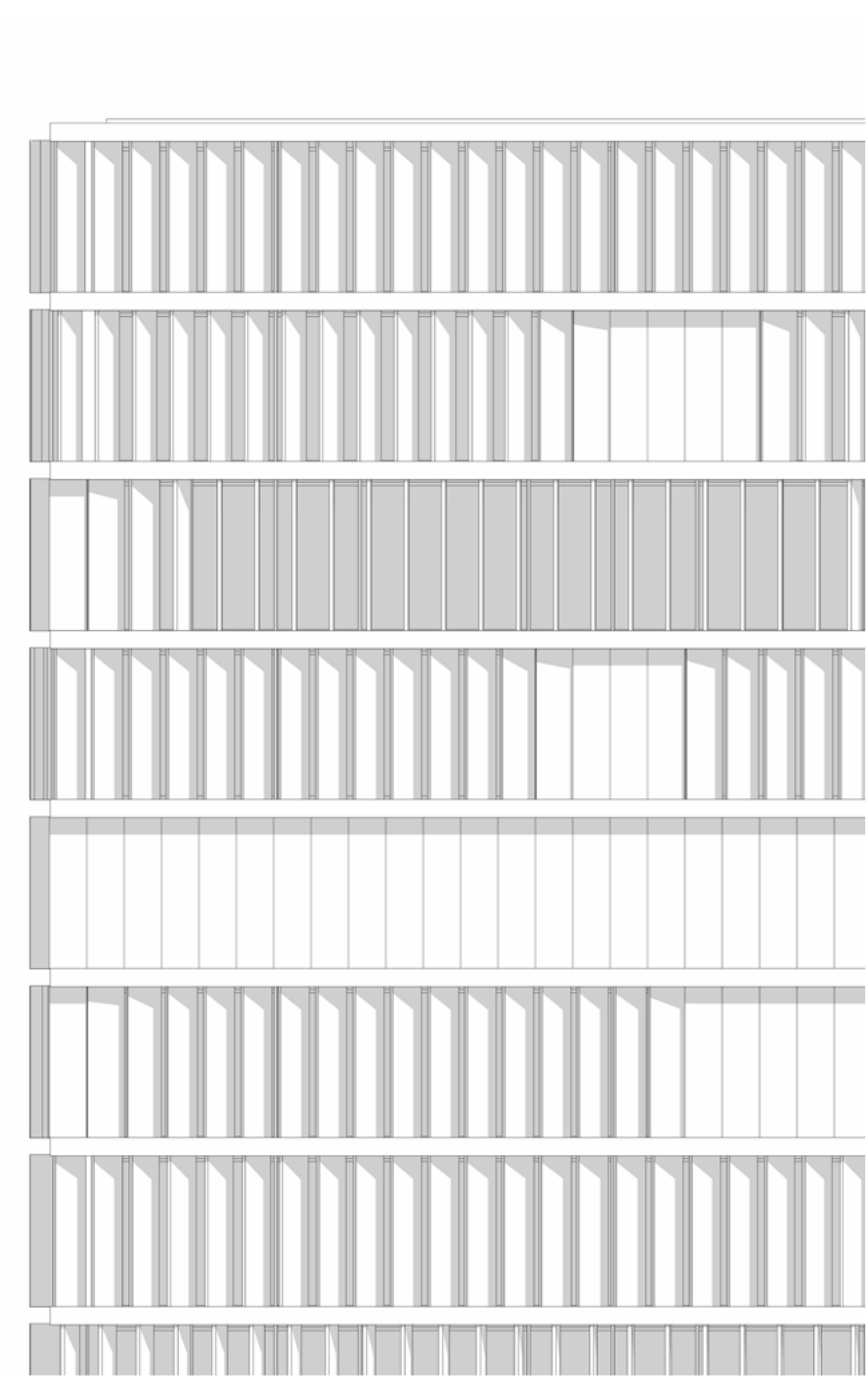


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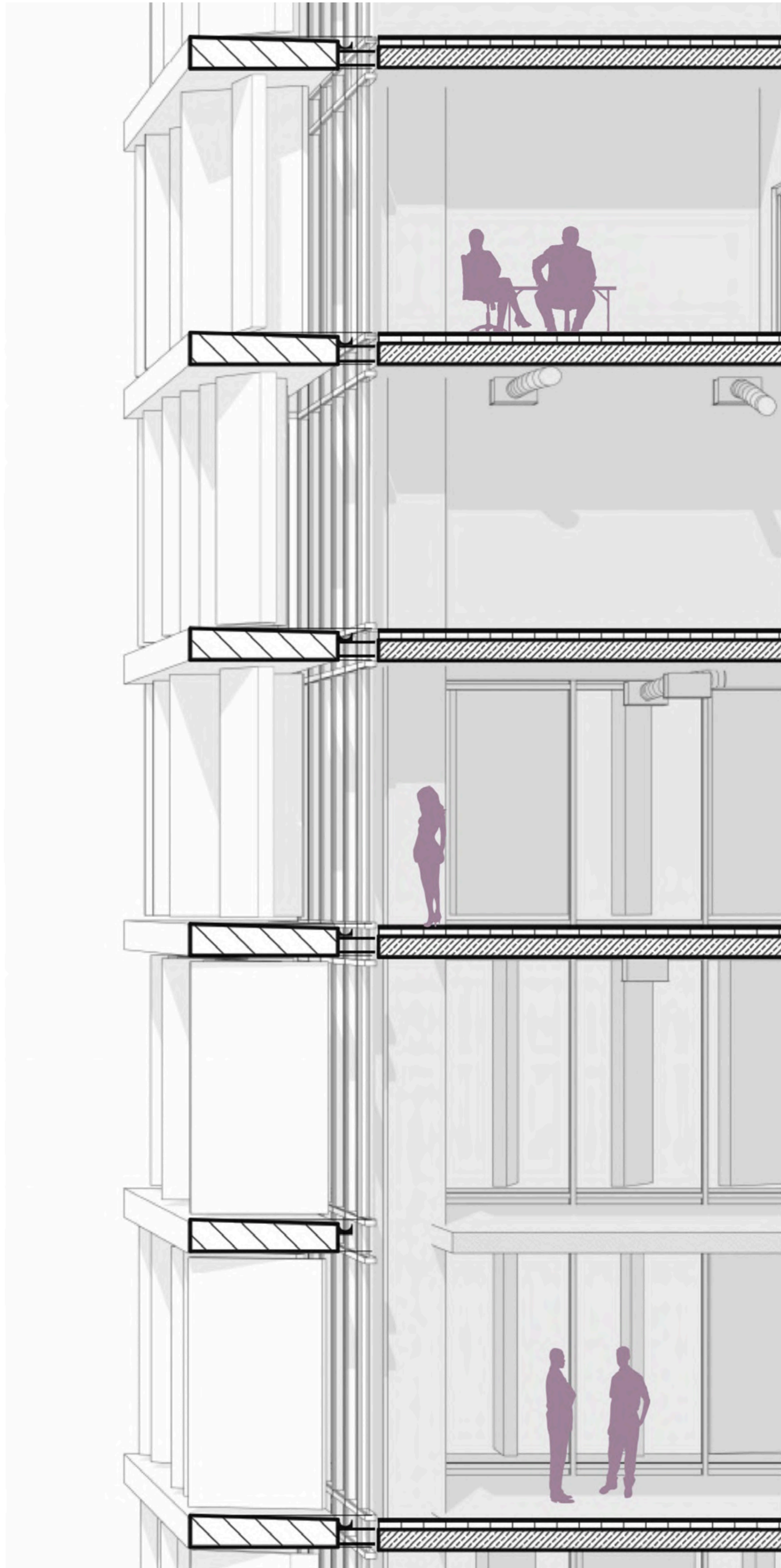




Kinetic Envelope and Environmental Responsiveness

The building envelope is conceived as a kinetic facade system reflecting the technological and innovative identity of the university. Rather than operating as a static architectural surface, selected facade components are movable and can be adjusted internally by users. This dynamic system enables environmental control through adaptive shading, daylight regulation, and visual permeability.

As a result, the facade continuously transforms in response to environmental conditions and user activity, producing an architecture that is visually dynamic and technologically expressive. At the urban scale, the entrance zone is intentionally accentuated to strengthen the symbolic role of the building as an institutional gateway. The arrival sequence is designed to establish a clear and recognizable point of access to the university campus.





Visibility of Scientific Processes

An important experiential component of the architectural concept is the visibility of scientific activity throughout the building. Passenger elevators are intentionally positioned to provide visual access to laboratories located on different floors. Rather than concealing research activities behind enclosed environments, the project transforms scientific production into an observable spatial experience. This strategy reinforces curiosity, interdisciplinary awareness, and the visibility of educational processes, allowing movement through the building to become an integral part of the architectural narrative. The vertical journey itself becomes educational — revealing the dynamic processes of experimentation, research, and innovation occurring throughout the tower.

