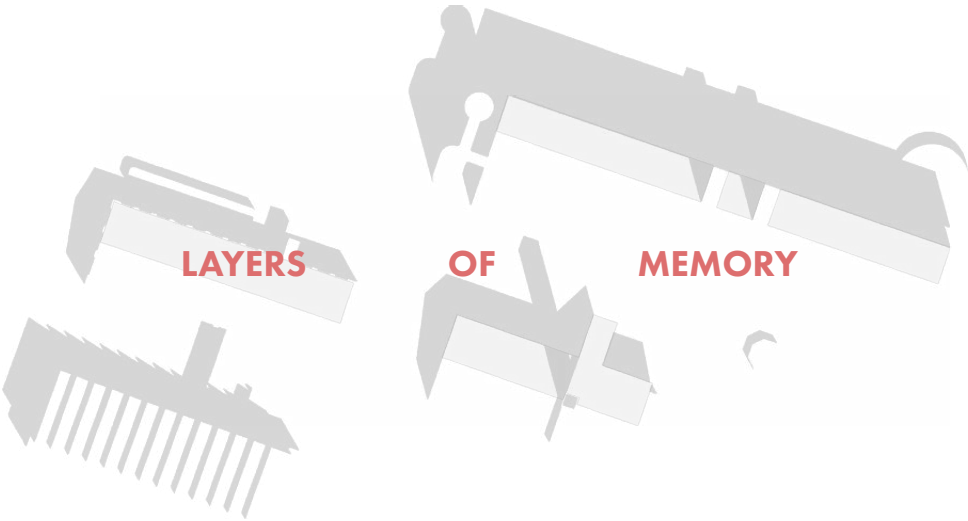

LAYERS OF MEMORY

Upcycle of the former tobacco station in Ljubuški, Bosnia and Herzegovina

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Thesis Supervisors:
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Master Thesis for the MSc Double Degree Program Architecture and Urban Design
Academic Year 2025-26
TU Graz - Politecnico di Milano

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Sažetak

Bivša Duhanska stanica u Ljubuškom promatra se kao struktura oblikovana svojom prošlošću, koja danas postoji u nedovoljno korištenom i fragmentiranom stanju. Ovaj rad istražuje njezinu reaktivaciju kroz adaptivnu transformaciju, kao nastavak njezinih prostornih, materijalnih i iskustvenih slojeva.

Arhitektura se promatra kao katalizator, jer postavlja temelj na kojem se život odvija. Ono što je nekada bio prostor skladištenja i proizvodnje transformira se u prostor susreta, učenja i zajedničkog života, oblikovan kroz vrijeme od strane onih koji njemu pristupaju.

Kroz slojevito čitanje lokacije, od memorije prema urbanim odnosima i materijalnim uvjetima, projekt otkriva ono što je utišano, ali ne i izgubljeno. Projekt djeluje na razini cijelog kompleksa, povezujući zgrade u koherentan sustav u kojem svaka intervencija slaže fragmente u heterogenu cjelinu. Ove arhitektonske geste uspostavljaju nove prostore za kulturnu, edukativnu, komercijalnu i kolektivnu uporabu. One definiraju jasnu prostornu strukturu te ostaju prilagodljive kroz korištenje.

Između materije i memorije, Duhanska stanica se pojavljuje kao struktura otvorena transformaciji. Novi sloj nastavlja se razvijati iz onoga što već postoji, oblikujući ono što dolazi, dok istovremeno omogućuje da prethodni slojevi ostanu prisutni.

KLJUČNE RIJEČI: adaptivna transformacija, prostorni slojevi, memorija, urbani odnosi, kolektivna uporaba, arhitektonski katalizator

Abstract

The former Tobacco Station in Ljubuški is understood as a structure shaped by its past, now existing in an underused and fragmented condition. This thesis explores its reactivation through adaptive transformation as a continuation of its spatial, material, and lived layers.

Architecture is approached as a catalyst, as it sets the ground where life unfolds. What was once a space of storage and production is transformed into a space of encounter, learning, and shared life, now open to the citizens. The programme introduces cultural, educational, and productive uses, including exhibition spaces, public stage, workshops, community facilities, and spaces for local initiatives and small-scale production.

Through a layered reading of the site, from memory to urban relations and material conditions, the project reveals what has been silenced but not lost. The design operates across the entire complex, connecting individual buildings into a coherent system where each intervention assembles fragments into a heterogeneous whole. These architectural gestures establish a clear spatial structure while remaining adaptable through use.

Between matter and memory, the Tobacco Station emerges as a structure open to transformation. A new layer evolves from what already exists, shaping future use while allowing previous layers to remain present.

KEY WORDS: adaptive transformation, spatial layers, memory, urban relations, collective use, architectural catalyst

Acknowledgments

I express my deep appreciation for the opportunity to be part of the double degree programme. This strong international experience allowed me to present my work within a broader context and to reflect on my hometown through different perspectives and ways of thinking.

I would like to thank my thesis supervisor, Dr. Marisol Vidal, for her continuous support, understanding, and guidance, particularly in developing a deeper knowledge of materials, construction, and tectonic thinking. I am equally grateful to Professor Giulia Setti, whose critical perspective and strong approach to design, especially in relation to industrial sites, helped me maintain focus and clarity throughout the project.

The Tobacco Station has been part of my everyday surroundings since childhood, a place connected to early memories, curiosity, and a quiet sense of the unknown. This project became an opportunity to return to it with a deeper understanding of what had always been present, yet never fully seen.

I would also like to thank the local community for their openness and willingness to share knowledge and materials related to the Tobacco Station. My deepest thanks go to my family for their continuous support. I would especially like to thank Michele and Đino for their photographic documentation, and my mother for her patience, and constant encouragement.

Marta

Introduction

INTRODUCTION

The proposed thesis explores the Tobacco Station that once supported the economy of local families in its wider rural region and shaped the further expansion of the city itself. The site is situated in the city of Ljubuški, in Bosnia and Herzegovina. Today, this plot of land stands silent in the very core of the city's urban centre. Despite its central position, the area is distanced from everyday urban life, acting as a void in the urban fabric it once formed.

The question of tobacco stations in Bosnia and Herzegovina, as part of the Austro-Hungarian industrial heritage, has recently been explored by a number of researchers. Yet, due to neglect, bureaucracy, and the tendency to replace rather than repair, these valuable structures are being gradually erased. This research is grounded in the understanding that the tobacco complex developed as a spatial manifestation of production, labour, and material processes. The architecture is therefore a consequence of its use. With the loss of its function, the space is left behind, lacking a clear contemporary role. The thesis is structured across three connected scales: urban, functional, and architectural. It explores the strategic reactivation of the site, evaluates the spatial and socio-economic conditions that inform future uses, and focuses on the adaptive transformation of existing structures. By introducing new uses, the proposed project establishes a framework that may serve as a starting point for future initiatives, discussions, and actions.

Lastly, the lack of public and adequately designed spaces in Ljubuški reflects a broader issue: a city that builds houses but rarely creates architecture.

This project introduces a new phase within the layered timeline of the Tobacco Station, raising the question of what comes next. At the same time, it allows the space to adapt again, as cycles of decline and renewal repeat over time. The Tobacco Station carries an inherent potential, shaped by its position, scale, material expression, and the memory it holds, allowing it to gradually re-enter the urban life of the city.

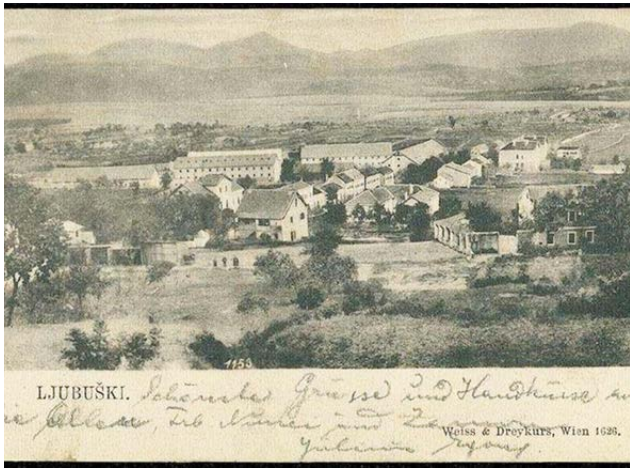


Figure 1. Ljubuški, early 20th century. Archival postcard showing the urban landscape with the Tobacco Station complex in the foreground.
Source: Ljubušaci.com (2020), Old photographs of Ljubuški from our archive

Figure 2. Interior of the Tobacco Station, mid-20th century. Workers sorting tobacco leaves within the structural grid of the warehouse, reflecting everyday life and production processes.
Source: Ljubušaci.com (2020), Old photographs of Ljubuški from our archive

Layers of Memory

Figure 3. Ljubuški, 1899. Archival photograph showing Mount Buturovica with the Old Fortress in the background. The foreground reveals early buildings of the Tobacco Station along the main street. Photographer: Dr. Grzlo Czech. Source: Sadiković (2021), Ljubušaci.com

LAYERS OF MEMORY

The complex of the Tobacco Station in Ljubuški presents a spatial result of a continuous process in which territory, production, and social relations shape each other through different historical phases. The historical progression of Bosnia and Herzegovina unfolded through changes in political and economic systems, with each period defining its own model of spatial management. These shifts were often sudden, resulting in a stratified structure where traces of different development phases are still present today. The architectural landscape of Herzegovina was formed primarily through productive activities, which determined the way land was used, how labour was organised, and how settlements were developed.

In this setting, the flourishing of the tobacco industry marks a turning point in the process of forming the built environment of Herzegovina from the 17th century onwards. From initial, dispersed production within households to institutional and industrially organised production, tobacco becomes a relevant aspect of both economic and spatial evolution.[1]

[1] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

Territory, Memory and the Formation of Tobacco Production

The earliest layers of inhabitation date back to Illyrian gradine located on hills. The positioning of settlements followed the relation between visual field and defensive capacity, establishing early patterns of landscape control.[2]

The Roman period opens a new logic of spatial organisation through a network of communications and territorial integration, still lacking urban centrality. The decline of the Roman Empire resulted in a spatial and demographic downturn of the area.[1]

In the Middle Ages, the Fortress of Herceg Stjepan Kosača took on the role of an administrative and defensive centre. Settlement was situated at the base of the hill Buturovica and developed in direct relation to topography, mobility axes, and availability of resources. Stone, as the dominant material, shaped both constructive principles and spatial logic. Stećci, medieval monolithic tombstones, spread throughout the environment, indicate a dense network of rural establishments and a stable territorial organisation.[3]

The Ottoman period introduced tobacco cultivation as a valuable agricultural practice. Production remained spatially integrated within the household, where labour and everyday life intersected.[4]

[1] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

[2] Škegro, A. (1991). Ancient economy in Bosnia and Herzegovina based on epigraphic sources.

[3] Šaravanja, K., Oreč, F., & Kurtović, A. (2018). Herzegovina - land of stone.

[4] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

Figure 4. Hillfort settlement Veliki Žuželj–Miletina, Čitluk. Source: Arheo Hercegovina (2013).

Figure 5. Necropolis of stećci in Prečko (Treskavica Mountain). Source: Furaj (n.d.), O bosanskim stećcima.

Figure 6. Dry stone walls in the Konavle region. Source: Cavtat–Konavle Tourist Board.

Figure 7. Tobacco cultivation and processing phases in Ljubuški, shown through a sequence of archival photographs including cultivation, drying, sorting, and weighing at the Tobacco Station. Source: Private family archive of Ivica Tomas.

From Rural Practice to Industrial Logic

Tobacco cultivation in Ljubuški evolved directly as a response to the territorial and climatic conditions of the region. Cultivation was permitted primarily for personal use, while the market remained controlled through taxation.[4]

Across the fields of Ljubuški, farming was grounded in manual labour and seasonal organisation. Production took place on small family farms, adapted to rocky terrain, seasonal droughts, and natural moisture cycles. Initial processing, fermentation, and drying were carried out within households and auxiliary structures. The process relied only on natural ventilation and the gradual reduction of moisture. Therefore, space was not determined by the process, but the process adapted to the existing space. In this phase, production remained dispersed and closely tied to everyday rural life.[1]

The Bosnian-Herzegovinian Tobacco Monopoly was established during the Austro-Hungarian occupation in 1880. The Monopoly reframed tobacco production into a system of state control. With the introduction of tobacco classification, professional supervision, and regulated workflows, tobacco became part of a larger administrative and economic system.[5] *Tobacco was no longer treated as an agricultural product, but as an industrial one. Rupčić (2021) notes that "the production process required controlled microclimatic conditions, stable ventilation, and organised logistics, which could not be achieved within the existing rural structures" (p. 14).*

[4] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

[1] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

[5] Beljo, J., Nadaždin, M., & Mandić, A. (2017). Tobacco in Bosnia and Herzegovina: past, present and future.

Technological requirements directly shaped spatial organisation, highlighting the need for specialised buildings and clearly defined functional zones. Tobacco became a catalyst for construction and industrial infrastructure, forming the basis for the development of the tobacco station as a productive urban complex.[4] This historical shift marks a significant change in the relation between industry and architectural space, where space becomes a direct answer to the requirements of the industrial process.

[4] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

The Leaf as a Technological Medium

The material, or rather the tobacco leaf, carries the technological requirements and directly determines spatial organisation. Following harvest and initial drying, the need for standardisation and controlled manipulation of material emerged. Physical characteristics of the leaf, especially its sensitivity to moisture, temperature, and airflow, define the conditions in which the processing should be done. In this phase, the space is shaped as a controlled environment. The organisation of space is not given but directly conditioned by the regulation of microclimatic parameters.

Towards an Industrial Space

These requirements became most evident during fermentation, the central technological operation in tobacco processing.

In earlier stages of production, the process relied on natural environmental conditions and long-term ageing cycles. Leaves were stacked in bundles and gradually transformed through chemical processes, where temperature, moisture, and airflow played a critical role. However, the technique required stable microclimatic conditions, sufficient spatial height, and continuous supervision.[1]

[1] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

Following the institutionalisation of production, fermentation shifted from passive natural transformation to a controlled technological procedure. Regulated microclimatic parameters, separation of productive phases, and organised material flow were introduced, and the process adopted a sequential logic in which individual steps could no longer exist within a shared, unified space. Processing became incompatible with household structures and required defined volumes, repetitive structural grids, and controlled spatial permeability. By introducing sequences between production phases, space became segmented and functionally defined. The model of the tobacco station was thus articulated as an industrial facility, where process, space, and the organisation of labour act inseparably.[4]

[4] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

Forming the Tobacco Station

The transition from fragmented manufacture into a centralised system developed simultaneously with the development of technological conditions and institutional control. As a result, the territory of cultivation and the area of processing separated.

In such context, the tobacco station emerged as a central element of the system, a mediator between the field and the factory. It was formed progressively, following the growth of production and technology. Their location is directly connected with the area of cultivation, making them the centres of logistics, labour, and control.[4]

Institutionalisation and Expansion

During the twentieth century, tobacco fabrication has been additionally developed through institutional frameworks. With the founding of experimental stations and later the Tobacco Institute in the city of Mostar in 1952, a systematic and scientific approach towards production has been established. The research encompasses the selection of various species, technological advancements, and the optimisation of productive workflows. The quality and competitiveness on the market increased. The system of production matured into a complex intersection between knowledge, infrastructure, and the organisation of labour.[5]

[4] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

[5] Beljo, J., Nadaždin, M., & Mandić, A. (2017). Tobacco in Bosnia and Herzegovina: past, present and future.

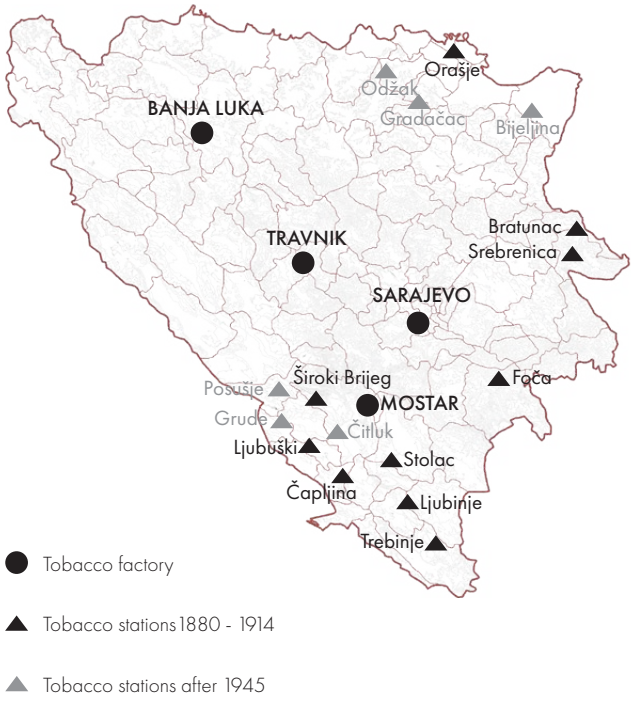


Figure 8. Tobacco stations and factories in Bosnia and Herzegovina. Author's drawing, based on Bilić (2024).

Figure 9. Family members stringing tobacco leaves at home. Source: Author's family archive.

Local Narratives and Memory

Nikola and Mira Tomas, my grandparents, are a part of the generation that was bound to tobacco production for almost their entire lives, from its cultivation to its trade. Their memories, articulated through simple and honest language, reveal everyday life in the tobacco station, the rhythm of work, community and the loss that followed its closure.

Draga Vasilj, my grandfather's aunt, belongs to the generation of tobacco station working women from the 1950s, when the dominant production was taken over by Magazine 7. Her faded memory is still a rich testament of the space's authenticity, its daily flows, and most of all the atmosphere we are unable relive otherwise. Her words display a truly rare opportunity to walk alongside the interiors of the tobacco station in its most performative times.

These testimonies are not just a written trace about work, but also about space, smell and sound of a time period that once shaped the city of Ljubuški.

Narrator: *Marta Majić*
Date: *29th October 2025*
Location: *Ljubuški, Bosnia and Herzegovina*
Participants:
Nikola Tomas (born 1947), Mira Tomas (born 1953)

The Rhythm of Tobacco

Ja se toga dobro sjećam, kako je to bilo s duhanom. Najprije se posije i pokrije najlonom, da ga uhvati prasunce i da lakše nikne. Kad nikne, zalivaš ga redovno, svaki dan. Kad naraste, onda ga bereš u dva, tri navrata, nekad i više, zavisi od vremena. Prođe mjesec i po dok ne sazrije. Prvi listovi su se zvali podbir, oni donji, drugi su nadbir, a najbolji su bili u sredini; sredina struka i iznadnadbir. Gore na vrhu bio je vrsak, to se kidalo da list naraste veći. Imao si posla cijelu godinu, bez šale. Pred Božić bi se gonilo na vagu, donosili bi ljudi poklone da se duhan bolje procijeni. To su bili događaji godine. Znalo se ustati u jedan po ponoći i ići na njivu.

(How did the process of planting and harvesting begin?)

I remember well how it was with tobacco. First, it was sown and covered with nylon to keep the early sun and help it sprout faster. Once it appeared, you had to water it every day. When it grew tall, you harvested it in two or three rounds, sometimes more, depending on the weather. It took about a month and a half to ripen. The first leaves were called podbir, the lower ones; the second were nadbir, and the best were in the middle; the heart of the stalk. At the top was the vrsak, the flower head, which was pinched off so the leaves would grow larger. It was a year-round job. Before Christmas, people brought tobacco to be weighed, sometimes with small gifts so it would be better evaluated. Those were big events. People would wake up at one in the morning to go to the fields.

Threading and drying

Kad se pobere, duhan se niza na špage, mi smo to zvali kanafe, dugačke po metar, dva. Na motke se veže i suši na suncu. Treba čekat da malo ovlaži, pa se unosi u kuću, u vlažan podrum, da omekša. Tek tada se može listati i slagati. Tada bi se ljudi okupljali po kućama, pomagali jedni drugima i radili do kasno u noć. To nije bilo samo poso, to je bilo i društvo.

(What followed after the harvest?)

After harvesting, the tobacco was threaded onto cords, which we called kanafe, one or two meters long. They were tied to wooden poles and dried in the sun. When they became slightly moist again, they were brought into the house, into a damp cellar, to soften. Only then could the leaves be sorted and stacked. People would gather in homes, helping one another, working late into the night. It wasn't only work, it was community.

Planting and growth

U proljeće se napravi zaklon; rashod, pet sa dva metra, unutra se stavi đubre i sjeme. Tu on iznikne, zaliva se polivacama, a kad malo naraste, kad bude desetak centimetara, onda se čupa i presadi na njivu. Na njivi se naprave brazde, otprilike pola metra razmaka da možeš proći. Na križištima zabodeš sadnicu, petnaestak centimetara duboko, i pritisneš zemlju da se primi. Raste on do visine lakta, metar i po, i kad se pojave veći listovi, bereš od dole prema gore. Sve ide u fazama.

(What was the process of planting and care like?)

In spring, a small shelter called "rashod" was built, about five by two meters, filled with manure and seeds. The seedlings were watered regularly, and when they reached ten centimeters, they were pulled out and transplanted into the field. There, furrows about half a meter apart were dug, and the seedlings were planted by hand. Each one was pressed into the soil to take root. The plants grew up to elbow height, sometimes taller, and when the lower leaves appeared, they were picked gradually upward.

Drying and bundling

Kad se obere, napraviš igle od čelika, kroz korijen lista se naniže na špagu, oko dva metra dugačku. Gradja od ravnog drveta se usiječe da se u nju zaveže i tako se napravi cijela konstrukcija, stubovi i tanke daske po kojima visi duhan. Kad se osuši, stavlja se opet u vlagu da omekša, ljudi su znali čak i poprskati vodom. Onda se slaže i veže lepušinom od kukuruza, to su ti one tanke trake, i tako nastane denjak. Prije nego što se išlo na vagu, znalo se i malo navlažit da bude teži, haha. Baba se sjeća da su ga znali pustit da naraste i do dva i po metra, pa se raspravljali ko će to brati. Ako bi došla kiša, unosilo se sve u kuću, i djeca su pomagala.

(What was the preparation process for repurchasing like?)

Once harvested, steel needles were used to thread the leaves through their stems onto cords about two meters long. Wooden beams were cut to hold them, forming entire frames where the tobacco would hang. When dry, the bundles were slightly moistened again to soften, people even sprinkled them with water.

The leaves were tied with corn husk strips called lepušina, forming denjci (bundles). Before taking them to the scales, some would even add moisture to make them heavier, my grandmother laughs. The plants sometimes grew over two meters tall, and there'd be arguments about who would climb to pick them. When rain came, everything was carried inside, and even the children helped.

Community and nights with tobacco

Prije vage, kad bi se listao, cijeli komšiluk bi dolazio pomagati skidat duhan s konaca. To se radilo po noći, uz priču i smijeh. Neki bi govorili: "Ajde još malo, samo još ovu špagu," i tako bi se ostajalo do ponoći. Bilo je teško, ali i lipo – rad i zajednica u jednom.

(What did gathering around tobacco mean to people?)

Before weighing, when it was time to remove the dried leaves from the cords, the whole neighbourhood gathered to help. It was done at night, with laughter and stories filling the room. Someone would always say, "Just one more cord," and they'd stay until midnight. It was exhausting but beautiful, work and community in one.

Before tobacco and childhood

Prije duhana, za Staljina i Tita, sadio se pamuk. To su bile one male čahure što puknu kad sazriju. Ali to nije donijelo koristi, pa se prestalo.

Duhan je bio bolji, od njega se živjelo. Duhan i sitni luk, to se nosilo u domove i tamo prodavalo po kilu. Naša kuća nije radila to, mi smo samo duhan.

A kao mali, nisam imao ni papuče. Hodali smo bosi. Sam sam sebi pravio papuče, kupio gumu i kajiš, a kasnije i vunene opanke od svinjske kože.

(How do you remember the time before tobacco was planted?)

Before tobacco, during the time of Stalin and Tito, people used to plant cotton. It grew in small pods that burst open when ripe, but it didn't bring much benefit, so it was abandoned. Tobacco proved better, people could actually live off it. Alongside tobacco, some planted small onions to sell by the kilo, but our family focused only on tobacco.

When I was a boy, I didn't even have slippers. We walked barefoot everywhere. I made my own, bought a piece of rubber and a strap. I was proud of them, you know, felt like the richest kid in the village.

The Tobacco Station and Work

Stanica je bila ograđena kapijom i imala stražara. Gore su bile kancelarije za procjenitelje i agronome. Žene su radile na slaganju, a muškarci su bili poslovođe. Sedmi magazin bio je po katovima, a sama riječ "dogan" dolazi iz Italije, znači carina. Bila je to lijepa zgrada, monumentalna, a sad sve porušeno.

(What was the station like and who worked there?)

The Tobacco Station was enclosed by a gate and had a guard. Upstairs were offices for inspectors and agronomists. Women worked inside, sorting and packing the leaves, while men were foremen. Warehouse No. 7 had several floors. The name dogan came from Italian "dogana", meaning customs. It was a beautiful, monumental building, but now, all gone.

Change and Migration

Kad je duhanska prestala raditi, Ljubuški se počeo mijenjati. Ljudi su išli u Njemačku, zarađivali, i sve se ubrzalo. Došle su freze i novi alati, privatna proizvodnja. Ali to nije bilo isto. Nekad je svaka kuća imala duhanjaru, svatko je imao svoju kutiju, pušile su se lule, sve je imalo miris duhana.

(What happened when the Tobacco Station stopped operating?)

When the station stopped working, Ljubuški began to change. People started going to Germany, earning money, and everything sped up. New tools arrived, private farming began. But it wasn't the same, every home once had its own tobacco shed, its own scent, its own rhythm.

Life and work

Djeca se nisu igrala, nije bilo vremena. Ako bi te otac uhvatio da se igraš, dobio bi degenek. Ujutro rano bi se ustajalo, čuvale krave, pravili stogovi, stalno se radilo. Stanica je bila napravljena za seljake, za one koji nisu živjeli u gradu nego su imali zemlju.

Služila je za otkup duhana koji su ljudi sami uzgajali. Radnici su uglavnom bile žene, one su razabirale duhan i slagale ga po klasama. Denjak se slagao između dva komada drveta, kao palete.

The Rhythm of Tobacco

Sve se vagalo i određivala se klasa. Procjenitelji su odlučivali koliko vrijedi, a znaš, bilo je i korupcije, paako si imao vezu, bolje si prolazio.

Bio je to državni posao, duhan je bio pod monopolom. Svaka njiva se mjerila, znao se broj struka koji smiješ posaditi. Ljudi su živjeli od toga, nije bilo druge. Kad bi se duhan prodao, kupovao se radio, cipele, ploče. Kad si dobio cipele, to je bilo kao danas kad neko kupi mercedes.

(What was everyday life like in those years?)

Children didn't play much, there wasn't time. If your father caught you playing, you'd get scolded or worse. Everyone woke early, tended to the animals, stacked hay, always working.

The station was built for farmers, for those who didn't live in town but worked the land. It served as a state-controlled collection point for the tobacco people grew themselves. Most workers were women, sorting the leaves by quality into "denjci"; bundles pressed between two wooden boards like small pallets. Everything was weighed, and inspectors decided the price.

And yes, there was corruption, if you had a connection, things went your way.

It was a state job, under monopoly control. Every plot was measured, every stalk counted. People lived from that and there was no alternative. When tobacco was sold, families bought radios, shoes, or vinyl records. Getting a pair of shoes back then felt like buying a Mercedes today.

Time of change and the decline of tobacco

Kad su šezdesetih ljudi počeli ići u Njemačku, duhan je počeo propadati. Više se nije isplatilo. Prije toga, to je bio izvor života. Socijalizam je bio pošten, država je uzimala porez, a ostatak ostajao seljaku. Od toga se živilo.

When people began migrating to Germany in the 1960s, tobacco started to fade. It was no longer worth the effort. Before that, it had been the main source of life. Under socialism, it was fair, the state took its share, and the rest stayed with the farmer. People lived from it, proudly and modestly.

(Why did tobacco production decline and how did you experience it?)

Narrator: *Marta Majić*
Date: *22nd March 2026*
Location: *Crnopod, Bosnia and Herzegovina*
Participant:
Draga Vasilj (born 1938)

From Leaf to Bale

Kad ljudi dotraju duhan na vagu, tu ima ljudi koji procijene koja je klasa i onda dalje ga otkupljuju. Duhan se donese u magazin, tu je bilo sedam magazina. U magazin se unese i tamo žene razvrstavaju po vrijednosti. Znači bila je prva klasa, druga, treća, četvrta i tako dalje. Kad se to rasporedi koje su klase, ima preša, pa se duhan spresuje, stavi se u platno i onda se formiraju bale. Onda se to nosi u jedno veliko skladište, tu se sve pripremi za dalje. Kad se tu pripremi, onda se izvadi vani da se ohladi i onda se bale stavljaju na vagu. Tu se izmjeri i označi koja je klasa, prva, druga, treća, ne bio koje. Kad to sve bude gotovo, po klasama se duhan rasporedi i pakuju se, recimo, prva klasa ide na jedno mjesto, druga na drugo, treća. I ove prve klase koje su se riješile, to ide za izvoz.

(How was tobacco processed inside the station?)

When people bring tobacco to the weighing point, there are people there who assess its class and then it is purchased further. The tobacco is brought into the warehouse, there were seven warehouses. It is taken inside and there women sort it by value. There was first class, second, third, fourth and so on. When it is sorted into classes, there is a press, so the tobacco is pressed, put into cloth and then formed into bales. Then it is taken into one large storage, where everything is prepared further. When it is prepared there, it is taken outside to cool down and then the bales are placed on the scale. There it is measured and marked which class it is, first, second, third, whichever. When all that is finished, the tobacco is arranged and packed according to class, for example first class goes to one place, second to another, third. And those first classes that are sorted out, they go for export.

(What happened after it was sorted?)

Entering the Magazine 7

Pa šta sam ja mogla vidjeti na Crnopodu, mi smo svi sa sela bili, u malim kućama, siromašni. Kad sam došla tamo, meni je to izgledalo ko da ima 20 katova. Još je moja zgrada, magazin 7, bila na više katova, ne sjećam se točno, ali meni je to sve bilo ogromno. Bilo mi je malo čudno, bilo mi je malo, kako se zva, ćutno, ali sve bez nelagode. Dobro, tada sam bila i mlada, 20-a godina i to.

Meni je to bilo zagušljivo kad uđeš unutra, taj miris duhana od fermentacije, to je bilo u sedmom magazinu, to se tu radilo i meni je to smetalo, nisam to mogla podnijeti. A prostor unutra, kad bi bio prazan, isto je bio jako velik. Bilo je svjetla, izgledalo je sve veliko, prostor je bio dobar.

(How did you experience the building when you first entered it?)

What could I have seen in Crnopod, we were all from the countryside, living in small houses, poor. When I came there, it looked to me as if it had 20 floors. And my building, warehouse 7, had several floors, I do not remember exactly, but to me it all felt enormous. It felt a bit strange, it felt a bit, how to say, quiet, but all without discomfort. Well, I was young then, around 20 years old.

For me it was suffocating when you entered inside, that smell of tobacco from fermentation, it was in the seventh warehouse, that is where it was done and it bothered me, I could not stand it. And the space inside, when it was empty, was also very large. There was light, everything looked big, the space was good.

Daily Life Inside the Warehouse

Unutra su bili dobri i sve skupa što se tiče toga nije bilo zabušavanja ni ničega. Svjetlo je jako bilo. Naučila sam ono slušati i kako mi kažu radio, i tako. A bilo je i napornih dana kad se, recimo, možda danas 200 bala prenese preko ruke i to je bilo naporno. Ali bilo se mlado, moglo se podnijeti. Radilo se, nije se zabušavalo.

Bilo nas je svega skupa oko tisuću radnika. Ljudi su bili raspoloženi, radili, pričali. Kad bi završili s poslom i kad bi svi izlazili, to je izgledalo kao nogometna utakmica, tolika masa ljudi.

Imali smo jedan obrok u podne. U dvorištu je bio restoran i kad bi zazvonilo zvono, svi bi išli jesti zajedno.

Imali smo možda pet minuta, da netko nešto radi drugo. Da bi se čekalo da more proći. To je to, tako bilo.

(What was a typical working day like?)

Inside people were good and overall, when it comes to that, there was no slacking or anything like that. The light was strong. I learned to listen and to work as they told me, and so on. And there were also hard days when, for example, maybe 200 bales would be carried by hand in a day and that was exhausting. But we were young, it could be endured. Work was done, there was no slacking.

There were around a thousand workers in total. People were in a good mood, working, talking. When the workday ended and everyone was leaving, it looked like a football match, such a mass of people.

We had one meal at noon. There was a restaurant in the courtyard and when the bell rang, everyone would go to eat together.

We maybe had five minutes for someone to do something else, just to wait until it was possible to pass. That was it, that's how it was.

(What happened when the workday ended, or in the breaks?)

Working Together

Ljudi su nam bili pristupačni, mislim, barem meni. Uglavnom šefovi su bili mladi, super, odlični. Sjećajne, kao ljudi, ali zaboravila sam im imenja. Atmosfera je fina bila što se tiče svega skupa. Ljudi su bili raspoloženi, rade, pričaju. Mislim da, čak neko bi i uživao tu radit. Bilo nas je svega skupa oko tisuću radnika.

A tamo ti nije bilo puno komunikacije. Tamo ti ako radiš, ideš, izlaziš. Jedino kada nekad neko sjedne deset minuta, pet, izađe na odmor na stepenice. Jer je prostor zauzet. Prostor je zauzet i tu nema...

Mi nekad, recimo, ako smo nešto radili u jednom odjeljenju, mi radnici, i nešto se mi pričamo. Ako ugledamo da ide šef, mi se sklonimo za zatale, on nas ne vidi, on proša kraj nas. Iskoristiš minutu, s nekim da popričaš ili da nešto, bombone ili nešto. To je. A uglavnom, bilo je malo bombone, više smo suve smokve nosili.

Plaćali su redovno sve. Bilo mi je potrebno raditi. Ljudi su pošteno radili, a pošteno su redovno i plaćeni.

(What were the relationships between workers like?)

People were approachable, at least to me. The supervisors were young, good, excellent. I remember them as people, but I forgot their names. The atmosphere was nice overall. People were in a good mood, working, talking. I think some people even enjoyed working there. There were around a thousand workers in total.

There was not much communication there. If you work, you work, you go in and out. Only sometimes someone would sit for ten minutes, five, or go out to the stairs for a break. Because the space was occupied. The space was occupied and there was no...

Sometimes, for example, if we were working in one section, we workers, and we were talking, if we saw the supervisor coming, we would hide behind the bales so he would not see us, and he would pass by us. You use a minute to talk to someone or to eat something, candy or something. That's it. But mostly there were few candies, we carried dried figs more.

They paid regularly. I needed to work. People worked honestly, and they were honestly and regularly paid.

Sequences of Movement and Control

U magazinu ti je prostor, recimo, ako se nosi na kamione i odlazi za određeno mjesto, ostane ti prostora. Drugi dan dolazi i napuni se pun prostor. To je tako redovno odlazilo i dolazilo. Mislim, prostora je bilo, nekad nisi mogao proći, jedva se prolazi kroz prostor koliko je bilo napunjeno, puno.

Tamo ti ako radiš, čim dođeš odma se krene i izlaziš kad ideš. Jedino kada nekad neko sjedne deset minuta, pet, izađe na odmor na stepenice. Jer je prostor zauzet.

Vanjski prostor, znači vani ono oko zgrada. Nije se tu radilo kao unutra. To je bilo za dolazak i kamione. Sve se koristilo, i unutra i vani. Bilo je dovoljno mjesta da kamioni mogu proći, a kad bi dolazili po duhan, čekali bi vani. Vani se još duhan iznosio da se posuši.

Kad smo izlazili, bila je žena koja bi nas pribrala sve da nismo što uzeli. Neko je možda uzeo konopce, neko je uzeo plata, tako da smo svaku večer bili pregledani kad smo kući odlazili. Pa nije bilo neugodno, kao što, to je moralo biti tako, jer možda bi ljudi bilo što odnijeli ili nešto, ali nije, žena nas pribrere, pripipa da nema što ispod suknje.

(How did people move through the warehouse during the day?)

In the warehouse, the space was such that, for example, when it was being carried to the trucks and sent to a certain place, there would be space left. The next day it would arrive again and the space would be filled up completely. It was constantly going out and coming in like that. I mean, there was space, but sometimes you could not pass through, you could barely move through the space because it was so full.

There, if you work, as soon as you arrive you start, and you leave when it is time to go.Only sometimes someone would sit for ten minutes, five, go out for a break on the stairs. Because the space was occupied.

(How was the courtyard used during work?)

The outdoor space, meaning outside around the buildings, was not used for work like inside. It was for arrivals and trucks. Everything was used, both inside and outside. There was enough space for trucks to pass, and when they came to collect tobacco, they would wait outside. Tobacco was also taken outside to dry.

When we were leaving, there was a woman who checked all of us so that we had not taken anything. Someone might have taken ropes, someone might have taken cloth, so every evening we were checked when going home. It was not uncomfortable, it had to be like that, because people might have taken something, but she would check us, feel us, to make sure there was nothing under the skirts.

Division of Work

Nije bilo tu. Recimo, ja sam zadnje vrijeme radila na glavnom premjeru gdje se mjerilo, tu nas je radilo sedmero. Još jedna djevojka i ja smo na vagu stavljale bale. Mi smo stavili bale i izmjeri čovjek, on sjedi i mjeri. Mi dignemo druge i druge nose dalje. A tamo još ima tri osobe koje pišu koja je klasa, koja je cijena, koja je vrsta duvana. To je zadnje godina, zadnje sam godine tu radila cijelo vrijeme.

Ali unutra su većinom ženske bile. Muški su bili dolje, to je muški sto, kamioni. A žene su slagale. Ja slagala. A ženske su u drugi magazine, one su sjedile i vrstale duvan po klasama. I kad one svrstaju, dođe komisija, izvadi iznutra, procijeni koja je vrijednost duvana i taj se pakuje u bale i ide na fermentaciju. I to je to. To je samo u sedmom magazinu bilo. Ovih šest drugih magazina su se prerazdjeljivale vrste duvana. Koja je ova prva, ova druga, ova treća. Tu je tako to bilo, ali to je više sa ja i zaboravila toga dosta.

(How was the work organised between workers?)

There was no division there. For example, towards the end I worked at the main measuring point where everything was measured, there were seven of us working there. Another girl and I were placing the bales on the scale. We would place the bales and a man would measure them, he sits and measures. We lift the others and others carry them further. And there are also three people who write which class it is, what the price is, what type of tobacco it is. That was in the last year, I worked there the whole time in my last year.

But inside there were mostly women. Men were downstairs, that was the men's place, trucks. And women were stacking. I was stacking. And the women in other warehouses were sitting and sorting tobacco by classes. And when they sort it, a commission comes, takes it from inside, assesses the value of the tobacco and it is packed into bales and goes to fermentation. And that is it. That was only in the seventh warehouse. The other six warehouses were for redistributing the types of tobacco. Which one is first, which second, which third. That is how it was, but I have forgotten a lot of that.

Dust, Heat, and Wood

Meni je to bilo zagušljivo kad uđeš unutra, taj miris duhana od fermentacije, to je bilo u sedmom magazinu, to se tu radilo i meni je to smetalo, nisam to mogla podnijeti. Neki su u tome uživali, ali ja nisam, zbog toga to nisam baš voljela raditi.

Obični prozori, obično sve unutra. E, recimo, i prašina bila i u nekim magazinima se tu više obrađivalo, tu je bilo vruće. Tu je bilo više prašine, mada se čistilo, ali opet iz duhana izlazi toplina i para i to je to.

Unutra je bilo svjetla, bilo je, ali ne znam kakav je to bio mehanizam. Sjećam se jednog dana kad je bila pomrčina, u sred dana je na nekoliko minuta bilo kao da je ponoć. Oni koji su bili bliže vratima su to mogli vidjeti.

Što se tiče roletna, toga ja ne, ni toga se ne sjećam, ničega. To su bile drvene daske. Kao što danas vidiš kad netko radi, pa naprave stepenice, pa jedan red, pa drugi, pa treći, to je tako u magazinu bilo. Sve drveno skoro. Stepenice drvene. Ja, to je meni u sjećanju ostalo. Drvene stepenice u magazinu 7.

(What were the working conditions inside like?)

It was suffocating for me when you enter inside, that smell of tobacco from fermentation, it was in the seventh warehouse, that is where it was done and it bothered me, I could not stand it. Some people enjoyed it, but I did not, because of that I did not really like doing that work.

There were ordinary windows, everything was simple inside. For example, there was dust, and in some warehouses more processing was done, so it was hot there. There was more dust, even though it was cleaned, but still heat and steam came out of the tobacco, and that was it.

There was light inside, there was, but I do not know what kind of mechanism it was. I remember one day when there was an eclipse, in the middle of the day it was like midnight for a few minutes. Those who were closer to the doors could see it. [6]

As for shutters, I do not remember that, none of it. They were wooden boards. Like you see today when someone works, they make steps, one row, then another, then a third, that is how it was in the warehouse. Almost everything was wooden. The stairs were wooden. Yes, that is what stayed in my memory. Wooden stairs in warehouse 7.

[6] *The interviewee refers to the solar eclipse of 15 February 1961, which was visible in the region.*

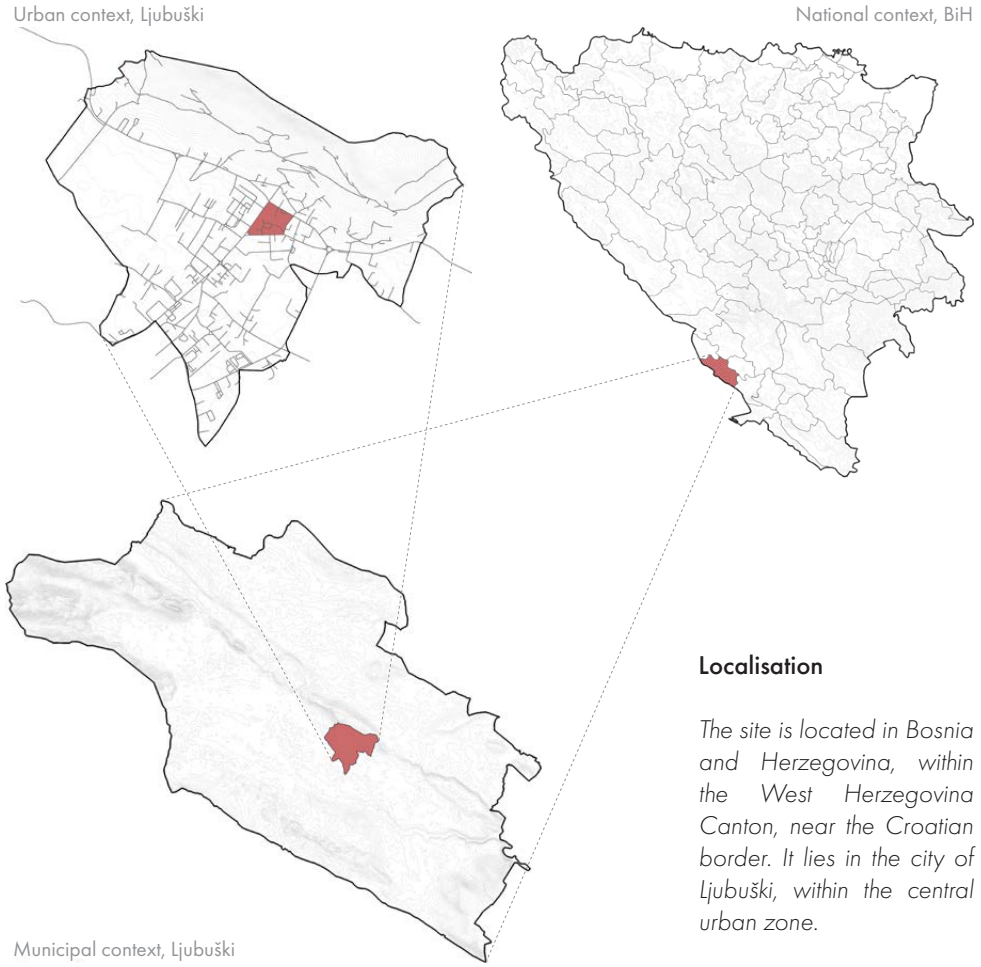
What Remains

Ogromno bilo, vrijednost je dobra bila i u ono vrijeme, te su zgrade bile kvalitetne. Kvalitetne i sigurne. Jer tu se dosta ljudi zaposlilo i dosta je ljudi živjelo od toga. To je bila moja zgrada. Na više katova, ogromna. Ne treba to rušiti. Samo treba renovirati i ljudi bi to iskoristili. Ne bi valjalo da se sruši, od toga nema ništa. Može se upotrijebiti za svašta, za stanove, za rad, za sve. To je zidano od debelog kamena. Nije kao ove današnje zgrade, malo betona izliju i gotovo.

(How do you see the rolle of the building now, what would you do with it?)

It was enormous, it had value even at that time, and those buildings were of good quality. They were solid and safe, because many people were employed there and many people lived from it. That was my building, on several floors, enormous. It should not be demolished, it just needs to be renovated and people would make use of it. It would not be good to tear it down, there is nothing in that. It can be used for many things, for housing, for work, for anything. It was built of thick stone, it is not like today's buildings, they pour a bit of concrete and that's it.

Urban Void



Localisation

The site is located in Bosnia and Herzegovina, within the West Herzegovina Canton, near the Croatian border. It lies in the city of Ljubuški, within the central urban zone.

Figure 10. Multi-scale site localisation, showing the position of the Tobacco Station within the broader territorial context. Adapted from OpenStreetMap (2025), author's own elaboration.

FRAGMENTS OF THE URBAN VOID

Position within the City

The present complex occupies the very core of the city, flanked by the main urban axis and in close proximity to administrative, educational, and commercial facilities.

The northern edge of the site borders the main bus station, which is directly connected to the county road. Zrinsko-Frankopanska Street defines the western edge of the complex as the main city road and one of the most active urban axes of Ljubuški (Figure 18). On the south, the area continues into a heterogeneous structure of smaller houses which were historically family houses and today are partially transformed into local business facilities, forming a block of mixed residential and commercial use. On the east side, a five-storey housing block is located, separated from the tobacco development by a narrow one-way street.

Despite the centrality, the tobacco station is perceived as a closed unit. A large perimeter wall limits its integration into everyday flows of movement. The area of the tobacco complex occupies a significant share in the urban centre. Such scale reveals a spatial void in the present urban fabric, yet at the same time indicates a distinct urban potential.

Urban Transformation: From Periphery to Integrated Centre

The progression of Ljubuški showcases the gradual transformation of the city's spatial logic.[1] *The medieval and Ottoman core was concentrated around the slopes of Buturovica and the Fortress of Herceg Stjepan Kosača. Urbanisation was topographically framed and defensively structured. The industrial component in this period was not present in the spatial structure.*

In the Austro-Hungarian period, a linear expansion towards the south takes place.[2] *In this phase, the Tobacco Station emerges as an industrial facility at the edge of the existing settlement.*

Its initial position was operative rather than representative. The localisation was defined by factors such as agricultural availability, flat terrain, and the possibility for expansion.

During the 20th century, the city gradually expanded, enclosing the former periphery. Housing blocks, public, and commercial functions were built around the complex, transforming it into an embedded urban fragment.

In the contemporary period, the spatial hierarchy inverts. The Tobacco Station is no longer a margin, nor an integrated centre. It is transformed into an urban vacuum, a spatial void within the urban fabric.

[1] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

[2] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

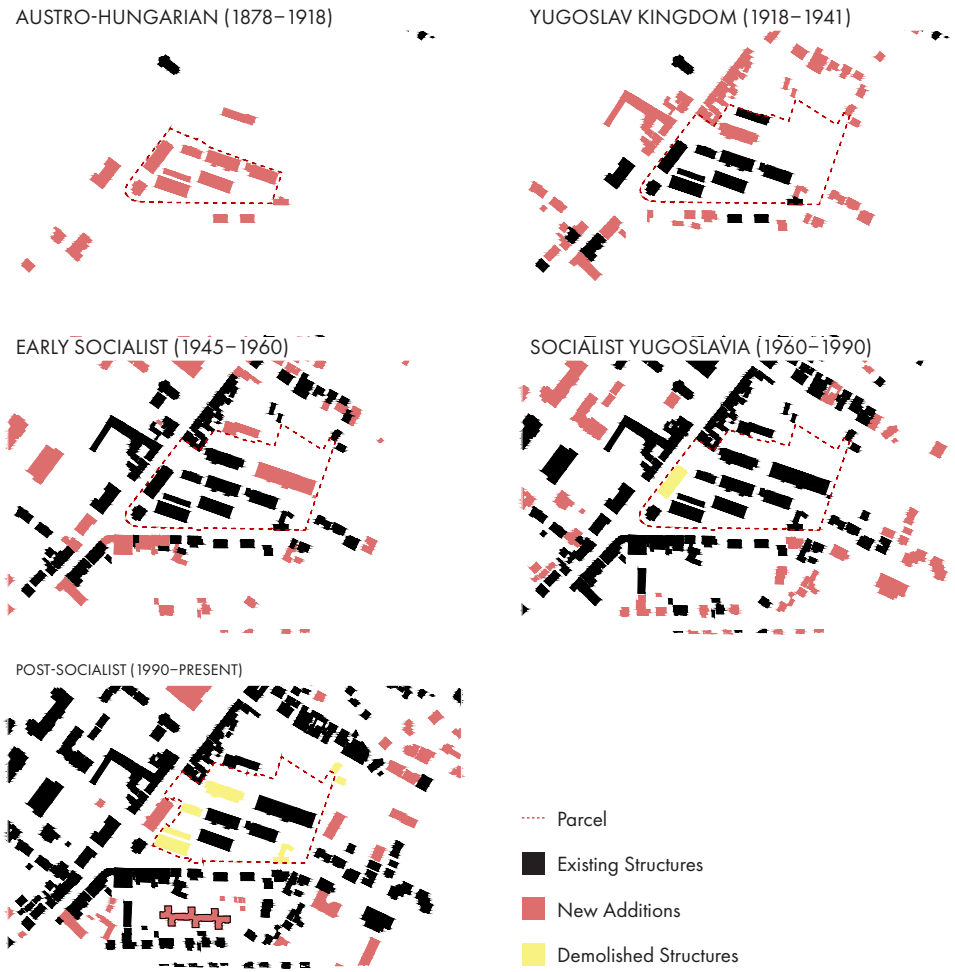


Figure 11. Morphological evolution of the Tobacco Station complex across five historical phases. Author's own drawing, based on archival documentation and site analysis.

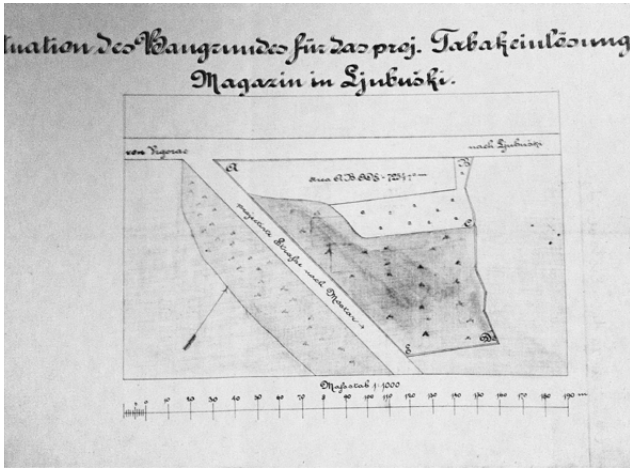


Figure 12. Early site plan of the Tobacco Station and the main street, 1879.

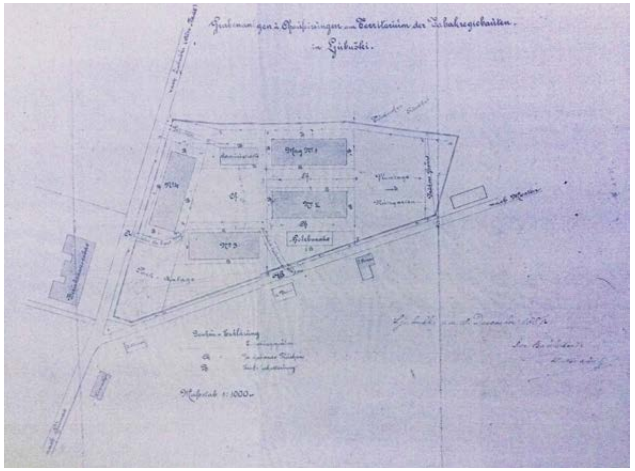


Figure 13. Site plan of the Tobacco Station, 1886.

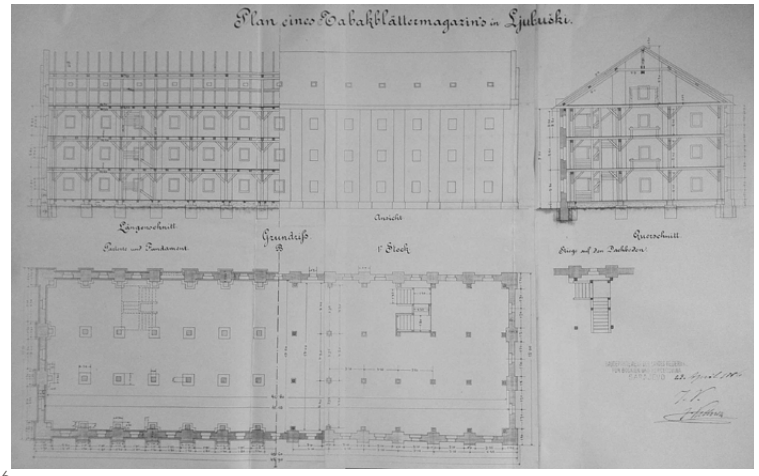


Figure 14. Standard design for the Tobacco Station warehouse (typical project for Bosnia and Herzegovina), 1886.

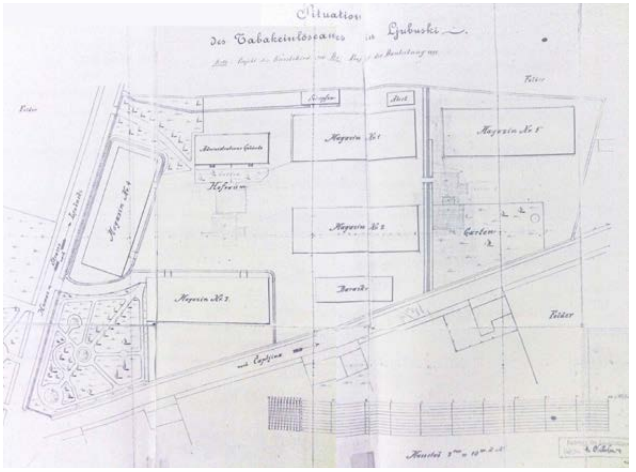


Figure 15. Site plan of the Tobacco Station, 1891.

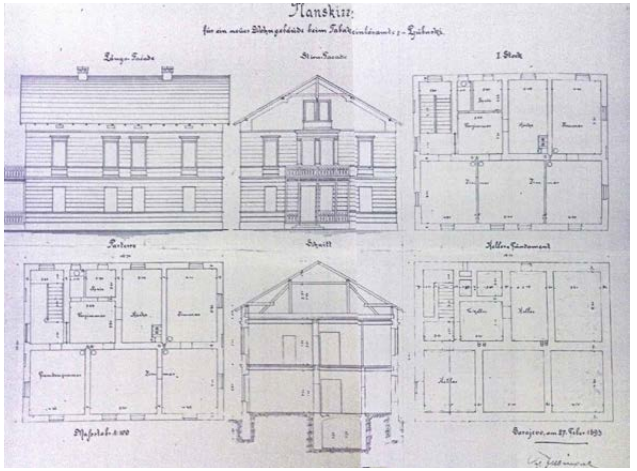


Figure 16. Design of the administrative building, 1896.

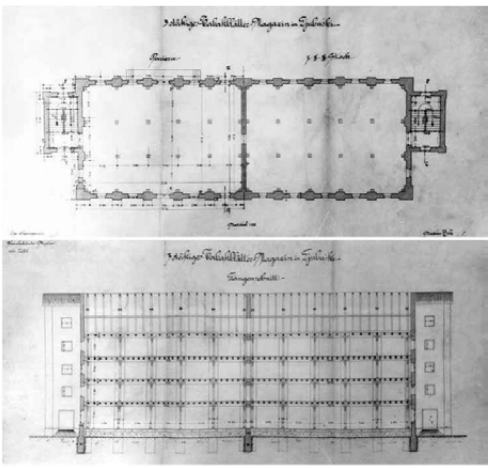
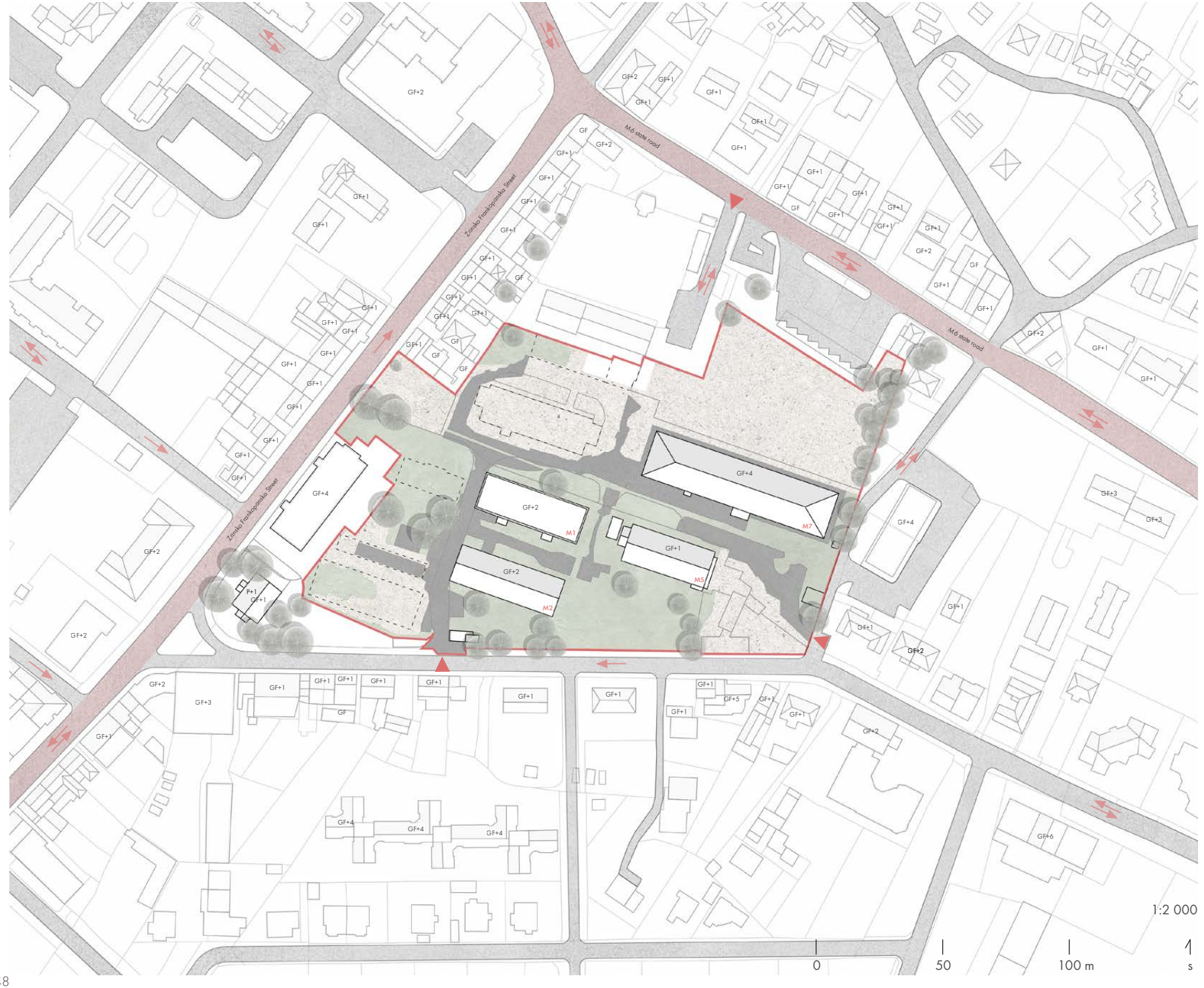


Figure 17. Floor plan and section of Warehouse 6, Tobacco Station Ljubuški, 1905.



Existing Site Conditions

- Parcel
- Demolished buildings
- Primary road
- Secondary road
- Asphalt
- Gravel
- Low vegetation area
- Tall vegetation
- Vehicular - Pedestrian access
- Two way street
- One way street

Figure 18. Present site plan of the Tobacco Station and its surrounding context.

Figure 19. Aerial view of the Tobacco Station from the south. Photograph: Michel Beara, 2025. Source: private archive.

Figure 20. Aerial view of the Tobacco Station from the northwest. Photograph: Michel Beara, 2025. Source: private archive.

Urban Morphology

The project site covers 24,680 sqm and represents the largest continuous block in the central zone of Ljubuški.[4] The total surface area of the remaining buildings (Figure 17) is 3,420 sqm, resulting in a low site coverage of approximately 13.9%.[2] The terrain slope is around 4%, without significant level changes.

The surrounding structure is defined by one- and two-storey buildings along the main street, originally residential and later adapted into retail and service uses.[3] Exceptions are two housing blocks, GF+5 at the eastern edge and GF+4 on the site of the former Magazine 4, and Magazine 7, which reaches 23 m, while the other volumes stand at approximately 11.5 m, creating a dominant vertical element in the city silhouette (Figures 18,19). Ljubuški develops linearly along the main city axis, with a heterogeneous matrix of smaller parcels in the background. [1] Within this context, the Tobacco Station reads as a morphological exception. Positioned on a trapezoidal plot, its organisation follows the requirements of production, resulting in an east-west orientation of the Magazines.

The internal organisation is based on parallel buildings and the spaces between them, used for ventilation and production logistics.[1] While the surrounding fabric is dense and perimeter-based, the complex operates as an enclosed industrial island structured by voids. The perimeter wall further reinforces this condition. Voids, orientation, and enclosure define the spatial logic of the Tobacco Station within the city.

[4] Cadastre data (katastar.ba), 2024.

[2] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

[3] Development Strategy of the City of Ljubuški, 2021.

[1] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

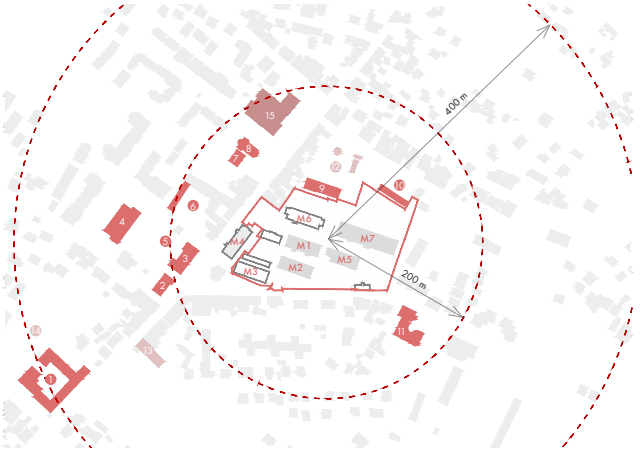


Figure 21. *Surrounding urban facilities.*
Note. Author's own elaboration based on official cadastral data.

- Parcel
- Demolished Buildings
- Public Facilities
- Comercial Facilities
- Recreational Facilities
- 1 Primary school
- 2 Courthouse
- 3 Municipality Hall
- 4 Police
- 5 Public Square
- 6 Public Market
- 7 Music school
- 8 St. Catherine's Church
- 9 Kindergarten
- 10 Bus Station
- 11 Fire Station
- 12 Sports Stadium
- 13 Cinema Hall
- 14 Sports Fields
- 15 Hotel Bigeste

Voids as spatial constructs

The present spatial structure of the Tobacco Station is defined equally by absence as it is by the remaining volumes. Magazines 3, 4 and 6 have been demolished, interrupting the original industrial sequence. [1] *Instead of the compact manufacturing facility, a fragmented matrix of volumes and voids remains.*

The total depth of the block in the north-west and south-east direction measures approximately 190 m, creating a distinct spatial depth towards the western edge of the site.[2] *In this length, the key liminal areas are defined by precise geometries. The distance between Magazines 5 and 7 is 19.15 m, while the separation between Magazines 1 and 2 is approximately 15 m wide. These in-between spaces are not accidental and were used for ventilation, material handling and manufacturing logistics. Today the site is lacking its function and the spaces in between remain spatial voids.*

The empty areas are partially asphalted, but these types of interventions are improvised and technically inadequate. The remaining surfaces are filled with uncontrolled vegetation, additionally highlighting the state of degradation. The voids are formally large in scale, but lacking infrastructure. The domination of empty spaces is confirmed through a 13.2% building coverage coefficient. However, this chapter defines the urban void as the primary structure of space rather than statistics. These in-between spaces structure the rhythm, scale and transformational potential of the site.

[1] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

[2] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

Visual Axes and Spatial Identity

The visual structure of the site is defined by three dominant elements: the silhouette of the warehouses, the medieval fortress on the hilltop on the northern side, and the bell tower of Saint Anthony's Church on the south. Other significant buildings perceived around the site are the St. Catherine's Church and the City Hall on the west, and the bus station on the northern perimeter.

In the wider territorial context, the fortress of Stjepan Kosača remains a dominant landmark. The tobacco complex is situated at the foothill of Buturovica, while lacking a clearly articulated visual relation towards the hill. Magazine 7, standing at 23 metres high, is clearly perceived from the southern road, while its façade is slightly hidden behind an array of smaller Magazines 1, 2, and 5. This compound is disguised by a strong gesture of the perimeter wall flanking the eastern edge and a compact row of one-storey houses attached to the main road on the western side of the plot. The perimeter wall interrupts the visual connection towards the housing development on the east. The 3 m height difference towards the bus station defines the northern edge, forming a visual barrier towards the north. Visual permeability is therefore heterogeneous and depends on the direction of the observer's approach. This creates a detachment of the site, forming an isolated and inaccessible void in the city centre. The present visual axes have not been systematically valorised. The articulation of views towards the fortress and the church towers opens the possibility for a more continuous and legible spatial identity of the site.

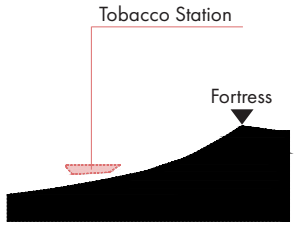


Figure 22. Section diagram of the Tobacco Station and Buturovica hill, indicating the site and the Old Fortress.

Planning and Implementation Framework

According to the Spatial Plan of the Municipality of Ljubuški 2015–2025, the analyzed parcel is situated within the construction area and marked as an urban central zone (Figure X).[5] *This classification implies the concentration of public, administrative, business and housing facilities and therefore confirms the strategic importance of the location.*

The spatial plan defines primary guidelines of spatial use and development, while detailed planning is expected through lower-level documents. This condition reflects the regulatory gap, lacking precise building parameters such as the building coefficient, maximal heights or public space obligations, which are not directly specified at the level of the valid plan. At the same time, the plan recognises the area through the protection of its urban morphological structure.[5]

Within the context of the existing morphology, where the site coverage coefficient amounts to 13.9%, the regulatory framework allows an open potential. The status of the central zone principally allows mixed-use and public programmes. However, the executive reality of the space is also determined by the ownership structure. The parcel is completely fragmented. The housing block at the position of a former Warehouse 4 and the object of a former bank belong to a private investor. The rest of the complex encompasses several cadastral units with different legal statuses. Such a mixed structure frames the possibilities of unified developmentand suggests phased planning as an appropriate model of implementation.

[5] *Spatial Plan Ljubuški, 2015.*

Recent administrative decisions have partially addressed this issue, as approximately 20,000 m² of the former tobacco station complex were transferred to the ownership of the City of Ljubuški, establishing the institutional precondition for the future redevelopment of the site. [6]

The tension between formal centrality and fragmented operative structure recalls the paradox of the location. The space is defined in planning documents as central, but in the absence of a clear spatial model it remains in a state of long-term decay.

[6] *Ljportal, 2024.*

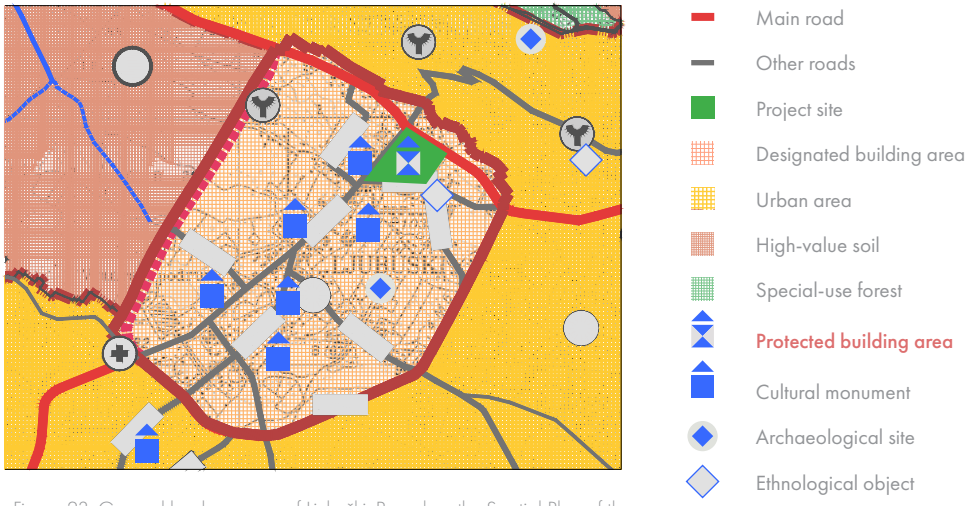


Figure 23. General land-use map of Ljubuški. Based on the Spatial Plan of the City of Ljubuški, with added protection parameters and planning conditions. Not to scale.

Environmental Setting

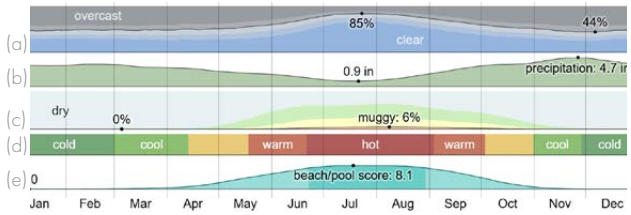


Figure 24. Climate overview of Ljubuški. Source: WeatherSpark (n.d.).

(a) Cloud coverge
(b) Precipitation
(c) Humidity comfort levels
(d) Average high and low temperatures
(e) Tourism score

The plot of the Tobacco Station is situated at an elevation between 99 m and 112 m a.s.l., resulting in a maximal fall of approximately 8 m and a terrain incline of 4%. The plot opens towards the south, the lowland plain, while towards the north it rises towards the hill Buturovica. This topographical configuration enables openness towards the southern horizon and generates potential for controlled gravitational water drainage.

According to the Copernicus classification, the area belongs to the type Csa, a Mediterranean climate with dry and hot summers.[7] Climatic data from the Federal Hydrometeorological Institute of Bosnia and Herzegovina (FHMZ) confirms a typical Mediterranean regime with warm, dry summers and humid winter periods, within a temperature span between 1 °C and 33 °C.[8]

[7] Köppen classification.

[8] WeatherSpark.

The median annual temperature is roughly 14–15 °C, while the median maximal summer temperatures reach 29–31 °C, alongside frequent extremes above 35 °C. The yearly measure of precipitation reaches around 1,000–1,300 mm, with a highlighted winter maximum and summer minimum values.[9]

[9] FHMZ, 1961 - 2020.

The site is completely open, without significant vegetational barriers. Insolation in such an environment is strongly present, especially in the summer period, with an annual sunshine duration above 2,200 hours[11]. Magazine 7, at a height of approximately 23 metres, creates a deep shadow on the northern part of the development and forms a distinct microclimatic zone in the area to the north of the building.

The openness of the territory allows natural airflow in the north–south and north-east–south-west directions. Ventilating distances between the magazines were originally designed for the processes of tobacco drying, confirming a clear climatic logic. Today, however, reduced building density within the complex and increased density in the surrounding urban fabric, have likely reduced the effectiveness of initial air circulation.

Retention of rainwater is evident in the south-eastern part of the plot, which indicates local geological and drainage specificities. Considering the presence of underground water and the site slope, the hydrological potential of the location can be actively integrated as a spatial and environmental resource.

Matter & Tectonics

MATTER AND TECTONICS

Industrial facilities such as tobacco stations represent material evidence of industrial processes where architecture, technology and organisation of labour shape the spatial and constructive logic of the buildings.

Each material layer showcases a specific building period and a certain function within the industrial compound. The objective of this analysis is to precisely define the typology of existing materials on the site, their characteristics, condition and potential for renewal.

Based on the site visit, photographic documentation and archival sources, the Tobacco Station in Ljubuški can be divided into several material phases: the original masonry structures, the transitional phase, the introduction of reinforced concrete, later technical additions, and the phase of post-industrial degradation. The site reflects the transition from traditional masonry techniques to industrial and reinforced concrete construction of the twentieth century.

Material layers can therefore be interpreted as an architectural stratigraphy of industrial development[1], in which a constructive phase reflects a shift in building technology, material availability and management of the production process. Every period holds a constructive logic and characteristic material palette, which together shape the heterogeneous yet coherent materiality of the industrial compound.

[1] *Industrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural or scientific value, including buildings, machinery, infrastructure and industrial landscapes (TICCIH, 2003).*

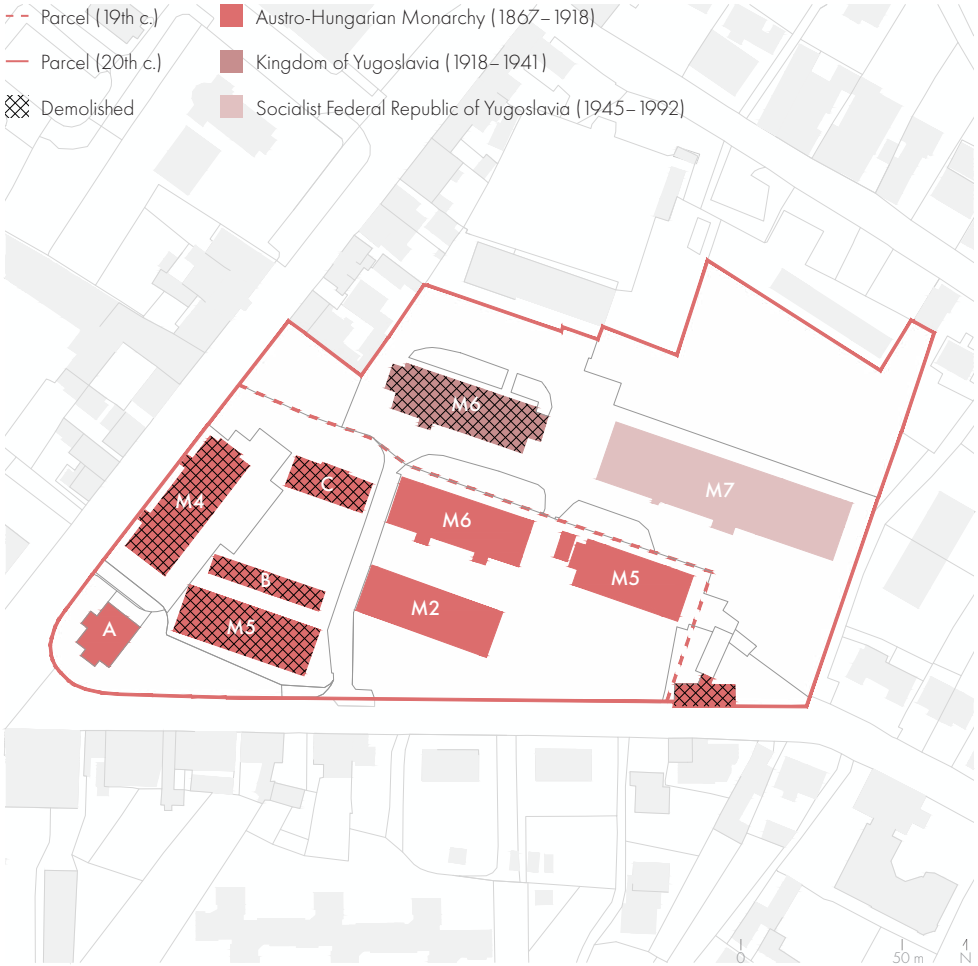


Figure 25. Construction phases of the Tobacco Station complex in Ljubuški.
Note. Author's drawing based on Rupčić (2021).

Figure 26. Construction phases and intensity of built structures over time.

Material Stratigraphy

Masonry phase (1880-1918)

The oldest part of the development dates to the Austro-Hungarian period, in which the dominant construction technique is masonry, highlighting durability, the use of local materials and structural stability. The walls are, as stated by Rupčić [2], "built of dressed limestone arranged in a regular or semi-regular pattern, bonded with lime mortar", while the interior partitions are made of full brick, simpler and thinner than the exterior layer.

Characteristic elements of this phase are:

- *dressed limestone and solid clay brick*
- *lime mortar*
- *timber floor structures and double*
- *pitched roofs with beaver-tail tiles*
- *stone lintels above openings*
- *metal elements such as clamps and connectors*

The structure is fully supported by load-bearing walls, without additional reinforcement. Wooden intermediate floors positioned in wall slots form a simple but durable system. According to Rupčić [2], "the wooden floor-beam structure represented the standard construction technology of the period, relying on the high thermal mass of the masonry walls". Such materials and techniques enabled natural moisture circulation, which was crucial for the drying and fermentation of tobacco.

[2] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

Transitional phase (1918-1945)

The period between the two wars brings a combination of the traditional masonry system and the first concrete elements. The walls are still made entirely of solid brick, but the first concrete beams and lintels appear, reducing reliance on load-bearing masonry walls. The mortar transitions from pure lime mortar to lime–cement mortar, increasing resistance to moisture and pressure.[2]

Rupčić and Bartulović note that "in this phase, the standardisation of openings and the rationalisation of the structure become evident"[3]*, which is visible in the even window modules and the simpler roof structure. This period marks the beginning of the transition toward a more industrial way of thinking in construction, while still maintaining a strong presence of local materials, primarily brick and lime mortar.*

Reinforced concrete phase (1945-1960)

After WWII, the construction sped up and transitioned to more contemporary technologies, mostly a reinforced concrete skeleton with masonry infill. This phase marks a radical change in the constructive logic. The walls are no longer the bearers but become a fill, while the loadbearing role is taken over by columns with capitals and slab structures.[2] *Reinforced concrete enables bigger spans and a more efficient building process. This phase displays the largest timeframe of technological modernisation in the development and the final transition toward a fully industrial constructive system.*[4]

[2] Rupčić, L. (2021). Tobacco treasure: Renewal of the Tobacco Station Ljubuški and the significance of tobacco in Herzegovina.

[3] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

[4] Trapara, B. (2019). From Vienna to Sarajevo.

Extension phase (1960-1990)

In this period, additional technical elements were introduced, including a reinforced concrete bridge between the buildings, with a standing seam galvanized steel sheet roof covering and an integrated steel frame supporting the lift. The combination of reinforced concrete and steel elements is visible, which typically corresponds to the industrial additions of the 1970s.[3] *The roof structures are wooden or steel, depending on the year of construction.*

Degradation phase (1990-now)

The newest layer is not a constructive phase, but rather a phase of degradation and improvised interventions. Rupčić and Bartulović note that "the highest degree of degradation is present at the junctions between the older and newer construction".[3]

The following conditions are observed on site:

- *corrugated aluminium sheet roof coverings*
- *precast concrete elements without structural continuity*
- *degradation of mortar and disintegration of limestone blocks*
- *moisture ingress, vegetation growth and efflorescence in the structure*
- *lintel collapse*
- *damaged wooden elements*

[3] Rupčić, L., & Bartulović, H. (2021). Development of the tobacco station in Ljubuški.

Apart from natural processes of decay, some areas of the complex were also affected by accidental or direct damage. The most notable event was a fire that occurred in the Magazine 6 in 2013. The object was burned completely and the roof structure collapsed.[5] Such events further degraded the site, contributing to the continued decay of this abandoned industrial facility.

Understanding the degradation processes is necessary to define an appropriate strategy of preservation and structural stabilisation.[1,6]

[5] *Jabuka (2013), Fire at the Ljubuški tobacco station.*

[1] TICCIH (2003), The Nizhny Tagil Charter.
[6] *ICOMOS (1964), The Venice Charter.*

Material Palette of the Industrial Structures

Material structure of the Tobacco Station does not represent only the technical component of the development, but also a layered memory of building techniques, work and use of the space. Each material carries a certain time period, specific technology and the traces of use, from craftsmanship until industrial prefabricated elements. This part of the chapter defines basic types of materials, their condition and potential for renewal, highlighting their role in forming the identity of the complex.

LIMESTONE

Position
external load-bearing walls, the plinth of the buildings, and lintels of several openings

Technology
manually cut limestone, assembled in a regular or semi-regular pattern and joined with lime mortar.

Current condition
- *degradation between old and new building connections*
- *washed-off mortar and granular decay on joints*
- *single blocks cracked by capillary moisture*
- *biological patina (lichens, microvegetation, vegetation)*

Analysis
Limestone is the most valuable historical material of the development. It carries craft traditions, handwork and techniques characteristic for the Austro-Hungarian period. Its thermal mass, vapor permeability and durability provide a solid base for renewal without aggressive interventions.

Potential for a renewal
- *injection of compatible lime mortar into joints*
- *cleaning and stabilisation of blocks, keeping the patina*
- *local reconstruction only in collapsed zones*

Limestone remains the foundation of the complex identity; the material of the first historical layer.

Figure 27. Limestone wall, exterior facade.
Note. Load-bearing limestone wall with visible openings and surface degradation, showing the current condition of the original masonry structure.

Figure 28. Limestone wall detail
Note. Dressed limestone blocks bonded with lime mortar.

Figure 29. Clay brick composed wall, Magazine 5
Note. Load-Bearing perimetral wall was composed by combining limestone and clay brick elements.

Figure 30. Brick wall, later addition
Note. Inconsistent mortar joints, indicating later repair or infill intervention.

FULL CLAY BRICK

Position
interior walls of the older warehouses, later phases as infill walls, chimneys

Technology
fully handcrafted or industrial baked brick, set with lime or lime-cement mortar (depending on the period)

Current condition
- *well preserved in protected zones*
- *decomposition in roof and foundation zones*
- *eroded mortar, but the structure remains stable*
- *visible efflorescence and moisture cycles*

Analysis
Clay brick connects all phases of architectural evolution, from early partitions to socialist infill walls. Because of its capillary structure, it clearly shows degradation traces; dark stains, efflorescence and hairline cracks reflect the movement of moisture over decades. Some areas indicate later interventions, where clay brick was used as a secondary material in repair and infill works.

Potential for a renewal
- *replacement only where degradation is severe*
- *mortar repair and removal of visible efflorescence*

TIMBER

Position
intermediate floor constructions, roof beams, secondary eaves, window frames

Technology
massive wood, usually oak or pine, placed into wall slots without additional reinforcement (Austro-Hungarian period)

Current condition
- *visible biological degradation, especially in roof areas*
- *local moisture damage*
- *stable only in dry areas*
- *majority of the timber construction is demolished or heavily damaged*

Analysis
Timber is the most fragile material on site, showing degradation early and clearly. Uneven deformations, traces of use and past fires contributed to its current condition. Most wooden elements no longer fulfil their structural function.

Potential for a renewal
- *complete replacement*
- *installation of lightweight systems that respect earlier wooden logic*
- *use of timber in selected interior spaces, where its material expression contributes to spatial quality*

Figure 31. Timber window frame, Magazine 2
Note. Wooden window frame shown in elevation and detail, with visible severe weathering and material erosion due to long-term exposure.

Figure 32. Reinforced concrete structure, Magazine 7
Note. Interior view of a plastered reinforced concrete structure with areas of detachment revealing the underlying concrete.

Figure 33. Reinforced concrete ceiling with exposed reinforcement, Magazine 7
Note. Area of concrete cover loss with exposed and corroded reinforcement.

CONCRETE

Position
pillars, beams, intermediate floor slabs, bridges between warehouses

Technology
reinforced concrete skeleton with clay brick infill, typical for 1950s–1970s

Current condition
- *carbonation on bridges*
- *excessive deflections and exposed reinforcement*
- *degraded concrete slabs and lintels*

Analysis
Concrete marks the technological modernisation and industrial shift of the complex. It allows larger spans, efficient construction and new circulation forms. However, it is also the most sensitive to poor maintenance and water penetration.

Potential for a renewal
- *reconstruction and replacement of existing elements with compatible materials*
- *use of glass in proposed new interventions and reinterpretations*

STEEL

Position
bridges, secondary constructions, eaves, roof

Technology
welded and bolted industrial steel profiles, mostly from the 1960s–1970s, typically protected by basic paint coatings or, in some cases, galvanization

Current condition
- *corrosion, occurring at joints and inadequately protected areas*
- *materially incompatible and poorly integrated joints on recent additions*
- *original 1970s steel elements are mostly stable*

Analysis
Steel is not dominant on the site, but it defines industrial interventions through connections between levels and buildings. Original steel structures differ from improvised additions in architectural and constructive value.

Potential for a renewal
- *sanding and protection of original steel*
- *removal of improvised constructions*
- *removal and replacement of severely damaged elements*
- *appropriate new lightweight steel additions in the future*

Figure 34. Corroded steel support element, Magazine 5
Note. Corroded steel support element, likely part of a secondary structural addition, with visible material degradation.

Figure 35. Steel bridge roof covering.
Note. Preserved metal roof covering of the bridge between warehouses, consisting of galvanized steel sheet.

Figure 36. Glass facade, Magazine 7
Note. Facade composed of repetitive square glazed openings extending through all floors, forming a clear vertical rhythm.

Figure 37. Windows
Note. Detail of a glazed opening with metal frame, showing ageing, deterioration and expired service life of the glazing elements, likely introduced as a later intervention.

GLASS

Position
openings

Technology
industrial single glazing, timber and occasional steel or aluminium frames

Current condition
- *deterioration due to weather exposure and lack of maintenance*
- *expired service life of most elements*
- *largely unpreserved condition*

Analysis
Glass appears in rhythmic openings across all magazines. One peculiar gesture is the glazed façade of Magazine 7 at the stair core, composed of square, filigree openings extending through all floors, indicating an architectural expression beyond mere utilitarian function.

Potential for a renewal
- *introduction of a unified window system compatible with the existing structure*
- *use of glass as a contemporary layer in new additions*

MORTAR

Types
- *lime mortar – oldest layer*
- *lime-cement mortar – interwar period*
- *cement mortar – socialist phase*

Current condition
- *lime mortar breathes well but washes off over time*
- *cement mortar cracks and becomes incompatible*
- *visible efflorescence at ground level*

Analysis
Mortar is the most fragile indicator of structural condition. It degrades faster than stone or brick and reveals weaknesses in the constructive system. Renewal should prioritise compatibility, mainly improved lime mortar.

Potential for a renewal
- *removal of incompatible cement-based repairs*
- *repointing with compatible lime mortar*
- *local testing of mortar composition before larger interventions*

Figure 38. Lime mortar, Magazine 1
Note. Original lime mortar from the masonry phase, showing surface erosion and material loss.

Figure 39. Cement mortar, Magazine 7
Note. Mortar from the reinforced concrete phase, showing a stable condition with good cohesion.

Figure 40. Vegetation growth, Magazine 1, interior space
Note. Uncontrolled vegetation growing inside the structure due to the absence of the roof, indicating advanced exposure to weather and lack of maintenance.

Figure 41. Ivy on facade
Note. Ivy growing on the facade and within masonry joints, contributing to moisture retention and gradual deterioration of the wall surface.

VEGETATION

Position
rooftop edges, wall crowns, facades, joints, degraded mortar zones, ground level

Types
- *unplanned organic growth through moisture and cracks*
- *planned tall vegetation*

Current condition
- *strong root infiltration in wall joints*
- *moss and lichens accelerating moisture retention*
- *vegetation growing from cracks in stone and brick*
- *tree growth forming buffer zones*

Analysis
Vegetation layer is interpreted through two different roles. In the cracked and damaged zones it acts as a factor of degradation, whereas in other areas it creates a valuable protective and ambient layer. Therefore, it is necessary to differentiate the deteriorating vegetation from the one that is worth keeping as part of the spatial identity.

Potential
- *removal of invasive growth from cracks, joints and wall crowns with controlled root extraction*
- *retention of selected trees and larger vegetation layers that contribute to spatial protection and ambient quality*

Material Behaviour within the Structure

Materials present in the Tobacco Station carry specific technical and physical properties that directly influence both the current structural stability and the possibilities for future renewal. Their behaviour depends on compressive strength, resistance to moisture, durability of connections and interaction between different material layers. Understanding these characteristics is essential for defining proper preservation and intervention strategies.[1]

[1] TICCIH (2003), The Nizhny Tagil Charter.

Masonry

Stone and clay brick show good compressive capacity but lower resistance to tension. Limestone, which dominates the elevations, carries the loads well and keeps its properties for a long period of time. It is sensitive to salt crystals and to cycles of freezing and thawing. Clay brick behaves in a stable way when the mortar and bearing surfaces are in good condition. The most common damage is caused by washed-out mortar and water infiltration.

Stonework was the primary constructive technique used in the earlier phases, while the clay brick acted mostly as a secondary material, used in partitions. Such methodology explains the compressive logic of the construction, dominant in the older warehouses.

Timber

Wood in the intermediate levels and roofs has good mechanical values for its weight, but it is extremely fragile when in contact with water, insects and mechanical damage. In several places, the deterioration between the beams and the walls is marked, especially where there was continuous water leakage.

According to the site research, the main reason for such decline is not the quality of the material itself but its exposure to climatic conditions without adequate protection. Additional damage is caused by several fires on site and the natural aging of the material. Currently, most of the original wood no longer exists on site.

Concrete

Concrete introduces significantly higher constructive possibilities in comparison to traditional masonry materials. Its high compressive strength allows the use of larger spans and greater volumes.

Local damage such as carbonation, corrosion of reinforcement, microcracking, and detachment of the protective layer implies the typical processes of reinforced concrete decay. Damage is commonly connected to water infiltration and the absence of maintenance. Despite the evident decay, the majority of the concrete elements still hold relatively high durability in relation to other materials present on the site.

Secondary Material Layers

Although non-dominant, materials such as steel and glass composed the final architectural layer. Their role expressed a particular architectural sensibility rather than being a technical necessity.

By implementing distinct architectural gestures, such as filigree glazing, carefully chosen capital shapes, and bridge volumetry, the industrial place was given a value of dignity and articulated the space at a more human scale.

The most common processes of degradation in steel elements are connected to corrosion caused by exposure to moisture and weathering processes. Glass in openings and glazing systems is almost completely gone due to the natural timeframe of the material, several fires, and intentional physical destruction.

The traces of the materials still display their original character and therefore hold a possibility of renewal and reconstruction.

Vegetation

Vegetation within the site can be divided into two roles regarding its relation to the existing structure. In zones of damage, it acts as a degrading factor, while in areas of planned greenery it creates a valuable ambient and spatial layer.

The roots which penetrate joints and cracks cause additional detachment of stone and clay elements. This process is mostly found in shadowed areas with lower ventilation.

Concurrently, articulated tall vegetation, concentrated mainly alongside the east perimeter, forms a natural protective barrier while improving the microclimate conditions of the space. The presence of trees filters the space through shadow and privacy.

The dual role of vegetation demands a clear distinction between maintenance and removal strategies in the early stages of design.

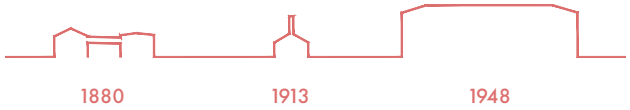
These observations form the basis for defining material-specific strategies of preservation, replacement and reinterpretation in the subsequent design phase.

Existing Fragments

EXISTING FRAGMENTS;
Analysis of the Remaining Magazines

Tobacco station displays a stratified constructive language where different architectural phases coexist. The original continuity of the tobacco station's development is interrupted over time and is no longer present on site.

The four remaining magazines show traces of this evolution, where the architecture can still be understood within the walls. This framework becomes an analytical research base for interpreting the fragments left on site. The architectural analysis of the remaining objects explores their position, construction, materiality and state of preservation, considering them as parts of its initial evolution.



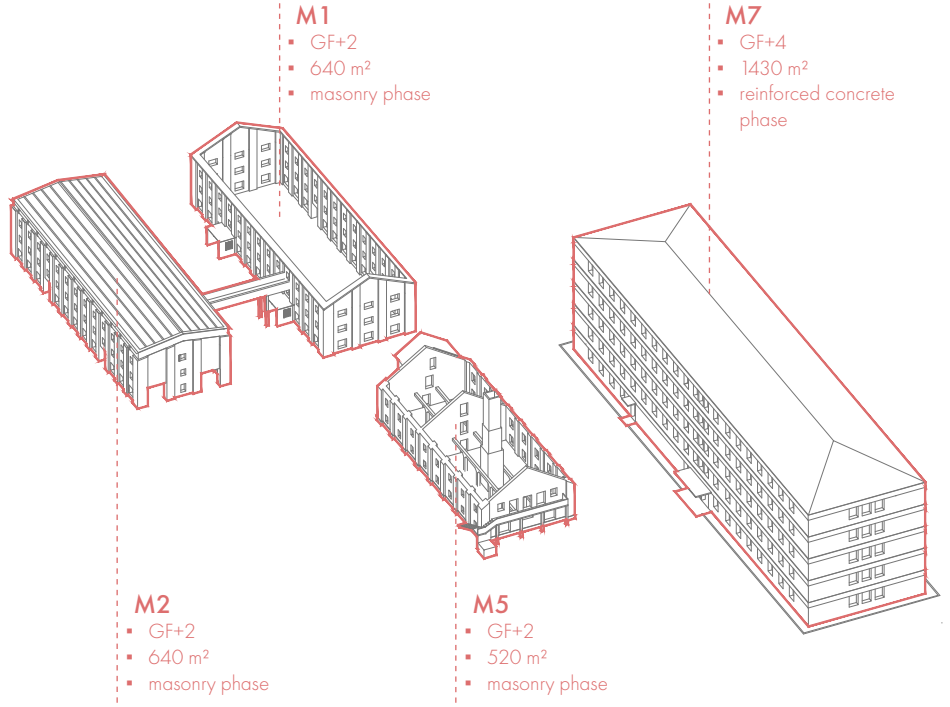


Figure 42. Axonometric representation of the Tobacco Station buildings, indicating structural phases, floor levels, and surface areas.

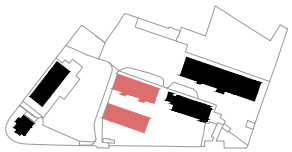


Figure 43. Magazines 1and 2 mapped on the site.

Magazines 1&2

Architectural Presence

Magazines 1 and 2 belong to the Austro-Hungarian period (around 1880) and represent the basic warehouse typology. The two identical longitudinal buildings connected by a bridge form a unified system, as the space between them functioned as an integral part of the complex, a relationship preserved only in this case[1].

Constructive Logic

The plan measures approximately 14.5 × 43.4 m. The buildings have load-bearing masonry perimeter walls, 50 cm thick, with vertical thickenings of approx. 105 cm, following a structural rhythm of 3.15 m. The original internal structure consisted of a timber column system (approx. 25 × 25 cm), organized in a grid of 4.25 m (transverse) and 3.15 m (longitudinal). Today, it survives only as traces in the walls. The buildings had a ground floor, two upper floors and an attic.

Spatial Function

The interior is organized as an open storage space defined by the structural grid, allowing flexible handling of tobacco. The bridge connection is positioned at approximately 5.40 m height (second floor), with a width of 2.50 m and a height of 2.65 m, used for transport between the buildings.

[1] Rupčić & Bartulović (2021), p. 21. "Interesting interstitial spaces were formed between the buildings, further framed by the construction of connecting bridges at the first-floor level."

State of Preservation

The perimeter walls remain largely preserved, while the internal timber structure and roof have been lost. The system is visible only through imprints in the walls. A later addition on Magazine 2 disrupts the original structural logic and destabilizes the volume. Both buildings are currently unprotected and exposed to degradation.

Architectural Expression

The rhythm of wall thickenings emphasizes the vertical articulation of the facades, giving the buildings a strong expression despite the loss of the internal structure.

Figure 44. Timber beam imprint in masonry wall
Note. Trace of the original timber floor beam embedded in the load-bearing wall.

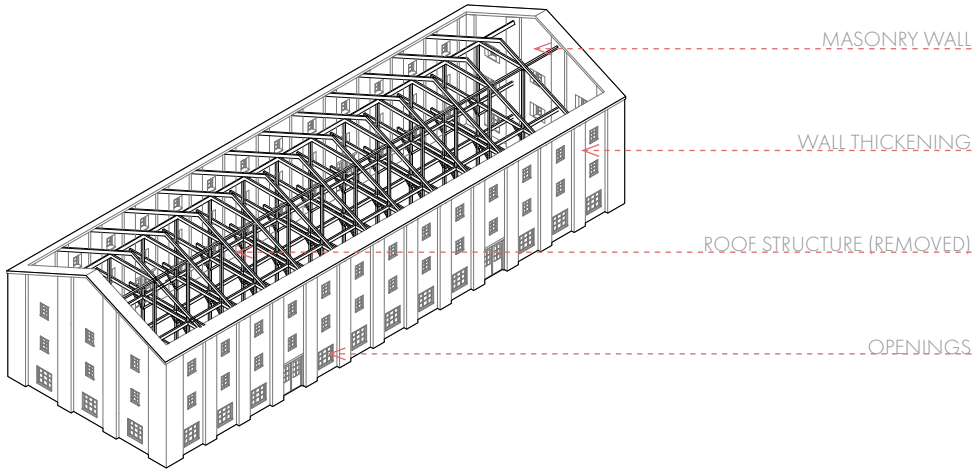


Figure 45. Typical warehouse axonometry (1879 prototype)

Plans M1&2

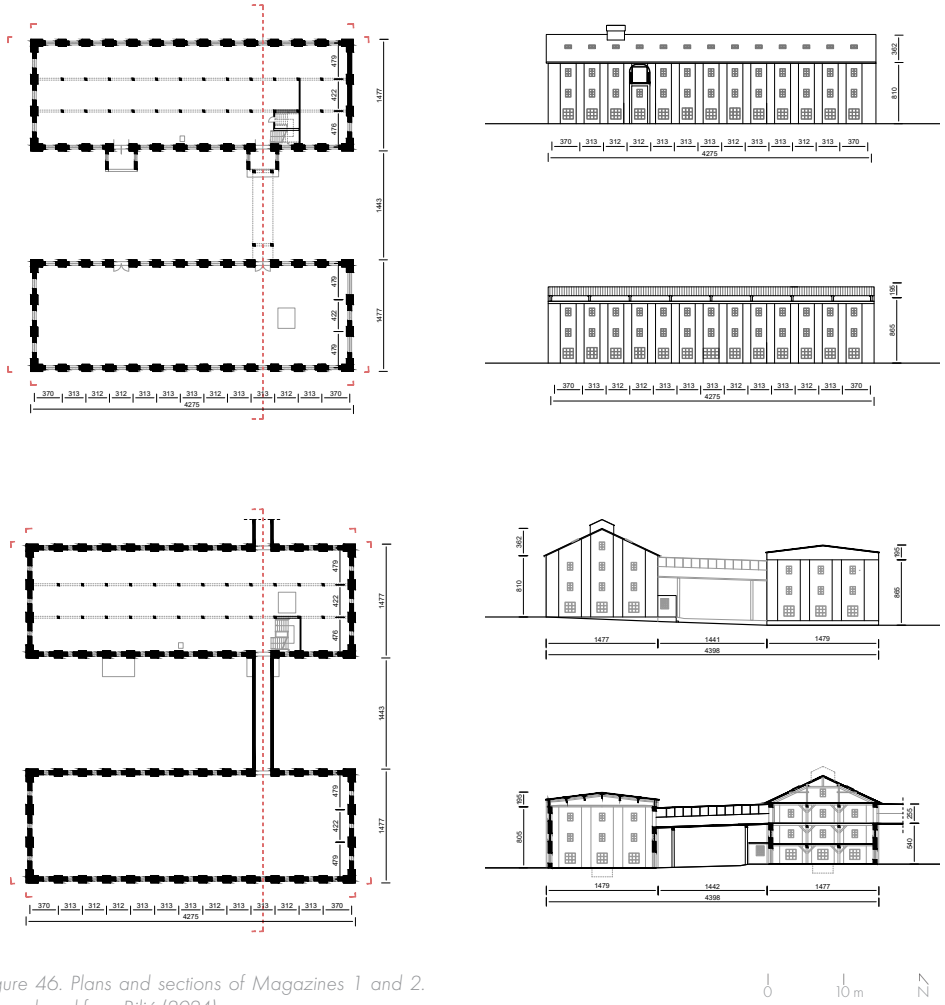


Figure 46. Plans and sections of Magazines 1 and 2. Reproduced from Bilić (2024).

Magazine 5

Architectural Presence

Magazine 5 belongs to the early phase of the complex. It is most likely constructed shortly after the initial buildings of the late 19th century. It is a variation of the original warehouse typology, positioned between the earlier masonry system and later structural transformations.

Constructive Logic

The building has a footprint of approximately 14.5 × 31 m and is organized longitudinally into a 3:5 sequence of fields. The perimeter walls are a mix of stone and clay brick, forming a layered envelope. Inside, a system of concrete columns with capitals extends only in the longitudinal direction through the building. This structure appears to be a later addition, likely linked to the early 20th-century transformation of the building (Rupčić & Bartulović, 2021). The original timber structure is no longer present, although traces of beam pockets suggest its position and logic. The building was organized over two levels with an attic. The original roof, with an approximate pitch of 30°, is preserved only in the small attached volume on the western facade.

Due to incomplete documentation, the plans are reconstructed based on site measurements, photographic analysis and typological comparison with similar buildings.

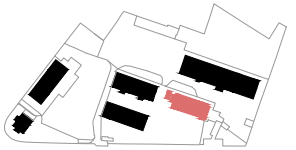


Figure 47. Magazine 5 mapped on the site.

Figure 48. Beam pocket in masonry wall, Magazine 5
Note. Recess in the masonry wall used for embedding a timber floor beam, indicates the position of the original floor structure and represents a distinct feature of the masonry phase.

Spatial Function

The building's initial function is not documented and is understood through interpretation. The presence of a chimney, positioned within the central field of the eastern wing, points to a system related to controlled heat. The building can be read as an earlier fermentation space, later adapted into storage, which explains its layered condition.[1]

State of Preservation

The building is in a highly degraded condition. Timber elements are mostly lost, while the masonry walls and concrete columns remain. The roof structure survives only in a small western attached volume, providing a single reference of the original covering system. The rest of the building is exposed and affected by long-term decay. Multiple phases of intervention, addition and neglect are visible, further fragmenting the original structure.

Spatial Expression

The interior reads as a layered assemblage, where traces of stone, brick, processed brick, timber structure and later steel additions coexist. The chimney remains the dominant element, anchoring the space both visually and spatially. An external terrace further reinforces the reading of the building as a composite structure shaped through different phases.

1 The interpretation is based on the author's interview (2026), where conditions of constant heat during tobacco processing were described in Magazine 7, suggesting a similar or earlier use of controlled temperature within the complex.

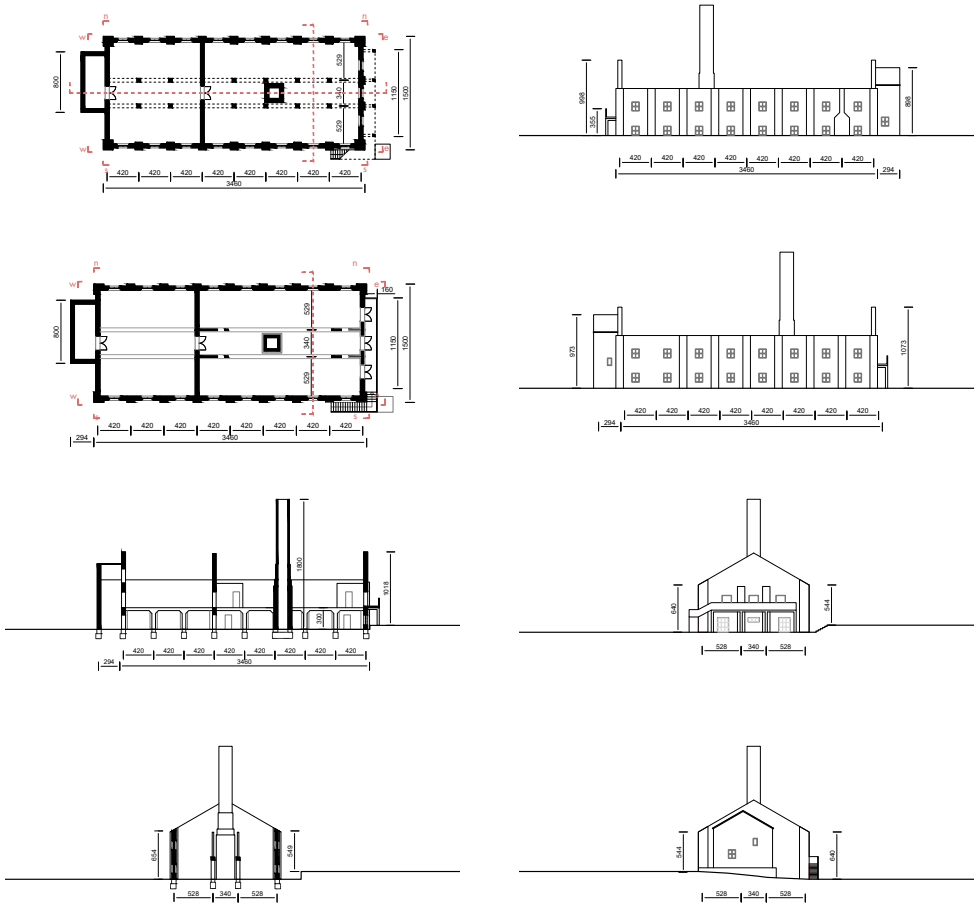


Figure 49. Plans and sections of Magazine 5. Reconstructed based on typical warehouse drawings and on-site measurements.

0 10 m N

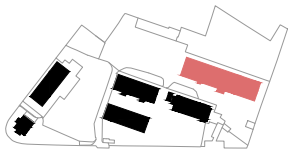


Figure 50. Magazine 7 mapped on the site.

Magazine 7

Architectural Presence

Magazine 7 belongs to the post-war phase (1948) and marks a clear shift in scale and construction within the complex. Its height and compact volume make it the most dominant structure on site, introducing a new structural logic compared to earlier magazines.

Constructive Logic

The building is organized through a reinforced concrete structural system, defined by a grid of approximately 3 × 11 fields. The central span reaches around 7 m, with an overall width of approximately 18.6 m. Columns are dimensioned at 50 × 50 cm, widening into capitals of 100 × 100 cm, which directly support concrete slabs of approximately 20 cm thickness. The floor-to-floor height is 3.88 m. The structure is defined by the relationship between columns, capitals and slabs. The building is further defined by a central core containing a staircase and vertical shafts, dividing the volume into two wings.

Spatial Function

The interior is conceived as a large open storage system. In use, however, the space was continuously filled with tobacco, creating a sense of spatial compression.

The central core, including the wide staircase (approx. 6.55 m) and adjacent shafts, formed a distinct zone of circulation and pause for workers (author's interview, 2026).

Ventilation elements integrated into the northern façade indicate a more advanced environmental control system, reflecting the technological development of the period.

State of Preservation

The reinforced concrete structure remains largely intact and structurally stable. In several areas, the protective concrete layer has deteriorated, exposing reinforcement. Moisture and surface decay are visible, and plaster has partially detached.

The roof has collapsed, allowing vegetation to penetrate the interior. Glass elements are damaged, and the building shows signs of long-term neglect. Despite this, it remains the most consolidated structure within the complex.

Spatial Expression

A specific moment appears at the façade of the central space, where a concrete grid with glass is introduced. As this area functioned as a space for worker breaks, the detail introduces a level of care beyond pure function and improves the spatial quality. The façade is not decoration, but a response to use.

Figure 51. Basement level of Magazine 7, identified on site and added to the author's documentation, as it was not included in the original survey drawings.

Plans M7

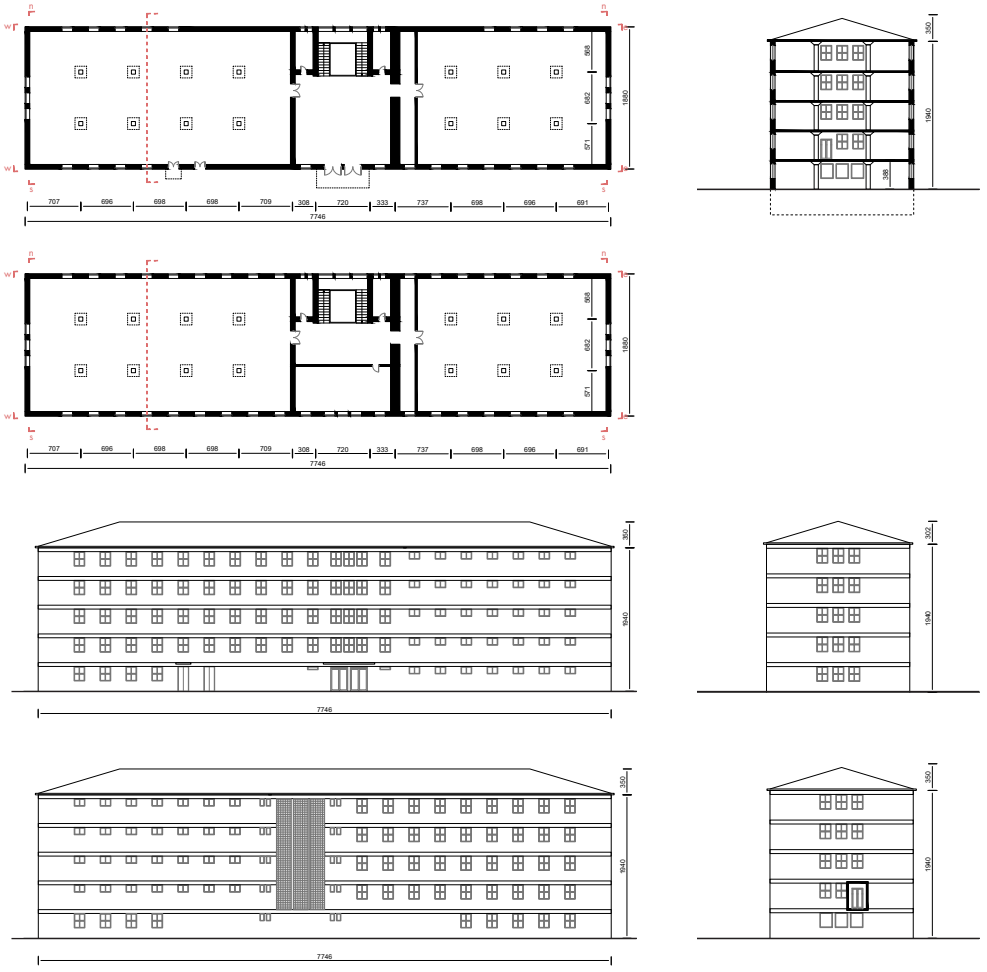


Figure 52. Plans and sections of Magazine 7. Based on architectural survey drawings provided by the Municipality of Ljubuški.

0 10 m N

Figure 53. Magazine 1, exterior corner view.
Note. Author's photograph.

Figure 54. Magazine 2, interior view with original steel lift and later interventions.
Note. Author's photograph.

Figure 55. Bridge between Magazines, 1970s addition.
Note. Author's photograph.

Figure 56. Magazine 5, exterior corner view.
Note. Author's photograph.

Figure 57. Magazine 5, east facade.
Note. Author's photograph.

Figure 58. Magazine 5, interior view.
Note. Author's photograph.

Figure 59. Magazine 7, western facade.
Note. Author's photograph.

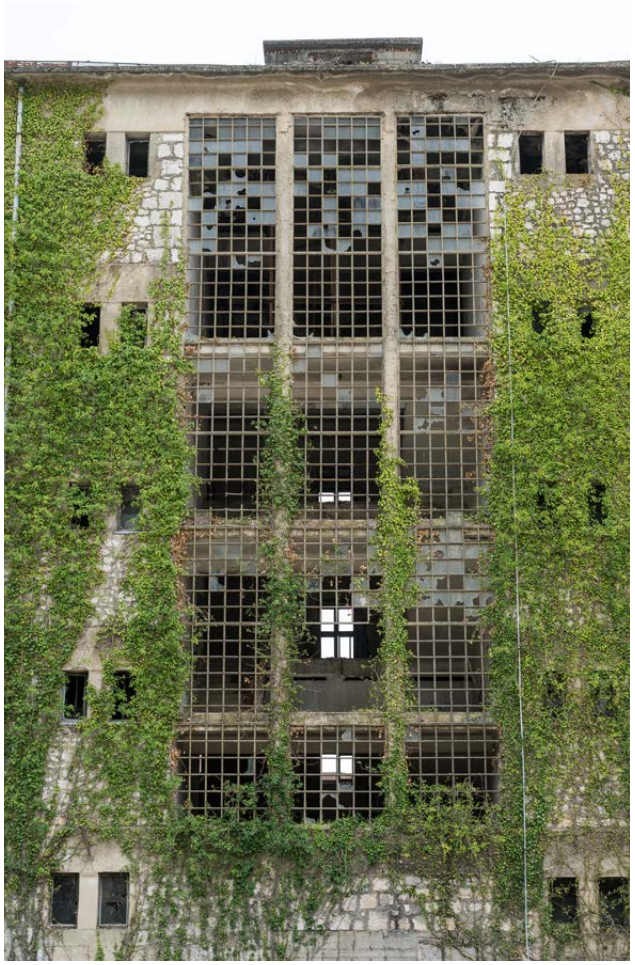


Figure 60. Magazine 7, glass facade detail.
Note. Author's photograph.

Figure 61. Magazine 7, southern facade detail.
Note. Author's photograph.

Figure 62. Magazine 7, interior view.
Source: Photograph by Ljilja Rupčić, 2020.

Figure 63. Magazine 7, interior staircase.
Note. Author's photograph.

New Ways of Use

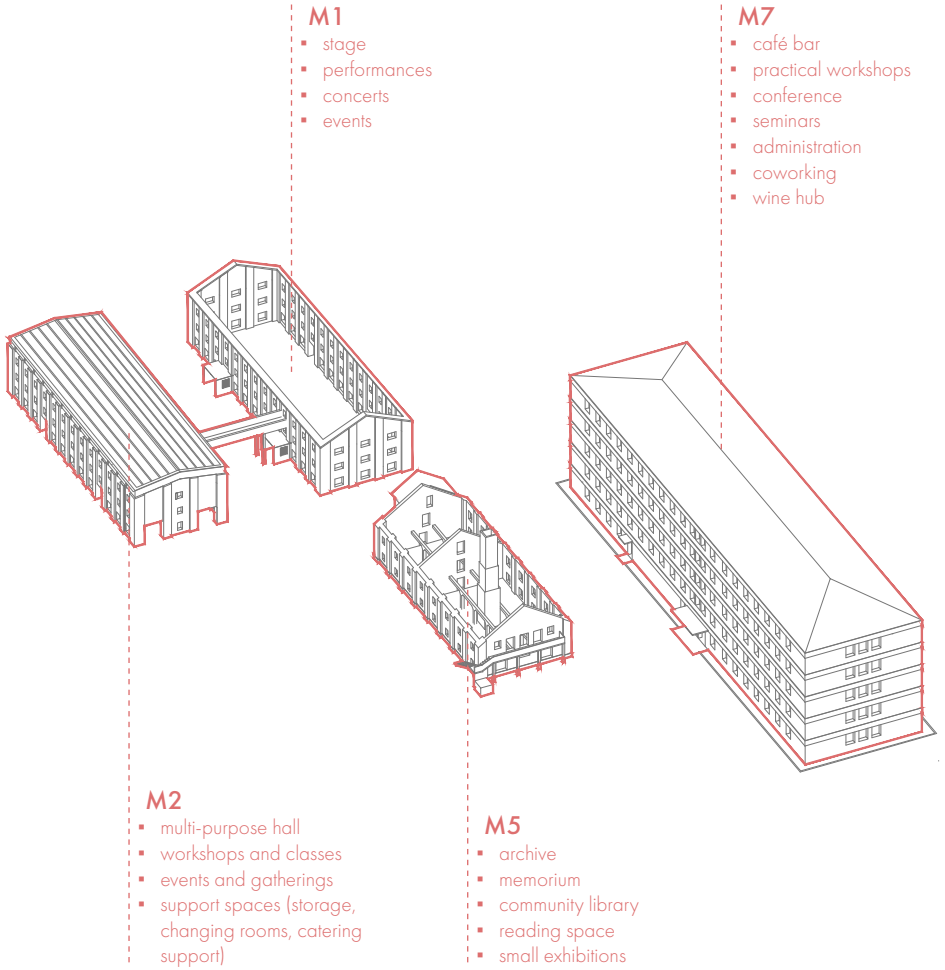


Figure 64. Functional diagram of the proposed programme across the magazines.

INTRODUCING NEW WAYS OF USE

Defining the new functions within the former tobacco development in Ljubuški is grounded in a multifaceted analysis of the spatial, social and economic context of the city.

Demographic indicators highlight a continuous decline, where the negative migration balance is most pronounced among the young working population. Exodus among youth, particularly during the phase of education, results in the loss of an active and progressive base of the city.[1]

The existing economic structure remains largely dependent on traditional and seasonal activities, with a limited presence of knowledge-based and self-organised work models.[2] *This structure reflects not only economic conditions but also the lack of spaces that support contemporary ways of working, learning and collaboration.*

Furthermore, dispersed urban growth without a clearly defined centre results in fragmented public life and weak functional connections. Public activities remain largely temporary and event-based, lacking permanent spatial support and reducing the intensity of everyday urban use.[3]

Within this framework, the programmatic concept emerges from the need for spatial condensation of already existing, but dispersed functions.[4]

[1] *Federal Office of Statistics of the Federation of Bosnia and Herzegovina. (2024). Socio-economic indicators by municipalities.*

[2] *Ivanković, M., Prusina, T., & Jurilj, I. (n.d.). Sustainable development of rural areas through development of original products.*

[3] *Kuko, S. (2015). Promotion of natural resources as a tourist potential of Herzegovina.*

[4] *Grad Ljubuški. (2021). Strategija razvoja Grada Ljubuškog 2021-2027.*

The tobacco station is conceived as an open hybrid compound that enables intersections between work, learning, production and public life within a single spatial system.

This approach aligns with contemporary development models for smaller and peripheral environments, where flexibility, proximity and everyday use are recognised as key factors of long-term sustainability.[5,6]

Patterns of Change in Population and Economy

Socio-economic and demographic parameters display fundamental reasons for defining the functional programme of the former tobacco station in Ljubuški. Migration trends, employment patterns and education all imply structural transformations which directly influence everyday urban life and the spatial requirements of the city. As noted, according to data from the Federal Institute for Statistics of the Federation of Bosnia and Herzegovina, Ljubuški records a continuous decline of the resident base over the last decade, where the negative migration balance is most pronounced among the young working population.[1]

State of the art analysis of the labour market signifies a high rate of youth unemployment, which in the regional context reaches approximately 33%, with a high dependency on seasonal and traditional economic sectors.[7]

The share of self-employed workers and those engaged in knowledge-based fields and creative work remains low in comparison with entity and European benchmarks, which additionally limits the possibilities of professional progression outside formal and institutional settings.[2]

The educational profile deepens these dynamics. A significant share of students is directed towards vocational high school tracks, while the spatial provision for practical teaching, informal learning and continuous education remains limited.[8] *Such imbalance between educational flows and provided spatial capacity results in weak connections among education, work and local production.*

Demographic trends of population ageing highlight the need for programmatic frameworks that enable intergenerational communication and continuous occupation of space. At the same time, demographic ageing requires spatial typologies that are not exclusively aimed at one generational or social group, but rather allow the overlapping of different modes of use.[1]

In a spatial sense, the mentioned socio-economic conditions are reflected through fragmented public life and dispersed urban growth. The absence of a distinct city centre and stable public infrastructure results in occasional and temporary activation of space, without continuity in everyday rhythms. Abandoned industrial complexes, such as the former tobacco station, in this sense represent rare spatial assets capable of accommodating the role of new urban catalysts.[3]

[5] *Zavratnik, V., et al. (2019). Living Labs for Innovation.*

[6] *European Commission. (2020). Living Labs as Instruments for Business and Social Innovation.*

[1] *Federal Office of Statistics of the Federation of Bosnia and Herzegovina. (2024). Socio-economic indicators by municipalities.*

[7] *Agency for Labour and Employment of Bosnia and Herzegovina. (2024). Labour Market Report of Bosnia and Herzegovina.*

[2] *Ivanković, M., Prusina, T., & Jurilj, I. (n.d.). Sustainable development of rural areas through development of original products.*

[8] *Federal Ministry of Education and Science. (2017). Enrollment Plan for Secondary Schools in the Federation of Bosnia and Herzegovina.*

[1] *Federal Office of Statistics of the Federation of Bosnia and Herzegovina. (2024). Socio-economic indicators by municipalities.*

[3] *Kuko, S. (2015). Promotion of natural resources as a tourist potential of Herzegovina.*

Table 1. – Socio-economic indicators and spatial implications.

Observed Data	Key Indicator	Spatial Implication	Source
Migration Balance	*-104 individuals, 68% < 35 yrs.*	*Working, learning and productive environments supporting continuous use*	*FZS (2023)[11]; FZS (2024)[1]; ŽZH (2021)[10]*
Youth Unemployment (15-24 yrs.)	*30–35%*	*Coworking, workshops, hybrid work models*	*ARZ BiH (2024)[7]*
Education–Practice Relation	*60% students in vocational tracks; <30% schools with workshops*	*Equipped training workshops, shared learning environments and spaces for skill-based practice*	*FMON (2017)[8]; FZS (2024)[1]*
Self-Employment	*10–11% self-employed*	*Accessible small-scale work and production environments*	*FZS (2024)[1]*
Agro-production	*28% workforce in agriculture; 42 wineries in Ljubuški area*	*Shared platforms for processing, presentation and distribution of local products*	*FZS (2024)[1]; Vinarije Ljubuški (2023)*
Public green infrastructure	*<10 m² per capita (EU avg. 18 m²)*	*Continuous public space and green infrastructure*	*Eurostat (2024)*
Settlement structure	*75.5% rural population*	*Centralised public nodes and spaces of collective activity*	*FZS (2024)[2]*

Strategies Shaping Spatial Transformation

Developmental and strategic contexts play a significant role in defining the programmatic concept of the former tobacco station in Ljubuški. The analysis of strategic and planning documents at the local and regional level indicates a clear gap between strategy and spatial implementation.[9]

Documents such as the Strategy of Development of the City of Ljubuški and the Strategy of Development of the West Herzegovina County highlight the need to retain the population by employing youth, diversifying the local economy and developing educational and cultural capacities, but rarely offer concrete spatial mechanisms for their realisation.[9,10]

Youth employment and the reduction of emigration are identified as key objectives, with a focus on entrepreneurship, lifelong learning and innovation activities. However, the suggested measures mainly remain at the level of institutional and economic instruments, without a clear spatial framework that would enable their everyday application.[10] In this way, development policies are often fragmented, time-restricted and mutually unconnected initiatives.

[9] *City of Ljubuški. (2021). Development Strategy of the City of Ljubuški 2021–2027.*

[10] *West Herzegovina County. (2021). Development Strategy of West Herzegovina County 2021–2027.*

Architectural Approach

Architectural response is developed through a spatial system capable of accommodating varying social, economic and temporal conditions. Considering unstable demographic trends, shifting concepts of work and different intensities of use, rigid functional division and strictly defined typologies are avoided. This approach translates identified socio-economic conditions and strategic goals into a spatial framework focused on continuous use rather than a fixed programmatic definition.[5]

The existing industrial structure acts as a bearing framework for such an approach. Large spans, repeating modules and a robust construction can accommodate numerous scenarios with minimal intervention. Transformation is understood as a gradual and partially reversible process, which enables future adjustments while preserving spatial coherence.[5]

structure → *adaptation* → *multiple use* → *continuity*

[5] *Zavratnik, V., et al. (2019). Living Labs for Innovation.*

Across Generations

The social aspect of the programme stems from the need to create a space that serves multiple social layers, age groups and modes of use. The analysis of demographic movements points to parallel processes of youth emigration and population ageing.[11] *Such trends create discontinuity in the social life of the city and require spatial typologies that enable constant use of space.*

The functional repositioning of the tobacco station is therefore defined through the intersection of various age groups and social layers rather than through one targeted group. Particular focus is placed on the young and younger actively employed population, which in the existing spatial context has limited accessibility to spaces for work, informal learning and social exchange, as noted in strategic documents.[9] *Concurrently, the inclusion of children and the older population through educational and public programmes responds to the need for strengthening intergenerational cohesion, especially in smaller environments where formal social spaces are often absent.*

This type of approach is grounded in a spatial logic of parallel use, rather than in formal models of inclusion. Activities take place simultaneously and in close proximity, which encourages spontaneous encounters and the everyday presence of users. The social dimension of the project is built through continuous use of space, which aligns with contemporary research on public space and social infrastructure.[12,13]

[11] *FZS (Federal Institute of Statistics). (2023).*

[9] *City of Ljubuški. (2021). Development Strategy of the City of Ljubuški 2021-2027.*

[12] *European Network of Cultural Centres et al. (2020). Beyond the Urban.*

[13] *OpenHeritage Consortium. (2020). Community-Driven Adaptive Reuse in Europe.*

Table 2. – Programmatic framework by functional block.

Program Block	Primary Function	Users	Mode of Use
Educational & Workshop Hub	*learning, making, knowledge exchange*	*students, craftsmen, visitors*	*daily, continuous*
Wine & Agro Hub	*production, presentation, exchange*	*local producers, visitors*	*seasonal + continuous*
Co-working & Innovation Hub	*digital work, collaboration, entrepreneurship*	*youth, entrepreneurs*	*flexible*
Event & Conference Hall	*public events, knowledge exchange*	*institutions, public*	*periodic*
Multi-use Hall (Performance / Training)	*movement, rehearsal, informal performance*	*students, citizens, performers*	*flexible, occasional*
Public Space (Piazza & Green Corridor)	*gathering, interaction, recreation*	*citizens, visitors*	*daily*

Contemporary Ways of Production

Productive programmes display a key link between the social and economic dimensions of the project. Socioeconomic indicators point to a strong dependence of the local economy on traditional and seasonal activities, with a low rate of self-employed work and activities based on knowledge and creative practices.[1] At the same time, development strategies emphasise the need for diversification of economic activities, but lack a clear spatial infrastructure for their implementation.

Workshops, coworking spaces and educational contents are therefore envisioned as productive frameworks which enable an interconnected network of work, learning and production. Such a model corresponds to the concept of Living Lab environments, in which spaces are used as platforms for experimentation, cooperation and development in a real context. [5,6]

Distinct attention is devoted to local products and the gastronomy of the region, whose potential is confirmed by numerous studies on wine tourism and rural development in Western Herzegovina.[14,15] The wine hub, educational kitchens and workshops for local product processing function as everyday working and educational spaces, through which local production is integrated into the urban life of the city.

[1] *Federal Office of Statistics of the Federation of Bosnia and Herzegovina. (2024). Socio-economic indicators by municipalities.*

[5] *Zavratnik, V., et al. (2019). Living Labs for Innovation.*

[6] *European Commission. (2020). Living Labs as Instruments for Business and Social Innovation.*

[14] *Jahić, H. (2016). Wine tourism and wine roads in Herzegovina-Neretva Canton.*

[15] *Budimir, Ž. (2020). Tourism as a factor of development in Western Herzegovina.*

Where the City comes Together

Public and performative functions showcase an open layer of the programme, aimed towards the activation of public space and the strengthening of everyday urban life. Research on public areas in smaller and peripheral centres highlights the importance of flexible and multipurpose places which allow informal gatherings, spontaneous events and continuous presence of people.[12]

The square, the stage and the dance school are envisioned as spaces of different ranges of intensity, from everyday activities such as workshops and training sessions to public performances and events. Their spatial organisation enables visual and physical connection with other programmes, which erases the boundaries between performer and audience, as well as between planned and unplanned ways of use.

Outdoor public programmes, including the square and green areas, play a role in connecting the complex with the city and creating urban continuity of public space. The main objective was to implement surfaces for everyday use, movement and encounter, with incorporated urban elements. Such an approach enables the former tobacco station to become an active part of urban life, capable of adjustment to various scenarios and cultural practices over time.

[12] *European Network of Cultural Centres et al. (2020). Beyond the Urban.*

Continuity through Use

A new urban shift of the former tobacco station in Ljubuški is derived from a layered reading of the city, its voids, rhythms and potentials. The programme is shaped as an answer to demographic trends, employment structure, educational fluxes and strategic guidelines, all of which imply an inconsistency between existing needs and their spatial articulation.

The functional strategy is envisioned as an open relational matrix in which work, learning, manufacture and public life overlap and fulfil each other. The space enables different scenarios of use, adjustable to time cycles and different user groups. The synthesis of the programmatic decisions is shown through socio-economic indicators and spatial responses within the complex.

Programmatic aims are guided towards creating a long-term presence and continuous use, with a significant accent on the young and younger actively working population, while at the same time including children and the elderly through educational and public facilities. Productive programmes and public functions additionally strengthen the role of this tobacco facility as an open urban compound.

Functions are therefore read as an adaptable spatial frame, whose value is set in relations that enable a multifaceted network of gatherings and events. Continuity of the former tobacco station is thus redefined not as preservation of form, but as an architectural condition shaped by an ongoing use.

What Comes Next

WHAT COMES NEXT *(Design Strategy)*

The project explores the relation between matter and memory through a precise intervention in the existing industrial complex. Existing buildings are recognized as carriers of memory, while new additions enable their future use and extended lifespan. The project concentrates the architectural intervention within three complementary clusters: gathering, memory, and production.

Magazines 1 and 2 form the gathering cluster, transforming into a public space for performances and cultural events. The system is organized as a open spatial framework, allowing various scenarios of use, from music and dance activities to exhibitions, shows, workshops and public gatherings. An additional northern linear volume establishes an infrastructural base both within the Magazines and in the broader urban context. The gathering cluster acts as a unified spatial organisation, connected both functionally and visually.

Magazine 5 forms the remembering cluster, shaped as a space of memory and community. The focus shifts towards the site's identity and atmosphere through a balance of individual experience and collective use, through sequences of individual sensory perception and collective exchanges, attained through encounter and interaction.

The productive cluster is defined through Magazine 7, which supports the development of local knowledge and young working population through education, workshops, and small-scale production. Its organisation combines learning, making, and presentation within a single spatial system, enabling the visibility and feasibility of work while encouraging long-term engagement and continuity of use.

The adaptive transformation of the complex is grounded in preserving the constructive logic and existing stratigraphy, defining a balance between the permanent and the variable, where the existing structures act as a stable frame, while the new layers remain open, enabling change and transformation over time.

Masterplan

Masterplan responds to the problems identified in the spatial analysis, including the inaccessibility of the site, the lack of public and articulated green surfaces, the absence of pedestrian zones, and poorly defined traffic edges. The project accepts the existing urban condition and preserves the structures on site.

Vehicular circulation is displaced to the perimeter, establishing a continuous pedestrian interior, with access maintained through a northern drop-off and an eastern connection.

The plan is organised through a regular grid derived from the existing Magazines, defined by three vertical pedestrian axes and one dominant horizontal axis. This organisation follows the existing spatial logic of the site, shaped by movement and long-term use. The main pedestrian axis connects directly to the primary city road in the west and forms the main entry sequence. Movement is not linear, and the space unfolds gradually through a sequences of framed views.

The footprint of the former Magazine 6 is transformed into a new public square, acting as a new urban centre. It is dimensioned for larger-scale events such as concerts, festivals, and seasonal programmes, relieving pressure from the existing main square. The space further develops through secondary plateaus and in-between areas, extending interior activities into the exterior.

The southeast area of the site is articulated as a public park for community use. The topography is formed by dry stone cascades, providing urban equipment elements that define different activities. The regular grid is interrupted by curves stemming from existing conditions and movement on site. These soften the strict geometry, creating different spatial situations, smaller vegetation patches, and areas for seating and gathering.

Lastly, the proposed masterplan becomes an open urban framework, supporting everyday use and accommodating larger public events. It also questions current development models, which rely on demolition and rapid housing construction while neglecting long-term public and social value.

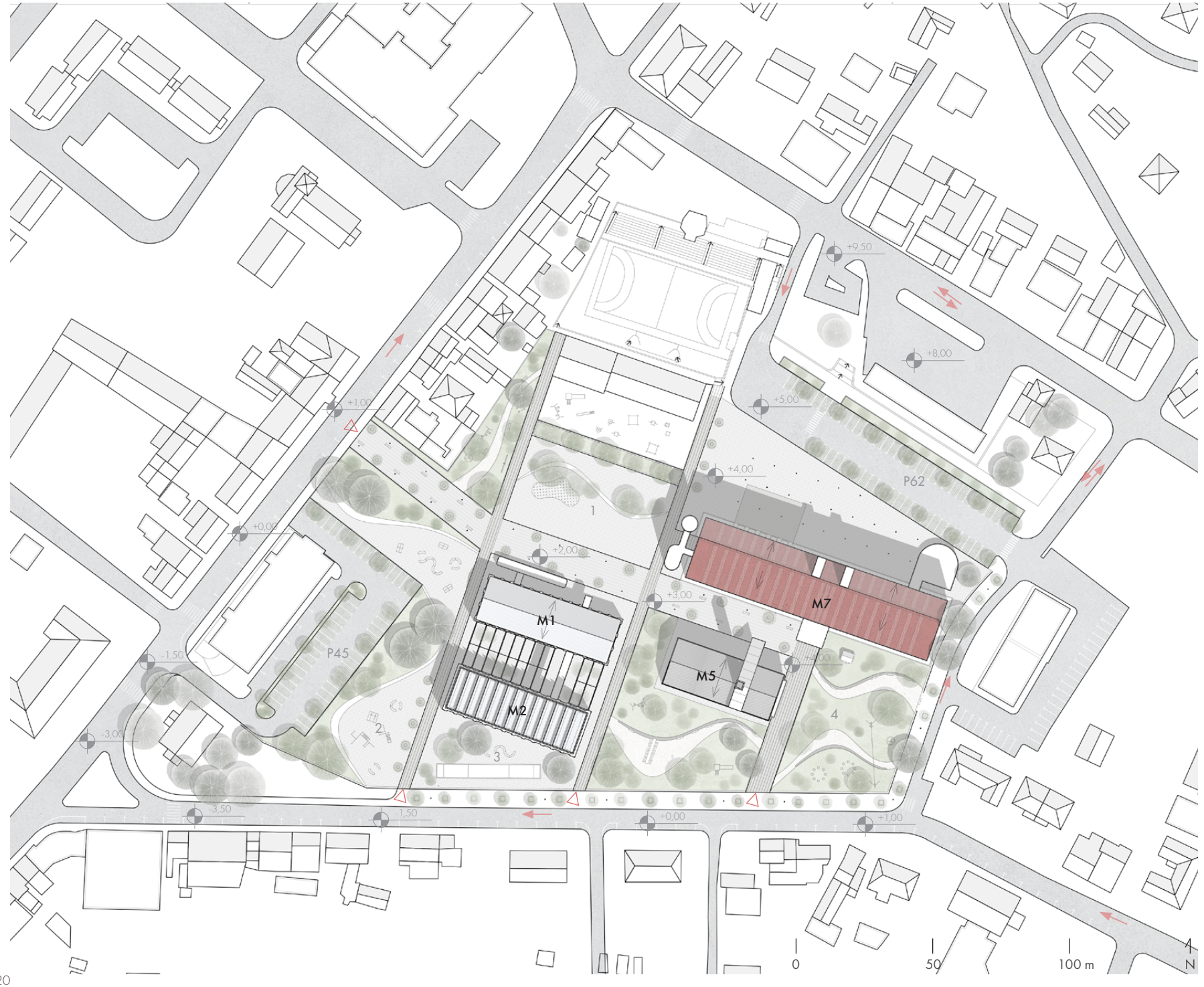


Figure 65. Masterplan of the Tobacco Station redevelopment. Note. Author's drawing.

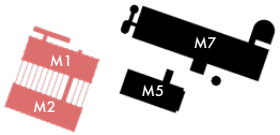


Figure 66. Magazine 1&2 mapped on the site.

The Gathering Cluster

Magazines 1 and 2 form the Gathering Cluster, understood as a flexible system for public and collective use. The two volumes operate as one spatial system, comprising two enclosed halls, an intermediate space, and an infrastructural volume. The configuration allows direct interaction between interior and exterior. Both buildings follow the same box-in-box system, but through different levels of spatial control.

Magazine 1 is defined as a non-heated enclosed volume, supporting concerts, dance, theatre, and temporary events. The polycarbonate roof is elevated above the existing structure, enabling passive ventilation and improving thermal comfort during warmer months. Operable external shading panels are integrated along the roof ridge, allowing solar protection to be adjusted according to seasonal and climatic conditions. The seating is organised through adjustable stage-deck platforms. When not in use, the hall remains open, extending public life. A gallery aligns with the axis of the existing bridge and extends towards the northern views. Magazine 2 follows the same architectural logic, with a thermally stable envelope. The main hall remains open, while auxiliary functions are concentrated in an elevated volume, allowing different scenarios while maintaining spatial flexibility. The serrated roof introduces diffused light, supporting rehearsal, dance, and collective use.

The buildings are connected by the existing bridge, preserved and reactivated at the upper level.

Between them, a semi-open intermediate space reinterprets the original roof geometry through a lightweight steel structure. It remains open, supporting infrastructure and vegetation, extending the halls and enabling hybrid use.

On the northern perimeter, a new infrastructural volume accommodates sanitary and technical facilities. It is defined by a perforated aluminium envelope and remains physically detached from the two volumes.

Together, Magazines 1 and 2 act as an adaptive public system that supports gathering, cultural exchange, and collective use, allowing programmatic change while preserving their spatial and structural identity.

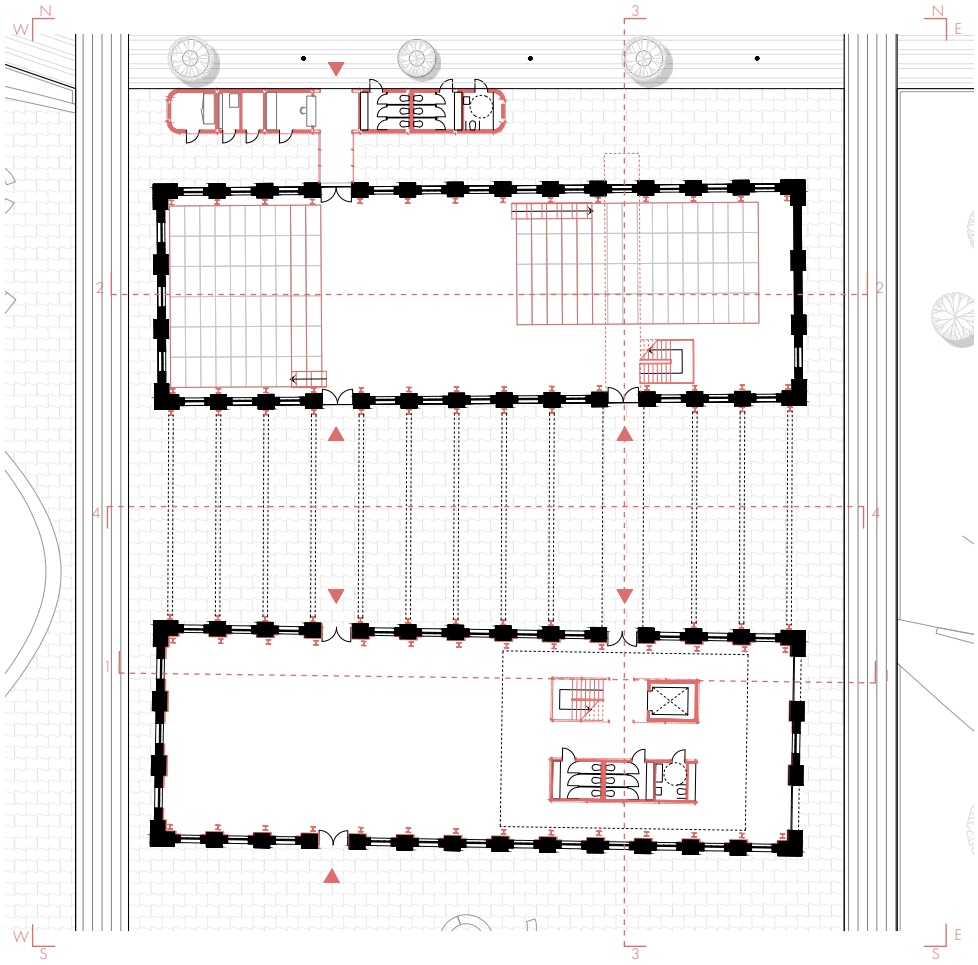


Figure 67. Ground floor plan of Magazines 1 and 2 with the auxiliary volume.
Note. Author's drawing.

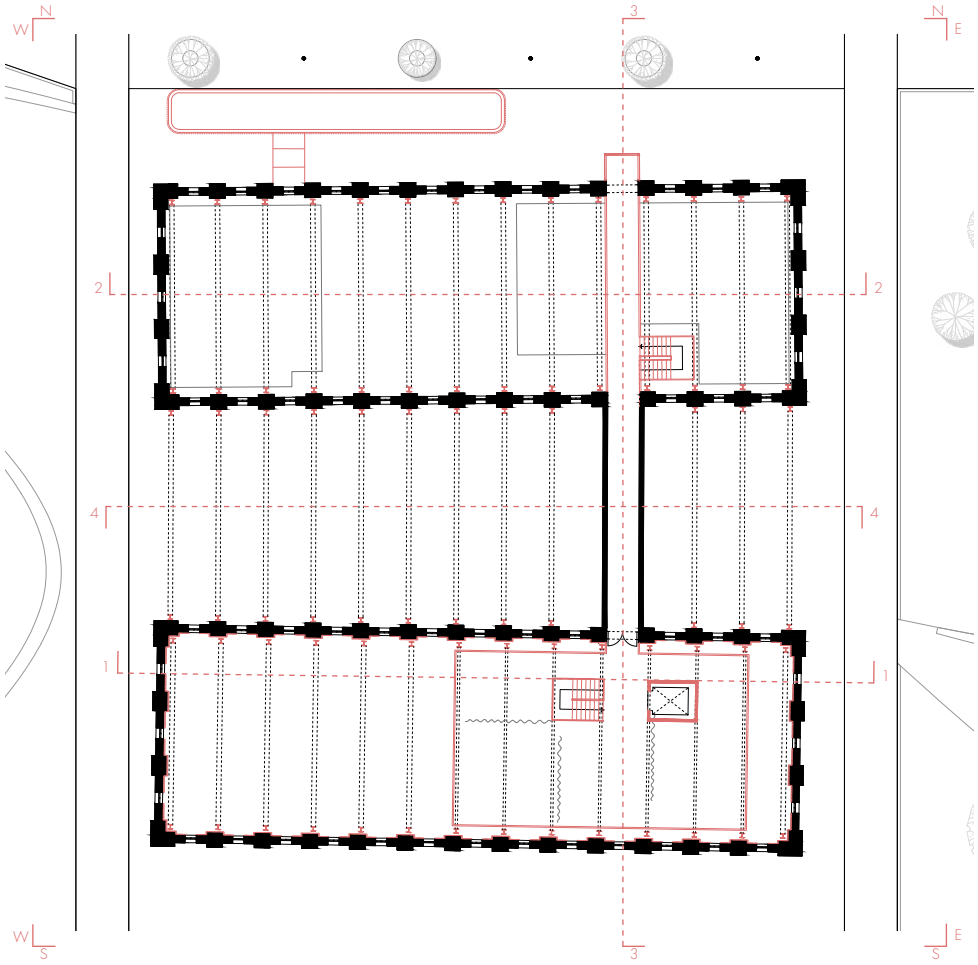


Figure 68. Second floor plan of Magazines 1 and 2 with the auxiliary volume.
Note. Author's drawing.

Section 1-1

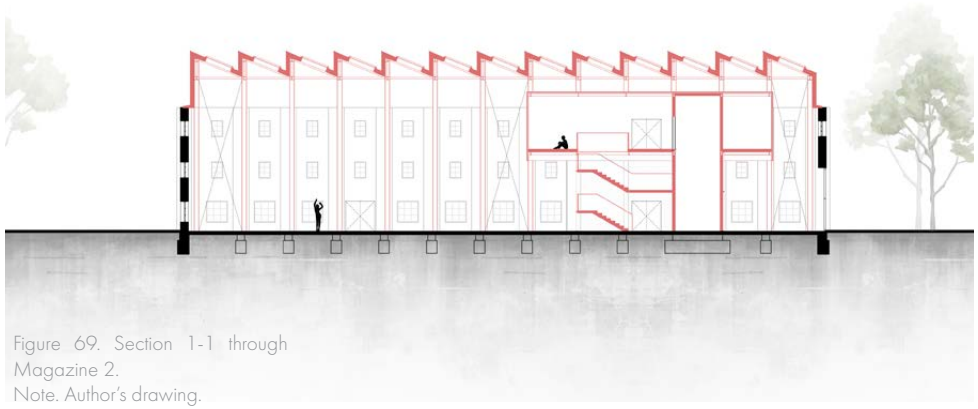


Figure 69. Section 1-1 through Magazine 2.
Note. Author's drawing.

Section 2-2

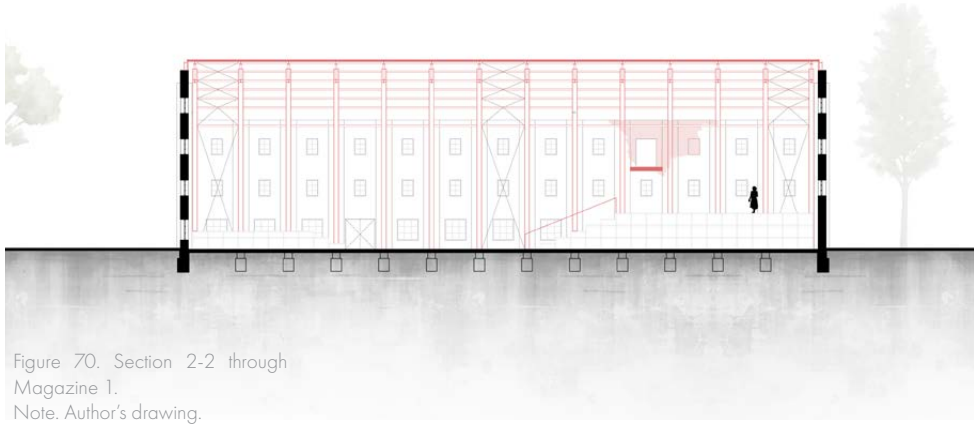


Figure 70. Section 2-2 through Magazine 1.
Note. Author's drawing.

1 : 500

0 5 10 m

Section 3-3

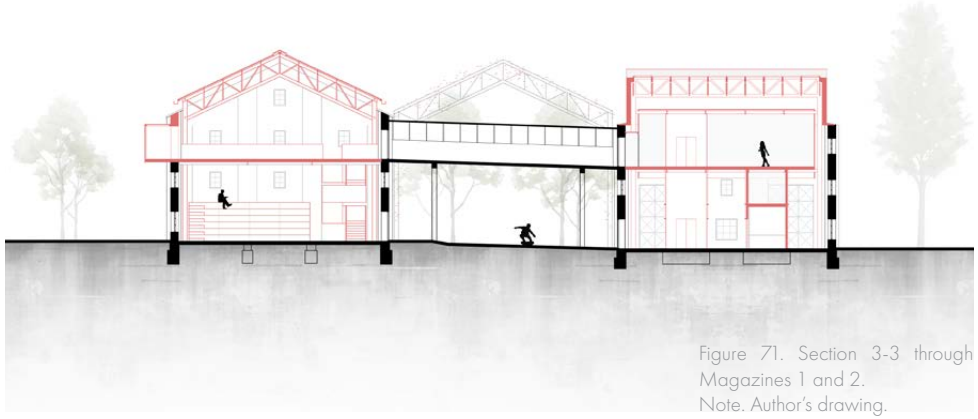


Figure 71. Section 3-3 through Magazines 1 and 2.
Note. Author's drawing.

Section 4-4

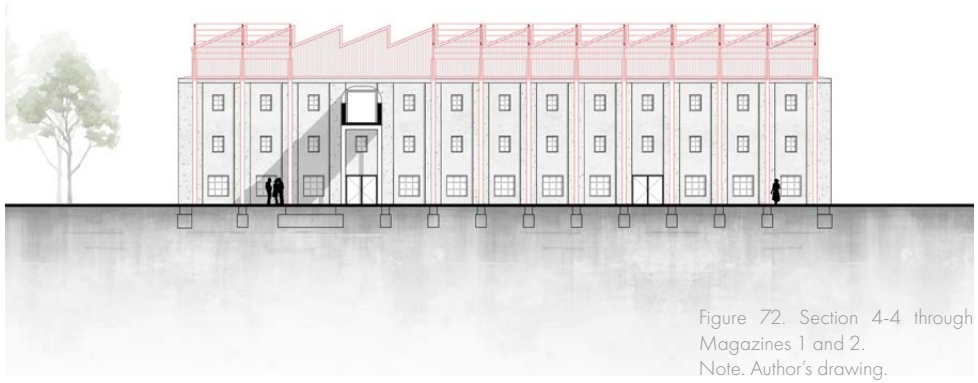


Figure 72. Section 4-4 through Magazines 1 and 2.
Note. Author's drawing.

1 : 500

0 5 10 m

South Elevation

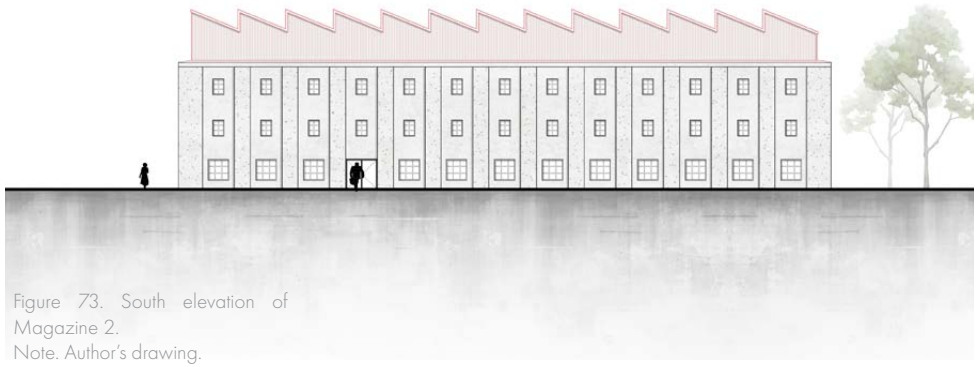


Figure 73. South elevation of Magazine 2.
Note. Author's drawing.

North Elevation

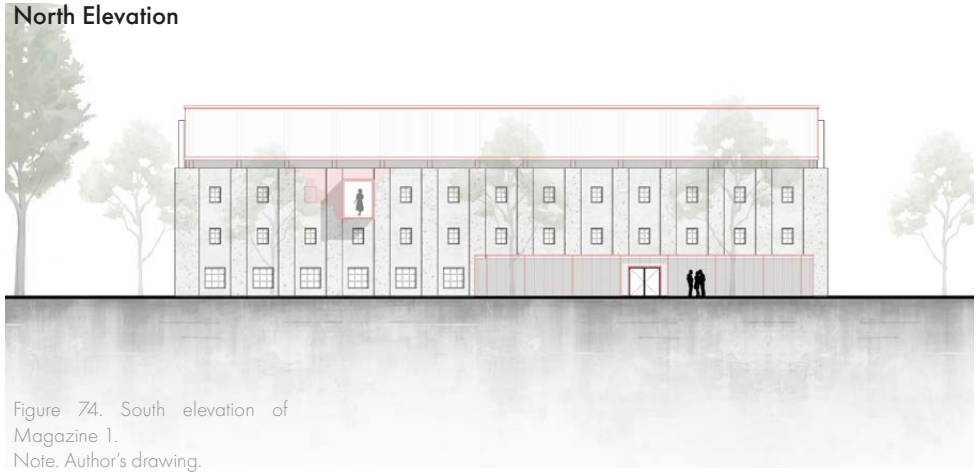


Figure 74. South elevation of Magazine 1.
Note. Author's drawing.

1 : 500

0 5 10 m

West Elevation

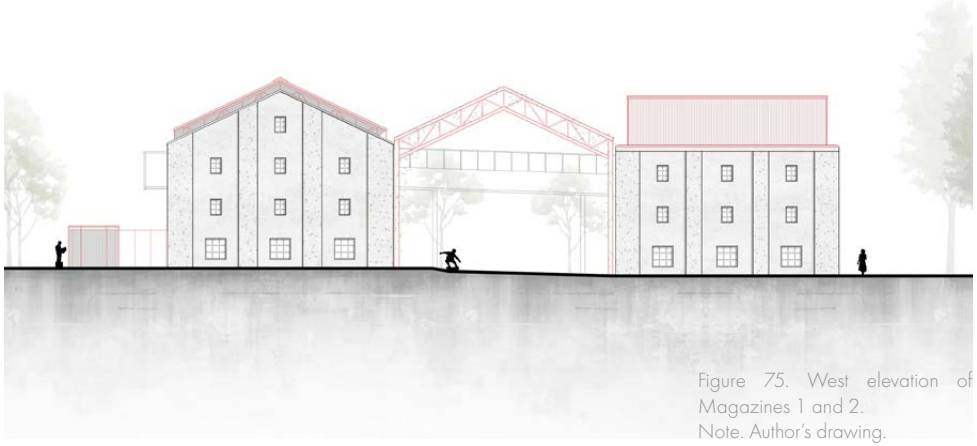


Figure 75. West elevation of Magazines 1 and 2.
Note. Author's drawing.

East Elevation

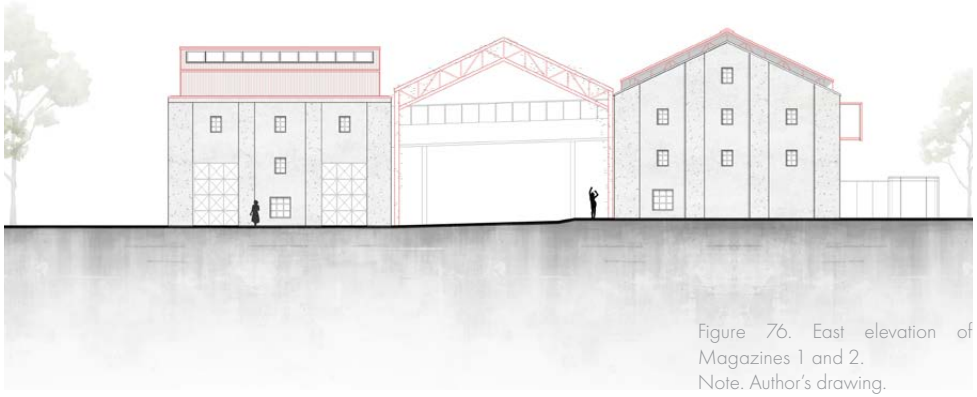


Figure 76. East elevation of Magazines 1 and 2.
Note. Author's drawing.

1 : 500

0 5 10 m

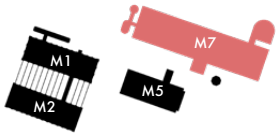


Figure 77. Magazine 7 mapped on the site.

The Production Cluster

The adaptive transformation of Magazine 7 is grounded in preserving the original spatial and constructive logic, while new, distinct additions support its functioning. The intervention focuses on intensifying the inherited qualities of the space, allowing them to be used and experienced in new ways. The starting point of the design proposal is the existing interior, marked by the rhythm of pillars with capitals and a strong spatial clarity. The original space holds the capacity to accommodate new functions while its quality remains intact.

Enterance and Movement

The main entrance, located on the southern facade, is shaped subtly, through a minimal intervention. A new wind lobby and a defined pedestrian axis leading from the southern road towards the building are introduced. The original staircase is preserved and renovated, remaining a central space for encounter and stay. Above the first level, the centre of the building opens into a gallery void extending to the top, organising the interior into two wings. Movement unfolds through a sequence of compression and release, shifting from darker, enclosed areas into the open central void and further towards framed views of the landscape. Outdoor vertical communication on the western facade is shaped as an independent vertical circulation system. The staircase with a lift is articulated as a sculptural element within a semi-transparent envelope, allowing public access to the upper levels of Magazine 7.

Organizing the Space

The elongated corpus of Magazine 7 is structured through a system of service cores aligned with the inner load-bearing walls. Their vertical consistency defines the organisation, while their spatial presence adapts, allowing areas to open or remain more articulated. The cores form a 4 m deep threshold, marking a shift in spatial condition. Added elements are positioned independently from the structural raster, reading as light, almost furniture-like insertions that concentrate services while leaving the remaining space open and adaptable.

Programmatic distribution follows this logic, combining production, learning, and administrative functions within a continuous system. Workshops at ground level extend towards the northern plateau, while upper levels accommodate spaces for learning, work, and exchange. The sequence leads to a rooftop programme where production and gathering overlap. The upper gallery recalls communal dining, bringing people together around a shared table and shaping different atmospheres within the space.[1]

Articulating the Structure

Thermal retrofitting of the Magazine 7 is carried out internally, preserving the exterior expression and existing fenestration. A lightweight steel extension is placed above the existing structure, maintaining its proportions and reading as a distinct layer.

[1] The interpretation is based on the author's interview (2026), where shared meals and collective dining routines among workers were described.

The new envelope follows the rhythm of the fenestration, articulated through alternating perforated and solid corten panels, interpreting the original facade articulation. Outdoor vertical communication is expressed as a steel structure, where the lift is enclosed in a perforated aluminium envelope, while the staircase is wrapped in a semi-transparent PTFE membrane, appearing permeable. Inside, capsule-like elements form a separate layer, accommodating presentation, market units, and smaller enclosed programmes.

Entering the next phase

Magazine 7 affirms a space profoundly inscribed in the collective experience of the city. Its smell, sound, texture, and atmosphere reflect the everyday life of the generations that once used and shaped it. By its scale, it carries a significant layer of memory, but also a strong architectural potential. Its new role sets a framework for reactivation. The space moves beyond the idea of a memorial artifact and acts as an operative structure in which memory emerges through use. The value of the building lies not only in preserving memory, but in its capacity to generate future value through education, entrepreneurship, and the development of local knowledge, particularly for the younger working population. The intervention establishes a framework through which new forms of production, learning, and exchange can emerge over time.

Ground Floor

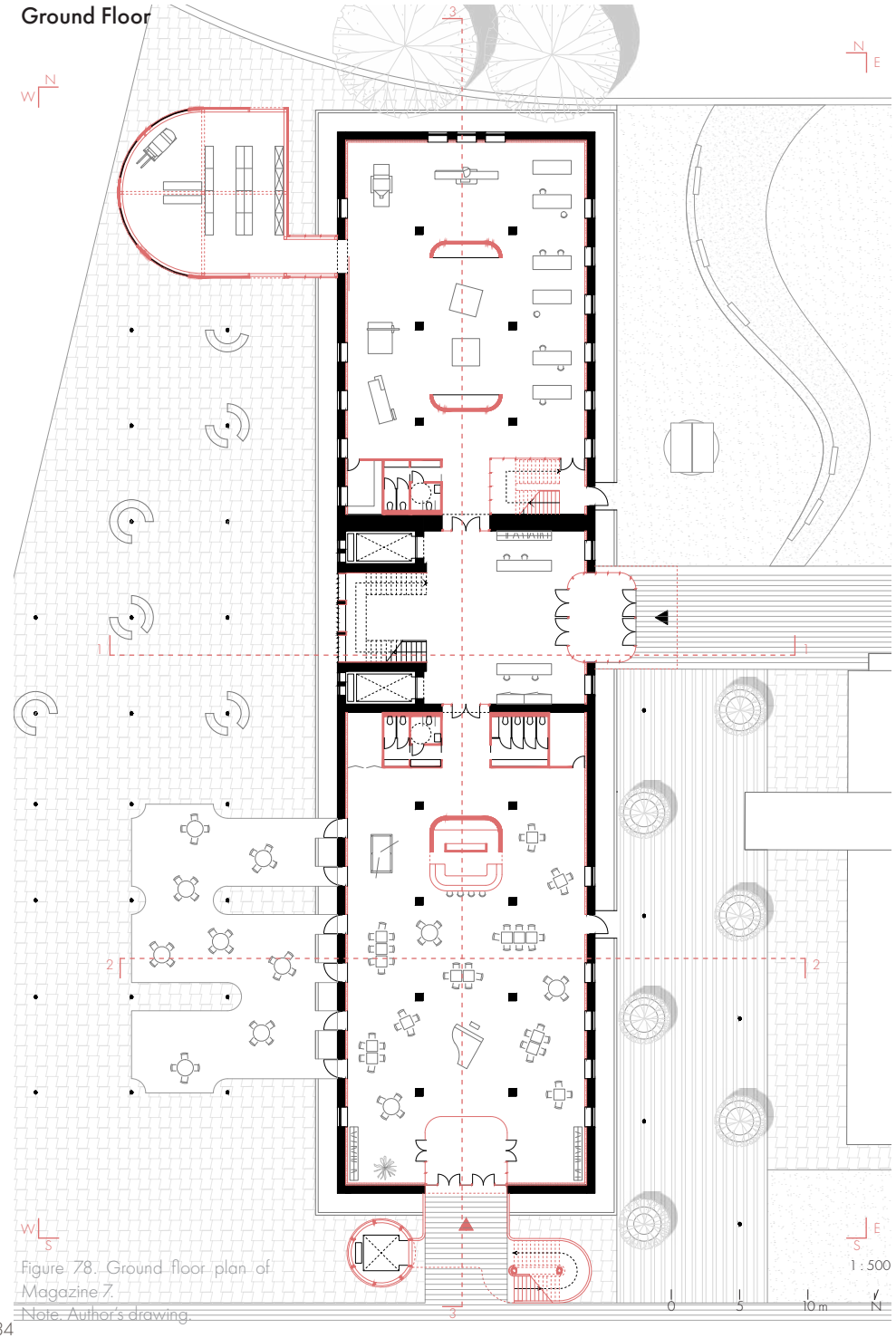


Figure 78. Ground floor plan of Magazine 7.
Note. Author's drawing.

1st Floor

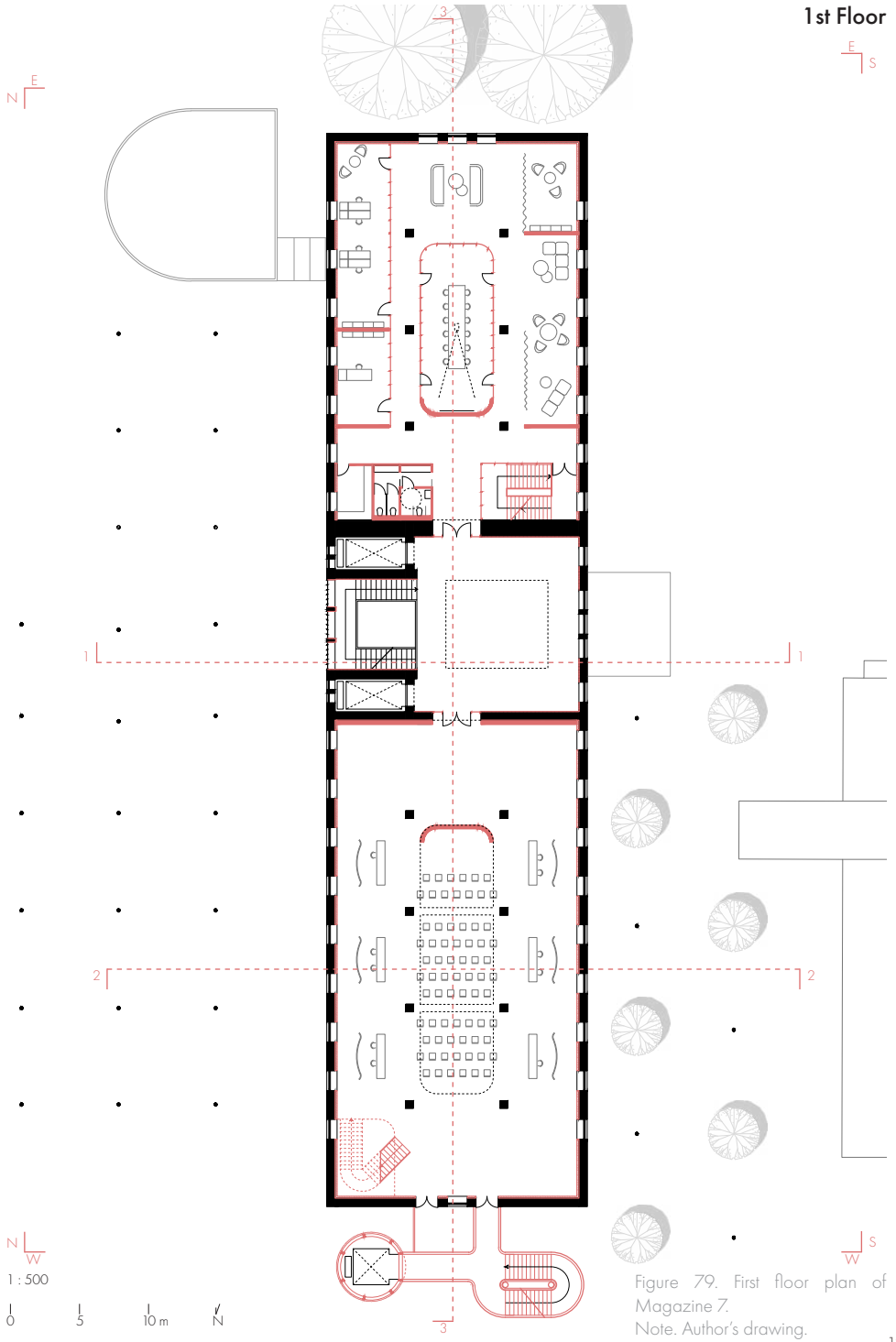


Figure 79. First floor plan of Magazine 7.
Note. Author's drawing.

2nd Floor

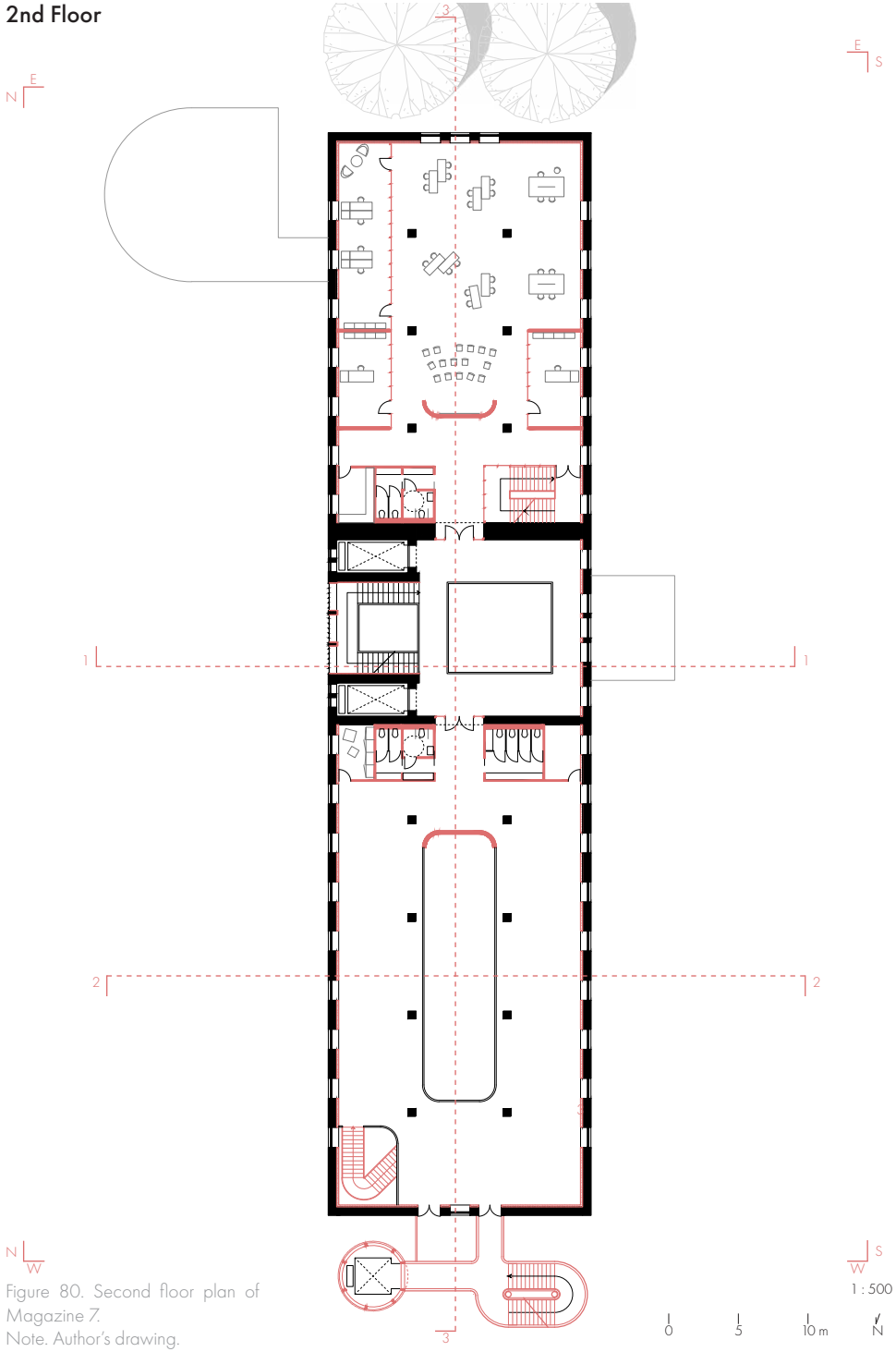


Figure 80. Second floor plan of Magazine 7.
Note. Author's drawing.

3rd Floor

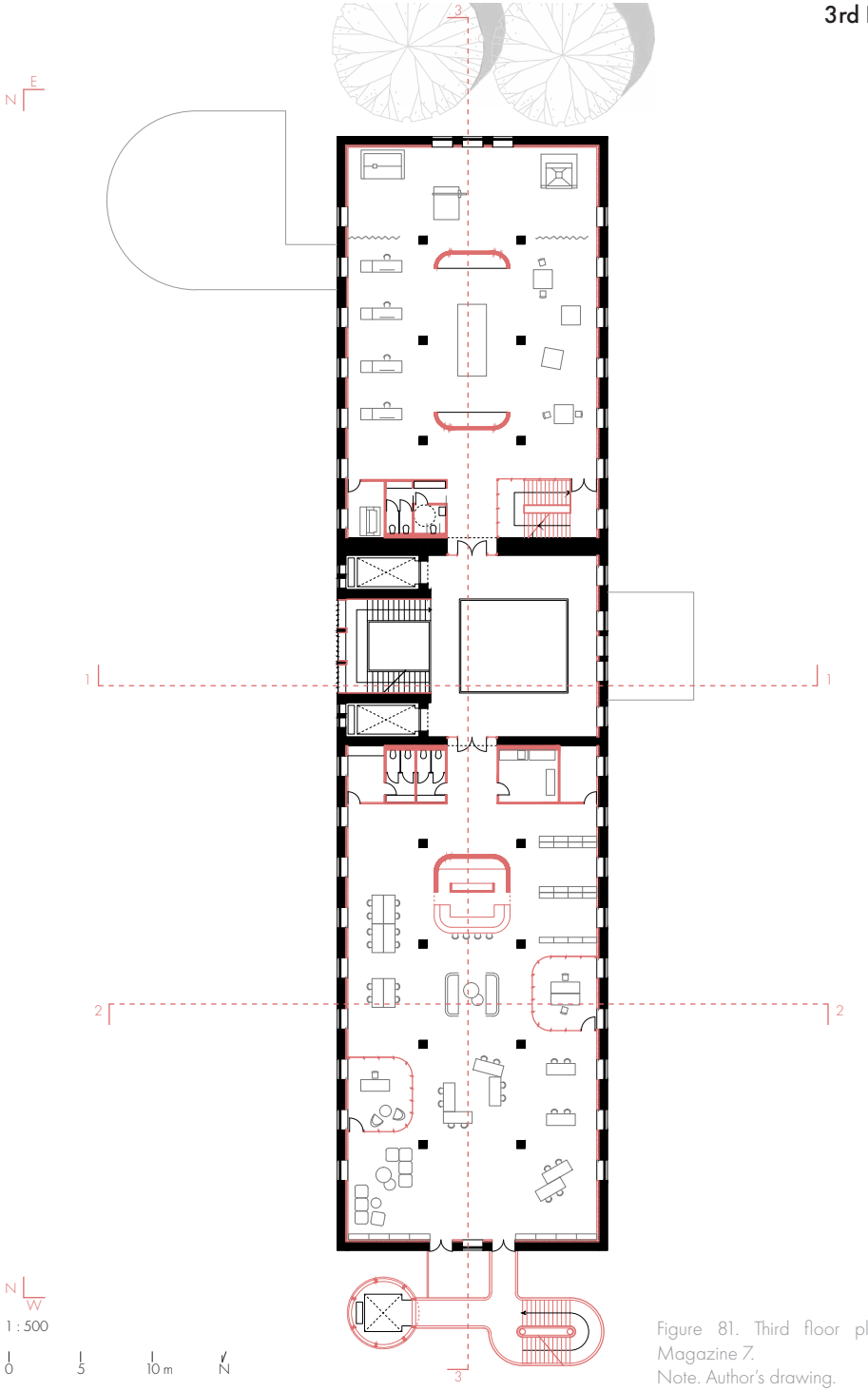


Figure 81. Third floor plan of Magazine 7.
Note. Author's drawing.

4th Floor

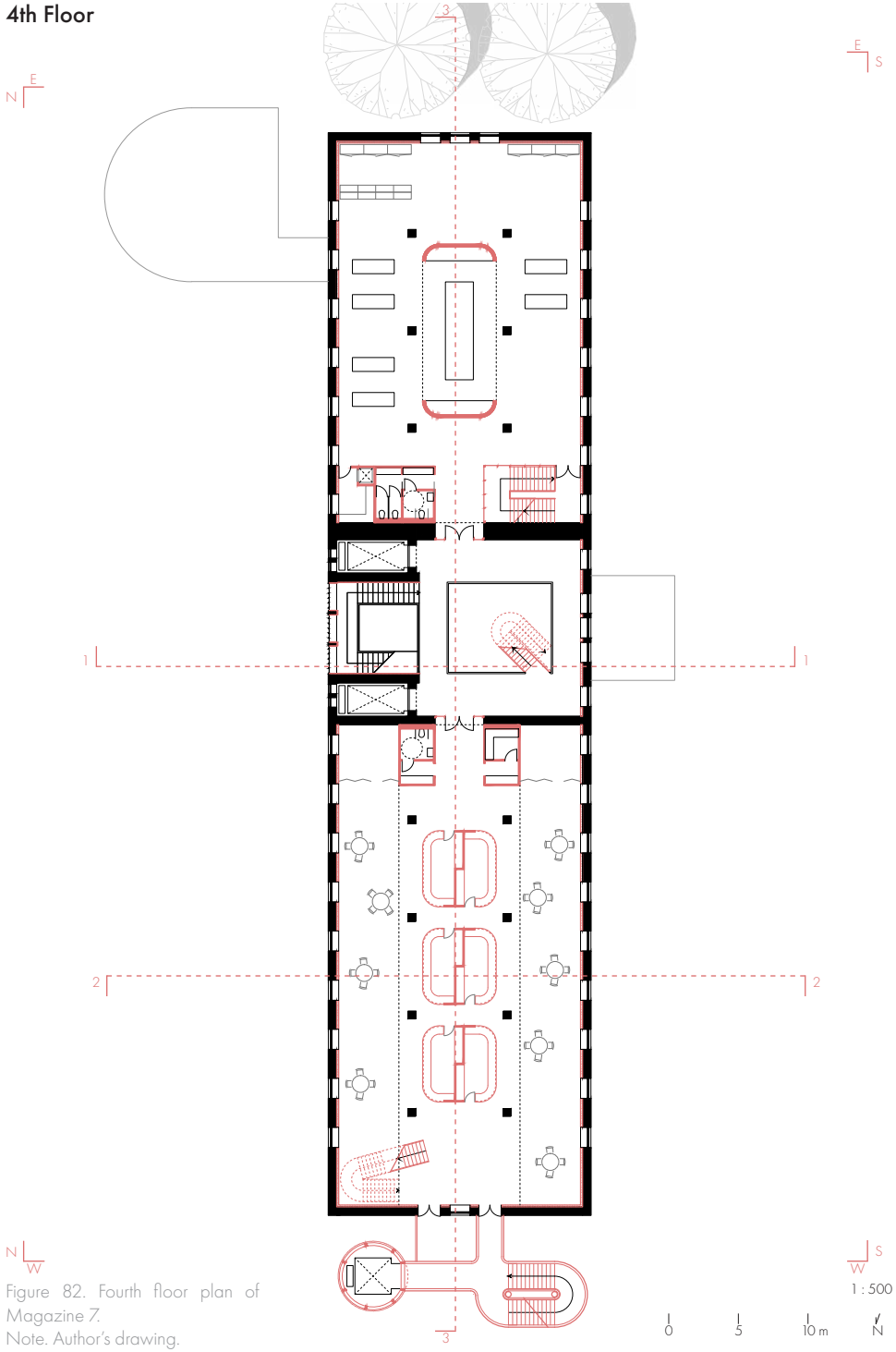


Figure 82. Fourth floor plan of Magazine 7.
Note. Author's drawing.

5th Floor

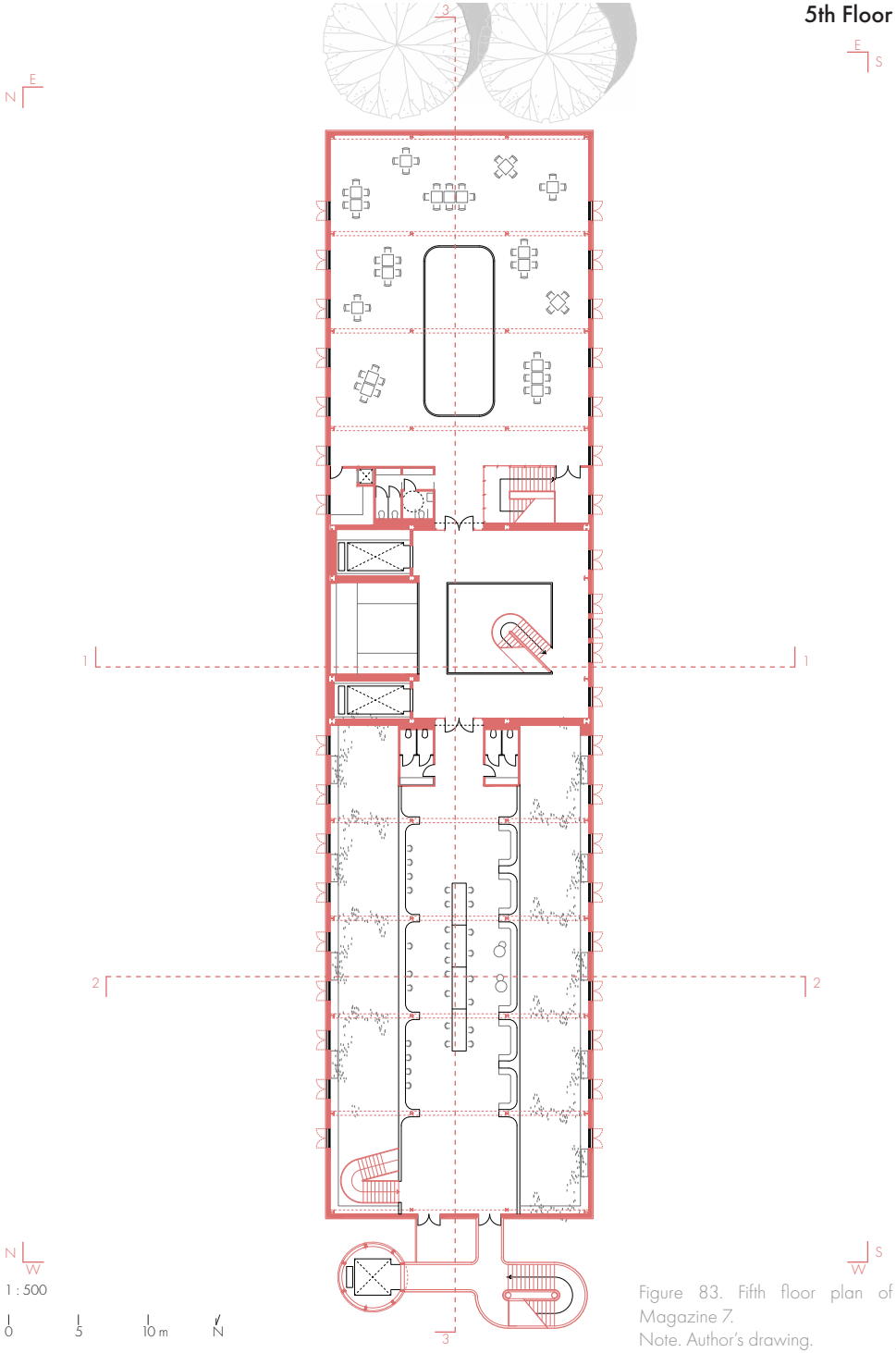


Figure 83. Fifth floor plan of Magazine 7.
Note. Author's drawing.

Section 1-1

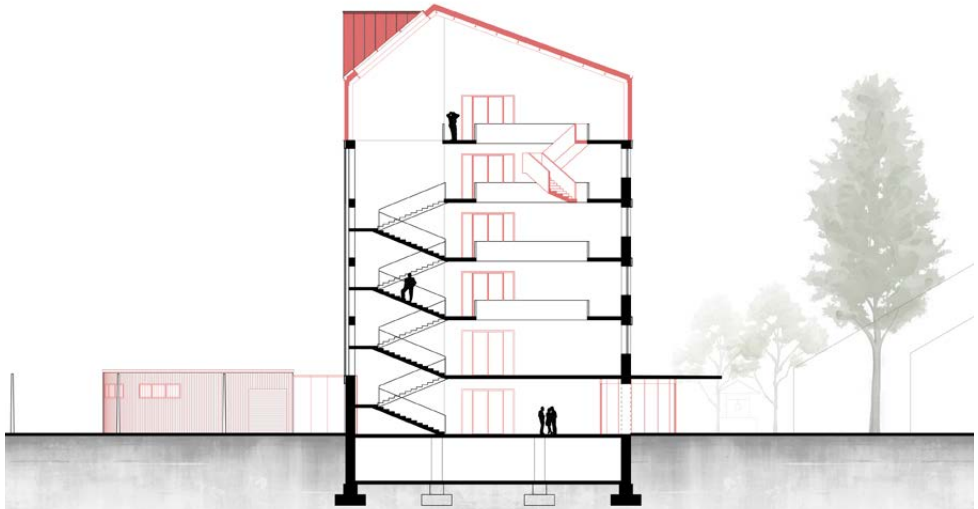


Figure 84. Section 1-1 through Magazine 7.
Note. Author's drawing.

Section 2-2

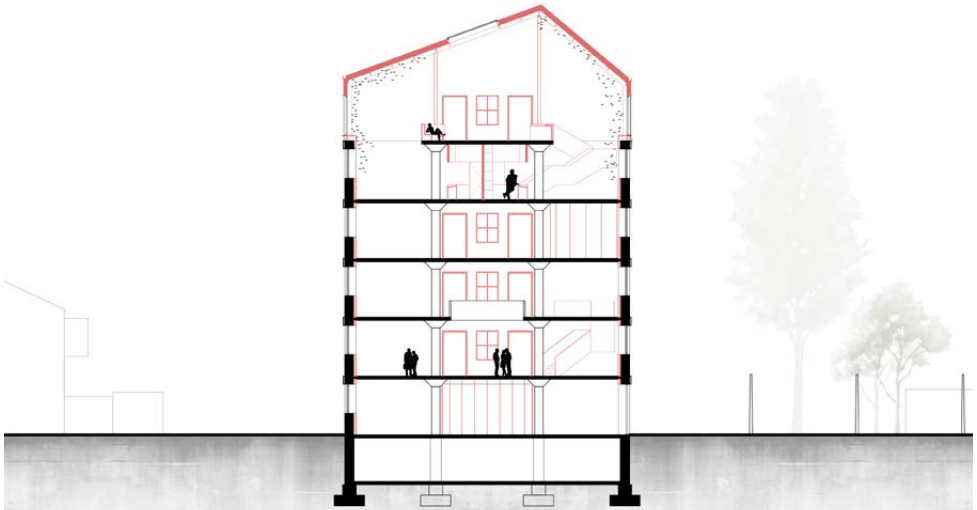


Figure 85. Section 2-2 through Magazine 7.
Note. Author's drawing.

Section 3-3

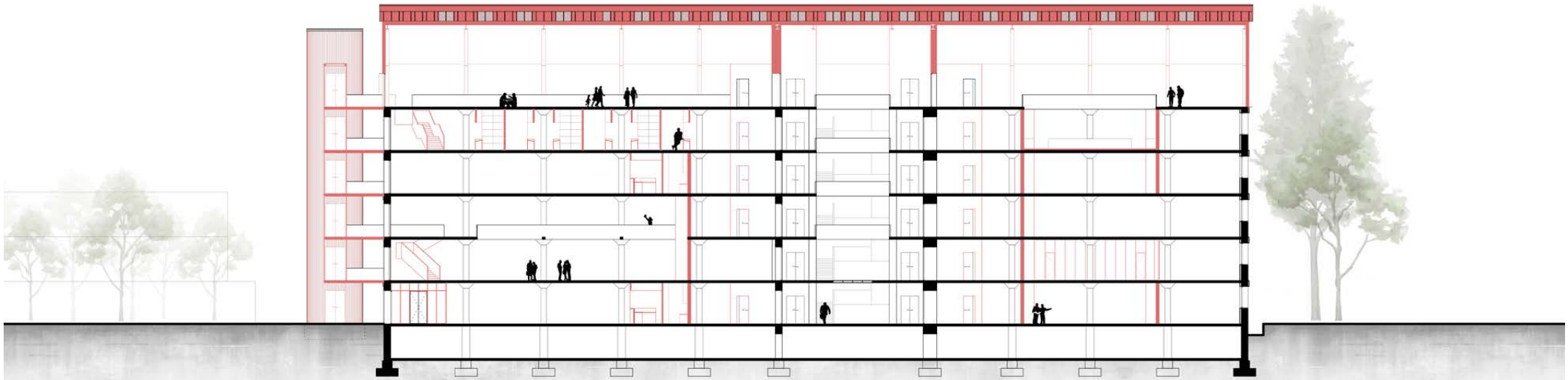


Figure 86. Section 3-3 through Magazine 7.
Note. Author's drawing.

1 : 500

0 5 10 m

West Elevation

Figure 87. West elevation of Magazine 7.
Note. Author's drawing.

1 : 500

0 5 10 m

East Elevation

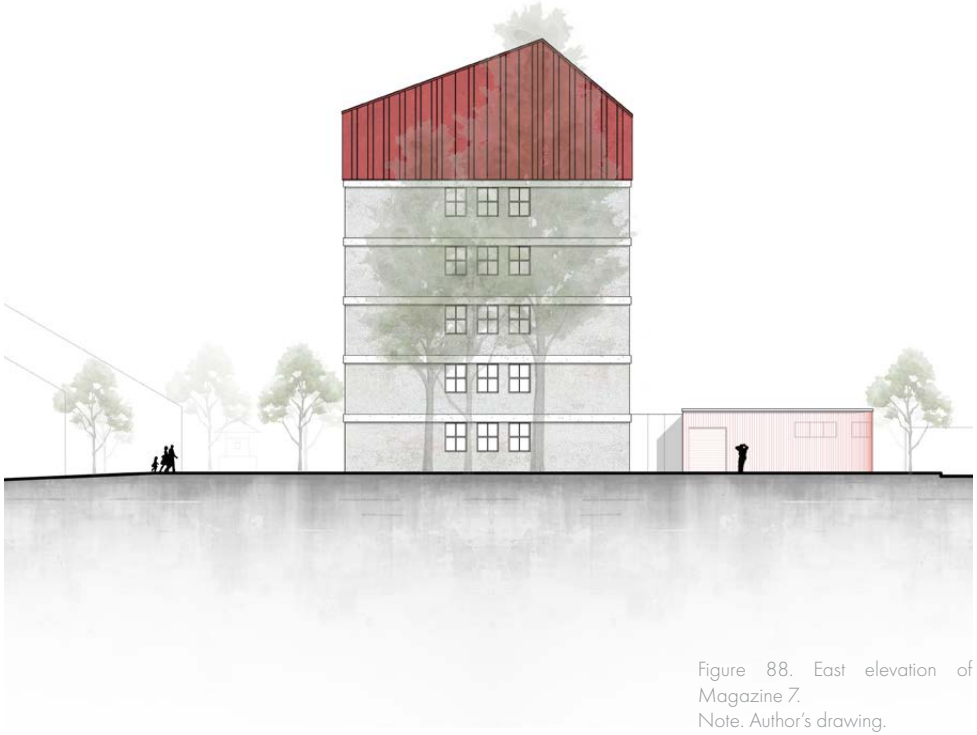


Figure 88. East elevation of Magazine 7.
Note. Author's drawing.

1 : 500

0 5 10 m

North Elevation

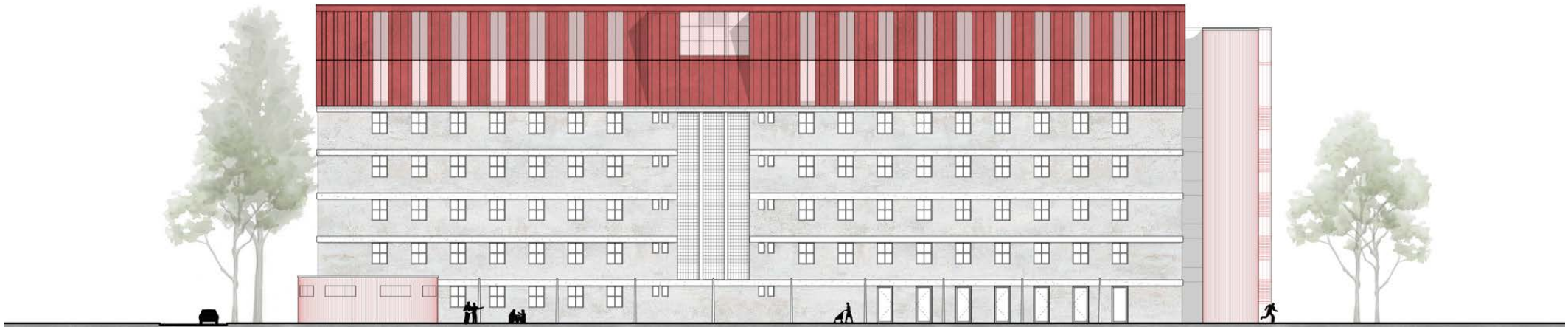


Figure 89. North elevation of Magazine 7.
Note. Author's drawing.

1 : 500

0 5 10 m

South Elevation

Figure 90. South elevation of Magazine 7.
Note. Author's drawing.

1 : 500

0 5 10 m

Detail Section

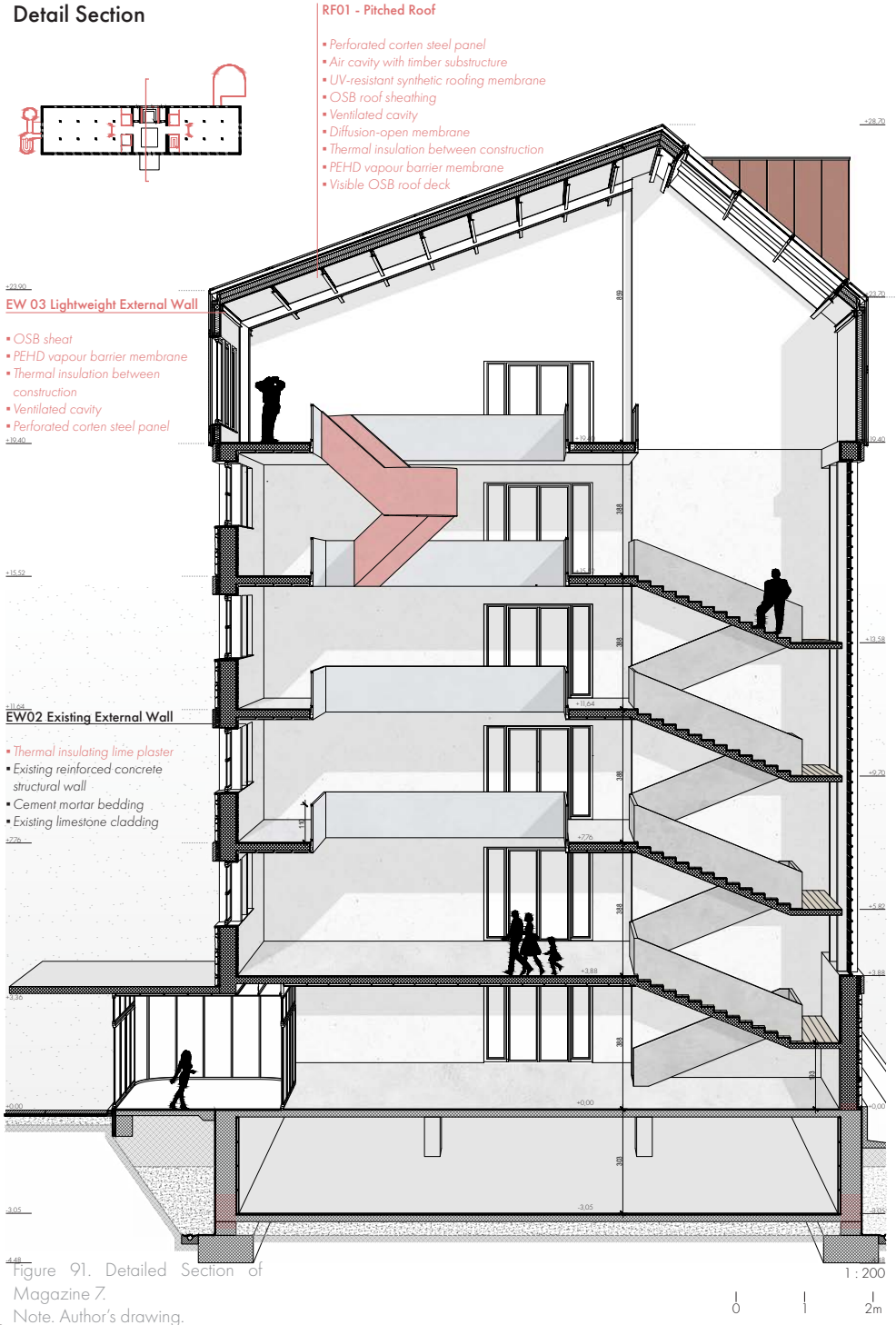


Figure 91. Detailed Section of Magazine 7.
Note. Author's drawing.

Materiality and Detail

The detail (Figure 89.) illustrates the relationship between the existing structure and the newly introduced layer. The original reinforced concrete structure, staircase, curtain wall, and the rhythm of fenestration are retained and restored, preserving the spatial character of Magazine 7.

The intervention focuses on improving performance while maintaining the identity of the building. Existing windows are replaced with new glazing of identical proportions, preserving the appearance of the façade while improving thermal comfort. Thermal upgrades are introduced where required, particularly within spaces intended for longer occupation. Suspended ceilings accommodate contemporary technical systems, integrating services and lighting while maintaining the clarity of the original spatial organisation. The newly introduced floor level and staircase are conceived as independent insertions within the existing structure. Their contemporary expression establishes a clear distinction between the original proportions of the building and the newly added layer. Above, the roof extension is articulated through alternating perforated and solid corten panels, following the rhythm of the existing façade while expressing its own tectonic identity. The detail reflects an approach based on continuity rather than replication, allowing different layers of time to coexist within a single architectural framework.

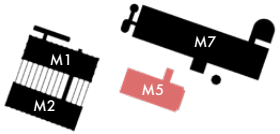


Figure 92. Magazine 5 mapped on the site.

The Memory Cluster

Magazine 5 transforms into a library and archive, conceived as a space of memory structured around the chimney as its central and most expressive element. Access is established through a glazed intervention, wrapped in perforated aluminium, that cuts through the building along its axis, directly intersecting the chimney and forming the primary point of entry. The chimney is not only preserved, but intensified through this gesture, becoming a spatial and visual marker.

The existing inner and outer facades remain preserved and fully visible to the user. A new internal structural system is introduced to stabilise the building and support the new use, integrated within the existing structure through reinforced concrete bond beams with embedded steel profiles inserted into the thickened wall zones.[2] The lower level accommodates the archive, digital archive, and permanent exhibition, creating a more introspective and sensory environment. The upper level opens towards community use, with a library, mediatheque, and smaller individual study spaces.

As the Memory Cluster, Magazine 5 anchors the project within its historical context, ensuring that the site's identity remains present alongside production and public life.

[2] The proposal is conceptual and requires further structural verification to define the method and dimensions of reinforcement.

Groundfloor

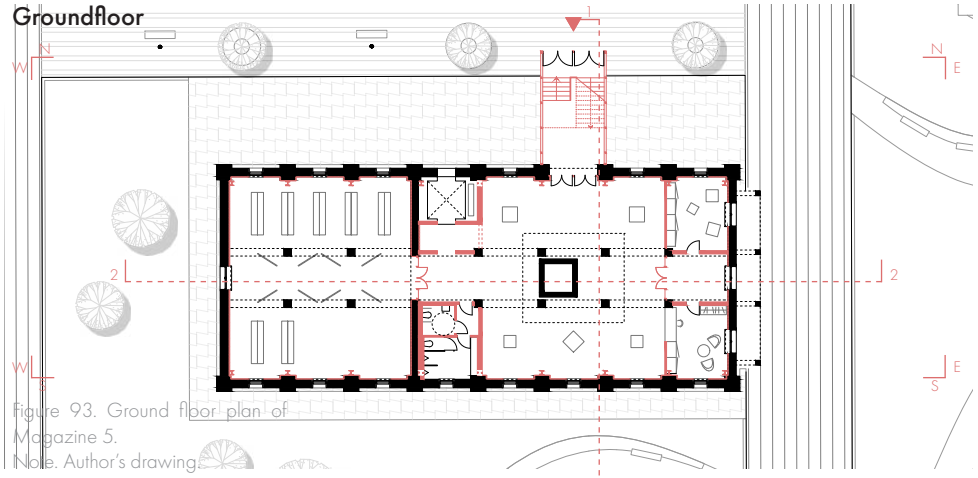


Figure 93. Ground floor plan of Magazine 5.
Note. Author's drawing.

1st Floor

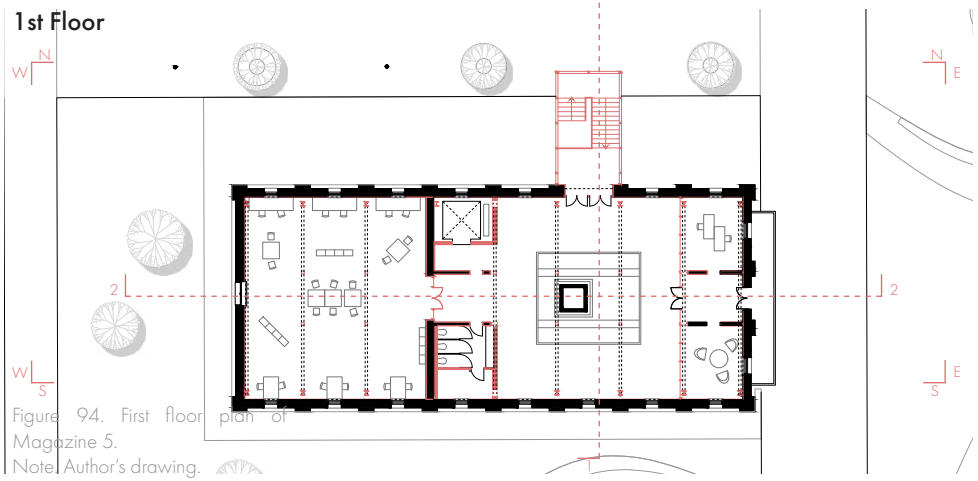


Figure 94. First floor plan of Magazine 5.
Note. Author's drawing.

1 : 500

0 5 10 m N

Section 1-1

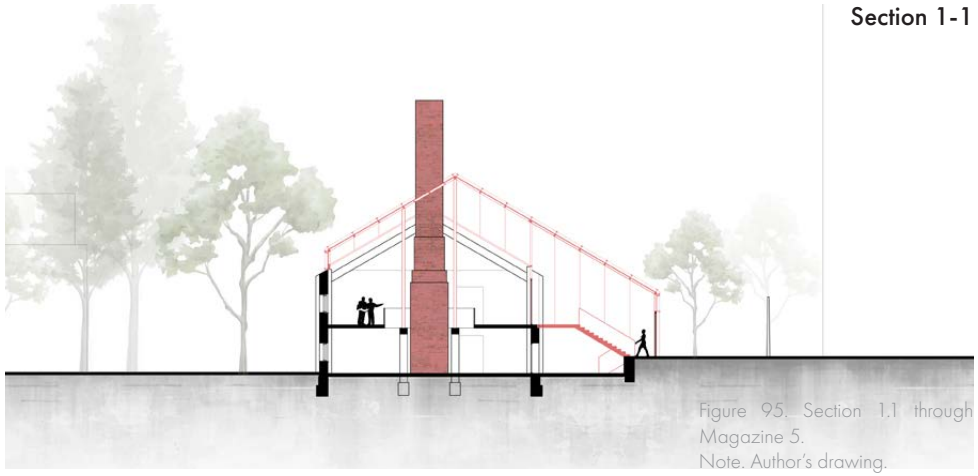


Figure 95. Section 1.1 through Magazine 5.
Note. Author's drawing.

Section 2-2

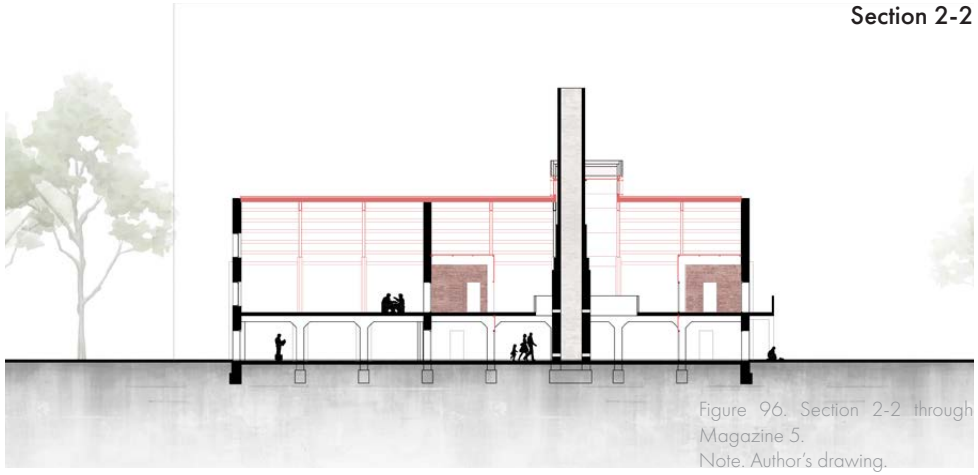


Figure 96. Section 2-2 through Magazine 5.
Note. Author's drawing.

1 : 500

0 5 10 m

East Elevation

Figure 97. East elevation of Magazine 5.
Note. Author's drawing.

South Elevation

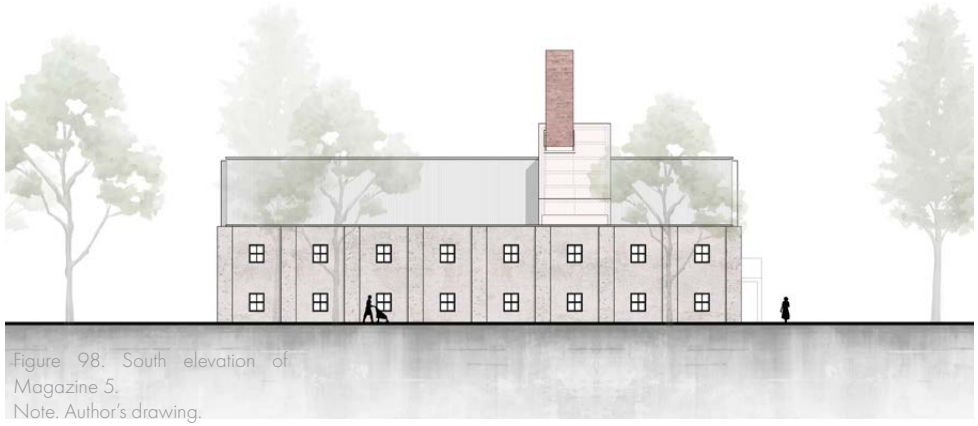


Figure 98. South elevation of Magazine 5.
Note. Author's drawing.

1 : 500

0 5 10 m

West Elevation

Figure 99. West elevation of Magazine 5.
Note. Author's drawing.

North Elevation

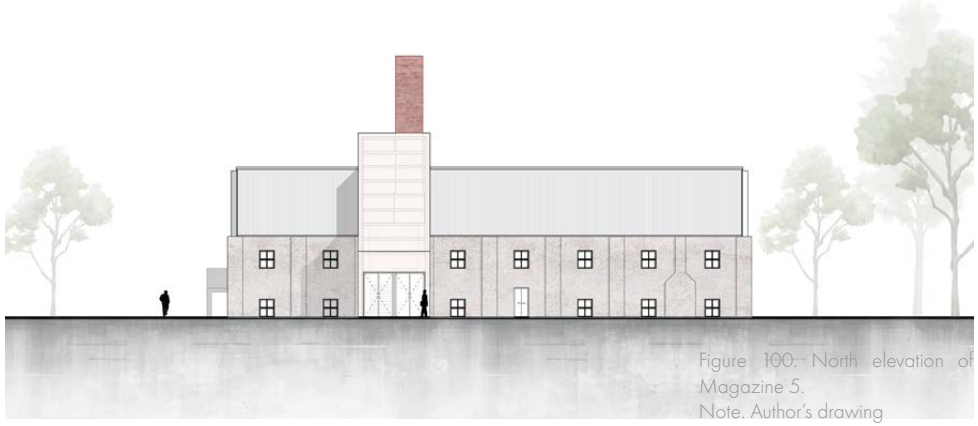


Figure 100. North elevation of Magazine 5.
Note. Author's drawing

1 : 500

0 5 10 m

Figure 101. Spatial overview of the proposal.

Figure 102. Spatial atmosphere of the proposal.

Figure 103. Spatial overview of the proposal.

Figure 104. Spatial atmosphere of the proposal.

Figure 105. Spatial atmosphere of the proposal.

Figure 106. Spatial atmosphere of the proposal.

Figure 107. Spatial atmosphere of the proposal.

Figure 108. Spatial atmosphere of the proposal.

Conclusion

The project initially approached the site through a sense of familiarity. Through the process, it became clear that its depth extends beyond an immediate reading, carrying layers of history, memory, events, and technology that came into focus over time. What first appeared as a set of abandoned structures revealed itself as a continuous system, not a collection of buildings, but a network of relationships that can be read through space, production, and memory.

Through research and design, the relationship towards the site shifted, and understanding emerged through direct engagement with the space, its traces, its people, and what it carries beyond the walls that are perceived today. This gradually led to a fundamental question: what comes next? The proposal responds through the introduction of a new layer. A layer that is clearly contemporary and distinct from what already exists. Large enough to support new forms of life, activity, and production, yet restrained enough not to overshadow the inherited values of the site. Instead of replacing the existing layers, it seeks to connect them, allowing the story of the Tobacco Station to continue.

The intervention is conceived as a phased transformation. It begins with the Gathering Cluster, demonstrating the site's potential through a modest initial investment, continues with the Production Cluster, generating long-term social and economic value, and lastly returns to the community the layers of memory that have shaped its identity over time.

The project is therefore understood as a pilot approach for the adaptive transformation of former Austro-Hungarian Tobacco Stations. While each site requires a response shaped by its own context, materiality, and local needs, the proposed methodology demonstrates how their continuity can be achieved through the reinterpretation of existing values rather than their replacement.

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List of Figures

PROJECT DRAWINGS

Visualization