*Ex-FIMIT **

*** Heritage Conservation and Urban Safety in the Post-Industrial Turin**

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To my family,
-for everything that doesn't show on the page.

Abstract

Ex-FIMIT: Heritage Conservation and Urban Safety in the Post-Industrial Turin

Conservation of industrial heritage has been influenced by frameworks designed to address a different issue: the historic center, the baroque set-piece, the archaeological monument, and similar heritage.

From the 1970s onwards, deindustrialization rendered cities a landscape of abandonment and vacancy. At the time, the conceptual tools available were unsuited to factories and monstrous scales of manufacturing plots. Yet, when industrial ruin was awaiting its place amongst debates over heritage, urban designers discovered in them an opportunity for regeneration schemes. Here, though, lay another conflict: urbanists may have discovered that industrial remnants are of great importance in urban regeneration; however, this was not necessarily aligned with heritage conservation. This led to a deepening of the gap between designation and genuine conservation, as the regeneration logic valued the Ex-industrial site for what it could be above what it had been.

In the space opened by that debate, the waiting itself produced a specific urban condition of "unsafety". Abandonment of large-scale industrial ruins severed large areas of urban land from the city, creating urban voids that generate an environment in which safety (both real and perceived) deteriorates. The communities bearing this cost were not necessarily the building's future users but the neighborhood beside it. Ex-FIMIT is a clear example of such a condition.

A former insulation and textile factory, Ex-FIMIT had been abandoned for more than a quarter of a century. Located in the Regio Parco district, the site has been designated and proposed many times. But any redevelopment on it has been deferred time and time again. In July 2024, the municipality sealed its gates in response to complaints from the neighboring residents regarding unauthorized activities. This was neither a heritage response nor an urban planning one. Rather, it was a control response, treating abandonment and neglect as solely a security problem requiring quarantine. While an environment in this condition is a security and urban safety problem, further severing it from urban life does not improve its safety.

This thesis combines a critical review of conservation theory and urban safety literature with a multicriteria design evaluation aimed at industrial heritage, using the specific case of Ex-FIMIT. A selection of precedents is evaluated using a weighted multicriteria framework, which is then applied to three design scenarios for Ex-FIMIT. To examine the correlation between strict heritage protection and urban performance/safety, the scenarios are designed in a spectrum from strict preservation to program-maximizing demolition. As a result, the scenario that treats heritage as a baseline condition, retains the heritage-protected buildings, and selectively demolishes and replaces the remaining fabric within the site's historical layout achieves the highest overall score—demonstrating a tie between the most programmatically ambitious alternative on the urban performance and safety objectives set within the evaluation framework. Conservation, as a conditioned objective directed toward community vitality and temporal activation, produces genuine urban safety, based on the thesis's findings. A site that is genuinely inhabited can be simultaneously conserved and safe. At Ex-FIMIT, conservation and safety are not two outcomes to be traded off against each other; rather, they are tied together, achieved by the same design.

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00 00

Goal and Structure of the Thesis

Can "heritage conservation" and "urban safety" be pursued as the same spatial objective? This thesis endeavors to explore this question through the case of Ex-FIMIT: an abandoned former industrial site in Turin's Regio Parco district. The site has been abandoned ever since its closure in 1998. Despite various proposals over the years, the site has remained largely unaccounted for in practice. It was sealed by the municipality in 2024, following neighbors' complaints about unauthorized activities. The City of Turin directly addressing the condition with a security measure was to be expected. However, the city's quarantine of the site did not resolve the vacancy. The site remains a large, unused patch of land with neglected buildings that pose a physical safety risk. At the same time, the vacancy itself not only reinforces the sense that the area is unsafe, but it also invites unauthorized activity, despite the sealed gate. With the site remaining forsaken as before, the conditions producing the problem remain in place, and the cycle repeats. This thesis first asks why a site of such heritage significance, scale, and strategic position was allowed to reach this condition. Moreover, is the unsafe atmosphere perceived by people real, or merely this author's own speculation? And what can reverse it?

The answer to these initial musings is explored and developed through Part 1, where a gap is identified between conservation doctrine and urban planning practice, leaving the site in limbo. Safety, a main objective of the thesis, will be seen as what falls through this gap. Part 2 examines Ex-FIMIT within Turin's post-industrial trajectory, exploring the Regio Parco district and Turin's plans for the area's potential. Meanwhile, Part 3 is a prelude to the design premise: a comparative reading of twenty-five international precedents. Five of these are assessed in greater depth using a multicriteria evaluation framework tailored to objectives derived from the first two Parts and inspired by the approaches adopted across twenty-five cases. Part 4 tests the argument by developing three design scenarios along a spectrum from strict preservation to program-maximizing demolition. The scenarios are then evaluated using the same multicriteria framework adopted in Part 3 to determine the best-case scenario for the thesis objective. As an extension of Part 4, Part 4* explores how this winning scenario would develop into a masterplan design, refining and developing the winning scenario through design, while addressing the practical necessities the scenario requires: alignment with the urban planning strategy in Turin, environmental considerations, and detailed intervention guidelines for the complex.

PART 01

/ Theoreti-cal Context

01 01

Monument to Urban Fabric: the Discourse of Heritage in the City

To understand what industrial ruins are worth, we go back to the underlying disagreement regarding the relationship between the historic city and its future before turning to the specific case for this thesis.

Looking at the latter half of the 19th century, Haussmann's Paris-the dominant model of urban transformation at the time- pictures a city remade through systematic demolition. In this context, the historic fabric was largely perceived as an obstacle to hygiene, circulation, and the image of modernity. Hence, came the demolition of medieval quarters in favor of "grand boulevards," . A phenomenon that established a planning logic spreading across Europe. This logic saw preservation as the exception and transformation as the rule; and the monuments that survived were mostly being isolated from the urban tissue that had given them meaning. This model persisted to postwar reconstruction and high-modernist housing policy, since it answered a genuine need for speed and legibility with a brutally simple instrument: "the blank slate."[1]

A counterargument to this consensus emerged in 1889 with Camillo Sitte's Der Städtebau nach seinen künstlerischen Grundsätzen (City Planning According to Artistic Principles). In his book, Sitte advanced his theory centering on historical context. In his view , rather than acting as freestanding, isolated objects, the monuments derive their meaning and significance from



1 Emily Kirkman, "Haussmann's Paris: Architecture in the Era of Napoleon III," The Art History Archive, 2007.

fig.1.1. Matthäus Merian and Caspar Merian, Wie Solche Ao. 1620 im Wessen Gestanden, 1620

the urban fabric surrounding them. Based on his argument, isolating a cathedral, for instance, disconnects it from the living city that has developed and accumulated around it for centuries, rather than honoring it; thereby implying that the urban fabric itself constituted heritage.[2]

In Belgium, Charles Buls pursued a related argument, focusing specifically on the issues of demolition and isolation. Consequently, he devised a methodological framework that was against both pure conservatism and pure progressivism. He proposed mediation as a continuous negotiation between the historical fabric and the transformations demanded by city. Buls theorized that said negotiation would be guided by criteria of historical and civic value , and spatial consequence. This position recurred and developed across different vocabularies in the 20th century.[3] However, even though this insight became fundamental to the contemporary heritage theory, it did not become fully operational in planning practice for decades.

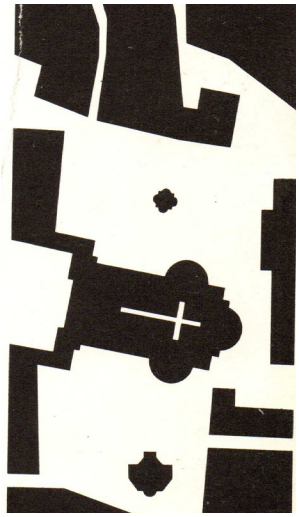
The twentieth century institutionalized conservation as a discipline without resolving its central tension. Dehio, Dvořák, and the Viennese school established the frameworks that would eventually govern listed buildings and protected zones.[4] But the decisive shift from the isolated monument to the urban ensemble came only after the destruction of the Second World War. The war instilled the question of what to rebuild, and in what form.

The reconstructions of Warsaw and Gdańsk, the debates over East and West Berlin, etc., were all more political decisions, each embodying a different theory of what the inherited city was for, whose memory it carried, and which futures it was permitted to support. Since the 1960s onward, the idea that heritage protection could not meaningfully operate at the scale of the individual building alone spread; hence, the spatial, social, and historical dimensions of urban fabric were seen to require frameworks capable of addressing the ensemble.[5]

This is the genealogy within which industrial heritage conservation eventually arrives ; and arrives late. When deindustrialization began generating its particular landscape of ruin and vacancy from the 1970s onward, the conceptual tools available were those developed for a different problem: the historic center, the medieval quarter, the baroque set-piece. The moment at which this theoretical inadequacy became structurally consequential can be located with some precision. The Venice Charter of 1964 — the foundational international document of twentieth-century conservation doctrine — codified a framework built around the singular monument and the archaeological site. Its logic was preservation through minimal intervention and the retention of authentic materials, applied to objects whose productive lives had already ended. The Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas[6] extended this to the urban ensemble, but still operated within the logic of the historic center: fabric whose value was recognized precisely because it was no longer changing.

By the time deindustrialization began generating its landscape of vacancy and abandonment -late 1970s onward- the conservation framework was not suitable to the problem at hand: it did not possess the tools for the still-warm factory floor or for buildings whose communities were alive and whose trauma was immediate, whose heritage value was contested rather than consensual.[7] The Nizhny Tagil Charter for the Industrial Heritage, the first international framework to address industrial sites specifically, was adopted by TICCIH only in 2003 -three decades after the first wave of closures had already begun reshaping cities like Turin[8]. As Jokilehto observes in his comprehensive history of conservation thought, the development of con-

fig.1.2. Der Städtebau nach seinen künstlerischen Gr-



2 Camillo Sitte, Der Städtebau nach seinen künstlerischen Grundsätzen (Vienna, 1889). Veldpaus, L., Ana P. Roders, and Bjf B. Colenbrander. "Urban Heritage: Putting the Past into the Future." The Historic Environment, (2013).

3 Charles Buls, L'Esthétique des villes (Bruxelles, 1893). Mariacristina Giambruno, Sonia Pistidda, and Nune Petrosyan, Heritage-Based Tools for the Sustainable Urban Development of Historic Centers: The Case Study of Gyumri in Armenia (Cham: Springer Nature, 2025).

4 Christopher S. Wood, The Vienna School of Art History (Princeton: Princeton University Press, 2018).

5 Miles Glendinning, The Conservation Movement: A History of Architectural Preservation: Antiquity to Modernity (London: Routledge, 2013).

6 Birgit Knauer and Laura Demeter (eds.), Transforming Cities: Planning and Preserving in Historic Urban Contexts (Vienna: TU Wien Academic Press, 2025).
Venice Charter, International Charter for the Conservation and Restoration of Monuments and Sites (Paris: ICOMOS, 1964).
Khalaf, Roha. "THE RECONCILIATION OF HERITAGE CONSERVATION AND DEVELOPMENT: The Success of Criteria in Guiding the Design and Assessment of Contemporary Interventions in Historic Places." ArchNet-IJAR : International Journal of Architectural Research 9, no. 1 (2015): 77-92.

servation doctrine has consistently followed rather than anticipated the categories of heritage that social and economic transformation generates; the framework arrives after the loss has already accumulated[9]. The gap between the pace of industrial decline and the pace of theoretical response lies in the structural condition that explains why, when industrial sites eventually enter urban planning frameworks, they enter without the conceptual tools that genuine heritage conservation would require - and why the planning documents that govern their transformation tend to treat them as spatial problems to be resolved rather than as heritage assets whose conservation must shape the resolution. As Neil Cossons observed, "advocating for the preservation of a redundant industrial site on the basis of traditional heritage values does not automatically look attractive to a community afflicted by economic collapse"[10], a reminder that the inadequacy of the existing framework was not only theoretical but social, requiring not just new conservation tools but a new argument for why conservation mattered at all.

7 Colletta, T. (Ed.). (2013). The role of the integrated conservation of cultural heritage for a creative, resilient and sustainable city: Acta of the ICOMOS-CIVVIH Symposium, Naples 2012 (Urbanistica, Vol. 177). FrancoAngeli.

8 TICCIH, The Nizhny Tagil Charter for the Industrial Heritage (2003).

9 Jukka Jokilehto, A History of Architectural Conservation (Oxford: Butterworth-Heinemann, 1999).

10 Cossons, Neil. "Sustaining England's Industrial Heritage: A Future for Preserved Industrial Sites in England."

01 02

Industrialization, Deindustrialization and the Urban Condition

The industrial city is often described as the city where production happened. But it is more than that. If the Industrial City was the encapsulation of industries and economic rise, the industry itself was the fuel that created a spatial and social organism built around it. The logic of production and manufacturing structured not just the workers' time but also their daily routine. From factory gates to worker housing, it was constructing, bit by bit, the circulation of people during shift changes, work hours, and movement between home and work. Industrialization did not simply occupy cities with a building or two; it reorganized the life within them.

In cities such as Turin, with many prominent industries, factories were basically the structuring force of urban geography, defining which neighborhoods grew and how, where the working class lived and moved, and how public space was used. Deindustrialization, however, shut this down without replacement, leaving in place not only unoccupied land but also holes in life.

Italy's industrial history followed a path that was partially distinct from the broader European experience. Industrialization did not come to Italy until roughly the 1890s. And even then, it concentrated heavily in the northwestern triangle of Turin, Milan, and Genoa. Geography, market access, banking infrastructure, and state policy all contributed to this marked regional concentration of core Italian manufacturing. After the world wars, though, Italy had firmly established itself among the world's leading industrial nations, albeit this national triumph was accompanied by deep regional inequality.

Among the cities of the northwestern triangle, Turin would come to represent the most concentrated and consequential case of industrial urbanism in Italy. Between 1864 and 1884, as Turin was stripped of the economic advantages that came with being Italy's capital, it designed its future as Italy's industrial capital. Industrialization in Turin began with the use of "white coal" and other energy sources. By the 1910s, factories were emerging all over the city, particularly in the northern areas (e.g., the Barriera di Milano district), first and foremost in the metallurgical and mechanical sectors, followed by the textile sector. The destiny of the Barriera "industrial district" and neighboring areas became clear: existing factories were expanding, and others kept emerging. In the 1950s and 1960s, however, FIAT, the automobile company already rooted in Turin, established itself as the city's main

industry. So much so that Turin was dubbed the “One Factory City” or the “City of Automobile.” Turin, therefore, became the most emblematic Italian case of a Fordist company-town on a metropolitan scale; a city whose identity, planning logic, spatial structure, and social fabric were shaped almost entirely by industry, and a city in which industry did not merely provide employment but dictated the very meaning of urban life. [1]

Then deindustrialization arrived as a prolonged crisis, with the first signs in Italy emerging in the textile industry in the late 1950s. In the 1970s, more drastic transformations followed, as large companies decentralized production in response to labor unrest. Unlike more coordinated regional restructuring elsewhere in Europe, there was no unified governance response in the Italian northwest. Largely, municipalities were left to devise their own strategies. This fragmentation fundamentally shaped the architectural and urban consequences of industrial decline in each of the three cities. Cowie and Heathcott argue in their study of deindustrialization’s meanings that what economists called “restructuring” in the post-industrialization era was experienced more as something akin to a conquest by the workers, a total destruction of a way of life that had seemed permanent, and the unraveling of social networks and temporal rhythms that had been built over generations. For them, the smokestacks and brick walls that remained were not neutral ruins; they were “monuments to broken promises.” [2]

The urban consequences of deindustrialization were severe: Factories’ closure left the city with empty buildings and the loss of what had sustained neighborhood vitality. The shift led to the disappearance of organized daily pedestrian flows. The workers who had provided informal territorial oversight of streets and public spaces were gone. And the mixed-use interdependencies between industrial, residential, and commercial functions that had made urban areas legible and alive began to unravel. What remained were large voids; abandoned ruins of monstrous scale, sometimes contaminated and often cut off from surrounding streets, neither clearly public nor clearly private. In the northern areas of Turin previously recognized through their industrial flourishing, such as Regio Parco, this process produced exactly the condition visible today: a network of post-industrial ruins (Ex-FIMIT, the case of concern to this thesis, and the vicinity Ex-Tabacchi amongst them) whose presence marks not the end of a chapter, but the unresolved inheritance of a city that industry built and abandonment unmade.

1 Stefan Berger, Salvatore Musso, and Christiane Wicke, “The Unmaking of Industrial Landscapes: The North-Western Italian Industrial Triangle and the Ruhr Region in Germany,” in Deindustrialisation in Europe since 1945, ed. Stefan Berger, Christiane Wicke, and Salvatore Musso (London: Routledge, 2016), 25–52.

2 Jefferson Cowie and Joseph Heathcott, “The Meanings of Deindustrialization,” in Beyond the Ruins: The Meanings of Deindustrialization, ed. Jefferson Cowie and Joseph Heathcott (Ithaca, NY: Cornell University Press, 2003), 1–15.

fig.1.3. Fiat Mirafiori 1972



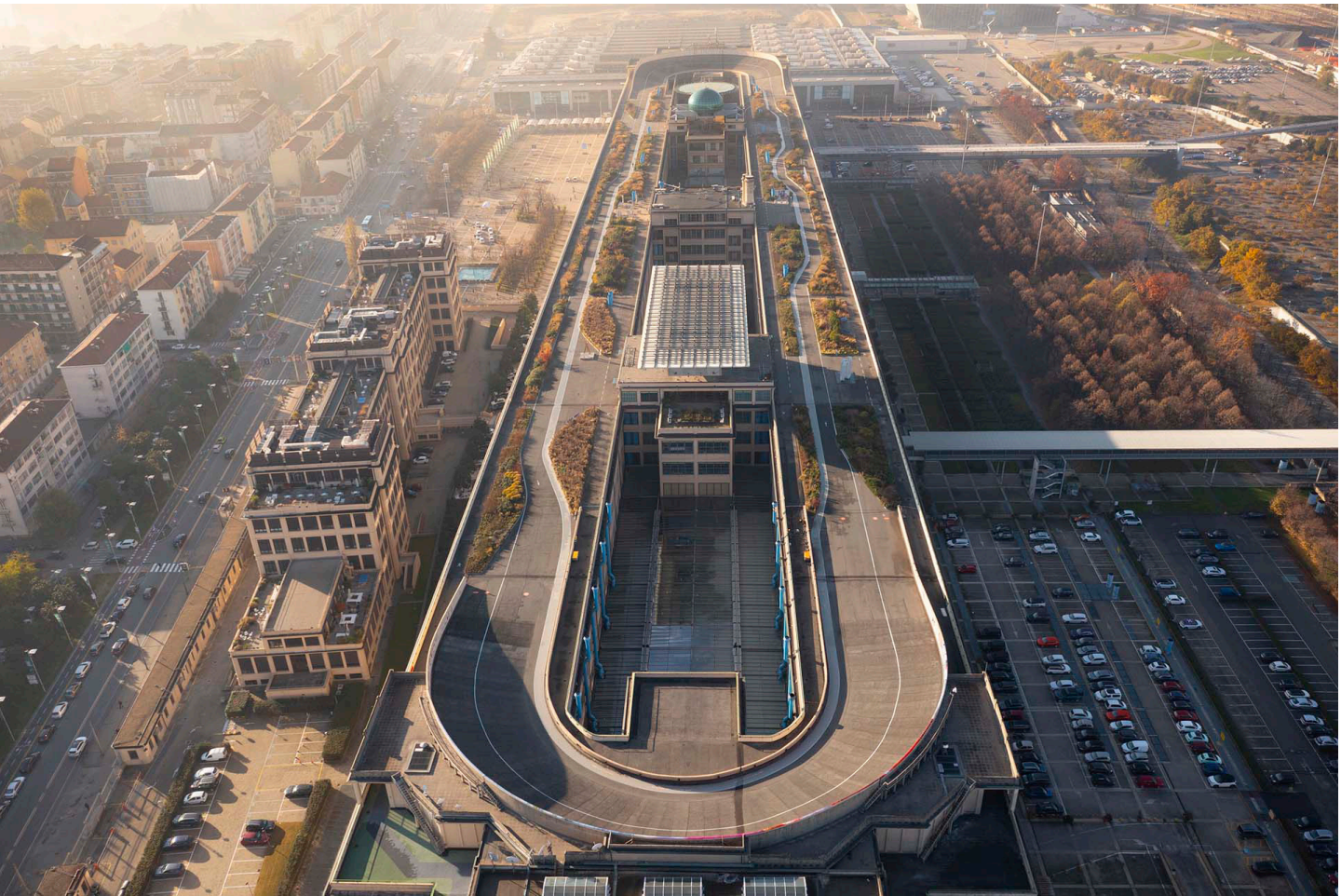
Turin's institutional response to deindustrialization made this structural condition directly visible. The Piano Regolatore Generale of 1995, directed by Gregotti Associati and Augusto Cagnardi, was the city's first comprehensive framework for the reuse of former industrial land - and it was, in its logic and priorities, primarily an infrastructure and development instrument rather than a heritage conservation one. The Spina Centrale project transformed its industrial corridors into development axes, and restructured over two million square meters of former industrial land across four zones. What it produced was a framework for the reactivation of industrial land through mixed-use development, university expansion, and public space redesign - not a framework for determining what within that land was worth conserving, or how conservation might shape the development that replaced it.

As Saccomani writes, the planning instruments of this period were calibrated to generate "extraordinary physical, social, and functional urban change," with an emphasis on speed of transformation rather than on the careful negotiation between inherited value and new use that conservation theory, at its most demanding, requires[3]. The Lingotto conversion by Renzo Piano - the emblematic case of Turin's industrial heritage reuse - was a flagship that preceded and shaped the plan and the framework rather than emerging from a conservation logic embedded within it. For the smaller sites that were not Lingotto - the smaller, less legible, less architecturally spectacular industrial complexes in the peripheral districts - no equivalent conservation argument was constructed. They entered the planning framework as zones of transformation, and the question of what they were worth was left unanswered. In the northern areas of Turin, including Regio Parco, this absence produced exactly the condition visible today: sites formally designated [4], repeatedly planned for, and indefinitely unresolved. The theoretical gap identified in section "01 01" was not abstract: it produced, in Turin as elsewhere, a planning practice that could designate industrial sites as heritage without knowing what to do with them.

3 Silvia Saccomani and Cristiana Rossignolo, "Torino: Urban Regeneration in a Post-Industrial City," Journal of Urban Regeneration and Renewal 3, no. 1.

4 Giulia Marra, Michela Barosio, Enrico Eynard, Cristina Marietta, Matteo Tabasso, and Giulia Melis, "From Urban Renewal to Urban Regeneration: Classification Criteria for Urban Interventions. Turin 1995–2015: Evolution of Planning Tools and Approaches," Journal of Urban Regeneration and Renewal 9, no. 4 (2016): 367–380.
James Douet, ed., Industrial Heritage Re-Tooled: The TICCIH Guide to Industrial Heritage Conservation (Lancaster: Carnegie Publishing, 2013).

fig.1.4. Lingotto today



01 03

Industrial Heritage, Conservation and Urban Regeneration

"From conservation as end to conservation as instrument": This theoretical shift began in academic debate and, by the 1990s, had found its way into mainstream planning practice across Europe. James Douet, writing for TICCIH, documents a transformation that would have been unthinkable twenty years earlier: the adaptation and repurposing of industrial heritage had generally become a standard strategy for urban planners. Deindustrialization in Europe had generated an array of vacancy and obsolescence that made ideological purity about preservation virtually impractical. Cities needed to do something with these sites. The question was no longer whether to intervene but how; and the consensus that emerged, however unevenly applied, was that industrial buildings were not obstacles to be cleared but assets to be reactivated.[1]

The instrument through which this consensus operated in practice was the "flagship project". Where industrial sites failed to attract investment due to contamination, scale, isolation, or the stigma of economic decline, a single high-profile intervention was used to demonstrate feasibility and shift perception. Looking at Zollverein in the Ruhr, for example, it was IBA that initiated and nearly completed the transformation before the establishment of the broader Ruhr regeneration framework. This sequence—where a flagship project precedes and ultimately generates the masterplan—is characteristic of this form of regeneration. However, this approach has consequences that are often obscured by the rhetoric of urban regeneration. When transformation begins before comprehensive planning, the social dimensions of the project are not fully considered and thus are not in balance with design ambitions; instead, they are subordinated to them. However, the flagship project generates momentum, attracts investment, and reshapes the district's narrative, even though it does not reliably address the needs of the communities that inhabited these sites before redevelopment.[2]

The very definition of conservation adds a further dimension to this discussion: "conservation is not inherently a neutral, timeless defense of the past but rather a culturally constructed, politically embedded, and economically entangled practice".[3] Heritage value as a quality that is assigned, negotiated, and revised over time is shaped by conflicting interests and political priorities. In the 1980s and 1990s, heritage was typically reframed as an economic asset, attracting tourism and useful for urban branding; henceforth

1 James Douet, "Introduction," in Industrial Heritage Re-Tooled: The TICCIH Guide to Industrial Heritage Conservation, ed. James Douet (Lancaster: Carnegie Publishing, 2013), 1.

Emanuele Romeo and Riccardo Rudiero, "Il dibattito internazionale e le riflessioni sul restauro archeologico dalla Conferenza di Atene (1931) alla Carta di Venezia (1964) e oltre," in La genealogia del restauro. La conservazione dei monumenti dalla Conferenza di Atene alla Carta di Venezia (1931–1964), ed. Stefano Caccia Gherardini (Pisa: ETS, 2025), 53–73.

2 Massimo Preite, "Urban Regeneration and Planning," in Industrial Heritage Re-Tooled: The TICCIH Guide to Industrial Heritage Conservation, ed. James Douet (Lancaster: Carnegie Publishing, 2013), 101.

, conservation gained mainstream political status. In this environment, industrial buildings began to gain value as aesthetic and symbolic capital within competitive urban economies. This commodification enabled many successful adaptive reuse projects. But at the same time, it carried significant risks: selective preservation prioritizing the marketable past over the socially meaningful one, potential displacement of existing communities, and the production of what Simonato Citron calls “elitist spaces” - regenerated sites that conserve industrial architecture while severing the ties to the community that gave it meaning.[4]

The Italian case was not immune from such consequences. According to Zazzara, Milan represents “virtuous forgetting”: a rapid conversion to a service economy accompanied by the deliberate erasure of industrial memory, producing districts that are economically successful but socially sterile.[5] Naples’ Bagnoli demonstrates the opposite end of the spectrum: decades of ambitious regeneration plans, generating environmental disaster and community resentment, and adding the trauma of failed hope to the trauma of economic loss[5]. Between these extremes, instead of a middle path, lies the absence of a framework capable of treating industrial heritage as something other than either an obstacle to erasure or a resource for commodification. It is the roots of that absence that Zazzara’s analysis makes visible.[6]

The Italian approach to industrial heritage, she argues, developed in troubling isolation from the actual processes of deindustrialization ; treating abandonment as a purely architectural preservation problem rather than a social and spatial crisis. Since the 1970s, she continues, Italian heritage scholars have focused primarily on cataloging sites and studying classical industrial architecture while remaining largely disconnected from the living communities affected by factory closures. The consequence, she argues, was a “purely aesthetic” heritage practice, limited to saving “chimney stacks”, rather than engaging with how industrial decline had reshaped class structures and senses of belonging.[5] Subsequently, the fundamental question Zazzara poses, [whether critical remembrance of industrial heritage is possible without recognition of deindustrialization itself], remains unanswered in Italian planning practice.

What Zazzara identifies as an Italian pathology is, however, the local expression of a structural problem in the discipline. The theoretical lineage traced in section “01 01” produced frameworks adequate for the historic



fig.1.5. Naples’ Bagnoli

3 John Pendlebury, Conservation in the Age of Consensus (London: Routledge, 2009).

4 Rafaela Simonato Citron, “Urban Regeneration of Industrial Sites: Between Heritage Preservation and Gentrification,” WIT Transactions on The Built Environment 203 (2021): 263–273.

5 Gilda Zazzara, Il passato del lavoro: Cultura, patrimonio, memorie dell’industria (Bologna: Il Mulino, 2016).

6 Gilda Zazzara, “Making Sense of the Industrial Past: Deindustrialisation and Industrial Heritage in Italy,” Italia Contemporanea Yearbook 2020, supplement to no. 294 (2021): 155–182.

fig.1.5. Naples’ Bagnoli

center and the urban ensemble but did not extend to generate equivalent tools for industrial heritage in live urban planning contexts. Pendlebury's analysis of the relationship between conservation values and planning practice determines that conservation operates within an "authorized heritage discourse" - a set of assumptions about what heritage is, who it belongs to, and what purposes it serves. And that discourse, shaped by the Venice Charter framework and its successors, was not built to accommodate the urgency, scale, and social complexity of post-industrial transformation.[7] The consequence is operational: when industrial sites enter strategic regeneration plans, they enter before the conceptual tools that would allow genuine conservation logic to operate have been developed; the planning framework acknowledges their existence, assigns them designations, and leaves the question of what to actually do with them to designers working without adequate theoretical precedent. This is the gap, and it is not a gap in knowledge; rather, it is a gap between the moment when strategic planning phases are defined and the moment when heritage conservation logic would need to be present to shape them, recurring in different institutional forms, across every case from Zollverein to Lingotto to the unrealized succession of plans for Ex-FIMIT.

The international policy framework developed in parallel with this practice tells a more demanding story. The Valletta Principles, the Leipzig Charter on Sustainable European Cities, and the successive European Spatial Planning documents do not describe conservation as an aesthetic operation or regeneration as primarily an economic one. They describe heritage as a resource, both tangible and intangible, embedded in the urban ecosystem, and insist on community participation, the integration of social and environmental objectives, and the protection of authenticity and identity as requirements of sustainable development. According to the Leipzig Charter, cities cannot function as engines of social progress unless cultural diversity and quality of urban life are sustained within them. The Territorial Agenda of the EU 2020 frames historic urban areas not as preservation problems but as "motors of smart, inclusive, and sustainable development". Describing a model of heritage-led regeneration in which the physical and social dimensions are inseparable, and saving the building without sustaining the community is not considered conservation but a more sophisticated form of erasure.[8]

This disconnect between policy ambition and operational practice is not unique to Italy, nor to any single scale of governance. The gap is operational. It lies in the persistent tendency -documented by Zazzara- to treat the social consequences of deindustrialization as a problem for social policy and the physical consequences as a problem for heritage conservation. Rather than these being separable fields operating on separable material, the empty building and the displaced community are the same event, viewed from different angles by the two practices.

The research on adaptive reuse by Vafaie, Remøy, and Gruis provides a more constructive framework for thinking through these tensions.[9] Their systematic literature review identifies success in adaptive reuse not as simple preservation of form but as a balance between compatibility and continuity; in other words, as a negotiation between existing cultural heritage and the needs of contemporary life. They observe in their study that ICOMOS identifies a successful adaptive reuse project as one that reuses a space for a compatible use while retaining its cultural heritage value. Their case study of Fenix I in Rotterdam demonstrates that intangible authenticity can potentially outweigh purely physical preservation as a driver of success. Even though Fenix I was not a formally listed building, it had significant

7 John Pendlebury, Conservation Values, the Authorised Heritage Discourse and the Conservation-Planning Assemblage, International Journal of Heritage Studies 19, no. 7 (2013): 709–727.

8 European Union, New Leipzig Charter: The Transformative Power of Cities for the Common Good, adopted November 30, 2020.

9 Fatemeh Vafaie, Hilde Remøy, and Vincent Gruis, "Adaptive Reuse of Heritage Buildings: A Systematic Literature Review of Success Factors," Habitat International 142 (2023)

Fatemeh Vafaie, Hilde Remøy, and Vincent Gruis, "From Theory to Practice: Evaluating Success Factors of Adaptive Reuse through a Case Study," Built Environment Project and Asset Management (advance online publication, 2025).

addressed social exclusion and criminal activity in the Katendrecht cultural value to the surrounding community, and its reuse directly neighborhood by reactivating the space and fostering community use. From this example, it can be deduced that economic profitability is not the only measure of success, and adaptive reuse can succeed socially and culturally even when financial returns are modest, provided that the community activation it generates is real and sustained.

Underlying the most successful adaptive reuse projects is what the Burra Charter describes as "the conservation of use and association alongside the conservation of fabric". The Burra Charter[10] distinguishes between the physical fabric of a heritage place and its cultural significance, including the associations and meanings. It uses what communities have developed in relation to that place over time. Its central principle is that conservation of place includes the retention or continuation of use wherever that use contributes to cultural significance. And where continuation is impossible, the new use should involve as little change to the significant fabric as possible. It should, where feasible, represent a legible evolution of the building's prior productive and social logic rather than a complete programmatic rupture. This principle, which the charter calls "functional continuity", provides the theoretical grounding for what the adaptive reuse literature is describing empirically: that projects maintaining a legible connection between a building's original use and its new program generate stronger community identification, more sustained activation, and more authentic heritage conservation than those that treat the industrial shell as a neutral container for unrelated content. [11]

The site of concern to this thesis, Ex-FIMIT, sits at the intersection of multiple tensions: Firstly, it is a genuine piece of industrial heritage at risk of either erasure or sterile commodification; then, it carries the social trauma of decades of abandonment; and finally, it represents a design opportunity that cannot be resolved by conservation alone or by regeneration alone.

What follows from this, made explicit by Douet and the editors of Transforming Cities, is that conservation can no longer function as an absolute objective. It must be understood as a conditioned one: conditioned toward achieving community vitality, economic activity, spatial integration, and the kind of diversity that sustains genuine urban life. In this context, conservation is defined by the negotiation between inherited value and living need, conducted in public, under conditions of genuine uncertainty about the outcome. The historic preservationists who argued for the selective mediation of the existing fabric, from Buls to the neighborhood movements of the 1960s and 1970s, understood this. However, the argument has been learned and forgotten in turns over the years; particularly when the pressure to deliver legible and fundable outcomes overrides the slower work of building the social conditions that make those outcomes meaningful.

In practice, this conditioned conservation means that the question shifts from what to conserve to what the conservation is for: regarding industrial heritage in the post-industrial city, this means a concern for whose vitality the conservation serves, what continuities it protects, and whether the communities that lived through deindustrialization recognize themselves in what is being preserved. As a result, a site regenerated through this perspective would likely be less smooth and more open to uses that resist commodification. It will carry visible evidence of its own negotiated history. And it will be, in the deepest sense, more authentic; not because it has preserved more brickwork or retained more industrial machinery, but because it has remained legible to the people for whom it was never simply

10 Australia ICOMOS, The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (Burwood, Victoria: Australia ICOMOS, 2013).

11 Arfa, Fatemeh H., Barbara Lubelli, Hielkje Zijlstra, and Wido Quist. "Criteria of "Effectiveness" and Related Aspects in Adaptive Reuse Projects of Heritage Buildings." Sustainability (2022).

a building.

Conservation theory, even with the conclusion that industrial heritage activation and community vitality are inseparable objectives, stops at the threshold of what inaction costs. The gap identified above (between the designation of industrial sites as heritage and the development of frameworks capable of actually conserving them within strategic urban planning) is not a neutral absence. It has a duration, and its consequences are borne by the neighborhood that lives beside it.

Comune di Torino sealed Ex-FIMIT's access gates in July of 2024, responding to complaints from neighboring residents about illegal occupation and "antisocial" activity. At the time, the comune was acting within the only framework available to it: not a heritage conservation framework, not an urban design framework, but an administrative control framework that treats the site as a security problem requiring quarantine rather than a spatial challenge requiring integration. [12] This response is not irrational given the absence of alternatives, but it is precisely what a three-decade accumulation of theoretical inadequacy produces in practice. Twenty-eight years of abandonment at FIMIT are not merely a neutral hiatus between industrial past and regenerated future. They are a period with its own spatial consequences that fall not on the building but on the surrounding community, in the form of eliminated pedestrian connections, degraded public space, and the distinctive urban safety conditions that large-scale abandonment generates. The following section is an investigation of those conditions and what the spatial design literature identifies as means of addressing them.

12 Neil Cossons, "Why Preserve the Industrial Heritage?" in Industrial Heritage Re-Tooled: The TICCIH Guide to Industrial Heritage Conservation, ed. James Douet (Lancaster: Carnegie Publishing, 2013).

01 04

Safety, Community Vitality and the Post-Industrial City

>1 Defining Safety and Safety Perception

Safety in urban space Safety in urban space can be read as a layered condition, as it does not merely include the condition of objective security but also perceived safety, which is a subjective sense of security that comes with the experience of using public space. These two aspects while related, are not mutually identical. What lies between them demonstrates an urban design problem that this thesis seeks to understand. Perceived safety, shaped by the individual's experiences and coping mechanisms, could be understood when we look at the example of "fear of crime" , a term distinct from crime or crime probability itself.[1] in other words an objectively "safe space" with a low crime rate , does not automatically generate perception of safety among the citizen.

An abandoned industrial site could lead to conditions such as physical deterioration of the buildings, poor lighting, and a lack of users. These conditions, we'll see in the literary works below, are directly related to the conditions that produce "unsafe space" at the urban scale, whether it is objectively unsafe space or a perception of it. In Ex-FIMIT, such conditions could be detected by simple observation and review of the related news. Decades of abandonment have naturally produced decay, while vegetation growth is seen not only in unattended branches blocking the view of the buildings but also in the reclamation of courtyards and interiors (see Appendix B). Meanwhile, the society's lack of presence has made way for illegal gatherings, squatting, and vandalism[2]. Likes of which would not only create illegal conditions and perceived unsafety among the surrounding community, but, due to the condition of decay, could also lead to objective unsafety for said unauthorized users. These factors could be said to reinforce each other in a self-perpetuating cycle: the surrounding community avoids a space such as Ex-FIMIT due to perceived unsafety, and that emptiness increases the likelihood of unauthorized spatial practices, as noted above.[3]

Saxena et al.'s research on "women's safety in public spaces" , deepens this understanding.[4] Their study shows that safety is above all a "right to freely access urban space"; one that is systematically denied to women , children and other vulnerable groups that would prioritize their movement based on perception of safety. As a result of their systematic review of conditions for safe space, they write that areas with active frontages offer "natural sur-

1 Shanshan Zhang, Through Urban Regeneration to Improve Urban Security: Some Research and Guide for Turin (master's thesis, Politecnico di Torino, 2024).

2 CronacaQui, "L'Ex-FIMIT, la fabbrica abbandonata che da 25 anni attende il suo rilancio," Torino Cronaca, January 9, 2022.

3 "Natural Surveillance and Crime Prevention," iResearchNet

4 Megha Saxena, Safiullah Khan, and Abdul Quadir, "Planning for Women Safety & Inclusivity in Public Realm: A Case of Residential Streets of Lucknow," International Journal of Scientific and Research Publications 15, no. 6 (2025): 185–195.

veilance" that reduces vulnerability; meanwhile, streets with poor lighting or obscured paths bring about insecurity or the perception of it, especially after dark.

>2 Urban Safety

Jane Jacobs's book " the Death and Life of Great American Cities" offers a fundamental understanding of safety as spatial problem rather than a policing one. his directly relates to the subject of this thesis. Jacobs , an urban planner wrote her book as a direct response to the urban planning practice of her time. One that, she claimed, was systematically destroying the conditions for "urban vitality" in favor of "order", "efficiency" and "expert authority". Her famous encounter with Boston's North End (officially classified as a slum at the time) paints a vivid picture of a neighborhood with intense street life, self maintained buildings, and a sense of collective responsibility. One that was in complete odds to her expectations and shaped her central argument of the book : that the conditions labelled by planners as problems were often [ironically] , ones that sustained safety and social cohesion. [5]

Jacobs's concept of "eyes on the street" describes a continuous community presence that fosters safety. She argues that the primary reason the streets remain secure is not the presence of police but an intricate, unconscious network of controls enforced by the people themselves: this happens through informal surveillance by people occupying windows, walking frequently in the street, and owning ground-floor shops, etc. In a sense, this is not intentional monitoring but a spatial configuration that allows people to see and be seen, she adds. In the course of her book, Jacobs identifies four spatial conditions for generating urban vitality that lead to urban safety: First , a clear distinction between public and private. Ambiguous zones without clear ownership wouldn't take responsibility, leading to neglect. Secondly, buildings must engage with the street through the ground floors. Inward-facing buildings and blank walls, she claims, reduce natural oversight (less "eyes on the street"). And most importantly, districts require mixed uses that produce diverse temporal arrangements and a continuous presence throughout the day. And finally , human-scaled density supports meaningful activity; in other words, neither so few users that the space feels deserted nor so many that anonymity dissolves social accountability.

Jan Gehl, a Danish architect and urban design consultant, even though working in a different urban landscape, saw Jacobs's arguments as relevant and extended her observations through empirical research. He translated Jacobs's social philosophy into measurable spatial principles in his book " Life Between buildings". His core insight centered on outdoor activities as self-reinforcing; meaning that "people come where people are" . [6] For an instance, a person sitting on a bench encourages others to join, while children playing attracts more children, etc. In parallel he says " nothing happens because nothing happens" , describing the spaces with scattered activity and/or poor condition. Gehl's studies did not end with whether an outdoor activity takes place, but also examined how the duration of said activity comes into play. Consequently , he argues that the duration matters even more than the number of people who are passing through: "few people lingering for thirty minutes create more genuine public life, more eyes on the street, more perceived safety, than many people hurrying past." This argument adds another layer to the question of safety design: not only a matter of bringing people to the site , but also creating the means to give them reasons to stay.

5 Jane Jacobs, The Death and Life of Great American Cities (New York: Random House, 1961).

6 Jan Gehl, Life Between Buildings: Using Public Space, trans. Jo Koch (Washington, DC: Island Press, 2011).

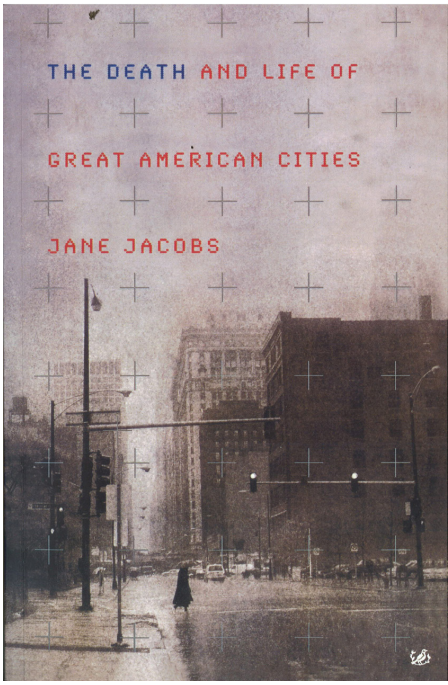


fig.1.6. Death and life of the Great American Cities, Jane Jacobs.

Gehl's concept of "soft edges" goes into deeper detail regarding what space would be occupied: His study shows that people tend to gravitate towards spatial boundaries rather than open centers. But to turn said boundaries from passing paths into spaces to stay, he comes up with the "soft edges" concept. A design solution in which the transitions are graduated using features such as porches, terraces , etc. Means that people can maintain privacy while participating in street life. This grows into his principle "activities grow from the edge toward the middle" , not only making the transitions gradual and making people more comfortable while being in the space but also giving them reasons to actively participate in the activities.

While Gehl extended Jacobs's core arguments into spatial urban principles with the aim of primarily increasing urban vitality, Oscar Newman's concept of "defensible space" focuses primarily on structural architectural theory aimed at crime prevention. Mawby , analyzing this concept write that Newman identifies four categories of defensible space: 1. environments that create perception of territorial influence, 2. the environments creating the opportunity of natural surveillance (eyes on the street) , 3.the capicity of design to influence the perception of the project in terms of uniqueness or stigma , and finally , 4. the influence of safe zones in the vicinity of the site.[7] Newman's practical evidence came from comparing two New York-housing estates. Specifically, a high-rise development with high crime rates and a low rise one with lower crime rate. Resulting in his argument that physical design directly shapes criminal opportunity. Mawby, even though acknowledging Newman's contribution, sees a significant methodological weakness: his evidence base was limited and largely ignorant of the social variables Jacobs had previously emphasized.

The synthesis of Newman's defensible space and Jacobs's view, turned into an operational set of design principles, dubbed Crime Prevention Through Environmental Design (CPTED). CPTED, still relevant and developing , in its first generation closely resembled Newman's four principles according to Mawby: 1. Natural surveillance , increasing visibility through lighting , clear sightlines and open layouts, 2. territoriality, which uses design to create a sense of ownership , 3. image and miliou , which maintains environments that signal safety , and 4. access control that restricts unauthorized entry. The second generation of CPTED, however, recognizing the limitations of the first generation , extended these principles toward social cohesion, community culture, and connectivity. [8] The question for this thesis then becomes whether these principles are sufficient for design criteria, specifically for the case of concern to this thesis.

>3 Towards Community-Centerd Safety

In practice, the response to Ex-FIMIT's abandonment issue has been one that's not fully incompatible with CPTED: After years of neglect, the access gates were sealed in July 2024 following complaints from neighboring residents.[9] In essence, this intervention was not irrational. It addressed an immediate problem of unauthorized occupation. However, this response treated Ex-FIMIT as an isolated security problem requiring fortification and quarantine rather than as an urban design challenge requiring spatial integration. That is to say, the gates exacerbate a fundamental problem by creating an impenetrable barrier, eliminating pedestrian connections, and thereby fostering a sense of insecurity in the large, enclosed, and ambiguous space.[10] This form of CPTED logic, in its most reductive form, is visible in the spectrum of responses across the Regio Parco neighborhood , a former industrial site north of Turin. Whether it's fortification of Ex-Ma.Ar.Di.Ci in the south of Ex-FIMIT or negligence of Ex-Poste Monteverdi in the vicinity,

7 Oscar Newman, Defensible Space: Crime Prevention Through Urban Design (New York: Macmillan, 1972).

R. I. Mawby, "Defensible Space: A Theoretical and Empirical Appraisal," Urban Studies 14, no. 2 (1977): 169–179.

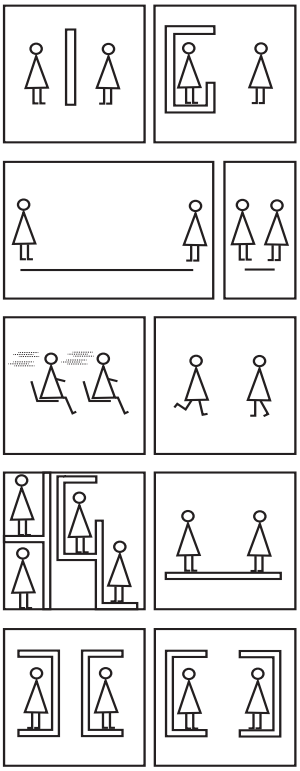
8 International CPTED Association, "Primer in CPTED – What Is CPTED?," CPTED.net

9 "L'Ex-FIMIT, da 26 anni la fabbrica di isolanti abbandonata attende il recupero," TorinOggi, August 28, 2024.

10 Elisabetta V. Brovarone, Luca Staricco, and Ersilia Verlinghieri, "Whose Is This Street? Actors and Conflicts in the Governance of Pedestrianisation Processes," Journal of Transport Geography 107 (2023).

11 Nuria Vidal-Domper, Susana Herrero-Olarte, Gonzalo Hoyos-Bucheli, and Marta Benages-Albert, "Do Jane Jacobs's Conditions Fostering the Presence of People Influence Crimes in Public Space? An Econometric Analysis in La Mariscal Neighborhood in Quito," Cities 148 (2024)., natural natural surveillance, image and milieu , territoriality.

fig.1.7. Inhibiting vs. promoting contact (adapted from Gehl 2011, 62).



all of these interventions share a tendency to control rather than community activation. And their success, even in that, is up for debate.

The main issue with control-based safety approaches isn't their insufficiency, but rather, as research by Saxena et al. supports, that they produce the perception of unsafety. Their research on surveillance and monitored space suggests that the visibility of security infrastructure, such as CCTV, guard posts, etc., signals to users that a place is dangerous, hence requiring constant surveillance. [4] Another layer to this paradox lies in the quality of generating anxiety and discomfort in an Orwellian public space , heavily surveilled and monitored. Such space would raise the question of whether organic social life can develop within it.

This critique draws a distinction between CPTED design that limits community presence and that which enables it. The qualitative study by Vidal-Domper et al. provides an empirical example ffor this: In their analysis, the indicators most correlated with reduced street crime included the conditions Jacobs identified as generators of public presence, such as commercial activity and proximity to public transport. [11] The theoretical position this thesis adopts is therefore an extension of Jacobs's core insight: community vitality as the foundation of urban safety. With consideration of Gehl's solution to bring people into the site and CPTED's mediated second-generation principles. Respecting Ex-FIMIT , the question of the thesis develops into how to make the site inhabited first and foremost.

fig.1.8. First generation of CPTED (up-down): access control , natural surveilance, image and milieu , territoriality.



PART 02

/ Ex-FIMIT within the city

02 01

Turin's Post-Industrial Transformation : A City chasing Identity

According to "La città dopo Ford : Il caso di Torino", Turin's identity is defined by presence and then the sudden absence of an industrial model that had shaped it for nearly a century. The founding of FIAT in 1899 marked a turning point for Turin, which beforehand had been defined by its political role until the 1860s.[1] From a royal and political capital, Turin reinvented itself as a Fordist town housing multiple industries, but, most importantly, it rebranded itself as "the city of the automobile". In the post-war era, this model intensified and grew to the point that neighborhoods were shaped around the factories; an example of which can still be seen in neighborhoods such as Mirafiori and Lingotto. By the mid-twentieth century, Turin had fully established itself as one of Italy's industrial capitals and as part of the northern "industrial triangle" of Milan, Turin and Genova. This position boosted Turin's economy and social structure. But in the late twentieth century, with the increase in deindustrialization and its peak in Turin in 1993 due to FIAT's downsizing, the city had to suffer the social and spatial consequences.[1] Roffo writes that the sudden industrial decline affected 80 percent of the city , leaving it not only facing economic decline but also an existential crisis of identity.[2]

Comune's response to this crisis was relatively structured. Political reforms in the early 1990s strengthened local governance, allowing the General Regulatory Plan (Piano Regolatore Generale) to take shape in 1995: the first principal planning framework for Turin's transformation. PRG1995 promoted the reuse of former industrial sites, which was later complemented by neighborhood regeneration programs from 1997 and a Strategic plan (1998-2000) that established a long-term development vision.[3] At the core of these strategies lay the Spina Centrale project, a large-scale, ambitious intervention that aimed to reconnect parts of the city that the old rail infrastructure and industrial zones had separated. In four major zones, the project envisioned development corridors that would restructure areas that had long functioned as a "line of separation," now reimagined as parks, cultural institutions, university expansions, etc. This ambitious project is still ongoing.[4]

1 Arnaldo Bagnasco, ed., La città dopo Ford: Il caso di Torino (Turin: Bollati Boringhieri, 1990).
International Center for Creativity and Sustainable Development, UNESCO, "Turin: The Transformation from a City of Automobile to a City of Design," March 18, 2021.

2 R. Roffo, "Industrialisation and Urbanisation in Turin: Urban Experience in Globalizing Times."

3 Stefan Berger, Sergio Musso, and Christoph Wicke, "The Unmaking of Industrial Landscapes: The North-Western Italian Industrial Triangle and the Ruhr Region in Germany," in Deindustrialisation in Europe since 1945, ed. Stefan Berger, Christoph Wicke, and Sergio Musso (London: Routledge, 2016), 25–52.

4 Planum – The Journal of Urbanism, "Street Life: Turin (Italy): The 'Spina Centrale' Project."
Stefania Saccomani and Chiara Rossignolo, "Torino: Urban Regeneration in a Post-Industrial City," Journal of Urban Regeneration and Renewal 3, no. 1, ISSN 1752-9638.

Parallel to Spina, Turin developed site-based post-industrial urban regeneration projects for large former industrial sites, with a focus on the preservation of industrial heritage. The conservation of Lingotto by Renzo Piano and Parco Dora by Latz + Partner amongst them. The district itself has absorbed nearly every major twentieth-century transformation Turin has undertaken: the Italia 61 exhibition, the Molinette hospital complex, the factory's own post-1982 conversion, and the 2006 Winter Olympics. Despite this concentration of intervention across a century, recent research on the district found that its residential and commercial fabric has largely resisted conversion into a generic, marketized "regenerated" product.[5] Heritage-led regeneration, in this case, did not carry commodification with it as an inevitable consequence — precisely the outcome this thesis holds up as successful, and the standard against which Regio Parco's own transformation is measured in what follows. Such major interventions layered the groundwork for more projects aimed at former industrial sites with the twofold purpose of heritage preservation and urban regeneration, accompanied by investment in culture, education, and design.[3] Subsequently, in 2014, UNESCO designated Turin as a City of Design, symbolically marking the completion of the first phase of post-industrial reinvention, merely nineteen years after the 1995 PRG.[1]

This transformation, however, has remained uneven across the city, and has not extended the Lingotto outcome to every district. While central areas experienced significant change in the past two decades , peripheral areas with lower class populations have been somewhat excluded from the benefits of regeneration plans. This dynamic is particularly evident in the Regio Parco district. in the northern sector of Turin , Regio Parco developed between late nineteenth and early twentieth centuries, as an industrial area linked to river-based production systems. This area was shaped by large manufacturing complexes, such as Ex-Manifattura Tabacchi, in the vicinity of Ex-FIMIT. Following deindustrialization and abandonment, this area, unlike areas such as the Spina Centrale network and the Lingotto, has undergone gradual,

5 Giulia Caramellino et al. (The Housing History Collective), "Tiny Events: Tales of Urban Domesticity from Lingotto, a Former Working-Class Neighborhood in Turin," Lo Squaderno, no. 53 (September 2019): 37–40.

6 Città di Torino, "La giunta approva il nuovo Piano Regolatore Generale dopo 30 anni. 'Così disegniamo la Torino del futuro'," TorinoClick, December 16, 2025.

7 City of Turin, "The Municipality Cedes the Former FIMIT Area for the Future Regio Parco University Campus," Press Office, June 15, 2015.

8 Eutropia Architettura, Custodi di memoria, promotori del futuro: Ex manifattura tabacchi di Torino

fig.2.1. Spina Centrale di Torino, museotorino



scattered regeneration efforts, resulting in a patchwork of reused buildings and vacant spaces. [6]

However, the presence of the Dora River corridor has laid the groundwork for the integration of Regio Parco into the Corona Verde system , the initiative to improve Turin's green infrastructure network.[7] Within this context , the flagship project of Manifattura Tabacchi, a complex that has structured both the economic and social life of the area plays a critical role in the future of the neighborhood.[8] The project, envisioning a cultural hub, archives, and University functions, extends to a new pedestrian/cycling network, public spaces, and connections to Metro Linea 2, establishing a spatial network for urban regeneration in the area. Within this framework, the City Plan for Public Buildings in 2025 formally identifies Ex-FIMIT as a priority site for transformation, with an assigned role of "urban park and services". However, as will be explored in the next section, the planning phase for the future of Ex-FIMIT and its role within the urban fabric has largely remained obscure.[9]

9 Agenzia del Demanio, "Firmato il Piano Città degli immobili pubblici di Torino," March 26, 2025.



fig.2.2. Municipal Office of Public Works, Map of Turin Showing the Two Regulatory and Expansion Plans for the Flat and Hilly Areas, Respectively, Adopted by the Municipal Council in 1913, with Amendments Subsequently Approved through May 1915, 1916. ASCT, Types and Drawings, 64.6.8. Image quality enhanced using Google Gemini.



fig.2.3. Manifattura Tabacchi and tram, 1920s (Chiara Devoti Collection).

fig.2.4. Municipal Office of Public Works, Topographic Map of the Territory of Turin Divided into Seven Sheets, 1879–1898. ASCT, Tipi e disegni, 64.8.10–11. Image quality enhanced using Google Gemini.

02 02

Ex-FIMIT: History, Buildings and Previous Schemes

fig.2.5. Rabbini Land Registry, Table XIV, 1866 (AST, Joint Sections). Image quality enhanced using Google Gemini. Source: I Canali di Torino.

>1 Historical Evolution

Ex-FIMIT complex occupies a strategic industrial site within the Regio Parco district, located directly behind the Ex-Manifattura Tabacchi and surrounded by the river Po and the Regio Parco Canal. The site's industrial



history began in 1833 when a water wheel for Carlo Vanzina's cotton spinning mill was installed on the discharge channel of the Regio Parco Canal. The cotton mill laid the foundation of the complex on the site today, with 170 years of industrial history. What remained throughout the site's industrial life was its connection to Turin's hydraulic infrastructure.

In 1847, under Gaston Blondel & Co., the site was converted into a rice-polishing factory, utilizing cutting-edge machinery of the time. However, eventually, with the plant's relocation, the site became underused. Until 1874, when it was under Ulrico Geisser & Co., it was initially used for non-ferrous metal processing, then returned to textile production in 1881. Throughout multiple changes in ownership, the factory remained an exclusively textile production site. In the 1930s, SITTA (Società Industrie Tessili Torinesi Anonima) acquired the complex to produce artificial fiber. During this time, the complex expanded within the site through the construction of new warehouses and the modernization of the facility. By the late 1950s, however, textile production had ceased, and FIMIT, a company that produced insulation materials and soundproofing panels for the automotive industry, took possession of the site.[1]

Under FIMIT's ownership, the site saw significant expansion until the 1980s. However, by 1998, production stopped at the site indefinitely, leaving it vacant and abandoned to this day; leaving it to "the degradation that, in just ten years[2017-2011], risks definitively compromising the beautiful architectural structure of Turin›s early industrialization, is very evident." [2]

As P. Bassignana writes of the abandoned site: *"Even though the water wheel has long since been removed and no longer exists, the building that housed it is still perfectly preserved. Through the slits that connect it to the main body, it is not difficult to imagine the large leather straps that, penetrating inside, gave movement to the machines used from time to time. And it is not even difficult to see with the mind's eye, in the long sleeves of the ground and first floors, the crowd of men and women intent on their respective tasks."*[2]

1 MuseoTorino, "Ex Stabilimento FIMIT"

2 I Canali di Torino, "Il canale del Regio Parco: Dai Molassi e dal ponte delle Benne al Regio Parco"





fig.2.6. Aerial photographs of the former FIMIT complex in 2011 (right) and 2017 (left), showing the deterioration of the site over a six-year period. Source: I Canali di Torino. Image quality enhanced using Google Gemini.

>2 The Previous Redevelopment Plans and Policy Framework

i / First Urban Planning Designation

Following closure in 1998, Ex-FIMIT was formally designated as "Areas Destined for Public Services" in 2001, specifically "University Education" and "Public Space for Parks, Play and Public Services". This rather early designation hinted at intentions to connect Ex-FIMIT to the University of Turin's spatial expansion, which had already, since the 1980s, identified the Regio Parco area as a potential new "Humanities Hub". However, this intention

>2001

3 Regional Directorate for Cultural and Landscape Heritage of Piedmont, Ministry of Cultural Heritage and Activities and Tourism, Historical-Artistic Report: Turin—Former F.I.M.I.T. Factory (Formerly F.lli Vanzina Cotton Mill), Via Gabriele Rossetti 34, December 9, 2014.

was never realized.[3]

2008<

4 Artom & Zanotti Architetti Associati, La Città della Musica: Proposta progettuale relativa alla riqualificazione dell'ex manifattura tabacchi ed Ex-FIMIT di Torino

ii / Variant 200 and Strategic Urban Shift

The approval of Variant 200 in 2008 marked a shift in the strategy adopted for Turin's northern zones. This framework explicitly supported the opening of a new University campus on former industrial sites, promoting urban regeneration through "knowledge-based economies and creative industries". Subsequently, it provided a conceptual foundation for reimagining Ex-FIMIT as part of district transformation, particularly in relation to university functions.[4]

2011-2015<

5 City of Turin, "The Municipality Cedes the Former FIMIT Area for the Future Regio Parco University Campus," Press Office, June 15, 2015.

iii / The University Campus Proposal

Variant 200 and a further positive view of the expansion of Unito facilities in Regio Parco resulted in negotiations between the City of Turin and Unito regarding Ex-FIMIT's redevelopment plans in 2011. By 2015, a proposal to relocate SUISM (the Interfaculty University School of Motor Sciences) had been presented. This design proposal would consolidate sports science disciplines across different campuses in Ex-FIMIT. What was crucial about this proposal was that the vision extended beyond purely academic functions and would instead make Ex-FIMIT a hybrid academic-community facility—opening sports and leisure facilities to the public. The proposal further treated Ex-FIMIT as a coordinated district system together with Ex-Manifattura Tabacchi.[5]

2014<

iv / The "City of Music"

In roughly the same time, architect Carlo Italo Zanotti and Prof. Arch. Franco Lattes developed an alternative proposal: La Città della Musica (The City of Music). In their vision, they saw a redevelopment of Ex-FIMIT and Ex-Tabacchi as a unified whole. The concept "imagined music as a unifying programmatic and architectural framework, structuring an interconnected network of cultural, academic, and economic activities." For Ex-FIMIT specifically, the proposal utilized the site's position as adjacent to both a Colletta river park and Ex-Manifattura Tabacchi, treating it as a hinge between the park's natural landscape and the urban fabric of the former factory. Like the university proposal, however, this vision was never realized.[4]

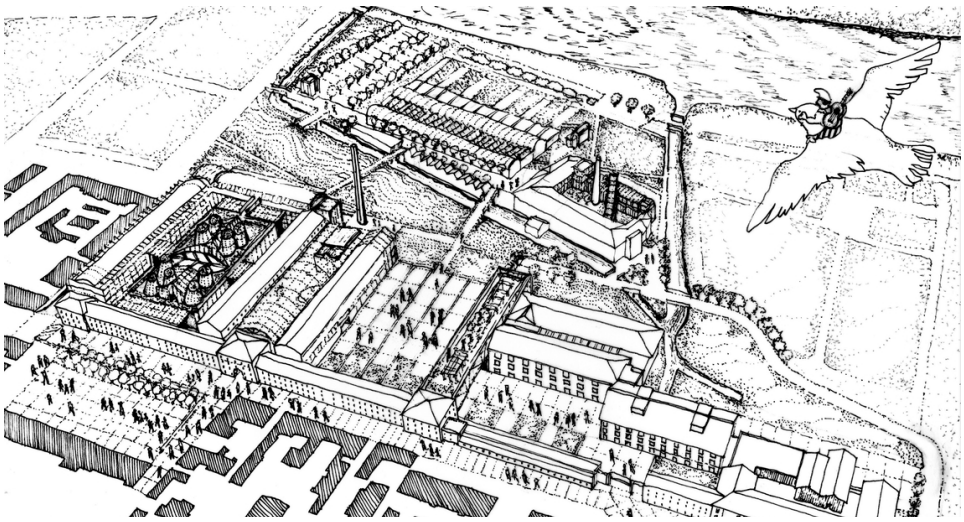


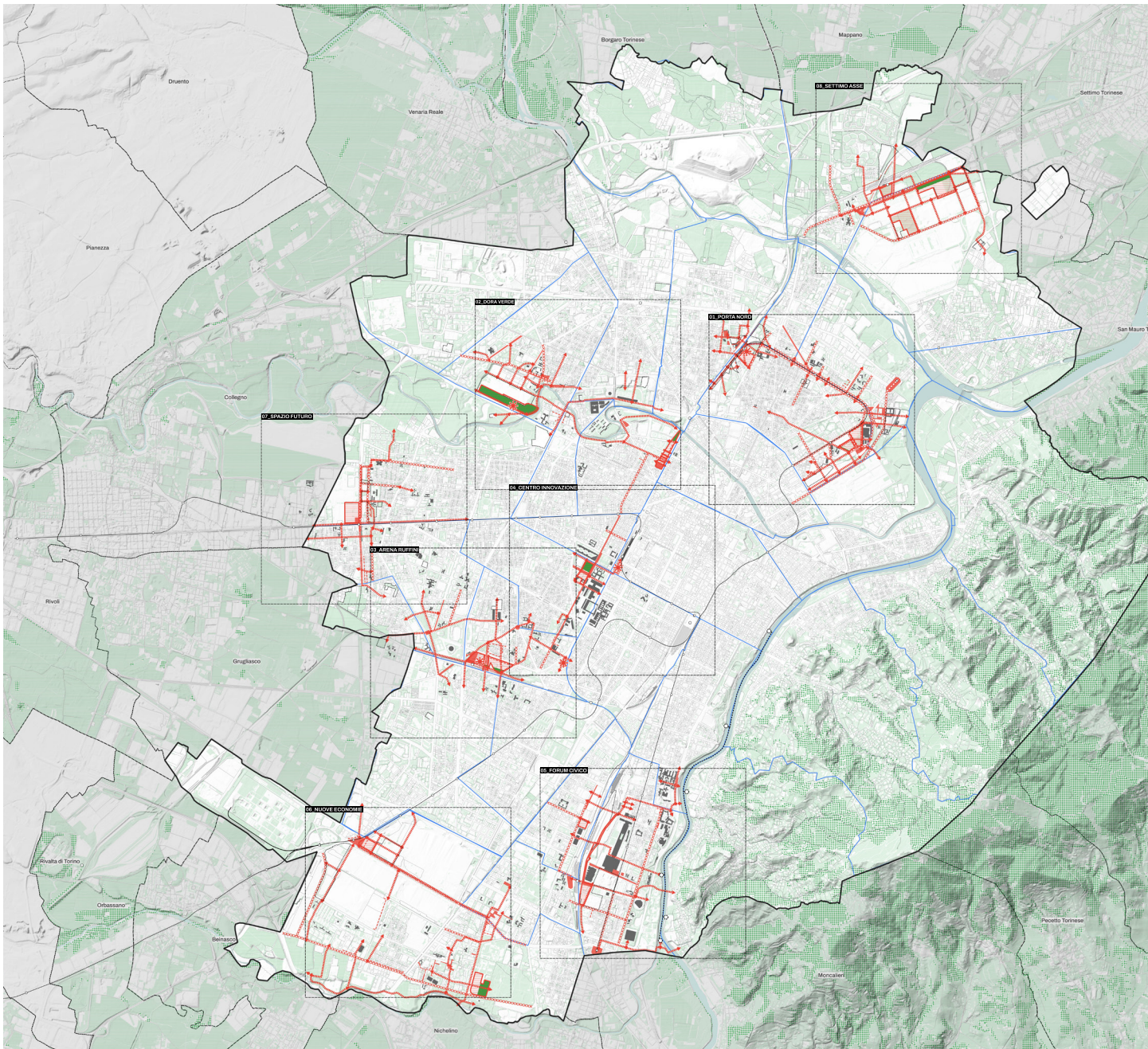
fig.2.7. Concept of "City of Music", Artom & Zanotti Architetti Associati, La Città della Musica: Proposta progettuale relativa alla riqualificazione dell'ex manifattura tabacchi ed Ex-FIMIT di Torino

v / Renewed Institutional Coordination and Porta Nord *>2022-2025*

In January 2022, a memorandum of understanding was signed by the City of Turin, the State Property Agency, and the University of Turin, marking a shift toward integrated district planning; explicitly tying Ex-FIMIT's revival to the redevelopment of the former Tobacco Manufactory and the wider Regio Parco industrial area. 26

This continued into March 2025, when the State Property Agency and City of Turin signed the Piano Città degli immobili pubblici, designating Ex-FIMIT as a priority property with a new programmatic destination: urban park, facilities, and services. The most consequential development came in December of that year, when Turin's City Council approved the preliminary draft of a new General Master Plan, marking the first major update in roughly thirty years, which would frame the Regio Parco area, including Ex-FIMIT, within one of eight "urban recomposition areas" designed to reconnect fragmented parts of the city. Within this framework, the Porta Nord zone, consisting of Regio Parco, the Rebaudengo intermodal hub, and the former Trincerone railway corridor, is identified as a strategic metropolitan gateway.24

fig.2.8. Urban Recomposition Figures, PRG 2026, Turin



02 03

Active Transformations and a New Life for Regio Parco

1 Torino PRG2026

2 Infra.To, "Linea 2"

The current PRG of Turin has a specific focus on the development of Porta Nord, a strategic urban recomposition in the northern zones of Turin, centered around the flagship project on Ex-Tabacchi and, by extension, the larger Regio Parco district.[1] This strategy is enabled by the development of Linea 2, a second metro line linking the city's peripheral districts to the central ones. The effects of these transformations on Ex-FIMIT will be further explored in Part 4 in a Close Reading of the PRG. Here, however, the concern is to examine such large-scale developments in their potential and limits, and to compare them with precedent within Regio Parco; namely, the Ex-Lanificio project.

>1 Linea 2 : a Top-Down redevelopment , stitching the divided parts

As infrastructure, the metro line is dictated and shaped by a top-down governance model. In 2017, the City of Turin launched a tender for an economic-technical plan, delivered in 2019, for a second metro line Linea 2). Linea 2 would effectively redraw the city's internal logic. The line's Y-shape creates a three-armed system, bringing mobility from the center and Linea 1 to the northern and southern peripheries, together with Linea 1 creating a spine linking the densest districts in Turin. In the Regio Parco district and adjacent neighborhoods, the first phase of Linea 2 construction would be carried out. Due to the project's top-down nature, any urban regeneration scheme or intervention, including those for Ex-Tabacchi and Ex-FIMIT, would be subordinate to it.[2]

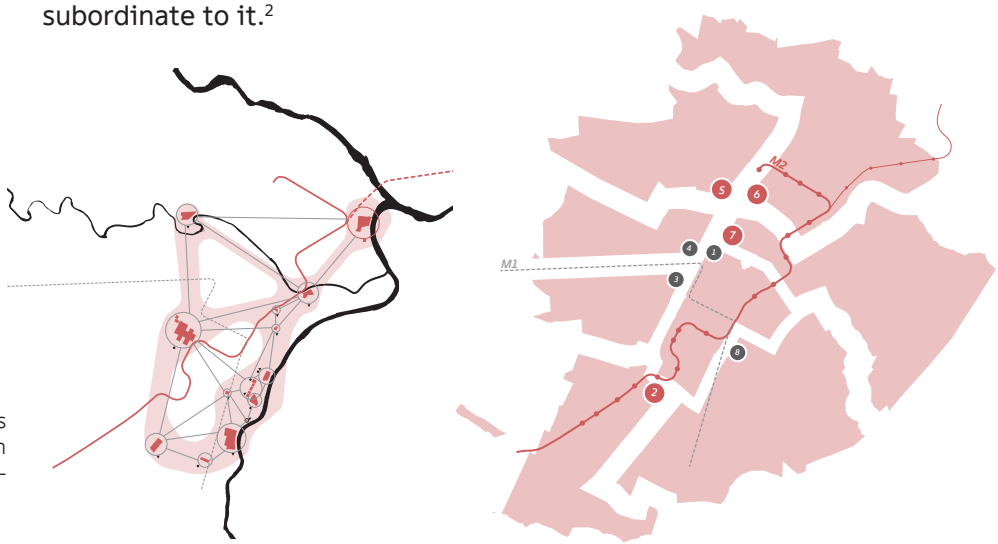


fig.2.9. Linea 2 linking Turin's zones (right) , Metro system connecting the university system (left), author

>2 The Ex-Manifattura Tabacchi : The Flagship project in the heart of Porta Nord

The Ex-Manifattura Tabacchi in Turin has been abandoned ever since 1996, with production ceasing after nearly 200 years of industrial history. Afterward, parts of the site were temporarily used for university functions. But unlike Ex-FIMIT, the site's initial redevelopment intentions were announced as early as 2002. In that primary phase, the site was considered for conservation as a public service district. The latest design proposal for the site is not far from that initial intent. In 2024, following an international design competition led by the Agenzia del Demanio, the winning proposal established the site as a mixed-use environment that combines cultural, educational, and public functions.[3]

This winning masterplan for Ex-Tabacchi has been developed by a multidisciplinary team consisting of Eutropia Architettura, Pininfarina Architecture, Weber Architects, and Paisà Landscape. In their design, they treat the site as a hybrid system: Existing industrial structures in the north of the site are maintained and restored, while in the south of the site, new architectural elements are introduced, including a public complex that preserves *"the strong reference to the industrial character of the place"*.[3] Following the trace of the former railway siding, the spatial framework organizes a sequence of public spaces, from the central square in the south to a series of thematic landscapes, primarily related to educational functions.

Programmatically, the new Archives and Cultural Center, as the main new element of the design and forming the central square, houses a gathering place and event venue, serving as a stage for social and cultural development. In contrast, the existing buildings would house the University Center, including teaching facilities and advanced training spaces. Other public functions are distributed across the site to ensure continuous activation.[4]

Ex-Tabacchi's design is affecting not only the neighboring sites but also the district's broader internal logic. In PRG2026, the connections created by this design have become part of the urban strategy. Furthermore, with the neighborhood center already at its heel, it can be speculated that the Tabacchi project would not only strengthen the neighborhood's centrality but also effectively shift it toward itself, especially with the introduction of the public square.

3 Redazione, "Eutropia Architettura e Pininfarina Architecture per la riqualificazione dell'ex-Manifattura Tabacchi di Torino," Matrix4Design, October 28, 2024

4 Eutropia Architettura, Custodi di memoria, promotori del futuro: Ex manifattura tabacchi di Torino

5 Good Design Awards, "Requalification Project for the Ex-Manifattura Tabacchi," 2024



fig.2.10. Ex-Manifattura Tabacchi Master Plan, Eutropia Architettura, from Custodi di memoria, promotori del futuro.

6 Former Artillery and Chemical Defense Warehouse, M.Ar.Di.Chi. – Former Fratelli Piacenza Wool Mill. MuseoTorino.

7 Il Lanificio di Torino, "La nostra storia"

Within this framework, Ex-FIMIT, Tabacchi's immediate neighbor, remains only partially defined. However, it is part of a larger *"landscape connection between the urban system and the surrounding natural areas, such as the Po River, nearby parks, and nature reserves"*.[5] What is missing from this interpretation is not accounting for Ex-FIMIT's own heritage preservation, which cuts through most of the site to create a natural plaza on Po's bank.

>*3* Lanificio , the Cost of Waiting and Future Development Projects

The northern districts of Turin, above the Dora River, are strongly marked by post-industrial voids. There is a sharp divide between their previous state and the contemporary: where, before the industrial decline, they housed vivid urban life, they now sit in prolonged uncertainty. Amongst these sites, not far from Ex-FIMIT and Ex-Tabacchi , Ex Poste Monteverdi is still awaiting a defined transformation strategy, while Scala Vanchiglia remains only partially realized. Further west, Ex M.Ar.Di.Chi. stands largely untouched, enclosed by a concrete perimeter that physically and symbolically separates it from the city.

Within PRG2026's urban recomposition strategy, Ex-Tabacchi, as mentioned before, is intended as a flagship , redefining the district. Ex-FIMIT, closely linked to it, is not an immediate priority but is nonetheless included in the long-term transformation strategy. Meanwhile, Ex Poste, though without a clear functional designation, is integrated into the "new public space" strategy, aiming to connect to the future Scala Vanchiglia park system. Ex M.Ar.Di.Chi. and the Magazzino del Genio Militare are framed, respectively, as "AT Bologna" and "AT Cimarosa," and are listed in PRG as Comune's highest-priority sites for future reuse planning.[1] Across all these strategies , however, timelines remain uncertain, leaving the sites and the district at large in a state of limbo. In contrast to this landscape, Lanificio di Torino ("La Fabbrica") demonstrates a different outcome.

Lanificio di Torino is located on Via Bologna, near Ex M.Ar.Di.Chi. But the two sites could not have more different stories after their initial closures. Both sites started as textile production sites between 1910 and 1915. Ex M.Ar.Di.Chi. -originally part of Lanificio's expansion in 1911- was sold to the military after the WWII crisis and eventually fell into long disuse. On the other hand, Lanificio expanded further in 1934 and again in 1951. In the 1970s, after the relocation of production, the activity ceased at Lanificio, though it lasted only three years, and after multiple ownership changes it was reactivated as a multi-use productive environment.[6]

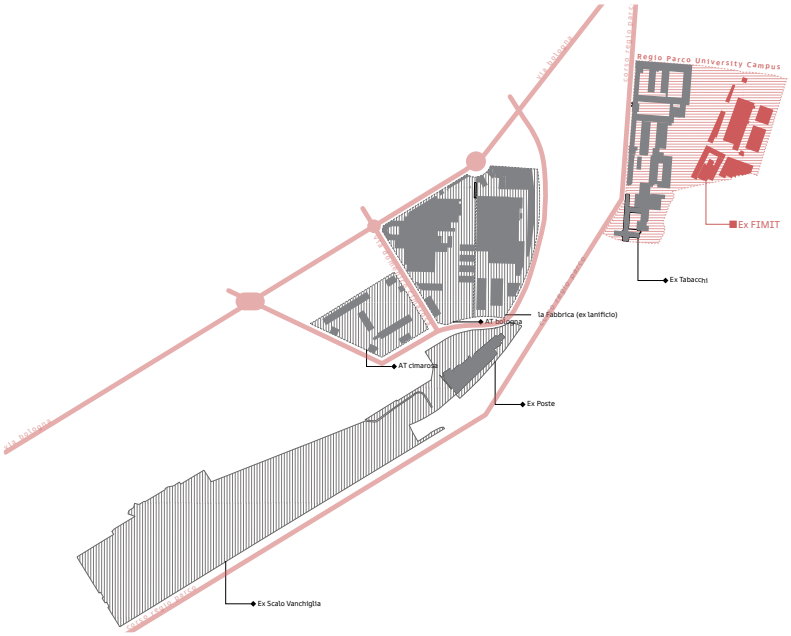


fig.2.11. Connected transformations, Regio Parco, Torino , author

Today “La Fabbrica” operates under a consolidated and ongoing adaptive-reuse strategy: While the original architectural fabric is preserved, the site is divided into 130 flexible units , each leased to a different function in charge of its further retention and adaptive reuse. As a result, a layered mix of historic offices, small brick warehouses, and later prefabricated additions creates a complex spatial identity. More than that, the site, essentially a bottom-up development, has almost never stopped operating, without reason to sacrifice conservation.[7]

In this context, “La Fabbrica” is in sharp contrast to its neighboring Ex M.Ar. Di.Chi. and the further northern industrial districts. While nearby sites remain abandoned or sealed, “La Fabbrica” has been continuously adapting. In a sense, it has become a counter-model to deferred development seen in other parts of the district.

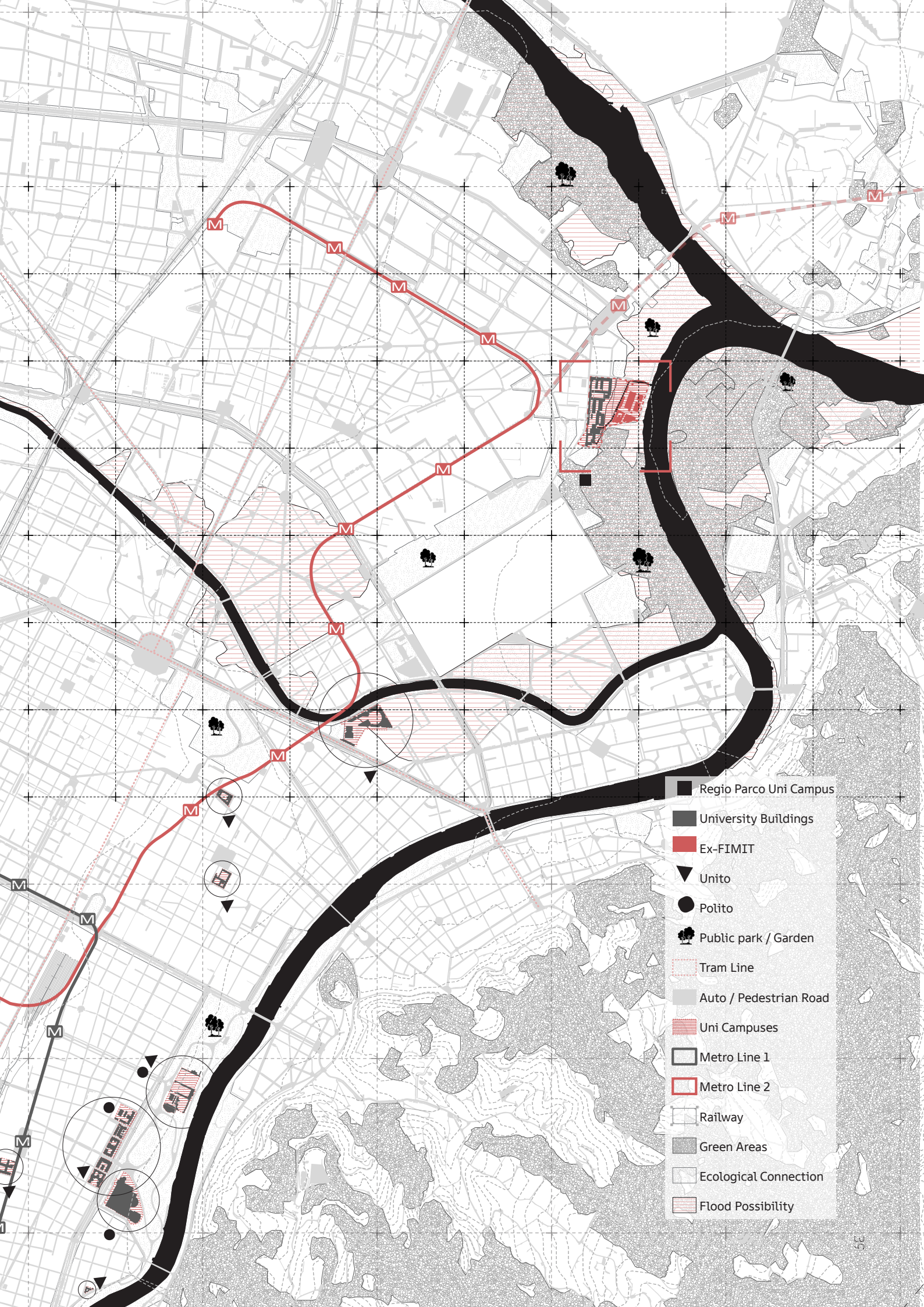
fig.2.12. “La Fabbrica”, photos from google maps







Drawing00. Ex-FIMIT within the city


Regio Parco Uni Campus
University Buildings
Ex-FIMIT
Unito
Polito
Public park / Garden
Tram Line
Auto / Pedestrian Road
Uni Campuses
Metro Line 1
Metro Line 2
Railway
Green Areas
Ecological Connection
Flood Possibility

PART 03

/ Prece-dents

03 01

Across Twenty-Five Projects

To gain a further understanding of intervention practices on former industrial sites, 25 cases are selected and studied in this section. The selection narrows the projects to those in a position similar to Ex-FIMIT's, in terms of the site's geographical location within the city and state before intervention. The aim is to first examine the projects' purposes, effects at the urban scale, and conservation techniques. Then, select five specific cases amongst them to analyze their performance against the objectives related to this thesis.

>1 The Catalogue

The initial catalog comprises 25 projects distributed across Europe, Asia, the Americas, and Africa, spanning from 1999 to 2026. Diversity in the selection of comparative case studies became important to the study, as it helped clarify the role of their respective urban environments in their preferred interventions. Their common point, however, is that they are interventions in abandoned or underused industrial sites, positioned in peripheral areas and transformed through design into a new form of public life. In other words, their starting point was a similar situation to that in which Ex-FIMIT is found.

Across these projects, three recurring patterns can be detected: Firstly , the projects relate accessibility to sustained public presence. A feature of utmost importance to urban safety, as previously recognized in Part 1. Secondly, most projects aim to maintain a legible connection between the building's original function and the new program; thus, respecting the industrial history of the building's previous life, as relayed in Part 1, could be an important part of heritage preservation. And finally, phased activation: maintaining a human presence throughout the project's phases and avoiding total isolation during construction.

What follows is a comparative table of these precedents ; while the more detailed catalog is in Appendix A.

Table 3.1. Comparative case studies analysis

n.	Project Name / Location	Governance Model	Prior Typology/ Control	New Function	Program Diversity	Target	Urban Access	Conservation Attitude
01	FRAC Dunkerque / Europe (France)	Top-Down (Public Institutional)	Industrial / Productive — Boat warehouse; open site presumably	Museum / Gallery	3–4 (gallery, public circulation, event space, landscape/public realm)	Diverse audiences beyond art visitors; local pedestrian activation	pedestrian routes upgraded; bridge as urban connector	Preservation + Dialogue — halle kept entirely; new volume mirrors it without competing
02	KANAL – Center Pompidou / Europe (Belgium)	Hybrid (Public-Private + City Mandate)	Industrial / Productive — Car factory; controlled production site	Cultural Hub / Art Center	6+ (museum, archive, public forum, exhibition, education, commercial)	Locals encouraged as 'places to be'; not just art audiences; social interaction prioritized	cross-axis circulation/ public interior/ connects canal, boulevard, streets	Minimal Intervention / Identity Retention — industrial structure retained and restored 3 new volumes were added
03	104 Paris (Centquatre)/ Europe (France)	Top-Down (City of Paris)	Industrial / Productive — Funeral home; semi-restricted civic infrastructure	Cultural Hub / Creative Center	5+ (art production, performance, incubator, retail/commercial, public event space)	Artists, researchers, designers, entrepreneurs, local residents; incubator model	open alley as spine/ two street connections	Preservation + Flexibility — authenticity preserved; spatial flexibility prioritized
04	La Friche la Belle de Mai / Europe (France)	Hybrid (Public + Arts Community)	Industrial / Productive — Tobacco factory; controlled production site	Cultural Hub / Creative District	6+ (contemporary art, studios, workshops, offices, events, rooftop public space)	Artists, local residents, cultural tourists; community engagement across social classes	connected territory of multiple buildings/ level access across floors/ public roof	Adaptive Reuse + Extension — industrial fabric retained; Panorama added as rooftop
05	Les Machines de l'Île de Nantes / Europe (France)	Top-Down (City-Led Urban Strategy)	Industrial / Productive — Shipyard; controlled production site	Theme Park / Engineering Workshop	4+ (theme park, engineering workshop, public space, cultural production)	Artists, engineers, public; working-class heritage honored; production visible	longitudinal warehouses as open passageways/ promenades connect island to city	Restoration + Minimal Intervention — raw framework exposed; selective transformation
06	Mill City Museum / Americas (US)	Top-Down (Public Institutional — Historical Society)	Industrial / Productive — Flour mill; partially ruined, derelict	Museum	4+ (history museum, interactive exhibits, event space, riverfront public realm)	Broad public; immigrant and labor histories foregrounded; educational audiences	two-level entries/ river-facing glass façade/ courtyard exposes ruins	Ruin-as-Feature + Contemporary Insertion — ruins preserved and framed
07	Gare Maritime / Europe (Belgium)	Hybrid (Private Developer + Heritage Mandate)	Infrastructural — Railway goods station; operationally closed, no public access	Mixed-Use (Work + Public Space + Retail)	5+ (offices, retail, hospitality, public event hall, gardens/ green space)	Workers, shoppers, event visitors, city residents; public gardens encourage social mixing	interior city district/ multiple circulation routes/ connects to surrounding streets	Light Restoration + Insertion — roof and structure preserved; CLT pavilions inserted

n.	Project Name / Location	Governance Model	Prior Typology/ Control	New Function	Program Diversity	Target	Urban Access	Conservation Attitude
08	**Le Murate Firenze / Europe (Italy)**	Top-Down (City Council)	Carceral — Prison; highly restricted, walled, zero public access	Social Complex / Mixed Residential-Civic	5+ (housing, commercial/ craft, social/ educational, cultural events, public squares)	Residents, local community, visitors; municipal housing; diverse social functions	two new urban squares/ new transit passages/ integrated into city circulation	Sensitive Preservation + Humanization — prison cells converted; historic fabric kept
09	**OGR Turin / Europe (Italy)**	Hybrid (Public Foundation + Private Consortium)	Industrial / Productive — Railway depot; operational facility, restricted access	Art + Innovation Center	5+ (exhibition, performance, coworking, tech labs, public square, food/beverage)	Artists, startups, academics, public; interdisciplinary; bridges art and technology	H-plan/ Corte dell'Arte as urban foyer/ connections to Politecnico district	Box-within-Box — original fabric untouched; new volumes inserted independently
10	**Casa del Lector (Matadero) / Europe (Spain)**	Top-Down (Municipal) + Community Programming	Industrial / Productive — Slaughterhouse; restricted production site	Cultural Hub / Creative Infrastructure	5+ (research, training, performance, dialogue, public outdoor space)	Researchers, artists, community, public; participatory programming; open-ended	courtyards as flexible public space/ phased opening/ multiple access points	Surgical Insertion — prefabricated structure inside preserved masonry shell
11	**Parco Dora / Europe (Italy)**	Top-Down (City of Turin)	Industrial / Productive — Steel plants; contaminated, fully closed brownfield	Urban Park / Landscape	4+ (park/recreation, event space, ecological restoration, cultural/heritage landscape)	All city residents; neighborhoods previously divided now connected; events up to 50,000	elevated walkways, ramps, bridges stitch fragmented zones	Industrial Landscape Preservation — steel columns, towers as spatial anchors
12	**LX Factory/ Europe (Portugal)**	Public–Private Hybrid (Privately led with municipal alignment; initially temporary, later institutionalized)	Industrial / Productive — Textile factory complex, later printing and manufacturing industries; privately owned, abandoned	Creative Hub / Mixed-Use Cultural District	5+ (workspaces, studios, retail, restaurants, bars, events, markets, exhibitions, offices)	Creative industries, startups, artists, tourists, local community; broad public engagement	previously closed industrial site opened as porous internal street network; strong pedestrian accessibility but internally oriented	Minimal Intervention + preservation of industrial fabric with reversible, low-cost interior modifications; user-driven transformation
13	**Tate Modern / Europe (UK)**	Top-Down (Public Institutional — Tate Gallery)	Industrial / Productive — Power station; fenced, no public access	Museum	4+ (museum, public plaza, education, café/retail))	International tourists, local residents, art audiences,	multiple ground-level entries/ river walk integration/ connects Southbank	Preservation + Selective Conversion
14	**Zollverein Kohlenwäsche / Europe (Germany)**	Top-Down (Government + UNESCO)	Industrial / Productive — Coal mine; restricted industrial operation	Cultural Campus / Museum + Park	4+ (museum, visitor center, park/landscape, event spaces)	Cultural tourists, regional residents, international visitors; collective industrial identity	central axis along rail tracks/ attractors as nodes/ cycling,-pedestrian trails	Monument Preservation + Landscape Integration — monumental character maintained

n.	Project Name / Location	Governance Model	Prior Typology/ Control	New Function	Program Diversity	Target	Urban Access	Conservation Attitude
15	**Coal Drops Yard / Europe (UK)**	Hybrid (Private Developer + Heritage Mandate)	Infrastructural — Coal depot; sealed, inaccessible to public	Retail + Public District	3–4 (retail, hospitality/F&B, public gathering space, events)	Shoppers, workers, local residents, tourists; sustained day-to-night social activity	permeability restored by multiple entrances/ connects King's Cross district	Bold Contemporary Intervention + Heritage Frame — roofs extended dramatically
16	**Engenho Central Piracicaba / Americas (Brazil)**	Top-Down (State Government)	Industrial / Productive — Sugar mill (hydraulic); partially derelict, restricted	Theatre + Cultural Center	4+ (theatre, museum, hotel/ convention, public park/ outdoor space)	Local community, cultural visitors, tourists; riverside civic and cultural axis	riverside integration/ urban park as connective tissue/ multiple access points	Selective Preservation + Contrast — significant buildings restored; non-essential demolished
17	**SESC 24 de Maio / Américas (Brazil)**	Top-Down (SESC Institution)	Commercial — Former store chain; closed to non-customers	Recreational + Social Services Complex	5+ (sports/ recreation, cultural events, food/beverage, education, public plaza/ pool)	Downtown São Paulo residents, workers, visitors; socially inclusive programming	street-level connectivity/ connects to civic landmarks/ vertical promenade	Transformation with New Spatial Order — existing building radically reorganized
18	**Tabakalera / Europe (Spain)**	Top-Down (Municipality)	Industrial / Productive — Tobacco factory; closed production facility	Art Museum / Cultural Hub	5+ (galleries, cinema, education, public square, cultural/creative spaces)	Local residents, cross-neighbourhood users, artists, students; social connectivity	'3 en Raya' urban square/ internal street/ connects center, Egia, Cristina-Enea park	Radical Interior + Preserved Façade — main façade kept; interior fully transformed
19	**Duisburg Nord Landscape Park / Europe (Germany)**	Top-Down (City + IBA Emscher Initiative)	Industrial / Productive — Blast furnace plant; contaminated, no public access	Landscape Park + Garden	5+ (park, climbing/adventure, diving center, event space, ecological restoration, cultural tours)	Regional residents, cultural tourists, climbers, divers, event visitors; up to 50,000	elevated promenades on railway berms/ Piazza Metallica/ reconnects districts	Industrial Landscape as Heritage — structures reinterpreted not restored
20	**C-Mine / Europe (Belgium)**	Top-Down (City of Genk)	Industrial / Productive — Coal mine machinery complex; restricted industrial site	Cultural Center / Creative Hub	4+ (theatre, exhibition space, restaurant/ visitor center, public square/ terraces)	Local residents, Genk community, cultural visitors; civic landmark and gathering space	one-level urban square/ cultural machines pierce base/ connects city districts	Light Restoration + Strategic Extension — machinery preserved; white concrete base added
21	**Oil Tank Culture Park (Mapo) / Asia (South Korea)**	Top-Down (Municipal Government)	Military / Industrial — Oil storage depot; high-security, no public access	Cultural Center / Public Park	5+ (exhibition, performance, library, community facilities, outdoor cultural yards)	General public, community, cultural visitors; formerly restricted military site now open	gardens, ramps, perforated retaining walls create layered entry sequences	Material Identity Preservation — weathered character embraced; independent inner skins

n.	Project Name / Location	Governance Model	Prior Typology/ Control	New Function	Program Diversity	Target	Urban Access	Conservation Attitude
22	**Zeitz MOCAA (Silo District) / Africa (South Africa)**	Hybrid (Private Developer + Cultural Institution)	Industrial / Productive — Grain silo; operational storage, restricted access	Art Museum	4+ (contemporary art museum, research/ education, restaurant, sculpture garden)	International art audiences, tourists, South African public; global platform for African art	connects to V&A Waterfront/ pedestrian harbour precinct/ fragmented surroundings	Carving as Revelation — silo tubes carved to create atrium; geometry celebrated
23	**Tai Kwun Center for Heritage and Art / Asia (Hong Kong)**	Top-Down (Government) + Private Management	Carceral / Institutional — Police station, prison, magistracy; walled, restricted	Cultural Center (Heritage + Art)	5+ (galleries, performance, restaurant/ retail, public courtyards, education)	Local residents, tourists, art audiences; rare open public space in dense HK district	new wall openings/ two courtyards activated/ pedestrian links to surrounding streets	Preservation + Hovering Insertion — heritage buildings restored; new volumes above
24	**BankART Studio NYK / Asia (Japan)**	Hybrid (City Initiative + Arts Community)	Industrial / Productive — Logistics warehouse; port facility, restricted commercial	Cultural + Creative Center	6+ (exhibition, studio, performance, café/ pub, library, classrooms, events)	Artists, citizens, institutions, creatives; collaborative; triggered wider district projects	exterior staircase/ connects to waterfront/ part of Creative City district network	Minimal Intervention / Platform Approach — warehouse open; flexible infrastructure added
25	**Power Station of Art / Asia (China)**	Top-Down (State / Municipal)	Industrial / Productive — Power station; operational infrastructure, restricted	Art Museum / Cultural Center	4+ (contemporary art museum, education/ research, public events/ biennale, café/ retail)	Chinese and international art public; city residents; bridges art and everyday life	multiple routes instead of single path/ riverfront Huangpu integration	Minimal Intervention + Symbolic Retention — chimney as icon; spatial order maintained

>2 Selection and Evaluation

Of the first 25 cases , five are selected for further analytical review. While the selection aimed to achieve the greatest diversity (in terms of spatial solutions, geographical location, and governance model , the main objective in this selection was the closest relevance to Ex-FIMIT. The analysis would explore the performance of each intervention at the urban scale. To this end, a multicriteria comparative analysis is used, with a set of criteria that addresses the thesis's specific objective: conservation and safety through urban vitality.

The five cases are:

1. KANAL, Center Pompidou (Brussels): This project is on a former Citroën factory-turned cultural hub that anchors the "Plan Canal" regeneration. Although still an ongoing project, it has been partially open to the public thanks to phased intervention and is already functioning as an urban catalyst.[1]

2. OGR (Turin): Formerly a railway station, OGR was converted into an "arts and innovation center" through a "box-in-box" strategy that preserves the industrial shell. The Comune had initially assigned it vaguely to "services," despite multiple attempts at intervention. Finally, the reuse project transformed it into part of Turin's Spina and the city's technological identity. [2]

3. La Friche la Belle de Mai (Marseille): The project started as a tobacco factory reimagined as a creative district through community-led, phased activation within a larger urban plan. The project's impact on the neighborhood was so significant that other abandoned buildings in the surrounding area were reopened or reused .[3]

4. Mapo Oil Tank Culture Park (Seoul): Oil Tank is a former high-security military oil storage facility established after the 1973 Middle East War. As an intervention , the site was transformed into a public landscape with a logic of preservation over replacement.[4]

5. LX Factory (Lisbon): A former industrial complex opened as a creative hub.[5] With a diverse architecture , it is perhaps a close comparison to Ex-FIMIT.

1 EM2N, "Kanal-Center Pompidou"

2 Zumaglini e Gallina, "OGR – Officine Grandi Riparazioni"

3 Divisare, "Friche la Belle de Mai," ARM Architecture and Olivier Amsellem

4 Divisare, "Mapo Oil Tank Cultural Park," Daniel Valle Architects

5 Eva Hellreich, "LX Factory: An Example of What Adaptive Reuse Can Offer Cities," Infrastructure Institute Blog

03 02

Comparative Case study Analysis

>1 Simplified Multicriteria Analysis

The five case studies are further analyzed and evaluated using "Analisi Multicriterio Semplificata" (Simplified Multicriteria Analysis), a method used in feasibility studies for urban transformations. In this methodology, alternatives are compared against a set of defined criteria, each assigned a weight reflecting its importance to the project's goal. The result is a ranking system that assigns points to each criterion for alternatives, as well as a general ranking. This approach was selected because it can make the evaluation transparent and simplified and allows for a measurable comparison. To avoid reverse-engineered results, criteria, assigned weights, and scoring points are fixed in advance.

For the objective of this thesis, heritage conservation and urban safety, the criteria are fixed accordingly, aligned with the views obtained in Part 1 of the thesis, as well as related precedents' priorities, studied in the previous section. The main selected criteria for this thesis are: A. Accessibility, Temporal Activation, and Program Diversity, which would theoretically increase people's presence and subsequently improve urban safety; B. Heritage Legibility and Environmental Value, which together could bring consideration for heritage conservation and understanding of heritage. Meanwhile, as a sixth independent criterion of highest importance, Governance and Efficiency would evaluate the compatibility of each project with the urban planning at hand.

The criteria are weighted from 2.0 (highest importance) to 1.3 (baseline), as detailed in the following table. Each criterion is then subdivided into sub-criteria with similar importance. Each sub-criterion is graded on a 1–3 scale (weakest to strongest). The average point of each criterion's sub-criteria is multiplied by the weight to obtain the total point. The sum of the criteria would demonstrate the final point for each alternative, in this case each project.

Weighted Score = (Average of sub-criterion scores) × Criterion weight.

1 Analisi multicriterio 1, course handout, Sapienza Università di Roma

Multi-plier	Criteria	Sub Criteria	Definition	Condition	Point
2.0	1. Accessibility	**1a · Urban connectivity (quantitative)**	How many distinct urban systems does the project physically connect to or generate new connections with(this includes streets, cycling infrastructure, public transport nodes)	Connects to 1–2 system only (e.g. adjacent street, no new routes created)	1
				Connects to 2–3 systems (e.g. street + cycling + existing transit stop) (these can include added path)	2
				Connects to 4+ systems OR creates a new urban axis that did not previously exist	3
		1b · Public surface ratio (quantitative)	What percentage of the total site area is physically accessible to the public without/with minimal restriction?	Less than 30% of site publicly accessible	1
				30–60% publicly accessible	2
				More than 60% publicly accessible	3
1.6	2. Temporal Activation	**2a · Daily operating hours (quantitative)**	How many hours per day is the site active and generating human presence across its program?	Fewer than 8 hours/day (single daytime use, office hours logic)	1
				8–16 hours/day (daytime + evening program)	2
				More than 16 hours/day (effectively continuous, day-to-night-to-morning)	3
		2b · Active surface ratio (quantitative)	What proportion of the total publicly accessible site area is active during the least busy operating hours ?	Less than 30% of public area actively programmed	1
				30–60% actively programmed / more than 60% is active without clear program	2
				More than 60% actively programmed at any given time	3
1.8	3. Heritage Legibility	**3a · Physical preservation (quantitative)**	What percentage of the original industrial fabric (structure, envelope, spatial volumes) is physically retained in the intervention?	Less than 30% of original fabric retained	1
				30–70% retained	2
				More than 70% retained and structurally integrated into the new project	3
		3b · Memory and historical respect (qualitative)	How explicitly does the design acknowledge and spatially translate the history and memory of the place , whether in its material choices, spatial organization or narrative?	History of the site is absent or incidental in the design (basically could be any building)	1
				History is referenced but superficially (decorative rather than spatial)	2
				History is structurally embedded in the design logic (the spatial experience is inseparable from the memory of the place)	3
		3c · Functional continuity (qualitative)	How much does the new function represent a continuation or evolution of the previous life of the building (rather than a complete programmatic rupture?)	New function has no relationship to prior use	1
				Partial continuity (some uses echo the prior function but the dominant program is unrelated)	2
				Strong continuity (the new program is a legible evolution of what the building was before, its productive or social logic carried forward)	3

Multi-plier	Criteria	Sub Criteria	Definition	Condition	Point
1.3	4. Program Diversity	4a · Use category count (quantitative)	How many distinct use categories does the project host?	1–2 distinct use categories (monoculture)	1
				3–4 distinct use categories	2
				5 or more distinct use categories	3
		4b · User profile range (qualitative)	How wide is the range of user profiles the program is genuinely designed to serve ; across age, income, purpose, and time of day?	Single audience : the program targets one profile (e.g. art visitors, office workers, students)	1
				Two or three profiles : some diversity but a dominant audience remains	2
				Genuinely broad : the program is structured to serve different people at different times, including local residents not just destination visitors	3
		4c · Mixed-use integration (qualitative)	Does the program generate sustained everyday use by local residents, or is it primarily a destination for external visitors?	Primarily destination-oriented : locals have little reason to visit regularly, activity is event-driven and irregular	1
				Primarily locally-oriented : program structured around daily rhythms of surrounding community but limited external appeal	2
				Genuinely mixed : locally-oriented daily uses coexist with destination program, generating both sustained everyday presence and broader audience appeal	3
1.3	5. Environmental Value	5a · Material reuse (quantitative)	What percentage of the existing structure is retained rather than demolished and rebuilt?	Less than 30% of existing structure retained	1
				30–70% retained	2
				More than 70% retained	3
		5b · Energy systems (qualitative)	Does the project introduce renewable energy systems or significantly improve the thermal performance of the existing envelope?	No renewable energy systems, basic temporal improvement	1
				Partial introduction of renewable systems or thermal improvement	2
				Comprehensive energy strategy : renewable generation, thermal improvement, active management integrated	3
		5c · Soil and landscape (quantitative)	Does the project increase permeable surfaces, introduce vegetation, or reduce the heat island effect compared to the prior condition of the site?	No improvement in permeability or vegetation	1
				Partial improvement : some new permeable surfaces or vegetation	2
				Significant increase in permeable surfaces and green infrastructure	3
		5d · Construction carbon footprint (quantitative)	Ratio of new construction area to total project area : how much of the project is new build?	New construction exceeds 70% of total project area	1
				New construction represents 30–70% of total project area	2
				New construction represents less than 30% of total project area	3

Multi-plier	Criteria	Sub Criteria	Definition	Condition	Point
2.0	0.Modifier: Efficiency and Governance Compliancy	**0a . Governance Compliancy**	Does the project align with and respond to its own city›s planning framework, urban regeneration strategy, and institutional mandate?	no	1
				yes	3
		0b . Efficiency Value	how economically and constructively efficient was the project? Did it minimize costs, allow phased implementation, optimize construction complexity, or affected new programs in the area?	no added value or compliancy / compliant but no phased implementation	1
				phased development, efficiency in cost, etc.	2
				high efficiency and / or positive larger affect	3
Total Points: 30					

Table 3.2. Simplified Multicriteria Analysis

>2 Analysis and Ranking of Selected Case Studies

2 EM2N, "Kanal-Center Pompidou"

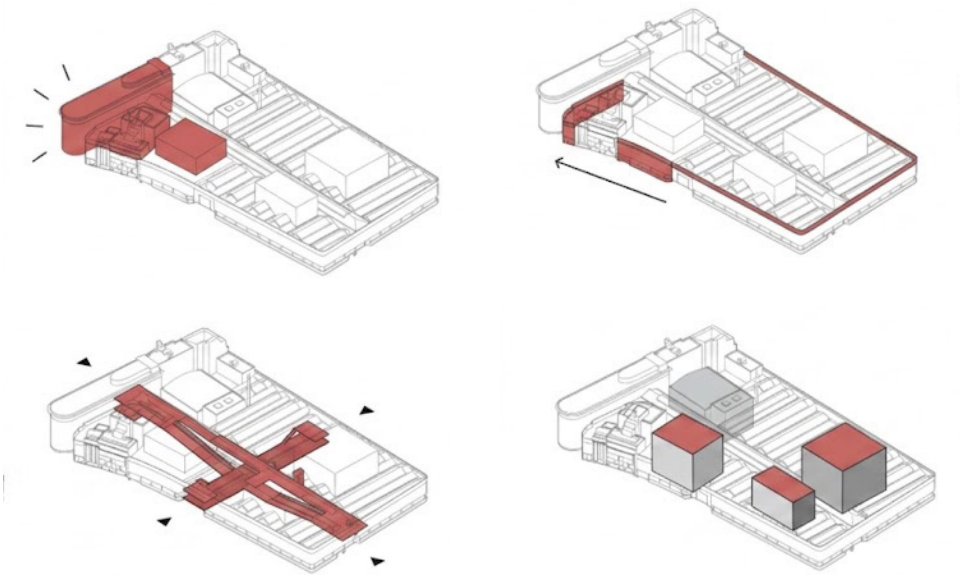
fig.3.1. KANAL development, (color modified by Gemini)

/ KANAL, Center Pompidou (Brussels)

By the canal in Brussels and formerly a Citroën Yser car factory and exhibition space, KANAL was envisioned as an adaptive reuse plan to create an art and cultural center within the larger Canal Regeneration plan in Brussels. The objectives of the project by EM2N can be described in three points:

1. Create a public forum and a multidisciplinary cultural center.
2. Encourage locals to use the spaces, even if only as *"places to be in,"* not just as art audiences.
3. Positioning KANAL as a cultural anchor within Plan Canal redevelopments in Brussels.

Meanwhile, heritage conservation of the building is achieved by understanding the project as a place of production, thus assigning functions that are continuous with those of the original building. Furthermore, the facade has a minimal additional band to link all the related facades of the complex visually, even though at times at odds, without disturbing the general iden-



Weighted Evaluation KANAL				
C)	Sub Criteria (SC)	point/SC	Av.Point/SC	Weighted Point/C
1. Accessibility	1a · Urban connectivity (quantitative)	2	2.0	4.0
	1b · Public surface ratio (quantitative)	2		
2. Temporal Activation	2a · Daily operating hours (quantitative)	2	2.0	3.2
	2b · Active surface ratio (quantitative)	2		
3. Heritage Legibility	3a · Physical preservation (quantitative)	3	2.7	4.8
	3b · Memory and historical respect (qualitative)	2		
	3c · Functional continuity (qualitative)	3		
4. Program Diversity	4a · Use category count (quantitative)	2	2.3	3.0
	4b · User profile range (qualitative)	2		
	4c · Mixed-use integration (qualitative)	3		
5. Environmental Value	5a · Material reuse (quantitative)	1	2.0	2.6
	5b · Energy systems (qualitative)	1		
	5c · Soil and landscape (quantitative)	3		
	5d · Construction carbon footprint (quantitative)	3		
0.Modifier	0a . Governance Compliancy	3	2.5	5.0
	0b . Efficiency Value	2		
Total Point (out of 30)		22.6		

Table 3.3. KANAL, Weighted Evaluation

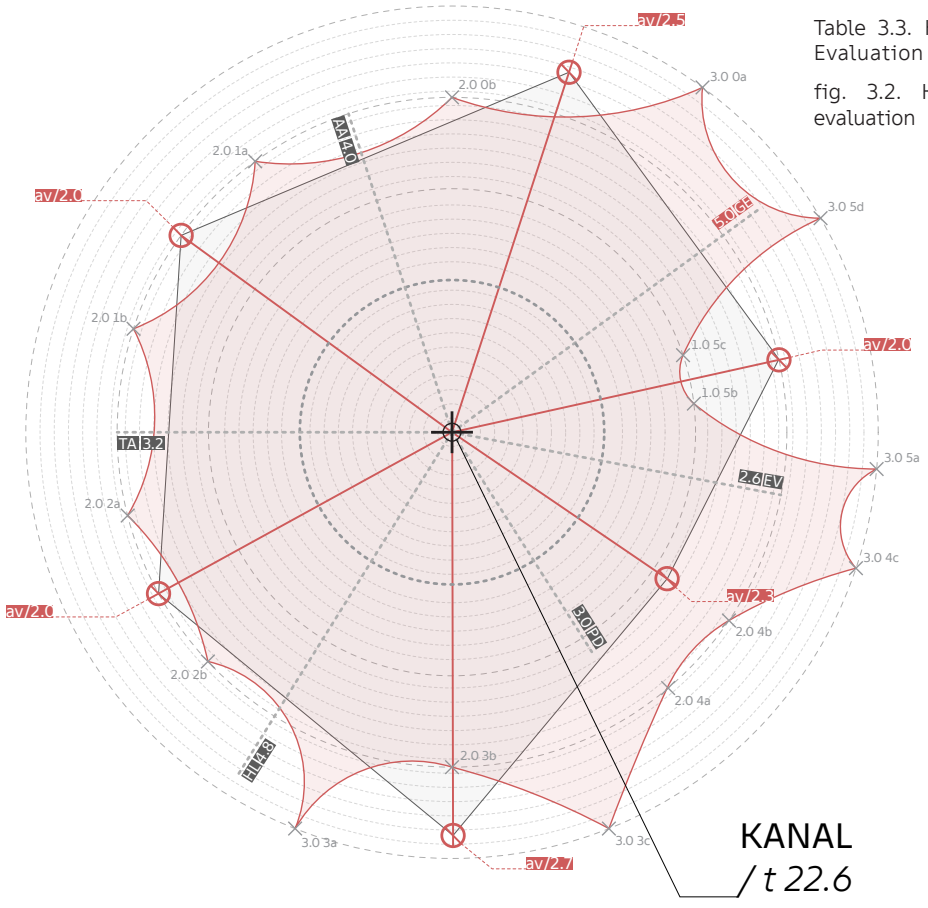


fig. 3.2. KANAL, weighted evaluation diagram, (author)

3 Zumaglini e Gallina, "OGR – Officine Grandi Riparazioni" OGR Torino, "Aree"

/ OGR (Turin)

Formerly a railway station, the Comune had vaguely assigned "services" to it, despite its location within Spina Centrale. After multiple attempts and proposals for the site's future, OGR was converted into an "arts and innovation center" through a "box-in-box" strategy that preserves not only the industrial shell but also the exterior walls in their entirety, including their graffiti. It was, however, OGR's new program above all that made it central to the city's latest rebranding as a "technology city". A technology and culture hub, OGR supports innovation and technology through start-ups in one wing and art and exhibitions in the other.[3]

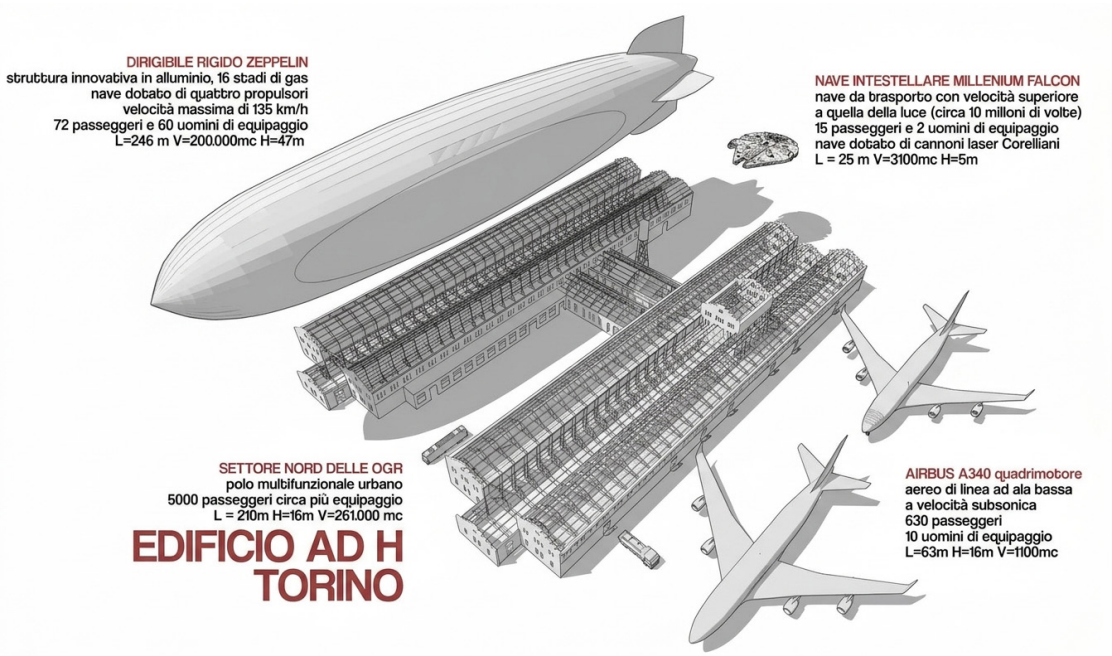


fig.3.3. OGR hub, (color modified by Gemini)

Weighted Evaluation OGR				
C)	Sub Criteria (SC)	point/SC	Av.Point/SC	Weighted Point/C
1. Accessibility	1a · Urban connectivity (quantitative)	2	2.0	4.0
	1b · Public surface ratio (quantitative)	2		
2. Temporal Activation	2a · Daily operating hours (quantitative)	2	2.0	3.2
	2b · Active surface ratio (quantitative)	2		
3. Heritage Legibility	3a · Physical preservation (quantitative)	3	3.0	5.4
	3b · Memory and historical respect (qualitative)	3		
	3c · Functional continuity (qualitative)	3		
4. Program Diversity	4a · Use category count (quantitative)	3	2.3	3.0
	4b · User profile range (qualitative)	2		
	4c · Mixed-use integration (qualitative)	2		
5. Environmental Value	5a · Material reuse (quantitative)	3	2.0	2.6
	5b · Energy systems (qualitative)	1		
	5c · Soil and landscape (quantitative)	1		
	5d · Construction carbon footprint (quantitative)	3		
0.Modifier	0a . Governance Compliancy	3	2.5	5.0
	0b . Efficiency Value	2		

Table 3.4. OGR, Weighted Evaluation

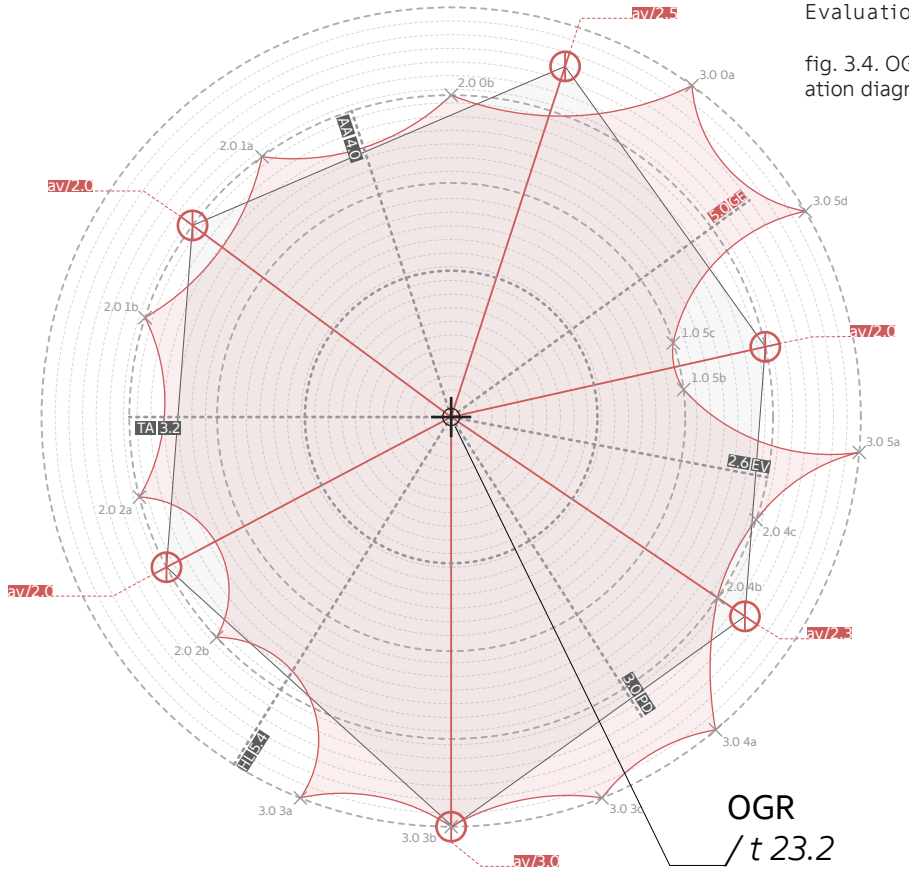


fig. 3.4. OGR, weighted evaluation diagram, (author)

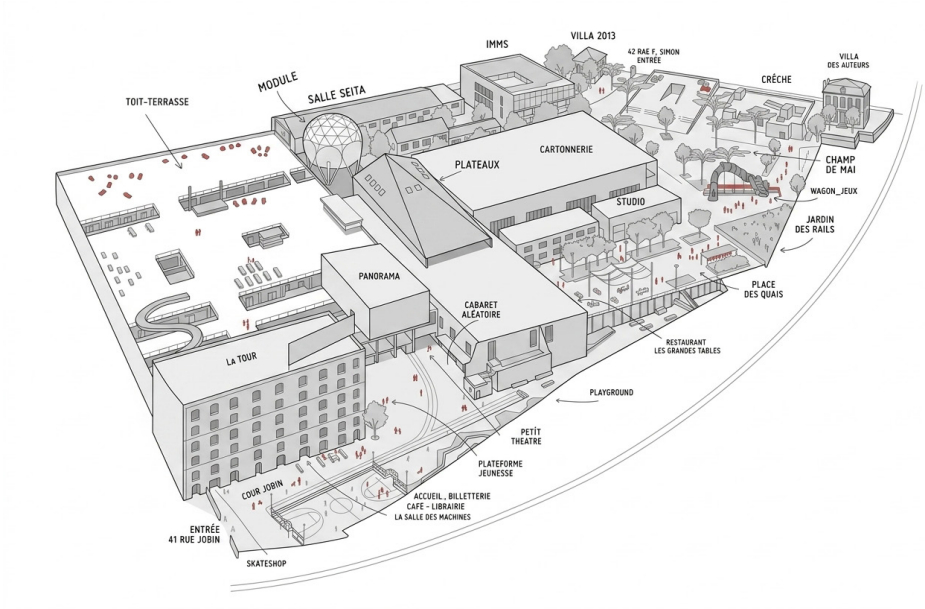
4 Divisare, "Friche la Belle de Mai," ARM Architecture and Olivier Amsellem

fig.3.5. La Friche functions, (color modified by Gemini)

/ La Friche la Belle de Mai (Marseille)

The intervention project on La Friche by ARM architects started in 2001. The design treats the large former tobacco factory as a small district, lending space to the city. The interventions range from the addition of new elements, such as the "Panorama'" building, to the storage and reuse of elements of the used complex. More than anything, the design devises a diverse program, allowing for a diverse set of users and a continuous temporal arrangement which is clear in the analysis. [4]

La Friche's success does not end at the complex itself; rather, its effects are evident throughout the neighborhood. La Friche opened the cinema Le Gyptis in 2014, a formerly disused cinema, which has since become a pillar of the neighborhood. More than that, La Friche's phased intervention has allowed it to open spaces in sections, while some parts are still awaiting their opening and completion.



Weighted Evaluation La Friche				
C)	Sub Criteria (SC)	point/SC	Av.Point/SC	Weighted Point/C
1. Accessibility	1a · Urban connectivity (quantitative)	2	2.0	4.0
	1b · Public surface ratio (quantitative)	2		
2. Temporal Activation	2a · Daily operating hours (quantitative)	2	1.5	2.4
	2b · Active surface ratio (quantitative)	1		
3. Heritage Legibility	3a · Physical preservation (quantitative)	3	3.0	5.4
	3b · Memory and historical respect (qualitative)	3		
	3c · Functional continuity (qualitative)	3		
4. Program Diversity	4a · Use category count (quantitative)	3	3.0	3.9
	4b · User profile range (qualitative)	3		
	4c · Mixed-use integration (qualitative)	3		
5. Environmental Value	5a · Material reuse (quantitative)	3	2.5	3.3
	5b · Energy systems (qualitative)	2		
	5c · Soil and landscape (quantitative)	2		
	5d · Construction carbon footprint (quantitative)	3		
0.Modifier	0a . Governance Compliancy	3	3.0	6.0
	0b . Efficiency Value	3		
Total Point (out of 30)			25.0	

Table 3.5. La Friche, Weighted Evaluation

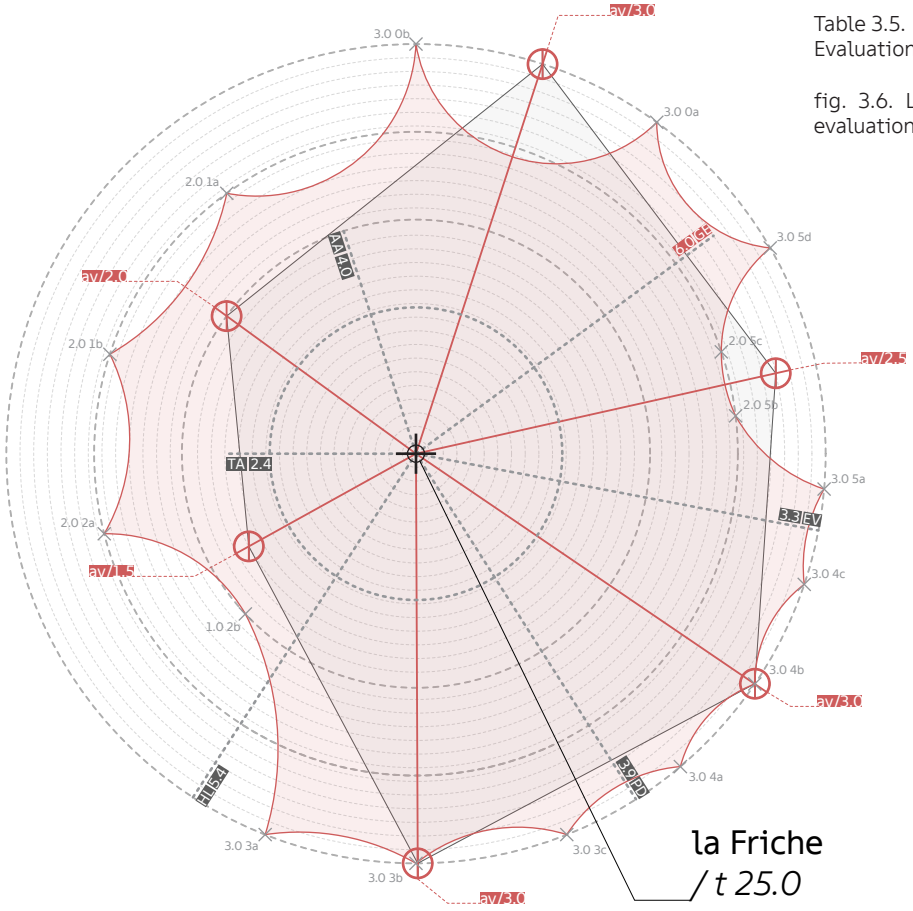


fig. 3.6. La Friche, weighted evaluation diagram, (author)

5 Divisare, "Mapo Oil Tank Cultural Park," Daniel Valle Architects

fig.3.7. Oil Tank composition , (color modified with Gemini)

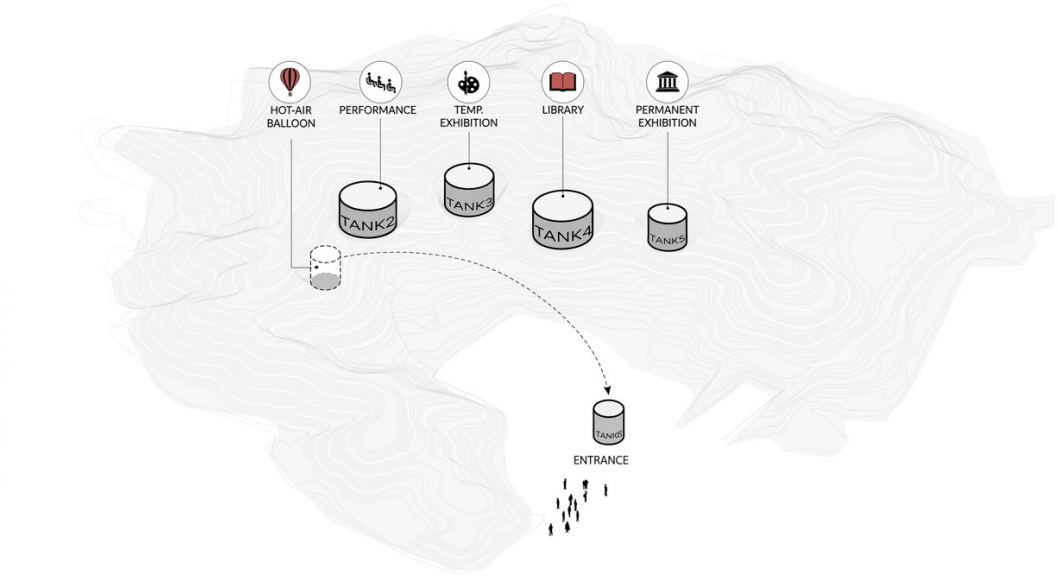
/ Mapo Oil Tank Culture Park (Seoul)

The 1st Oil Shock was caused by the Middle East War, which struck the world economy in 1973. Oil prices skyrocketed to three times their previous level over three months. And in this context , South Korea reserved 40 million barrels of oil in 1978.4 As a country that has risen from one of the poorest, aided by the UN in 1950 , to one of the leading economies of the world , Korea has been exceptional when it comes to maintaining its identity as a homogeneous nation in East Asia.

When the oil depot was built on the southern slope of Maebong Mountain, South Korea was preparing for bombing from the North.

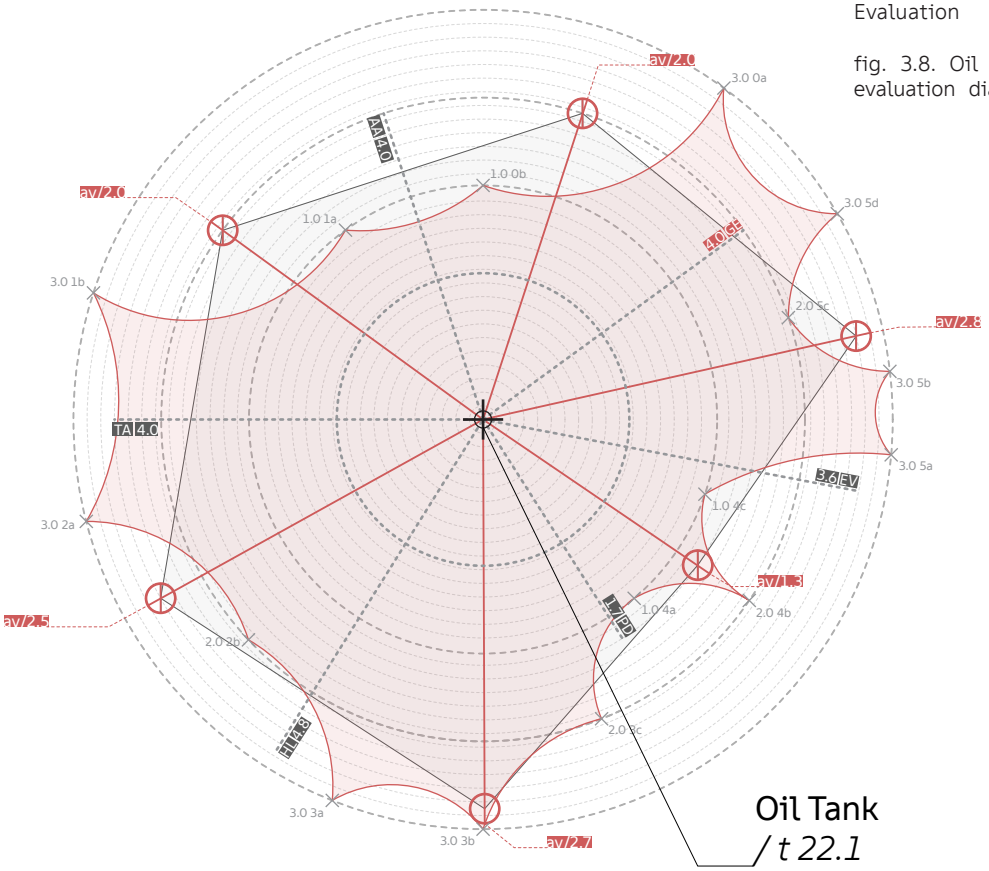
Since 1950, the Korean War has not ended. By 2002, despite the main World Cup stadium being built in front of the oil tank, the site had been designated for storing dangerous goods and was neglected in terms of safety until 2014. In that year , a new plan was developed following an international competition.

Today, the oil tanks have transformed into a cultural and exhibition center, with each tank housing a different form of art. The exterior shell has been fully preserved, and in one case, the tank's entire structure is preserved as a museum. [5]



Weighted Evaluation Oil Tank				
C)	Sub Criteria (SC)	point/SC	Av.Point/SC	Weighted Point/C
1. Accessibility	1a · Urban connectivity (quantitative)	1	2.0	4.0
	1b · Public surface ratio (quantitative)	3		
2. Temporal Activation	2a · Daily operating hours (quantitative)	3	2.5	4.0
	2b · Active surface ratio (quantitative)	2		
3. Heritage Legibility	3a · Physical preservation (quantitative)	3	2.7	4.8
	3b · Memory and historical respect (qualitative)	3		
	3c · Functional continuity (qualitative)	2		
4. Program Diversity	4a · Use category count (quantitative)	1	1.3	1.7
	4b · User profile range (qualitative)	2		
	4c · Mixed-use integration (qualitative)	1		
5. Environmental Value	5a · Material reuse (quantitative)	3	2.8	3.6
	5b · Energy systems (qualitative)	3		
	5c · Soil and landscape (quantitative)	2		
	5d · Construction carbon footprint (quantitative)	3		
0.Modifier	0a . Governance Compliancy	3	2.0	4.0
	0b . Efficiency Value	1		
Total Point (out of 30)		22.1		

Table 3.6. Oil Tank, Weighted Evaluation



Oil Tank
/ t 22.1

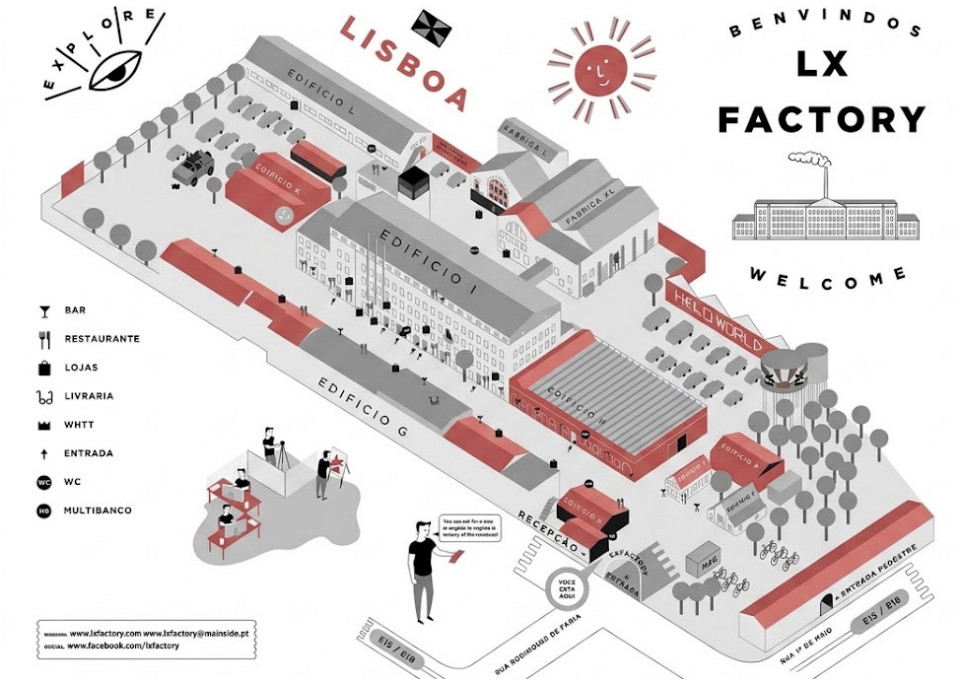
fig. 3.8. Oil Tank, weighted evaluation diagram, (author)

6 Eva Hellreich, "LX Factory: An Example of What Adaptive Reuse Can Offer Cities," Infrastructure Institute Blog

fig.3.9. LX factory composition (color modified with Gemini)

/ LX Factory, Lisbon

LX factory began life in the 19th century as a textile plant; however, after its decline, it stood idle. As an intervention, the project at the LX factory adopts a light-touch adaptive reuse strategy, retaining the structures and overall composition while introducing new functions to the site. The intervention does not treat the site as a unified complex in the sense that it has the same ownership. Rather, diverse uses are assigned and allowed to grow organically while maintaining the historical character. This diverse programming not only keeps the site from sudden closure but also allows for extended activities throughout the day. Among these are public spaces specifically aimed at recurring public gatherings, markets, and events. [6]



Weighted Evaluation LX Factory				
C)	Sub Criteria (SC)	point/SC	Av.Point/SC	Weighted Point/C
1. Accessibility	1a · Urban connectivity (quantitative)	2	2.0	4.0
	1b · Public surface ratio (quantitative)	2		
2. Temporal Activation	2a · Daily operating hours (quantitative)	2	2.0	3.2
	2b · Active surface ratio (quantitative)	2		
3. Heritage Legibility	3a · Physical preservation (quantitative)	3	2.3	4.2
	3b · Memory and historical respect (qualitative)	2		
	3c · Functional continuity (qualitative)	2		
4. Program Diversity	4a · Use category count (quantitative)	3	3.0	3.9
	4b · User profile range (qualitative)	3		
	4c · Mixed-use integration (qualitative)	3		
5. Environmental Value	5a · Material reuse (quantitative)	3	2.3	2.9
	5b · Energy systems (qualitative)	1		
	5c · Soil and landscape (quantitative)	2		
	5d · Construction carbon footprint (quantitative)	3		
0.Modifier	0a . Governance Compliancy	3	3.0	6.0
	0b . Efficiency Value	3		
Total Point (out of 30)		24.2		

Table 3.5. LX Factory, Weighted Evaluation

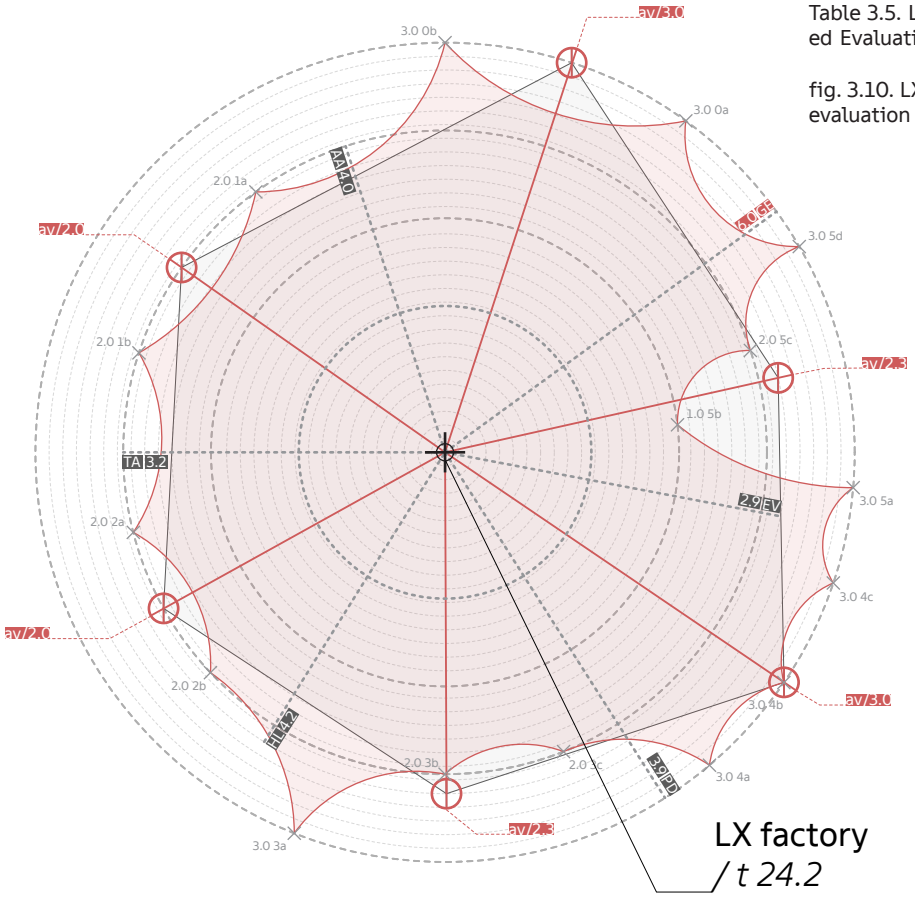


fig. 3.10. LX Factory, weighted evaluation diagram, (author)

PART 04

/ Proposals

04 01

Ex-FIMIT : A Close Reading

Ex-FIMIT is the picture of a piece of land long planned for, yet persistently overlooked. Always in the shadow of the Ex-Manifattura Tabacchi, FIMIT has functioned as a companion to its larger, more "valuable" neighbor ; subordinate both in scale and ambition. Where Tabacchi was envisioned as a "City of Music," Ex-FIMIT was drawn into that vision as an appendage. Where later plans proposed a new University Campus in Regio Parco, Ex-FIMIT appeared again as an extension of the primary scheme, never its subject. Even in the most recent planning proposals for Ex-Tabacchi, this relationship has held: parts of Ex-FIMIT are slated for demolition to accommodate the spatial demands of its neighbor. FIMIT's entanglement with Tabacchi reaches back to its origin and to the first mill established on the Regio Parco canal, whose waters were drawn primarily to feed the Tabacchi factory.

This thesis reads that historical entanglement not as a limitation, but as an opportunity. The following section is a close reading of Ex-FIMIT's designation within the Piano Regolatore Generale 2026, examining how the current urban planning framework creates favorable conditions for the redevelopment argued for in this thesis, and, in turn, how FIMIT itself could become an active asset in the ongoing planning of northern Turin. This potential is developed in greater detail in the Master Plan Scenarios section that concludes this chapter. Following that, the thesis redrafts Ex-FIMIT's documents based on three sources: available floor plans, informed speculation from other design proposals, aerial analysis via Google Maps, and site visit. *

* A full internal survey of the site was not possible, due both to logistical constraints and to the confirmed presence of asbestos within the structure. However , the survey proved to be crucial to the understanding of the site , the buildings within the complex and the current condition they are in . See the photo album of the survey in the Appendix B.

>1 Ex-FIMIT in PRG2026

/ part one - accessibility

In terms of accessibility, the influence of Metro Line 2 is evident, especially from the earliest phase of the project, considering that the first phase launches the stations between Corso Grosseto (Correli) and Rebaudengo. The site, currently connected to the city center by Tram Line 4 (the main north-south spine of Turin's urban network), will be among the first beneficiaries of Linea 2, given its proximity to two of the line's planned stations at Via Bologna and Via Sempione. The final phase of Linea 2 (still designated as a project line within the current PRG), will decisively transform the condition of the "Regio Parco University Campus". The two earlier stations at Via

Bologna and Via Sempione connect the site to the metro network, while the station at Piazza Sofia, by contrast, brings the metro network even closer to the site, rendering it the primary connection.

Fi Ex-FIMIT
Ta Ex-Tabacchi

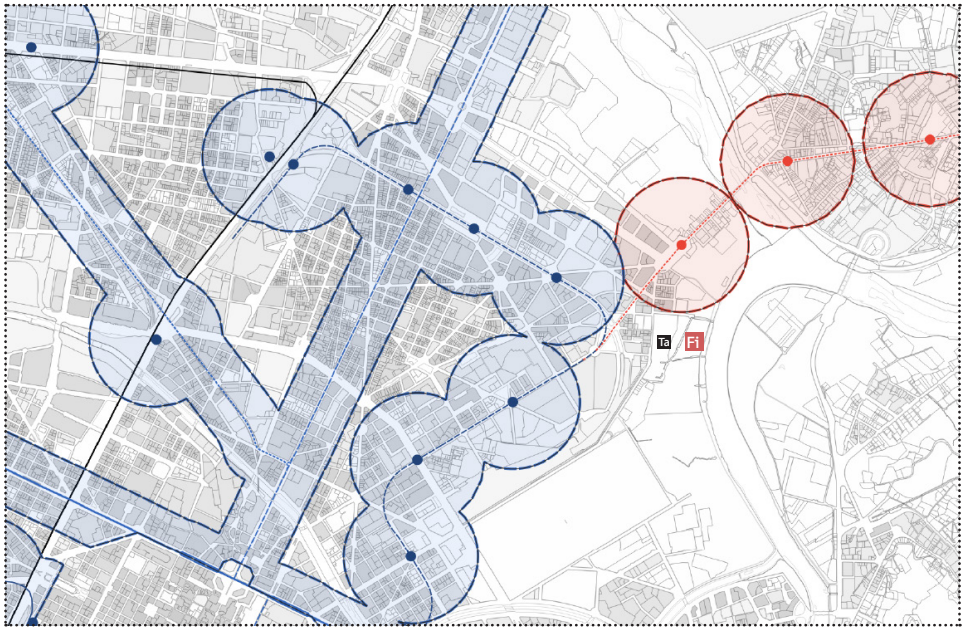


fig 4.1. accessibility, PRG-2026Torino

Existing/under construct line
Lines in project
Existing/under construct Stop
Project Stop
Metro2
Project Metro2
SFM

/ part two - Territorial Strategy

In the territorial strategy map, the most notable designation is that Ex-FIMIT falls entirely within the ecosystemic connection zone , a classification that frames the site not as an isolated plot but as a potential connective tissue between the parks and green areas in its vicinity. This positions Ex-FIMIT as a possible link in a continuous green corridor running along the river, stitching together the fragmented open spaces of this part of the city.

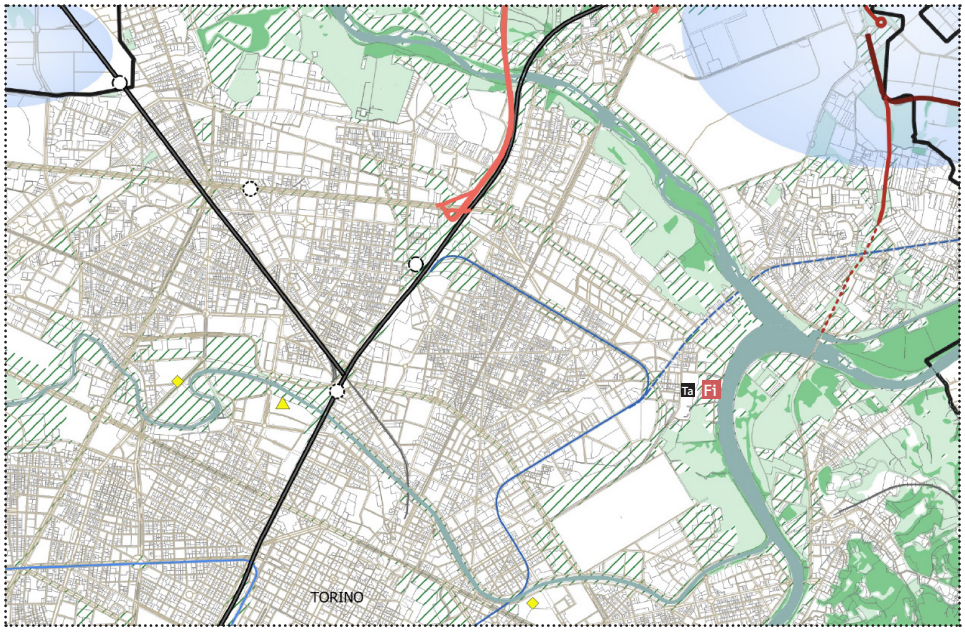


fig 4.2. Territorial Strategy, PRG2026Torino

Production/Commercial
Polito
Unito
Science&Tech Park
Ecosystem Connections
Ecological Value
Ecological Connection

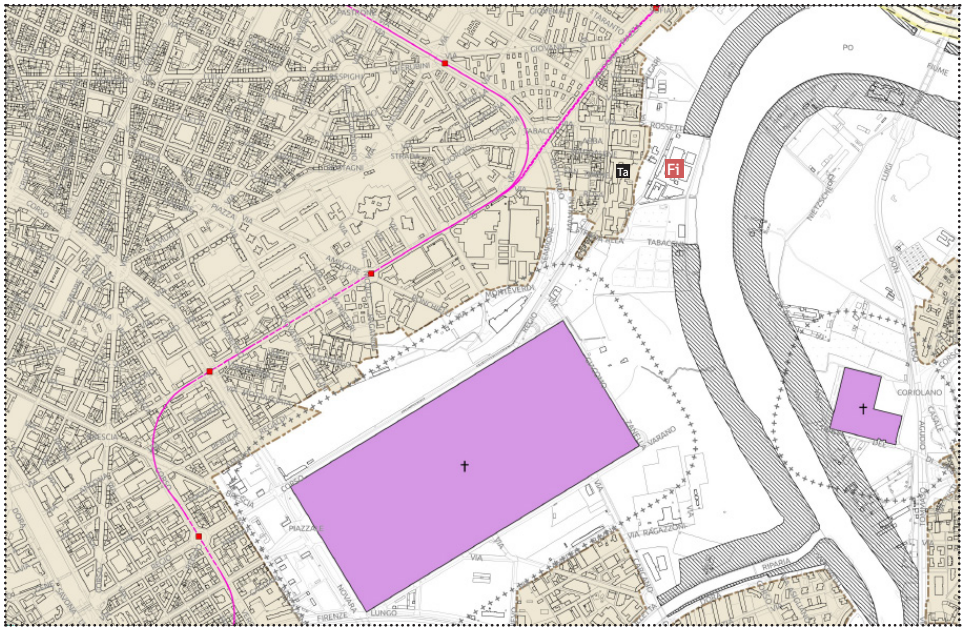
/ part three - administrative constraints

What is notable in “administrative constraints”: a map demonstrating buffer zones of the cemetery and the river, is that Ex-FIMIT is not within the river’s buffer zone , despite its position in relation to the Po. What is interesting in this lack of constraint is that it’s an interruption to the zone. This anomaly

is likely correlated with Comune's interest in a development scheme for Ex-FIMIT with minimal initial constraints. What is more, in this map, Ex-FIMIT is shown as vacant, a condition distinct from Ex-Tabacchi.

fig 4.3. administrative constraints, PRG2026Torino

- River Buffer Zone
- Inhabited Area with accordance to art81 of L.R.56/77
- Cemetery
- Cemetery Buffer Zone

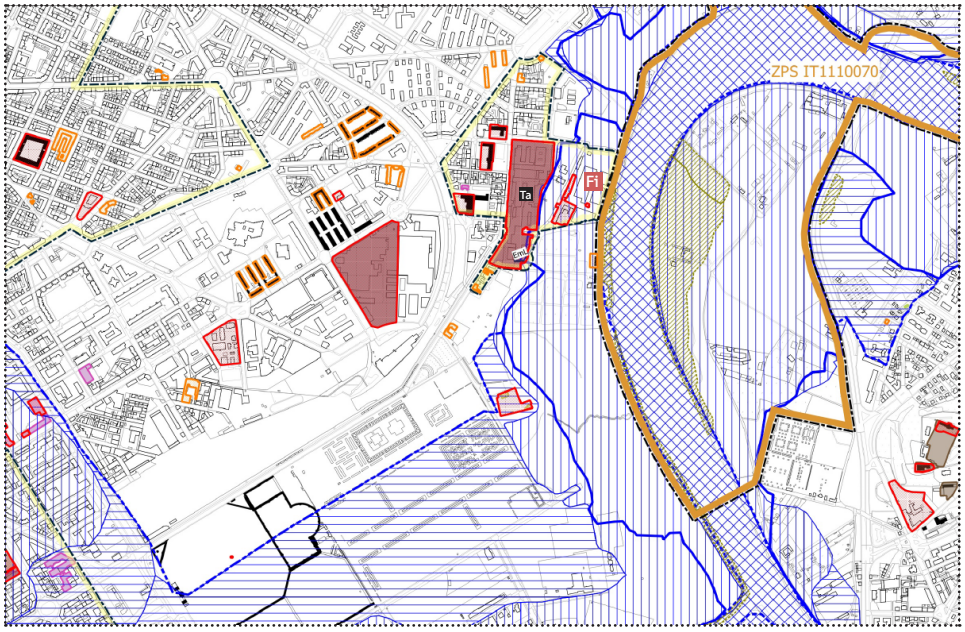


/ part four - constraints and protections

In terms of historical value, three buildings within Ex-FIMIT are afforded legal protection under the "Codice dei Beni Culturali e del Paesaggio": the main building (Building A), dating to 1830, with later additions made during the FIMIT era; the extension (Building C) , dating to 1926; and the distinctive electricity building (Building E), dating to 1947. Beyond these individually protected structures, the PRG designates Ex-FIMIT, Ex-Manifattura Tabacchi, and their surrounding built fabric collectively as "areas of historical and environmental significance"; in other words, an endorsement of industrial heritage preservation. Another constraint visible in the map is the site's classification within a "medium flood-risk zone". While this classification does not prevent development, it warns any proposal to consider this, especially since the buffer zone constraint is interrupted on Ex-FIMIT's surface.

fig 4.4. constraints and protections, PRG2026Torino

- Protected Cultural Heritage under the Codice dei beni culturali e del paesaggio
- Protected Cultural Heritage under "Ope Legis" belonging to Comune di Torino
- Buildings of Particular Historical Interest to the PRG
- Historically and Environmentally Significant Areas
- High Flood Possibility
- Medium Flood Possibility
- Low Flood Possibility



/ part five - regulatory areas

Ex-FIMIT and its surroundings fall within Zone B1 of the PRG's regulatory zoning framework. Consolidated areas of type B are subject to "regeneration and equalization", with Zone B1 carrying a maximum building capacity of 1.35 m²/m².

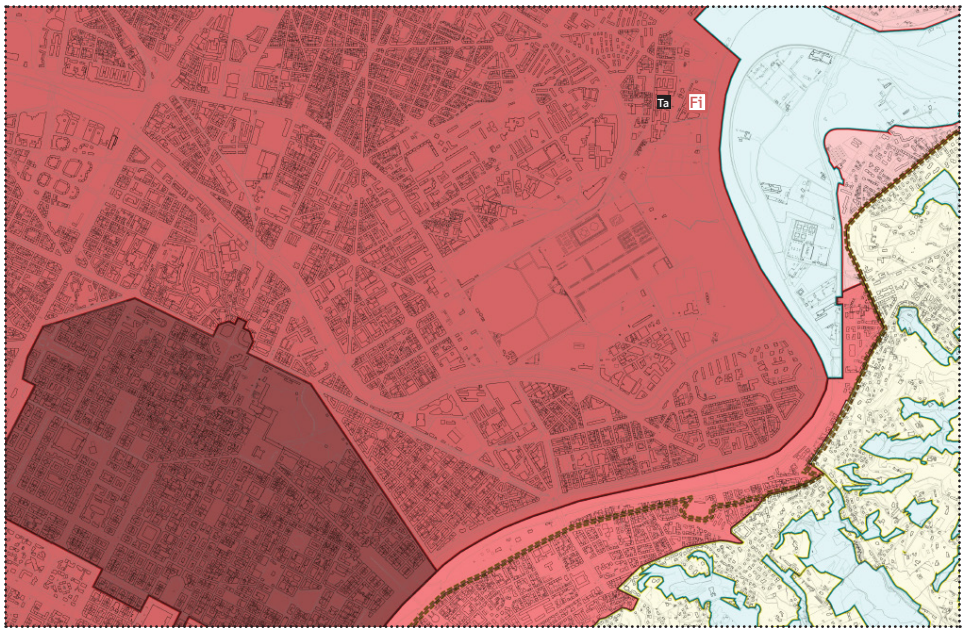


fig 4.5. regulatory areas, PRG-2026Torino

- Zone A
- Zone B1
- Zone B2
- Zone B3
- Zone C
- Zone F

/ part six - land-use

As previously noted, the current PRG designates Ex-FIMIT, Ex-Tabacchi, and the small parcel between them as part of a unified University Campus development. The PRG envisions the streets of the historical fabric on the west side of Tabacchi, connecting southward to a new piazza ; a neighborhood center further linked to Scalo Vanchiglia and the Ex-Poste site, designated as a new area for common interests.

Ex-FIMIT's immediate proximity to this new urban quarter could be a significant planning asset for the project.

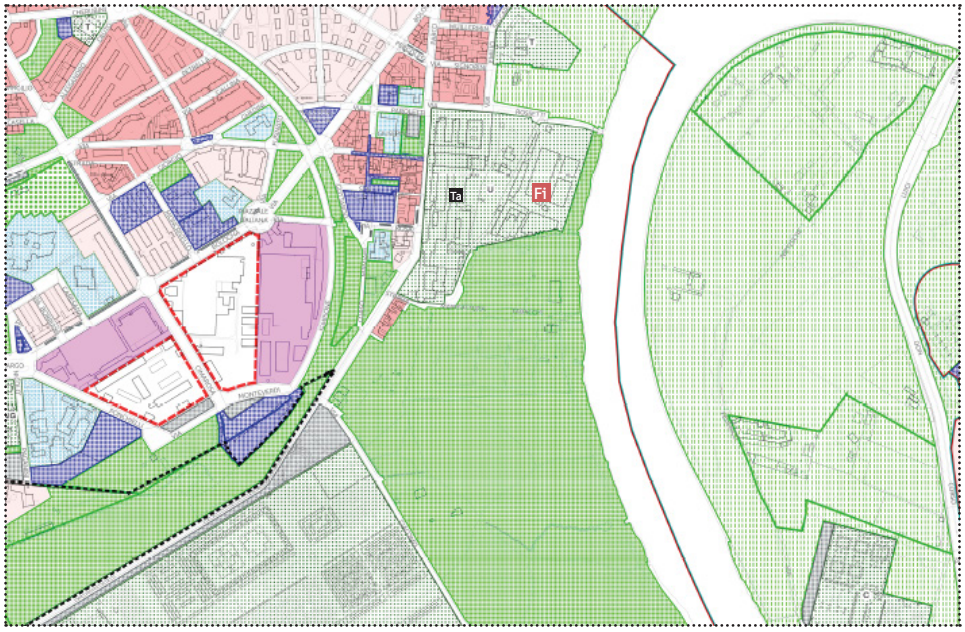


fig 4.6. land use,PRG2026Torino

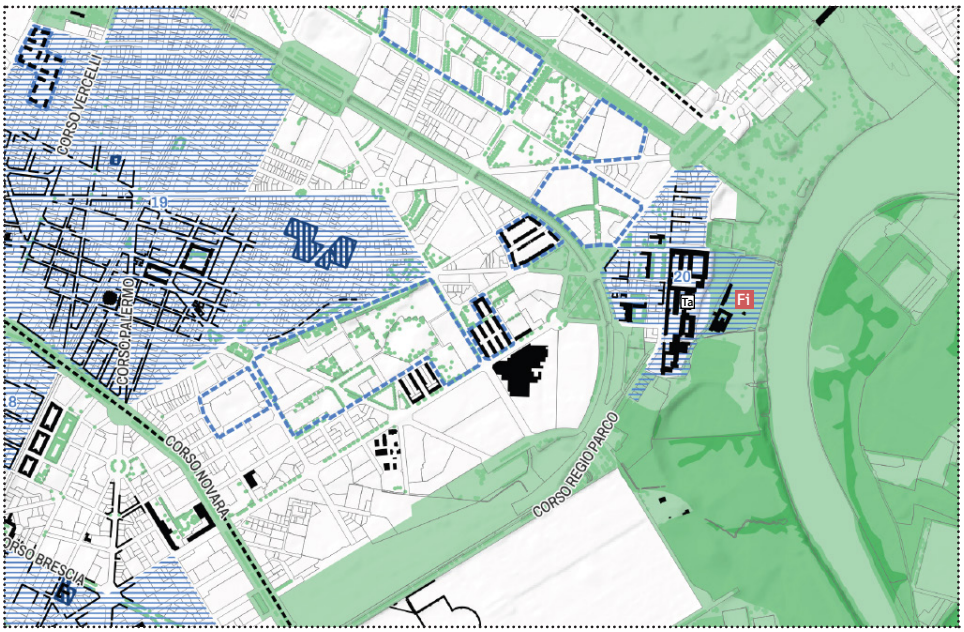
- University Assets
- Areas for Education
- Areas for common Interests
- Parks
- Playgrounds
- Sport Areas
- Multipurpose Park
- Ecosystemic Greenery
- Public Parking
- Continuous Curtain Areas
- Platform-Type Infrastructures
- Transformation Areas
- Open Building Areas

/ part seven - environmental and landscape values

The "environmental and landscape values" map identifies parts of the city carrying either landscape or historical significance. Ex-FIMIT falls within "Ambito Storico Ambientale number 20" ; a designation that also includes the industrial zone associated with the Regio Parco canal and the surrounding Ex-Tabacchi complex. Within this, the three previously identified protected buildings are explicitly marked as being of particular historical interest. What distinguishes Ex-FIMIT from much of the broader ASA 20 designation, however, is that the site, in its entirety, is also classified within the ecosystemic connections layer. A consistent condition across layers that underscores the site's dual character.

fig 4.7. environmental and landscape values, PRG2026 Torino

- Historical-Environmental Areas (ASA 4-25)
- Ecosystemic Connections
- Areas of Ecological Value
- Areas of Ecological Connectivity
- Buildings of Particular Historical Interest



/ part eight - urban recomposition : Porta Nord

The PRG 2026 introduces eight strategic plans targeting underdeveloped or overlooked areas in the city's peripheral parts. Within these, the Porta Nord development identifies the northern industrial zone surrounding Ex-Tabacchi as its flagship project. Linea 2's initial construction phases are concentrated in this area. The green strategy connects the parks along Corso Taranto to Scalo Vanchiglia through reconstructed street sections. At the same time, the neighborhood center to the west of Ex-Tabacchi emerges as the social and spatial heart of the intervention. The broader network of connections also extends towards Spina 4. Most significant are the strategic connections the PRG traces between the public spaces of Porta Nord and the river; a relationship that's been severed by the unused industrial and agricultural zones along the riverbank. Two of these connections pass directly through Ex-FIMIT from Ex-Tabacchi, and it is evident that the Tabacchi project has been taken into account in their routing, as they align with the public spaces proposed in that proposal.

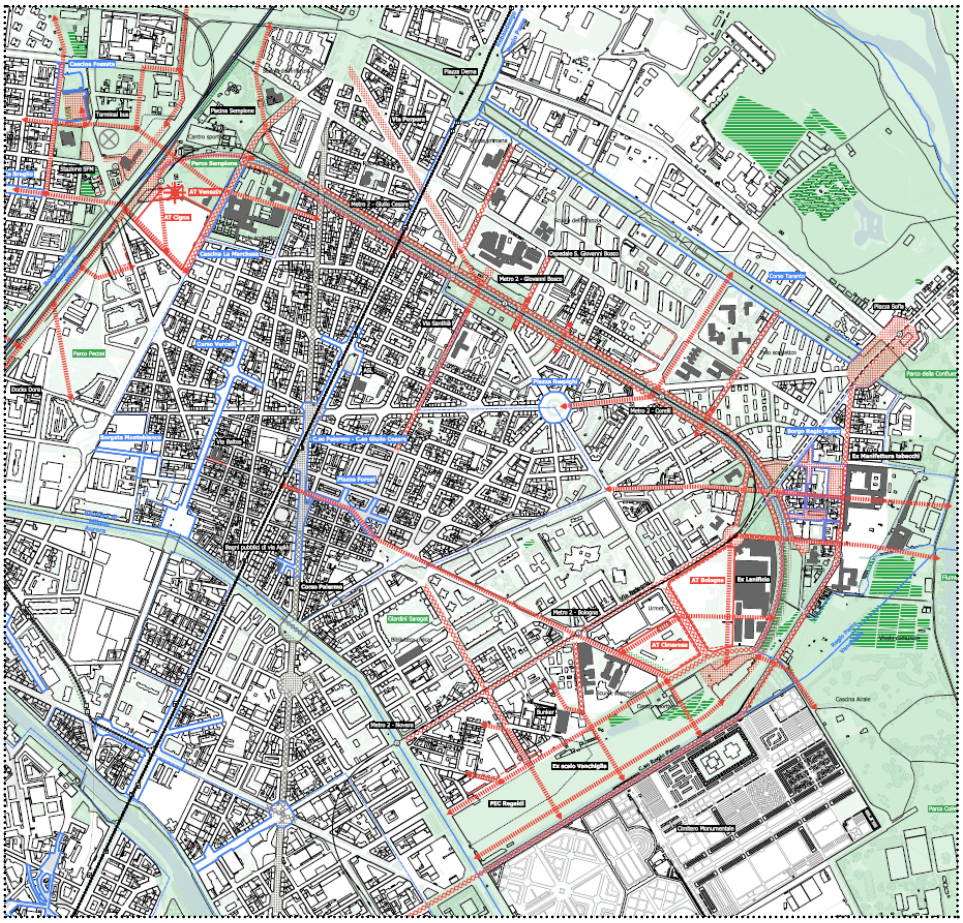


fig 4.8. urban recomposition : Porta Nord, PRG2026 Torino

- Strategic Connections
- Strategic Axes
- Urban Fronts to be Enhanced
- Recomposition of Street Section
- New Urban Marker
- New Public spaces
- Green Public Spaces
- Areas of Transformation
- Neighborhood Perimeter
- Neighborhood Center
- ZUCS
- ASA
- Ecosystemic Connection
- Buildings of Interest

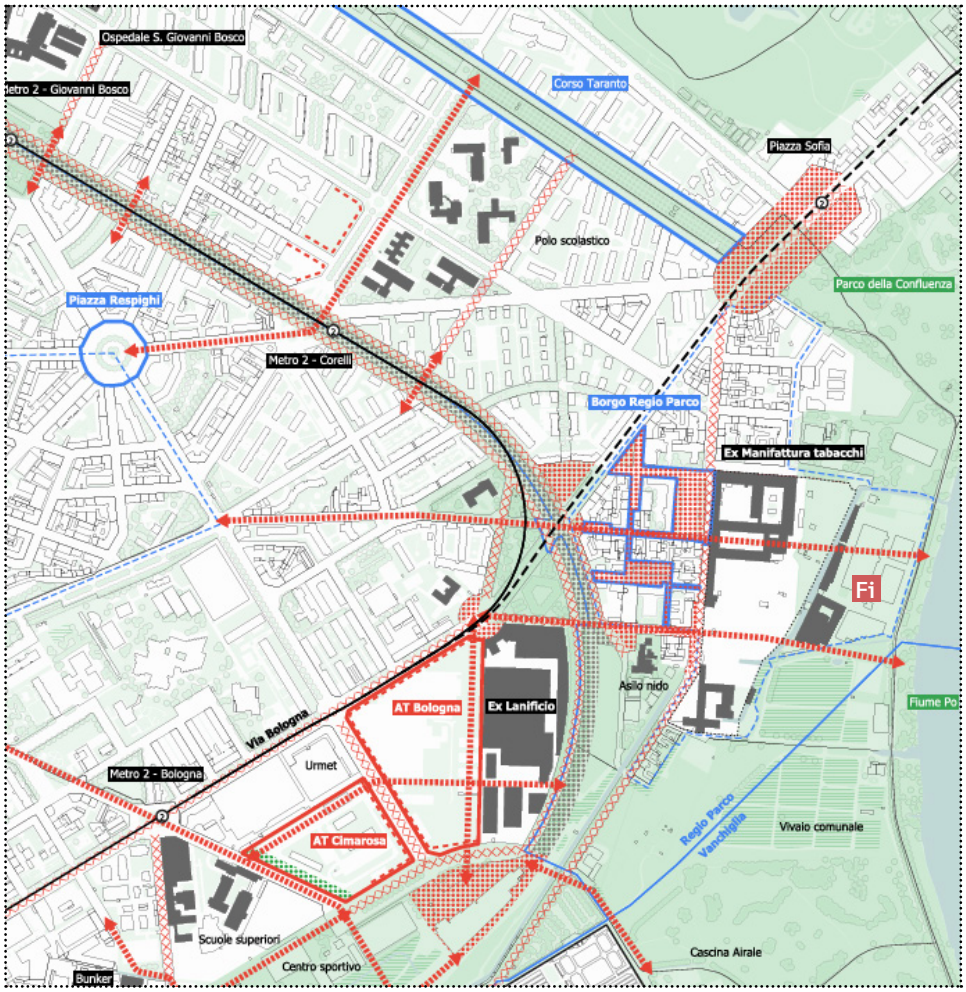
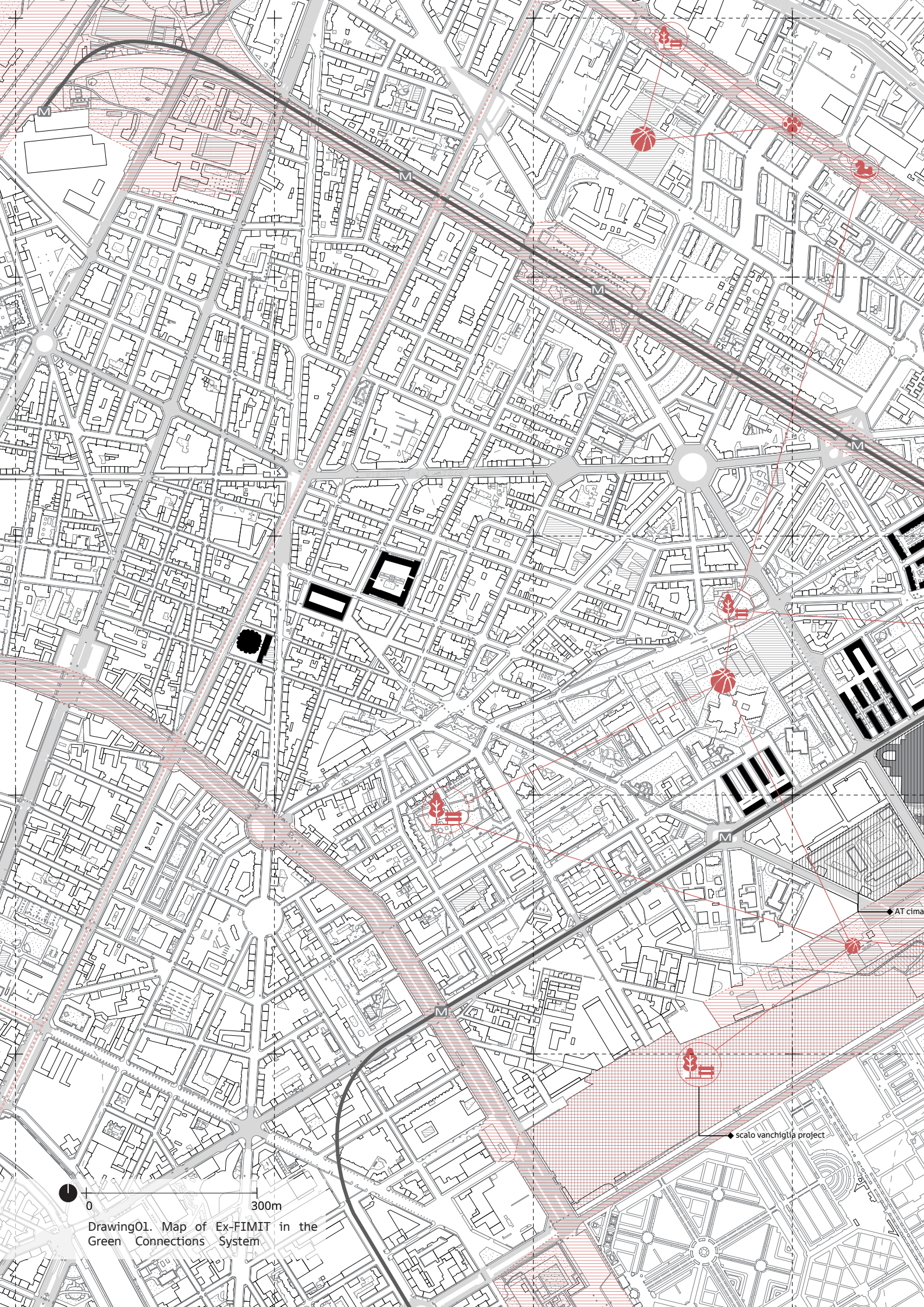


fig 4.9. urban recomposition : Porta Nord, zoom in, PRG2026 Torino

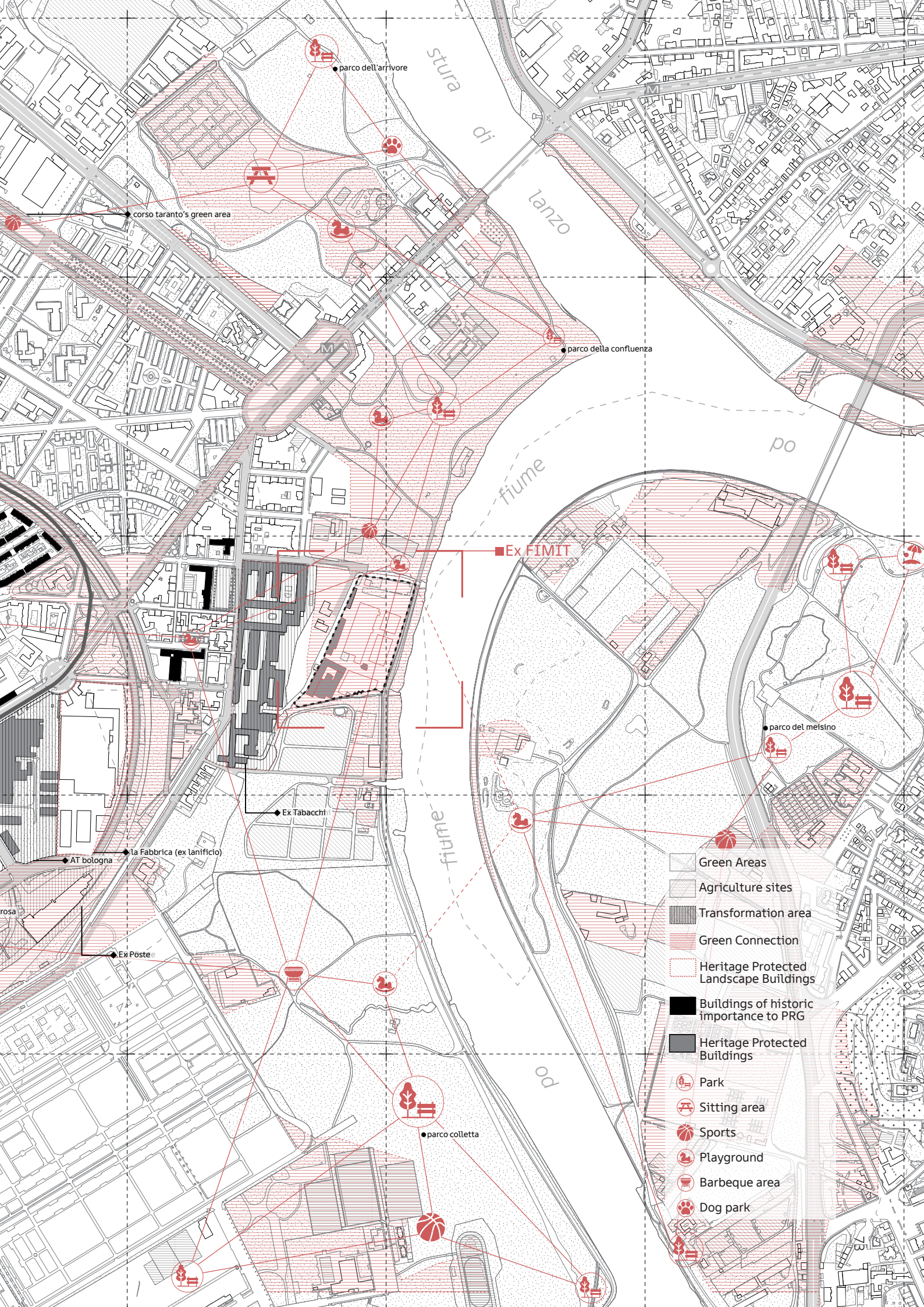
/ Conclusions & the Issue

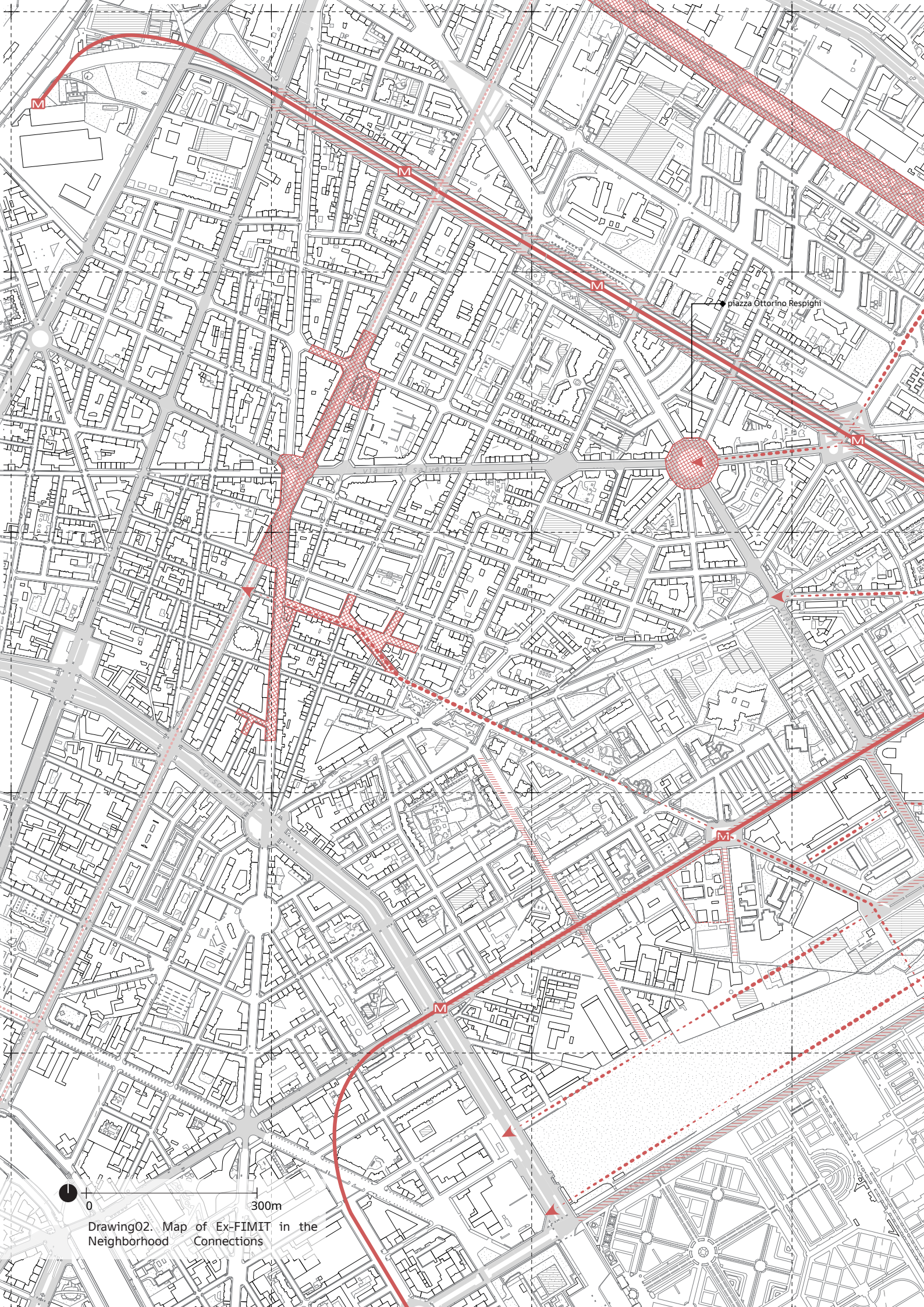
PRG 2026 acknowledges Ex-FIMIT's value in a dual role: firstly, as part of the new Regio Parco University Campus; and second, as part of the city's ecosystemic green network.

What is worth noting here is that the strategic connections set to bring the river to the central life of the Regio Parco neighborhood pass through Ex-FIMIT's perimeter. This brings the advantage of framing Ex-FIMIT as connective tissue. What is worrying, though, is that while said opportunity exists, it isn't necessarily realized. Tabacchi's development plan sees Ex-FIMIT as largely part of the landscape. Given the strategic connections passing through the site, it is concerning that the heritage aspect of the site is not fully taken into consideration: Even though PRG recognizes the three heritage-protected buildings of Ex-FIMIT in some layers, in others, namely the Porta Nord strategic plan, building E is not indicated. This reveals a disconnect between urban planning and heritage conservation in the city. The contradiction becomes particularly ironic when this disconnect occurs in a strategic plan anchored in an industrial reuse project. This demonstrates an issue discussed earlier in the first part of Part 1 of this thesis: Re-use of former industrial sites has become the norm, while the conservation policies that guard them have fallen behind. As a result, the industrial heritage may be incorporated into regeneration strategies without its heritage values being given equal priority, leaving it vulnerable to neglect.

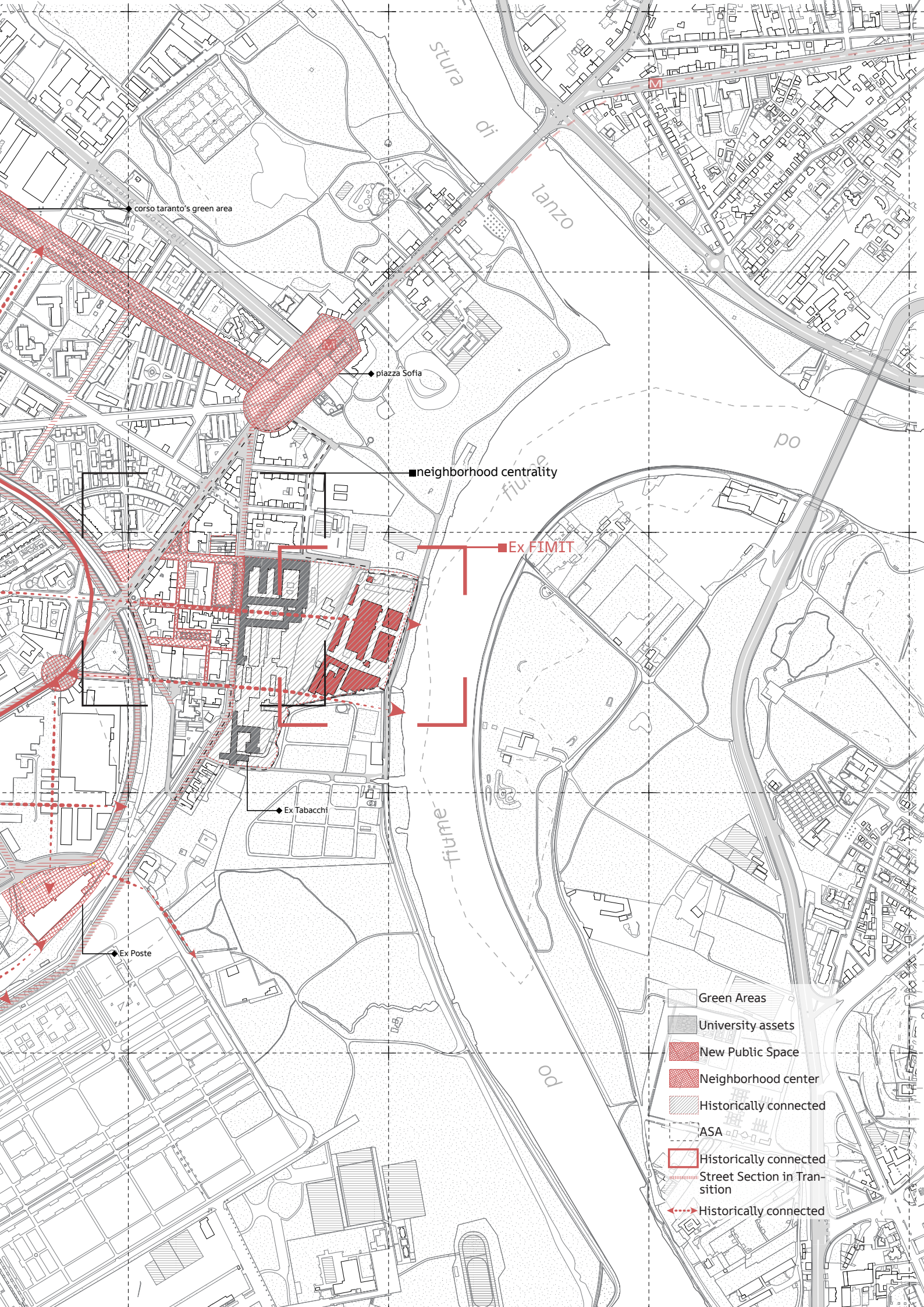


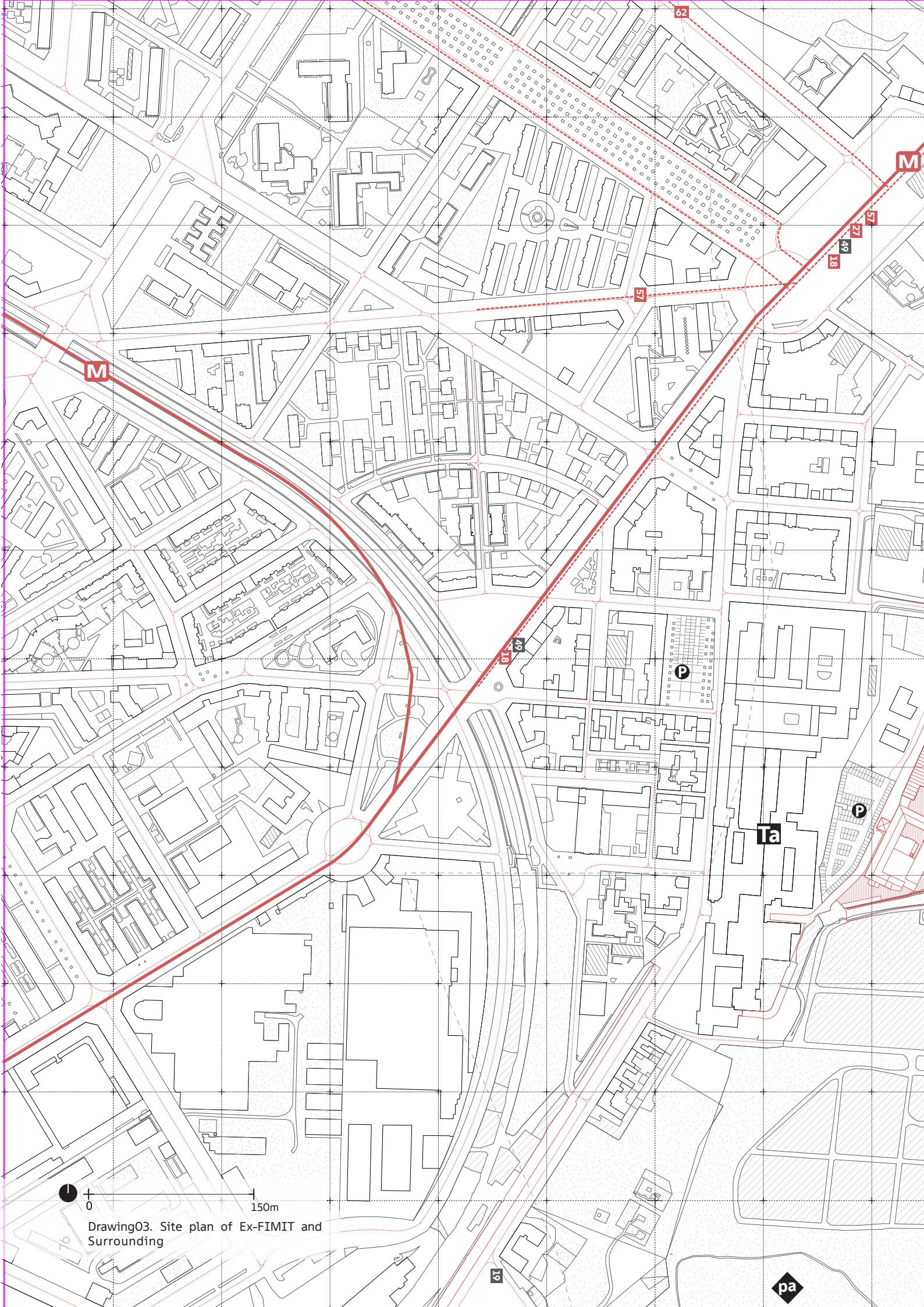
Drawing01. Map of Ex-FIMIT in the Green Connections System


parco dell'arrivore
corso taranto's green area
parco della confluenza
Ex FIMIT
Ex Tabacchi
la Fabbrica (ex lanificio)
AT bologna
Ex Poste
parco colletta
parco del meisino
stura di lanzo
fiume
po
Green Areas
Agriculture sites
Transformation area
Green Connection
Heritage Protected Landscape Buildings
Buildings of historic importance to PRG
Heritage Protected Buildings
Park
Sitting area
Sports
Playground
Barbeque area
Dog park

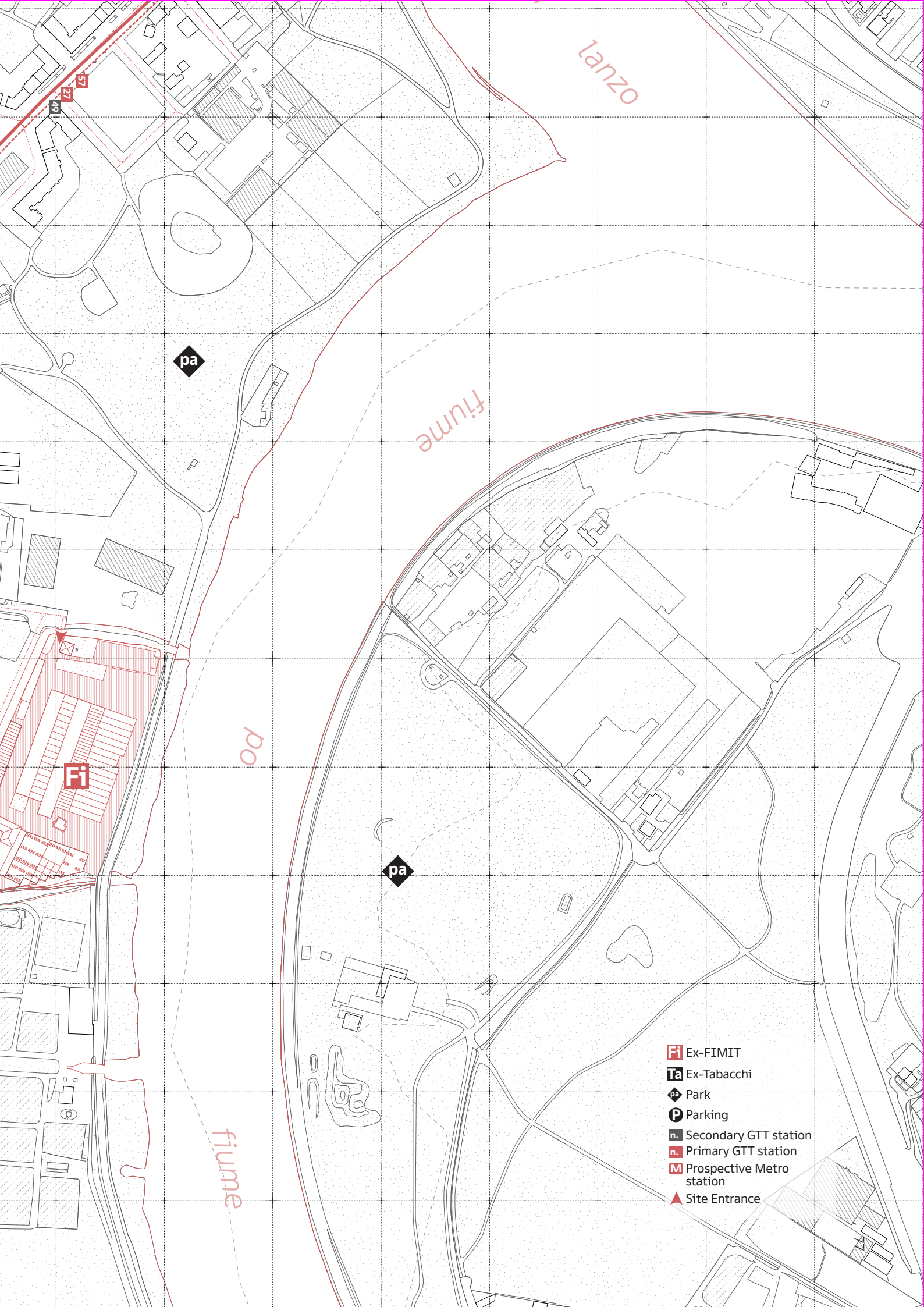


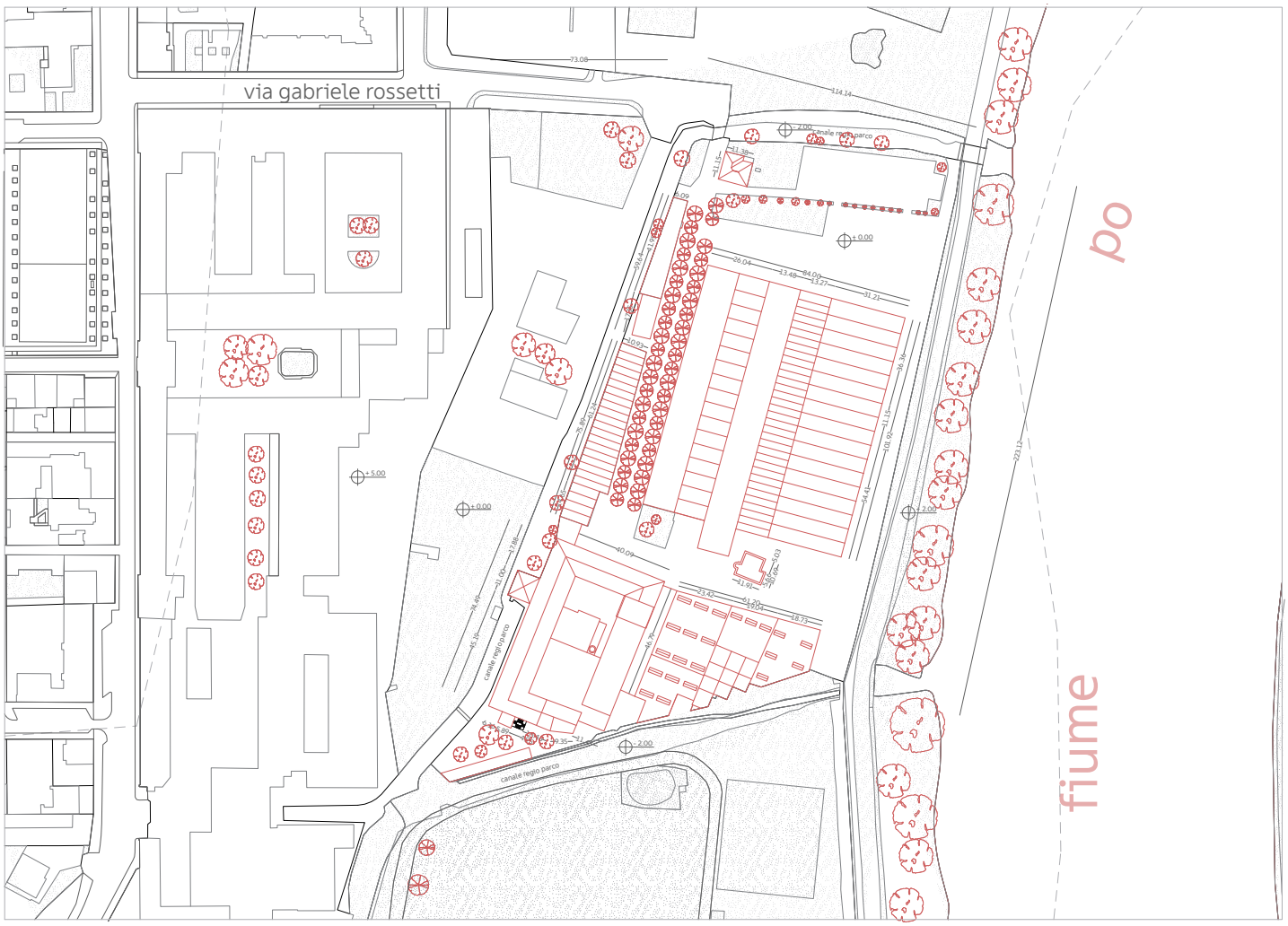
Drawing02. Map of Ex-FIMIT in the Neighborhood Connections


corso taranto's green area
piazza Sofia
neighborhood centrality
Ex FIMIT
Ex Tabacchi
Ex Poste
stura di lanzo
fiume po
fiume po
Green Areas
University assets
New Public Space
Neighborhood center
Historically connected
ASA
Historically connected
Street Section in Transition
Historically connected



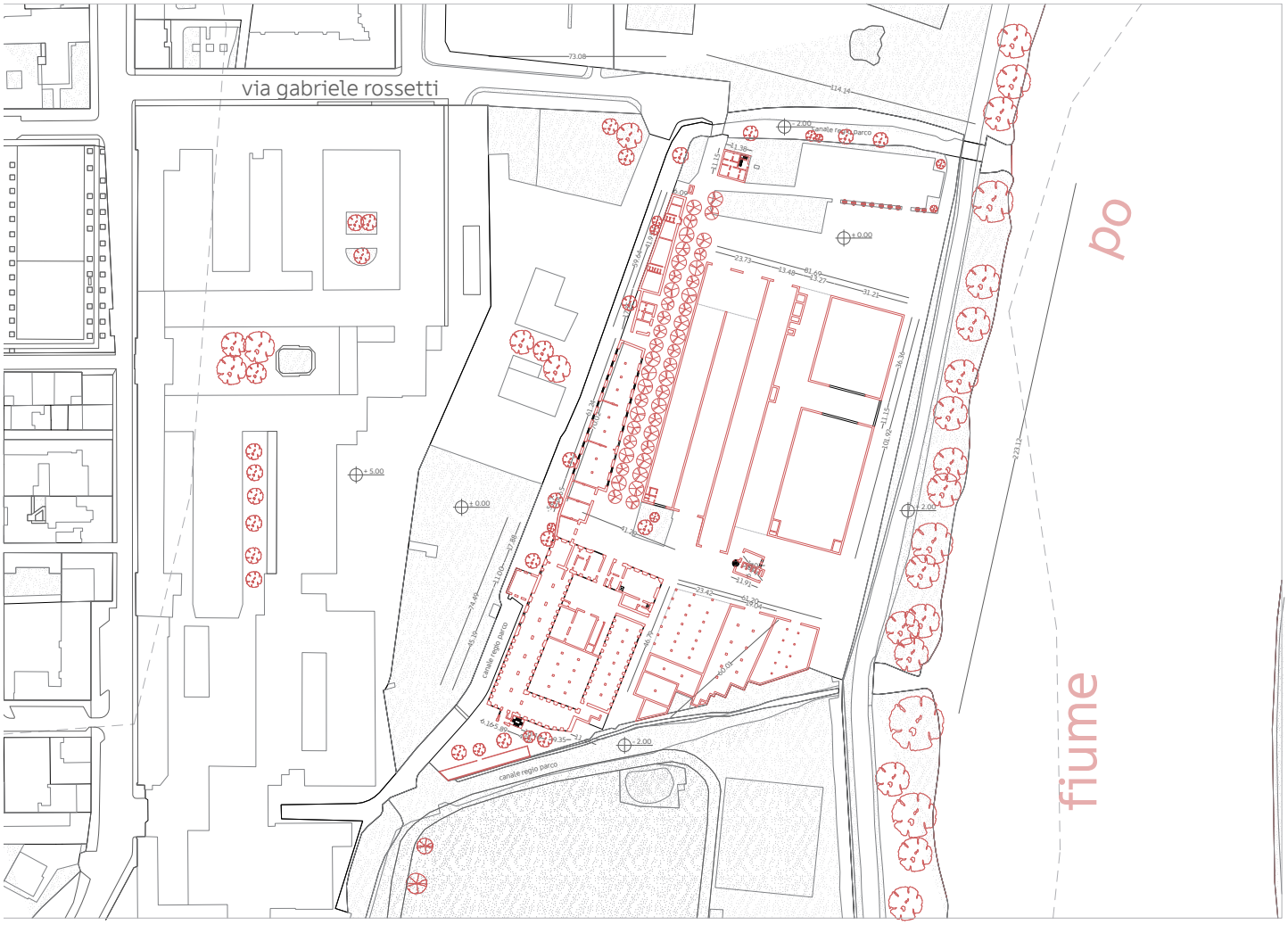
Drawing03. Site plan of Ex-FIMIT and Surrounding


lanzo
fiume
Po
fiume
pa
pa
Fi
Fi Ex-FIMIT
Ta Ex-Tabacchi
pa Park
P Parking
n. Secondary GTT station
n. Primary GTT station
M Prospective Metro station
Site Entrance

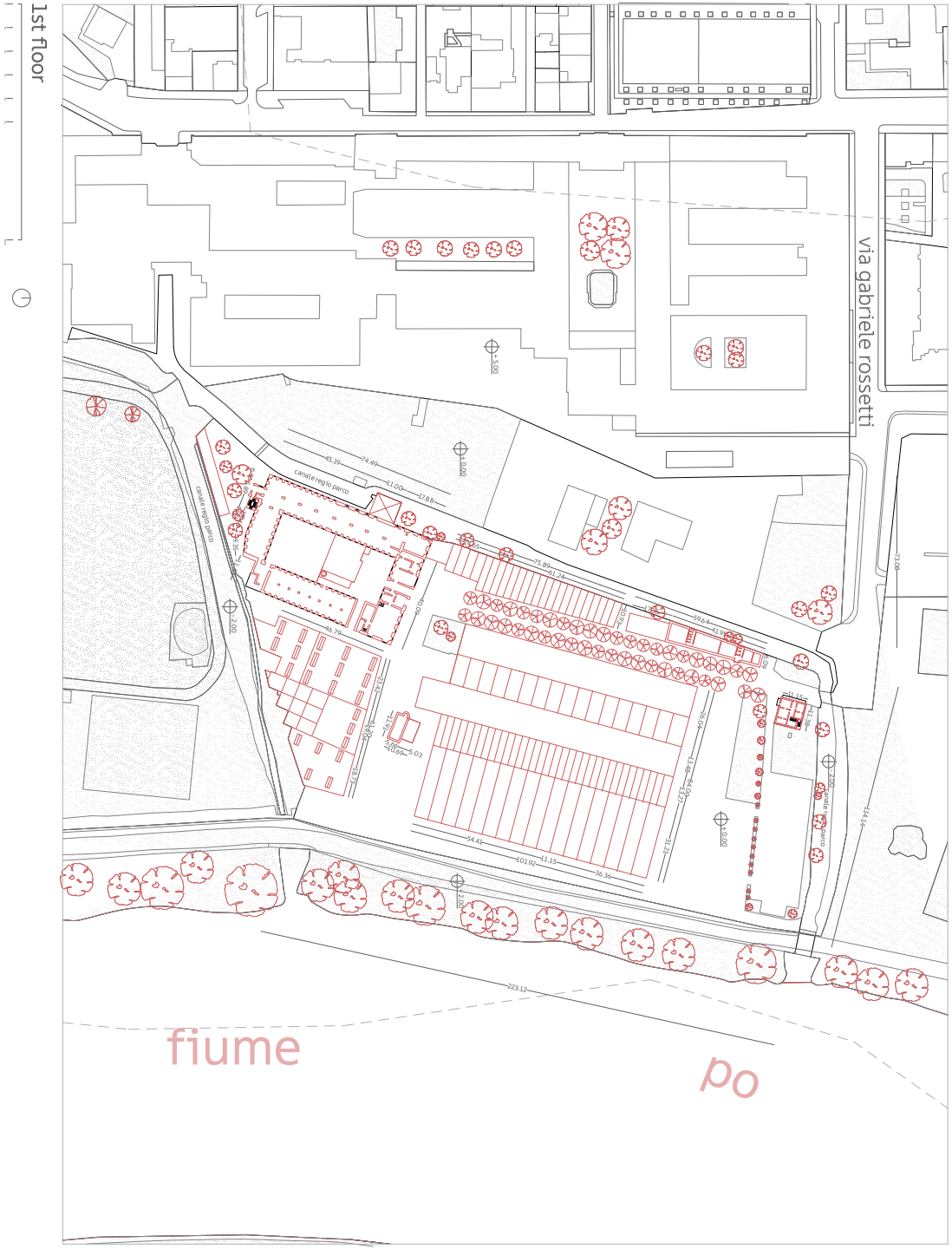


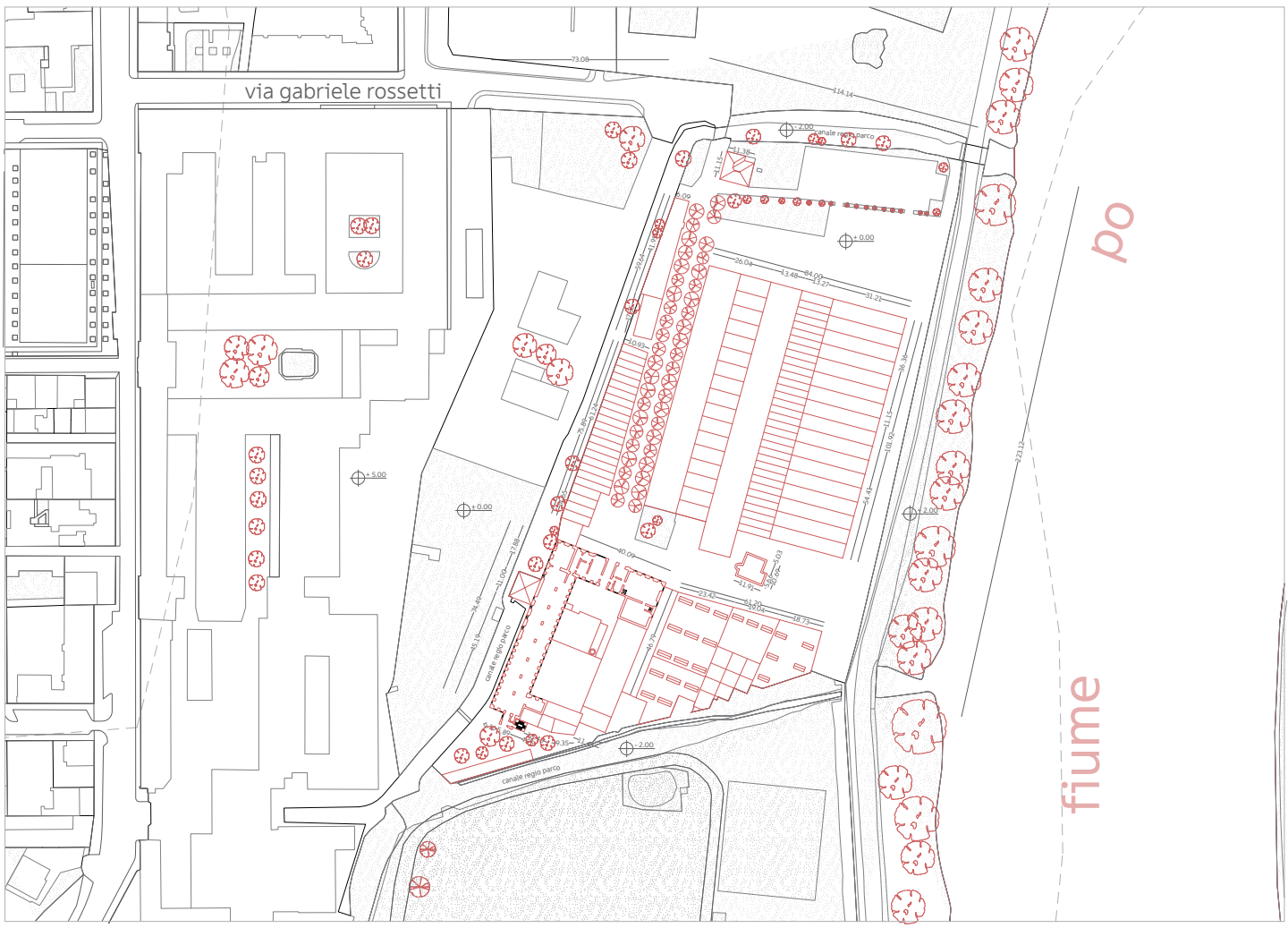
Site Plan

Drawings 04-07. Ex-FIMIT floor Plans , as found based on survey and Università degli Studi di Torino, Città per la riqualificazione funzionale degli immobili dell'"Area della Manifattura Tabacchi" (N.U.E.A. art. 19), "Stato di fatto. Piano terra Ex-FIMIT. Piano interrato ex Manifattura," tav. 3-6, December 1, 2003, scale 1:1,500.

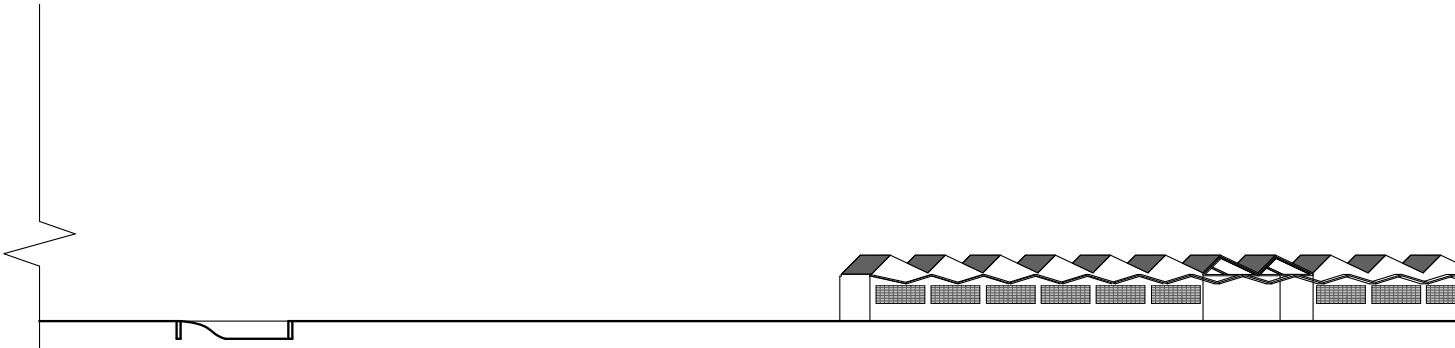


ground floor

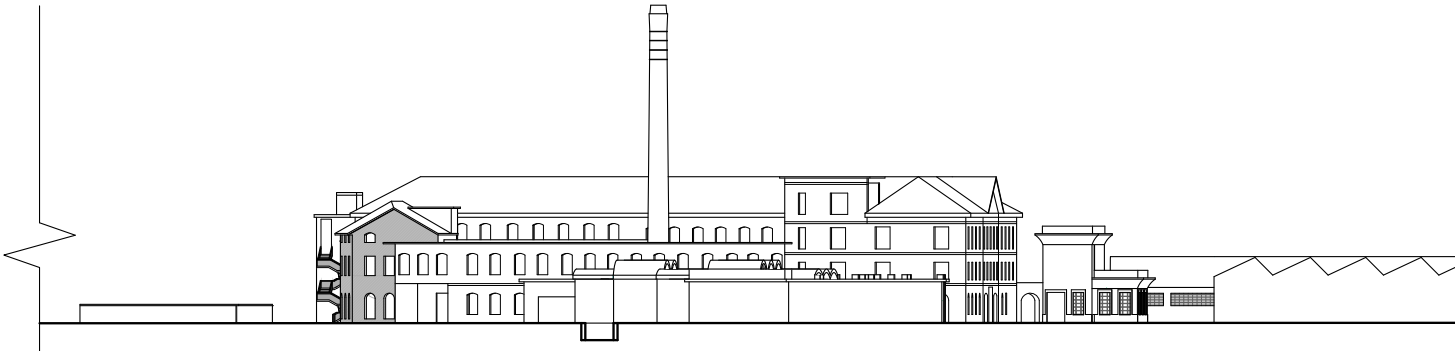

1st floor
via gabriele rossetti
canale regio parco
fiume
po



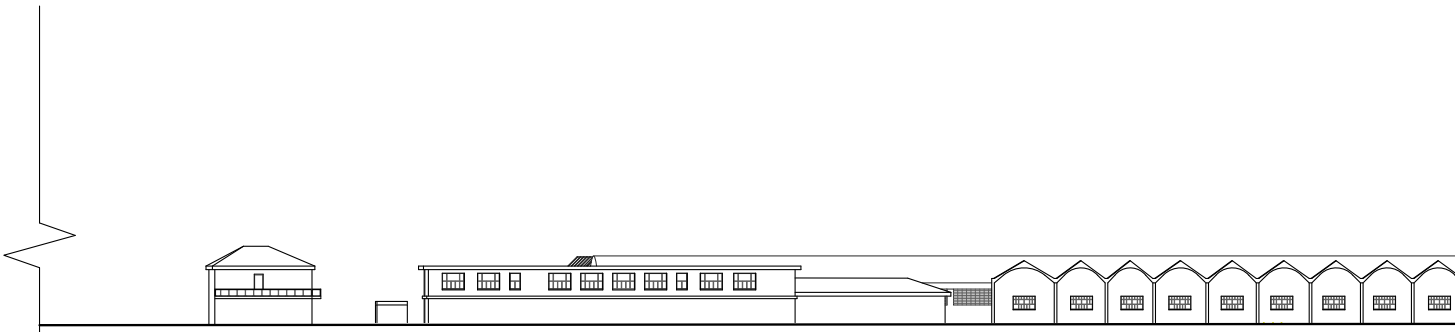
2nd floor



Section-Elevation CC

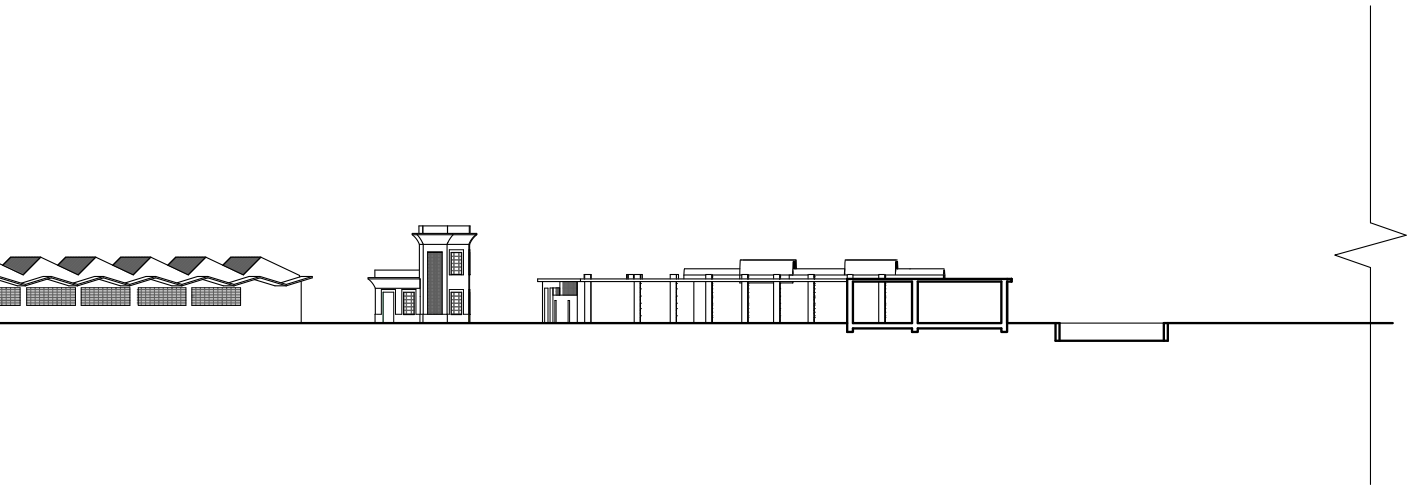


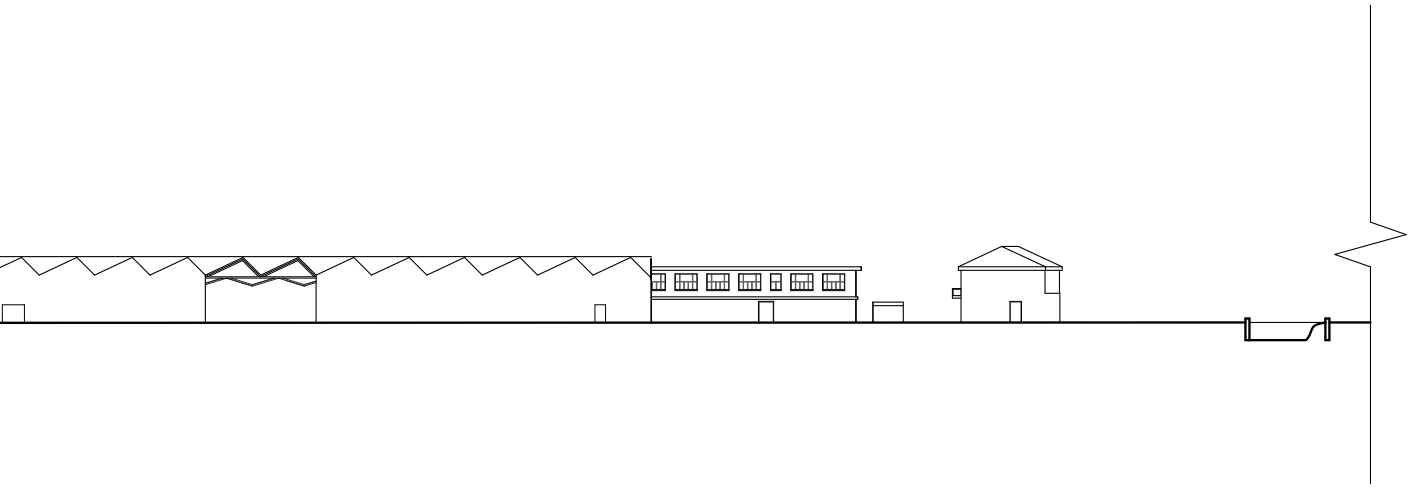
Section-Elevation BB

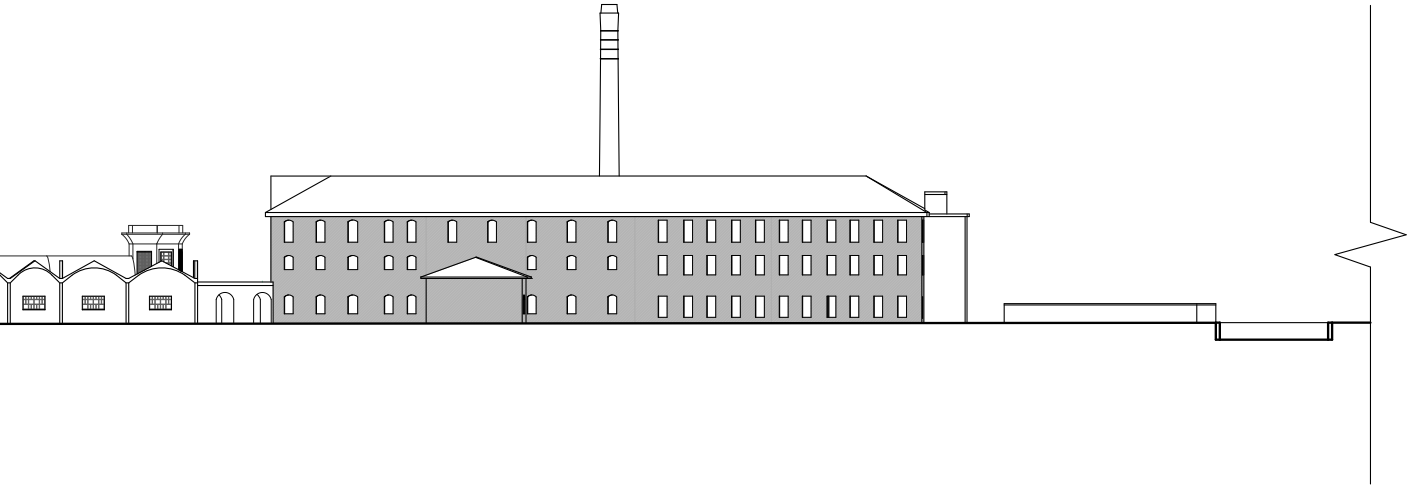


Section-Elevation AA

Drawings 08-13. Ex-FIMIT section-elevations , as found

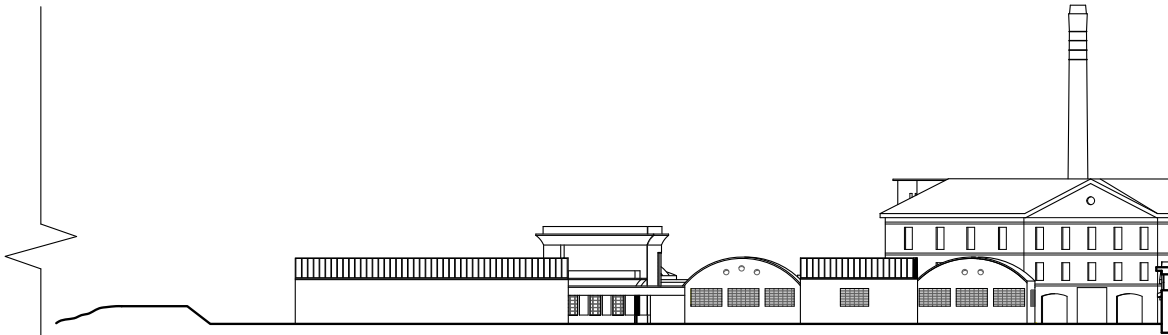




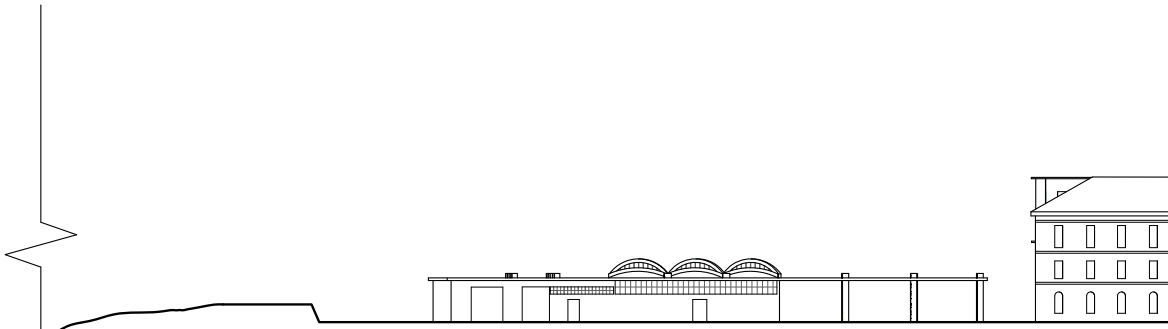




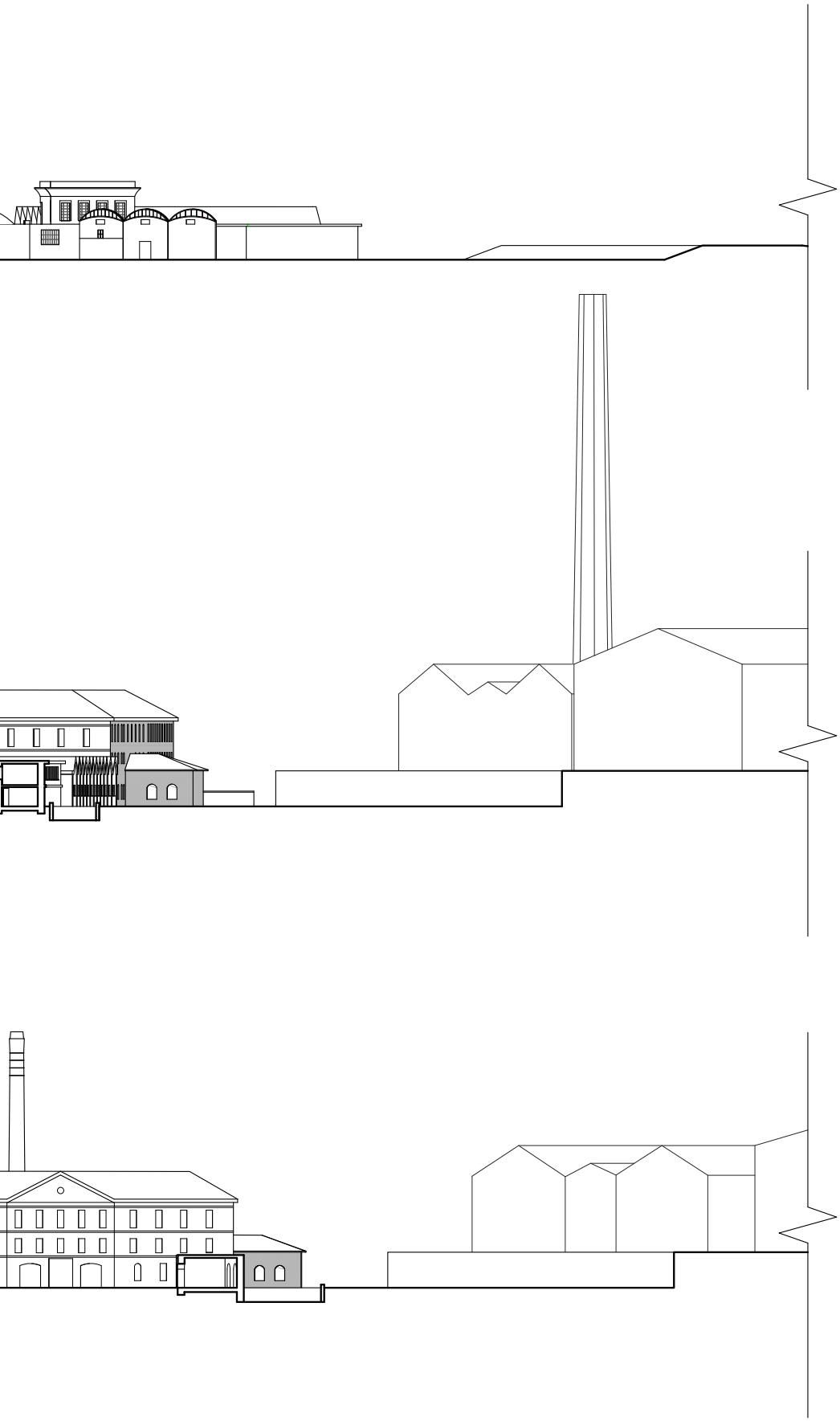
Section-Elevation FF



Section-Elevation EE



Section-Elevation DD



04 02

Design Scenarios

This section explores how urban regeneration on a former industrial site, specifically Ex-FIMIT, can achieve a twofold goal: Conserve the industrial heritage and, at the same time, foster urban safety by ensuring urban vitality and people's presence.

To develop a site-specific response, Ex-FIMIT first approaches the site through a SWOT analysis and and a reading of the neighborhood profile based on the Comune's PRG neighborhood. These analyses would inform a programmatic proposal. Together, these tools first establish a baseline for design scenarios.

While all scenarios pursue the same goal of balancing heritage conservation with urban safety and vitality, they would be structured along a conservation spectrum to examine the degrees of intervention and how varying approaches to conservation affect the broader objectives established throughout the thesis. The scenarios are subsequently evaluated against the criteria established in Part 3.

>1 SWOT Analysis

The following SWOT analysis views Ex-FIMIT not as a neutral object but in its urban context, with consideration of its historical layer. What is more, the thesis considers the layers of planning ambitions and unrealized proposals, seeking opportunities within them. Strengths and weaknesses describe the site's inheritance, and opportunities and threats describe the possibilities. What the analysis reveals, perhaps most clearly, is that some of the site's most persistent constraints are also, under the right conditions, the very things that make it worth designing at all.

S

1. **Heritage character**: contrasting 19th–20th c. buildings, vaulted warehouse, standalone electricity building
2. **Parks** to north and south (Parco della Confluenza , Parco Colletta)
3. Three buildings under Codice dei Beni Culturali → **legal protection** = forced design quality
4. Large, undivided **site footprint** → program flexibility
5. Direct physical edge onto the **Po bank**

W

1. **Single car-only access** via Via G. Rossetti
2. Unaddressed **asbestos hazard**
3. **Material degradation** — roof of building A especially
4. **Canal enclosure** on three sides = structural barrier to pedestrian permeability
5. **No active public-facing frontage** currently

O

1. **Public river access**: connecting to Po bank
2. Bike/pedestrian route from Corso F. Guarrazzi + synergy with Ex-Tabacchi project
3. **Ecosystemic connectivity** assigned by PRG (canals + river combo)
4. Strategic chain: FIMIT → neighborhood center → Spina 4
5. Linea 2 nearby + P. Sofia station (later phase) will redefine **site connectivity**
6. **Regio Parco University Campus** designation → institutional anchor
7. Adjacent to PRG2026 **neighborhood center**

T

1. **Prolonged construction** (dual-site: FIMIT + Tabacchi) → complete inaccessibility risk
2. **Unused canals** = safety/liability hazard
3. **Heritage protection vs PRG** connectivity pressure may conflict at design level
4. Ex-Tabacchi demolition of heritage parts may set precedent affecting FIMIT protections

>*2* Reading Regio Parco Profile

Regio Parco's population is distributed unevenly across a district where residential fabric competes for space with parks, abandoned land, and productive infrastructure : conditions that push daily life toward the western and southern edges, away from the river and the industrial corridor that runs along it.

The neighborhood's demographic profile leans toward a working-age majority, but with a senior population more than twice the size of its children; a gap that likely speaks to decades of slow demographic attrition in a district that regeneration has repeatedly promised to reach , yet has repeatedly bypassed. One in five residents of the district is not Italian, with North African communities making up the largest share of that group; while 12% of the housing stock is publicly owned.

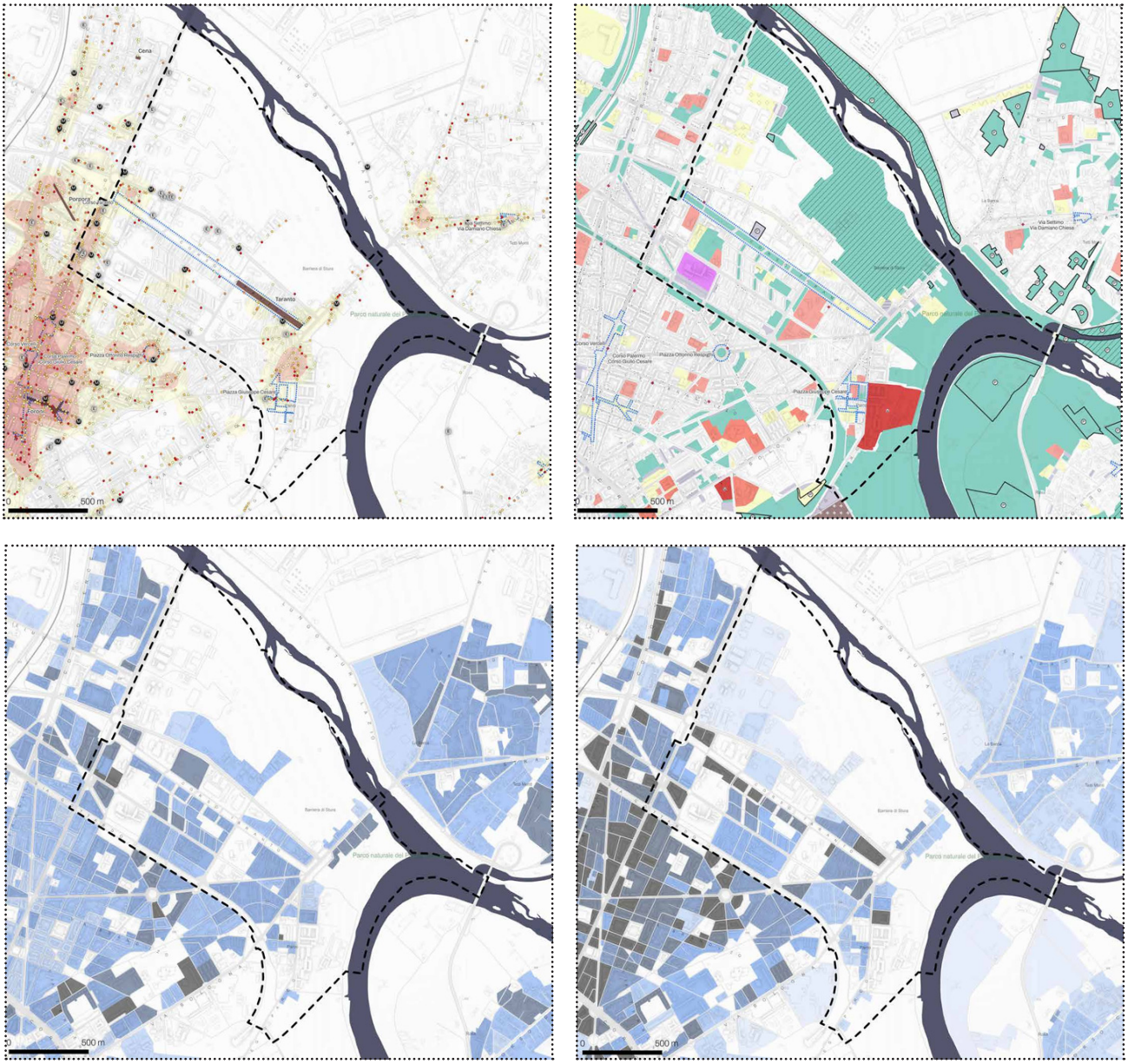


fig 4.10. socio-economic situation of Regio Parco neighborhood, PRG2026 Torino: trading system(top-left), present services in the neighborhood(top-right), foreigner population(down-left) , inhabitants density(down-right)

>3 Defining a Program

The program for Ex-FIMIT is developed in direct relation to what is already being built across the canal: the winning project for Ex-Manifattura Tabacchi, an archival and cultural hub, university classrooms, student residences, and advanced training facilities, defines the institutional character of this zone for the future. The thesis uses that definition as a baseline, with Ex-FIMIT and Ex-Tabacchi being so closely related both geographically and within PRG's designation. The desirable program for Ex-FIMIT does not replicate that of Ex-Tabacchi, but complements it. From the demographic profile of Regio Parco and from a close reading of the site's own history, three programmatic cores are formed : Firstly, a craft and textile production school as a continuation of the production history of the factory ; a water-centric core , based primarily on the site's relation to the Po River and Turin's historical hydraulic system; and finally community-based functions, connecting the river to the city and be a part of day to day life of the neighborhood. The first two cores would be institutionally entangled with Ex-Tabacchi and the university campus designation of the site, while the third, based core would act as a continuation of Ex-Tabacchi's civic core, extending it all the way to the neighborhood center.

>3 cores:

C 01 *Living Water Center (Blue Connection)*
Core 1 establishes FIMIT's main university-linked anchor through a layered program consisting of research, education, and memory: The Water Research Wing (a CWC/PoliTO branch) is paired with researcher and student residency ; The River Discovery Center operates as a specialized, MAcA-type educational space; the Hydraulic Heritage Museum relates to Turin's canal system; and the Environmental Art Gallery closes the core with a water/ecology-focused cultural program, positioning Core 1 as the layer that gives Ex-FIMIT's conservation its intellectual and institutional legitimacy.

C 02 *Water Culture & Production Hub*
Core 2 is primarily a socio-economic core, with the main goal of linking the site's production history to income-generating production. Partially modeled on Polimi's fabrication labs , Dye and Textile Hub would create multidisciplinary labs and workshops for students and artisans working on textile production and material/dye research. Giving the opportunity to bring related disciplines from both Unito and Polito together and creating both exhibitions and markets to both revive the site's production history and generate income to support the core's own activities. The functions within this core would include workshops and labs, exhibition and installation spaces, short-term leasing of artisan residence-work studios, and market spaces.

C 03 *Active River Edge and Civic Core*
Core 3 would act as the main urban core within the site. Its anchor would be a multipurpose hall serving exhibitions and events for Core 1 and 2. River engagement would be achieved through ramps, platforms, and terraces that provide a smooth transition between the site's elevation and that of the riverbank; seating areas; a bike and pedestrian path along the river edge, ultimately connected to the site; rowing and canoe docks; and a café/bar and playgrounds along the river. Meanwhile, community-targeted functions would be distributed within the site , including: community gardens, café/canteen, weekly market shared with Core 2, and the Casa del Quartiere consolidating the core's social mission: health point, social worker, and cultural integration services for the immigrant community, and language meetings (incontri di lingua).

Ex- Tabacchi	Ex- FIMIT
formal / archival / academic	**productive / ecological**
Archives and consultation center	Living heritage: water + textile narrative
University classrooms + residences	Making, repair, craft production
Formal cultural center	movement / river access: continuation of cultural center

>4 Defining three distinct Scenarios

To get to the roots of the relationship between heritage preservation and safety through urban vitality, the thesis develops three design scenarios along a spectrum from maximum preservation to maximum planning priority. In all three, the endeavor is to design with the safety principles established in Part 1, embedded in the programming and spatial composition of functions (as outlined in Table 4.1).

To evaluate the scenarios and determine the main design direction, all three are assessed using the same Multicriteria Evaluation method applied to the preceding case studies. All five criteria are maintained; however, for the modifier criterion (Governance and Efficiency), it is deemed appropriate to rely solely on whether the design scenario aligns with the PRG requirements. The second sub-criterion (assessing how economically and constructively efficient the project was) is removed because it pertains to the post-design and construction phases and therefore falls outside the scope of this thesis.

To remain aligned with the two pillars on which the thesis is built, Heritage Conservation and Safety Generation through Design, the scenarios are further analyzed using a set of requirements that are only partially captured by the multicriteria approach but require deeper examination to determine the final design direction.

fig 4.11. Ex-FIMIT, current situation

Table 4.1. Functions and Temporal arrangements



	Function Core	Function	Timing Potential
Core 1: Living Water Center (Blue Connection) - identity core (uni related)	1. Water Research Wing (CWC PoliTO branch) 2. researcher/student residency 3. River Discovery Center (educational, MAcA-type but specialized) 4. Hydraulic Heritage Museum (Turin canals + Regio Parco) 5. Environmental Art Gallery (water / ecology focused)	Water Research Wing (connected to CWC Polito) : labs: normal height + high ceiling / offices / study room	8am - 8pm
		Student/ researcher Residency (PHD - scholarship placement) : 30ppl	24h
		Environmental Art Gallery (water / ecology focused)	9am - 7pm weekends & special events 9am-9pm
		Hydraulic Heritage Museum +River Discovery Center (for Kids) > educational center connected to museum	9am - 5pm weekends: 9am - 9pm
Core 2 : Water Culture & Production Hub - socio economic core	1. Dye and textile Hub (multidisciplinary lab and workshop modeled based on Polimi) 2. workshops 3. student / resident studios (short-term use which could be with housing) 4. market spaces (to sell the crafts) 5. exhibitions and installations	multidisciplinary lab (Polito's material engineering, architecture, design, and Unito's Fashion, design, and local textile disciplines) + workshops (same building)	8am-5pm / workshop : 8am-8pm
		Exhibitions and installations (Open Space)	24h
		Exhibitions and installations (Interior)	9am - 7pm weekends & special events 9am-9pm
		Work and Live Studios (max20-30ppl)	24h
		market stalls (weekends : garden produce market with Core3)	9am-4pm craft market / 9am-4pm
Core 3 :Active River Edge amd Civic Core: Urban core	1. multi purpose hall (this would also be used for core 1 and 2 for exhibitions and installations and also mainly for events) (this is the same space as market stalls and Exhibitoion /instalations open space) 2. rowing / canoe docks 3. river access (ramps, platforms) 4. steps / terraces / seating and continuous bike road 5. Weekly Health Point 6. community gardens 7. café / canteen 8. playground (for elementary schoolers and kindergarteners) 9. weekly market (same with Core 2) 10.Casa del quartiere (health point / social worker / cultural integration for immigrant community (work with the exhibition and workshops) / incontri di lingua	multi purpose hall (open space)	24h
		multi purpose hall(enclosed space)	8am - 10pm
		playground	24h
		Canoe/boat platforms (counting also open space including sitting areas and landscape): (bike road also goes from here so part of the bike connection system)	24h
		Canoe/boat halls + beach bar etc)	8am - 7pm
		Gardens (Enclosed area)	8am - 8pm
		combination café and study area for students and residents (reserved for students)	8am-10pm
		Café and study area for students and residents	8am-10pm
		Café/ bar / restaurant	8am - 7pm
		Casa del quartiere (helth point / social worker / cultural integration for immigrant community (work with the exhibition and workshops) / incontri di lingua	8am-7pm
		Canteen	11am -3pm / 6pm-9pm
		Study room	8am - 12am
Core 0:Residence outside of FIMIT perimeter	Dorm for Tabacchi and Fimit		8am - 12am

>4.1 Scenario A: Revival of the ensemble (Min Construction)

Scenario A aims to preserve the factory's spatial layout and buildings as completely as possible, with minimal construction and demolition. This scenario treats the existing buildings as vessels for the new program. Adapting the functions to the space rather than vice versa. The intervention strategy in this scenario prioritizes complete conservation of protected buildings, utilizing them through adaptive reuse, while non-protected buildings are selectively renovated.

fig 4.12. Scenario A, within the site

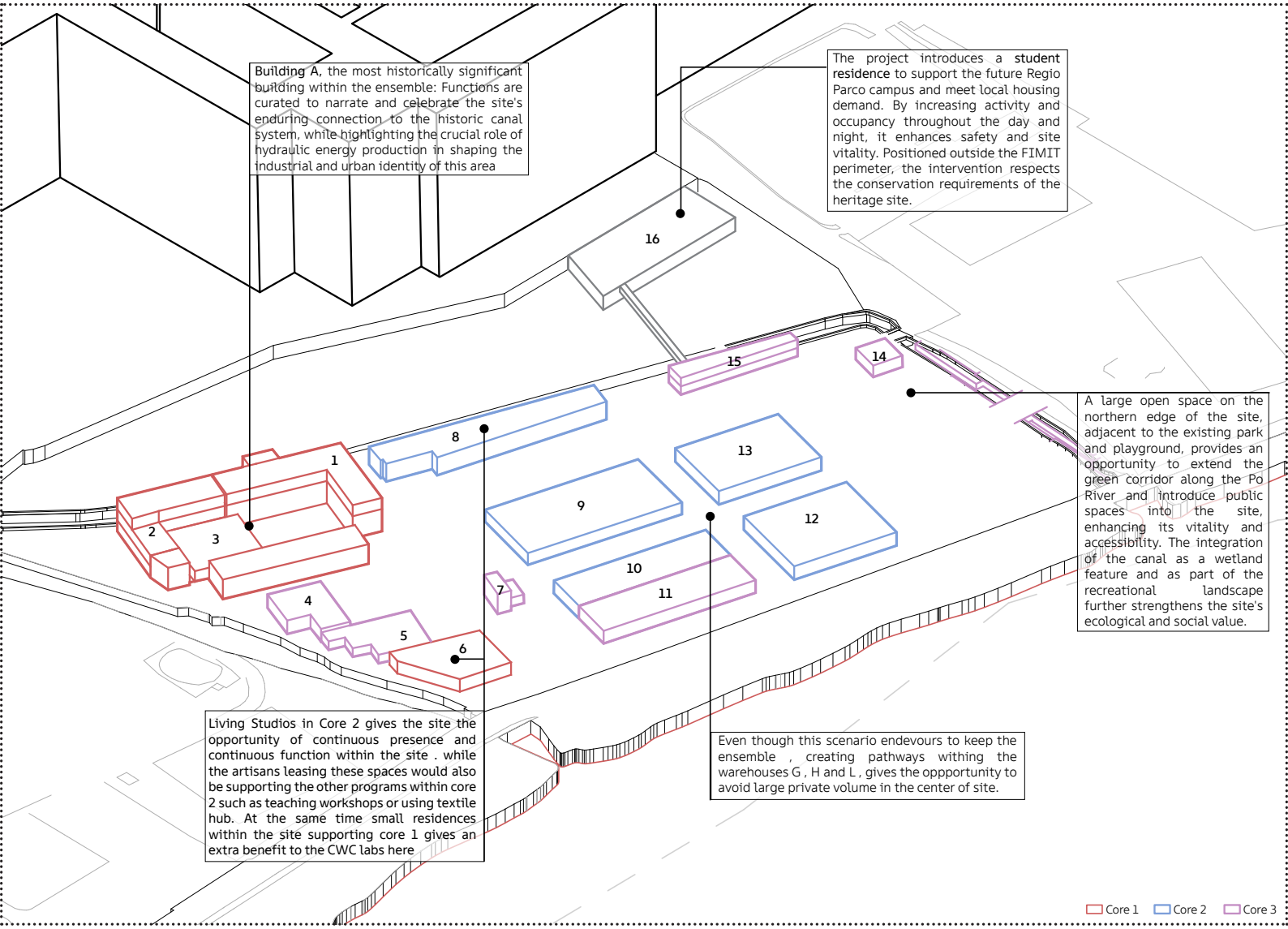


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Function Map . Scenario A

1. Hydraulic Heritage Museum + River Discovery center
2. Water Research Wing (Polito)
3. Environmental Art Gallery
4. Community Gardens
5. Cafe/ hang out / study
6. Scholarship Residence (30p)
7. Casa del Quartiere
8. Living Studios
9. installations and Exhibitions
10. Market Stalls
11. Boat Hall / Eat and Sit
12. Workshop / Multipurpose Hall
13. Textile and Dye Hub (Unito + Polito) / workshops
14. Playground Services (cafe /etc.)
15. Canteen / Study room (EDISU)
16. Regio Parco Student Residence (EDISU)

fig 4.13. Scenario A, program layout



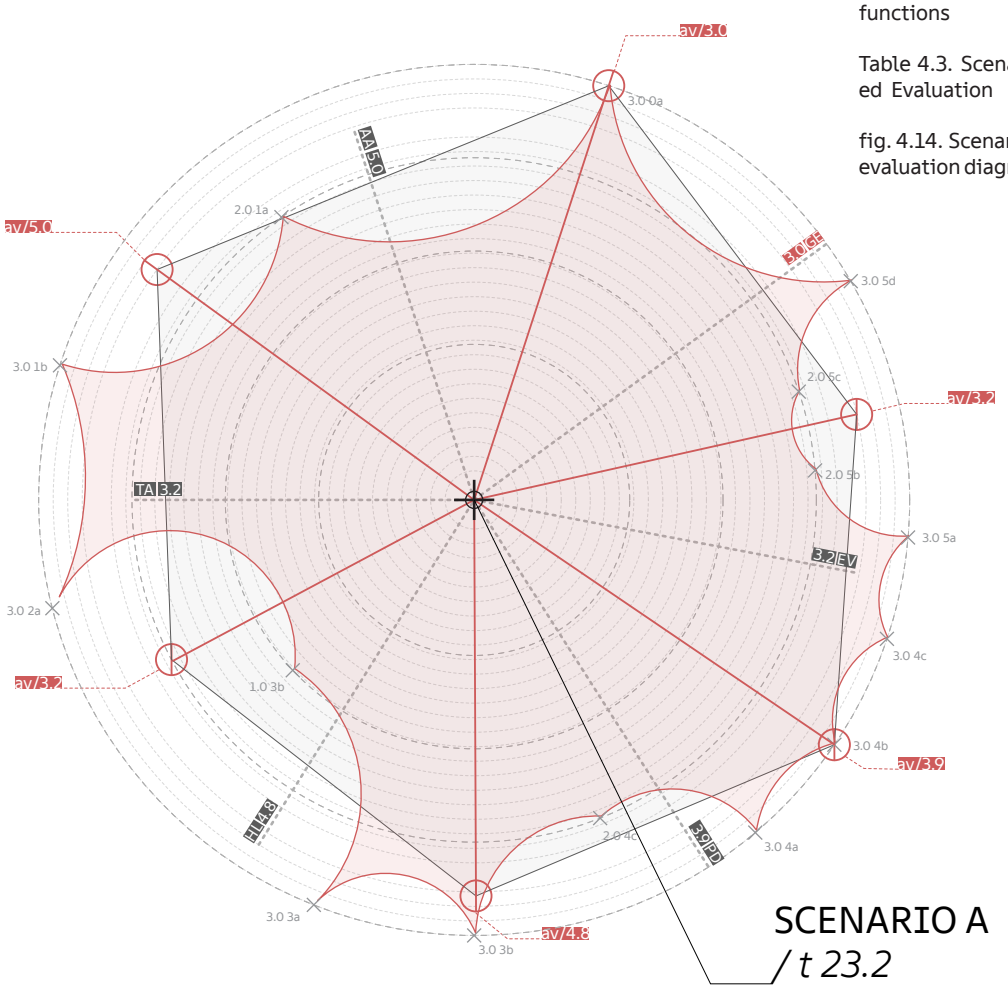
	Scenario A : Revival of the ensemble (Min Construction)			
	Function	**Timing Potential**	**User**	**~Square Meter**
C 01	Water Research Wing (connected to CWC Polito) : labs: normal height + high ceiling / offices / study room	8am - 8pm	University students - researchers - staff	1000
	Student/ researcher Residency (PHD - scholarship placement) : 30ppl	24h	Residents	500
	Environmental Art Gallery (water / ecology focused)	9am - 7pm weekends & special events 9am-9pm	Everyone	1000
	Hydraulic Heritage Museum +River Discovery Center (for Kids) > educational center connected to museum	9am - 5pm weekends: 9am - 9pm	Everyone for museum / mainly children for river discovery	1200
C 02	multidisciplinary lab (Polito's material engineering, architecture, design, and Unito's Fashion, design, and local textile disciplines) + workshops (same building)	8am-5pm / workshop : 8am-8pm	University students and staff + students for workshops	900
	Exhibitions and installations (Open Space)	24h	Everyone	750
	Exhibitions and installations (Interior)	9am - 7pm weekends & special events 9am-9pm	Everyone	750
	Work and Live Studios (max20-30ppl)	24h	Artisans /Students	800
	market stalls (weekends : garden produce market with Core3)	9am-4pm craft market / 9am-4pm	locals	750
C 03	multi purpose hall (open space)	24h	Everyone	2000
	multi purpose hall(enclosed space)	8am - 10pm	0	0
	playground	24h	Everyone to work with existing playground and barbeque area	800
	Canoe/boat platforms (counting also open space including sitting areas and landscape): (bike road also goes from here so part of the bike connection system)	24h	Everyone	2000
	Canoe/boat halls + beach bar etc)	8am - 7pm	Everyone	750
	Gardens (Enclosed area)	8am - 8pm	Locals	300
	combination café and study area for students and residents (reserved for students)	8am-10pm	0	0
	Café and study area for students and residents	8am-10pm	Everyone	400
	Café/ bar / restaurant	8am - 7pm	Everyone	500
	Casa del quartiere (health point / social worker / cultural integration for immigrant community (work with the exhibition and workshops) / incontri di lingua	8am-7pm	Locals : immigrants/ seniors	140
	Canteen	11am -3pm / 6pm-9pm	students	120
	Study room	8am - 12am	students	200
C 00	Residece outside of FIMIT perimeter	8am - 12am	students	1400

Weighted Evaluation Scenario A				
Criteria(C)	**Sub Criteria (SC)**	**point/SC**	**Av.Point/SC**	**Weighted Point/C**
1. Accessibility	1a · Urban connectivity (quantitative)	3	2.5	5.0
	1b · Public surface ratio (quantitative)	2		
2. Temporal Activation	2a · Daily operating hours (quantitative)	3	2.0	3.2
	2b · Active surface ratio (quantitative)	1		
3. Heritage Legibility	3a · Physical preservation (quantitative)	3	2.7	4.8
	3b · Memory and historical respect (qualitative)	3		
	3c · Functional continuity (qualitative)	2		
4. Program Diversity	4a · Use category count (quantitative)	3	3.0	3.9
	4b · User profile range (qualitative)	3		
	4c · Mixed-use integration (qualitative)	3		
5. Environmental Value	5a · Material reuse (quantitative)	3	2.5	3.2
	5b · Energy systems (qualitative)	2		
	5c · Soil and landscape (quantitative)	2		
	5d · Construction carbon footprint (quantitative)	3		
0.Modifier	0a . Governance Compliancy	3	1.5	3.0

Table 4.2. Scenario A, Program functions

Table 4.3. ScenarioA, Weighted Evaluation

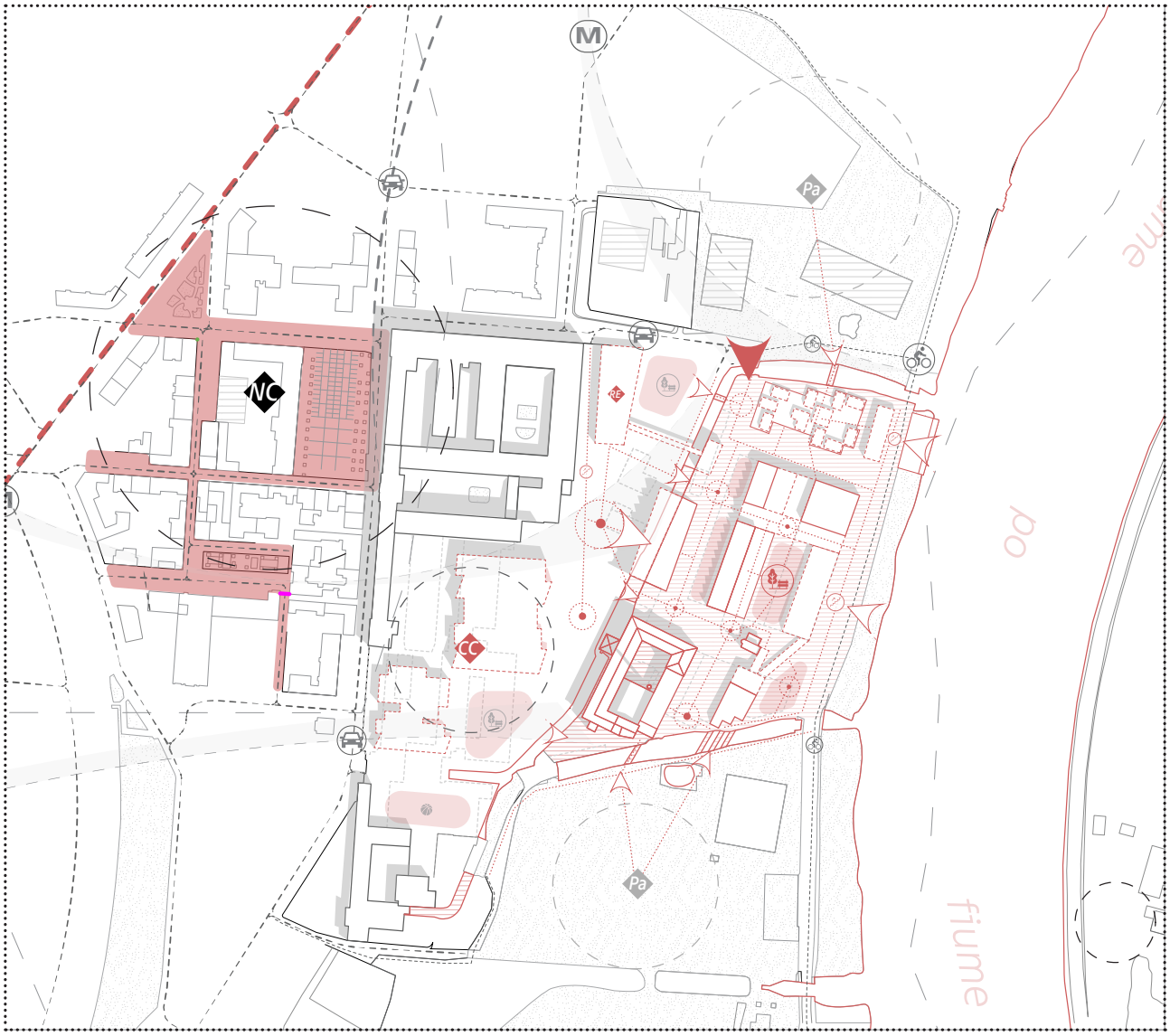
fig. 4.14. Scenario A, weighted evaluation diagram



>4.2 Scenario B: Middle Ground (Heritage Protection + Introduction of the new)

Scenario B establishes a dialogue between preserved heritage structures and additions to the site. While Scenario B has a priority in conserving the protected buildings and using them in the program through adaptive reuse, the non-protected buildings are retained as part of preserving the historical layout.

fig 4.15. Scenario B, within the site

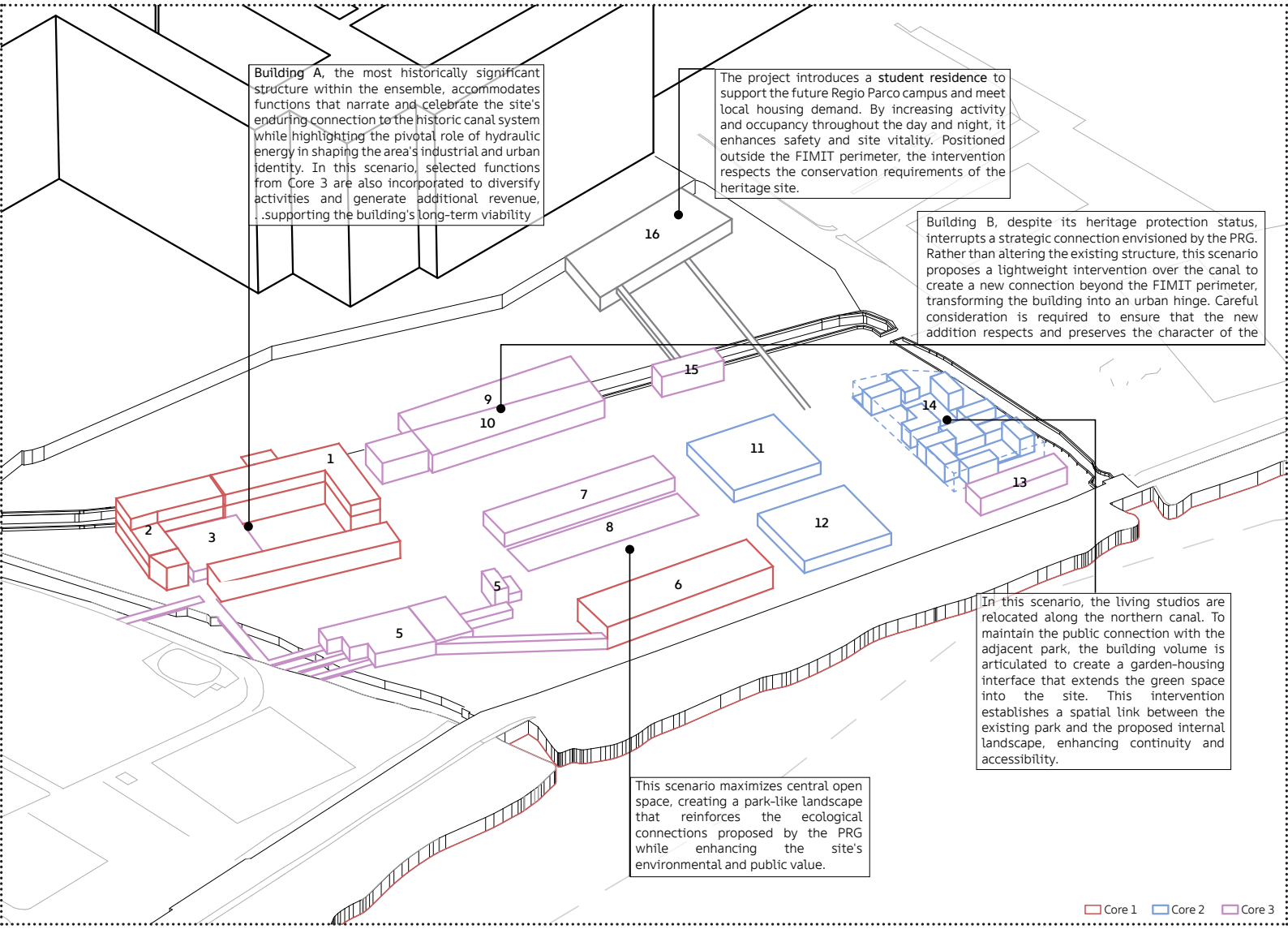


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Function Map . Scenario B

1. Hydraulic Heritage Museum + River Discovery center
2. Water Research Wing (Polito)
3. Cafe/ Bar / etc.
4. Study Hall and River Discovery
5. Casa del Quartiere
6. Art Gallery + Scholarship Residence (30p)
7. Community Gardens
8. Market Stalls
9. Multipurpose Hall
10. Study / Hangout / Cafe
11. Textile and Dye Hub (Unito + Polito) / workshops
12. Exhibitions and installations
13. Boat Hall / sit and eat
14. Living Studios
15. Canteen / Study room (EDISU)
16. Regio Parco Student Residence (EDISU)

fig 4.16. Scenario B, program layout



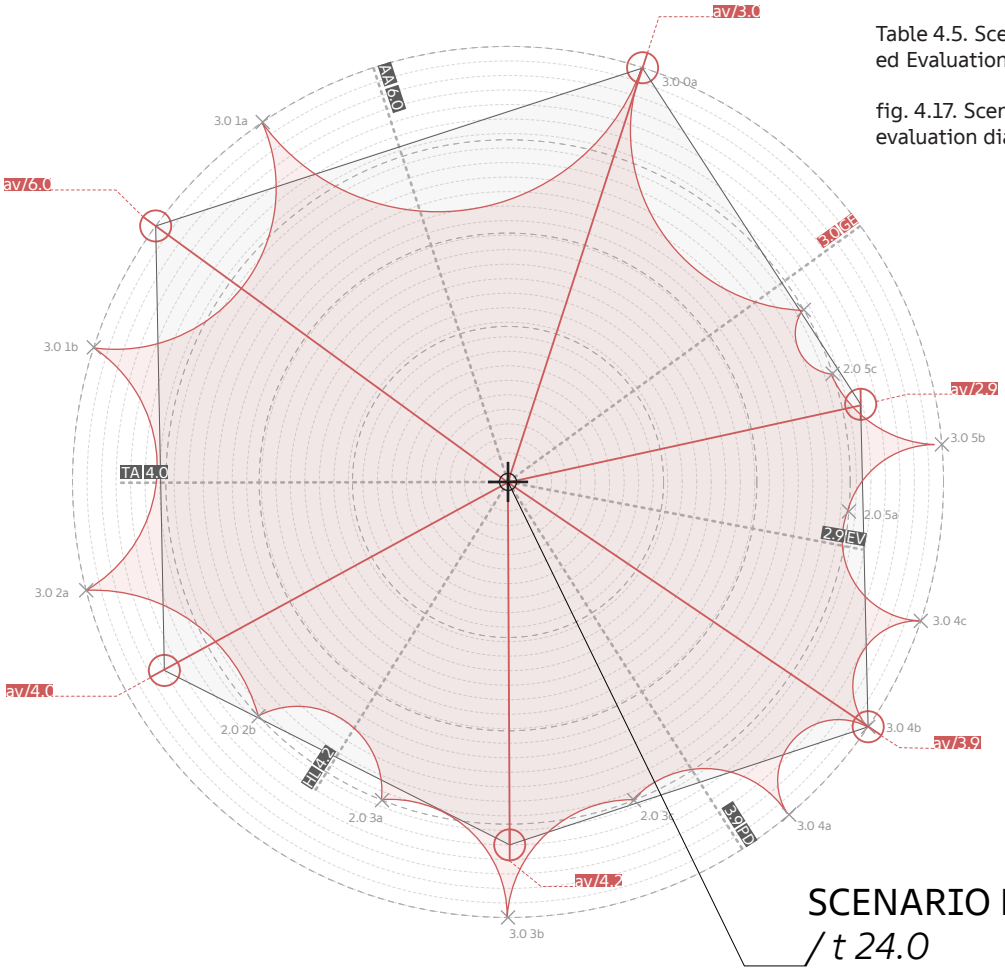
	Scenario B : Middle Ground (Heritage Protection + Introduction of the new)			
	Function	**Timing Potential**	**User**	**~Square Meter**
C 01	Water Research Wing (connected to CWC Polito) : labs: normal height + high ceiling / offices / study room	8am - 8pm	University students - researchers - staff	1000
	Student/ researcher Residency (PHD - scholarship placement) : 30ppl	24h	Residents	500
	Environmental Art Gallery (water / ecology focused)	9am - 7pm weekends & special events 9am-9pm	Everyone	600 (main Building) 400 (new building)
	Hydraulic Heritage Museum +River Discovery Center (for Kids) > educational center connected to museum	9am - 5pm weekends: 9am - 9pm	Everyone for museum / mainly children for river discovery	1000+ 500(only for River Discovery)
C 02	multidisciplinary lab (Polito's material engineering, architecture, design, and Unito's Fashion, design, and local textile disciplines) + workshops (same building)	8am-5pm / workshop : 8am-8pm	University students and staff + students for workshops	800
	Exhibition and installations (Open Space)	24h	Everyone	750
	Exhibitions and installations (Interior)	9am - 7pm weekends & special events 9am-9pm	Everyone	800
	Work and Live Studios (max20-30ppl)	24h	Artisans /Students	1200
	market stalls (weekends : garden produce market with Core3)	9am-4pm craft market / 9am-4pm	locals	300+700outdoor
C 03	multi purpose hall (open space)	24h	Everyone	800
	multi purpose hall(enclosed space)	8am - 10pm	Everyone	600
	playground	24h	Everyone to work with existing playground and barbeque area	1500
	Canoe/boat platforms (counting also open space including sitting areas and landscape): (bike road also goes from here so part of the bike connection system)	24h	Everyone	1000 + 1000(deck)
	Canoe/boat halls + beach bar etc)	8am - 7pm	Everyone	250
	Gardens (Enclosed area)	8am - 8pm	Locals	500
	combination café and study area for students and residents (reserved for students)	8am-10pm	Students	550
	Café and study area for students and residents	8am-10pm	Everyone	200
	Café/ bar / restaurant	8am - 7pm	Everyone	400
	Casa del quartiere (health point / social worker / cultural integration for immigrant community (work with the exhibition and workshops) / incontri di lingua	8am-7pm	Locals : immigrants/ seniors	400
	Canteen	11am -3pm / 6pm-9pm	students	200
	Study room	8am - 12am	students	400
C 00	Residece outside of FIMIT perimeter	8am - 12am	students	1400

Weighted Evaluation Scenario B				
Criteria(C)	**Sub Criteria (SC)**	**point/SC**	**Av.Point/SC**	**Weighted Point/C**
1. Accessibility	1a · Urban connectivity (quantitative)	3	3.0	6.0
	1b · Public surface ratio (quantitative)	3		
2. Temporal Activation	2a · Daily operating hours (quantitative)	3	2.5	4.0
	2b · Active surface ratio (quantitative)	2		
3. Heritage Legibility	3a · Physical preservation (quantitative)	2	2.3	4.1
	3b · Memory and historical respect (qualitative)	3		
	3c · Functional continuity (qualitative)	2		
4. Program Diversity	4a · Use category count (quantitative)	3	3.0	3.9
	4b · User profile range (qualitative)	3		
	4c · Mixed-use integration (qualitative)	3		
5. Environmental Value	5a · Material reuse (quantitative)	2	2.2	2.9
	5b · Energy systems (qualitative)	3		
	5c · Soil and landscape (quantitative)	2		
	5d · Construction carbon footprint (quantitative)	2		
0.Modifier	0a . Governance Compliancy	3	1.5	3.0

Table 4.4. Scenario B, Program functions

Table 4.5. Scenario B, Weighted Evaluation

fig. 4.17. Scenario B, weighted evaluation diagram



>4.3 Scenario C: Program Over Preservation (Planning and Program over Heritage Protection)

Scenario C prioritizes programmatic and urban requirements over conservation. Scenario C preserves the protected buildings but uses selective demolition where it serves its planning purpose. Meanwhile, although the non-protected buildings are partially retained, they are used primarily to meet the scenario's programmatic requirements, avoiding large-scale demolition and new construction, for environmental reasons rather than conservation.

fig 4.18. Scenario C, within the site

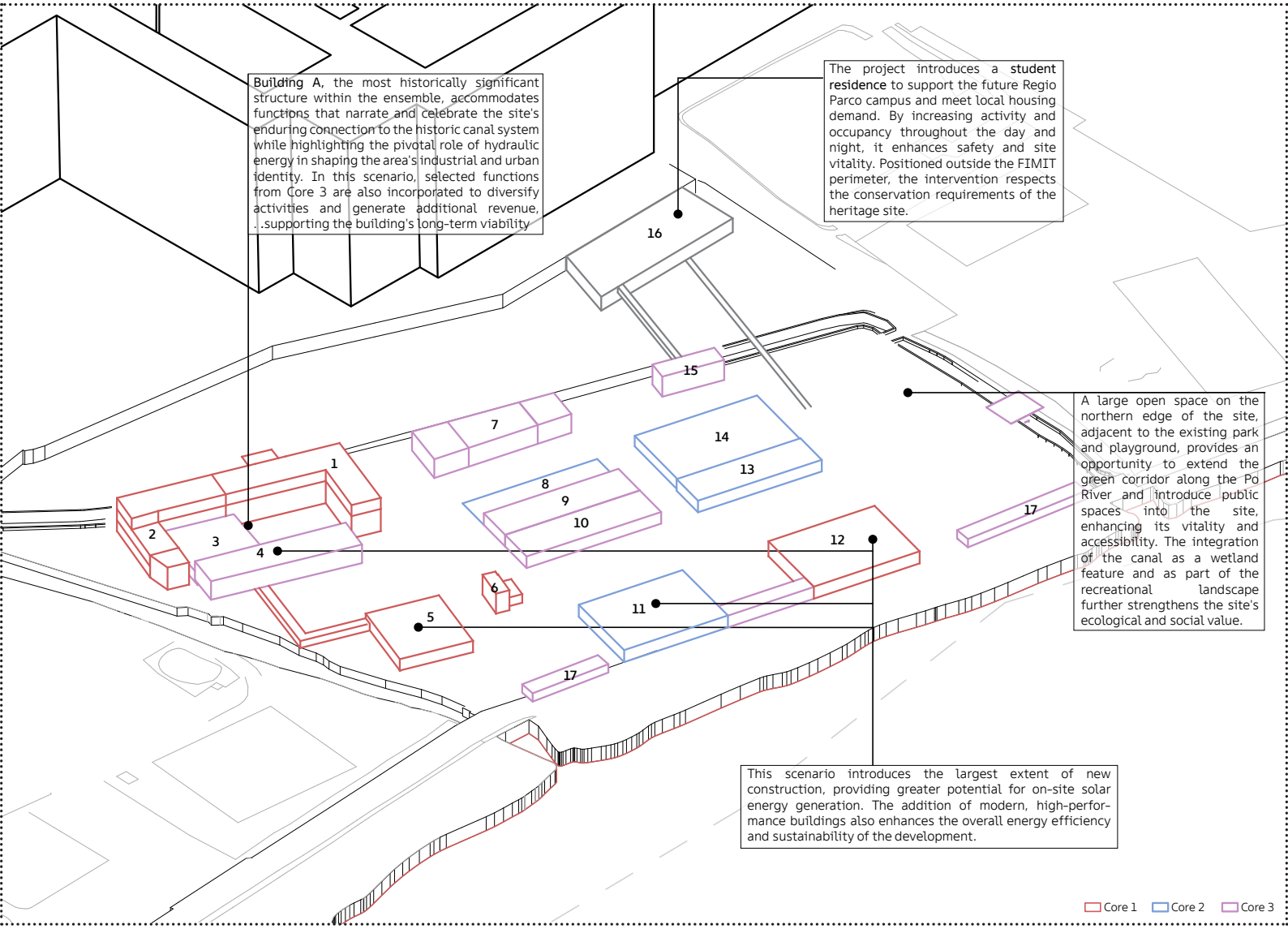


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Function Map . Scenario C

1. Hydraulic Heritage Museum + River Discovery center
2. Water Research Wing (Polito)
3. Cafe/ Bar / etc.
4. Multipurpose Hall
5. Scholarship Residence (30p)
6. Cafe/Bar/etc.
7. Casa del Quartiere
8. Outdoor Event Space
9. Community Gardens
10. Market Stalls
11. Environmental Art Gallery
12. Textile and Dye Hub (Unito + Polito) / workshops
13. Exhibitions and installations
14. Living Studios
15. Canteen / Study room (EDISU)
16. Regio Parco Student Residence (EDISU)
17. Boat Hall / eat and sit

fig 4.19. Scenario C, program layout



Scenario C : Program Over Preservation (Planning and Program over Heritage Protection)

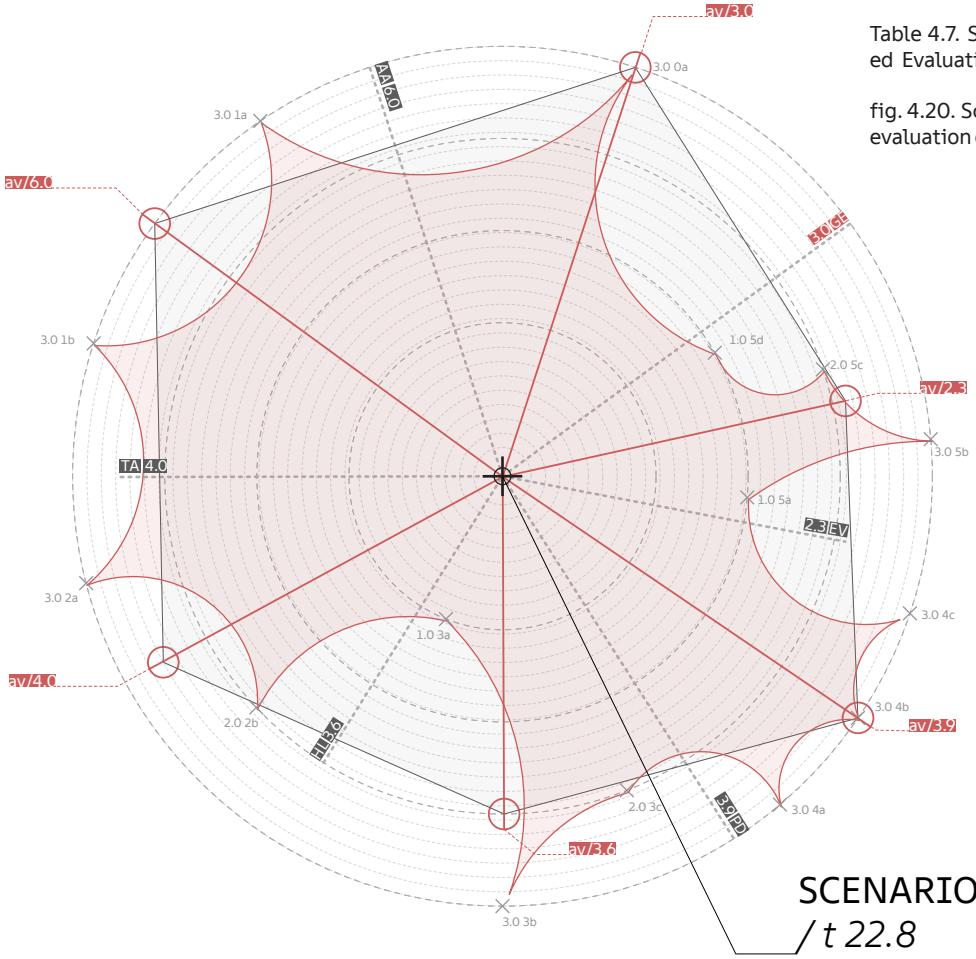
	Function	Timing Potential	User	~Square Meter
C 01	Water Research Wing (connected to CWC Polito) : labs: normal height + high ceiling / offices / study room	8am - 8pm	University students - researchers - staff	1000
	Student/ researcher Residency (PHD - scholarship placement) : 30ppl	24h	Residents	600
	Environmental Art Gallery (water / ecology focused)	9am - 7pm weekends & special events 9am-9pm	Everyone	1000
	Hydraulic Heritage Museum +River Discovery Center (for Kids) > educational center connected to museum	9am - 5pm weekends: 9am - 9pm	Everyone for museum / mainly children for river discovery	1200
C 02	multidisciplinary lab (Polito's material engineering, architecture, design, and Unito's Fashion, design, and local textile disciplines) + workshops (same building)	8am-5pm / workshop : 8am-8pm	University students and staff + students for workshops	1000
	Exhibitions and installations (Open Space)	24h	Everyone	800
	Exhibitions and installations (Interior)	9am - 7pm weekends & special events 9am-9pm	Everyone	600
	Work and Live Studios (max20-30ppl)	24h	Artisans /Students	1200
	market stalls (weekends : garden produce market with Core3)	9am-4pm craft market / 9am-4pm	locals	600
C 03	multi purpose hall (open space)	24h	Everyone	600
	multi purpose hall(enclosed space)	8am - 10pm	0	0
	playground	24h	Everyone to work with existing playground and barbeque area	800
	Canoe/boat platforms (counting also open space including sitting areas and landscape): (bike road also goes from here so part of the bike connection system)	24h	Everyone	1000 + 1000(deck)
	Canoe/boat halls + beach bar etc)	8am - 7pm	Everyone	250
	Gardens (Enclosed area)	8am - 8pm	Locals	600
	combination café and study area for students and residents (reserved for students)	8am-10pm	Students	80 (Electricity Building)
	Café and study area for students and residents	8am-10pm	Everyone	300
	Café/ bar / restourant	8am - 7pm	Everyone	600 + 150 (by the bank)
	Casa del quartiere (helth point / social worker / cultural integration for immigrant community (work with the exhibition and workshops) / incontri di lingua	8am-7pm	Locals : immigrants/ seniors	300
	Canteen	11am -3pm / 6pm-9pm	students	200
	Study room	8am - 12am	students	500
C 00	Residence outside of FIMIT perimeter	8am - 12am	students	1400

Weighted Evaluation Scenario A				
Criteria(C)	**Sub Criteria (SC)**	**point/SC**	**Av.Point/SC**	**Weighted Point/C**
1. Accessibility	1a · Urban connectivity (quantitative)	3	3.0	6.0
	1b · Public surface ratio (quantitative)	3		
2. Temporal Activation	2a · Daily operating hours (quantitative)	3	2.5	4.0
	2b · Active surface ratio (quantitative)	2		
3. Heritage Legibility	3a · Physical preservation (quantitative)	1	2.0	3.6
	3b · Memory and historical respect (qualitative)	3		
	3c · Functional continuity (qualitative)	2		
4. Program Diversity	4a · Use category count (quantitative)	3	3.0	3.9
	4b · User profile range (qualitative)	3		
	4c · Mixed-use integration (qualitative)	3		
5. Environmental Value	5a · Material reuse (quantitative)	1	1.7	2.3
	5b · Energy systems (qualitative)	3		
	5c · Soil and landscape (quantitative)	2		
	5d · Construction carbon footprint (quantitative)	1		
0.Modifier	0a . Governance Compliancy	3	1.5	3.0

Table 4.6. Scenario C, Program functions

Table 4.7. Scenario C, Weighted Evaluation

fig. 4.20. Scenario C, weighted evaluation diagram



>5 Comparison of the scenarios

A/ Comparison based on Multi-Criteria Framework

The three scenarios were evaluated using the same multi-criteria framework as the case studies, yielding scores of 23.2 (Scenario A), 24.0 (Scenario B), and 22.8 (Scenario C) out of 30. What differentiates them most is the logic of program composition, although the number of preserved elements directly affects the Heritage Legibility and Environmental Value criteria.

Scenario A, following a min-construction logic, in which preservation extends beyond heritage-protected buildings, retains the most fabric because reconstruction is unnecessary, rather than because conservation demands it. Meanwhile, Scenario B takes an inverted approach: heritage-protected fabric is preserved and restored, while the rest of the ensemble is retained only when the program demands it. Scenario C fully subordinates conservation to urban planning, and, when it comes to preserving non-heritage-protected buildings, it retains them only when demolition is not necessary.

As a result, despite its narrower preservation footprint, scenario B's score in Heritage legibility and Environmental Value, is not that much lower than scenario A. Subsequently, it can be detected that meeting heritage protection requirements does not come at the expense of urban performance, as We see that scenario C, despite prioritizing planning and programmatic logic, does not outperform scenario B on Accessibility and Temporal Activation.

B/ Comparison based on Heritage Intervention

Looking more closely at Heritage Legibility in the multicriteria evaluation, Scenario A clearly achieves the highest score . Yet the difference between scenarios lies in a single sub-criterion: the percentage of preservation in terms of material and volume. This requires unpacking, because most of the Ex-FIMIT site is not under heritage protection, making it reasonable on face value to demolish all non-protected structures. Yet Article 6 of the Venice Charter establishes that conservation requires maintaining the setting; therefore, no demolition or modification that alters the relations of mass and space is allowed. At first glance, this appears to settle the question. This raises a question the quantitative preservation score alone cannot answer: does the amount of demolition determine whether a heritage setting is overall respected? The Nizhny Tagil Charter is instructive here, treating industrial heritage as systems rather than standalone buildings . This understanding of significance opens space to evaluate what replaces demolished fabric, not only what is lost.

Examining the composition of Scenarios B and C closely makes it evident that although demolition of warehouse structures has occurred in both, the new volumes introduced follow the same spatial logic as the original layout while simultaneously improving accessibility. This shifts the comparison toward another question: which specific buildings were demolished, why, and what replaced them. Scenario B does not go further than Scenario A with respect to heritage-protected buildings in terms of demolition. Scenario C, however, takes two more significant steps: it demolishes portions of Building C (which is under heritage protection) in favor of widening canal access and aligning with the strategic connections set in the PRG; and it replaces a notable portion of Building A, the most significant structure on site in terms of heritage value. In the case of Building C, Scenario C could argue that the repetitive nature of its constituent buildings ,both in facade rhythm and

interior organization , provides justification for selective demolition without loss of overall character. The treatment of Building A is harder to defend: even where precedents exist, removing a portion that appears to represent a distinct historical phase is difficult to reconcile with conservation principles.

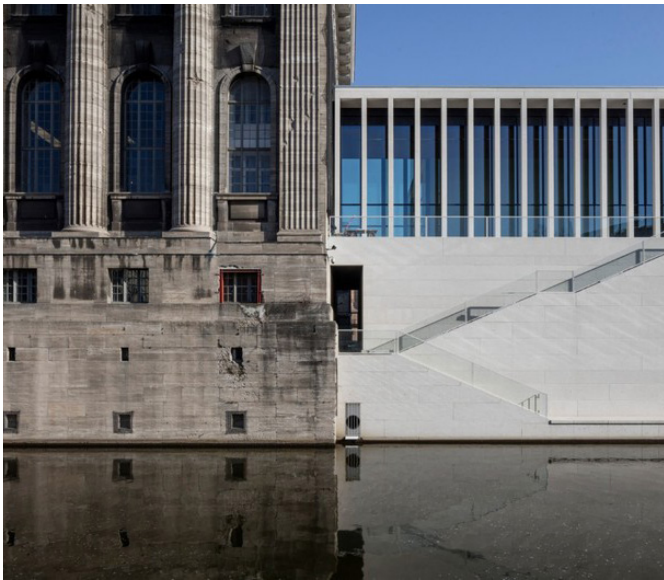
Scenario B takes a different approach: rather than demolishing protected fabric, it adds a volume to Building C. Under Articles 12 and 13 of the Venice Charter, this intervention could argue that the introduced volume is distinguishable from the original and compatible with it, and that rather than eliminating the canal-facing facade, it converts it into an interior facade (a logic with a successful precedent in the Museo dell'Opera del Duomo in Florence. It could further be argued that, given the site survey evidence that the facade in that section has already been significantly altered, the intervention is less damaging than it might appear. In light of conservation principles, however, this argument falls short on two fronts: it compromises the symmetry of matching facades on both sides of the building, and it disrupts the historic spatial relationship between Building C and the canal.

Yet while Scenario A's more restrained approach makes it the strongest choice in terms of pure heritage protection, Scenario B demonstrates that a higher degree of intervention does not necessarily preclude a strong conservation outcome. Its problematic intervention at Building C is not fundamental to the scheme's defining logic and can therefore be addressed through a targeted adjustment: reducing the introduced volume to the length of a few modules of Building C rather than to its full length. This preserves the "hinge over the canal" spatial idea while maintaining the historic relationship between the building and the canal. The Neues Museum in Berlin provides a relevant precedent for this approach, where an addition is constructed in relation to the original fabric while respecting the spatial sequence it once defined. With this adjustment, Scenario B can approach the heritage compatibility of Scenario A while retaining the stronger programmatic and urban qualities that distinguish it.

fig. 4.21. Museo dell'Opera del Duomo in Florence

fig. 4.22. Neues Museum in Berlin





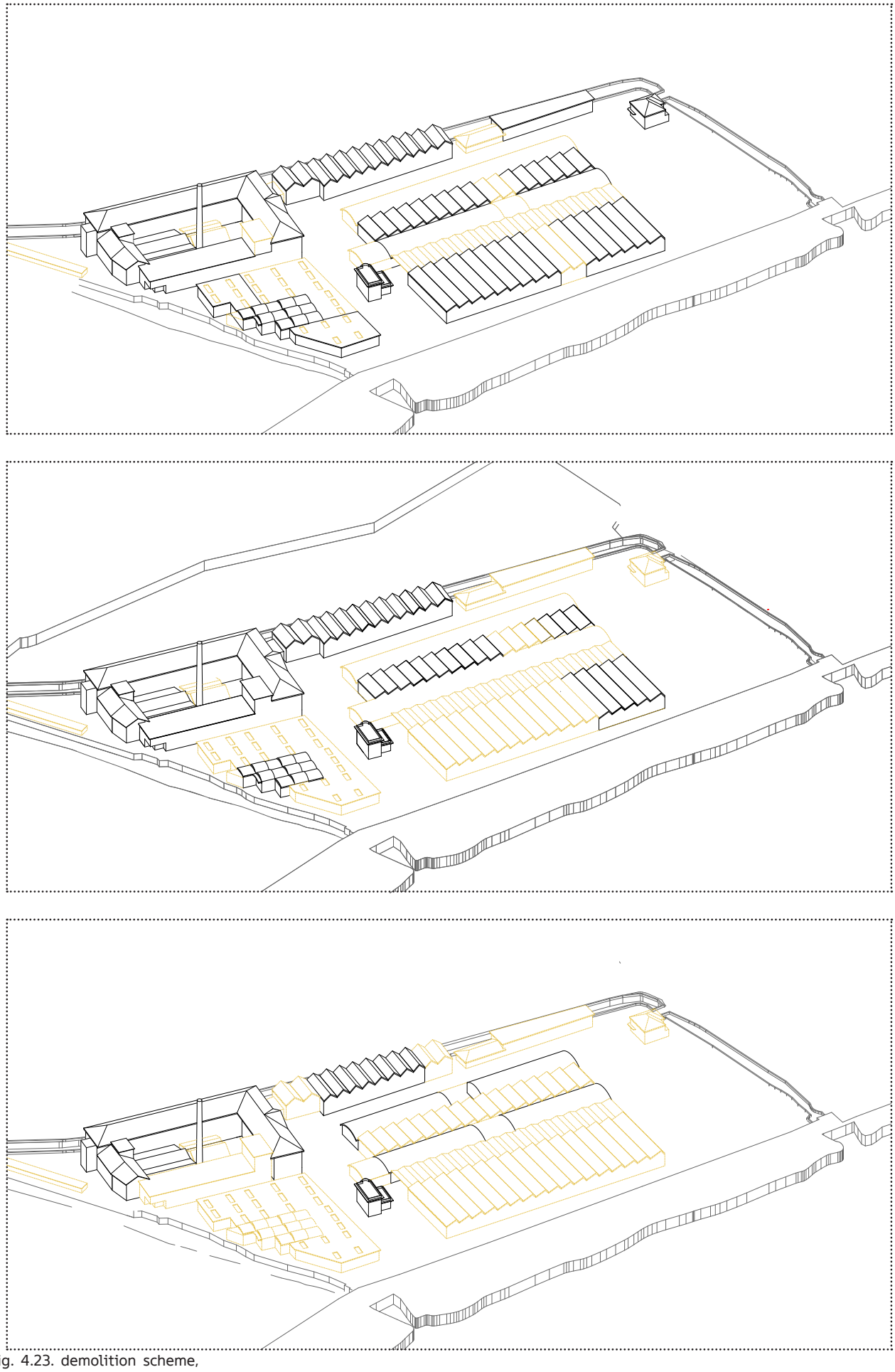
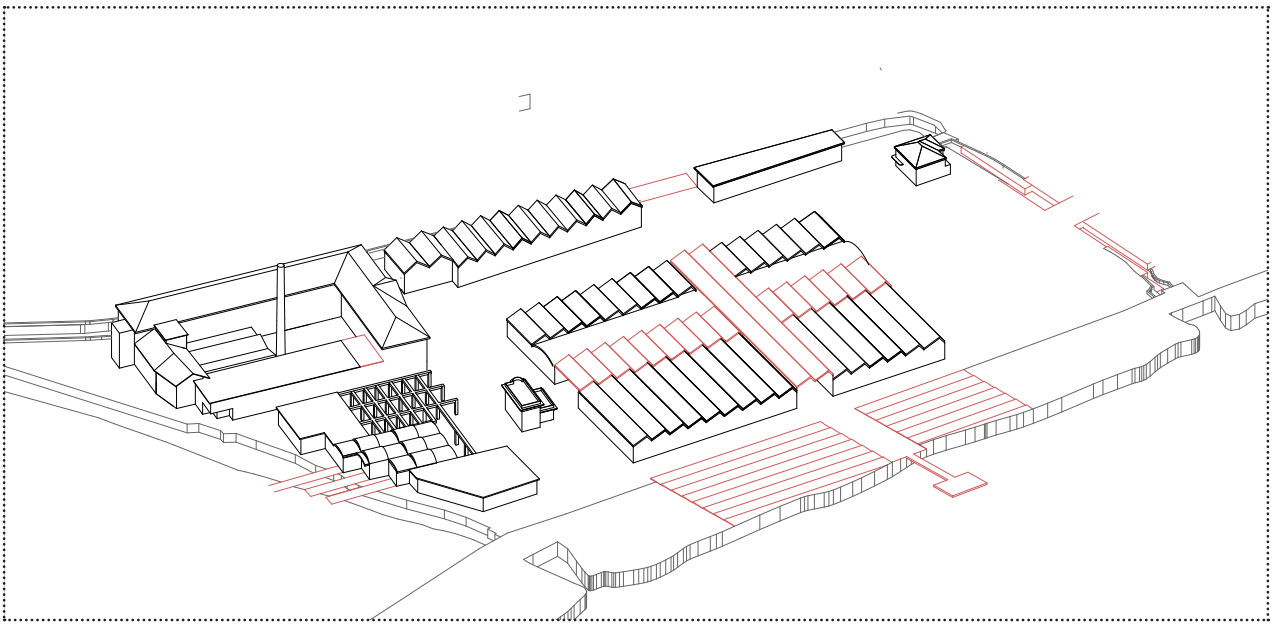
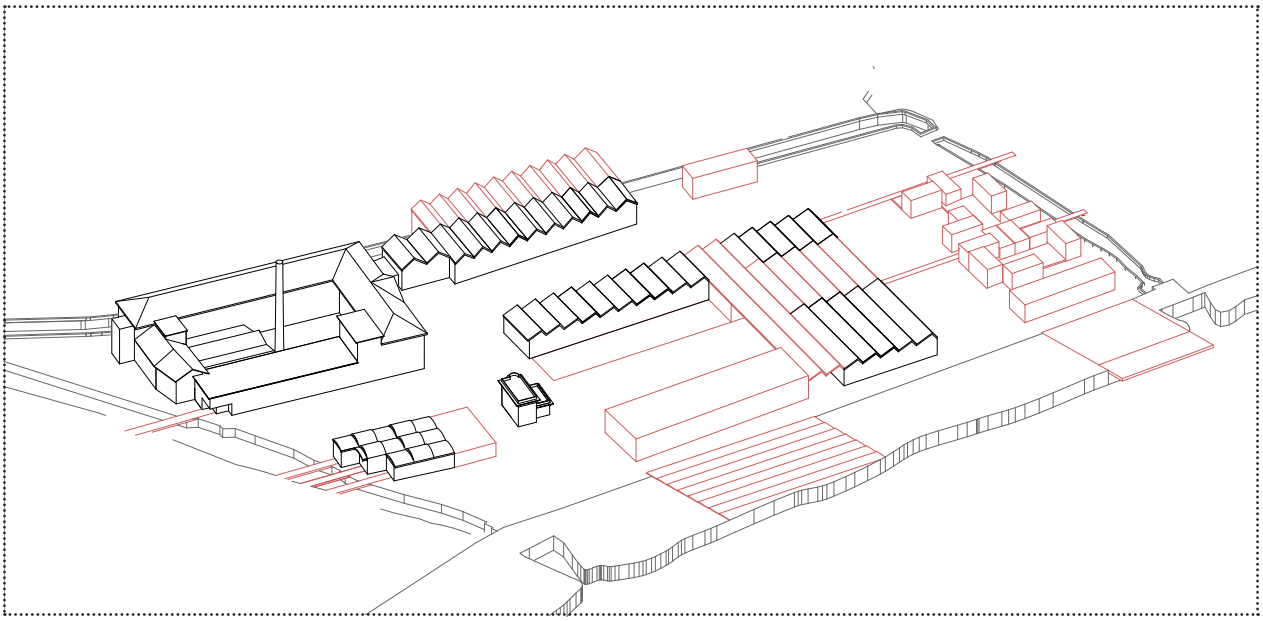


fig. 4.23. demolition scheme, scenarios A,B&C (Top-down)





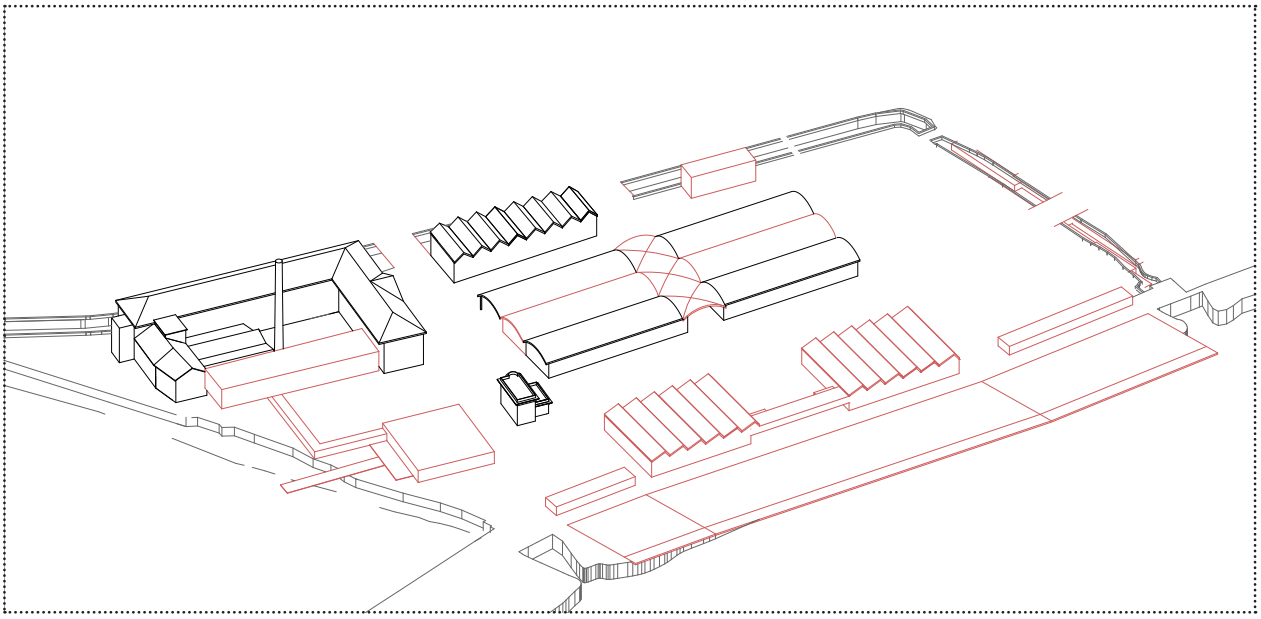


fig. 4.24. construction scheme,
scenarios A,B&C (Top-down)

C/ Comparison based on Safety generation

Looking back at the safety and safety perception literature reviewed in Part 1, four general requirements emerge for achieving a safe urban environment. In Jane Jacobs's work, program diversity and temporal diversity are the defining criteria for generating a safer neighborhood , a principle Gehl later operationalized through the observation that "people go where people go." Achieving a genuinely active zone at a site like Ex-FIMIT is therefore not incidental to the safety argument but central to it.

The program tables establish the basis on which diversity in both regards was pursued. The multicriteria evaluation confirms that all three scenarios score highly on Program Diversity, a direct result of the three-core function approach and its deliberately engineered mix of uses and user profiles. However, genuine diversity lies not only in the nature of programs and the range of users they attract, but in programs' composition within the site . It is here that the three scenarios begin to diverge.

Even with an identical program, spatial arrangement produces measurably different patterns of temporal activation, natural surveillance (eyes on the street), and the hierarchy of access (the clear boundaries condition). This section endeavors to examine that.

1. Temporal Activation >

Examining activity hours in closer detail reveals a distinction the multicriteria scores alone do not capture. Scenarios B and C achieved the same temporal activation score (both higher than Scenario A), yet their spatial distributions of active hours differ significantly. Scenario C has the most surfaces with longer active hours across the site. Scenario B, by contrast, has more surfaces with shorter active hours concentrated in its central zone, while the fully active areas are more dispersed throughout the site. It is precisely this overlap and layering of activities across different zones that gives Scenario C its edge in raw temporal coverage.

2. Clear Boundaries Condition >

At first glance, all three scenarios successfully establish clear boundaries. However, while Scenario A realizes this condition in a more rigid form, Scenarios B and C are both more successful in generating public space within the site. Scenario C goes furthest, rendering all surfaces as fully or semi-public and avoiding any Zone 5 areas (the highest privacy gradient within public space). That said, Scenario B most seamlessly blends the zones while maintaining hierarchy and clarity (as evidenced by the diagrams).

3. Eyes on the Street >

The concept of eyes on the street is inseparable from presence and therefore closely related to both temporal activity and program type. The more people are present, whether across different hours or staying in the space for extended periods, the more natural surveillance occurs. Gehl argues that fewer people staying longer generate more effective natural surveillance than larger numbers simply passing through. Taken to its logical conclusion, residents (who naturally occupy the site around the clock) represent the most effective source of eyes on the street, and their impact is maximized when their presence is decentralized rather than concentrated. In the temporal diagrams, the more dispersed the permanently active areas are, the stronger this effect is. By this measure, Scenario C is the most successful, followed by Scenario B and then Scenario A.

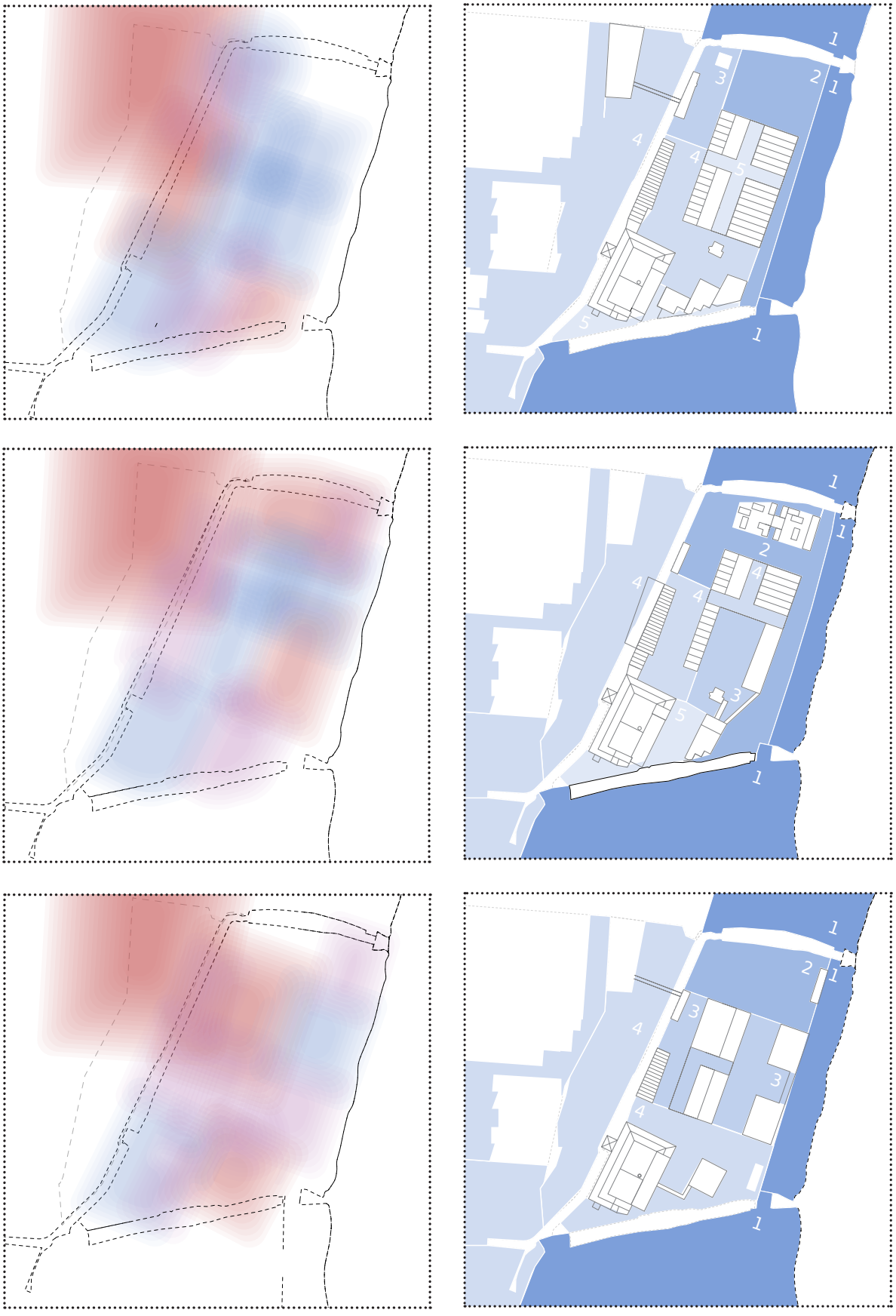


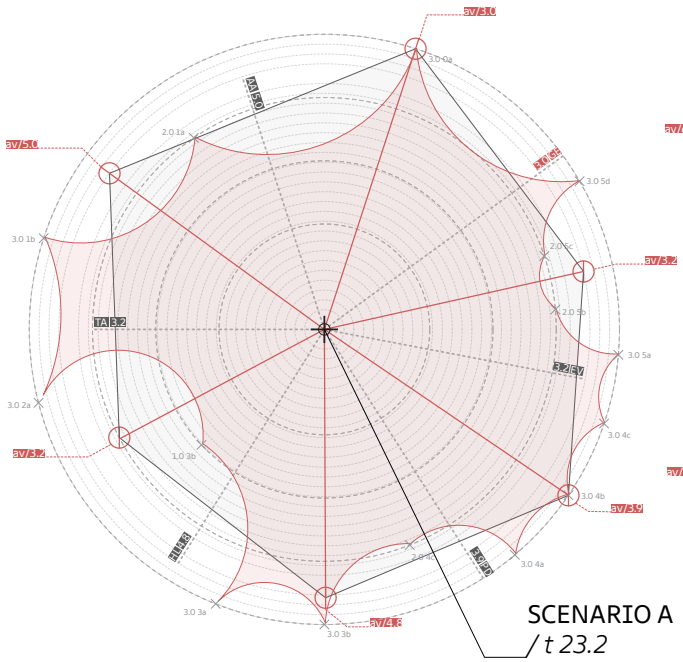
fig. 4.25. temporal occupancy and street surveillance analysis, scenarios A,B&C (Top-down)

fig. 4.26. spatial hierarchy of access, scenarios A,B&C (Top-down)

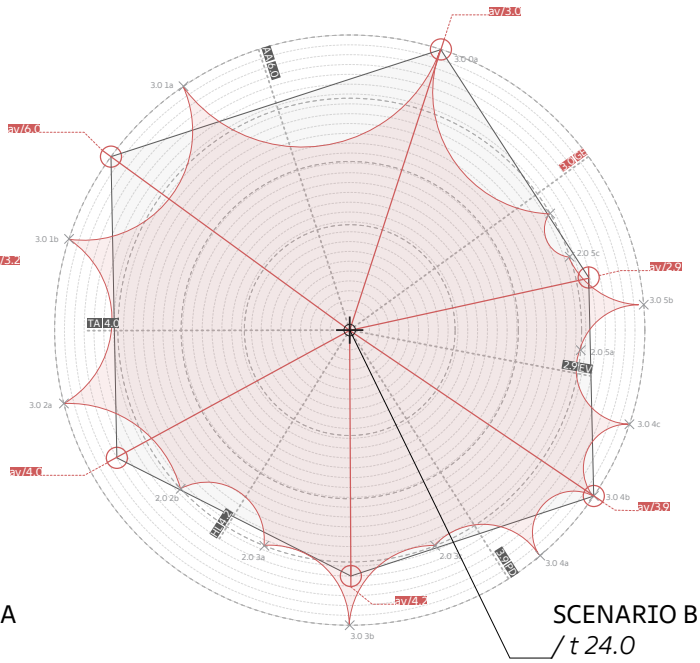
>6 Selecting A Scenario

Scenario B is selected as the winning scenario. Its result reframes the thesis's core claim: prioritizing program over preservation does not in itself maximize urban performance, while a scenario that treats heritage protection as a baseline condition ,rather than a constraint to minimize, as in Scenario A, or an obstacle to discard, as in Scenario C, achieves the highest overall outcome. Scenario B is the design direction in which heritage protection and urban development engage in dialogue rather than competition, substantiating the thesis's positioning of conservation as a conditioned, not absolute, objective.

That said, Scenario B's selection is not straightforward once the multicriteria score is set aside and the deeper analysis into heritage conservation and safety principles is taken into account. On safety, Scenario C offers a stronger spatial composition in terms of temporal activation and spread of permanent presence; however, on hierarchy of access, Scenario B is more seamless and therefore more effective — and Scenario C's advantage in the former regard is only partial. It is heritage conservation that gives the author pause. Scenario A remains the more cautious choice on this front; yet, as argued in the preceding section, the specific concern regarding the intervention on Building C in Scenario B is addressable without compromising the scheme's defining logic. And so, what makes scenario A a better option lies more in environmental value than in heritage legitimacy. With Scenario B only ever falling short of Scenario A on these two grounds ,it becomes important during the design phase to place greater focus on improving these criteria within the scenario scheme. This adjustment will be explored in a masterplan design scheme in the following part.



SCENARIO A
/ t 23.2



SCENARIO B
/ t 24.0


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*PART 04**

/ A Design Exploration

04 03*

Principles

Masterplan design follows three principles: Firstly, improving alignment with the PRG 2026. While, during the scenario proposal phase, alignment with the PRG was taken into consideration, at this level the scheme is sharpened through site circulation design. The second concern addresses the environmental conditions , in particular the canal system on three sides and the river edge to the east. Both of which simultaneously are constraining and offer opportunities. Lastly, the third establishes the conservation approach for each individual building.

>1 PRG Alignment

As mentioned before , the aim to align the project with the PRG started with programming and the university related core in the site . Other than that PRG's instructions for a potential project set in Ex-FIMIT could be summarised in three main points:

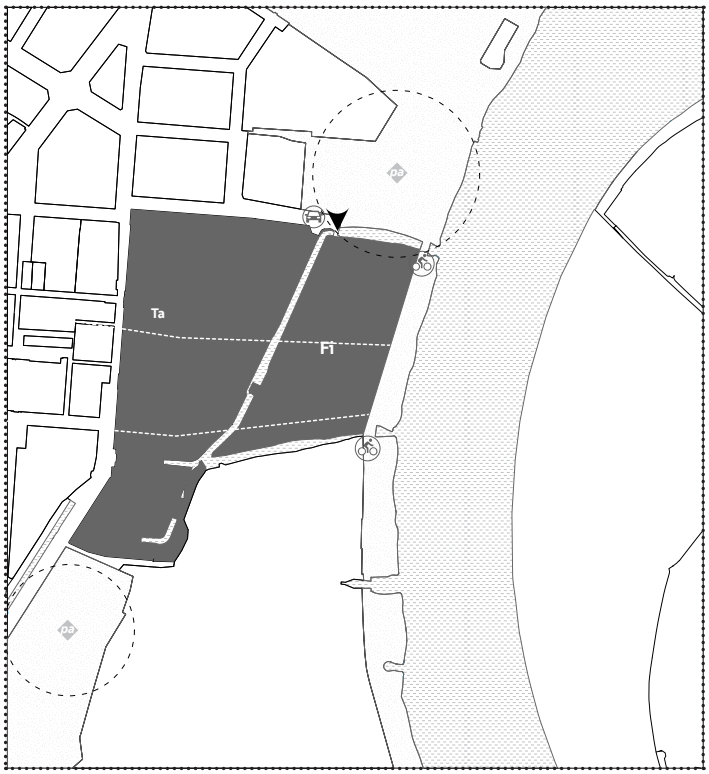
a. respect the buildings of historical value : Three buildings in the site are dubbed of " particular historical interest" in PRG2026 , all of which are the buildings already under heritage protection , namely buildings A, C and E . PRG though, does not go further than this . Thus the interventions and considerations for these buildings would be further explored later on in "conservation principles" part.

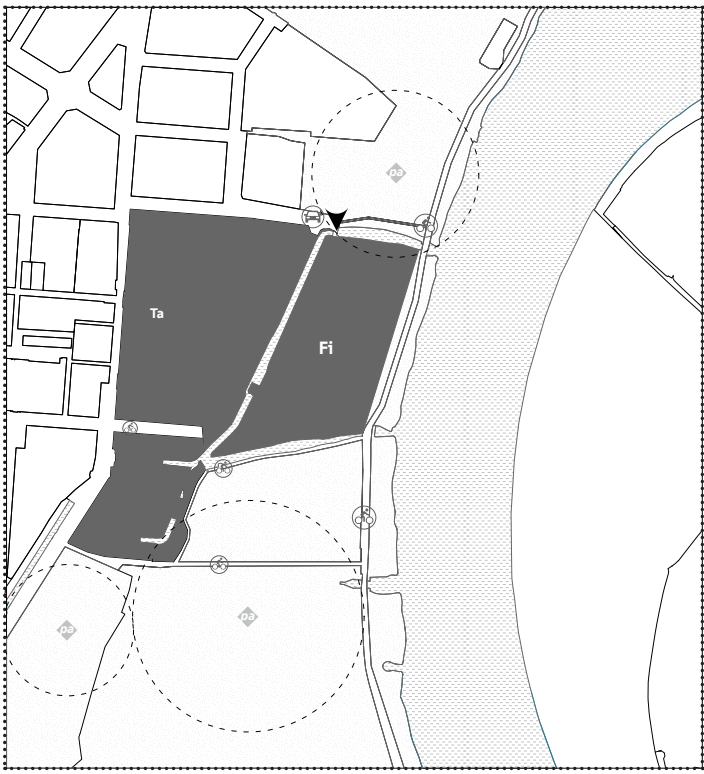
b. importance of territory: the site in its entirety is within the *" ecosystemic connection"* zone relating to green connections of the city and a part of *"Historical Environment Areas"* likely related to not only the landscape and territory but the artificial territory of historic value within the site , particularly the Canal of Regio Parco. Even though currently is out of use. This would be discussed in more length in the next section.

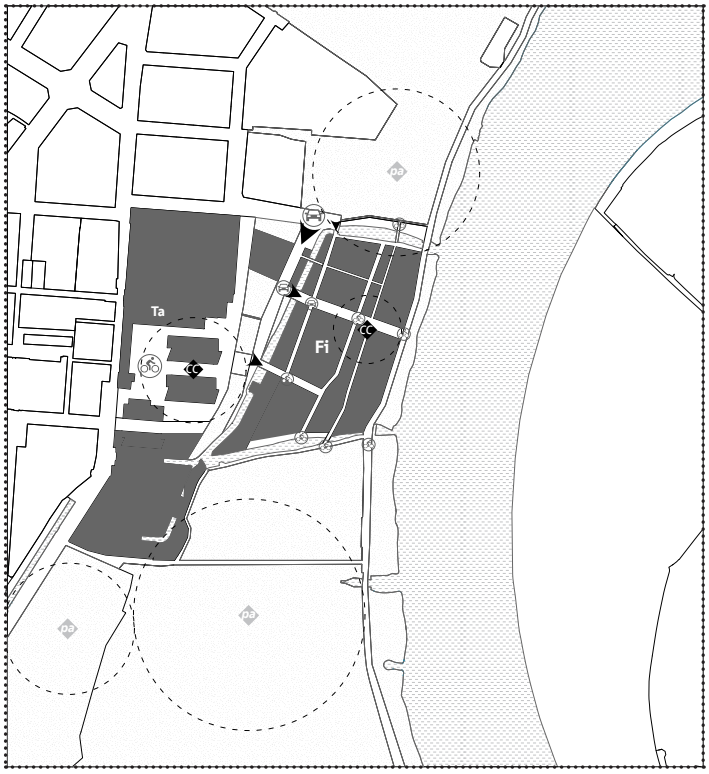
c. *accessibility and strategic connection in Porta Nord:* Porta Nord (a developement strategic plan set around the repurposing of Ex-Tabacchi and the connection of this part of Regio Parco to Spina 4) must be the most important strategy in PRG in relation to Ex-FIMIT. It has been demonstrated before (fig 4.8-9) how the redevelopment plan for Tabacchi changes that site from a monstrous wall between the neighborhood and the river to a new form of civic center. What remains then between the neighborhood center and consequently Spina 4 to the river is then Ex-FIMIT : a site isolated by

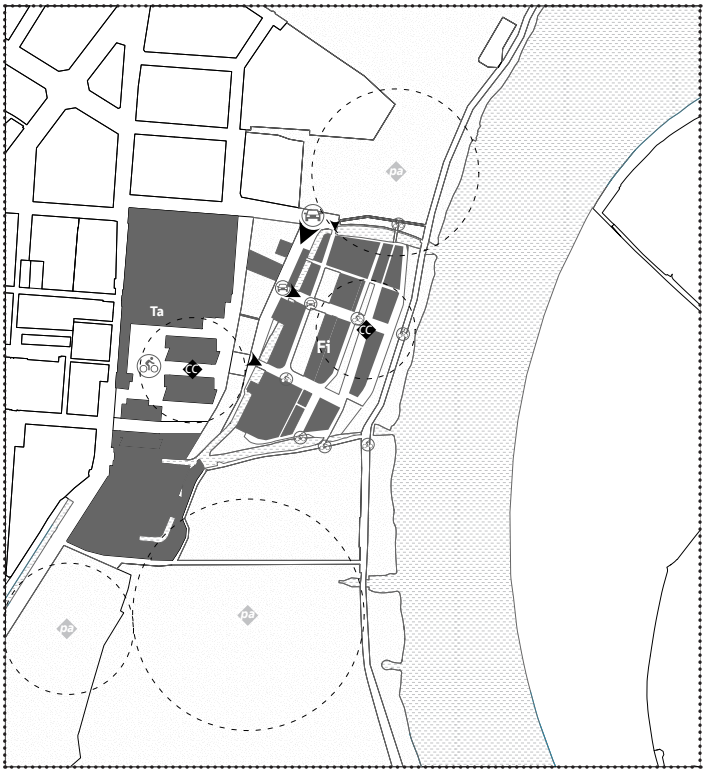
three unused canals on three sides and the river on the other. The PRG salvages this by drawing two strategic connections right through Ex-FIMIT. This thesis respects this strategy and expands on it , aligning the connections going to FIMIT with these.

fig 5.1. Access Diagram









Photographic catalogue of the present state in Appendix B.

>2 Intervention Guidelines

Ex-FIMIT consists of several buildings, each with a unique architectural style reflecting the period of construction and its contemporary function. As previously mentioned, only three of these buildings are under heritage protection (Buildings A, C, and E), which together cover less than one third of the site's total surface area. To preserve heritage legibility, however, as discussed in the design scenarios, it stands to reason to preserve the general spatial relationships within the site by retaining the warehouses as well, where possible. The variety of building morphologies and the new functions assigned to them thus require distinct operative logics suited to each building's heritage status, current condition, and program role within the design scheme. This section explores the intervention typologies applied to these buildings.

Building A/ *the main historic core*

Building A, the oldest building in the site and dating back to 1833, is the founding spatial element of the Ex-FIMIT complex: As the original cotton mill and its subsequent expansion, this building's relationship to the canal system defines the organization of the entire ensemble. As such, Building A, with mixed masonry structure (solid brick and stone), is under legal heritage protection. Based on the site survey, it is speculated that the stucco render finish, including cornices and wooden window frames (photos A01–A04), was a later addition applied only on the main facades. Looking back at historic cartographic sources (Fig.2.6-7) as well as observations during the site survey, it could be speculated that the flat-roofed parts of the building, as well as the chimney, were all later additions to the building, likely contemporary to the facade alterations (photos A19). The courtyard currently has two other additions, both of which have independent roof structures (photos: A12-A17).

Currently, the building envelope survives in its entirety but is in advanced deterioration: the render finish is failing, biological growth poses a structural threat, window frames are either absent or damaged, while the window glass is completely removed, interior floor structures are partially intact, one of the courtyard sub-structures has collapsed to a single wall while the other is in good condition. Meanwhile, the pitched roof is in the most critical condition: with partial tile and timber survival alongside completely collapsed sections (Fig.2.8).

The intervention proposed in this thesis focuses largely on retaining what has remained: restoring the facade (especially the main facade facing north)as a surviving document of historical phases, addressing the roof issue through anastylosis and tile reinstatement, and consolidating the courtyard fragment in place. To render the interior functional for the museum and laboratory programmes assigned to the building (both of which require utmost control regarding environmental conditions), independent programme volumes are inserted in the interior. And finally, a bridge connection at the rear introduces a connection toward the Manifattura Tabacchi at the building's first floor from an existing opening. The more detailed intervention guideline is followed in the table:

fig 5.2. Significance Diagram-Building A .

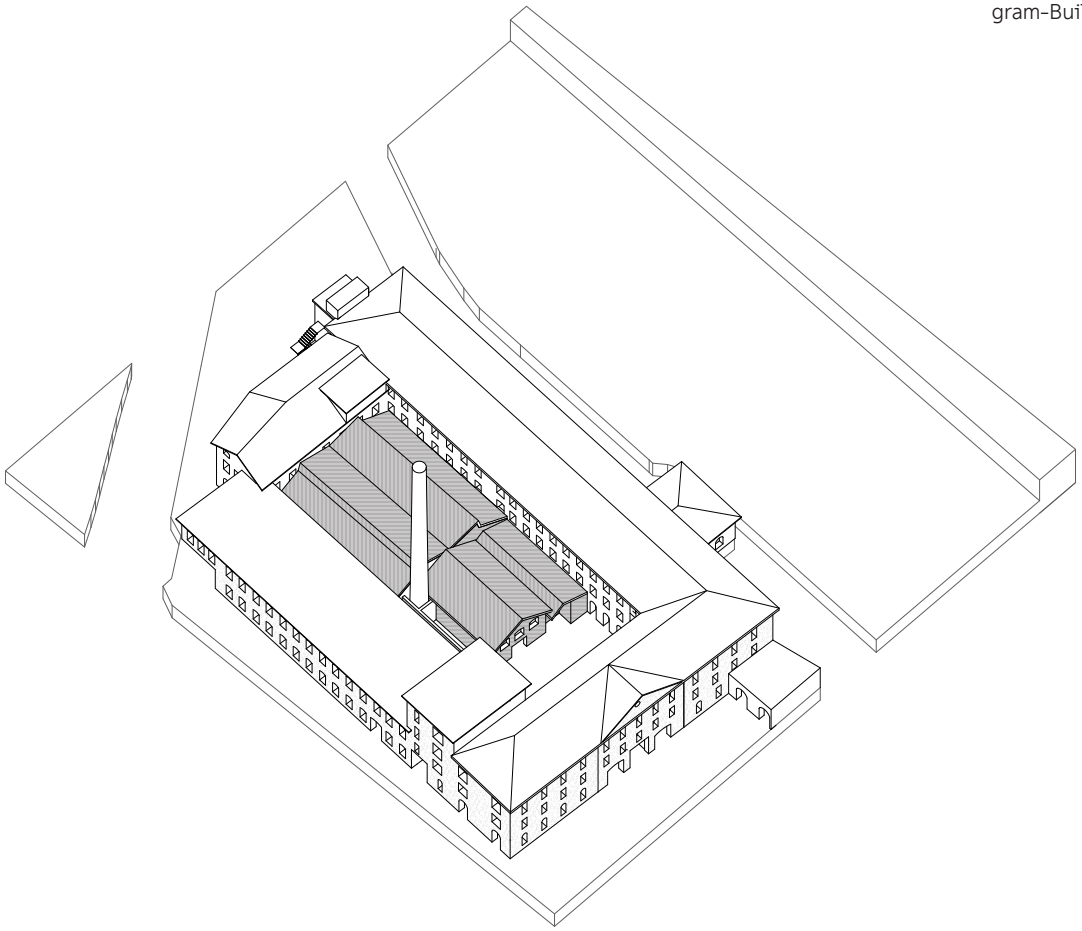
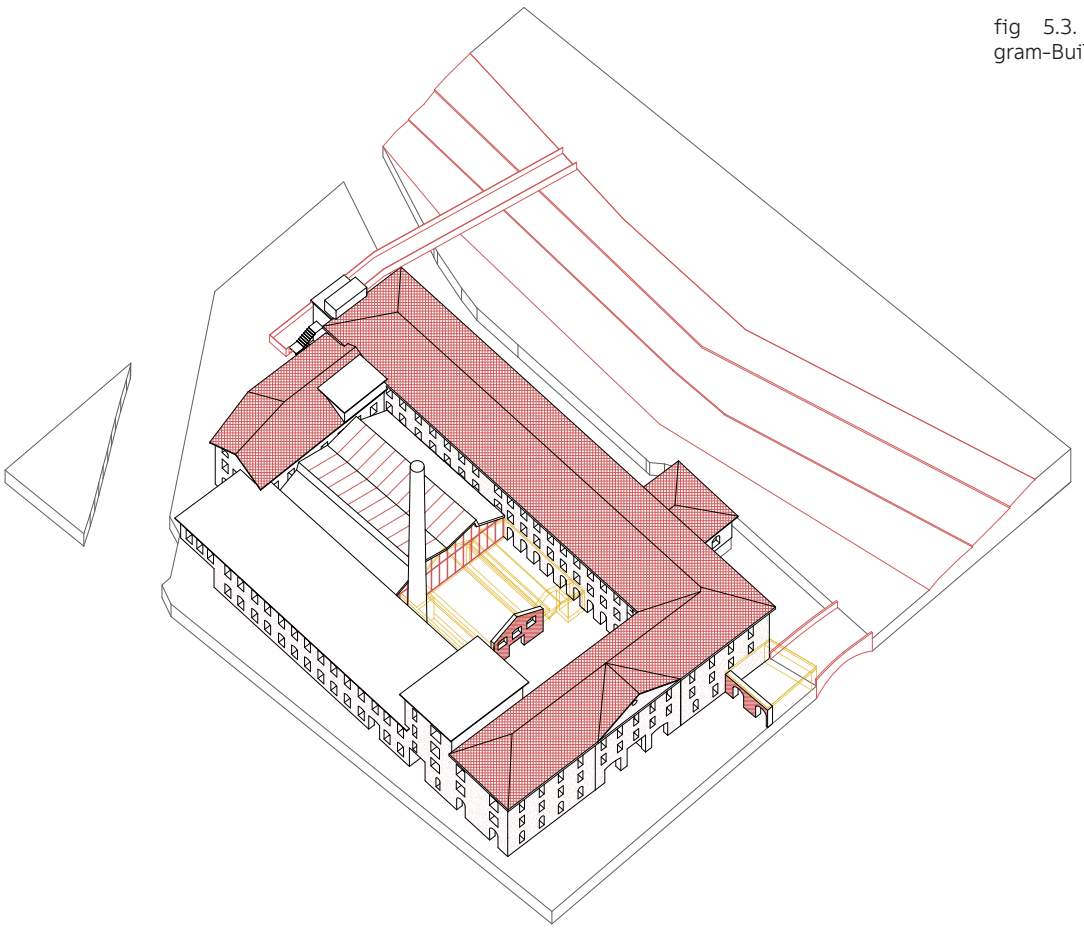


fig 5.3. Intervention Diagram-Building A .



Building Section	Condition	Pathology	Intervention	Case study	Justification
Masonry Envelope photos: A01–A04, A07–A11, A13, A20, A21	Structurally intact, Mortar joints eroded, Brick face spalling, Ivy root penetration , Self-seeded trees at parapet and roof level, Vegetation growth in the courtyard, Moisture infiltration at wall heads	Water infiltration, Biological growth, Salt crystallisation	Vegetation removal, Repointing in lime mortar, Injection grouting at voids, Perimeter drainage at base	Neues Museum Berlin: masonry consolidation	Venice Charter: Articles 3 & 9
Facade Finishing photos: A01–A04	Large sections detached exposing brick substrate, Cracking and bulging, Cornices and window frames partially surviving	Differential thermal movement, Freeze–thaw cycles behind render skin	Lost zones on main facades re-rendered using surviving sections as documentary basis, Decorative profiles repaired and reinstated where profile evidence survives	Neues Museum Berlin: lost plaster reinstated in matching composition	Venice Charter: Articles 9 & 12
Window openings photos: A01–A20	Geometry intact, Wooden frames partially absent and at parts damaged, Some visible frames of metal likely changed in a later date, Window glass and doors lost	Weathering, Degradation of wood, Likely theft during abandonment period	Surviving frames consolidated and restored, Missing frames reinstated in matching profile and documented as new, Contemporary glazings recessed within frame depth	Samaritaine Paris: new glazing within historic apertures	Venice Charter: Articles 12 & 13
Arched ground floor opening photos: A21	Geometry intact, render largely lost revealing brick	sustained moisture, erosion from prolonged exposure	Exposed brick arcade retained as found		Venice Charter: Articles 4&9
Pitched roof	Roof collapsed in large over main volume, Timber structure mostly survived but deteriorated and exposed	Structural failure from sustained water infiltration, Timber decay, Vegetation growth	Full reconstruction of roof volume in contemporary material maintaining original pitch and profile	Mill City Museum Minneapolis : contemporary roof reconstruction over surviving masonry envelope	Venice Charter: Article 9
Courtyard structure 1 photos: A14–A17	Steel truss roof with corrugated metal sheeting largely intact, three walls formed by main courtyard masonry,	Corrugated cladding deteriorating	Steel truss structure assessed and consolidated, Roof covering replaced with clear membranes to allow view to surrounding heritage fabric, Masonry arcade walls consolidated and repointed	Les Machines de l'île: covered with flexible and clear membranes as well as translucent panels	Venice Charter: Article 9
Courtyard structure 2 photos: A09,A10,A12	Corrugated metal roof partially collapsed	Corrosion of corrugated metal, Sustained exposure	All walls and roof demolished except single standing wall, Standing wall structurally consolidated and retained as found fragment, demolition of other walls deliberately exposes chimney	Parco Dora Turin: fragments retained	Venice Charter: Articles 4 & 9
Chimney	Condition not fully assessable from survey		Structural survey, Consolidation of brick chimney shaft	Duisburg Nord Landscape Park : chimneys retained as spatial landmarks	Venice Charter: Articles 3 & 4

Building Section	Condition	Pathology	Intervention	Case study	Justification
Interior photos: A05, A06, A18,A19	Ground floor structurally intact , Upper levels not accessible or visible during site survey	Sustained water damage, Vegetation growth	Ground floor cleared and structurally assessed, Upper levels to be assessed, Sound floor elements retained and consolidated, Compromised elements replaced with contemporary structure, Non-original interior partition walls selectively demolished, Independent circulation boxes inserted, Programmatic insertion for museum and laboratory functions as independent volumes within the retained envelope	OGR Turin: structurally independent insertion within retained shell	Venice Charter: Articles 5,12 & 13
Connector between Buildings A and C (later addition)	Two walls with roof, Vegitation growth has blocked further assessment		Removal of one wall (immediate vicinity of Canal) and roof, Retention and consolidation of wall with opening as gateway threshold from canal bridge (design addition) into site	Samaritaine Paris: new glazing within historic apertures	
Bridge connection to Manifattura Tabacchi(Design Addition)	Not existing		Modest pedestrian bridge of archaeological infrastructure character, single intermediate pier, connection through existing opening on the first floor's existing circulation box , Southern facade (not the main facade)	Acropolis Museum basement bridges	Venice Charter: Article 13

table 5.1. Intervention guideline - Building A .

Building B/ *The primary production hall*

Building B showcases the primary production hall in the complex, running along the Regio Parco Canal. Although Building B carries no legal heritage significance, it holds spatial value within the ensemble, given its position in relation to Building A and E (both of which are under heritage protection) and the Regio Parco Canal on its southern facade. Based on observation during the site survey, Building B clearly consists of two distinct structures: a. the inner part: concrete columns with barrel vaults ceiling and brick enclosure walls, which is generally in good condition(photos: B01,B02); and b. the outer part: concrete columns with a block flat roof, which is speculated to be a later expansion.(photos: B03-B05)

The intervention proposes total demolition of the outer part and retaining the inner part as a means of preserving the architectural character and site composition. To achieve better dialogue with both buildings A and E, the immediate eastern and western walls surrounding the inner part are preserved and fully restored, and the demolished part in between them will see an addition. The more detailed intervention proposition is as followed:

fig 5.4. Significance Diagram-Building B .

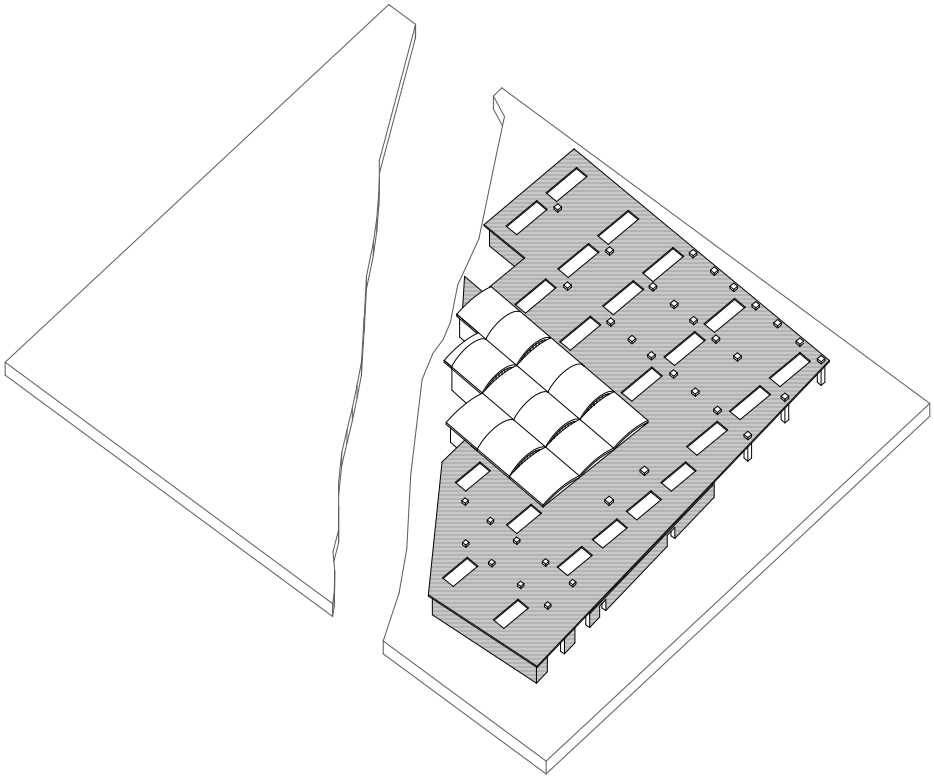
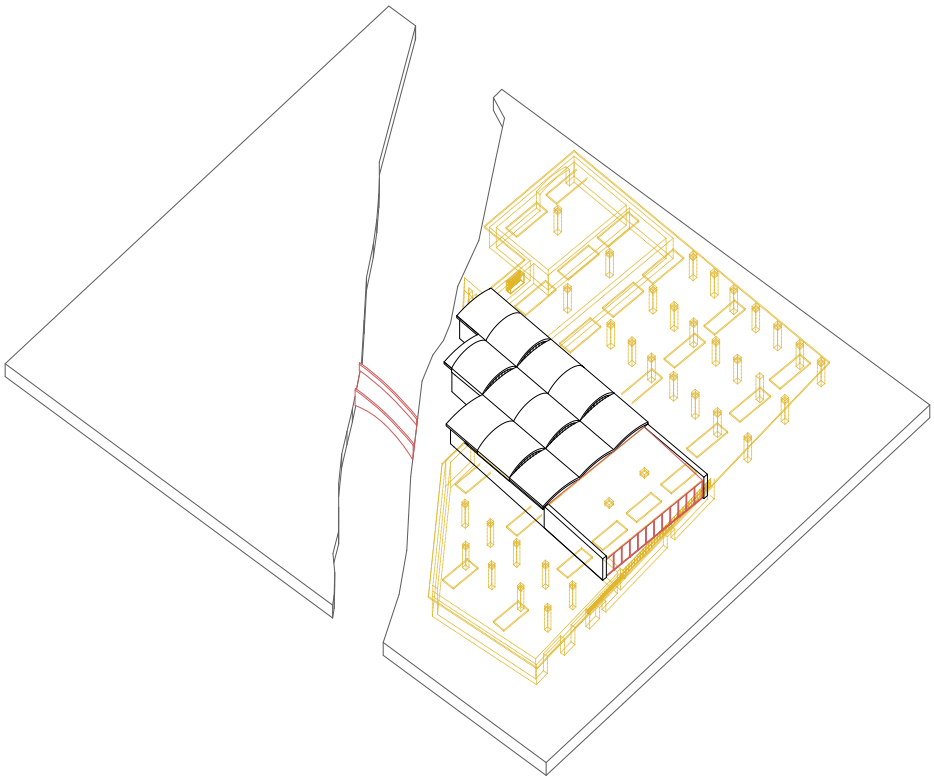


fig 5.5. Intervention Diagram-Building B .



Building Section	Condition	Pathology	Intervention	Case study	Justification *
Inner structure; envelope photos: B01, B02	Walls structurally sound while finishing deteriorating with localised detachment, Graffiti across all wall surfaces, Biological growth at base and column faces	Water infiltration through missing glazing, Moisture cycling; Biological growth biological growth from sustained damp at base	Finishing consolidated and stabilised with lost zones re-patched in matching lime, Vegetation removed, Base damp addressed by perimeter drainage, Graffiti removed (chemical and then mechanical means if necessary) without harming the render	Neues Museum Berlin : render consolidated and retained	Venice Charter: Article 9
Inner structure; barrel vault roof photos: B01, B02	Brick barrel vaults intact, Render deteriorating with map cracking and localised detachment	Differential thermal movement between brick vault and render skin, Moisture infiltration	Vault structure assessed and consolidated, Render stabilised by injection grouting at detached zones, Lost sections repatched in matching lime	Centrale Montemartini, Rome : industrial vaulted hall preserved	Venice Charter: Article 9
Window openings photos: B01,B02	Clerestory window band above vaults present with glazing largely missing, Canal facing windows and door present with glazing missing	Frame corrosion from exposure	Frames consolidated and restored, Missing frames reinstated in matching profile, Contemporary glazing reinstated, Canal-facing central opening: converted to door of matching aperture dimension and character (visible in B01)		Venice Charter: Article 9
Outer section ; flat hollow clay block roof with concrete columns photos: B03-B05	Flat ceiling constructed in hollow clay block, Finishing largely lost exposing block surface with significant paint peeling, Structure intact	Render and paint loss from water infiltration, Biological growth penetrating through skylights, Sustained exposure from absence of enclosing walls	Demolition of structure , envelope and interior with the exception of shared walls with inner part (see below)		Not under heritage protection
Outer section ; insertion and spatial integration with inner section	Outer section surrounds inner section on three sidesincluding the main entrance to the building		Shared walls between inner and outer sections retained to the north as the perimeter boundary of the new unified volume, New contemporary ceiling inserted at appropriate height (structurally independent): spanning between retained perimeter walls, New wall and entrance introduced , New ceiling, wall, and entrance to be clearly contemporary and distinguishable from retained fabric	OGR Turin: new enclosure elements	Venice Charter: Articles 5,12&13
Facing Canal	Canal activation and connection to the opposite bank		Stone steps introduced into canal bed creating direct water-level connection to opposite bank, Pedestrian bridge added	Cheonggye-cheon Seoul	

table 5.2. Intervention guideline - Building B .

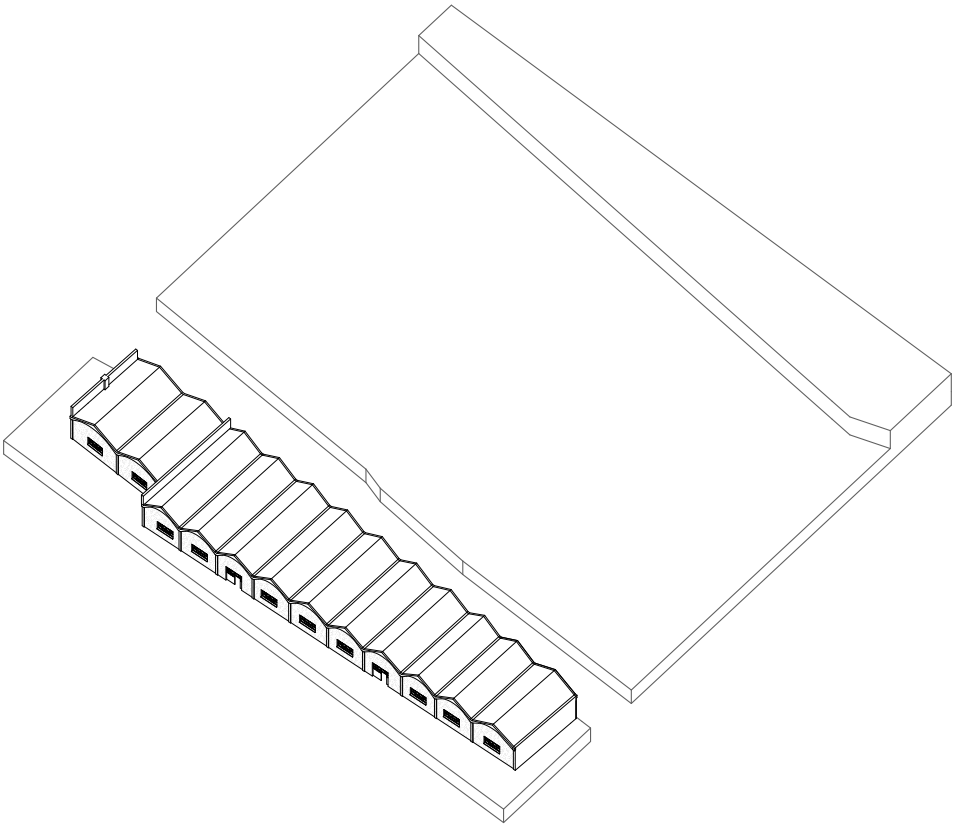
Building C/ *Repetitive Canal-Facing Modules*

A one-story section with a double-pitched roof, likely rebuilt in 1947 (previously seen in a 1926 project), Building C is the second installment in the complex under heritage protection. Typologically, the building consists of a series of repetitive modular volumes; the modular system is seen both in plan and in the canal-facing facade. However, not all the modules follow the same dimensions.

Building C is in generally good condition, structurally speaking; with being consolidated at an unknown date. However, not only has the building been partially deteriorated through abandonment in the interior and envelope, but also the canal-facing facade has been tampered with: original window openings have been infilled with concrete block, destroying the original facade rhythm. Portions of the original wooden window frames survive within the remaining openings on the non-canal-facing sides (although some have been replaced with similar metal pieces), and the interior is mostly continuous across the modules.

Building C's significance relies on three aspects: a. typologically, b. spatially, its canal-facing elevation constitutes the primary public face of the Ex-FIMIT complex, and c. materially, the surviving wooden frames are significant as evidence of the original aperture character. The intervention aimed at this building is as follows:

fig 5.6. Significance Diagram-Building C .



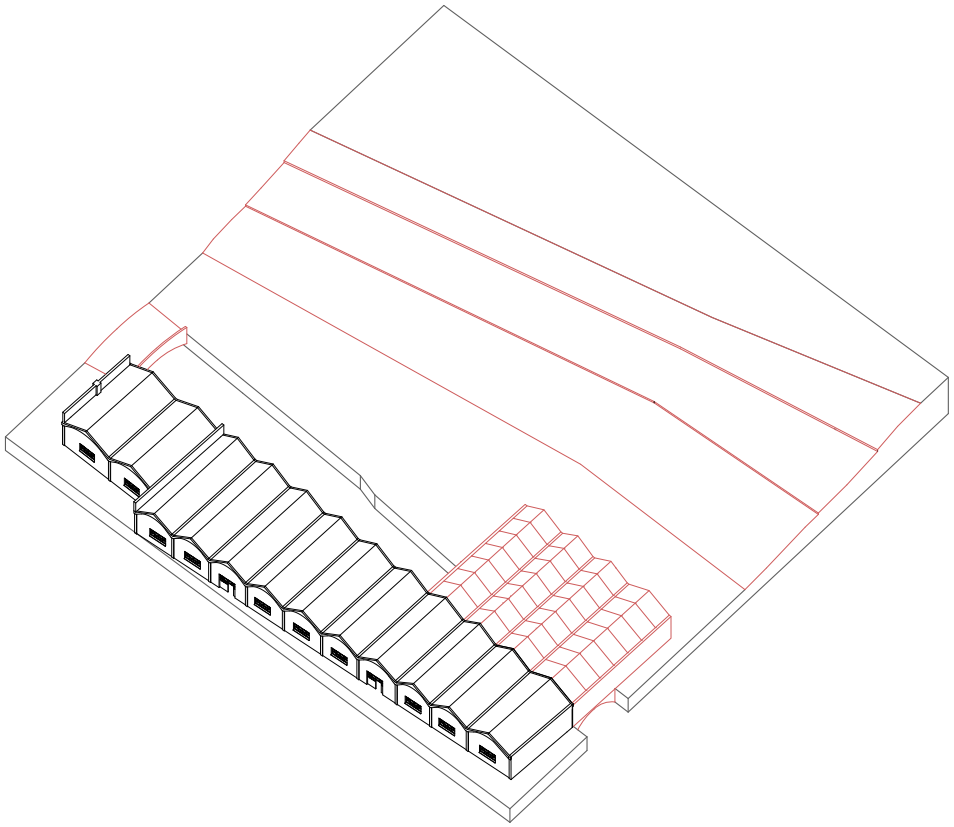


fig 5.7. Intervention Diagram-Building C .

table 5.3. Intervention guideline - Building C .

Building Section	Condition	Pathology	Intervention	Case study	Justification
Masonry envelope photos: C01-C03,C09	Finishing present but deteriorated across all elevations, Biological growth, Brick exposed at zones of render detachment, Masonry structurally continuous with no wall collapse, Modular repetition of structural bays clearly legible despite surface deterioration	Water infiltration , Sustained moisture retention in render, freeze-thaw cycling and differential thermal movement	Vegetation and biological growth removed, Render consolidated where adherent by injection of lime-compatible grout at detached zones Lost r zones repointed in matching hydraulic lime mortar Main facade render restored using surviving sections as documentary basis	Neues Museum Berlin : render consolidated and retained	Venice Charter: Articles 3,4 & 9
Interior photos: C05-C07	Continuous open space across modular bays, Structure intact and consolidated at unknown date, Sloped ceiling following barrel vault roof profile, Finishing deteriorating with biological growth at upper zones, Non-original partition walls present (C06)	Sustained moisture from window loss and roof-wall junction failure, Partition walls introduced during later operational phases as non-original subdivisions	Biological growth removed by lime-compatible chemical treatment, Non-original partition walls selectively demolished to recover spatial continuity of original modular bay system (with structural assessment to confirm non-loadbearing status prior to removal), Original structural elements retained without alteration, Interior surfaces cleaned and consolidated with refinishing programme accommodated within continuous open modular space with insertion of an independent mezzanine and circulation where necessary	1.BankART Studio NYK Yokohama 2. Gare Maritime Brussels	Venice Charter: Articles 5&9

Building Section	Condition	Pathology	Intervention	Case study	Justification
Roof ; barrel vault profile over modular bays photos: C01-C03, C05-C07,C09	Barrel vault roof profile intact, Tile covering seemingly surviving (full assessment to be done) , Biological growth at eaves and roof-wall junction	Tile displacement and joint failure allowing water infiltration at eaves, Sustained moisture	Roof structure surveyed from interior prior to intervention, Sound structural members consolidated Irrecoverable members replaced in matching timber section, Tile covering repaired and retained using original tiles where recoverable with missing tiles replaced with matching new production tiles (distinguishable) Eaves flashing renewed	Mill City Museum Minneapolis	Venice Charter: Articles 9&15
Canal-facing openings photos: C06,C08	Original window openings infilled with concrete block across entire canal-facing elevation. The infill is non-original and has been applied at unknown date likely for security or thermal reasons during later operational phase, Original aperture geometry and masonry reveals surviving behind infill	Non-original infill, hence, no structural or conservation value	Full removal of concrete block infill, Original aperture geometry reinstated, Masonry reveals repaired where damaged during removal using matching brick and lime mortar	Tai Kwun Hong Kong : removal of non-original infill	Venice Charter: Article 9
Non-canal-facing openings: original wooden frames photos: C01-C04	Original window frames surviving at some places but heavily deteriorated, Metal frames replacements introduced at a later operational phase, Glazing entirely absent or broken	frames corroded from prolonged exposure, Glazing lost from mechanical damage during abandonment	Metal frames removed as non-original fabric New timber frames reinstated in matching species and profile using evidence of original frame character , Repair of surviving wooden frame, Glazing reinstated recessed within frame depth	Neues Museum Berlin : non-original later interventions removed	Venice Charter: Article 9
New canal volume: addition	Not existing — new element proposed	N/A	New volume constructed above canal on independent structure bearing on canal banks(not on historic masonry of Building C) attachment to Building C via connection joint, Canal remains open below at ground level, Volume proportionally derived from existing module dimension (aemulatio strategy) with volume spanning partial length of Building C),	1. Rialto Bridge Venice 2. Museo dell'Opera del Duomo in Florence	Venice Charter: Articles 13&14
Canal-facing openings converted to doors : junction with new volume	Specific canal-facing openings at junction with new canal volume (currently concrete block infilled)	N/A	Concrete block infill removed, Openings converted from window to door maintaining exact original aperture dimension, proportion, head height, and masonry reveal profile, Conversion justified by three conditions: openings already non-original; matching door character documented on opposite facade; only openings directly connected to new volume converted	Neues Museum Berlin : render consolidated and retained	Venice Charter: Articles 5&9

Building D/ *General Services*

This two-story building was constructed and later expanded as a service building during FIMIT's peak production period. The building consists of simple plastered facades, punctuated by large, regular windows, finishing with a flat roof. However, a small single-storey part of this building has a sloped roof.

Building D is not under heritage protection; however, its spatial relationship to the canal, Building C, and, most importantly seemingly good condition in terms of structure (despite limited clearance of view during survey) gives it significance. This building would accommodate canteen and study room services for the dormitory building, which would be a new addition in the design. The intervention is as follows:

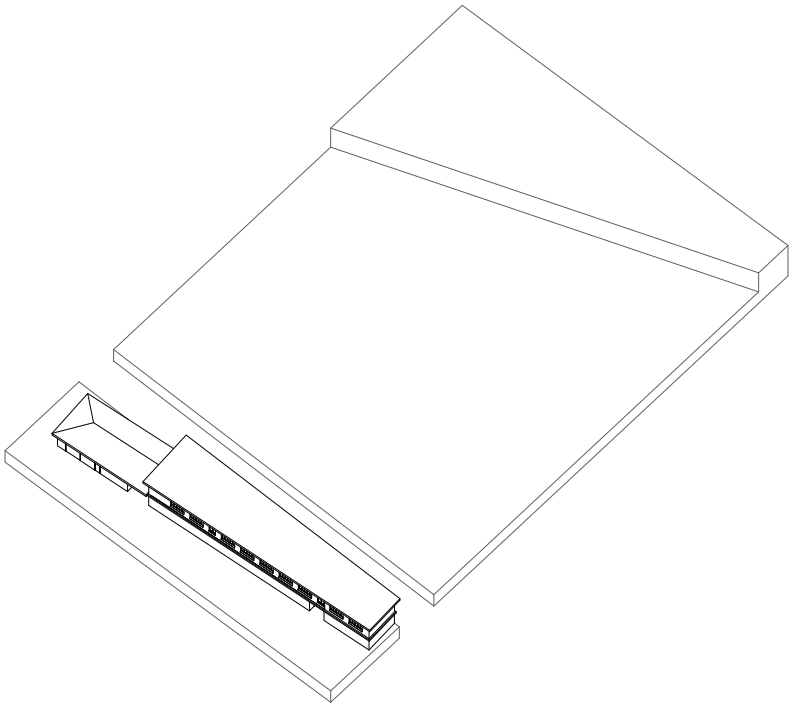


fig 5.8. Significance Diagram-Building D .

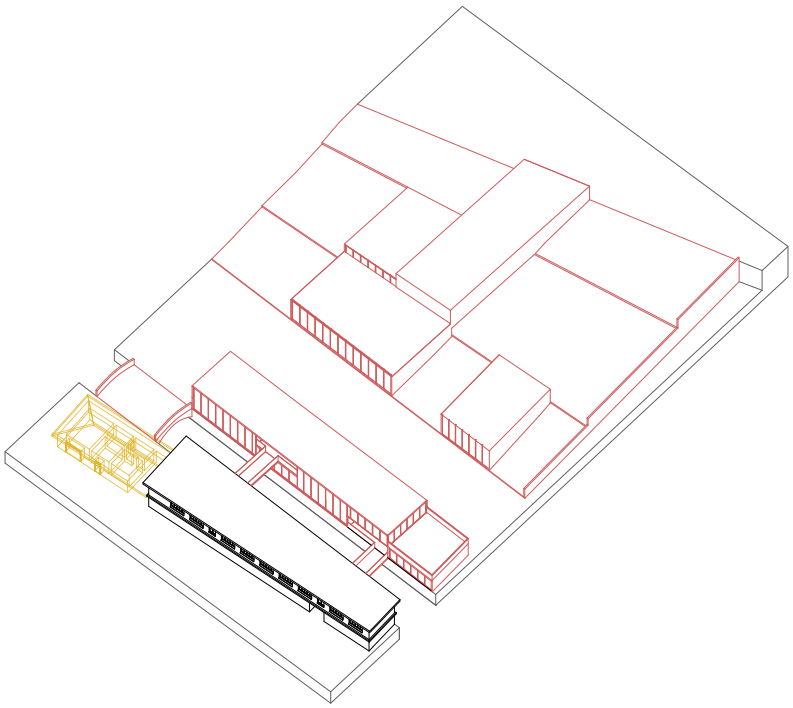


fig 5.9. Intervention Diagram-Building D .

Building Section	Condition	Pathology	Intervention	Case study	Justification*
Envelope photos: D01	Not completely visible during the survey due to overgrown trees blocking the view, Simple plastered finishing largely intact with localised peeling at base and isolated patches, Windows with metal frame surviving, the glazing lost	weathering and lack of maintenance	Refinishing with the similar color and material, Window frames replaced with same proportion and characteristics		-
Flat roof	No visible collapse		Full structural and waterproofing survey prior to intervention, Membrane replaced where failed, Roof structure retained if sound		-
Partial demolition : single-storey section	Not visible during the survey due to vegetation overgrown	N/A	Single-storey section demolished to create the primary entrance threshold to the Ex-FIMIT complex from the canal	Tai Kwun Hong Kong : wall and volume removal expressed as clean contemporary cuts creating new public access thresholds	-
Interior	Interior not accessible during survey but structural condition of floor plates and internal walls assumed to be sound given good envelope condition	condition to be assessed	Full structural survey prior to intervention, Sound floor plates and walls retained, while compromised elements to be replaced with contemporary Interior reorganised for canteen and study room programme with minimal structural alteration, Independent circulation boxes inserted as freestanding contemporary elements structurally disconnected from existing fabric	BankART Studio NYK	-
New parallel building and canal bridges	Not existing, completely new construction (outside of FIMIT boundary)	N/A	New building parallel to D on opposite bank: connected by pedestrian bridges over canal		-

table 5.4. Intervention guideline - Building D .

Building E/ *Unique Electricity Building*

A freestanding structure, built after 1947 to accommodate new industrial electrification requirements, this building is the third and final heritage-protected instalment in the Ex-FIMIT complex.

Building E's significance resides almost entirely in its exterior envelope: Plastered facades, wide windows, and a semi-circular, fully glazed body containing an internal spiral staircase (which had been destroyed at the time of visit), showcasing a striking expression of mid-century industrial modernism. Due to the loss of the interior, operative logic focuses on fully conserving the exterior while using insertion as a means to reactivate the

building. Intervention guidelines are more detailed in the following table:

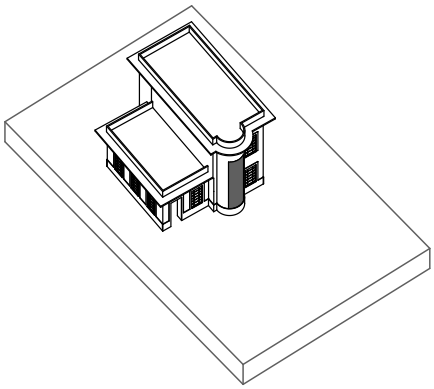


fig 5.10. Significance Diagram-Building E .

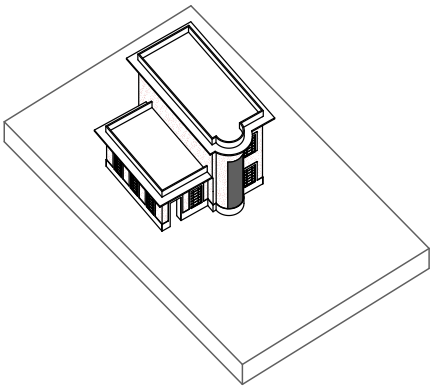


fig 5.11. Intervention Diagram-Building E .

table 5.5. Intervention guideline - Building E .

Building Section	Condition	Pathology	Intervention	Case study	Justification*
Envelope photos: E01-E03,E06	Yellow-ochre render largely intact with localised peeling and detachment with render failing at base courses, Graffiti present on exterior surfaces, String course and plinth legible, Overall envelope structurally sound	Rising damp at base, Weathering	Graffiti removed by appropriate chemical and mechanical means without damage to render substrate, Render consolidated and restored with lost zones repatched in matching lime render, Base course rising damp addressed by perimeter drainage	Tai Kwun Hong Kong : heritage-protected envelope fully restored	Venice Charter: Articles 3,4&9
Cylindrical staircase tower : glass block curtain wall photos: E01,E05,E06	Structurally intact, Glass block largely in place with localised units missing or cracked, Rendered surround of tower in similar condition to main facade, Mortar joints between blocks deteriorating	Abandonment, Water infiltration; Rising damp	Full structural assessment before intervention, Sound blocks consolidated in place with missing and cracked units replaced with matching glass block of identical dimension and translucency Mortar joints repointed in matching mix, Tower render restored as per main facade	Samaritaine Paris	Venice Charter: Articles 9&12
Window openings photos: E01-E06	Metal-framed windows with subdivided grid, Glazing lost, Frames corroded but geometrically intact, Ivy penetrating through open glazing	Prolonged exposure and water infiltration Glazing loss from mechanical damage Moisture retention at frames	Vegetation removal, Sound frames consolidated and treated against corrosion Irrecoverable frames replaced in matching profile and material, Contemporary glazing reinstated within existing frame depth	Samaritaine Paris	Venice Charter: Articles 12&13
Interior photos: E04	Interior seemingly mostly destroyed (not fully accessible: evidently from outside the staircase in large damaged while the flooring might be intact), Walls structurally present but finishing heavily deteriorated	Deterioration likely from roof and window failure allowing sustained water infiltration, staircase damage unknown cause	New programme inserted as structurally independent volumes within restored shell, Insertion organised around existing aperture positions as primary sources of light and access, All services surface-mounted or within new fabric; minimum 50mm clearance from historic walls maintained throughout		Venice Charter: Articles 5,12&13

Building(s) F,G,H,I/ *Later Industrial Cluster*

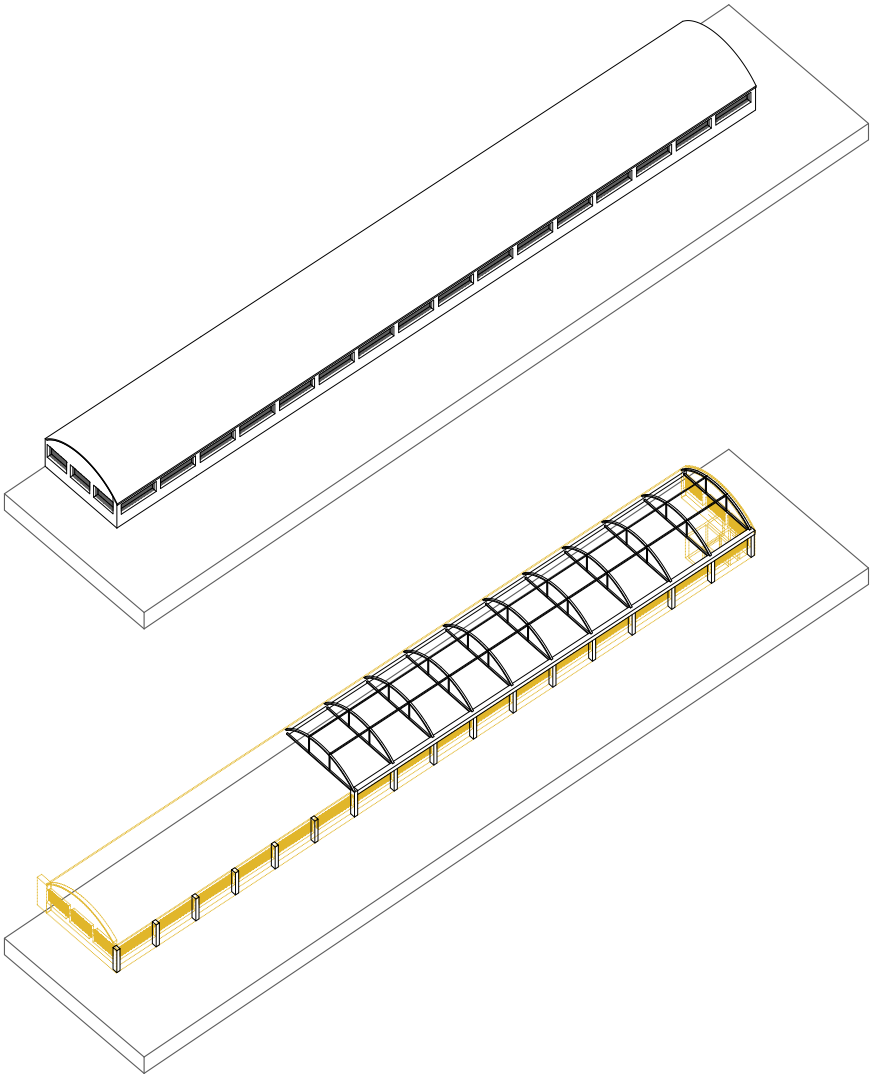
The latest addition to the Ex-FIMIT complex: these buildings feature voluminous vaulted roofs (Buildings F and H) as well as lighter sawtooth roofs (Buildings G and I). Structurally speaking, these buildings are connected, with only Building I operating as an isolated structure. However, even there, a light canopy acts as a connection between H and I.

Over the years of abandonment, due to their sheer size and volume, and the interconnective nature, they have seemingly been the main host of rave parties and gatherings in Ex-FIMIT.

Even though these structures are not under heritage protections, the intervention proposed for them focuses mostly on reuse rather than full demolition: Selective demolition of enclosure fabric to create the open park and plaza network threading between the buildings, retention of structural frames as spatial infrastructure within that landscape, and consolidation of the remaining enclosed volumes for a new programme.

The tables below show the intervention guidelines in more detail:

/Building F:



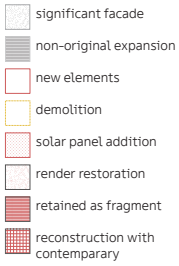


fig 5.12. Significance Diagram-Building F .

fig 5.13. Intervention Diagram-Building F .

Building Section	Condition	Pathology	Intervention	Case study	Justification*
Structural frame : concrete columns photos: F01-F04	Concrete column grid structurally continuous throughout, Biological growth: green algae and moss at upper sections, Render deteriorating with localised spalling	Sustained moisture, Freeze-thaw cycling and moisture infiltration,	Structural assessment of all columns, Sound columns consolidated, Biological growth removed by chemical treatment, Render consolidated or repatched where spalling, Compromised columns assessed individually for structural reinforcement	Parco Dora Turin	-
Steel vaulted roof structure photos: F01-F04	Shallow arched steel roof structure geometrically present but heavily deteriorated, Water infiltration Biological growth throughout steel frame members and at connection points, Surface corrosionl, Covering functionally lost	UV degradation, Sustained moisture exposure, Water retention at connection points and purlins	Sound members of steel frames consolidated and retained with irrecoverable members replaced with steel of matching section, PVC covering and all wall enclosure panels demolished entirely with roof structure retained as open exposed frame without covering, Biological growth removed from retained structure	IBA Emscher Park Duisburg Nord	-

table 5.6. Intervention guideline - Building F .

/Building G:

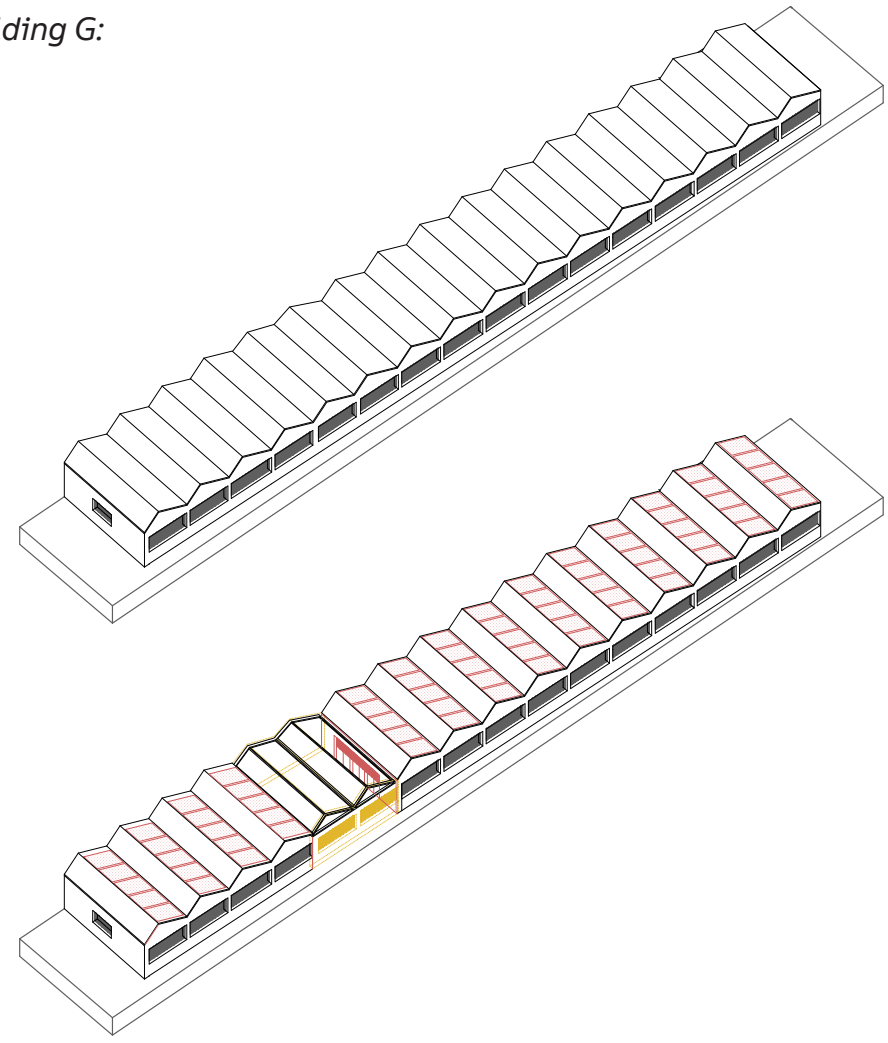


fig 5.14. Significance Diagram-Building G .

fig 5.15. Intervention Diagram-Building G .

Building Section	Condition	Pathology	Intervention	Case study	Justification*
Structural frame : concrete columns and steel connecting elements photos: G01,G02	Concrete columns structurally present(shared with buildings F and H), Steel connecting elements at column heads linking G to F, Biological growth on columns	Biological growth from roof and window failure, Corrosion at steel connection elements from sustained exposure	Structural assessment of concrete columns and steel connection elements, Sound elements consolidated, Biological growth removed, Steel connections assessed for corrosion and consolidated or replaced in matching steel section where compromised	Parco Dora Turin	-
Sawtooth roof structure : retained half photos: G01,G02	Steel sawtooth frame with glazed and PVC sloped faces, Significant sections of glazing and PVC covering missing or partially collapsed, Biological growth hanging from steel frame members, Structure showing active deterioration but geometrically present	Glazing and PVC loss from mechanical damage and UV degradation, Biological growth from sustained water infiltration through open roof sections, Steel frame corrosion at connection points	Structural assessment of sawtooth frame bay by bay: sound members consolidated and retained and irrecoverable members replaced in matching steel section, Glazing faces of sawtooth replaced with new double-glazed units or polycarbonate panel in matching profile, south-facing opaque slopes of sawtooth to receive photovoltaic panels for site use and integrated with canal micro-hydropower scheme, Partial demolition and replacement with translucent canopy	Les Machines de l›Île de Nantes	-
Wall enclosure photos: G01,G02	Rendered masonry , Metal grid windows with glazing largely absent, Render deteriorating with biological growth;, Graffiti covering lower sections	Water infiltration, Sustained moisture	Walls retained (partial demolition to split the building into two seperate blocks), Biological growth removed Render consolidated and retained, Windows: frames consolidated and new glazing reinstated, Graffiti on exterior wall surfaces retained while interior wall surfaces cleaned for programme requirements	1. BankART Studio NYK 2. LX Factory Lisbon	-
Interior photos: G01,G02	Large open floor, Vegetation growth, Graffiti on lower wall sections	sustained moisture	Floor slab cleared and assessed: sound slab retained, Vegetation removed, Interior walls cleaned (graffiti removed by lime-compatible chemical gel treatment), Independent mezzanine structure inserted based on program requirements, Independent circulation boxes inserted where required	Casa del Lector Matadero Madrid	-

table 5.7. Intervention guideline - Building G .

/Building H:

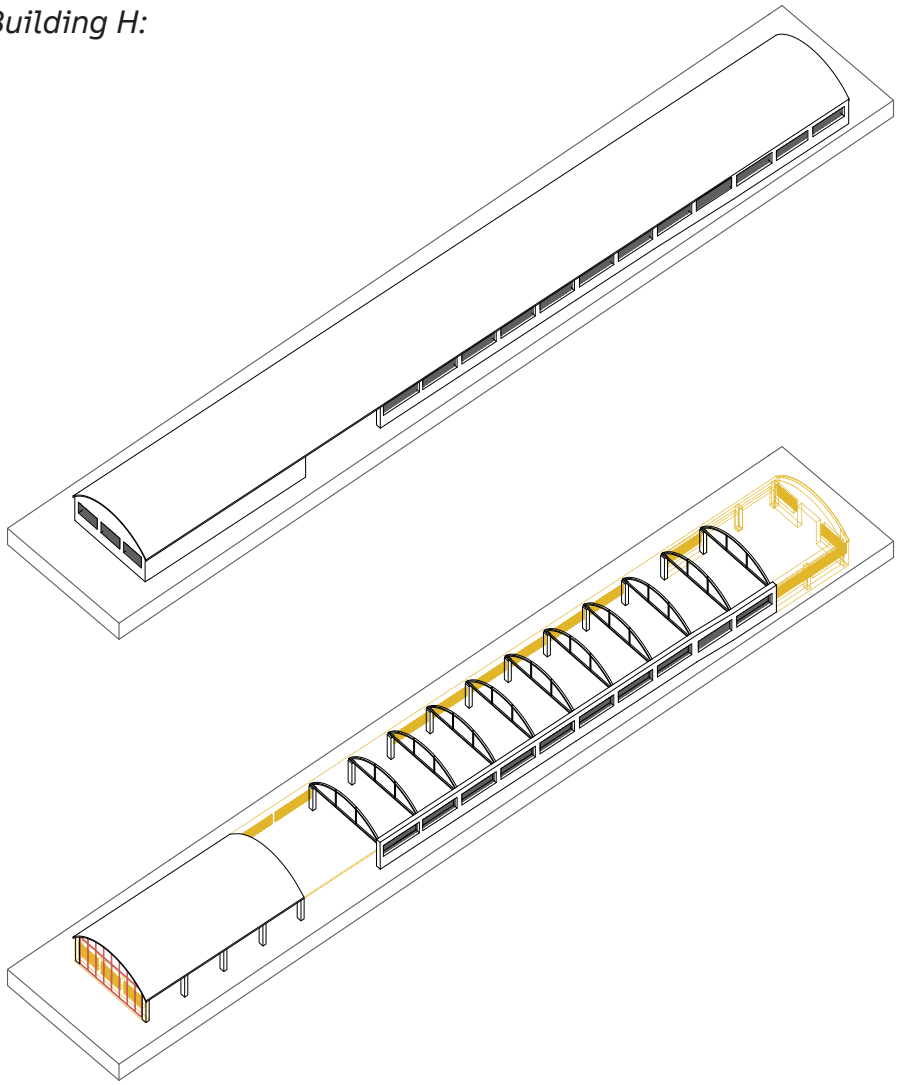
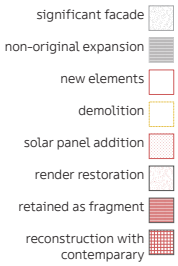


fig 5.16. Significance Diagram-Building H .

fig 5.17. Intervention Diagram-Building H .



Building Section	Condition	Pathology	Intervention	Case study	Justification*
Structural frame : concrete columns	Concrete column grid structurally continuous throughout, Biological growth: green algae and moss at upper sections, Render deteriorating with localised spalling	Sustained moisture, Freeze-thaw cycling and moisture infiltration,	Structural assessment of all columns, Sound columns consolidated, Biological growth removed by chemical treatment, Render consolidated or repatched where spalling, Compromised columns assessed individually for structural reinforcement	Parco Dora Turin	-
Steel vaulted roof structure	Shallow arched steel roof structure geometrically present but heavily deteriorated, Water infiltration Biological growth throughout steel frame members and at connection points, Surface corrosionl, Covering functionally lost	UV degradation, Sustained moisture exposure, Water retention at connection points and purlins	Sound members of steel frames consolidated and retained with irrecoverable members replaced with steel of matching section, PVC covering and all wall enclosure panels demolished entirely with roof structure retained as open exposed frame without covering partially and partially covering replaced with contemparary, Biological growth removed from retained structure		-

Building Section	Condition	Pathology	Intervention	Case study	Justification*
Consolidation of retained part	Portion attached to G textile hub section, Same condition as per F	Same condition as per F	Full retention and consolidation, Walls assessed and repaired, Roof covering replaced where failed Interior open plan consistent with G textile hub with mezzanine insertion as independent structure if program demands Graffiti on exterior surfaces retained with interior surfaces cleaned	BankART Studio NYK	-

table 5.8. Intervention guideline - Building H .

/Building I:

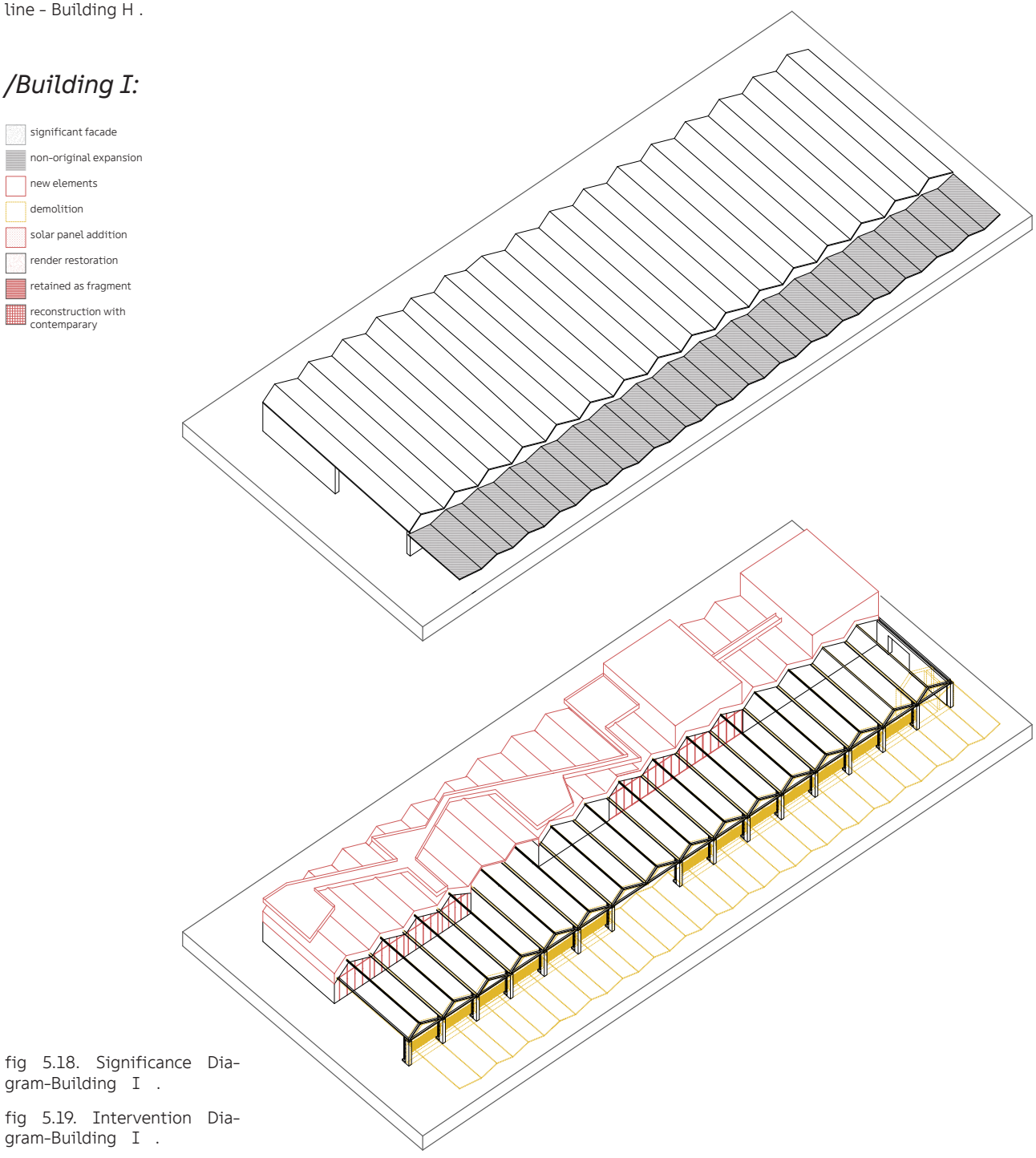


fig 5.18. Significance Diagram-Building I .

fig 5.19. Intervention Diagram-Building I .

Building Section	Condition	Pathology	Intervention	Case study	Justification*
Structural frame : concrete columns and sawtooth roof	Double-width version of G : concrete column grid with sawtooth steel roof, Condition assumed similar to G based on identical typology and shared abandonment history, Larger scale means potentially greater accumulated deterioration	As per Building G , sawtooth glazing and PVC loss, biological growth, steel corrosion, graffiti accumulation	Full structural survey mandatory prior to intervention: operative principles conditional on survey findings, Roof covering demolition, Sawtooth steel structure: 1. partially retained as open spatial infrastructure within park/ plaza zone,2. Vertical extension added above existing roof level to accomadate new functions Biological growth removed	1. CaixaForum Madrid 2. Mirafiori University Turin	-
Walls	As per building G: Rendered masonry , Metal grid windows with glazing largely absent, Render deteriorating with biological growth;, Graffiti covering lower sections	Water infiltration, Sustained moisture	Partial demolition (program based), Walls partially retained, Biological growth removed Render consolidated and retained, Windows: frames consolidated and new glazing reinstated, Graffiti on exterior wall surfaces retained while interior wall surfaces cleaned for programme requirements	LX Factory Lisbon	-
Rooftop plaza	Not existing (addition)	N/A	Publicly accessible open space at elevated level overlooking river:open public realm with seating and planting and access via new circulation; designed in relation to river view rather than warehouse logic below	Yongping Warehouses Foshan: rooftop public plaza above retained warehouse	-

table 5.9. Intervention guideline - Building I .

Buildings J & K/ / *Non-protected parts*

Building J, a two-story structure with a regular square layout, was built to house administrative functions (photo: J01), while Building K, inaccessible during the survey with limited information regarding its construction or function, is neither under heritage protection nor does it play a significant role in the complex layout, allowing for its demolition.

>3 Environmental Considerations

Starting in the 1960s, the City of Turin decided to close the Molassi canal and the broader municipal hydraulic system, thereby sealing the fate of the Regio Parco canal. Since the decommissioning of the canal, the three branches enclosing the Ex-FIMIT site have become overgrown with uncontrolled vegetation. The hydraulic infrastructure has now become a condition of physical hazard and spatial exclusion: empty water bodies in urban environments are documented vectors of disease risk and mosquito proliferation, while the unmanaged canal edges compound the site's perceptual unsafety, reinforcing the detachment of the site from the surrounding city fabric regardless of the number of crossing points designed.

The previous proposals to reactivate the canal , particularly by STE Spa in

2010, which envisioned the full reactivation of the canal , failed due to the environmental impact assessment. Therefore, it can be said that a full hydraulic reactivation is both environmentally constrained and technically beyond the scope of this thesis.[1]

This finding is consistent with comparable cases in the Piedmont's industrial-hydraulic landscape. At the Widemann cotton mill in San Germano Chisone , a canal-fed production complex whose history parallels Regio Parco's own, heritage conservation and clean energy production have been treated not as competing objectives but as mutually reinforcing ones, on the condition that the energy intervention accentuates rather than diminishes the socio-cultural weight of what survives.[2] The precedent proposes that the site's own ongoing reactivation project (Idroval 4) preserves the historic canal's footprint but converts its open intake channel into a pressurized steel pipe, trading visible hydraulic memory for engineering efficiency.[2] This thesis deliberately departs from that model, keeping the canal open rather than piped, in order to preserve both its perceptual legibility and its ecological function.

Consequently, this thesis proposes a twofold strategy regarding the canal in order to address the issues mentioned above:

a. Small-scale hydraulic energy harvesting through an Archimedes screw turbine and drawing on the residual head of the existing weir infrastructure (micro-hydropower scheme):The site's available head of approximately 2 meters is within the standard operating range for this technology (eg., Parco Lambro, Milan, where a screw turbine operates at a 2.1-meter head on a similarly reclaimed, disused hydraulic diversion). This scheme is primarily to supply the Ex-FIMIT site's own energy needs and is programmatically connected to the hydrology laboratories.

b. Free-water-surface constructed wetland and stormwater collection scheme, treating the canal branches as productive ecological edges through slow flow-through and vegetated treatment: Drawing an example from Emscher Landscape Park (Germany) , this scheme helps improve the microclimate, raise biodiversity, and align with the PRG's scheme to position the site in the ecological connection system.

Beyond the canal, the masterplan's energy strategy extends to the buildings. Building G's existing sawtooth roof is retained and fitted with photovoltaic panels, converting a structural feature already required for reasons of heritage preservation into a productive surface rather than a purely passive one. The Resident-Studios for Artisans , the one fully new-build volume in the masterplan, is to be designed from the outset around a combined-source energy strategy: rooftop solar photovoltaics, a direct connection to the canal's hydraulic scheme described above, and rainwater harvesting and passive bioclimatic design as complementary measures. Unlike the retrofitted historic buildings, whose energy performance is necessarily constrained by their protected fabric, the new construction is free to be designed as the site's primary energy-positive volume, offsetting demand elsewhere in the complex.

1 I Canali di Torino, "La centrale elettrica 'Regio Parco,'"

2 Riccardo Rudiero, "La centrale idroelettrica del cotonificio Widemann (San Germano Chisone, Torino): prospettive di conoscenza, conservazione e valorizzazione," Labor & Engenho 11, no. 4 (2017): 500-501.

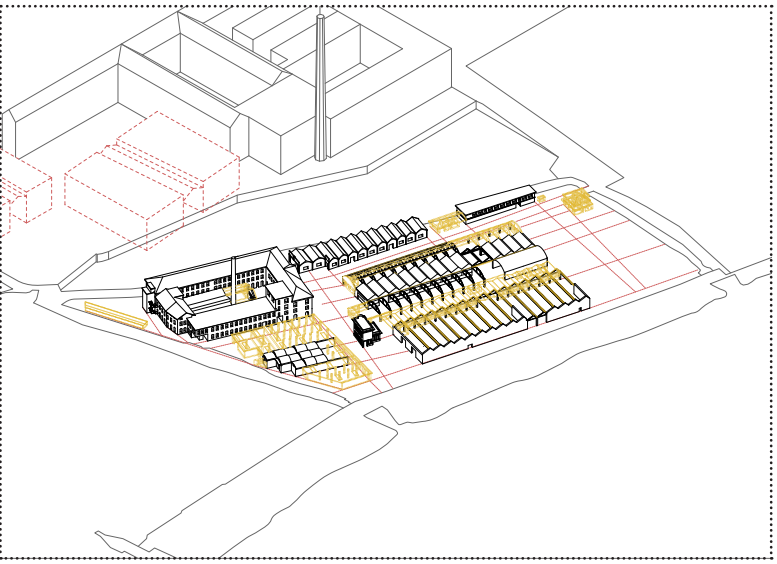
Riccardo Rudiero, "The Industrial Heritage between Conservation and Sustainability. A Difficult Relationship in the City of Pinerolo," Compasses, no. 37 (2021): 41–48.

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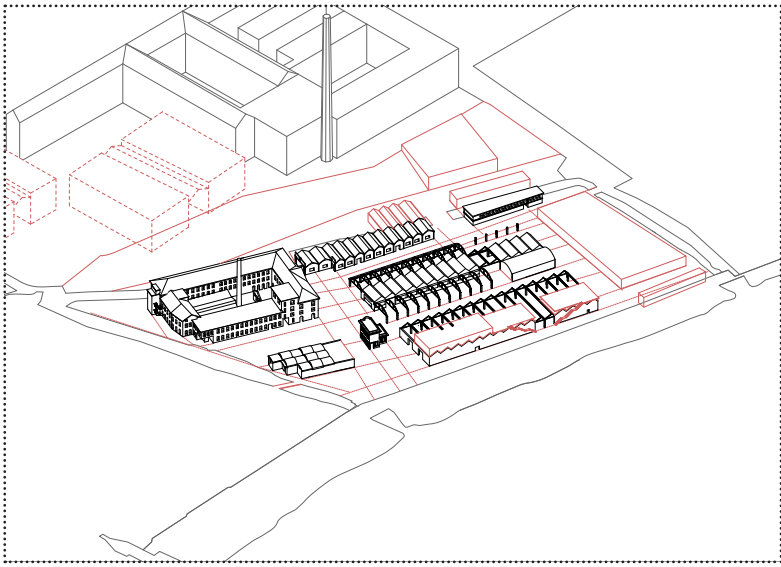
Designing a Masterplan

As established previously , the design scenario preserves the complex's overall morphological layout while selectively demolishing parts of it, replacing them with contemporary additions. The goal is to create conditions for an improved relationship between the site and the surrounding urban fabric, while consolidating the complex's internal spatial composition around its heritage core.

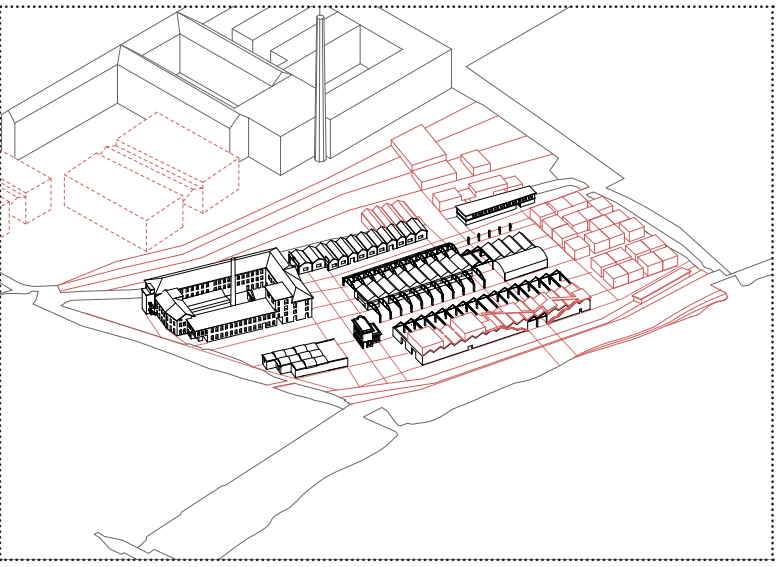
This section constitutes the final design representation of the thesis: a sequential reading of the site through formation diagrams, a masterplan, and targeted magnifications of key areas.



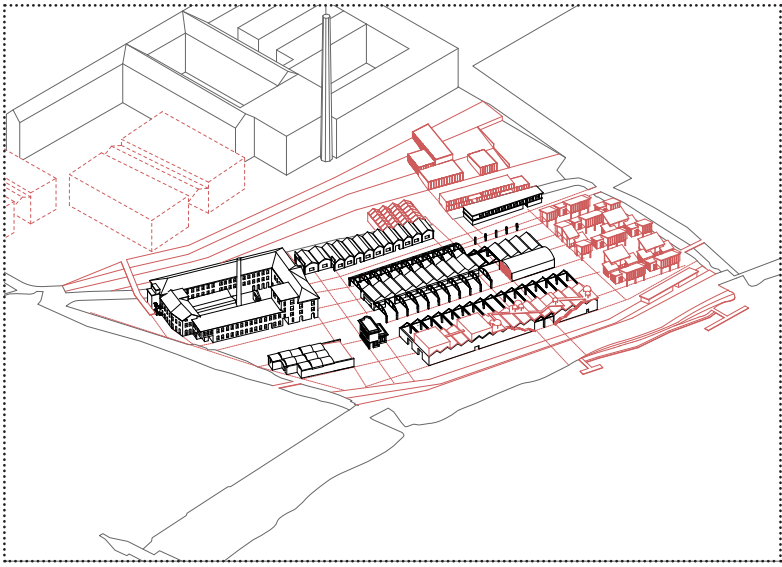
1. As the design foundation the original grid of the complex's layout is taken into consideration



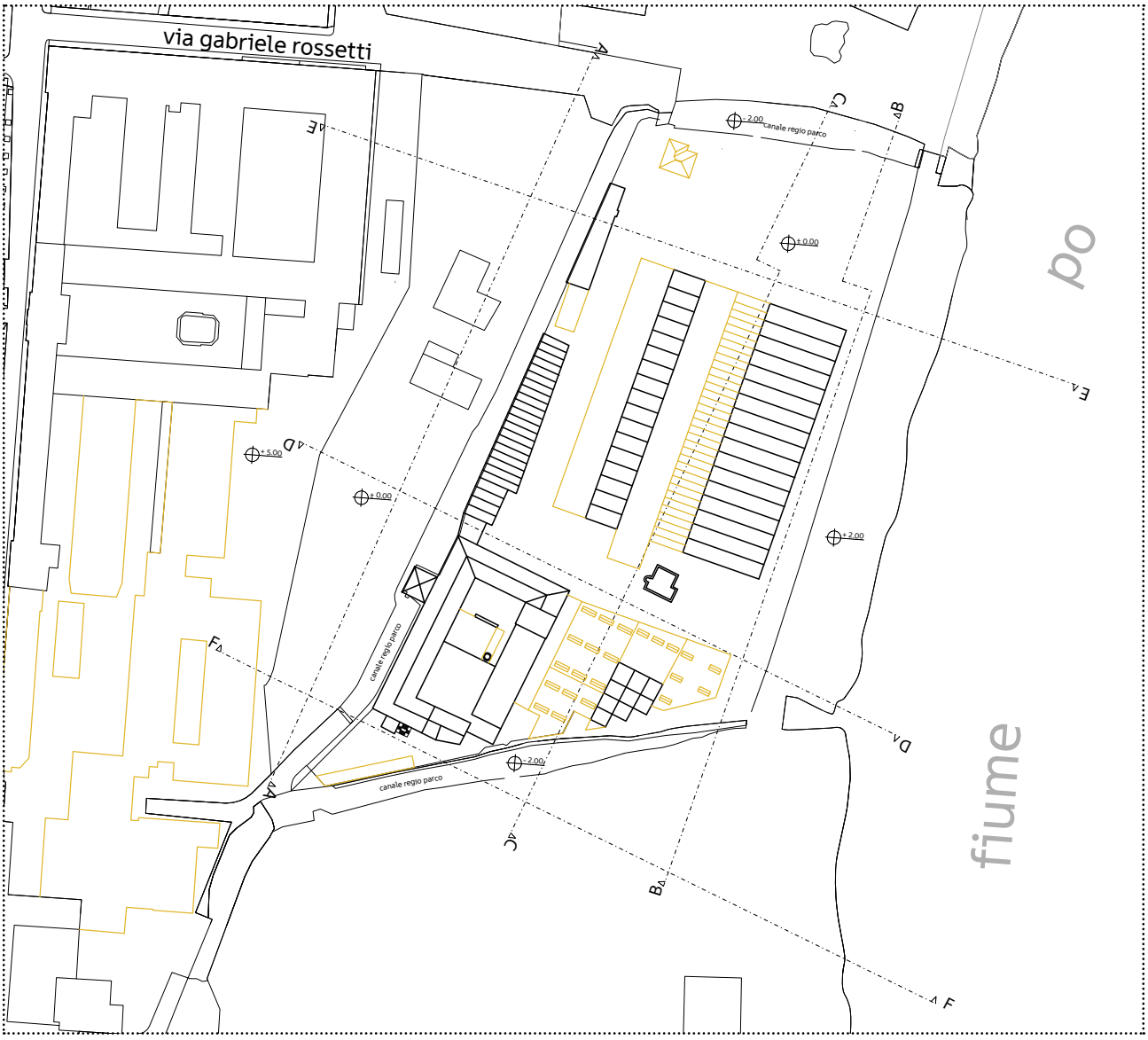
2. The additions follow the same grid both horizontally and vertically , while open spaces give way to better composition of public spaces



3. new system is linked not only by pathways but by bridges , to enhance connectivity and mobility. the large volumes along the site boundaries are carved with a twofold purpose: a. improve the access , and b. take into account the ecosystem connection and give way to more green spaces.



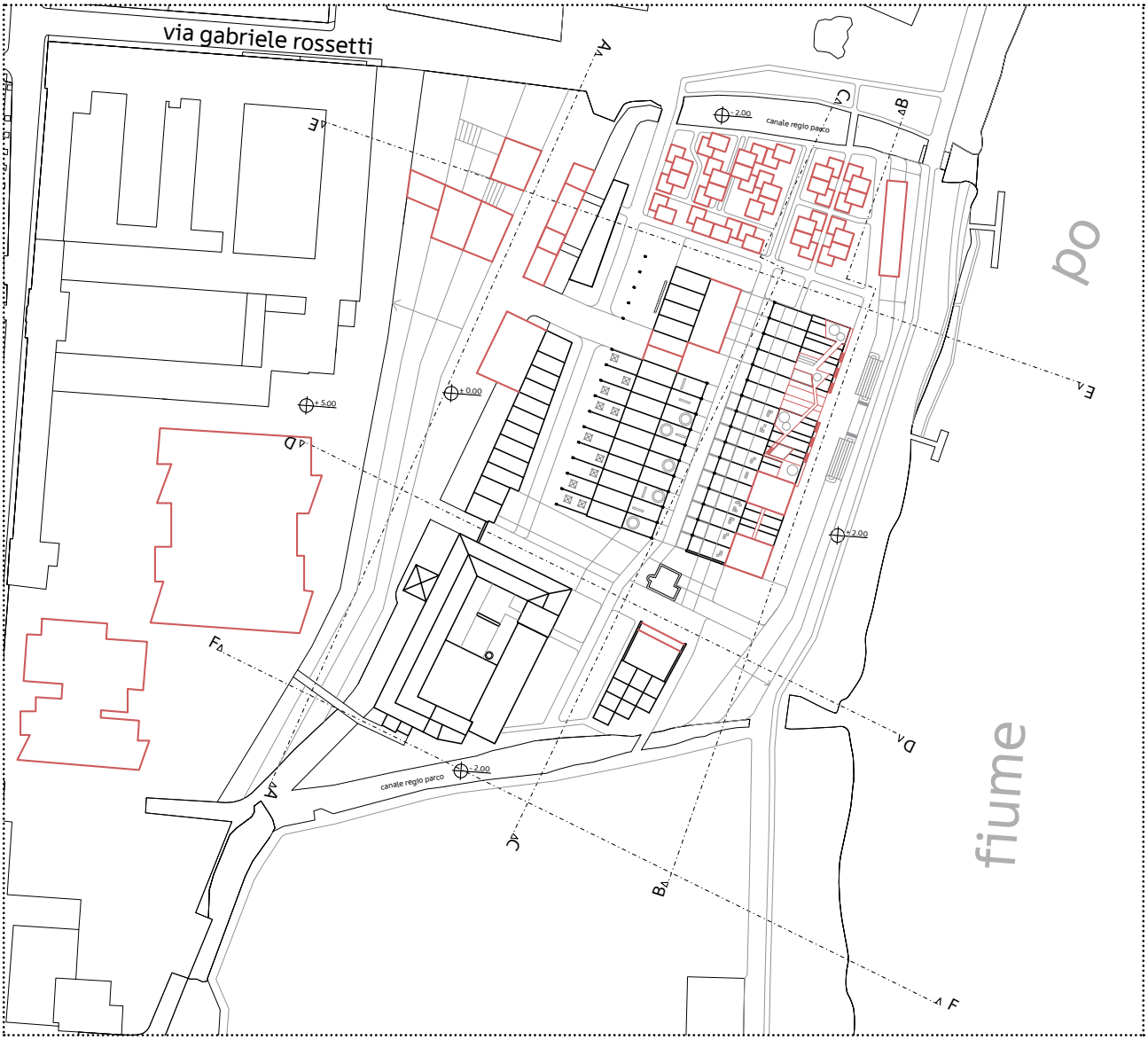
4. Access to the site is achieved through new bridges over the canal , reviving the life of the canal through removing the stigma of uncontrolled vegetation and out of use canal and connection to the river front . In addition, accentuating the connection to the Tabacchi and the river through a new bridge.



Site Plan

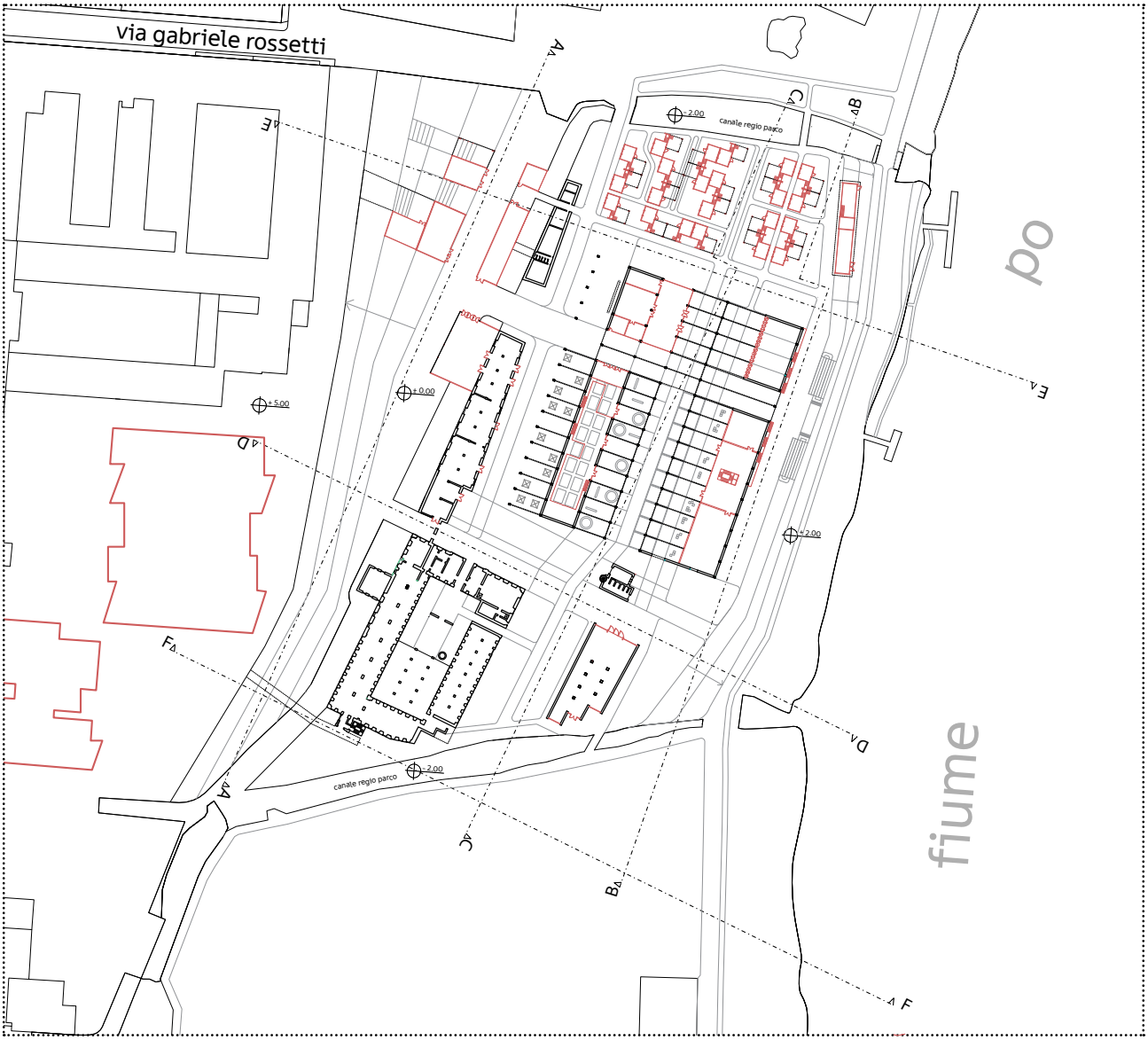
Drawings 14,15. Ex-FIMIT , design demolition plans: site plan & ground floor plan.

ground floor

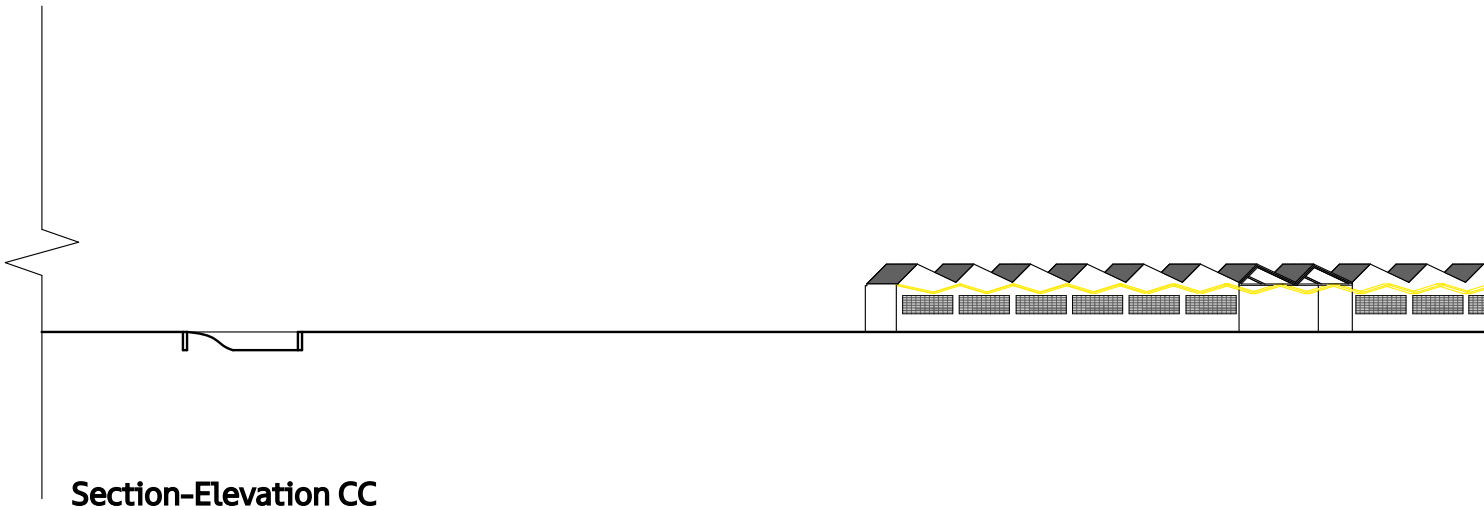


Site Plan

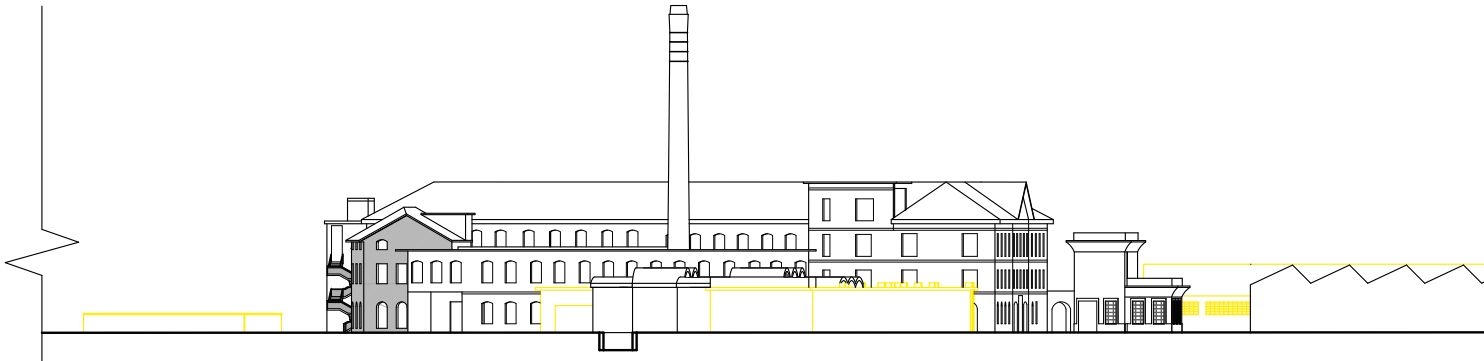
Drawings 16,17. Ex-FIMIT , design construction plans: site plan & ground floor plan.



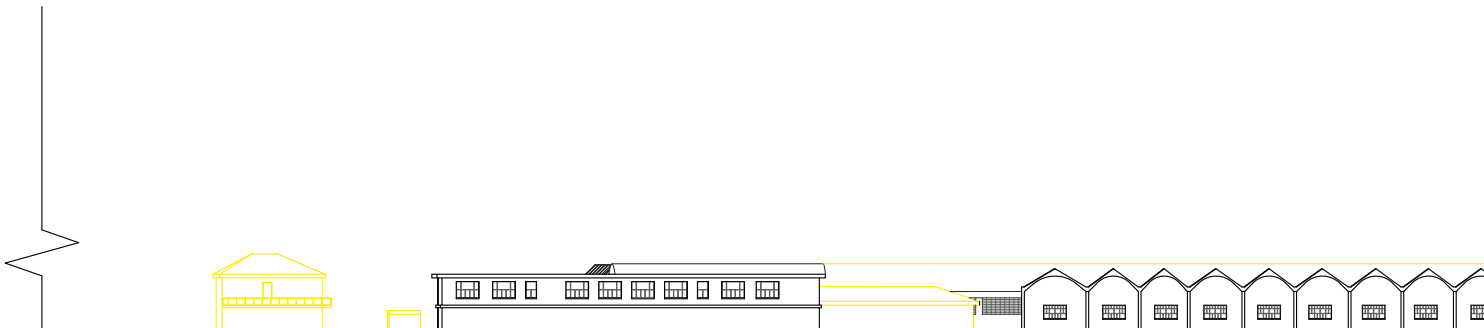
ground floor



Section-Elevation CC

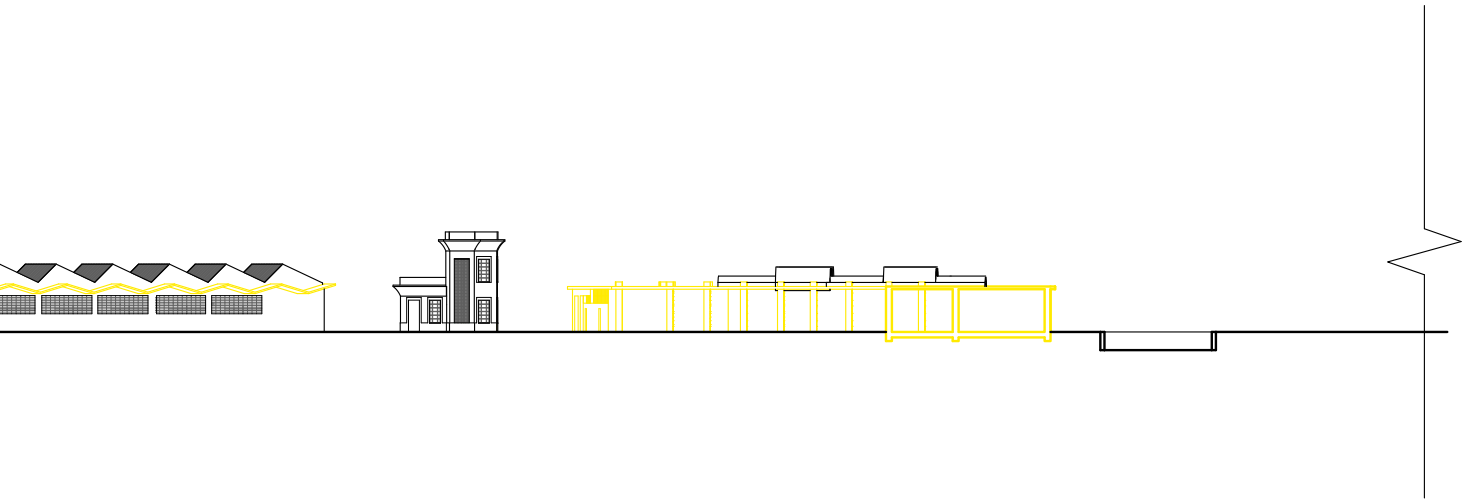


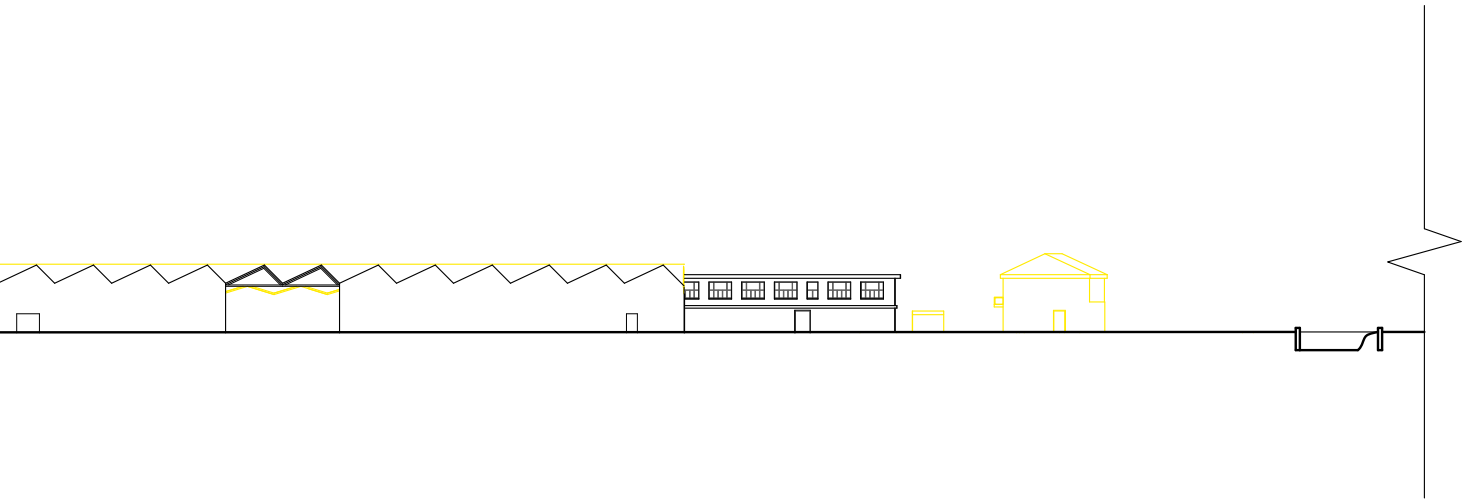
Section-Elevation BB

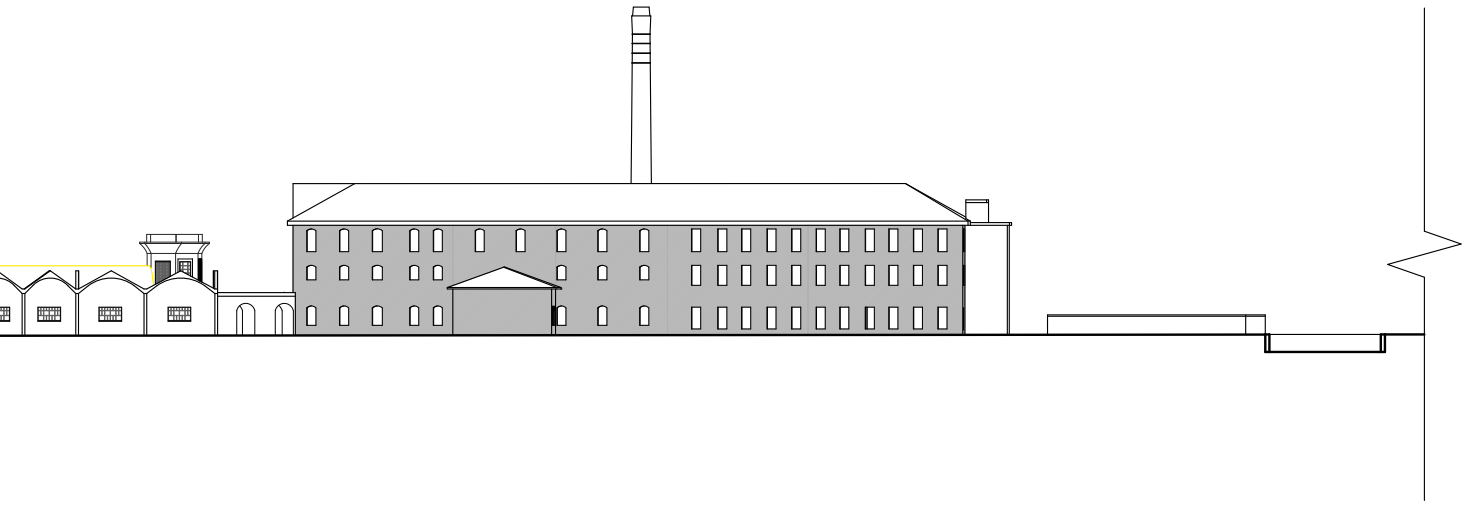


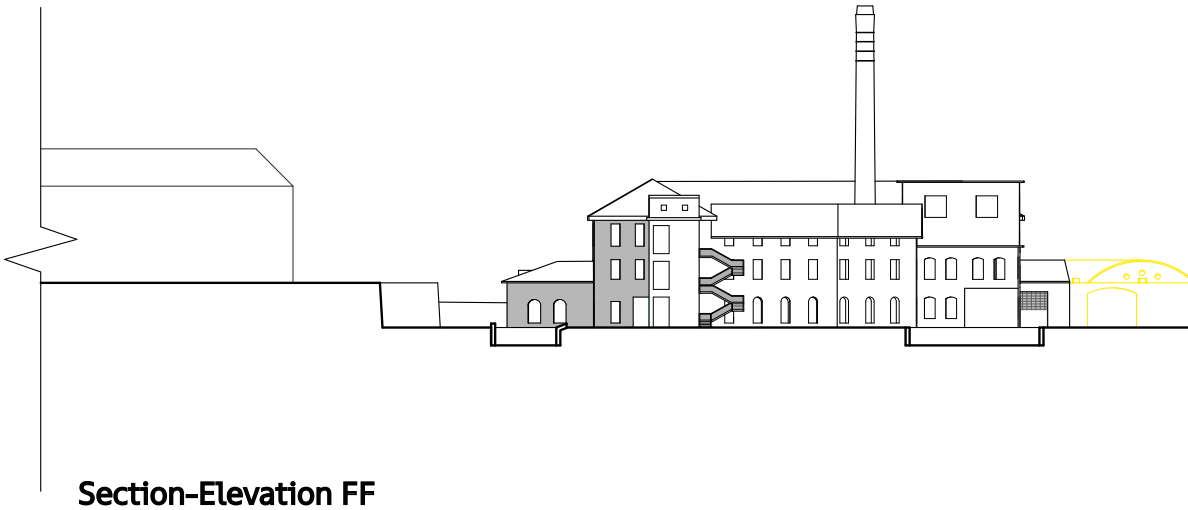
Section-Elevation AA

Drawings 18-23. Ex-FIMIT section-elevations ,design demolition

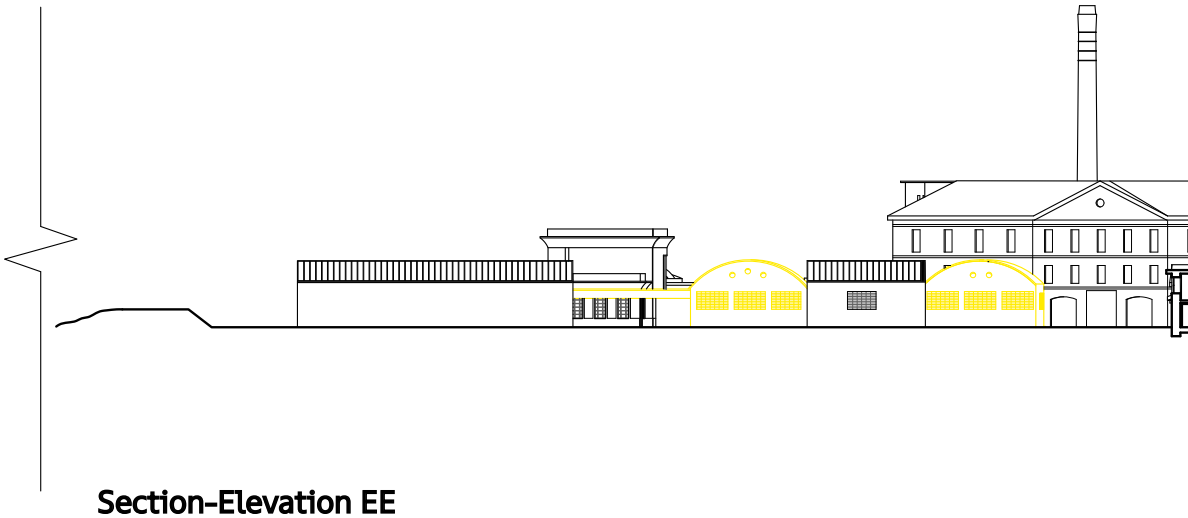




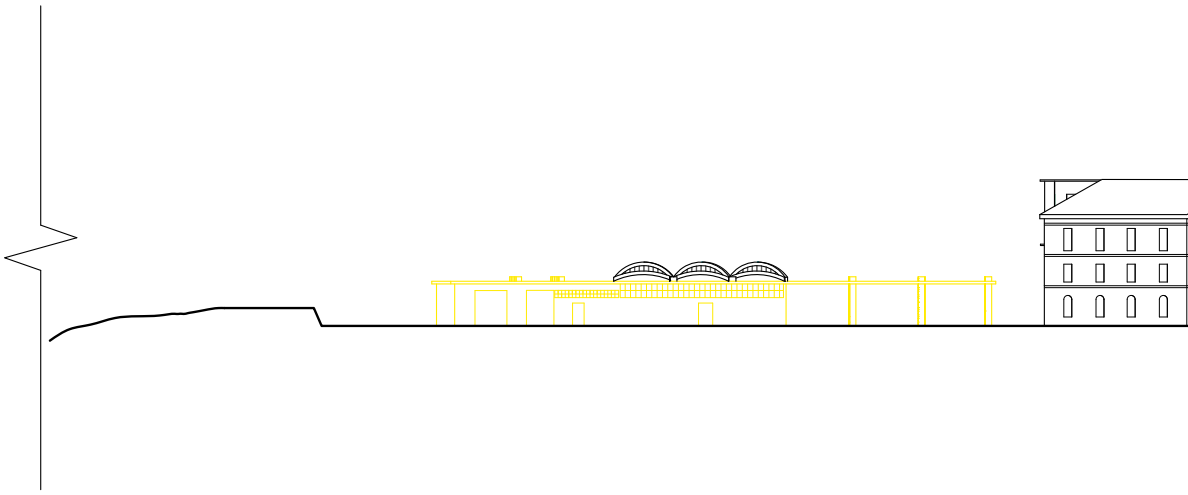




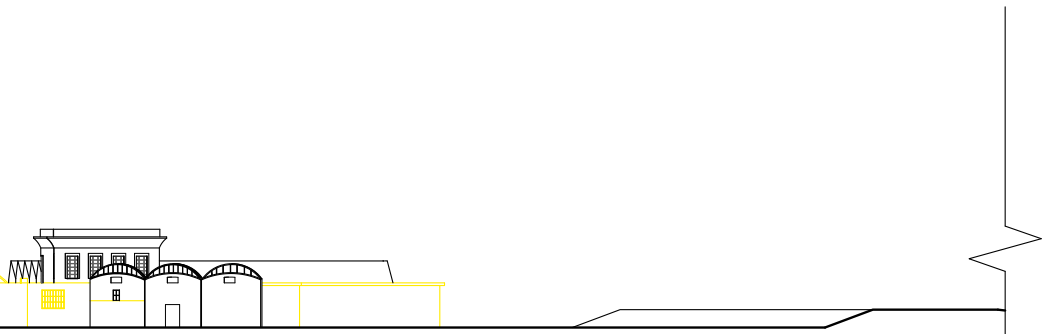
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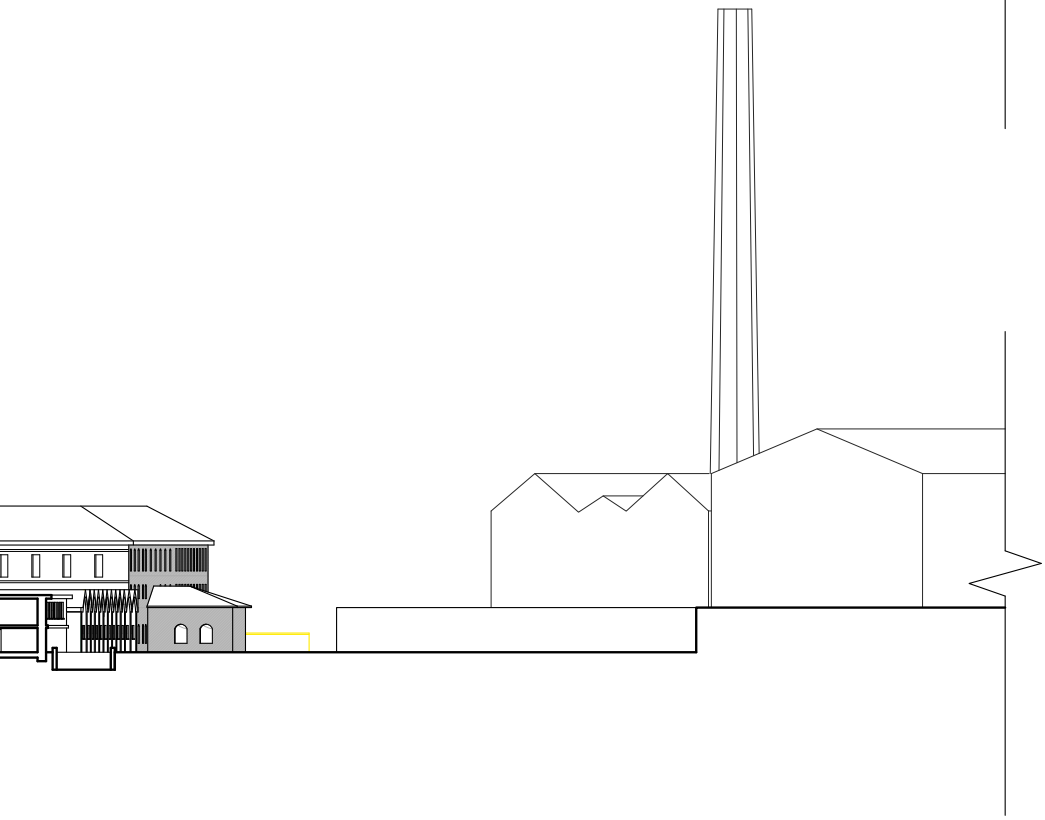


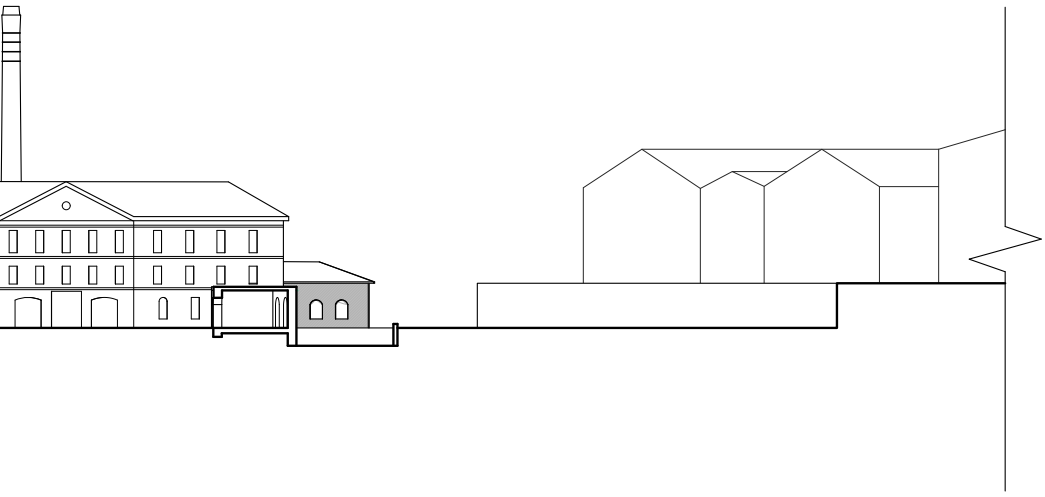
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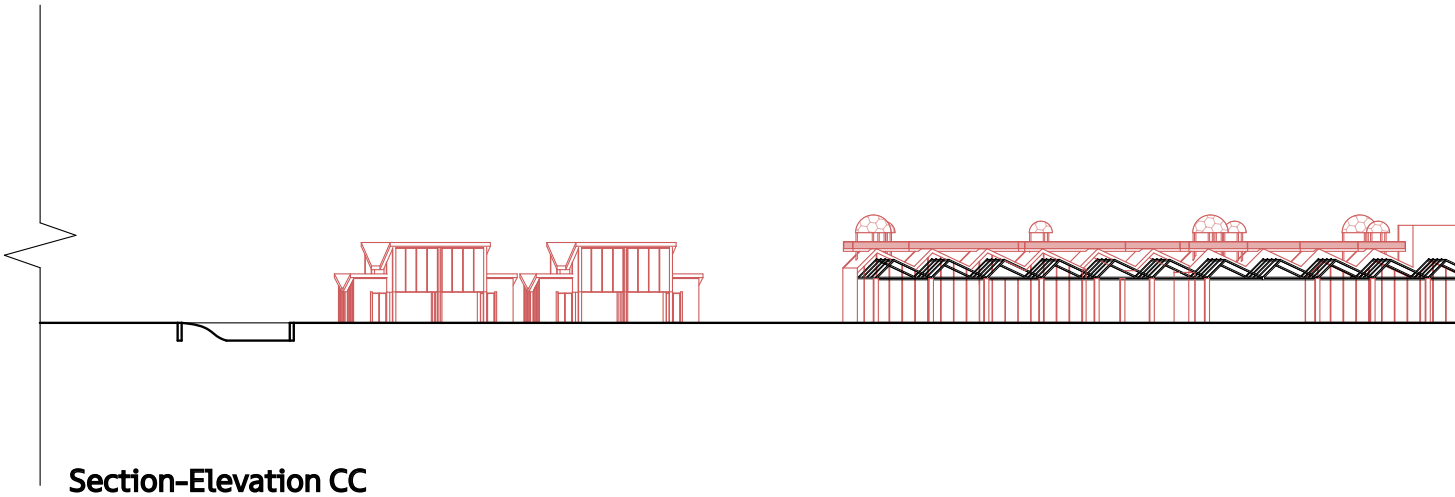


Section-Elevation DD

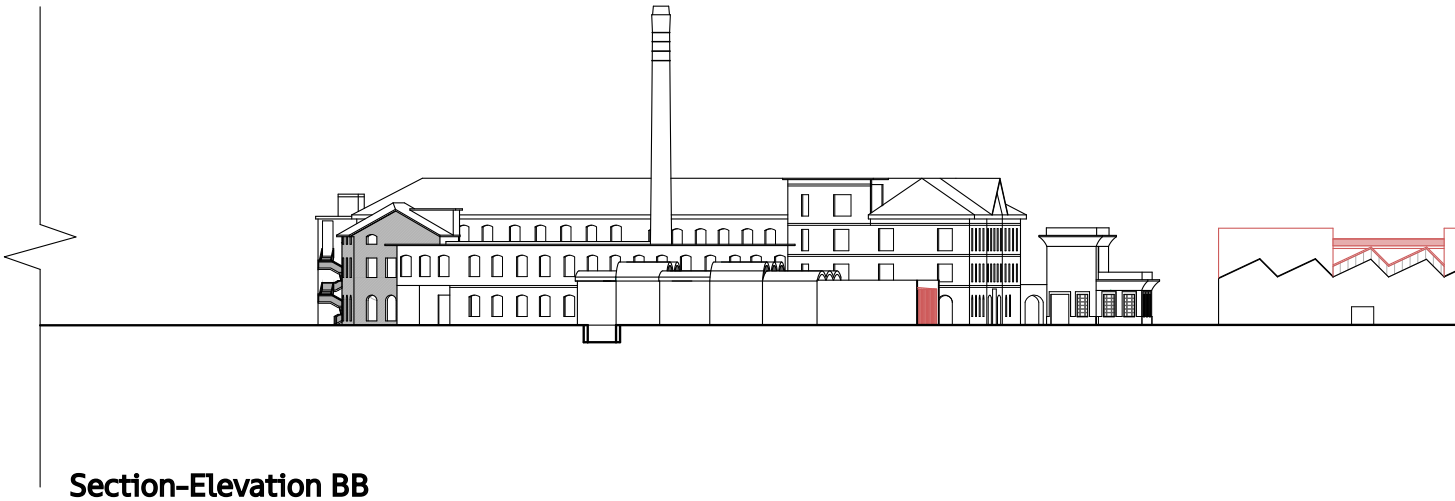




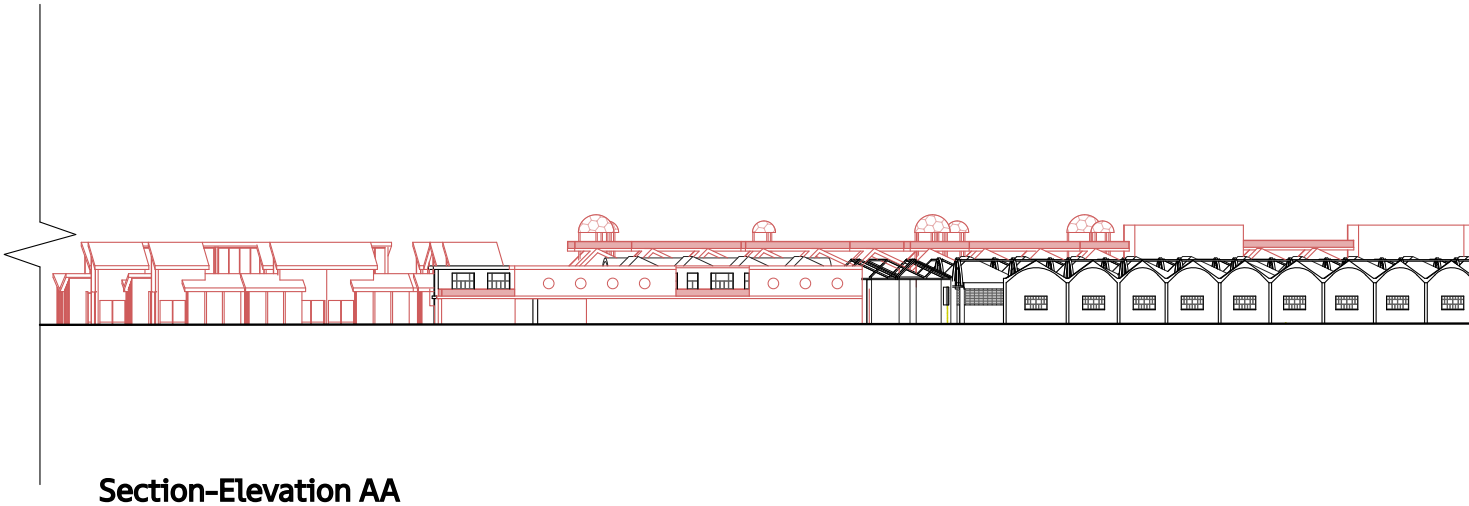




Section-Elevation CC

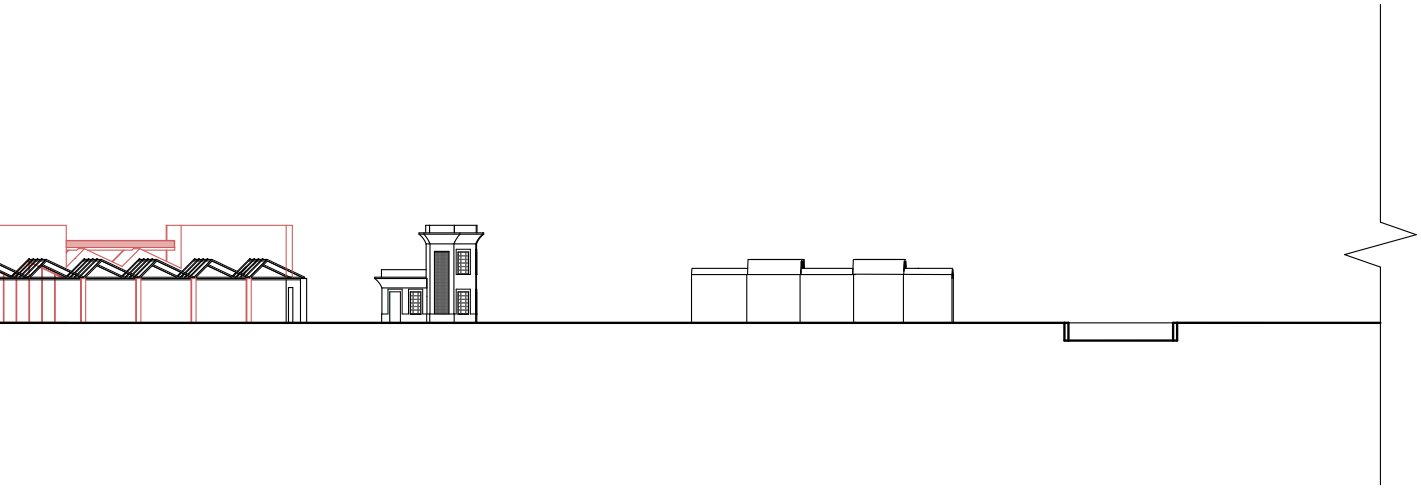


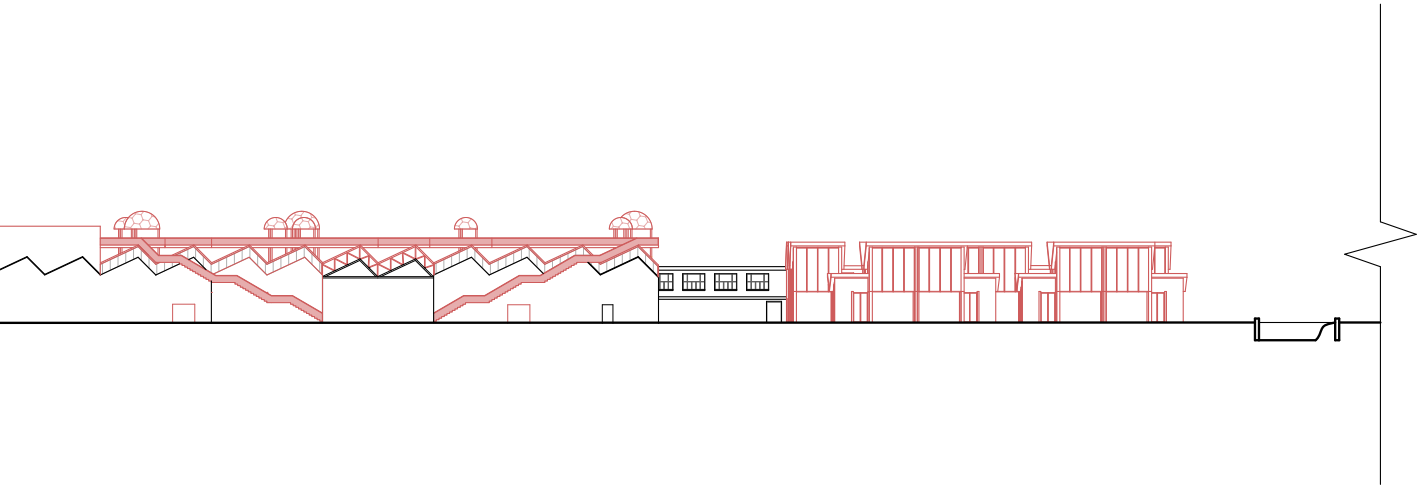
Section-Elevation BB

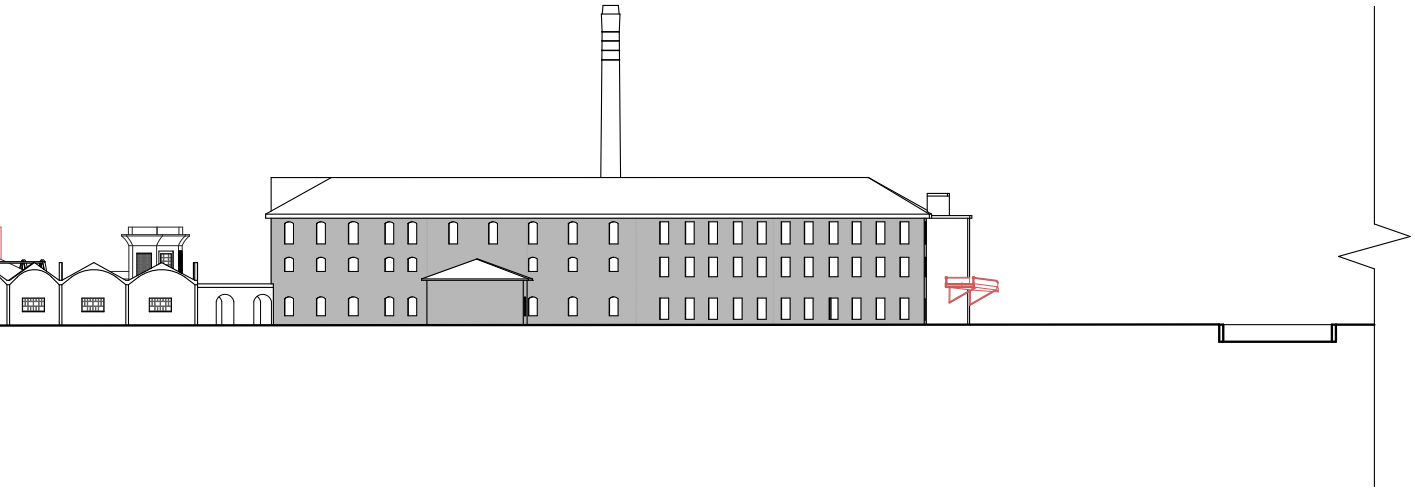


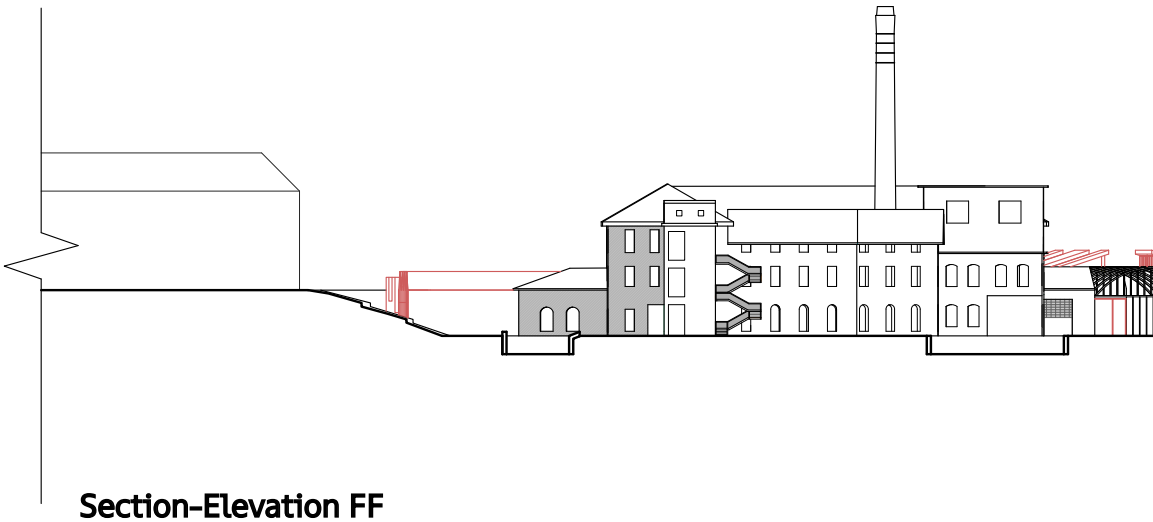
Section-Elevation AA

Drawings 24-29. Ex-FIMIT section-elevations ,design construction

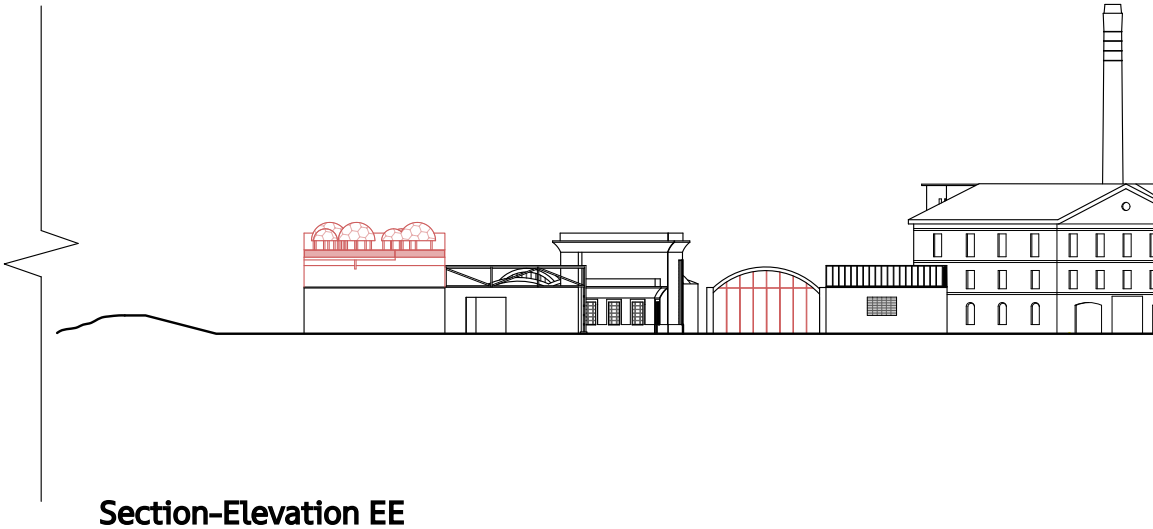




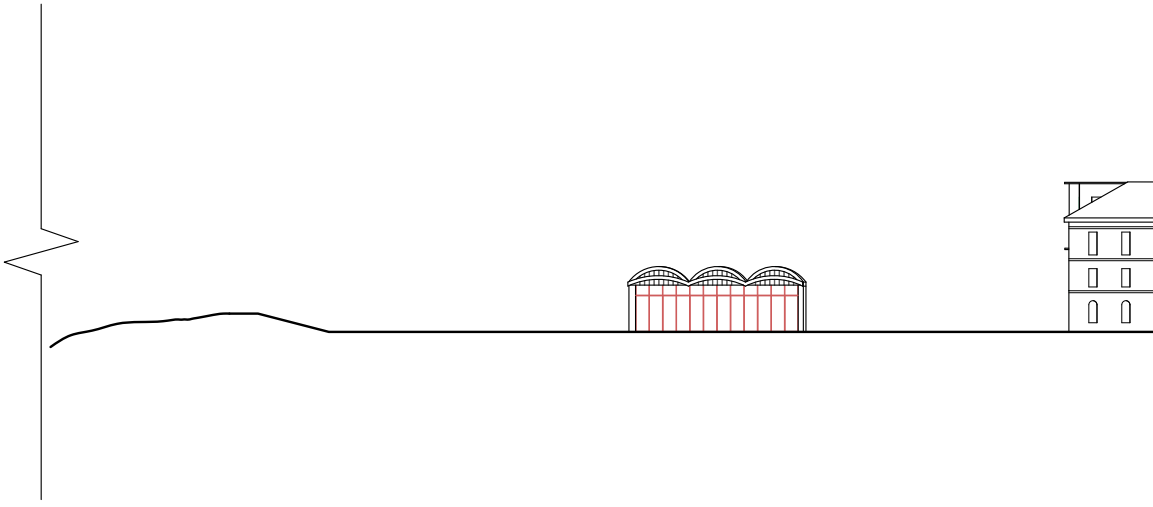




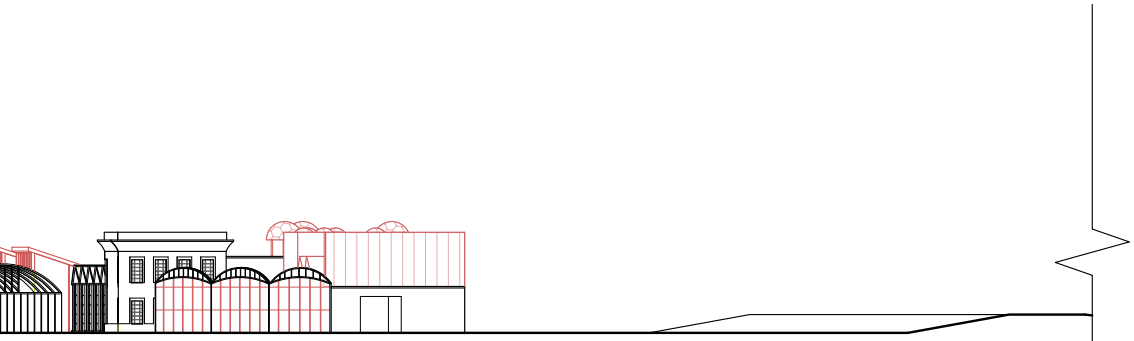
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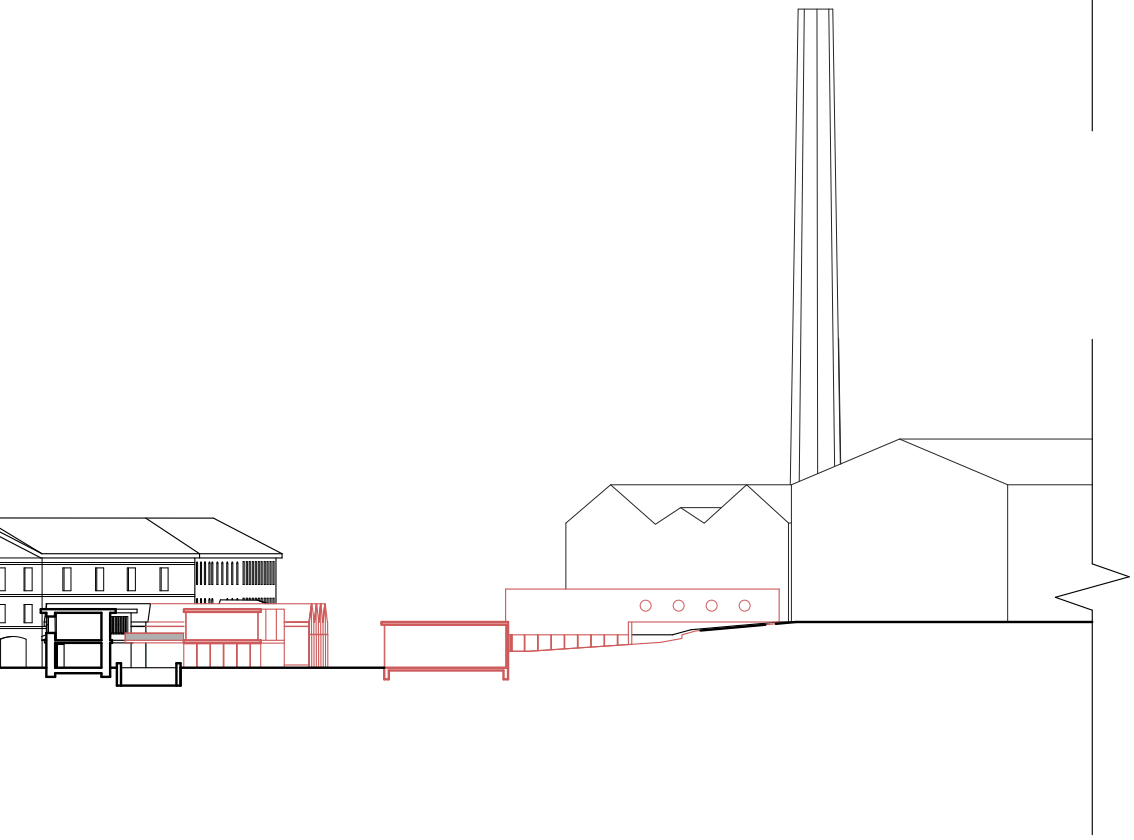


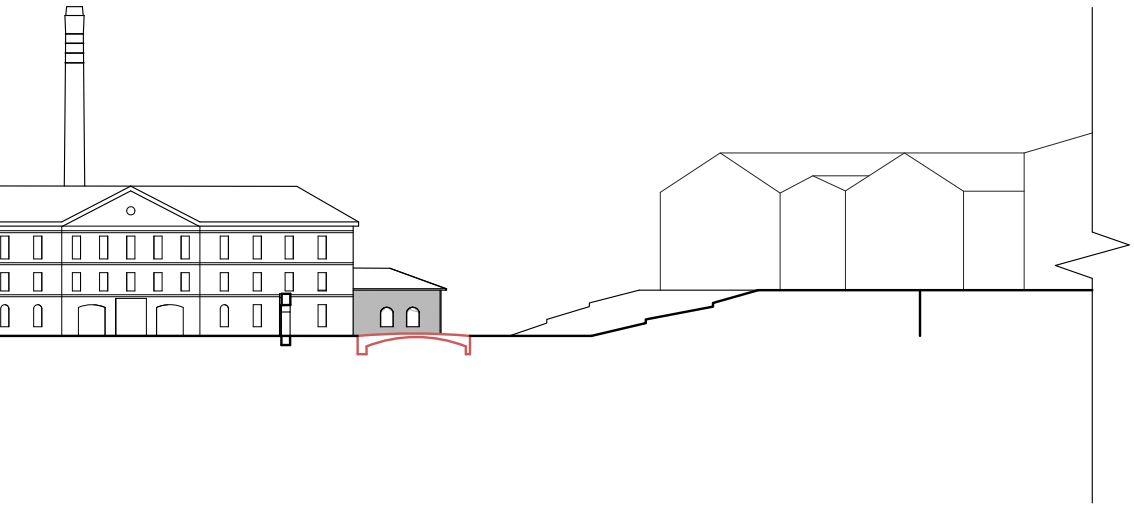
Section-Elevation EE



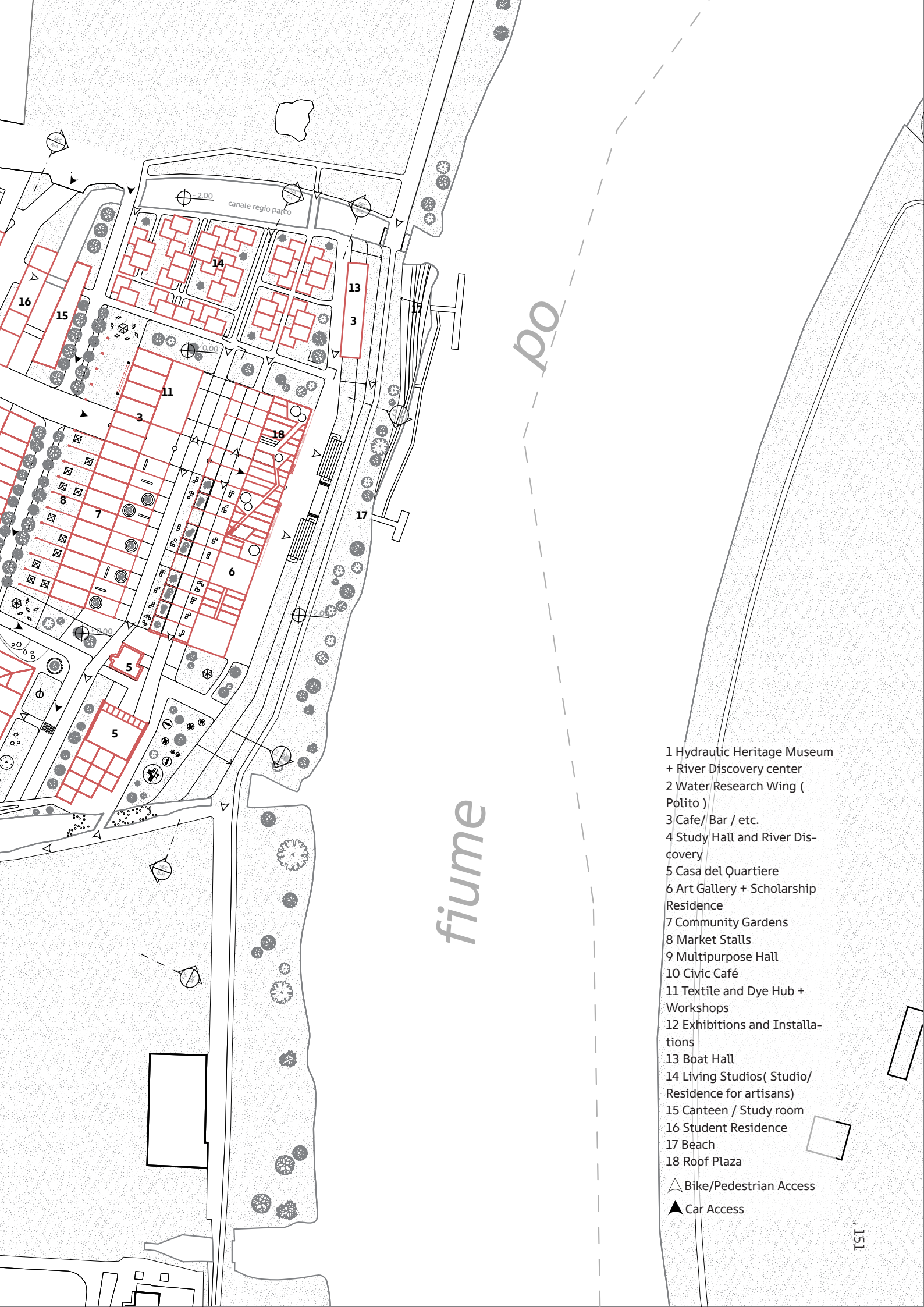
Section-Elevation DD








via gabriele rossetti
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16
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canale regio parco
Drawing 30
Site Plan
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100m



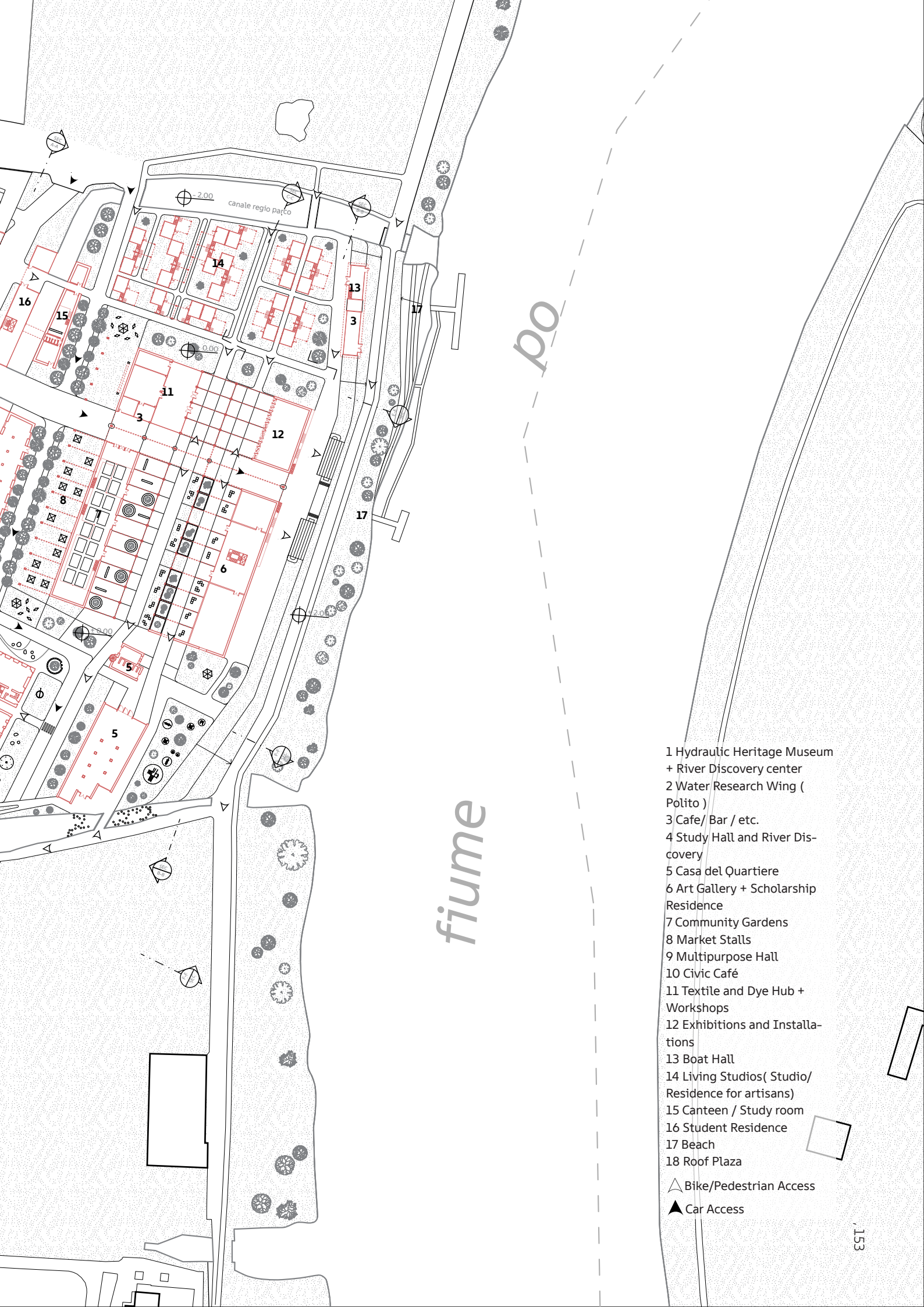
1 Hydraulic Heritage Museum + River Discovery center
2 Water Research Wing (Polito)
3 Cafe/ Bar / etc.
4 Study Hall and River Discovery
5 Casa del Quartiere
6 Art Gallery + Scholarship Residence
7 Community Gardens
8 Market Stalls
9 Multipurpose Hall
10 Civic Café
11 Textile and Dye Hub + Workshops
12 Exhibitions and Installations
13 Boat Hall
14 Living Studios(Studio/ Residence for artisans)
15 Canteen / Study room
16 Student Residence
17 Beach
18 Roof Plaza

Bike/Pedestrian Access

Car Access



Drawing 31
Ground Floor Plan



1 Hydraulic Heritage Museum + River Discovery center
2 Water Research Wing (Polito)
3 Cafe/ Bar / etc.
4 Study Hall and River Discovery
5 Casa del Quartiere
6 Art Gallery + Scholarship Residence
7 Community Gardens
8 Market Stalls
9 Multipurpose Hall
10 Civic Café
11 Textile and Dye Hub + Workshops
12 Exhibitions and Installations
13 Boat Hall
14 Living Studios(Studio/ Residence for artisans)
15 Canteen / Study room
16 Student Residence
17 Beach
18 Roof Plaza

Bike/Pedestrian Access

Car Access

PART 05

/ Conclu-sion

05 -

Conclusion

An onservation sparked this thesis: vacant industrial sites becoming sources of their communities' fear and nuisance, not just because of their state of decay and physical degradation, but also because of safety concerns. Looking at Turin's Ex-FIMIT and similar cases examined in this thesis, namely Ex-M.Ar.Di.Chi (fortified) and Ex-Poste Monteverdi (neglected), a paradox arose: despite control responses such as the sealing of gates, the condition of "urban unsafety", meaning the lack of either or both perceived and real safety, was not resolved but reinforced. In this context, why didn't the municipality's response to Ex-FIMIT's condition address the vacancy? Is the site instead kept in a state of limbo by confusion over what an adequate response would look like? These questions build on the one this thesis sets out to answer: Can the conservation of industrial heritage and urban safety be pursued as the same spatial objective?

The theoretical review identified a gap between the conservation of industrial heritage and its treatment within post-industrial urban regeneration. Industrial sites became useful instruments for urban regeneration primarily because of their potential for reuse. While approaches centered on urban vitality could address safety through occupation, conservation became subordinate to what the site could become rather than to what it had been. This was partly linked to the lack of sufficiently developed conservation frameworks suited to the scale and complexity of industrial heritage. Jacobs, Gehl, Newman, and the second generation of CPTED provided the baseline for understanding the relationship between safety, urban vitality, and the conservation of industrial sites.

Turin's urban investigation demonstrated that Ex-FIMIT cannot be understood only as an abandoned industrial complex. Its history and condition within the Regio Parco district, together with its position within Turin's ecological connection system set in PRG and its designated role within the university campus system, identify a wider urban value for the site. Its vacancy therefore represents not only the loss of a heritage asset but also the interruption of potential connections between existing urban systems and the day-to-day life of the neighboring community.

The study of 25 similar case studies established a multicriteria evaluation framework based on their approaches to conservation and urban vitality. Safety through urban vitality and the conservation of industrial heritage

were identified as core objectives and assessed through accessibility, temporal activation, program diversity, heritage legibility, environmental value, and governance and efficiency. The framework was tested on five selected cases, providing both a test of the framework and lessons for developing the Ex-FIMIT scenarios.

The central argument of the thesis is tested through three scenarios for Ex-FIMIT, structured along a spectrum of conservation, all of which pursue the same goal of balancing heritage conservation with safety through urban vitality. Their programs draw from the site's industrial history while responding to its position within the university campus designation and the day-to-day needs of the neighboring community, organized around institutional, productive, and civic cores.

The evaluation results show that scenario A is the strictest in terms of conservation and preserves well beyond what the heritage designation requires, while Scenario C treats heritage as subordinate to the program. Meanwhile, Scenario B retains the heritage-protected buildings and selectively demolishes, adds to, or adapts the remaining fabric, while maintaining the complex's original layout. This moderate response ranks highest overall, demonstrating a stronger balance between the thesis's objectives.

However, a deeper look into the sub-criteria shows that Scenario B falls short of Scenario A in both Heritage Legibility and Environmental Value. Scenario A's stronger performance in these criteria is therefore significant and becomes the basis for further refinement. The thesis subsequently develops Scenario B beyond the initial concept, focusing on conservation and environmental value while maintaining its broader urban strategy. Building-level intervention guidelines are developed to establish a more differentiated approach to retention, adaptation, demolition, and replacement, leading to a final masterplan that demonstrates what Scenario B can entail in spatial terms.

The design process therefore does not identify a single ideal degree of preservation. Rather, it demonstrates that the relationship between conservation and safety through urban vitality depends on how heritage is retained and integrated into an active urban condition. Selective intervention allows the historical structure of Ex-FIMIT to remain legible while creating the accessibility, occupation, programmatic diversity, and temporal activation required to reconnect the site to its neighborhood.

This thesis contributes a demonstrated method for applying principles of conservation and safety through urban vitality to devise scenarios that respond to both within a single concept, albeit with varying degrees. The design scenarios demonstrate how conservation can be treated as an active and selective strategy rather than solely as the retention of historic fabric. The findings suggest that conservation, when conditioned toward community vitality and temporal activation, can contribute to urban safety rather than competing with it. In this sense, the thesis addresses the gap between industrial-heritage conservation and urban regeneration by testing how the mechanisms of activation used in regeneration can be directed toward the continued conservation and occupation of industrial heritage.

Yet some aspects remain outside the scope of the thesis. The final proposal, even with an expansion of Scenario B's conceptual masterplan, sits at the DOCFAP level, a feasibility study of alternatives. The per-building assessments and intervention guidelines developed in Part 4* are a starting point for the next stage. Finally, the canal's full hydraulic reactivation, excluded

here for both environmental and flow-velocity reasons, would need its own dedicated study before any energy scheme beyond the Archimedes screw proposed in Part 4* could be seriously considered.

Returning at last to the sealed gates: In July 2024, the City of Turin filled Ex-FIMIT's vacancy with quarantine. Likely because it was the only response the administrative framework available to it could produce. This thesis argues against sealing it . A site that people actually inhabit generates the surveillance, the activity, and the legibility that a locked gate simply cannot. At Ex-FIMIT, conservation and safety turned out not to be two separate outcomes to be balanced against each other. They were the same design problem and were answered the same way.

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Appendix - A
Case Studies/

Project 01: FRAC Dunkerque 2013-2015

Location: Dunkirk , France
Dimensions: 9157 m2 new building, 1972 m2 existing halle / height is 35 m
Former use: boat warehouse
Architect / Client: Lacaton & Vassal / Dunkirk Urban Community
New Function: modern art museum , a new addition to an existing shipyard on the site of the harbor



Main Premise:
Dealing with an immense, bright and impressive volume and seeing its potential, the architects decided to keep halle in its entirety and on the other hand implant the FRAC, as a catalyst for the new area.
Program Objectives: The project proposes a mirroring structure of the existing halle in both scale and proportion, attached to its seaward façade and housing the FRAC program. This new volume positions itself in deliberate juxtaposition, neither competing with nor receding from the original structure. The act of duplication becomes a measured architectural response to the halle's identity, reinforcing it through dialogue rather than contrast.

Program Objectives
- Extend the existing Halle with a mirrored volume housing the FRAC programme.
- Reinforce the industrial heritage through architectural dialogue between old and new.

Effects + Spatial Strategies
- Adaptable spaces, material efficiency, and minimal construction intervention
- Improved pedestrian routes and a bridge strengthen links with the surrounding city
- Revitalizes the peripheral site and creates an inviting public realm
- Attracts a broader and more diverse public beyond museum visitors
- Uses the architecture, landscape, and views as attractions, strengthening the site›s cultural identity

Project 02: KANAL – Center Pompidou 2017-2026

Location: Brussels, Belgium
Dimensions: 40,000 m² different functions - 21m high
Former use: Citroën Yser car factory
Architect / Client: EM2N, noAarchitecten, Sergison Bates / Capitale City of Brussels
New Function: Art and cultural center



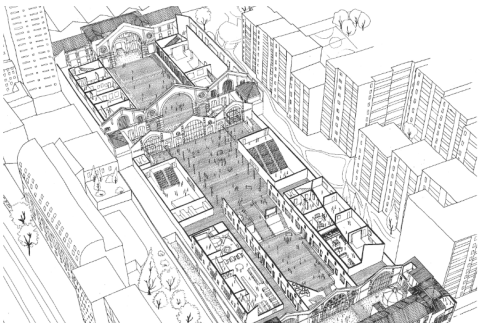
Main Premise:
provide opportunities for learning as well as a framework for diverse curatorial opportunities, a network of buildings and public spaces that act as an open forum, a catalyst for debate and social interaction. embrace the industrial identity of the former factory, transforming it with a light touch and a deliberate economy of means. As well as minimising waste, pollution and reducing demolition and construction costs, this conservation strategy embraces the identity of the historical building and transforms the car factory into an urban culture factory, a place of creativity and making.

Program Objectives
- Create a multidisciplinary cultural center and public forum accessible beyond art audiences.
- Establish KANAL as a cultural anchor within the Plan Canal regeneration.
- Preserve the industrial identity through minimal conservation intervention.

Effects + Spatial Strategies
- Converts the former showroom into a large public interior and main entrance, encouraging people to use the building simply as a place to stay.
- Multiple entrances, internal routes, and direct links to the canal, boulevard, and surrounding streets integrate the building with the city.
- A strong cross-axis organizes the public interior and connects with the pedestrian structure of the Canal Plan.
- Retains the existing industrial structure while inserting controlled new volumes for museum and archive functions.
- Repositions the industrial landmark as a cultural destination, strengthens the canal as an urban node, and supports wider social and economic regeneration.

Project 03: 104 Paris 2008

Location: Paris, France
Dimensions: 41,000 m²
Former use: funeral home
Architect / Client: Atelier Novembre / City of Paris
New Function: Center for artistic creation



Main Premise:
As part of France's political agenda to decentralize culture, the City of Paris transformed the nineteenth-century municipal funeral building into a public cultural center in 2008. Located in a largely residential and somewhat peripheral area near the railway tracks, the project aimed to create an accessible platform where art, production, and public life could coexist. Rather than following a predefined institutional model, it established a flexible framework capable of supporting evolving and multidisciplinary cultural practices

Program Objectives
- Foster collaboration between artists, researchers, designers, and entrepreneurs.
- Make art and cultural activities accessible to local and wider audiences.
- Combine cultural production with an economic and commercial hub.

Effects + Spatial Strategies
- A longitudinal central alley connects two streets and functions as the main public spine.
- The central hall combines circulation, events, and informal occupation, encouraging spontaneous interaction.
- Simple, open spaces allow changing programmes and long-term evolution while retaining the building›s architectural character.
- Mixed cultural, commercial, and creative uses attract artists, residents, visitors, and entrepreneurs.
- Visibility, continuous activity, and mixed occupancy provide natural surveillance and control.
- The hybrid programme supports cultural production while generating commercial and entrepreneurial activity.

Project 04: La Friche la Belle de Mai 2001-2013

Location: Marseille , France
Dimensions: 40,000 m²
Former use: tobacco factory
Architect / Client: ARM architecture(Matthieu Poitevin) / Secretary of the State for Heritage and territorial decentralization
New Function: cultural center, a creative district, a place to live, a piece of the city



Main Premise:
A culture-led urban regeneration project that transforms a former industrial tobacco factory into an interconnected territorial framework where contemporary creation, public life, and urban development operate as one system.

Program Objectives
- Create an interconnected cultural hub combining industrial heritage, contemporary art, and cultural production.
- Provide inclusive public and creative spaces for community use and artistic production.
- Support artists through studios, workshops, offices, and exhibition spaces.
- Establish «Panorama» as a cultural anchor within the wider Euroméditerranée regeneration.

Effects + Spatial Strategies
- Multiple buildings form a connected territory with accessible routes across levels.
- Retains and adapts the existing industrial structures while accommodating diverse programmes.
- A large accessible roof terrace and Panorama belvedere create new elevated public spaces.
- Atriums introduce natural light deep into the large industrial volumes.
- Creative production and public cultural programmes maintain activity throughout the site.
- Transforms underused industrial land into a civic destination and contributes to the wider regeneration of the district
- Development can proceed incrementally while keeping artistic and cultural activity active.

Project 05: Les Machines de l'Île de Nantes 2007



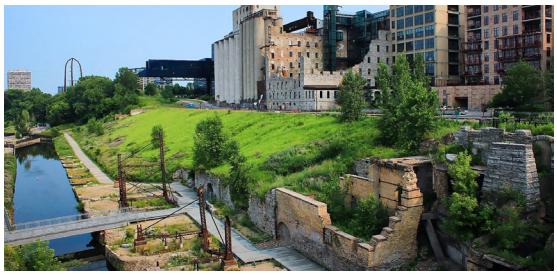
Location: Nantes, France
Dimensions: 337 hectares
Former use: shipyard
Architect / Client: Alexandre Chemetoff
New Function: theme park and engineering workshop

Main Premise:
A culture-led regeneration strategy that reactivates Nantes' former shipyard by preserving its industrial fabric and transforming it into a living site of production, public space, and urban continuity.

Program Objectives
- Preserve the shipyard's industrial and working-class heritage.
- Maintain the island as a place of active production, combining creation with public exhibition.
- Use cultural activity and public-space investment as a catalyst for long-term urban regeneration.

Effects + Spatial Strategies
- Existing structures are restored, repaired, and selectively transformed while exposing their raw industrial character.
- Promenades, circulation routes, and open warehouses connect scattered structures and reintegrate the site into city life
- Buildings and public spaces are oriented toward the river, strengthening the site›s relationship with its landscape.
- Visible creative processes encourage interaction between artists, engineers, and the public.
- Reclaims an industrial wasteland, reinforces collective memory, and anchors the wider regeneration of Île de Nantes.

Project 06: Mill City Museum



Location: Minneapolis, US
Dimensions: 11613 m^2
Former use: Mill
Architect / Client: MSR Design / Minnesota Historical Society
New Function: museum

Main Premise:
An adaptive reuse project that transforms the ruined Washburn "A" Mill into a contemporary museum, preserving industrial heritage while reconnecting Minneapolis to its riverfront origins.

Program Objectives
- Interpret the site›s industrial, labour, and immigrant heritage.
- Preserve the Washburn "A" Mill ruins while integrating them into a contemporary museum.
- Combine historic fabric with modern architecture to create a major cultural destination and support riverfront revitalization.

Effects + Spatial Strategies
- Preserves the historic masonry shell while inserting steel and glass elements, creating a clear dialogue between heritage and contemporary use.
- An eight-storey glass façade and transparent transition spaces bring light into the historic structure and open it toward the river.
- Courtyards, exposed archaeological remains, and circulation through the historic shell make the building›s industrial history physically experiential.
- Multiple entrances across two levels improve connections between the museum, city, and riverfront.
- Reconnects downtown to the Mississippi, revitalizes an abandoned industrial site, and strengthens the riverfront as a cultural destination.

Project 07: Gare Maritime 2020

Location: Brussels, Belgium
Dimensions: 45000 m²
Former use: railway station
Architect / Client: Neutelings Riedijk Architects / Extensa
New Function: work place/ public space



Main Premise:
once Europe's largest railway station for goods on the Tour & Taxis site in Brussels, has been transformed into a covered city with a mixed program of working and shopping and plenty of public space to relax. Under impressive steel roofs, Neutelings Riedijk Architects designed the new Gare Maritime as a City District; 'a city where it never rains

Program Objectives
- Transform the historic Gare Maritime into a mixed-use public destination combining commercial, social, and event functions.
- Preserve the historic structure while introducing a sustainable and adaptable contemporary programme.
- Create an accessible indoor urban landscape that supports public life and long-term use.

Effects + Spatial Strategies
- Interior boulevards, streets, parks, and squares organize circulation and create a public urban landscape within the historic hall.
- Lightweight CLT pavilions are inserted beneath the existing roof, preserving the large-scale industrial structure.
- The central hall remains open for events, while gardens and green promenades encourage social interaction.
- Photovoltaics, rooftop solar, geothermal systems, and rainwater reuse support an energy-neutral, fossil-free development
- Combines heritage reuse, public activity, and low-carbon construction to support sustainable urban redevelopment.

Project 08: le murate firenze 1999-2018

Location: Florence, Italy
Dimensions: 2700 m²
Former use: prison
Architect / Client: Renzo Piano building workshop / City Council of Florence
New Function: social complex



Main Premise:
Transforming the former Murate complex (prison) into a permeable, multifunctional "city-fortress" within Florence, revitalizing a degraded historic site by layering public, social, commercial, educational, and residential functions while preserving its architectural memory and identity.

Program Objectives
- Integrate municipal housing with civic, cultural, commercial, and educational uses.
- Increase ground-level permeability and connection with the city.
- Preserve the former prison›s heritage while humanizing and reactivating the complex.
- Transform the isolated complex into a vibrant urban hub.

Effects + Spatial Strategies
- Public, commercial, and craft uses at ground level; social and educational spaces above; housing on upper levels.
- New passages and public squares reconnect the former prison block to the surrounding city.
- Former prison cells are converted into varied housing typologies while retaining historic elements.
- Careful restoration is combined with contemporary additions, such as the vertical garden, to express renewal.
- Housing, culture, commerce, education, and events generate continuous activity and support the local economy.
- Reintegrates an isolated historic block and demonstrates how heritage can be revitalized without relying on extensive new construction.

Project 09: OGR 2018

Location: Turin, Italy
Dimensions: 20000m²
Former use: railway depot
Architect / Client: Bp+p Architecture&Design (phase 2), CRA (premier concept) , FOR / OGR-CRT Consortium Company
New Function: center for art and innovation



Main Premise:
The project aims to preserve the industrial architectural identity while redefining the complex as an open, city-oriented platform where artistic production and scientific innovation coexist. Rather than a single-use venue, it operates as a connective system linking past industrial labor with future-oriented creativity.

Program Objectives
- Preserve the historic industrial structure while introducing flexible cultural, research, and innovation uses.
- Create a metropolitan hub active beyond traditional working hours.
- Connect art, technology, academia, startups, and the public through interdisciplinary programming.
- Reintegrate the complex into Turin through a new civic public space.

Effects + Spatial Strategies
- Uses a "box within a box" strategy, inserting new functions inside the preserved industrial shell without altering the historic masonry.
- The H-shaped layout connects exhibition/performance, research, coworking, and technology spaces through a central social interface.
- Preserves large, uninterrupted volumes for adaptable programming, logistics, and visual impact.
- Transforms the entrance courtyard into Corte dell'Arte, an urban foyer connecting OGR with the city.
- Repositions industrial heritage as an active platform for creative production, research, and entrepreneurship.
- Creates continuous interaction between cultural, academic, and economic actors, strengthening Turins innovation identity while retaining its industrial legacy.

Project 10: Casa del Lector 2012

Location: Madrid, Spain
Dimensions: 148,300 m²
Former use: slaughterhouse
Architect / Client: Ensamble Studio
New Function: contemporary creation



Main Premise:
The project maintains and enhances the original industrial character of the complex by imposing a new order on the existing buildings. The confluence and relationship between the new and pre-existing systems creates a new space.

Program Objectives
- Preserve and stabilize the historic structures through precise, minimally invasive interventions.
- Introduce flexible spaces for research, training, performance, and interdisciplinary exchange.
- Maintain the industrial identity while enabling long-term adaptation and transformation.
- Establish Matadero as open-ended, community-oriented cultural infrastructure.

Effects + Spatial Strategies
- Introduces a prefabricated concrete structure within the preserved masonry and metal shell.
- A dual-level system accommodates research/workspaces and reconfigurable training and outreach activities.
- Preserved courtyards function as flexible public spaces, supporting changing uses and community activity.
- New materials and interventions reinforce rather than conceal the existing industrial character.
- Reframes the complex as an evolving cultural ecosystem supporting experimentation, participation, and interdisciplinary production.
- Uses incompleteness and gradual transformation as a long-term strategy for activating the historic complex.

Project 11: Parco Dora 2004-2012

Location: Turin, Italy
Dimensions: 37hectars
Former use: steel plants
Architect / Client: Latz + Partner/ City of Turin
New Function: urban park



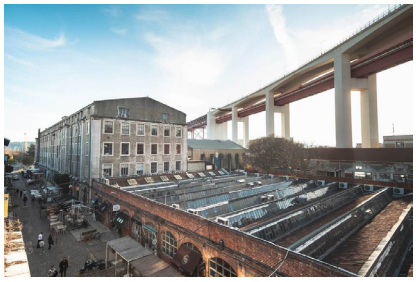
Main Premise:
Parco Dora transforms a vast abandoned industrial corridor along the Dora River into a post-industrial landscape park that integrates ecological restoration, heritage preservation, and urban reconnection. Rather than erasing its manufacturing past, the project reinterprets industrial remnants as structural, spatial, and symbolic assets—turning a former brownfield into a new environmental and civic backbone for Turin.

Program Objectives
- Reconnect the Dora River with the city and surrounding neighbourhoods.
- Reuse industrial heritage as public and recreational infrastructure.
- Establish a continuous pedestrian and cycling network across the former industrial site.
- Create a resilient park system supporting recreation, events, and environmental performance.
- Reframe post-industrial heritage as a resource for long-term urban transformation.

Effects + Spatial Strategies
- Preserves steelworks, cooling towers, sheds, and other structures as spatial anchors and event spaces.
- Elevated walkways, bridges, ramps, and promenades stitch together the five former industrial lots.
- Reopens and reconnects the Dora, activates its banks, and integrates stormwater management into the existing industrial landscape.
- Uses durable industrial materials and extensive planting rather than ornamental landscaping.
- Transforms contaminated brownfield into a major green space supporting everyday recreation, events, and tourism.
- Repairs physical and visual connections between neighbourhoods previously separated by industrial infrastructure.

Project 12: LX Factory

Location: Lisbon, Portugal
Dimensions: 23000 m^2
Former use: food processing company and printers
Architect / Client: Ana Duarte Pinto and João Manuel Alves
New Function: creative hub



Main Premise:
LX Factory is the adaptive reuse of a 19th-century industrial complex in Alcântara, originally built for textile production, into a contemporary creative hub. The project transforms abandoned factories into a vibrant urban village while preserving their industrial character, turning a previously inaccessible and decaying site into an open, dynamic environment that reflects Lisbon's shift from production-based industry to culture-driven urban life.

Program Objectives
- Establish a creative and economic cluster combining work, leisure, and cultural production.
- Reactivate vacant industrial land through mixed-use, low-cost spaces for creatives and small businesses.
- Encourage continuous occupation, experimentation, and public accessibility.
- Strengthen local creative identity while supporting tourism and economic activity.

Effects + Spatial Strategies
- Reuses industrial warehouses with reversible partitions, allowing spaces to adapt to different tenants and uses.
- Combines studios, offices, shops, restaurants, cultural venues, and leisure within the same complex.
- Turns outdoor circulation streets into public spaces for everyday interaction and events.
- Preserves existing structures and façades while integrating street art and installations into the industrial fabric.
- Develops incrementally in response to occupancy and demand, supporting a low-cost regeneration model.
- Supports local creatives and businesses while increasing tourism, cultural participation, and economic activity.

Project 13: Tate Modern

Location: London , England
Dimensions: 34,500m²
Former use: Power Station
Architect / Client: Herzog & de Meuron / The Tate Gallery
New Function: Museum



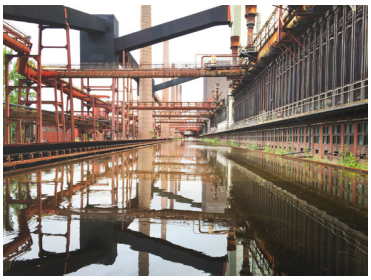
Main Premise:
Preserving the industrial character while creating a flexible, monumental public space. The project transforms a sequestered, monolithic structure into a cultural and urban catalyst that revitalized the surrounding Southbank area.

Program Objectives
- Adapt the power station for contemporary art while preserving its industrial heritage and spatial character.
- Create flexible galleries and circulation that emphasize the building's monumental scale.
- Improve access and integrate the museum with the surrounding urban fabric and public realm.

Effects + Spatial Strategies
- Preserve key industrial elements while adapting the turbine hall into a flexible public space for exhibitions, gatherings, and events.
- Use new entrances, gardens, and pedestrian connections to link the museum with the city.
- Transform an isolated industrial site into an accessible cultural destination, supporting public interaction while maintaining its heritage identity.

Project 14: Zollverein Kohlenwäsche 2008

Location: Essen , Germany
Dimensions: 16000 m²
Former use: coal mine
Architect / Client: OMA,Böll & Krabel / Ministry for culture
New Function: park , museum



Main Premise:
Through a long-term master plan, the site evolved from a decommissioned industrial zone into a UNESCO World Heritage cultural campus, preserving its monumental character while introducing contemporary programs.

Program Objectives
- Reorganize the large industrial site through a clear central axis and strategic cultural "attractors."
- Introduce new programs within existing industrial structures through adaptive reuse.
- Preserve the architectural integrity and spatial complexity of the former mine.
- Reconnect the site to the surrounding city through pedestrian and cycling networks.

Effects + Spatial Strategies
- Use the former railway tracks as a central linear axis connecting the coal mine and coking plant.
- Combine industrial relics with spontaneous vegetation and designed landscapes.
- Introduce elevated paths, skybridges, recreational trails, and cultural attractors to structure movement and access.
- Transform the former industrial complex into a major cultural and tourism destination, strengthening regional identity and supporting long-term regeneration.

Project 15: Coal Drops Yard 2018

Location: London , England
Dimensions: 9290m²
Former use: coal distribution depot
Architect / Client: Heatherwick Studio
New Function: retail and public district



Main Premise:
The project preserves and celebrates the industrial heritage while inserting a bold new architectural intervention that unifies the buildings and reopens a formerly sealed infrastructure site to the city.

Program Objectives
- Integrate retail and hospitality programs within the historic industrial fabric.
- Create fluid public circulation and multiple points of access.
- Establish a central covered yard as a civic and social gathering space.
- Introduce contemporary construction to meet modern technical, thermal, and safety standards while preserving the legibility of the heritage structures.

Effects + Spatial Strategies
- Insert an independent contemporary structural system within the historic fabric, allowing new volumes to function without compromising the existing buildings.
- Extend and curve the inner roofs upward to connect the viaducts, creating a floating upper level and covered central courtyard.
- Introduce multiple entrances and longitudinal circulation routes to increase permeability and pedestrian movement.
- Transform the former industrial enclave into a commercial and social anchor, reconnecting it to the city and activating surrounding streets throughout the day and evening.

Project 16: Engenho Central Piracicaba 2009

Location: Piracicaba, Brazil
Dimensions: 17,800 m²
Former use: hydraulic power sugar mill
Architect / Client: Brasil Arquitetura, Pedro Mendes da Rocha
New Function: theatre , cultural center

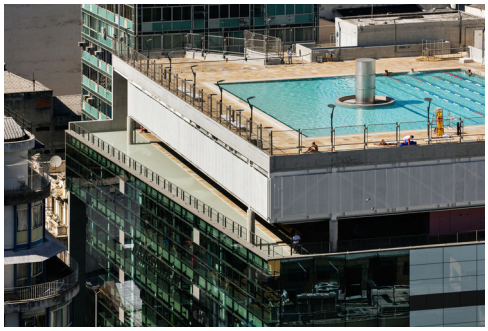


Main Premise:
The project transforms underused industrial heritage into theaters, museums, and public spaces while negotiating urban expansion pressures, historical preservation, and modern programming needs.

Program Objectives
- Restore and adaptively reuse significant industrial buildings.
- Selectively demolish less important structures to improve spatial openness and circulation.
- Introduce cultural, hospitality, and civic programs, including theaters, museums, hotels, and convention spaces.
- Create a cohesive urban park that respects the original industrial layout.
- Improve public accessibility and reconnect the site with the surrounding city.

Effects + Spatial Strategies
- Retain and adapt significant structures, such as Warehouse 6, for new cultural uses.
- Remove non-essential buildings to open up circulation, public spaces, and the landscape.
- Introduce clearly contemporary elements, such as external staircases and projecting stages, that contrast with but remain legible against the historic fabric.
- Transform the former industrial site into a cultural and recreational park, strengthening the Piracicaba riverside as a civic axis and reconnecting the heritage complex with the expanding city.

Project 17: SESC 24 de Maio 2017



Location: Sao Paulo , Brazil
Dimensions: 27865m²
Former use: store chain
Architect / Client: MMBB Arquitetos, Paulo Mendes da Rocha
New Function: Complex of recreational facilities and services

Main Premise:
The intervention transforms the building into a fluid, vertical urban space that engages the surrounding downtown context while introducing diverse programmatic and public activities.

Program Objectives
- Revitalize the urban block through new spatial hierarchies and flexible public uses.
- Create interconnected plazas, halls, rooftop gardens, and promenades to activate the building vertically and horizontally
- Enhance architectural legibility and visual identity.
- Integrate technical and mechanical systems without compromising public or aesthetic qualities.
- Strengthen the building's urban presence and connection to the downtown streetscape.

Effects + Spatial Strategies
- Create a continuous vertical promenade connecting plazas, gardens, and different programmatic areas.
- Use varied ceiling heights, overhanging galleries, and layered spaces to create diverse spatial experiences.
- Introduce a rooftop "Sun Plaza" with a pool and expressive façades that reveal the building's internal activities.
- Activate public life through spaces for interaction, recreation, and cultural engagement while strengthening pedestrian connections with surrounding civic landmarks.

Project 18: Tabakalera



Location: San Sebastian, Spain
Dimensions: 30,000 m²
Former use: tobacco factory
Architect / Client: Jon and Naiara Montero / Municipality of San Sebastian
New Function: Art Museum

Main Premise:
The project preserves the monumental industrial structure while radically reconfiguring its interior and urban interface, repositioning the building from a closed production facility into an open cultural and civic landmark.

Program Objectives
- Preserve the building's historical identity and industrial character while enabling spatial adaptability and technical modernization.
- Transform the complex into an urban landmark and connective node between the city center, Egia neighbourhood, and Cristina-Enea Park.
- Improve physical and visual integration with the surrounding urban fabric.
- Provide flexible spaces for cultural, creative, and educational uses.
- Integrate sustainability, mobility, and modern building systems within the existing structure.

Effects + Spatial Strategies
- Preserve the main façade while radically transforming the interior to accommodate adaptable contemporary uses.
- Remove perimeter walls and fences and introduce an internal public street to open the complex to the city.
- Create a new urban square and a central glass prism to improve connectivity, visibility, vertical circulation, and landmark presence.
- Develop hybrid spaces that support cultural production, education, and creative activities.
- Strengthen connections between neighbourhoods and the public realm while supporting creative economies and artistic and educational networks.

Project 19: Duisburg Nord Landscape Park 2002

Location: Duisburg Nord, Germany
Dimensions: 200 hectares
Former use: blast furnace plant
Architect / Client: Peter Latz / Stadt Duisburg
New Function: park and garden



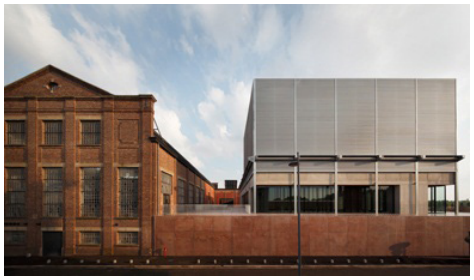
Main Premise:
Landschaftspark Duisburg-Nord reinterprets a contaminated blast furnace complex as a post-industrial landscape park, transforming industrial remnants into an ecological, cultural, and recreational infrastructure. Rather than erasing the past, the project integrates and re-scripts existing industrial fragments into a new landscape syntax, positioning the site as a catalyst for regional environmental and urban regeneration under the IBA Emscher Park initiative.

Program Objectives
- Remediate contaminated areas while preserving industrial structures as heritage assets.
- Prioritize adaptive reuse and integrate contemporary programs into the existing infrastructure.
- Combine industrial heritage with ecological regeneration and natural processes.

Effects + Spatial Strategies
- Create a connected landscape of water, vegetation, railway infrastructure, promenades, and public spaces.
- Adapt industrial structures for cultural and recreational uses while transforming contaminated areas into ecological landscapes.
- Use elevated and ground-level paths to reconnect fragmented neighbourhoods and Piazza Metallica as a central public space.
- Reframe the former industrial site as a cultural, ecological, and recreational destination, supporting tourism, public life, and regional identity.

Project 20: C-Mine 2010(the building)-2012(the square)

Location: Genk , Belgium
Dimensions: 15.000 m^2
Former use: coalmining site
Architect / Client: Hosper(for the square) , 51N4E / city of Genk
New Function: cultural center



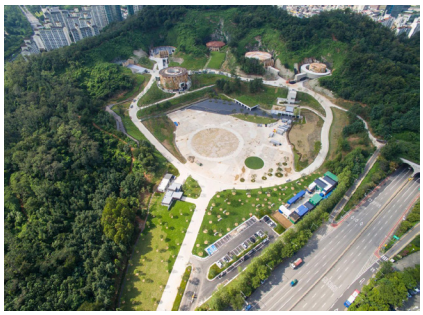
Main Premise:
C-Mine transforms the former coal mine's machinery complex into a cultural and creative hub, repositioning the industrial "nerve center" as the civic heart of Genk. Through light restoration and strategic extensions, the project preserves the monumental mining architecture while inserting new cultural infrastructure and redefining the surrounding square as a dynamic urban core.

Program Objectives
- Preserve the architectural integrity and industrial character of the former machine halls.
- Integrate new volumes to increase functional capacity while respecting the historic structures.
- Strengthen the relationship between the complex and the public square.
- Establish the site as a cultural, creative, and recreational anchor for the city.

Effects + Spatial Strategies
- Apply light-touch restoration to preserve brick façades and industrial machinery as witnesses of the site's mining history.
- Introduce a new concrete base containing contemporary programs, with two theatre volumes emerging from it as contrasting "cultural machines."
- Organize circulation through a central foyer connecting theatres, exhibitions, restaurant, visitor center, and roof terraces.
- Create elevated terraces between old and new structures and a barrier-free public square for events and everyday civic use.
- Establish a new civic landmark that supports cultural activity, public gathering, and economic revitalization.

Project 21: Oil Tank Culture Park 2014-2017

Location: Seoul , South Korea
Dimensions: 101510m²
Former use: oil tanks
Architect / Client: Daniel Valle Architects
New Function: cultural center (performance spaces)



Main Premise:
The Mapo Oil Tank Culture Park transforms a former high-security oil storage depot into a public cultural landscape by preserving the industrial tanks and reprogramming them for cultural and civic use. Rather than erasing the site's military and industrial past, the project embraces the existing structures and their weathered character, allowing them to evolve into a cultural engine that connects history, nature, and contemporary urban life.

Program Objectives
- Transform the former industrial/military infrastructure into a multifunctional cultural park.
- Introduce exhibition, performance, library, and community programs within the existing tanks.
- Preserve the site's historical and material identity while enabling public access and engagement.
- Reuse existing structures and materials through sustainable adaptive reuse.

Effects + Spatial Strategies
- Preserve the weathered industrial structures while inserting independent internal structures and skins for new uses.
- Add roofs, translucent skins, and skylights to provide climate control and natural lighting.
- Create varied entrances through gardens, ramps, and perforated walls, organized around cultural yards and outdoor event spaces.
- Reuse dismantled steel elements and integrate energy and water-recycling systems.
- Transform a restricted site into an accessible cultural park supporting year-round events, community life, and sustainable reuse.

Project 22: Zeitz Museum of Contemporary Art Africa (Silo District) 2017

Location: Cape Town , South Africa
Dimensions: 9500 m²
Former use: grain silo
Architect / Client: Heatherwick Studio
New Function: Art museum



Main Premise:
By carving gallery and circulation spaces from the dense cluster of concrete storage tubes, the project preserves the industrial monument while redefining it as a public museum. The intervention retains the silo's structural identity while introducing a monumental central atrium and flexible galleries.

Program Objectives
- Transform the historic grain silo into a major museum for contemporary African art and its diaspora.
- Preserve the industrial character and historical significance of the silo.
- Integrate exhibition, research, education, and public amenities within the complex.
- Revitalize the surrounding Silo District by connecting culture, tourism, and public life.
- Strengthen pedestrian and urban connections with the harbour precinct.

Effects + Spatial Strategies
- Carve a central atrium through the existing silos and organize flexible galleries vertically around it.
- Preserve and expose the original cylindrical structure while introducing skylights, windows, and glazed elements for natural light.
- Create a pedestrian-oriented public realm connecting the museum to the harbour and surrounding urban spaces.
- Transform an obsolete industrial landmark into a major cultural destination, strengthening local identity while stimulating tourism, public activity, and economic regeneration.

Project 23: Tai Kwun Center for Heritage and Art 2018



Location: Hong Kong
Dimensions: 27000m²
Former use: Central Police Station, the Central Magistracy, and the Victoria Prison
Architect / Client: Herzog & de Meuron
New Function: Cultural Center

Main Premise:
the intervention integrates contemporary cultural functions within the historic fabric and introduces carefully inserted new volumes, allowing the once restricted institutional site to evolve into an accessible urban cultural space while maintaining its heritage identity.

Program Objectives
- Reactivate the historic compound with cultural, artistic, commercial, and public programs.
- Preserve the architectural and historical significance of the existing buildings.
- Integrate galleries, exhibitions, performance venues, restaurants, and public gathering spaces.
- Transform the former enclosed complex into an accessible, pedestrian-oriented cultural hub.
- Strengthen integration with the surrounding urban fabric.

Effects + Spatial Strategies
- Preserve and activate the two historic courtyards as central public gathering spaces.
- Add lightweight hovering volumes above existing walls, minimizing intervention in the historic fabric.
- Create shaded public spaces and circulation routes beneath the new structures.
- Improve permeability through new entrances, wall openings, pedestrian connections, and vertical circulation.
- Transform the formerly enclosed compound into an open cultural oasis that strengthens pedestrian connectivity and supports arts, events, and public life in the city center.

Project 24: BankART studio NYK 2005-2008



Location: Yokohama, Japan
Dimensions: 3000 m²
Former use: logistics warehouse for a shipping company
Architect / Client: Naohiko Hino , MIKAN Architects
New Function: cultural and creative center

Main Premise:
BankART Studio NYK is part of Yokohama's Creative City Initiative, which repurposes historic port and commercial buildings to stimulate cultural production and urban revitalization. The project transforms a former Nippon Yusen Kaisha (NYK) warehouse into an open cultural platform where art, education, and civic activity intersect. Rather than functioning as a traditional museum, the space operates as a flexible cultural hub that connects artists, citizens, and institutions, using creativity as a tool for city-building and strengthening Yokohama's cultural identity.

Program Objectives
- Revitalize an underused industrial warehouse as a flexible cultural and creative hub.
- Support artistic production, exhibitions, performances, education, and social interaction.
- Contribute to waterfront regeneration and Yokohama's creative economy.

Effects + Spatial Strategies
- Transform the open warehouse into adaptable spaces combining exhibitions, studios, performances, education, and social uses.
- Use flexible infrastructure, extended access, and strong interior–exterior connections to maximize activity.
- Establish the building as a catalyst for wider cultural and urban regeneration, attracting creative professionals and stimulating further waterfront projects.

Project 25: Power Station of Art 2011

Location: Shanghai , China
Dimensions: 38000m²
Former use: power station
Architect / Client: TJAD Original Design Studio
New Function: art center



Main Premise:
Through controlled architectural intervention, the renovation adapts the large-scale infrastructure of the power station into an open cultural platform that reflects the city's transition from an industrial economy to a culture-driven urban future, maintaining the building's historical narrative while giving it a new public and artistic function.

Program Objectives
- Transform the former power station into a contemporary art museum with exhibition, research, education, and event spaces
- Preserve its industrial character while expanding Shanghai's cultural infrastructure.
- Create accessible spaces for cultural exchange and artistic production.

Effects + Spatial Strategies
- Adapt the turbine halls with minimal intervention into flexible galleries and transform the chimney into a landmark and exhibition space.
- Use multiple circulation routes and integrated public areas to encourage exploration and everyday engagement with art.
- Strengthen Shanghai's cultural presence while contributing to the regeneration of the industrial waterfront.

Appendix – B
/Survey Photos


A01


A08


A03


A04


A05


A06


A09


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A12


A11


A13


A14


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