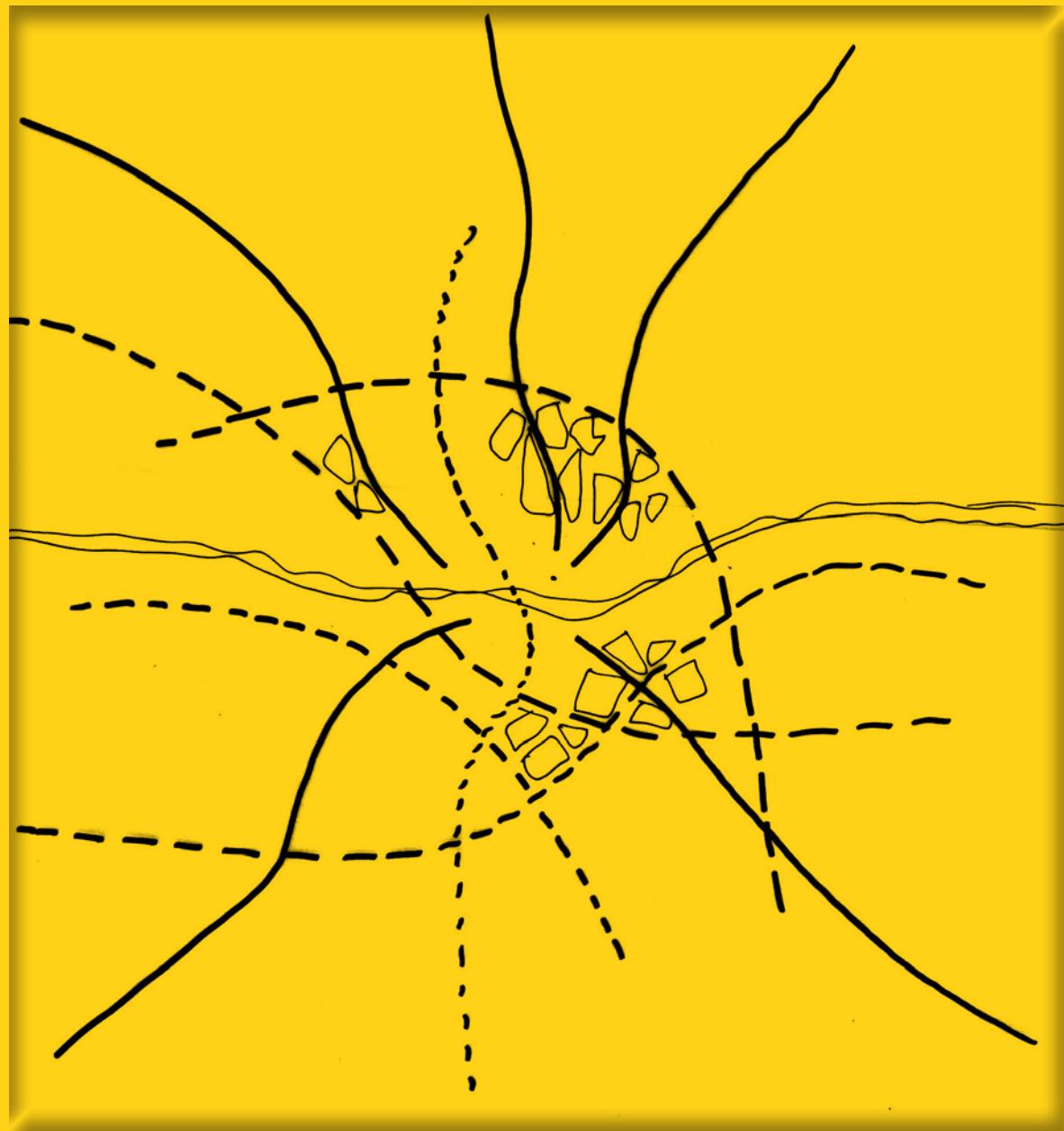


I N D U S T R I A L



Versions of New Ecologies for Abandoned Territories of Kentish Town

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Contents

06

Declining Industry
01

10

Shifting Global Trends
02

16

London Context-SIL Sites
03

22

Kentish Town Site Conditions
04

34

GLA Approach and Critique
05

38

Housing + Industry Strategies
06

42

Industry as Ecology
07

48

Food Ecology
Stripes, Streets and Compounds
08

76

Music Industry
Streets, Campuses and Estates
09

100

Design Ecology
Strips, Loops and Levels
10

130

LogisticsIndustry
Sheds and Campuses
11

158

Conclusion
12





Declining Industry

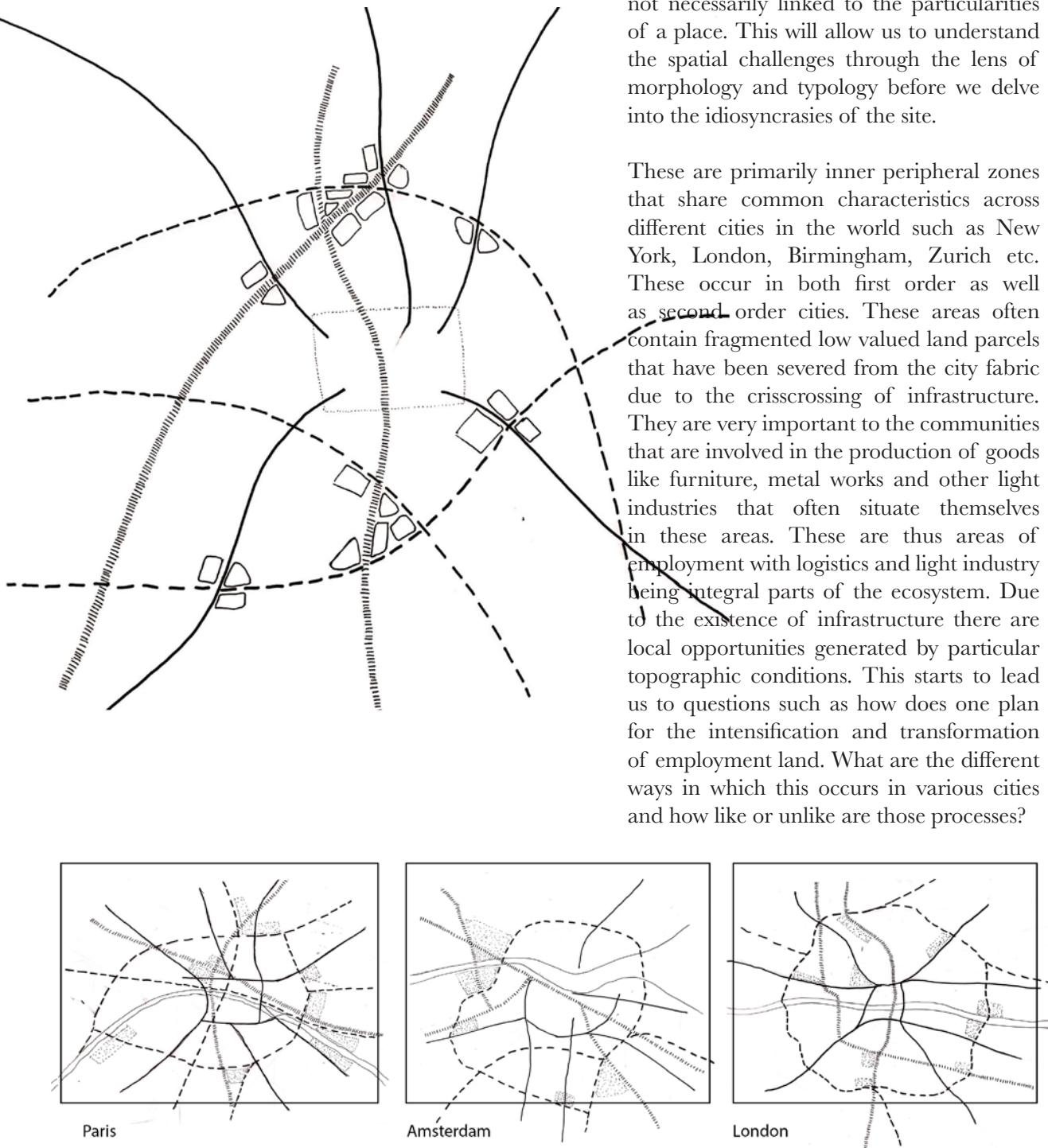
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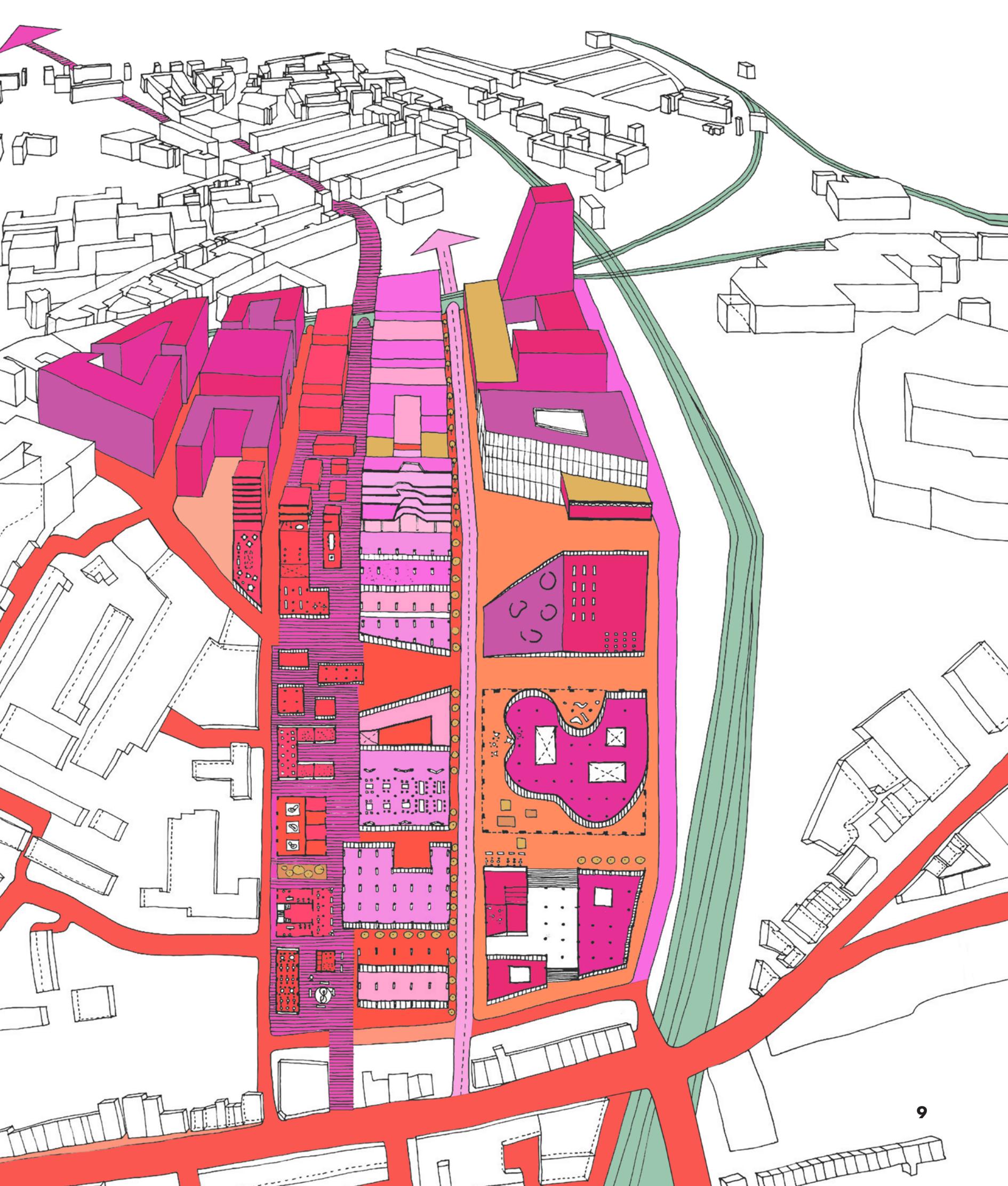
Declining Industry

CHAPTER 1: DECLINING INDUSTRY

The first step in the design research is to determine whether there could be a way to describe the site as a set of conditions that are not necessarily linked to the particularities of a place. This will allow us to understand the spatial challenges through the lens of morphology and typology before we delve into the idiosyncrasies of the site.

These are primarily inner peripheral zones that share common characteristics across different cities in the world such as New York, London, Birmingham, Zurich etc. These occur in both first order as well as second order cities. These areas often contain fragmented low valued land parcels that have been severed from the city fabric due to the crisscrossing of infrastructure. They are very important to the communities that are involved in the production of goods like furniture, metal works and other light industries that often situate themselves in these areas. These are thus areas of employment with logistics and light industry being integral parts of the ecosystem. Due to the existence of infrastructure there are local opportunities generated by particular topographic conditions. This starts to lead us to questions such as how does one plan for the intensification and transformation of employment land. What are the different ways in which this occurs in various cities and how like or unlike are those processes?







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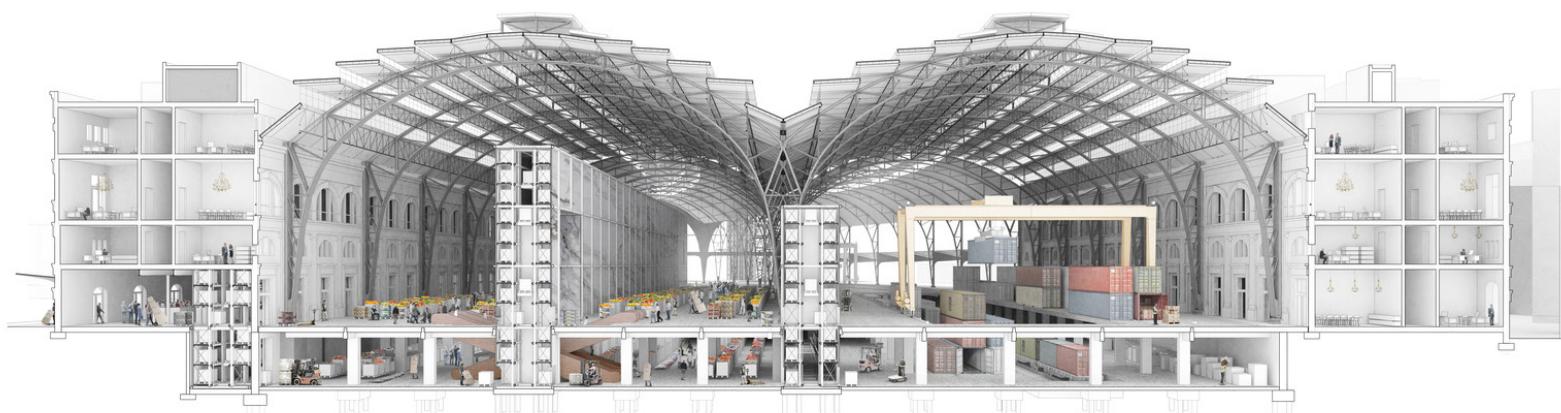
Shifting Global Trends

2.

Shifting Global Trends

CHAPTER 2: SHIFTING GLOBAL TRENDS

The process of transformation of employment land is closely linked to the changing nature of the industry in cities today. The intention of study from this Design workshop stems from the recognition that there is a current fragility of industrial land in cities. We are not talking about the massive 'dirty' factories which have already moved to the periphery owing to the nature of their spatial requirements and their subsequent effects on the fabric of the city. In an attempt to solve the housing crisis, we created a massive loss in industry within the city. In the past two decades, remarkable changes have occurred in the character and spatial organisation of urban working conditions, the industrial and business sectors and in the perception of urban living. These changes constitute a moment of opportunity to rethink the position of the industry in the city. But the processes that are being used to integrate employment land into the city have not always been comprehensive.



For instance, in London, we name areas as opportunity sites and place them within a framework that hands over the problem to a developer and the city makes relatively few claims other than prescribing conditions like viewing corridors and a notional pathway. What the city tends not to do is to establish conditions regarding the pattern of procurement or pattern of action and stakeholder assembly. They don't try to use design to get together a more ambitious set of stakeholders. When we look at other places, they often tend to do it differently. In Zurich, the stakeholder base has been expanded for the way they requalify the industrial land.



Thus, there is a need to rethink how we envision both the process and the possibilities of the design approach. We are interested in the effects of small and medium scale industries being in the heart of the city and the growing importance of network driven innovation. We need to protect the small business units, light industrial workshops, last mile logistics etc as they are vital to the economic health of the city. Our exploration is underpinned by a wish to create integrated, intense, dense, active urban areas that form sustainable and desirable places for employees, residents and visitors. By creating an enriched urban mix through new combinations with industry, industrial areas, which are currently presented on city maps as uninviting grey districts, should become colourful living parts of the city with their own unique identity.



Shifting Global Trends

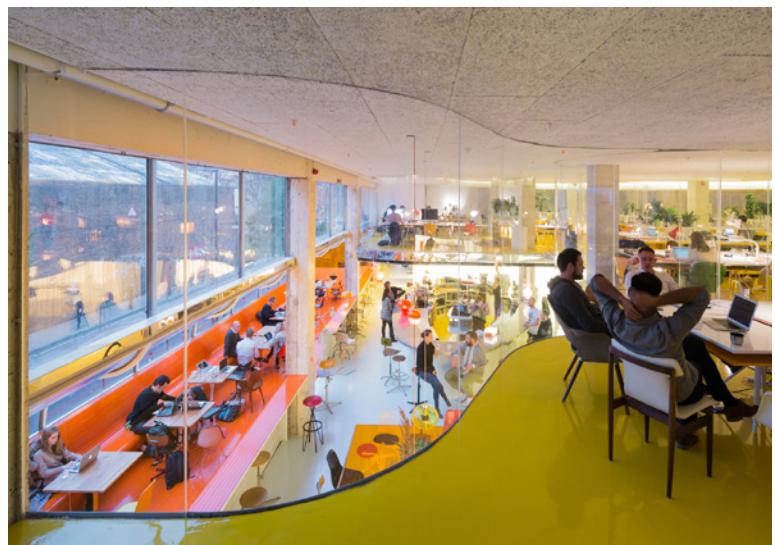
Changing Trends- Drivers of Change

Traditionally, a series of barriers to mixing commercial and residential space has been identified - such as value and lease differentials between residential and employment uses; the risk aversion in the development industry; the reluctance of residents to 'live above the shop'; the mortgage industry's reluctance to lend money on such schemes; lack of skills amongst planners and designers; the lack of success of ground floor units where these have been provided. Many factors undoubtedly still apply but many of the fundamental drivers are now changing. There are three important shifts that start to affect how we reposition our approach to these inner peripheral sites.

Rise of Creative Industries

Advanced economies have seen a shift away from heavy industry towards high value-added industries, miniaturisation of work processes and improvements in emission treatment. The upgrading of many activities has led to a blurring of the boundaries between industry and services.

Increasingly, they rely on high levels of research and development, face-to-face contacts to facilitate creative processes, and just-in-time delivery depending on sophisticated logistics systems. The design, prototyping, production and marketing of both goods and services are now taking place in ever more rapid cycles of iteration, often close to the target market. This rise in the creative industry within the city gives rise to new patterns of clustering, accumulation and typologies that accommodate processes of various scales. The differential processes of each industry start to drive the spatial characteristics of the area.



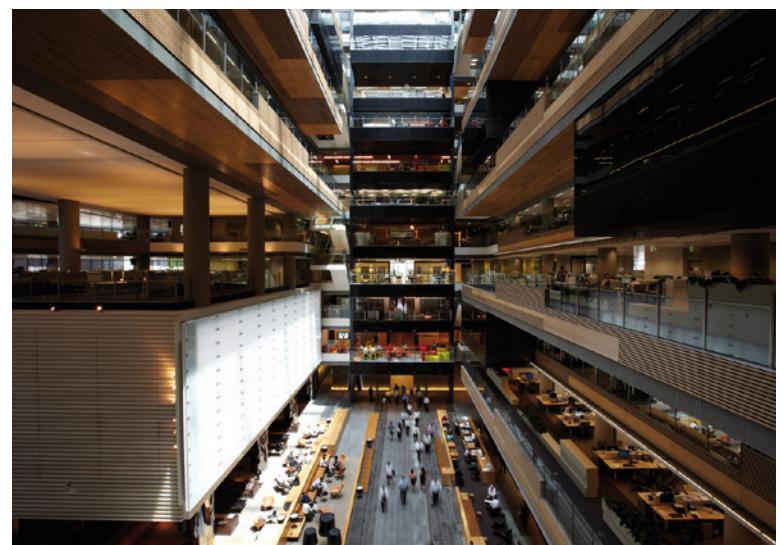
Changes in the Servicing the City

The continued relevance of industry in the city is also made apparent by the fact that for many types of industry (food, energy, construction, and printing for example) proximity remains a crucial factor. A significant part of such activities will want to remain close to their urban markets. Similarly, as logistics have become more important to the functioning of the economy, warehousing and distribution remain crucial elements, generating an unabated need for transport movement and buildings with truck access and large horizontal floor plates. It is far more sustainable to expand and enhance the local supply chains instead of everything being accumulated in large sites in the periphery.



Expansion of Knowledge Economy and Central City Living

We start to see a noticeable change in the patterns of living and working today. We are seeing a high number of microenterprises across London, many of them innovative ventures run by second-career professionals who choose to work close to home. For example, the development of small studios, micro-offices and workshop-retail units at Blue House Yard in Wood Green has revealed latent demand - from internet sale-driven designer-makers in fashion or homeware accessories, event and festival planners, electronic music PR businesses and graphic designers to name just a few. This expansion of the knowledge economy is accompanied by an increase in the varied modes of mobility within the city. There is a shift in policy and practice of encouraging public transport systems, cycling lanes and pedestrian paths, thus enhancing the micro mobility structures in the city. There is now a demand to create neighbourhoods that allow close proximity between working and living thereby creating central city environments.





LONDON
MAKES
POSSIBLE



London Context - SIL Sites

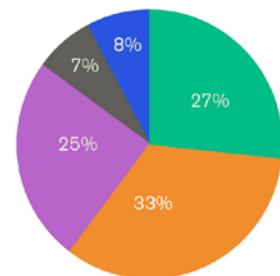
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London Context

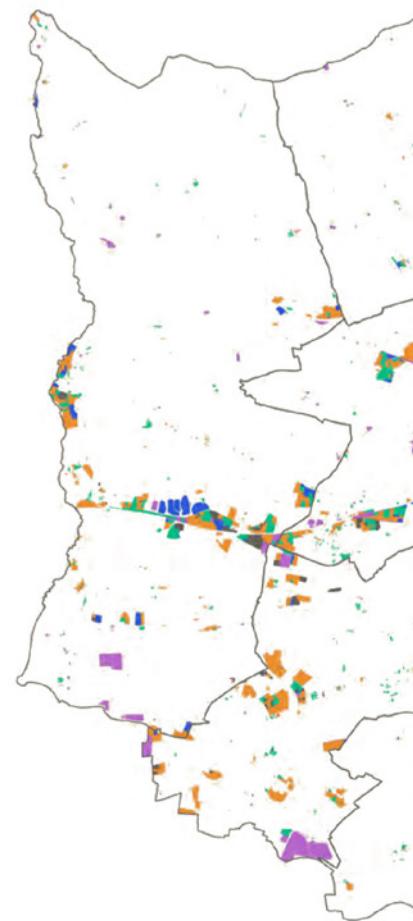
CHAPTER 3: THE LONDON CONTEXT

In recent decades, London has been losing industrial and employment land far faster than planning policy had envisaged, as residential demand and land values have risen. Reflecting the mounting concern about the impact of losing productive commercial space on London's economic health and resilience, the draft New London Plan calls for a greater focus on protection and provision of industrial space premises for Small and Medium-sized Enterprises (SMEs) and affordable workspace. Most industrial, logistics and creative businesses that can easily move out of the city have already done so; the remainder needs to be here because of proximity to clients, supply chains and talented workers. In addition, many non-industrial activities are relocating to Strategic Industrial Land – protected through planning – given its greater security, greater flexibility and often lower costs. This includes places of worship, artists' studios, offices and the night time economy. It is estimated that 45 per cent of jobs accommodated on SIL is now in non-industrial roles.

Industrial Land in London by Activity



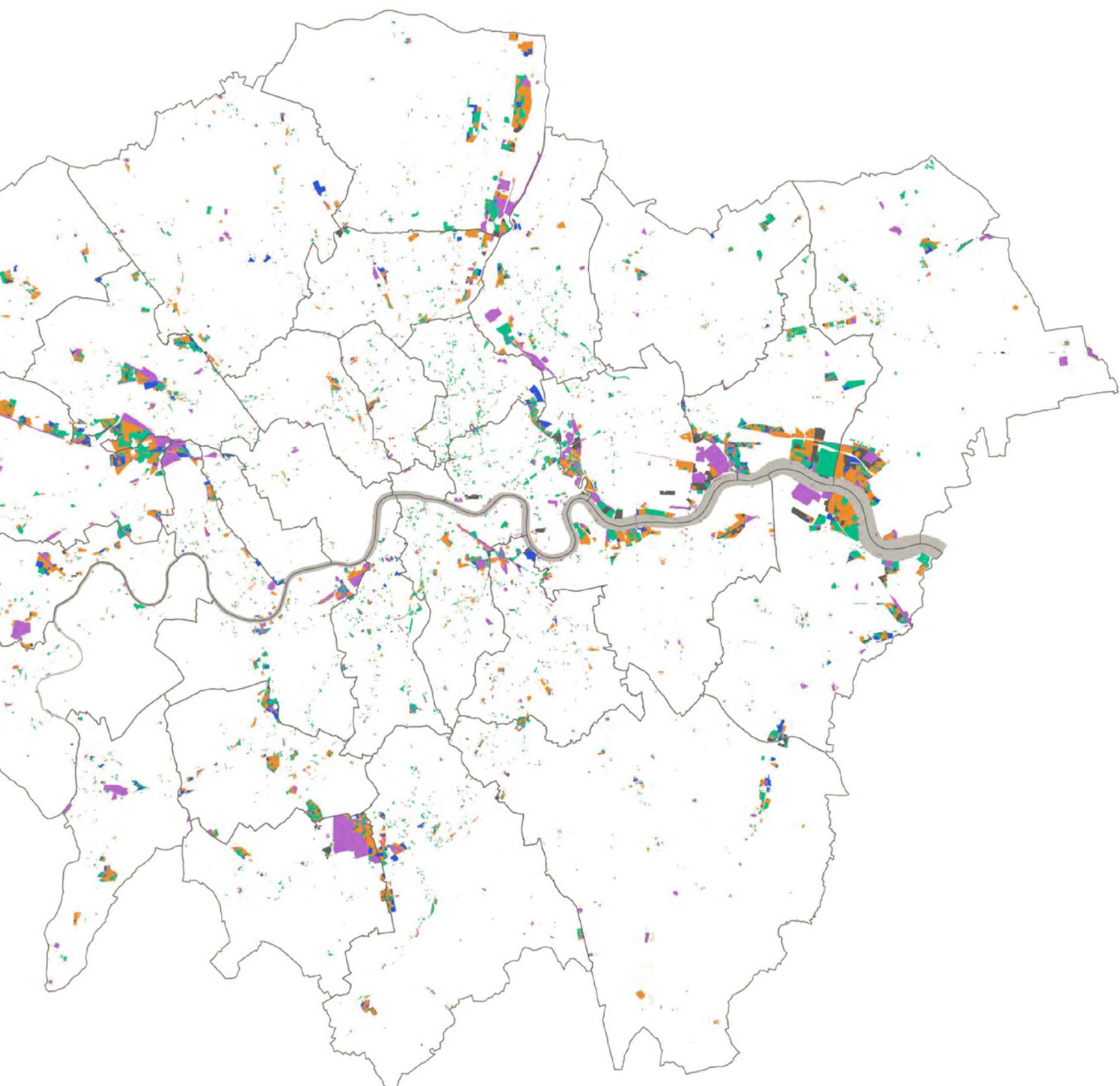
Total Industrial Activities



- General & light industry
- Warehouse & open storage
- Wider industrial uses
- Vacant land & land with vacant buildings
- Non industrial uses

Scale

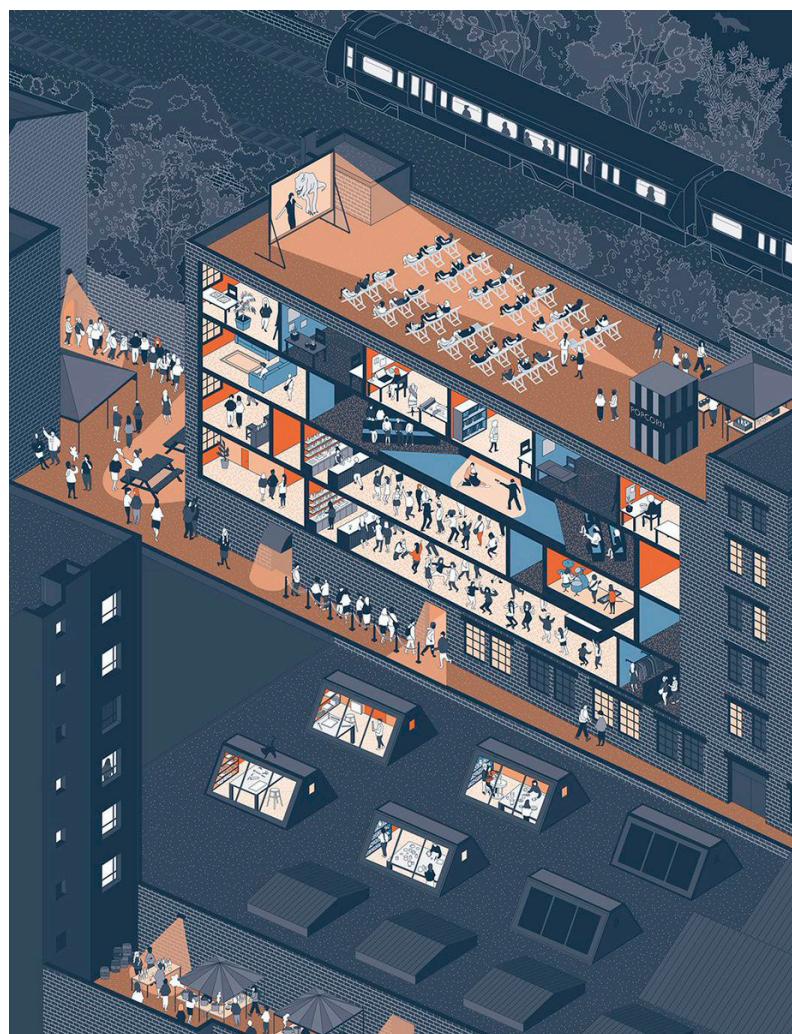
0 2 4 miles
| | |



London Context

The combination of dislocation, rent rises, and uncertainty destroys the rich ecosystem that enables small businesses to thrive, with local suppliers and collaborators, proximity to clients and designers and sophisticated networks of talent, ideas and finance. For many businesses, this is an existential crisis; and arguably the sheer lack of capacity may already be stifling innovation and growth of new businesses. The overwhelming relative value of housing provides developers with very strong incentives to both speculate on industrial premises and then minimise any non-residential space reprovision. Many new developments provide non-residential ground floors only when required by planners - and not enough attention is paid to the fundamentals that make space suitable for a diversity of businesses. These include ceiling heights, flexibility, depth and access/servicing, affordability, level of initial fit-out, flexible approaches to rental terms and track records, and early engagement with operators and occupiers. The phenomenon of newly built ground floor units remaining boarded up for several years is all-too-common across London.

All of these factors amounted to a loss of industry in the city and this is an urgent need to accommodate. The scale of opportunity to create a mixed industrial neighbourhood is massive. The demand amounts to about 4,000,000 sqm, which is equivalent to 47 Shards. Owing to the change in trends of urban living and the industrial processes, delivering this mix is now viable in certain conditions. London is an extremely conducive environment for creative industries to thrive owing to the varied urban conditions and stakeholders it offers.

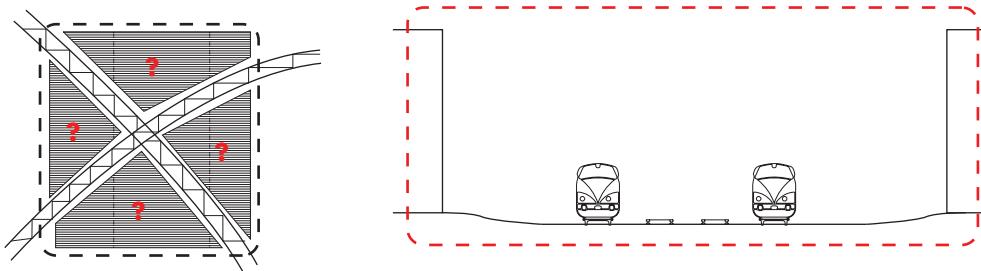


The conditions of inner peripheral sites discussed before are especially apparent in London- with infrastructure creating fragmented, low-value land in fairly well-connected areas. We see these conditions occurring in various sites in London- Lower Lea Valley, Wandle Valley, Park Royal, East Thames etc. Topography adds another layer of intricacy to these areas in London-for example, as we move from North to South there is a considerable level difference that changes the positioning of railway infrastructure on grade in the North to that of viaducts prevalent in the South. These create different kinds of spaces underneath the railway lines creating a variety of opportunities. They also allow for stacking of diverse functions together which adds to the viability of these mixed neighbourhoods.

Topography & Infrastructure

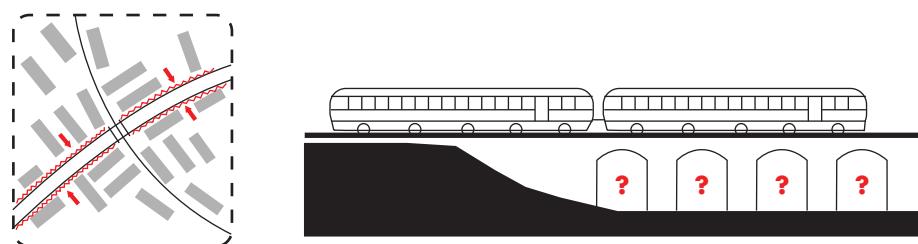
North London:

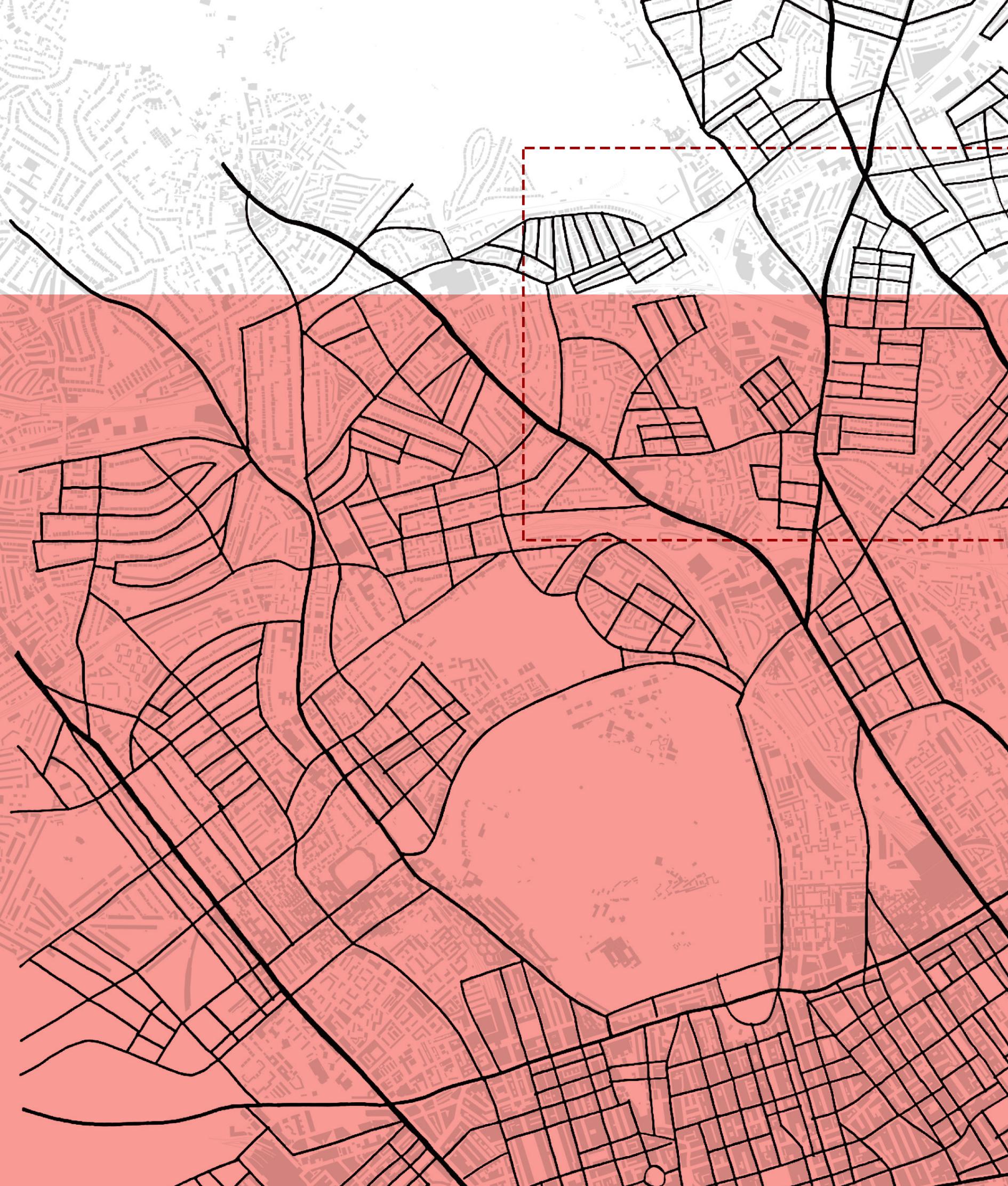
Rail infrastructure **on-ground** creates physically divided plots & triangulated zones with no order or structure to them.

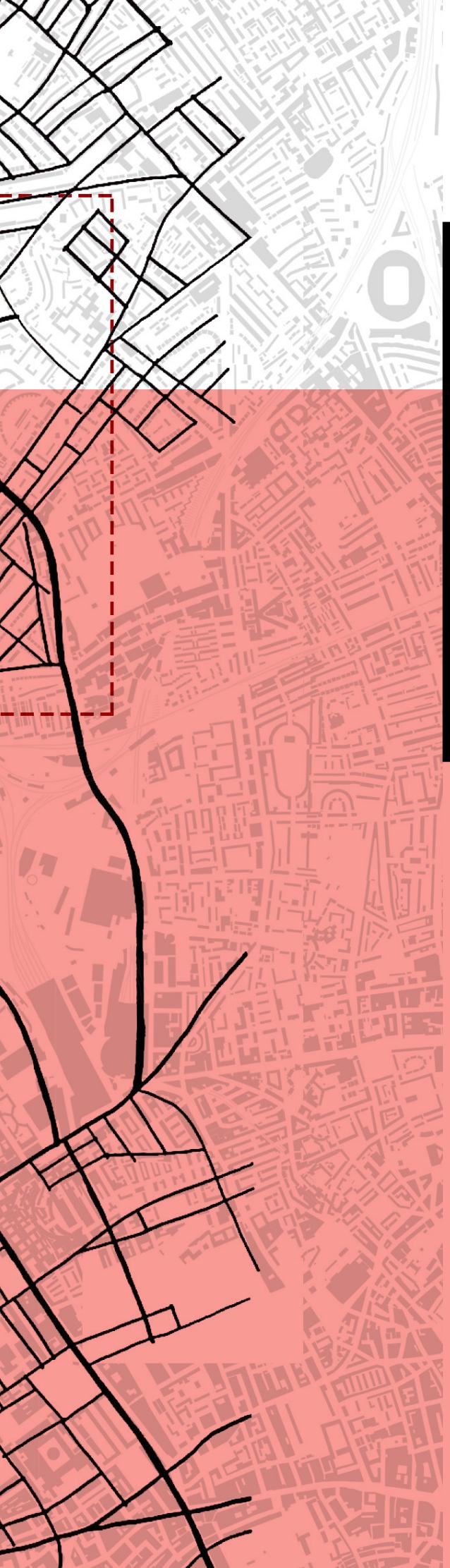


South London:

Rail infrastructure **over-ground** creates a barrier between plots. The viaducts can only accommodate a limited variety of uses, and the railway bridges disrupt the continuity of blocks.







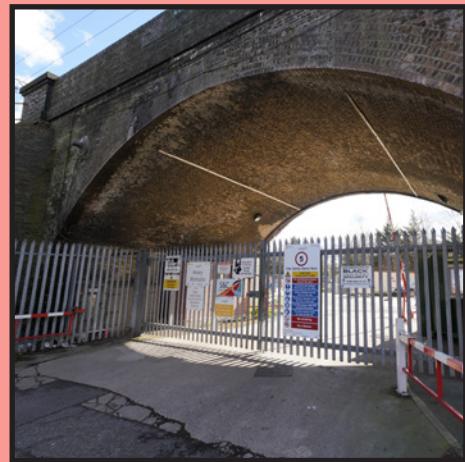
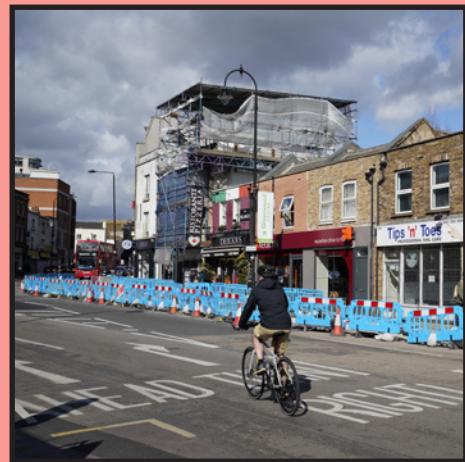
Kentish Town Site Conditions

4.

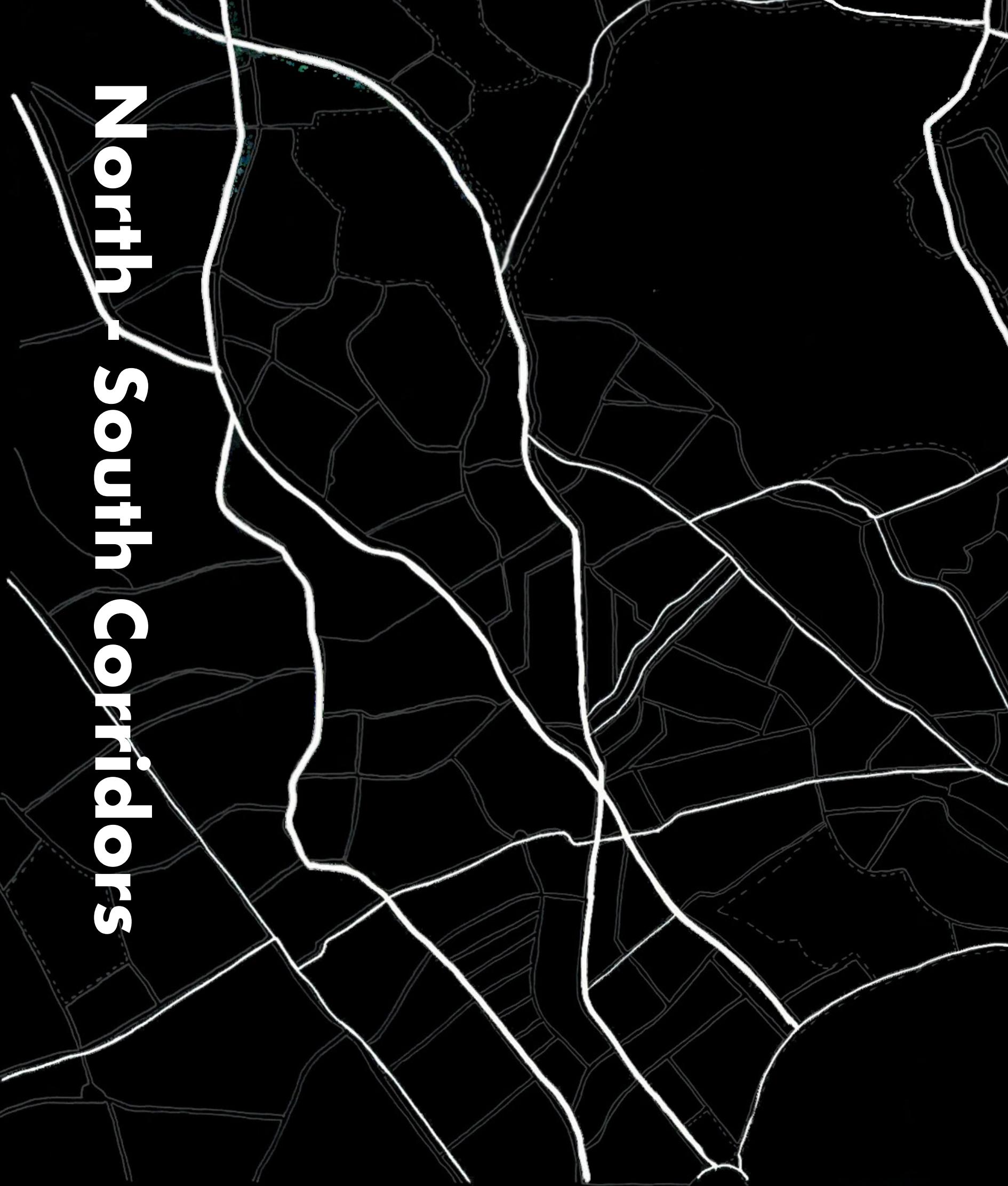
Kentish Town Site Conditions

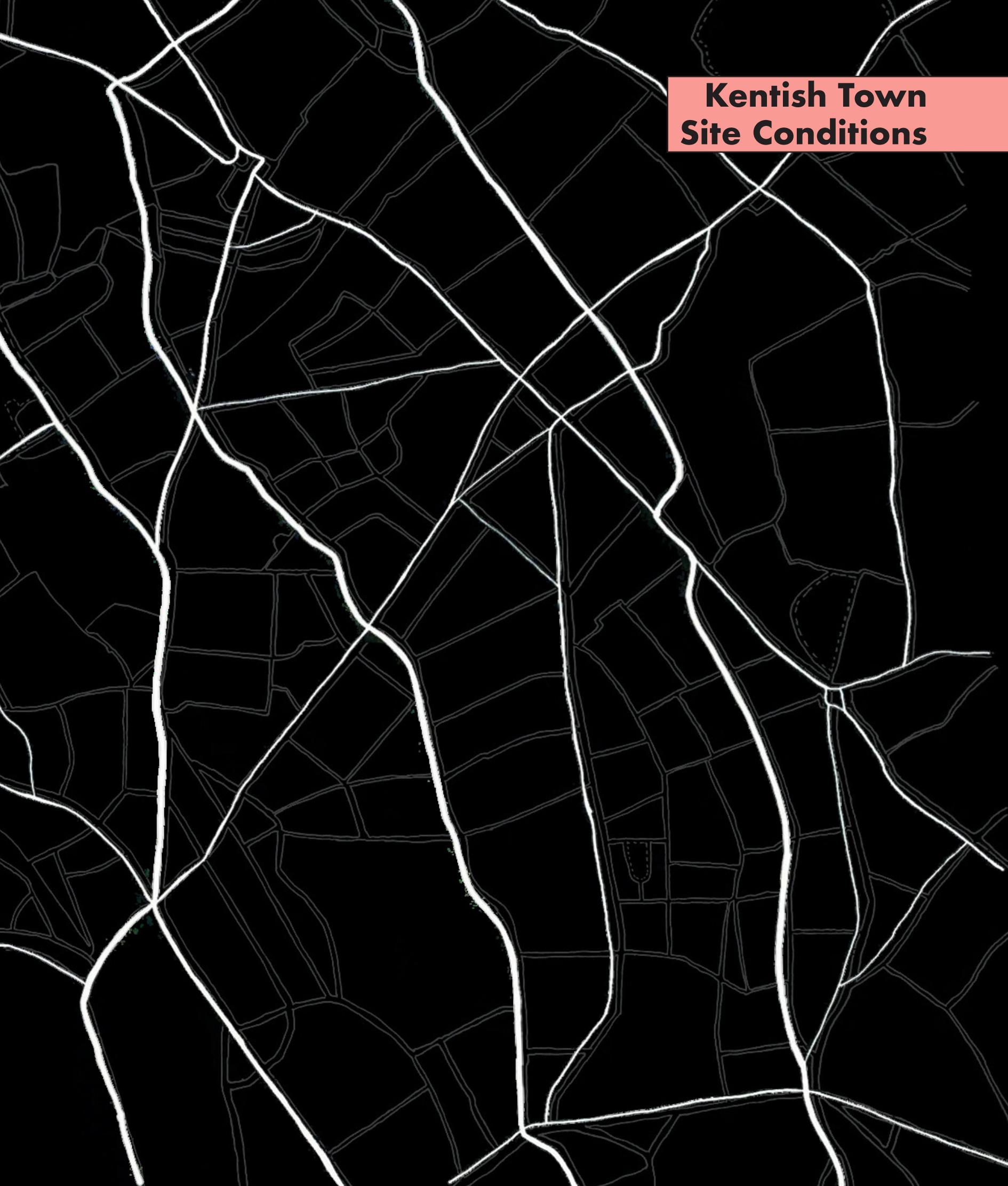
The site sits in Kentish Town which is quite well connected to the central city. This is a triangular site that is created owing to the crisscrossing of railway infrastructure and is thus a low-value land even though Kentish town is quite well connected to the central city. There is a railway line that cuts through the middle of the site which divides into two parts. The northern part known as the Murphy site is bound to the north, west and southern sides by railway lines. The northern tip of the site is directly opposite Hampstead Heath. The historic warehouse buildings along Highgate Road create an interesting context, but conceal the area from public view and act as a barrier to access. There are also significant level changes across the site which conceal the site further.

The southern part is the Regis Road site which is bound to the north and west by railway lines. It is not visible from surrounding streets and spaces and virtually hidden from public view. Access into the area is constrained to a single access point from Kentish Town Road, which is its only public interface and prevents any through movement between surrounding neighbourhoods. Regis Road is currently home to a number of large commercial units including several logistics, manufacturing and media companies as well as a mix of other one-off businesses.



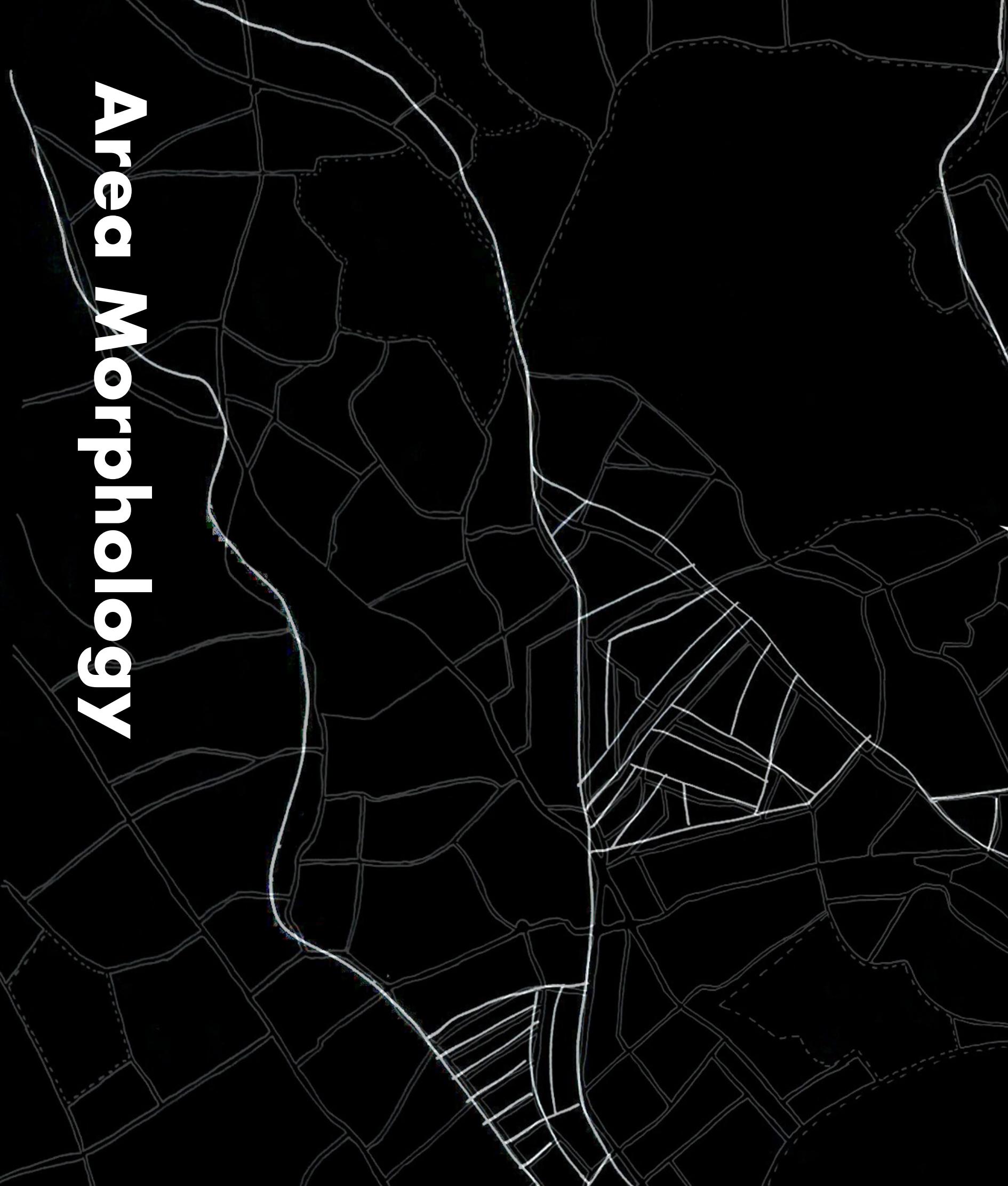
**North
South
Corridors**

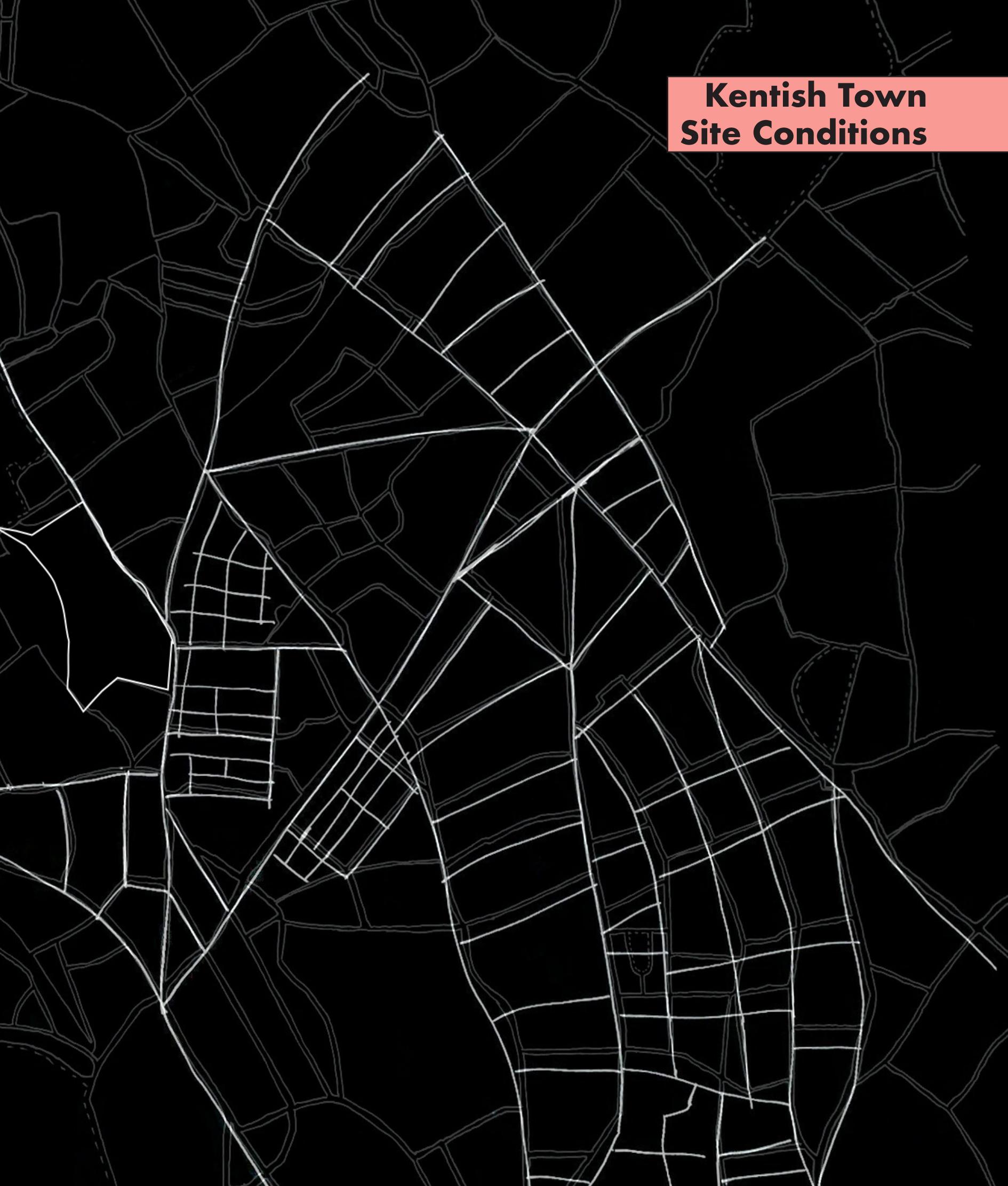




Kentish Town Site Conditions

Area Morphology



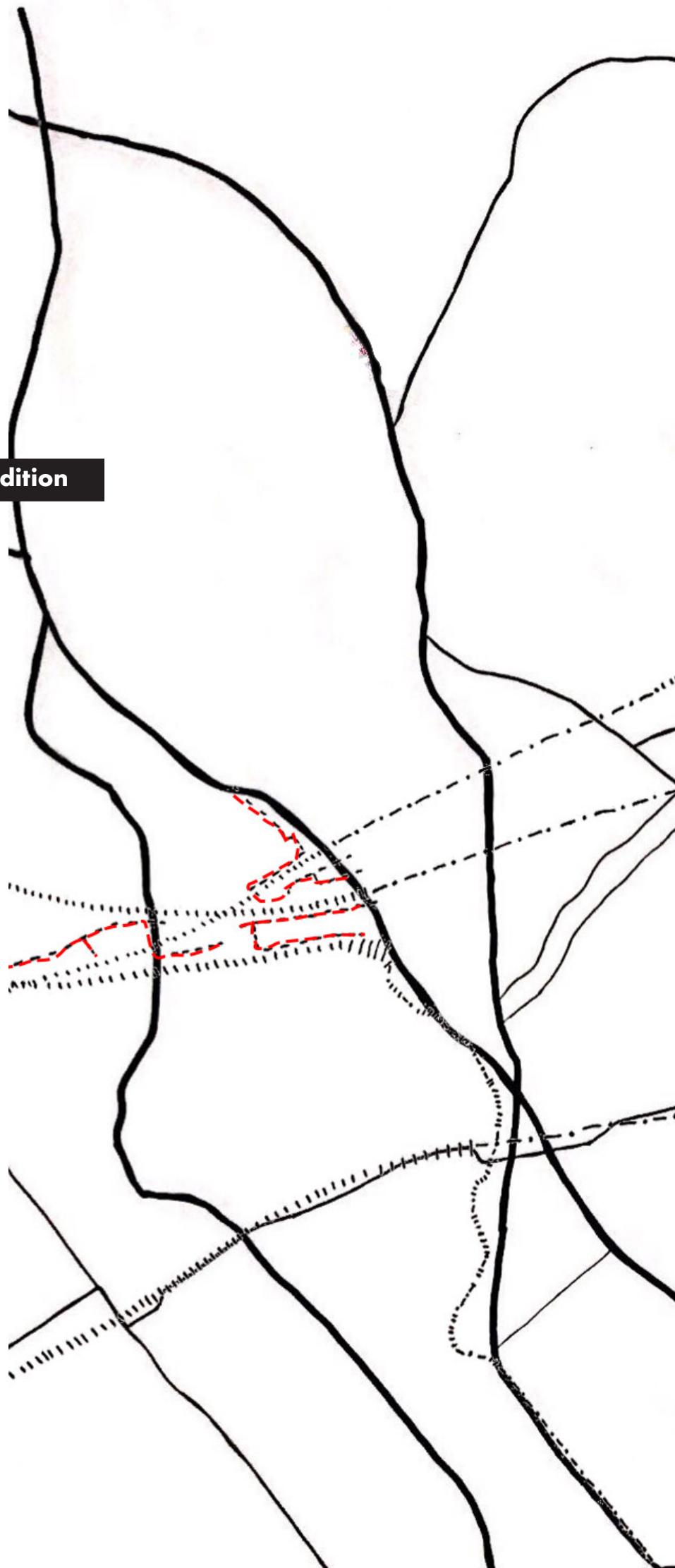


Kentish Town Site Conditions

Kentish Town Site Conditions

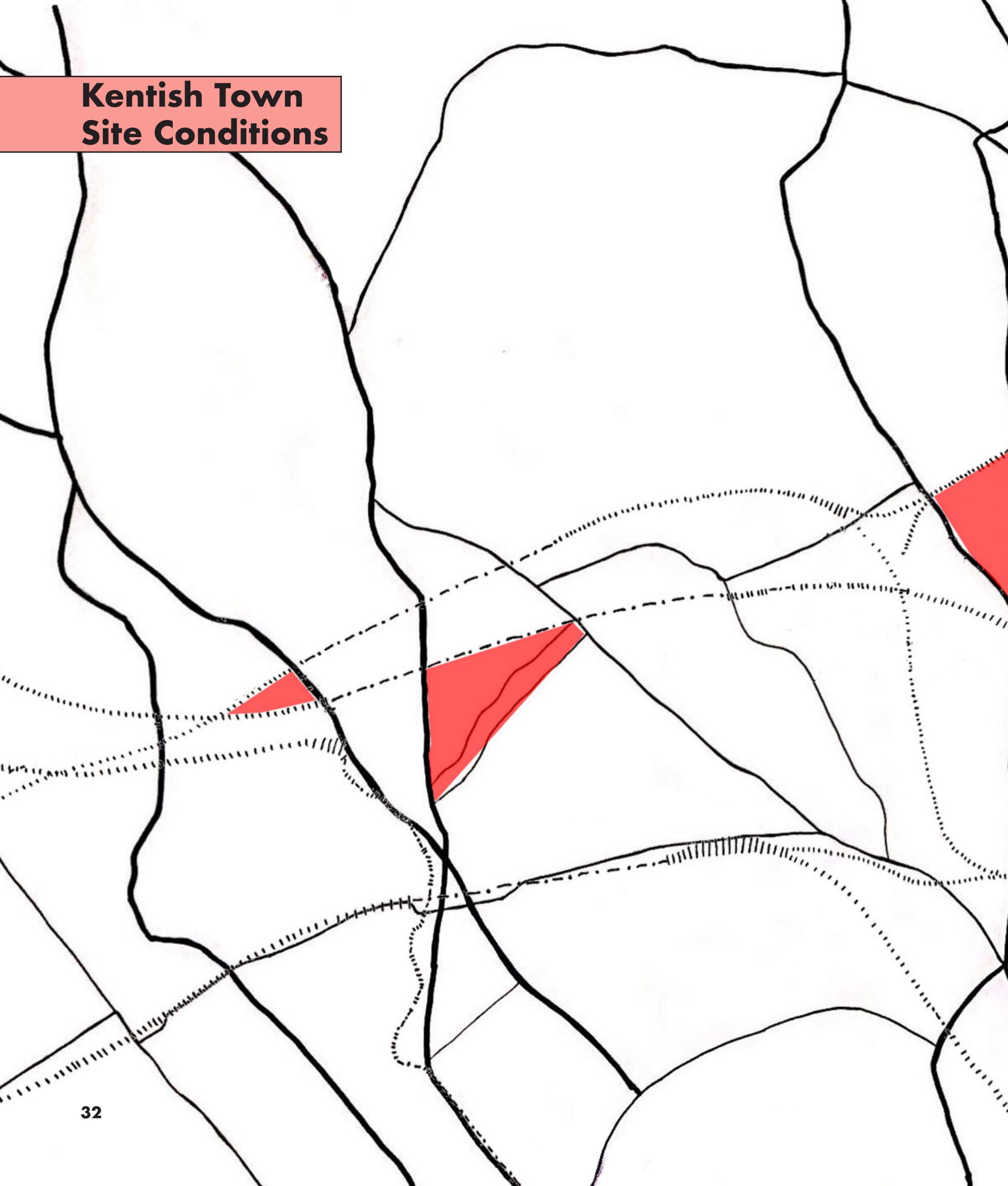
Railway Infrastructure North - South Condition

When one begins to look at the larger context with respect to Kentish town, the strong North-South connections are apparent. But what is also noticeable is the lack of coherence and continuity in the East-West connections. This problem is exacerbated by the presence of the railway infrastructure which further fragments these areas and creates areas that are quite inaccessible. As these become low-value pockets of land in the well-connected neighbourhoods, they then begin to be occupied by industrial clusters. These lead to distinctive spatial moves such as creating autonomous large-scale plots that can accommodate the needs of the industry. For instance, this is the reason the Regis road site accommodates industries of large footprints and have a single access road that caters primarily to their needs.





Kentish Town Site Conditions





A map illustrating the relationship between land parcels and infrastructure constraints. The map features several irregularly shaped land parcels outlined in black. A network of dotted lines represents infrastructure, such as roads or utility lines, which often divide the parcels. Two specific areas are highlighted with red shading: a large triangular area in the upper left and a smaller triangular area near the bottom center. These red-shaded regions represent 'Low Value Parts of Land Constraint by Bits of Infrastructure'.

Low Value Parts of Land Constraint by Bits of Infrastructure



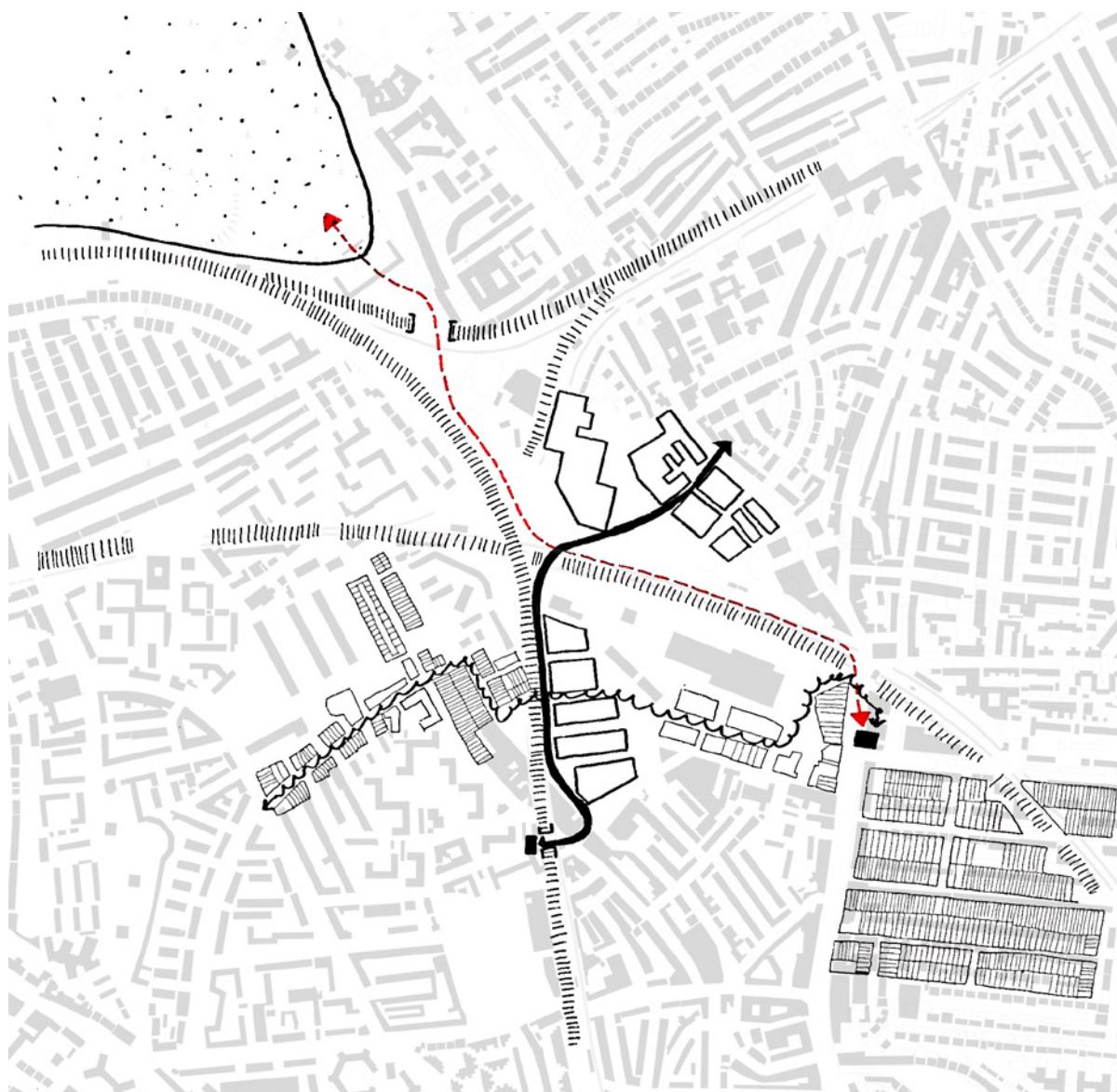
GLA Approach and Critique

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GLA Approach & Critique

CHAPTER 5: GLA PROPOSAL AND CRITIQUE

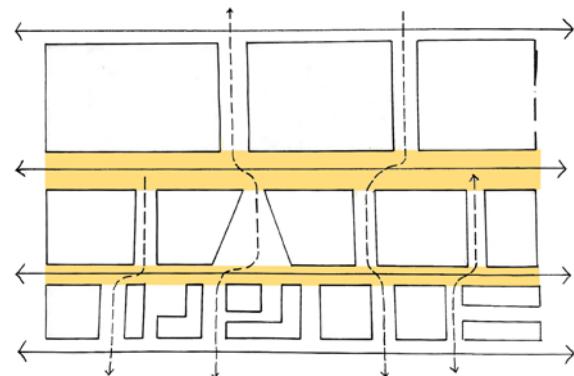
The primary objective of the GLA Framework is to deliver a mixed-use neighbourhood that retains the employment on site and to incorporate housing into the mix. One of the central strategies is to provide three different connections or routes through the site that seeks to stitch the neighbourhood into the existing community to improve access and reduce the severance caused by the rail lines. The approach of integrating housing and industry is either by wrapping around a large commercial building or by stacking them on top. They identify existing business clusters that can be built upon such as the Highgate and Spring studios and also aim at creating a unique identity for the Kentish townsit. There is no effort to use design as a tool to understand possible stakeholder assemblies or to reconceive who the actors can be and the ways to bring them together in order to generate longer-term value. All of those are left out of the preview of governance. The focus is on generating corridors and preserving views and finding ways to parcel off the rest of the site for development.



The understanding of the nature of the industry and the ways they interact with housing or other functions is also very limited. It does not take into consideration the several scales of industrial activity that are possible which will generate very different spatial outcomes. To be able to support the integration of the site, the nature of the armature has to be more than conceiving it as an open space or a route. The armature has to keep changing and articulating things at different scales. It cannot be perceived as an unchanging route without taking into account what it runs through. Therefore, it has to both provide consistency and differentiation and achieve a range of outcomes.

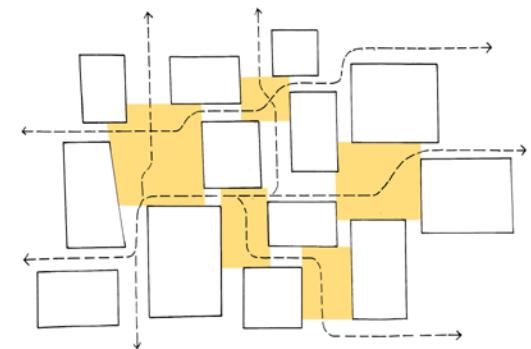
How can the site be reimagined to contribute to the larger urban area? What are the different ways to organise the site- from armature to campus, to a striated plan etc. that start to create varied possibilities of spatial structure? There can possibly be four options of varied grain and morphology that start to deal with the triangular piece of the site and restructure the area.

Fine Grain Hierarchy



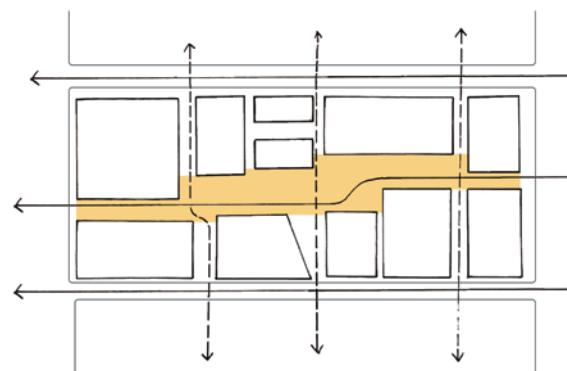
Stripes differentiated according to block depth

Campus



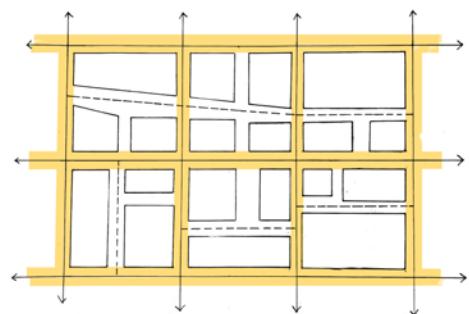
Campus arrangement of smaller blocks forming sequences of yards

Perimeter Blocks

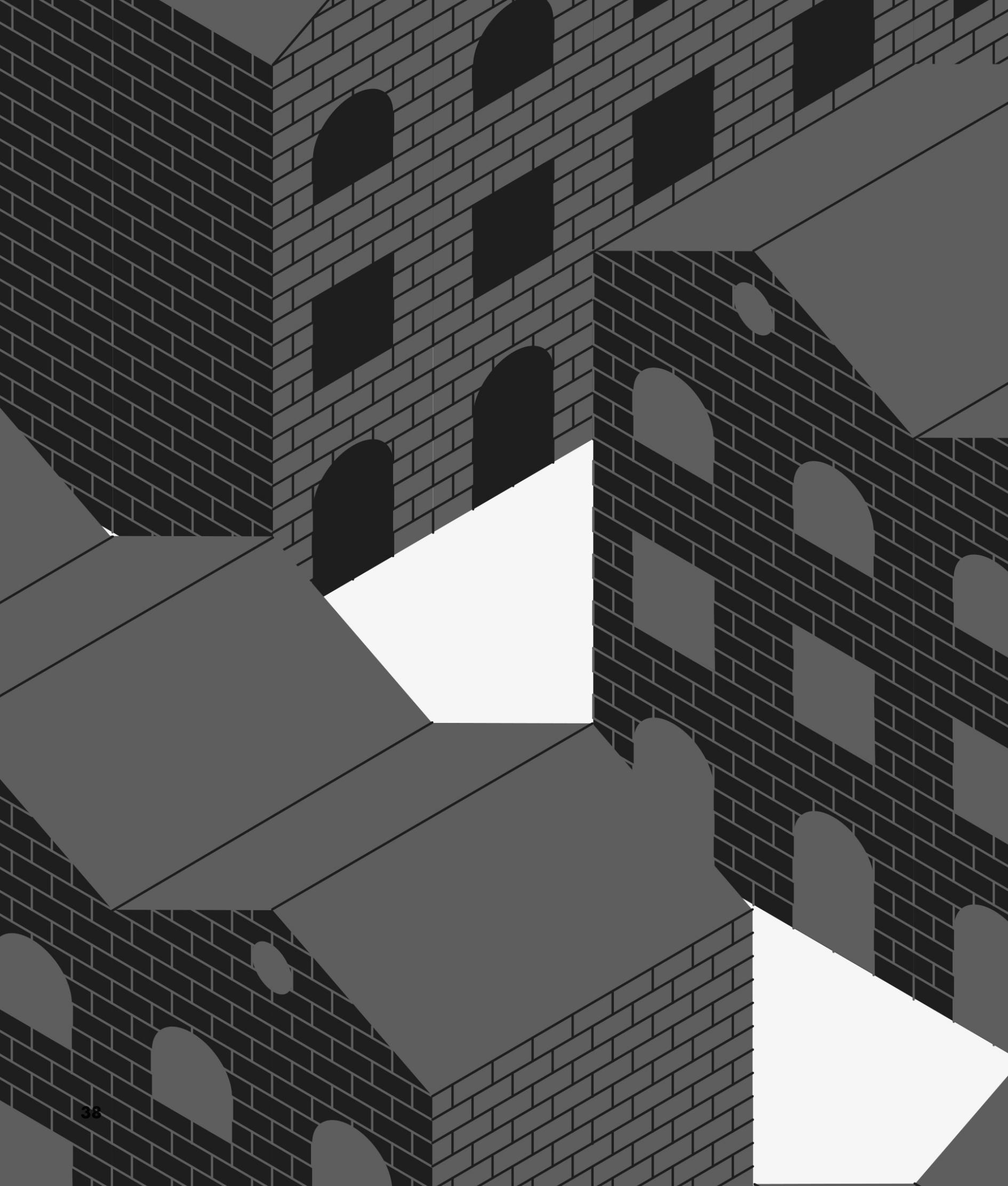


Perimeter blocks defining interior streets and squares

Gridness



New gridness independent of site conditions





Housing + Industry Strategies

6.

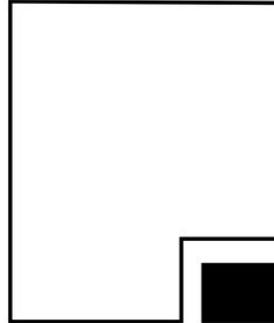
Housing Strategies

CHAPTER 6: HOUSING STRATEGIES

The challenge of intensification of employment land in an inner peripheral condition is the constant fluctuation of the lifespan of industries affected by political and economic factors. This makes questions like who are the possible inhabitants of this area, what would the living and working environment be like, tricky to answer. If we are to start to reimagine these industries as part of a hybrid network or an ecology, then the introduction of the residential component becomes crucial. They build resilience in these neighbourhoods that allow for the evolution of the nature of businesses and industries around the area.

There are possibly three approaches of integrating residential in these industrial environments.

1. Housing and industry operating in the same structure:
This could be in the form of stacking or a more intimate mix as we vertically organise the various functions. They could have a common street-oriented frontage with the logistics being tucked in at the backside. The topography also starts to help in differentiating the levels of access between the industry and housing.



2. Housing and industry as separate structures clustered together:
This could be used to retain a higher degree of privacy of residential components while at the same time allowing for certain adjacencies to exist that allow for intermediate mobility between working and living environments. The organisation would be structured around courtyards of different sizes and natures that start to create a sequence of spaces that generate various modes of interaction in the shared areas.

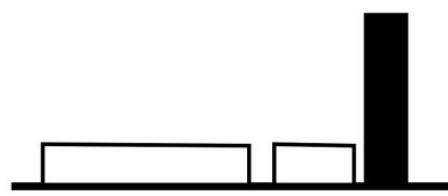
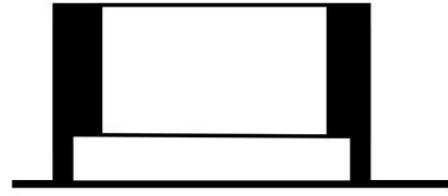
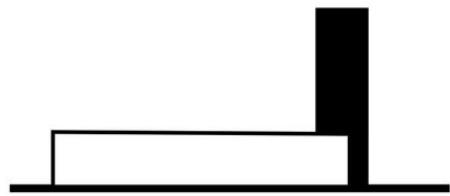
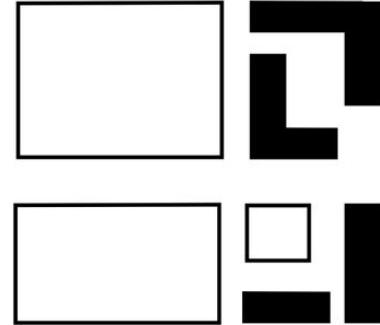
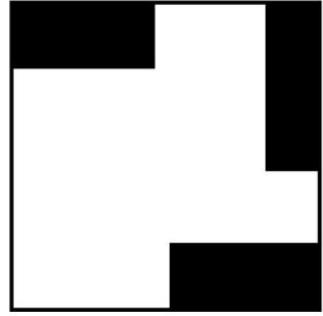


Created buffer between residential and industrial

3. Spatially autonomous residential and industrial areas:
This is used to create distinctive residential and industrial environments that nevertheless have the potential of creating common events in the spaces between them. The ground becomes a crucial factor in how these elements stitch together.

Each of these approaches can be appropriate depending on the particular condition of the area. In Kentish town, we start to see several opportunities to deploy each of these strategies on site.

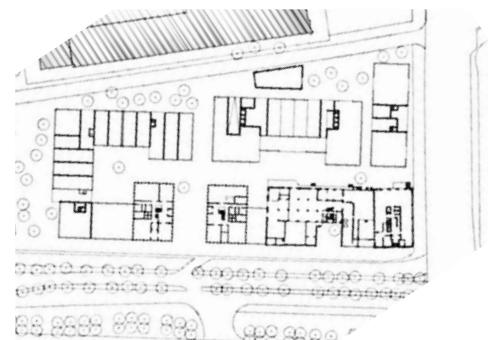
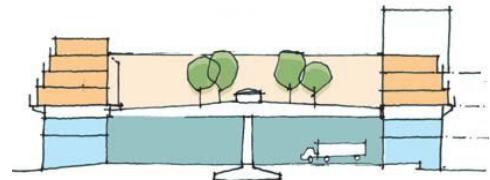
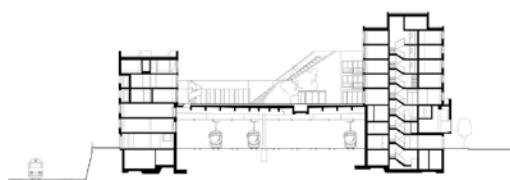




Stacked towers above the industrial shed

Stacking above the industrial shed and formed block

Shared courtyard with industrial parts



**'ARE ALL CREATIVE
INDUSTRIES THE
SAME?'**

Industry as Ecology

7.

Industry as Ecology

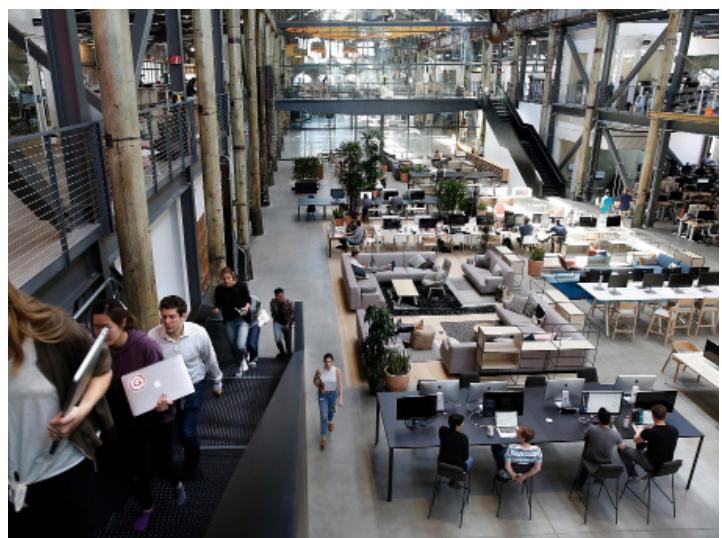
CHAPTER 7: INDUSTRY AS ECOLOGY

Conceptualising an industrial neighbourhood in the heart of the city and turning them from abandoned leftover areas into vibrant parts of the city requires an understanding of how different users come together and can be strengthened by each other. Companies no longer work in isolation but are part of larger value chains that compete as well as cooperate with one and other. They find new innovative ways to work together and form new patterns of association and partnership. Thus, creating a network becomes critical for their success and this results in companies seeking environments that are well connected, accessible to all their partners and clients and also have an inner-city environment that is well served by urban amenities.

This understanding has to be juxtaposed with the emerging patterns of how people live and work in urban environments today. There is an aspiration for a new balance in which civic environments, workspaces and residential areas coexist in close proximity and create more integrated neighbourhoods. This is possible with improved micro mobility structures and creating meaningful proximities and synergies that can build resilience in these neighbourhoods.

Our approach is to create a new London Hyper mix which combines a wide range of employment space with residential and other uses. We are looking to create hybrids such as production and retail; design, prototyping and marketing; employment and community space; coworking and making space and many more.

This approach is not limited to simply introducing industrial use into inner-city environments but about using industry as ecology and to understanding how value can be expanded by creating new synergies and looking beyond retail as a way to add value to neighbourhood development. There are various approaches to ‘mix’ residential and industrial spaces. They range from relatively simple combinations, which are effectively versions of ‘living over the shop’ to more complex combinations that include multiple floors of employment space, with specific ceiling heights, servicing or noise mitigation solutions. They may involve open or covered yards or be serviced from the street. They may range from multiple smaller maker units of 10 or 15 sq metres to a single unit of c.1000sq metres or even more. The reality is that there are likely to be many different layouts and typologies.



Are all Creative Industries The Same?

The reasons for why certain typologies and combinations work better than the others depend on the kind of neighbourhood that is envisioned and the reading of the morphology of the site and conditions. We have looked at four possible industrial ecologies that could be appropriate on our site- Food Industry, Music Industry, Design Industry and Logistics Industry. When we look at a particular ecology it is important to understand the synergies possible within that field and the kind of subsidiary uses and activities that would be generated around it. All creative industries do not operate in the same way and they would require different spatial strategies, typologies and mixes. These would be used as starting points to explore the vast range of options possible in generating these industrial neighbourhoods.

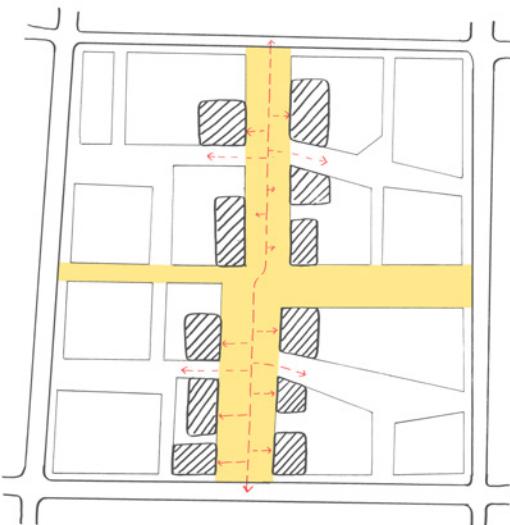


Industry as Ecology

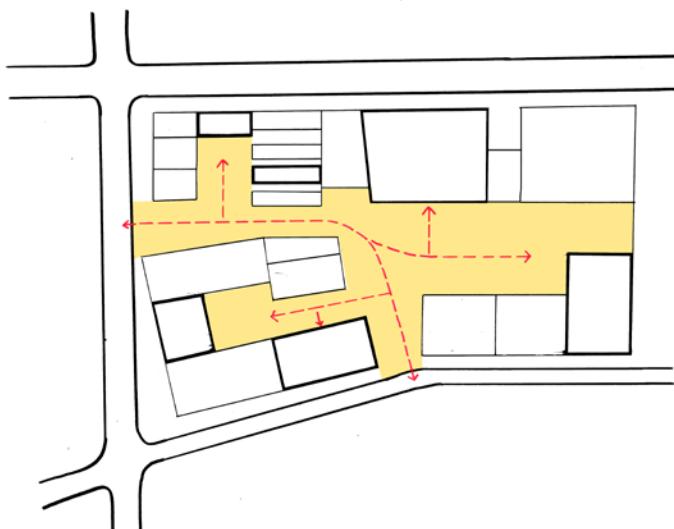
There are of course commonalities between various creative industries. There is a consistent logic in terms of how they have an ability to scale up and the variance they have in the breakdown of company or business sizes. But it is also important to understand the processes involved in each industry to better inform the nature of the network that can be established. We are not treating these as necessary differences but indicative ones. If we are to think of stakeholder assemblies and possible actors, understanding them as particular ecologies can be very useful. This starts to clarify what architecture can offer a strategic decision-making process. By understanding each industry and the ways of extending and creating a balance in their particular ecology, there is an opportunity to put something on the table that can invite a response and can push for an ambitious number of stakeholders.

Given this understanding, the key question then is what is the potential of Kentish town to accommodate these industries. Given its location and accessibility as well as the existence of cheap land, it would seem like a conducive location in terms of geography. The challenge then is in the transformation of these light industrial territories. There can be ample opportunity to retain the morphology of the area but completely altering the nature of the shared spaces and the activities that the buildings can accommodate through typological transformation.

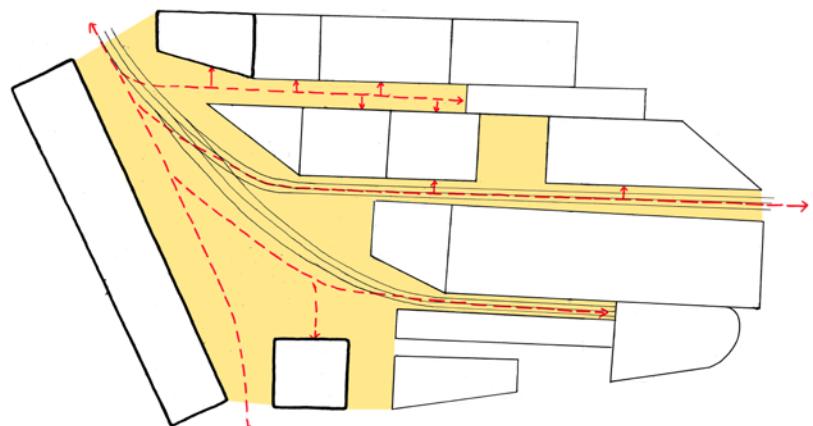
How Creative Industries Occupy Space



1. Clustering creative industry in several deep block within the newly developing area



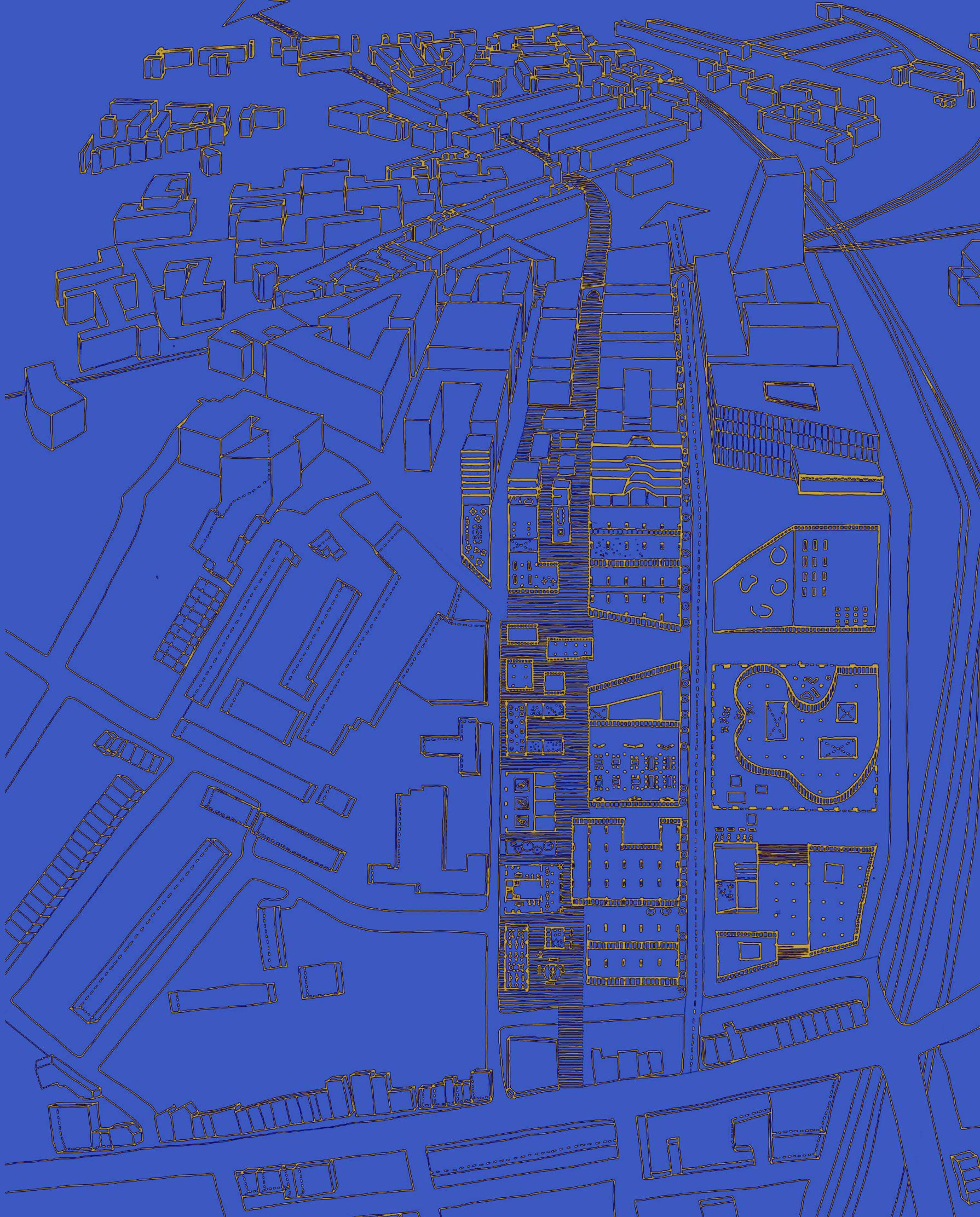
2. Forming industrial court yard connecting differentiated spaces spaces

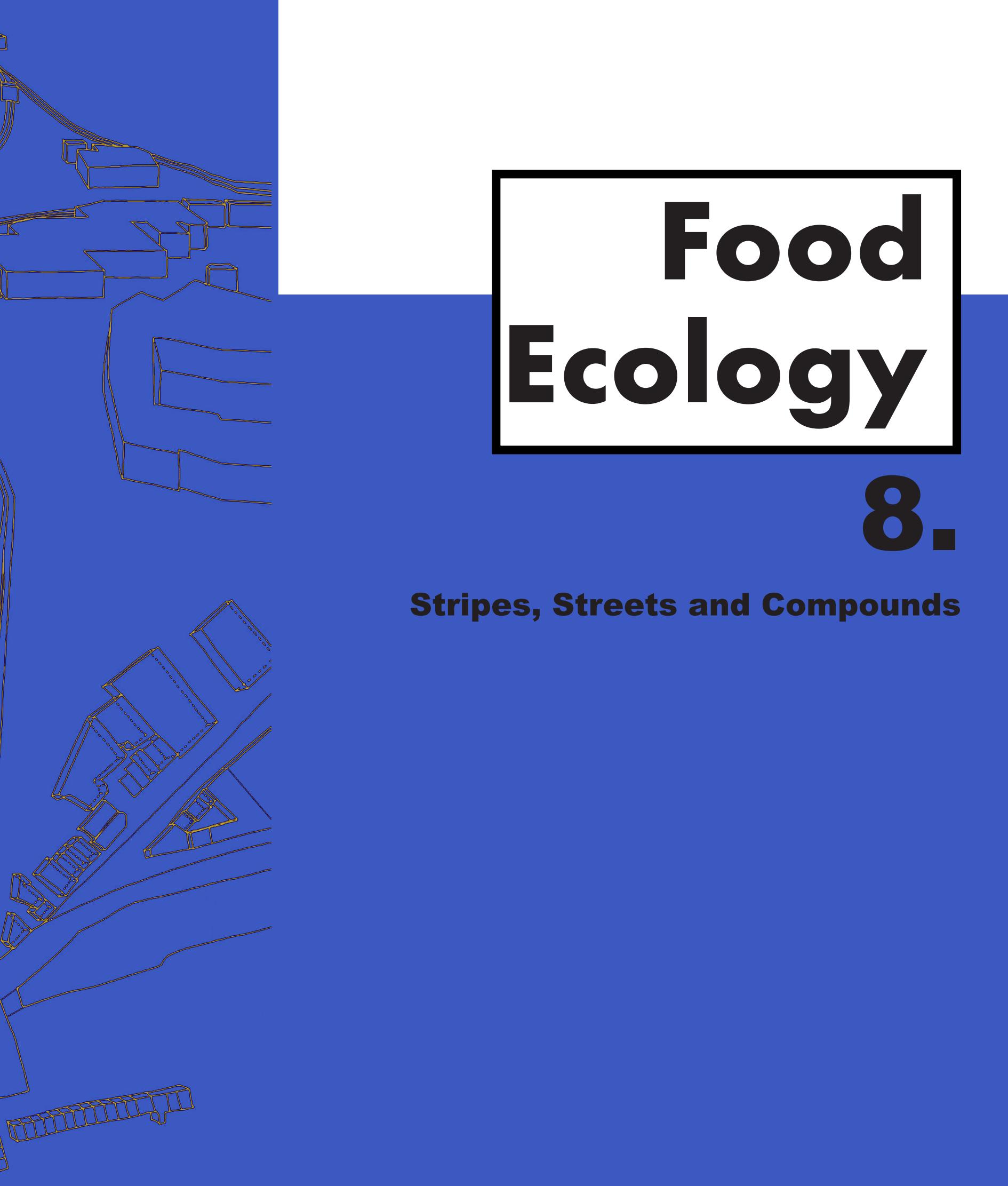


3. Readaptation of existing industrial sites constrained by railway infrastructure

If we look at how creative industries respond and requalify different site conditions, some intriguing observations can be found. Below are three cases- each of varying site conditions and size of the site with the biggest being around 300 by 300 metres and the smallest being 150 by 80 metres and an intermediary example of 300 by 200 metres. If we are to look at the intermediate case, the creative industries start to cluster themselves around the industrial area which is generated by the railway infrastructure. In the larger site condition, they start to organise themselves in several deep blocks and in the smallest case they start to situate themselves around a shared yard with spaces corresponding to that. Creative industries have the potential to readapt to varied conditions which are quite different from how industries used to perform. This is particularly useful to understand for Kentish town with its constrained site conditions and existing light industry. With this in mind, we start to look at a more nuanced exploration of each of those possible ecologies.

‘ARE ALL CREATIVE INDUSTRIES THE SAME?’





Food Ecology

8.

Stripes, Streets and Compounds

Food Ecology

CHAPTER 8: FOOD ECOLOGY

Why Food Industry?

Food has always been an inevitable part of our daily life. Beyond a source of sustenance, food plays an instrumental role in our social life; in the way, it invites people from various cultural, social and economic backgrounds to come together to exchange thoughts and ideas during meals. The public consumption of food brings vitality to city streets and can be experienced in multi-layered and multi-temporal ways. For example, the market brings merchants and buyers together in order to experience, taste and smell food from local as well as global sources. Such experiences instil a sense of belonging and generate a sensory-rich feeling of vitality. The experience of food in the city is a collective one, from dynamic experiences such as markets and food plazas to celebratory events such as anniversaries to quiet candlelit dinners; we all share these moments.

Food is an ecology which operates on a 24h cycle, from production to processing to delivery to consumption, it requires a systematic collaboration between stakeholders in order to sustain, maintain and improve our experience of food in the city. Although food is an integral part of city life, it has rarely been considered in terms of urban planning systems until recently. According to Cabannes and Marocchino (2018), research conducted by the US planning agency in 1997 found the reason for this to be contributed to the fact that food and agriculture were regarded as rural issues, not urban ones. Moreover, other research conducted by Sonnino in 2009 concluded that because of this misunderstanding, the planners and policymakers blamed the food supply in the city on the farming system lacking consideration of food distribution in cities.





The Food and Social Life A Complex Network

However, during the recent years, cities have made some efforts to integrate food into the city planning systems, for example, the London Food Strategy (2006) aims to provide healthy, affordable and accessible food to residents in London. The Settle Food Action Plan in 2013 act as a strategy to reduce the food waste in the city, and at the same time increase city farming and boost the food economy. Similarly, the Melbourne Food Policy (2012) aims to provide healthy food options for all citizens and establish a sustainable and resilient food system.

Food Ecology

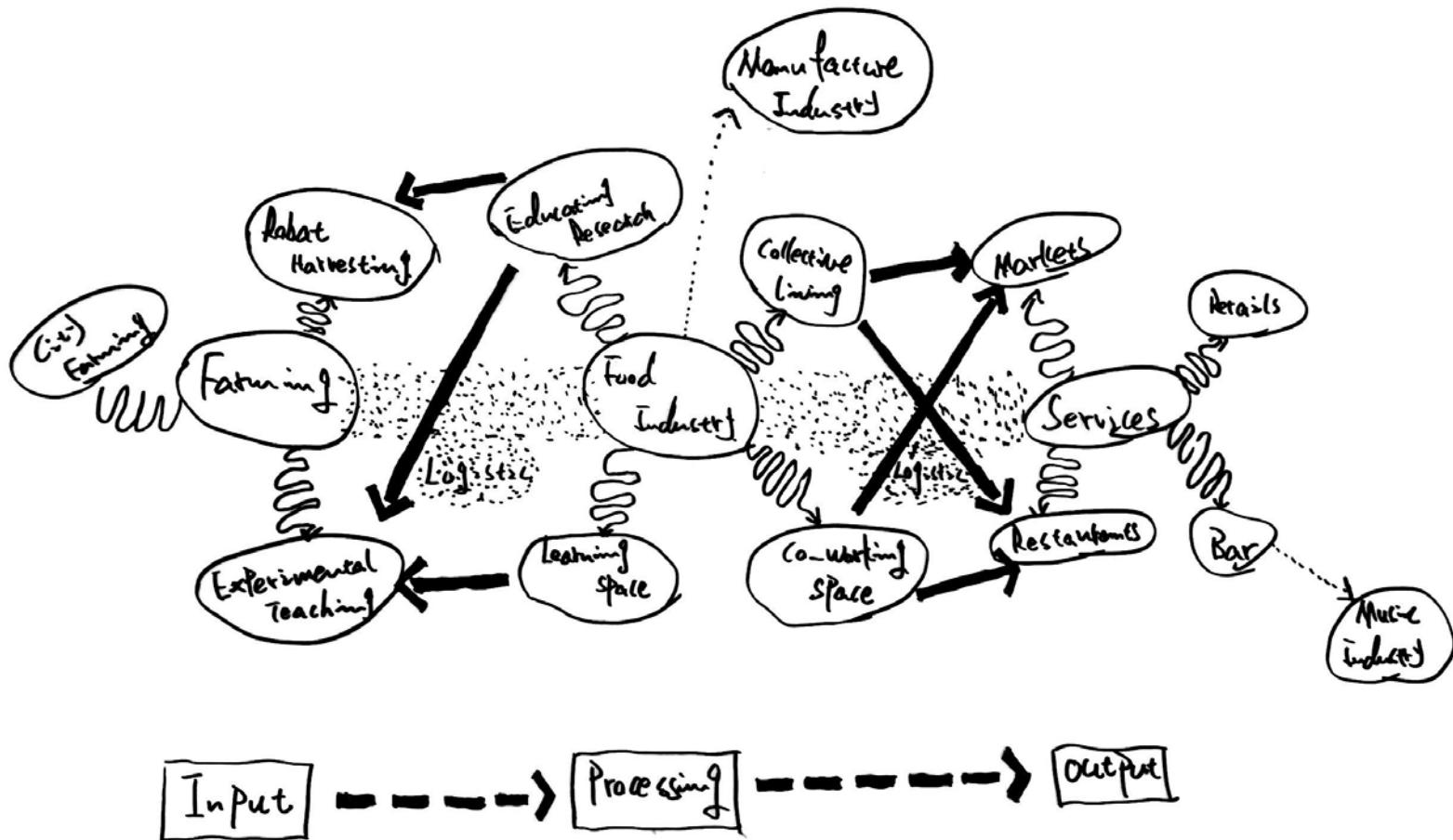
Food, Work, Production



Transparent spatial strategy enables transparent policy of food production and more participation between producers and consumers.



Education as integral component to supporting local community awareness.



The Food and Social Life A Complex Network

Beyond the social aspects of the food ecology, it is also associated with other aspects of city life such as education, culture, employment, business, health and wellbeing. Food is not simply a linear process, which starts with farming and ends with a consumer good. It involves other industries, such as logistics, manufacturing and creative industries. Our exploration reflects this and proposes a well-integrated ecosystem in which businesses of various scale can work together and invite participation and partnerships to form. In order rethink how food can be part of our neighbourhoods; we are proposing a layered multi-tenant, mixed neighbourhood, which supports the changing patterns of living and working together.

Food Ecology

Precedent Study: OMA Food Port, Louisville

The beginning of studies with an exploration of the megaform and its potential to drive growth and development starts with the case study of OMA. The horizontality of the megaform indicates unity and integration of the mixed-use program, which serves the wider urban area and acts as a catalyst for businesses to locate in proximity and strengthen participation between industries.

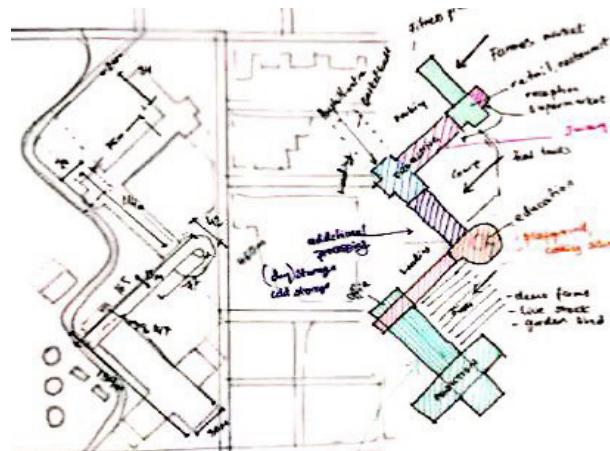
Precedents



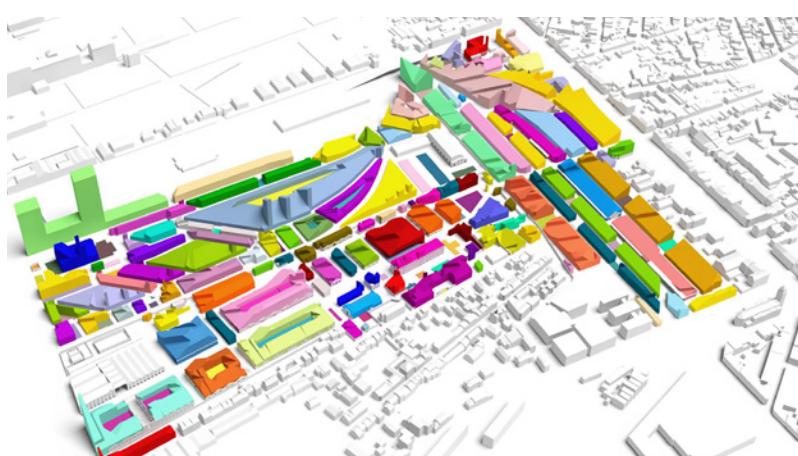
This scheme brings a comprehensive approach to the food system. It significantly reduces food transportation distance, which reduces costs and environmental impact.



By bringing various uses into the same site, rather than relying on services being scattered across the city, there is a creation of synergy between producers and consumers, which is currently lacking in cities.



Gdansk Port Masterplan , MVRDV Bordeaux Masterplan

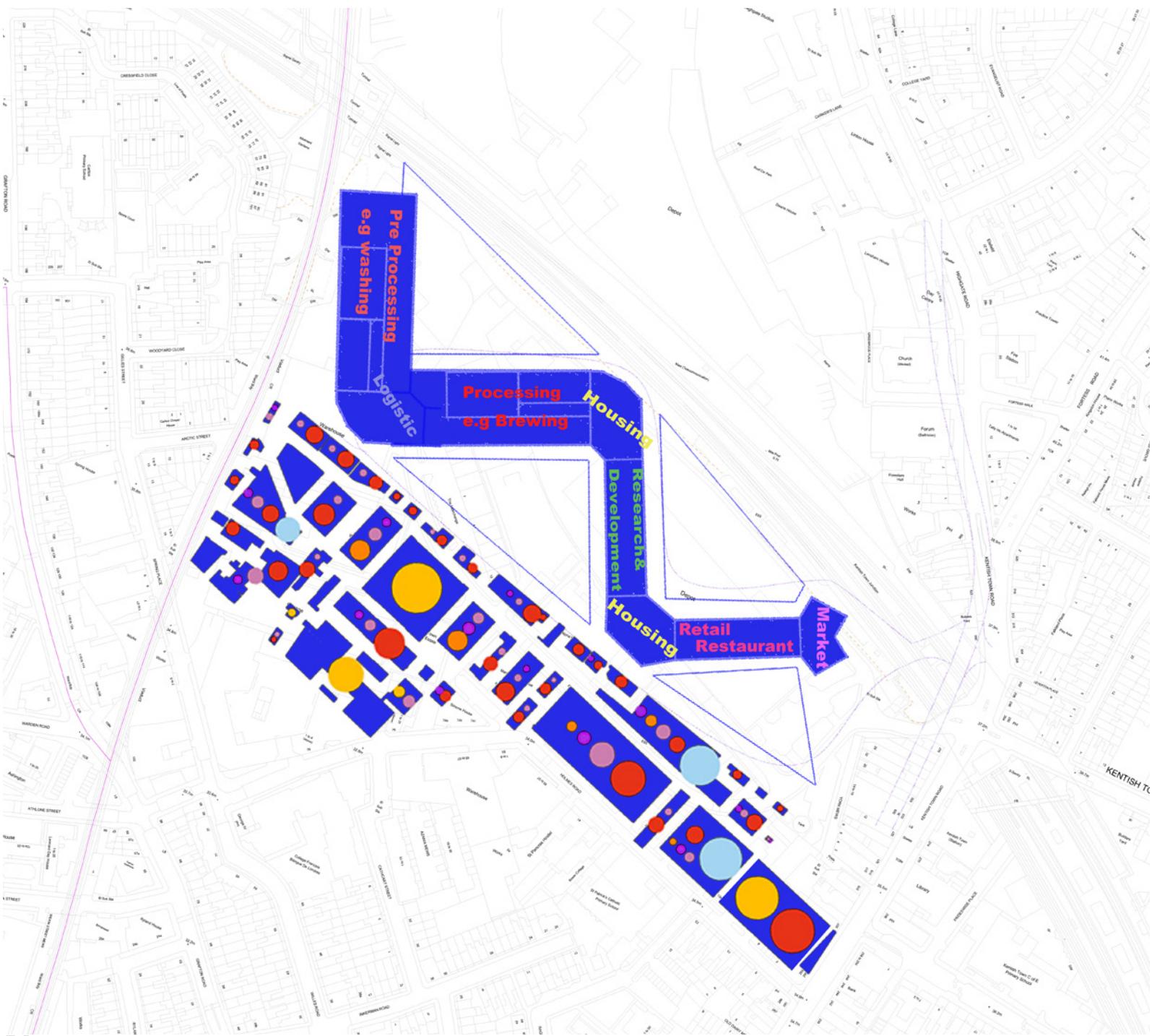


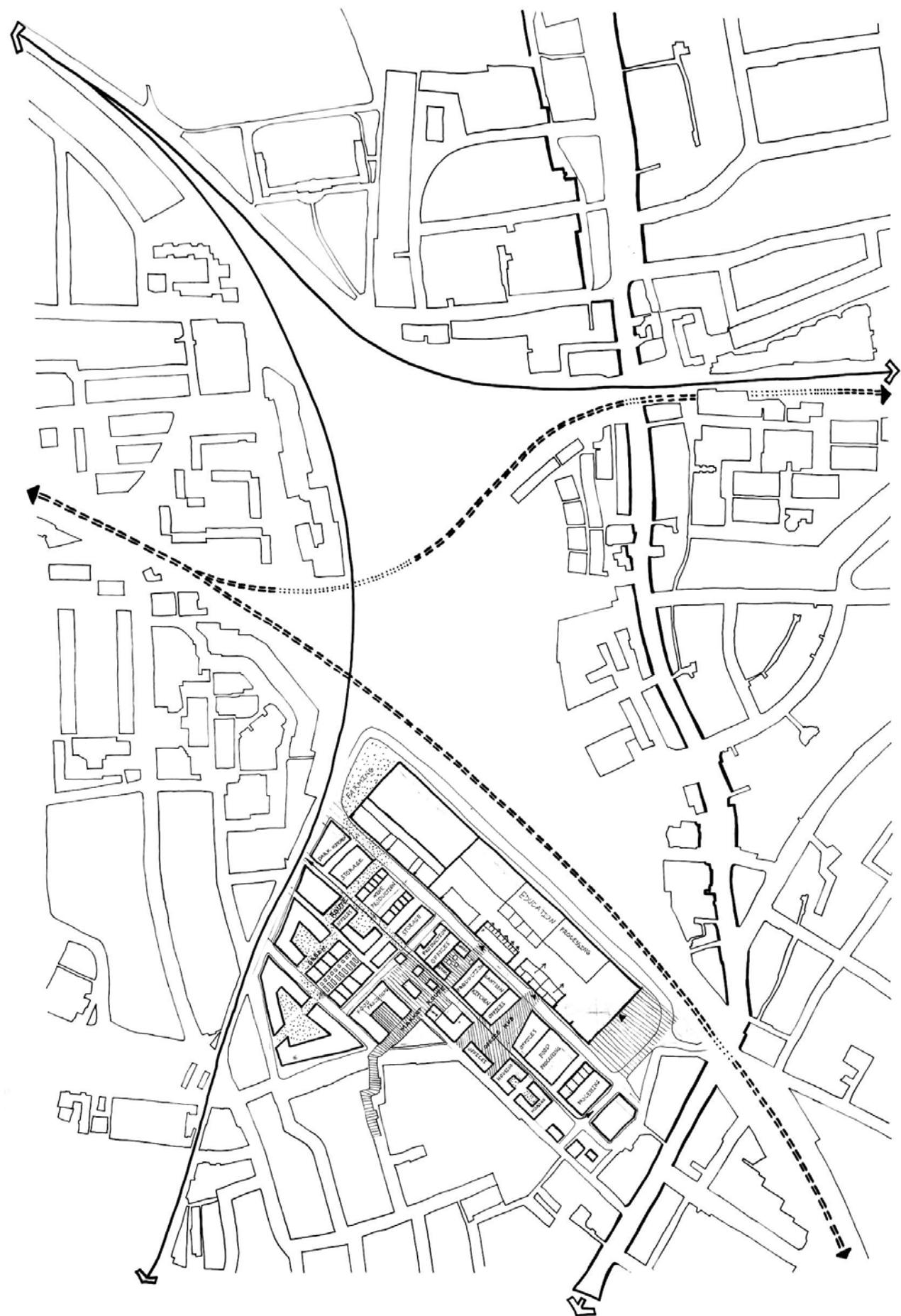
What was appealing when studying the MVRDV Bordeaux Masterplan as well as the Gdansk Port Masterplan was the integration of industries of various scales into a gridded and permeable system. Through the implementation of differentiated streets, yards and interior courtyards, there is a multi-layered experience of the plan for residents, merchants and consumers, which caters to the needs of differing programs.

Food Ecology

Concept of Megaform

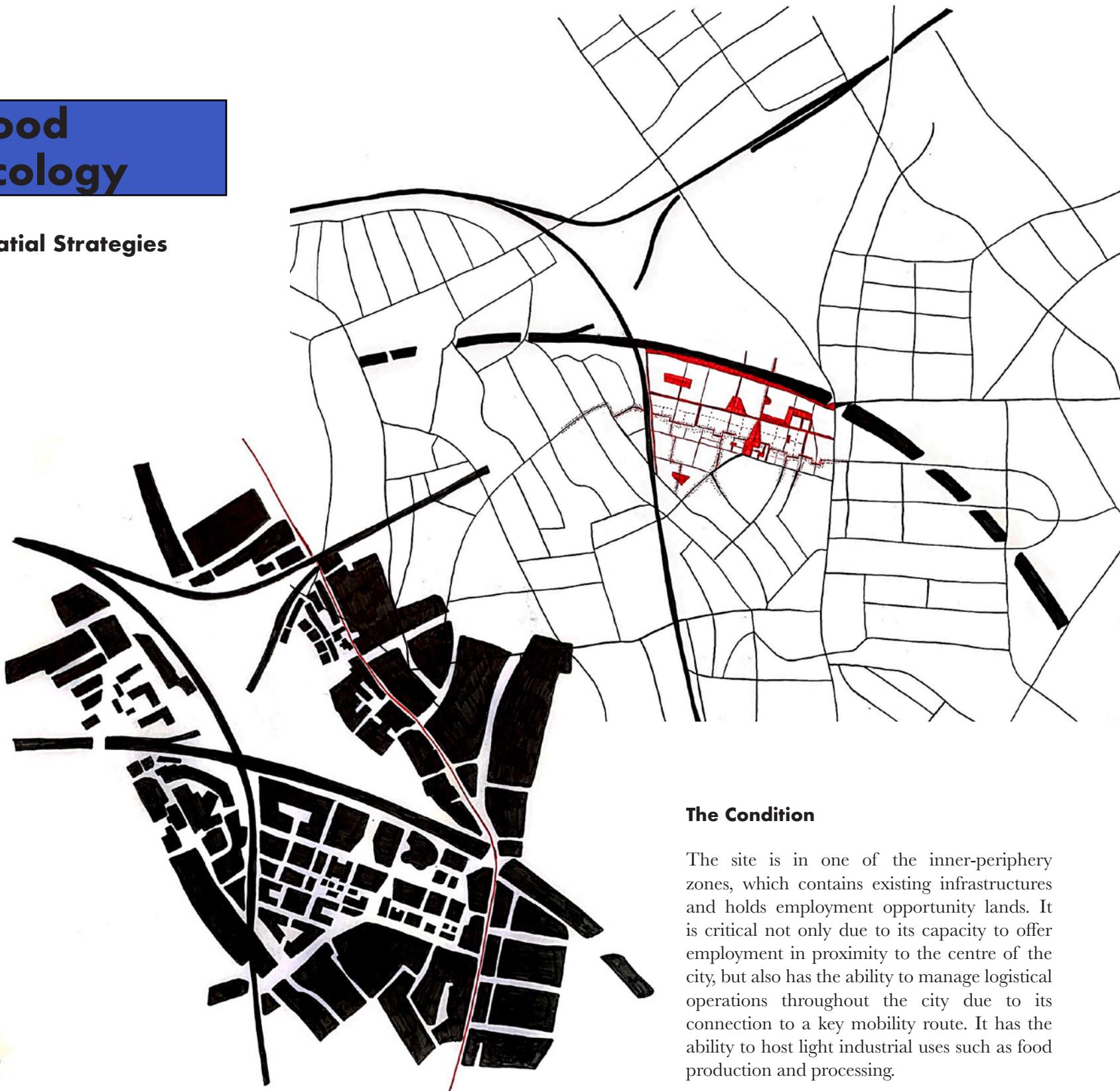
After comparing the megaform approach with the more differentiated MVRDV approach, it was apparent that the services can be well distributed and constructed in phases, without the need for a megaform. The combination of megaform with a differentiated gridded plan gave rise to the striated plan which can accommodate multi-scalar interventions.





Food Ecology

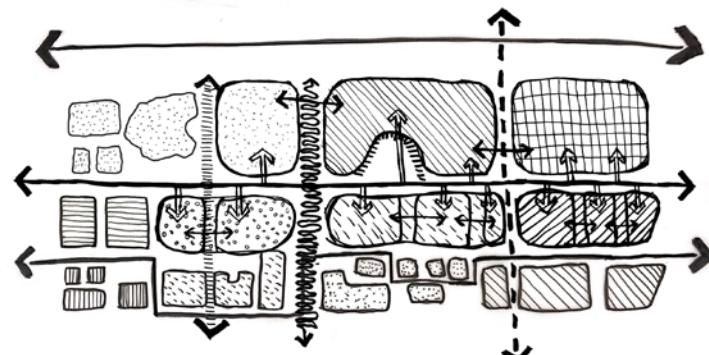
Spatial Strategies



The existing site is predominantly occupied by industrial sheds which are constrained, not well connected to the city fabric and are bounded by railway infrastructure. It does not facilitate interaction between industry and the inhabitants. In addition, there is little, if any, street life, therefore residents are not particularly invited to enter the site.

The Condition

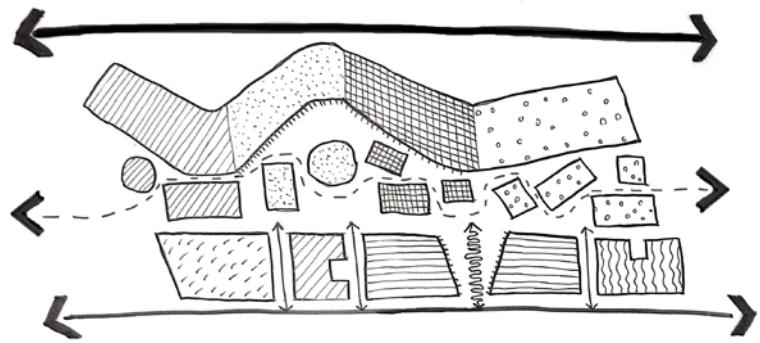
The site is in one of the inner-periphery zones, which contains existing infrastructures and holds employment opportunity lands. It is critical not only due to its capacity to offer employment in proximity to the centre of the city, but also has the ability to manage logistical operations throughout the city due to its connection to a key mobility route. It has the ability to host light industrial uses such as food production and processing.





What are potential steps of creating megaform? We continue altering and exploring varieties of organization of the building migration of yards, potentials of involving stacked housing to collective activities driven by food ecology.

Due to its proximity to central London via the main road and the Kentish Town underground station, there is a large potential that can be explored if we re-think the structure and occupation of the site, and propose a well-integrated system of road networks which run across the site, connecting it within its surrounding context.



Food Ecology

Spatial Strategies

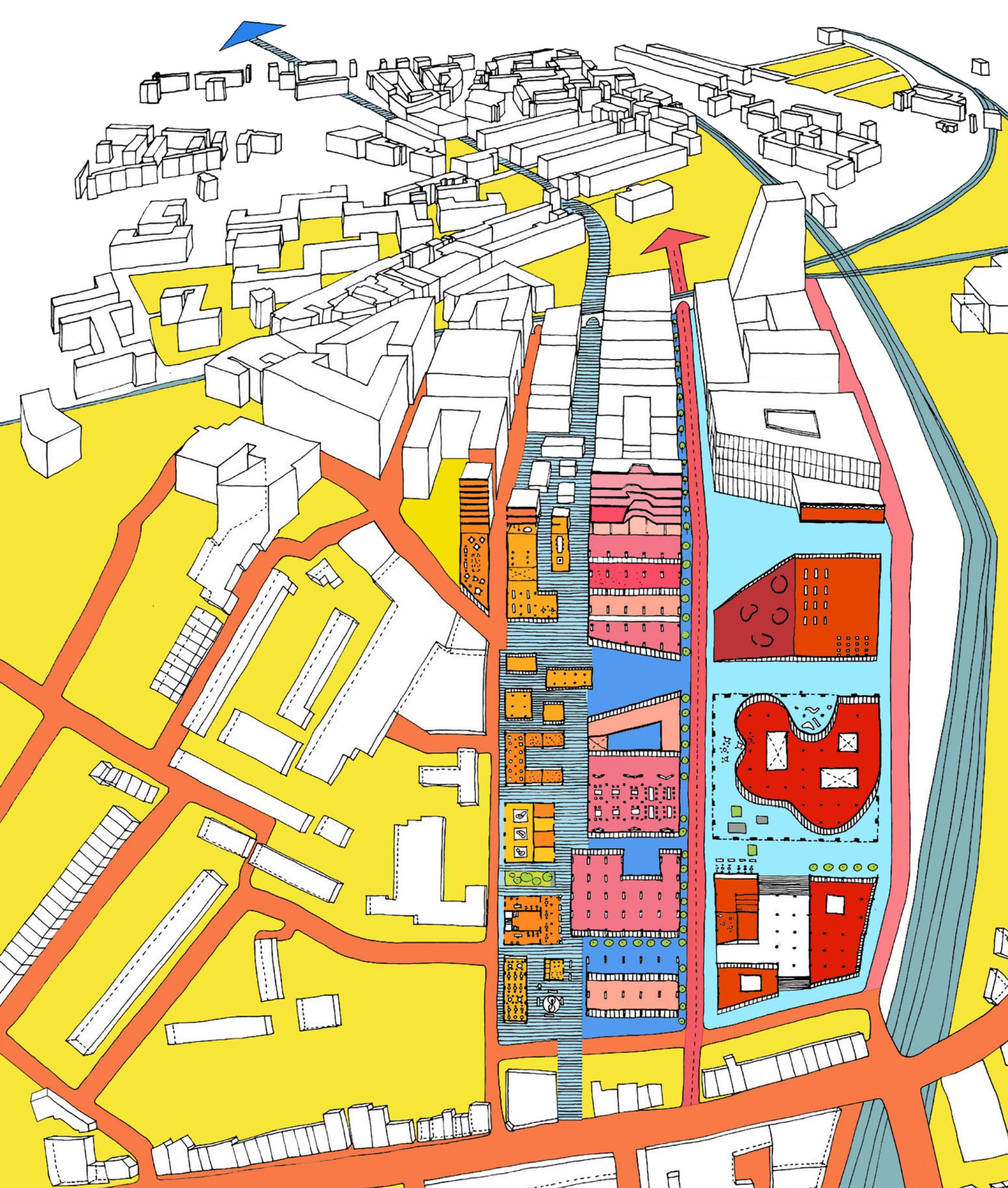
Differentiated network of spaces and stripes working across S,M and L Size of block dimensions

Re-thinking the morphology and the block sizes gives the idea of building the structure of the area giving it strict hierarchy. The clear system of differentiated striation gives the advantage of logistic servicing route and also the mobility system around the site integrating it East - West and generating the synergy of spacial qualities and diversified services across the site.

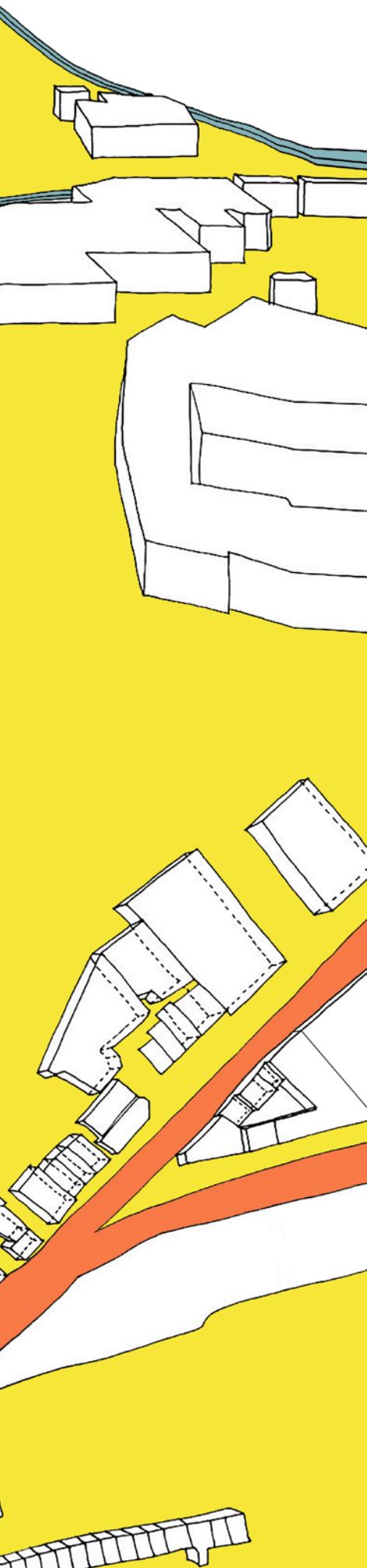


**Differentiated network of spaces and stripes
working across the site in relation to Megaform**

The megaform creates a sequence of pockets and plazas which brings activity into the building. The open spaces left over by the megaform give rise to the potential of pop-up spaces to appear, working as a sequence across the site, and becoming an integrational element between territories behind railway infrastructure and Highgate Road.



Food Ecology



Strategy

In order to accommodate light industrial spaces, as well as working and living environments within the site, different dimensions and striation of the block are introduced to offer various possibilities of street life and inner block activities which are well integrated within the larger area and offer relationships to form between businesses of differing scale, associations and stakeholders.

The buildings in the first striation are substantially large enough in order to accommodate food production processes and invite large companies to locate in the site that brings employment opportunities and boost the local economy. The market is located within this striation, placed towards the point of entry to the site from Highgate Road and Kentish Town Underground Station. The market acts as an inviting element, with the open free ground it belongs to the continuous realm of the street. Besides allowing for permeability, the open ground allows for collectivization of services of various scales and brings more diverse activity to the ground.

As one moves further through this striation, the street life is further absorbed by differentiated plazas, residential mews and connected lobby spaces. The striated site allows Large, Medium and Small industries to operate within the same neighbourhood and brings the ability for housing and workspace to locate within the site.

Food Ecology

Organizational Strategy with Differentiated Fine Grain





Deep Industrial Blocks

70 m



Deep Workspace + Housing Blocks

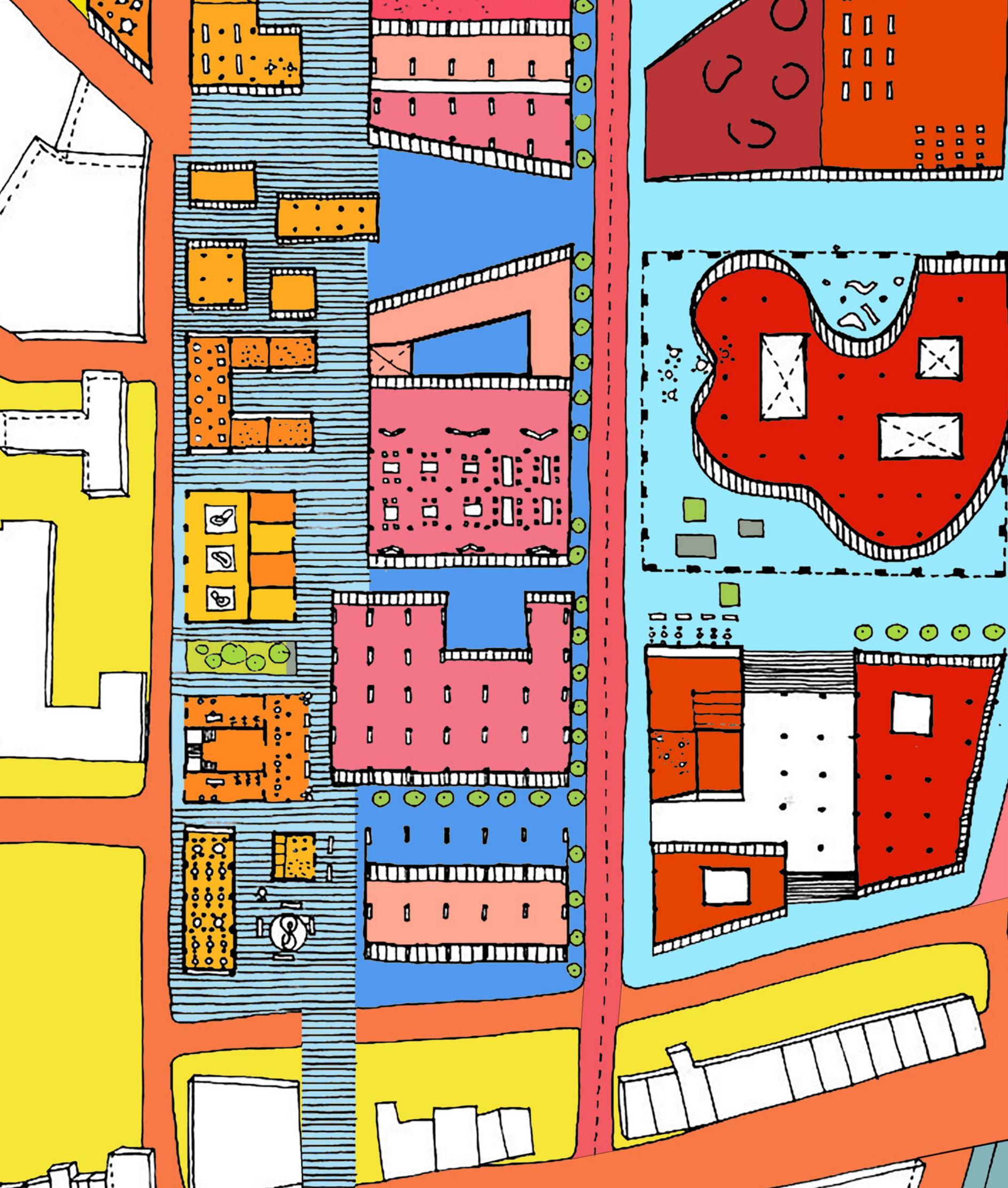
40 m



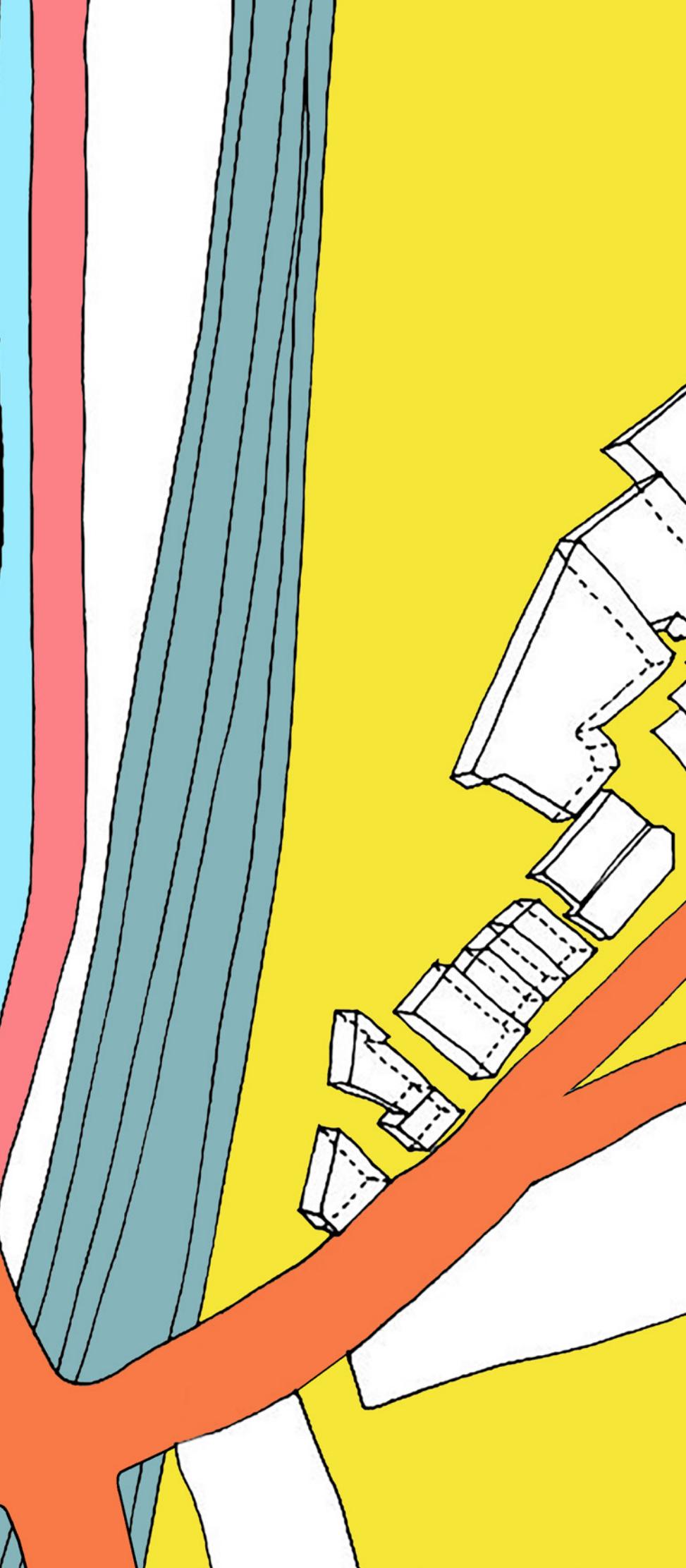
Pop-Up Temporary Pavilions

For small businesses, galleries e.t.c.
on the edge as a potential move for
morphological integration with the territory of
Kentish Town.

20 m



Food Ecology



Strategy

In addition to various block sizes, the differentiated and hierarchical order of streets and squares appears, what supports logistical purposes, and offers various qualities of street life, from busy service-rich streets and plazas to quieter residential mews with separated entries.

The logistical route and yard are located between the railway infrastructure and the large developments and runs across the entire site. The diffused, residential streets, as well as a network of plazas, are located perpendicular to the main vehicular mobility routes. In addition, the surface running throughout the smallest block striation is treated as a pedestrian zone.

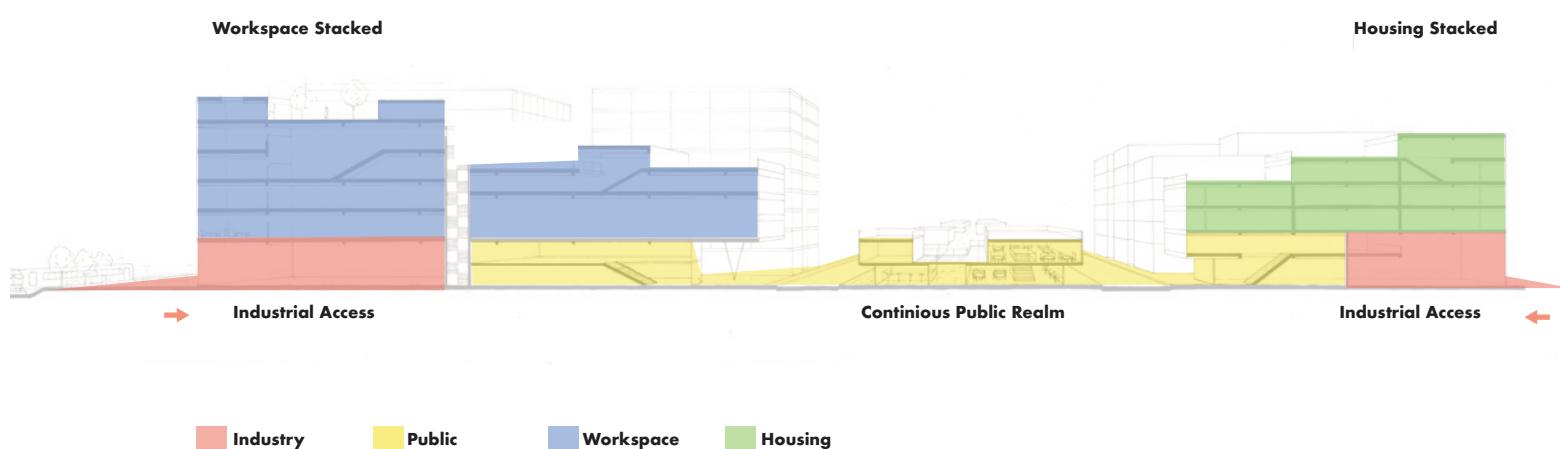
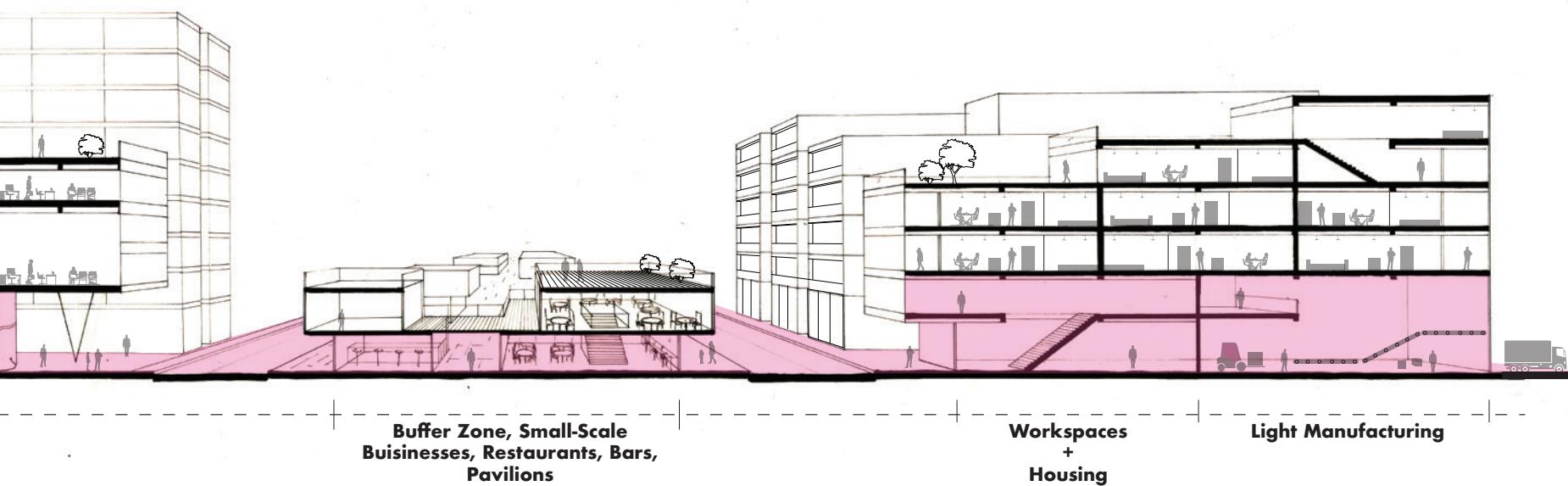
The free ground strategy, as well as differentiated qualities of streets and squares, bring a rich diversity of experiences that support the industrial, working, cultural and residential activity.

Food Ecology

Scenario 1

Pavilions stripe in the middle as an East-West integrational element

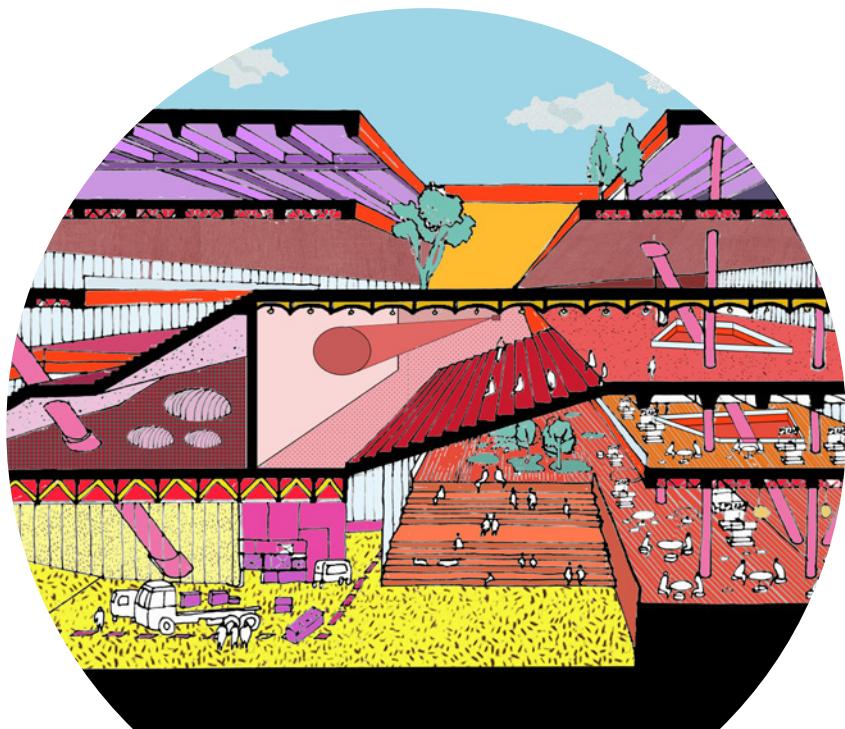
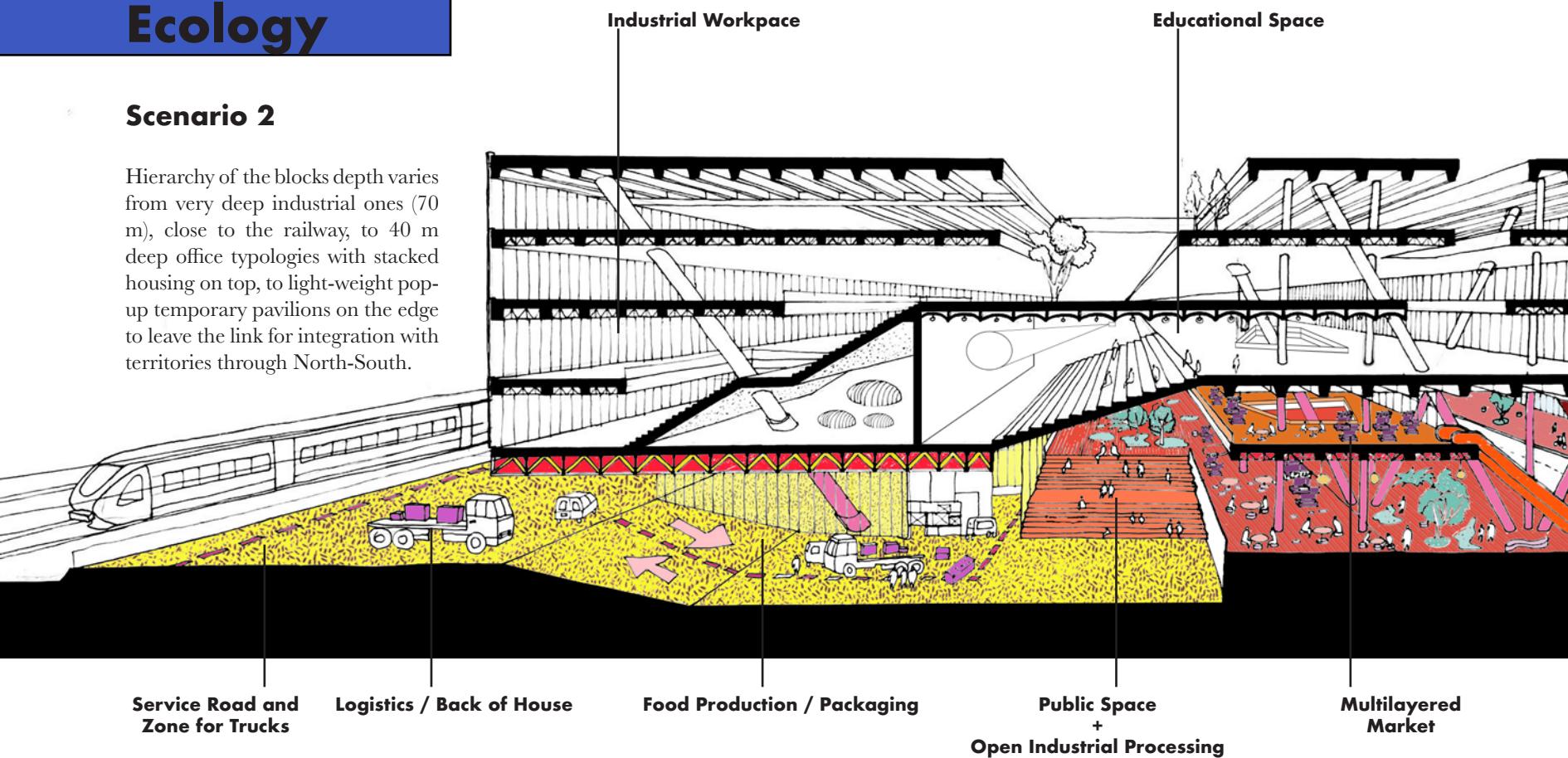


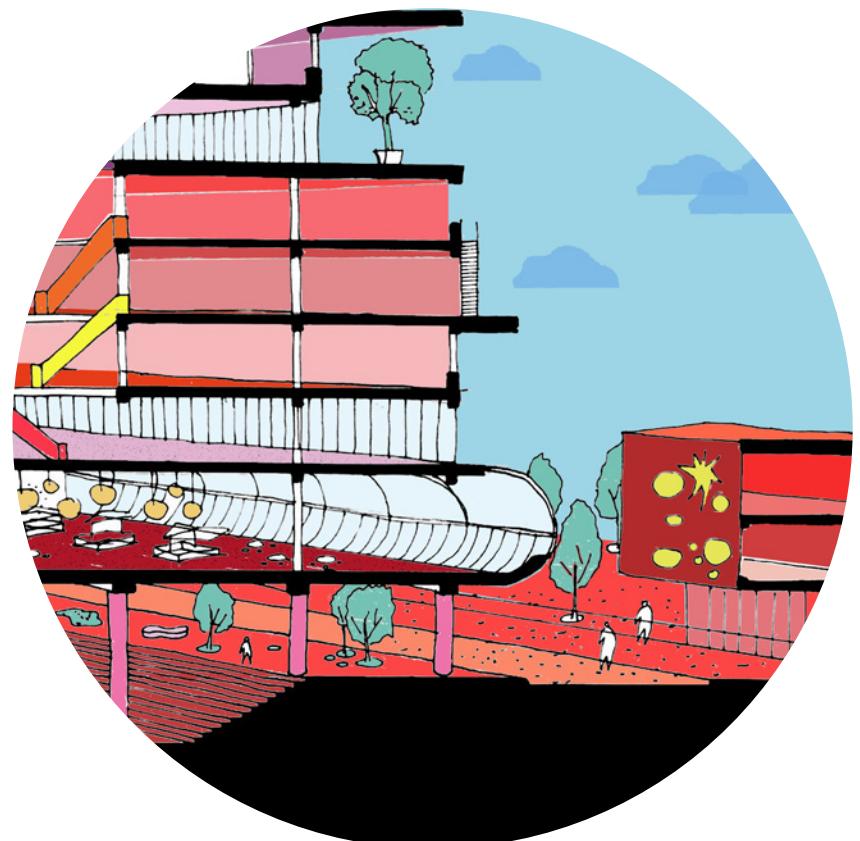
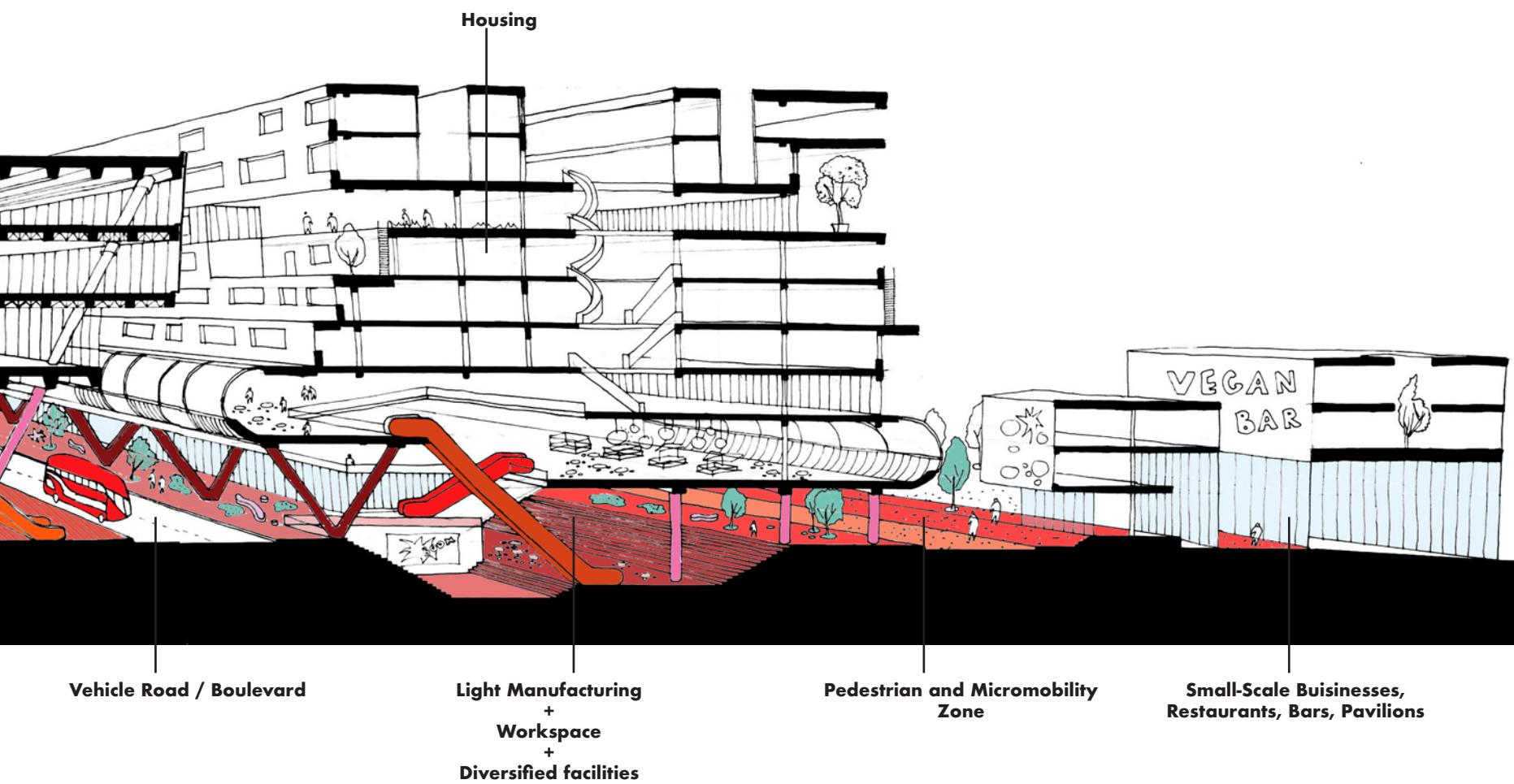


Food Ecology

Scenario 2

Hierarchy of the blocks depth varies from very deep industrial ones (70 m), close to the railway, to 40 m deep office typologies with stacked housing on top, to light-weight pop-up temporary pavilions on the edge to leave the link for integration with territories through North-South.

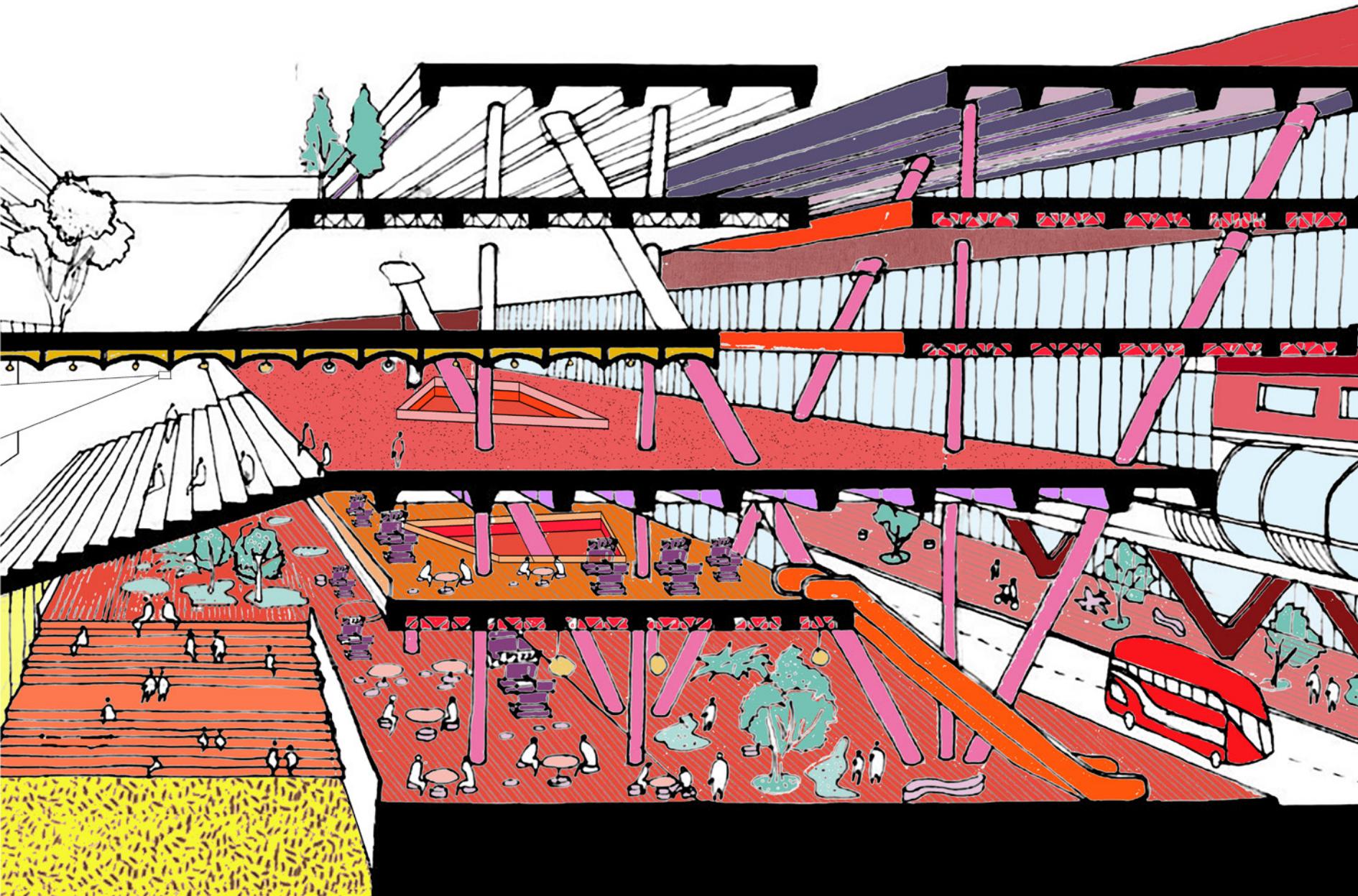


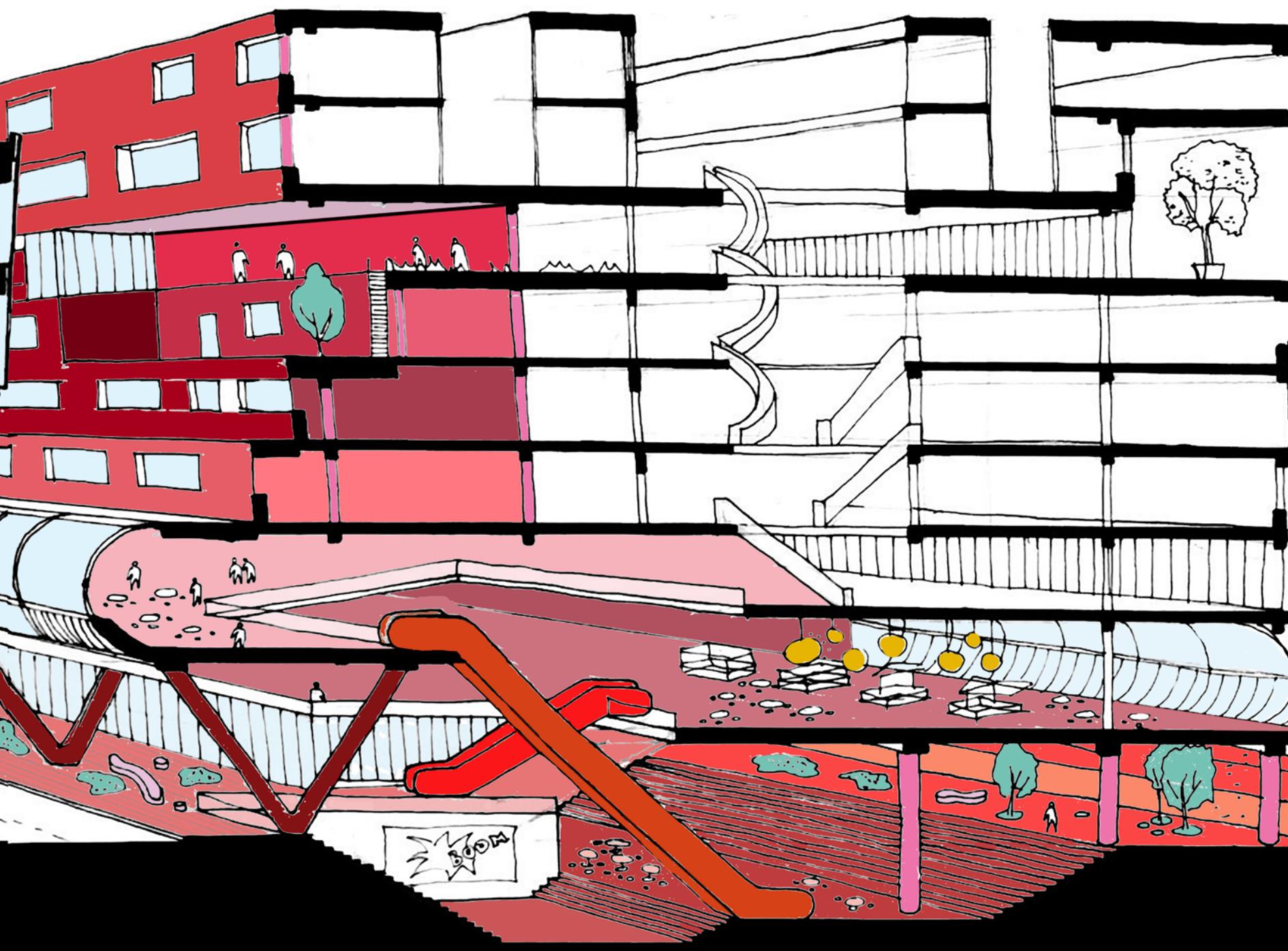


Food Ecology

Permeability and Synergies across Players of Different Scale

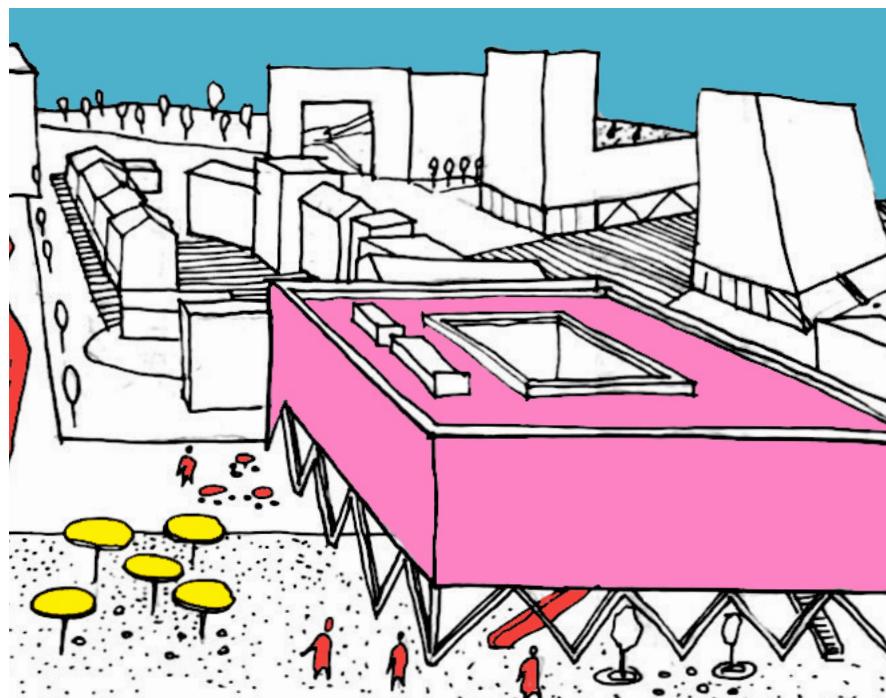
Permeable ground floor, multilayered spaces, diversity of typologies and hierarchy of block depths constructs richness and flexibility of environment, attractive both for stakeholders and citizens.



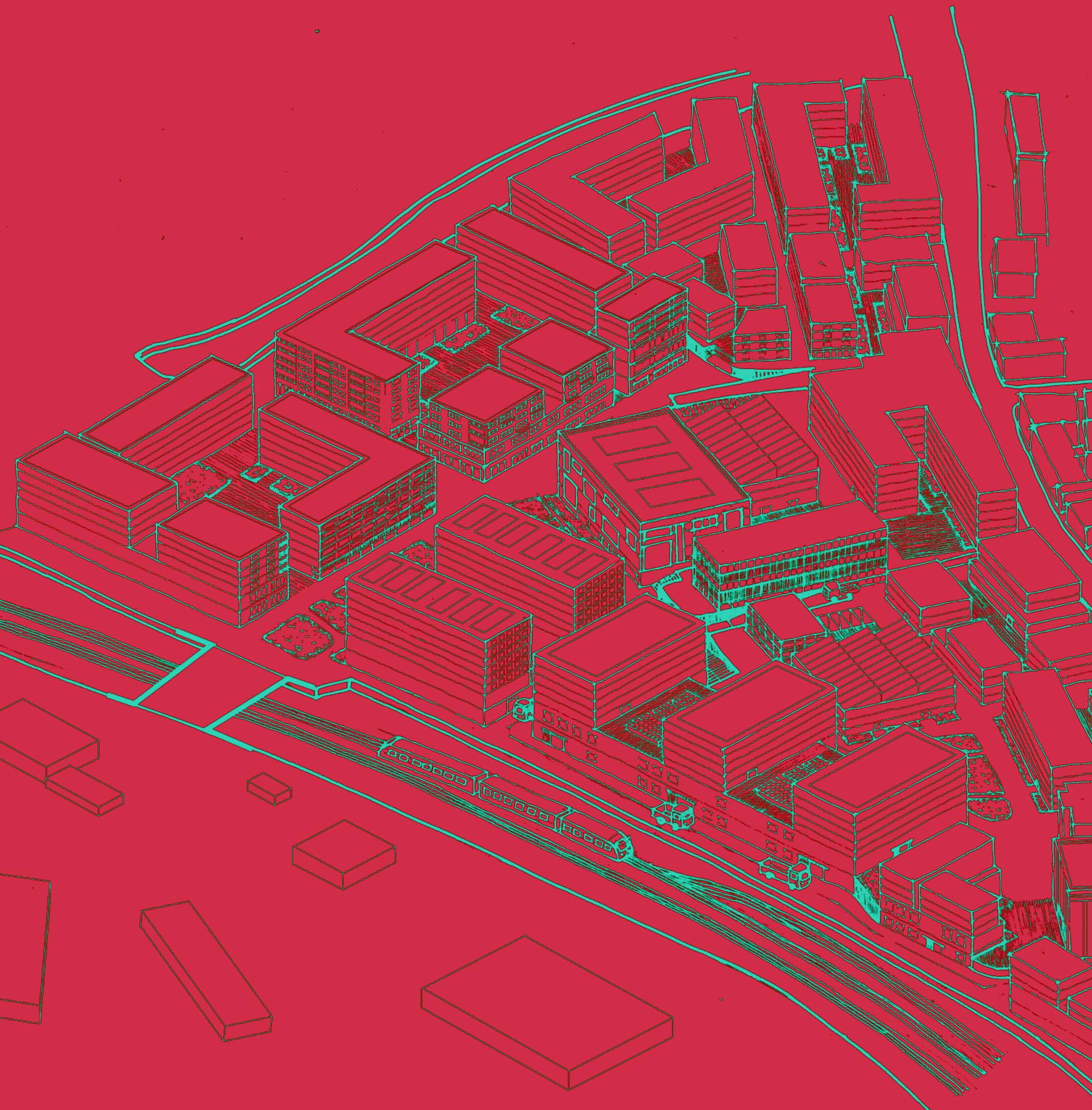


Food Ecology

Kentish Town Living Differently









Music Industry

9.

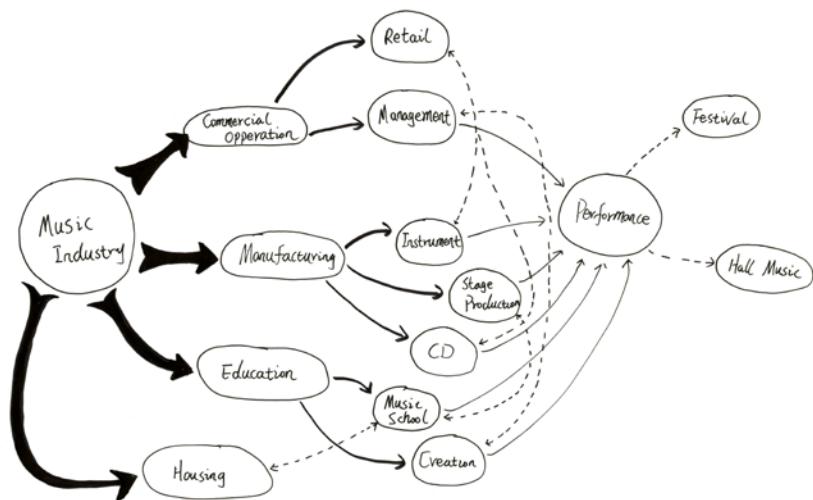
Streets, Campuses and Estates

Music Industry

CHAPTER 9: MUSIC INDUSTRY

Why the Music Industry?

Due to the transformation, it is possible to have a workspace neighbourhood including industries in the central city. In this notion, not only retain the employment in Kentish Town but also offer the wider urban benefit with greater integration and diversification. Therefore, the question comes to what kind of industry could drive the change. The music industry is in the revolution which relied on manufacturing such as producing CD in the early period. Producing and broadcasting can be easily done through laptop and internet. The one which is pursuing by people is a new innovative experience. The synergy of organising production spaces, offices, stages, and educational institutions together not only for efficient cooperation but also offer the chance for more people to participate in the process. One can imagine that the audiences can have the chance to witness the production process at the backstage or have a glass of beer with the music producer. On the other hands, music producers get opportunities to exchange academic knowledge through cultural institutions.





Kings Cross

There are some music corporations like Sony Music, EMI moved from Kensington to Kings Cross which take advantage of the convince location. It is not able to accommodate the whole production process due to the high land value. However, Kentish Town which takes 10 minutes tube from Kings Cross gives opportunities to those industries. Integration and intensification which create a successful innovation environment by bringing the production and office together.

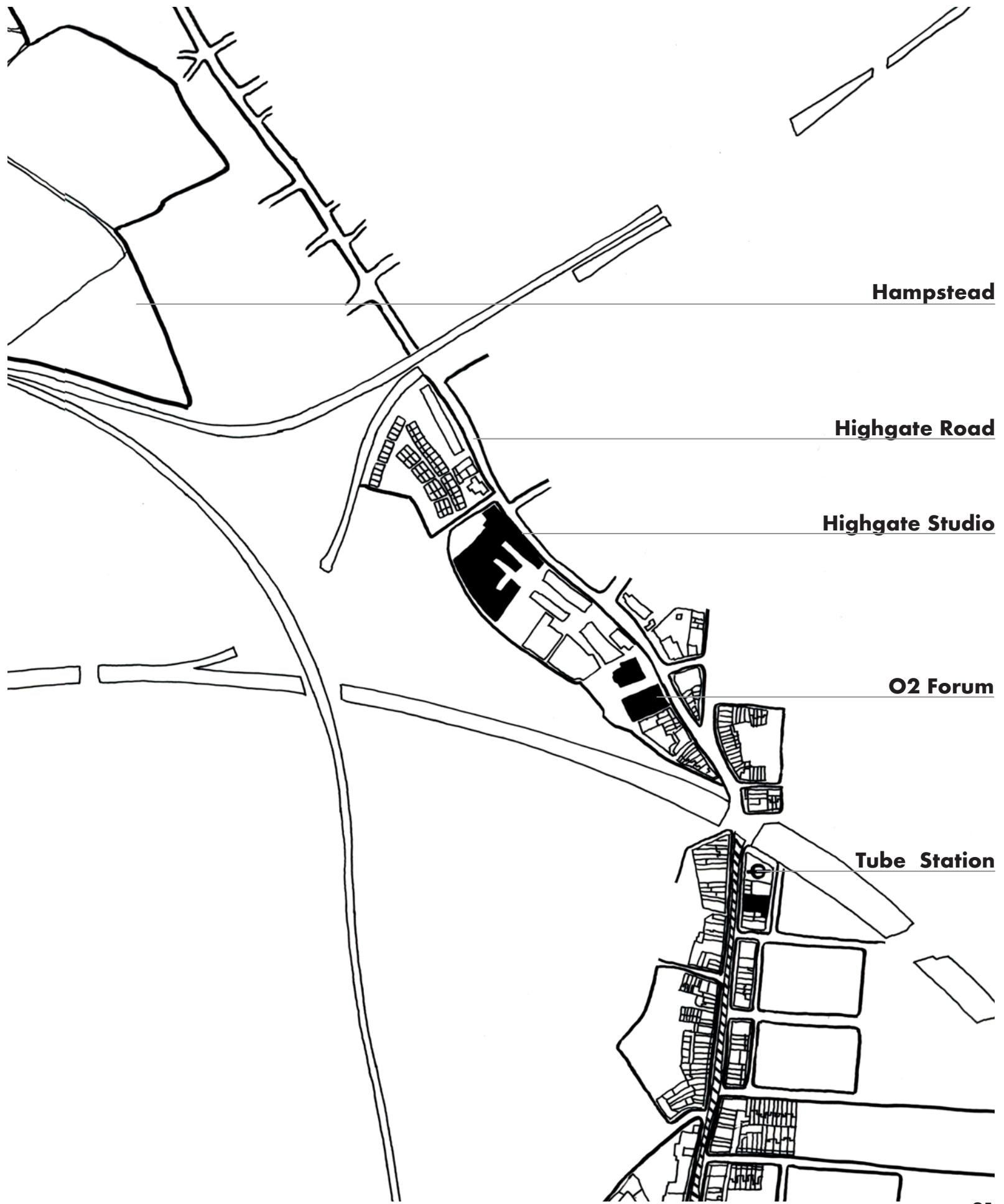
Music Industry



Kentish Town

There are several serving facilities in the area. Transportation infrastructure, Kentish Town station, Gospel station, and Tufnell station, offers great accessibility. Hampstead Heath which at the north of the site which gives the qualities of the neighbourhood with the outdoor spaces and green area. O2 Forum which can accommodate 2000 people still hold the performance now since 1934. Highgate Studio was a warehouse and reconstructed into a workspace with the integration of various studios, collective spaces, and a cafe shop on the ground floor. What's the key driver that can encourage further development in the area?

There are some challenges which may be the chance to set up the characteristic of the area through the transformation. The current low land value compared to the central city, however, gives the opportunities to accommodate larger spaces which intensify the car park, storage area and undefined land. On the other hand of a convenient transportation system, the railway cut the plot into triangular pieces. At the same time, pot-shape topography form around 3 metres height difference from the Highgate road to the area close to the railway. The notion of how to utilise the existing topography and triangular shape plot becomes an essential idea of the proposal.

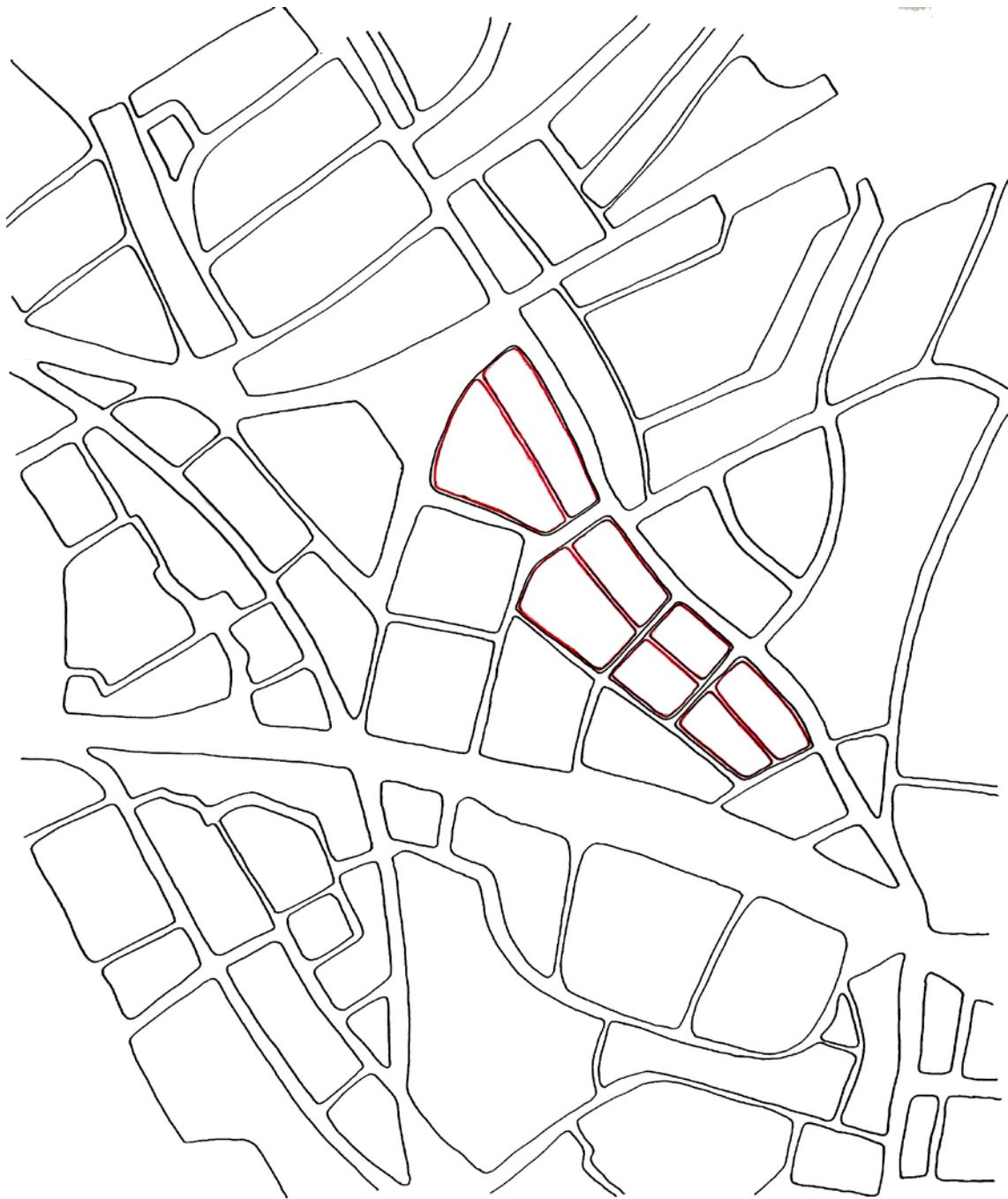


Music Industry



Mobility System

Re-thinking the morphology and the block gives the idea of building the structure of the area and its hierarchy. The clear grid system gives the advantage of logistic servicing route and also the mobility system around. The diversity can be contributed in the inner structure of a deep plot.



Plot Dimension

Similar plot dimension introduces consistency and greater orientation of the grid system. There is a potential of creating the secondary circulation in the deep plot which develops an interior network.

Music Industry

Hampstead

Primary School

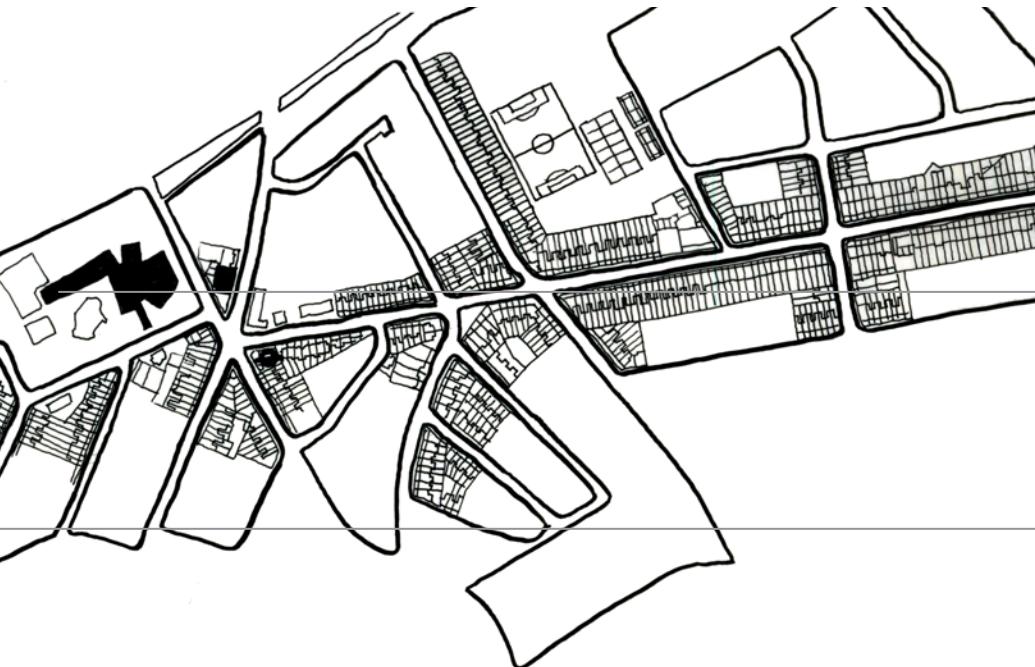
Library

Community Centre

Nursery

Gallery

Comprehensive



Comprehensive

Community Centre

Highgate Studio

O2 Forum

Tube Station
Library

The Integration of the Wider Area

North-South

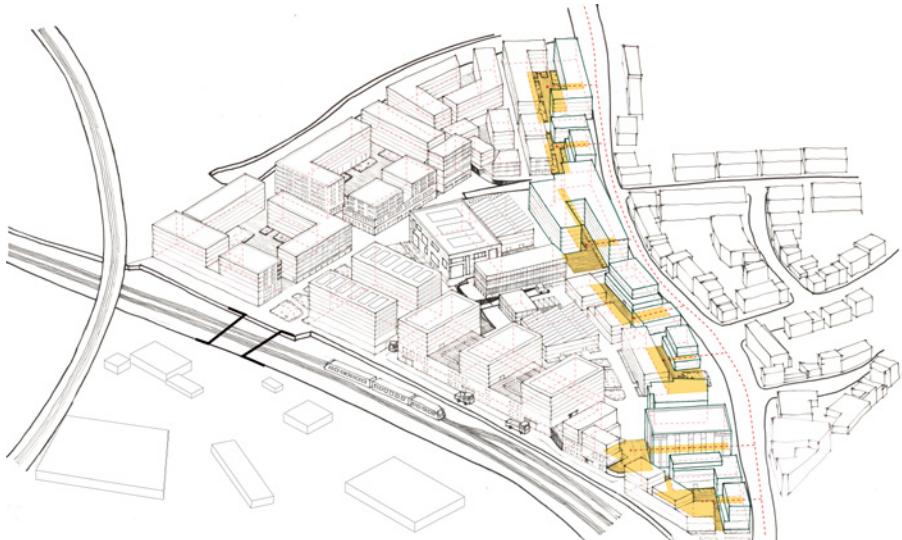
Although there is an existing north-south route, the additional north-south route can help to link the opportunities what Hampstead Heath can offer as an outdoor festival site to the forum. By bring the north part closer to the viaduct and the south part closer to the Highgate road creates the hierarchy and it also allows services back to the Highgate Studio.



East-West

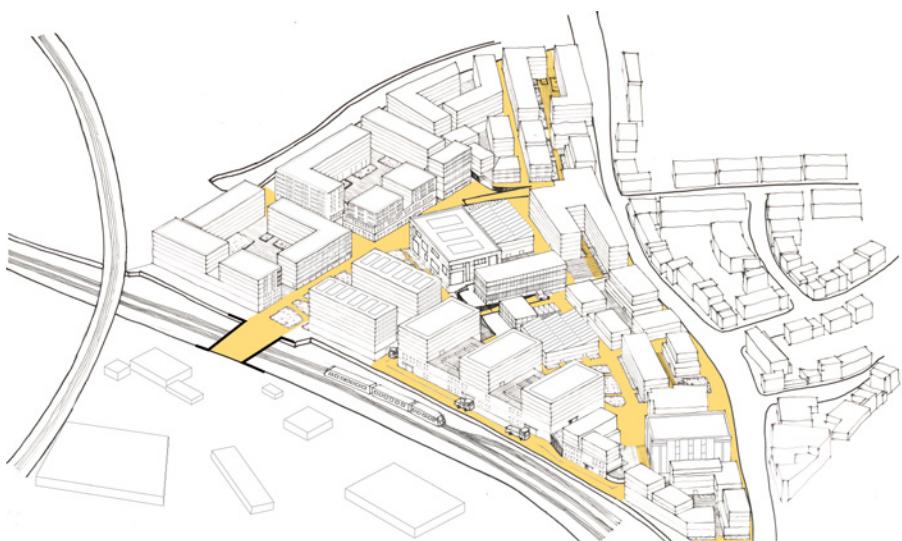
It does not exist in the site. The next east-west road is 500 metres away to the north and 500 metres away to the south. The additional east-west route opens up a grid to the area which introduce synergistic opportunities to the food market and the servicing spaces around the area such as schools.

Music Industry

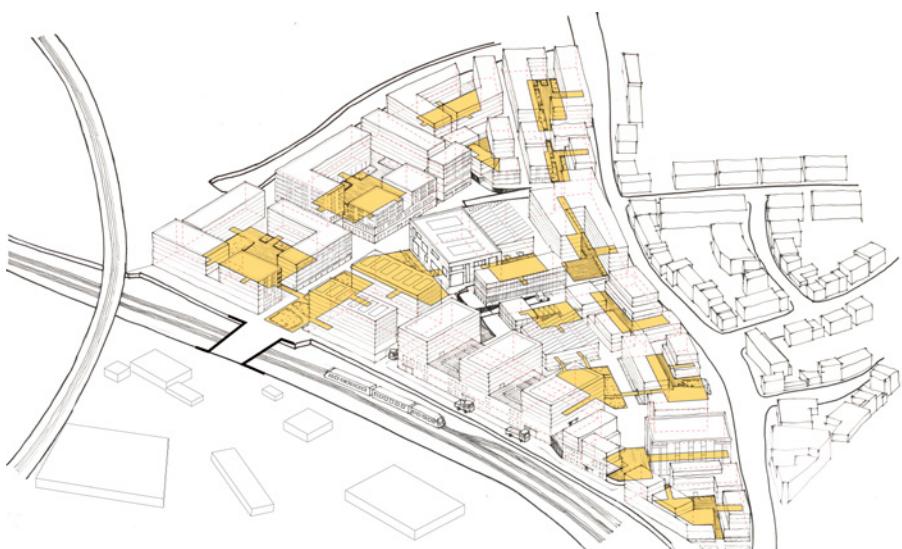


Campus Organisation

Re-clustering the buildings on the Highgate road gives multiple orientations to the original architectures. One side facing the high street which is the dominant route of this area with the servicing infrastructures and retails. The other orientation introduces a shared activity space in the central area of a cluster.



The combination of grid system the campus organisation in each block gives a clear orientation to the servicing road and inner pedestrians through each cluster.



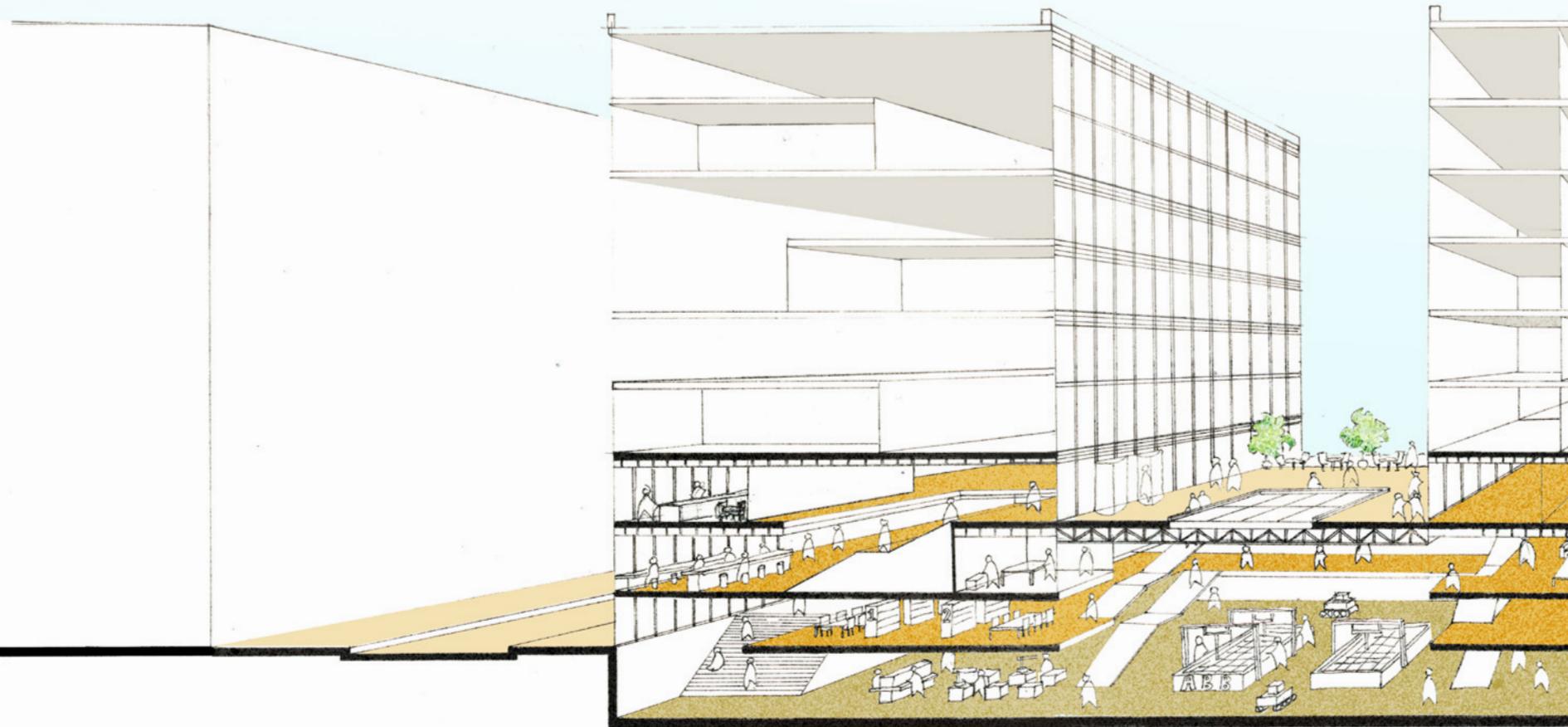
The sequence of the courtyards gives the variation and diversity of each cluster. It also provides the quality of North-South and East-west route. At the same time, the entrance of buildings facing the central area which create transparency through the ground floor.

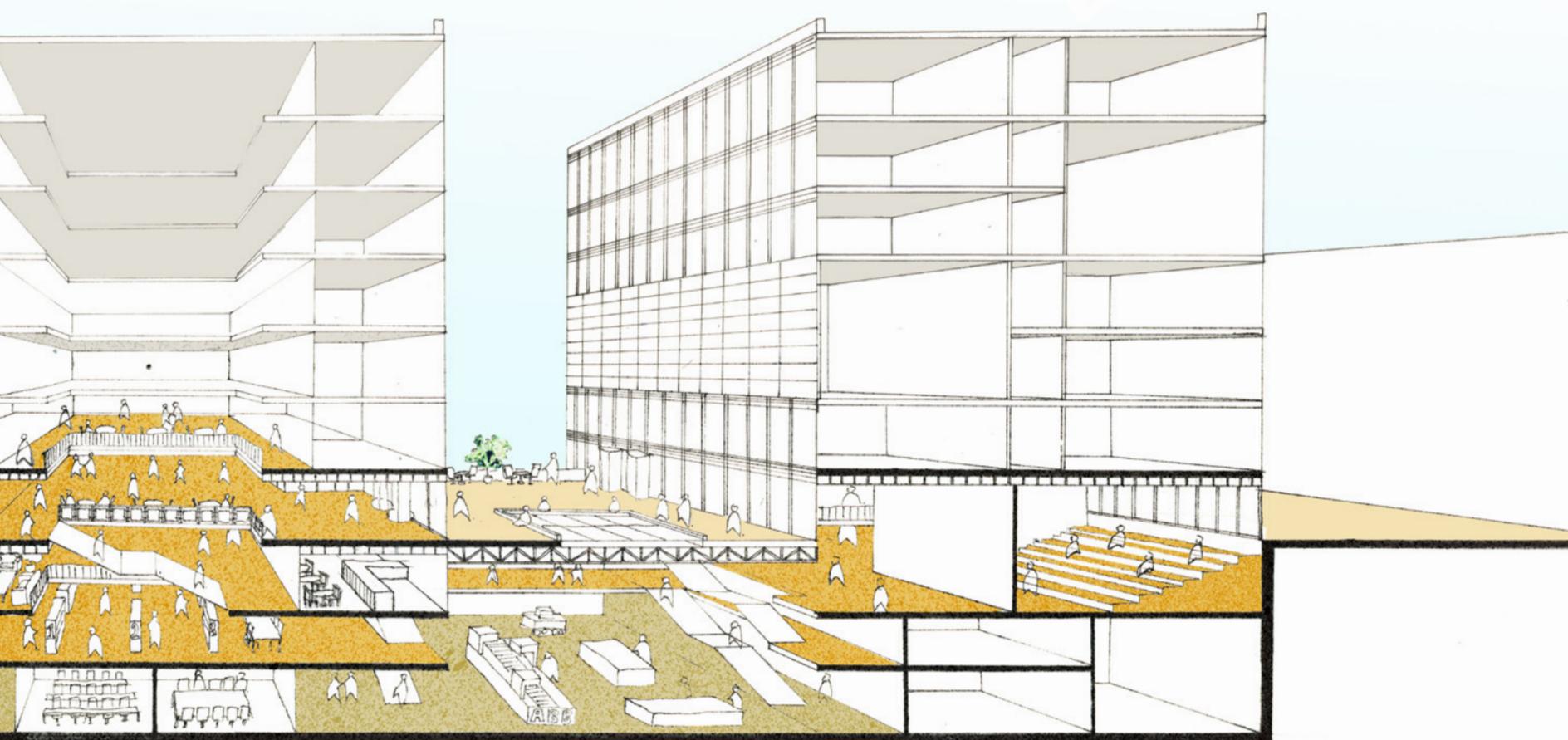


Music Industry

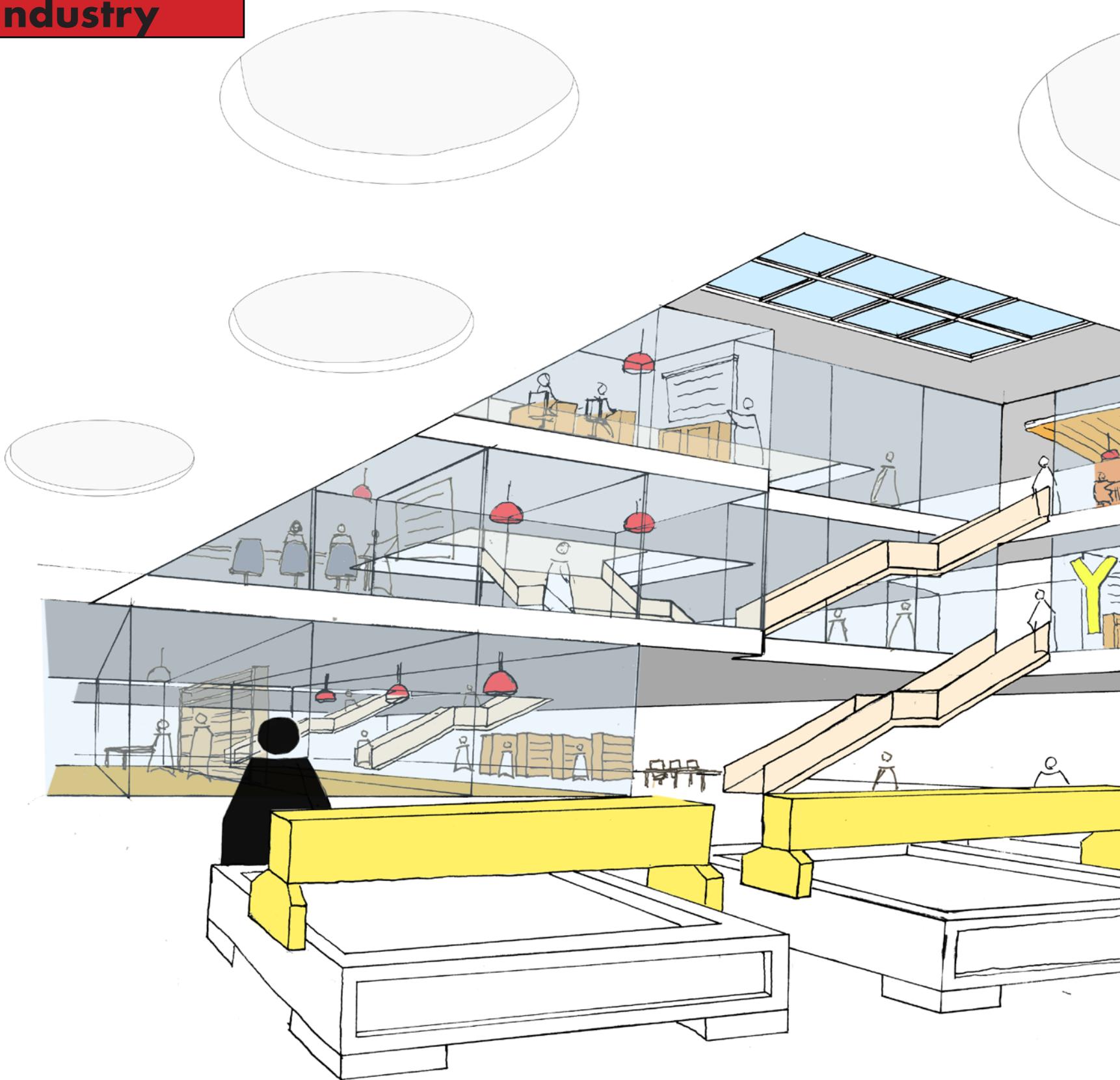
Retaining Employment

In the site, there is an existing forum, church and Highgate studio. Search for a chance of intensifying existing fabric and encourage a synergy of clustering offices with music and stage production.





Music Industry



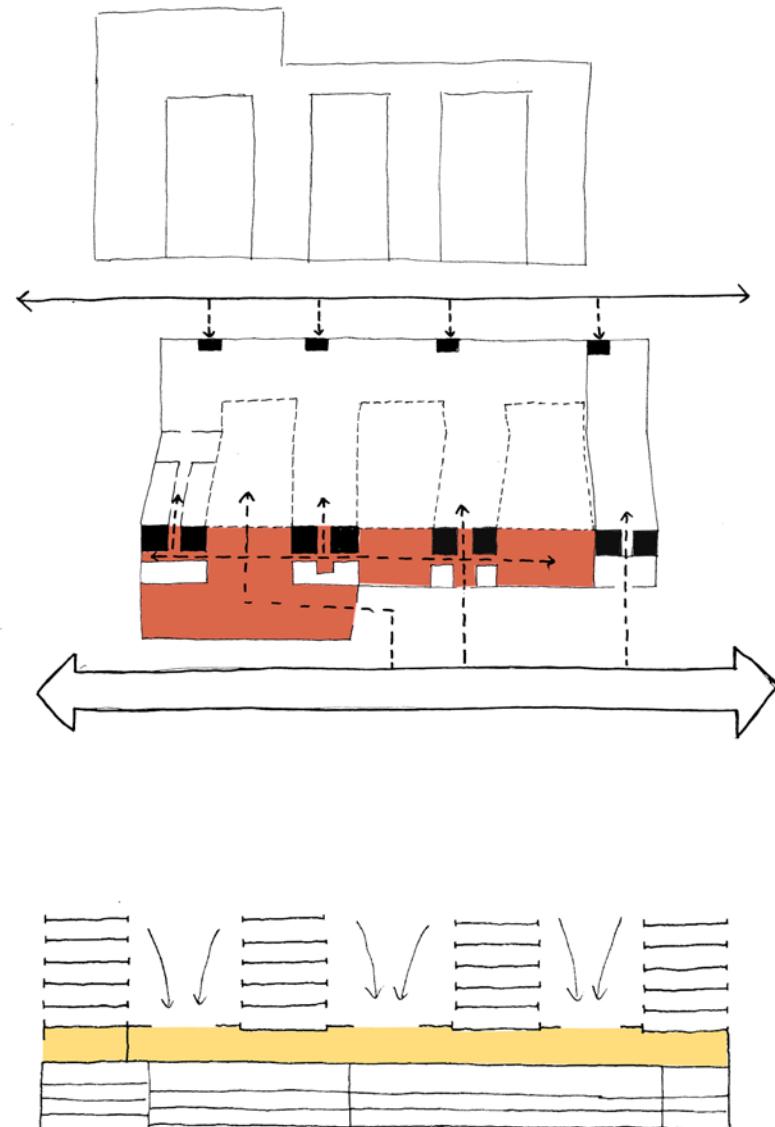
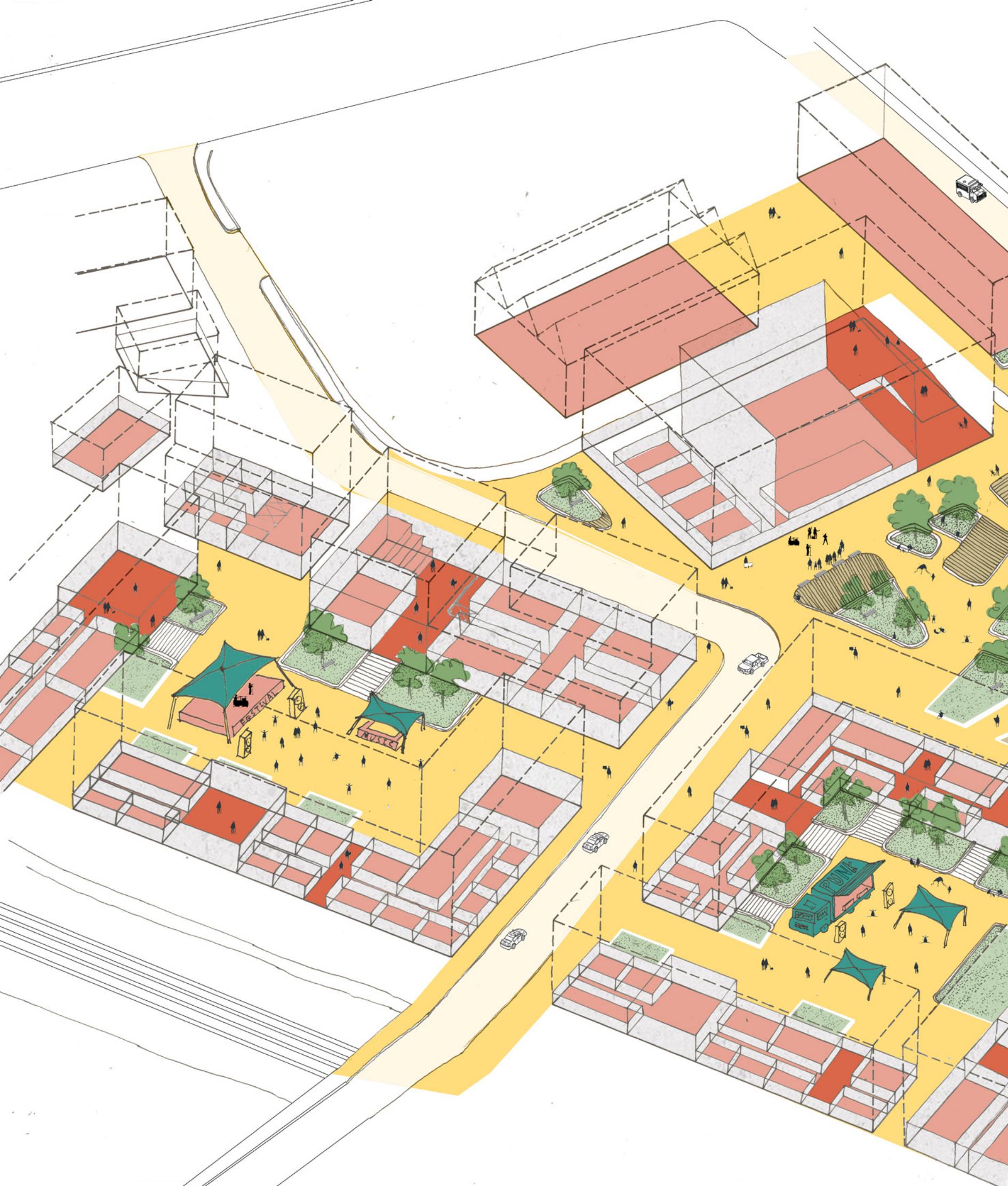
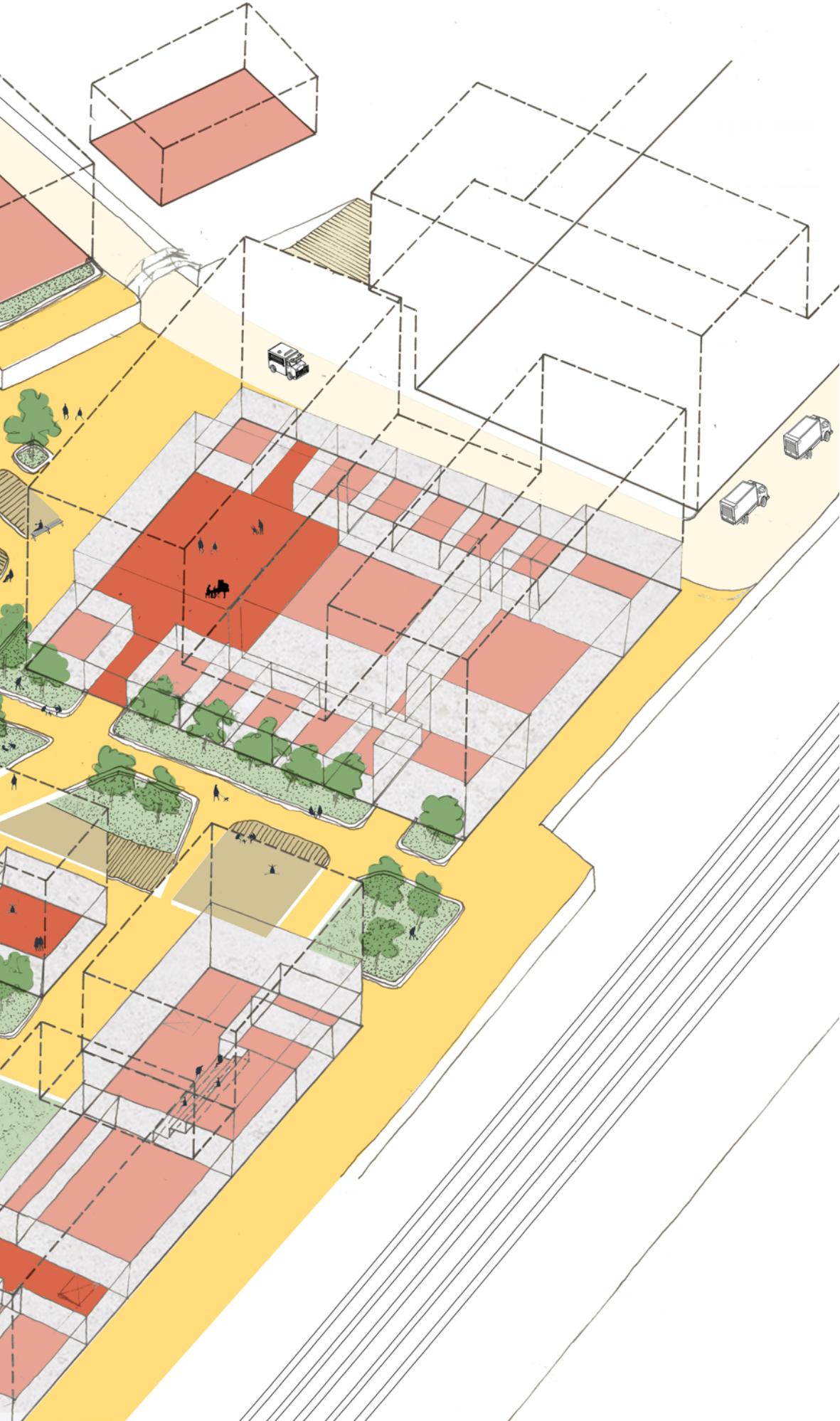


ABB Power Tower

In the exemplary of ABB Power Tower by Diener & Diener, there is an opportunity to combine light industrial space and workspace. In the project, not only provide the daylight to the deep industrial space but also two sides orientation. One side serves the logistic route and another gives the quality of pedestrian and retails. Moreover, the typology offers the variation of dividing the building into several owners by different towers or as one big corporation.



Music Industry



Knowledge Environment

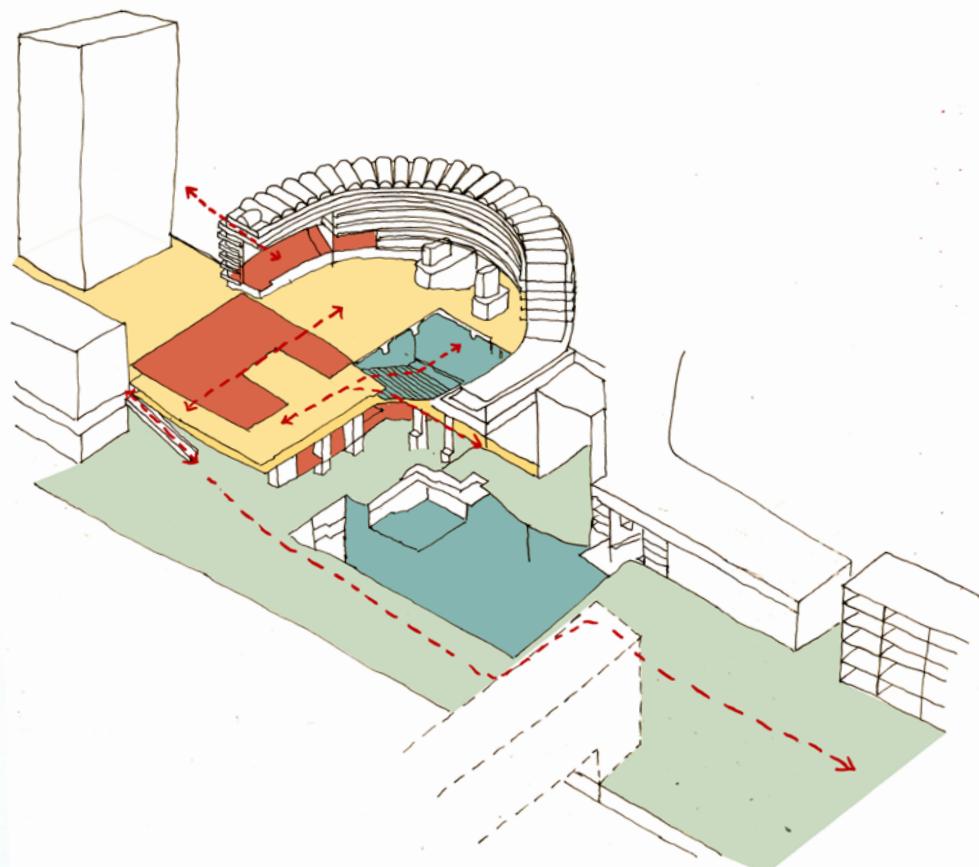
Re-thinking the urban complex integrated workspace, housing, cultural institution and servicing facilities. The new pattern of the cluster the cultural and economic activities give a new balance of the workspace neighbourhood.

Music Industry



Barbican

In the precedent of Barbican and Guildhall School of Music and Drama, there is a new way of dealing with the mix of residential and cultural buildings. The central building contributes connection to multiple layers. Barbican centre which requires a big dark space located on the lower floor. Central courtyard and cafe on the ground floor served the community. Moreover, the facilities are shared with Guildhall School located across the street.



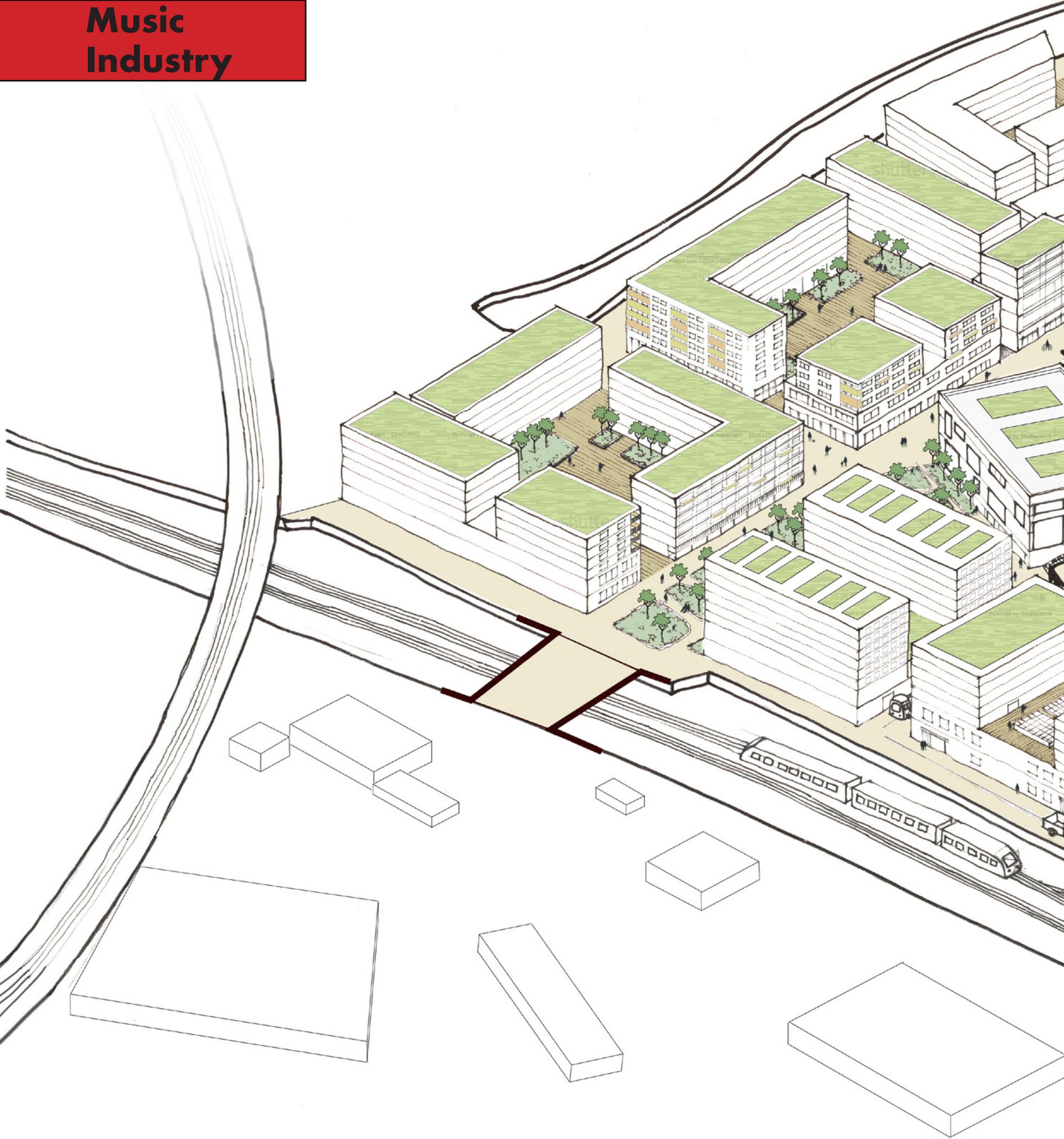
Music Industry

At the Murphy side, the existing key elements encourage the potential to establish an intense living, learning and working neighbourhood. The outdoor open spaces are adaptability for festival, venue, and diversity activities which redefined a dynamic neighbourhood life.

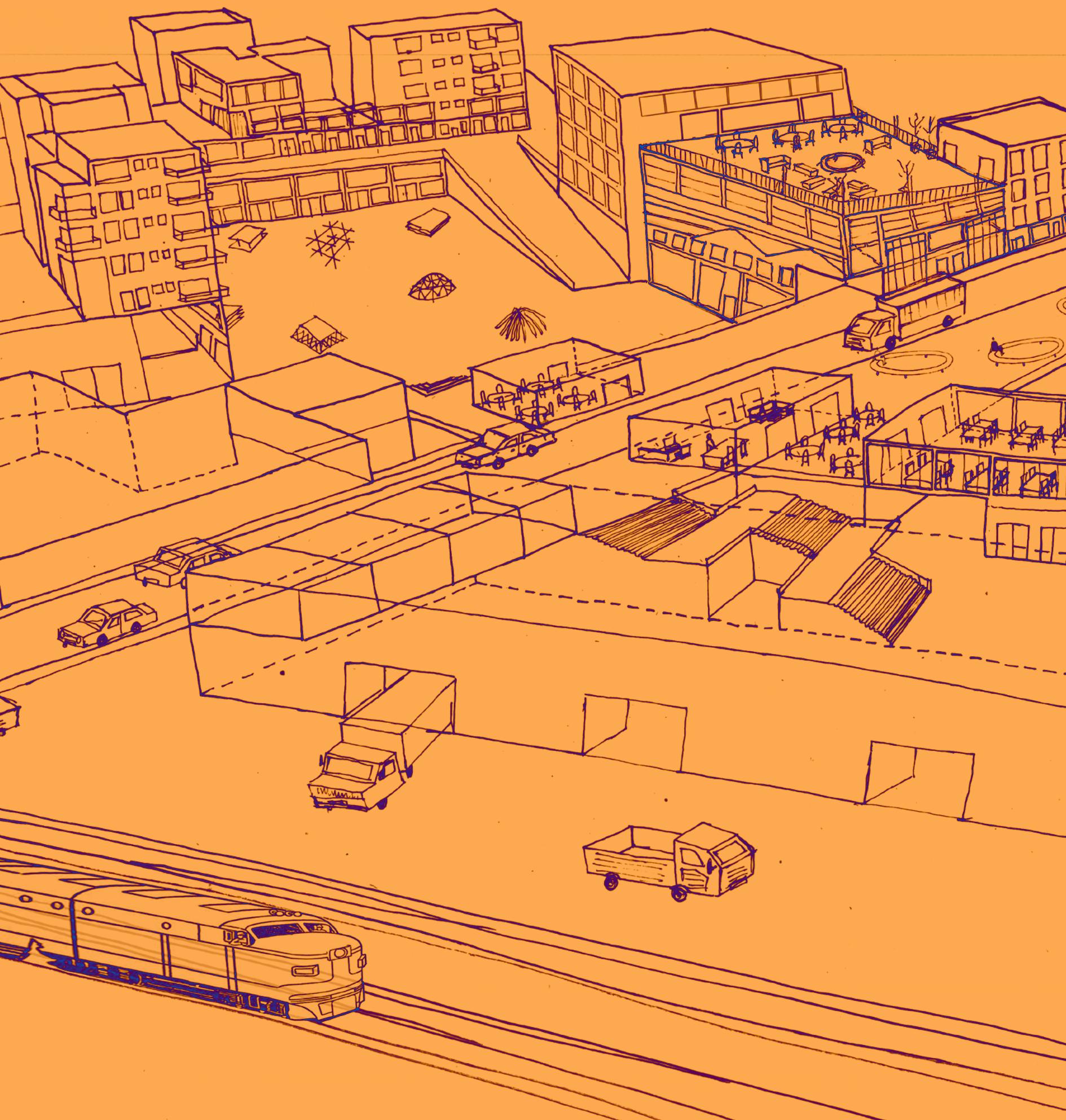


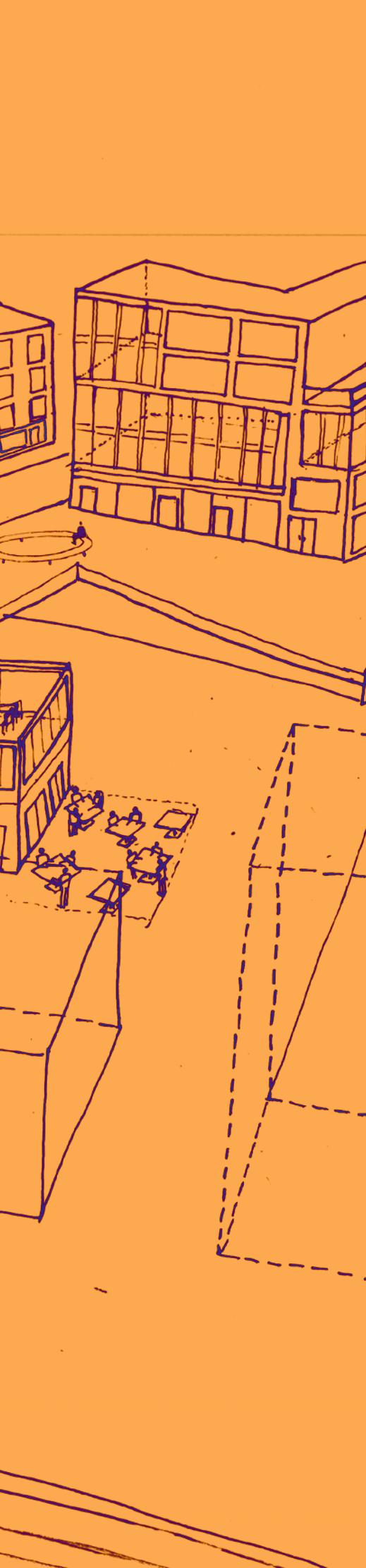


Music Industry







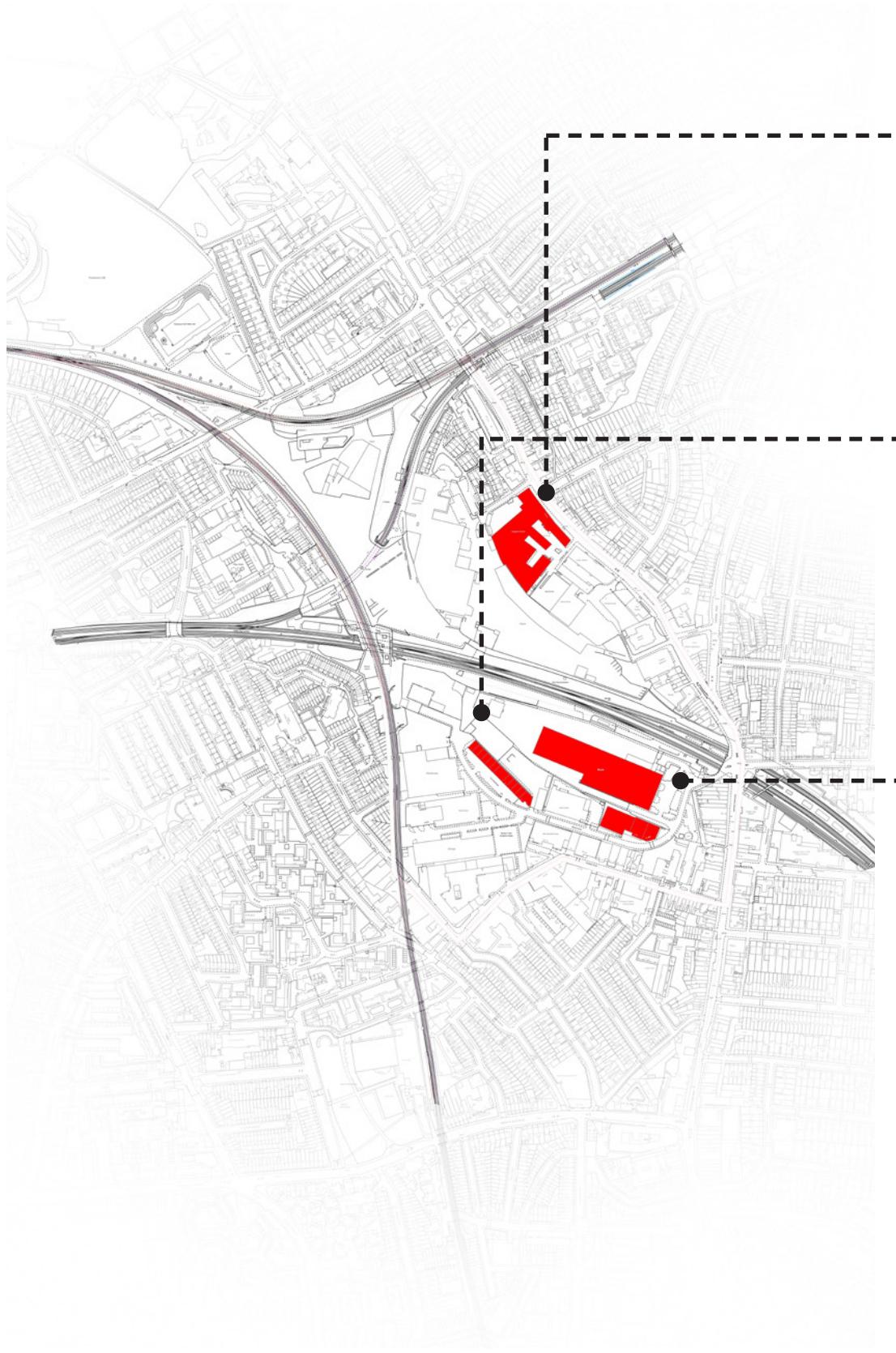


Design Ecology

10.

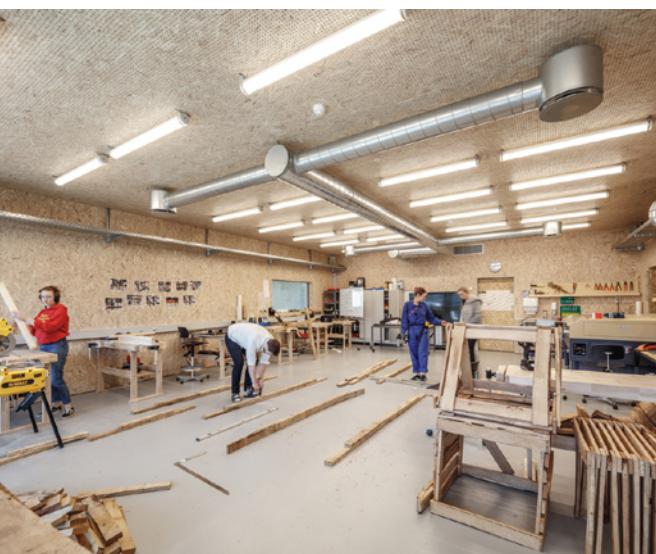
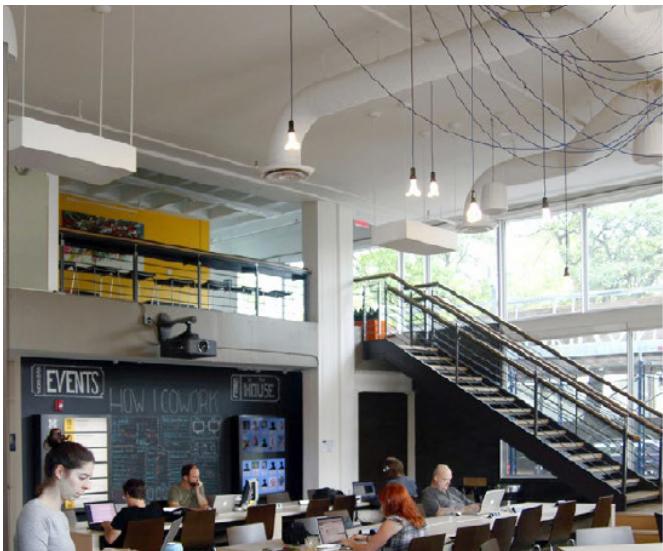
Strips, Loops and Levels

Design Ecology



The existing industries on Regis Road site include sanitary fixture manufacturing, tiles manufacturing and other industries that support design. Thus, design ecology can be used as a possible strategy for the site by building on existing networks and expanding them. The site also houses several workplace clusters such as Highgate Studios, Spring Studios etc. in close proximity. These are clusters of creative industries that are reliant upon close contact and collaboration to enhance their productivity. These act as crucial design drivers that can add to and clarify the possible adjacencies of the urban area.

Design - Relevance and Synergy

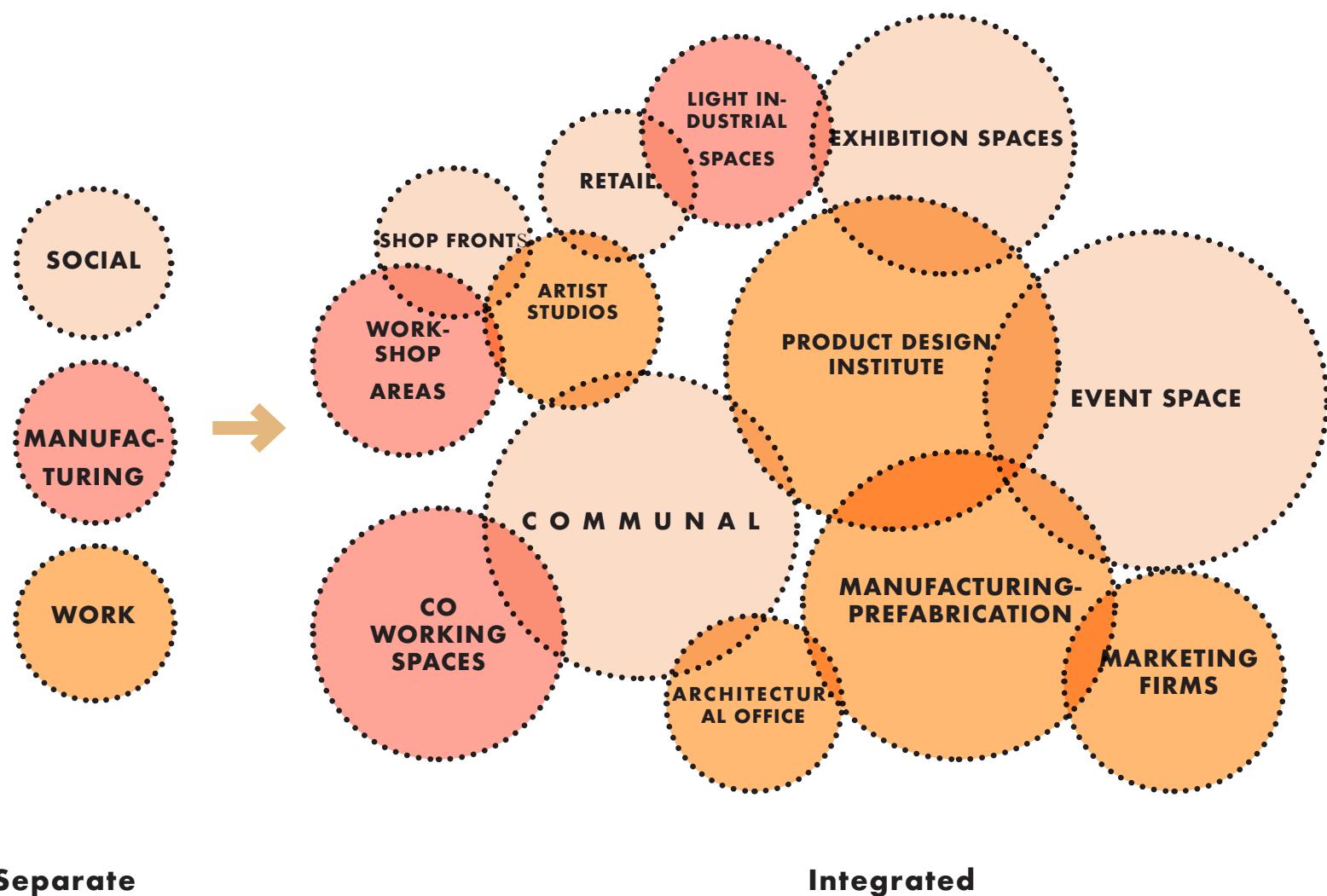


Design as an ecology can be understood from the point of idea generation to the production and marketing of it. This process requires a lot of collaborations and inputs from several actors that provide intriguing possible synergies. Design as an ecology can house industries of various scales and sizes. For example, one possible large industry that can coexist with the existing networks on site is that of prefabrication. This leads to secondary networks of medium scale industries such as modular kitchen and furniture industries that can further operate in conjunction with smaller scale makers economy and light industrial spaces. When such industries start clustering together, they provide better efficiency in the way they get serviced and opens up avenues for knowledge sharing and showcasing. These start to lead to questions of what are the resources that can be shared between these industries while also providing spaces that cater to differential needs.

Apart from these manufacturing units, a design institute could be instrumental to this knowledge sharing and by working alongside the industries they also open up opportunities to share and optimize the cost of resources such as CNC labs and research units. The ecology would be further reinforced by the presence of creative industries like the ones already existing in Highgate studios, architectural firms and marketing agencies. In order to make the neighbourhood sustainable and vibrant in the long run, it's important to incorporate housing and social spaces as well and develop strategies that negotiate the interests of all these stakeholders.

Design Ecology

Understanding the Ecology





Industrial Sizes

Manufacturing of prefabricated units

Large floor plate industry with yard
Size: 85m x 65m



Manufacturing of modular furniture

Medium floor plate industry with yard
Size: 45m x 25m

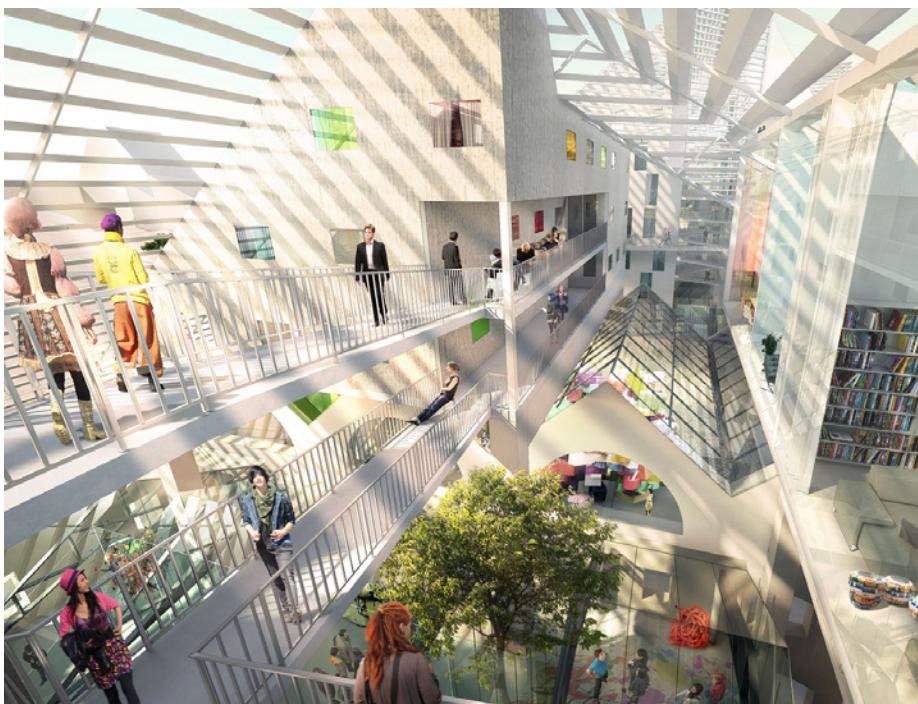
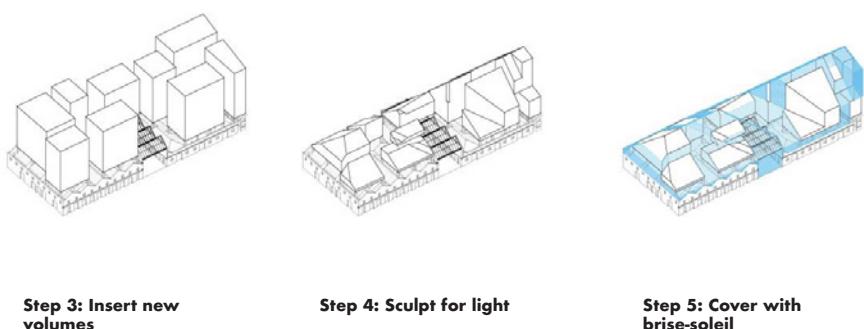
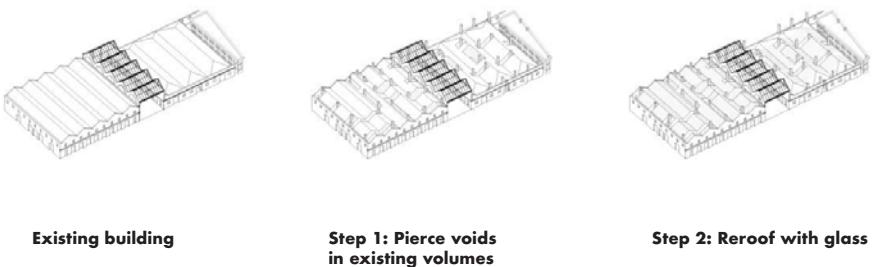


Light industry

Size: 6m x 12.5m

Design Ecology

Precedents: Typological Transformation of Industrial Sheds

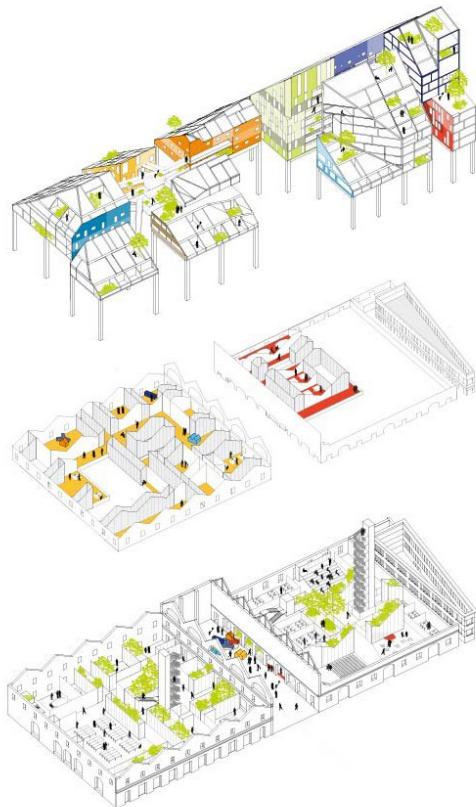


106

PROJECT: Le Grand Magasin
ARCHITECT: MVRDV
LOCATION: Bastide Niel

14,800 sqm Gross Area Mixed-use project including educational facilities, workspace, residential, auditorium and exhibition spaces.

The design integrates a rich mix of uses through the typological transformation of the industrial shed. It uses the depth of the block to create a sectional complexity that accommodates the varied uses and negotiate aspects of accessibility and light. On the ground floor, the voids which are left in relation to the housing stacked above create a street like an environment, which allows light into the building. The ground is made up of multiple institutions and facilities, each of which starts to differentiate itself while retaining some amount of shared activity.



Complexity achieved through section



Light industrial units of various sizes on the ground floor

Light Industry Stacked with Housing

**PROJECT: Caxton Works
ARCHITECT: Studio Egret West
LOCATION: Canning Town**

336 homes+ light industrial spaces
Gross Floor Area: 28,821 sqm
Gross Industrial Area: 2,390 sqm
5 Apartment blocks with studios, 1 Bedroom, 2 Bedroom and 3 Bedroom layouts,
Communal Roof Gardens.

Caxton Works is a useful example to understand how light industry and housing can be stacked together. The ground is occupied by the industrial activity, with the ground floor for the residential decked above. This starts to control the access and privacy of the residents while allowing the street to be utilized for a workspace environment. The ground floor is treated such that there is a variance in the heights available so as to accommodate the different needs of each industry.



Variety of heights provided for industry



Housing stacked on top

Design Ecology



The mix of uses by effective clustering.



Light Industry Clustered with Housing

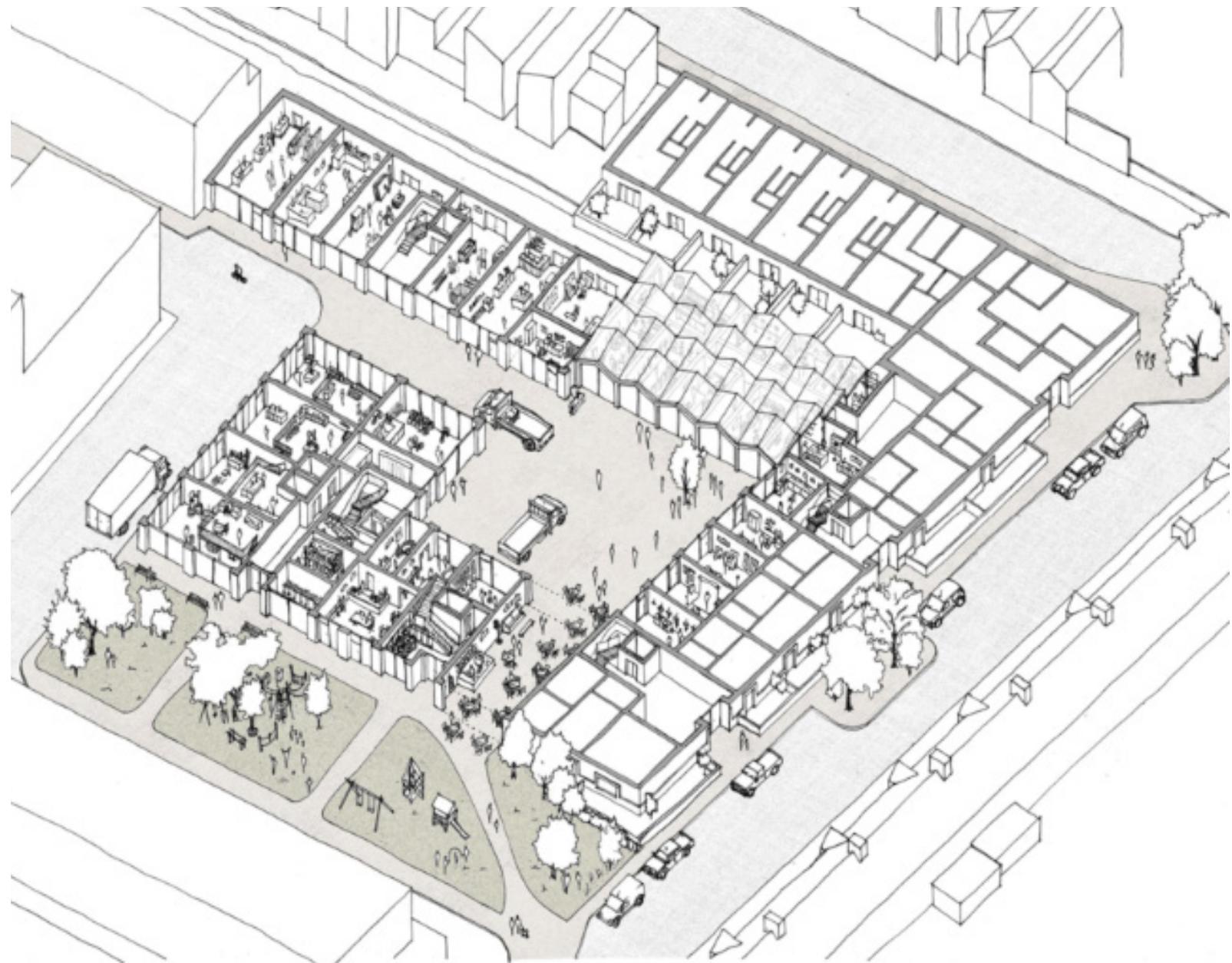


**PROJECT- Bernard Works
ARCHITECT: Morris+ Company
LOCATION: Tottenham**

11,248 sqm Gross Area
99 Residential Units including 12 Tethered Units
25 Commercial Units (2450 sqm)
Music Theatre Rehearsal Space
Park
Exhibition Space
Cafe

Theatre Rehearsal Space Park Exhibition Space
Cafe Bernard Works enjoys a strategic site position with a rich mix of site conditions. It is part of a larger industrial area surrounded by lots of residential as well as a host of creative workspaces. The design successfully clusters light industry and housing units by designing a set of relationships using the courtyard spaces, elevations and civic spaces. They also provide tethered units, that allows the people hiring the light industry spaces to also live adjacent to their workspace. It accommodates new typologies of housing that moves away from just catering to the family.

**An Integrated Ground that negotiates the mix of
civic and light industrial acivties**



Topography as a Driver to Structure Urban Fabric



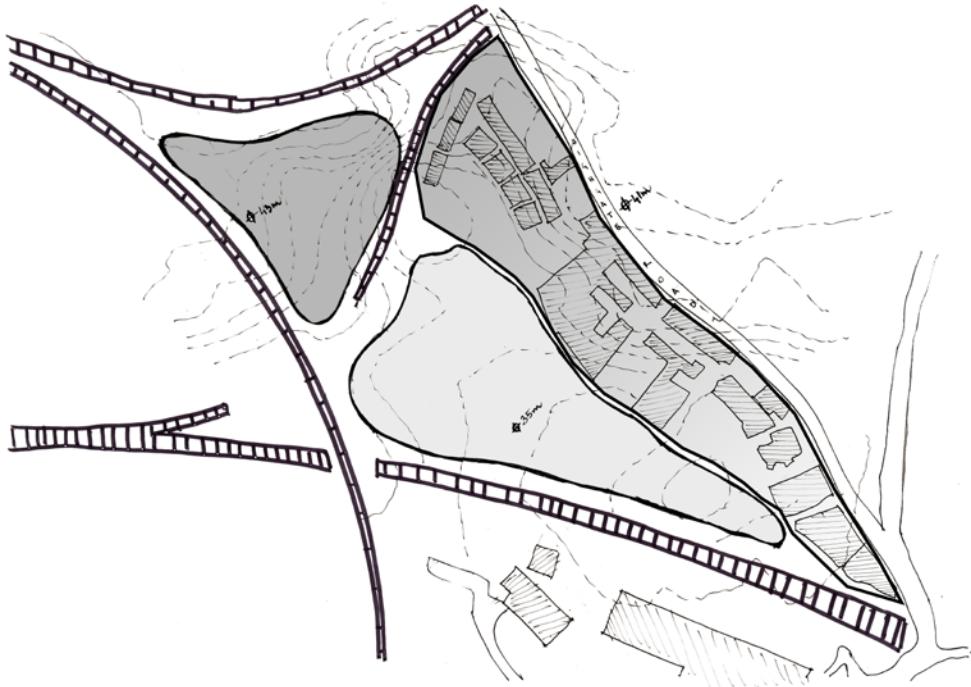
Structuring the fabric through a series of intersecting loops

A crucial aspect of the site is the topographical variation present, especially in the Murphy site. There is a level drop of about 7m at certain points on site.

The existing fabric of the area provides very little gridness and regularity owing to the infrastructure cutting across this area. This resulted in a fragmented, triangular site that creates a low-value pocket in the city even though Kentish Town is very well connected to the other parts of the city. The first question then is what are the macro level strategies in order to better integrate this piece of the city. One way to do it is to think of it as a system of loops that operate at different levels creating systems of servicing and movement as well as bridging over infrastructure to connect the two different parts across the railway. Within the site, the micro mobility structures need to be improved in order to provide an opportunity to move across the site through several different environments.



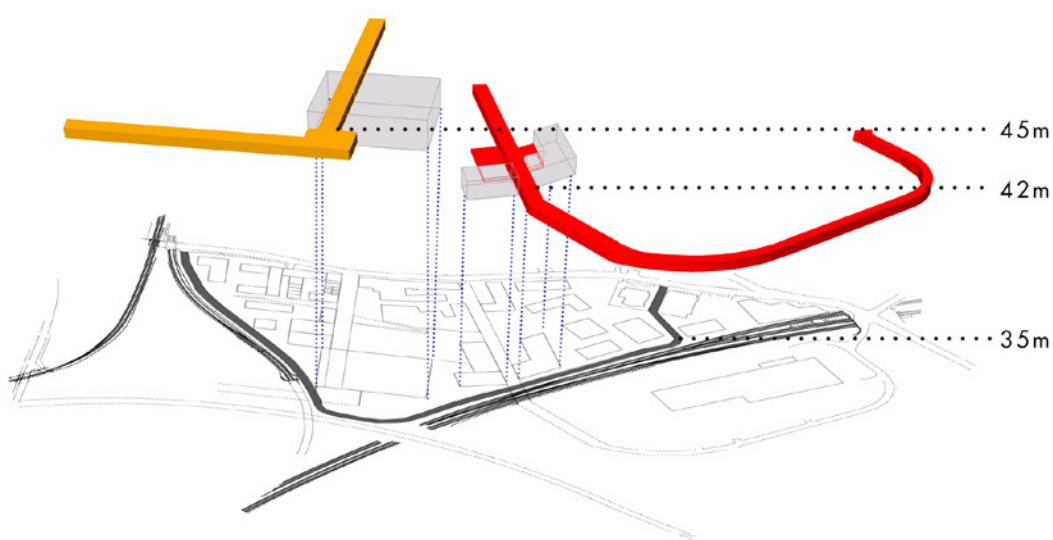
Transforming a condition of dead ends into continuous connections



The level drops on Murphy site

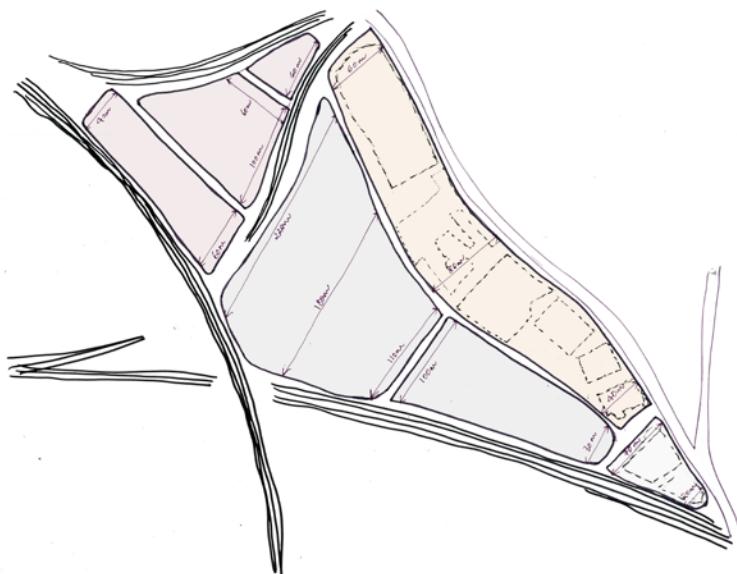
The Murphy site drops 6m from the road level as we move inside and then remains almost constant as we move towards the Regis Road site with a railway line bifurcating the two parts. The northern triangular pocket slopes up again towards Hampstead Heath creating a rich complexity. This level difference can be used to provide varied access to different user groups such as servicing, residents, industrial employees etc. that allow various different uses to coexist while allowing for retaining privileged environments and accesses on different levels as necessary. These levels also have the potential to create interesting connections beyond the site into Hampstead Heath and connecting the industries of Regis road and Murphy sites.

The architecture at the critical intersections of these levels starts to behave as **points of transfer** that allow the movement of people and services to occur through the buildings thus acting as important anchors on site.



Intersection of loops of circulation creating points of transfer

Design Ecology



Site structured due to conditions of railway and high street



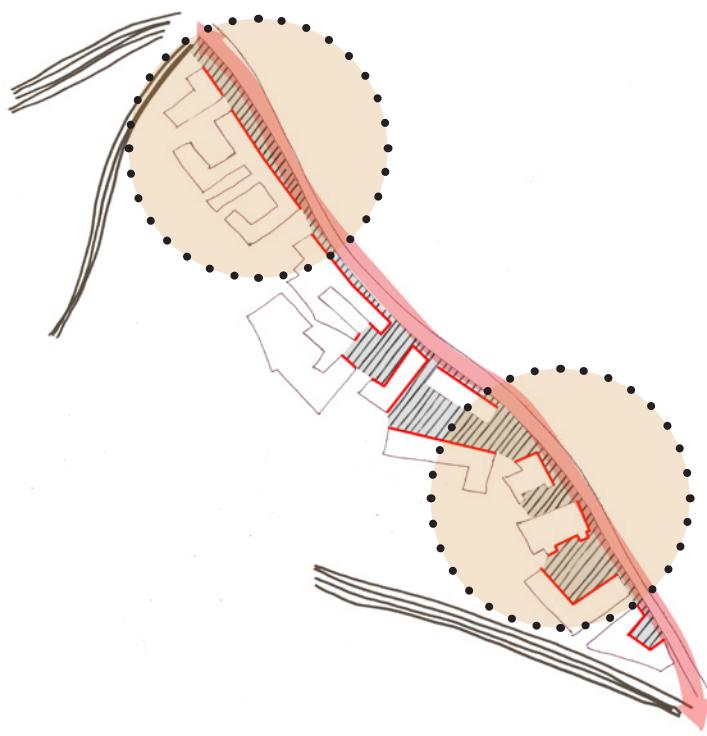
Restructuring of site by a central armature that allows shearing

Structure of the Site

The existing structure of the Murphy Road site is primarily driven by its relationship to the Highgate Road and to that of the railway. This triangular piece of land is quite restricted on one end by the railway and high street on either side with the lowest width of 20m and then expands to accommodate larger plot sizes going up to 220m. Existing buildings such as the Highgate studios largely respond to the high street condition while the parts of the site behind it house the larger industrial units where services and logistics can be accommodated.

From this understanding of morphology, we can begin to see how there is great potential to move from a grain size of smaller industries and units clustering along the Highgate road to the larger design industries and deeper blocks being closer to the railway as the site allows this variance to exist. Furthermore, a central armature can start to structure and shear a sequence of spaces that start to create a permeable and differentiated ground plane that can accommodate varied relationships and synergies.

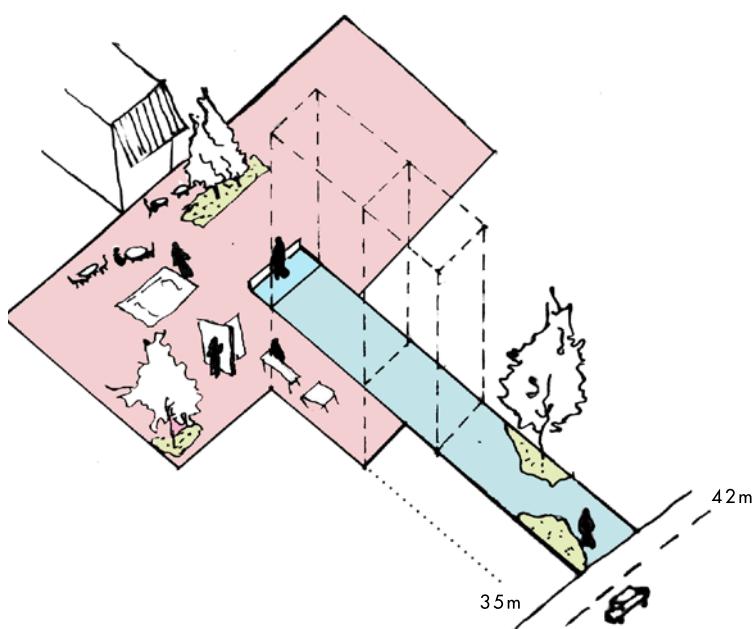
When the strategies of using topography and the elevated ground start to interact with that of striation and grain as we move across the site, it gives rise to a series of complex and layered relationships between different parts of the site.



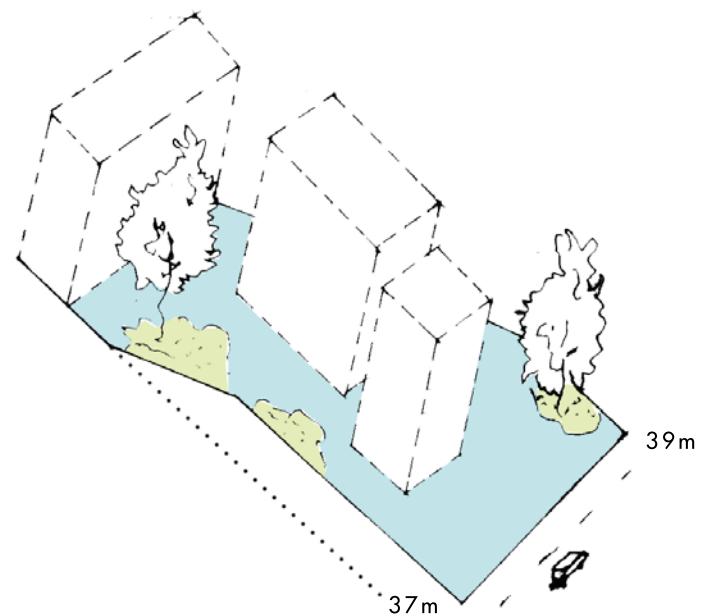
High Street Conditions

There can be several ways of determining the way the architecture and grain responds to the Highgate road. It can be that of frontage or clustering and rotation or an amalgamation of both of those strategies. With respect to the particularities of the Murphy site, this relationship is also affected by the change in the topography along the Highgate road. The road slopes up from South to North thereby creating different conditions along the edge. This starts to indicate that responses such as clustering and rotation are perhaps more suitable in the areas where a movement across the site is possible and the level drop isn't significant. On the northern part of site, where the level drop is more apparent, it is a better strategy to have a street frontage-oriented edge treatment that then starts to use the architecture of the building to vertically move across the site.

Relationship between frontage, street and clusters



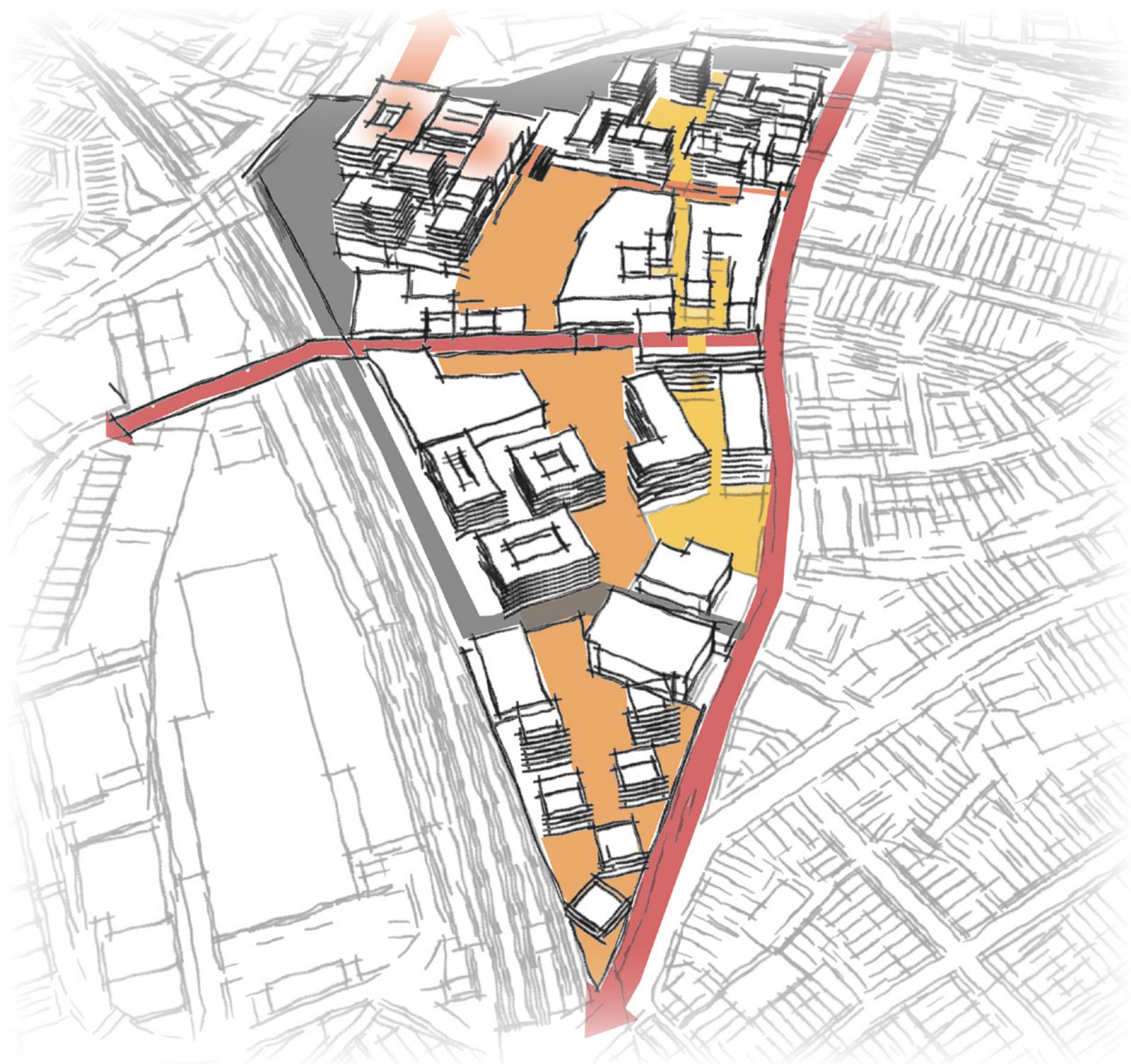
Street oriented facades to negotiate the level drop



Clustering around gradual slopes

Design Ecology

Using the levels to create a hierarchy of movement





Understanding the complexity of the sloping site

Interaction of Armatures

The loops of circulation are generated by manipulating the existing slopes and strategically raising the levels in order to accommodate the heights of the industry. This leads to paths of various different characters that operate at several levels. They integrate with the other paths in different ways as one moves through site- sometimes visually, or as one moves through the buildings vertically or through the gradual sloping of the land.

Design Ecology

Permeability of the Ground

Interaction of the central armature with the spaces at 35m level



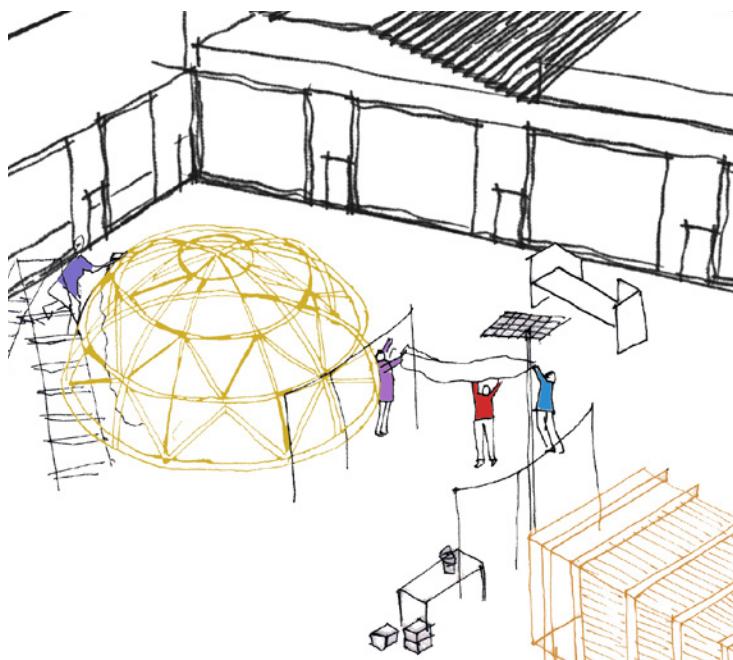
Elevated circulation routes connecting beyond Murphy site at 45m levelW



Design Ecology



Exhibition spaces



Makers Yard

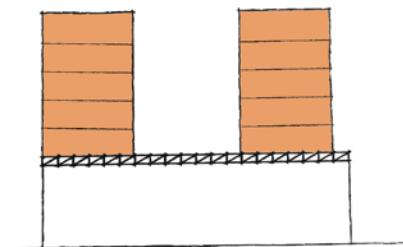
Evolution of Central Shared Space

The central space has the potential to be transformed at several points in time. This is possible due to the adjacencies that are accommodated- the institute, exhibition and industry. All of them have potential for activities that spill out, have showcasing functions and it also functions as a testing ground for the design industry.

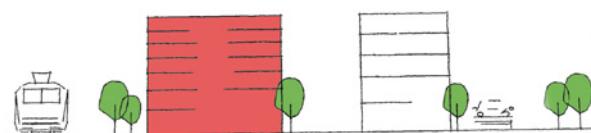


Spillout for institute

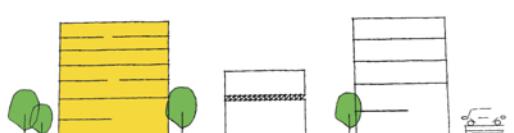
Housing Strategy



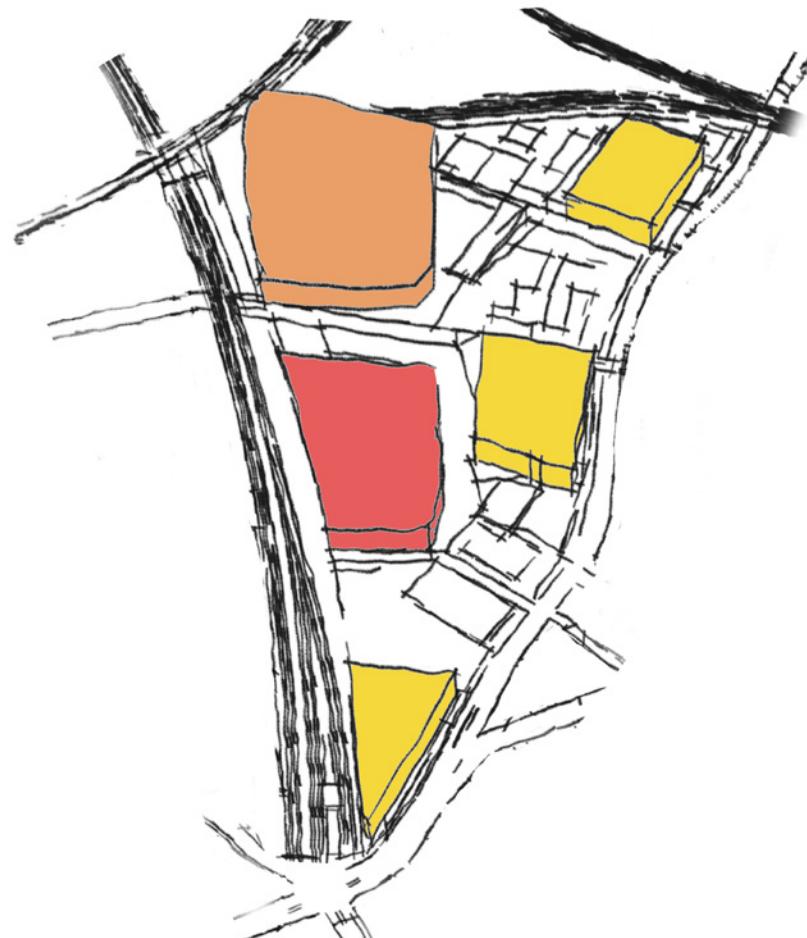
Housing with large industry



Housing next to railway condition



Housng responding to High street



The housing strategy is derived from an understanding of the conditions on site. There are several character areas on site—the parts that directly respond to the high street, the parts that can accommodate large footprints of industry and the areas that are restricted by the railways on one side on the interior of the site. Each of these could be used as testing grounds for different models and patterns of housing that provide a rich complexity which allows for various conceptions of residential living.

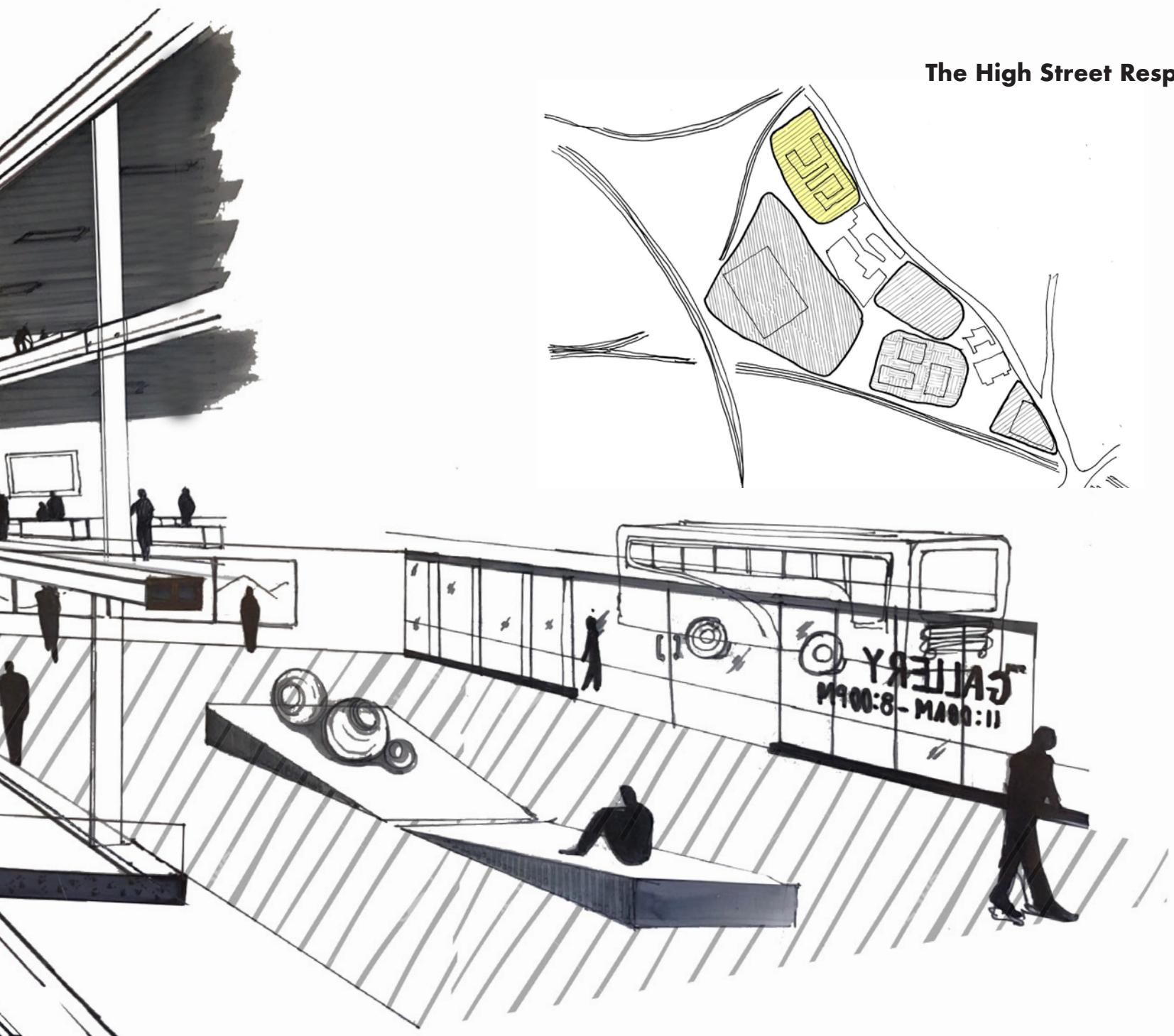
For instance, the areas next to the high street can negotiate a mix of retail, residential and small-scale light industrial spaces. This form of clustering encourages the mix of industrial and residential contributing to the vitality of the street. This allows both an interaction in the public domain of the street while at the same time creating more private domains using a clustering of courtyards that have very different characters.

Design Ecology



Layered relationship between light industry, retail and housing using clustering

The High Street Response



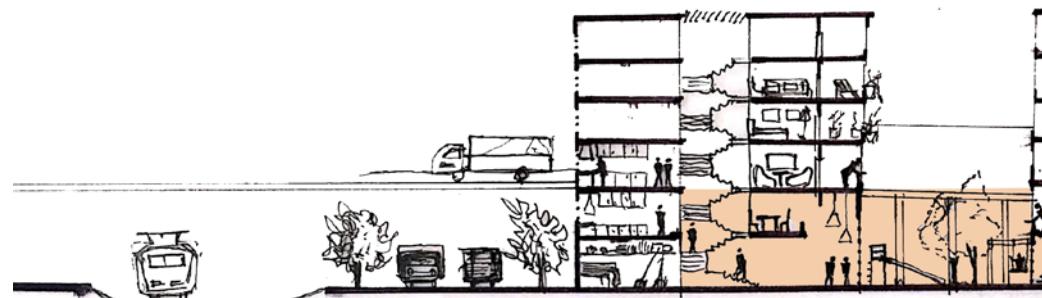
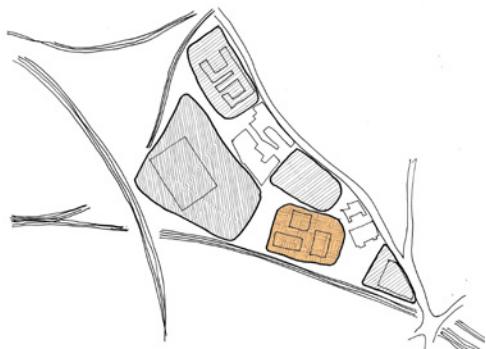
The housing at the edge of the High street has a dual character- the front has a more street oriented nature while allowing the rear of the building to accommodate the workspace and make use of the levels to stack synergistic functions. This allows visual layering as one moves through the building while also creating an effective clustering of housing and light industry.

Design Ecology

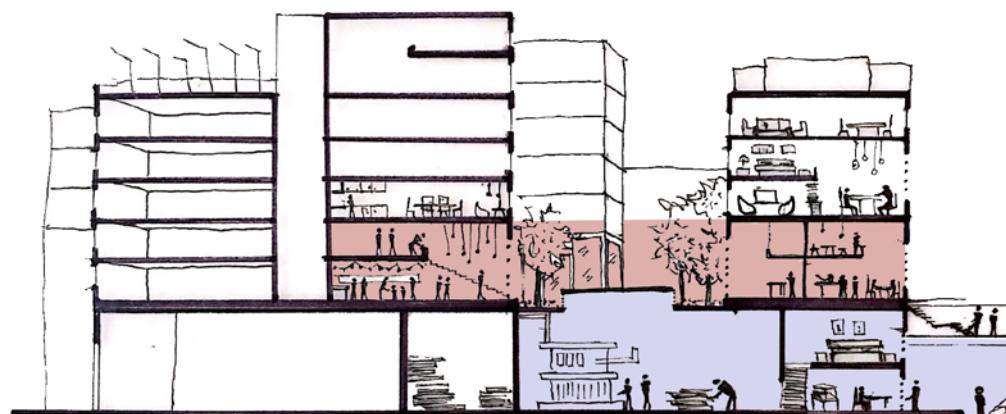
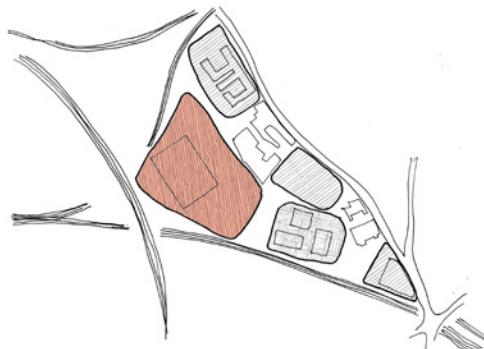
Stacking and Separation

The areas with the large industrial footprints create a possibility for stacking while also utilizing the level difference that occurs on the site. The access for the industry and servicing happens on a lower level as compared to residential development.

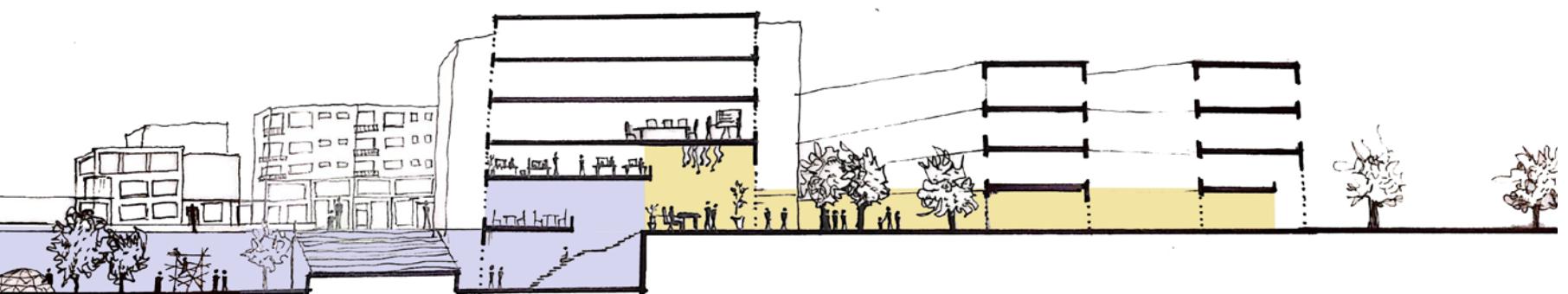
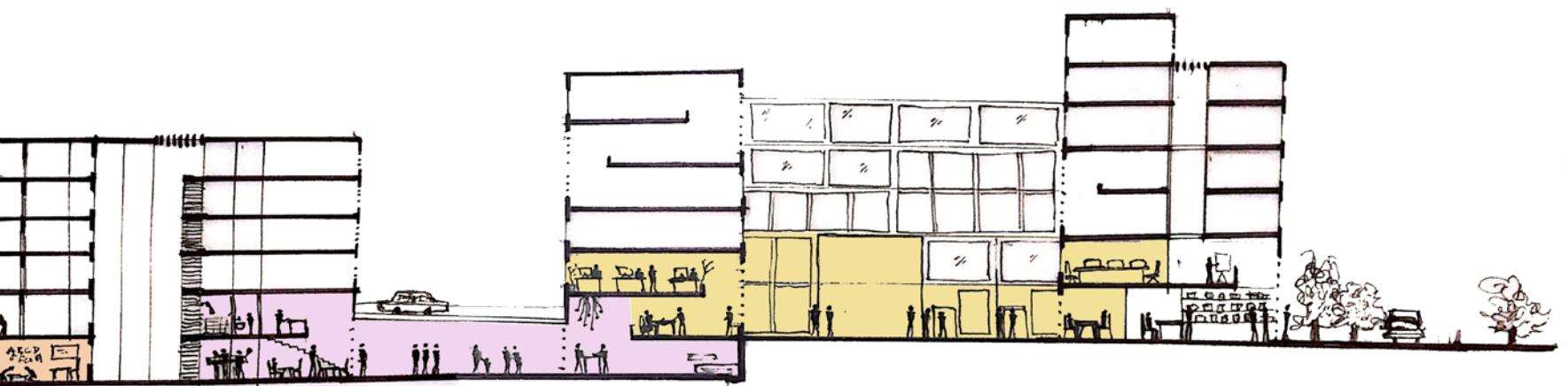
Housing can be successfully designed next to railway infrastructure with a sensitive design of the ground and by creating good quality residential environments. This also allows for a variance in the housing typologies, as blocks could become deeper and the shared spaces have a more internal organization.



Housing separated from other functions



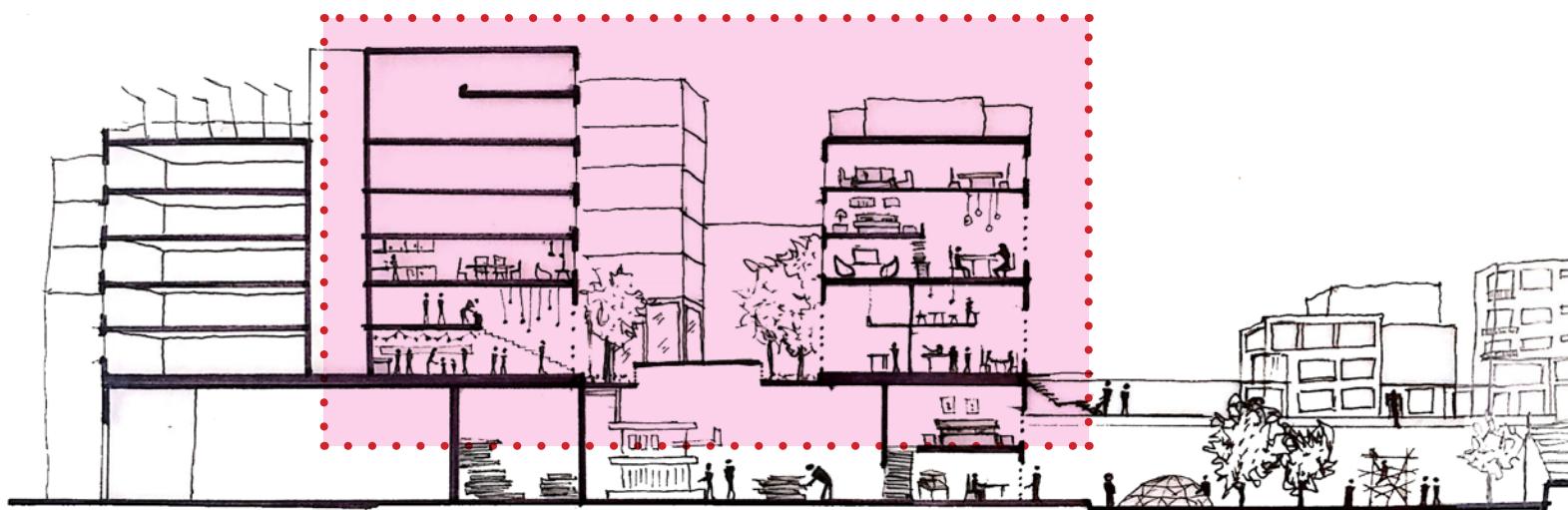
Housing stacked on industry



Design Ecology



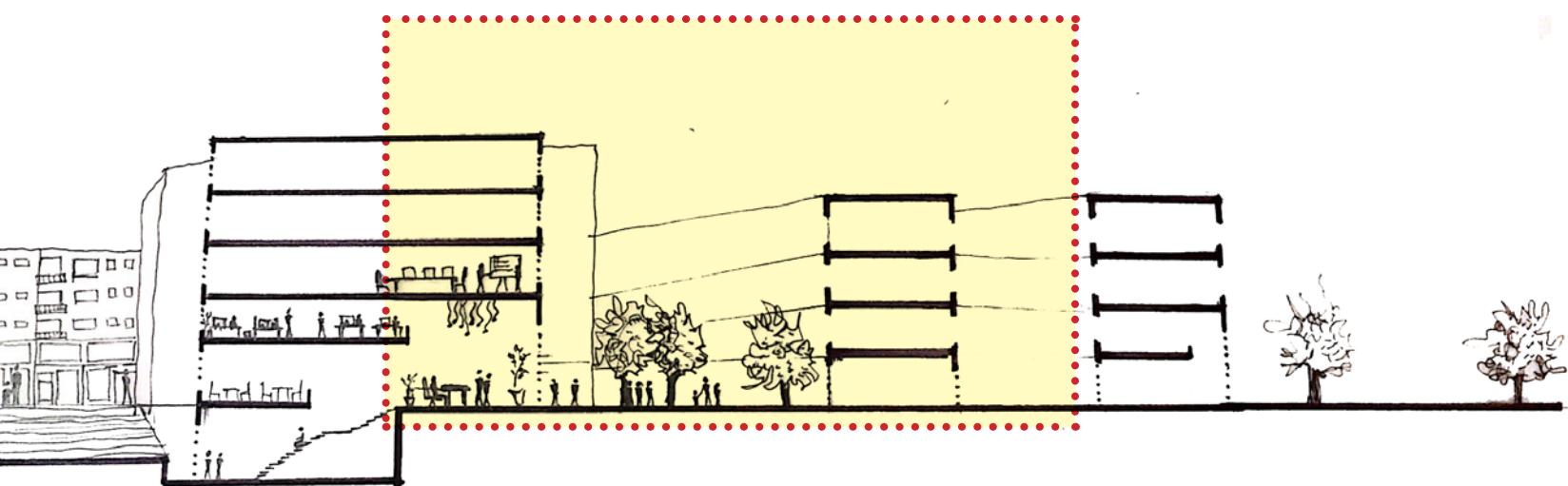
Residential decked on Industry



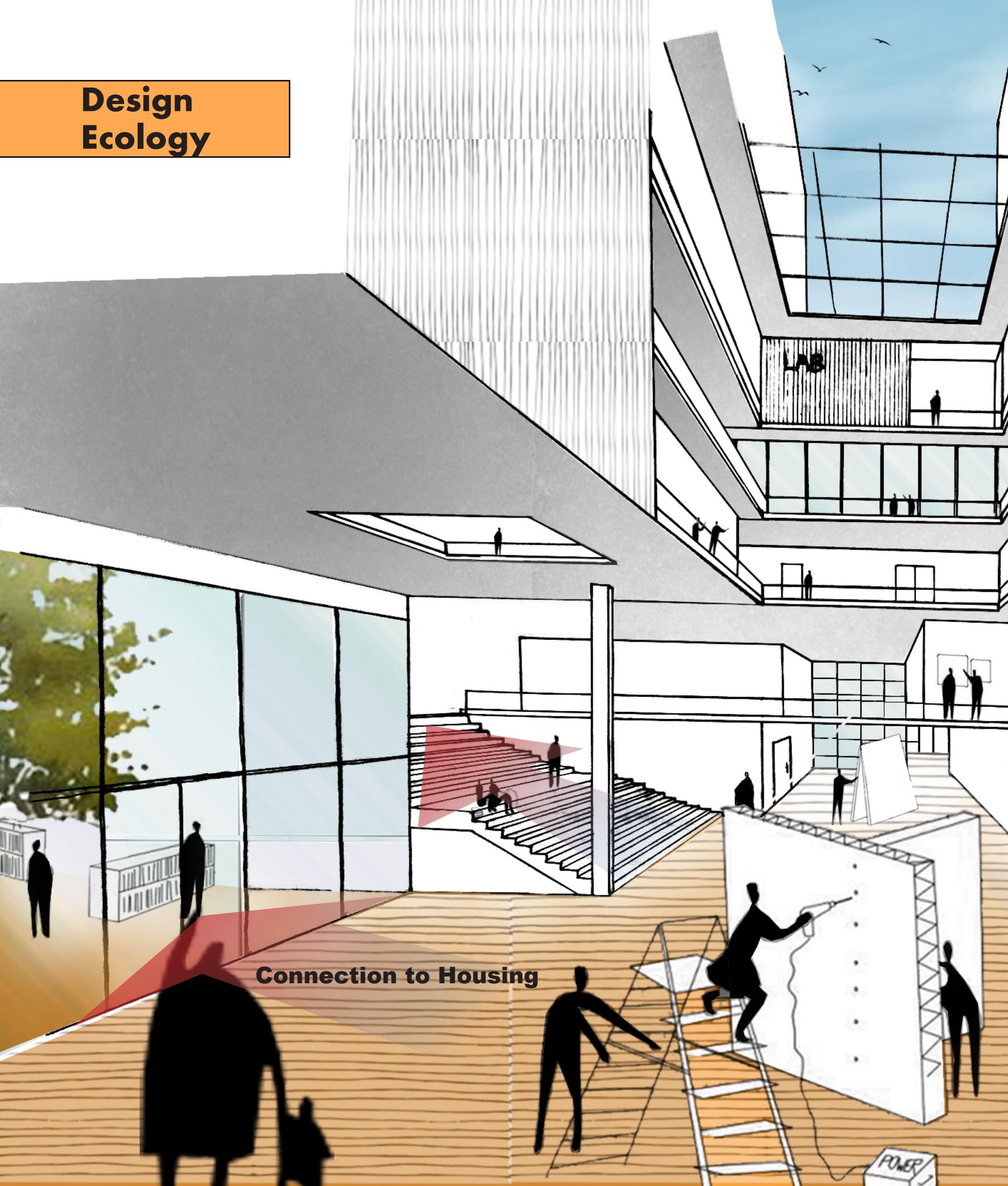
Character of Shared Spaces



Workspace cluster of Highgate Studios



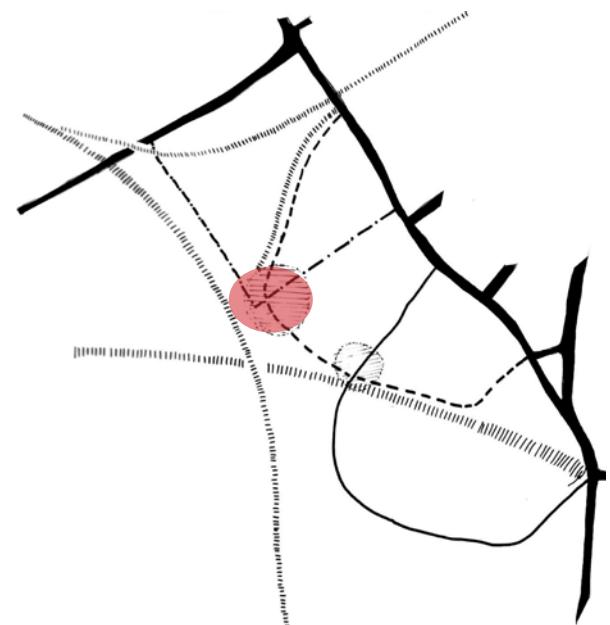
Design Ecology



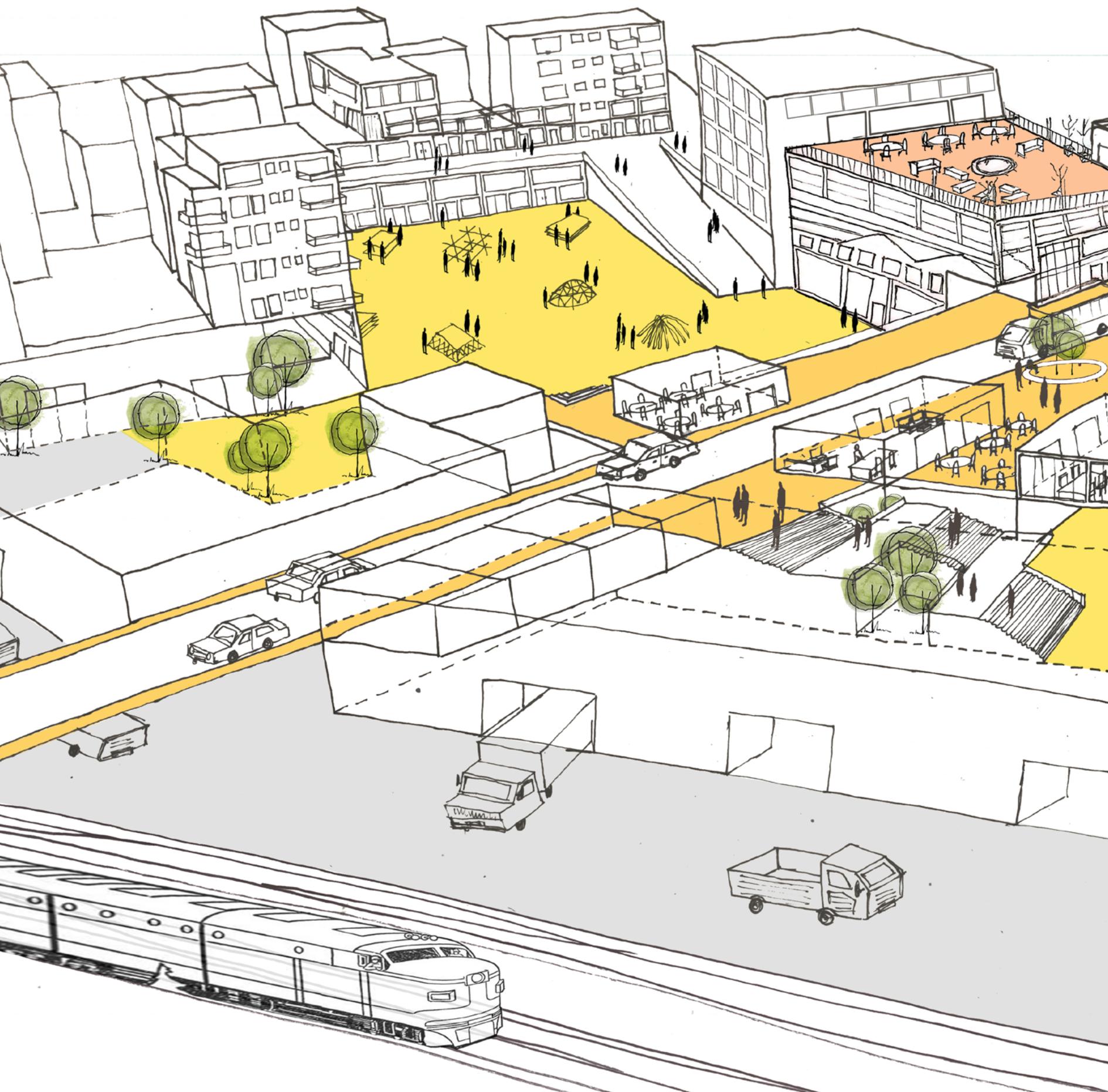


Points of Transfer: Institute

The elevated ground floor above the industry becomes a keyspace that disperses activity. It acts as a common ground for the institute, housing and as a connection towards Hampstead Heath. The layering of the ground plane allows this mix to occur.



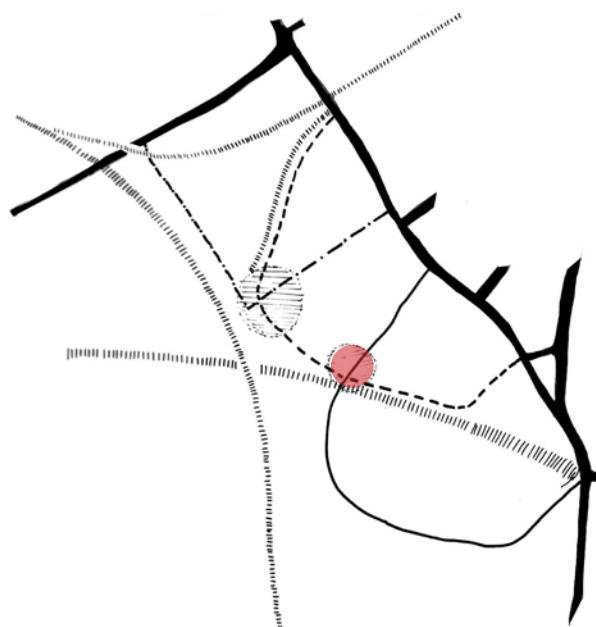
Design Ecology



Points of Transfer: Exhibition



The exhibition space functions as a key point of transfer. The permeability of the exhibition at the 35m level encourages pedestrian movement and it starts to connect to the elevated road at the 45m level. Thus the building acts as a vertical transfer element that connects circulation across levels.







Logistics Industry

11.

Sheds & Campuses

Logistics Industry

CHAPTER 11: LOGISTICS INDUSTRY

According to the research about conventional logistic building, there are some characteristics of conventional logistics buildings :

1. Location: Most of the buildings of the logistics are situated in some places which are near the rural area. Those places usually do not influence people's daily life.
2. Mobility: The logistics sites are adjacent to the highway, railway, airport or port area, accessible for HGV (Heavy Goods Vehicles).
3. Dimension: Conventionally, the buildings of the logistics are large scale, which can ensure the flexibility and integrality of the space and allows the normal operation of the workflow.

4. Low density: Many logistics buildings are large sheds with the low rise (ensure the possibility of the development and changeable)

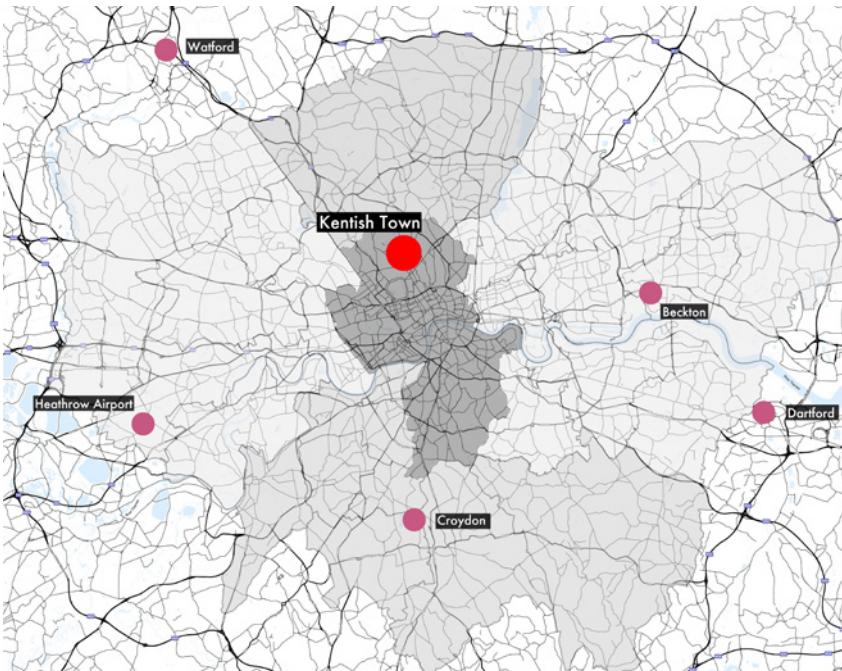
However, in an urban setting, one of the key points is the high land value which conventional industrial buildings cannot achieve, so if we consider logistics in an urban environment, we can find that something needs to be changed.



Walmart distribution centres in USA



UPS Depot in Kentish Town



The role of UPS builing in London context

From London regional perspective, each area of London has a large UPS logistics centre, such as the UPS logistics docking station near Heathrow Airport serviced for the airport logistics service and the logistics of the entire west London. In the Kentish town, the UPS building is located in convenient transportation and is one of the six big UPS logistics hubs in London. It is serviced for the whole centre of London.

So we can see the logistics building is very important for logistics in the heart of London. Logistics as a part of urban infrastructure requires proximity to the city. If you do not retain this logistics building but move to the suburbs, it will lead to more delivery vehicles and the resulting traffic congestion and environmental pollution, which will also lead to lower logistics delivery efficiency. Therefore, we must not only keep UPS in the base but also provide more logistics land in the face of the growing trend of the logistics industry.

The role of UPS builing in regional scale

From the regional perspective, UPS is only a few hundred meters away from Kentish town subway station and only 20 minutes away from King's cross. It is an area close to the city centre, which means that the site is located in an area with high land value. At the same time, the location of the base is convenient for transportation. Highgate road, which is adjacent to UPS, is of high grade and convenient for communication with other parts of the city. It connects north London in the north and Camden and Kingscross in the south. In such an area, logistics must change if it is to retain its function.

Logistics Industry



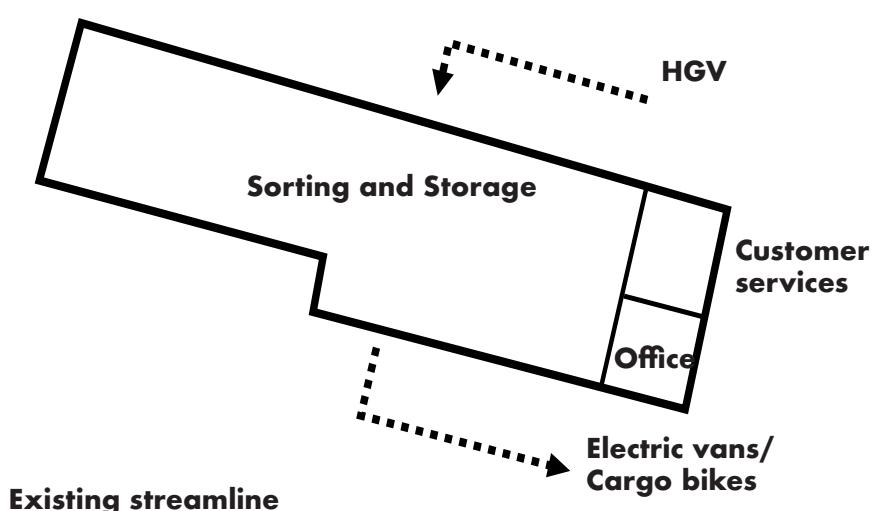
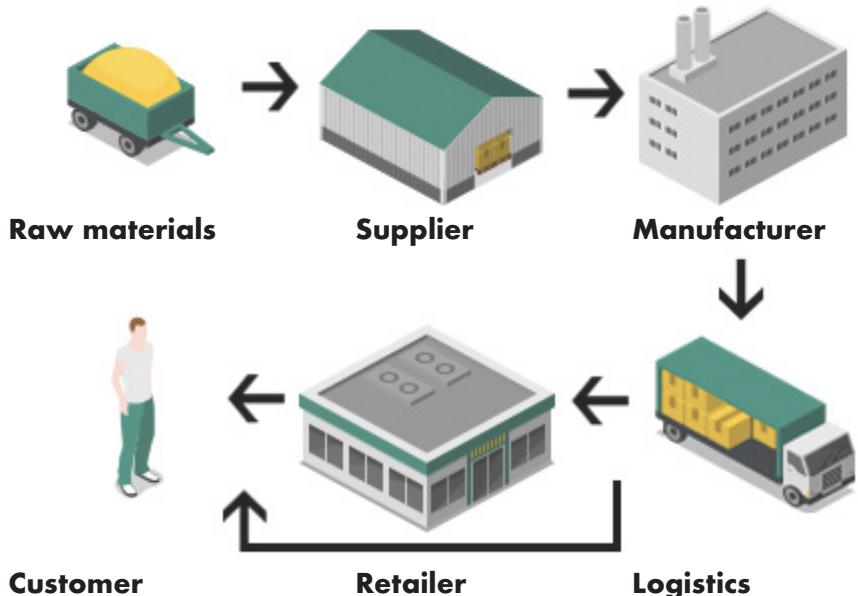
Understanding the Site

Through the base survey, we found that there is already a logistics building belonging to UPS in the Regis Road part. It is close to the railway and occupies the largest area in various industrial sheds on the south side of the railway. It occupies a large shed with only one floor. The scale is 180m long and 50m wide. It is used as parking spaces and customer service centre on the east side. The building is closed and lacks contact with the city. We began to study how to retain the logistics industry and develop Kentish Town at the same time.



Our site -- Kentish Town, it is only a few hundreds of meters from Kentish Town Station. And it will take only about 20 minutes from Kentish Town to Kings Cross or Camden. Kentish Town is a district very close to the city centre, which means the land value here is extremely high. If we want to preserve the logistics function in this kind of area, compared with the traditional logistics pattern and considered about the surroundings, the innovation of logistics ecology should be created. From the point of intensification and diversity of logistics area, logistics can be located in a city environment. Meanwhile, from the diagram on the left, we can see that the site and its surroundings are a little bit complex. The areas next to the railway are extremely negative which have no interaction with the urban environment. Also, on the south of the site, there are education buildings, light industrial buildings, retail shops, studios and residential buildings, which has higher quality for the living environment.

Logistics Industry



Cargo bikes of UPS
136



Logistics locker

The Essence of Logistics

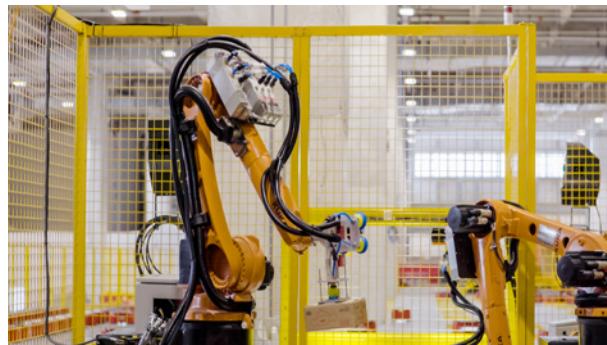
In essence, logistics is a link between a business or a customer and other customers. With the globalization of production, many developed countries have shifted the production process to developing countries such as China. And after assembling and production, goods are transported to the worldwide countries through logistics. So, logistics connects the various companies and customers.

Transportation and Streamline Organization

The main function of the UPS logistics building in the base is to store the goods from various places and then sorting them according to the area. Currently, the HGV(heavy goods vehicle) which come from other regions enters to the north side of the UPS. After storing and sorting, the packages are dispatched from the south side by electric vans. Since the HGV are transported frequently and logistics working 24 hours a day, the trucks require a separate streamline.

In the future, in order to address the growing traffic congestion and air quality concerns, UPS will use more convenient and environmentally friendly cargo bikes for cargo delivery, which can make deliveries to areas conventional delivery trucks can't access directly and currently require that trucks be parked on the periphery for long periods of time. This not only reduces traffic congestion but also reduces noise and pollution. At the same time, continuous testing and the application of sustainable transportation will be the direction of continuous development of logistics. At the same time, in order to solve the last mile problem of logistics, the logistics locker will become more and more popular and become the main way to receive express delivery.

Logistics Sorting Robots



Automated Storage and Retrieval System



The Large Span and High Floor Heights of Logistics Building



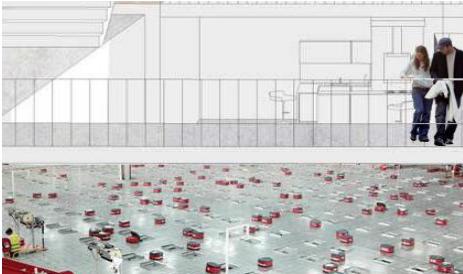
Workflow

The logistics workflow is divided into receiving, sorting, storage, and dispatching. These processes are connected by conveyor, thus also providing the possibility for future logistics stacking. Now the sorting part uses the combination of manual sorting and automatic sorting. In the future, with the use of more logistics sorting robots, it is conceivable to realize all automatic sorting. In the storage part, with the use of ASRS (Automated storage and retrieval system), storage can achieve high-density and compact automated storage. In addition, the electric forklift trucks can be used to carry goods and are remotely controlled, so the logistics labour force will be greatly reduced in the future. The interior of the future logistics building will become unmanned. The development of logistics automation and high tech will be an important part of logistics.

Spatial Layout

In space organization, warehousing and sorting still occupy the main area of logistics buildings. In the UPS building in the base, warehouse and sorting account for nearly 90% of the building area. The use of ASRS systems and conveyor belts between different floors still require buildings with higher floor heights and large spans.

Logistics Industry



Logistics Combined with Exhibition

As logistics become cleaner and process automation, logistics buildings will be unmanned and full of high technology, so logistics can be partly opened to the public as an exhibition space. People can see how automated logistics works and how high technology affects daily life.

Logistics Combined with Retail

With the rise of online shopping, logistics has become a very important part of online retail. Argos becomes a good example that connects online and offline shopping. Argos requires only a small portion to be used as the order area and a larger portion is used for goods storage on the back side.

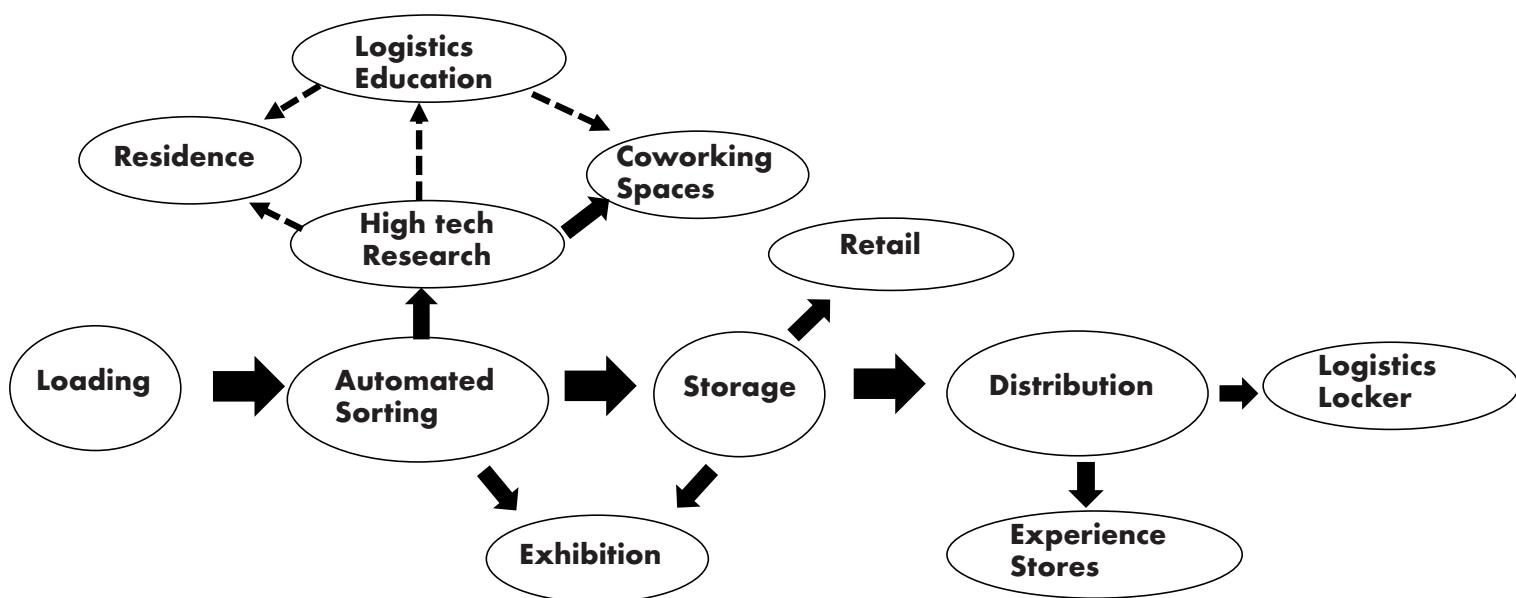


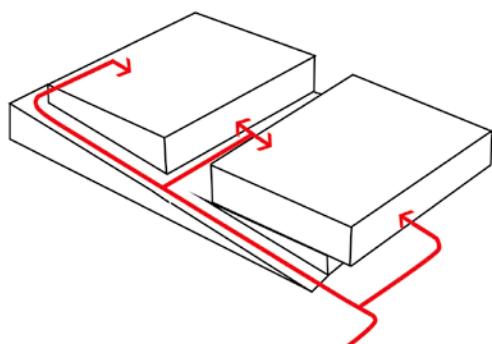
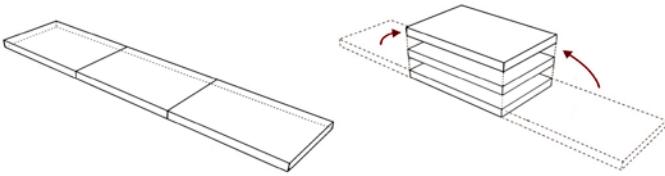
Logistics Combined with Research of High-Tech

In the process of gradually automating logistics and improving logistics efficiency, more scientific research personnel such as sorting robot research, intelligent logistics, and automatic storage will be needed. This high-tech research and development of logistics will generate more research and office needs.

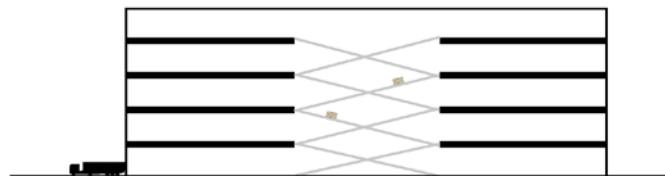
Logistics Combined With Education

Logistics automation and high-tech research work are very important for logistics to reduce costs and improve efficiency. How to integrate cutting-edge technology into the intelligent logistics industry chain will inevitably lead to more school-enterprise cooperation, so we have arranged teaching facilities and experiment rooms, they can provide teaching and research functions in related industries.





Method 1: Using a ramp around the building.



Method 2: Using the conveyor belt to connect different floors.



Using the green space as a buffer between logistics and housing.

Increasing Logistics Buildings Density

With the scarcity of urban industrial land and rising land prices, it is inevitable that logistics buildings in the core areas of the city will reduce the floor space and stack vertically. Logistics will no longer be the low-density shed as in the suburbs, but more like a logistics skyscraper.

Ways of Transporting Goods on Different Floors

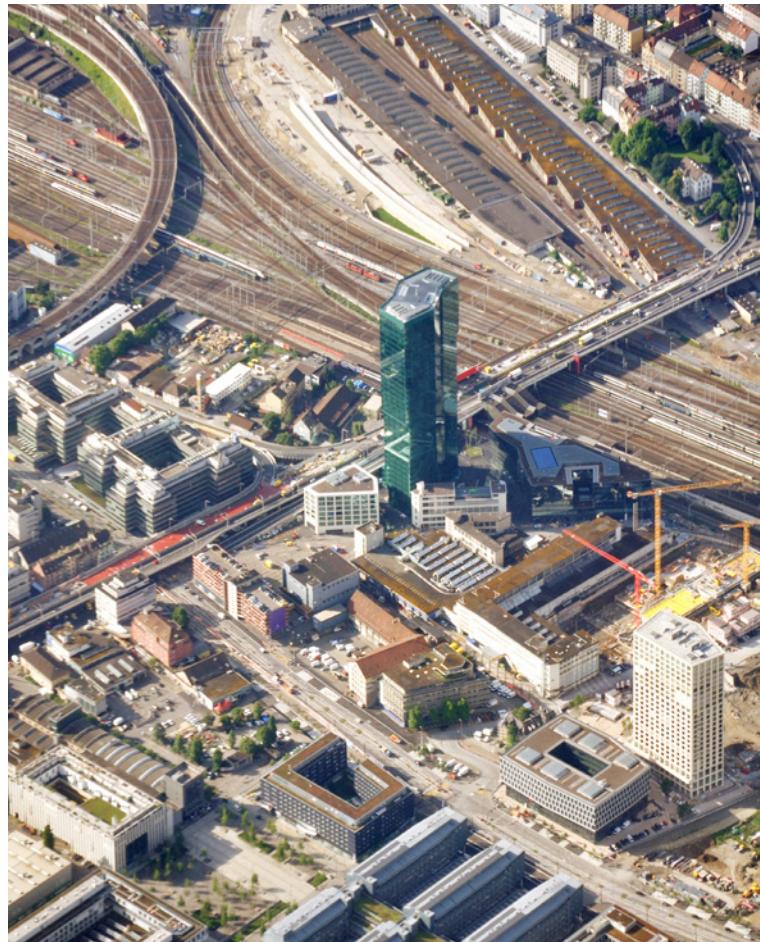
After the density of the logistics building is increased, the transportation of goods between different layers can be solved in two ways. One is to surround the entire building with the main ramp that allows the truck to enter the different layers directly through the ramp. This approach reduces the traffic pressure on the ground floor and is more suitable for companies that often need to transport large cargos. Another way is to transport the goods vertically with a sloping conveyor belt inside the building. Compared to the first way, the logistics building using this type will no longer be limited to the number of layers, and the loading bay is still on the ground floor of the building.

Housing Strategy

Logistics still need to work 24 hours a day and there is no holiday, and there will be continuous large trucks driving in and out. In addition, the logistics industry is more suitable for stacking itself to increase density, and its connection with other industries is relatively weak. Therefore, it is more suitable to divide logistics and residence horizontally. Offices and green spaces can be used as a buffer between logistics and residence. The loading bay is arranged on the back of the logistics building for loading and unloading cargos.

Logistics Industry

Zurich West

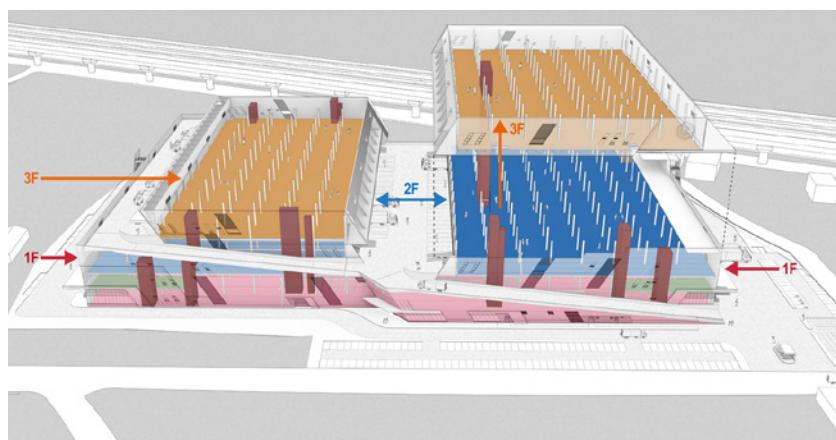


Precedents

In the road network organization, we refer to the case of Zurich West. It adopts the matrix in the road network. At the same time, it has many large-scale industrial buildings that are retained. It also creates large-scale landscape space. In addition, in terms of organizing residence, it partially subdivides the road network, thus forming some medium-scale neighbourhoods. And then the residence clusters can be organized. In the Kentish town facing the huge scale of logistics building and other community environments need small dimension, this method of combining large shed and clusters can also be adopted.



ALP Ally Logistics Republic Yangmei, Taiwan

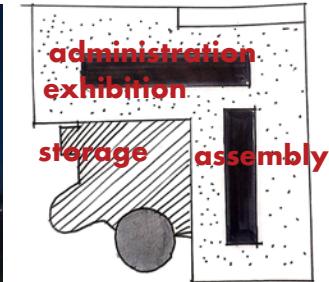
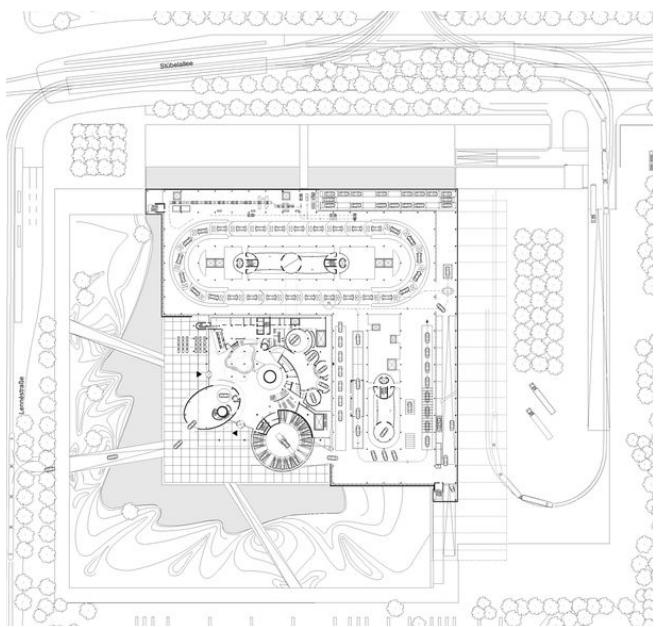


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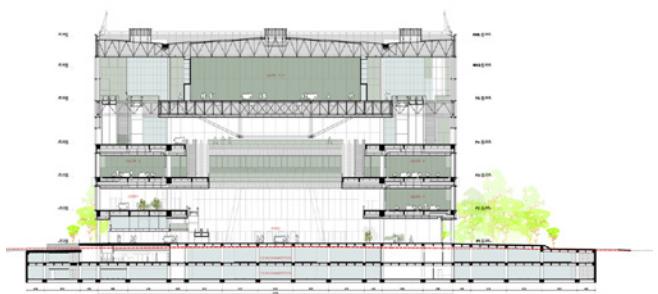
A logistics project in Taiwan, it achieves the intensification of logistics to some degree. And in addition to the elevations, the long ramp around the building can increase the flexibility of the logistics work flow.

Transparent Factory, Dresden, Germany



The transparent factory was a car factory built more than ten years ago, now it is a factory and car museum, it achieves the combination of factory and exhibition place. However, one of the points is that in this building, only the final assembly process of the car industry will happen here. This process is very clean, which logistics may achieve in the future.

Ágora-Bogotá / Estudio Herreros + Consorcio Bermúdez Arquitectos, Colombia



When considering the exhibition space in logistics building, it is quite important to ensure the flexibility and integrality of logistics space, from this case, we can see that there are some platforms on different levels, by this method, when standing on the high level, one can have a good view of the ground floor, it is an option for exhibition in logistics because, in this way, the logistics workflow will not be disturbed.

Logistics Industry



Development of mobility system

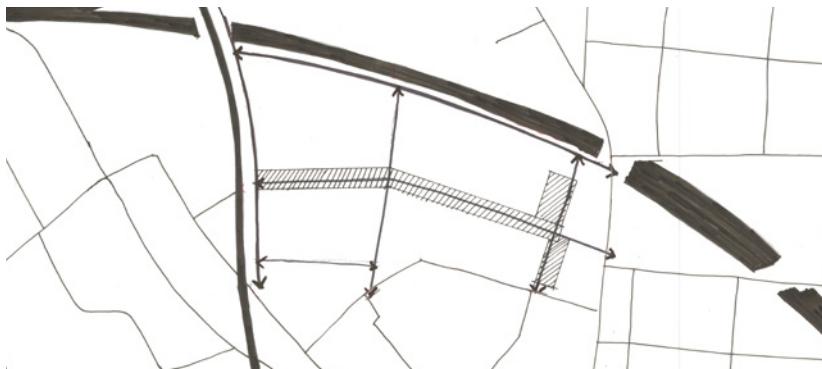
The connections between the existing arteries are generated, at the same time, these connections can be new arteries mainly for logistics. Besides, in the south of the site, we also generate some connections from south to north as well as from east to west which is mainly for cars, bicycles and walking.



Organization of the site

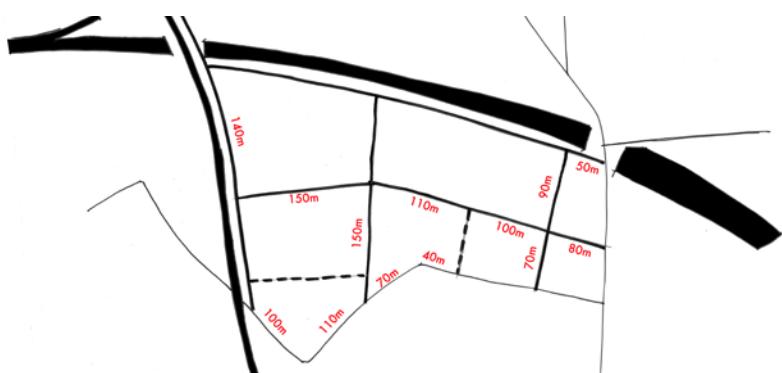
As what has been widely known, logistics architectures have a high requirement of larger space, there should be an extension area around logistics buildings. In order to intensify the logistics, our strategy is adding another logistics building next to the existing one. These two buildings will exist as the primary elements, they can work in turns when this district is developed. Meanwhile, other architectures will exist as clusters whose size are similar to surroundings.

Logistics Industry

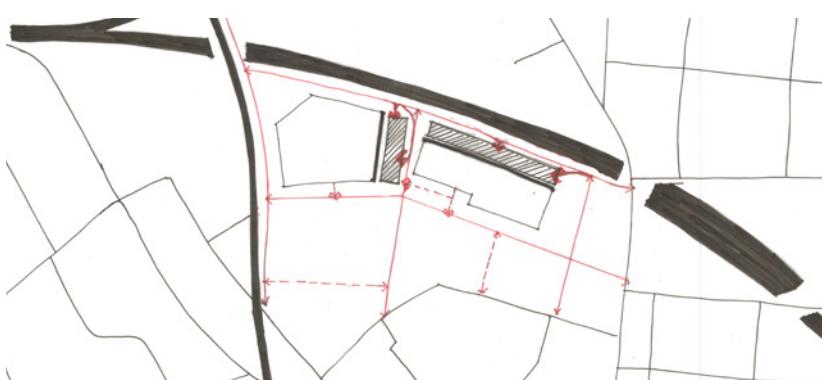


Development Strategy

In order to reduce the influence which logistics building will have on the living environment and increase the quality of the site, a buffer which consist of green place, parking lot for cargos and electrical vans is between the logistics area and other areas in the site.



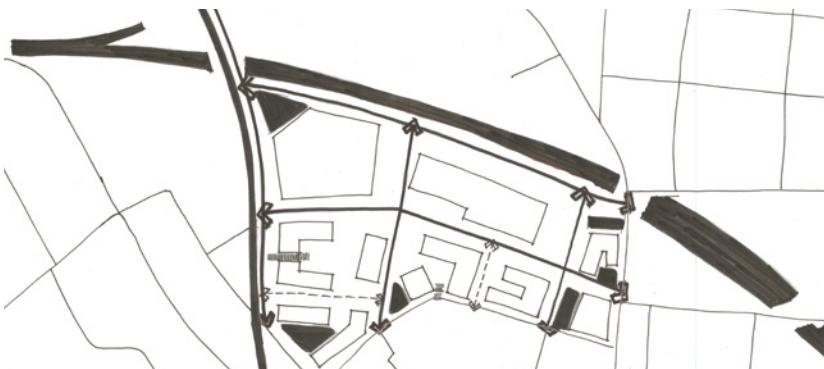
The dimension: We try to keep the dimension of each block similar to the blocks around the site.



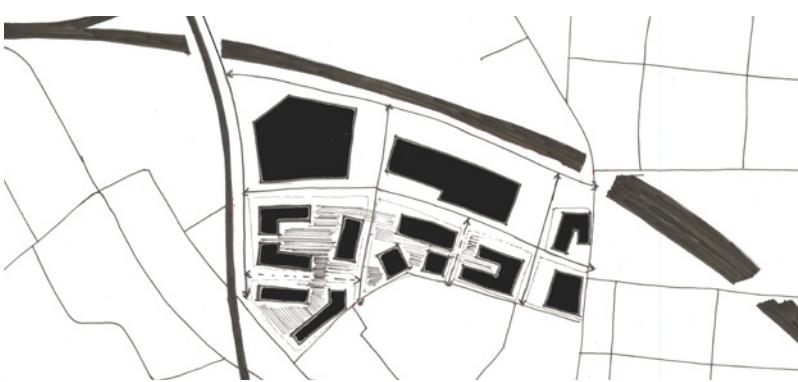
Because the area next to the railway is still the negative area and will not benefit the living environment and is not visible from many angles, these areas are still the best options for loading bays of logistics. Meanwhile, these areas are close to the arteries, which is more accessible for heavy goods vehicles.

Functional diagram

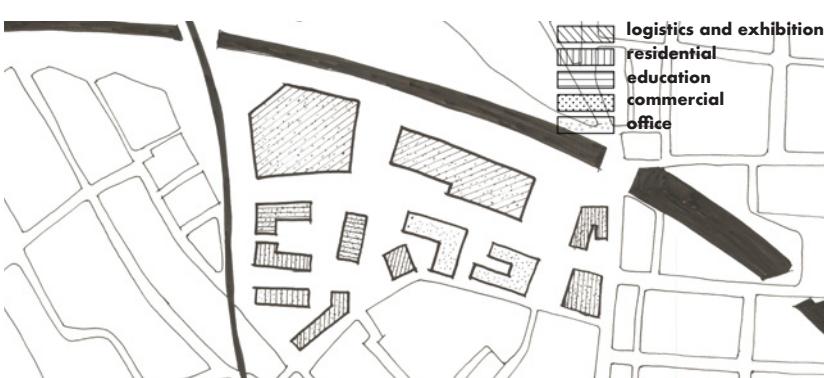




The open places in the site are also accessible from different directions and can be shared by people who work or live in the site as well as people who live out of the site.

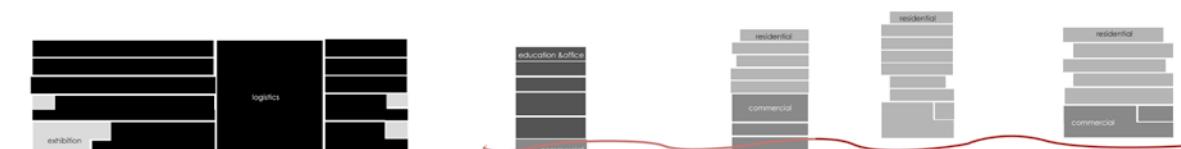


In the office and the living area of the site, we try to keep the continuity of the open space and the movements.

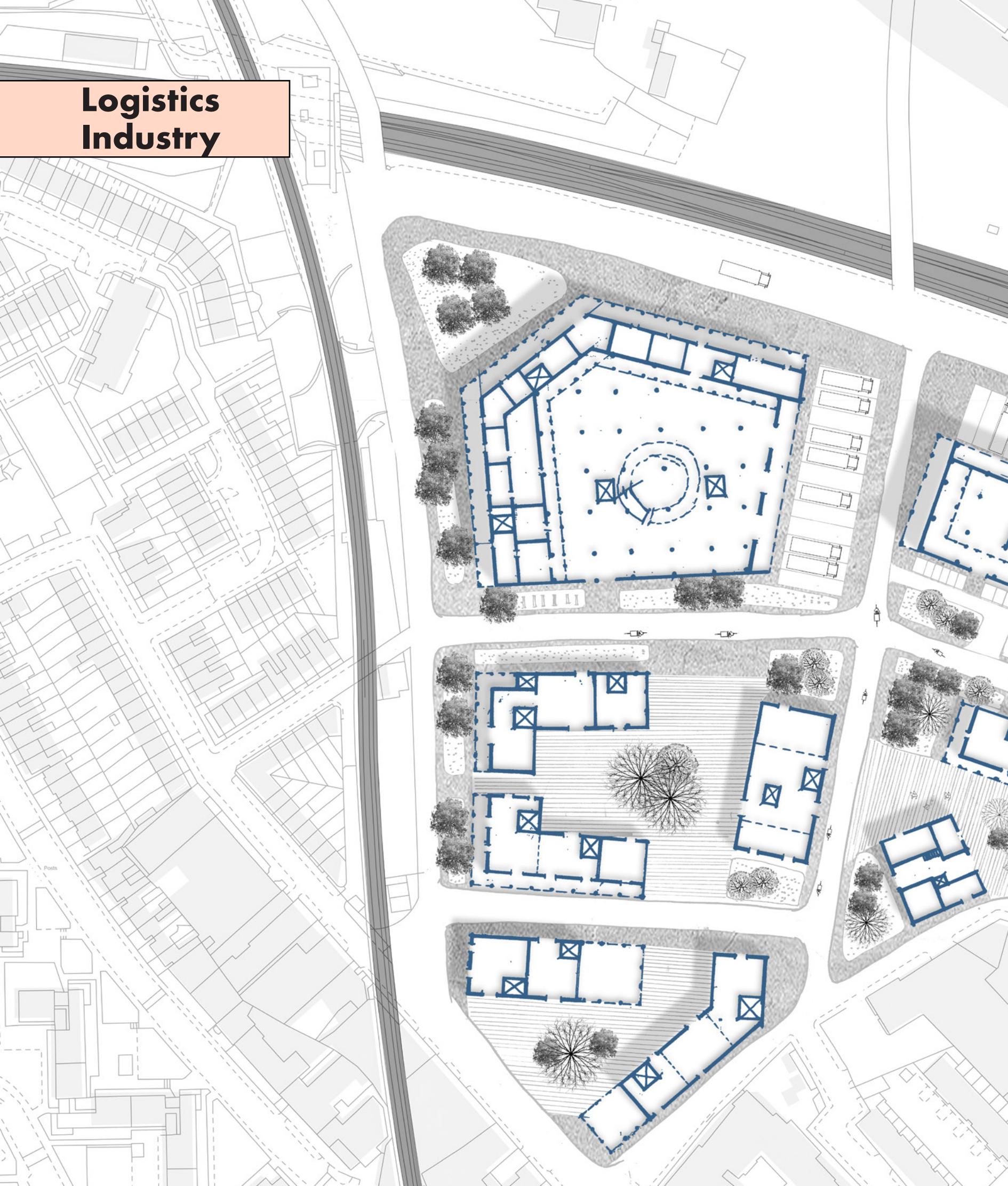


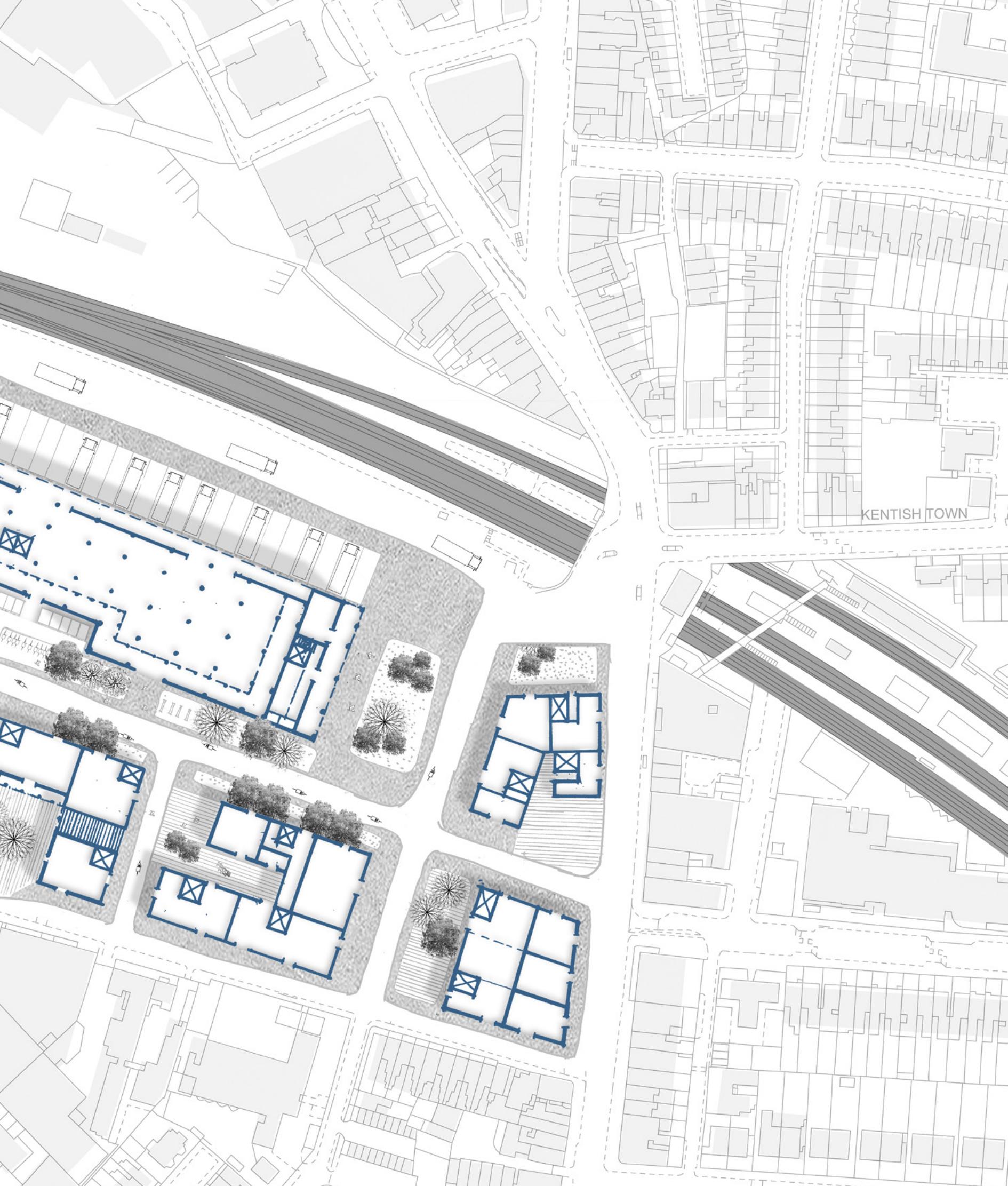
As for the functions, from north to south, there is a transition from logistics to office and education to residential, which will achieve the diversity of the site but will reduce the influence between the industrial area and living environment.

Functional diagram of the section

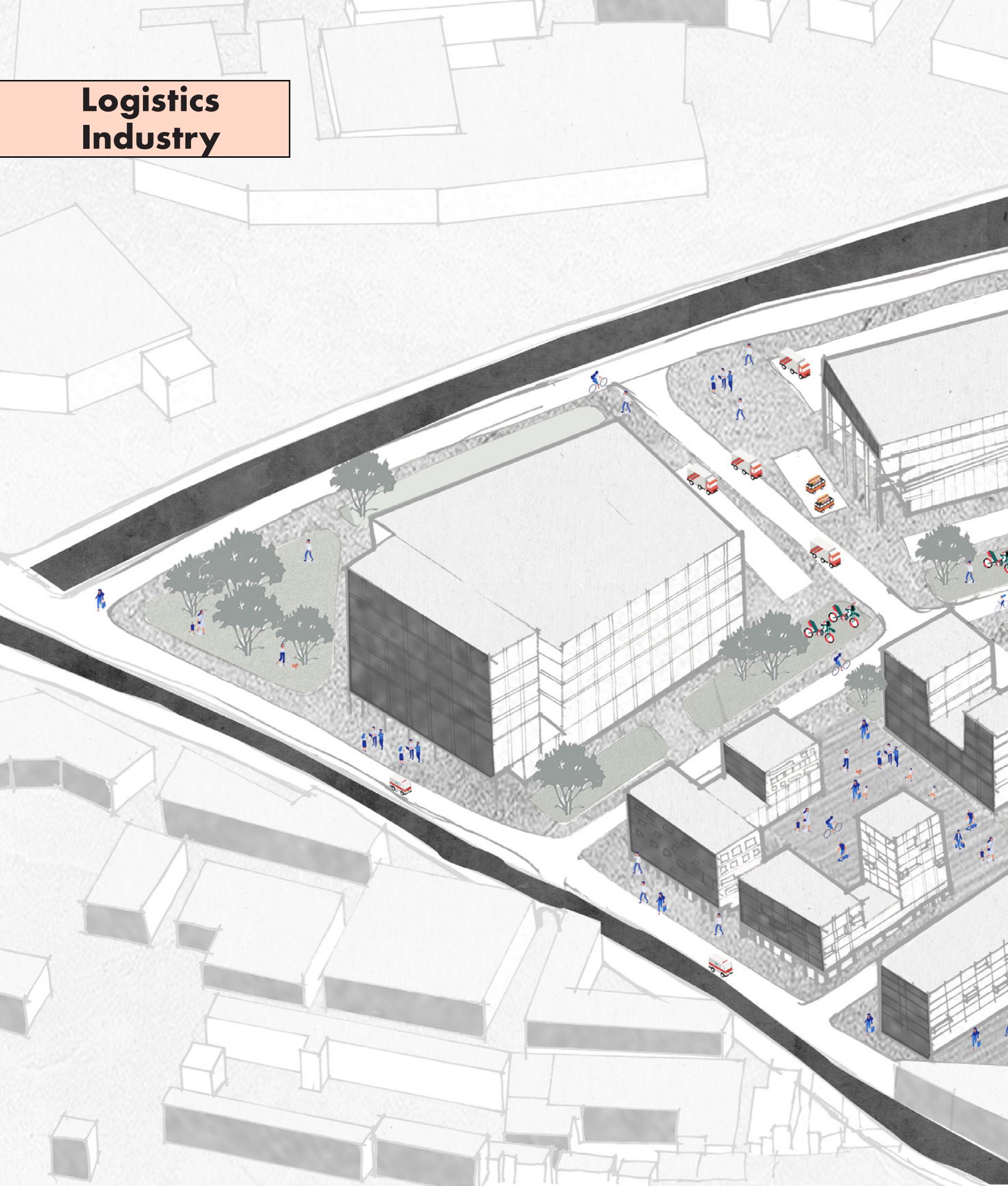


Logistics Industry





Logistics Industry

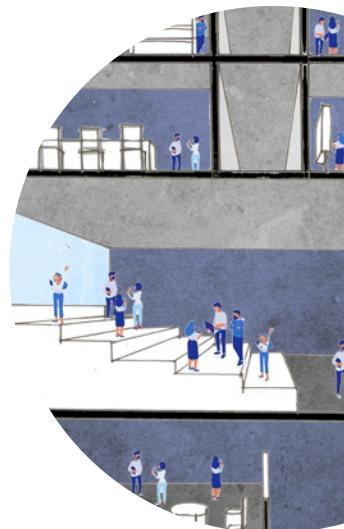




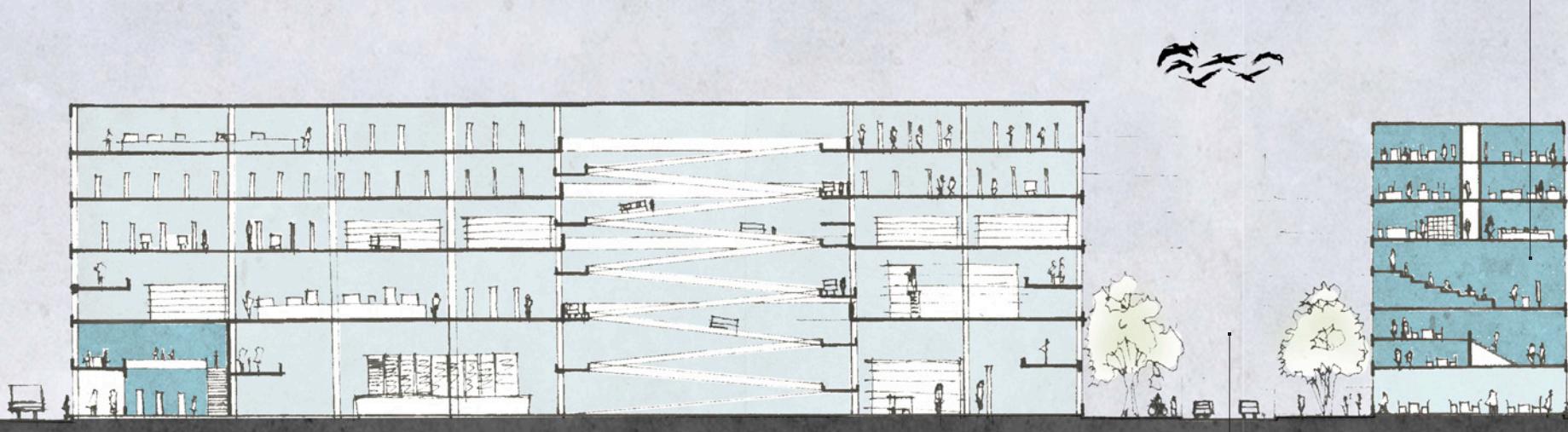
Logistics Industry

Diversity of Industrial District

In the spatial organization, a layout of large blocks and clusters of normal scale is used. Future logistics still require large-scale buildings and are vertically stacked. Vertical transport of goods can be achieved with a conveyor belt. At the same time, part of the logistics space can be opened to the public. The building on the south side of the logistics combines education to set up a shared office space. The residence and logistics are separated by office and green corridor. Through this layout, a quiet living environment is created for living. And at the same time, living can be linked to office research.



Educational space c



Section A-A



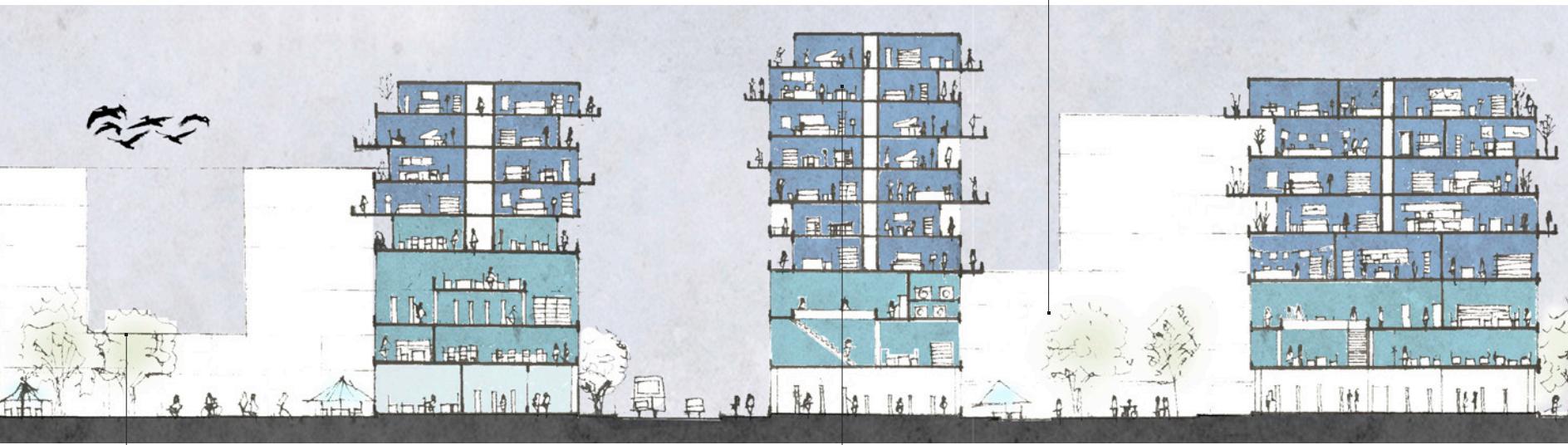
Proposal of the buffer between logistics and living environment



and office



Open space



Open space



Residential space

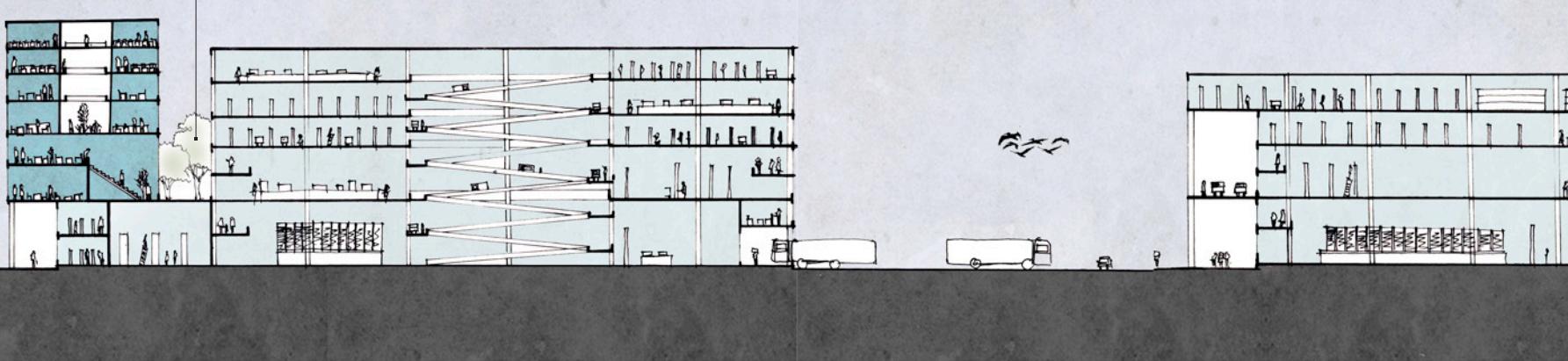
Logistics Industry



Proposal of the the mixture of logistics and education

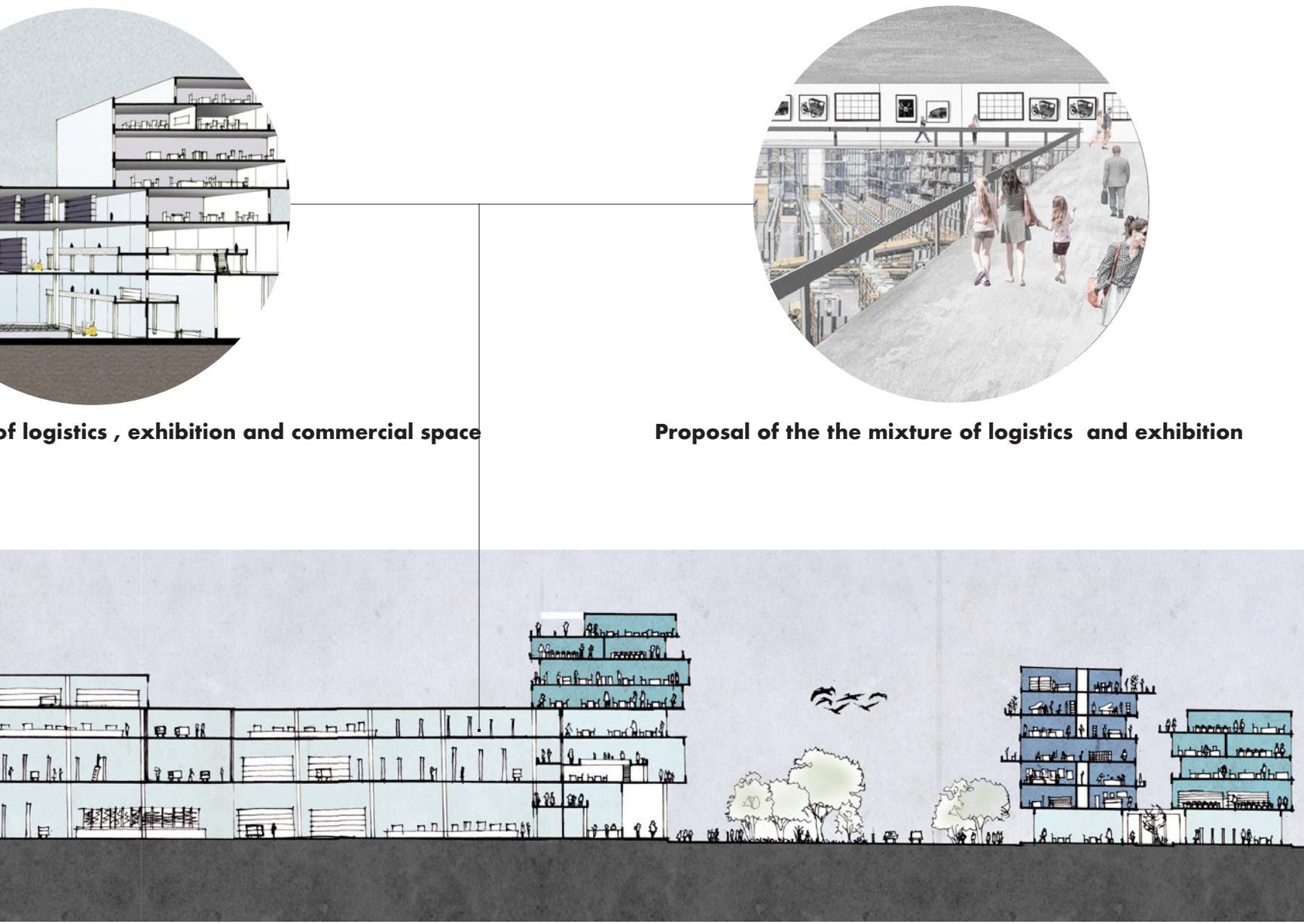


Proposal of the the mixture of



Logistics as Exposition

In addition to the diversity of the site, we also considered the diversity of the logistics building itself. Through the research of the logistics industry, we found that it is a technological and clean, and enjoyable.



of logistics , exhibition and commercial space

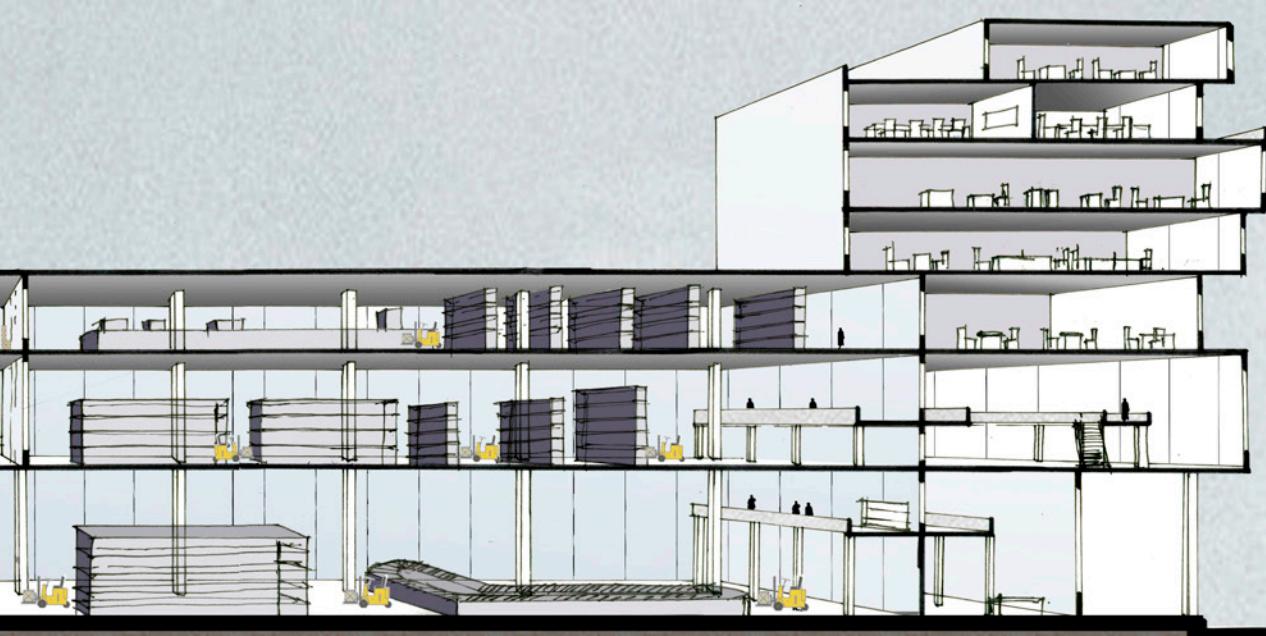
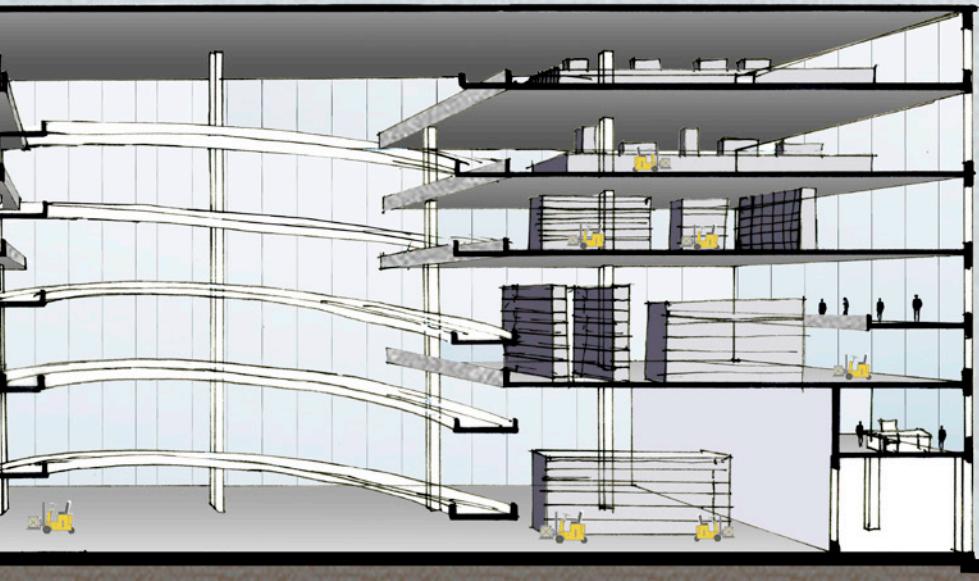
Proposal of the the mixture of logistics and exhibition

Section B-B

found that in the next 10-15 years, the logistics industry will achieve semi-automation or automation to a large extent. Future logistics will be more

Logistics Industry





Logistics Industry



Buffer Between Logistics and Living Environment



Logistics + Exhibition

‘YES.’

Conclusion

12.

CHAPTER 12: CONCLUSION

These four approaches are indicative of what a broader understanding of the role of industry and workspace in building neighbourhoods can achieve in building resilience. It begins to imagine a neighbourhood that accepts workspace as a primary domain that coexists successfully with residential life. Accessibility and mobility become key questions that need to be tackled in order to make these workspace neighbourhoods viable. This is especially challenging given the conditions we have observed in these inner peripheral sites- those of fragmentation and disjunction as well as the tendency for industries to form autonomous units that do not interact or integrate with a wider mix. If we start to coalesce the four approaches into broader strategies of reimagining the mobility structures of the wider area, several opportunities become apparent.

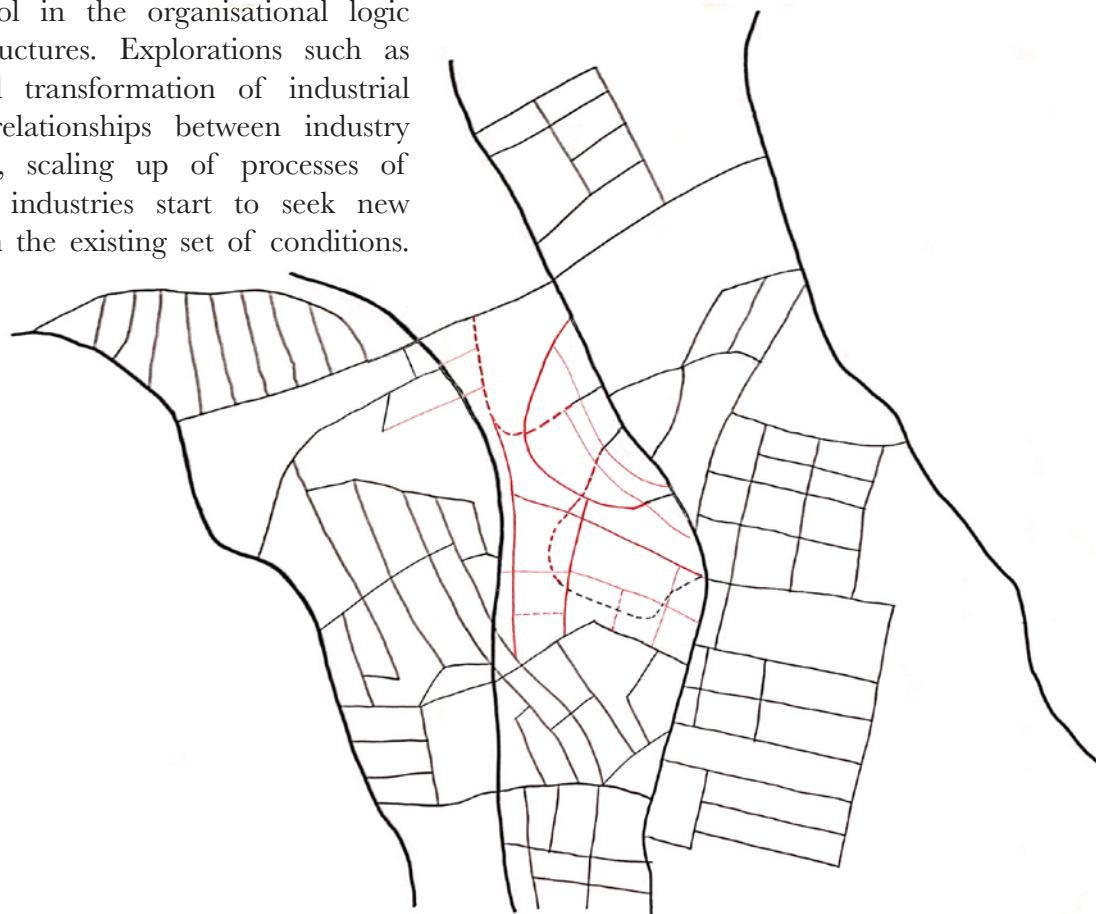
It could be that of a gridded organisation that reorganises the existing site while negotiating with the disparate grids in the surrounding area. This starts to establish a logic of street life that generates a fairly well-ordered differentiation of parcel and block sizes. Another approach could be to retain as much of the existing mobility patterns as possible and strengthening it by creating a series of loops across different levels, thereby utilising the topographical potential of the site. It is almost like juxtaposing two different systems of movement vertically. This possibly allows for an organisation around a series of amalgamated blocks and shared spaces that are different from the more regular grid in the above case.



Both these approaches establish a distinctive pattern of continuities and differentiation of the area thereby creating a variance of block sizes that gives rise to different morphologies and spatial ecologies. This is not limited to our understandings of this particular site but with respect to a larger context and the means to strengthen the East-West connections across London.

These approaches also indicate the varied kinds of mixes possible in creating these neighbourhoods that allow for a much more ambitious set of actors and processes that shape the larger urban area. Given the increased complexity of these hybrid clusters, typological reasoning becomes a crucial tool in the organisational logic of these structures. Explorations such as the potential transformation of industrial sheds, the relationships between industry and housing, scaling up of processes of the creative industries start to seek new answers from the existing set of conditions.

This exploration also provides insight into how the drivers of change are quite similar for the development of creative industries and to a certain extent, each of the four industries explored to use the spaces in a similar fashion. The implication, therefore, is that it creates robustness in the range of possibilities for the site as these industries can change over a period of time and still be accommodated. There are still questions regarding delivery mechanisms and the level of density that this site can appropriately support. This research can be a starting point in reshaping our understanding of the urban processes that enable the transformation and intensification of such sites.



**Thank You
For Your Time!**