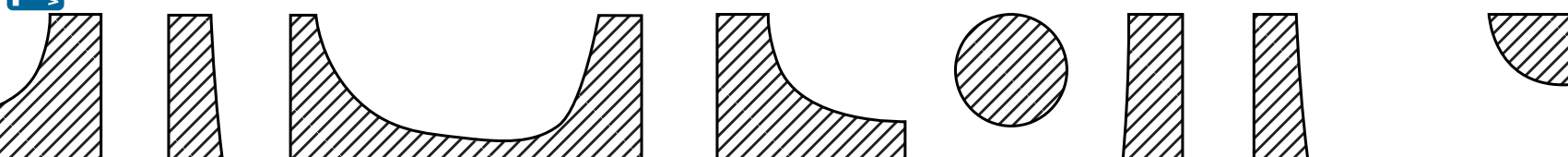
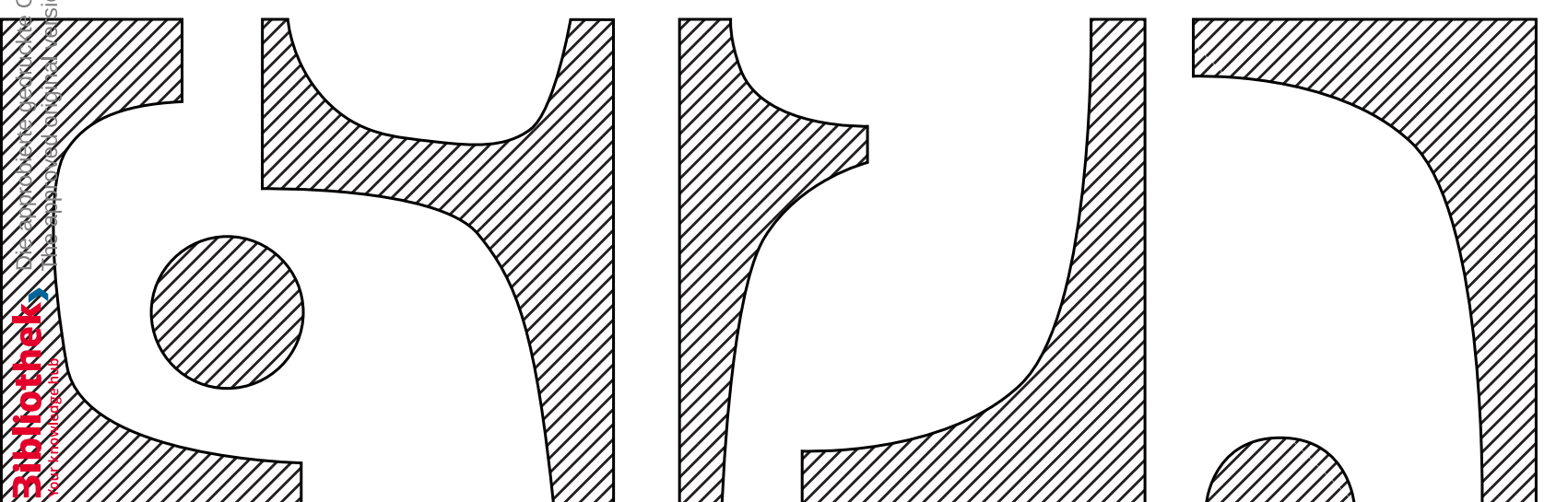
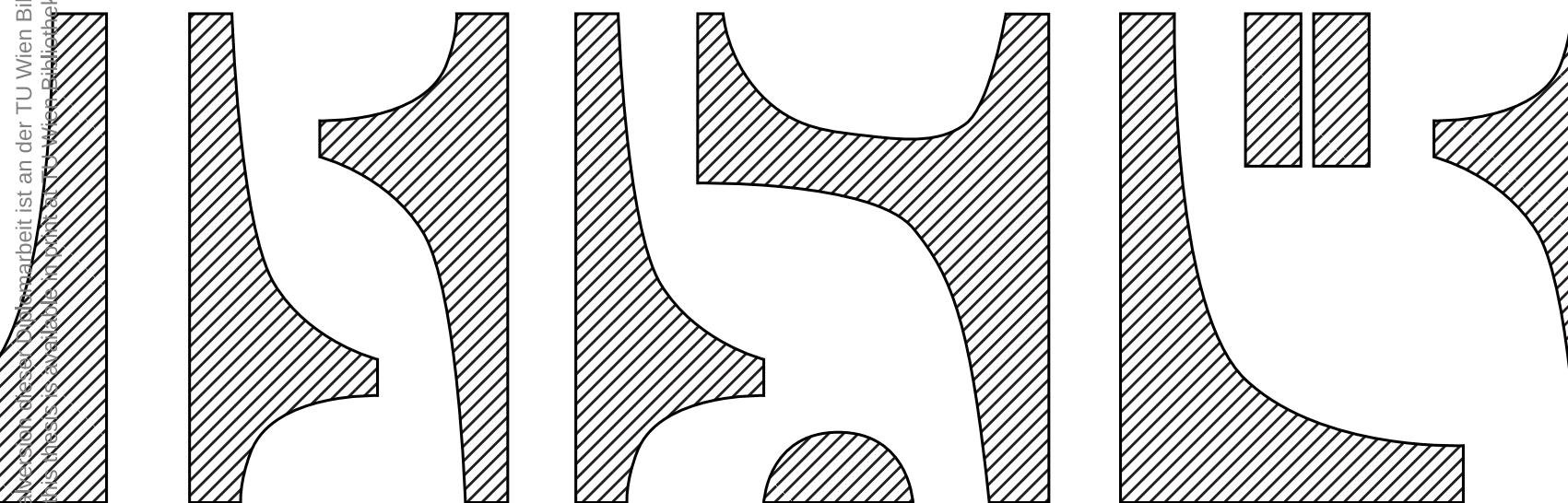


DÉLI



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DIPLOMARBEIT

Déli

ausgeführt zum Zwecke der Erlangung des akademischen Grades
eines Diplom-Ingenieurs / Diplom-Ingenieurin

unter der Leitung

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ABSTRACT

Déli Bahnhof, einer der Hauptbahnhöfe von Budapest, verfügt über eine reiche Geschichte, die von seiner Errichtung während der österreichisch-ungarischen Monarchie bis hin zu seiner modernen Form in den 1970er Jahren reicht. Die Architektur des Bahnhofs, entworfen vom ungarischen Architekten *Kövári György*, brach mit sozialistischen architektonischen Traditionen und strahlt Pracht und Eleganz aus. Auf der Budaseite von Budapest gelegen, dient er als ein Verkehrsknotenpunkt mit mehreren Ebenen und ist an die U-Bahn-Linie 2 angeschlossen, die Züge zu verschiedenen Zielen ermöglicht.

Trotz seiner architektonischen Bedeutung sieht sich der Bahnhof derzeit Verfall gegenüber, mit vielen geschlossenen Geschäften, veralteten Passagen und einem Bedarf an Modernisierung. Pläne wurden in Betracht gezogen, den Bahnhof und den Bahnhofsbereich zu verlagern, um den sich ändernden Reisetrends und dem gestiegenen Passagieraufkommen gerecht zu werden. Ein bedeutender Vorschlag ist die Budapest Agglomerationseisenbahnstrategie, die plant, *Kelenföld* und *Nyugati* Bahnhöfe bis 2040 mit einem unterirdischen Tunnel zu verbinden und *Déli* von der Bahnanbindung zu entlasten.

Der Bahnhof hat für viele Ungarn einen sentimentalwert und ist mit Urlauben und persönlichen Erinnerungen verbunden. Daher besteht ein starker Wunsch, diese Erinnerung zu bewahren. Um diesen Anliegen gerecht zu werden, zielt mein Dissertationsprojekt darauf ab, den Bahnhof und seine Umgebung umfassend zu untersuchen, seine städtischen Verbindungen zu analysieren und eine Nachnutzung nach dem Ende des Bahnverkehrs vorzuschlagen. Dies beinhaltet die Entwicklung eines Masterplans für potenzielle Entwicklungen und die Sanierung der bestehenden Gebäude. Darüber hinaus werden historische Bilder verwendet, um den Charme des Bahnhofs und den Geist der Ära vor dem Ende des Kommunismus in Ungarn (1989) einzufangen.

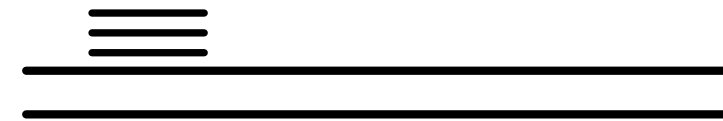
Déli Railway Station, one of Budapest's main railway stations, boasts a rich history, evolving from its construction during the Austro-Hungarian Monarchy to its modern form established in the 1970s. The station's architecture, designed by Hungarian architect *Kövári György*, broke away from socialist architectural traditions, reflecting grandeur and elegance. Situated on the *Buda* side of Budapest, it serves as a multi-level transportation hub, connecting with Metro Line 2 and facilitating trains to various destinations.

Despite its architectural significance, the station currently faces deterioration, with many shops closed, outdated passageways, and a need for modernization. Plans have been considered to relocate the station and railway yard to adapt to changing travel trends and increased passenger traffic. One significant proposal is the Budapest Agglomeration Railway Strategy, planning to connect *Kelenföld* and *Nyugati* railway stations with an underground tunnel by 2040, relieving *Déli* of railway traffic.

The railway station holds sentimental value for many Hungarians, associated with holidays and personal memories. Therefore, there's a strong desire to preserve this memory. To address these concerns, my thesis project aims to comprehensively study the station and its surroundings, analyse its urban connections, and propose a post-railway reuse function. This involves developing a master plan for potential development and rehabilitation of existing buildings. Additionally, historical pictures will be used to capture the station's charm and the spirit of the era before the end of communism in Hungary (1989).

DÉLI

[de:li]
Southern Railway Station
Budapest, Hungary
Krisztina Körút 37/a



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Déli Railway Station, from the underpass, 1978 / Fortepan / Fortepan

INTRODUCTION

Déli, or *Déli Railway Station*, is one of the three main railway stations in Budapest. Located on the *Buda* side of Budapest, which is the western part of the Hungarian capital, the facility, built during the Austro-Hungarian Monarchy, has undergone several reconstructions throughout its history and acquired its current form in the 1970s. The present passenger hall of the railway station stands as one of the most beautiful Hungarian buildings from the later half of the 20th century, exhibiting grandeur and complexity. The building, constructed during the era of socialism and conceived by Hungarian architect Kővári György, already indicated, during its construction, the designer's intention to break away from socialist architectural traditions and envision a railway station that was more open and elegant.

The train station serves as a multi-level junction, where Metro Line 2 terminates. Trains to *Balaton*, *Székesfehérvár*, and *Pécs* depart from here, and *Krisztina körút* [a boulevard in Budapest] and *Alkotás utca* [a busy main road with a tramway] intersect here, both of which have tram and bus stops. The train station also offers connections to District XII, known as *Hegyvidék*, and *Vérmező*, a public park at the western foot of the *Várhegy* [Castle Hill]. The railway station comprises four primary elements: the waiting hall, the recessed area in front of the hall, the administration building, which extends perpendicularly to the hall on the other side of *Vérmező*, and the train yard behind the station building.

The architectural significance of the railway station is unquestionable. Unfortunately, the elements that make it so significant are not readily visible on the building, which is currently designated as a monument. The current condition of the buildings is severely deteriorated compared to their original state. Most of the shops in the square in front of the hall are closed and vacant, and the passageways are too narrow and dim. The connections between the levels are outdated. From the station, you can only see the scaffolding and the giant tarpaulin covering the facade. A portion of the hall is closed, and more than half of it is empty. The view from the hall is obstructed by the stands. The cube cladding of the commercial building has been removed, and the concrete elements are now visible. In the early 1900s, there were discussions about relocating the trainyard and the station, diverting railway traffic to *Kelen-*

föld [a train station south of *Déli*] or perhaps to *Nyugati* [the Western railway station], but these ideas remained only plans. Since the establishment of the railway station, the concept of travel has evolved, passenger traffic has increased, and terminal railway stations have become increasingly obsolete. There is currently a project called the Budapest Agglomeration Railway Strategy, which forms the basis of my thesis, aimed at addressing the obsolescence of *Déli* railway station by connecting *Kelenföld* and *Nyugati* railway stations with an underground tunnel by 2040. According to the plan, *Széll Kálmán tér*, one of the city's busiest transport interchanges north of *Déli*, would serve as a stop instead of *Déli* railway station, completely relieving the station of railway traffic. The entire station and the railway yard behind the buildings cover a total area of approximately 15 hectares, making it a substantial area very close to the heart of the city.

For many Hungarians, across generations, the railway station is associated with holidays at Lake *Balaton* or, for those from the countryside, a trip to Budapest. The train station represents a memory and a personal experience for many Hungarians. I believe it is crucial to preserve and nurture this memory, which is why I have chosen *Déli* as the theme for my thesis.

Through my diploma thesis, I aim to provide a detailed presentation of the station and its surroundings, as well as the architectural significance of *Déli*. To offer a complete picture of the station and its role in the city, I will analyse its urban connections and its environment from various perspectives. Based on these analyses, I intend to find a suitable post-railway reuse function for the area, prepare a master plan for its development potential, and formulate a strategy for the rehabilitation of the existing buildings.

In addition to the redesign of the railway station, I plan to illustrate the true charm of the railway station and the spirit of the era before the end of communism in Hungary (1989) using selected Fortepan pictures.



Southern railway station, 1974 / Fortepan / Bojár Sándor



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URBAN CONTEXT

In the upcoming chapter, I will provide an overview of the railway station's environment. To comprehend the significance of both the railway station and its adjacent area, I conducted a thorough analysis of the urban structure.

To begin, I will introduce the railway station's location within the city and proceed to analyse its immediate surroundings. This analysis will encompass the topography of the *Déli* area, its historical context, the interplay and architectural configuration of the surrounding buildings, the purposes these buildings serve, and the placement of green spaces and public areas.



The underpass in front of the Southern railway station. In the background, the Military History Museum and the tower of the Mary Magdalene Church can be seen above in the Buda Castle, 1973 / Fortepan / Fömterv

ORIENTATION

The *Déli* Railway Station is situated on the western side of the Danube, in the *Buda* district of Budapest, to the south of the *Várnegyed*, which is part of Budapest located within the defensive walls of the Buda Castle complex. This railway station serves as a terminus station, allowing trains to enter and exit the station in only one direction. The largest transportation hub before reaching this terminus is the *Kelenföld* railway station, which also serves as a significant intersection housing railway, tram, and bus stations. *Kelenföld* is connected by rail to both the *Déli* and *Keleti* railway stations.

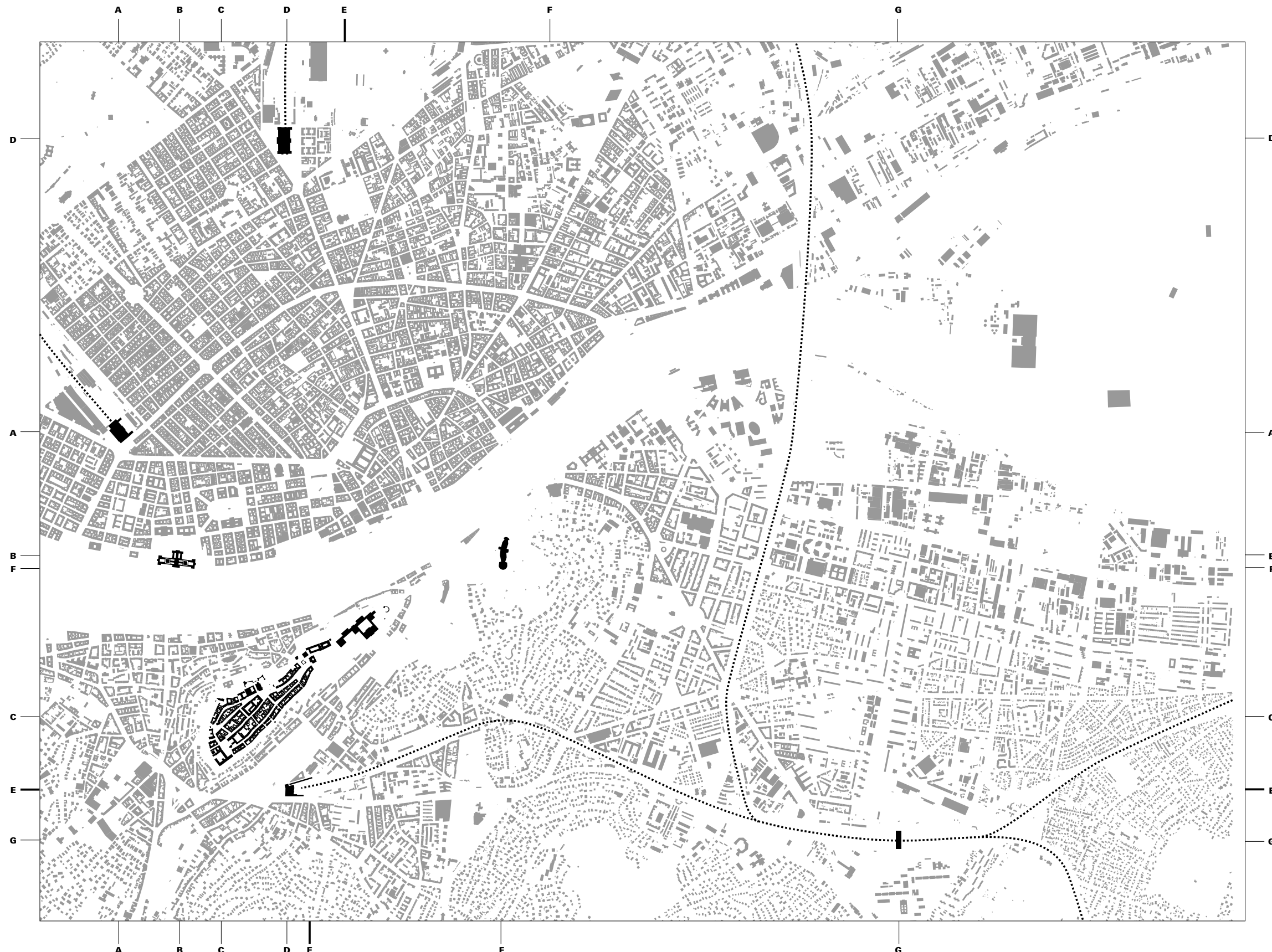


Figure ground plan of Budapest with the main train stations, trainroutes and landmarks

- | | | | |
|-------|--|-------|---|
| A - A | Nyugati pályaudvar [Western railway station] | E - E | Déli pályaudvar [Déli railway station] |
| B - B | Országház [Hungarian Parliament Building] | F - F | Citadella [Fortification, upon the top of Gellért Hill] |
| C - C | Várnegyed [Castle Quarter] | G - G | Kelenföld [Kelenföld railway station] |
| D - D | Keleti pályaudvar [Eastern railway station] | | Train route |





The *Déli* railway station is a vital component of the *Nagykörút*, also known as the Grand Boulevard. The *Nagykörút* is one of the primary arteries in downtown Budapest, with the Pest section developed along the former riverbed of a natural tributary of the Danube. It traverses the inner districts, running along the southern border of *Újlipótváros* and the northern border of *Lipótváros*, *Terézváros*, *Erzsébetváros*, *Józsefváros*, and *Ferencváros*. In an official sense, the *Nagykörút* extends from the Pest side of *Margit híd* [a bridge connecting Buda, Pest, and Margaret island], to the Pest side of *Petőfi híd*. However, the term can also encompass the road sections in *Buda* that connect the bridges. The *Nagykörút* can be further divided into several smaller sections, or boulevards, starting from *Margit híd*, these sections include *Szent István Körút*, *Erzsébet Körút*, *József Körút* and *Ferenc Körút*. In *Buda*, these sections include *Karinthy Frigyes út*, *Villányi út*, *Alkotás út*, and *Margit körút*¹.

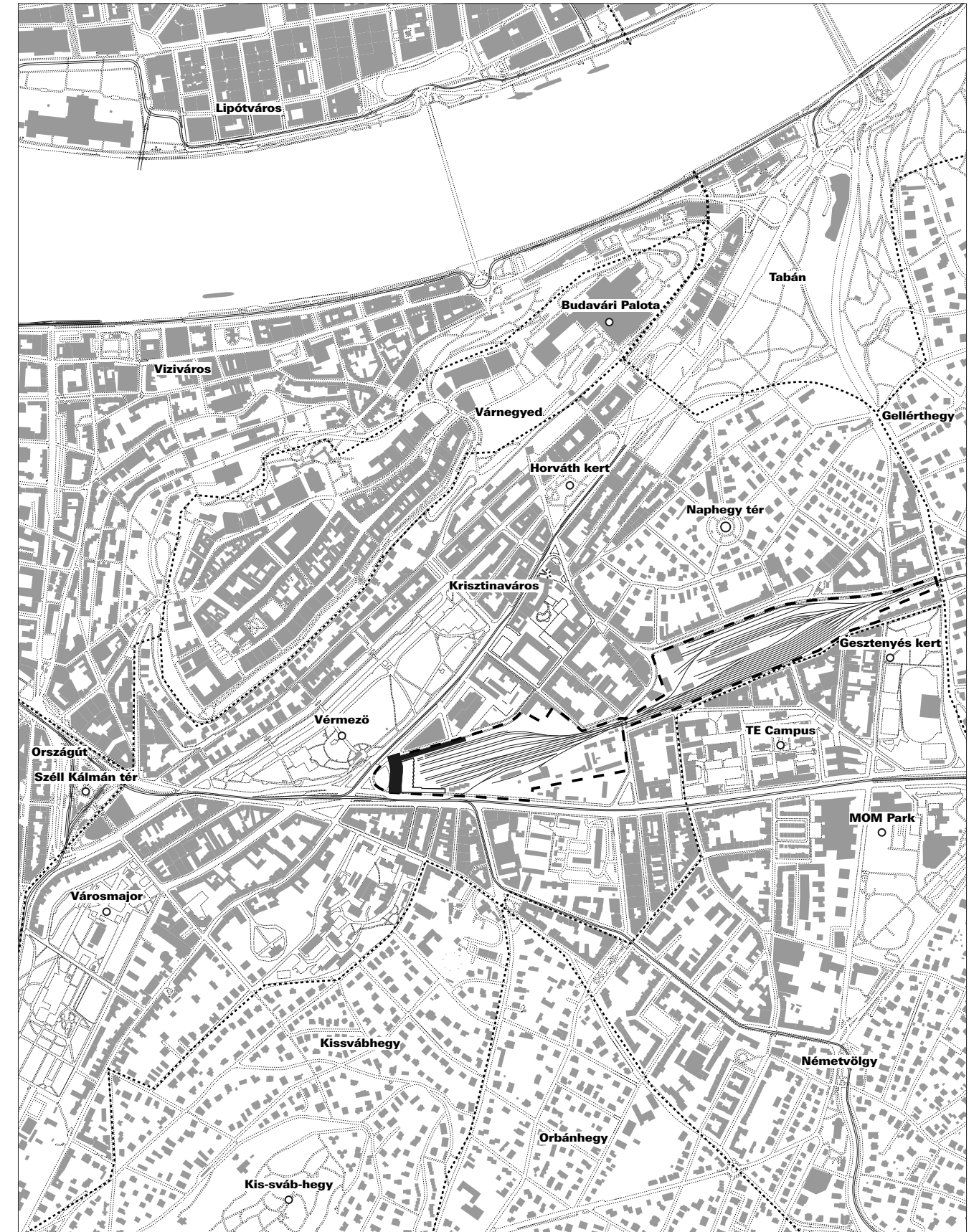
The boulevard hosts numerous public buildings and significant parks, with two major railway stations, the *Déli* and *Nyugati* railway stations, being among its most prominent features. Additionally, several university campuses are located along the boulevard, including those of Budapest University of Technology and Economics, Semmelweis University, and the University of Physical Education.

- | | | | | | |
|-------|--|-------|--|-------|---|
| A - A | Margit-sziget [Margareteninsel] | G - G | TE Campus [University of Physical Education Campus] | K - K | Feneketlen-tó [Lake and public park] |
| B - B | Millenáris [Exhibition space, event center and park] | H - H | MOM park [Business park, Shopping mall] | L - L | ELTE Lágymányosi Campus [Eötvös Loránd University Campus] |
| C - C | Városmajor [Public park] | I - I | MATE / Budai Arboretum [Hungarian University of Agriculture and Life Sciences Arboretum] | | Nagykörút [Grand Boulevard] |
| D - D | Széll Kálmán Tér [Square, transport interchanges] | J - J | BME Campus [Budapest University of Technology and Economics Campus] | | Parks and recreational areas |
| E - E | Vörösmarty [Public park] | | | --- | Cutout 1:15.000 |
| F - F | Déli pályaudvar [Déli railway station] | | | | |



The following map provides a detailed representation of the immediate vicinity of the *Déli* Railway Station, highlighting its urban layout, administrative boundaries, and the surrounding infrastructure. This urban sector showcases a distinctive landscape, characterized by a diversity of architectural styles, resulting in a heterogeneous visual landscape. In contrast to the more densely populated Pest side, the buildings in this area do not conform to a uniform architectural style and are relatively spaced apart.

The *Déli* Railway Station is strategically positioned at the boundary of Budapest's 12th district and the 1st district, nestled within the vibrant district known as *Krisztinaváros*. To the north, it is embraced by the *Várnegyed* and the expansive *Vérmező*, while to the south, it finds its natural confines in the foothills of *Gellért-hegy*.



Site plan of the area

- Point of interests
- Neighbourhood
- - - Area of the Déli train station

1:15.000



TOPOGRAPHY

Budapest encompasses two distinct geographical regions, with *Buda* situated on the *Buda Hills* to the west and *Pest* residing on the *Pest Plain* to the east. The *Danube River* divides these two regions. The *Buda* side, found on the western bank of the river, is characterized by its mountainous and hilly terrain².

The southernmost peak, perhaps the most striking, is *Gellért-hegy* [*Gellért Hill*], named after a martyred bishop from the Middle Ages. It is flanked by the *Danube* to the east, *Sas-hegy* [*Sas Hill*] to the southwest, *Nap-hegy* [*Sun Hill*] to the northwest, and *Vár-hegy* [*Castle Hill*] to the north. *Gellért-hegy* reaches an elevation of 235 meters, with the *Citadella* fortress perched at its summit. Neighbourhoods adorn the western and southern slopes of the hill. To the east, a steep rock wall offers panoramic views of *Pest* and the *Danube*, making it an unparalleled sight. On the western fringe of *Gellért-hegy* lies *Kis-Gellért-hegy* [*Smaller part of the Gellért Hill*], beneath which runs a railway tunnel connecting the southern railway station with *Kelenföld*³.

Between *Vár-hegy* and *Gellért-hegy* lies *Nap-hegy*, standing at 154 meters. At its summit, there's a square enveloped by neighbourhoods

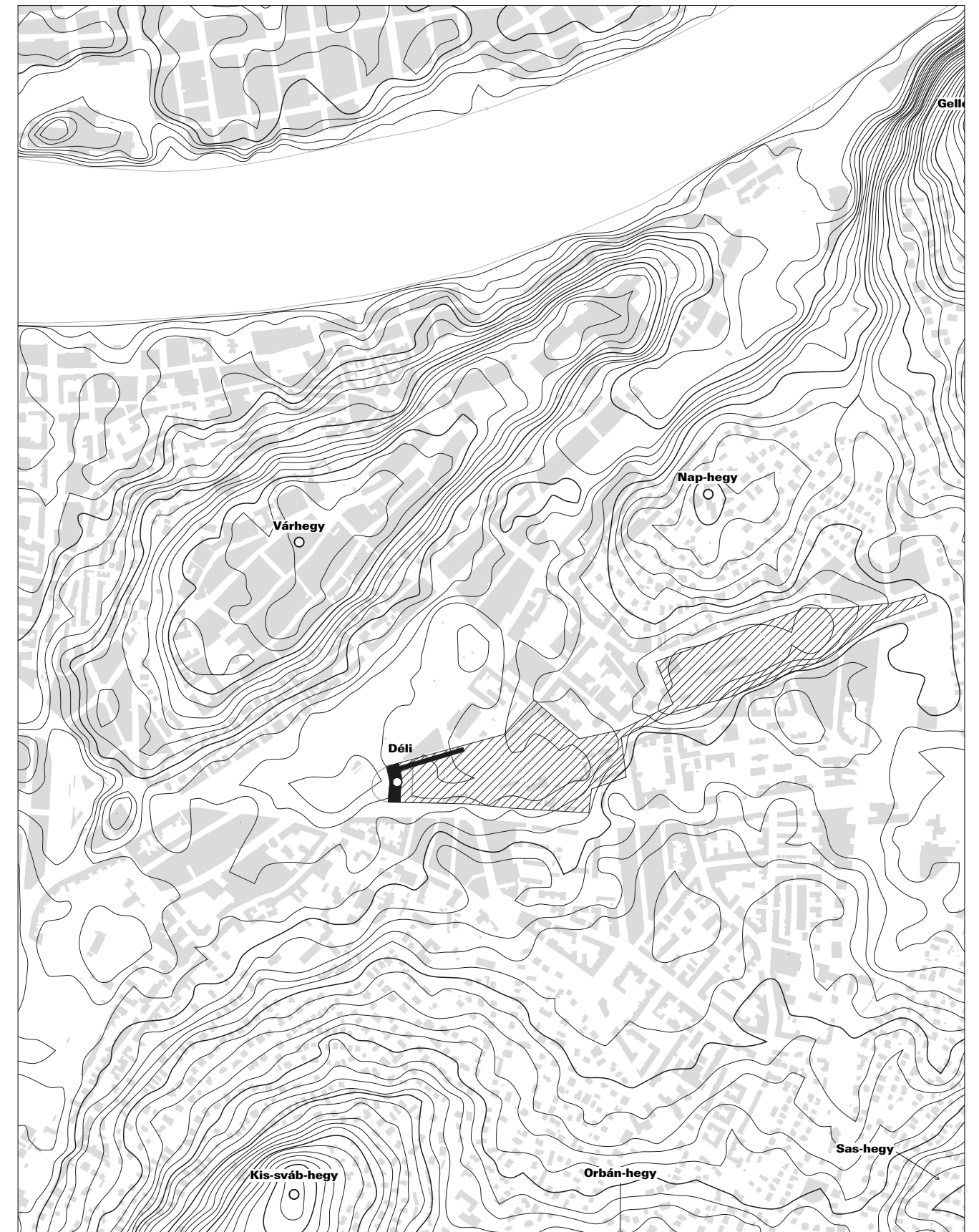
on all sides. The western side of *Nap-hegy* borders *Déli's* train yard⁴.

Vár-hegy is a unique natural formation, emerging from its surroundings like an island. The plateau atop the mountain takes on an elongated triangular shape, stretching about 2 kilometres in length, with the northern part nearly 400 meters wide. Its highest point reaches almost 180 meters above sea level. *Buda Castle* and the *Várnegyed* are situated on this plateau. The southern and northern slopes of *Vár-hegy* gently descend, while to the southwest, in the valley between *Kis-Sváb-hegy* [*Kis-Sváb Hill*] and *Vár-hegy*, you'll find *Vérmező* and the *Déli* railway station. West of *Vár-hegy* lies *Kis-Sváb-hegy*. Further southwest from the *Déli* railway station, there are other mountains, including *Orbán-hegy* and *Sas-hegy*⁵.

Remarkably, the *Déli* railway station finds itself nestled within a valley surrounded by three imposing mountains.



20 Today's Nehru beach, with Gellért Hill in the background, 1976
Fortepan / Hlatky Katalin-Főkert



Topography of the area
 O Hills
 // Area of the Déli train station
 1:15.000

URBAN HISTORY

Budapest, the capital of the former Kingdom of Hungary and today's Hungary, was established in 1873 through the merger of the previously independently administered cities of **Buda**, **Pest**, and **Óbuda**. However, the agglomeration formed by these three cities and the smaller settlements clustered around them had taken shape many centuries before the unification, during the Middle Ages.⁶

In prehistoric times, people already inhabited this region due to its excellent settlement conditions. Traces of the oldest Paleolithic settlement in **Víziváros** date back to more thousand years ago. The first fortified village was constructed on **Várhegy** during the early Bronze Age. Later, the Celts built their fortified tribal center on the steep **Gellért-hegy**. The Celts also settled along the riverbank below **Gellért-hegy** and on the eastern side of **Várhegy**.⁷

At the start of the 1st century, as Roman conquerors advanced towards the Danube, they recognized the strategic significance of this area. They brought the Celtic settlement under their control and established military camps to safeguard the border and the rivers.

During the Migration Period, the region became depopulated, and even the ruins of Roman structures failed to attract the successive waves of people. The area around the ferries maintained its significance, but early royal centers and urban developments emerged in the region of **Óbuda** and **Pest** on the opposite bank. Notable among the smaller settlements in the **Buda** section were **Kispest**, situated across from **Pest**, at the base of **Gellért-hegy** and **Várhegy**, as well as **Hévíz**, located near the Roman ruins, on the ridge to the north of **Várhegy**.⁶

In April 1241, Mongol armies invading the Kingdom of Hungary occupied and razed the city of **Pest**. With the onset of winter, the castle, chapter, and town of **Óbuda**, located on the other side of the Danube and serving as an early royal and ecclesiastical center among Roman ruins, suffered a similar fate. In the following year, due to the unexpected death of the Mongol Grand Khan, the Tatars withdrew from the country. Still, their return remained a looming threat, prompting King Béla IV of Hungary to build a castle on **Várhegy**, opposite **Pest**.⁶

In 1249, Béla relocated his headquarters and offices from **Esztergom** to **Buda**, officially making **Buda** the capital of the country. By the end of the Middle Ages, **Buda** had become a leading Hungarian city in terms of the number of crafts

and guilds. In addition to trade and handicrafts, the majority of citizens derived an essential income from vineyards surrounding the city. The **Buda** border produced high-quality wine from its grape harvests. Most of the urban population worked as day labourers in the vineyards, particularly the less affluent. During the late Middle Ages, nearly half to a third of the houses in the **Várnegyed** were owned by nobles and ecclesiastics, who played pivotal roles at the royal court or in service there. The more affluent citizens, mainly craftsmen, remained in these areas, while many day labourers were pushed out to today's **Víziváros**.⁷

In the early 16th century, the Ottoman Empire expanded its influence into the central areas of the Kingdom of Hungary, particularly during the Battle of **Mohács** and the turbulent period that followed. Although Turkish troops entered **Buda** in 1526 and 1529, Suleiman the Magnificent initially treated these territories as vassals rather than occupied territories.⁶

In 1541, he decided to consolidate his conquests and incorporate them into the empire. On August 29, 1541, Suleiman captured **Buda**, along with **Pest**, located on the opposite side of the Danube. This time, he went a step further, establishing the first *vilayet* [province] in Hungary, with **Buda** as its center.⁷

Buda was retaken from the Turks on September 2, 1686, after 145 years of Turkish rule. The Turkish army had attempted to capture the city of Vienna in 1683, signalling the Ottoman Empire's ultimate goal of conquering the entire continent. Realizing the historical danger, the Pope created the Holy League, forming a multinational besieging Christian mercenary army. Following the Holy League's recapture of **Buda** after 150 years of Turkish rule, the task of removing the many dead Turkish and allied soldiers began. To accommodate this, the existing cemeteries from the Turkish era were used, and new ones were opened, such as the **Víziváros** military cemetery, located at the site of today's **Déli** railway station.⁶



Map of Budapest in 1761

— Buildings
 ···· Cultivated land
 - - - City walls




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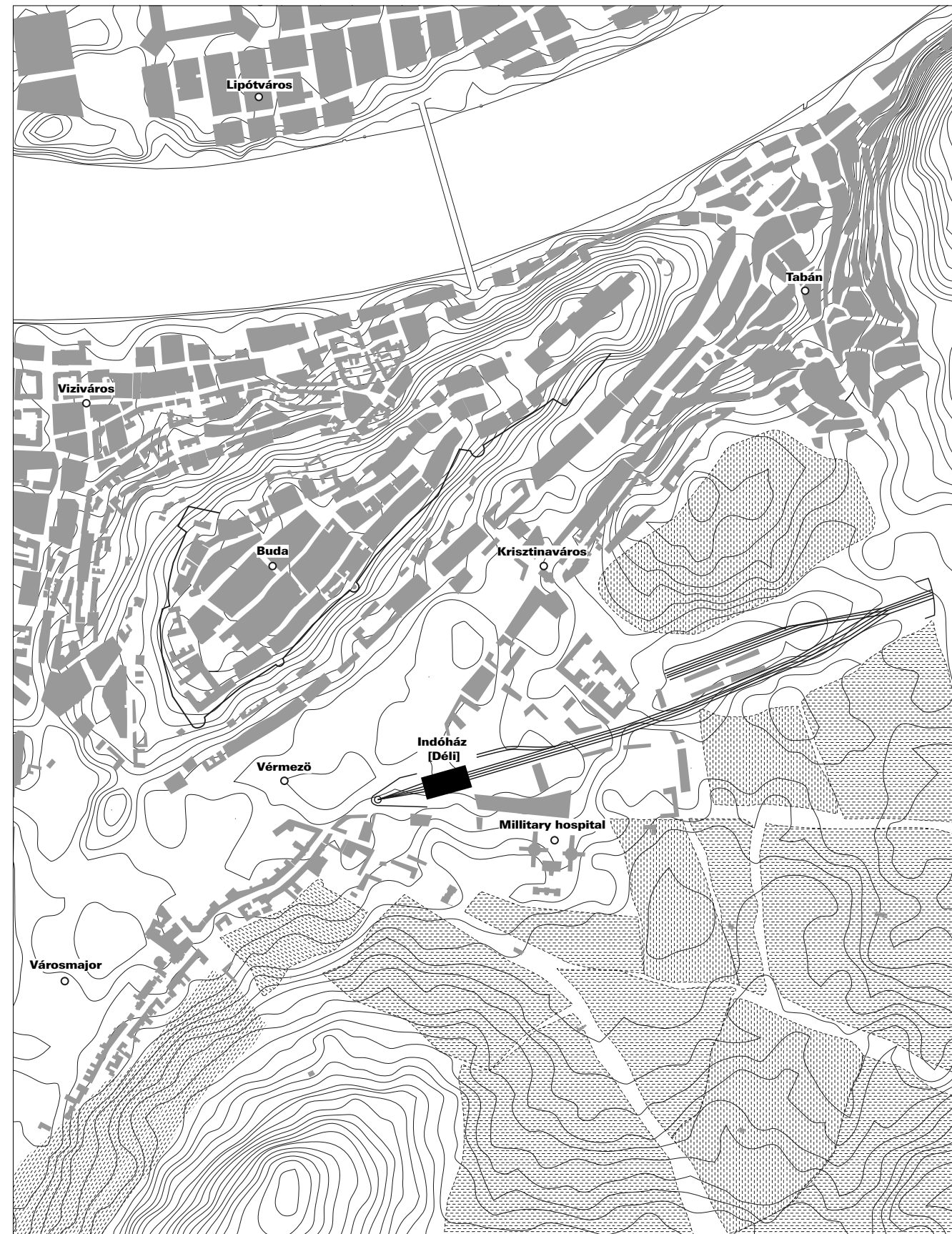
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


24 Map of Budapest in 1837

-  Buildings
-  Cultivated land
-  City walls

1:15.000



Map of Budapest in 1872

-  Buildings
-  Cultivated land
-  Railway tracks
-  City walls

1:15.000



Between 1541 and 1686, Turkish rule not only hindered urban development throughout Hungary but also led to the destruction of *Buda* and *Pest*, nearly obliterating their medieval monuments due to the sieges and battles. In the 18th century, both cities experienced rapid development during the reconstruction and increased Habsburg imperial presence. By the end of the 18th century, Pest had outgrown the city wall, which was gradually dismantled by 1800, shaping the route of today's *Kiskörút*.⁶

As the population and economy prospered, it became evident that *Pest*, the commercial and cultural center, and *Buda*, the legislative center, should form a unified administrative unit. The Parliament voted to merge *Pest*, *Buda*, *Óbuda*, and *Margitsziget* under a single legal authority, and the law came into effect on January 1, 1873. This merger marked the beginning of unprecedented development for the new capital. While the combined population of *Pest*, *Buda*, and *Óbuda* barely reached 60,000 residents at the start of the century, it surged to 860,000 by the century's end, reaching 1,200,000 by 1920. To accommodate the influx of people, the capital constructed large apartment buildings, yet the pace of migration surpassed construction capacity.⁷

The progress of the city came to a halt during the First World War and subsequent events, including the Aster Revolution of 1918-1919 and the Soviet Republic. The Trianon Peace Treaty was followed by Horthy's consolidation policy. Many people migrated to the capital from annexed Hungarian-inhabited areas, and some lived in railway stations and carriages. By the 1930s, the population had surpassed one million. The demand for housing led to the construction of housing estates, including *Wekerle-telep* and the State housing estate, while many poorer individuals lived in slums.⁶

At the end of the Second World War, the city suffered significant losses. After the German occupation in 1944, part of the population fell victim to the Holocaust, and others lost their lives during the 102-day siege. Many of the city's buildings lay in ruins, and all the bridges had been blown up. Unfortunately, the areas with the richest architectural treasures, such as *Belváros [Inner City]* and *Várnegyed*, suffered the greatest damage. Full restoration of the damage remains incomplete, with some areas and facades bearing gunshot marks as reminders of the Soviet siege. Several valuable buildings

were demolished or reconstructed without preserving their original form or with simpler solutions.⁶

In the 1950s, Budapest experienced Stalinist oppression, leading to the 1956 revolution and its street battles that shook the city. Starting in the 1960s, Budapest entered its second significant development period under the "soft dictatorship" of the Kádár regime. In 1970, the first metro line was inaugurated. Housing estates sprung up one after another, and hundreds of thousands migrated to the capital from across the country. By the 1980s, Budapest's population reached 2.1 million. Since the end of communism in Hungary in 1989, the population has started to decrease significantly, partly due to the mass migration of the city's residents to suburban areas. The population decline reversed in the latter half of the 2000s.^{6 7}



URBAN MORPHOLOGY

In the selected area, there are four main urban morphologies that contribute to its unique character.

Blocks, one of the traditional building forms of the city, have maintained their structural significance for centuries. These blocks are defined by streets and, in doing so, create distinct boundaries in the public space. This results in an extensive network that connects the blocks with the surrounding urban fabric⁸. In *Buda*, you can find blocks predominantly in and around the *Várnegyed* and *Viziváros*. However, in areas like *Krisztinaváros* and around the *Déli* train station, blocks take on a segmented form, shaping smaller interconnected islands.

Solitaires, on the other hand, are buildings that stand in isolation within the landscape, much like individual farmsteads. They may also exist as standalone structures due to their specific design concept or size. The form of solitaires is often guided by their internal function and the desired external impact they aim to achieve. These solitaires are frequently found where urban structures come to an end or dissolve, allowing individual buildings to continue to exist. Solitaires also serve as intentional focal points in the cultural landscape, acting as landmarks and fostering a sense of identification.⁹ You can spot solitaires throughout the *Kisváb-hegy*, *Németvölgy*, and *Naphegy* areas.

Clusters represent a unique urban typology, characterized by an arrangement of buildings guided by its compositional logic. Clusters have a long history, emerging as workers' settlements during the industrialization of the last century and featuring prominently in the garden city movement as more extensive residential groups. Since the 1960s, they have increasingly

taken the form of suburban settlements. Housing projects often express the idea of communal living through cluster development, which can also be referred to as group construction, given that multiple objects are combined to create an organizational unit. Elements within the cluster interact with each other, forming distinct parts of the city. However, this isolation from the surrounding environment can sometimes lead to clusters evolving as isolated islands within the urban fabric. As a result, clusters are governed by their own spatial rules, which can be either geometric or more organic in nature⁸. You'll find clusters primarily in the *Németvölgy* area.

Residential Rows, as the name suggests, are formed by linear arrangements of buildings and parcels along roads, which can be straight, curved, or kinked. The buildings can be positioned in an open or closed configuration, leading to various spatial patterns. The row's structural typology can be adapted along access routes and roads or used as an independent arrangement pattern. Depending on the surrounding context, they can serve a wide range of purposes, from mixed-use urban building blocks to mono-use structures. The ground floors are particularly versatile, lending themselves to a variety of uses while maintaining a strong connection to the street as an access area. This alignment to the street creates well-defined urban spaces, with the spatial impact influenced by the openness or closedness of the building structure⁸. Rows are prominent in *Buda*, especially to the south of the *Várnegyed*, around *Naphegy*, and next to *Városmajor*.



28 Solitaire / Aerial photo of Sasad. 1986 / Fortepan / Urbán Tamás



Cluster / József Attila neighborhood looking towards Üllői út. 1968 / Fortepan / Ferencvárosi Helytörténeti Gyűjtemény



- Blocks
- - - Solitaire
- ▨ Residential rows
- ⊞ Cluster
- Special Typology

Urban Typology

1:15.000



FUNCTIONS

The area around the station boasts a diverse urban landscape, characterized by a wide array of buildings and institutions catering to various purposes.

The majority of the buildings are dedicated to educational endeavours, housing primary and secondary schools. Moreover, there are notable campuses and university buildings situated nearby. Notable examples include the campus of the University of Physical Education and one of the faculties of the University of Theatre and Cinema in close proximity to the train station. The faculty of teaching and kindergarten teachers of Eötvös Loránd University, along with the distinctive International Law Enforcement Academy building is located to the west of the Railway Station. Furthermore, south of Déli Station, one can find the Mathias Corvinus Collegium, contributing to the rich educational landscape in the area.

Nursing homes, clinics, and health centers also play a significant role in the neighbourhood. Medical institutions such as the National

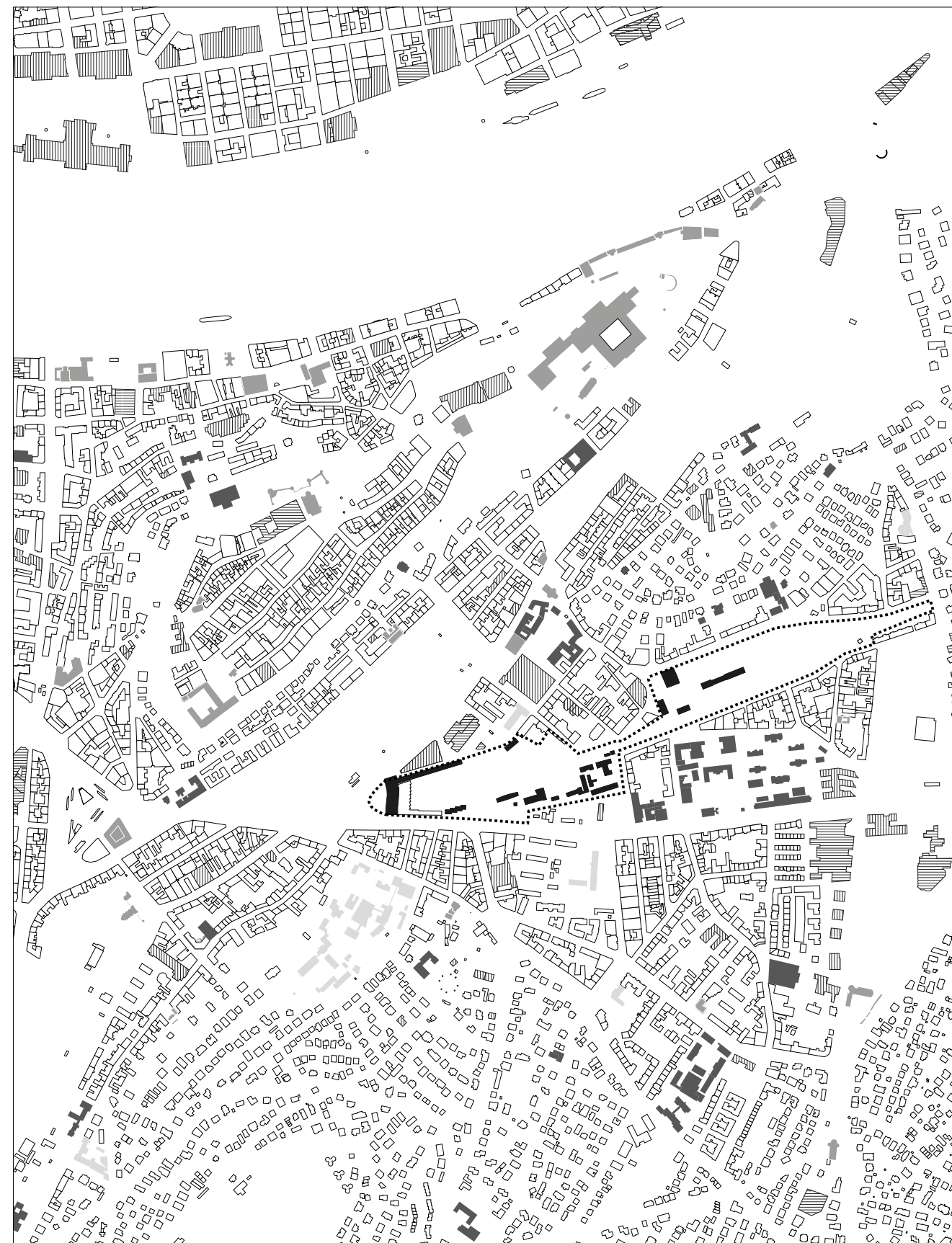
Oncology Institute and the National Spinal Medicine Center contribute to the region's commitment to healthcare and wellness.

Given its central location, this area features a notable presence of government buildings, including the Hungarian National Bank building, which stands closest to the railway station, underlining the importance of financial and administrative functions.

The landscape is further enriched by the presence of office buildings, museums, cultural institutions, and complexes designed for leisure and recreation. These amenities add to the dynamic character of the region, making it a well-rounded and thriving urban space, catering to a wide range of needs and interests.



30 Déli railway station, houses No. 11 and No. 13 Alkotás utca in the background, 1967 / Fortepan / FÖFOTÓ



PARKS AND PUBLIC SPACES

In the valley south of the *Várhegy* and north of the *Nap-hegy*, from the foot of the *Gellért-hegy* to the *Városmajor*, there is a green axis that includes the *Városmajor*, *Vérmező*, *Horváth kert*, *Tabán* and the northern side of the *Gellért-hegy*. The part called today's *Vérmező* was surrounded by a wider, meadow-like flat area, in the middle of which the *Ördögárok* [intermittent stream, one of the watercourses of Buda flowing into the Danube] flowed, coming from *Nagykovácsi*, passing through *Hüvösvölgy*, *Városmajor*, *Vérmező*, *Horváth-kert*, *Tabán*, *Döbrentei tér* and near the *Erzsébet híd* flows into the Danube.

Városmajor was originally, the floodplain of the *Ördögárok*, it was a mowing and military property for a long time. At the beginning of the 19th century, the *Buda vurstli* [Amusement park] moved here, which led to the deterioration of the area. In 1920, the park was revived with the covering of the *Ördögárok* and the subsequent park reconstruction. Several buildings

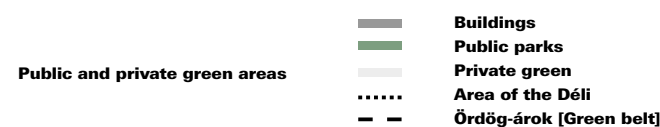
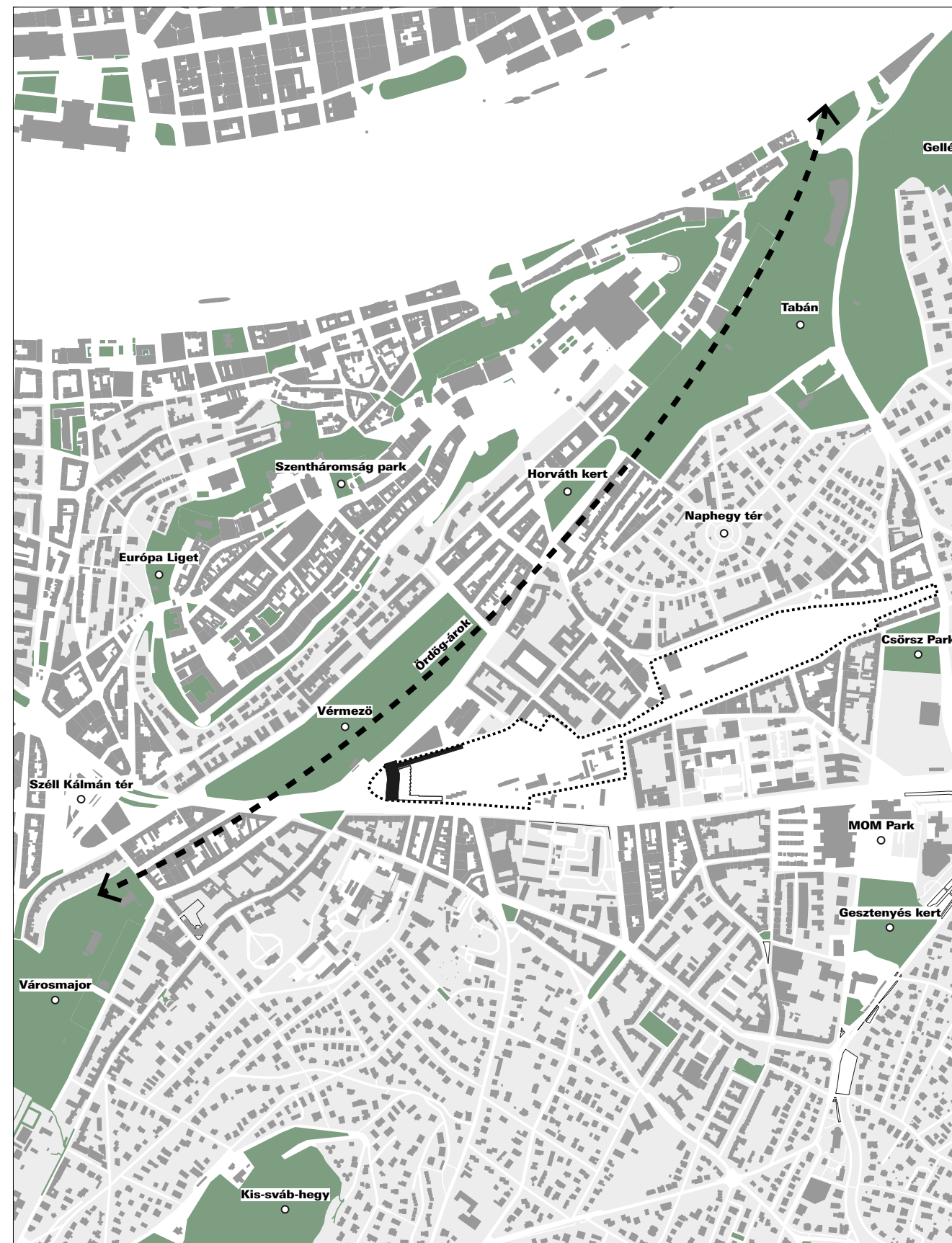
were completed during this period, including the Heart of Jesus Parish Church in *Városmajor* designed by *Aladár Árkay*.<?>

Horváth kert was named after its former owner, *Zsigmond Szentgyörgyi Horváth*. In 1862, when the Tunnel was built, the city of *Buda* bought it and turned it into a public park.<?>

Tabán was once an independent settlement, then it first became a part of *Buda* and finally *Budapest*. It was characterized by densely built one- or two-story houses until the 1930s. At the turn of the century it became a romantic quarter full of entertainment venues, restaurants, and wine bars. It was sometimes referred to as the "Montmartre of Budapest". Its area was destroyed in the early to mid-1930s, but the new part of the city dreamed of in its place could never be built due to the outbreak of the Second World War. It was finally landscaped in the 1960s, so today the *Tabán* is largely a public park.<?>



32 Vérmező, playground near Mikó Street. In the background to the right are the houses of Kony Domokos Street, 1981 / Fortepan / Hlatky Katalin-Főkert



Public and private green areas

1:15.000



33

TRAFFIC AND ACCESS

The *Déli* railway station currently has all the elements of urban and long-distance transport. Many suburban and long-distance trains arrive at the southern railway station, so the railway station is connected - via the *Kelenföld* railway station - with most of Transdanubia.

The terminus of the second metro is located under the Railway Station. Tram lines run through *Alkotás út* and *Krisztina körút*, and there are tram and bus stops on both sides of the railway station.

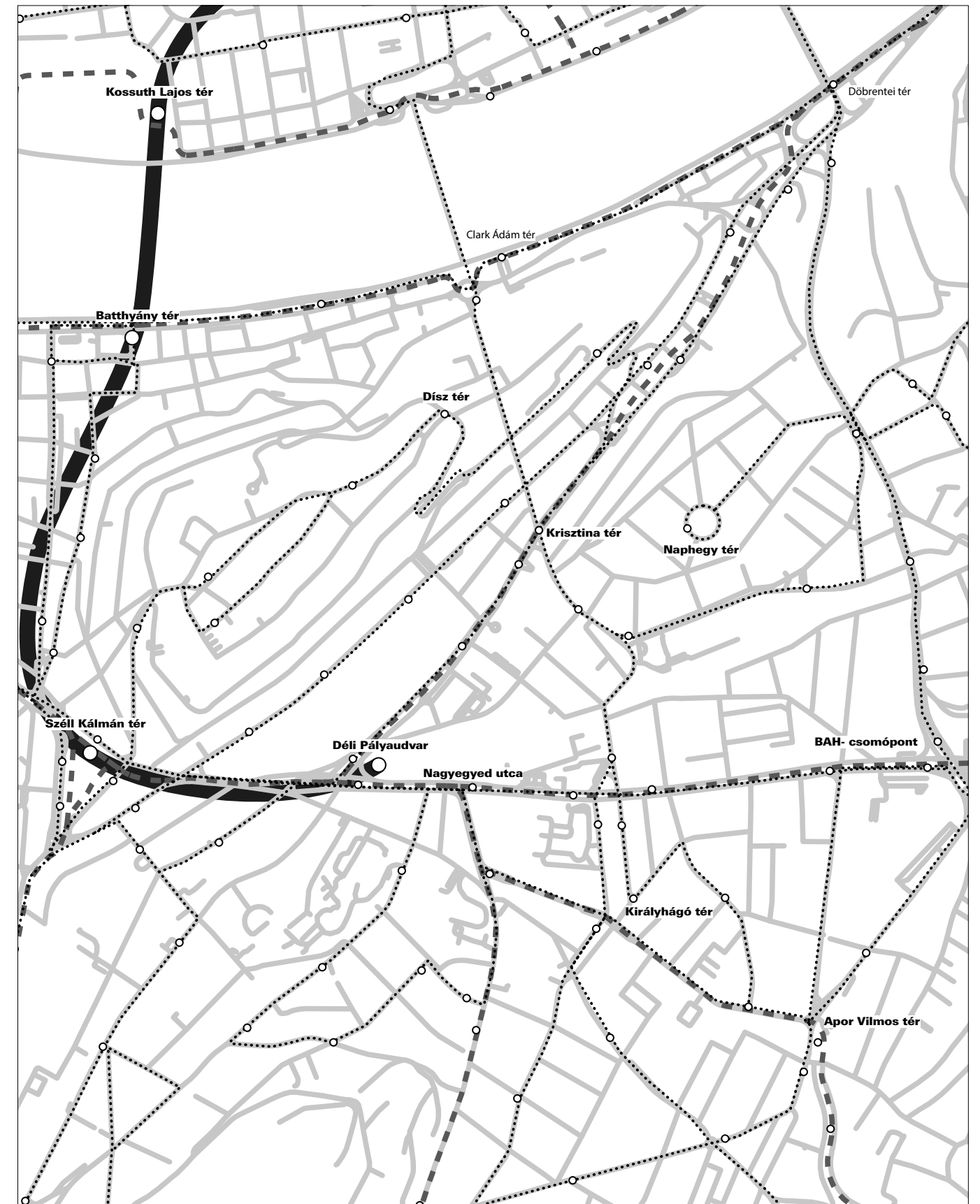
Currently, 15 bus and tram lines pass through the *Déli*, many routes cross each other here while passing through the city center, thus connecting the train station not only with the city

center but also with the agglomerations of *Pest* and *Buda*.

A bus line passes through the *Márvány utca* - which connects the two sides of the railway station - and goes through the tunnel under the *Vár-hegy* all the way to the city center. This bus line proceeds through a tunnel under the *Vár-hegy* ultimately reaching the heart of the city center. This transportation route serves as an emblematic example of the ingenious infrastructure that enables smooth and efficient travel across the urban landscape, further highlighting the importance of *Déli* railway station in Budapest's transportation network.



34 Alkotás street at Déli railway station, looking towards Krisztina körút and Vérmező, 1980 / Fortepan / Magyar Rendőr



Traffic connections

	Streets		Subway stops
	Metro		Bus/Tram stops
	Tram		
	Bus		

1:15.000

Underpass in front of Déli railway station. In the background, the tower of the Mary Magdalene Church can be seen above in Buda Castle, 1975 / Fortepan / UVATERV



CLOSER LOOK

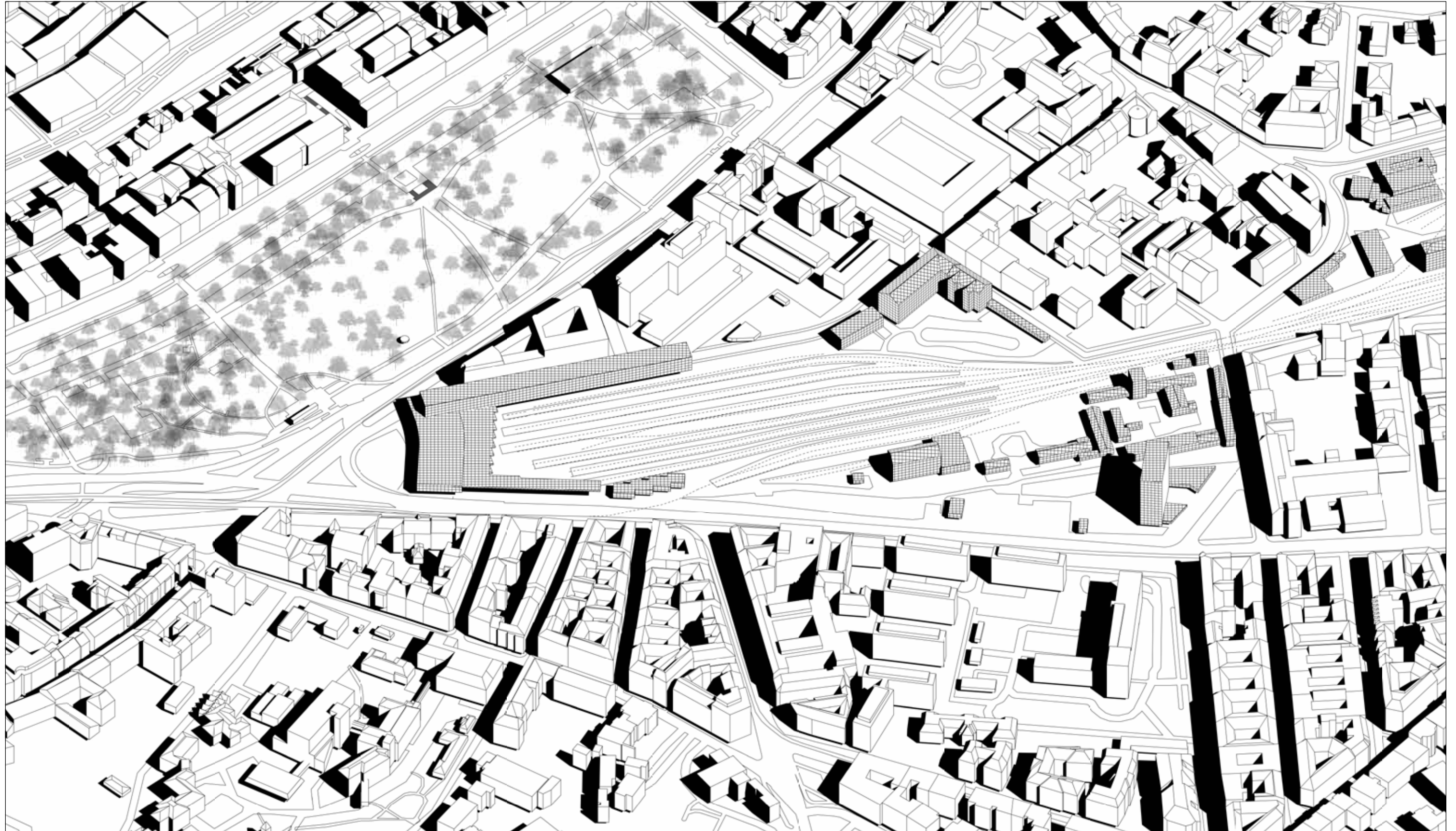
In this chapter, my intention is to showcase the immediate environs of the railway station. I aim to depict the existing linkage between the railway station and the city by highlighting the adjacent streets and notable landmarks. Subsequently, I will delve into the evolution and metamorphosis of the railway station, which evolved from a mere freight station into a vibrant, contemporary transportation hub.

Through the presentation and examination of the present-day station building, I seek to unfold the architect's vision and the principles that underpinned the development of this innovative railway station.



Déli, cashier's hall with Buda Castle in the background, 1973 / Fortepan / Gábor Viktor

SITE PLAN AXONOMETRY



AMBIENCE

In this topic, I would like to present the immediate surroundings of the station: the streets around the station and their more prominent buildings. The presentation of the streets starts from north to west and ends with the *Vérmező*. The first in line is *Alkotás utca*, which is also the most important, as it is in direct contact with the railway station.

Alkotás utca is a busy street with tram and bus lines starting from *Magyar Jakobinusok tere* and going all the way to the *BAH-csomópont* [intersection of *Budaörsi út*, *Alkotás utca* és a *Hegyalja út*]. Until its demolition in 1936, the *Schöpfungshaus* [Creation House] stood at number 5 of today's *Magyar Jakobinusok tere*, which took its name from the well-loved bas-relief depicting the creation of the world on its tympanum, which is now in the *Kis-cellii Museum*.⁴² From *Magyar Jakobinusok tere* to *Márvány utca*, the following streets flow into it: *Schwarzer Ferenc utca*, *Ráth György utca*, *Greguss utca* and *Nagyenyed utca*. In terms of its topography, it rises to the street in the direction of the *Márvány utca*, as well as perpendicular to its direction. The architectural style of the facades of *Alkotás utca* varies greatly. The majority of the buildings are characterized by *Gründerzeit* architecture, with some simplified Art Nouveau buildings, socialist apartment

blocks, and modern apartment buildings.

The northern part of the *Alkotás utca*, towards the *Déli* railway station, is typically more urban: the houses are denser, the streets are narrower and there is less green space. From the intersection of *Nagyegyed utca*, the buildings become sparser, more and more green areas are established and the newly built apartment buildings take over the historical buildings. The National Center for Spinal Disorders is located at the intersection of the *Alkotás utca* and the *Márvány utca*, opposite the railway station area. From *Nagyegyed utca* on both sides of the *Alkotás utca*, the proportion of green areas is also increasing.

The *Déli* railway station touches *Alkotás utca* all the way to the intersection with *Nagyenyedi utca*, and from there, it forms a triangle, moving towards *Márvány utca*, with the railway station area remaining flat while the triangle rises to match the terrain. The triangle mainly consists of park areas. At the intersection of *Márvány utca* and *Alkotás utca*, you can find a restaurant, an auto service, and a gas station before reaching the offices of *Intranszmas*.





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Márvány utca runs along the southern perimeter of the railway station, forming its southern boundary. At the intersection with *Alkotás utca*, you'll encounter a green park area. This street gradually ascends about four meters above the railway tracks of the *Déli* station, culminating at the *Márvány utcai híd* [Marble Street Bridge]. This bridge gracefully arches six meters above the railway tracks. The bridge serves as the sole connection point within the railway station, serving as both a literal and symbolic bridge between *Krisztinaváros* and the 12th district. This connection point divides the railway station into distinct zones dedicated to passenger services and economic activities.

On *Márvány utca*, you'll find the *Intransmasz* office building, a solitary structure that was built in 1968-69. This office complex stands as an emblem of the 'new economic mechanism.' Situated between the *Alkotás utca*, and the *Déli* railway station, the *Intransmasz* building has to meet the requirements for a Hungarian-Bulgarian joint material handling venture.¹³ Across the office building, a high school offers an additional layer of to this landscape.





The *Kosciuszkó Tádé utca* serves as the eastern border of the railway station, following the station's boundary curve from *Krisztina körút* all the way to *Kunyi Domonkos utca*. From the intersection of these two roads, the borders of the railway station is demarcated by *Kunyi Domonkos utca*, which leads to the bridge

Facing the railway station's administrative building stands the imposing *Krisztina Plaza*, an office building designed in the deconstructivist architectural style. Build in 2001, this seven-story building stands on the former parking lot of the *Déli* Railway Station. Unfortunately, the strategic positioning and considerable height of this

office building have disrupted the connection between the administrative building and Buda Castle. In the vicinity of *Krisztina Plaza*, you'll discover the *Mercure Hotel*, which was established in the year 1982.

To the east of the station, but not in its immediate vicinity, is the office building of the *Magyar nemzeti bank*, which is huge compared to the area. Apart from the office buildings, there are only residential buildings east of the railway station to the *Vérmező*.



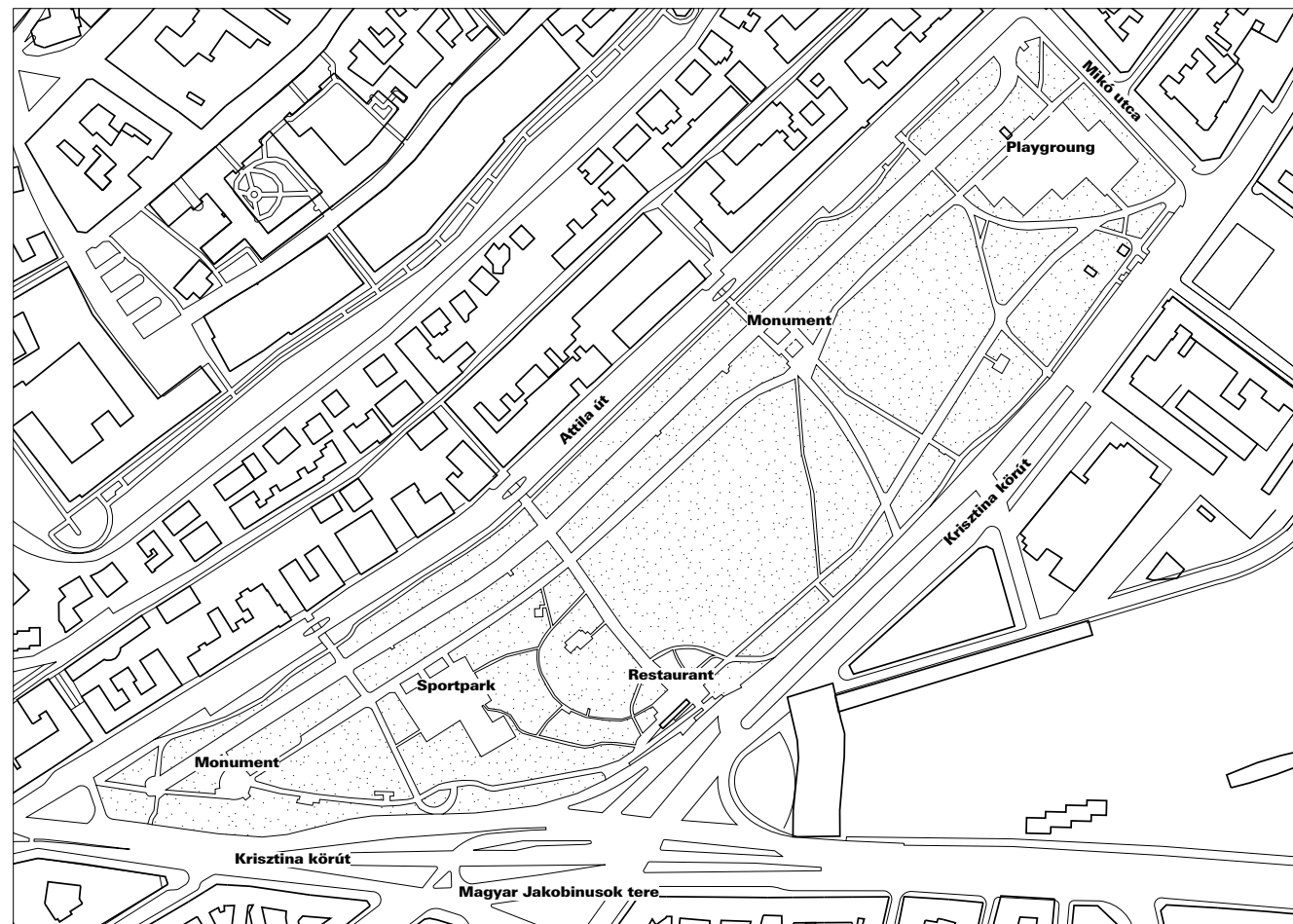
Vérmező is located in the 1st district of Budapest, on the western side of Castle Hill, in the area bounded by *Krisztina körút - Mikó utca - Attila út*. Together with the *Horváth kert*, it is the remnant of the former glacis, covering an area of 140,000 square meters. The non-buildable defense area was designated a rifle shot from the castle walls and placed under military administration; this area is known as the glacis.

After the expulsion of the Turks, its military importance decreased, and the population increased. With the relocation of government offices to *Buda*, the Council of Governors ordered in 1784 that plots must be allocated from the glacis, in addition to the construction obligation, and the houses built here were removed from the jurisdiction of the military administration. Beyond the narrowed glacis boundaries, 224 house plots were allocated, and in 1819, the entire area was divided into parcels. It was developed throughout the century, except for **Vérmező**. <->

In 1795, *Ignác Martinovics*, the abbot of *Szászvár* and the leader of the first republican movement in Hungary, was executed here, along with his companions. The name **Vérmező** [*Blood field*] preserves the memory of this event.

Through **Vérmező**, via *Tabán*, the *Ördögárok*, a ditch flowed into the Danube. Around the turn of the century, several sections of the ditch were enclosed, and the surrounding area was filled up.¹⁴

Various plans were considered for the future of **Vérmező**, but ultimately, it was decided to turn it into a park, and its implementation was entrusted to the Capital Horticulture. The garden designer was *Józsefné Hetessy*, and the successful realization is due to the foreman *Antal Katonai*, who had been working in the area since 1949, making **Vérmező** one of the most beautiful public gardens in Budapest.¹⁴



HISTORY OF THE STATION

The premodernist period of *Déli* lasted for 100 years. The atmosphere of the neighborhood and the station building was determined by the architecture of the industrial revolution.

After the War of Independence in 1848, the central government aimed to develop the railway system. This resulted in the establishment of the Central Railway Company and the acquisition of their railway lines, followed by expansion towards *Esztergom*, *Pozsony*, and *Szeged*. However, in the 1850s, there was a significant change in railway affairs. State-owned railway lines were sold, and a new approval system was adopted. According to the contract established in 1858, the *Délviasút társaság* [Austrian Southern Railway Company] acquired the Vienna-Trieste railway line and all its branches, extending to Carinthia, Krajna, Tyrol, Croatia, and Hungary. Over the next few years, the company further expanded its railway lines in Hungary, including the construction of the Buda-Trieste railway. This development aimed to establish a more direct connection with the sea, reducing the need to transport goods through Vienna.

The railway lines led from already operational sections to the central railway station in Hungary, initially referred to as *Indóház* [Buda railway station] and later renamed *Déli* train station in 1873, reflecting its builder the *Délviasút társaság*. Construction of *Déli* Railway Station began in 1859, following the plans by Karl Etzel. This station was primarily constructed for freight transportation, with passenger traffic considered secondary.¹⁵

The company intended to build the station close to the suburbs but on the city's outskirts, as was planned even in 1848, despite the enormous costs of tunnel construction. They chose an irregular triangular plot next to *Vérmező*. The plot was once a military cemetery in the 17th century, later transformed into a botanical garden in the 18th century, with subsequent villa construction. On this site the *Buda* Railway Station was built, and the first train arrived on April 1, 1861.¹⁵ The tunnel beneath *Gellérthegy*, along with the embankment connected to it, was constructed with two tracks and completed simultaneously with the railway station.

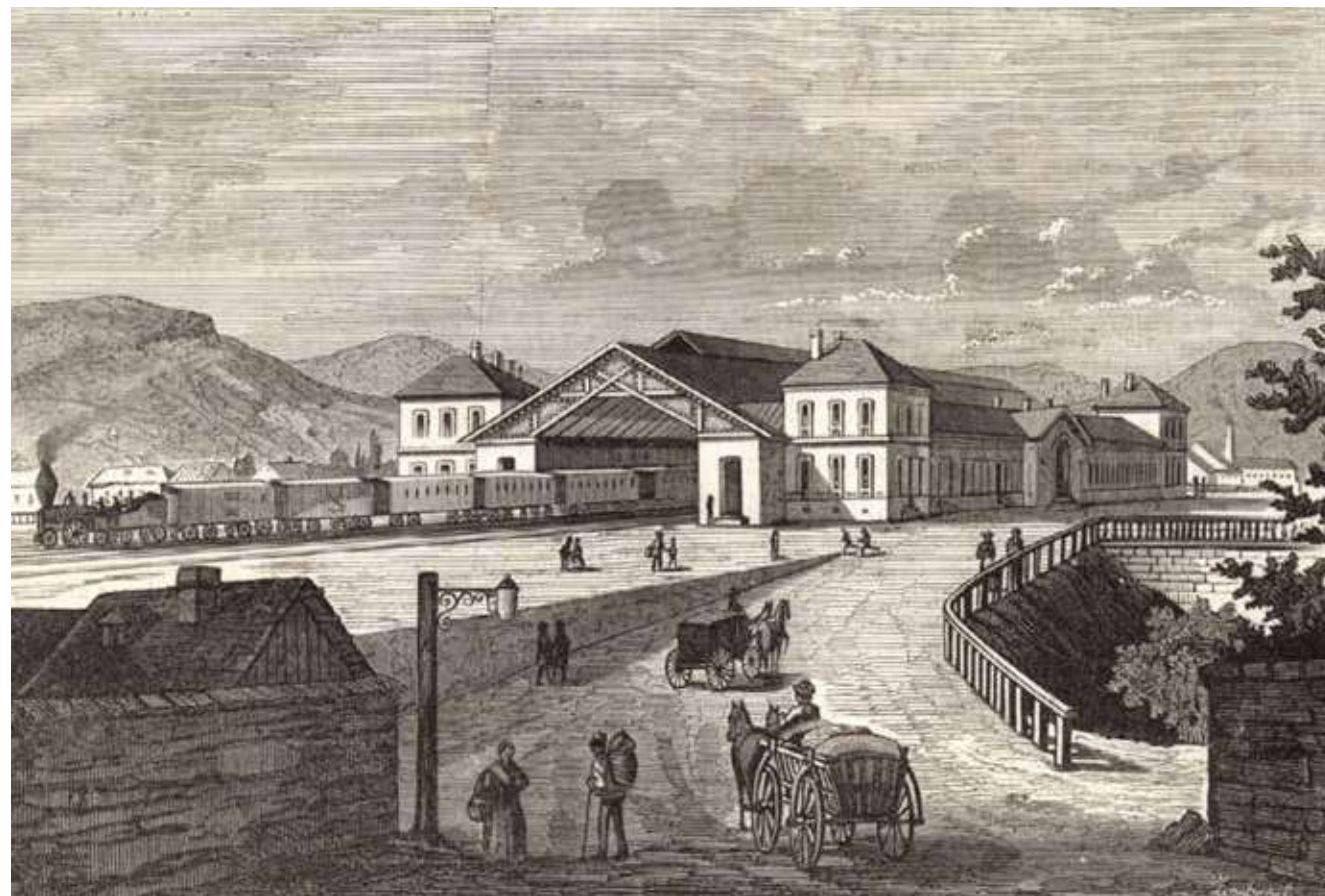


North of the tunnel, a freight railway station with six tracks was built, along with a train storage facility, followed by the covered passenger railway station located between the two access buildings. The design and construction of the station's rail network required extensive earthwork. The earth and rock, carried from the higher ground between *Sas-hegy* and *Gellérthegy* and the tunnel, were used to fill the lower-lying areas. A massive stone wall supported the embankment near where the current head railway station was located. Presently, there is a two-story height difference between the tracks and *Vérmező*.¹⁶

In addition to the features mentioned earlier, the railway station's construction included grain storage, warehouses, service apartments, and several storage tracks. The rail network and other facilities were initially sufficient for the traffic in the early days. The building itself was designed and constructed with great care and extravagance to provide the utmost comfort. The large roof stretching between iron columns built into the outer walls was devoid of any internal columns in the hall. Since both passenger terminals, administrative offices, apartments, and restaurants were attached on both sides, light was obtained primarily from crystal windows on the roof, in addition to the generous

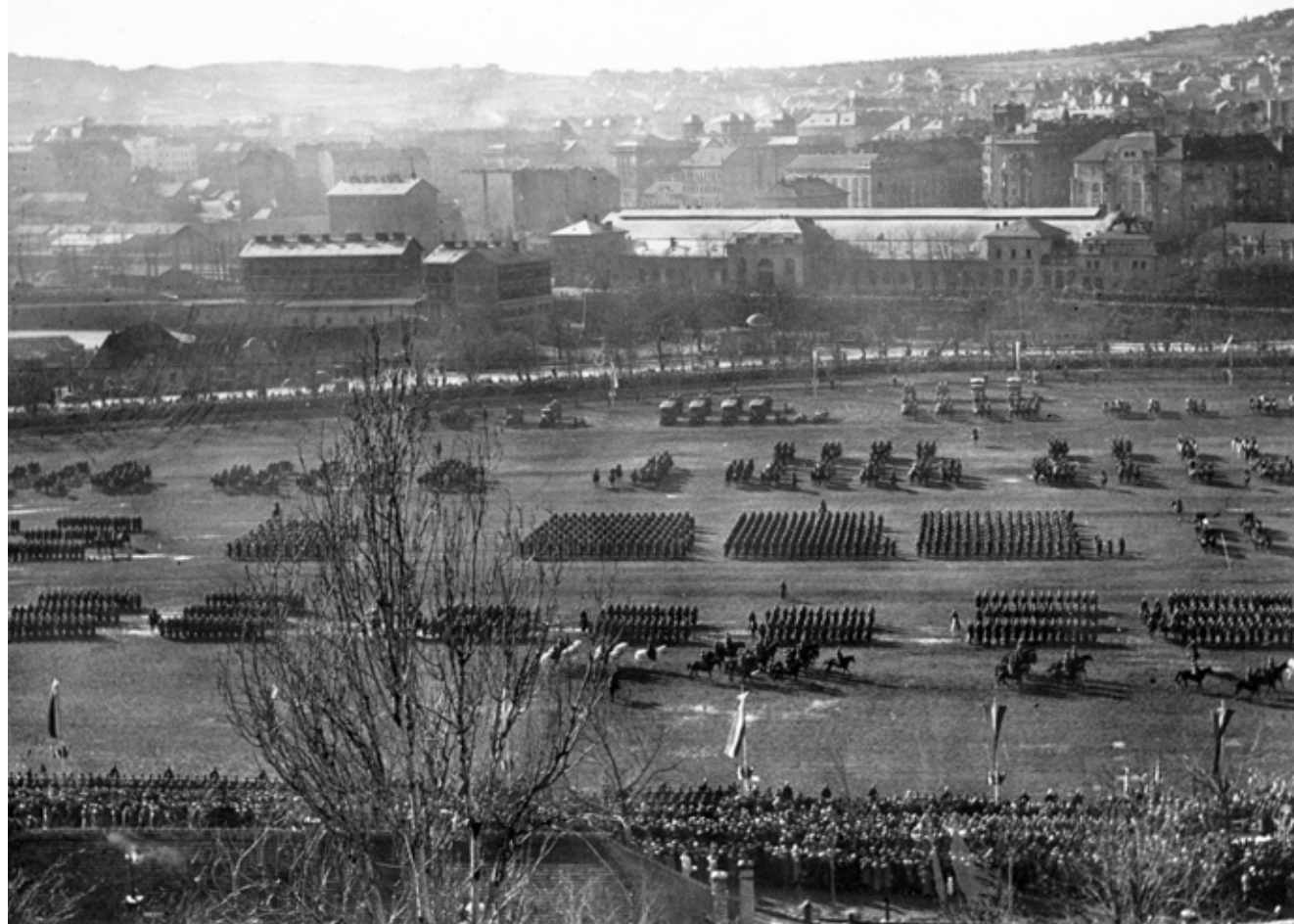
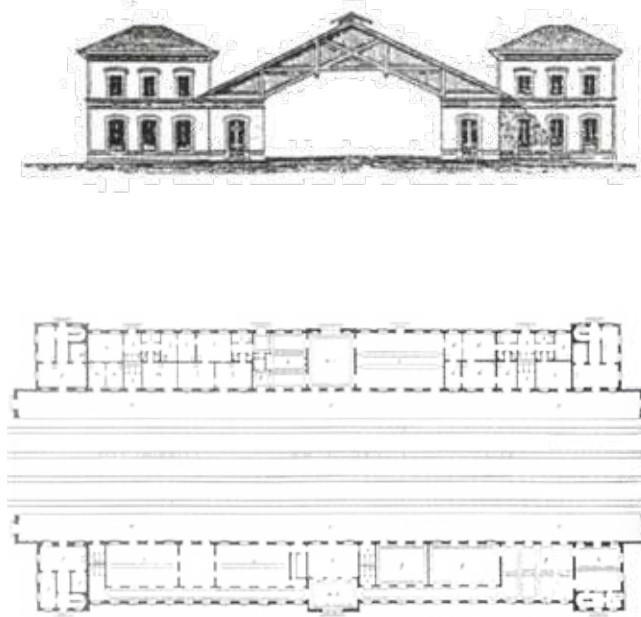
entrances. A 27,3 meter wide roof spanned the platforms between Access Buildings A and B, while each building was 12,9 meters wide and 113 meters long.¹⁶

Inside the station hall, four tracks were provided. The two middle tracks served railway operations, while the transportation of passengers occurred on the two outer tracks. To facilitate the turning and direction change of trains within the limited space, a 16-meter diameter turntable was installed, becoming an iconic feature of the station. To reach the waiting hall, a spacious foyer allowed access from both the *Krisztinaváros Koronaör utca* on the south and today's *Magyar Jakobinusok tere* on the north. Here, ticket offices were located. The corridor led to the waiting rooms, express freight and baggage collection areas, the restaurant, and the post office. The same-sized building wing on the other side of the hall contained the courtyard waiting room, customs and police offices, and other railway service areas. Both long building wings were single-story but became two-story at the corners, where service apartments were located.¹⁵



It's undeniable that the Déli Railway Station's Access Building was precisely designed and constructed. The characteristics introduced by this building, such as the covered passenger hall, the platform arrangement, the massive roof over the central hall, and the design with two-story building sections at the corners, re-appeared later in Budapest's *Nyugati* and *Keleti* railway stations.

The station quickly became outdated after its opening: the four tracks proved to be insufficient, and expansion was hindered by the station's confined location and the design of the Access Building. The 'throat' near *Márvány utca* further intensified this constraint. To alleviate this narrowness, the transitional nature of the Access Building and the later-built turntable played a crucial role. This design saved many unnecessary kilometers of shunting. The conservative layout and narrowness of the station prevented significant growth in traffic for nearly a century.¹⁷



The exterior and internal architectural layout of the Access Building remained largely unchanged for 84 years, until 1945. The Southern Railway Company ceased to exist after World War I, and its successor became the Danube-Sava-Adriatic Railway Company. In 1932, all Hungarian railway lines were transferred to the MÁV a national railway company.¹⁵

The station facility suffered the greatest destruction during the Second World War during the siege of Budapest. The City became a besieged fortress in November 1944. Hitler forbade the defenders to break out, no matter how many times they asked him for permission. Thus, on November 23, he declared the capital city a fortress [*Festung Budapest*], thus sealing his fate. The siege of Budapest was one of the longest and bloodiest city sieges of World War II, lasting 102 days. Several protective belts were created in the city, especially strengthening the Technical University, the *Citadella* and the *Várnegyed*. On January 19, a powerful

attack the emergency airstrip created on the *Vérmező* ensured the survival of the defenders trapped and surrounded in the *Várnegyed*. The attack on the *Vérmező* airfield and its surroundings, which served as the last supply target, and the artillery duel to destroy the attacking artillery caused immeasurable and irreparable damage to the surrounding buildings.¹⁸

After the end of the fighting in *Buda*, in February 1945, they immediately started cleaning up the ruins. At the train station, in 1945, the old track, which was largely destroyed during the war, was renovated, and a temporary passenger station was established in place of the destroyed arrival side of the station.



The devastation of World War II created a completely new situation. While the *Keleti*, *Nyugati* and *Józsefváros* stations did not suffer serious structural damage, most of the *Déli* station was in ruins. The new condition created new opportunities for the future railway station. The extensive plans for the transformation and modernization of the railway station were drawn up by the *MÁVTI [Hungarian State Railways Design Institut]* at the time. The new building was built on a temporary basis based on the plans of György Kövári, only to ensure the accident-free nature of the increased *Balaton* traffic. The construction began in January 1962, and it was ready for use in June.¹⁷

The arrival hall was demolished and replaced by new tracks. The turntable towering over the *Jakobinusok tere* has been preserved, but the burnt-out wooden hall has not been rebuilt. With minor additions, this sub-base was conserved until the beginning of the 1960s. At that time, the fifteen-year-old, solidified socialist government made a profound decision, which determined the fate of *Déli* railway station for many decades. The construction work of the Subway, which had been stopped for almost ten years, had to be continued, one of the key strategic goals of the Cold War was the railway interoperability between the *Keleti* and *Déli* railway stations, which would only satisfy military purposes. So, *Déli* will remain, and even now it must be permanently restored and developed.¹⁷

The planning could begin. The actual works were started on January 1, 1962, by order of *István Kossa*, Minister of Transport and Posts, on the occasion of the 100th birthday of the railway station. By the time everything was finished, 1963 was already written. The design was entrusted to the young architect of the Railway Planning Company, *György Kövári*.

The turntable on the north side of the station was demolished and a new passenger hall was built in its place. This made it possible for the majority of the traveling public to now use the station as a de facto main station. The conversion resulted in a significant increase in passenger traffic capacity and ensured a cultured passenger reception. The location of the subway hall was already known then. In 1962, the glass hall was built in such a way that it could be built on top of the future subway hall without having to demolish it, of course, by rebuilding the glazing and coverings in the same way as the extended part. Today it is not even visible which part of the hall was built in 1962.

In place of the dismantled turntable overlooking *Vérmező*, the designer raised a glass cube with a double broken axis, resting on a row of floating stairs, to the level of the 8-meter-high track, with barely noticeable support. The new passenger hall and ticket office, cantilevered in three directions, were connected at the end to twelve tracks by a covered cross platform between *Krisztina körút* and *Alkotás utca*.

Moving towards *Alkotás utca*, demolishing the temporary buildings, closing the former taxi and bus interchange and parking lot, a ware-

house and maintenance workshops were added, and all of this was done in such a way that the future connecting facilities and building parts did not even exist at the initial level of planning. Their final implementation took place only much later, ten years later.¹⁸

The support structures of the lightly floating cube closed on four sides with glass walls, as well as all other non-glass surfaces, are covered with red sandstone facades from the *Balaton* highlands. The consciously chosen rustic covering evoked the atmosphere of the true destination of the trains departing from the station, *Balaton*, at the moment of ticket purchase. The cashier located in the retaining wall served to ensure the smooth operation of summer traffic. The parapet and parapet walls of the cross platform and hall, as well as the parapets of the improbably cantilevered staircase, were an exception to this.¹⁷



The country marvelled at this new, remarkably modern piece of socialist realism architecture. The passengers who marvelled at the new architecture were not finished with the catharsis brought about by the previously unfamiliar built environment from an external point of view. The true experience awaited passengers gazing out from the hall. They could observe the Castle and *Vérmező*, which were slowly recovering from the ravages of war, from nearly two floors high.

In the hall, the designer broke with the Hungarian State Railways previous functional and relationship schemes for reception buildings. The new hall followed the era, not only Hungary's democratization process. The previously accustomed waiting rooms for different classes, the artificially separated spaces for social groups with functions such as Soviet-style separated areas for students, families with young children, cultural facilities, and restrooms were not created. Everything was placed in one large space, so the relationship and position of each element allowed for the selection of a comfortable waiting area, while at the same time, passengers could enjoy a beautiful panorama before their train left the capital.¹⁶

The new building complex, handed over in 1962, prepared every detail of a future much larger and more elegant and spacious reception building, but this had to wait until 1975. The building ahead of its time and its designer were deservedly awarded for this work in 1964 Ybl award. It was a pioneer of its kind in Hungarian architecture, since all of our buildings, which have since become icons, were all born only after the building. After the handover in 1962-1963, the design work did not stop. The subway also got closer and closer to the station.¹⁸



THE PRESENT BUILDING

The necessity for further construction that began in 1970 was also influenced by the increasingly prominent urban transportation and urban planning requirements. The area around the *Déli pályaudvar* began to evolve into an important point in Budapest. This is where the highways from Lake *Balaton* and Vienna passed through the city and the metro arrived. The traffic in this area was significant, with the daily passenger count at the station reaching around 80,000, a number that increased to 120,000 after the construction of 12 tracks.¹⁹

The modernization plans for *Déli pályaudvar* were prepared by the MÁV Planning Institute, while the related plans were developed by the Budapest Deep Construction Company with the involvement of several designers. As part of the works, the smaller passenger hall built in 1962 was expanded by connecting it to a new section with the same appearance, but designed with a slight curve towards *Vérmező*, increasing its width to approximately 30 meters and its length to 85 meters. The expanded passenger hall included essential facilities related to passenger traffic, such as spaces equipped with state-of-the-art ticket management equipment, featuring 24 ticket booths. On Christmas 1972, the section of the Budapest Metro Line 2 between *Deák Ferenc tér* and *Déli pályaudvar* was opened, coinciding with the opening of the passenger hall. A new connection was established between the railway station and the *Keleti pályaudvar* via metro. Modern pedestrian and road connections were established in front of the northern facade of the railway station, integrating it with the renovated *Magyar Jakobinusok tér*, the expanded *Alkotás utca*, and the *Krisztina körút* shifted towards *Vérmező*. Simultaneously with the establishment of modern pedestrian and road connections, the head platform roof and the transit area under the passenger hall were completed, housing a post office, a flower shop, a gift shop, a newsstand, an automatic kiosk, and numerous telephone booths. The railway station's international ticket office was also located here, and this is where the eastern-western metro line connects to the railway station. Perpendicular to the passenger hall and parallel to the tracks, a roughly 100 to 120 meters long and 14 meters wide operational building was erected. This building had three stories facing the tracks. It featured a completely modern design and a light gray color scheme.¹⁹



The railway station complex comprises four essential levels: the lowest serves as the subway terminus, the second level lies sunken below street level, facilitating pedestrian traffic. The third level accommodates road traffic on the street, while the fourth level houses the platforms.

The lowest level functions as the metro terminus, connected to the underground concourse via an escalator at street level. The second level, a sunken space, is architecturally integrated with the train station, and pedestrian traffic passes without the need to cross the road through underpasses. This sunken square also significantly enhances the station's ambience, intensifying the hall's effect and adding to the metropolitan atmosphere of the square. Equipped with shops, resting areas, cafés, fast food restaurants, and an underground link to *Vérmező*, it becomes an inviting place for commuters. The third level is the street level, where road traffic flows, and the surface hall of the subway, along with a row of shops beneath the train station, can be found. The metro hall directly connects to the railway station entrance via the main staircase.

The subway hall is enclosed by a perforated concrete wall, designed to disperse the solid appearance of the concrete, emphasize the subway's "cave-like" location, and symbolize the dynamics of traffic. The fourth level is the station level, featuring tracks, platforms, and the passenger hall. Conveniently, the passenger hall and ticket office are located directly above the Metro roundabout, facilitating smooth passenger flow in multiple directions. Metro pas-

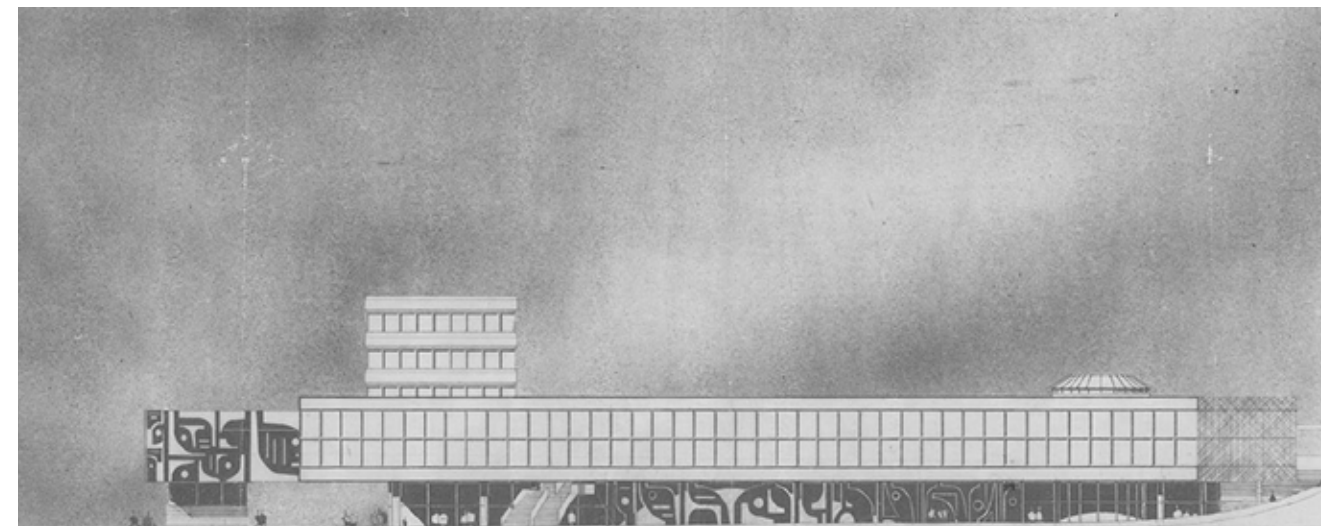
sengers can effortlessly reach the station after exiting the metro without encountering other traffic.

The transit of Metro passengers to connecting main roads, public transport options, and the surrounding area was thoughtfully designed to minimize disruption to train station traffic. A direct connection to the train station is also available for passengers arriving by means other than the metro. In place of a traditional restaurant, there's a bistro beneath the office building connected to the passenger hall. Here, you can enjoy seated consumption with a fast serving system while relishing a splendid view of *Várnegyed*.

Parallel to the tracks, an office building rises three stories above the platform level. It closes off the railway station on the *Vérmező* side and stands on pillars. This design choice is justified by both internal operational functions and the intent not to obstruct passengers' views of the *Várnegyed* and *Vérmező*.

The office building encompasses a wide range of room groups. On the street level, which also doubles as the railway station's forecourt, a car park has been constructed, housing a taxi station. Access to the luggage and express warehouses, as well as the cloakroom, is available from here. Adjacent to the station, you'll find a large, two-story ABC grocery store accessible from the platform level, with its main entrance facing *Krisztina körút*.

Above the platform level, you'll find various facilities, including changing rooms, railway operating rooms, a working kitchen-restaurant, and more, accessible through several stairwells.

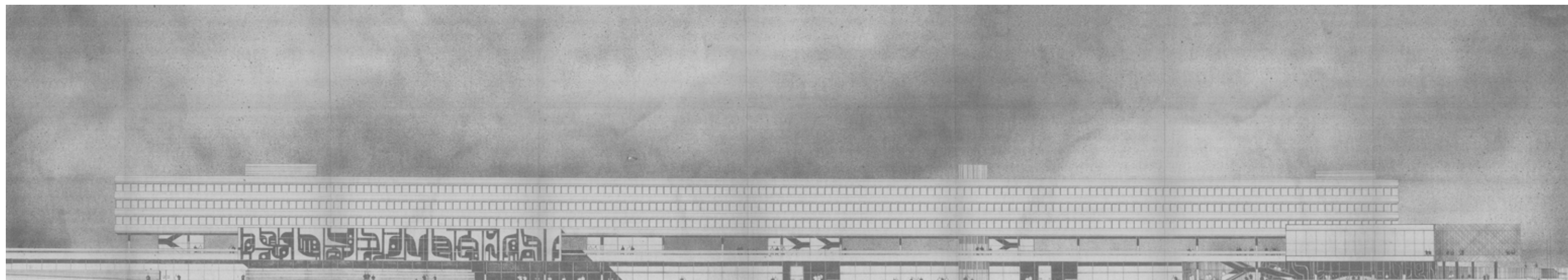


At the southern end of the office building, the MÁV Computing Center is situated, offering a modern, air-conditioned environment for high-performance computers.²⁰

The entire station complex is situated within a rather confined space, bordered by *Alkotás utca* on one side, *Krisztina körút* on the other, and *Vérmező*. This limited width necessitated the installation of various functional rooms, including warehouses, beneath the tracks. Connections between the levels are established through an intricate system of stairs and ramps, including one that provides access from the sunken space to the street level and even up to the track level.

The architect believed that „the most important direction of travel for the flow of passengers is based on circular arcs”²¹. This concept was prominently reflected in the building's

internal traffic elements and design. Internal stairs take on a curved form, ticket offices feature circular floor plans, and even the ceiling lights follow a circular pattern. Complementing these geometric elements, a notable ornamental motif adorns the facade: artificial stone plasticity, referred to as the “decorative wall” in the plans. This motif replicates the curve of the subway exit's cylindrical casing on the exterior of the stairs, comprising circular arches. Today, this would stand as one of the railway station's most iconic motifs if a significant portion of it hadn't been removed to make way for commercial expansion.¹⁹



The curved “movement” of levels, beyond facilitating smooth traffic, endeavours to harmonize with the *Buda* landscape. The passenger hall occupies one of Budapest’s most picturesque locations. In such an environment, full glazing becomes imperative, offering a floor-to-ceiling glass hall. Solar protection glass was chosen, as shading such extensive surfaces during summer poses challenges and obscures the view. The substantial glass surface also plays a pivotal role in the hall’s exterior appearance, lending the building a sense of lightness and simplicity. The curved facade, distinct from the sunken space’s curved closure, underscores the unity of the outdoor space.²⁰

The first floor predominantly juxtaposes black and white colors. A gleaming black Norwegian natural quartzite covers the carefully laid floor, while quartzite or natural slate graces the delicately maintained pillars. Elegant white and gray-white marble adorns the walls and stair parapets. The almost continuous, full-height smoked Belgian glass facade without a steel structure provides an unobstructed view, with only a metal support and protective barrier in front of it.²¹

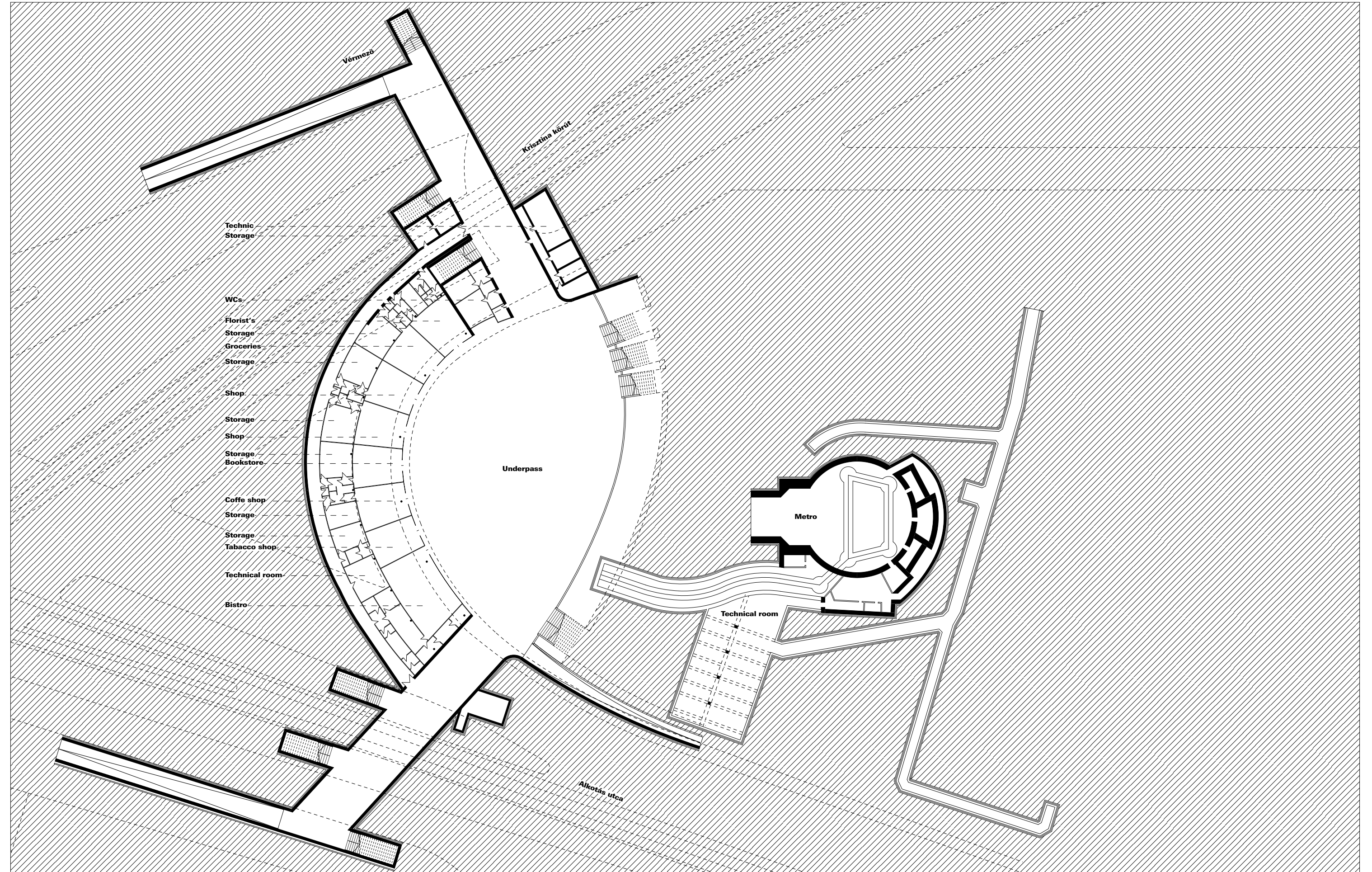
The interior design world of the lower levels is different from that of the hall, where even the copper handrails have somewhat merged into the black and white harmony. It is much more colorful: there was a blue-green glazed ceramic wall covering at the telephone booths on the ground floor, orange plastic seats and purple and blue, scribbled at the factory enamelled metal telephone booth covers in the sunken vestibule, and blue, burgundy and green enamelled metal cladding elements in the connecting underpasses. This bold color scheme also characterizes the hypermodern self-service bistro situated at the *Várhegy* end of the passenger hall. Designed by *György Kövári*, the “hospitality unit” initially conceived as a restaurant, ultimately evolved into a bistro. Operational functions are centralized at its core, surrounded by a consumer area offering a panoramic view. The counters and background walls feature fashionable chrome, riveted, curved coverings, and the lighting is provided by chrome steel lamps with rounded edges.²⁰

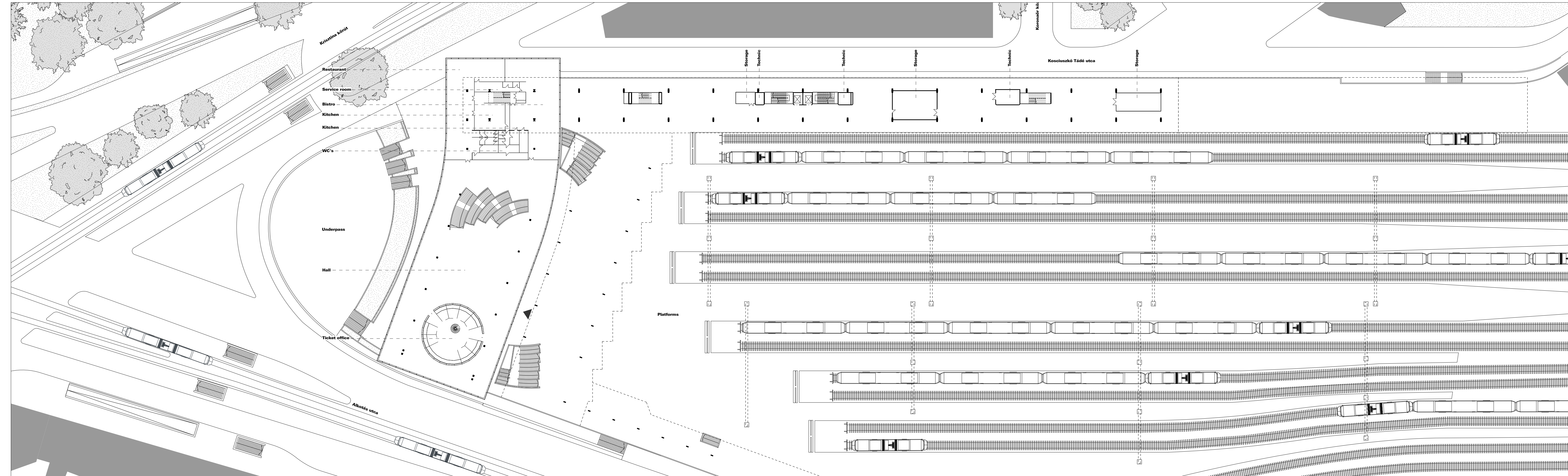
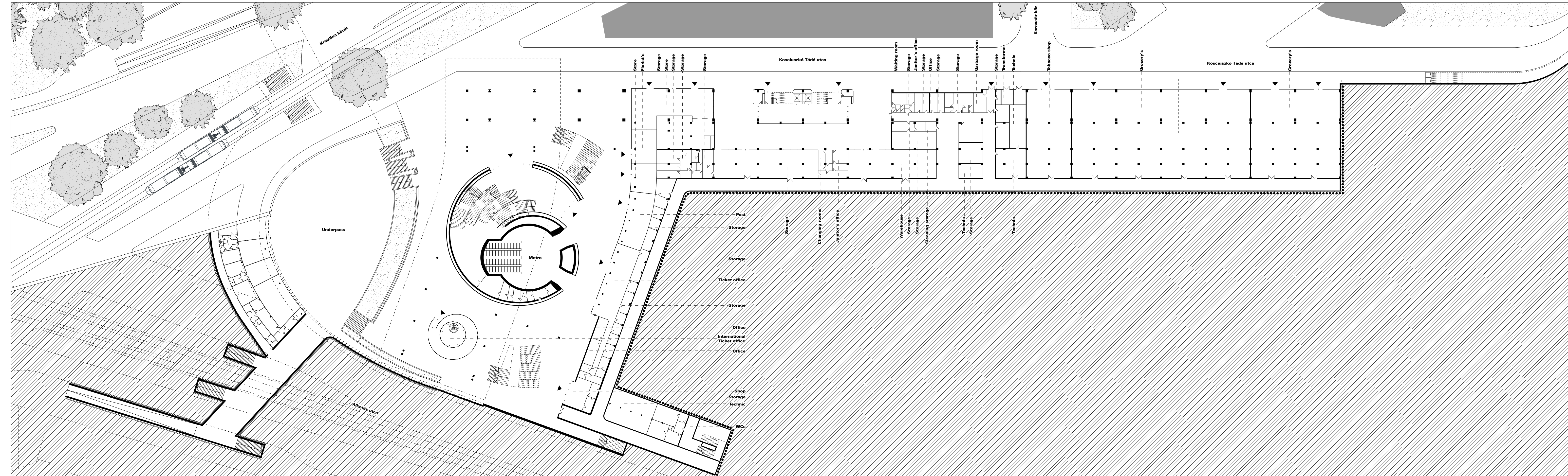




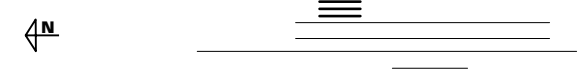
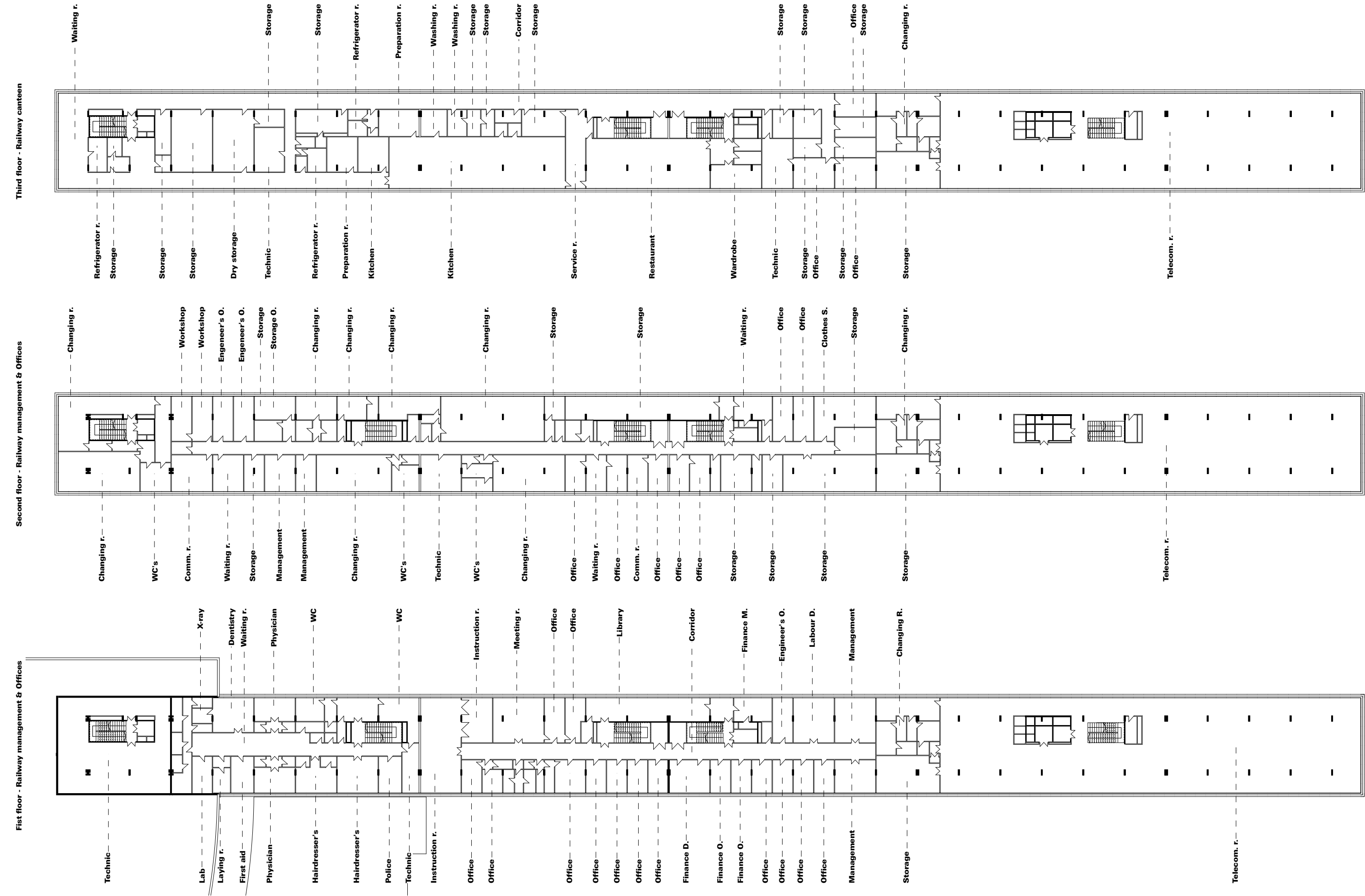
The interior design extends its generosity to art, with acclaimed visual artists *János Blaski* and *László Miskei* commissioned to adorn specific wall surfaces. In 1975, they introduced a dynamic and colorful glazed tile wall covering, shifting circular shapes along the horizontal axis. Remarkably, many tiles and some pieces of furniture, despite minor signs of wear, have persevered - perhaps concealed by plasterboard. Today, nearly fifty years later, they remain part of the bistro's character.²⁰

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STYLE

“The most important direction of passenger flow is based on circular arcs”²²

The quote below comes from the architect and is reflected in most elements of the station. The most striking expression of the quote just mentioned can be seen in the shape of the building: the area of the railway station encloses a triangle due to the peculiarities of the environment, the architect designed the building of the hall perpendicular to the legs of the triangle, so that the angle of the mass of the hall is a single generous arch with a radius of eight hundred meters rounds it off. A circle with a similar, but significantly smaller radius than the previous one forms the curves of the sunken space.

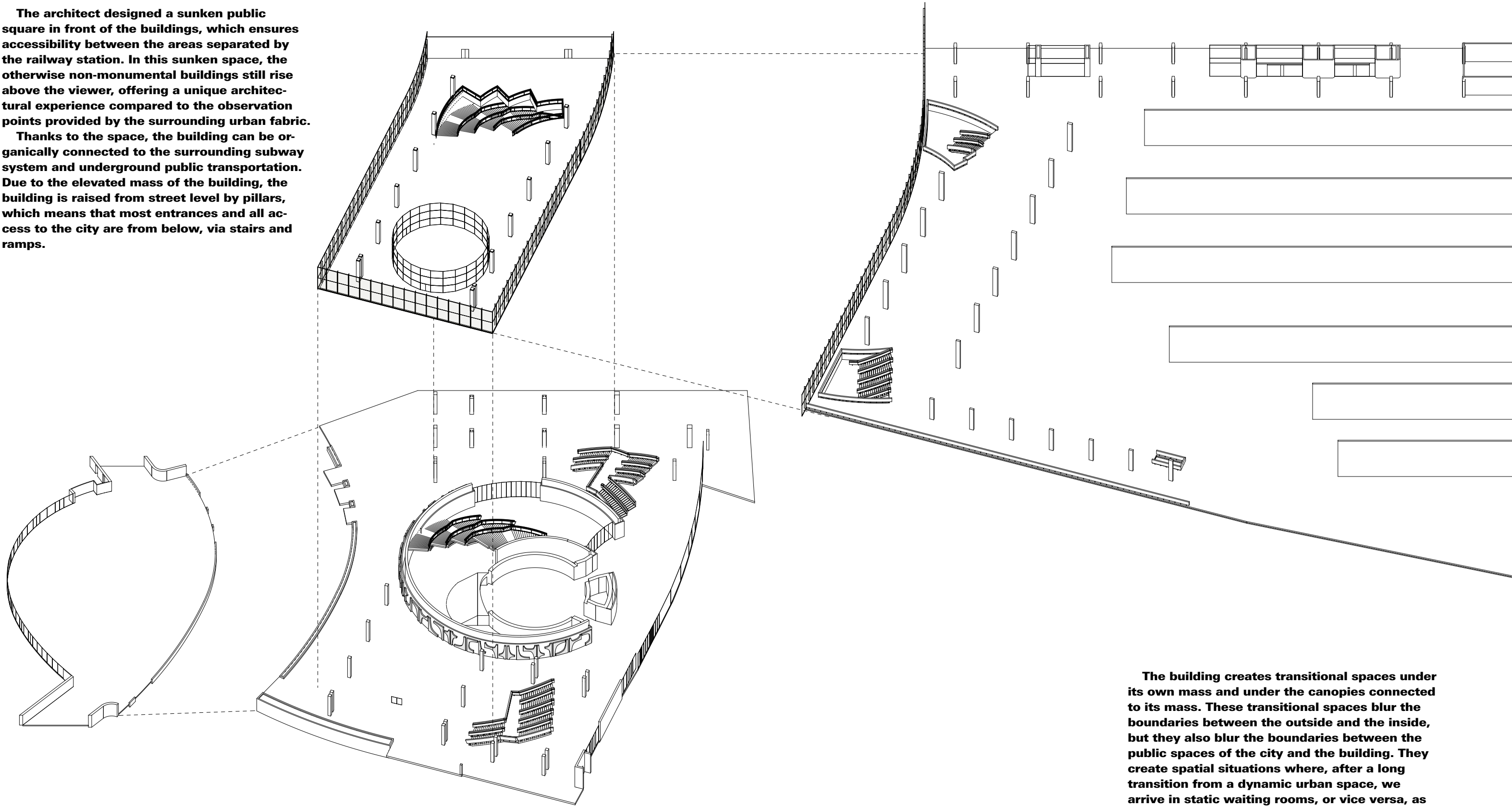
The second easily visible element is the curved, multi-round design of the metro approach. The entrance and the stairs that lead to the hall are separated from the arch of the hall, forming a separate system. The stairs leading to the platforms and the cash registers also form a unique system, separate from the rest of the building, which are also based on the arches.

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SPACE

The architect designed a sunken public square in front of the buildings, which ensures accessibility between the areas separated by the railway station. In this sunken space, the otherwise non-monumental buildings still rise above the viewer, offering a unique architectural experience compared to the observation points provided by the surrounding urban fabric.

Thanks to the space, the building can be organically connected to the surrounding subway system and underground public transportation. Due to the elevated mass of the building, the building is raised from street level by pillars, which means that most entrances and all access to the city are from below, via stairs and ramps.



The building creates transitional spaces under its own mass and under the canopies connected to its mass. These transitional spaces blur the boundaries between the outside and the inside, but they also blur the boundaries between the public spaces of the city and the building. They create spatial situations where, after a long transition from a dynamic urban space, we arrive in static waiting rooms, or vice versa, as we get off the train, the city gradually unfolds before us.²³

STRUCTURE

The connected surfaces visible from the outside are fixed or stiffened by the structures visible from the inside, so the structural hierarchy can be recognized despite the strong visual experience caused by the surfaces.²³

The one-story hall with a huge floor area stands free as an independent object, away from the surrounding buildings. Due to its elevated position, the hall rests on columns and the circular supporting walls of the metro access. Inside the hall, columns ensure maximum utilization of the space bounded by the glass facade. The administration building is raised from the platform level and looks like a ship standing on pillars, which rises three levels above the hall. Its support structure is essentially a frame structure.

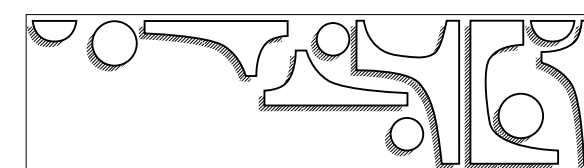
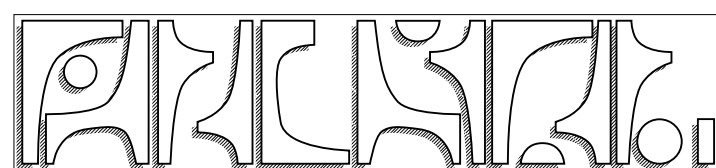
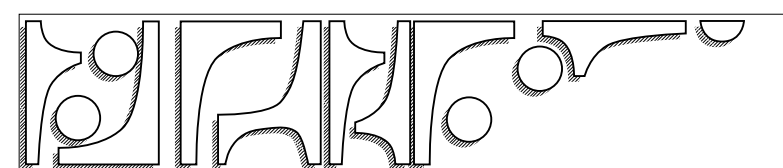
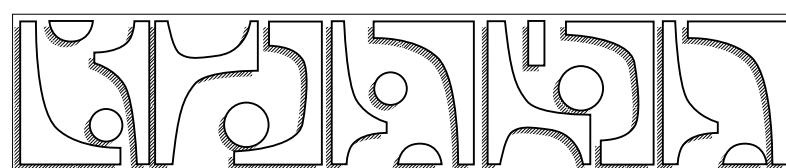
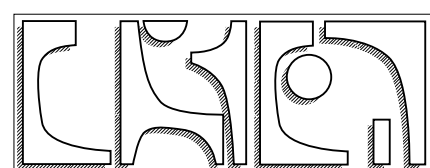
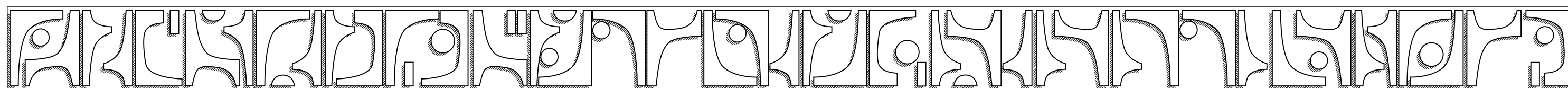
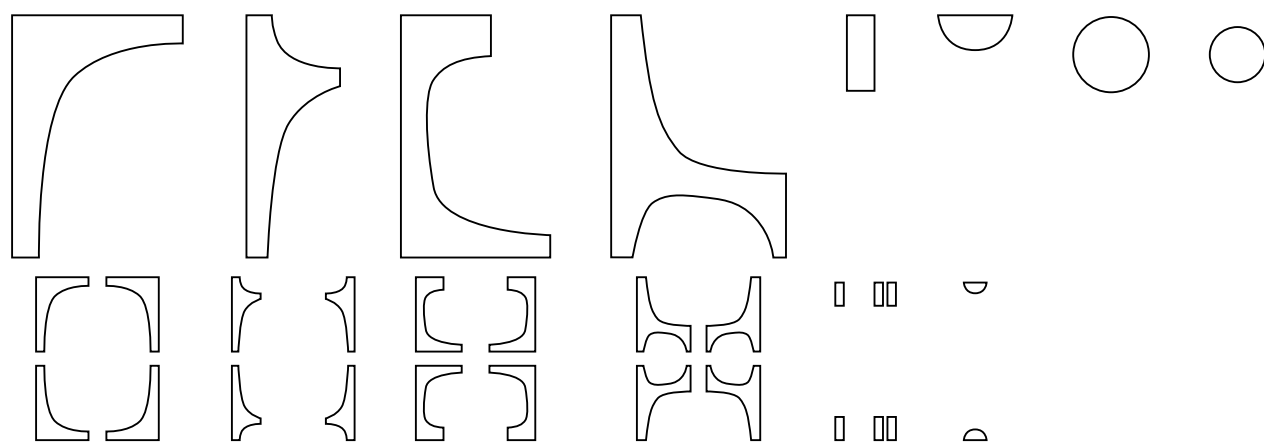
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ORNAMENTS

The architect used his outlines not only for shaping the building but also for designing its decorations. The formal world of the "Decorative Walls" designed by György Kővári fits well with the dynamics of the railway station. The Decorative Walls adorn the retaining walls of the subway entrance both on the outside and inside.²⁰

The ornaments were shaped from artificial stone and glued to the walls with the help of a rail, leaving an air gap of twenty centimetres between the ornaments and the walls.

Essentially, the decoration consists of four larger and four smaller elements, as well as their reflections and various combinations. The elements typically form groups in pairs or with several elements, and their different repetitions make up the row.



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Underpass in front of Déli railway station, 1973 / Fortepan / Gábor Viktor



RENEWAL

Currently, the most pressing question regarding *Déli* is the fate of an outdated railway station from the last century. Its architectural value is undeniable, but it carries the negative memories of socialism.

The *Déli* railway station's building complex is a unique creation, yet the architectural values can only be partially appreciated at the moment. Most of the station is currently closed. Passenger services in the passenger hall have been inactive for many years. The suspended ceiling of the hall has been removed, and the glazing that provided a panoramic view is now covered. The facade of the administration building has lost its covering. Some of the shops under the passenger hall, opposite the metro exit, and nearly every shop in the underpass have closed. In general, it can be stated that the building complex is significantly deteriorated, damaged, and in need of rehabilitation.

There are many arguments in favour of its demolition. From the very beginning, there were shortcomings and planning errors that affected the flow of passengers and the perception of the buildings.

One noticeable shortcoming of the railway station is its visibility from *Alkotás út*. While the building is clearly recognizable from *Vérmező*, it is practically invisible from *Alkotás út*. The building complex lacks communication with this part of the city, with no facade, and pedestrian connections are complicated, involving numerous detours, while the sidewalks remain very narrow.

The second significant problem is a design error: the metro hall's escalator leads to an intermediate level below the railway station, above the underpass, causing unnecessary stairs for those wanting to reach *Vérmező* or the other side of *Alkotás út*. Additionally, it remains dark under the waiting hall day and night, with minimal natural light and poor ventilation. When exiting the subway, the smell of *Kürtöskalács* or beer fills the air.

The third and most prominent shortcoming is the lack of lateral traffic. The railway station divides the city into two sections, with the only direct crossing point being through the sunken square or through the Bridge in *Márvány utca*. There are no transverse paths between the Station hall and the bridge, resulting in sparsely populated areas on both sides of the station.

Despite these drawbacks, demolishing the building complex would not be justified. Many of these planning errors can be addressed through a comprehensive rethinking of the area.

Following the General Assembly of Budapest's meeting on February 23, 2022, the city administration initiated the implementation of its protection program. This program aims to extend the protection of mainly endangered twentieth-century buildings. An ordinance was issued to safeguard nearly 180 buildings, including the *Déli* railway station. The primary goal of the ordinance is to protect the exceptional elements of architectural heritage that define Budapest's cityscape and history. It seeks to preserve the city's distinct character for future generations and prevent the demolition or alterations that would compromise its architectural values. The proposed protection of these buildings can positively impact the cityscape's development.²⁴

As Budapest has declared the buildings of the *Déli* railway station protected, their demolition or any alterations that would compromise their architectural values are not permissible.



Krisztina körút, Déli railway station to the left, 1978 / Fortepan / FÖMTERV

AGGLOMERATION RAILWAY STRATEGY

At the moment, in Hungary, all major railway main axes of the country pass through Budapest, which is a network that has been petrified for 100 years and which carries 61% of the national railway traffic. More than half of the track sections in Budapest are awaiting renovation, which causes delays, hinders the compression of trains, and the advantages of modern trains cannot be applied. In Budapest, the Track Renewals did not affect the most critical internal sections, in many places the location of railway stations is unfavourable, the number of transfer options is currently limited, dead-end head stations inherited from the age of steam locomotives are obstacles to the compression of trains, the connection crossing the Danube is overloaded, traffic is complicated on the two connecting railway bridges. The outdated structure does not allow the railway to play a greater role, so the government created a railway strategy, which offers a solution to the obsolescence of the railways in Budapest and its surroundings.²⁵

The Budapest Agglomeration Railway Strategy summarizes the development of the suburban network over a 20-year period. The key element of traffic expansion is the development of the Southern Ring Railway and the construction of a tunnel under the Danube, since the current network leads trains to the dead ends of the head stations, where they cannot accommodate more trains. The railway tunnel, would connect Budapest's two important railway stations, the *Kelenföld* and the *Nyugati* Railway Stations. During the preparation of the study, *BFK [Budapest Fejlesztési Központ]* and *Főmterv* examined many options for the route of the tunnel between *Kelenföld* and *Nyugati*. In the end, the route belonging to *Széll Kálmán tér* was chosen, which would operate with 63,000 daily passengers, as well as the construction of a stop under the *Vérmező* that would provide access to *Széll Kálmán tér* metro station, *Magyar Jakobinusok tere* and the *Vérmező*. According to the plans, the current track from *Kelenföld* railway station to *Kis-Gellérthegy* would remain, and then the new tracks would start to sink at *Mészáros utca*, which would connect to the metro at *Széll Kálmán tér*. After that, it would reach the *Nyugati* railway station under the Danube²⁶.

In the study, it is recommended to abolish the *Déli* Railway Station, which could thus be handed over to the capital and a 17-hectare development area would be created.



Map of the newly planned underground train route

- A - A Nyugati pályaudvar [Western railway station]
- B - B Keleti pályaudvar [Eastern railway station]
- C - C Déli pályaudvar [Déli railway station]
- D - D Kelenföld [Kelenföld railway station]
- Existing train routes
- - - New underground train route
- Possible Stops
- //// Freed area



OPPORTUNITY FOR A STUDENT CITY



The *Nagykörút* is a large boulevard in Budapest, which consists of smaller units that are connected to each other. There are more residential buildings and a few public buildings on the *Nagykörút* sections in Pest, while the *Buda* side consists mostly of recreational areas, parks and public buildings. Tram tracks and bus lines run along the boulevard, and in many places metro stations and railway stations guarantee the diversity of transport and circulation around parts of the city center. The *Déli* railway station is part of the grand tour.

Most of the Budapest university campuses and buildings are located on the *Nagykörút* or in the immediate vicinity of the *Nagykörút*. On the Buda side are the campuses of two of Budapest's most populous universities - the *BME* and *ELTE* campuses, as well as the *TE* campus and many other university buildings.

Since the *Déli* railway station is located in a very central location and has a very good infrastructure - metro, tram and bus lines - and is connected to the universities of Budapest by the *Nagykörút*, the question arises of the educational reuse of the railway station.

If the area were to be freed from railway use, as stated in the *BKF's* Agglomeration Strategy, a new university campus and possibly a student town could be created, which would be closely related to the University of Physical Education and connected through the *Nagykörút* with every major university campuses in Budapest.



VISION

The area of the Railway Station, including the railway park and the surrounding service buildings, covers approximately 17.6 hectares. This vast area can be divided into two distinct parts, each with its own function and design. Notably, the areas on either side of the Marble Street Bridge exhibit differences in functionality and design. For my thesis, I will focus on the section between the bridge and the railway station, seeking to address questions related to this specific area.

Currently, several campus developments and projects aimed at enhancing university life are underway in Budapest. Alongside the railway agglomeration strategy, the Budapest Development Center is overseeing two significant education-related initiatives: the Campus Development of Pázmány Péter Catholic University and the Southern City Gate program. The latter aims to establish a new student city within Budapest.

Both of these projects underscore the city's demand for additional educational infrastructure and spaces. This demand further emphasizes the idea that the railway station could continue to serve as a campus. It is also possible to envision Pázmány Péter Catholic University playing a role in this context. In the following chapters, I will explore the possibilities for the area's transformation into a university campus.



HIRLAP →
MEGNYILT

Underpass in front of Déli railway station, 1978 / Fortepan / Kriss Géza

REFERENCES

In this chapter, I would like to show the universities and also the operation and structure of the campuses by presenting and analysing different universities.

First of all, I would like to clarify the following basic concepts: University is delivered from the Latin 'universitas' which means „a number , a prulativity, an aggregate of persons” – a community or society of students and teachers.²⁷ The word 'Campus' is Latin, which means 'field', practically the physical embodiment of the university community.

“not one of the later universities is known to be direct outgrowth of a monastery, but more than one - among them the university of Paris was rooted in a cathedral and the scools annexed to it.”²⁸

The quote above refers to the origin of universities, since most modern universities and European medieval universities can be traced back to Christian monasteries. The first universities are 'the University of Paris' and 'the University of Bologna'. They were established in the same era, which was called 'époque Carlogienne'. In addition to the two universities, church schools were also established in this period, which laid the foundation for the university's typology.²⁹ Over the centuries, universities, technology and society have transformed and developed, but similarities between modern universities and monasteries can still be found.

Medieval monasteries and modern university campuses, though separated by centuries and distinct in purpose, share some intriguing similarities. Both medieval monasteries and modern university campuses are characterized by communal living. Monasteries were communities of monks or nuns who lived, prayed, and worked together, while university campuses bring together students and faculty in a shared environment for learning and personal development. The sense of community is a unifying aspect of both settings. Monasteries were centers of learning in the medieval period, where manuscripts were copied, and scholarly activities took place. Similarly, modern university campuses are hubs of education, where students pursue various academic disciplines and research. In both settings, knowledge is a central focus.

The physical embodiment of universities, the campuses, have changed a lot during the century, often taking on the spirit and ideals of the given era, but they have one thing in common, they often form an area well separated from the city and indicate the existence of the university community.

On the following pages, I illustrate the different ideologies that shaped the formation of the campuses by presenting ten universities and their campuses.



Déli railway station, Krisztina körút to the left, 1962 / Fortepan / Racsmány Dömötör

UNIVERSITY CAMPUSES

The University of Virginia, nestled in the city of Charlottesville, was founded by Thomas Jefferson in 1819. This prestigious institution embodies his vision of an academical village, a concept he devised to promote both intellectual pursuits and community interactions within a well designed physical environment.³⁰

The plan Jefferson was proposed for the university consist a main open square 'Lawn' boarded with the university building that shapes an U form. One of the most iconic features of the University of Virginia is the Rotunda, which serves as the central hub of academic life on campus. The Rotunda, often referred to as the 'heart' of the university, houses various classrooms, faculty offices, and a magnificent dome room, which serves as a venue for lectures, meetings, and special events. The Lawn, a terraced green space and the most important part of the university, flanked by student rooms on one side and faculty pavilions on the other. It's a place where students and professors can come together for discussions and gatherings,

promote a strong sense of community. The university's landscape is equally impressive, with sprawling lawns and gardens that offer picturesque views of the surrounding Blue Ridge Mountains. The academic village concept envisioned by Jefferson encourages both intellectual discourse and personal connections in a natural setting.³⁰

The Campus shown a clear border, separates itself from the city, building a unity. Jefferson reached back to classicism, this can be seen not only in the Rotunda and the style of the buildings, but also in the landscape that the buildings contribute to. The campus is characterized by strong symmetry and square picturesque spaces.

The University of Virginia is a landscape-dominated campus type, where the landscape and the spaces are more dominant than the buildings around them. This type of campus has a sense of place, a well planted greenery that provides a relaxing and reflective environment for learning.³¹



The campus of the Illinois Institute of Technology in Chicago is a proof to modernist architecture, where lines, innovative design, and a blend of function and form create a unique academic environment. Founded in 1940, IIT's main campus, located in Chicago's Bronzeville neighbourhood, reflects the principles of the Bauhaus and the vision of its pioneering architect, Ludwig Mies van der Rohe.³²

Mies created a grid as a structural model, he used it to determine not just the building but the room sizes too. "Orderliness was the real reason," said Mies about the grid structure. Furthermore he describes the space between the buildings created by the grids as 'universal space', a space that flows between the building.³³ The campus of the Illinois Institute of Technology is a Grid-dominated campus. The grid, whether it exhibits a preference for one of its axes or not, offers a rational foundation for the design of university campuses. The orthogonal arrangement, with streets, pedestrian pathways, or infrastructure corridors intersecting

at right angles, maximizes land utilization while creating a network of diverse routes within the campus. The permeable nature of gridded layouts aligns with the democratic principles that many universities uphold, facilitating a high degree of adaptability in land use. The various blocks within the grid can accommodate a wide array of educational functions, and the rectangular parcels of land typically allow for future expansion.³¹

Unlike Jefferson's campus, Mies's campus does not enclose space, there is no static space, but the space flows dynamically between the buildings. Although the university forms a unit within the city, its borders form a transition into the city. The rationality and unification used by Mies breaks the commune character of the university, erases the hierarchy of spaces and unifies them.



Columbia University, located in the heart of New York City was established in 1754, the university's Morningside Heights campus is a vibrant hub for the Columbia community and the city at large.

Usually universities and colleges in the USA were exclusive in the countryside. But in this case the Columbia university remains in the city. The main task by planning the campus was to acquire enough space in a rapidly growing city and use it efficiency. By the design of the masterplan, the architects used a method called 'City Beautiful'. It is an approach, where instead of clumping buildings together in courtyards, the buildings were placed on intersecting, perpendicular axes. The campus lies on more squares of the grid system of New York, and the architects used the axis of the city's grid system to place the main building of the campus. On the intersection point where the main building is placed is the University library. The 'Low Memorial Library', a grand neoclassical structure, is the centerpiece of the campus and symboliz-

es the university's commitment to knowledge and intellectual pursuit. On the original plan, the architect didn't want to eliminate the courtyard entirely, he wanted a balance between an Atrium of the Campus, which outline the Library building, and the smaller courtyards, which were crated by the axes.³⁴

The Sapienza University of Rome, known as 'La Sapienza' was founded in 1303, it's one of the oldest universities in Italy.³⁵

During the times of Mussolini, Rome significantly altered its look. Broad roads, numerous municipal buildings, as well as new urban complexes were created. One of these was built in the San Lorenzo district. The university town which sprung up here in 1932, was very important project for the Fascists. Here were most of the faculties of the University located.³⁵

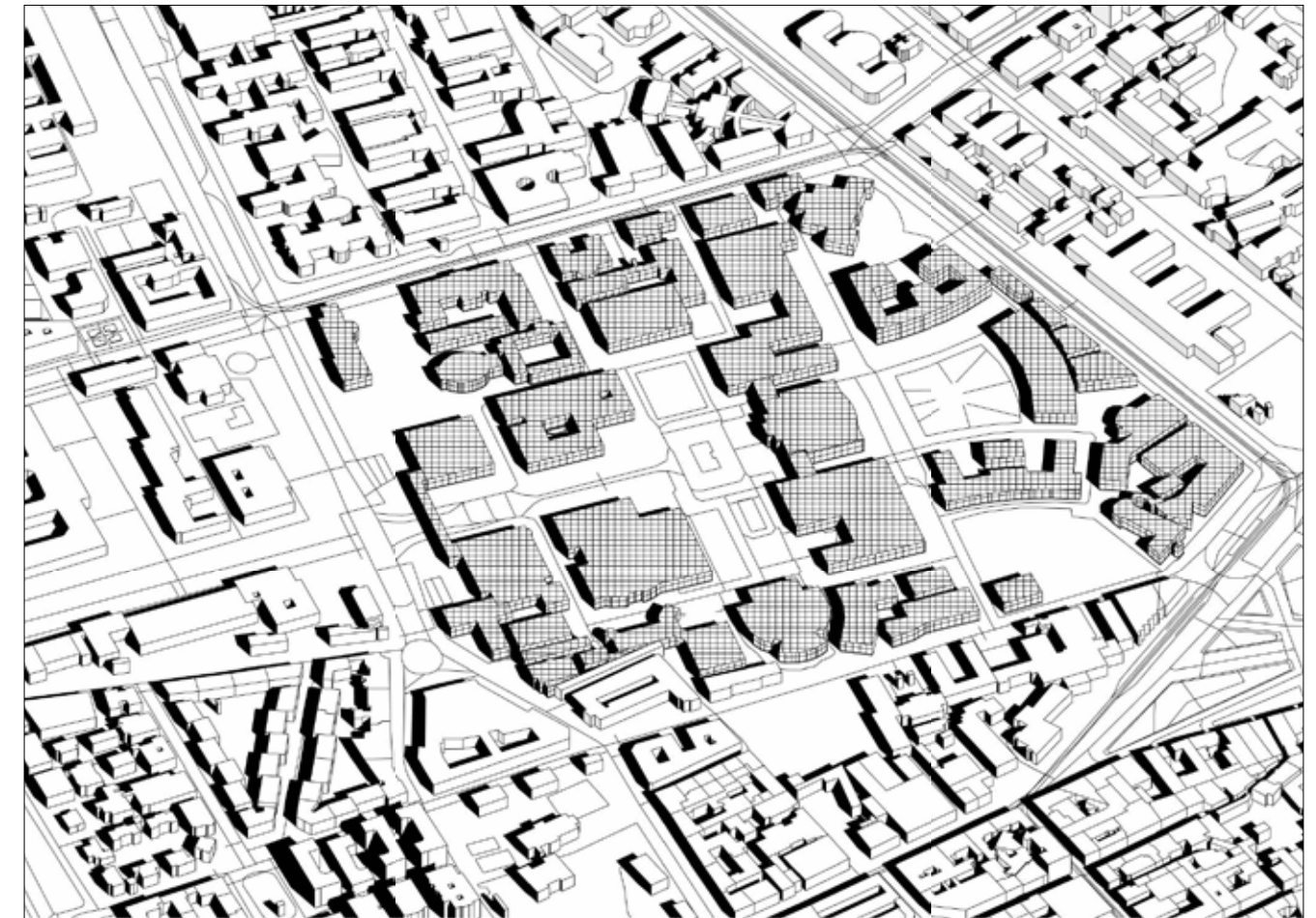
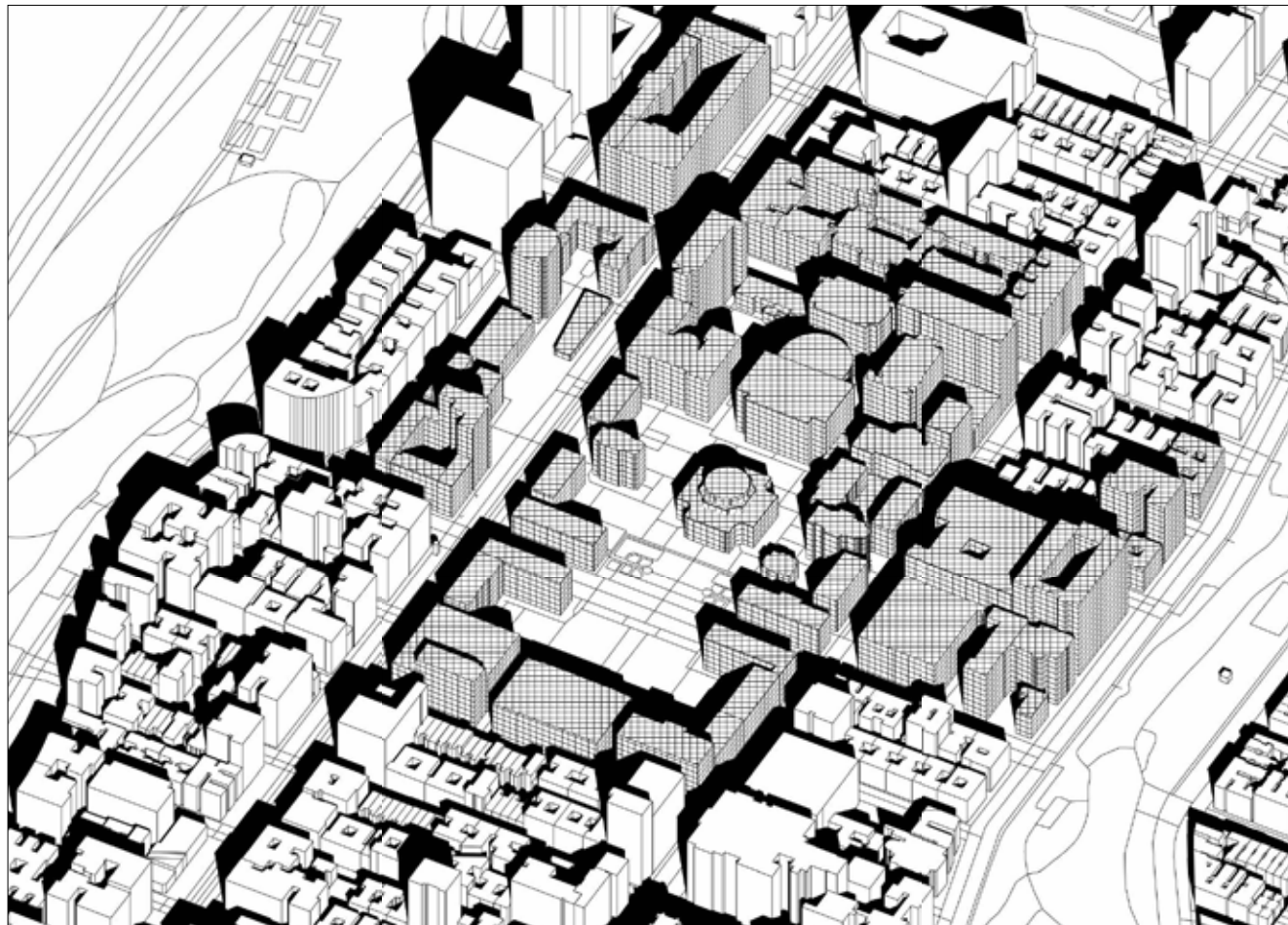
On a relatively small, rectangular land plot a university campus was created which would bring together tens of institute buildings, as well as additional structures, such as bars, a preschool, a post office a bank, and even the

offices of the university militia. The designs of individual faculties were entrusted to architects from various parts of Italy. Stylistic unity was not required - on the contrary: the city was to represent stylistic pluralism but also prove the modernity of Italian architecture, which used not only marble and columns but also reinforced steel constructions and glass.³⁵

The urban concept was based on the plan of a forum with the main building of the 'Rectory' (*Palazzo del Rettorato*), around which the head offices of each individual faculty were concentrated. It was possible to access the complex from various sides, however, the representative entrance was situated at *Piazzale delle Scienze* (present-day *Piazzale Aldo Moro*), where monumental propylaea with a double row of supports were placed. The Campus was accessed by an equally monumental, sixty-meter wide avenue, with the Rectory located at its axis.³⁵

The similarity between the two universities is that both universities use the axes offered by the city. At both universities, the more promi-

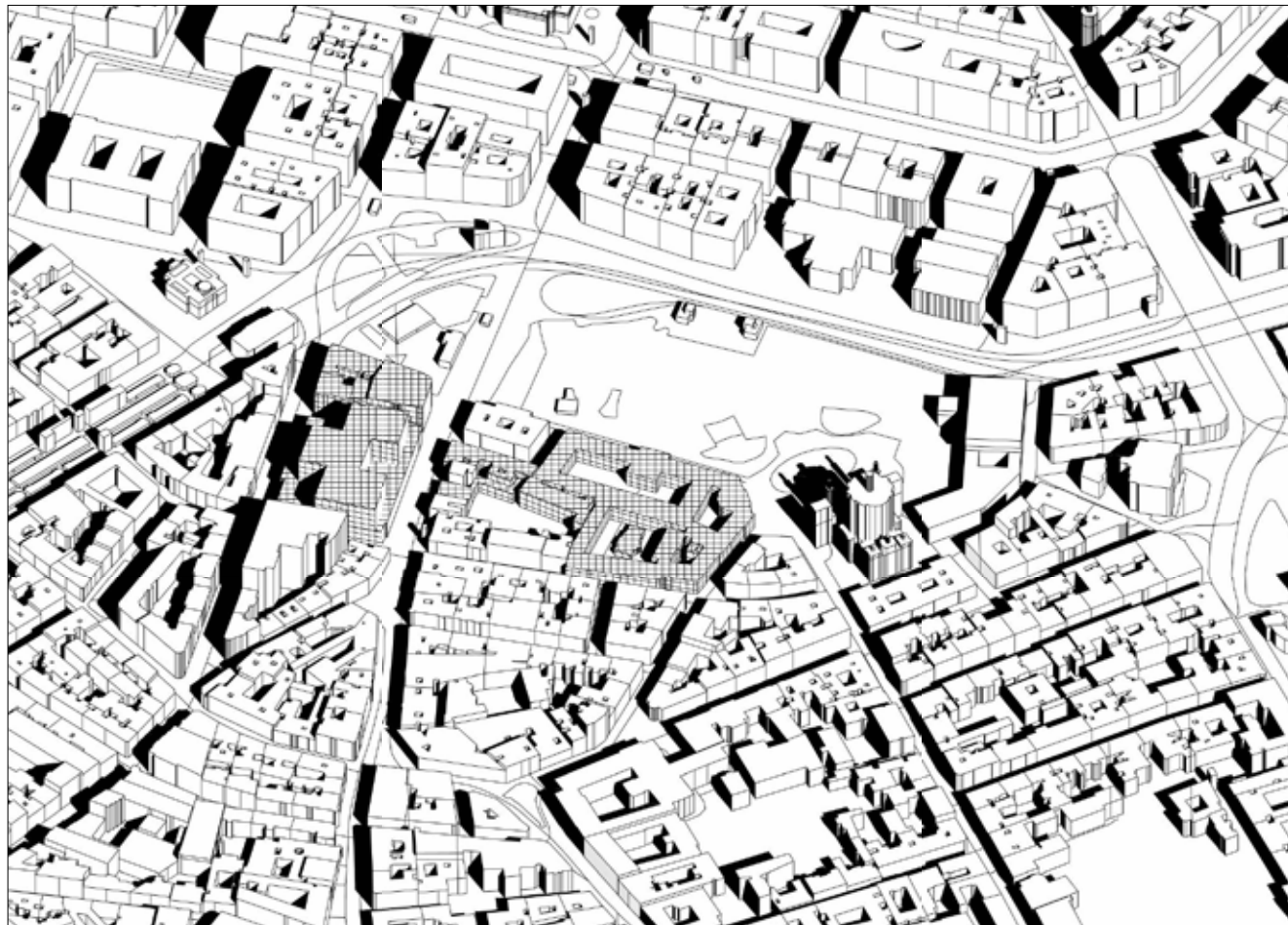
nent buildings were placed at the intersections of the axes, so the resulting picturesque spaces highlight those buildings from their surroundings, enhancing their monumentality. The La Sapienza campus uses the axes used by the city, creating a U-shape around the axis, closing it and placing the *Palazzo del Rettorato* at its end point, highlighting its importance, while the campus of Columbia University, practically enclosing the space as an atrium, where the axis form the entrances and mark the location of the main buildings, including the library. Both, Columbia University and the La Sapienza University, have a strong sense of campus identity forged mainly by the presence of usually large bold buildings and have a strong presence on the street.



The roots of the Sorbonne, or the University of Paris as it was originally called, date back to the 13th century, making it one of the oldest universities in Europe alongside the University of Bologna. The campus itself acquired its current form at the end of the 19th century. The University of Vienna was established and also built in the 19th century. The Technical University of Vienna and the Sorbonne University in Paris have many similarities. The main campuses of the universities are typically located in the heart of the city on a smaller plot. The campuses are characterized by the original hundreds-of-year-old buildings, narrow courtyards and connecting passages. They both share a common campus model.^{36 37}

This particular campus model is often referred to as the 'Collegiate' layout. Historically, these campuses typically trace their origins back to ancient times, with many of them having been privately established or affiliated with religious institutions. The collegiate structure offers several advantages, including fostering

close teacher-student relationships, providing a sense of containment in physical, social, and academic dimensions, and featuring a well-defined typology for the college unit, encompassing components such as gatehouses, quads, lodgings, refectories, and clock towers, among others. However, there are notable disadvantages to the collegiate structure. One significant drawback is the limited central control over individual colleges, which can lead to a dilution of the university's overall identity. While colleges excel at serving as residential units, they are less conducive to accommodating faculty structures. The extensive gardens or enclosed courts associated with this layout demand a significant amount of land per student and result in high maintenance costs. Additionally, expansion opportunities may be constrained due to spatial limitations. Furthermore, essential university components such as libraries, lecture theatres, laboratories, and sports facilities may be located at a distance from the individual colleges within the collegiate structure.³¹



The origins of *Città Studi* can be traced back to the establishment of the Palace of the Senate on November 29, 1863, which served as the original building for Politecnico di Milano. Recognizing the constraints posed by limited space and the growing student and faculty population, a decision was made in 1910 to relocate Politecnico di Milano. This decision was influenced by the concept of well-known American and British higher education campuses of that era, with the aim of creating a dedicated scientific educational district. Finally, after the war, a location outside the city center was chosen, which is still the main campus of the university.³⁸

The 20th-century urban expansion of Milan is notably characterized by its distinctive urban layout. This expansion is evident in the form of what is often referred to as the "donut" pattern, signifying a ring-like radiating growth outward from the city center. In these newly developed regions, the existing city axis was meticulously preserved and extended, thereby serving as the foundation for the new urban framework. Along

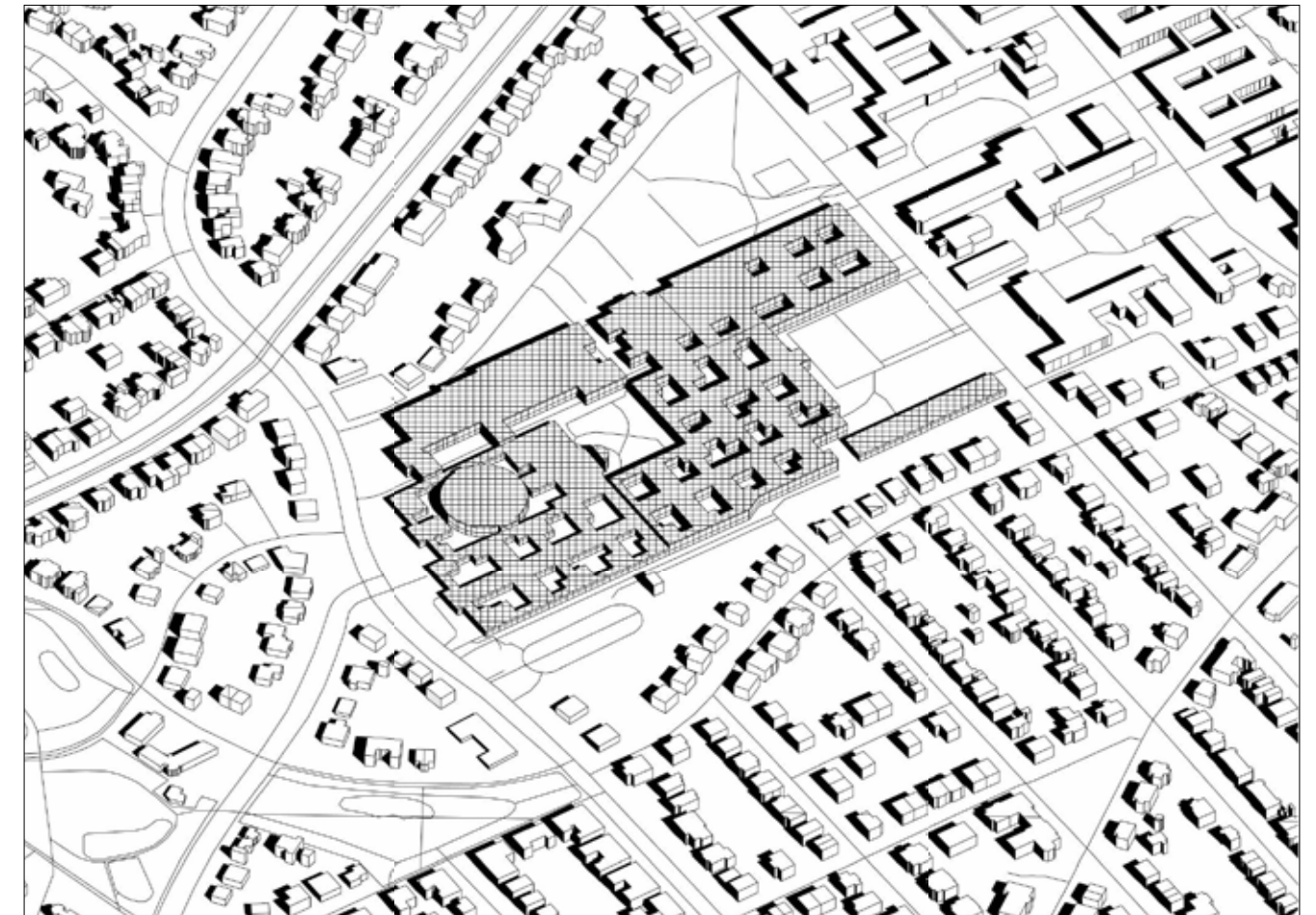
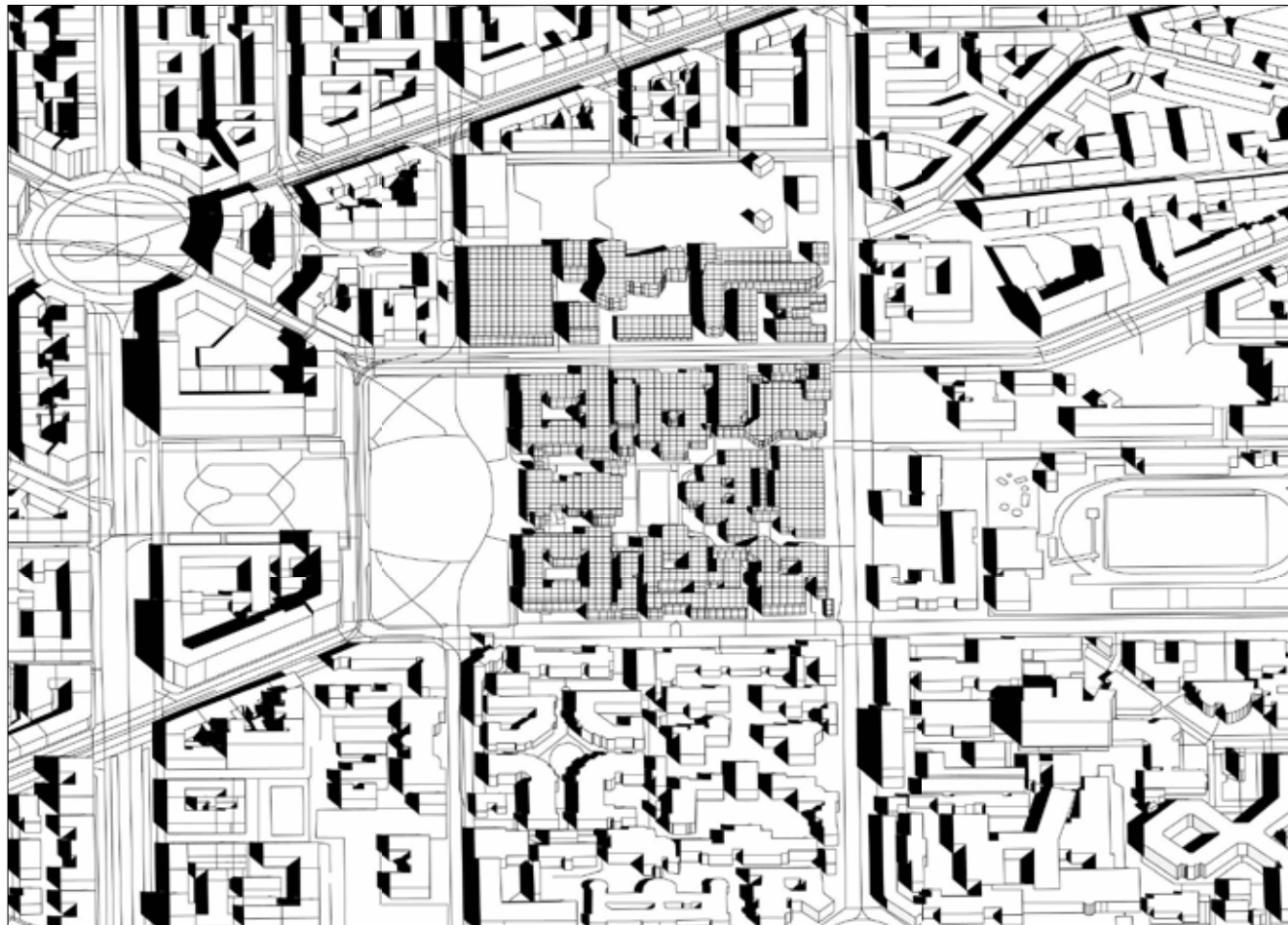
these axes, public spaces were situated, and this principle was consistently applied to the new expansion areas.³⁸

The Politecnico campus also uses such axes. At the intersection of two city axes, there is a square surrounded by the buildings of the university, so to speak, on the street front, between the two axes, the rector's office is located, as if the most prominent building. There is a large square in front of the campus, which, so to speak, removes the university from the city, creating an urban space.

The Free University of Berlin (FU) was founded in 1948 by professors and students - as a response to the persecution of students critical of the system at the University of *Unter den Linden*, located in the then Soviet sector of divided Berlin.³⁹

The number of students at the FU rose steadily over the course of the 1950s. In the 1960s, the FU developed into a mass university. A major expansion of the university was the development of the so-called fruit growing area in *Dahlem*. In 1963 an architectural competition was announced for the extension. The most striking feature of the design is the polycentric circulation, which runs through the building like a street grid. A large number of inner courtyards were created through the grid. Three parallel corridors run along the length of the building - from *Habelschwerdter Allee* to *Fabeckstrasse*. Across the main "streets" there are several narrow corridors, also parallel to each other, which are numbered.³⁹

The Free University of Berlin adopts a modular-based masterplan approach. This type of masterplan relies on the use of recurring units that can be configured and scaled to suit various university needs. It essentially provides a set of components that can be assembled in different ways, offering the university several advantages. It brings a sense of visual coherence to the campus and, by leveraging mass production techniques, it offers cost-efficiencies. Modularity is particularly well-suited for elements of the university that involve repetitive units, such as student housing or research facilities. It is also a suitable approach for universities that follow standardized architectural plans. However, there are some drawbacks to this approach. It may result in a visual uniformity that lacks differentiation in terms of functional hierarchies. Moreover, this approach establishes a clear organizational structure into which future expansion can seamlessly integrate.³¹



Following the competition for the Ecole Centrale in Saclay, OMA has been appointed as the urban planner and designer for the master plan of Joliot-Curie, an expansive 33-hectare area surrounding the Ecole Centrale. Situated on the plateau de Saclay, 40 kilometres from Paris, this cluster is home to many French institutions, including CentraleSupélec, Polytechniques, Ecole Normale Supérieure, Mines Tech, and Paris Sud, alongside research and development units of major corporations.⁴⁰

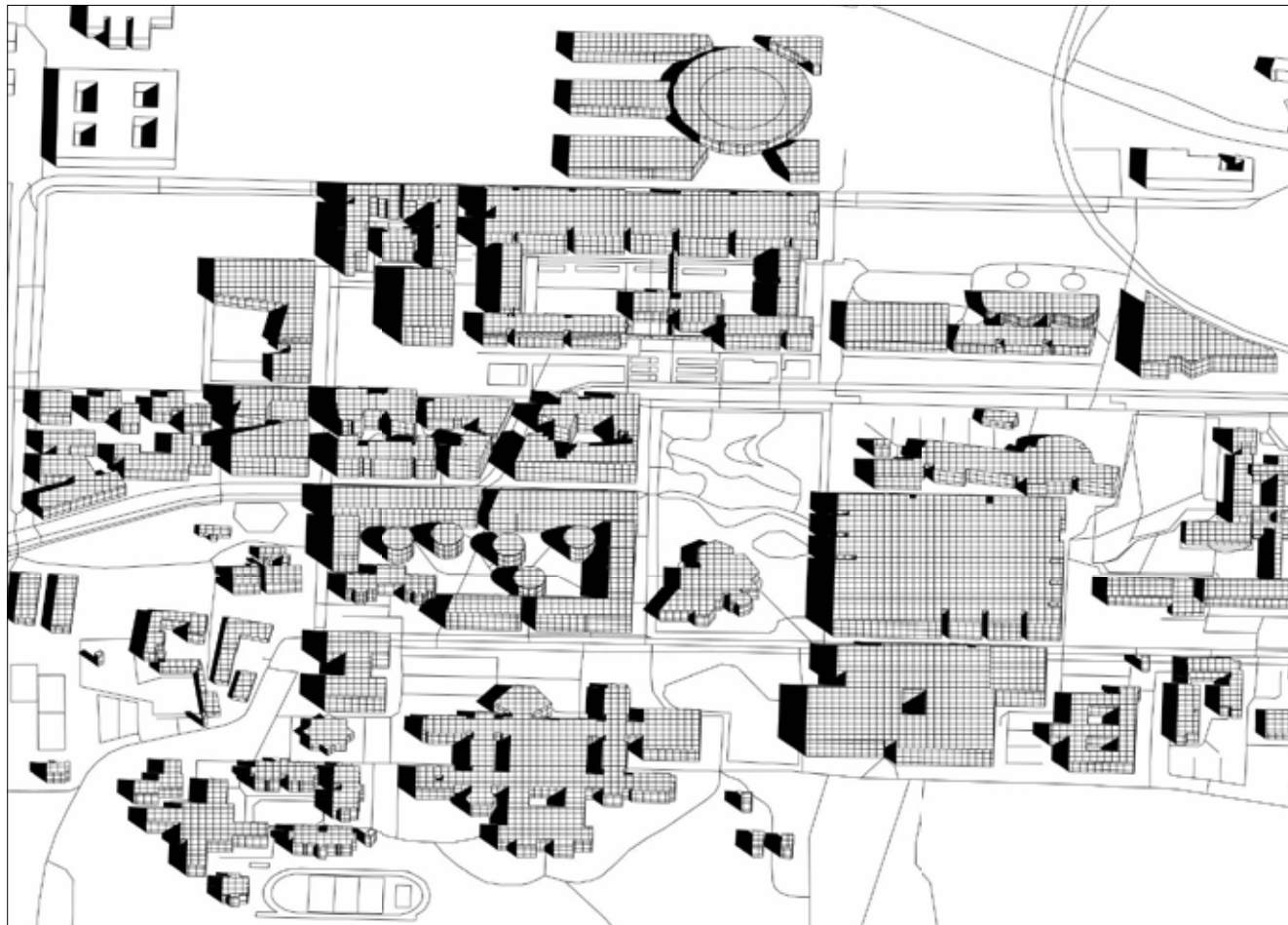
Encompassing over 250,000 square meters of mixed-use development, which includes accommodations for students and families, public amenities, commercial spaces, and communal areas, this new district aims to foster the growth of a unique 'urban campus'. The master plan, based on a grid structure, serves as an extension of the LabCity, a flexible yet well-organized urban concept capable of accommodating a diverse range of programs and seamlessly incorporating existing structures into a cohesive and efficient scheme. Public spaces, thought-

fully integrated with the surrounding natural environment, play a pivotal role in connecting the various functions and promoting interactions among different users. The master plan places a strong emphasis on density and intensity for student housing, while simultaneously tailoring the design of family housing plots to accommodate a wide range of lifestyles.⁴⁰

The École Polytechnique Fédérale de Lausanne (EPFL) was established in 1969, growing out of the former École Polytechnique de l'Université de Lausanne, evolving from a cantonal engineering school into a federal institution. The Swiss federal government aimed to enhance and relocate the entire institution to a unified, newly developed site in Écublens-Dorigny. The initial structures on EPFL's fresh campus were officially unveiled in 1978, with construction activities extending over several more decades. The university is essentially based on a modular system, which developed from its core over the decades and took on its current form. This modular system is complemented by some notable

buildings, such as the Rolex Learning Center designed by SANAA.⁴¹

Both campuses are larger than the universities presented so far, and both are located outside the city center, in less urban areas. Their common feature is that both campuses have a multifunctional monumental building that distinguishes itself from its surroundings and dominates the landscape. The Rolex Learning Center stands as the iconic building for EPFL, while the LabCity building serves as the centerpiece for Saclay.



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Vérmező, on the left, the Herman Ottó memorial fountain by sculptor Róbert Csíkszentmihályi, 1974 / Fortepan / Gábor Viktor



PROPOSAL

Based on the analyses, it can be inferred that there are essentially two ways to establish the relationship between a campus and the surrounding city. The first design approach involves the university's buildings enclosing one or more squares, essentially creating a closed island. The second design method entails the buildings forming dynamic spaces and seamlessly integrating with the city and its structural layout. In the first design mode, the campus spaces take precedence, whereas in the second mode, the buildings assume a more dominant role. In the forthcoming chapter, I will explore how these distinct methods can be applied to the railway station area.



CONNECTIONS

The urban context revealed that the area of the *Déli* railway station forms an independent island, which doesn't really have any points of permeability. This can be clearly attributed to the characteristics of the terrain and the establishment of the railway station. The diagram below clearly indicates the pedestrian accessibility of the area, with arrows showing possible pedestrian routes. The diagram effectively illustrates the island-like nature of the railway station and the separation of the two city parts, *Krisztinaváros* from the 12th district. Currently, there is no passage through the train station, but there is an 'entrance' from the direction of *Alkotás utca*, a zebra crossing leads to the railway station area from *Nagyenyed út*, and from this entrance, it is possible to cross the area through the station hall and reach *Vérmező*. Apart from the *Nagyenyed* entrance, crossing is only possible via the *Márvány utca* bridge or through the underpass in the center of the railway station. The density of the area's passability can also be observed from the diagram: the

head of the station, where there are also metro and tram connections, forms a densely accessible urban environment, in contrast to the rest of the station.

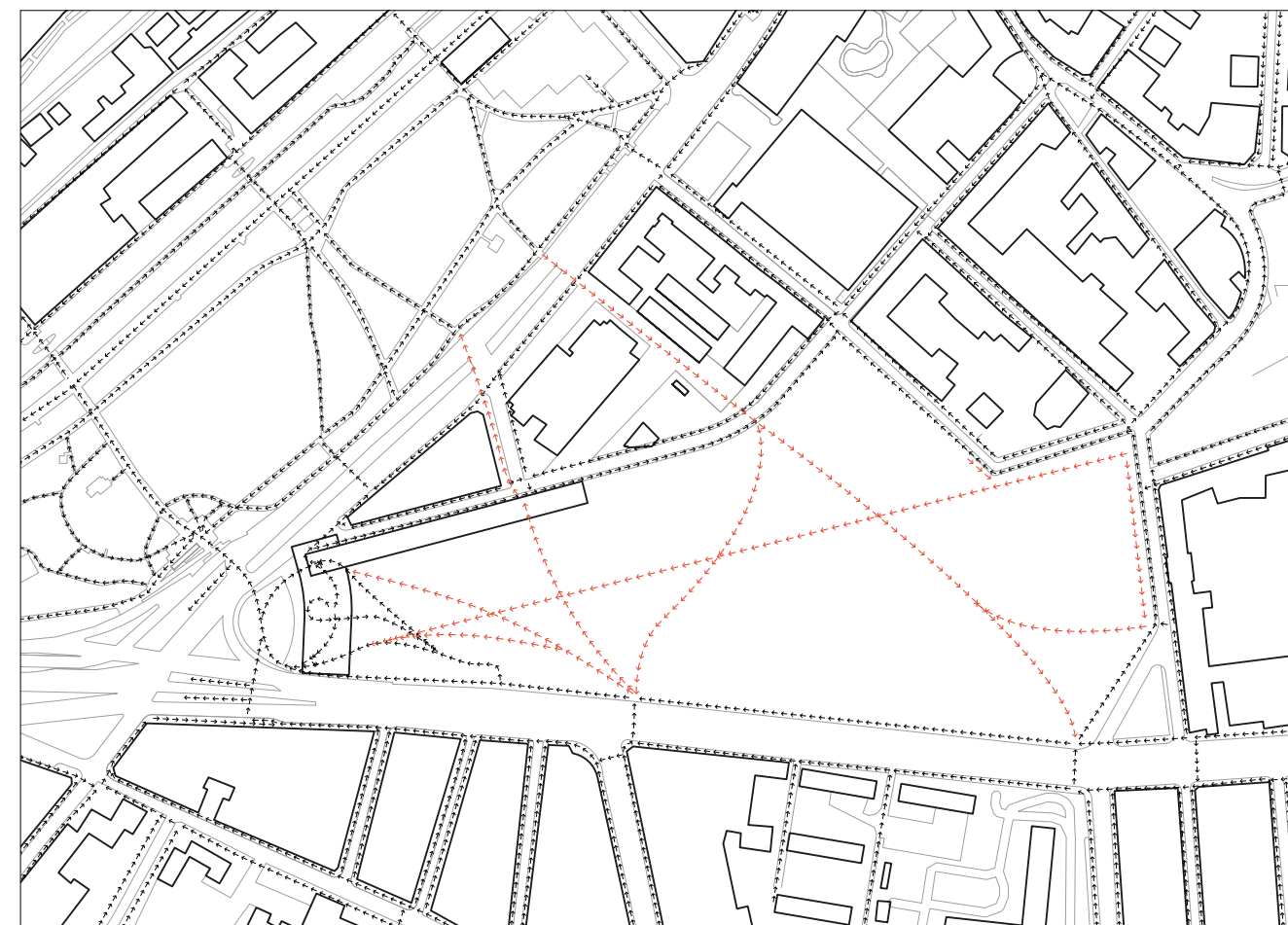
In my opinion, when designing the the new campus, regardless of the location of the buildings, it is necessary to restore or establish access points and streets across the area. The second diagram illustrates how I envision new connections in the area of the new Campus. Essentially, I aim to create new links between *Vérmező* and the part of the town separated by the railway station.

In addition to the central station connection, connections are being established from *Koronaőr út* and *Feszyt Árpád utca*, which seamlessly integrate into the city's structure. It is important to note that due to the elevated ground floor of the railway station, connections will only be possible by stairs.

Beyond east-west accessibility, I also aim to create a north-south route that would connect the current Railway Station Center with the *Márvány utca* bridge and the subsequent development area. In addition to the west-east passability, I would create a north-south connection, which would bind the current Center of the station with the bridge and the subsequent development area.



110 Pedestrian traffic directions in the existing area



Directions of possible pedestrian traffic in the new area without the railway



FACILITIES

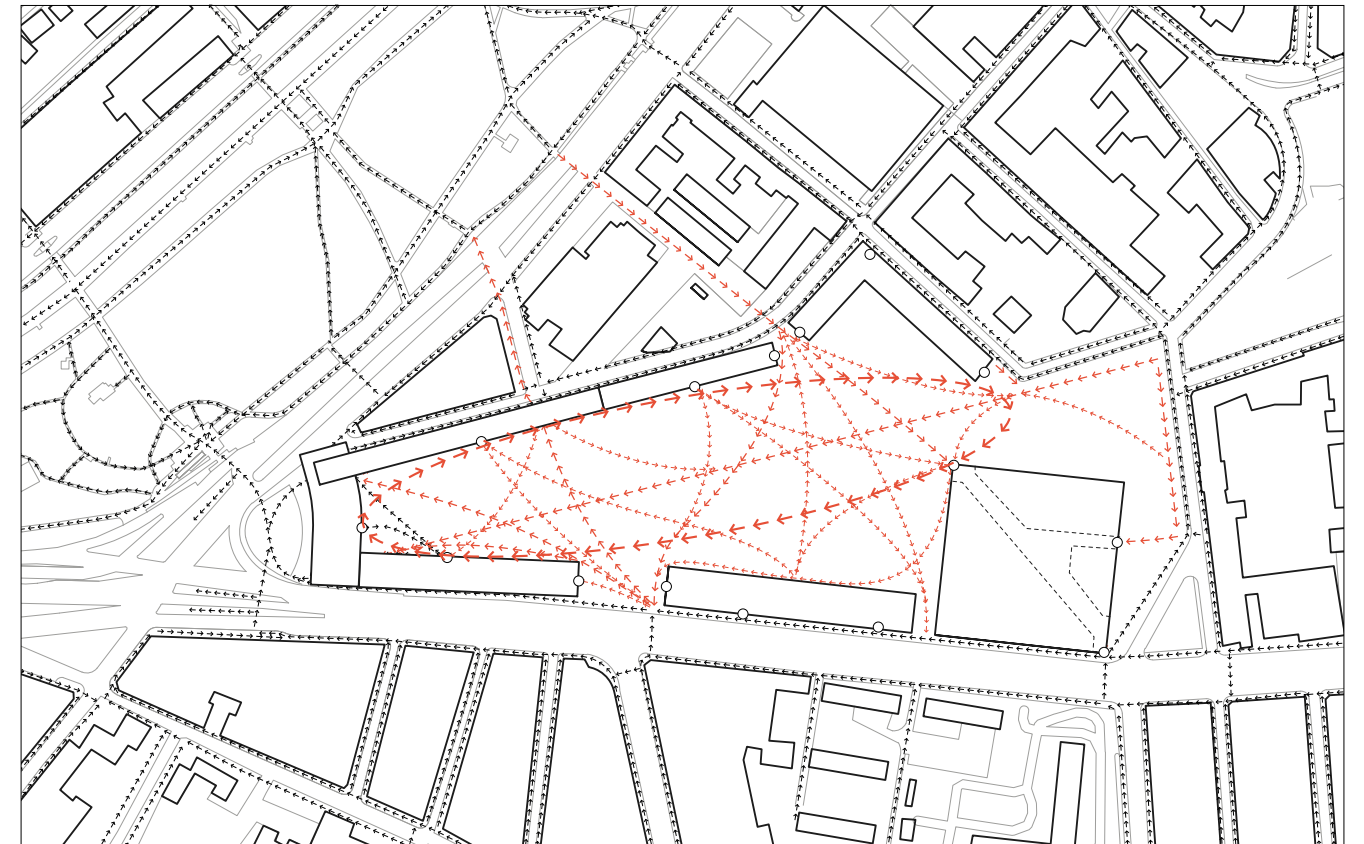
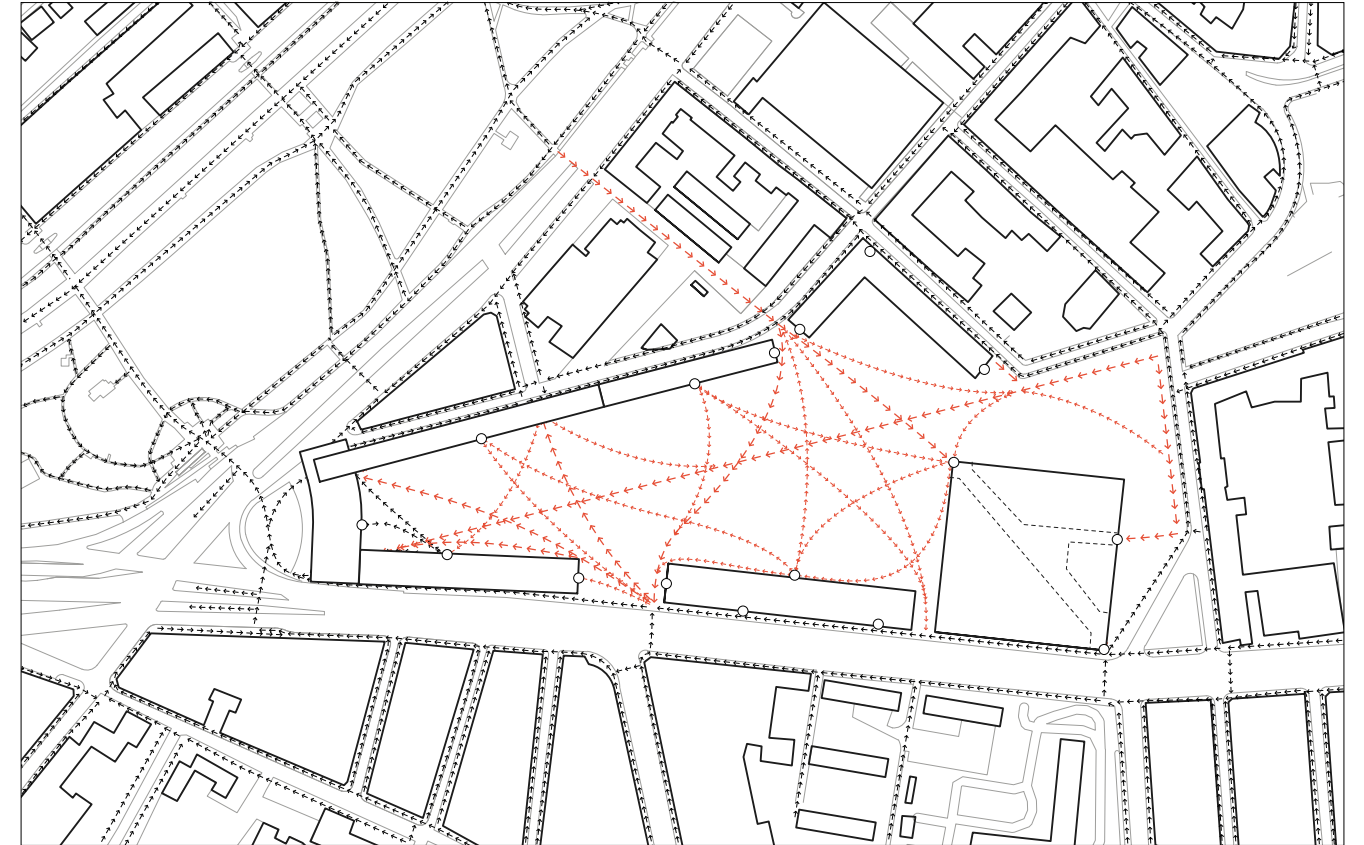
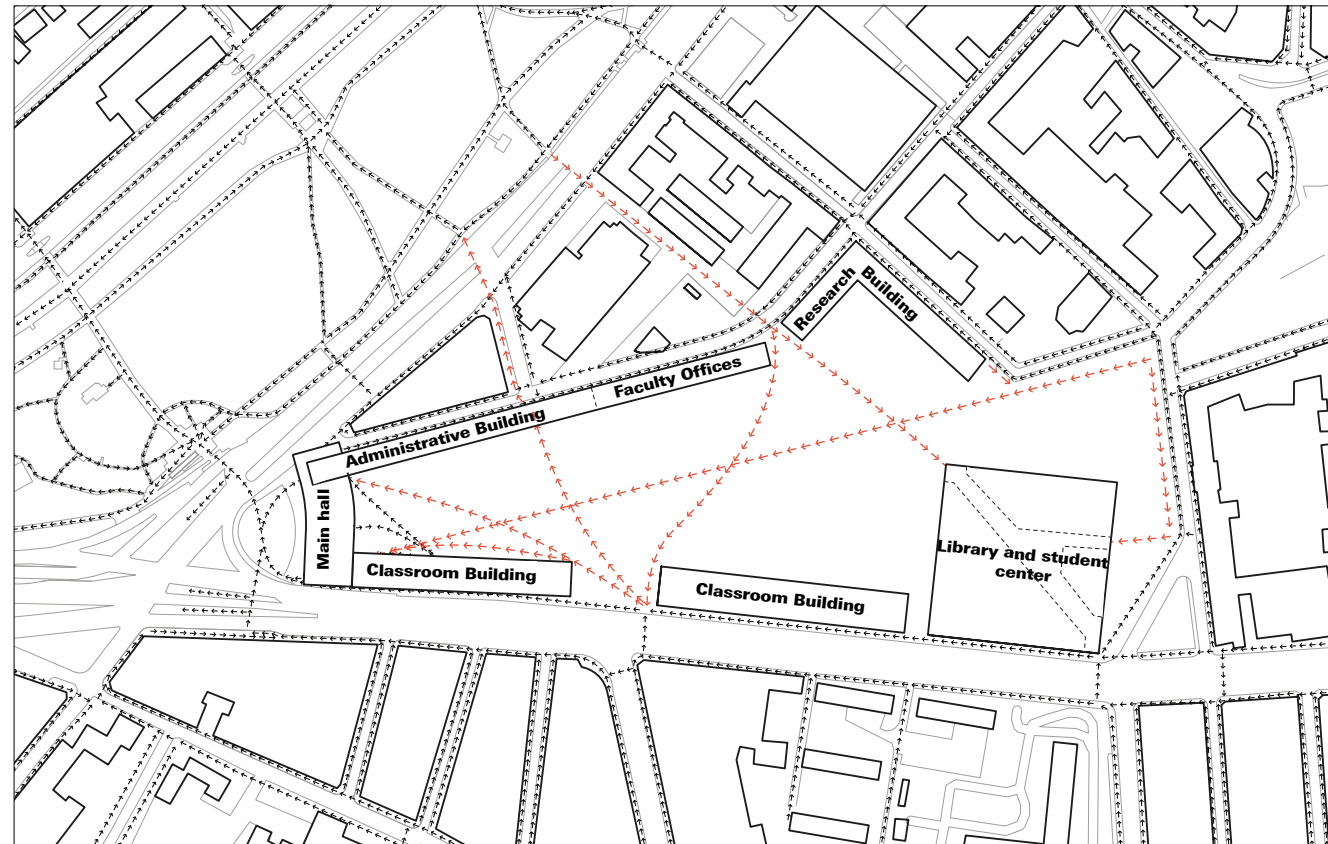
Based on the connections, the areas where it's worthwhile to place the campus buildings become evident, ensuring they don't hinder accessibility. Reflecting on the analysis, the following types of buildings typically find their place on campuses: a library and student center, educational buildings - lecture halls, a rector's office - administrative building, and a research facility. In the campuses I analyzed, the library building, symbolizing knowledge acquisition, and the rector's office usually dominate and stand out from their surroundings.

I would like to implement the emphasis on the library and student center in a manner similar to the Saclay/EPFL campuses. A large rectangular building would serve as the library, functioning as a passageway and arched connection. The library could function as a public library and would be positioned at the southern corner of the railway station, creating another hub and balancing the dominance of the hall. The educational buildings would be located opposite the administrative building of the railway station, acting as a closure and sound barrier toward Alkotás Street. The current station hall would remain as the main entrance and hub, connect-

ing the educational buildings, the administrative building and the faculty building opposite them.

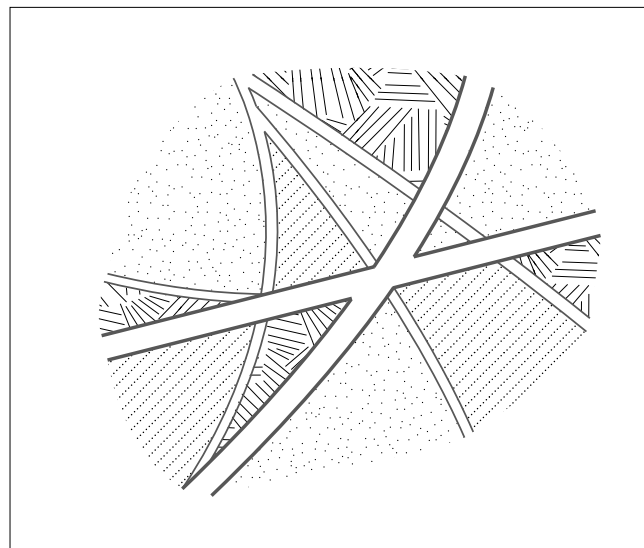
I have designated a possible point for the new buildings, indicating the entrances. By connecting the entrances and integrating them into the interconnecting pathways, a new area of accessibility is created. To allow more than just passing through within the park, I have created an ellipse that integrates well with the central structure of the railway station. This ellipse facilitates circulation within the area.

Within the area, three types of pathways exist: the largest is the raised pergola, also serving as a boundary, with a width of four meters. The second type comprises the pathways ensuring accessibility, with a width of three meters. The third type consists of smaller pathways connecting the buildings, with a width of 1.75 meters.

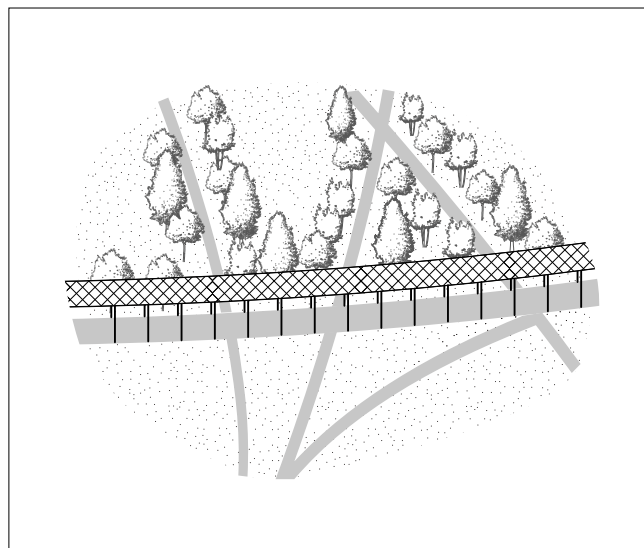


SCENARIOS

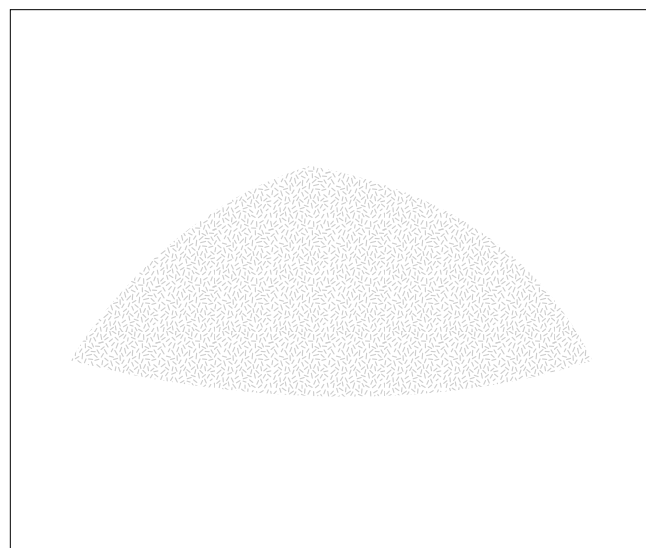
At the center of the newly established campus lies a new green space. This space is defined by areas separated by pathways, where different themes emerge. Due to the diversity of these areas, a sort of hierarchy is established. Fundamentally, two types of areas can be found within the newly created space: green, vegetated areas, and urban, paved areas. The green areas manifest in five different forms: open grassy spaces, flowery lush meadows, community gardens, clearings surrounded by trees, and densely wooded areas. The paved areas can appear in three different forms: as outdoor classrooms and learning spaces, as performance spaces, and as communal areas.



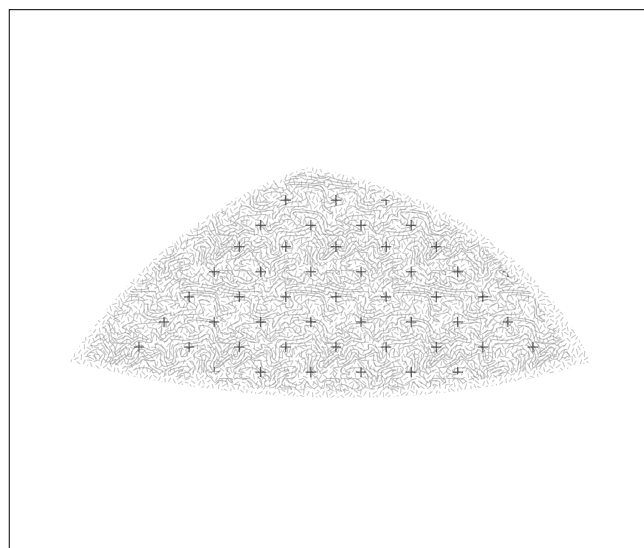
Hierarchy and diversity



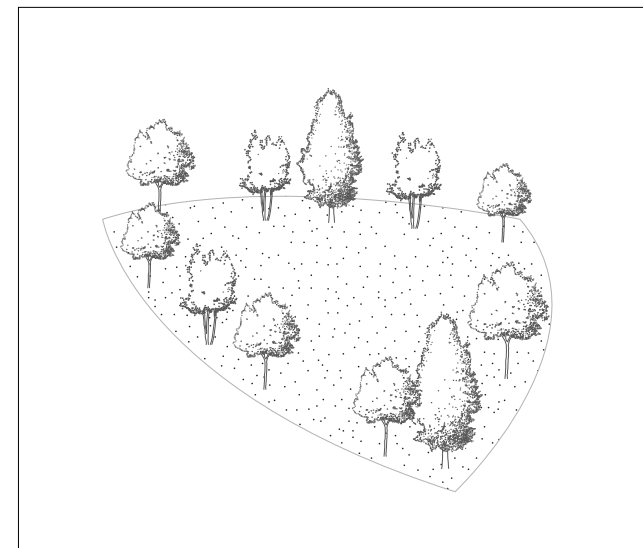
Pergola for the circulation



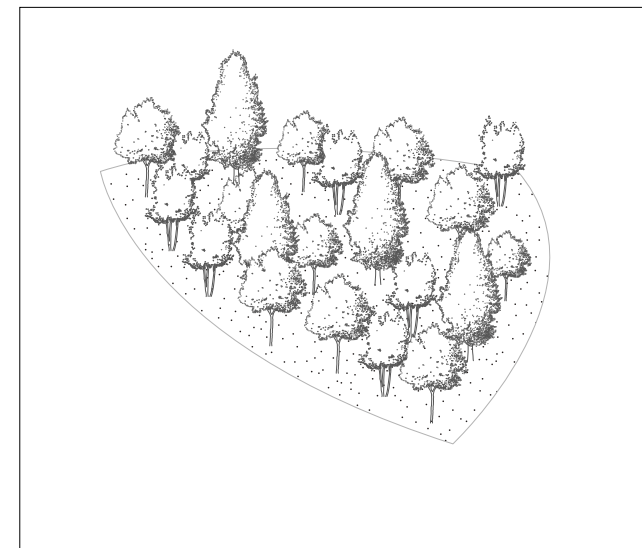
Open lawns



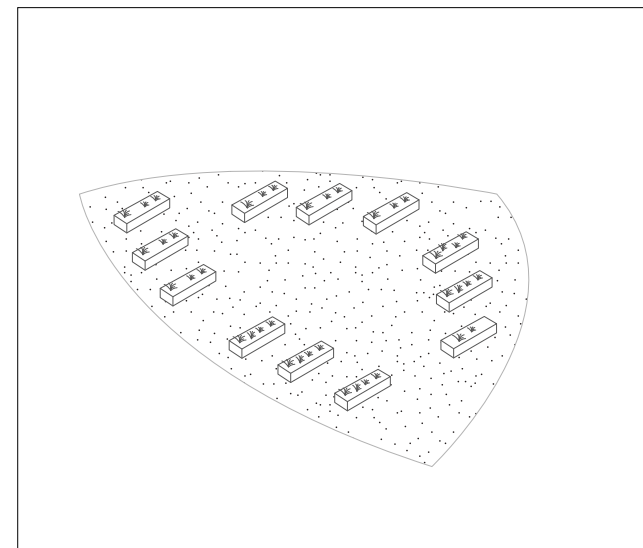
Meadow



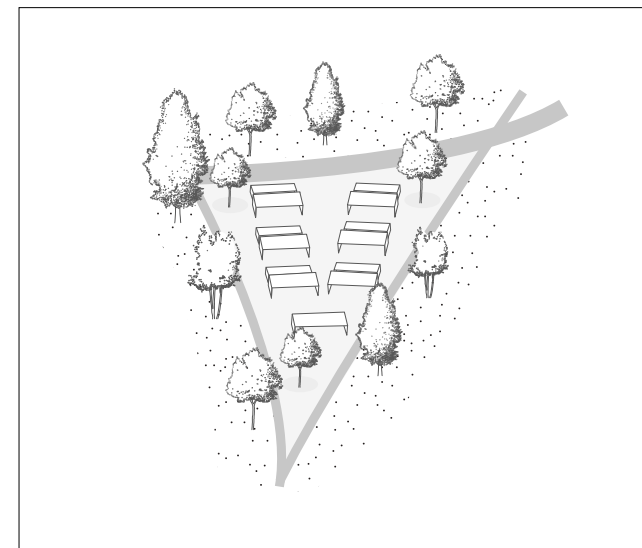
Clearing



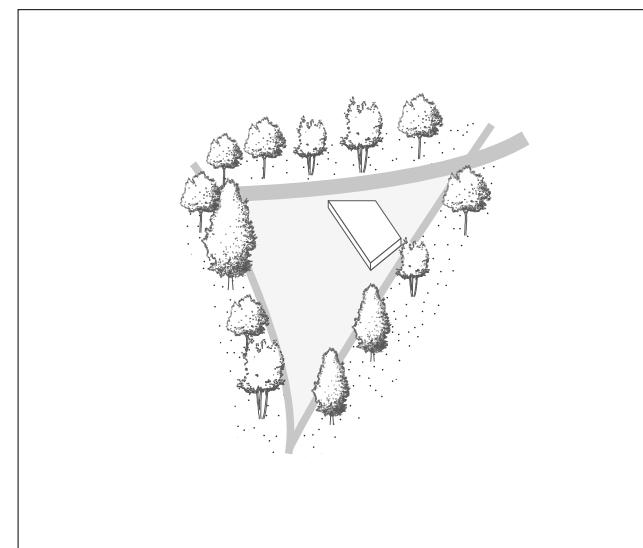
Green oasis



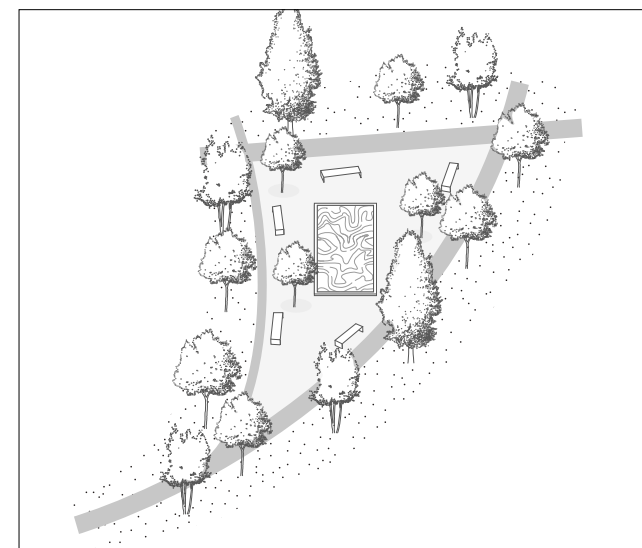
Community gardens



Outdoor Study Area

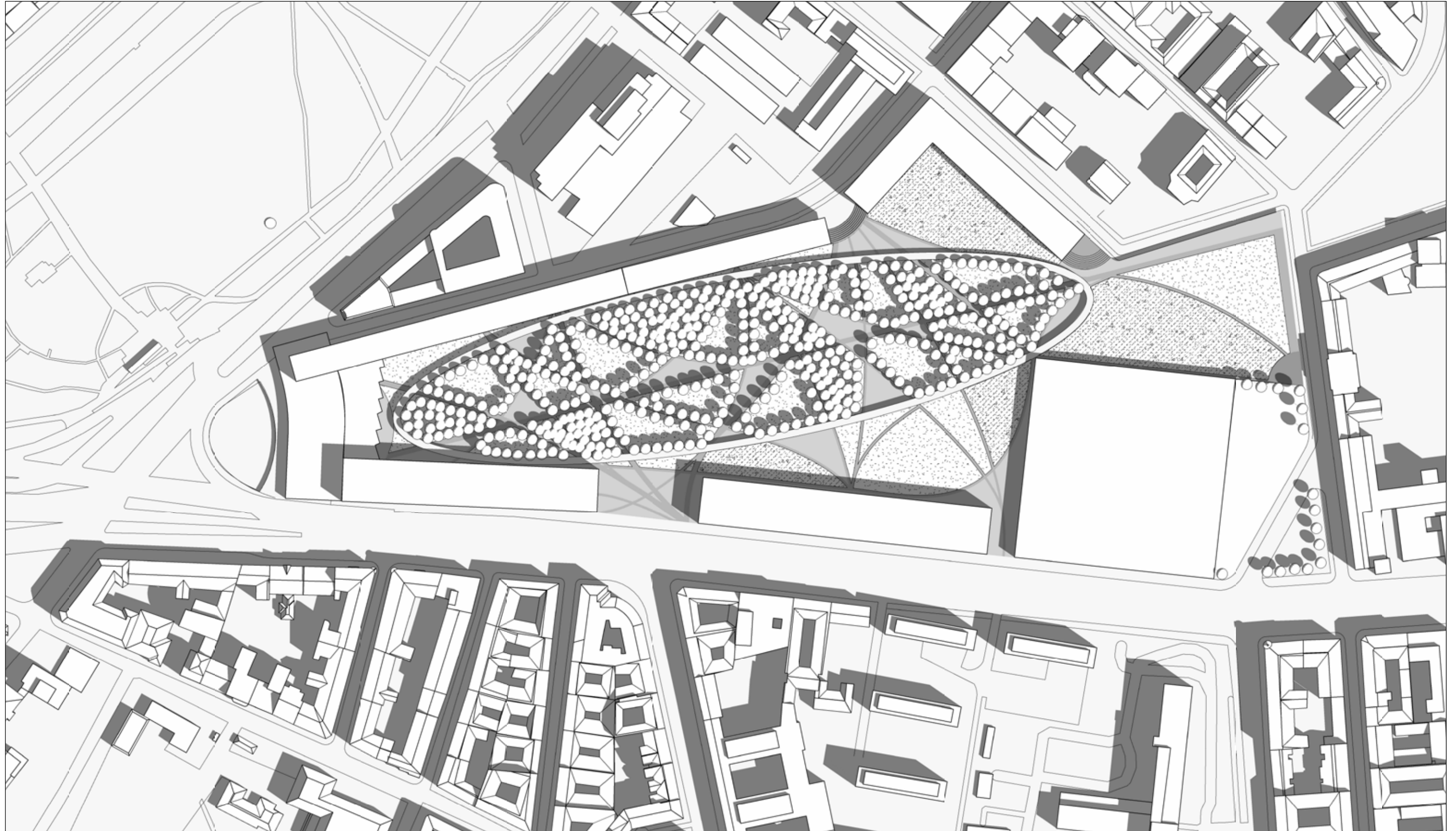


Performance stages



Squares

NEW SITE PLAN

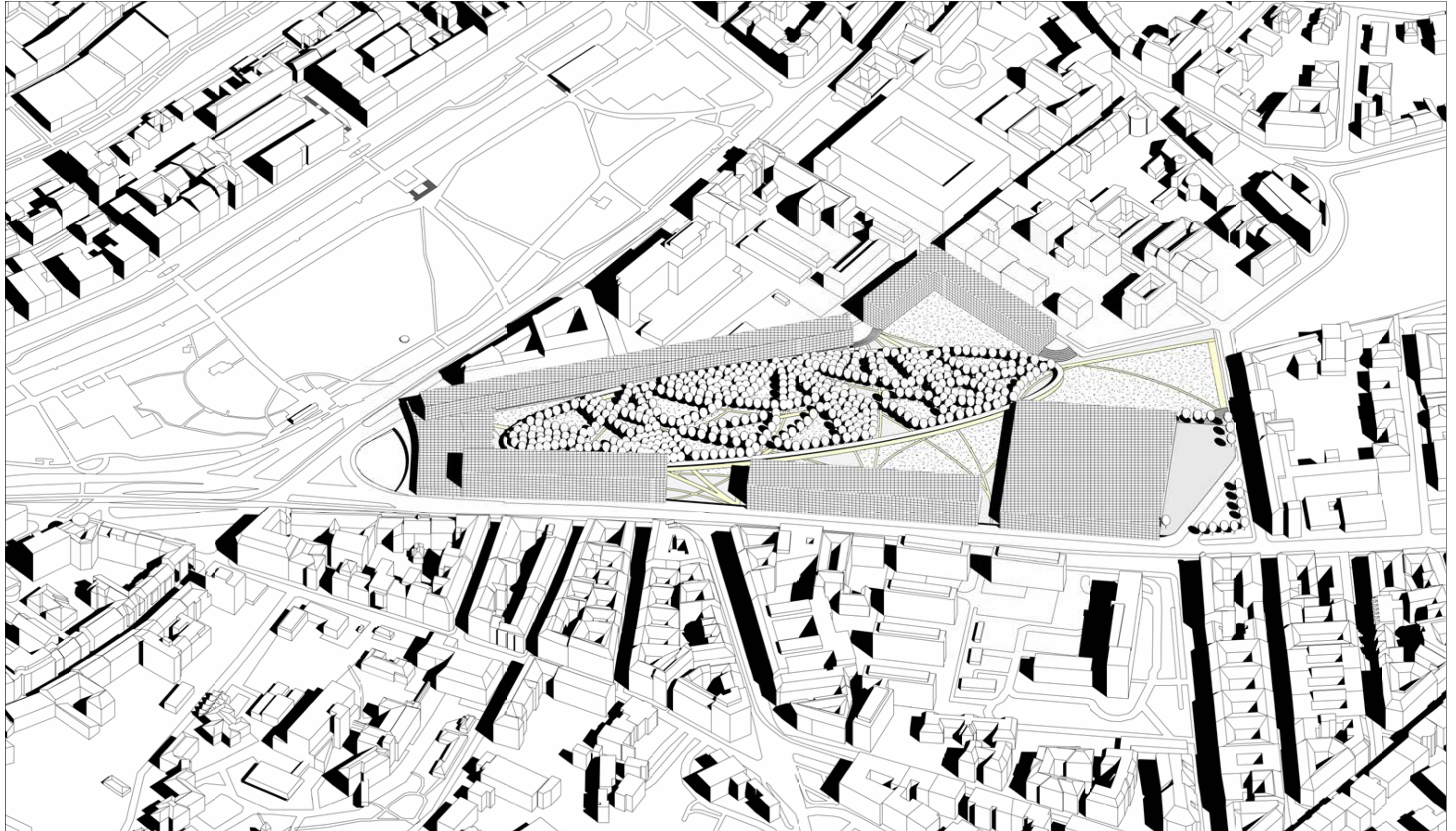


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NEW SITE PLAN AXONOMETRY





Kosciuszkó Tádé utca, opposite the passenger hall of the Déli railway station, 1976 / Fortepan / Domonkos Endre

NEW UNIVERSITY

The universities I have analysed often reached their current form over decades or even centuries, and due to changing needs and society, they will undergo further transformations. In general, campus planning aims to create the most effective use of space and establish a kind of flexibility. In this chapter, I would like to present the possible first phase of the campus I have designed, which includes the transformation of existing buildings and the creation of new functions.

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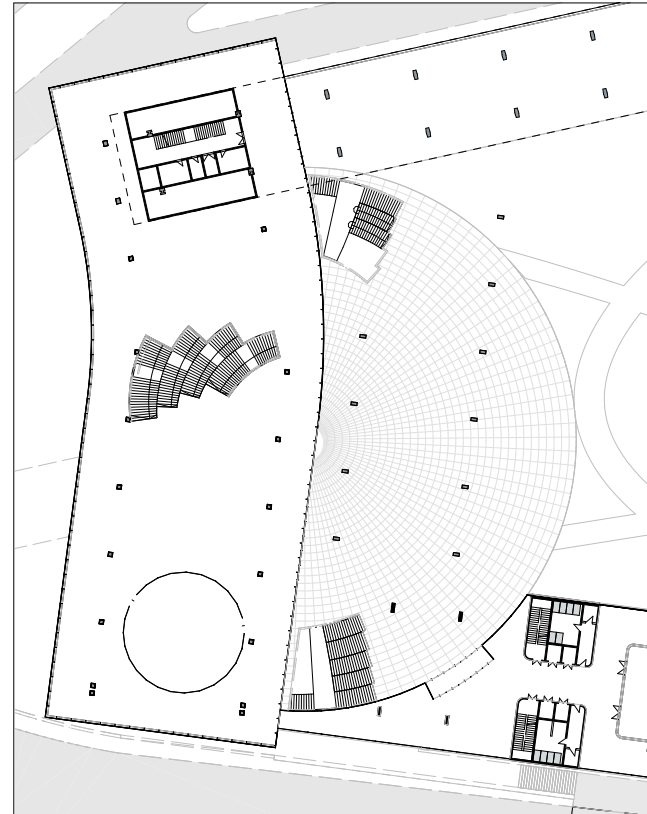
Déli railway station, 1974 / Fortepan / Bojár Sándor

CHANGING ON EXISTING BUILDINGS

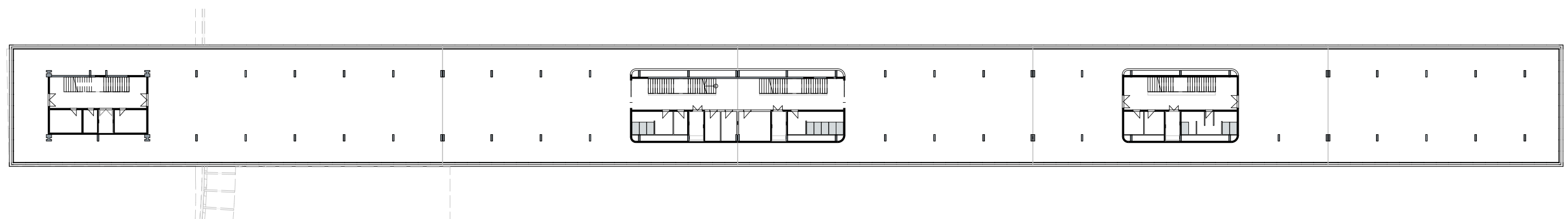
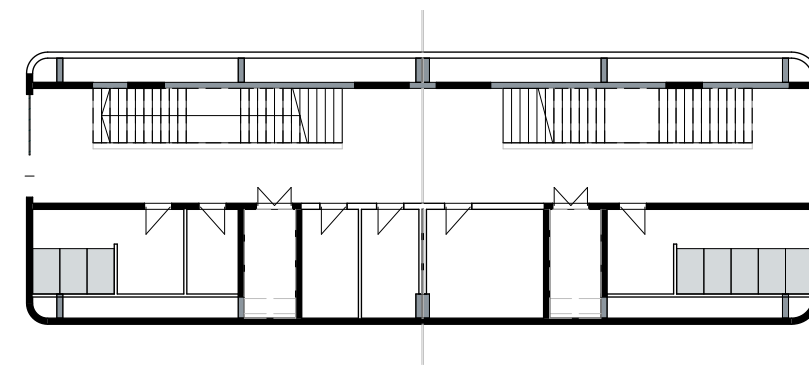
Due to the new typology, it was necessary to transform, eliminate, or create certain elements.

Starting from the ground floor towards Krisztina Plaza, I gave new functions to the rooms previously used by MÁV. Here, you can find the archive and technical rooms of the new administrative building, as well as an entrance to the underground parking, which extends below the campus and connects Kosciuszko Tade Street with the new educational building.

The old waiting hall received a new function, essentially serving as the university's main building. It functions as a distributive space where students and teachers arrive. I will dismantle the current restaurant and bistro to create a new, smaller connection with the administrative building, and restrooms will also be located in the hall. As an addition, I will incorporate a kind of imaginary outdoor circle that differs in material from the external elements and follows the direction of the stairs.



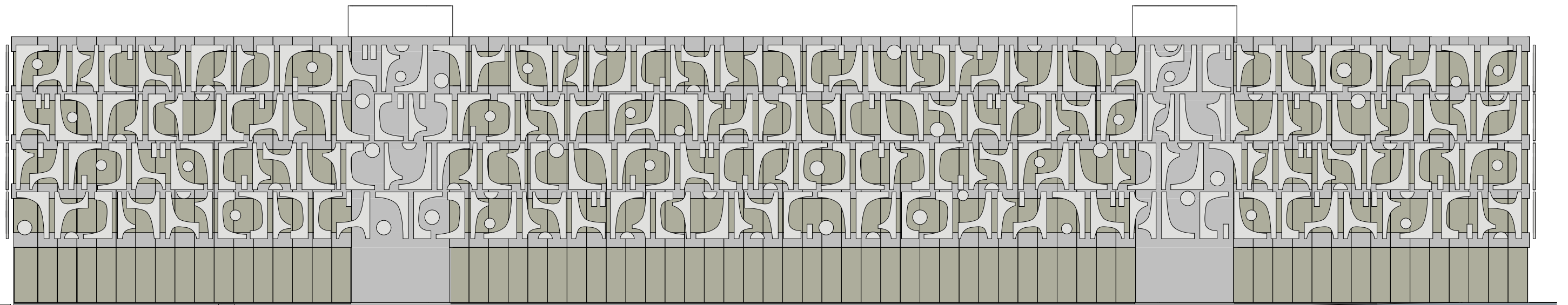
The role of the new administrative building changes less; according to my plans, this building would serve as the new administrative center where deans and the entire administration would be located. To meet today's needs, I simplified the floor plan, which received a new core. In this core, you can find restrooms, staircases, and building services.

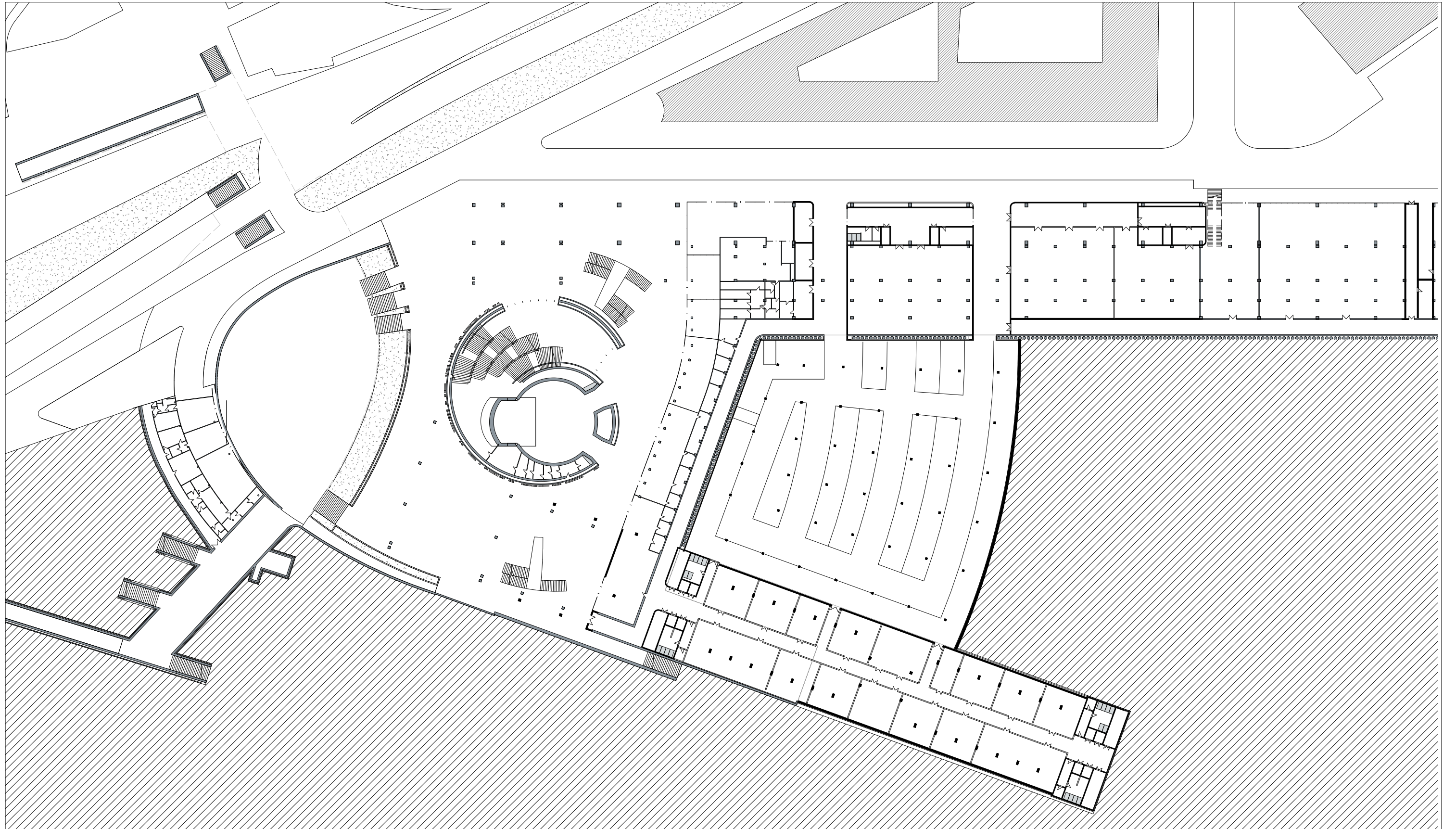


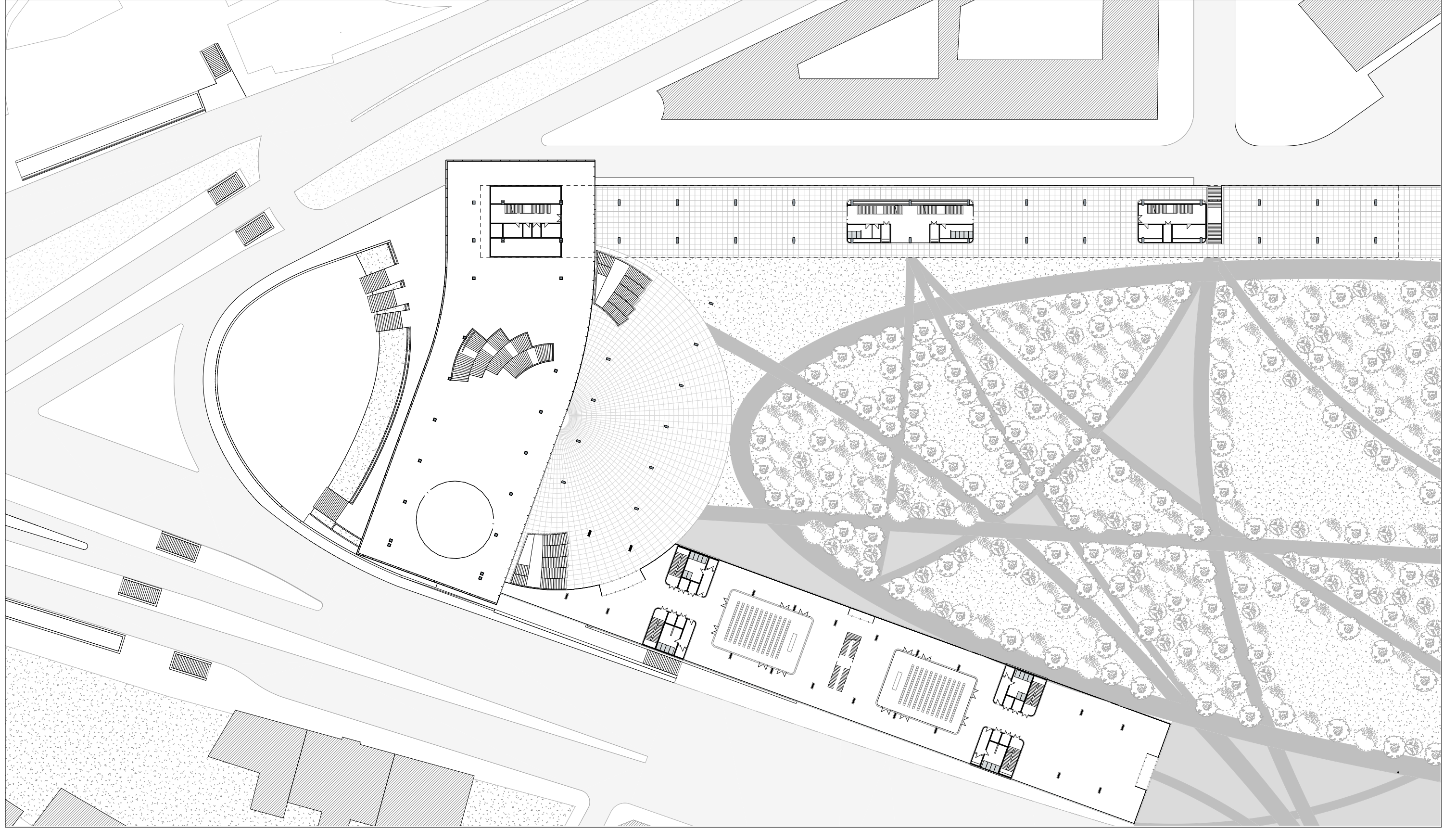
COMPLETION

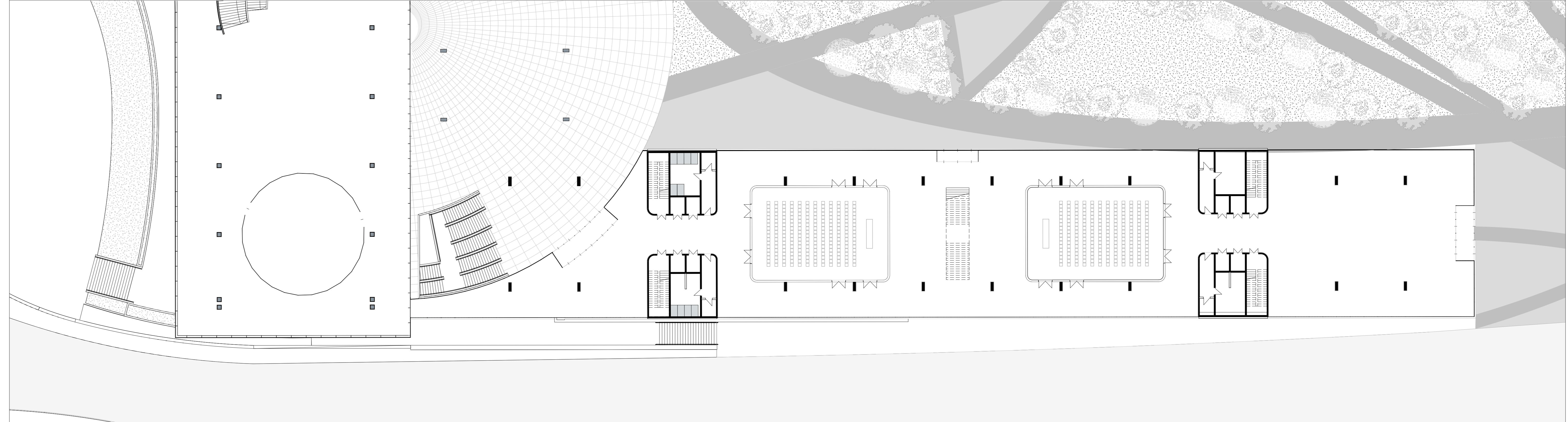
I envisioned a new wing of the building opposite the administrative building, following the lines of the railway station. The new wing would extend all the way to the intersection of *Nagyenyedi Street* and serve an educational function, temporarily accommodating the university faculties.

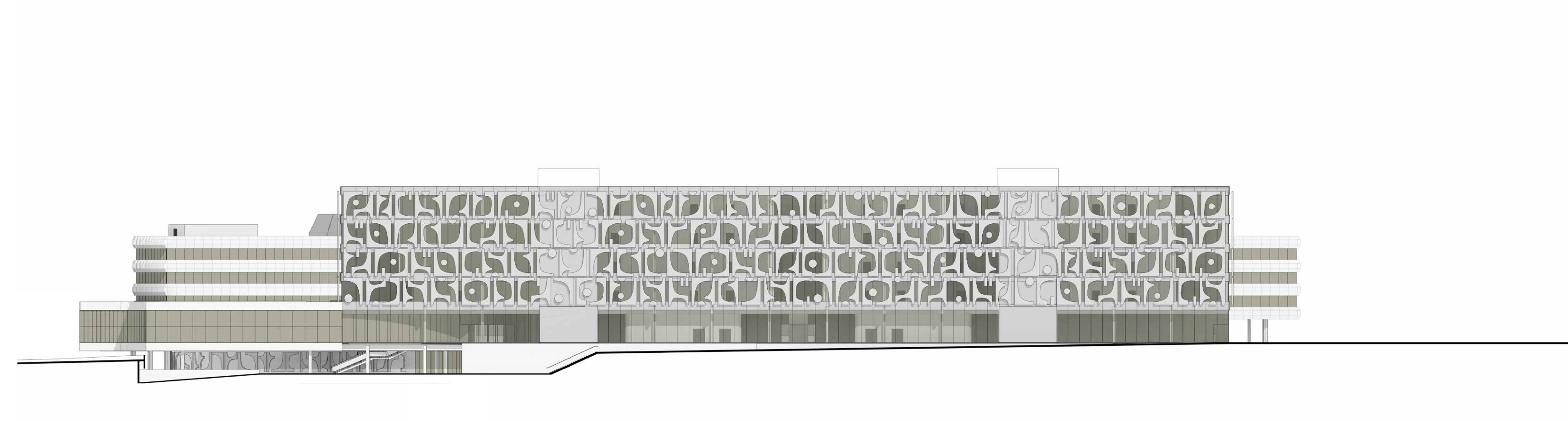
The main entrance of the building would be located near the old railway station hall, with additional entrances at the *Nagyenyedi Street* intersection and in the middle of the building. The educational building would have five floors. The ground floor would be transparent, in harmony with the city's structure, reflecting the design of the administrative building. The upper levels would house student rooms and university faculties. These upper levels would also be glazed, but I would use the pattern of the old railway station's decorative walls as shading. The layout of the upper four floors would be the same, with the university faculties on the side facing the Castle and the other rooms serving educational and community functions.















APPENDIX

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