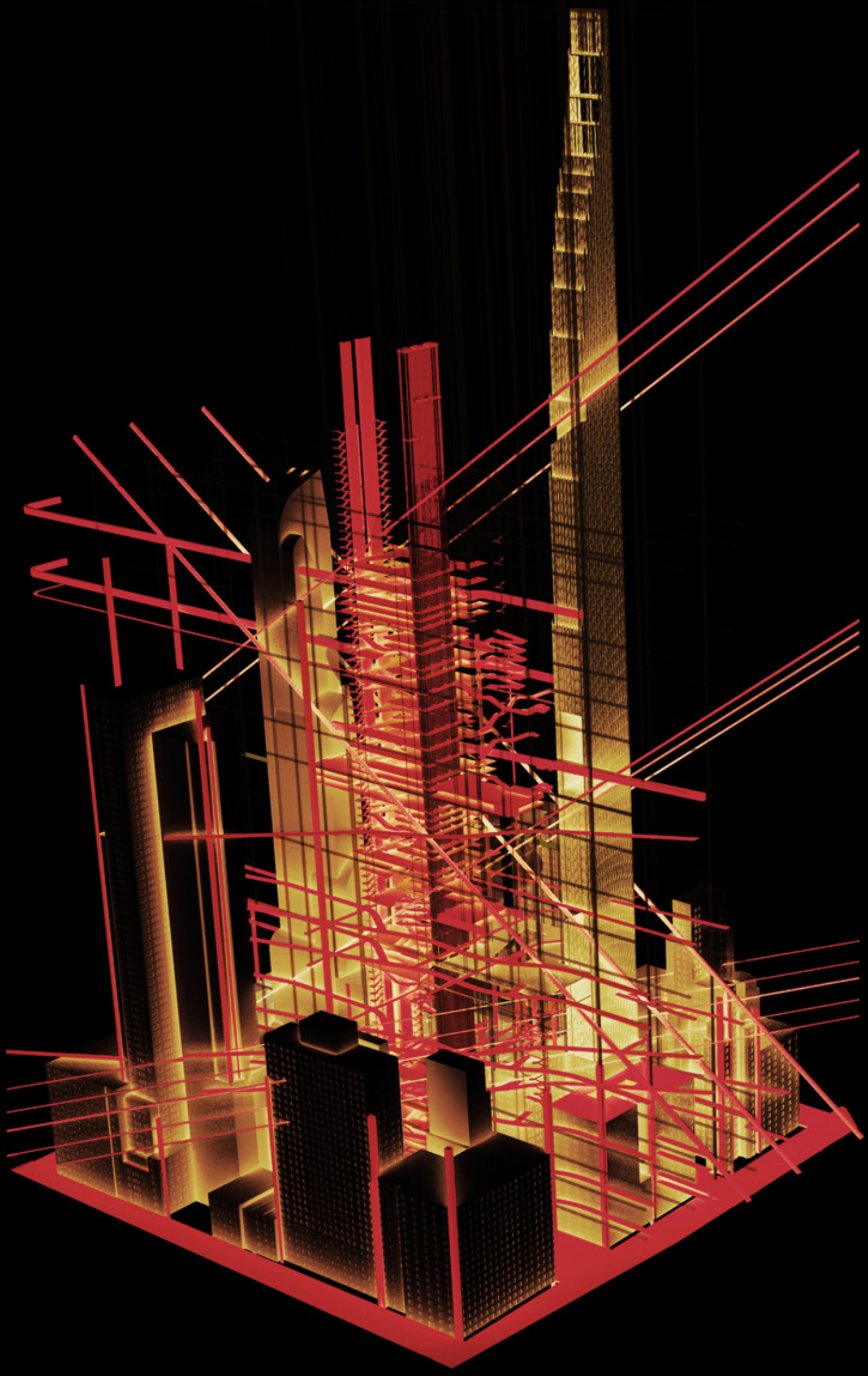


The Upper City

BY RUBA RADEEF

The upper city

Ruba Radeef

A thesis is submitted to the faculty of Virginia Polytechnic Institute and State University in partial fulfillment of the thesis requirements for the degree of:

Master of Architecture

Henri T. de Hahn , Chair
Andrew Gipe-Lazarou
Ellen Braaten
Stefan Al

May 4th,2023
Blacksburg, Virginia

Keywords: upper cities, three-dimensional Grid, urban fabric, elevated streets, New York City

This architectural thesis challenges the conventional perception of cities as horizontally sprawling realms dominated by towering edifices and sky-scrapers. Inspired by Rem Koolhaas' influential book "Delirious New York," which argues that each block represents an independent fantasy, which creates a more cohesive and united version of the city (Koolhaas, 1994). This thesis introduces a groundbreaking outlook that envisions cities as complex networks of functions, neighborhoods, and pathways within an immersive three-dimensional framework.

The proposed approach seeks to merge the established city of Manhattan with a new counterpart, driven by enhancing residents' quality of life and addressing the challenges of metropolitan areas. Three key factors underscore the significance of this approach.

Firstly, there is a current dearth of connections between buildings and floors, impeding the cohesive fabric of urban life and hindering social interaction and community engagement. Secondly, the rapid population growth in Manhattan has strained the city's surface, leading to challenges in space availability. Additionally, there is a significant lack of public spaces that cater to the community's needs for socializing, outdoor recreation, and access to nature. Moreover, the looming threat of rising sea levels amplifies the urgency of these challenges.

By addressing these key factors, the proposed approach aims to revolutionize the urban fabric, creating a more interconnected, sustainable, and resilient cityscape that elevates the well-being of residents and harmonizes with the dynamic nature of urban life.

To address these issues, the thesis examines specific components such as existing voids, the street network, and building elements. Through reimagining and redesigning these elements, the goal is to create a unified and sustainable urban environment that aligns with current trends and harnesses emerging technologies. The ultimate aspiration is to achieve a cohesive urban milieu that enhances and reshapes the well-being of residents while adapting to the dynamic nature of urban life.

ABSTRACT

GENERAL ABSTRACT

This architectural thesis challenges our traditional view of cities as sprawling landscapes dominated by tall buildings. Taking inspiration from Rem Koolhaas' exploration of Manhattan's unique block fantasies in "Delirious New York," this thesis presents an exciting new perspective. It envisions cities as vibrant hybrid networks, blending various functions, neighborhoods, and pathways within a three-dimensional grid.

The proposed approach seeks to merge and integrate the existing city of Manhattan with a new one, aiming to improve the overall quality of life for its residents while addressing the challenges faced by metropolitan areas. Three significant factors justify this approach. First, there is a lack of connections between buildings and floors, which limits the cohesiveness of urban life. Second, Manhattan's surface is strained due to population growth, demanding innovative solutions. Additionally, public spaces that encourage socializing, outdoor activities, and access to natural environments are insufficient. The rising sea levels add an extra layer of concern.

To tackle these complex issues, the thesis explores specific components such as underutilized spaces within the city, streets, and existing buildings. Through imaginative redesign and reimagining, the goal is to create a more harmonious and sustainable urban environment that responds to current trends and technologies. By integrating these elements, the thesis aims to shape cities into vibrant, inclusive, and interconnected spaces that cater to the needs of their communities.

To Henri T. de Hahn,

Words cannot fully express the depth of my gratitude for the unwavering encouragement you have provided. I am immensely grateful for your constant encouragement to push the boundaries of conventional thinking and to dream beyond the ordinary. Your steadfast belief in my abilities has been and will always be a driving force in my personal and intellectual growth.

To Andrew Gipe-Lazarou,

Your energy, passion, and guidance in Architecture have been invaluable to my personal and professional growth. I am immensely grateful for your inspiration, constructive critique, and unwavering support, shaping my distinct standpoint and significantly contributing to my journey.

To Ellen Braaten,

I sincerely appreciate your tranquil and unwavering guidance, invaluable mentorship, and profound expertise that have accompanied me throughout this remarkable journey.” You are a legend, Ellen.”

To Stefan Al,

I am grateful for your constant guidance, expertise, and willingness to share your knowledge. Your invaluable support has led me in the right direction, emphasizing the crucial elements and helping me navigate and prioritize effectively. Thank you for your directness and the experience you have imparted

ACKNOWLEDGEMENT

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“***A city is not gauged by its length and width, but by the broadness of its vision and the height of its dreams.***” (Caen)

A quote by Herb Caen

We typically think ...

The common perception is that cities consist of tall buildings and skyscrapers, spread out horizontally. In “Delirious New York,” Rem Koolhaas uses Manhattan as an example and argues that each block represents an independent fantasy, resulting in a more cohesive city (Koolhaas, 1994).

what if ……

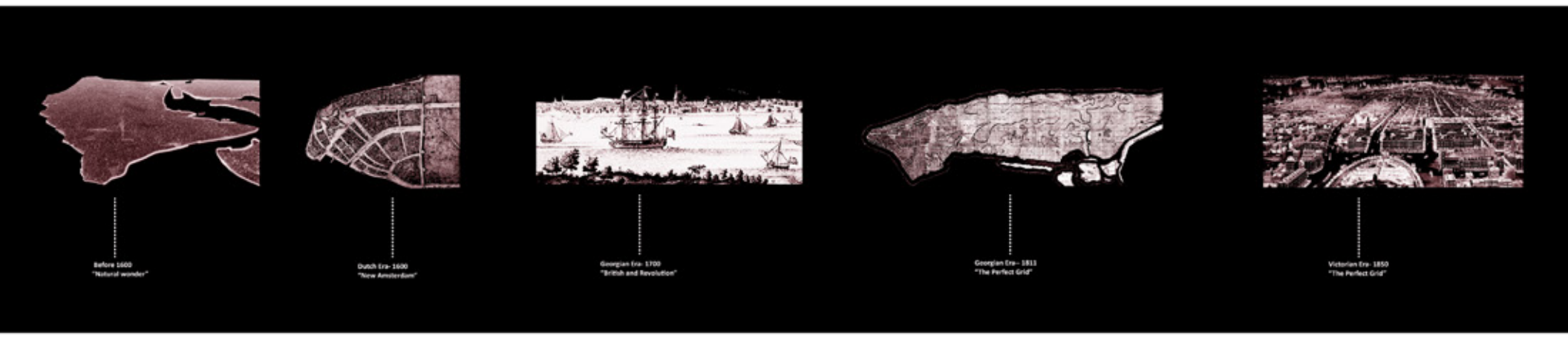
What if we consider cities as a hybrid network of functionalities, neighborhoods, and circulation, arranged within a three-dimensional grid? This new approach would involve merging and integrating the existing city of Manhattan with a new one, to improve the overall quality of life for everyone and tackle the challenges that metropolitan areas face by adapting to new trends and technologies.

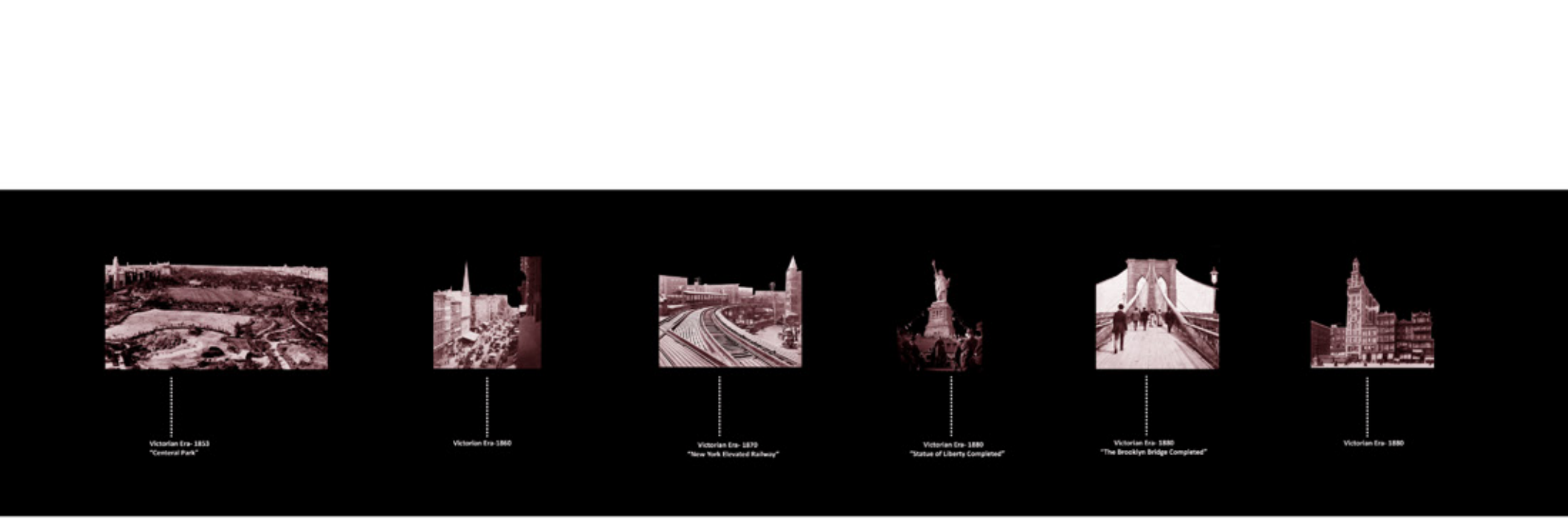
1.1 The historical development of New York City

1.2 Criticism of The Existing Condition

INTRODUCTION

1.1 The historical development of New York City

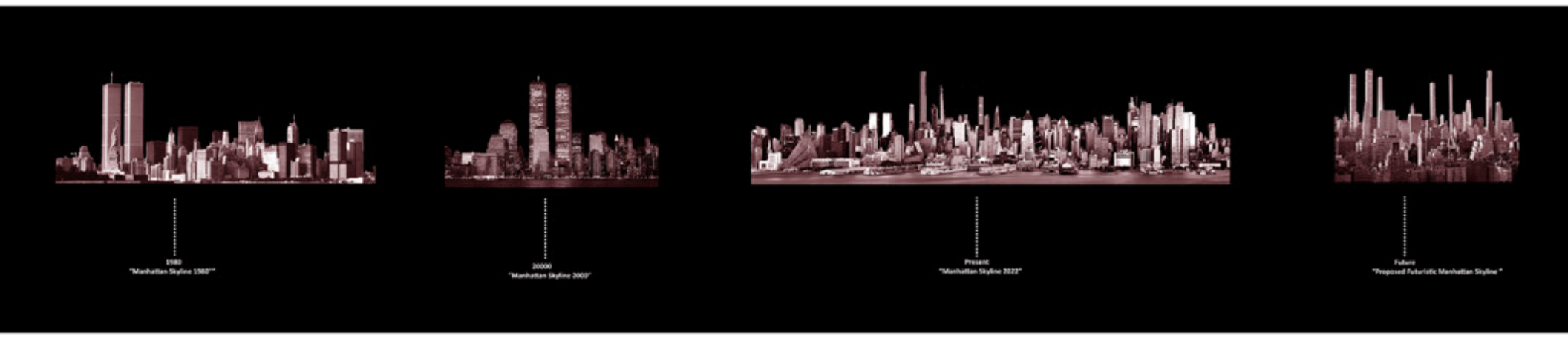


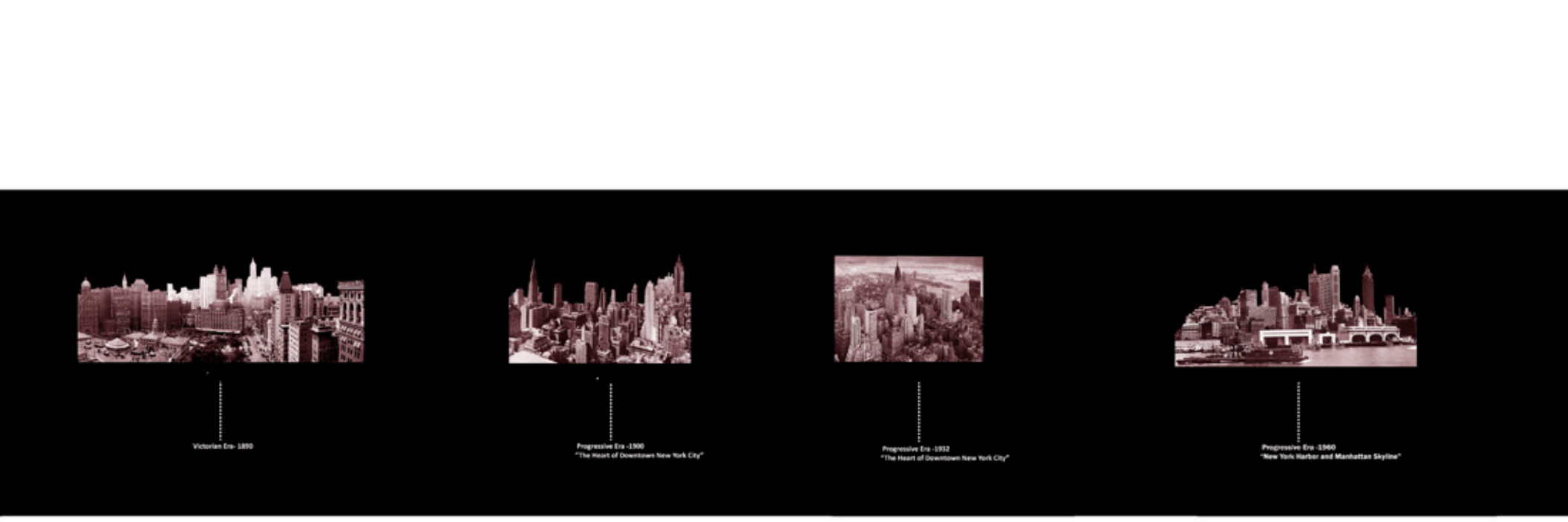


The History of New York City: Fro

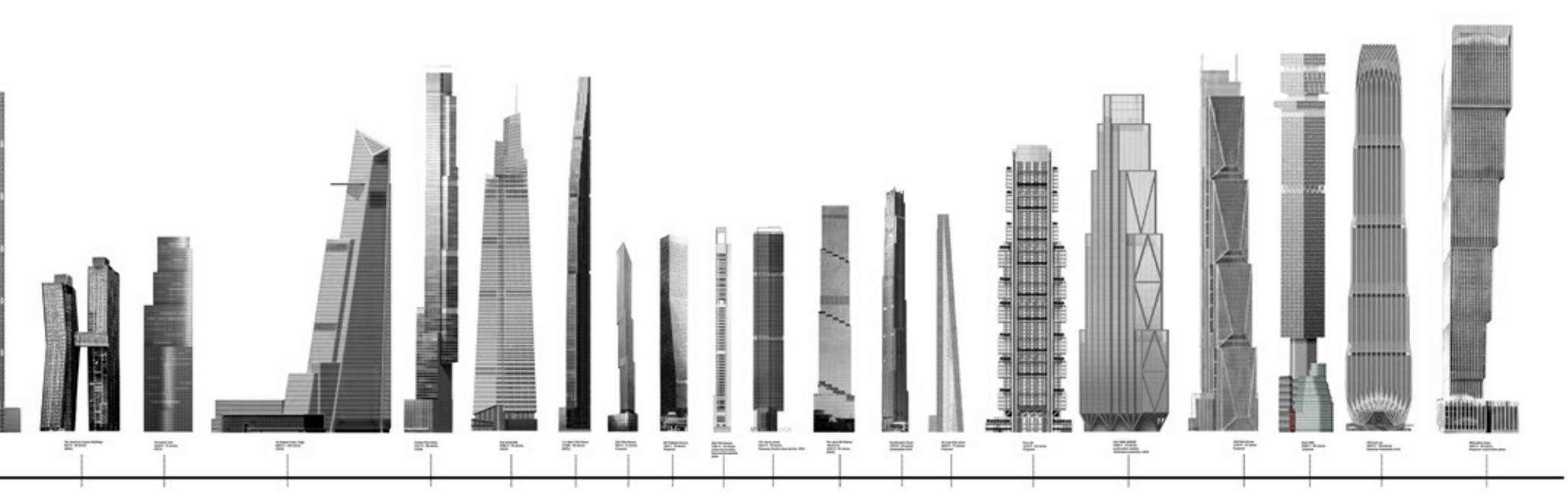


The Evolution of New York City's Skys



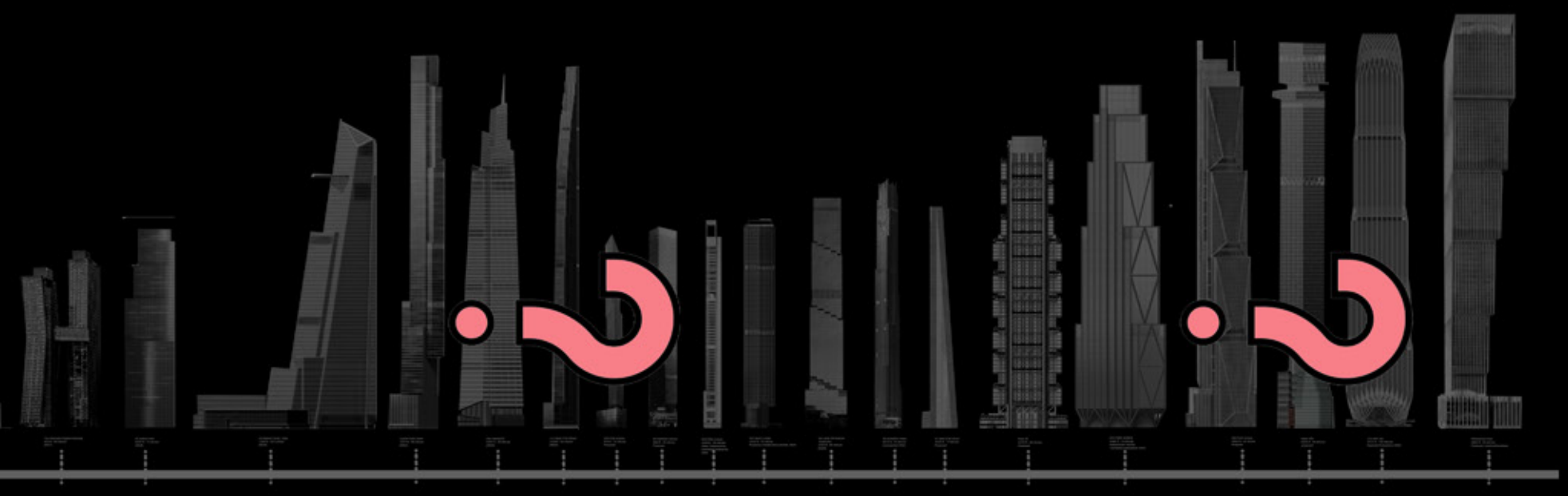


m Natural Wonder to Urban Jungle



crapers: From Modest to Monumental





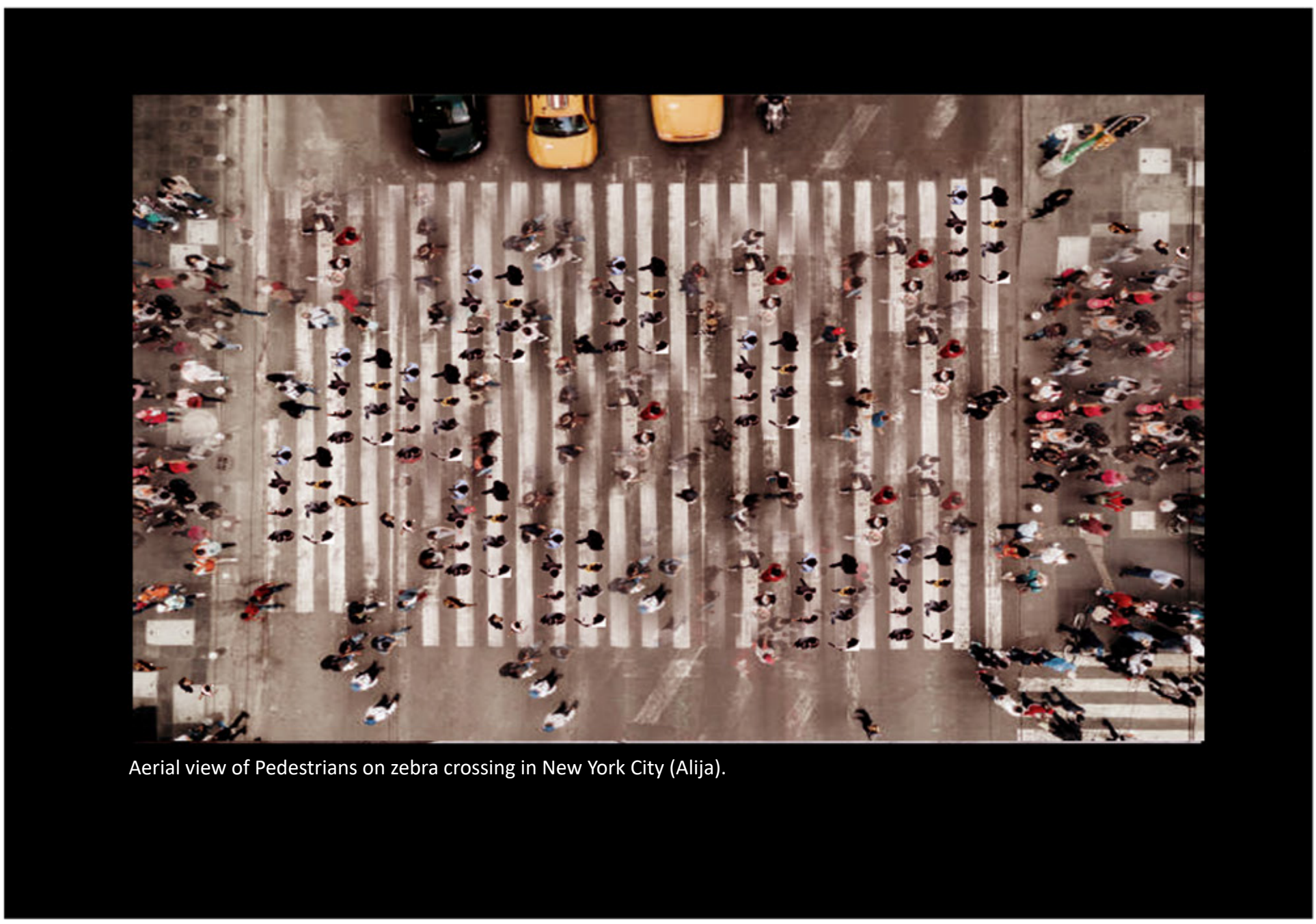
02 Criticism of The Existing Condition

01 Issue

The surface of Manhattan is too exhausted - growing population- not enough public space that caters to the community's needs for socializing, outdoor recreation, and natural surroundings

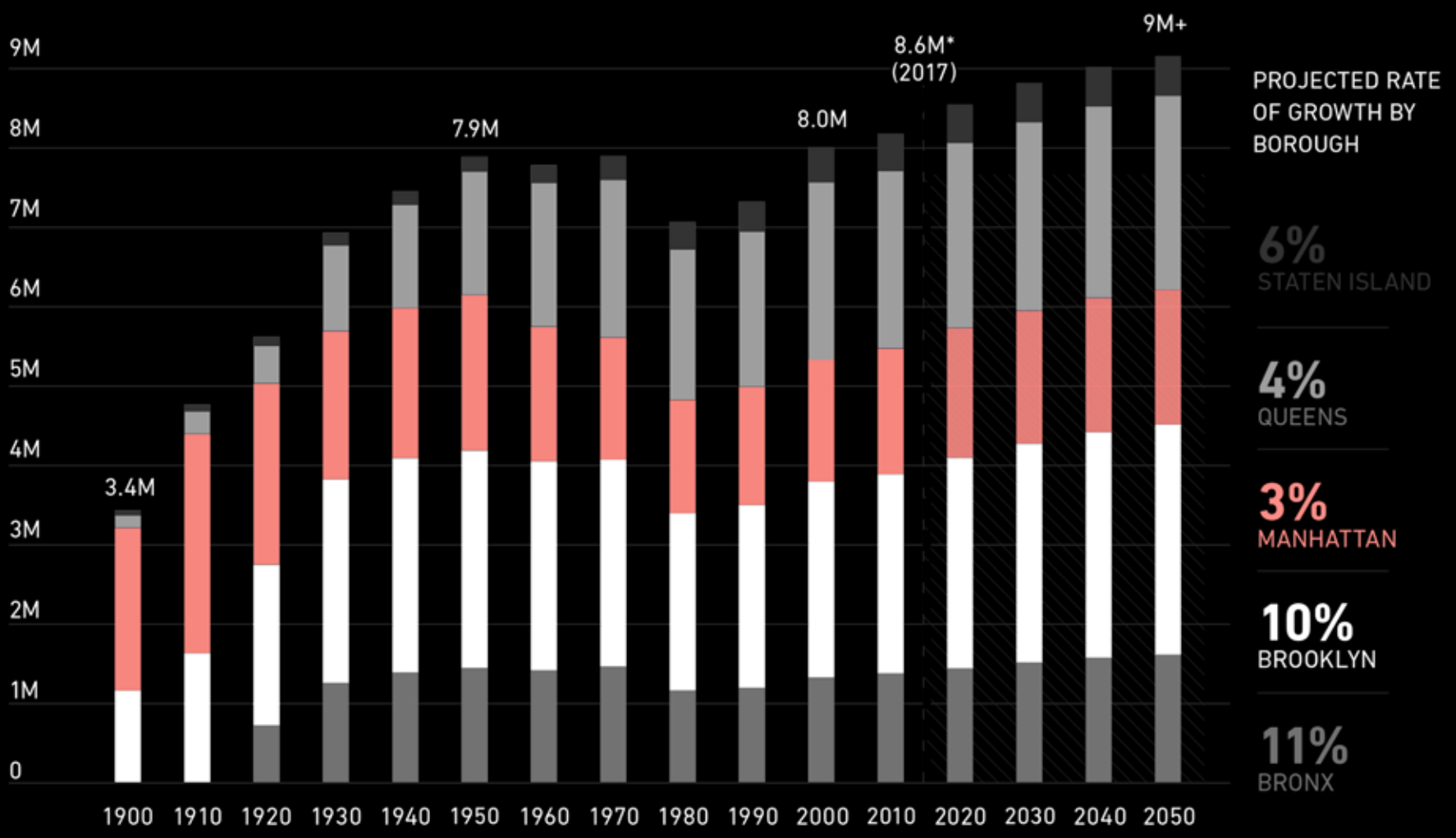


On the Brooklyn Bridge, painters were suspended from wires 1914.(2012)



Aerial view of Pedestrians on zebra crossing in New York City (Alija).

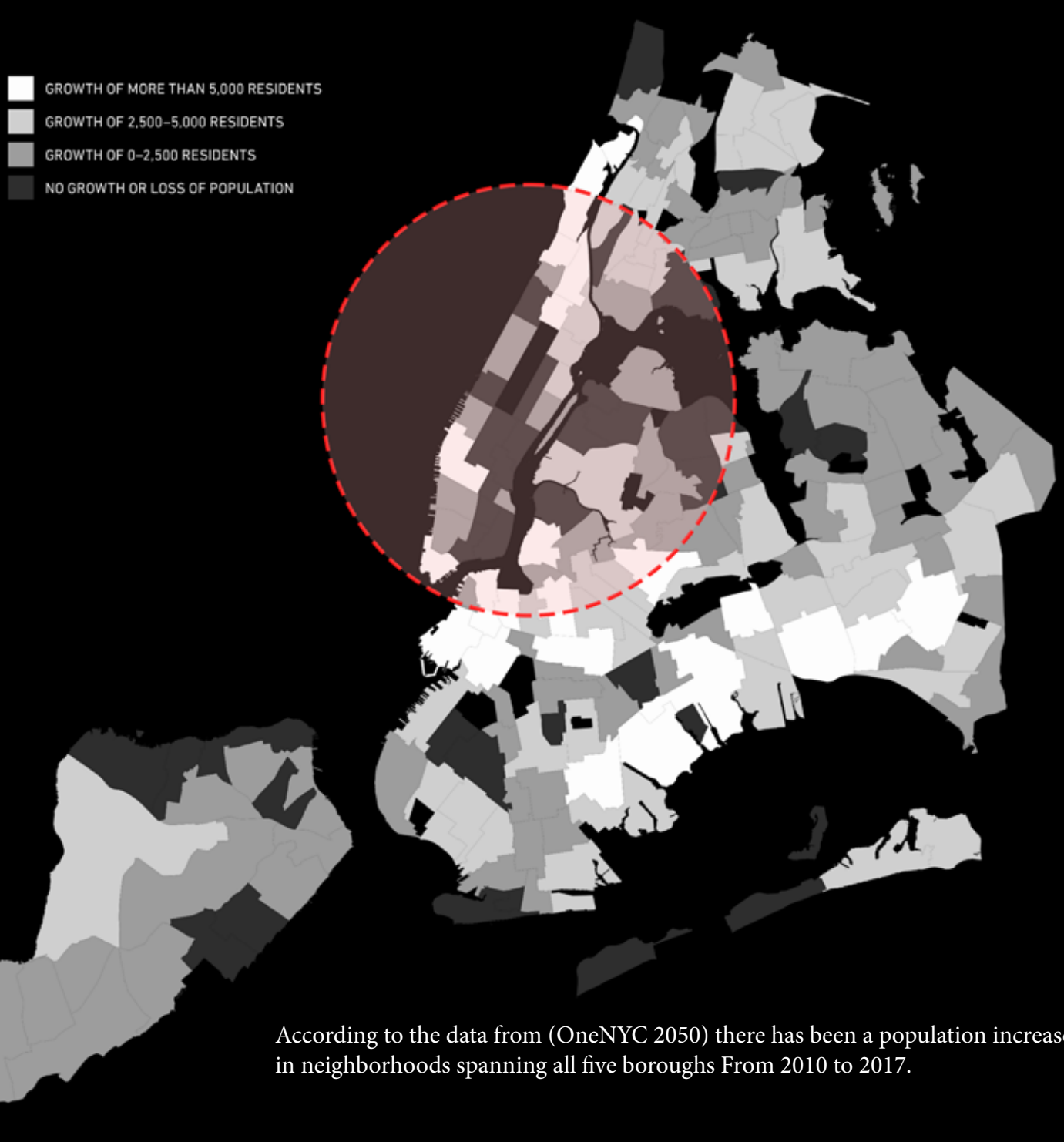
According to ONENYC 2050, With New York City's population reaching a historic peak, it is anticipated to exceed 9 million residents by 2050, solidifying its status as a thriving hub attracting individuals in pursuit of opportunities. This trend is not limited to the city alone but extends throughout the metropolitan region. By 2050, the regional population, which currently stands at 23 million, is projected to surpass 26 million. (ONENYC 2050)



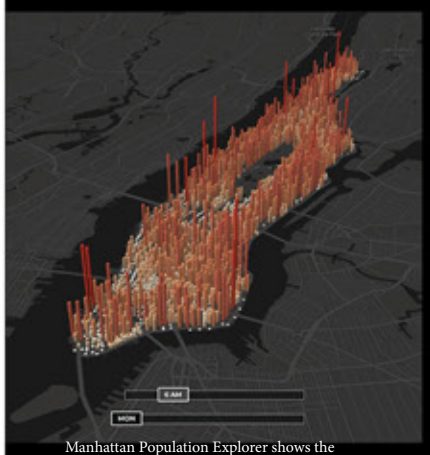
By 2050, the population of New York City is expected to exceed 9 million, experiencing the most rapid growth in the Bronx and Brooklyn/Date from (OneNYC 2050)

City of New York
Population by year

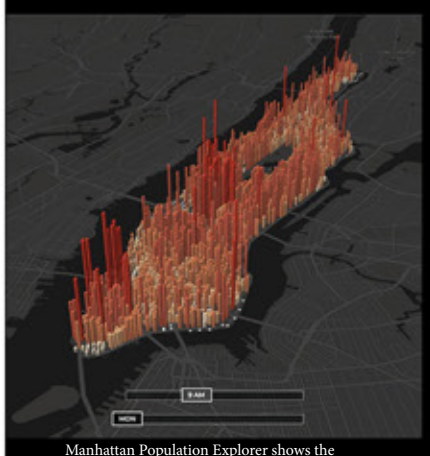
1656	1,000
1690	6,000
1790	33,131
1800	60,515
1810	96,373
1820	123,706
1830	202,589
1840	312,710
1850	515,547
1860	813,669
1870	942,292
1880	1,206,299
1890	1,515,301
1900	3,437,202
1910	4,766,883
1920	5,620,048
1930	6,930,446
1940	7,454,995
1950	7,891,957
1960	7,781,984
1970	7,894,862
1980	7,071,639
1990	7,322,564
2000	8,008,278
2010	8,175,133
2020	8,804,190



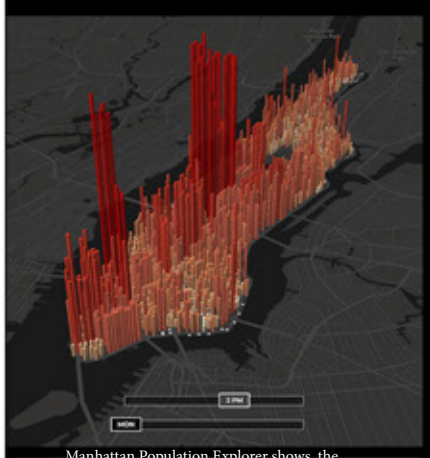
According to the data from (OneNYC 2050) there has been a population increase in neighborhoods spanning all five boroughs From 2010 to 2017.



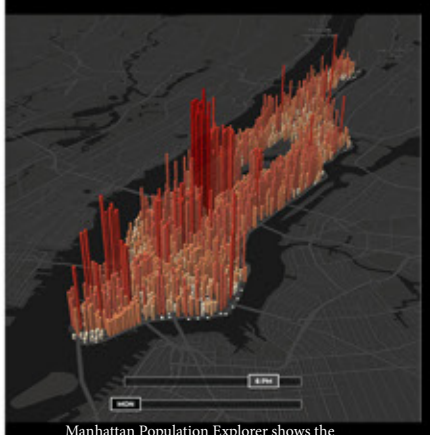
Manhattan Population Explorer shows the New York City population at 6 am (Fung).



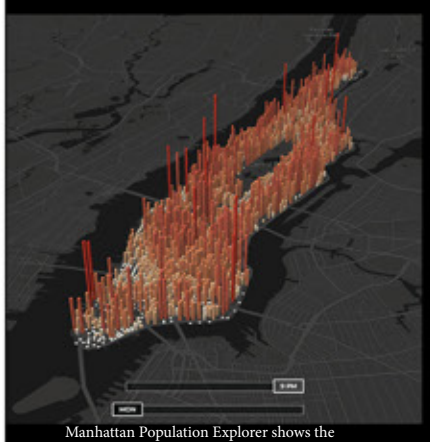
Manhattan Population Explorer shows the New York City population at 9 am (Fung).



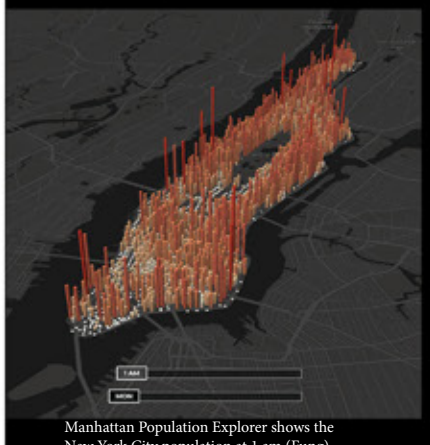
Manhattan Population Explorer shows the New York City population at 2 pm (Fung).



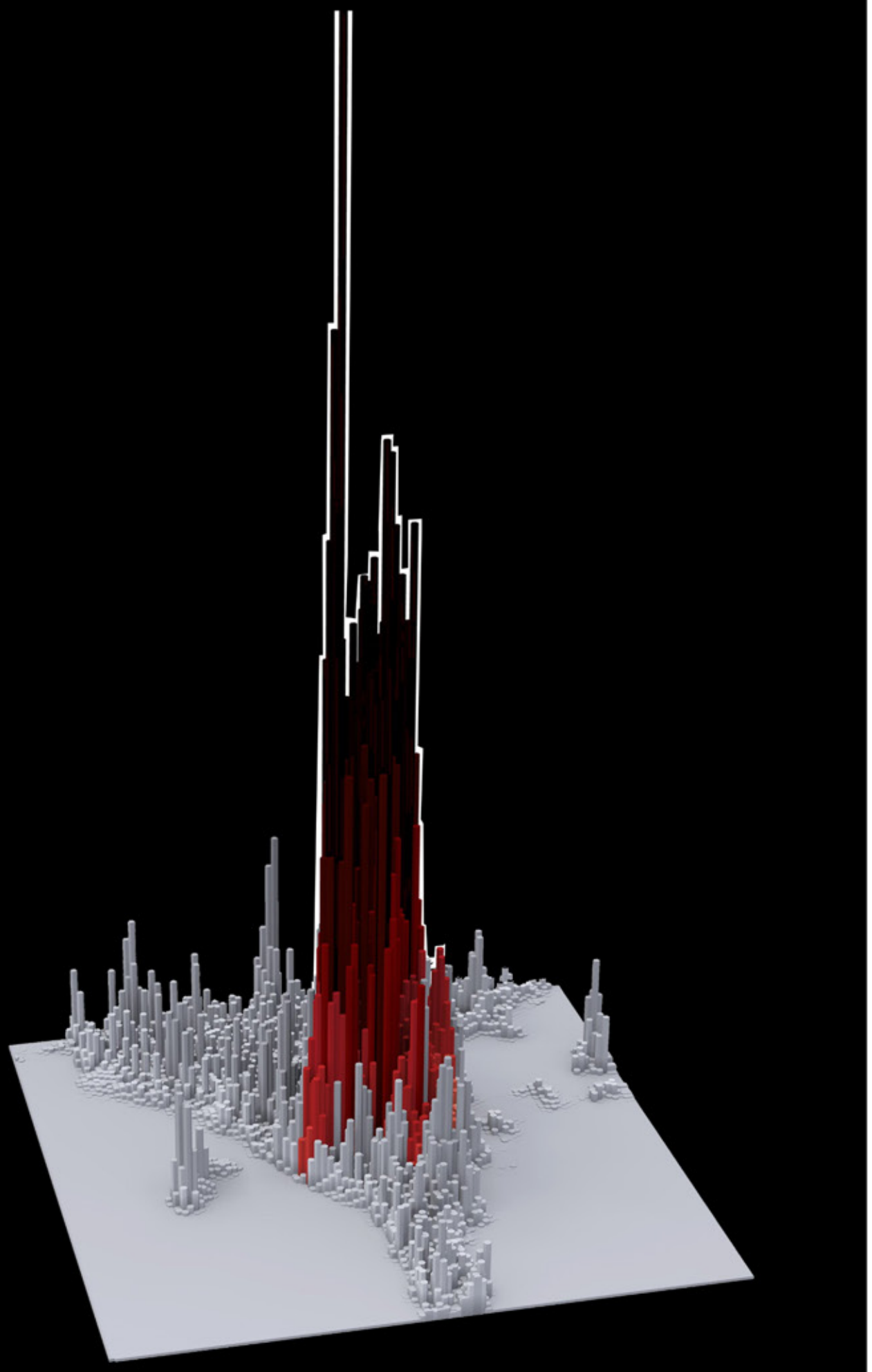
Manhattan Population Explorer shows the New York City population at 6 pm (Fung).



Manhattan Population Explorer shows the New York City population at 9 pm (Fung).

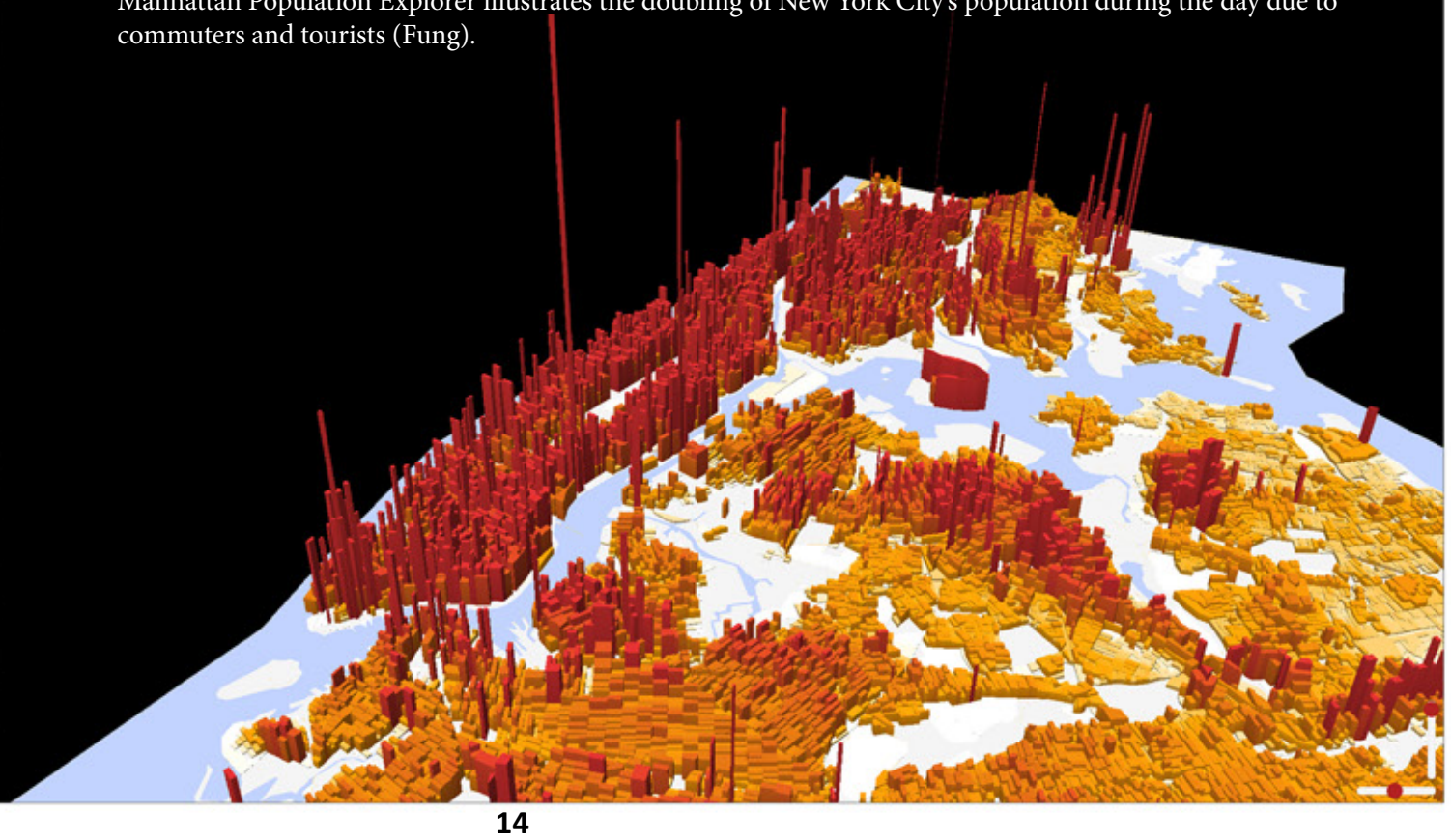


Manhattan Population Explorer shows the New York City population at 1 am (Fung).



The visual representations use mapping techniques to showcase the density of cities, capturing the count of individuals inhabiting and working within an area spanning one square kilometer This diagram offers valuable insights into the average population density that encompasses residents and workers over 24 hours (Colman, 2019).

Manhattan Population Explorer illustrates the doubling of New York City's population during the day due to commuters and tourists (Fung).

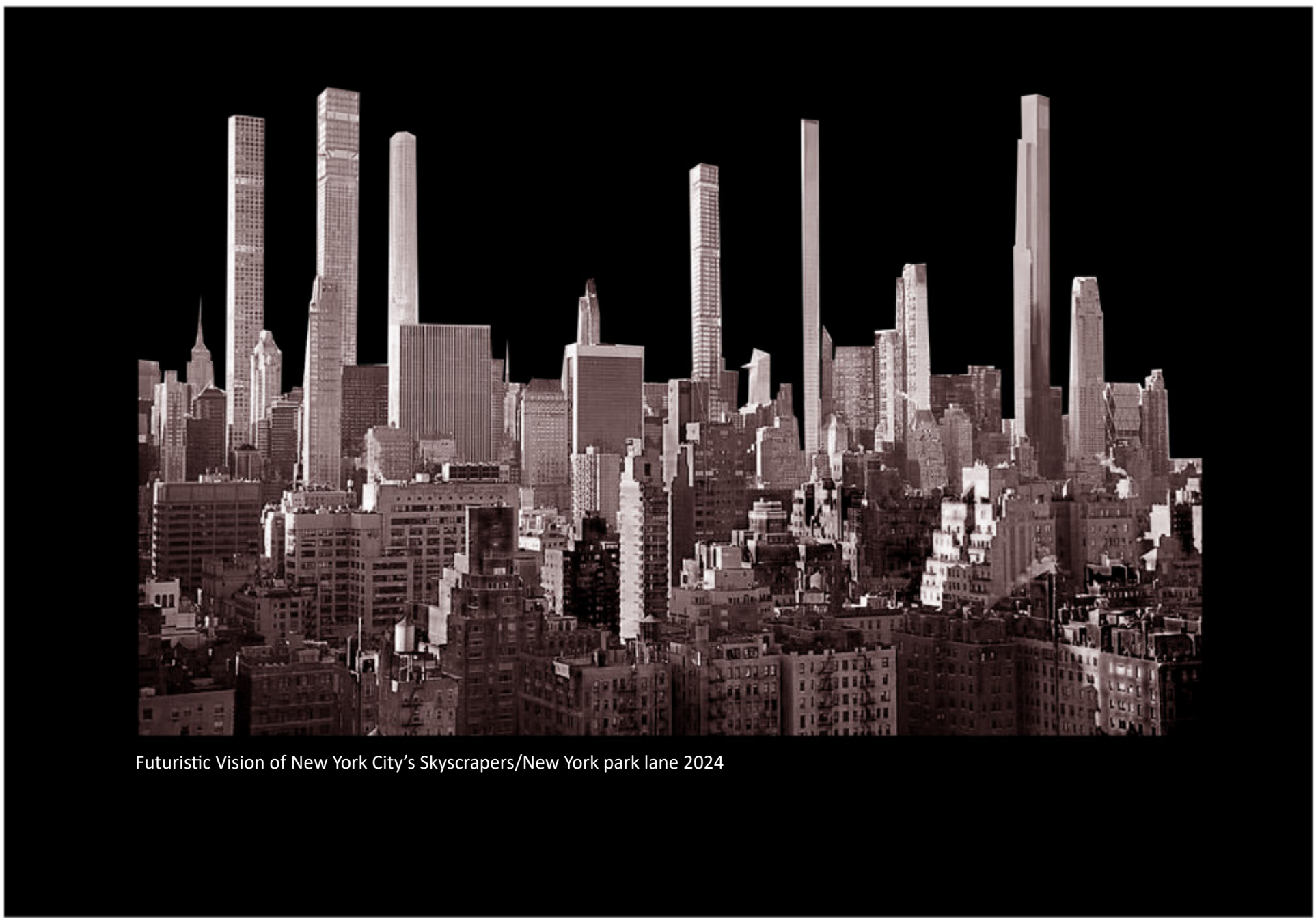


02 Issue

No programmatic connections between building to each other and between floors to each other



The Captive Globe: Axonometric Drawing by Rem Koolhaas, 1972



Futuristic Vision of New York City's Skyscrapers/New York park lane 2024

The Significance of The Grid

In his discourse on “Delirious New York,” Rem Koolhaas discusses the significance of the concept of The Grid and illustrates a collection of ‘Cities within Cities,’ wherein the celebration of distinct values on each ‘island’ strengthens the unity of the entire archipelago system. By deliberately segregating exterior and interior architecture and transforming the latter into independent units, these structures can dedicate their exteriors exclusively to formalism while focusing their interiors solely on functionalism. This approach not only permanently resolves the conflict between form and function but also cultivates a city where enduring monolithic structures embrace the inherent dynamism of the metropolis (Koolhaas, 1994).

Lobotomy

Lobotomy: Challenging the Relationship between Building Interiors and Exteriors

In his book “Delirious New York,” Reem discussed the traditional approach in Western architecture, which assumes a desire to establish a moral connection between the interior and exterior of buildings. It is believed that the exterior should reveal certain aspects of the interior that the interior substantiates. The concept of an “honest” facade communicates the activities concealed within. However, from a mathematical perspective, the interior volume of three-dimensional objects increases exponentially while the enclosing envelope only increases incrementally. This means that less and less surface area must represent an ever-increasing interior activity (Koolhaas, 1994).

Schism

Schism: Challenging Symbolism and Embracing Independence in Skyscraper Design

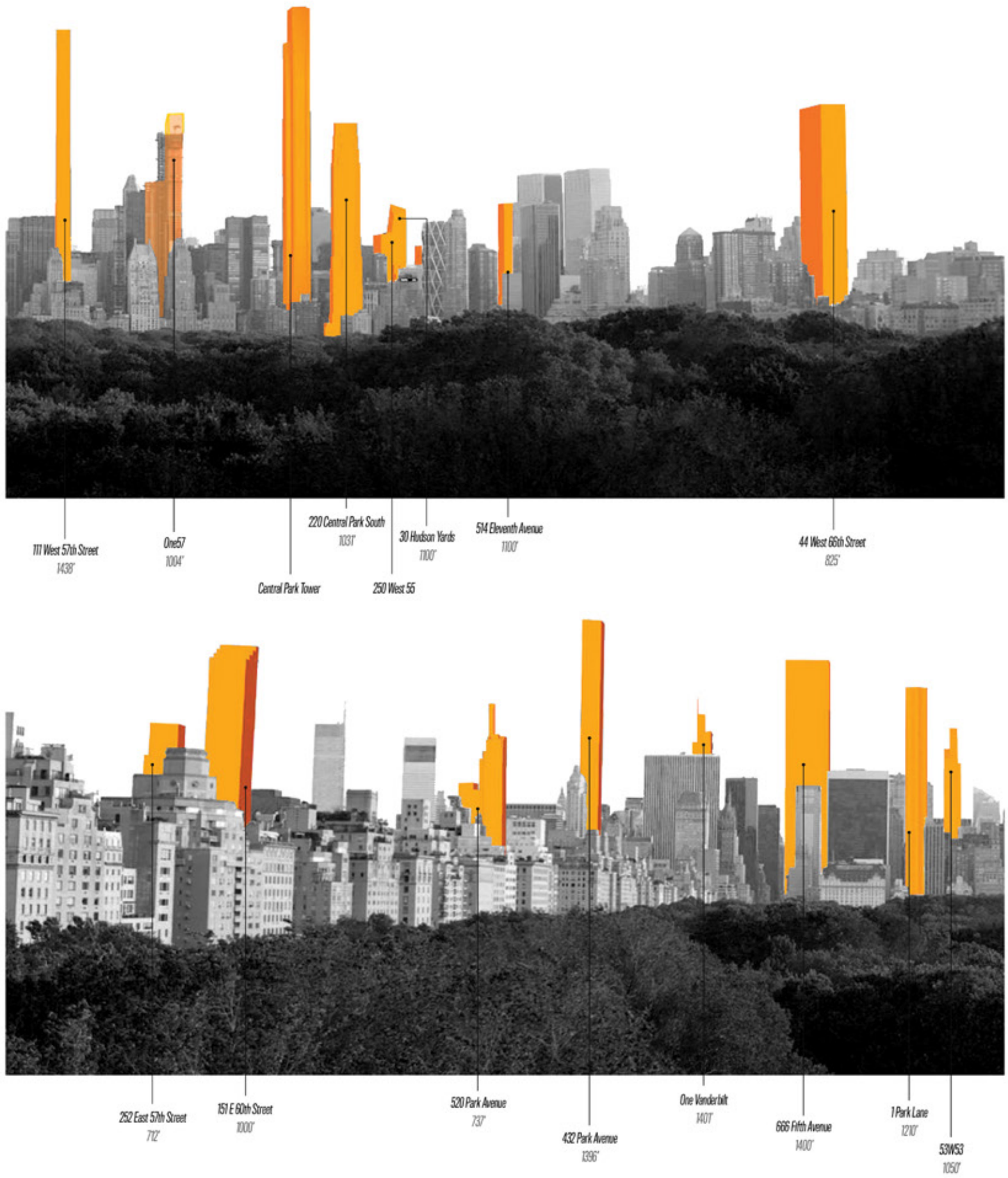
In the book “Delirious New York,” Reem explored the idea in an architectural context; it is essential to prevent the seepage of symbolism between different floors. The fragmented arrangement of thematic planes introduces an architectural approach for designing the interior of Skyscrapers, which have achieved autonomy through the lobotomy technique. This approach, known as the Vertical Schism, intentionally severs the connection between stories. By rejecting the reliance of one floor on another, the Vertical Schism enables the arbitrary distribution of spaces within a single building (Koolhaas, 1994).



Views from The accidental skyline report capturing Lower Manhattan in the year 2013 (The accidental skyline: 2017).



Views from The accidental skyline report capturing Lower Manhattan in the year 2025 (The accidental skyline: 2017).



A modified skyline featuring the proposed 2025 build-out, as viewed from Central Park, offering a glimpse of the evolving cityscape (The accidental skyline: 2017).

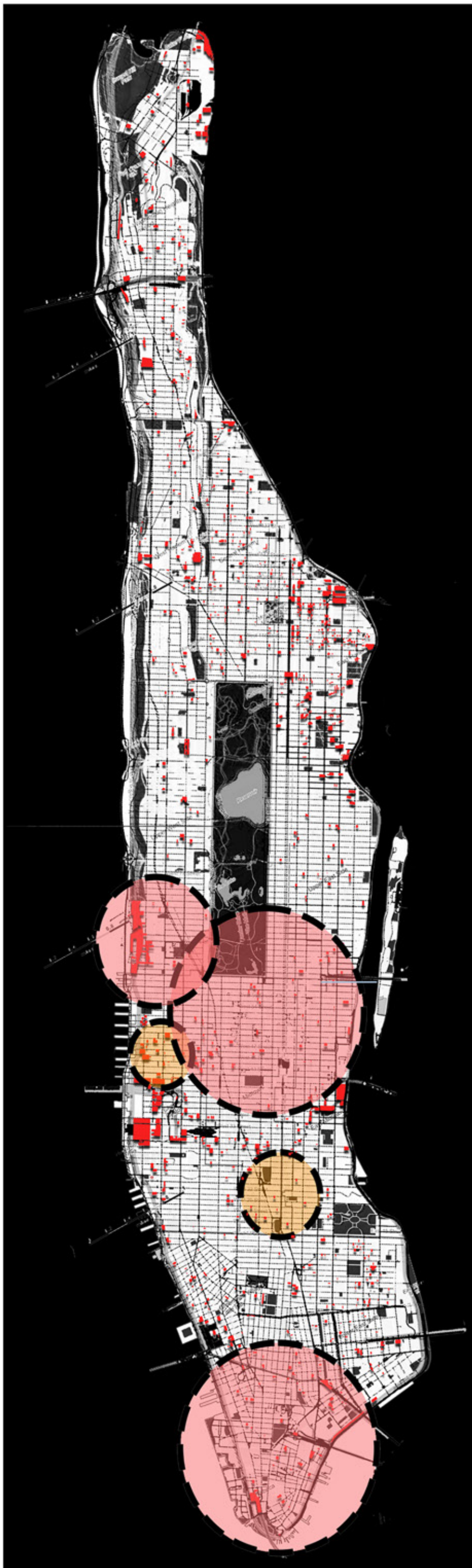
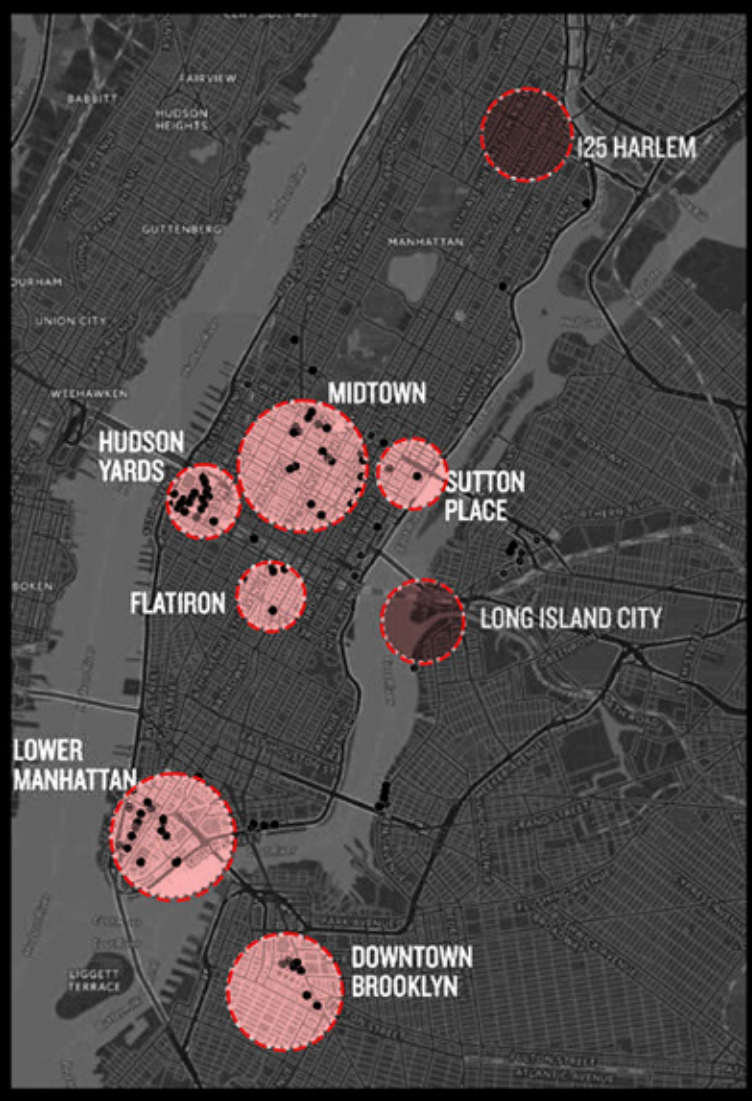


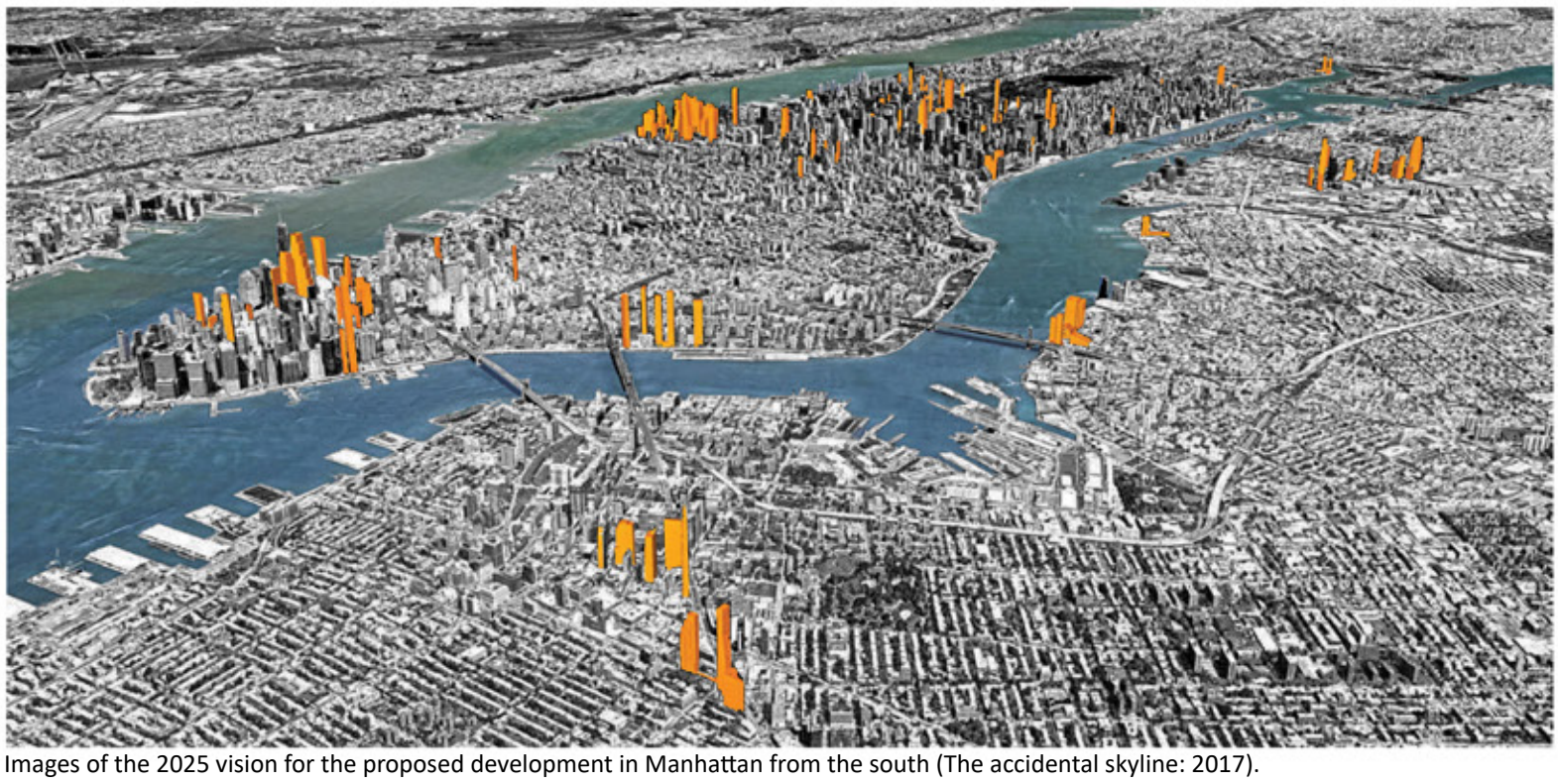
Diagram illustrating the proposed locations of future developments for the new Manhattan skyline.



Diagrams from the accident skyline show status of completed, under-construction, or proposed projects (The accidental skyline: 2017).



Diagrams from the accident skyline to show The distribution of available development rights and prominent areas of interest (The accidental skyline: 2017).

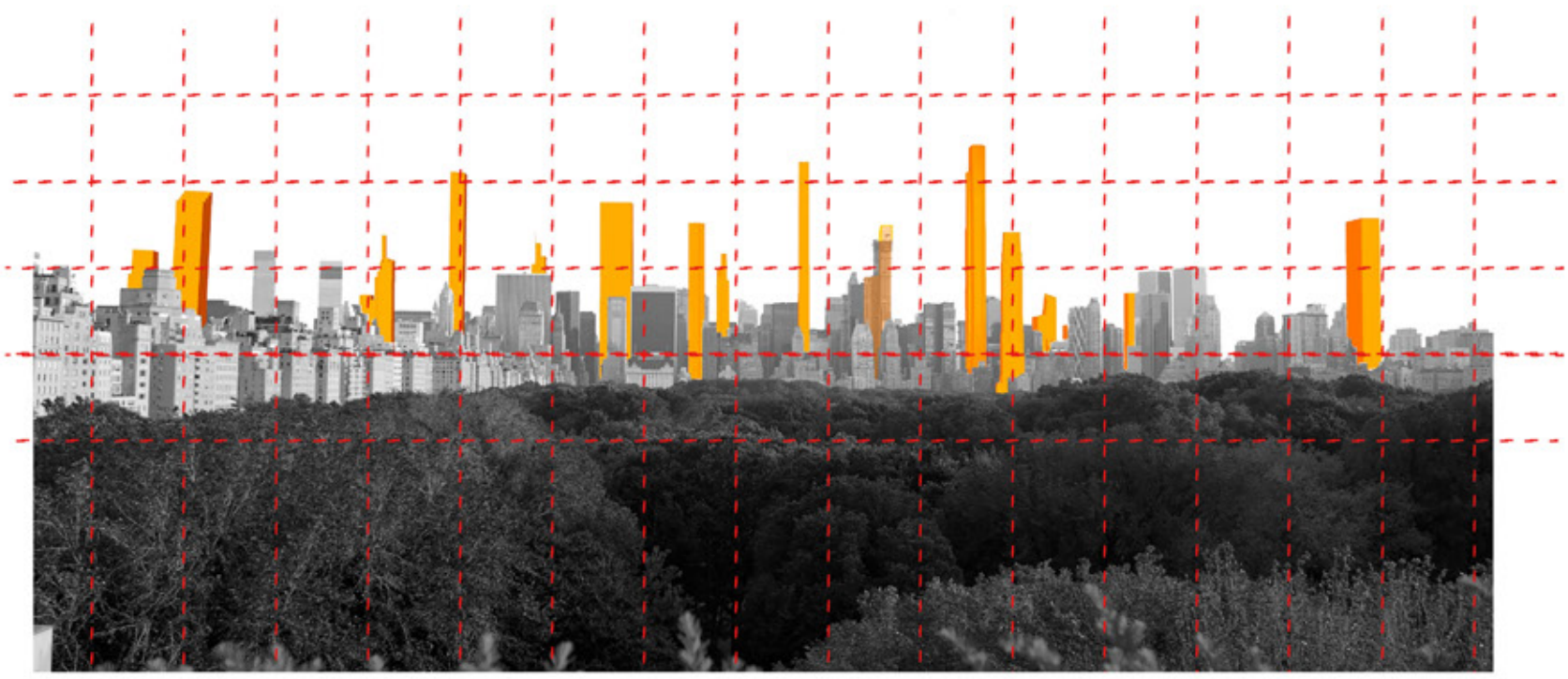


Images of the 2025 vision for the proposed development in Manhattan from the south (The accidental skyline: 2017).



Images of the 2025 vision for the proposed development in Manhattan from the west (The accidental skyline: 2017).

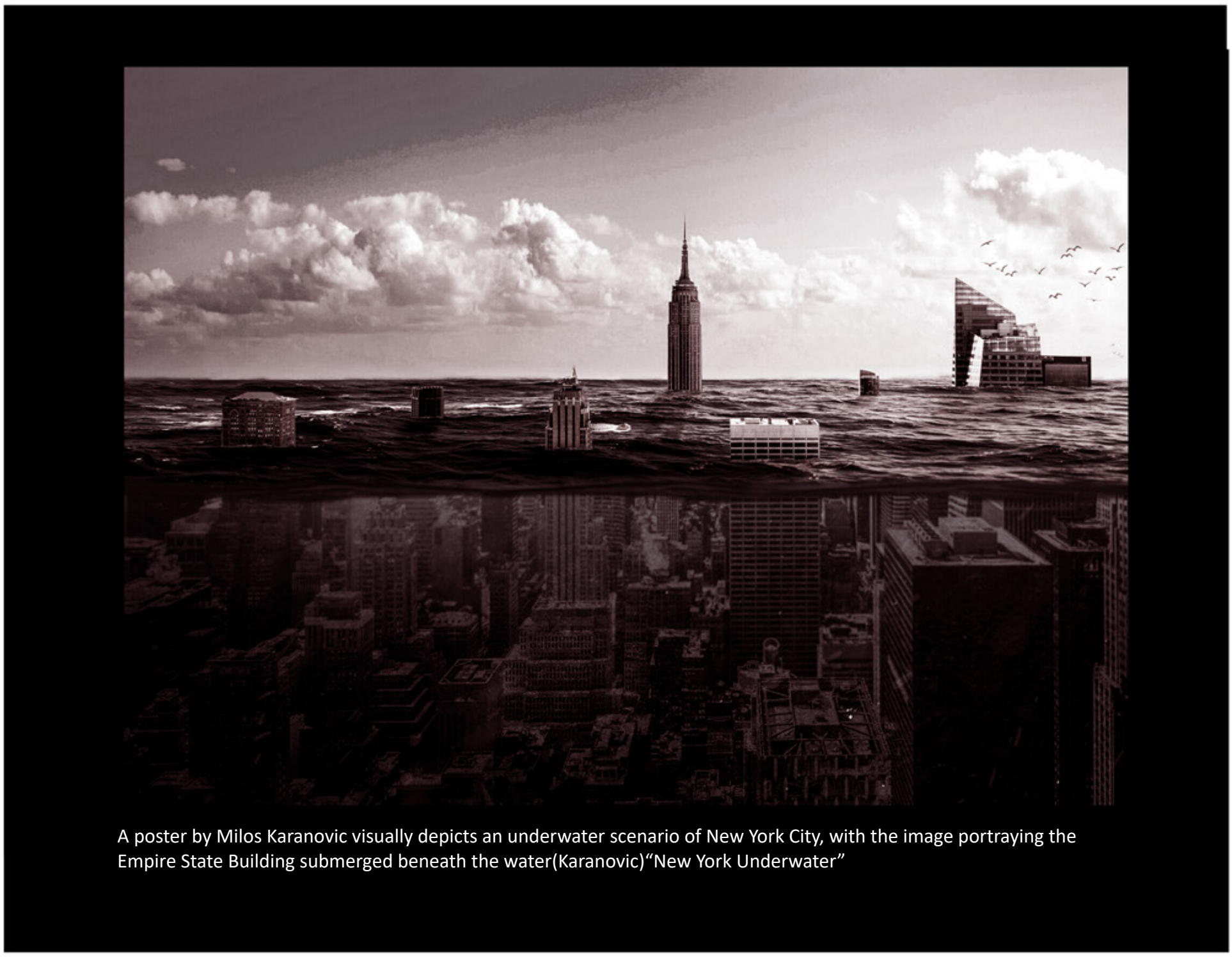
Proposing the integration of a three-dimensional grid into the accidental skyline to restructure and optimize urban development. This grid system would enhance connectivity and promote efficient land utilization and resource allocation. By embracing vertical density, the grid would facilitate the creation of vibrant and sustainable communities, encouraging social interaction and fostering a stronger sense of place. Additionally, the grid's implementation would provide opportunities for innovative architectural designs, accommodating diverse functions and addressing the city's evolving needs.



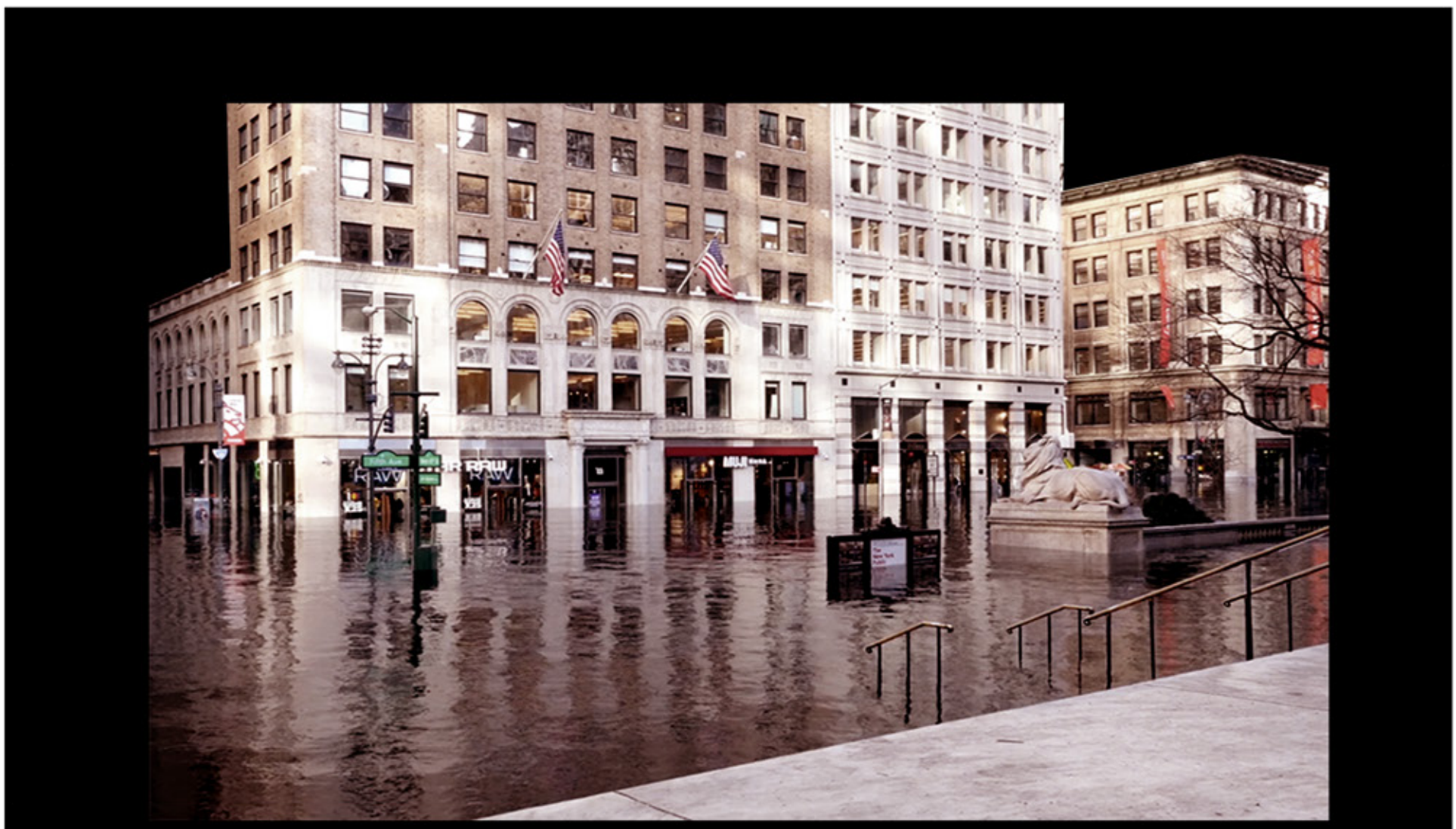
The diagrams depict the potential integration of a three-dimensional grid into the proposed accidental skyline

03 Issue

Threat of rising sea levels



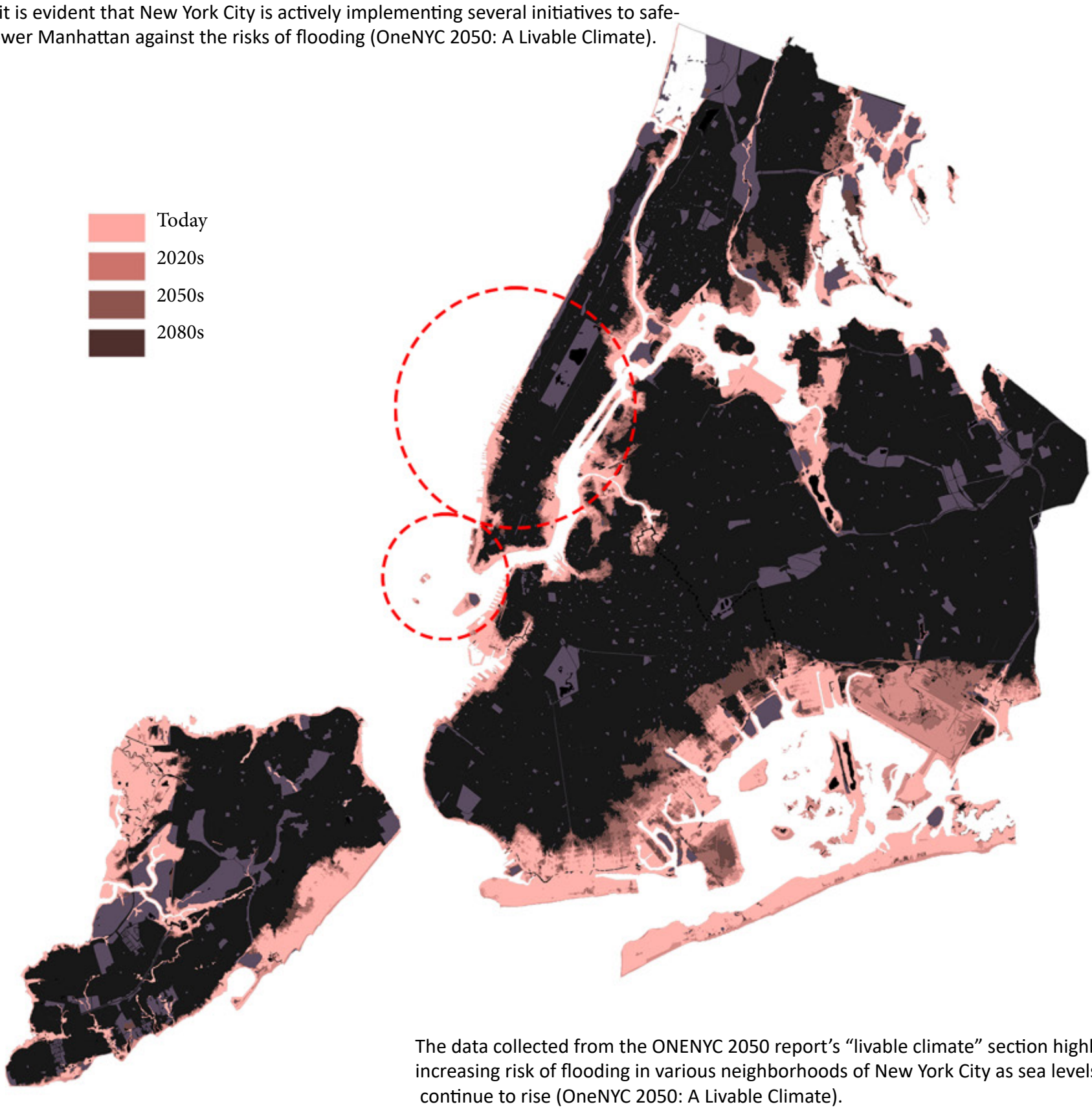
A poster by Milos Karanovic visually depicts an underwater scenario of New York City, with the image portraying the Empire State Building submerged beneath the water(Karanovic)“New York Underwater”



An image showcasing a flooded street in New York City following the impact of a hurricane



Based on the data collected from the ONENYC 2050 report's "livable climate" section, it is evident that New York City is actively implementing several initiatives to safe-guard Lower Manhattan against the risks of flooding (OneNYC 2050: A Livable Climate).



The data collected from the ONENYC 2050 report's "livable climate" section highlights the increasing risk of flooding in various neighborhoods of New York City as sea levels continue to rise (OneNYC 2050: A Livable Climate).

CHRONIC HAZARDS		BASELINE 1971–2000	2050 MIDDLE RANGE	2050 HIGH END	2100 MIDDLE RANGE	2100 HIGH END
AVERAGE TEMPERATURE		54°F	+4.1 TO 5.7°F	+6.6°F	+5.8 TO 10.4°F	+12.1°F
PRECIPITATION		50.1 IN.	+4 TO 11%	+13%	-1 TO +19%	+25%
		BASELINE 2000–2004	2050 MIDDLE RANGE	2050 HIGH END	2100 MIDDLE RANGE	2100 HIGH END
SEA LEVEL RISE		0	+11 TO 21 IN.	+30 IN.	+22 TO 50 IN.	+75 IN.
EXTREME EVENTS		**BASELINE 1971–2000**	**2050 MIDDLE RANGE**	**2050 HIGH END**	**2100 MIDDLE RANGE**	**2100 HIGH END**
HEAT WAVES & COLD EVENTS	NUMBER OF DAYS PER YEAR WITH MAXIMUM TEMPERATURE AT OR ABOVE 90 °F	18	39 TO 52	57	-	-
	NUMBER OF HEAT WAVES PER YEAR	2	5 TO 7	7	-	-
	AVERAGE DURATION IN DAYS	4	5 TO 6	6	-	-
	NUMBER OF DAYS PER YEAR WITH MINIMUM TEMPERATURE AT OR BELOW 32 °F	71	42 TO 48	52	-	-
INTENSE PRECIPITATION	NUMBER OF DAYS PER YEAR WITH RAINFALL EXCEEDING 2 INCHES	3	4	5	-	-
		BASELINE 2000–2004	2050 MIDDLE RANGE	2050 HIGH END	2100 MIDDLE RANGE	2100 HIGH END
COASTAL FLOODS AT THE BATTERY	FUTURE ANNUAL FREQUENCY OF TODAY'S 100-YEAR FLOOD	1%	1.6 TO 2.4%	3.6%	-	-
	FLOOD HEIGHTS (FEET) ASSOCIATED WITH 100-YEAR FLOOD	11.3	12.2 TO 13.1	13.8	-	-

The ONENYC 2050 report, specifically its "livable climate" section, presents data that sheds light on the projections made by the NPCC regarding climate hazards and extreme events anticipated to take place until the conclusion of the century. (OneNYC 2050: A Livable Climate).

Will these efforts be sufficient for the future?

Due to limitations, implementing land-based adaptation measures is not viable for the Seaport and Financial District areas of Lower Manhattan, leaving them highly vulnerable to climate threats. To address this challenge, the city intends to extend the shoreline into the East River and construct new land at elevated points above the current sea level. However, the question remains: will these efforts be sufficient for the future? It is worth considering the option of building elevated streets or artificial ground that can facilitate the movement of people between buildings during hurricanes or extreme flooding. By doing so, the impact of these severe weather events on people's daily lives could be minimized, with the lower city being temporarily shut down while the upper city remains functional.

Moreover, envision a scenario where nature is seamlessly integrated both vertically and horizontally into both the existing and new areas of Manhattan. This integration could involve the incorporation of green spaces, public parks, and vegetation, allowing nature to reclaim its presence. Achieving this vision might necessitate the implementation of new zoning laws mandating a specific percentage of green spaces in each neighborhood or block. Such laws would promote a livable climate and highlight the significance of landscapes in mitigating heat and enhancing air quality within the city.

THESIS STATEMENT

By challenging the common perception of cities as solely comprised of tall buildings and horizontally sprawled, this thesis proposes a paradigm shift that envisions cities as hybrid networks of functionalities, neighborhoods, and circulation organized within a three-dimensional grid. By merging and integrating the existing city of Manhattan with a new counterpart, this innovative approach aims to enhance the overall quality of life for urban residents and address the challenges faced by metropolitan areas. Embracing new trends and technologies, the thesis seeks to adapt and reshape the urban fabric to create a harmonious and sustainable urban environment. Key factors driving this approach include improving connections between buildings, addressing space constraints due to rapid population growth, and creating public spaces catering to social interaction, recreation, and access to the nature of the urban fabric. The impending threat of rising sea levels further heightens the urgency of these challenges.

2.1 Aspirations and Fantasies of New York City

2.2 Existing Evidence in New York City

2.3 Relevant Case studies

EVIDENCE AND CASE STUDIES

2.1 Aspirations and Fantasies of New York City



Moses King, “King’s Dreams of New York,” King’s Views of New York, 1908-1909



Moses King, “King’s Dreams of New York,” King’s Views of New York, 1908-1909

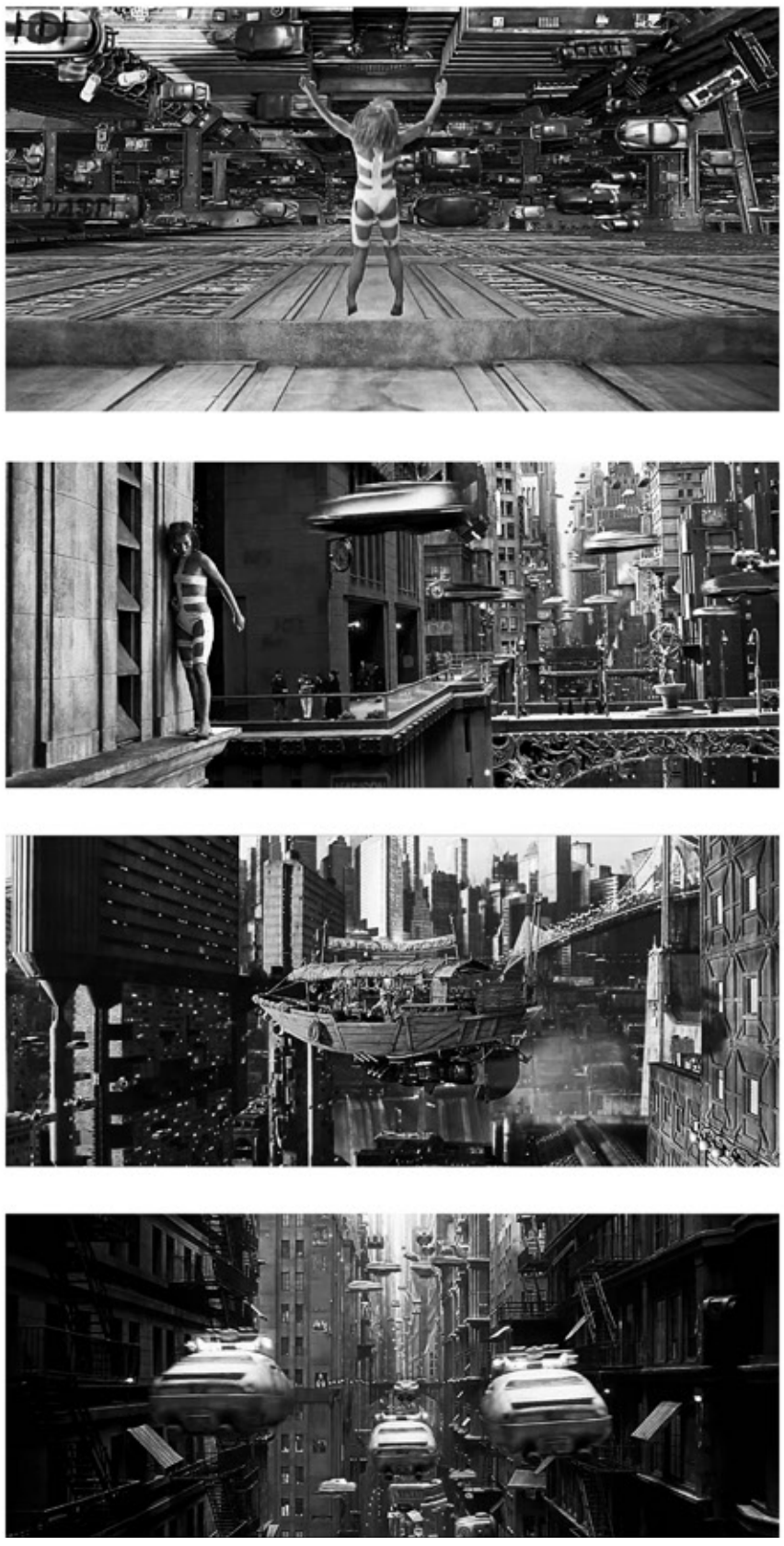
Screenshots from Metropolis. Directed by Fritz Lang. Universum Film A.G., 1927.



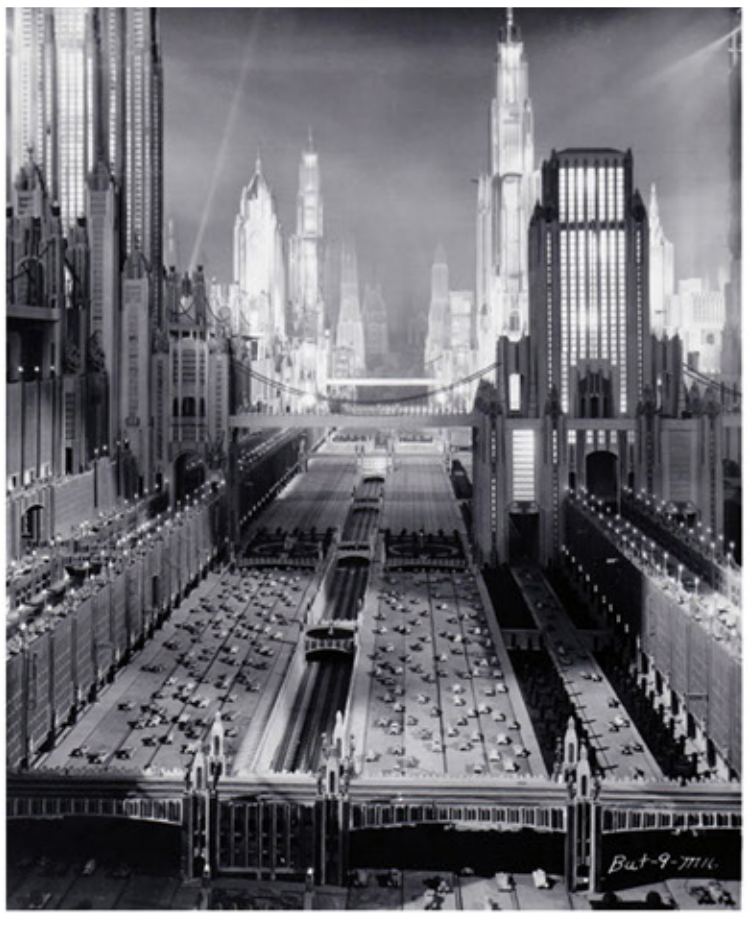




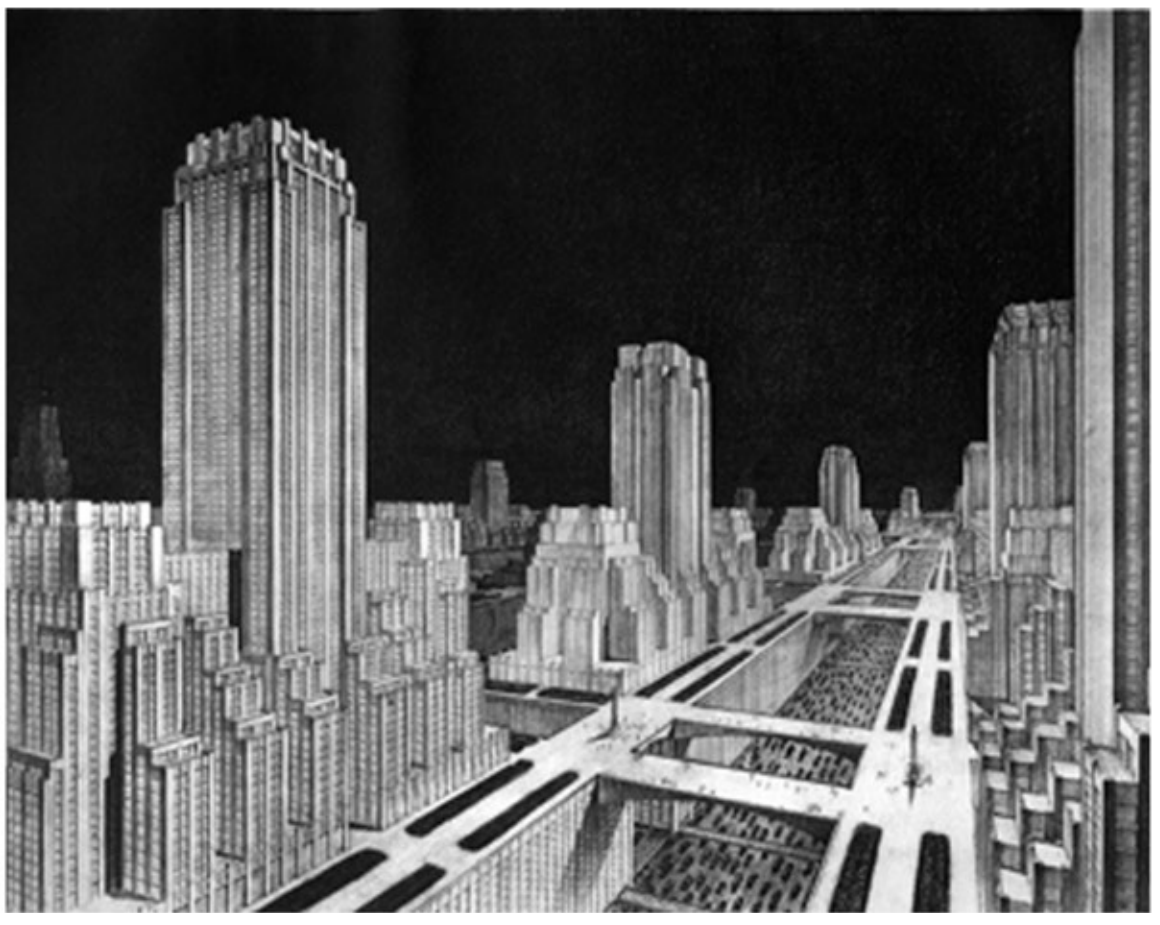




Screenshots of futuristic scenery created by Jean-Claude Mézières, from The Fifth Element,1997.



Screenshots of The Future City: A Glimpse into the 1930 Fox Film (Reddit)



Screenshots of Hundred Story City in the Neo-American Style by Francisco Mujica

2.2 Existing Evidence in New York City

Evidence 1: Existing Bridges In New York City



The East 24th Street Skybridge,(carr, 2014)



The Staple Street Skybridge 67 Hudson Street (carr, 2014)



The East 24th Street Skybridge,(carr, 2014)



The copper three-story skybridge, 116 West 32nd Street (carr, 2014)



The West 15th Street Skybridge,(carr, 2014)

Evidence 2: The High Line



The high line, Manhattan new york city /Designed by James Corner Field Operations (Project Lead), Diller Scofidio + Renfro, and Piet Oudolf (Nguyen, 2018).

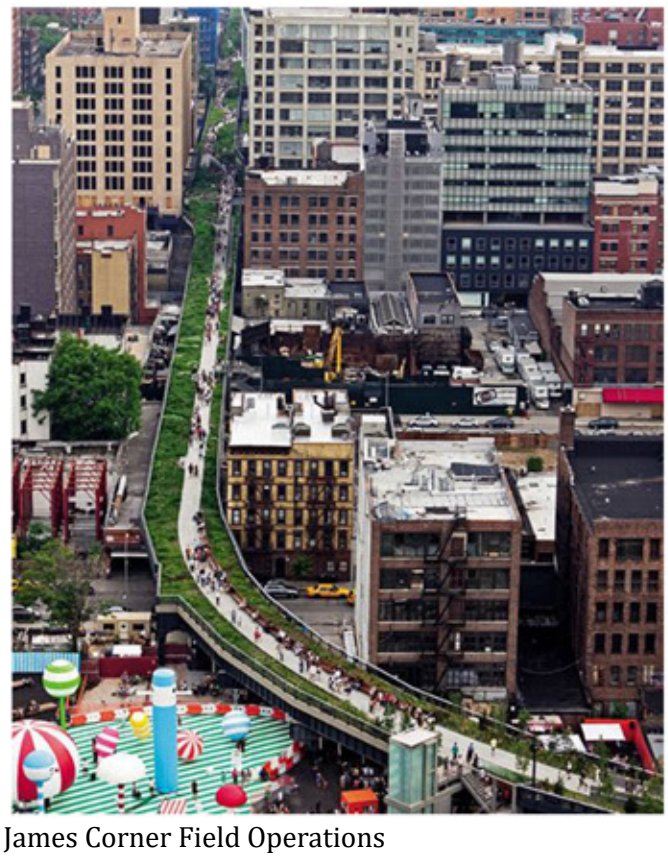


Arial view of the high line, Manhattan, New York City /Designed by James Corner Field Operations (Project Lead), Diller Scofidio + Renfro, and Piet Oudolf (Alija).



Aerial view of people walking on the high line, Manhattan, New York City /Designed by James Corner Field Operations (Project Lead), Diller Scofidio + Renfro, and Piet Oudolf (DS+R).

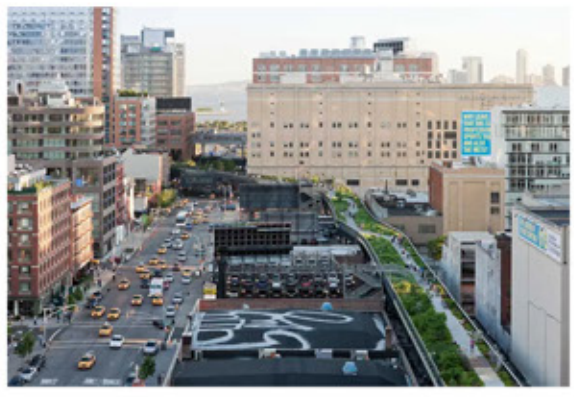




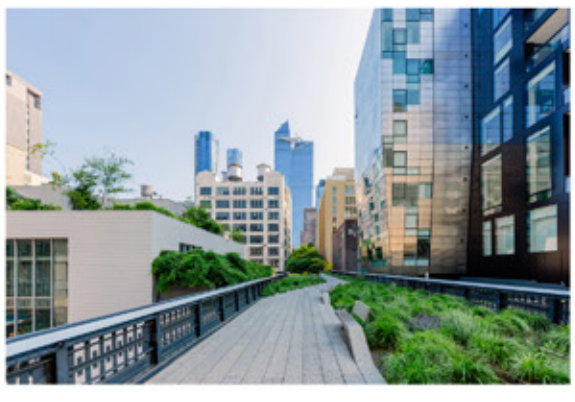
Aerial view of activities on the high line, Manhattan, New York City /Designed by James Corner Field Operations (Project Lead), Diller Scofidio + Renfro, and Piet Oudolf (Renfro, 2018).





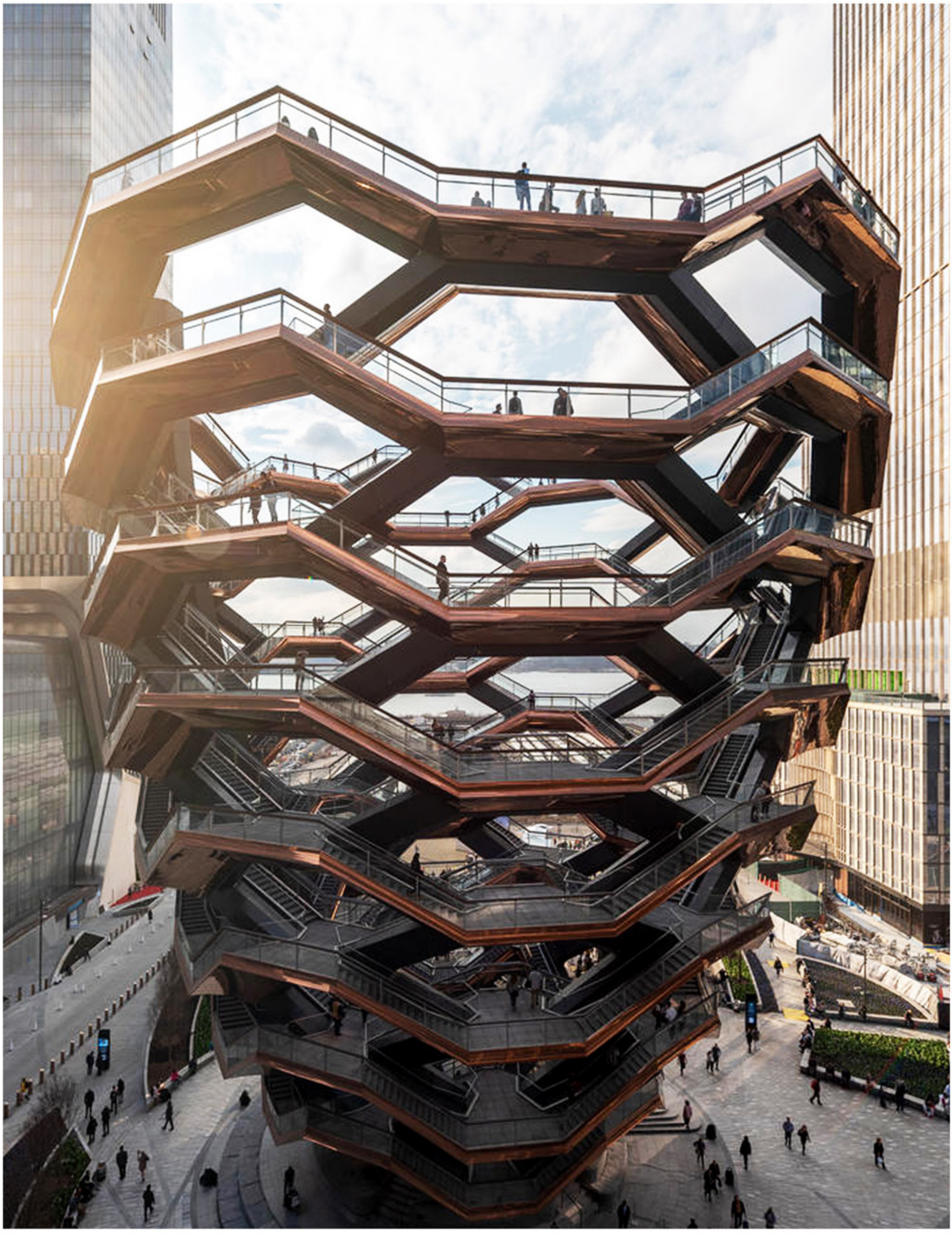






Aerial view of activities on the high line, Manhattan, New York City /Designed by James Corner Field Operations (Project Lead), Diller Scofidio + Renfro, and Piet Oudolf (Renfro, 2018).

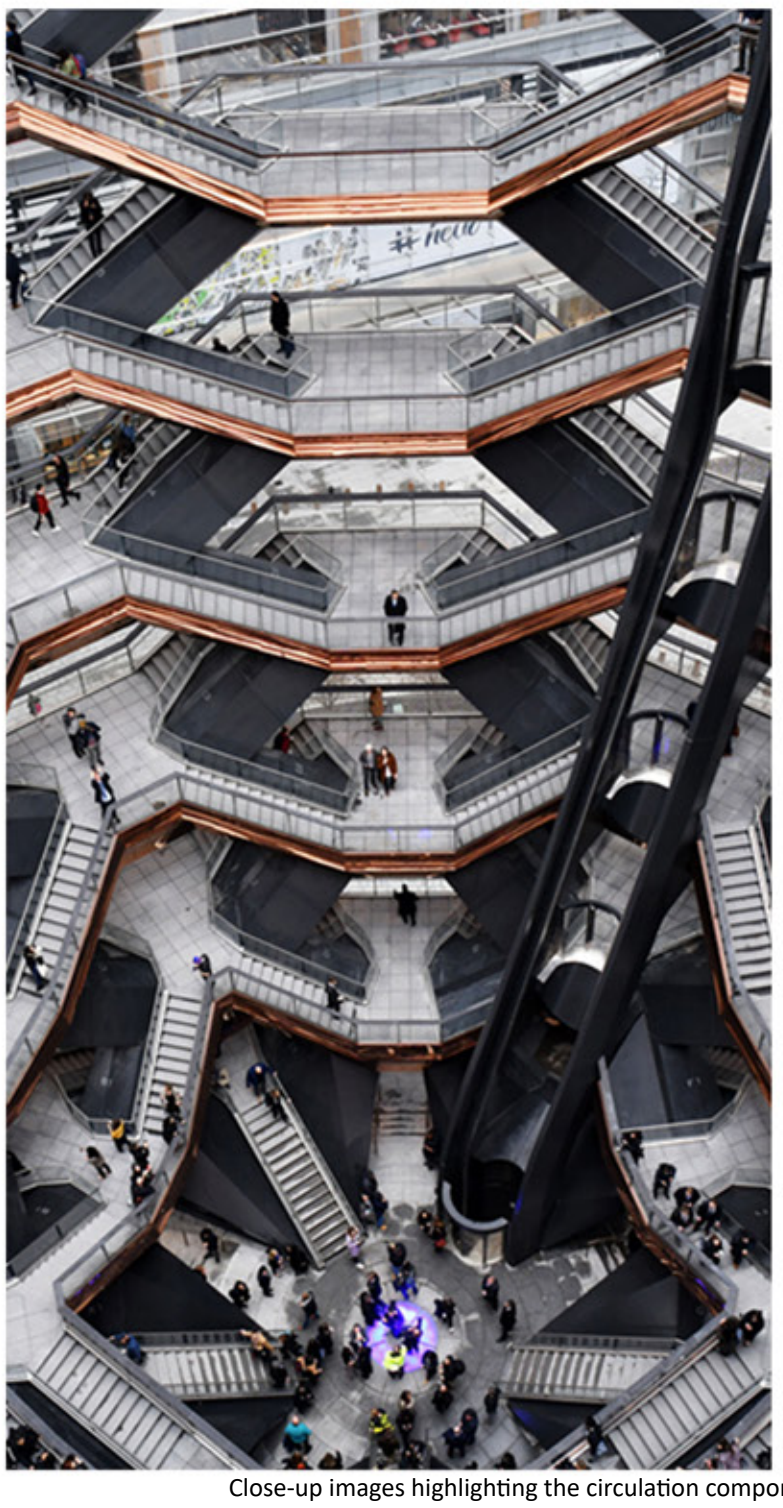
Evidence 3: The Vessel



The Vessel, located in Hudson Yards, New York/designed by Thomas Heatherwick



Close-up capturing the vibrant activity of people at The Vessel, located in Hudson Yards, New York/Designed by Thomas Heatherwick (Lynch, 2016).







Close-up images highlighting the circulation components such as the stairs and elevators inside The Vessel, located in Hudson Yards, New York/Designed by Thomas Heatherwick (Plitt, 2019).

High Line, The Vessel, and the Existing Bridges?

Combining the High Line, the Vessel, and the existing bridges in New York City into one architectural project would create a dynamic and interconnected urban experience. This integrated project would seamlessly blend the elevated greenery and modern design of the High Line with the unique and interactive structure of the Vessel. In addition, the existing bridges would serve as additional pathways, linking various buildings and structures within the city.

The result would be a multifaceted architectural endeavor that offers a range of experiences for residents and visitors alike. People could stroll along the elevated park of the High Line, enjoying panoramic views of the city and exploring the intricate pathways and viewpoints of the Vessel. In addition, the existing bridges would provide further connectivity, allowing for seamless movement and access between architectural landmarks.

This combined project would enhance the city's visual and functional aspects and create a cohesive urban experience that integrates nature, art, and urban infrastructure. In addition, it would be a testament to the innovative spirit of architecture and its ability to transform and shape urban environments into vibrant and engaging spaces.

2.3 Relevant Case studies



Linked Hybrid, Designed by Steven Holl Architects (Saieh, 2009).

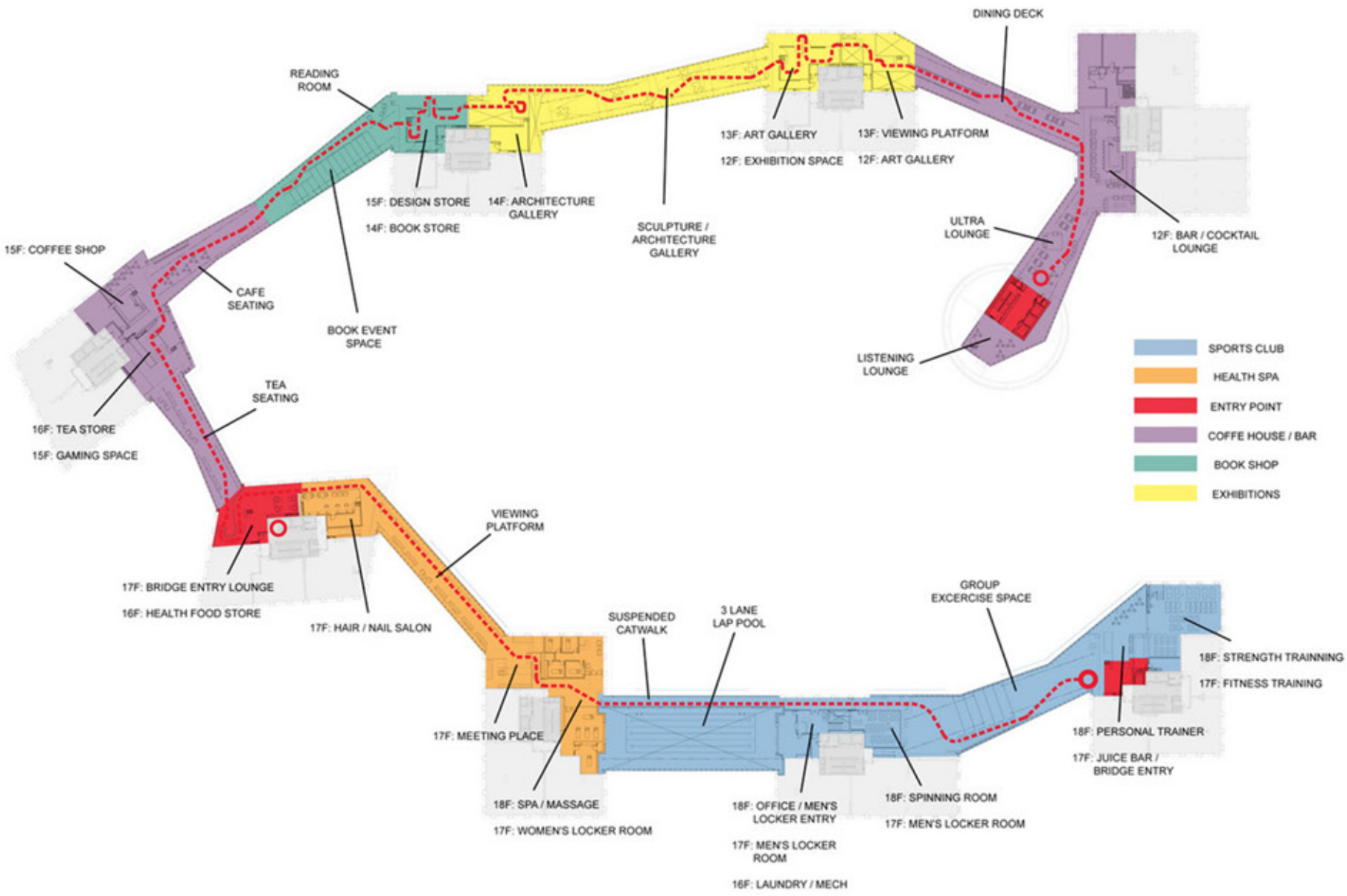


Linked Hybrid, Designed by Steven Holl Architects (Saieh, 2009).

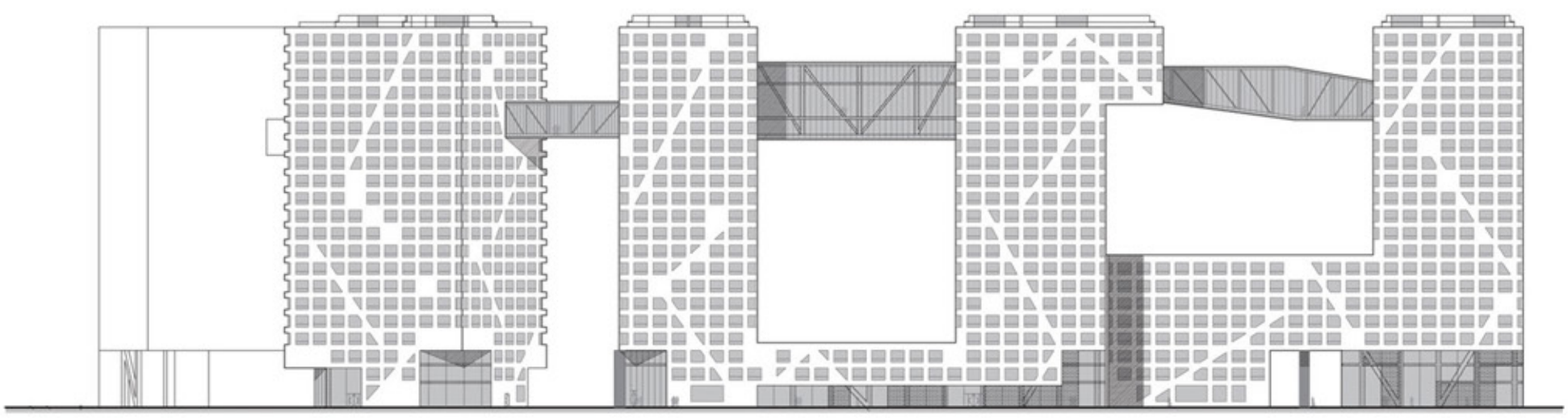


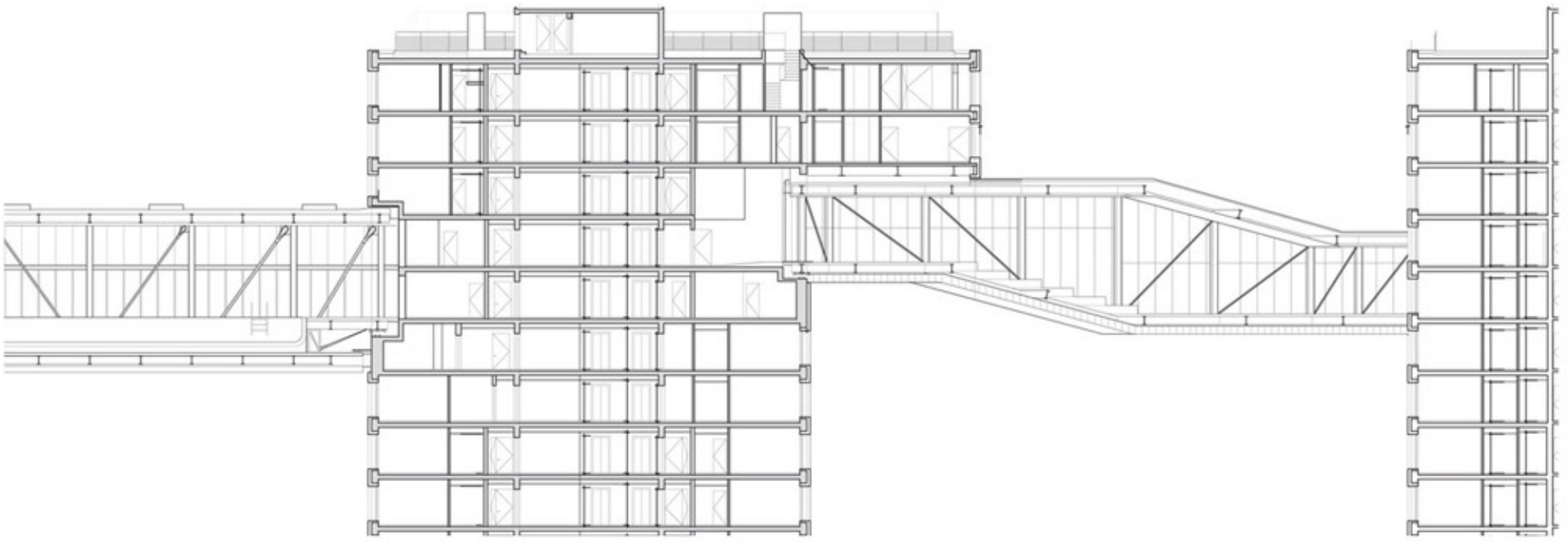


Linked Hybrid, Designed by Steven Holl Architects (Saieh, 2009).



Programmatic floor plan of Linked Hybrid, Designed by Steven Holl Architects (Saieh, 2009).

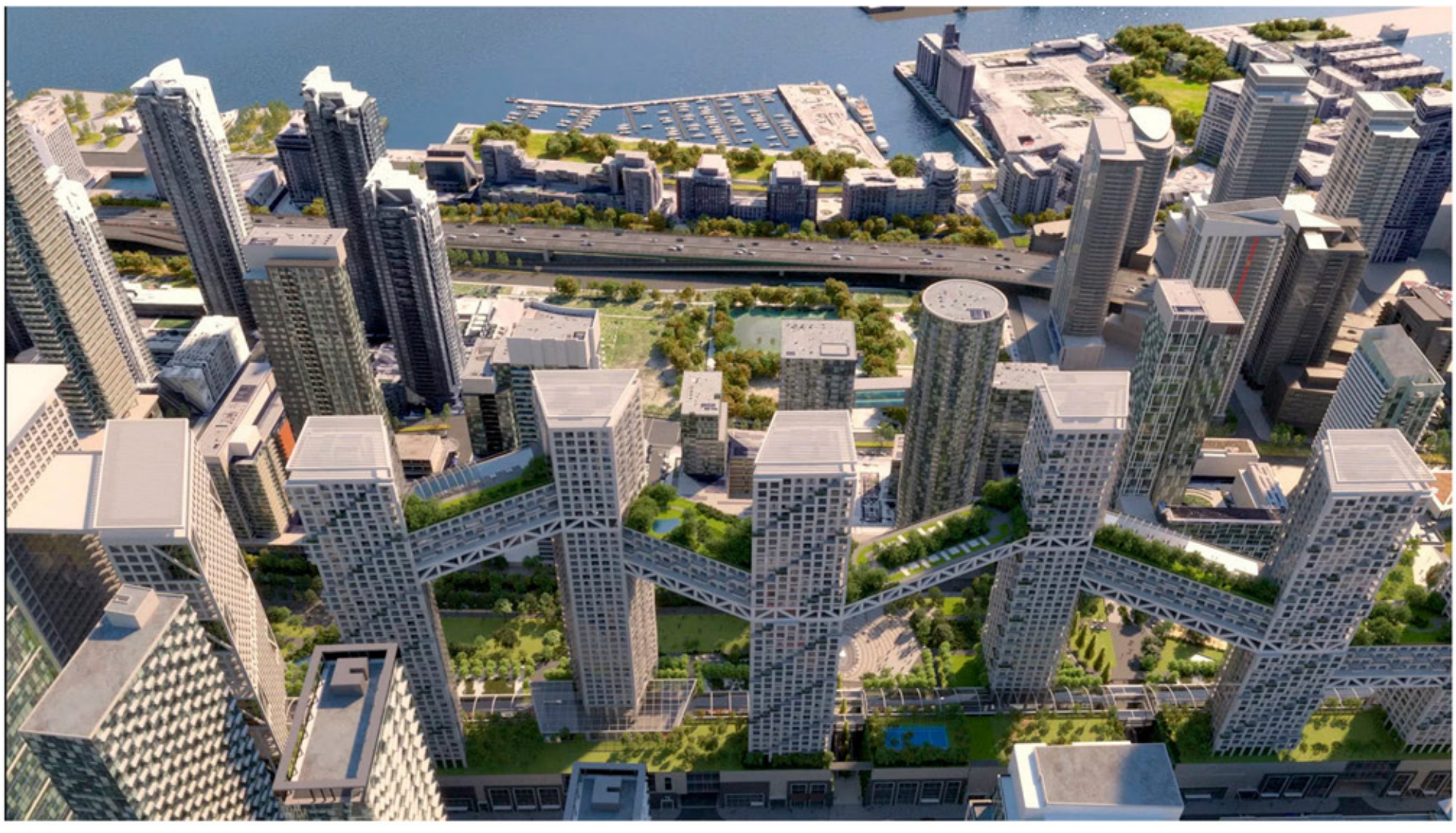




Section of Linked Hybrid, Designed by Steven Holl Architects (Saieh, 2009).



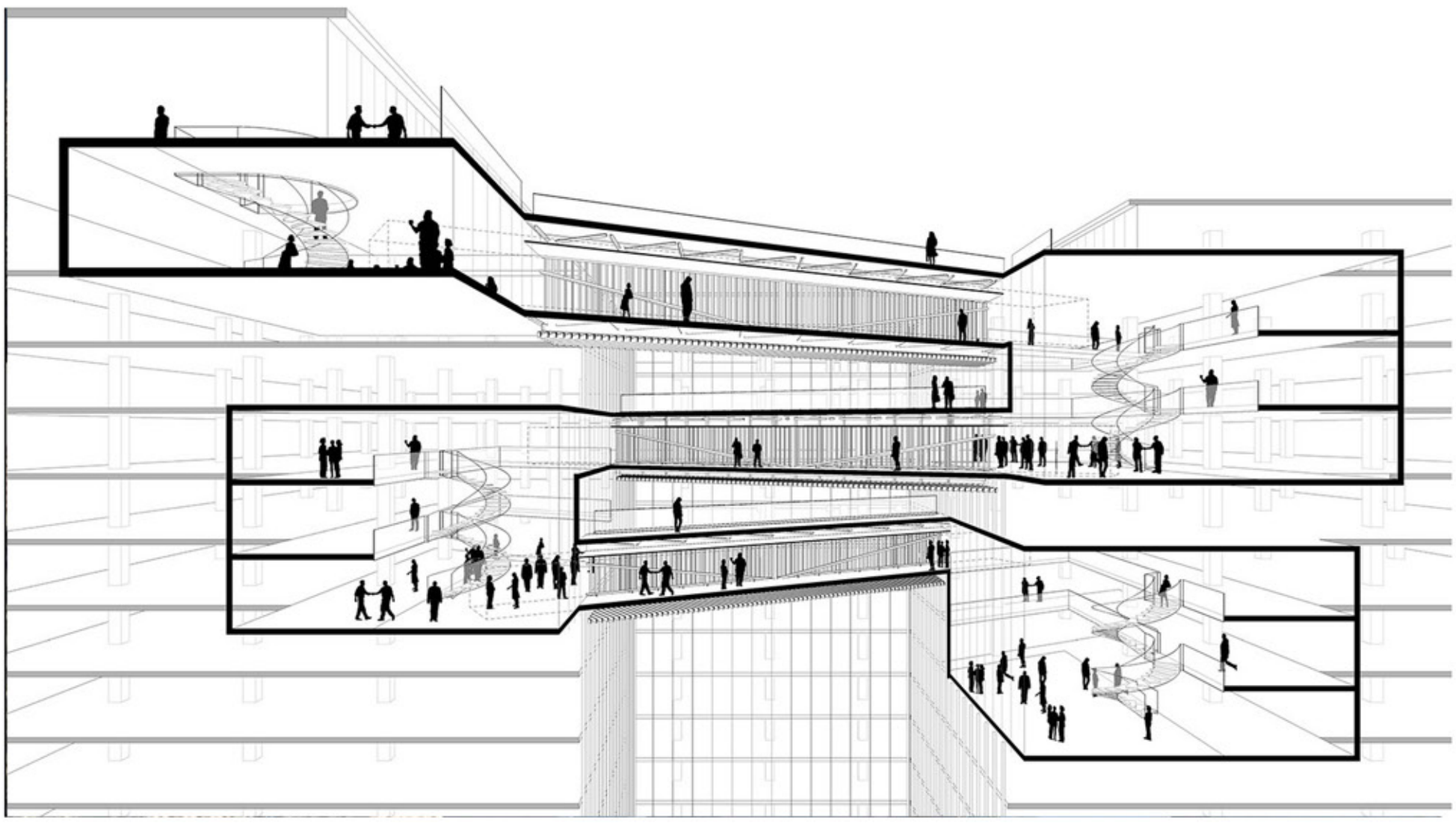
ORCA, Designed by Safdie Architects.



ORCA, Designed by Safdie Architects.



Midtown Center,Designed by Shop Architects



Sectional perspective of Midtown Center,Designed by Shop Architects



Atlanta Marriott Marquis Hotel, Designed by John Portman (Architecture, 2019).



Atlanta Marriott Marquis Hotel, Designed by John Portman (Architecture, 2019).

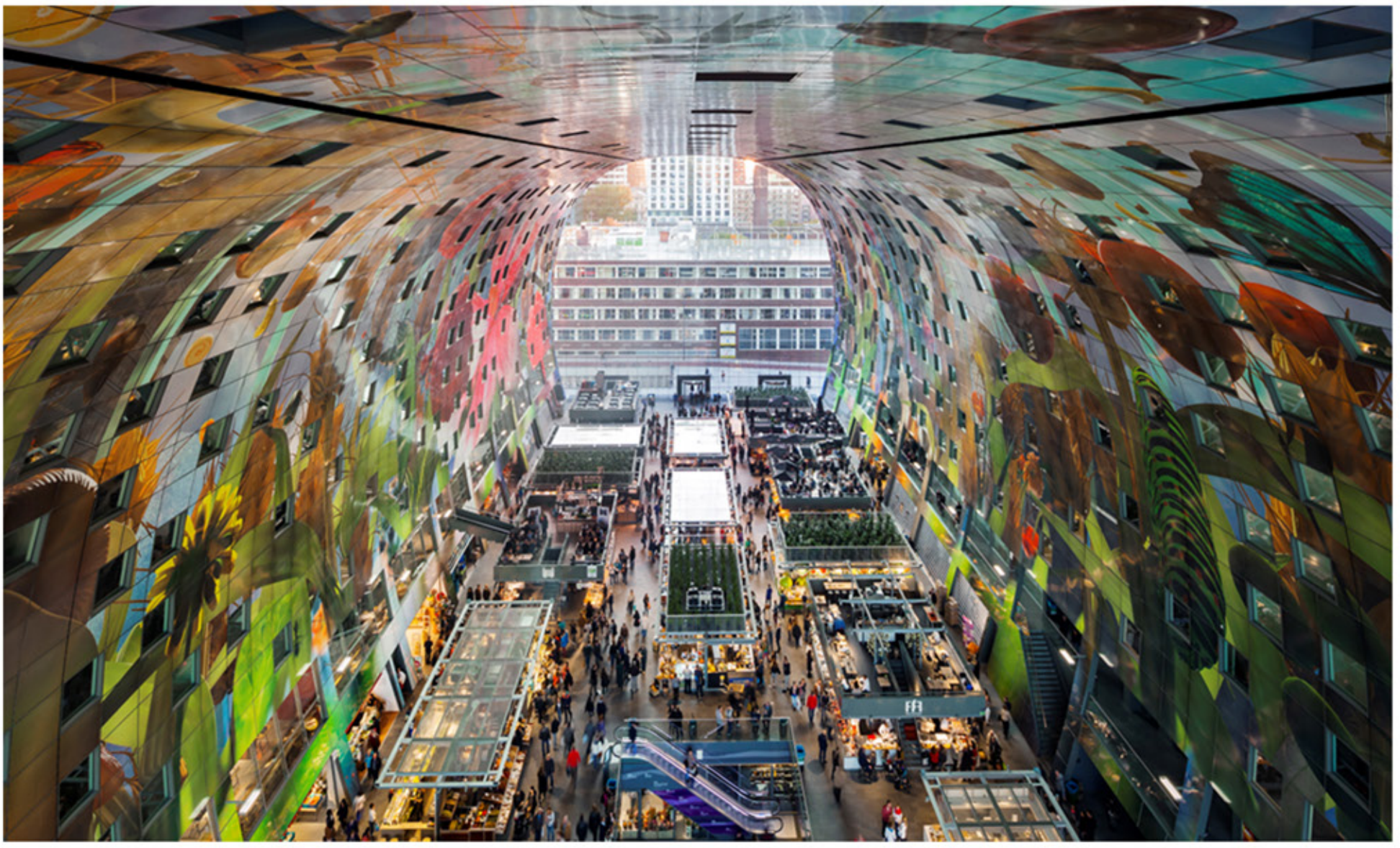


HSBC building, Designed by Norman Foster(Ravenscroft , 2019).





HSBC building, Designed by Norman Foster(Ravenscroft , 2019).



Rotterdam Market Hall-Markthal, Designed by MVRDV (Viva, 2022).







Rotterdam Market Hall-Markthal, Designed by MVRDV (Viva, 2022).

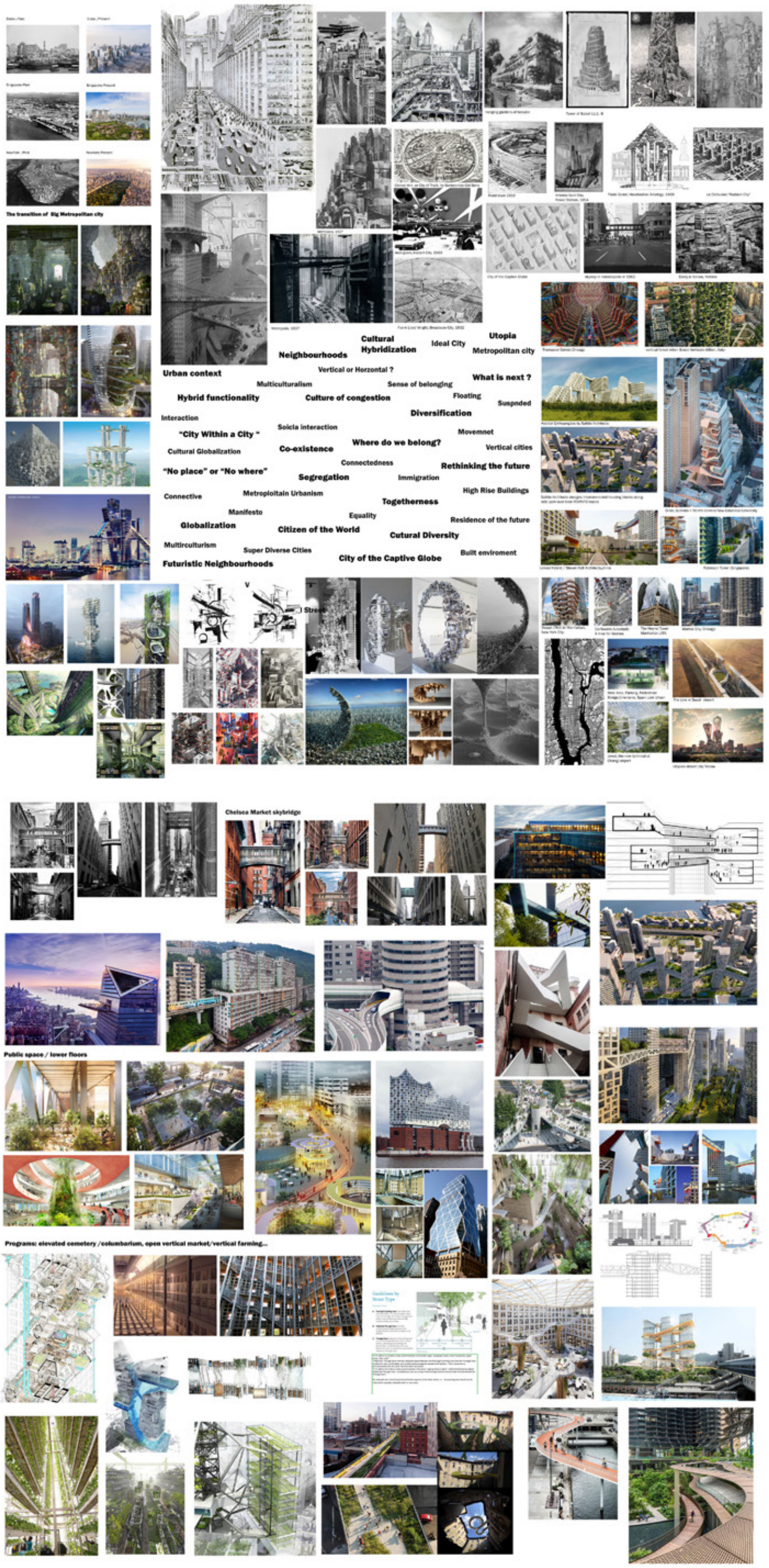


A highway goes through a building in Osaka, Japan (Morrison, 2018).



Liziba Station in Chongqing municipality, China (Colectiva Plus, 2019).

Overview of the comprehensive case studies and aspirations

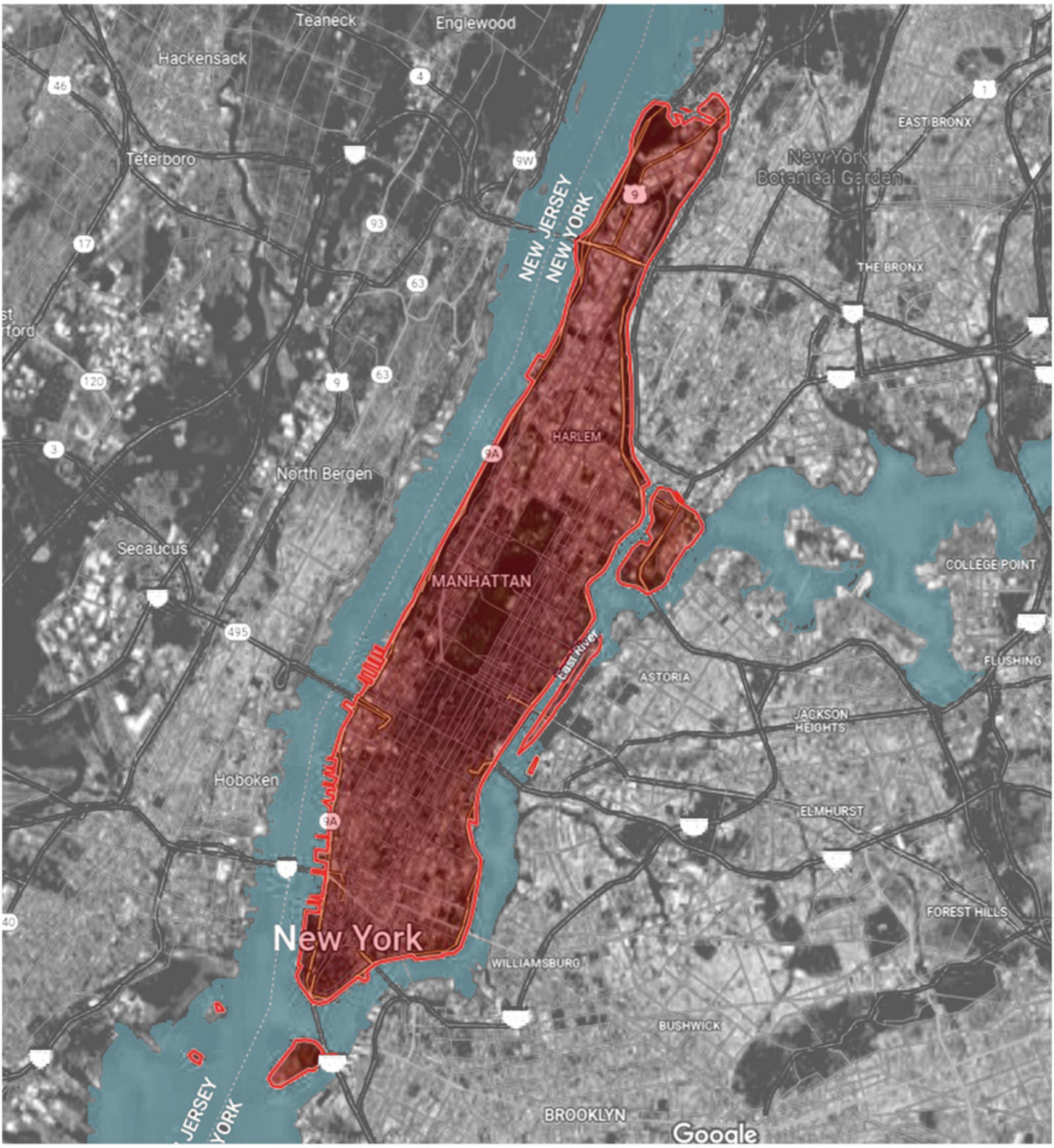


3.1 Comprehensive Site Analysis of Manhattan

3.2 Site Analysis for the zoomed-in site

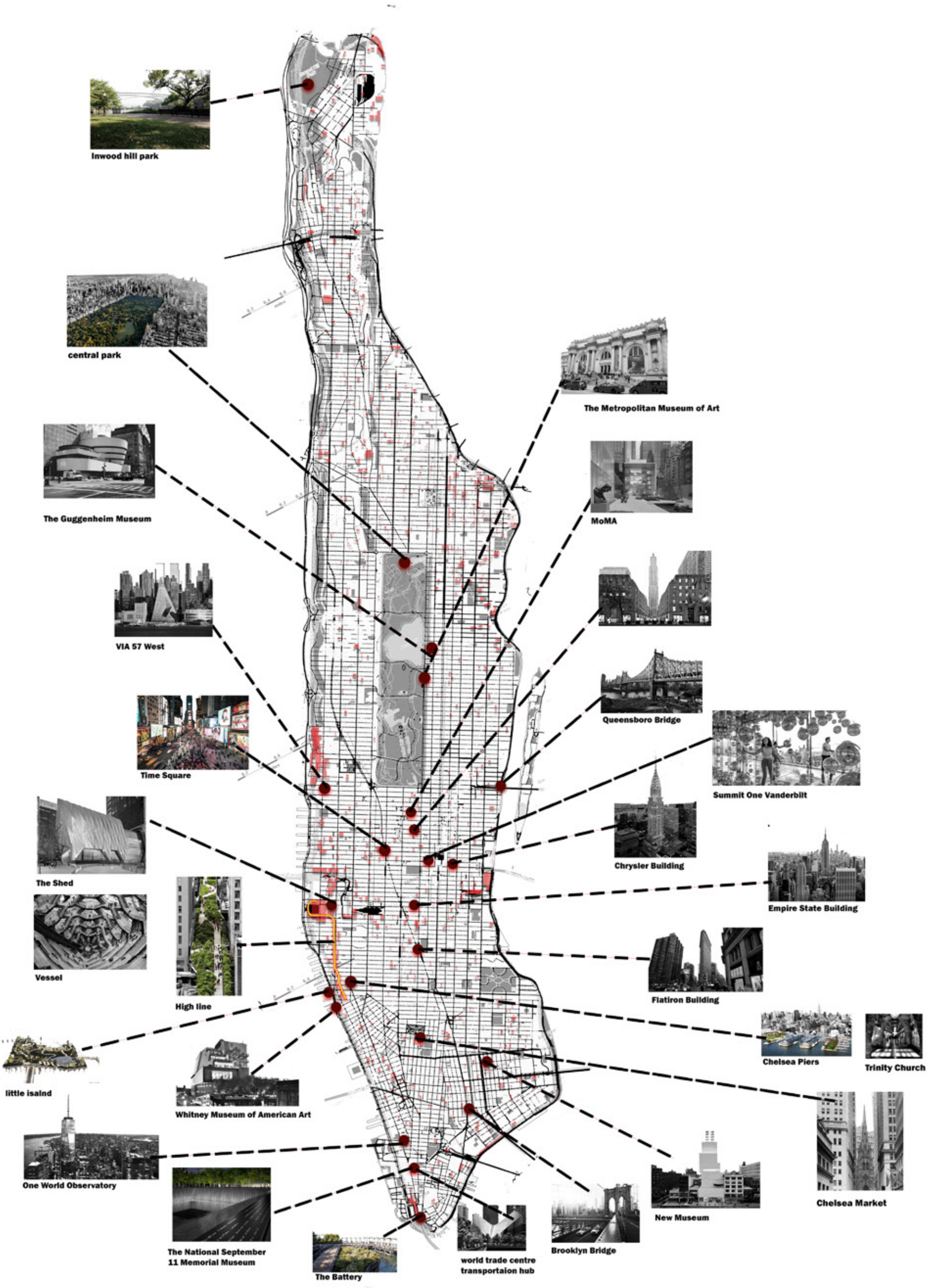
SITE ANALYSIS

3.1 Comprehensive Site Analysis of Manhattan

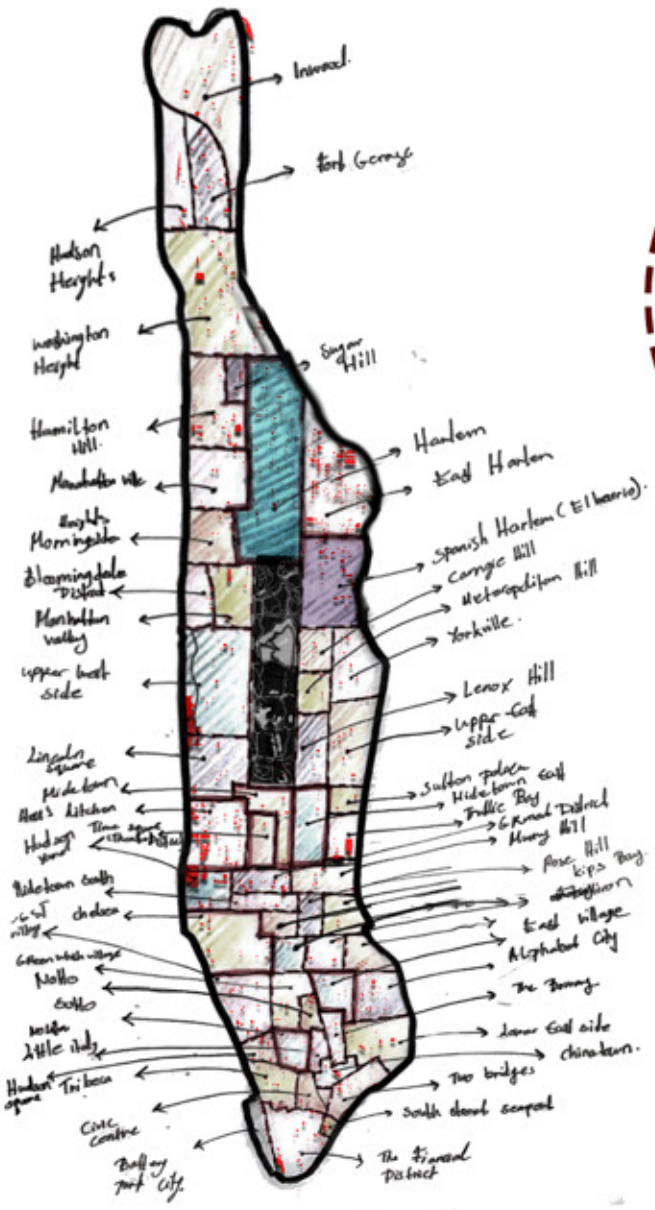


Manhattan, New York City

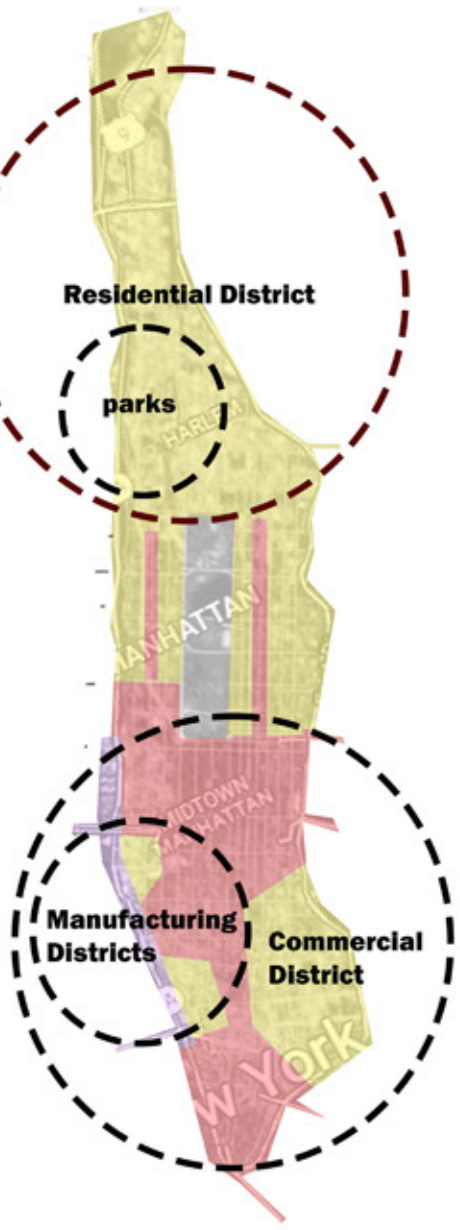
Key Landmarks in Manhattan, NYC



SITE ANALYSIS



Neighborhoods



Districts

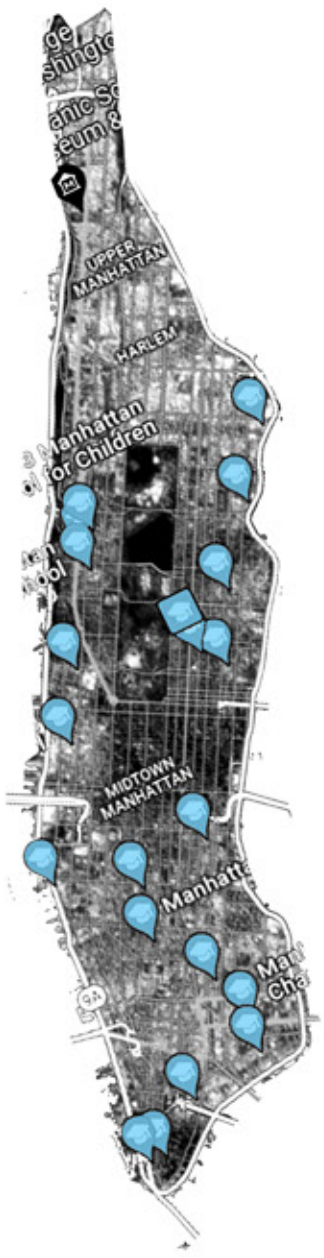


Subway /Metros



Bridges

SITE ANALYSIS



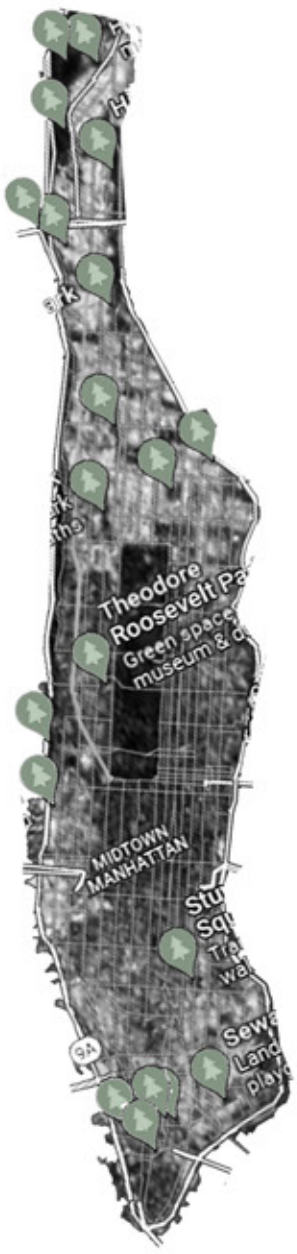
Schools



Parks



Museums



Parks



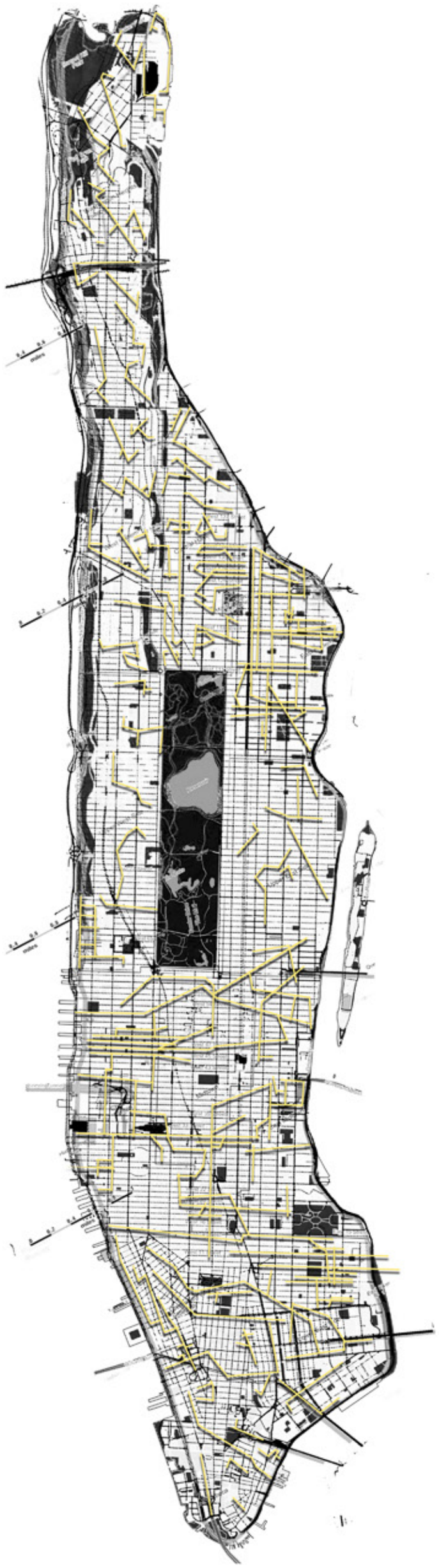
Parking



Diagrammatic map illustrating the vacant spaces within Manhattan



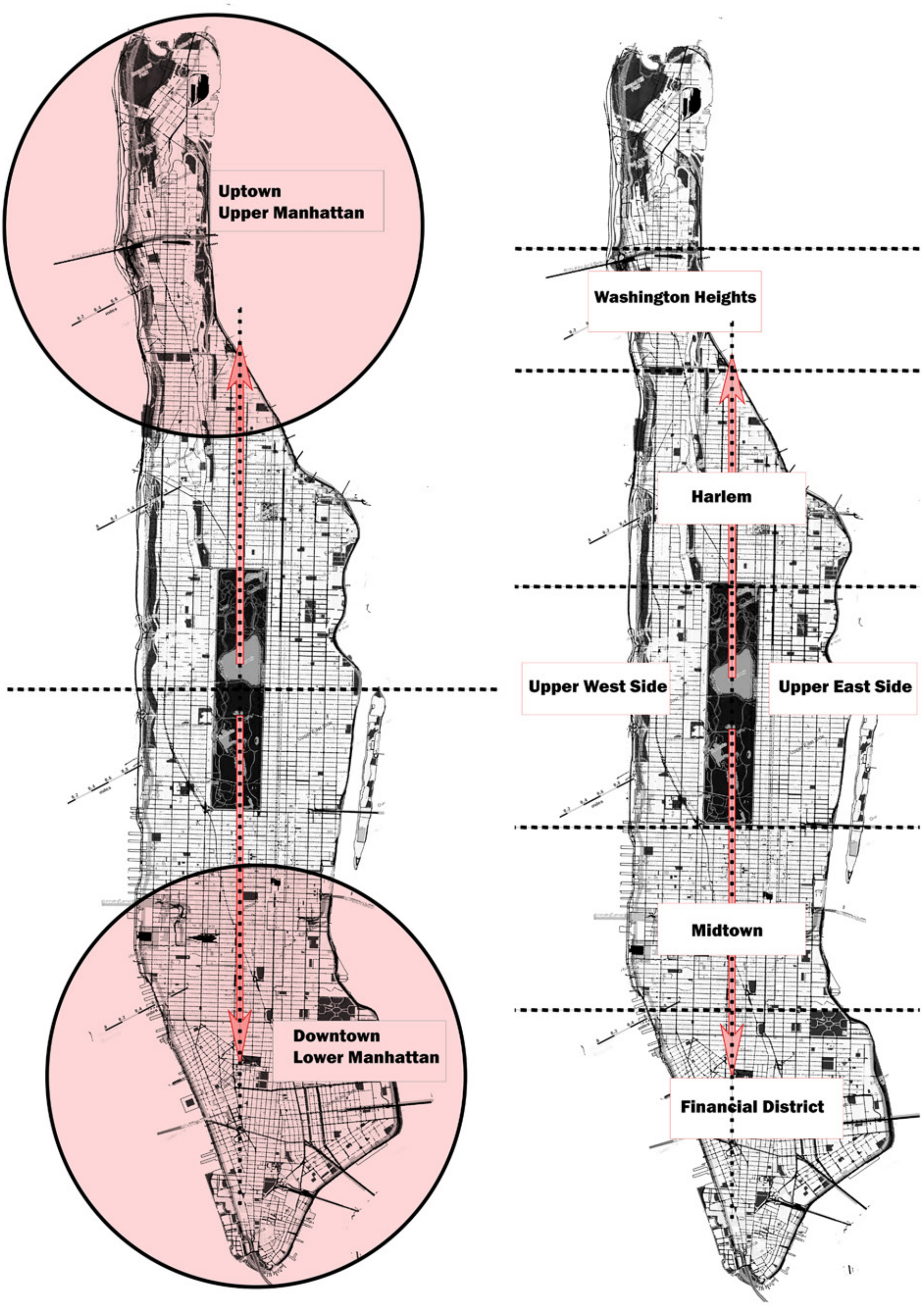
Diagrammatic map illustrating the vacant spaces relationship to the proposed development



Diagrammatic map illustrating a pattern created by the vacant spaces, aimed at identifying the most suitable site for the proposal

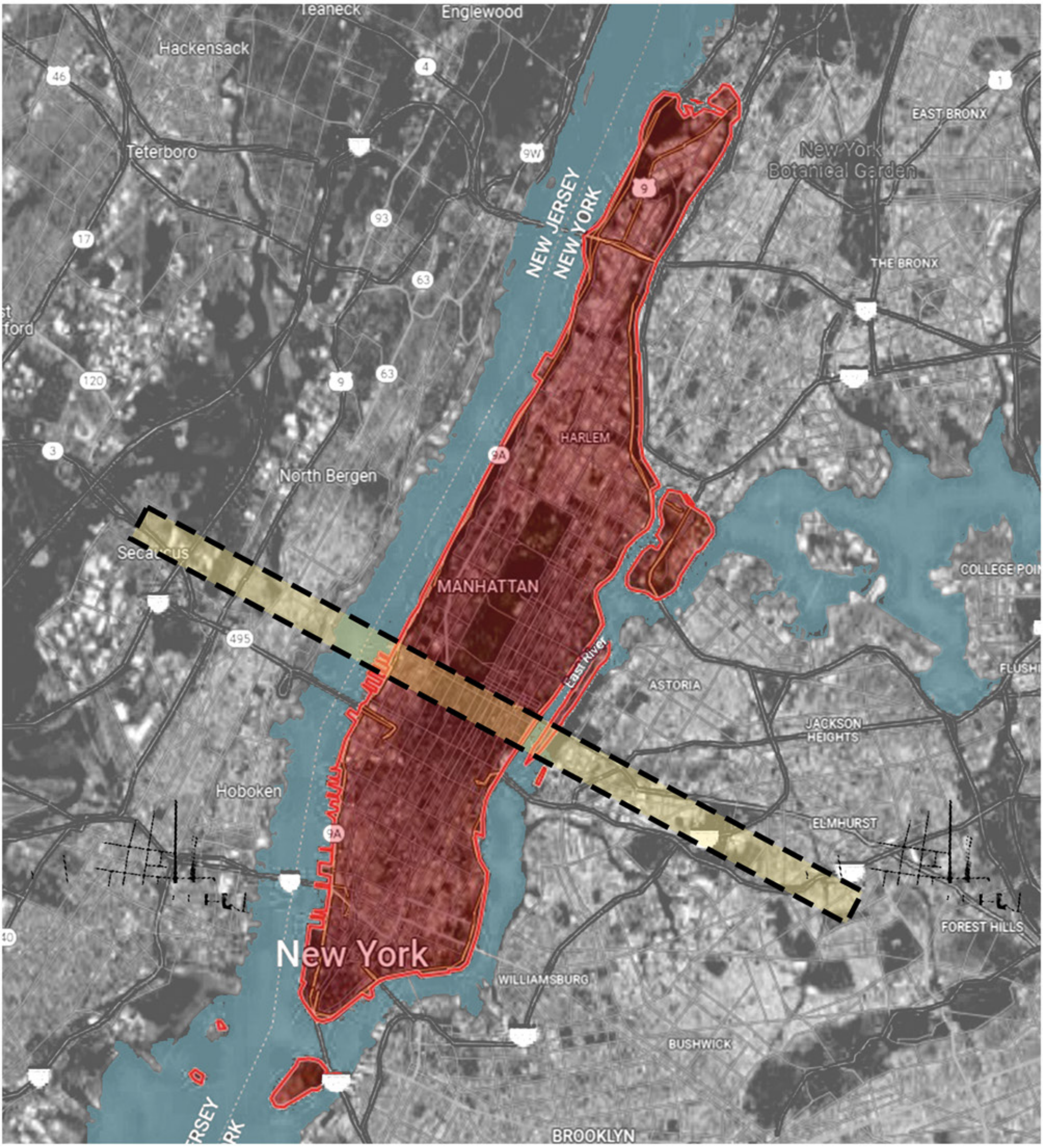


The yellow color illustrates the pattern and the maroon color is the vacant site

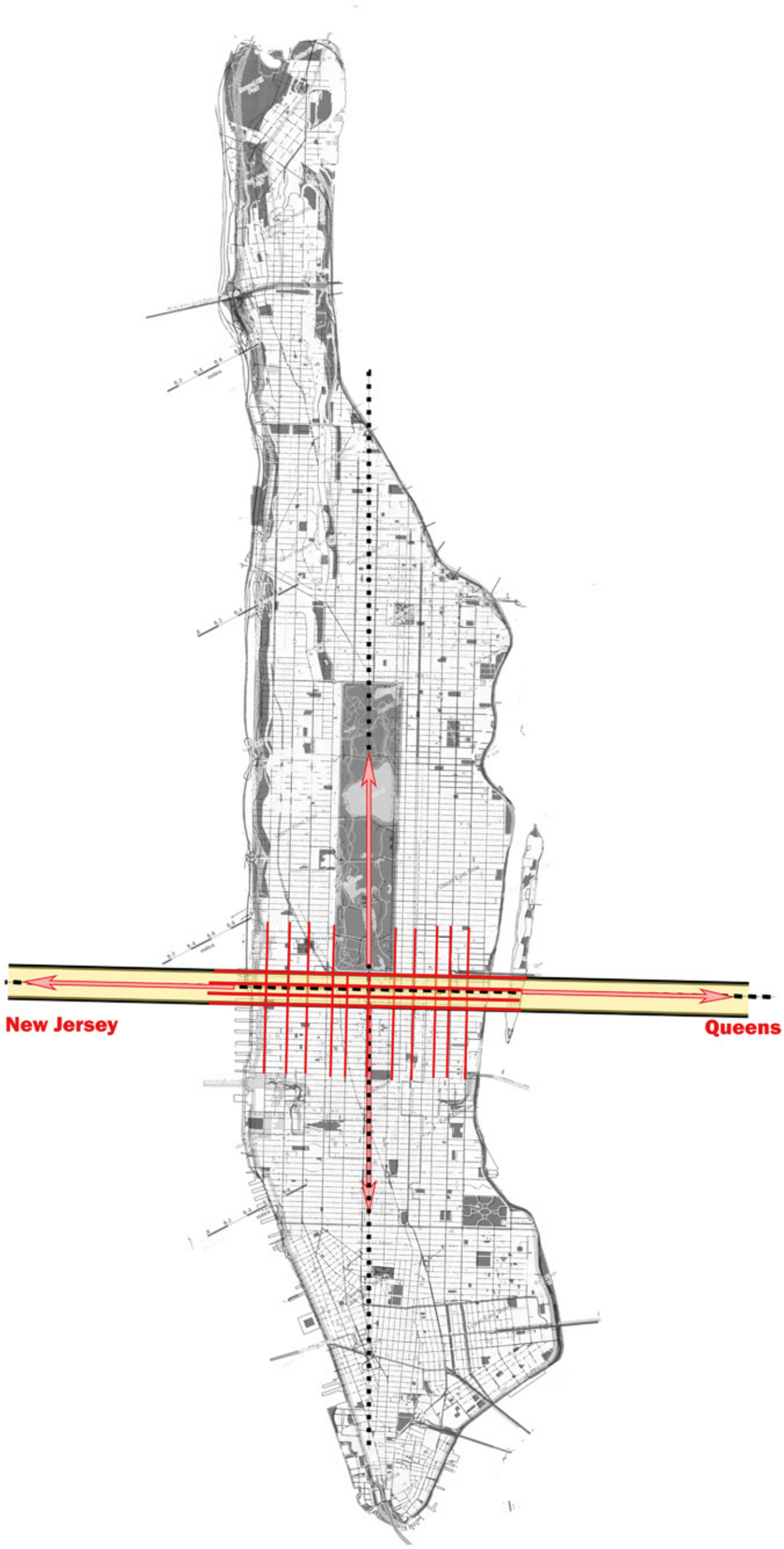

Uptown
Upper Manhattan
Washington Heights
Harlem
Upper West Side
Upper East Side
Midtown
Downtown
Lower Manhattan
Financial District

3.2 Site analysis for the zoomed-in site

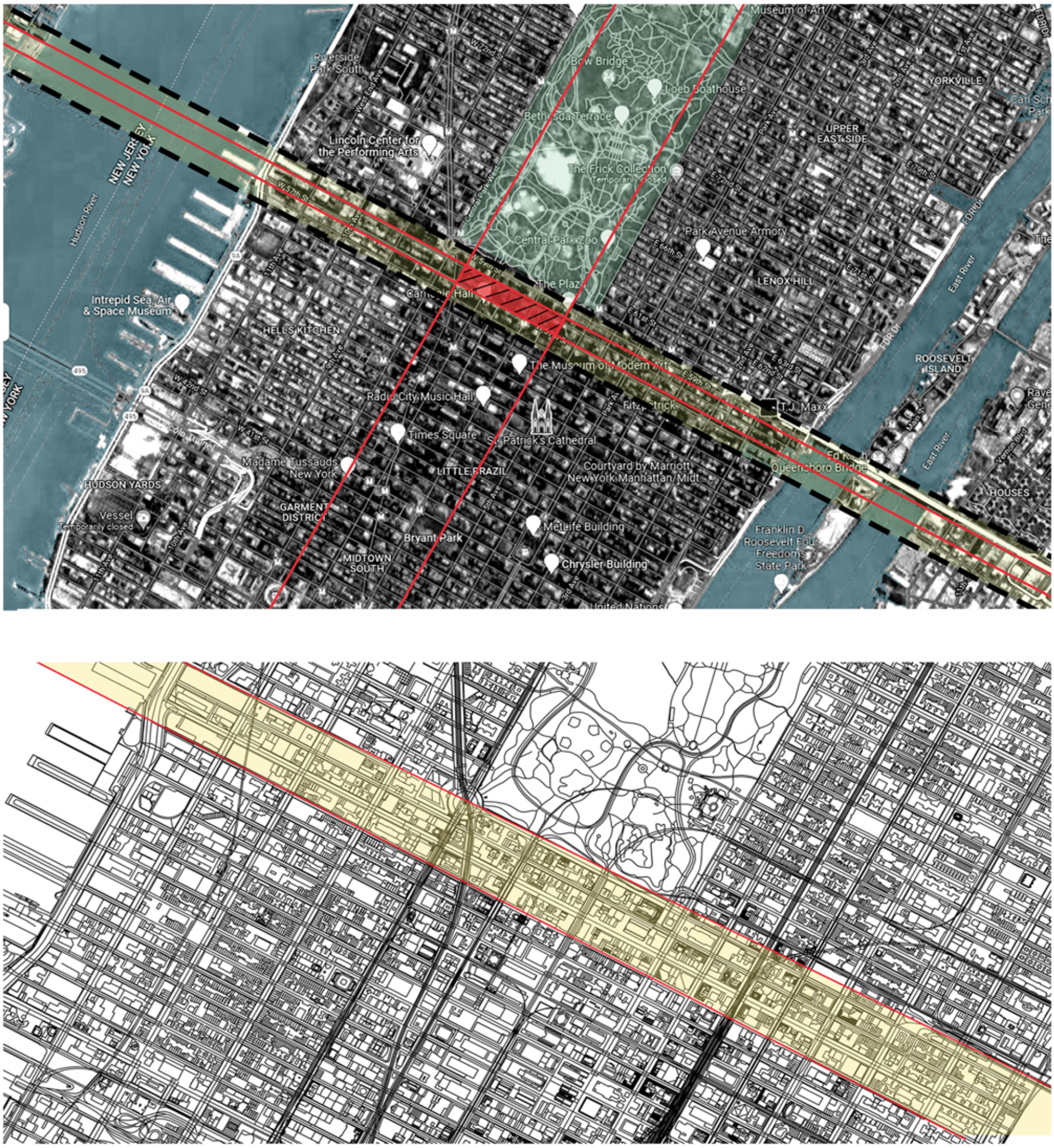
SITE ANALYSIS



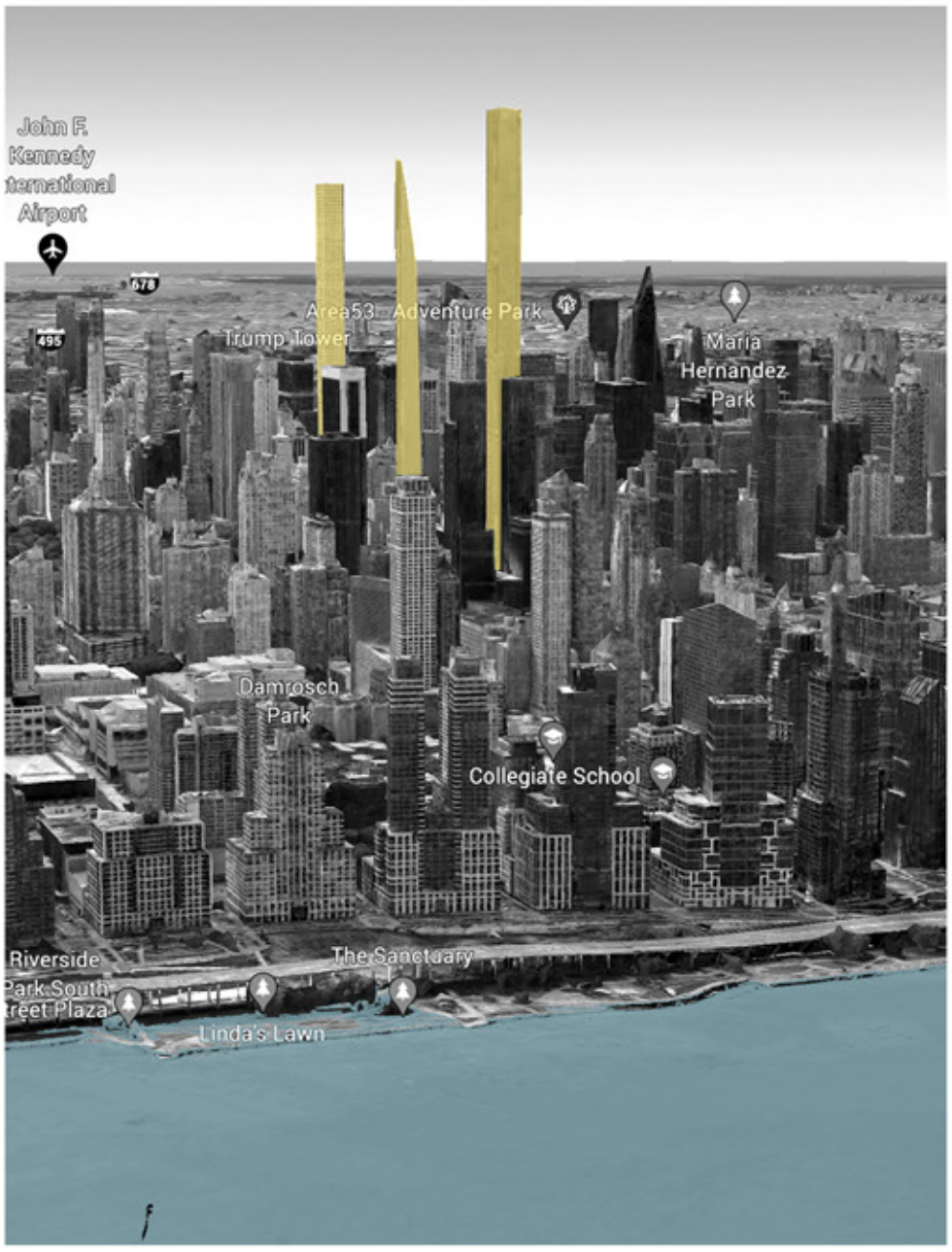
The cross-section encompasses three blocks on W 55th St, W 56th St, and W 57th St, extending from 1st Ave to 11th Ave

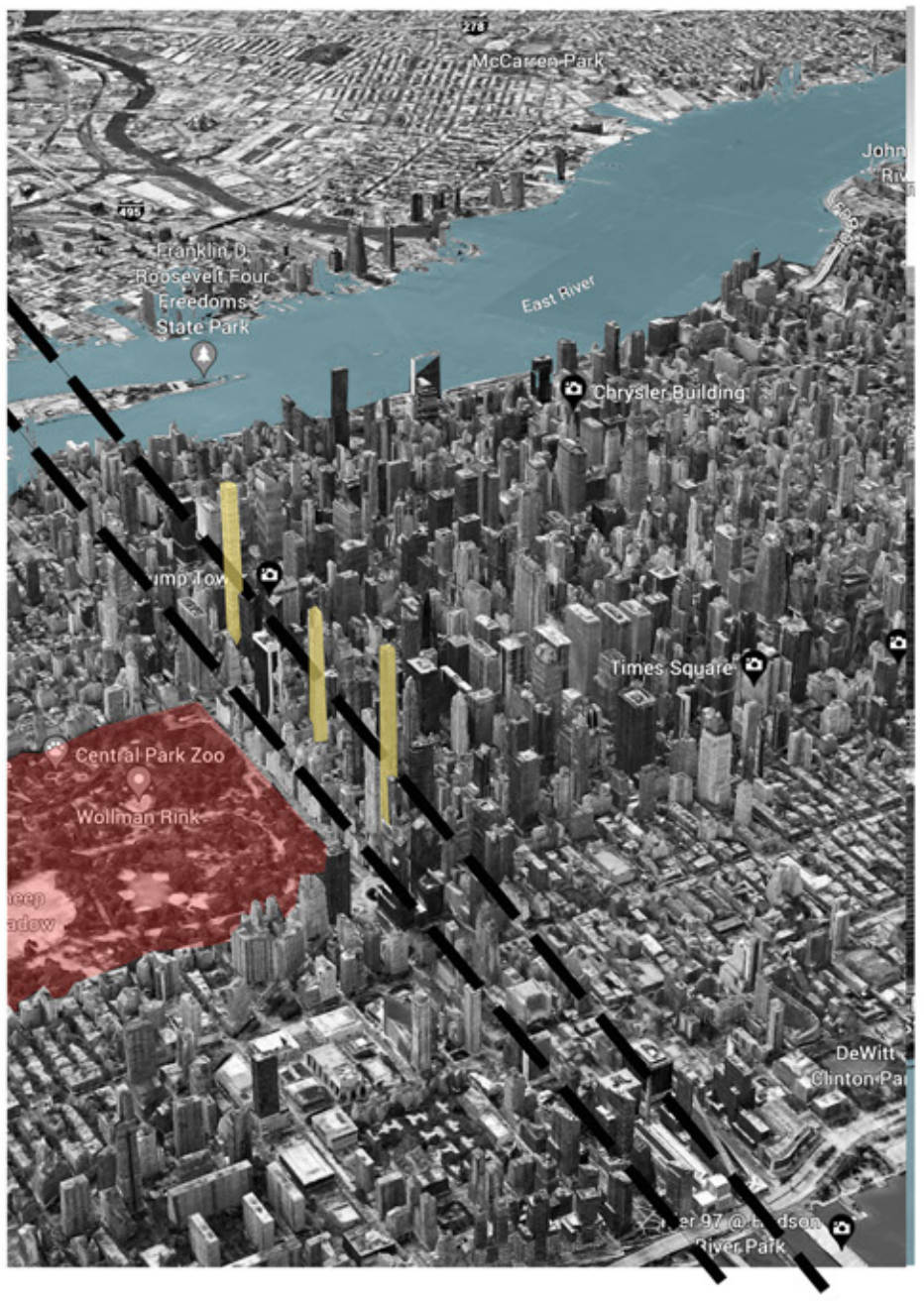


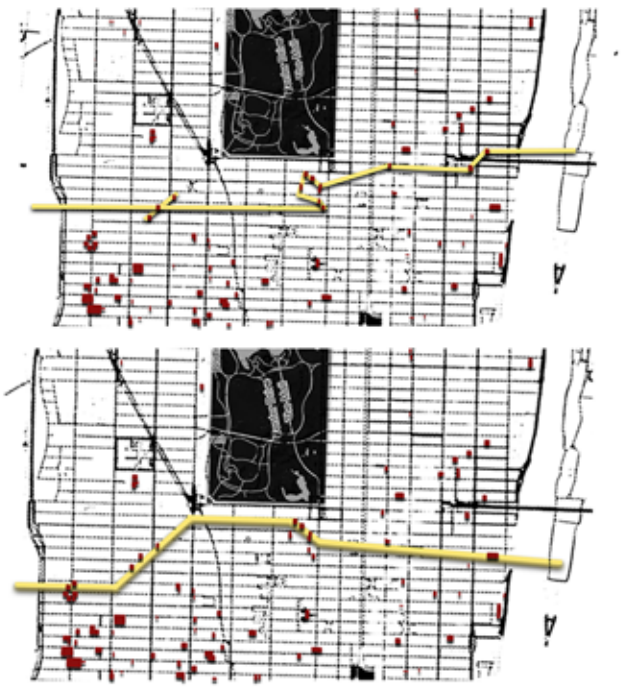
correlation between the cross-section and the regions of New Jersey and Queens



The zoomed in site inside the proposed cross-section











The selection of this site is based on its remarkable feature of housing the tallest skyscraper in Manhattan. This choice poses a significant challenge, considering its location within a bustling new proposed development and tourist attraction, as well as the limited availability of vacant sites. Moreover, the site benefits from its strategic positioning, facing the iconic Central Park

Site pictures from the Centeral park















Site pictures from the Rooftops



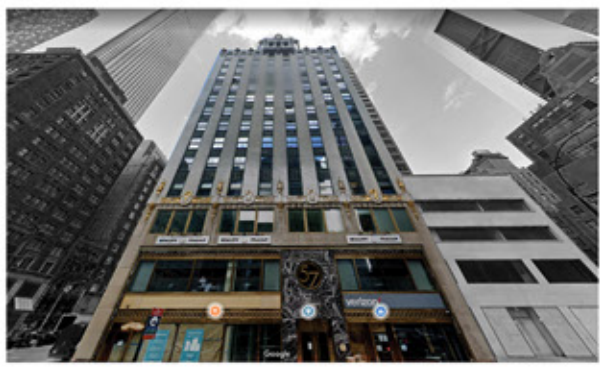








Site pictures from the ground -level

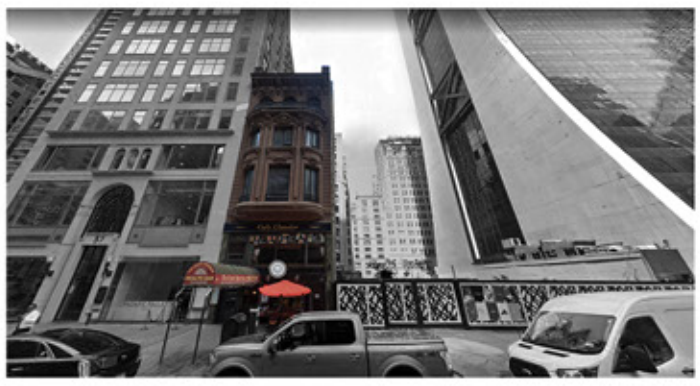






Vacant site 2







Vacant site 1





Vacant site 3







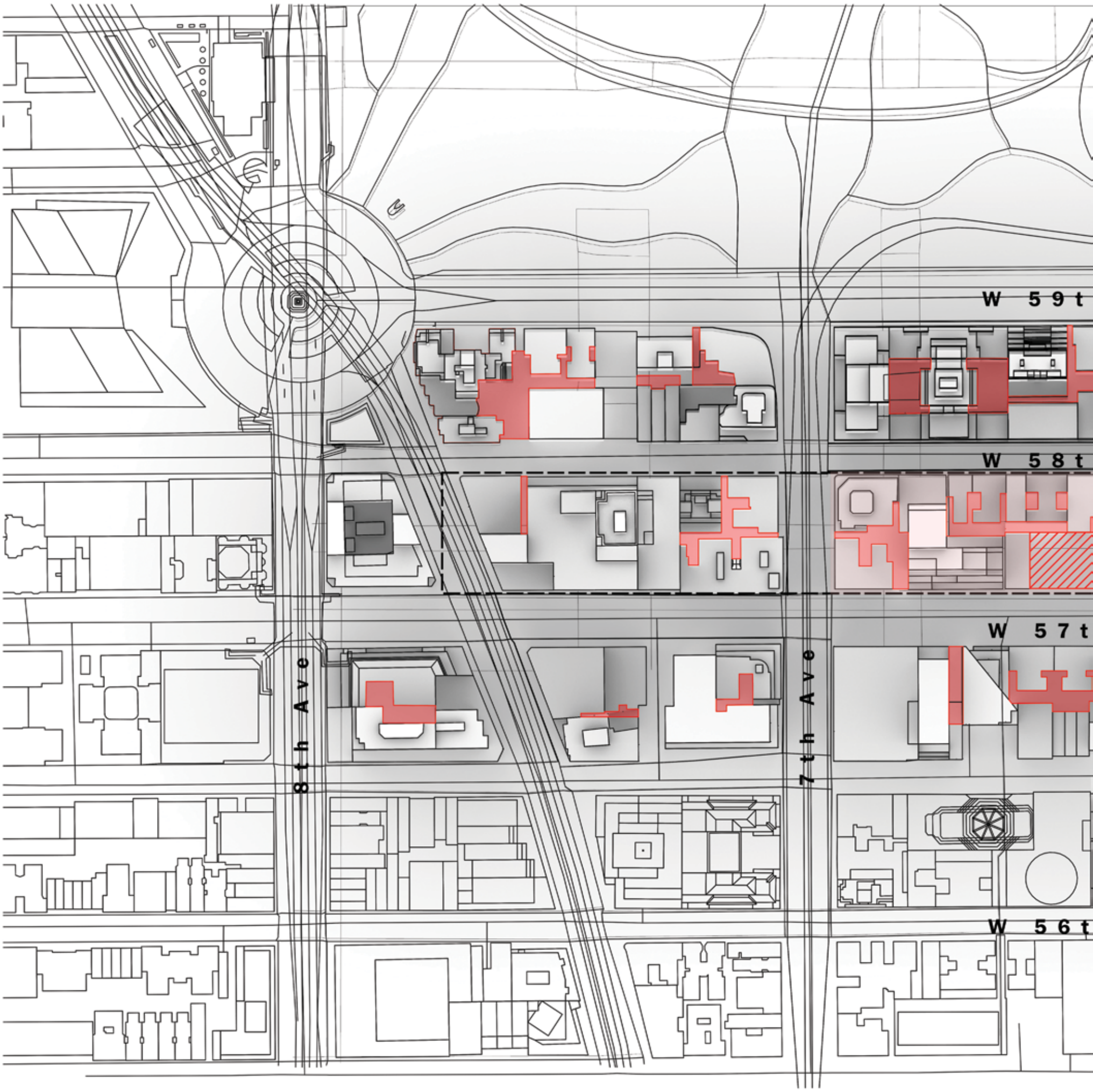




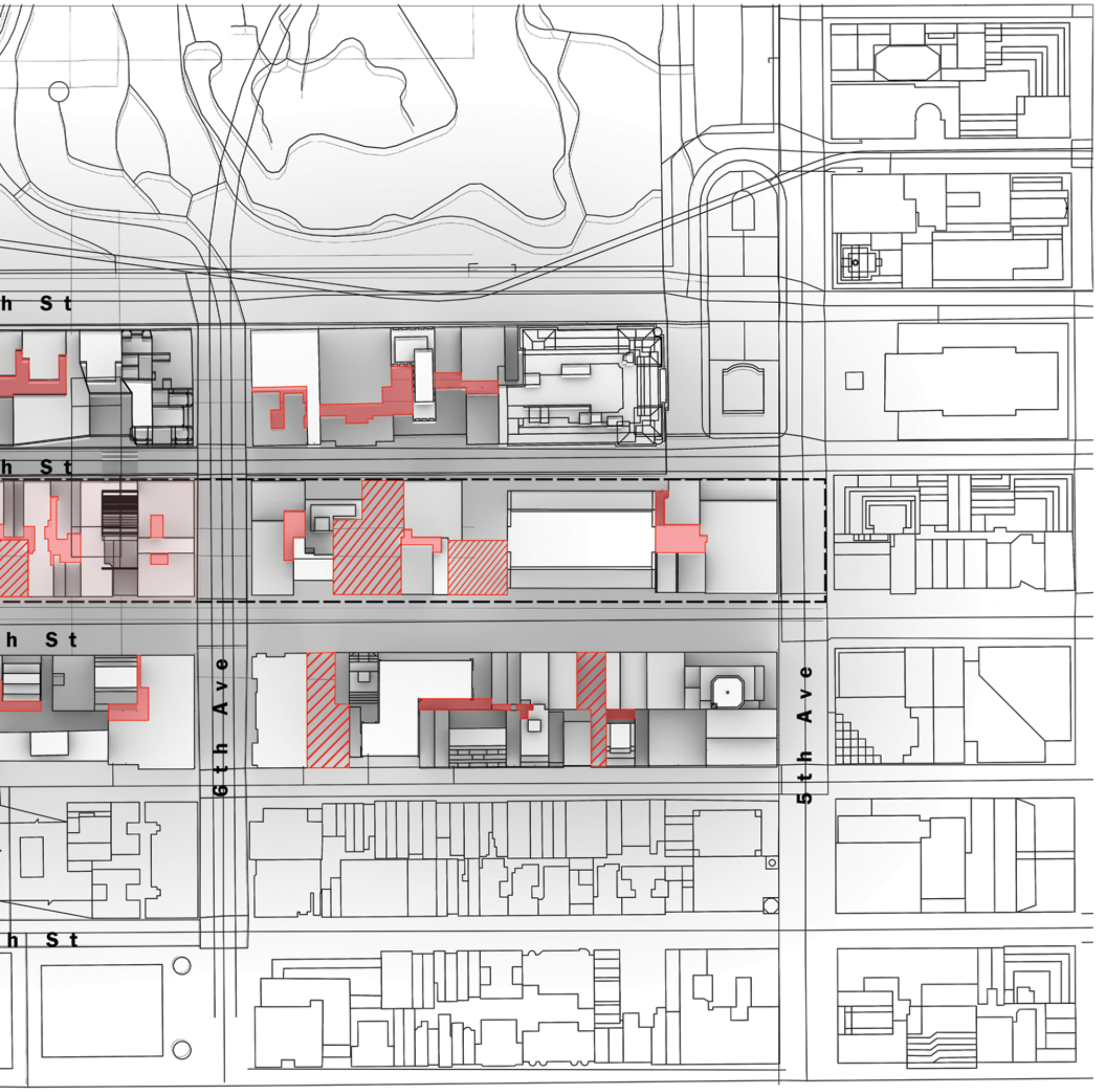


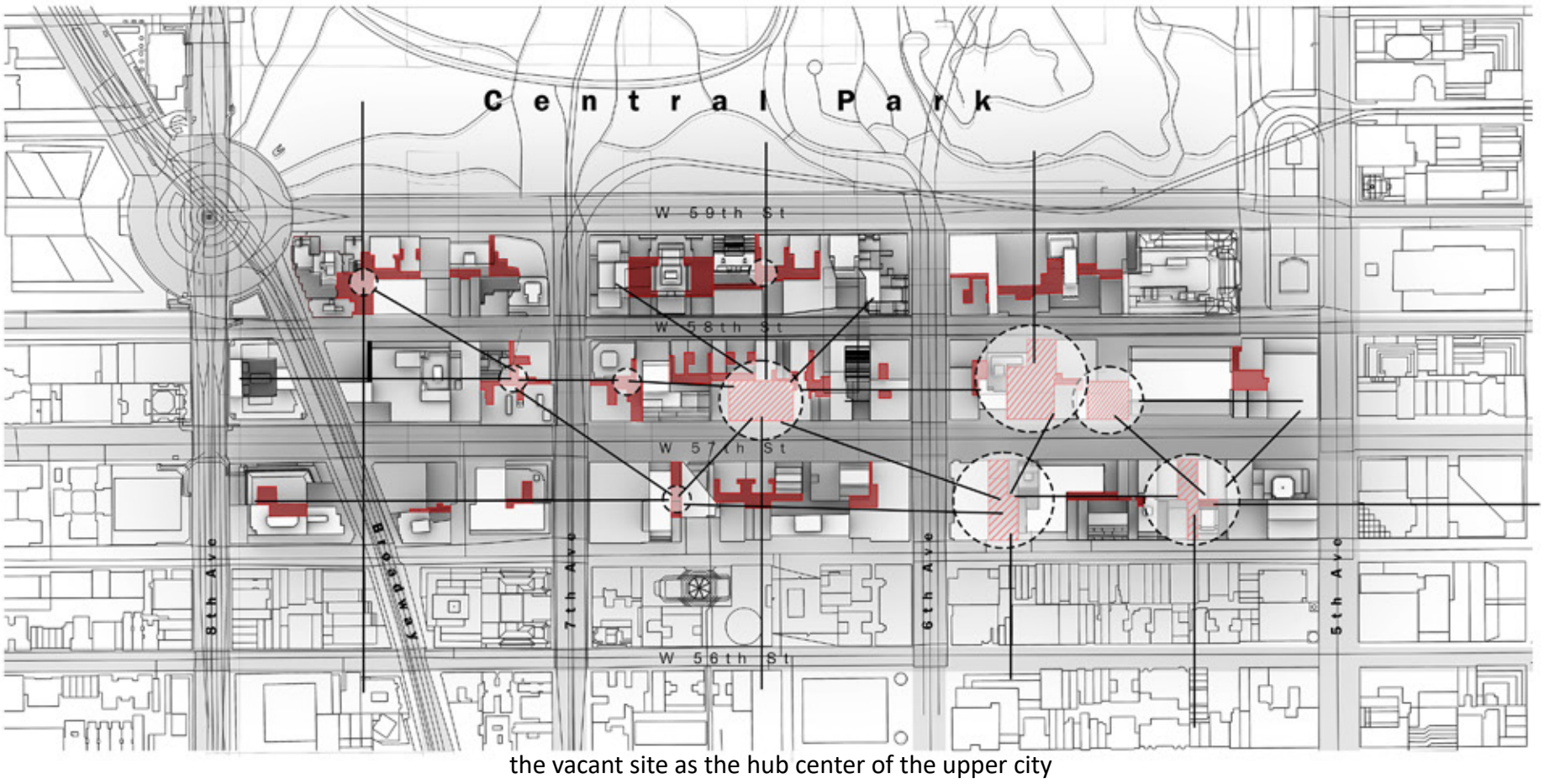


A site plan illustrating the empty areas a

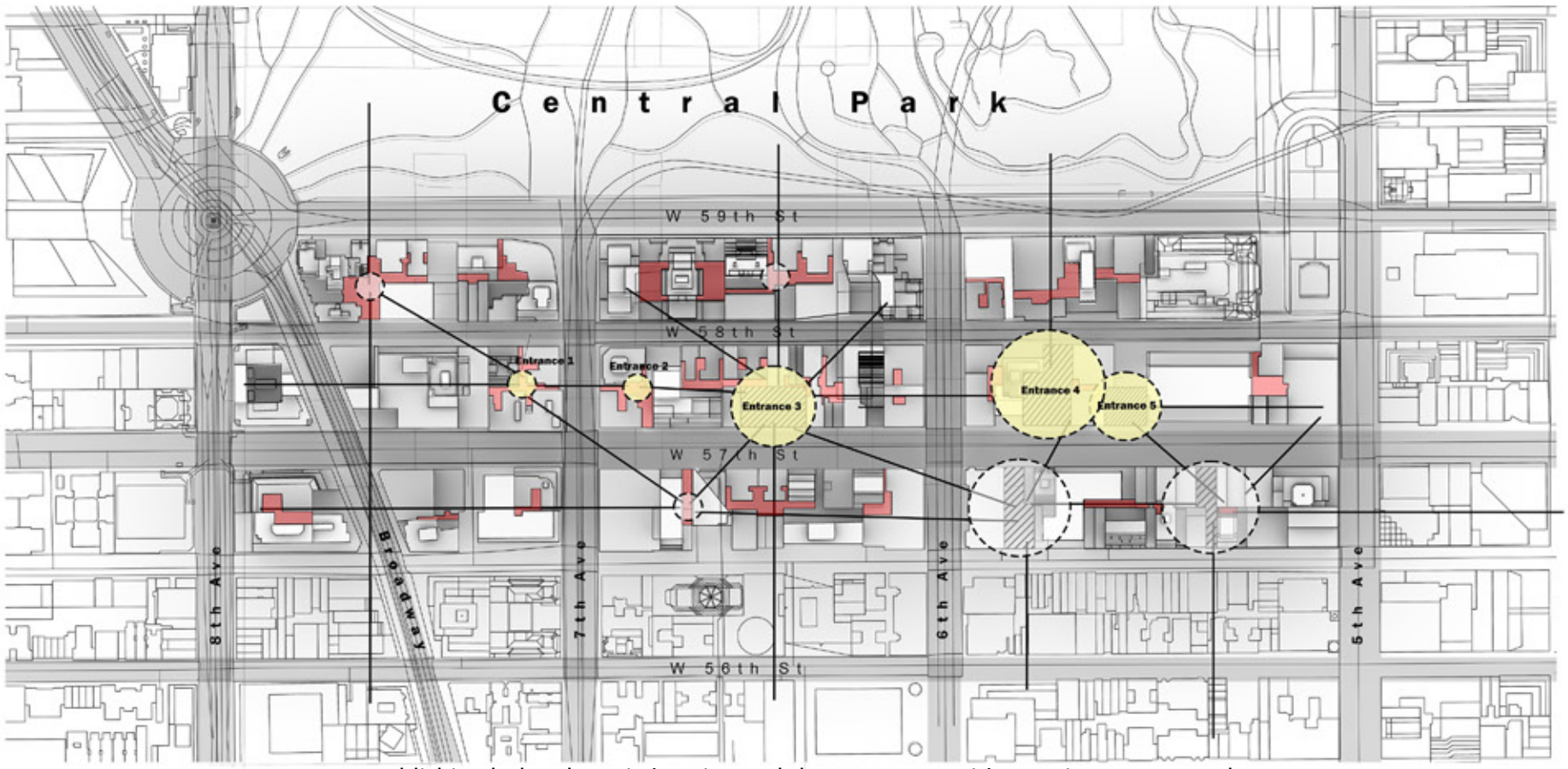


and viod gaps within the existing city.

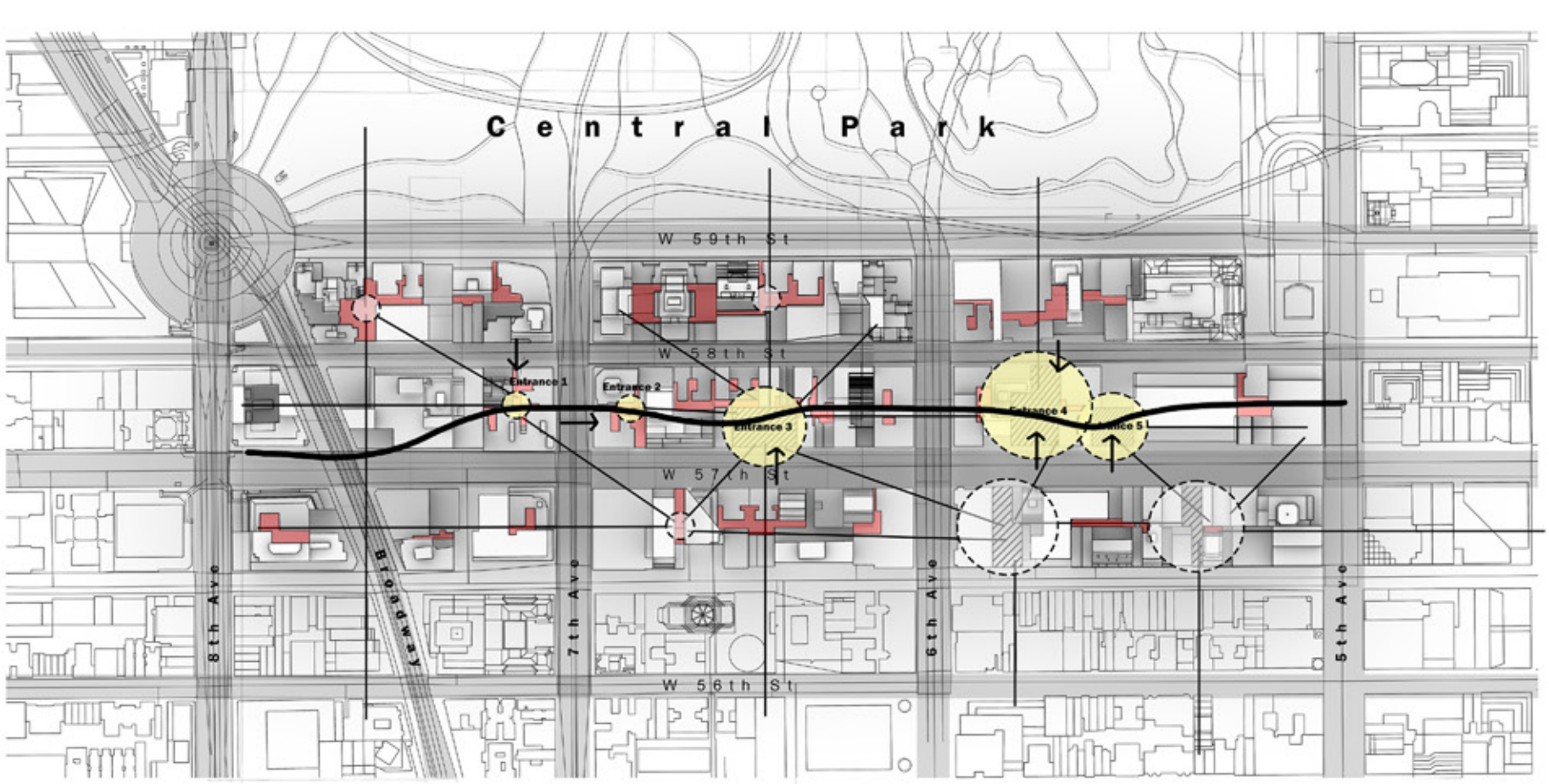




the vacant site as the hub center of the upper city

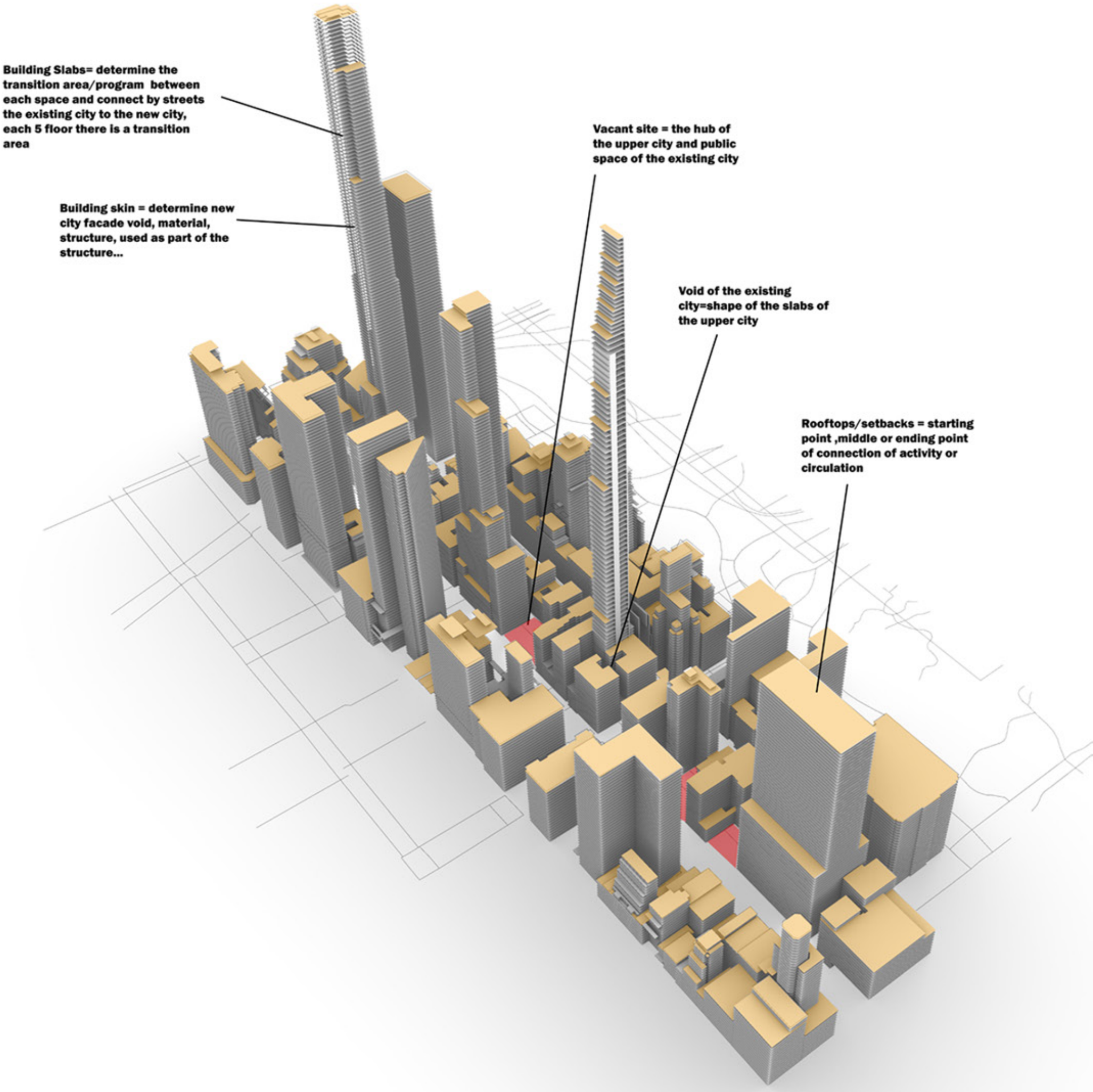


By establishing hubs, the existing city, and the new upper cities are interconnected, with these hubs also functioning as entry points to the upper city.

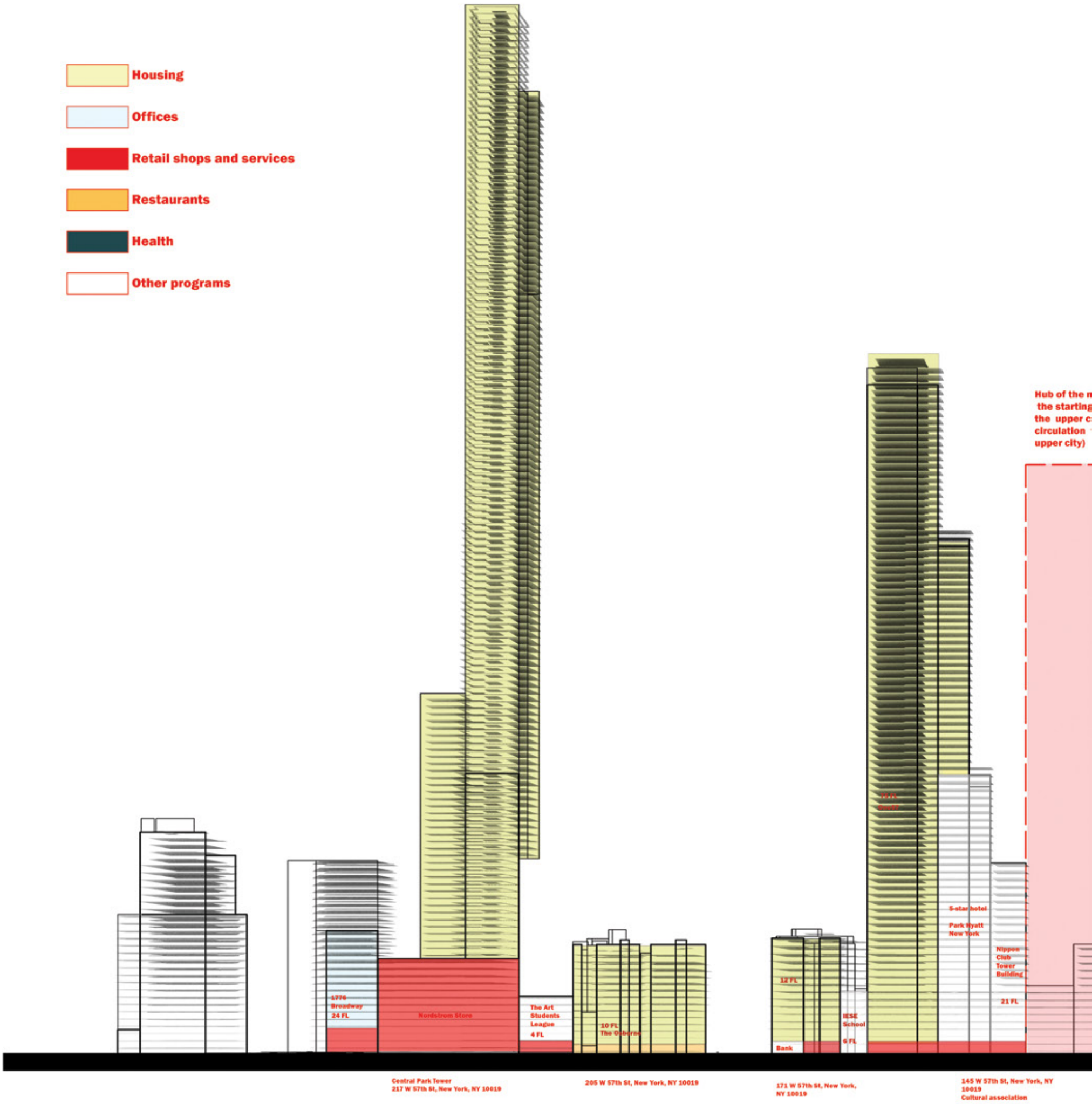


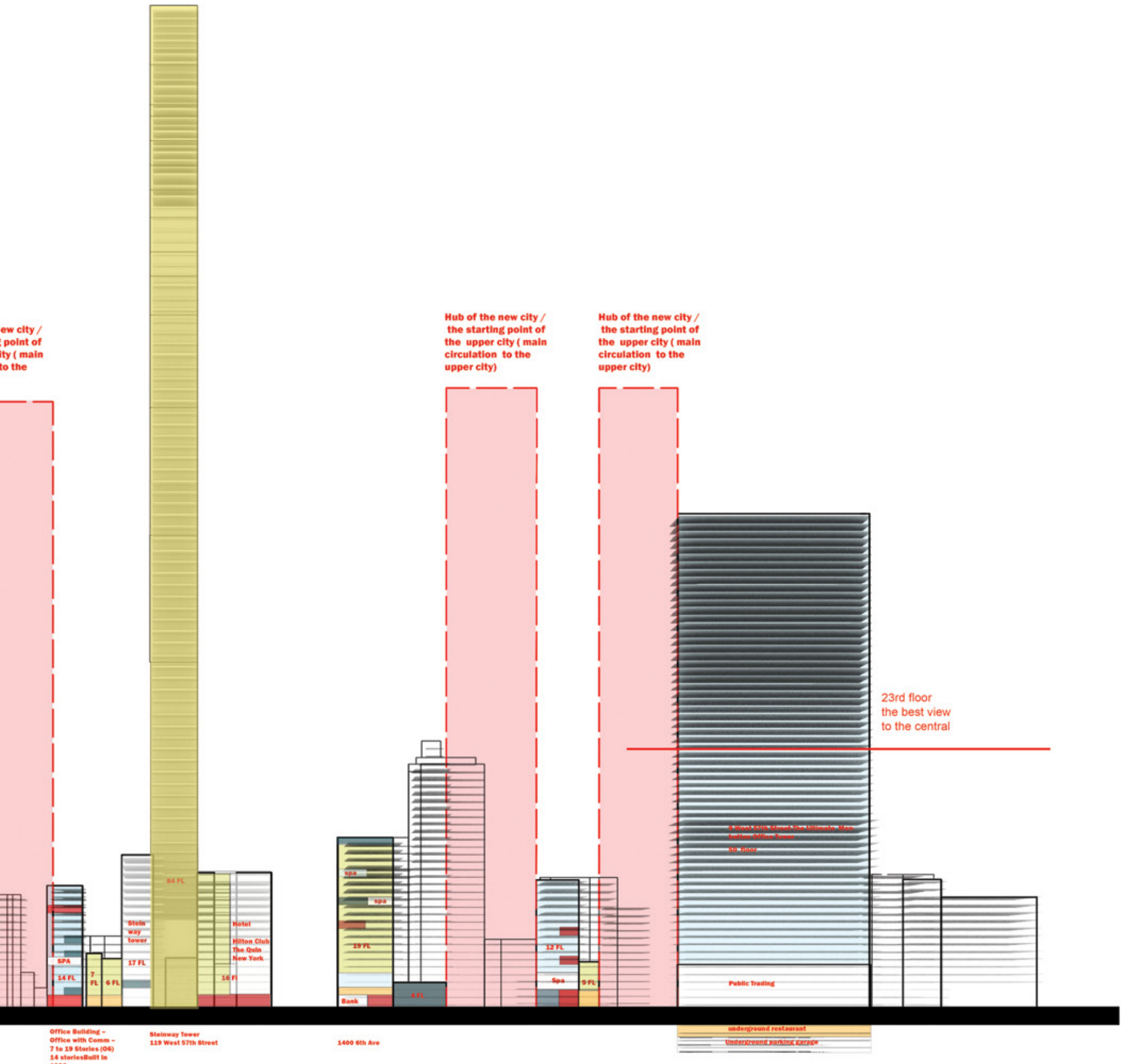
Establish a connection between these hubs and the elevated pathways that link both components in the sky.

3D Model of the existing site



Site section of the existing site




ew city /
point of
ity (main
to the
Hub of the new city /
the starting point of
the upper city (main
circulation to the
upper city)
Hub of the new city /
the starting point of
the upper city (main
circulation to the
upper city)
23rd floor
the best view
to the central
84 FL
Stein
way
tower
Hotel
Hilton Club
The Quin
New York
SPA
14 FL
7
FL
6 FL
17 FL
16 Fl
spa
spa
19 FL
4 FL
Bank
12 FL
Spa
5 FL
Public Trading
underground restaurant
Underground parking kargge
Office Building –
Office with Comm –
7 to 19 Stories (06)
14 storiesBuilt in
1926
Steinway Tower
119 West 57th Street
1400 6th Ave

Integration and Connectivity

Integration and Connectivity: The Interplay of Existing and Upper City Components

The existing buildings have four main components: slabs, roofs, voids, and programmatic spaces. The voids within the existing city can be programmed as public spaces or parks, functioning as secondary entrances to the upper city. In contrast, the vacant site acts as the primary entrance and hub for the new city. The elevated pedestrian streets forming the main street are predominantly vertical within the vacant site, extending horizontally as they branch out. The upper city's infrastructure will heavily depend on the existing city, with a significant portion integrated or interwoven into the existing urban fabric.

The program within each space will be determined by building slabs, which will also serve as connectors between the existing city and the New City through a network of streets. For instance, a transition area will be provided every five floors, allowing for a breathable environment. The vacant site acts as the central hub of the upper city and a public space, while the voids within the existing city shape the slabs of the upper city. Rooftops and setbacks play crucial roles as starting points, endpoints, or intermediate points for connections and circulation activities.

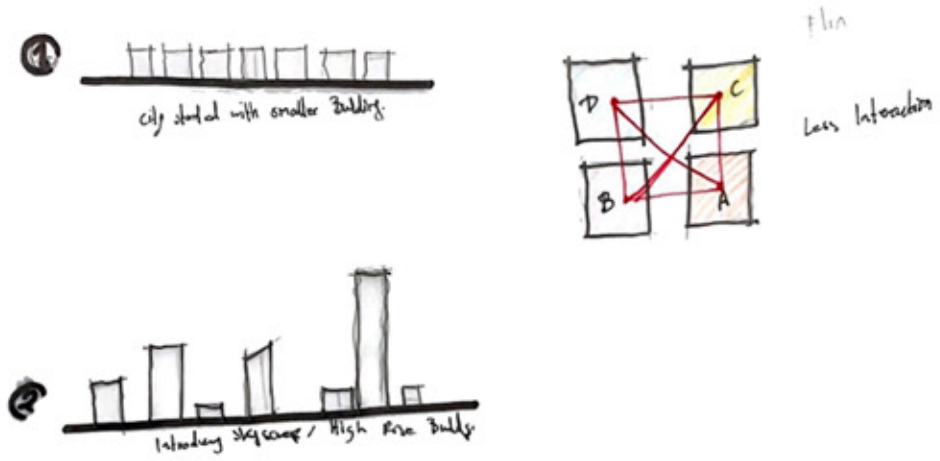
4.1 Exploratory Techniques in Generating Ideas

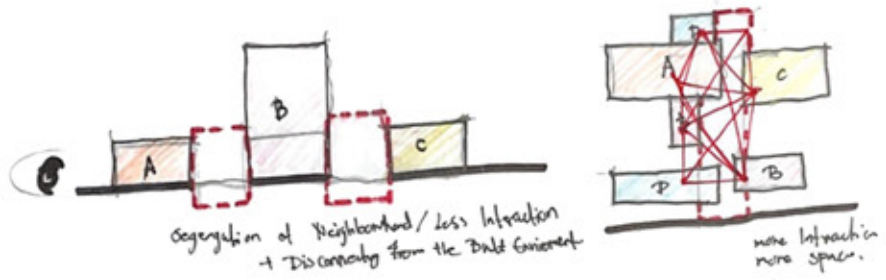
02 Diagrammatic Proposal of the Upper City

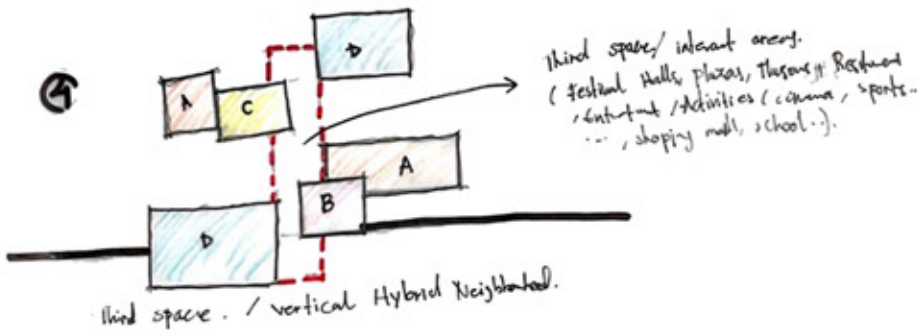
DESIGN METHODOLOGY

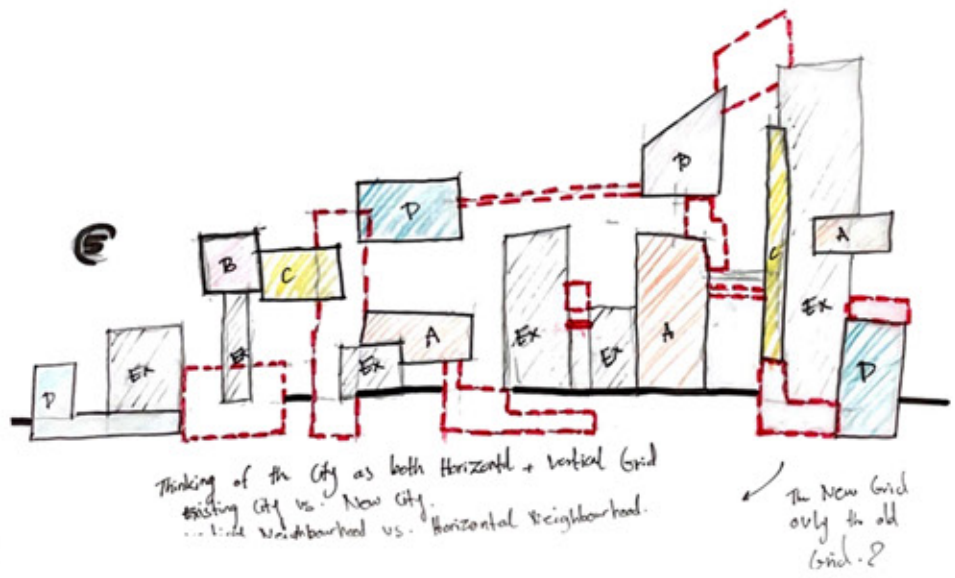
4.1 Exploratory Techniques in Generating Ideas

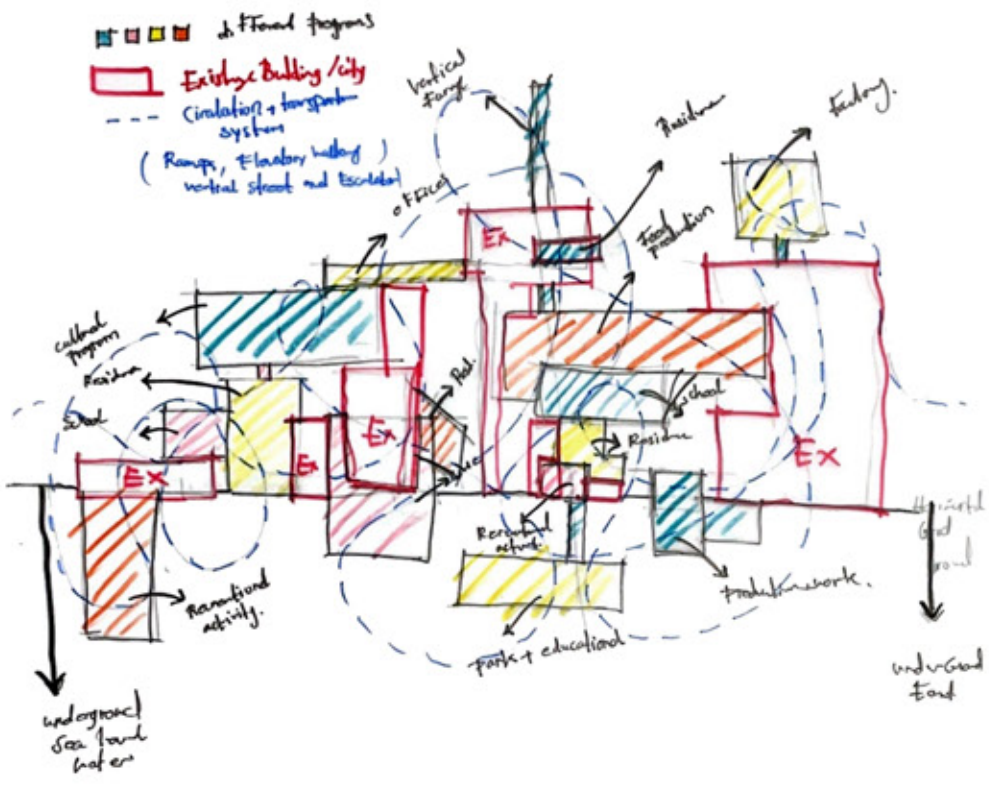
Initial Sketches and Diagrams of the Main Ideas



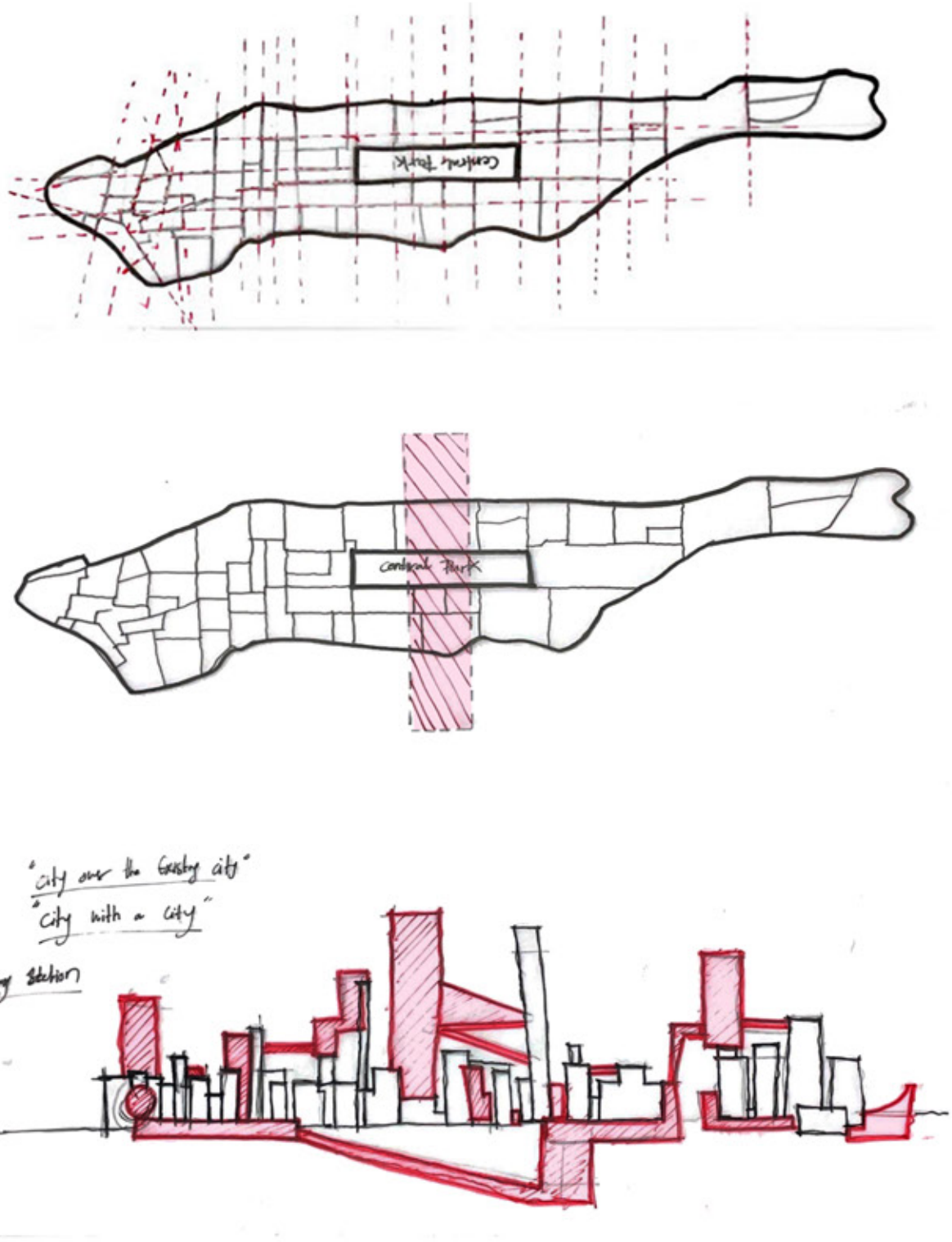


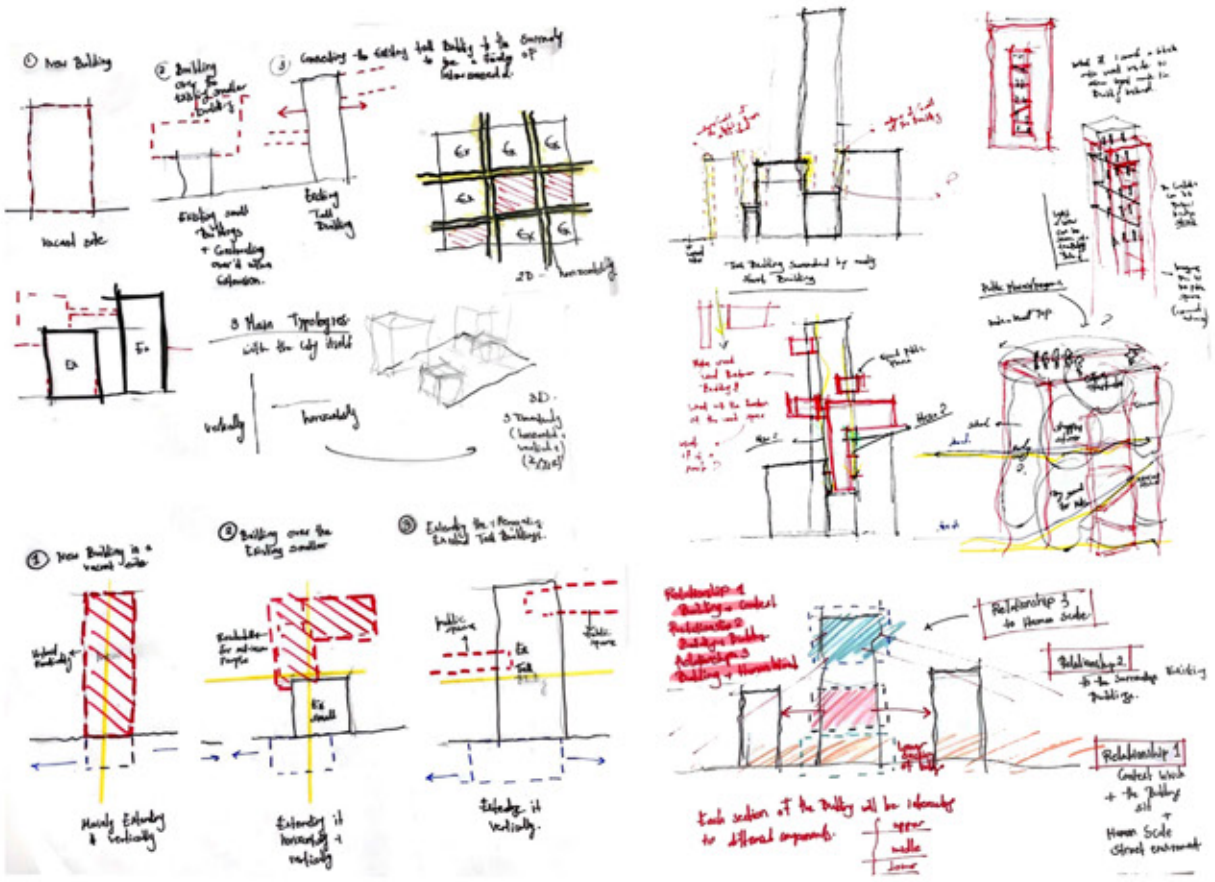




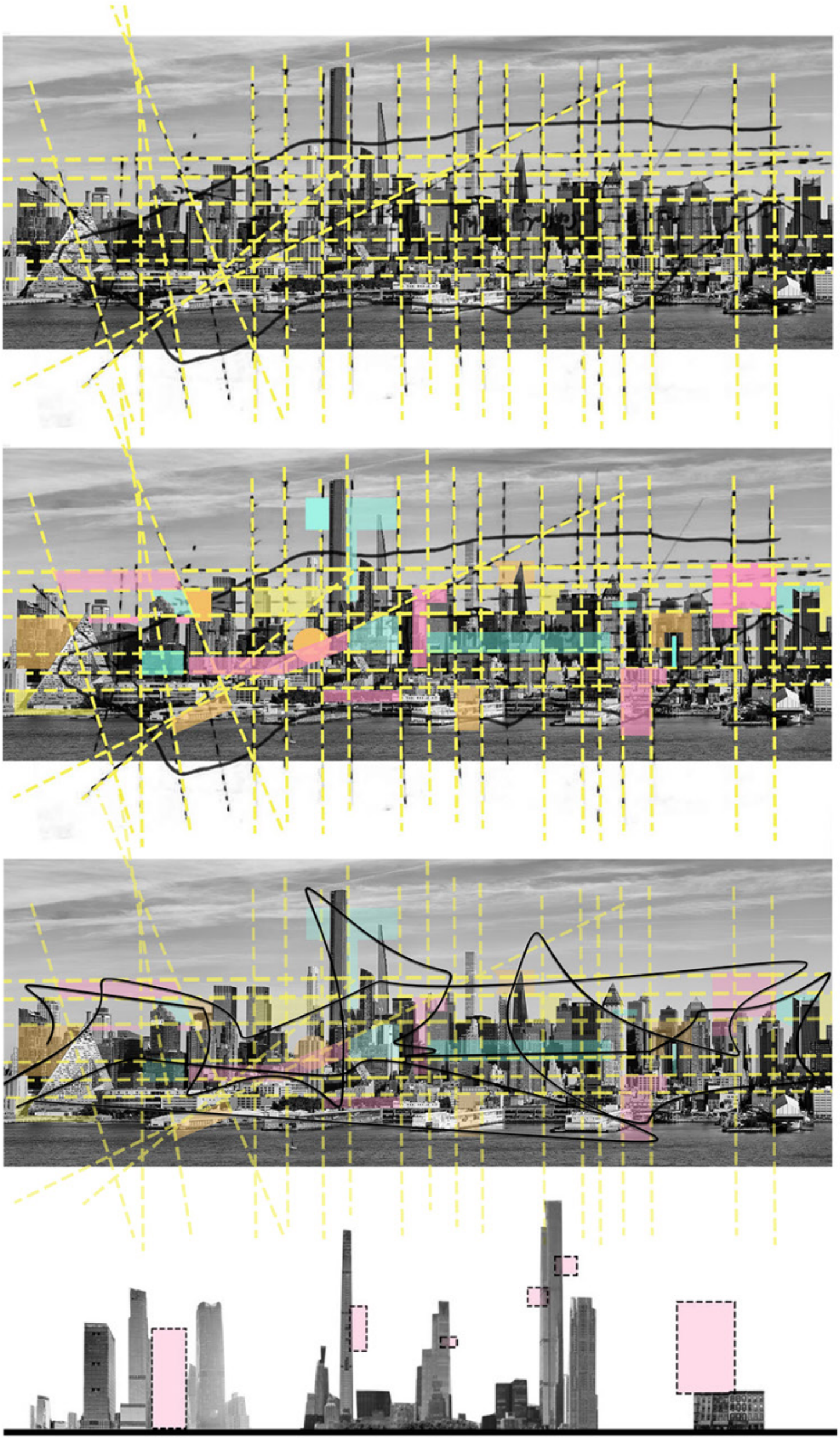


Initial Sketches and Diagrams of the Main Ideas

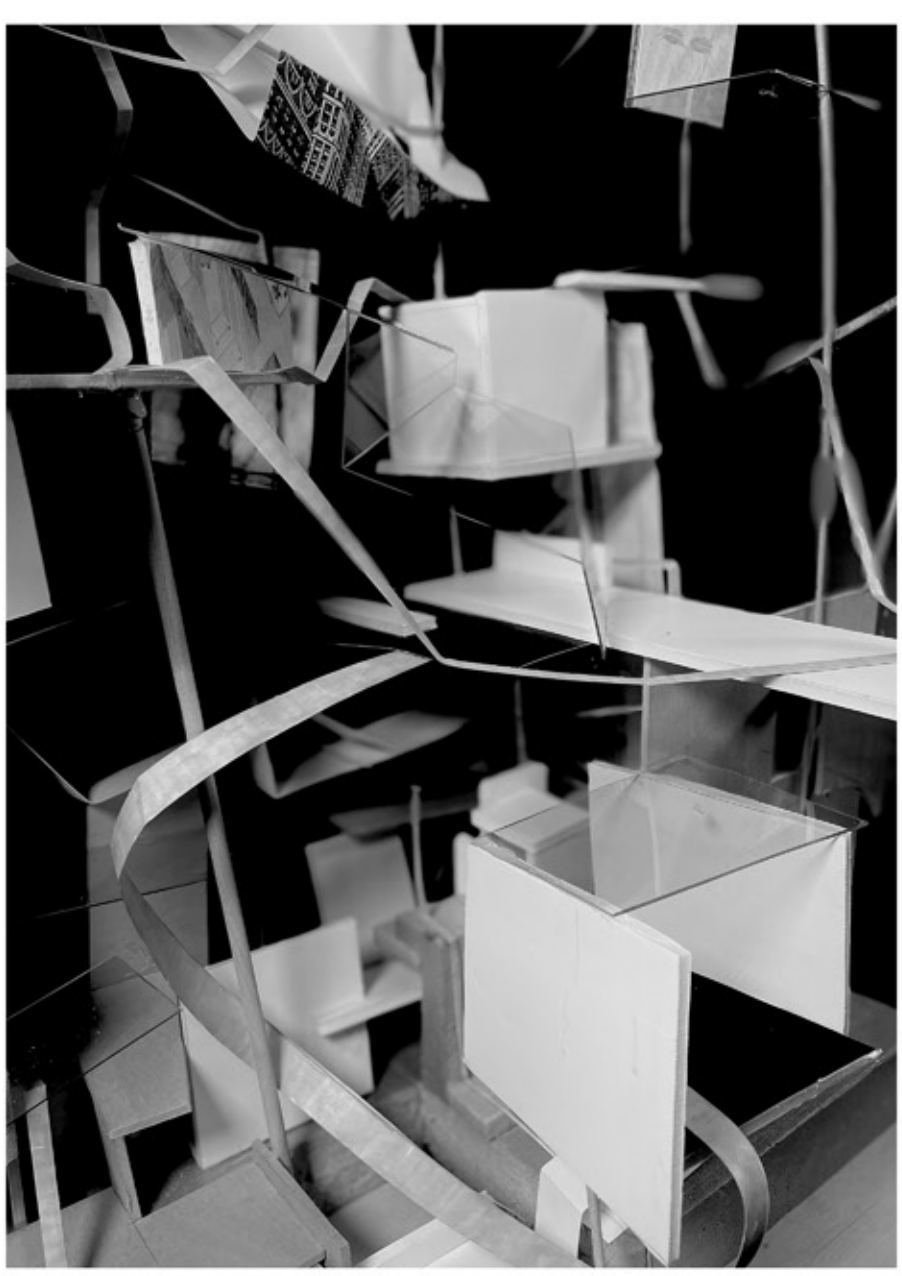




Initial Sketches and Diagrams of the Main Ideas

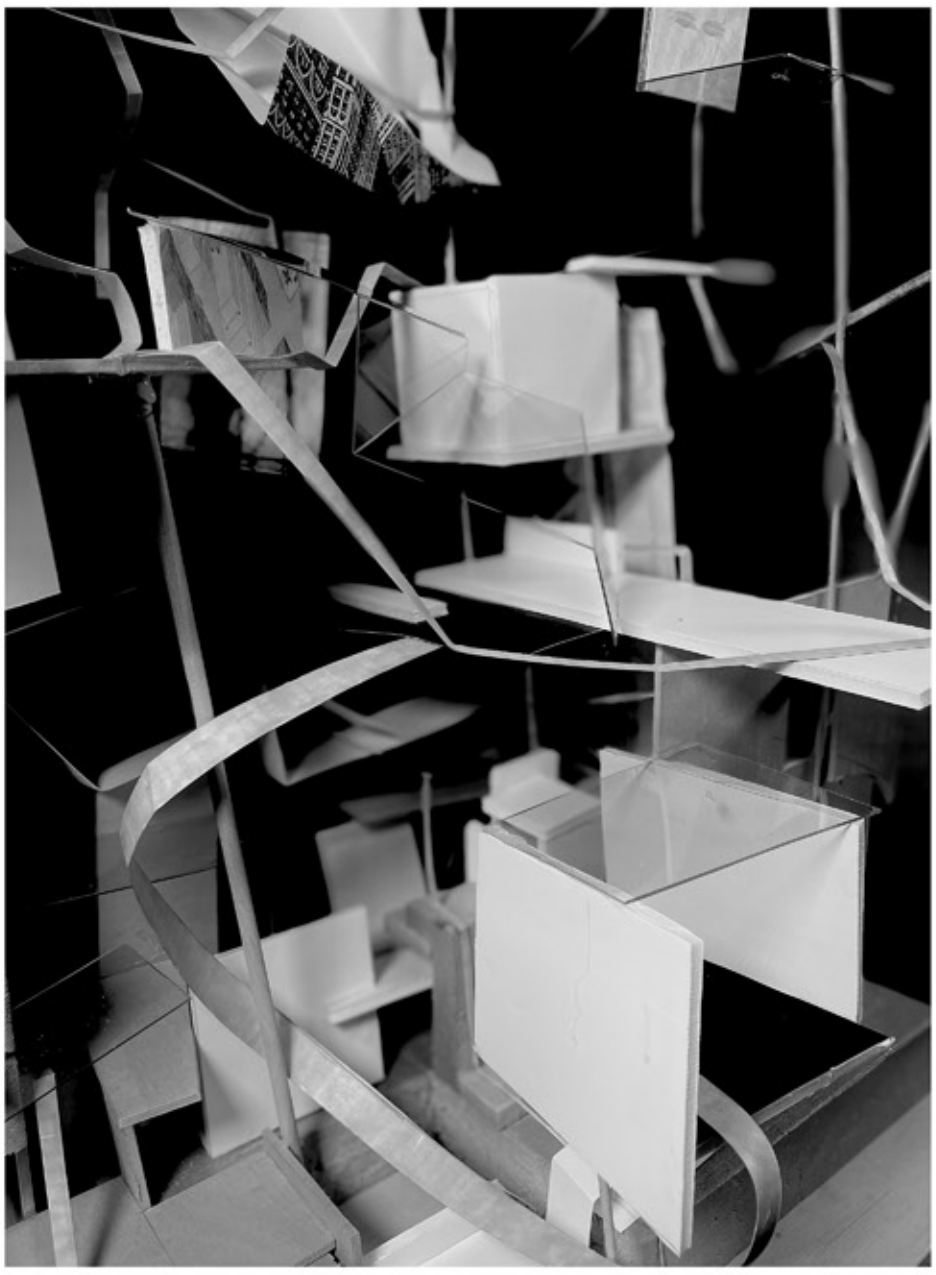


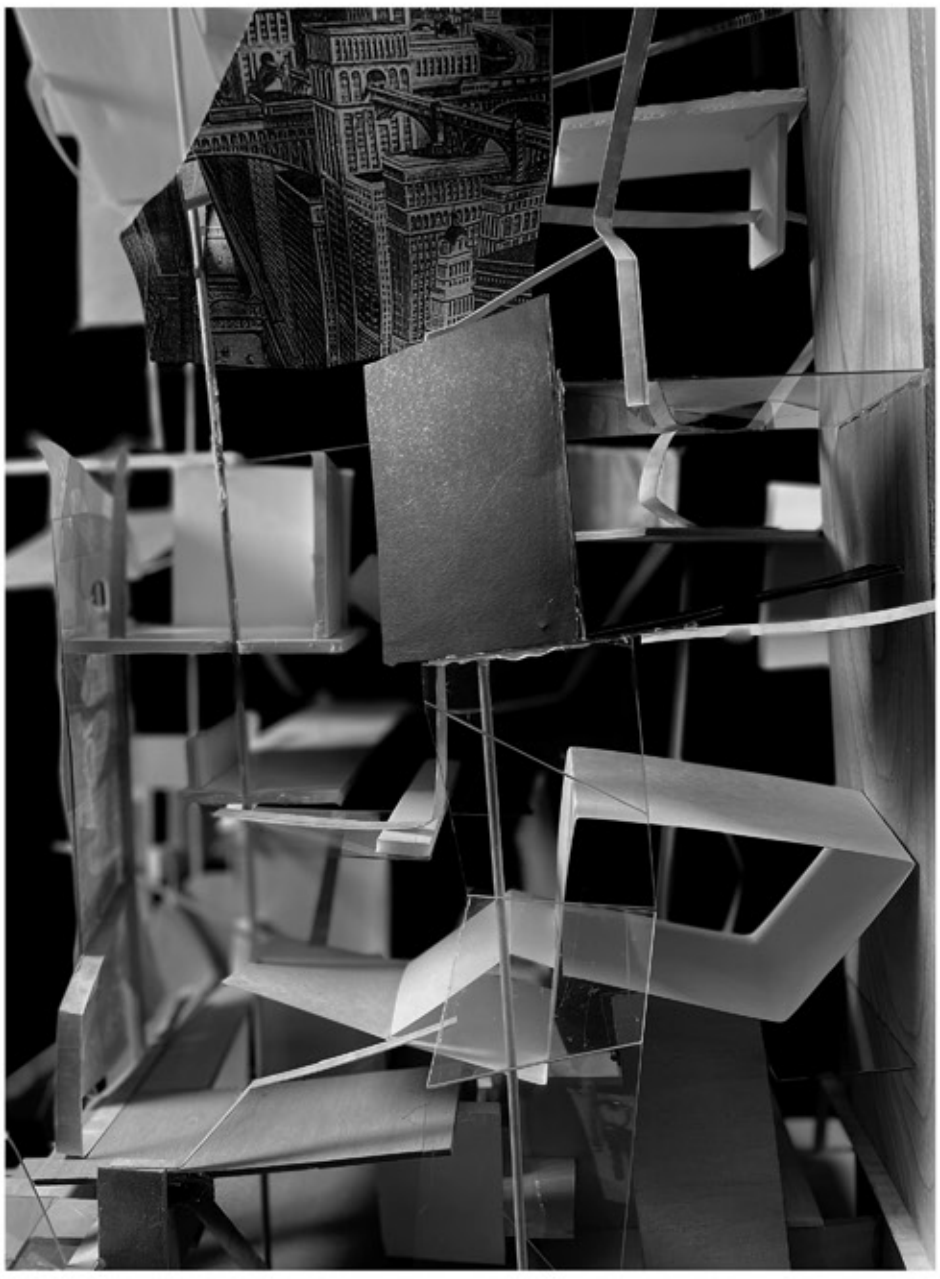
Sketch Model of the Initial Ideas





Sketch Model of the Initial Ideas

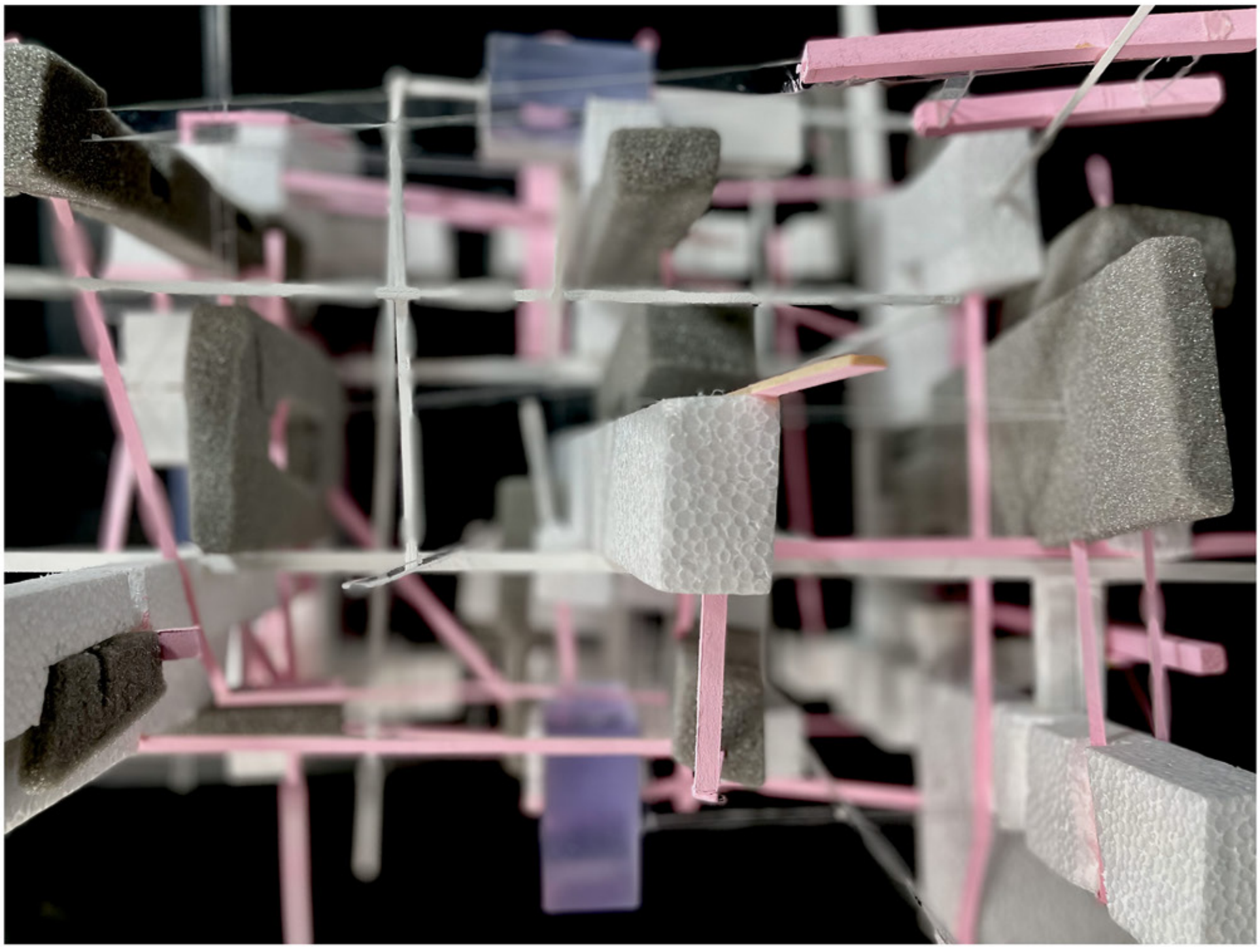


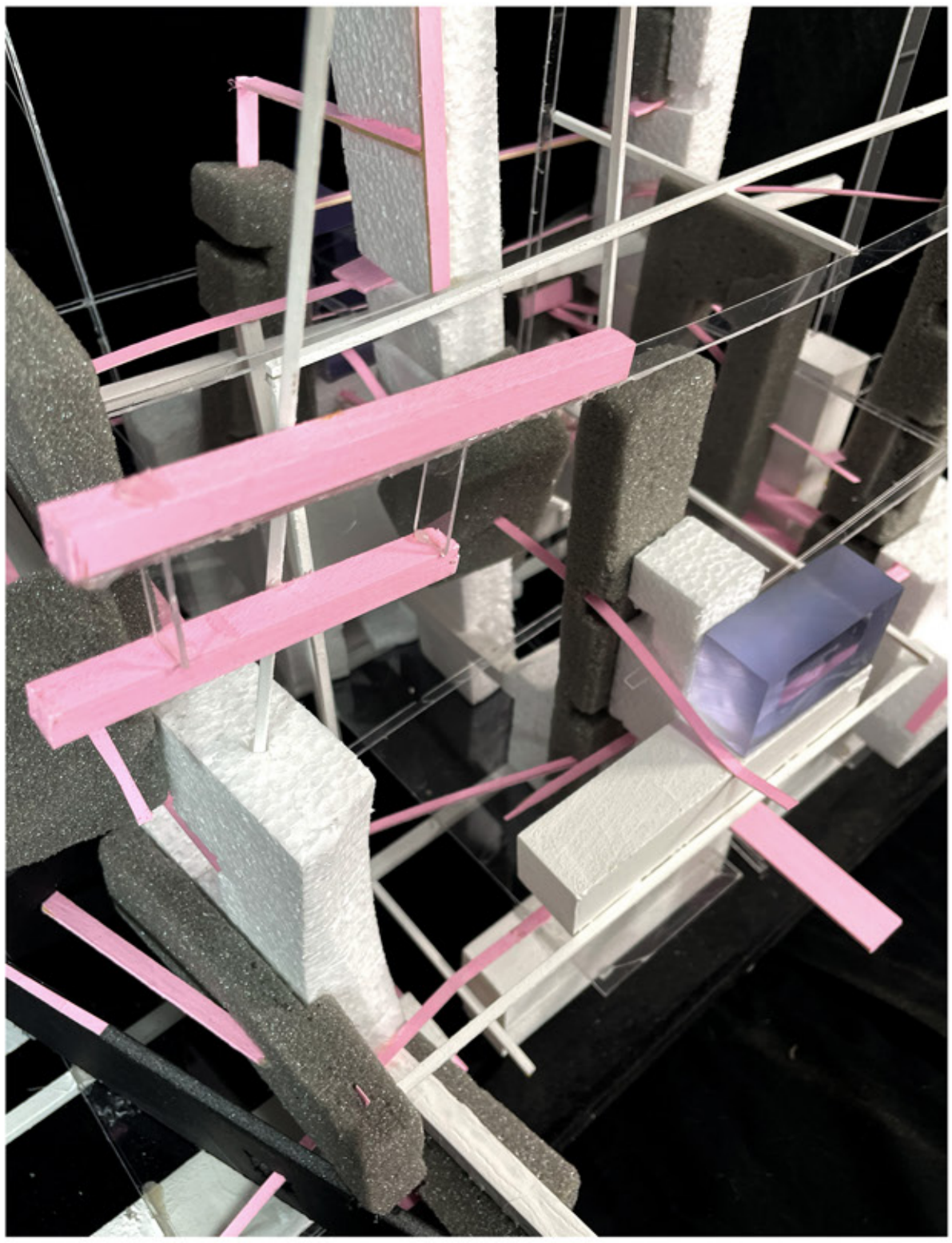


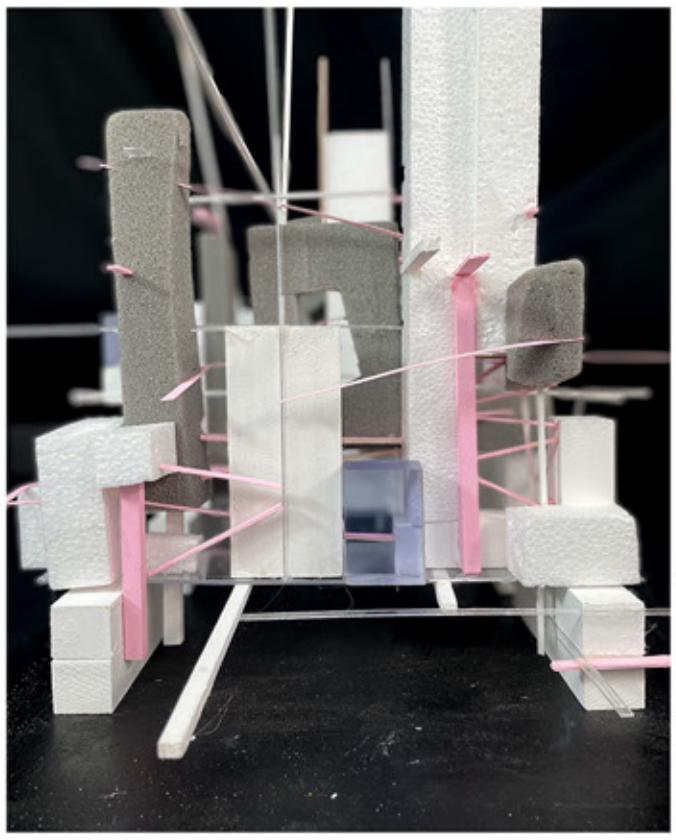


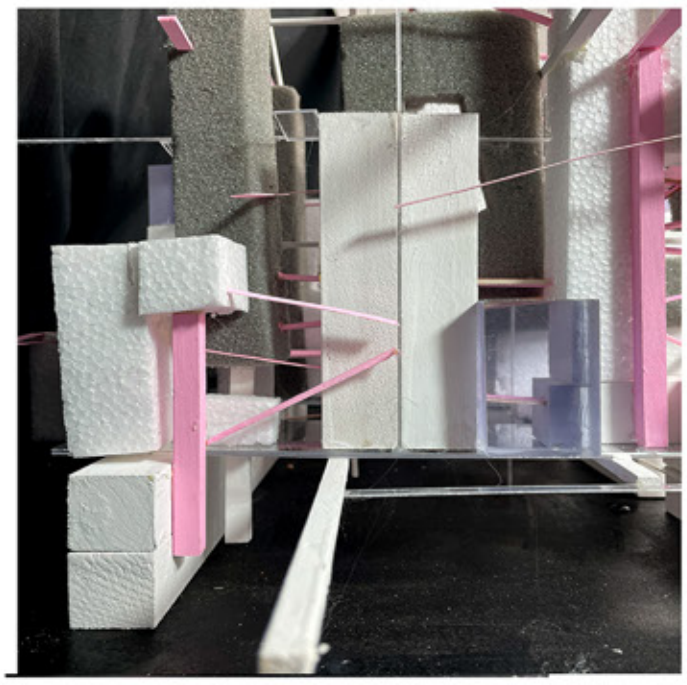


Sketch Model 2 of the Initial Ideas

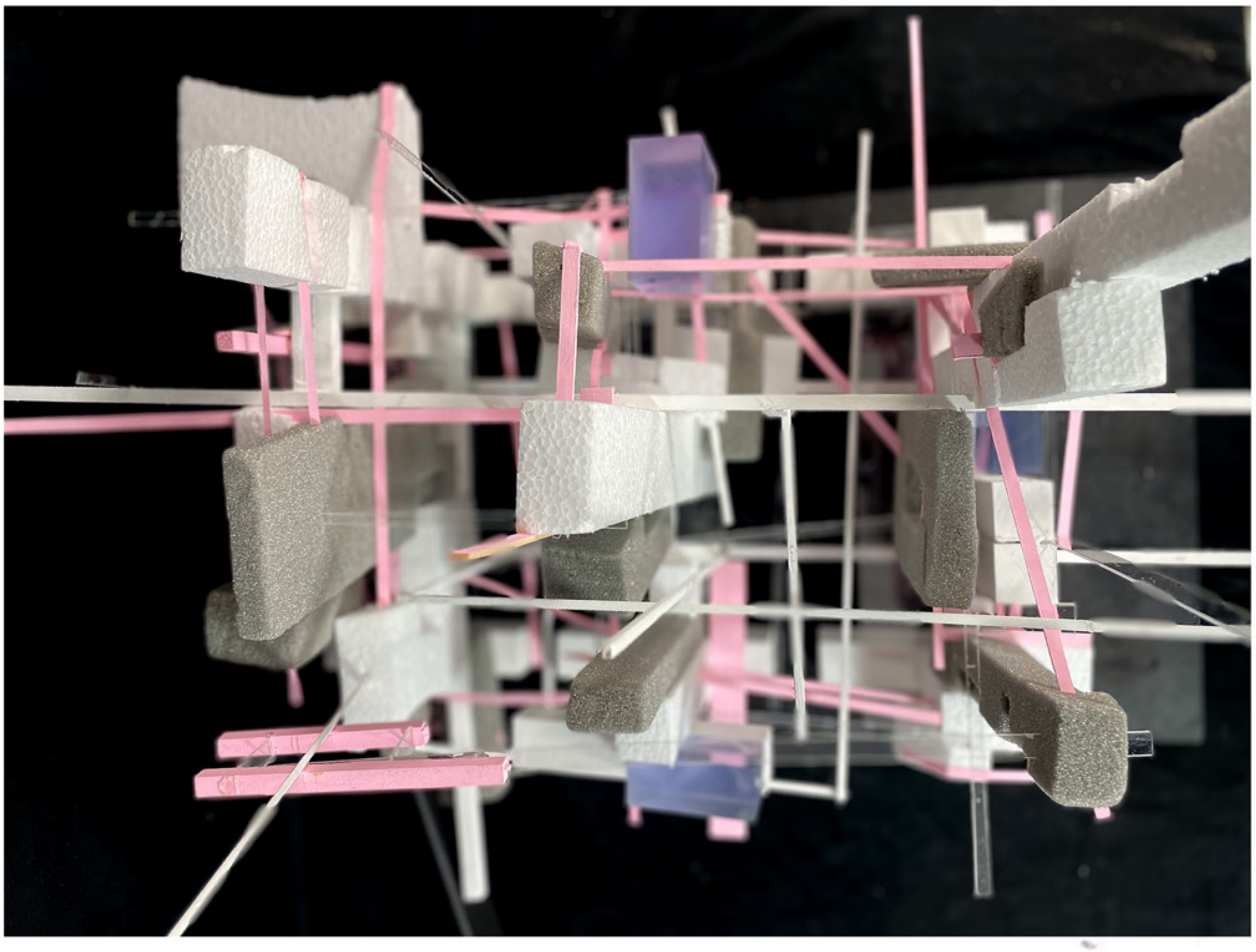




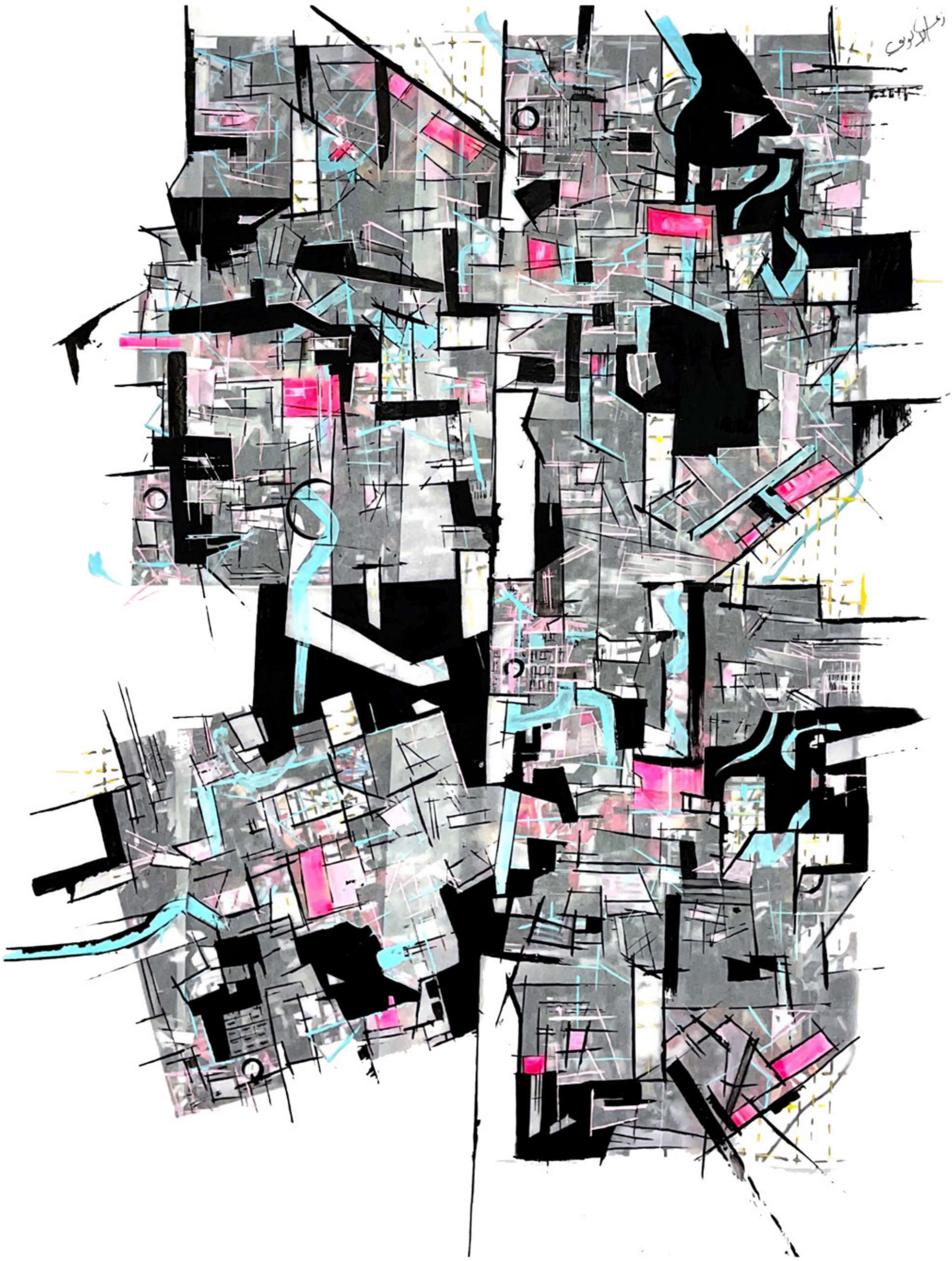




Sketch Model 2 of the Initial Ideas



Acrylic Abstract Art Canvas 5ft by 7ft



Acrylic Abstract Art



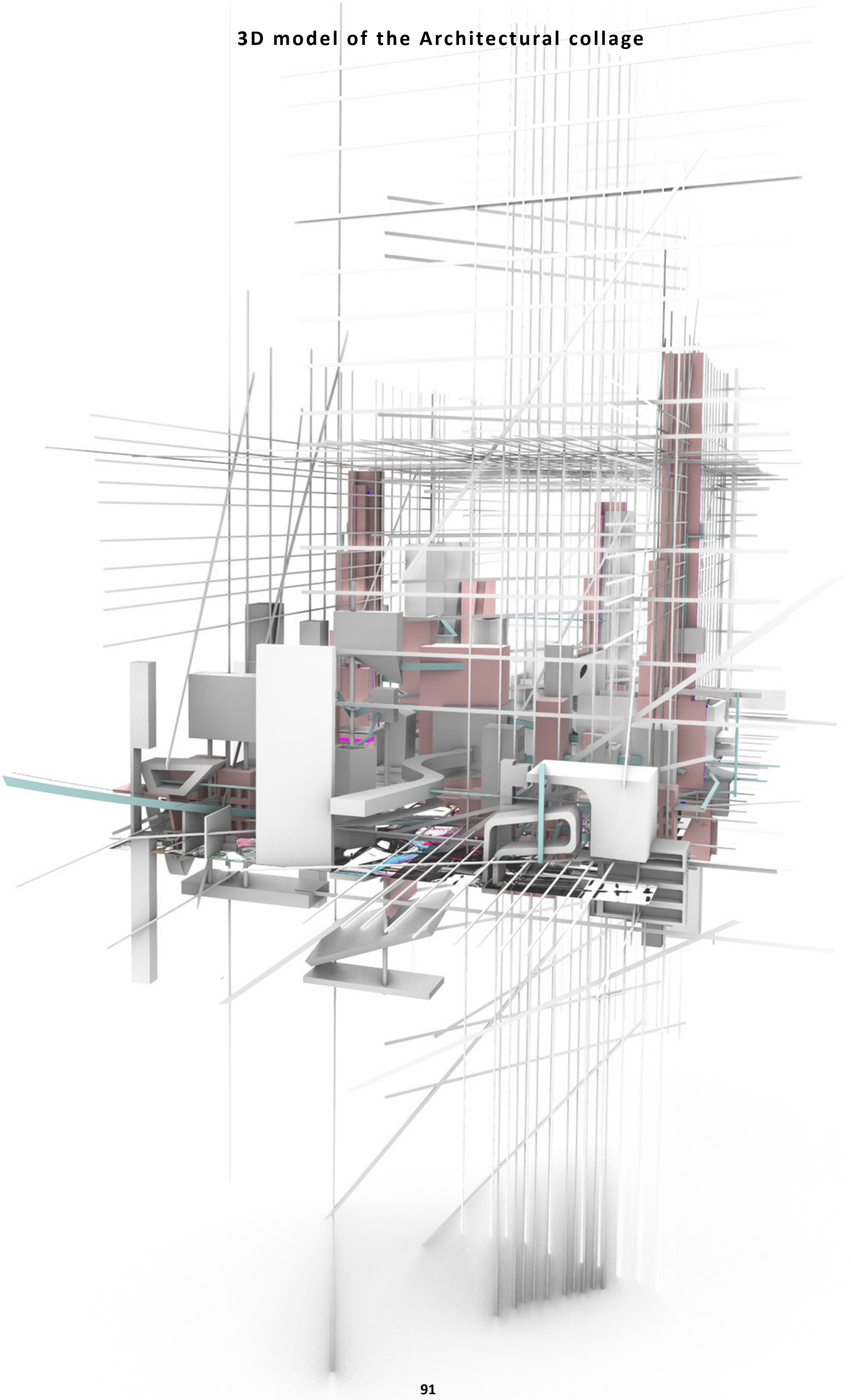
Acrylic Abstract Art



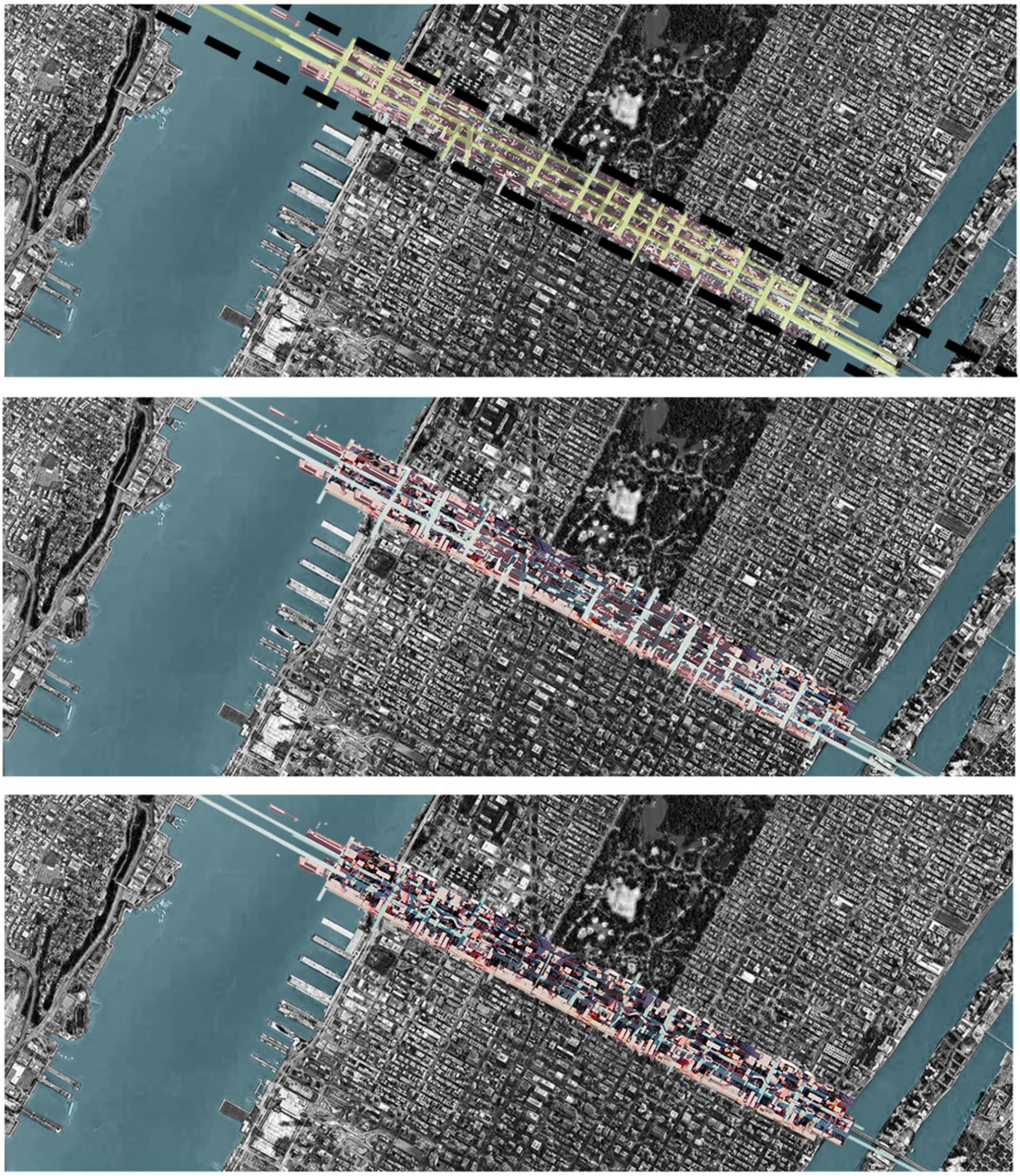
Architectural collage of sketch models,abstract art, and pictures from NYC



3D model of the Architectural collage



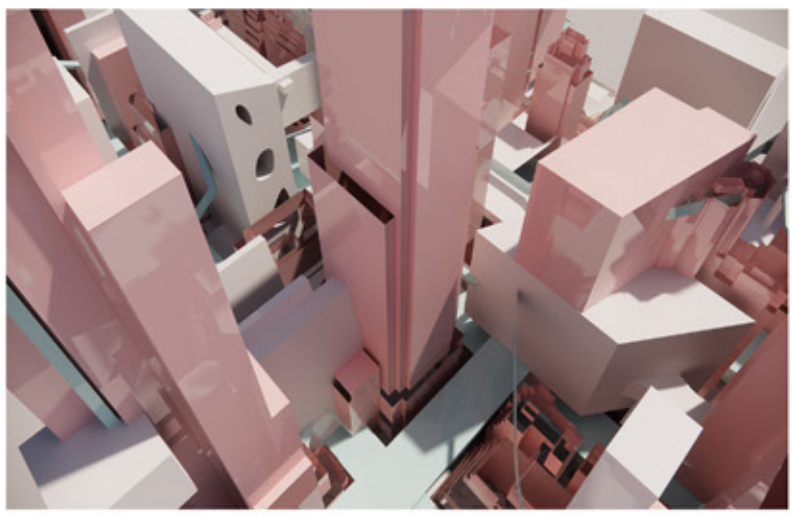
Placing The 3D model in the cross-section of Manhattan



Perspectives of the 3D model with the existing site



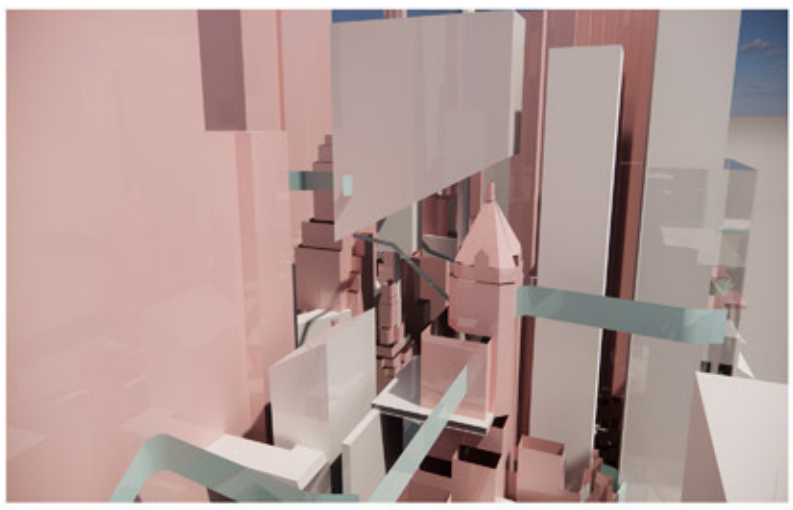


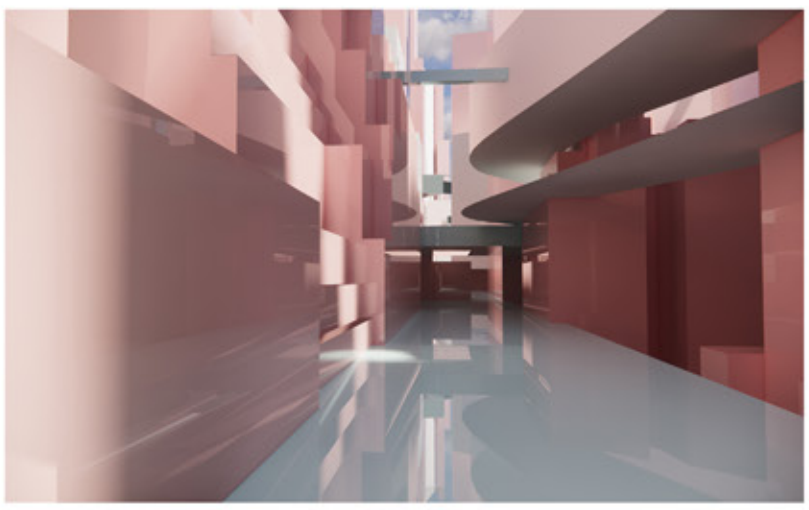












Exploratory Techniques in Generating Ideas

Throughout the design process, a dynamic methodology is employed, embracing a diverse range of techniques. With each new method adopted, uncharted territory is eagerly explored, driven by a desire to gain fresh insights and perspectives. Hand sketching facilitates the intuitive exploration of ideas, capturing the essence of concepts on paper. Abstracting elements into abstract forms challenges conventional thinking and encourages discovery of unconventional solutions. Constructing physical models provides the opportunity to engage with the tactile aspects of design, allowing for the testing and refining of ideas in three-dimensional space.

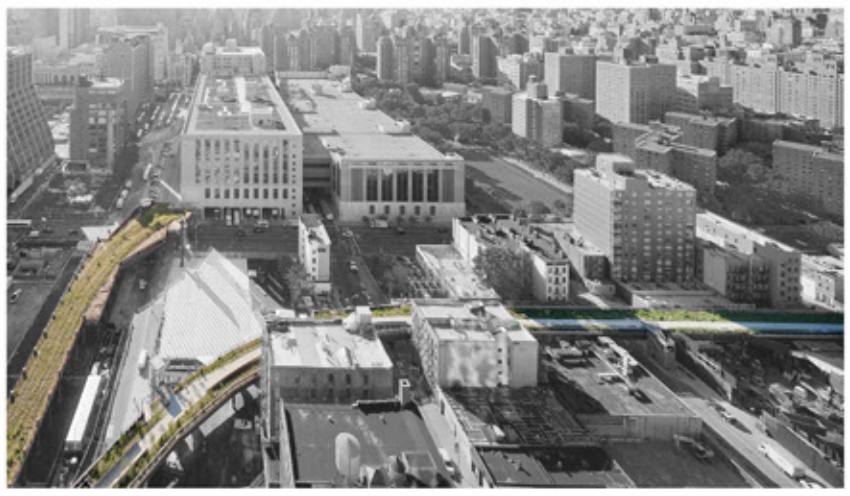
Furthermore, computerized tools generate intricate diagrams and schematic design proposals, facilitating the visualization and effective communication of complex ideas. Embracing experimental techniques is vital for pushing the boundaries of creative exploration and evoking a sense of intrigue and intellectual curiosity within the theoretical concepts developed.

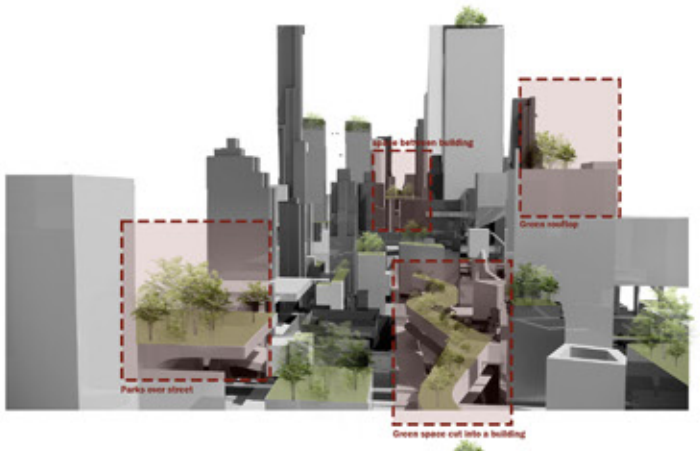
By weaving together these diverse techniques, continuous learning and discovery are cultivated throughout the design journey. Moreover, this approach transcends the limitations of traditional design processes, fostering innovation and pushing the boundaries of what is possible in envisioning future scenarios. Ultimately, this multifaceted methodology aims to provoke thought, inspire contemplation, create meaning, question the future of architecture to meet the needs of people best and create transformative architectural experiences.

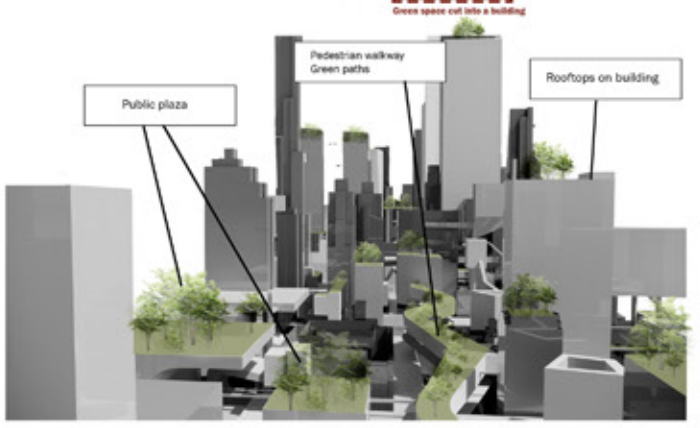
Exploring the Potential Opportunities of Upper Cities within the 3D Model

Green Areas/Urban Farming/Rooftop Gardens

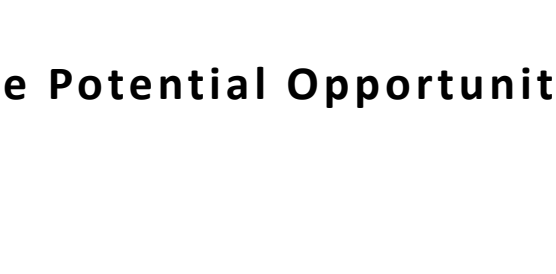




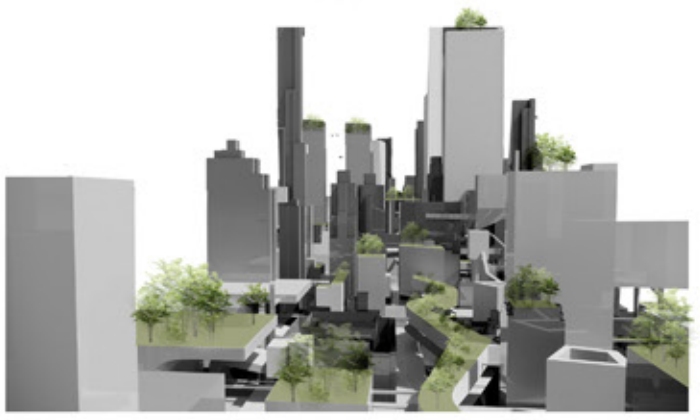




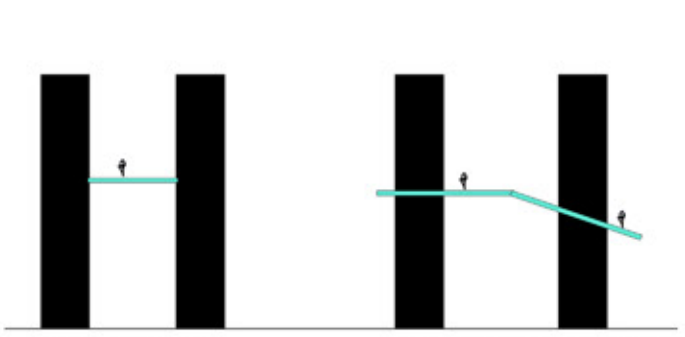
What if a seriesr of the high line is created on the top of the buildings, whith-in the builings and over the streets to bring the busy city life into the park and the sky ?

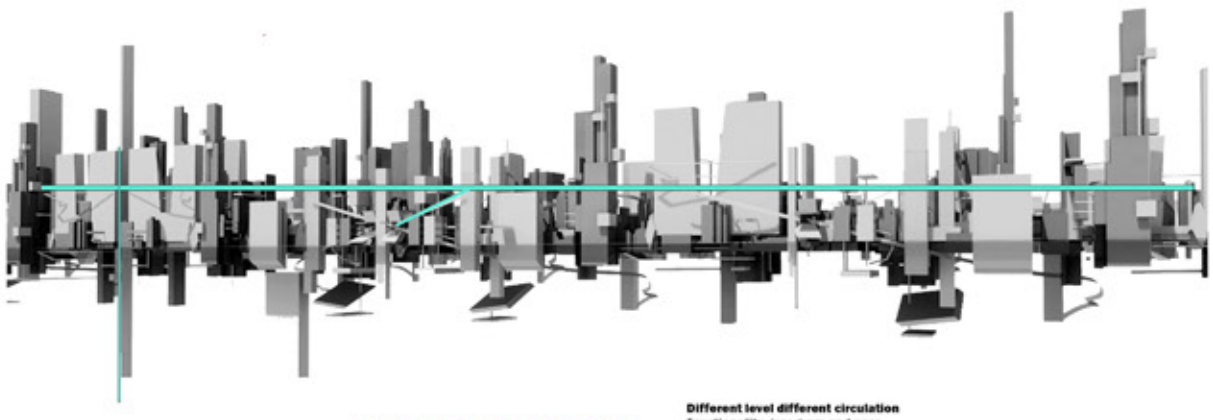


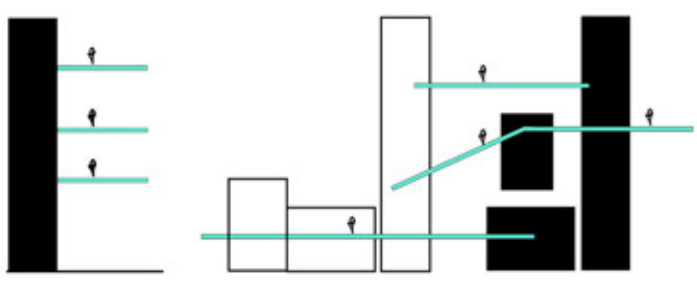


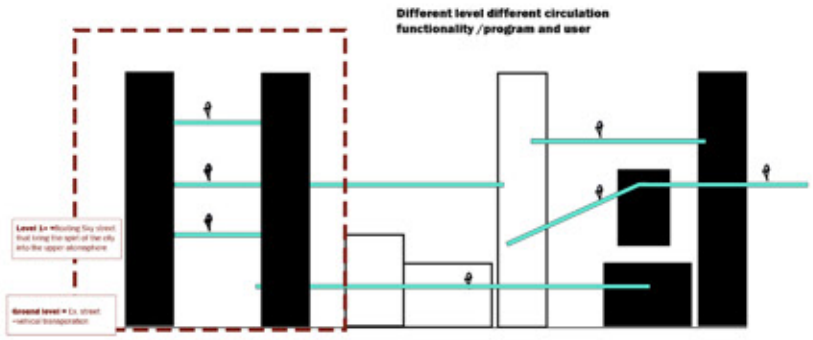


Interconnectedness Versus Matrix of Elevated Circulation Networks

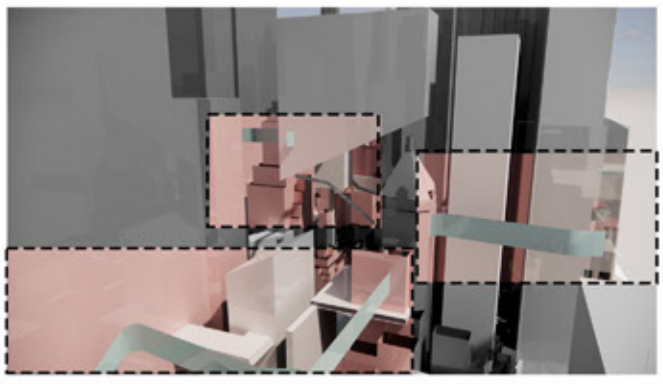


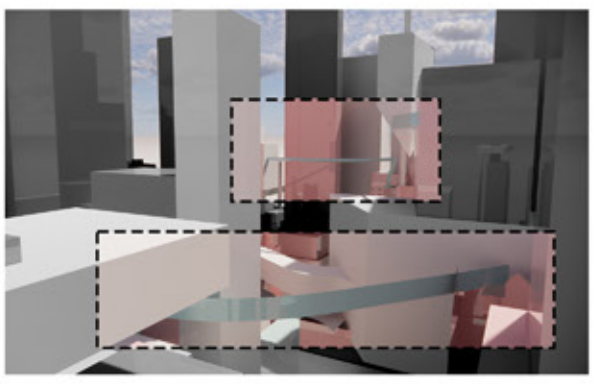






These figures connect in there dimensional creating the impression of city as continuous urban scale interior city as a continuous.vision of continual figure to figure relationships a template of public space within future cities undergoing intense densification and subject to change .a system that would enable you to navigate the city beyond the horizontal realm. The surface plane of Manhattan is exhausted, and you need to find ways where the space above you could be

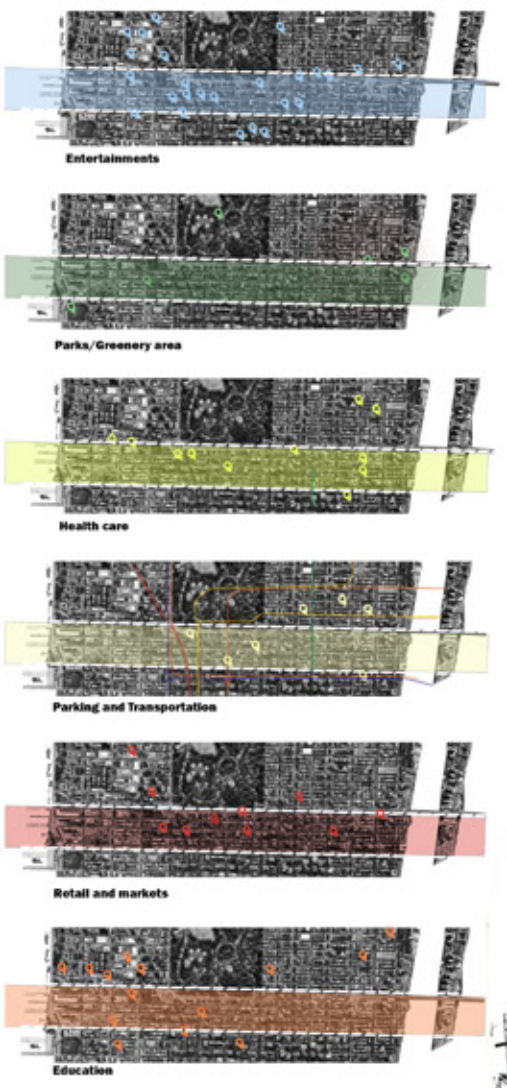


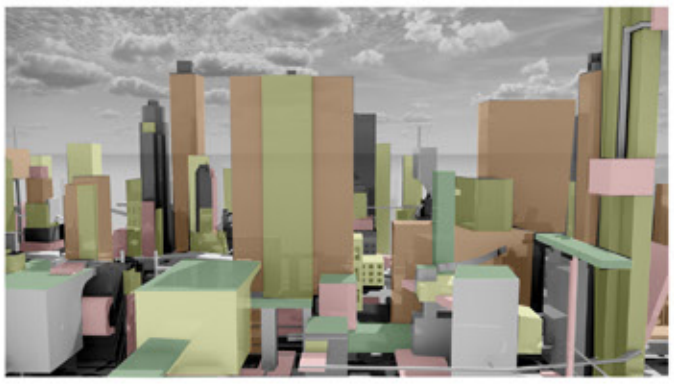


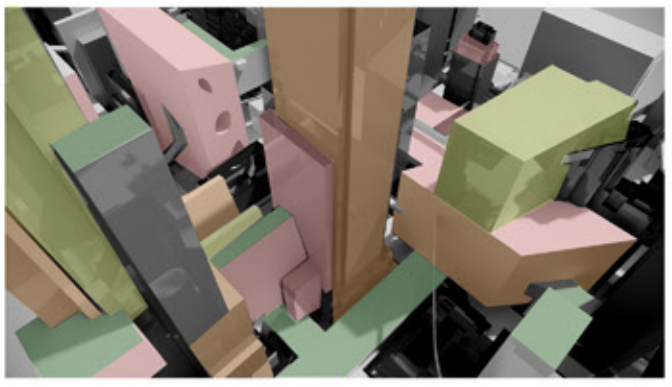


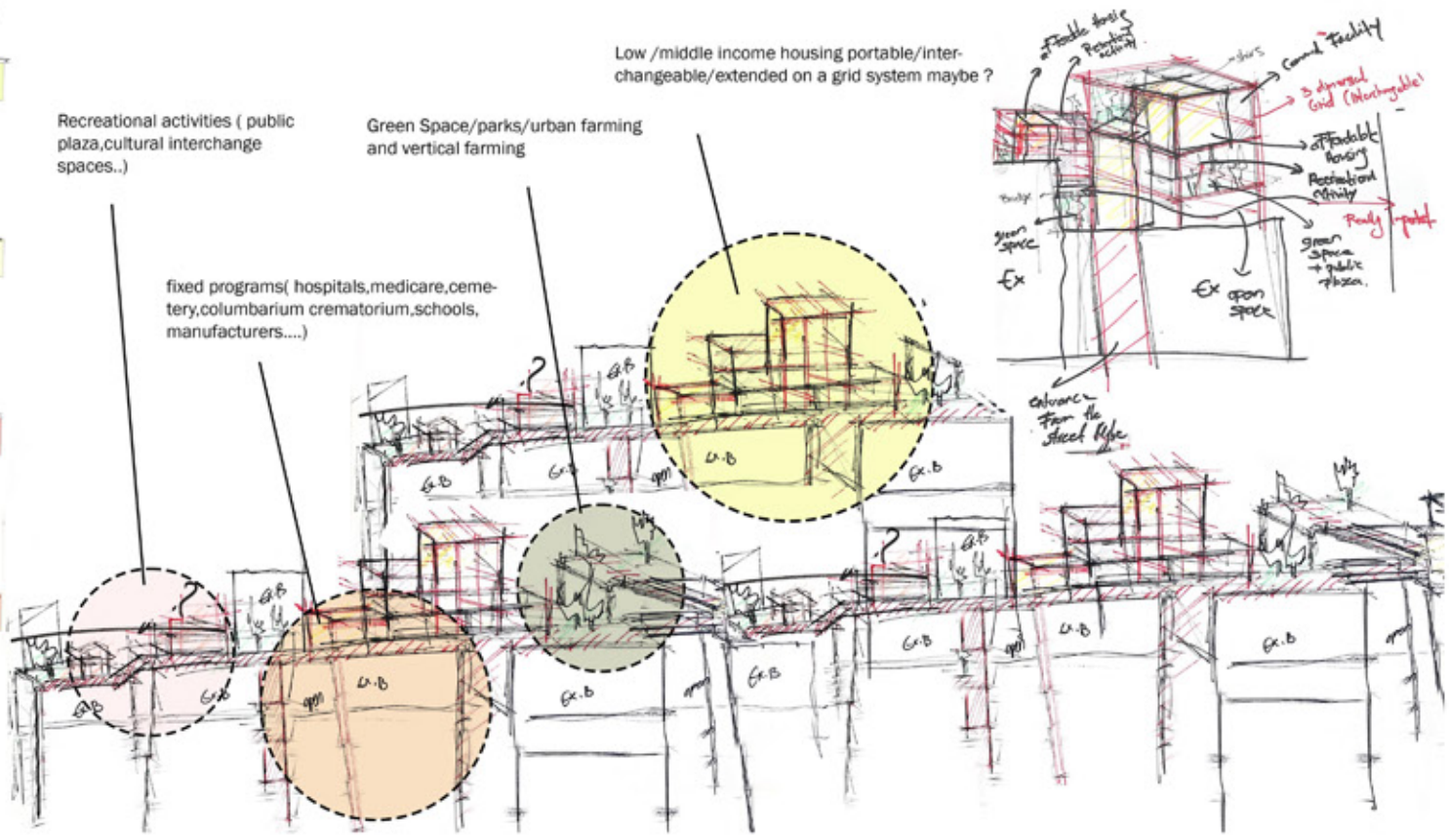
Exploring the Potential Opportunities of Upper Cities within the 3D Model

Activity vs program

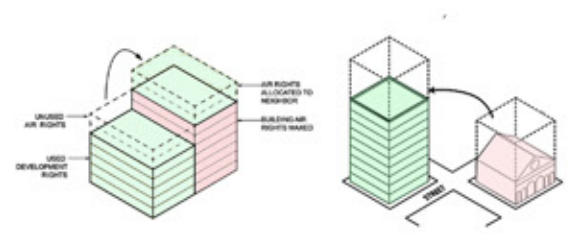








Air Rights vs Atmosphere



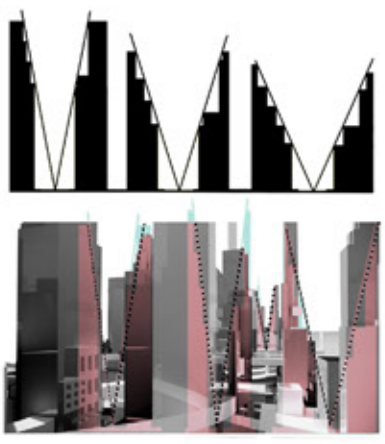


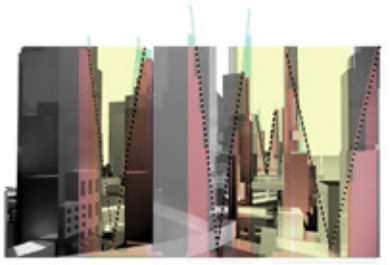
Zoning lot merger



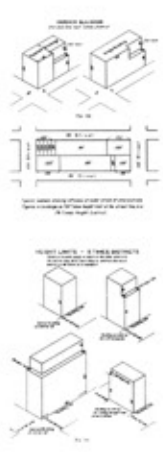
A transfer of development rights (TDR)

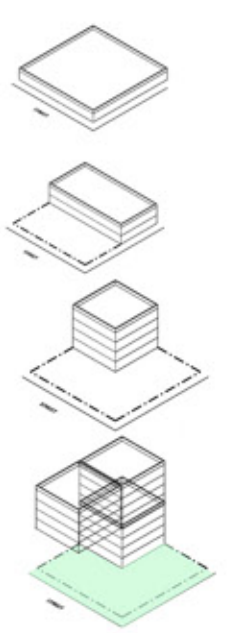
Sky Exposure Plane vs Set Back





Floor Area Ratio (FAR)

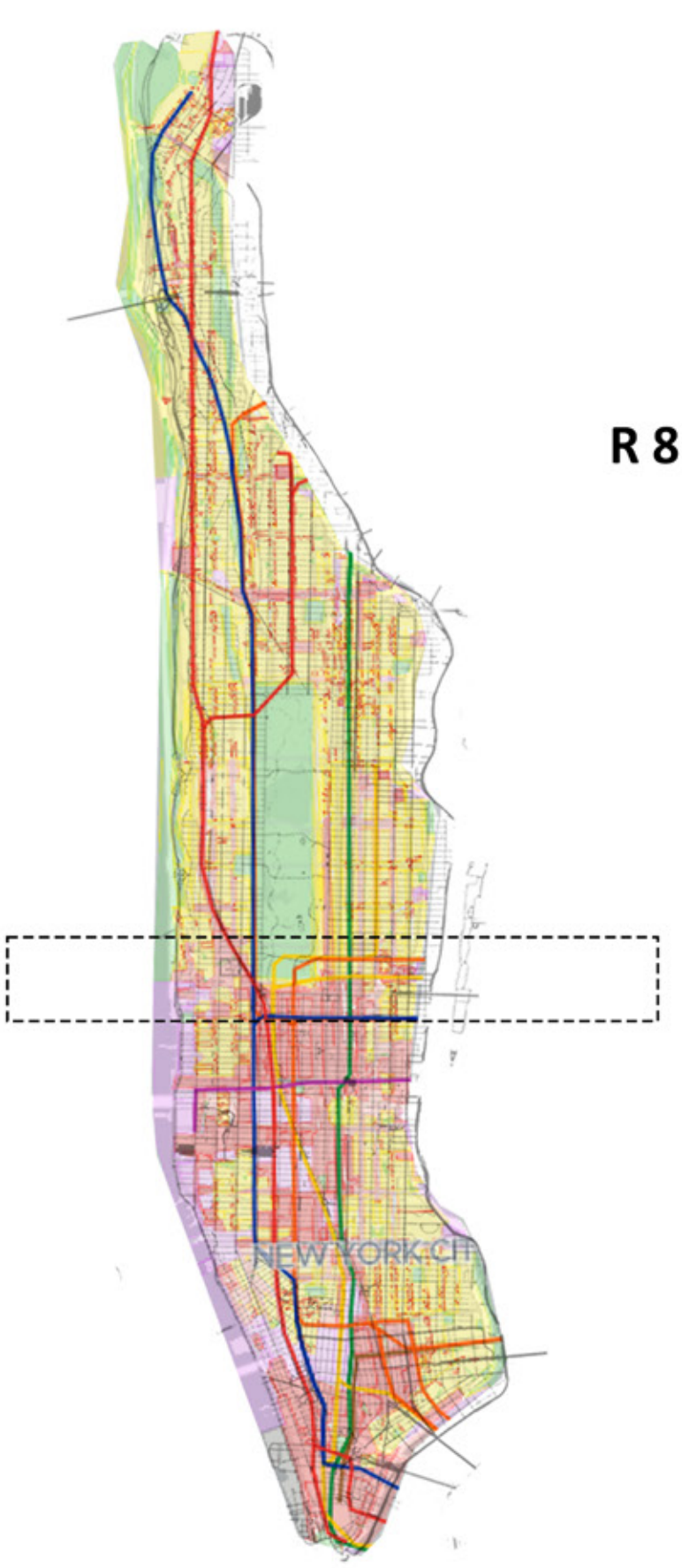


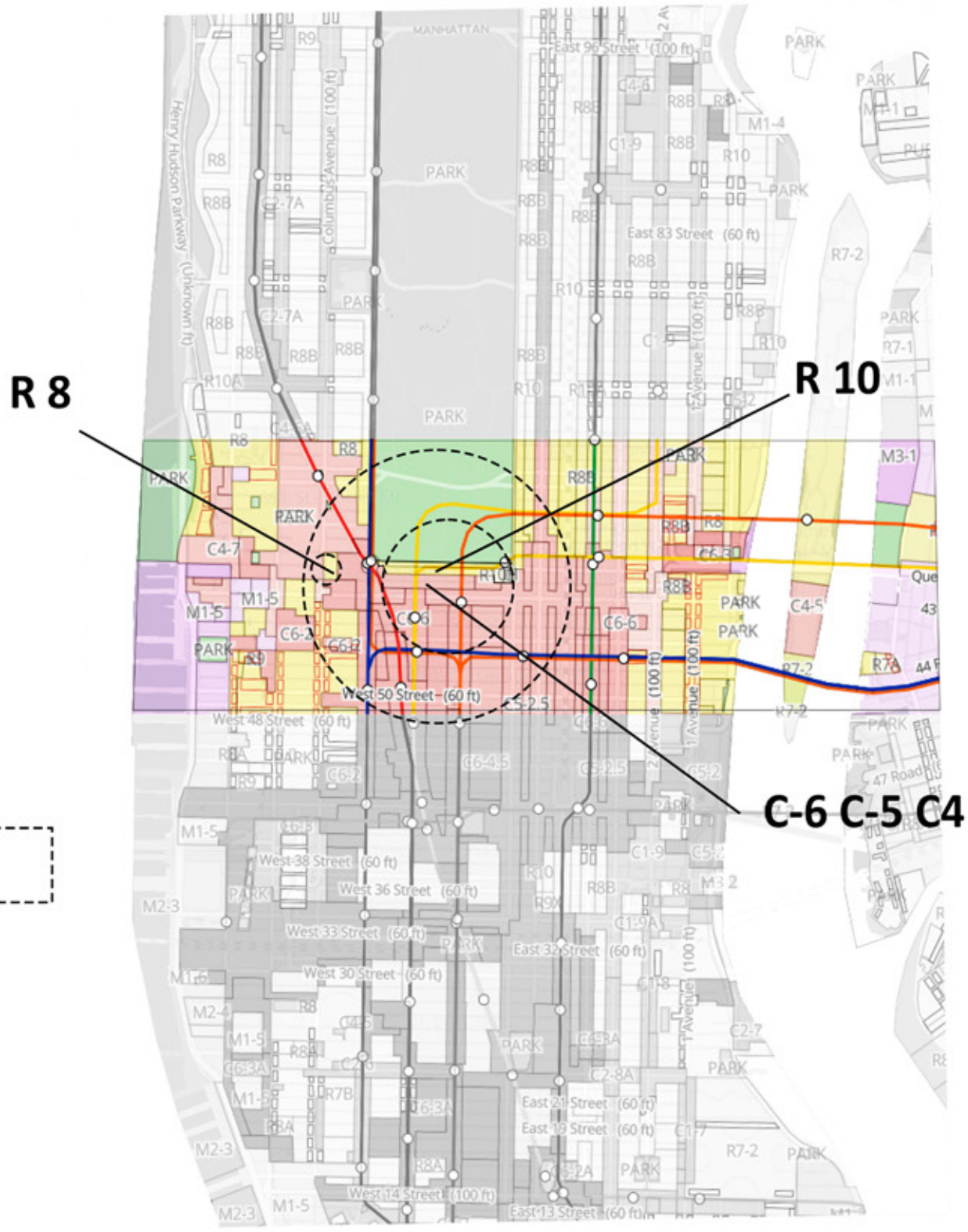




what if the Atomsphere generate urban herachy of the new city by implmenting the Air right,law zones.....?

Zoning laws / District Type

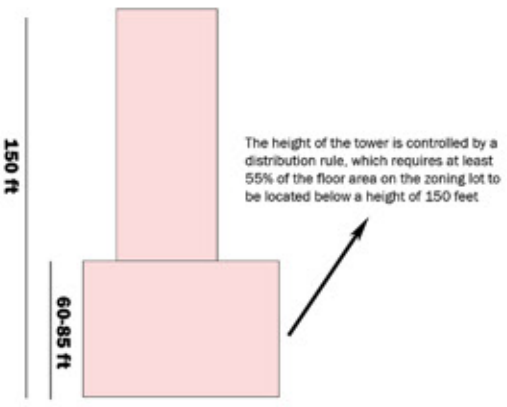




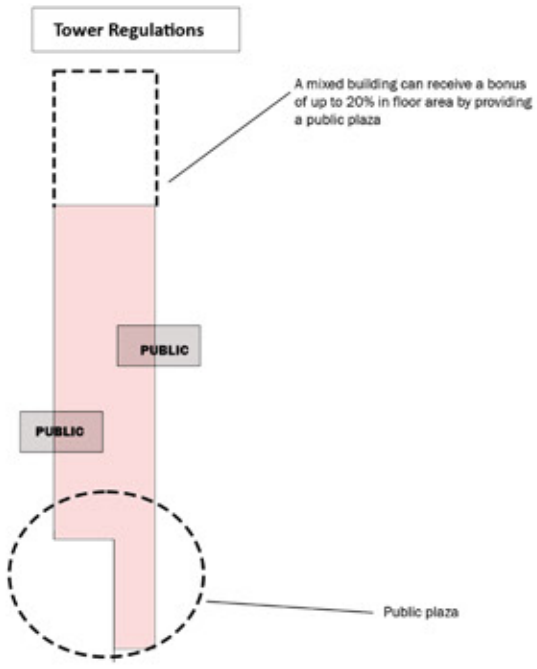
Quality Housing Regulations

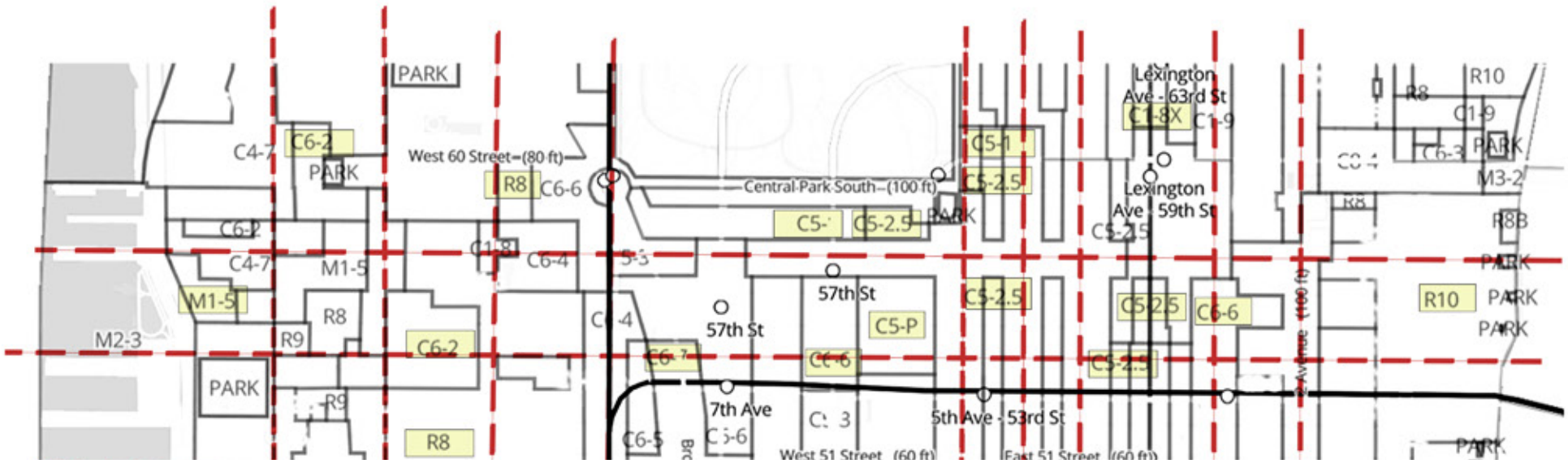


Tower-on-a-Base Regulations



Tower Regulations





4.2 Diagrammatic Proposal of the Upper City

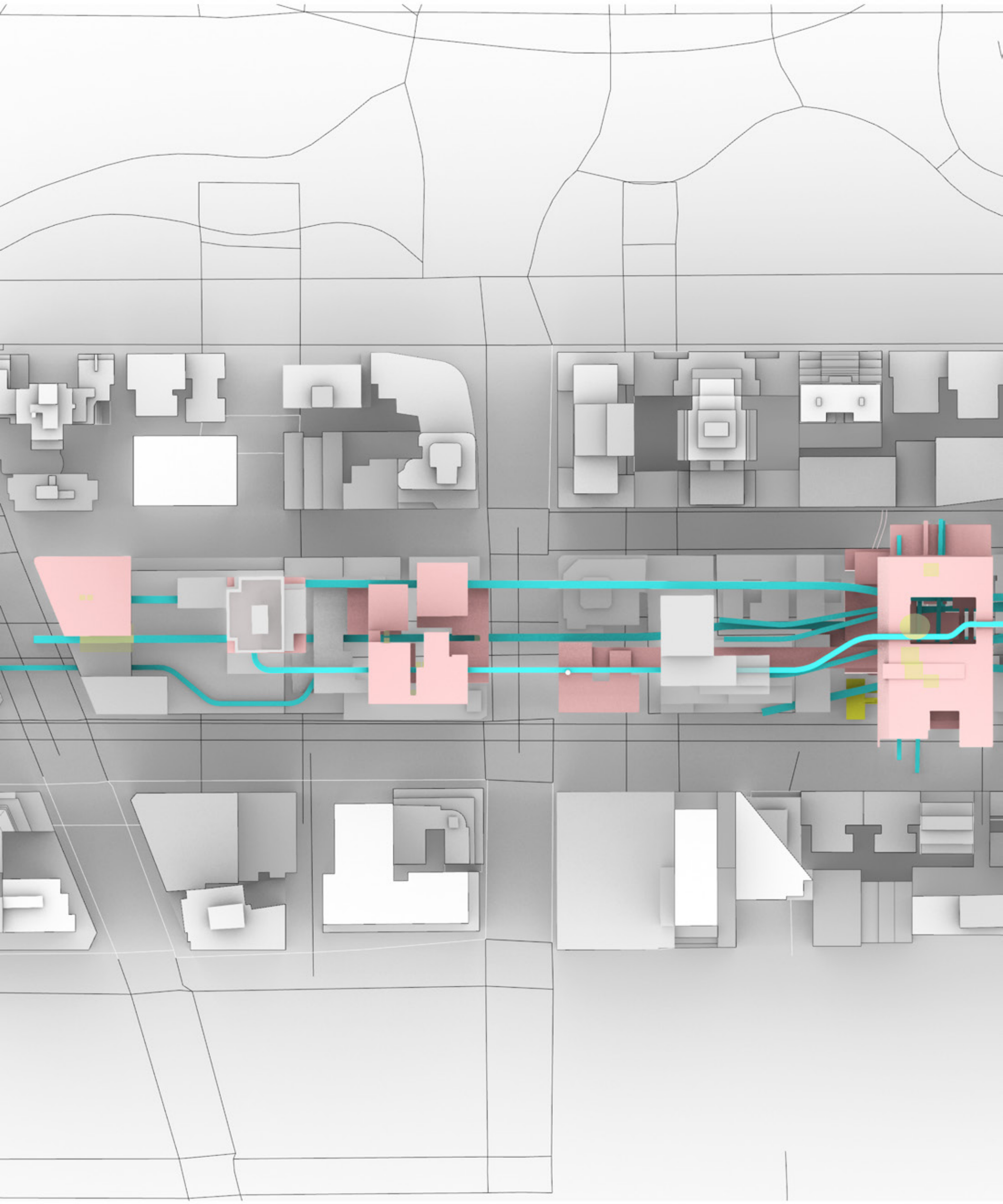
Diagrammatic Perspectives of t



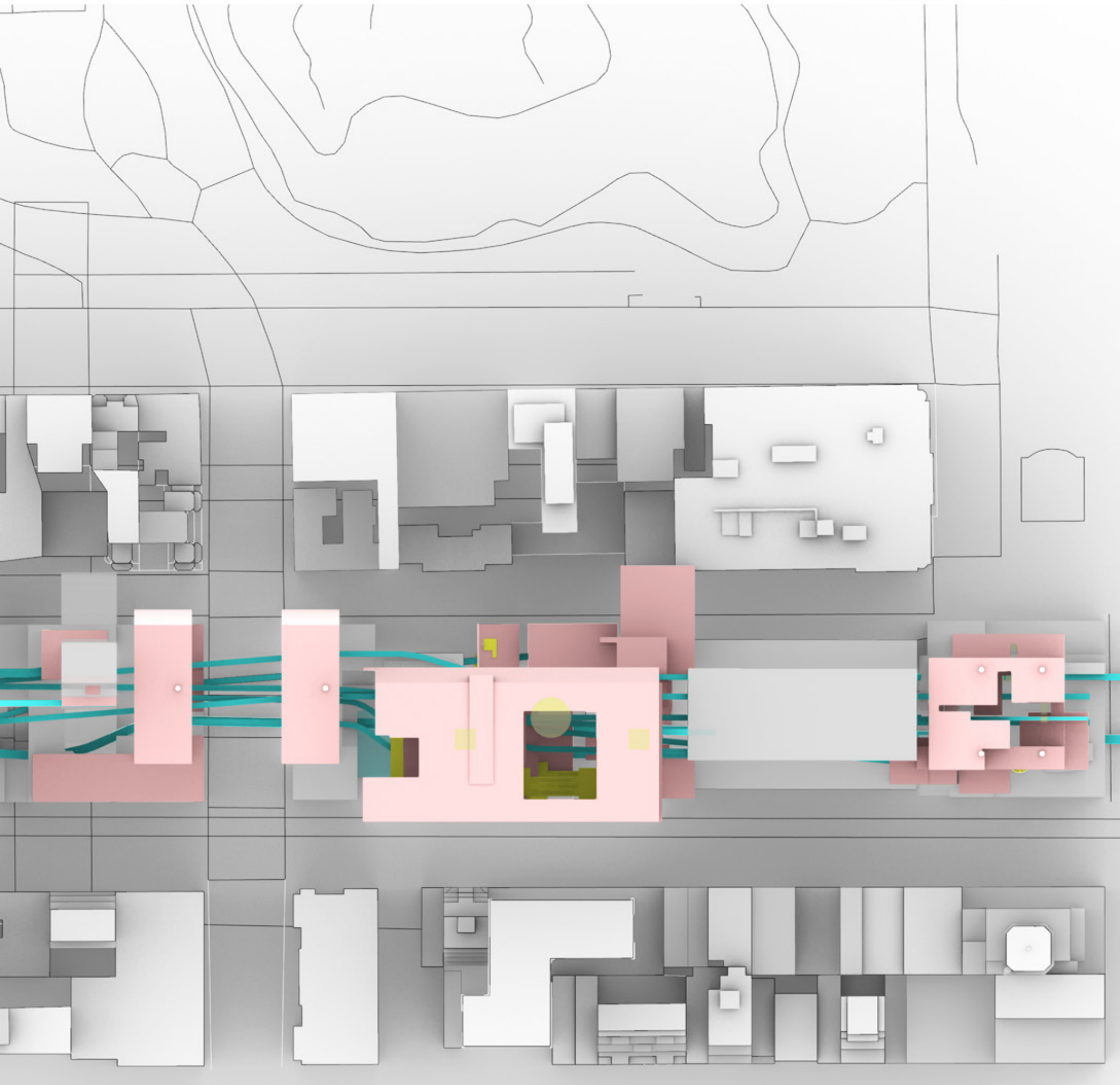
he Upper City from Central Park



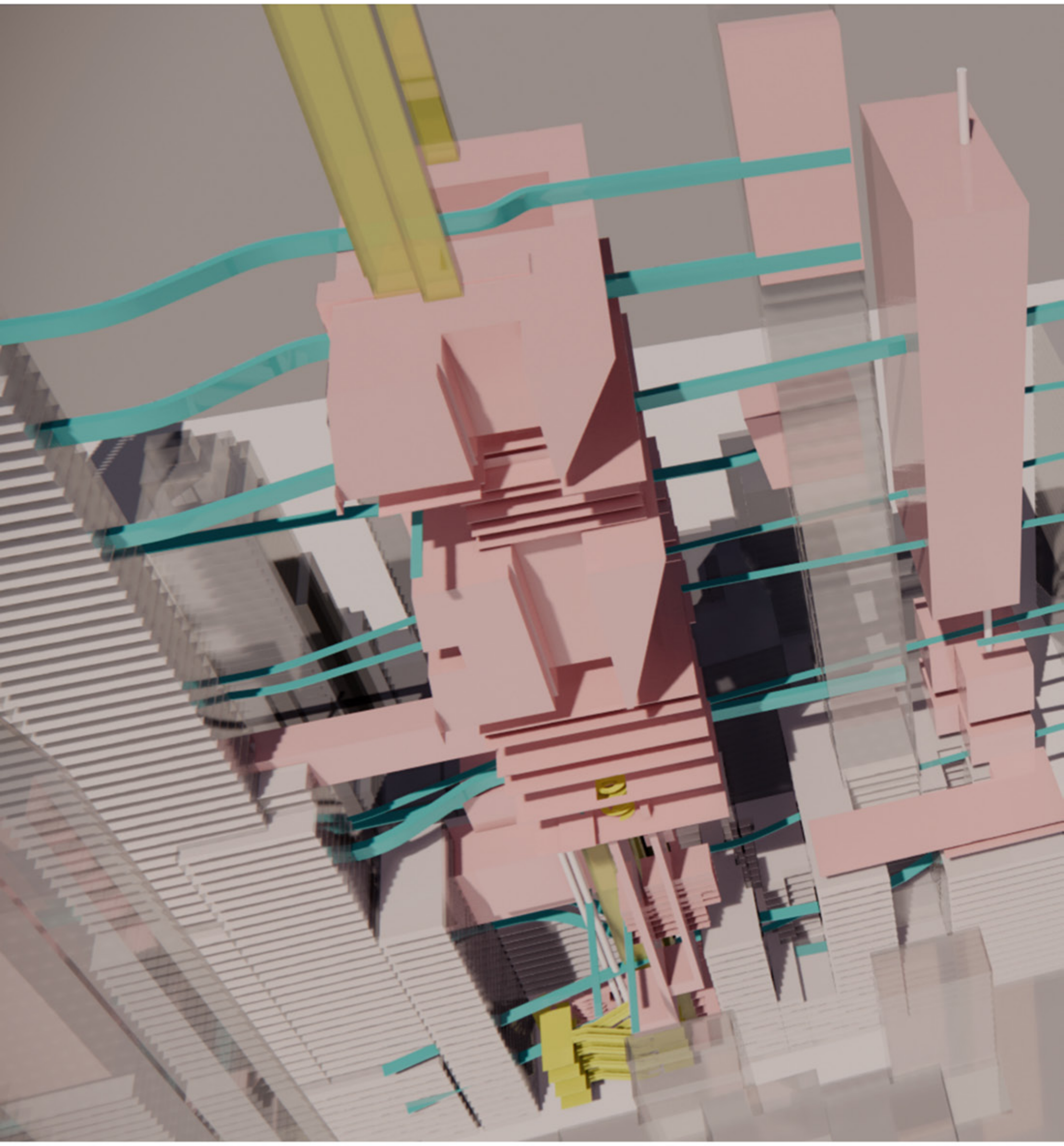
Diagrammatic Site Plan of the Up

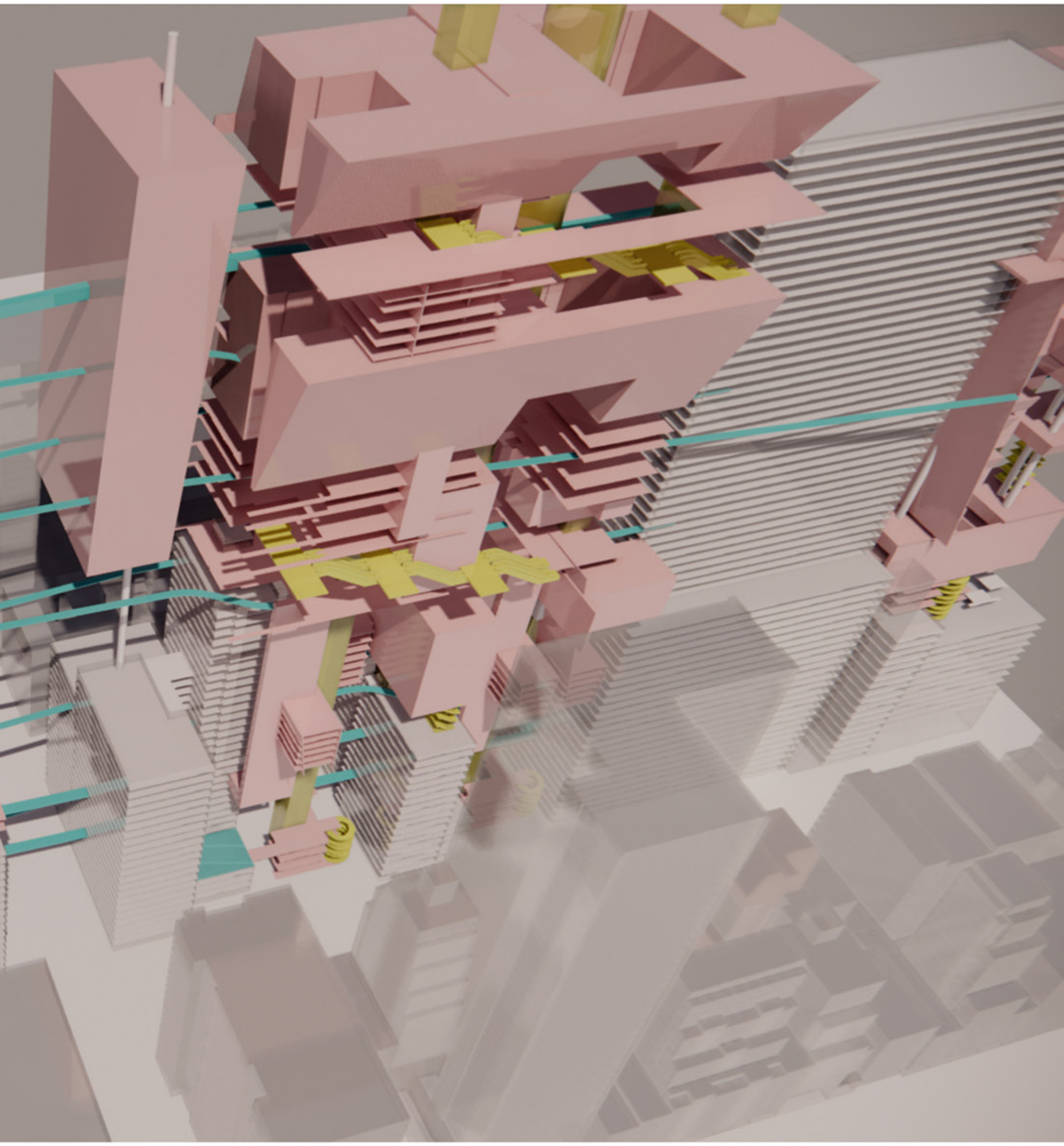


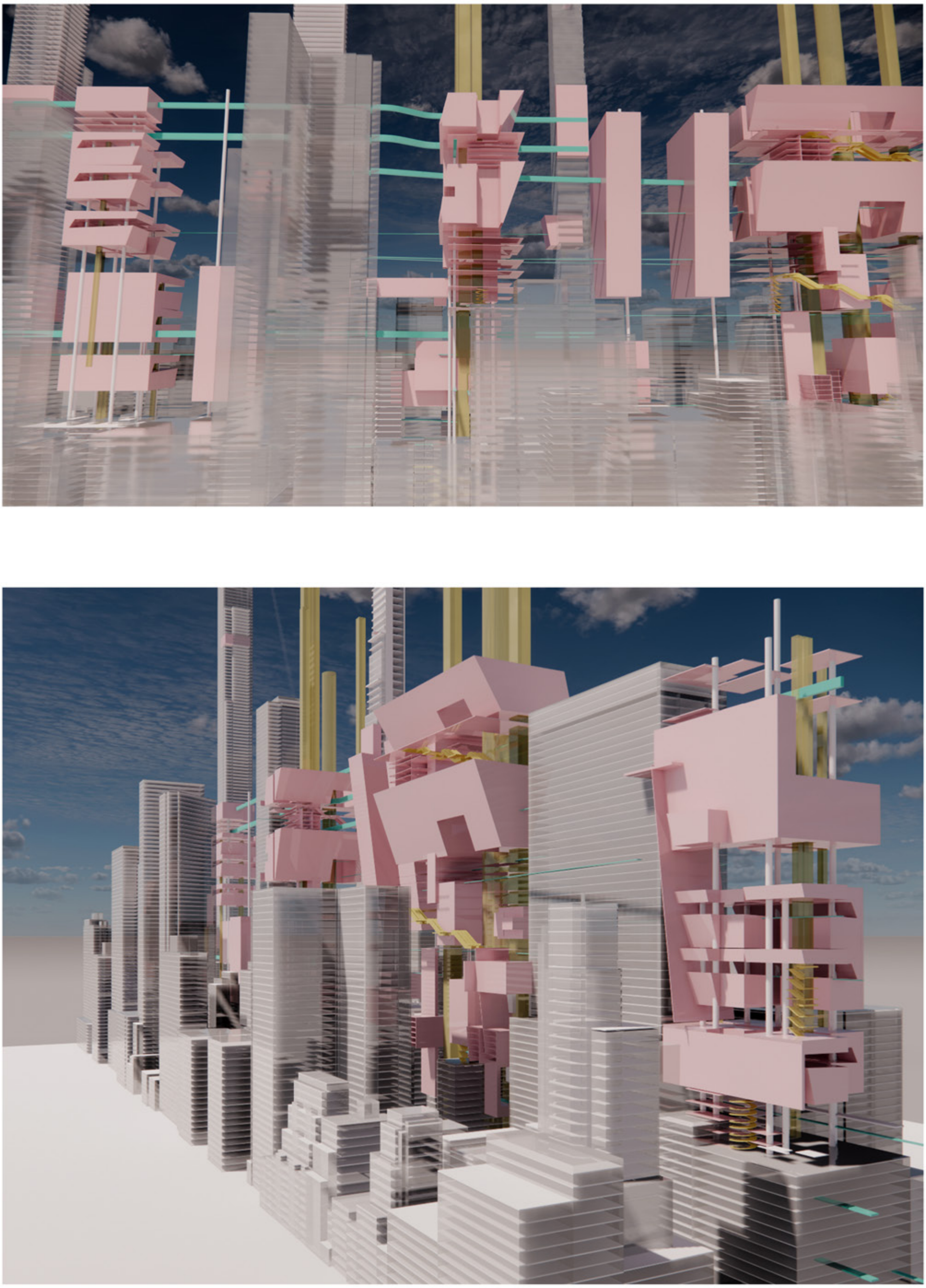
per City in the Zoomed-in Block



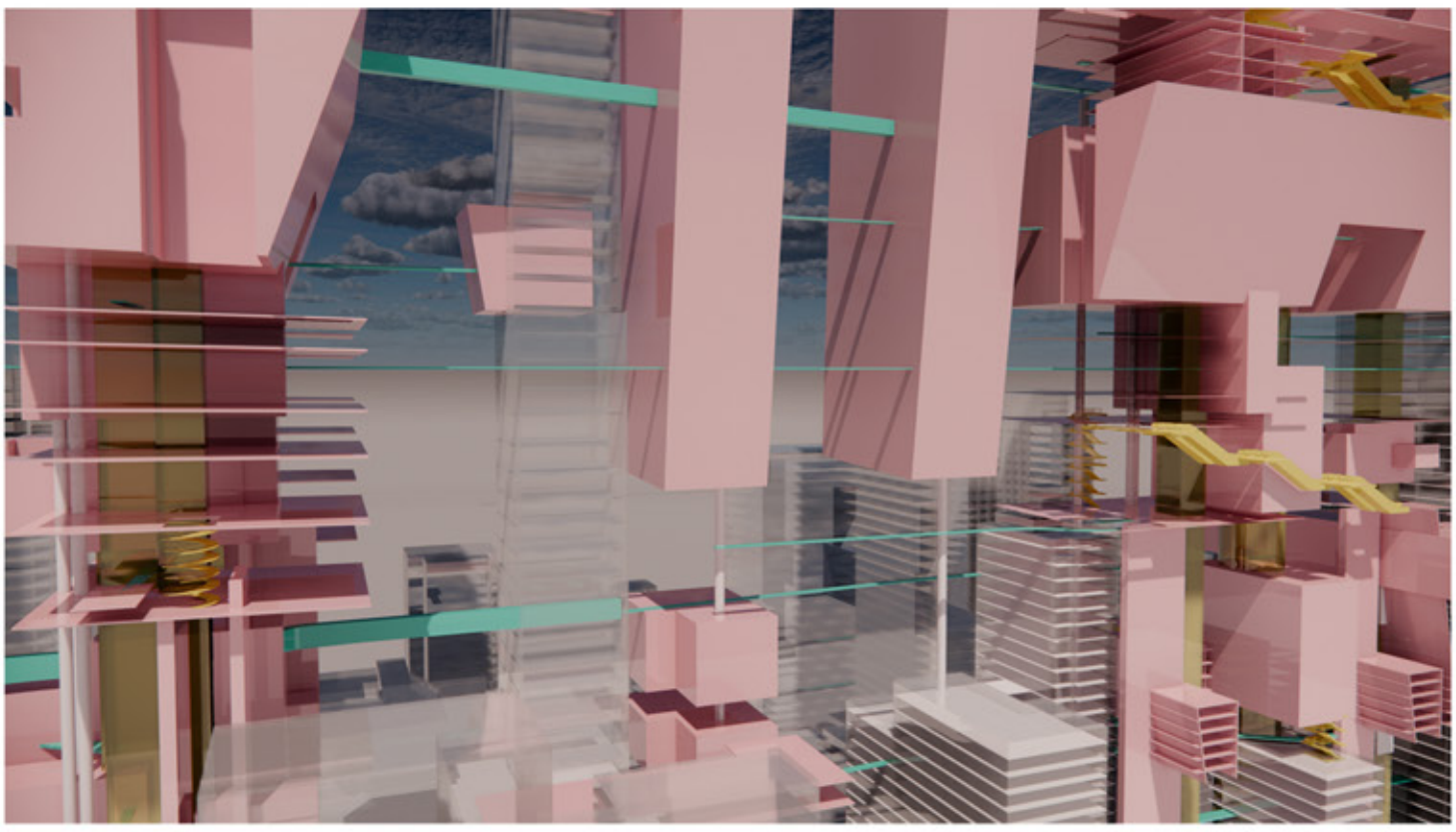
Diagrammatic Perspectives of the U

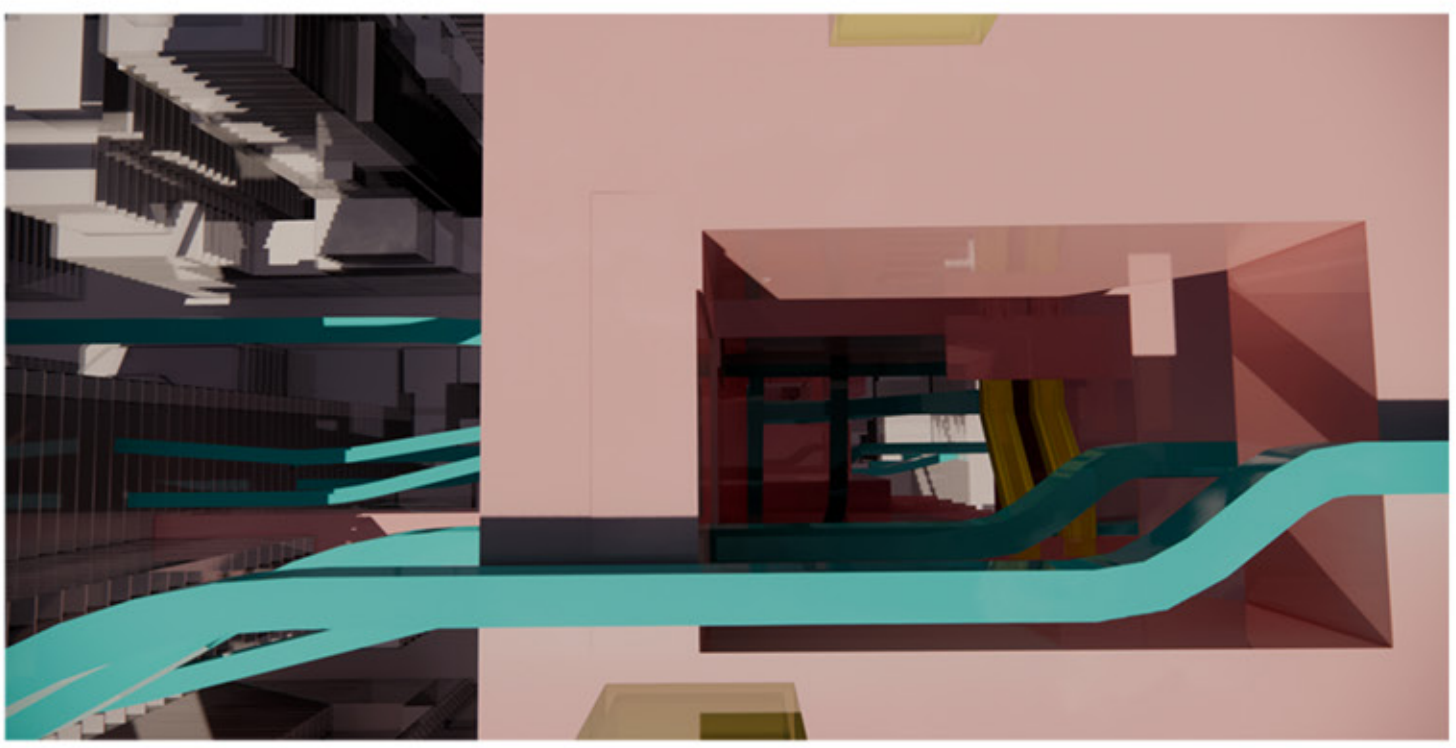


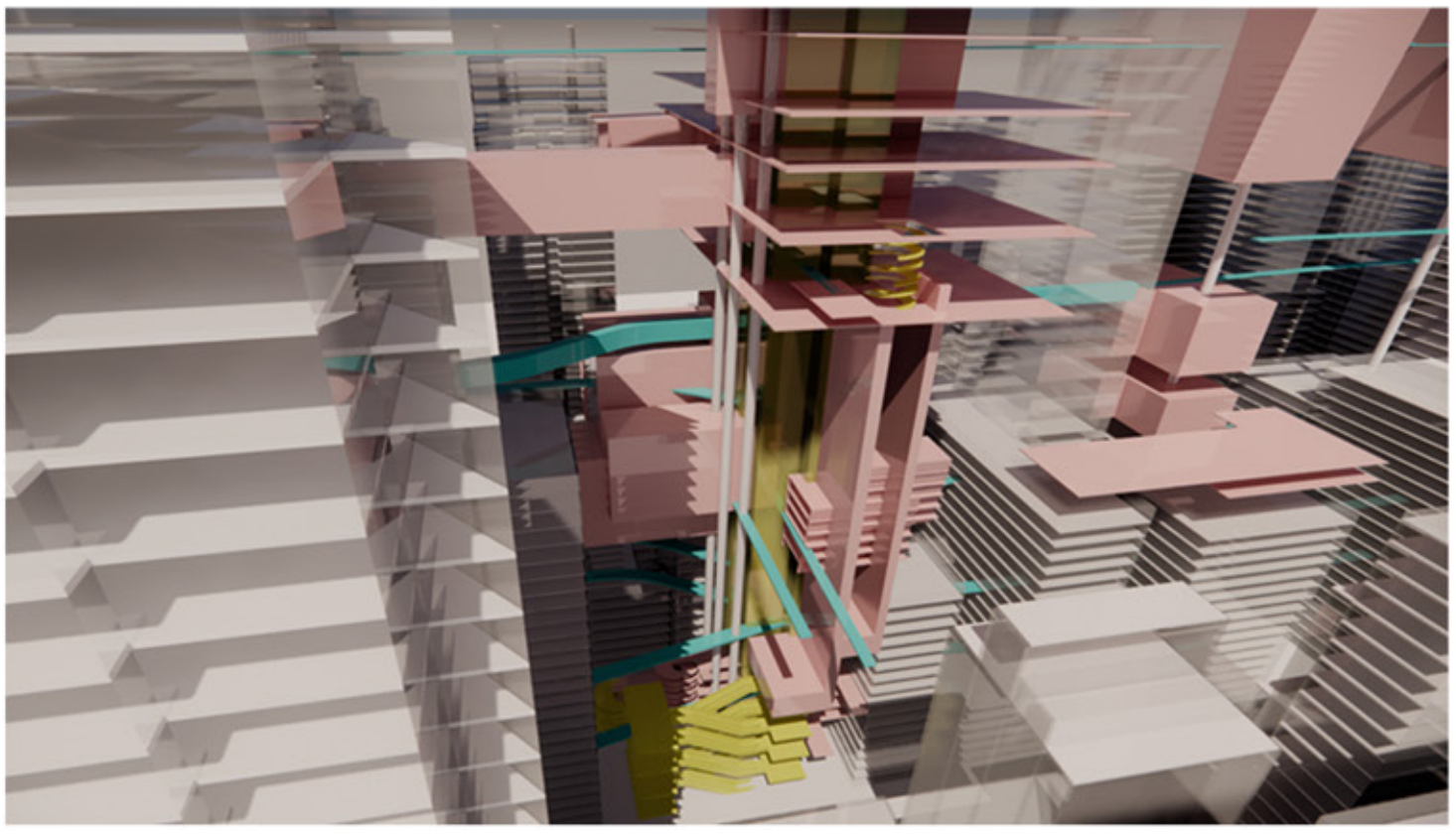




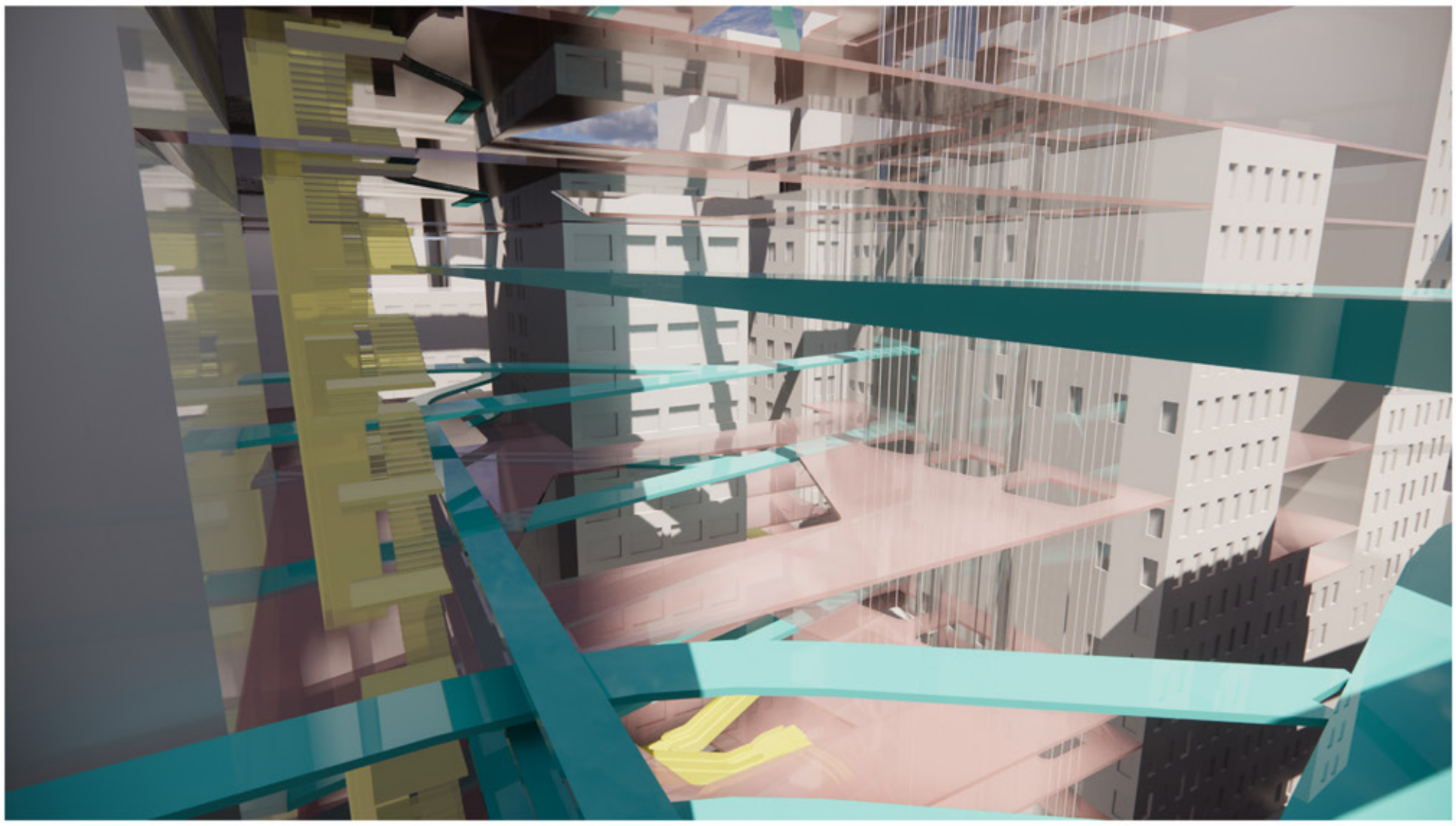
Diagrammatic Interior Perspectives of the Upper City

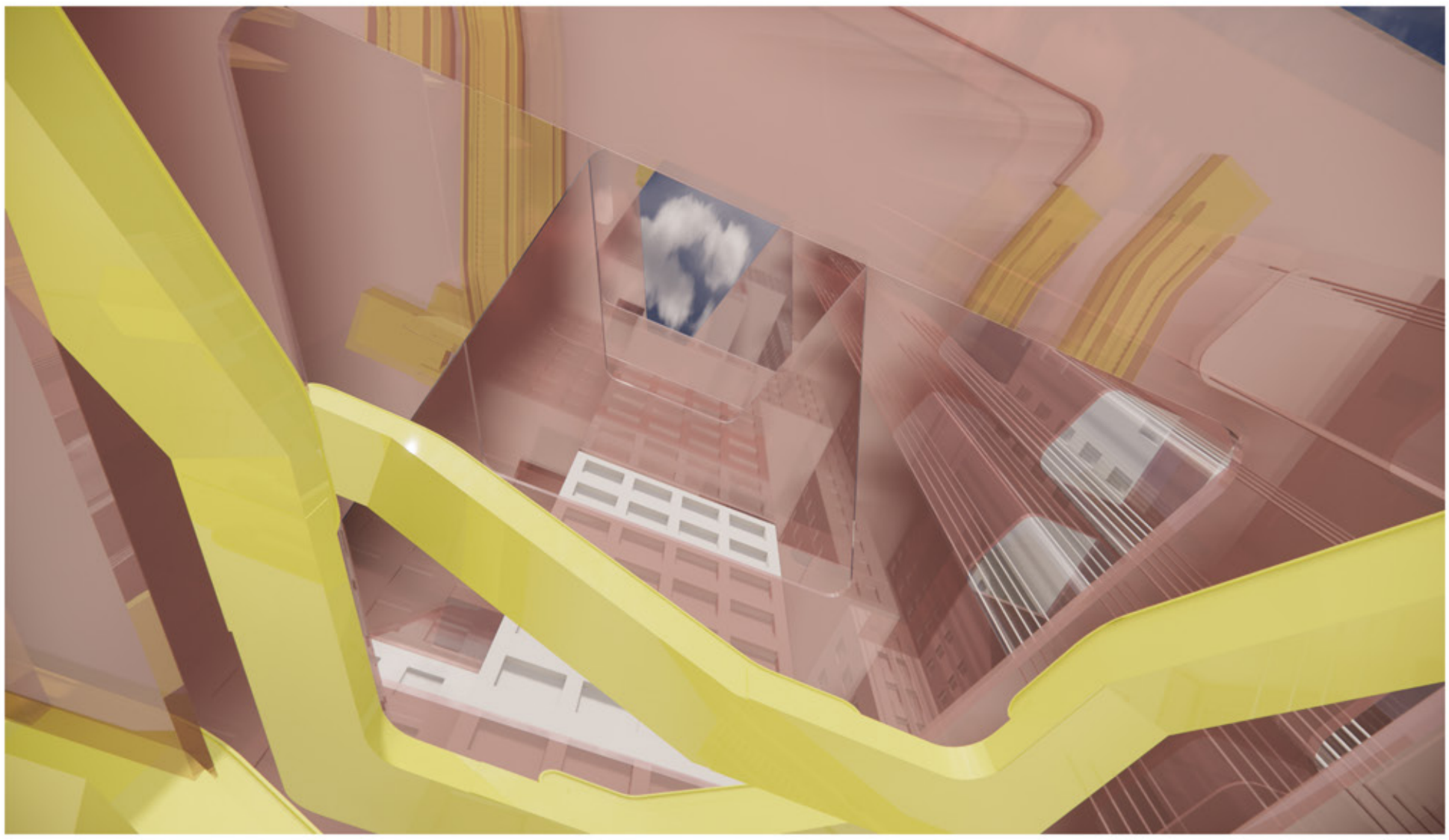




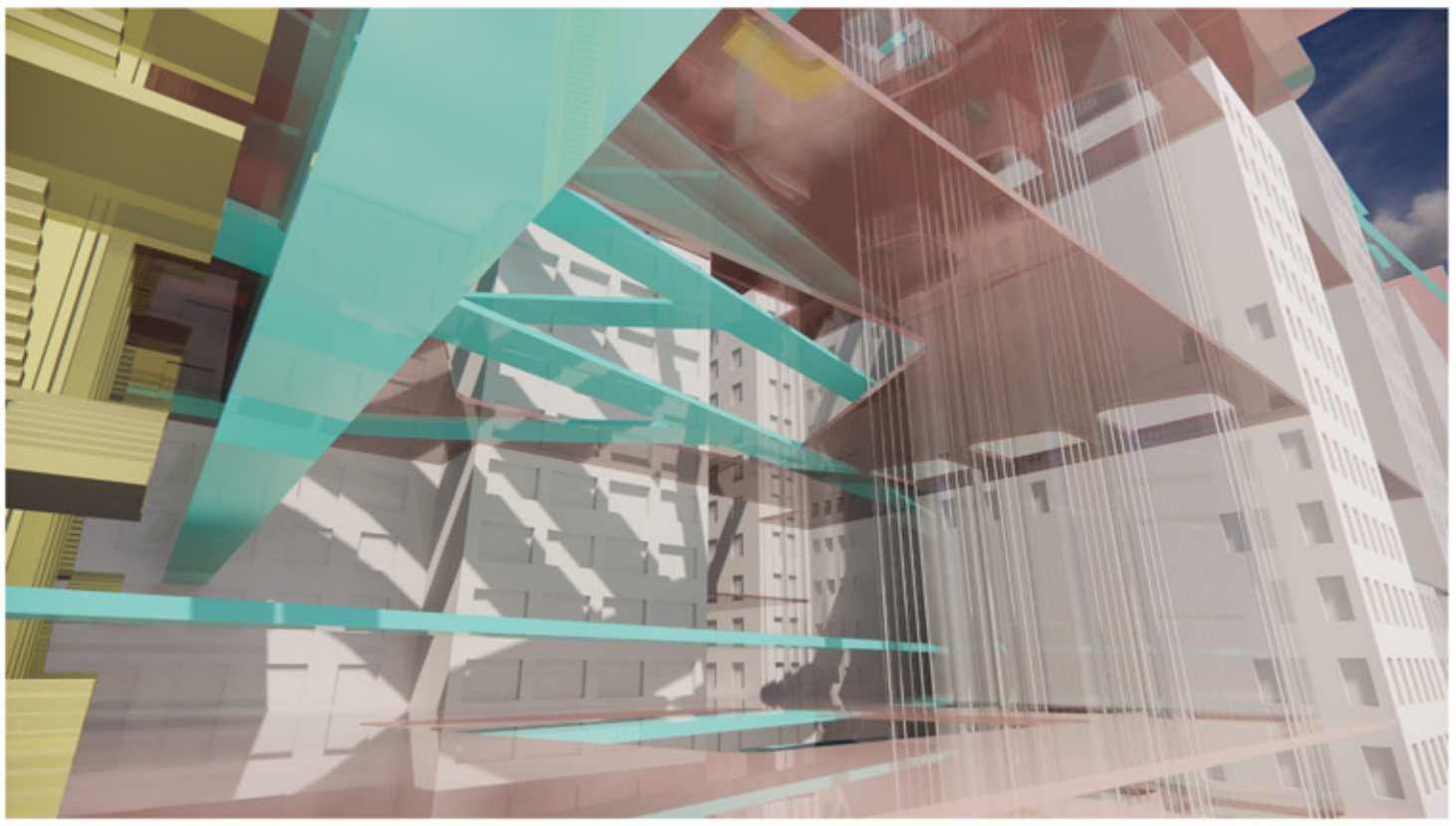


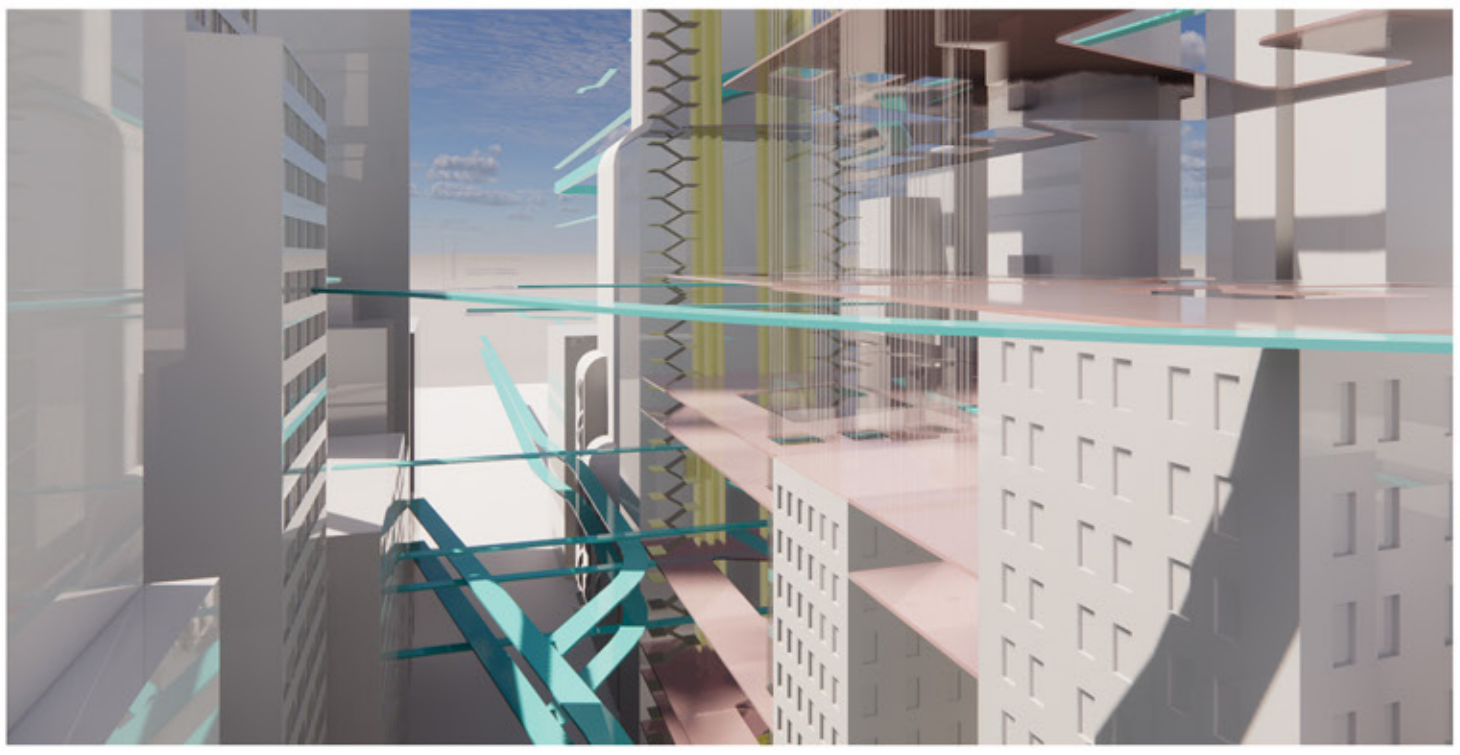
Diagrammatic Interior Perspectives of the Upper City

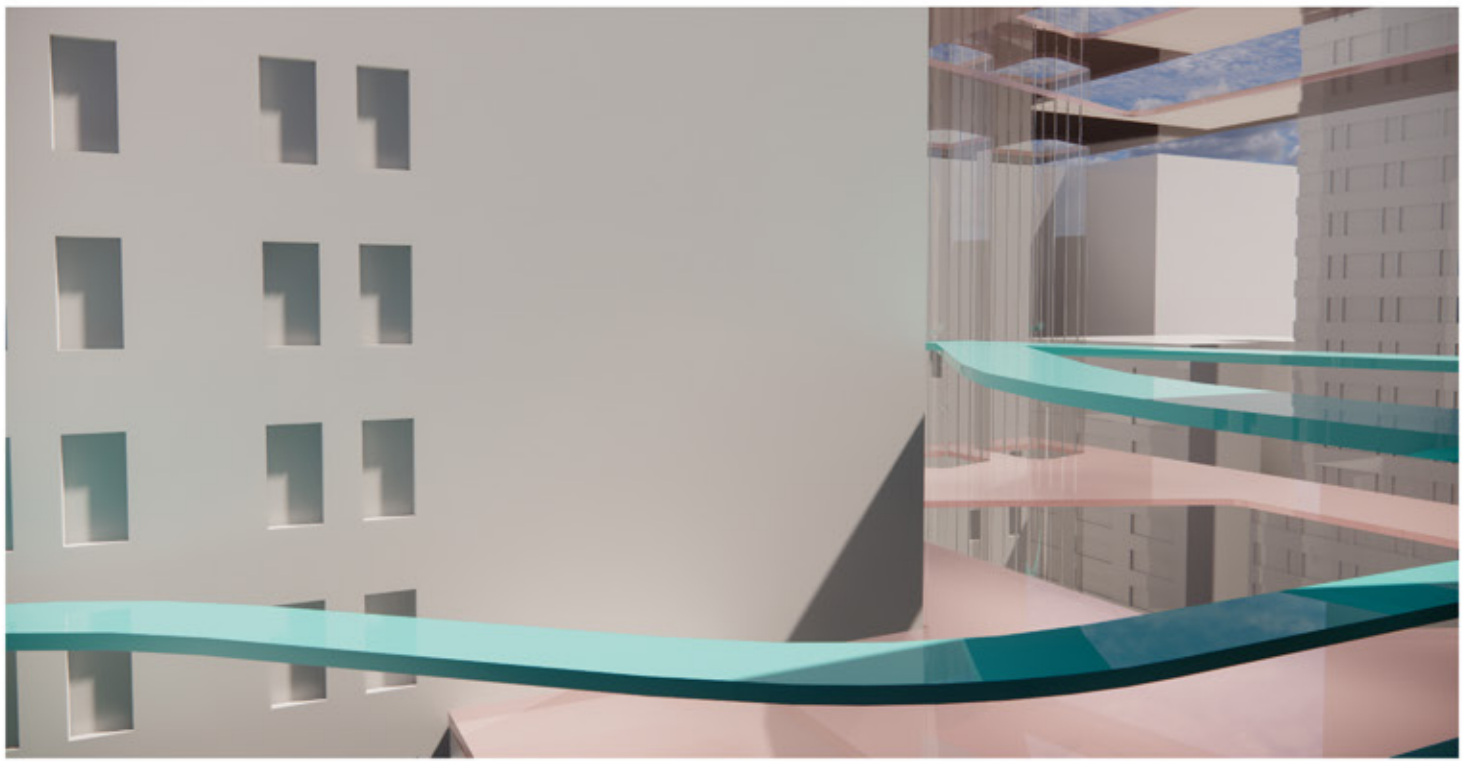




Diagrammatic Interior Perspectives of the Upper City







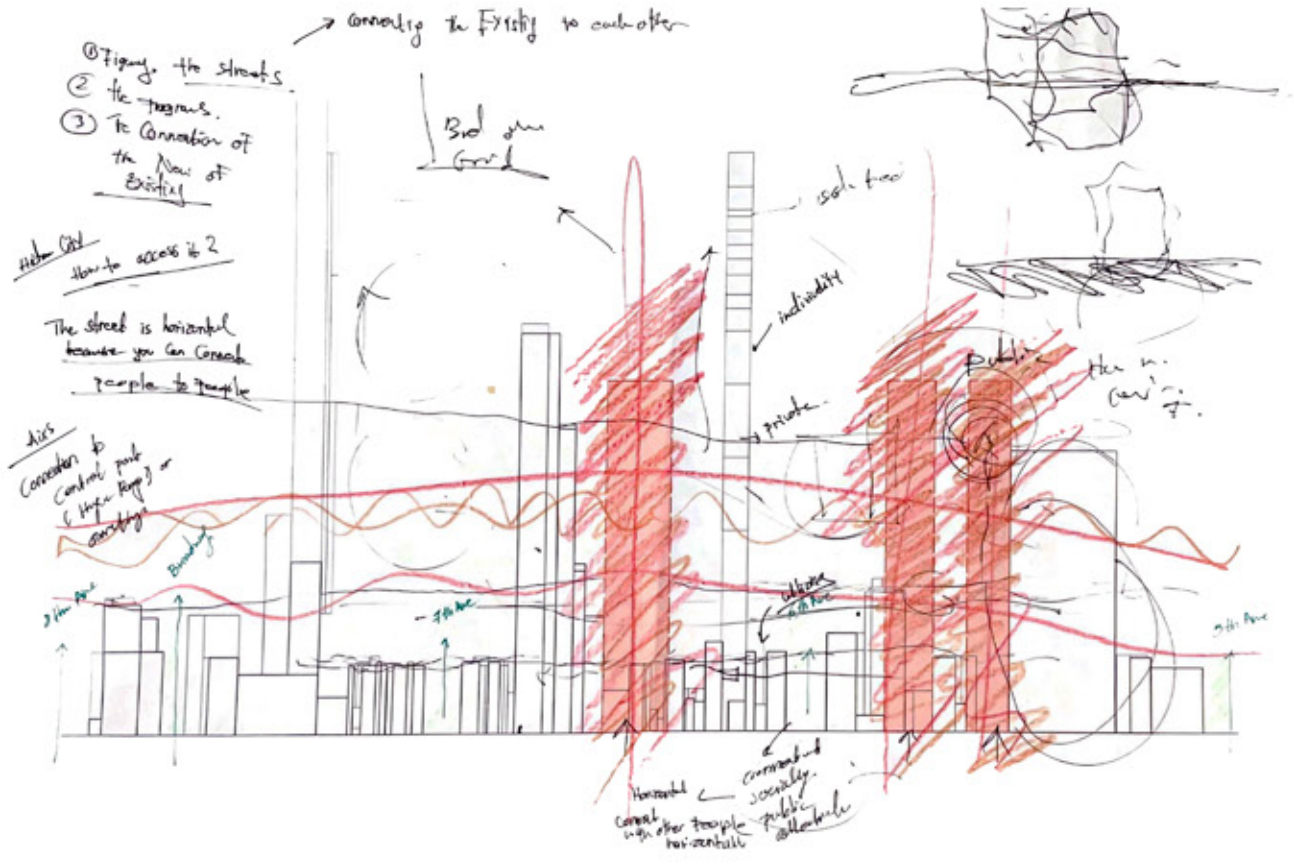
5.1 Sketches and Diagrams of The Final Proposal

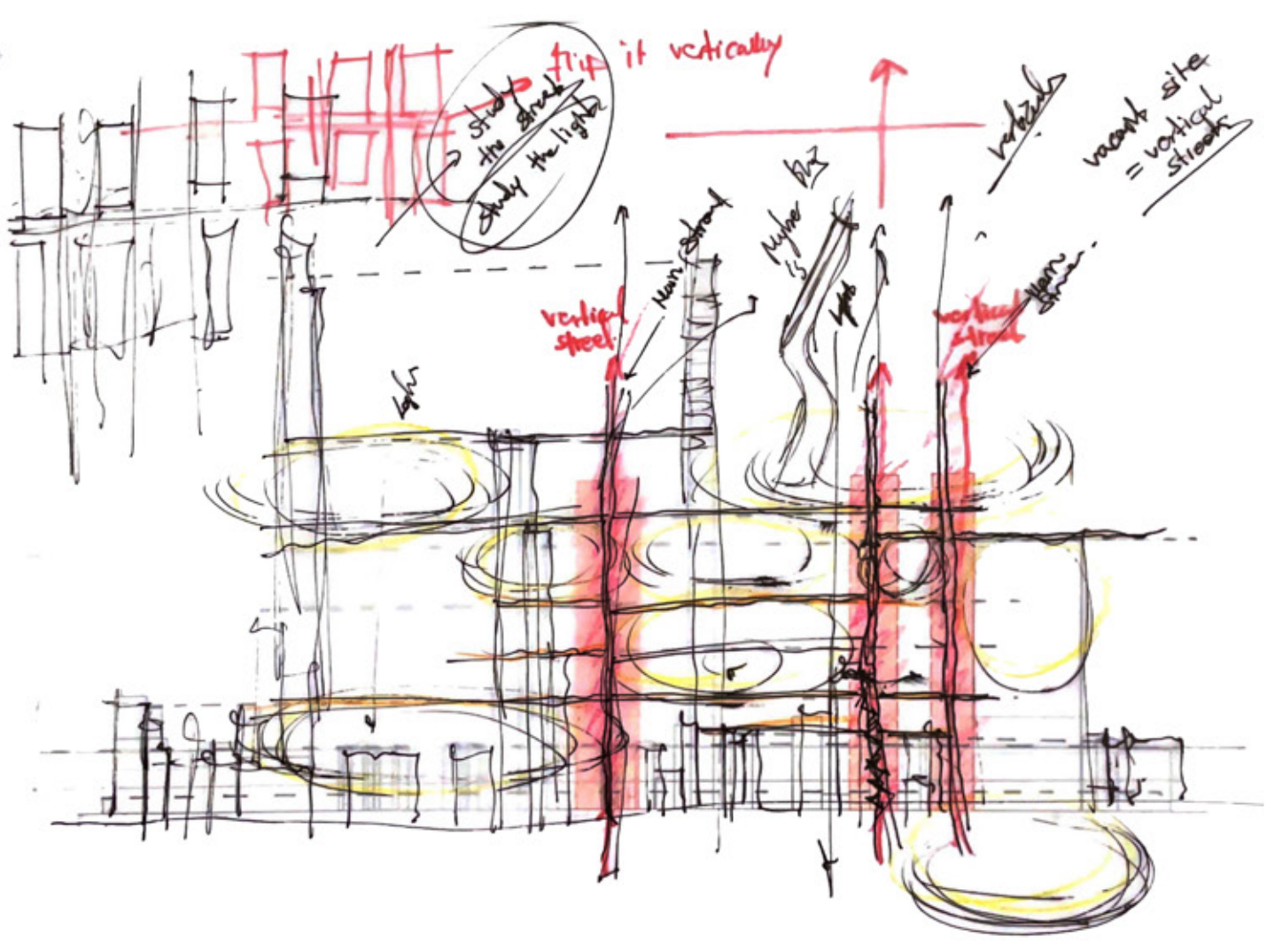
5.2 Perspective And Sections of The Final Proposal

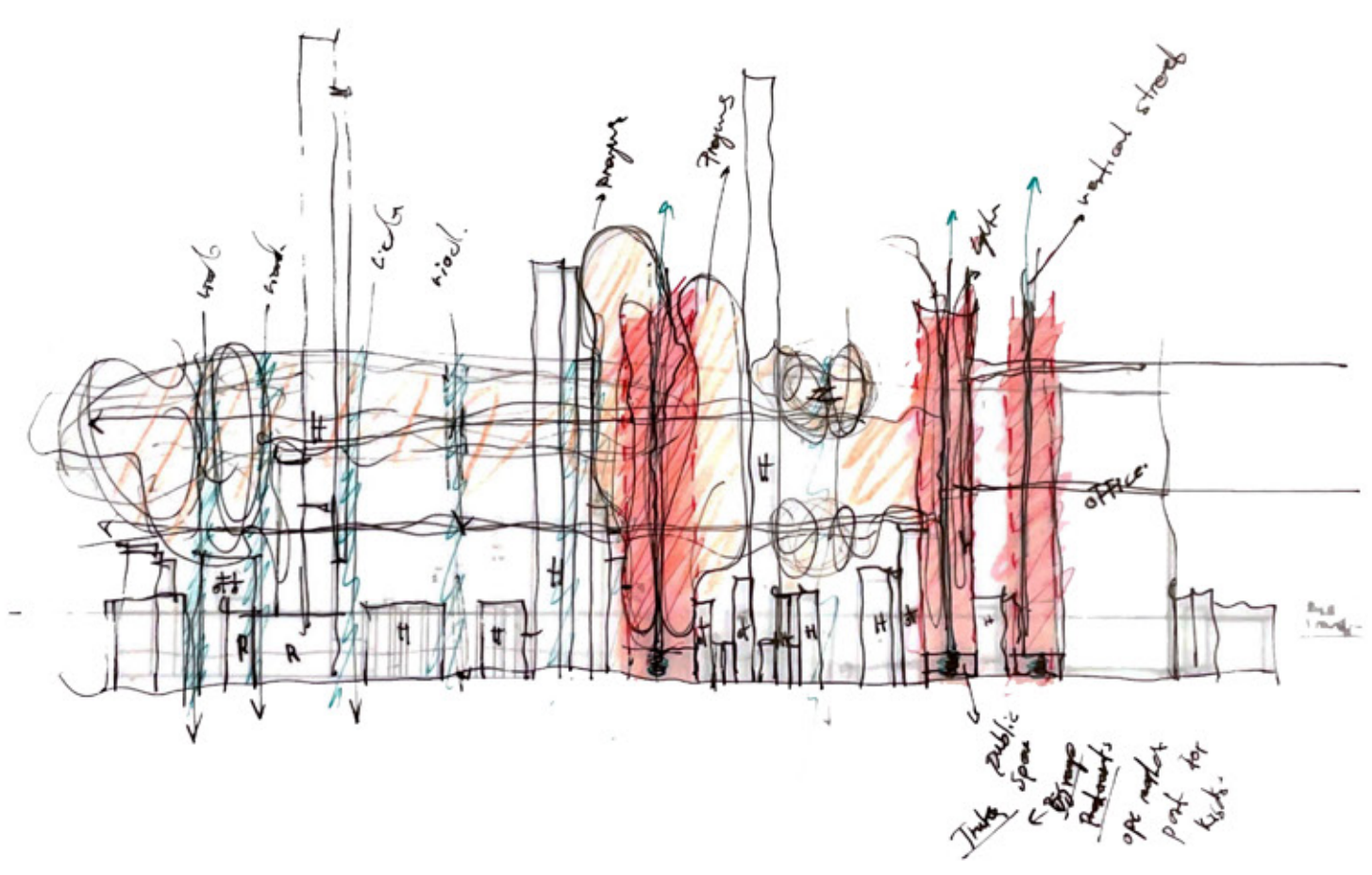
5.3 3D Models of the Site and Final Model of the Zoomed-In Site Proposal

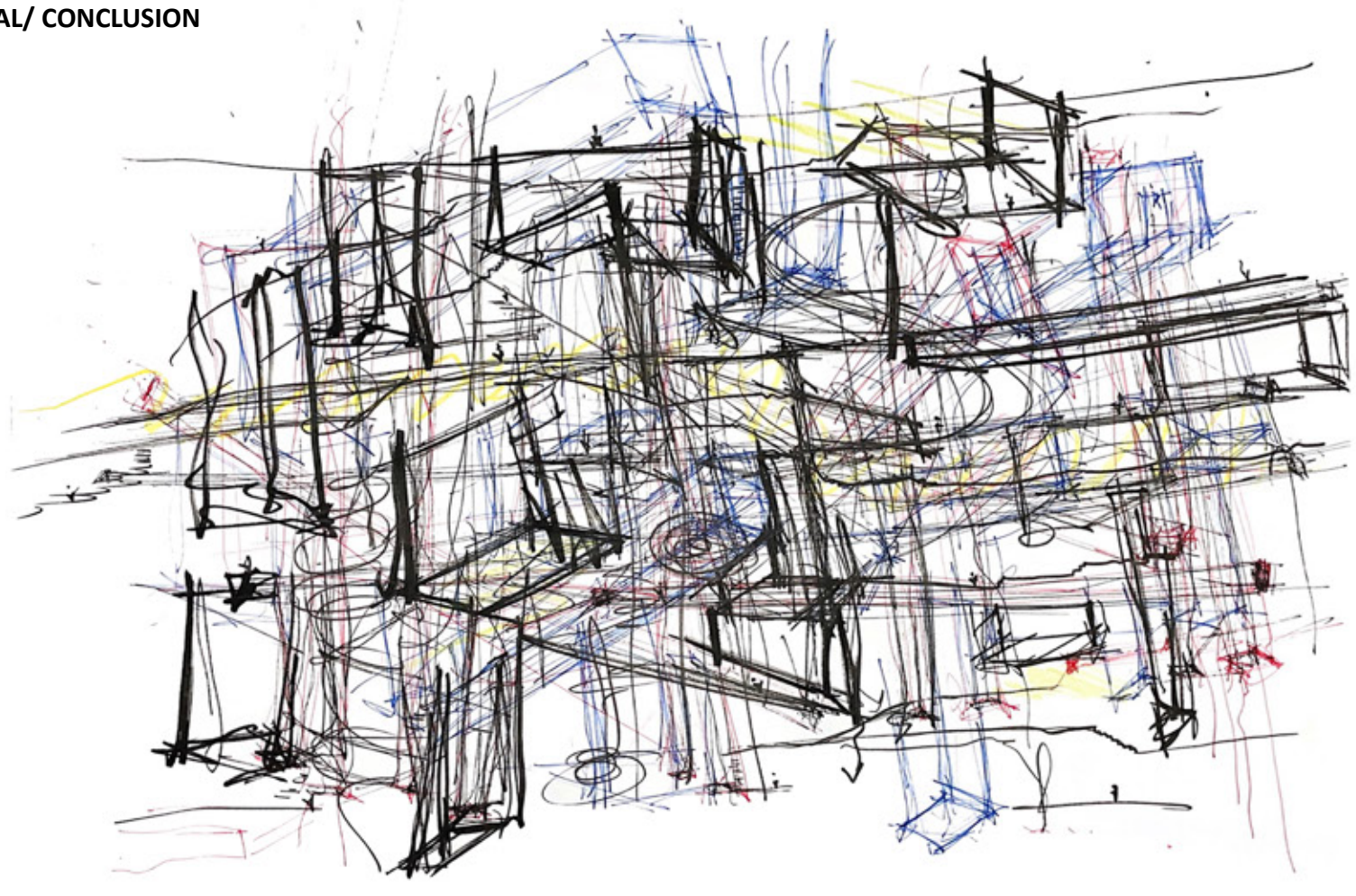
FINAL PROPOSAL/ CONCLUSION

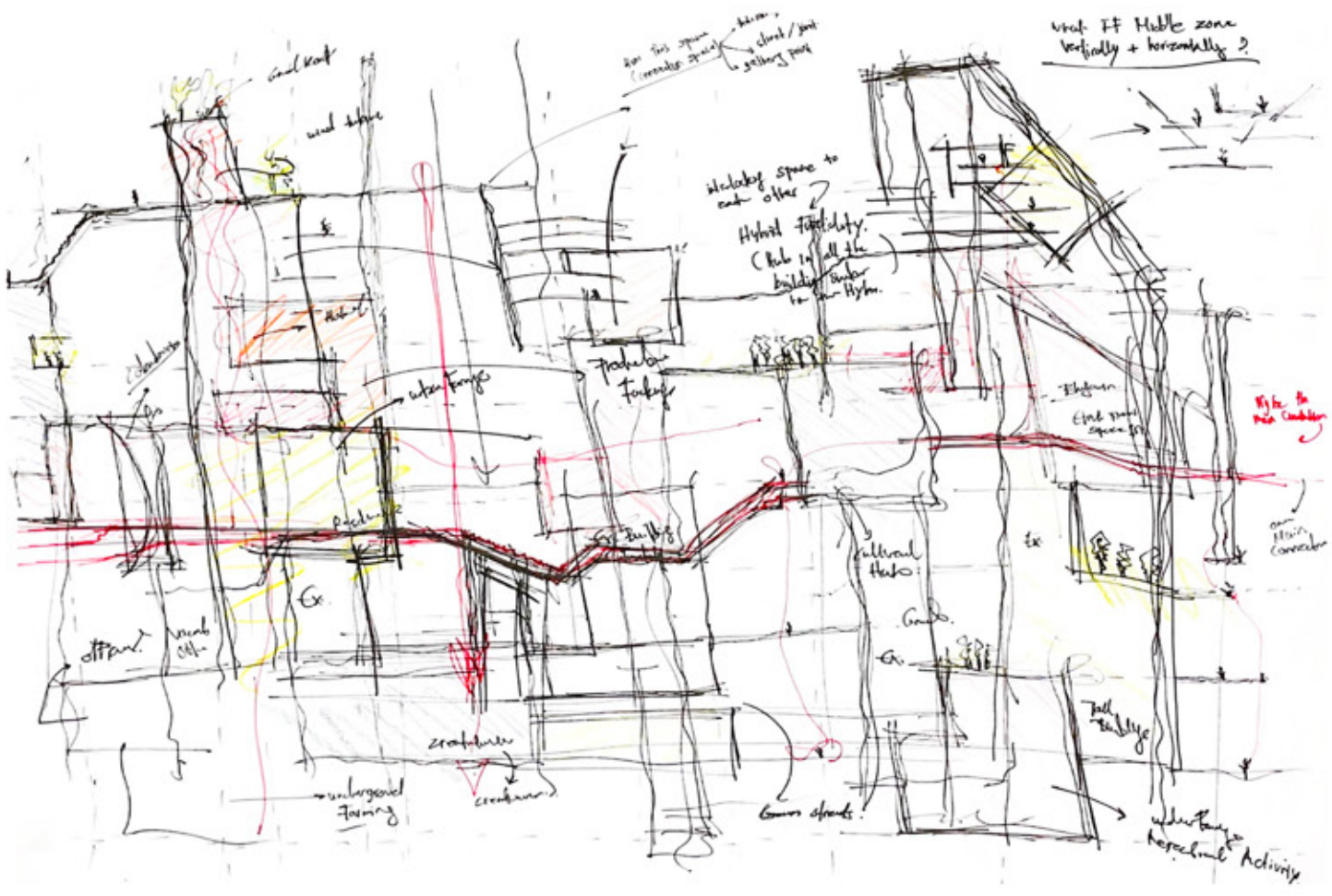
5.1 Sketches and Diagrams of The Final Proposal

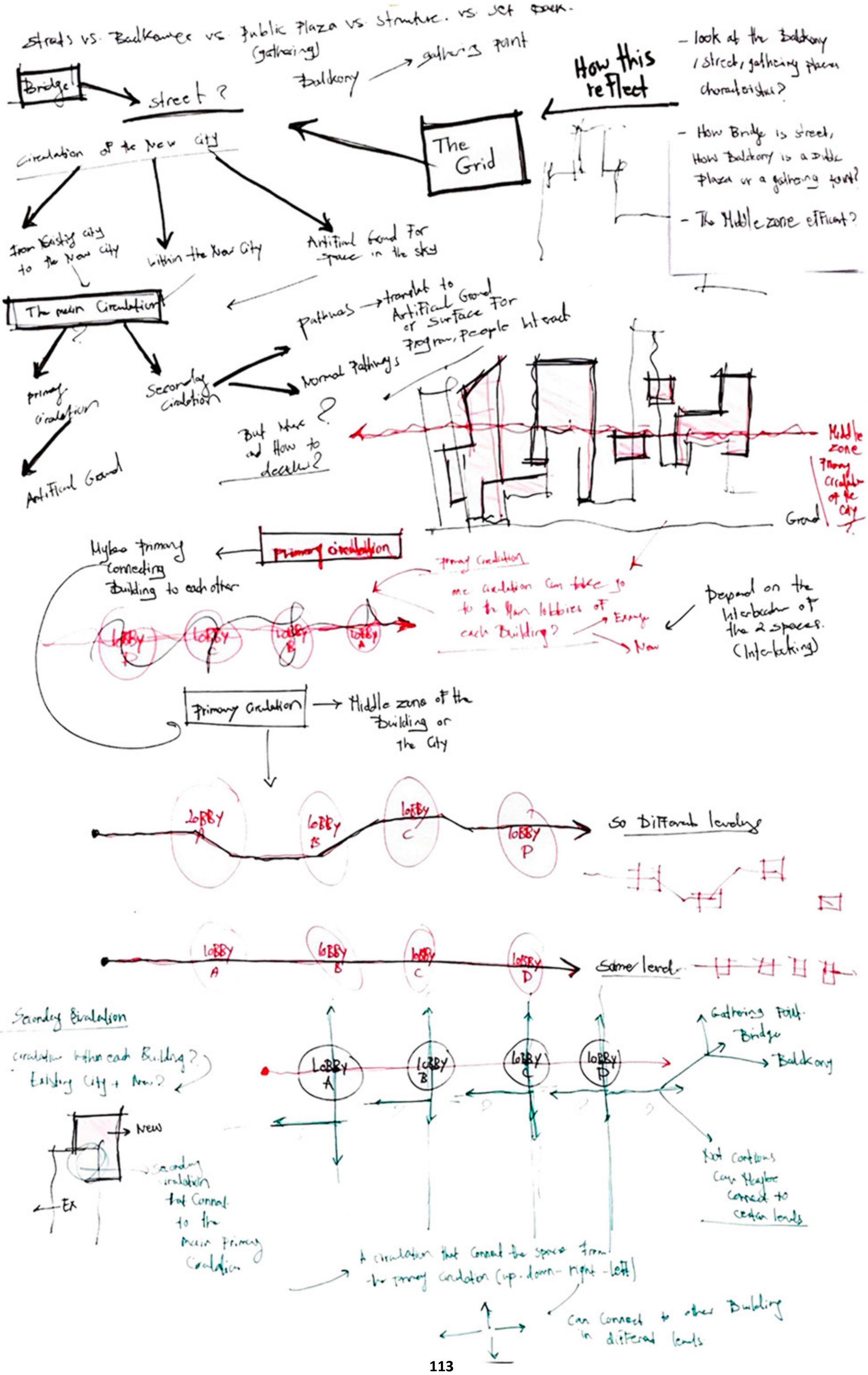

Connecting the Existing to each other
Bird view
Ground
individuality
Public
Private
Horizontal
Connect with other people horizontally
Connected vertically
public walkway

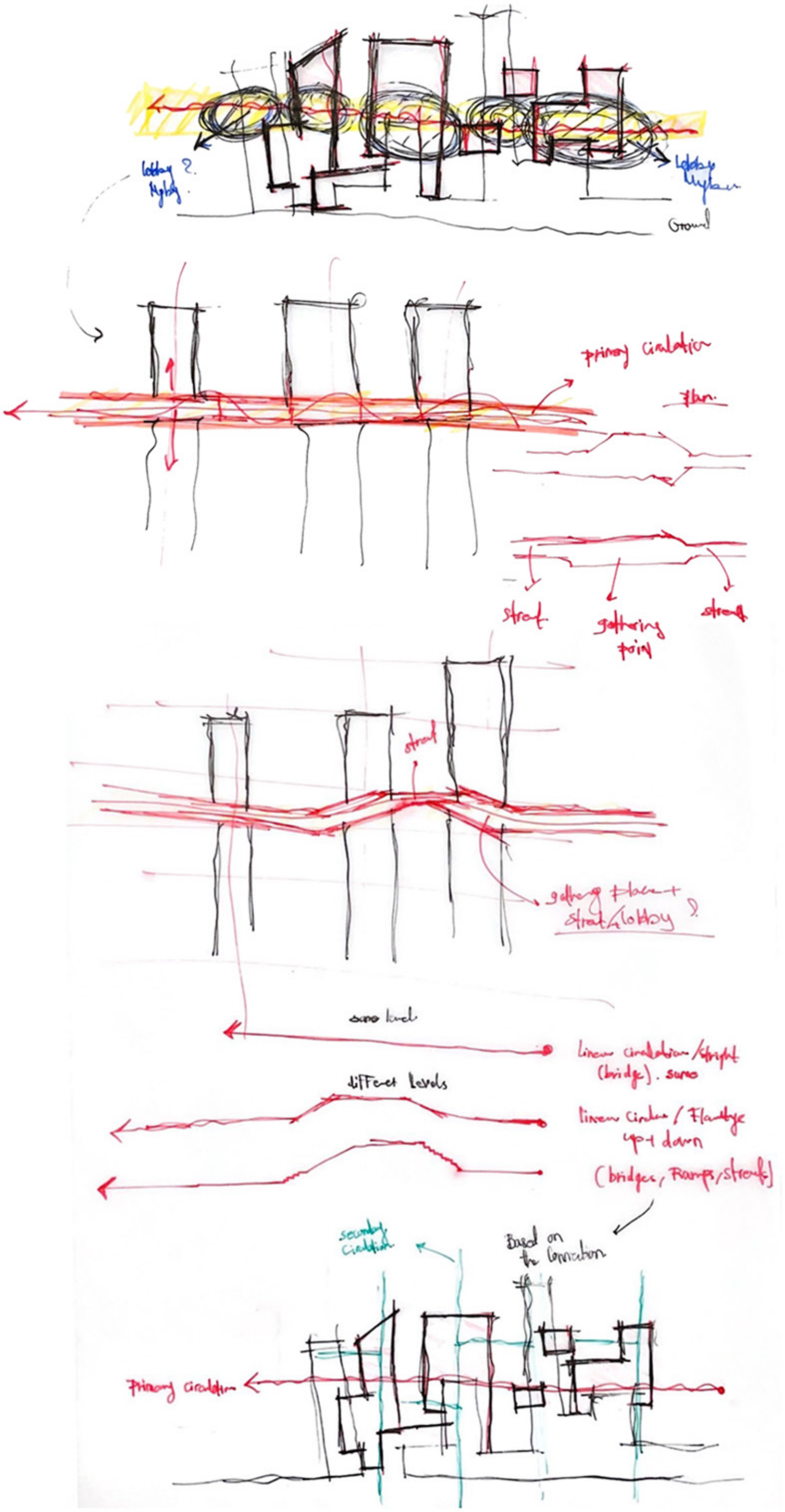

flip it vertically
study the street
study the lights
vertical
vacant site = vertical streets
vertical steel
Near Street
Higher is light
Near Street

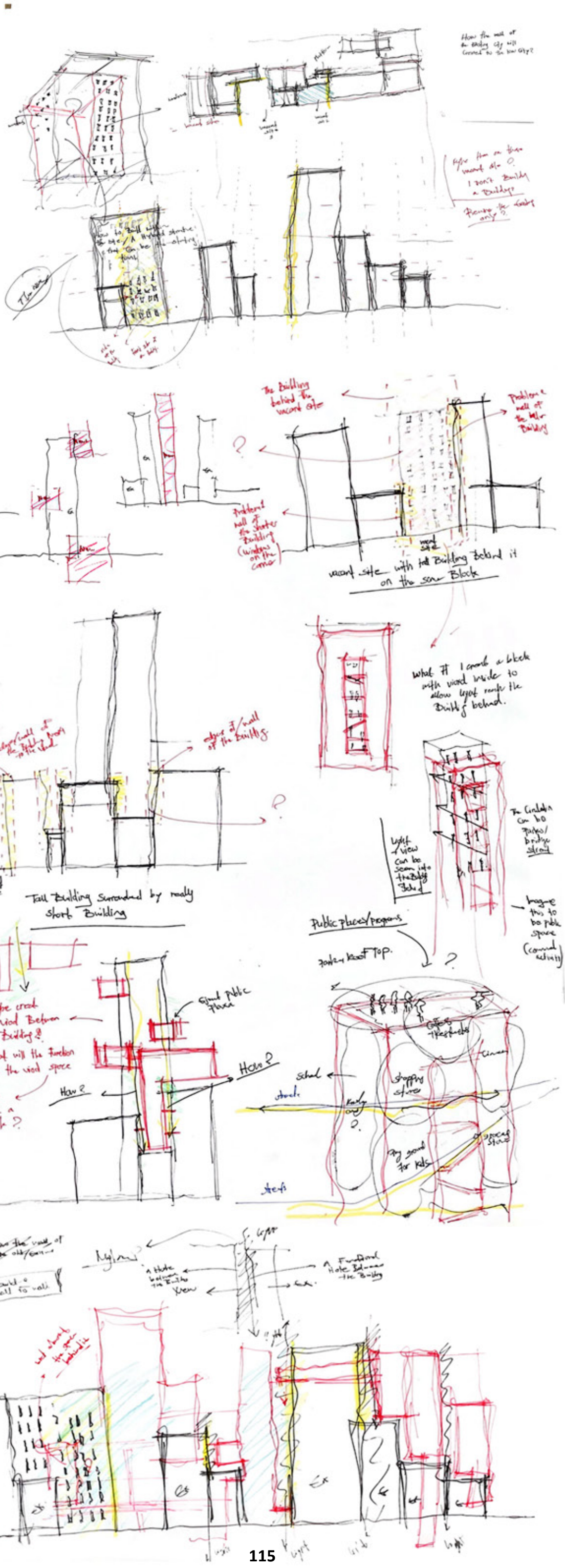

Analysis
Analysis
vertical streets
OFFICE
Public space
Bridge
Pedestrians
open market
park for kids

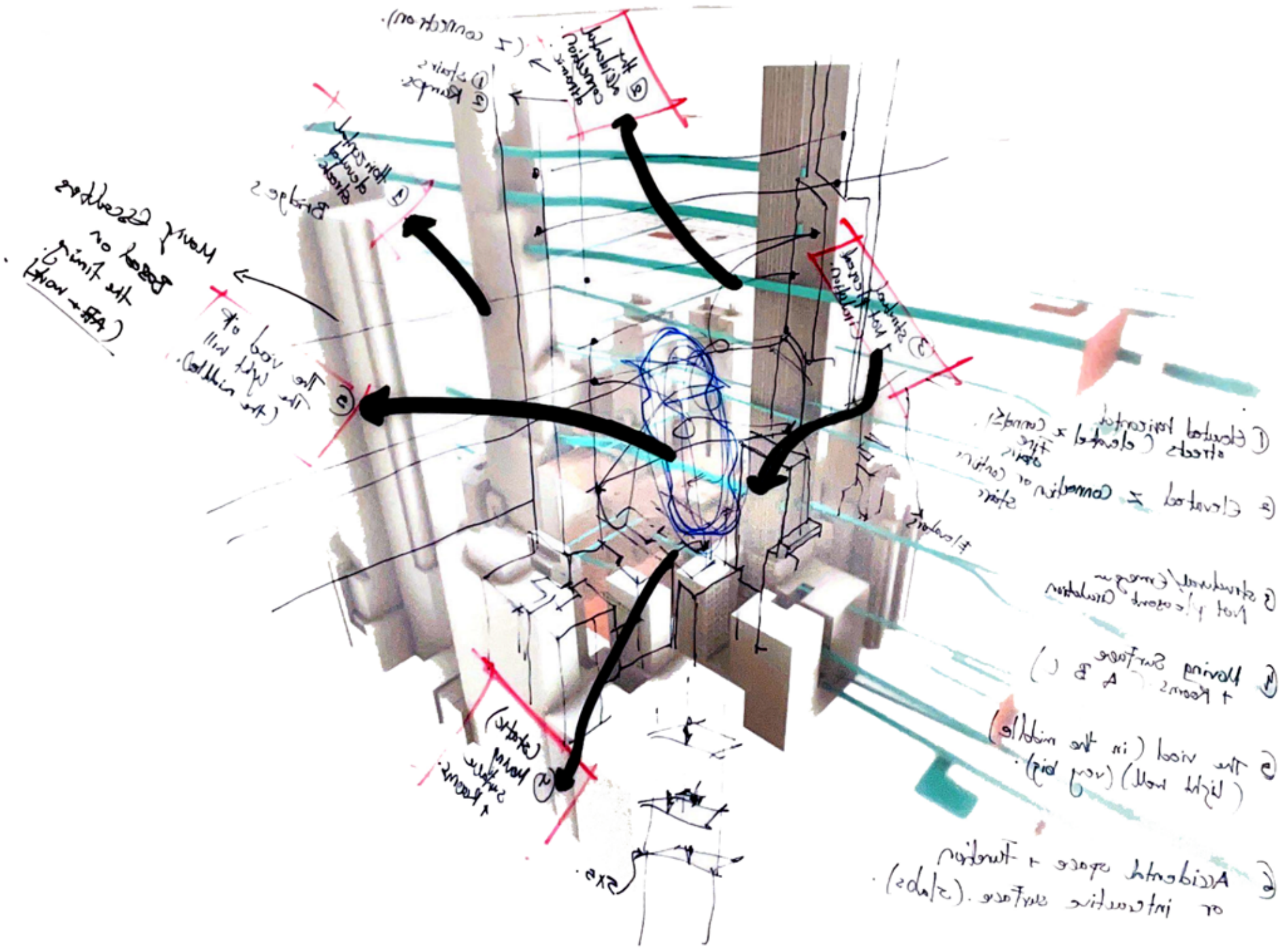


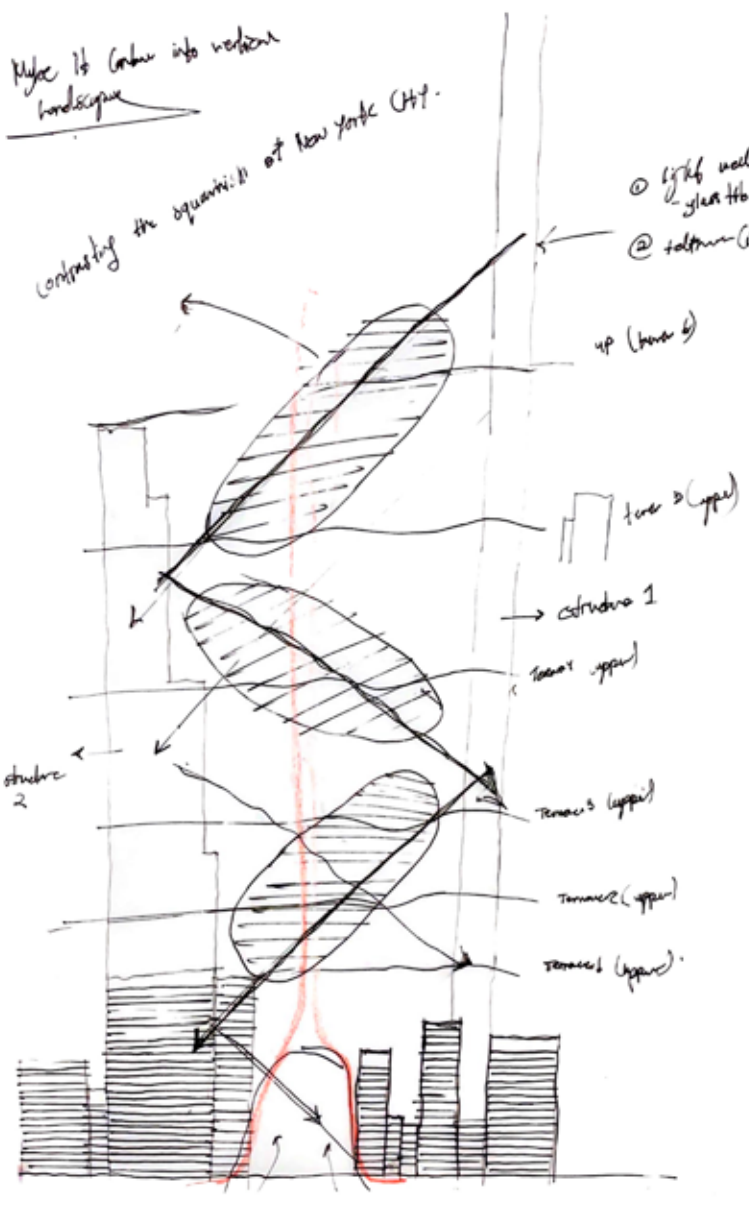

What if Mobile zone vertically + horizontally ?
Hybrid Typology.
Divide the Cities to sections
vacant site to tall Building
vacant site to short Building
short Building to tall Building

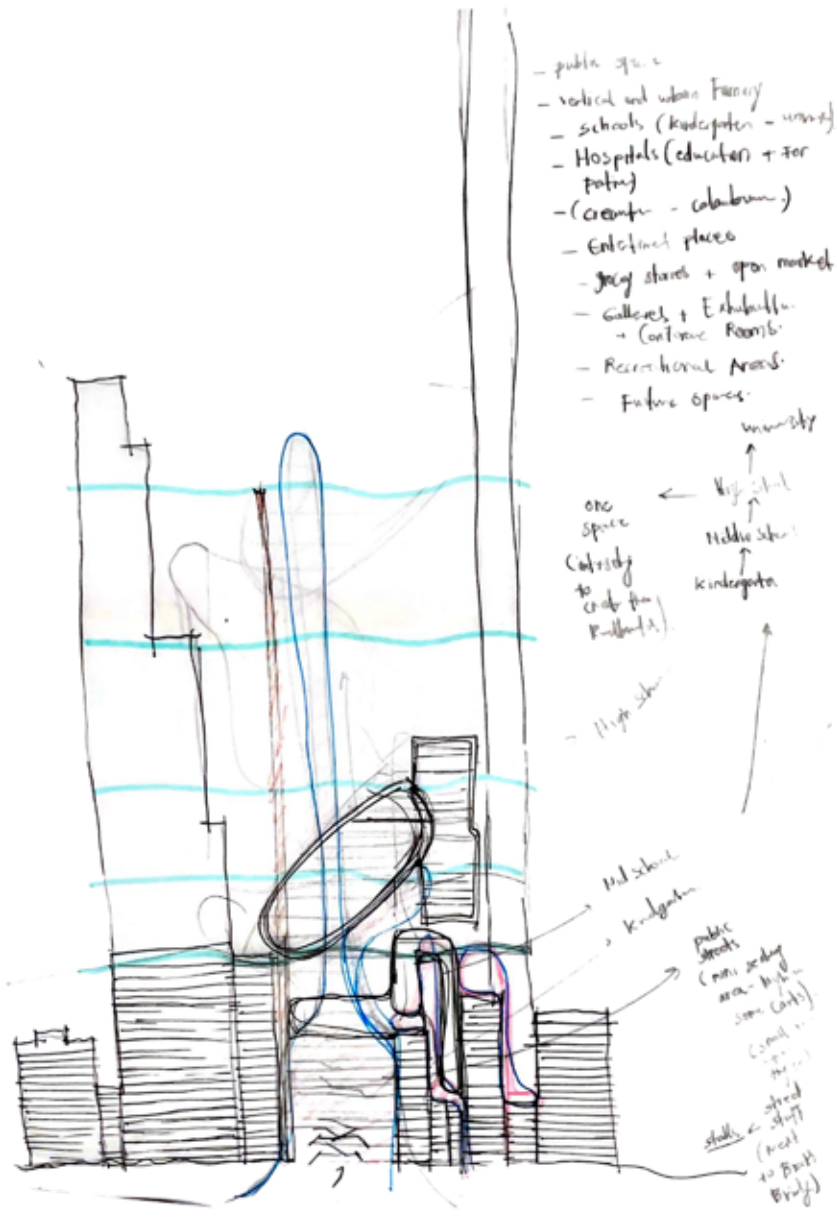

Strats vs. Balkonies vs. Public Plaza vs. Structure. vs. Set back.
(gathering)
Bridge
street ?
Balkony → gathering point
How this reflect
- look at the Balkony / street, gathering places characteristics?
- How Bridge is street, How Balkony is a Public Plaza or a gathering point?
- The Middle zone efficient?
Circulation of the New City
The Grid
From Existing city to the New city
Within the New City
Artifical Ground For space in the sky
The main Circulation
primary circulation
Secondary circulation
Normal Pathways
Artificial Ground
pathways → translate to Artificial Ground or Surface For Program, people interact
But where and How to develop?
Middle zone
Primary Circulation of the City
Ground
Mybao primary connecting Building to each other
primary circulation
primary Circulation
the circulation can take go to the Main lobbies of each Building?
Exsting
New
Depend on the interbeding of the 2 spaces. (Interlocking)
LOBBY A
LOBBY B
LOBBY C
primary circulation → Middle zone of the Building or the City
So Different leveling
Same level
Secondary Circulation
circulation within each Building? Existing City + New?
New
Ex
secondary circulation that Connect to the main Primary Circulation
Gathering Point: Bridge
Balkony
Not continuous Can Maybe Connect to certain levels
A circulation that Connect the spaces from the primary circulation (up - down - right - left)
Can Connect to other Building in different levels

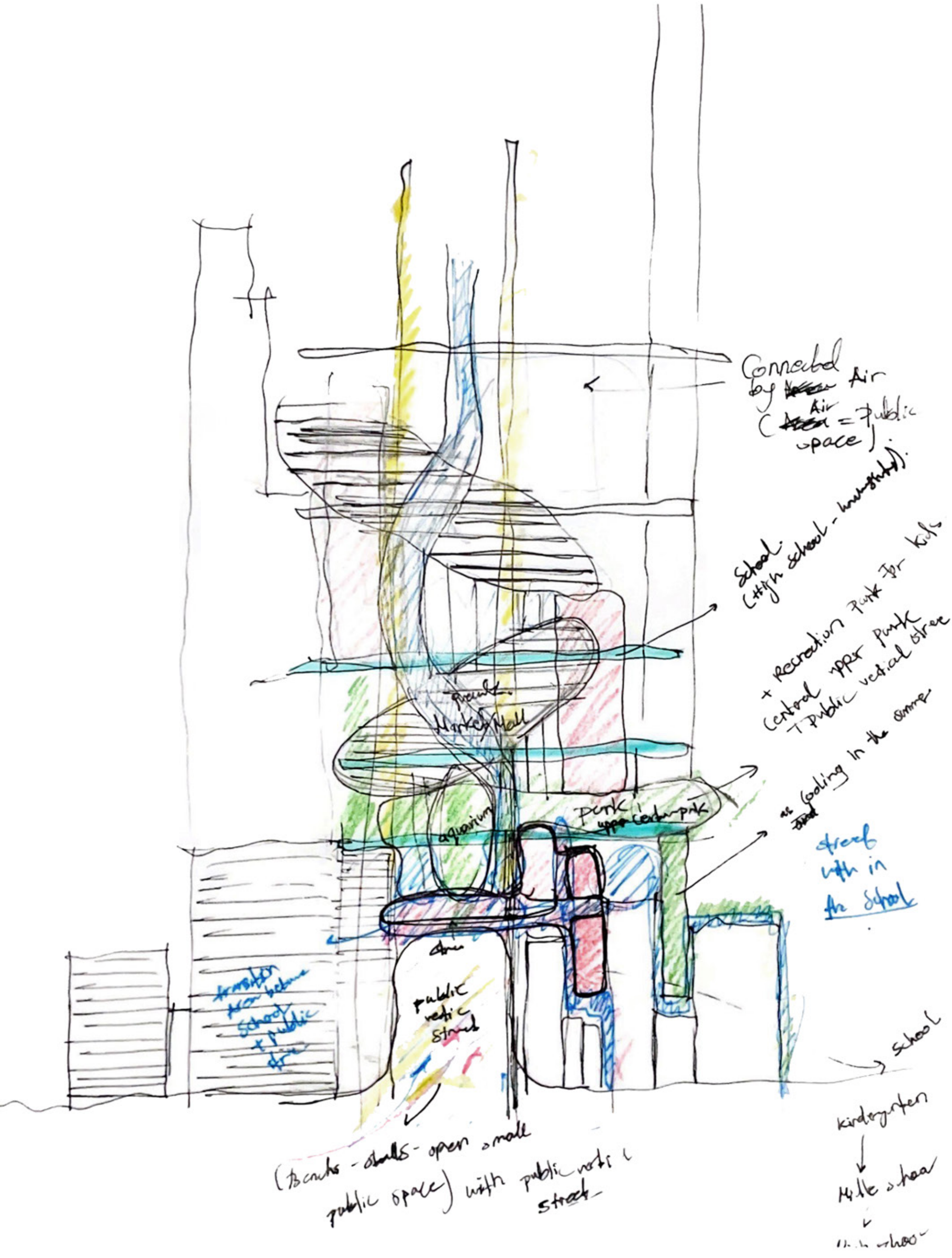

primary circulation
strat.
gathering point
strat.
gathering place + strat/lobby
same level
linear circulation / straight (bridge). same
different levels
linear circulation / Flat bye up + down (bridges, Ramps, stairs)
secondary circulation
Based on the connection
Primary circulation


The Building behind the vacant site
Problems wall of the other Building
How can I produce an design that is strong and that can connect all the blocks to each other ?
Problems wall of the shorter Building (windows on the corner)
vacant site with tall Building behind it on the same Block
What if I create a block with void inside to allow light reach the Building behind.
Light view can be seen into the Building behind
The Corridor can be parks/ bridge streets
Imagine this to be public spaces (communal activity)
Public Places/ programs
Parking Roof Top.
Tall Building Surrounded by really short Building
Void between Building ?
What will the function of the void space
What if it a park ?
How ?
How ?
Giant Public Place
school
shopping stores
Cinema
Restaurants
Gallery
Park
Steps
Light
Void between the Buildings
Functional Hole Between the Building
View
Build a wall to wall
Void between the Buildings

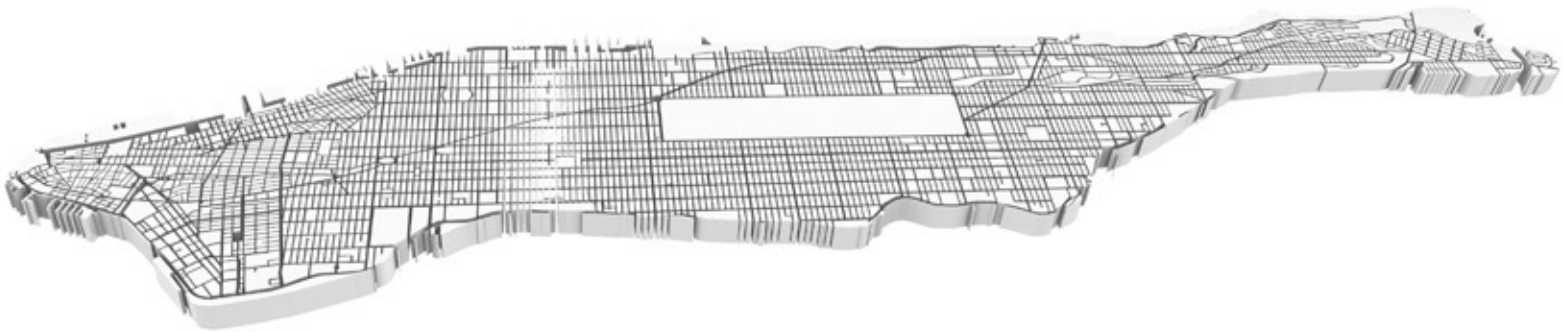


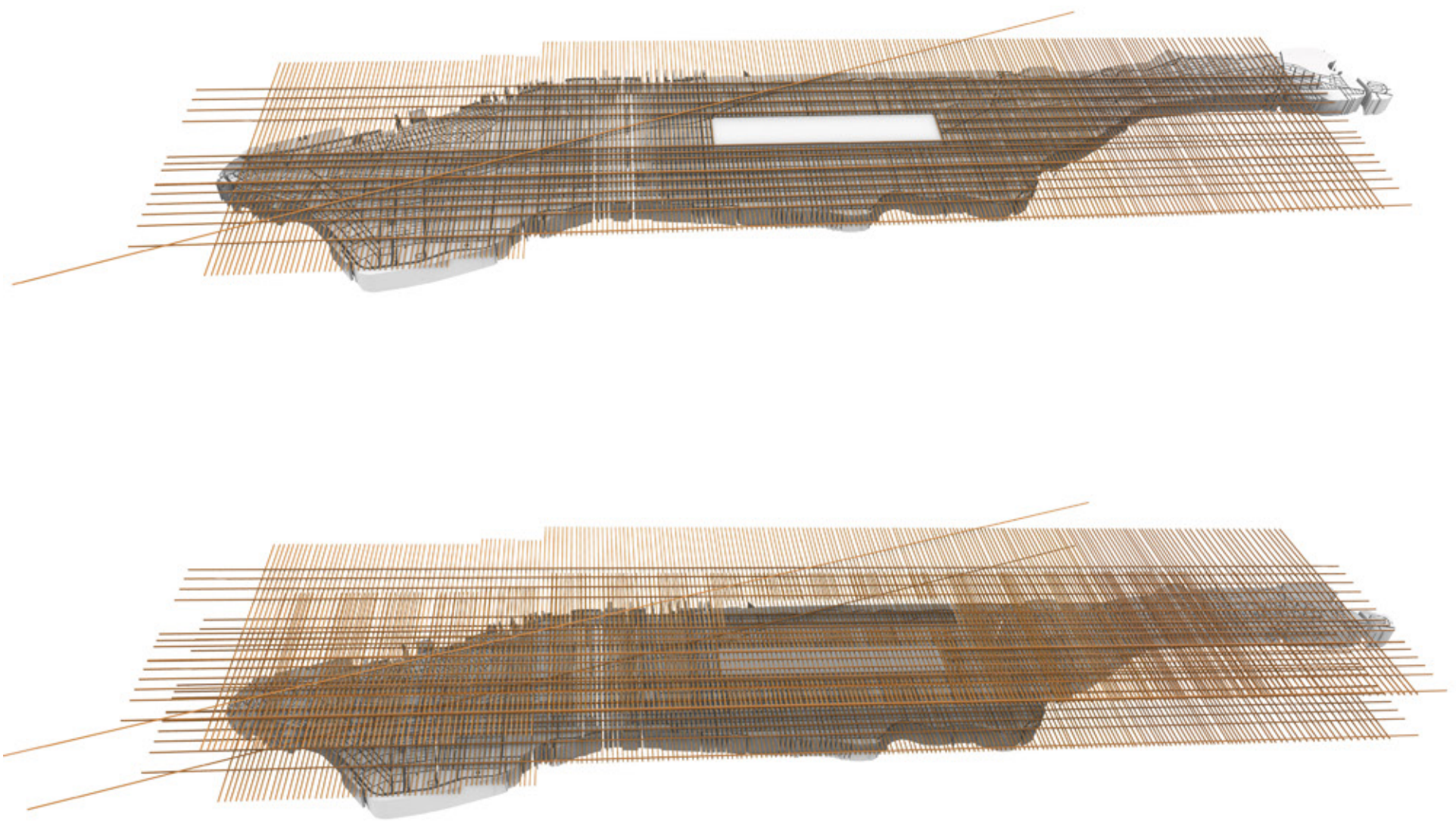

Make it Garden into nature landscape
connecting the aquarium at New York City.
up (tower 4)
tower 3 (upper)
structure 1
structure 2
Terraces (upper)
Terraces (upper)
Terraces (upper).

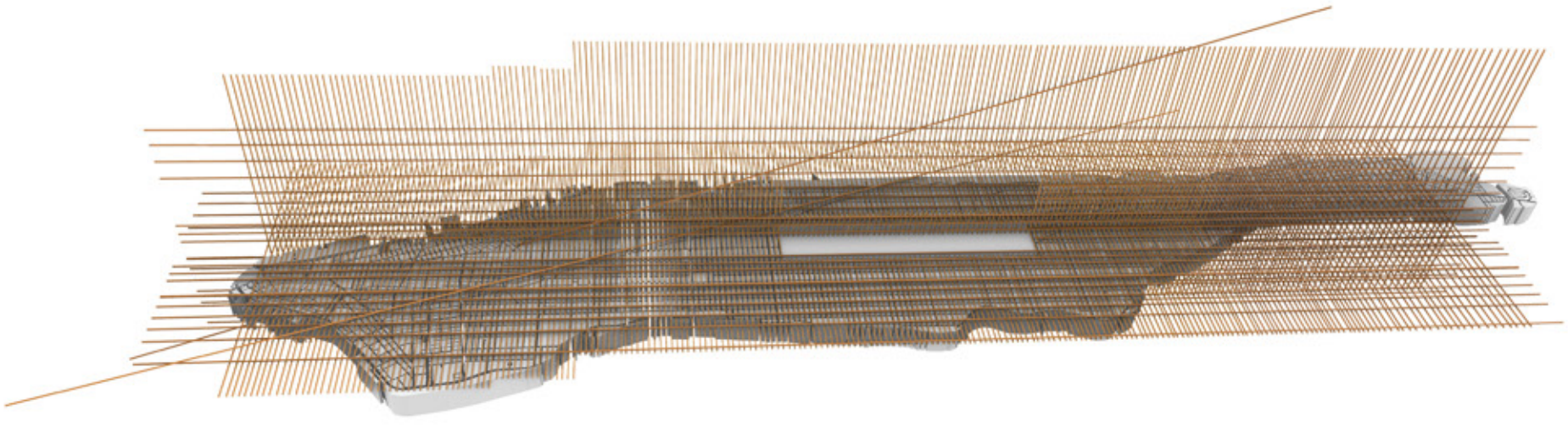

- public spaces
- vertical and urban farming
- schools (kindergarten - university)
- Hospitals (education + for patients)
- (creative - collaborative)
- Entertainment places
- shopping stores + open market
- Galleries + Exhibitions + Conference Rooms.
- Recreational Areas.
- Future spaces.
university
High school
Middle school
kindergarten
one space
Curiosity to create the Buildings
High school
Mid school
kindergarten
Public spaces (main seating area - high - stem Cells)
stalls


Connected by Air
(Air = Public space)
School
(High school - kindergarten)
+ Recreation Park for kids
Central upper Park
+ Public vertical street
Park upper central park
aquarium
Market Hall
street with in the School
Store
public vertic street
(Benches - shells - open small public space) with public vertic street
School
kindergarten
Middle school

Creating a three-dimensional replication of 'The Perfect Grid' by duplicating the grid along the Z-axis.





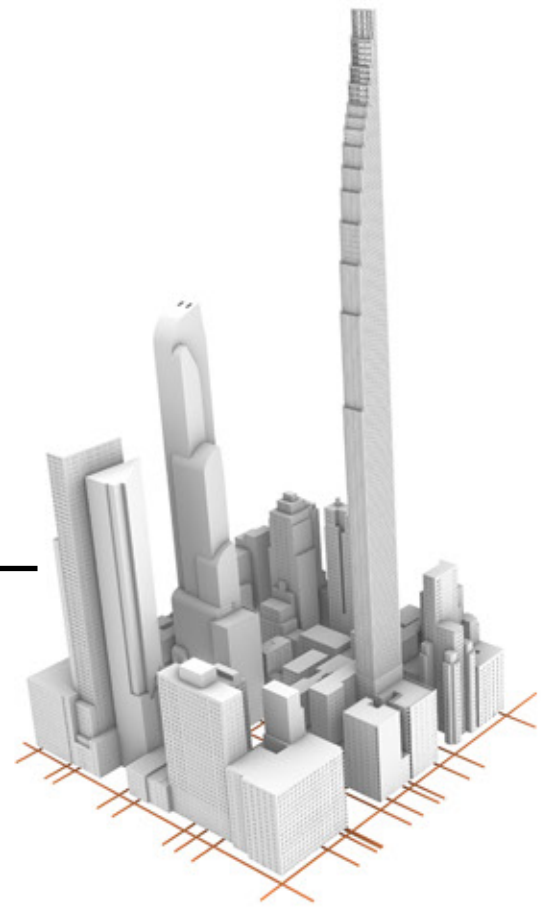


The Grid

The Grid :Collection of Interconnected Episodes

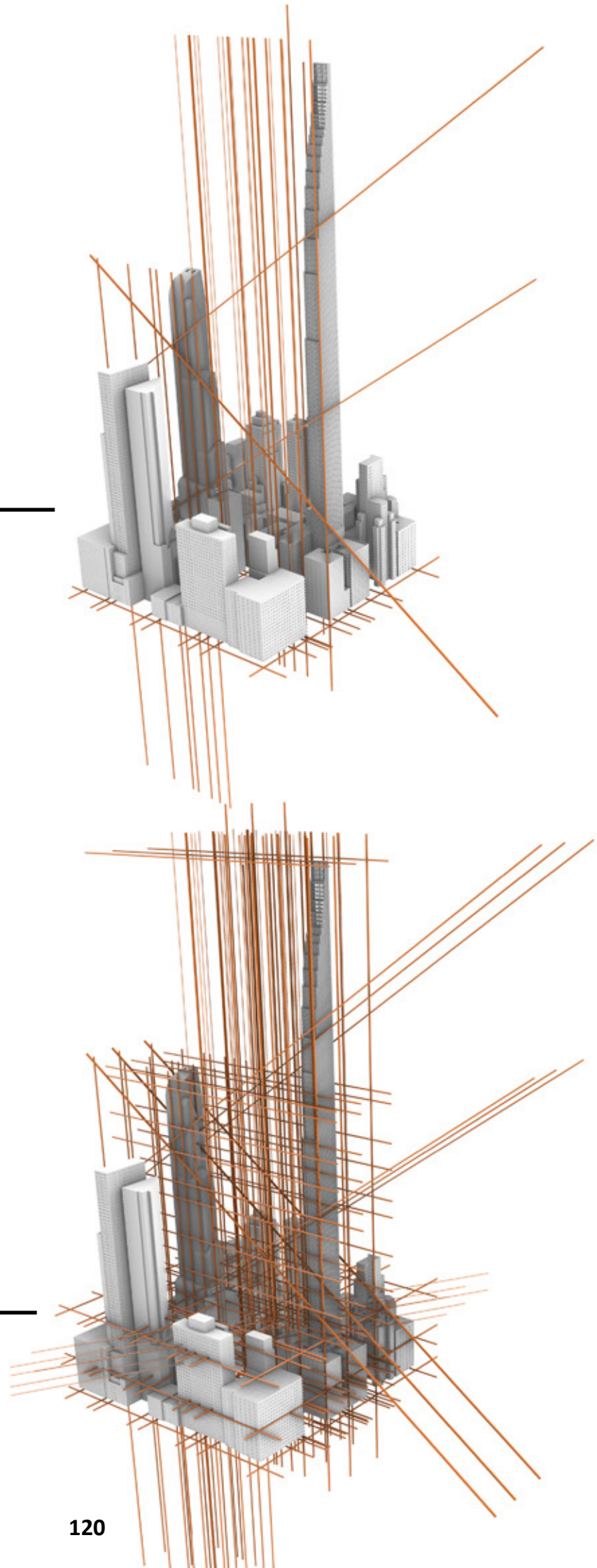
The Grid represents a network of interconnected “Cities within Cities,” replicating its vertical and horizontal structure to establish a three-dimensional grid. This grid system aims to improve connectivity, optimize land usage, and allocate resources efficiently.
Embracing vertical density, the grid fosters the development of vibrant and sustainable communities, encouraging social interaction and cultivating a stronger sense of place.
Furthermore, implementing the grid opens doors to innovative architectural designs that can cater to diverse functions and adapt to the city’s evolving needs. As a result, the urban landscape transforms into a diverse patchwork of distinct episodes, each with its unique lifespan, engaging in a dynamic interplay within the Grid.

Horizontal 2D Grid



Vertical 2D Grid

Replicating the grid both vertically and horizontally to construct a three-dimensional grid

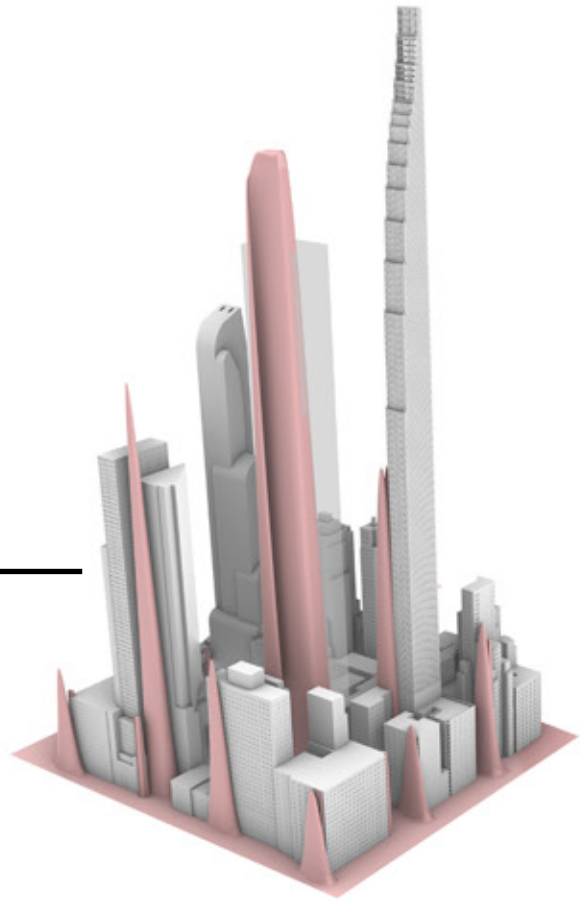


Upper Street

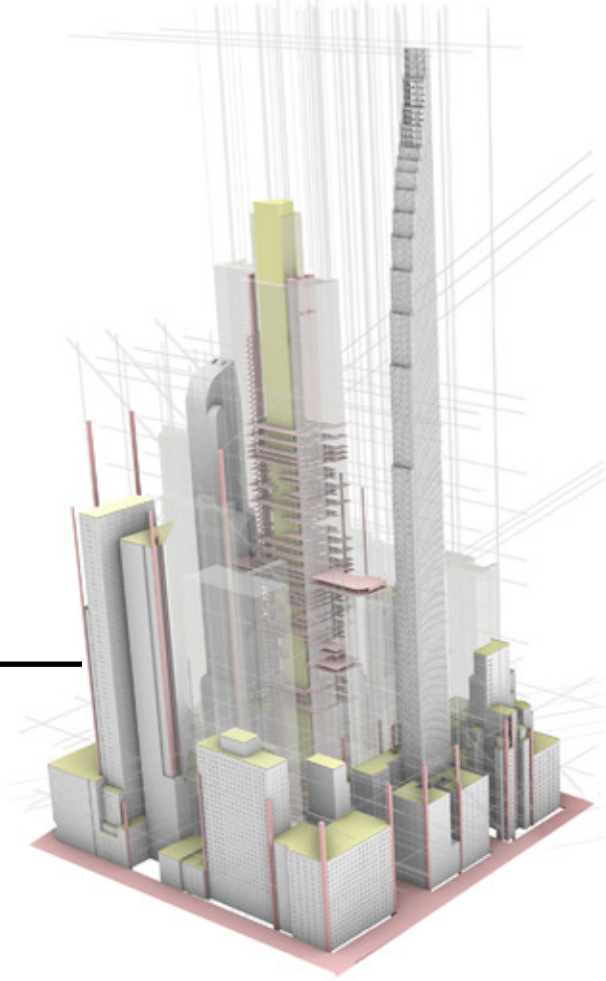
Upper Street:Elevate the Urban Scenery of the Street Vertically

By vertically elevating sections of the street, seamless connections can be established between the existing city and the upper city, enabling efficient movement and improved accessibility. Integrating the upper street with the existing urban fabric also presents an opportunity to architecturally transform and architect the void spaces within the city, shaping the structure and form of the elevated city above. This holistic approach ensures a harmonious blending of existing and new developments. Moreover, incorporating an elevated upper street creates a distinctive platform to expand and connect the city to the sky horizontally. These elevated pathways provide enhanced mobility options, foster vibrant public spaces, and offer panoramic views, enhancing the overall urban experience.

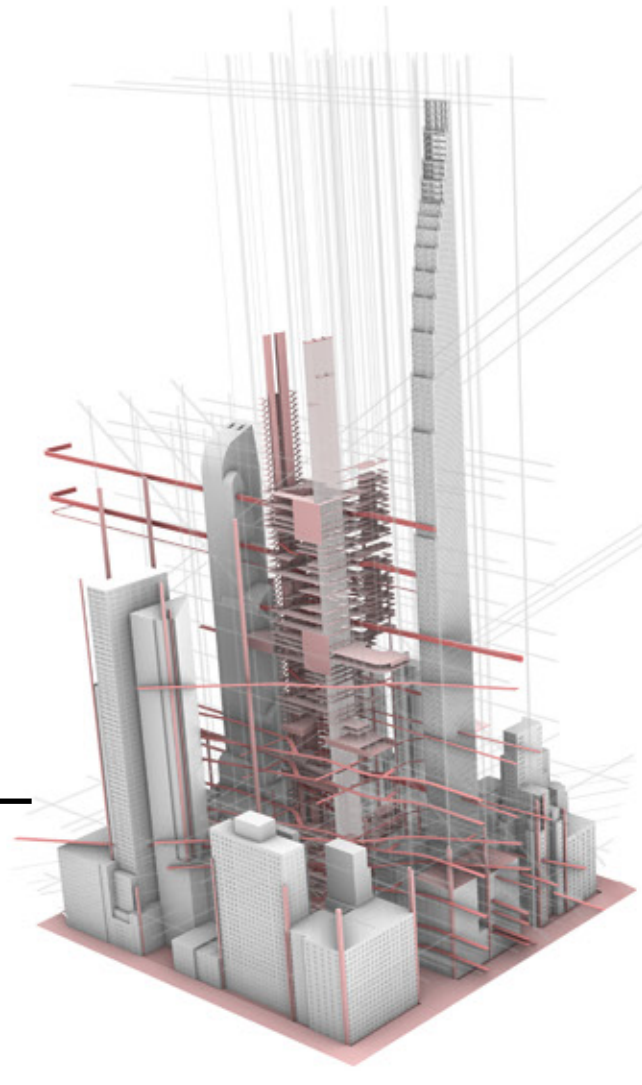
Elevating sections of the street vertically to connect the existing city to the upper city



Architecting the void the void within the existing city to shape the structure and form of the elevated city above



Incorporating an elevated upper street to horizontally connect and expand the city in the sky.

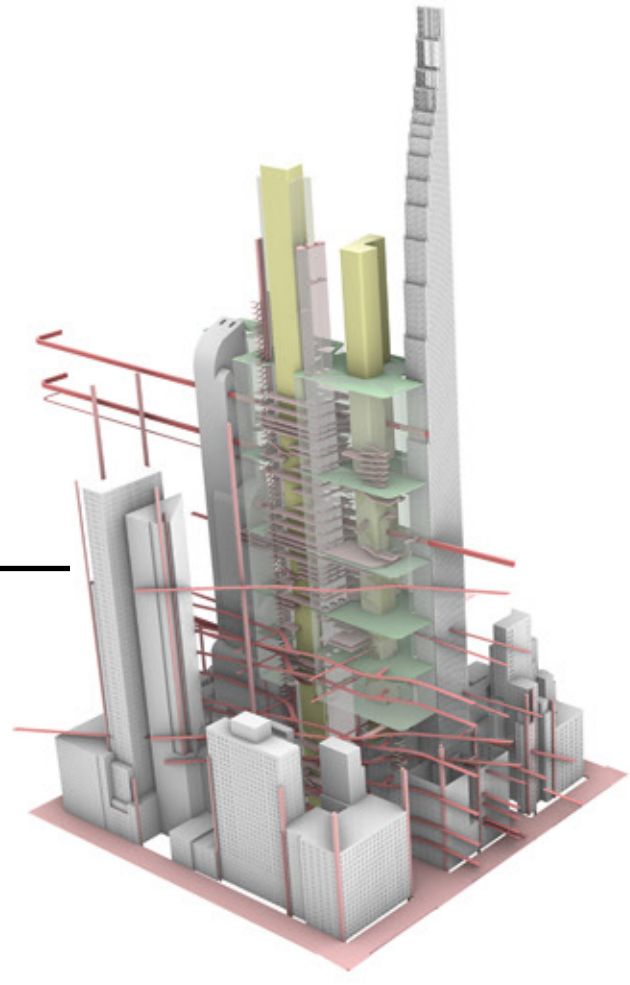


Upper Terraces

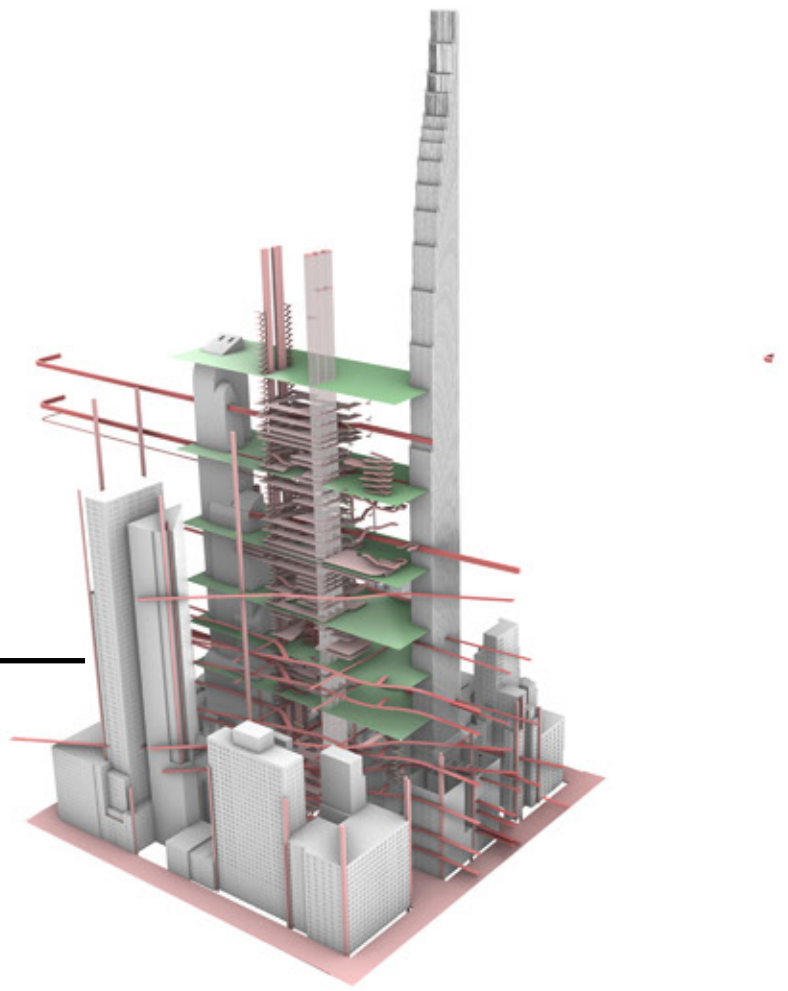
Upper Terraces: Transition and breathable public spaces.

Incorporating periodic terraces as transitional and open spaces is one viable approach to address the rising urban density in vertical settings. These terraces not only promote breathability but also serve as platforms for various activities and amenities that cater to the specific needs of the public in a metropolitan urban setting. Moreover, the integration of vertical and horizontal circulation pathways will establish seamless connections not only between the terraces but also with the new and existing city areas. This holistic approach creates a dynamic urban fabric that adapts to the changing demands and aspirations of the cities, fostering a vibrant and sustainable environment for residents and visitors alike.

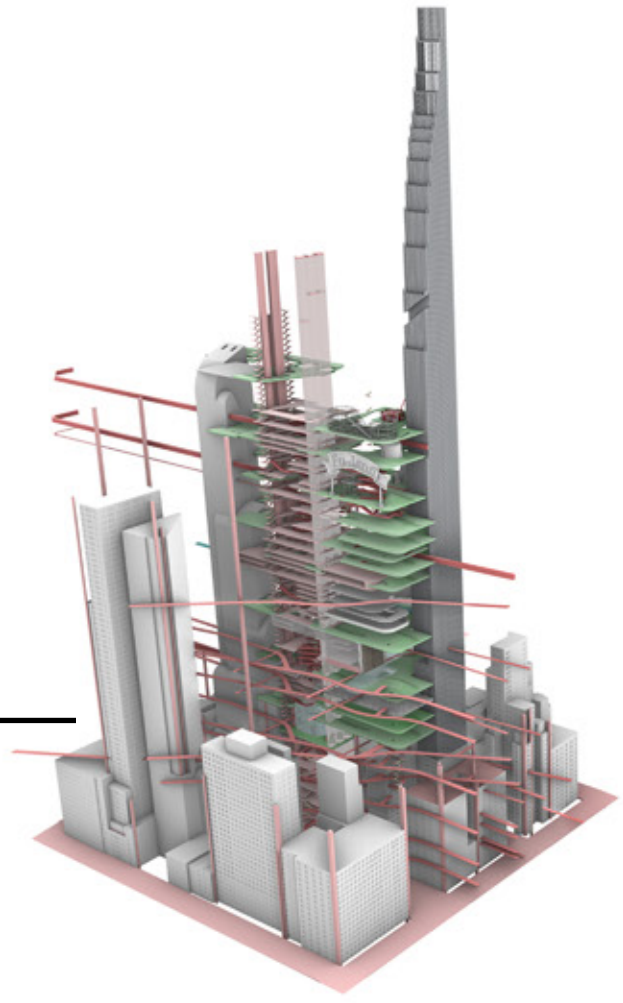
Integrate periodic terraces that function as transitional and open spaces promoting breathability as densifying vertically



Vertical and horizontal circulation pathways will establish connections between these terraces and the new and existing city areas.



Each terrace will have a unique program that caters to the specific needs of the public in metropolitan areas, while also adjusting to the evolving needs of the cities.

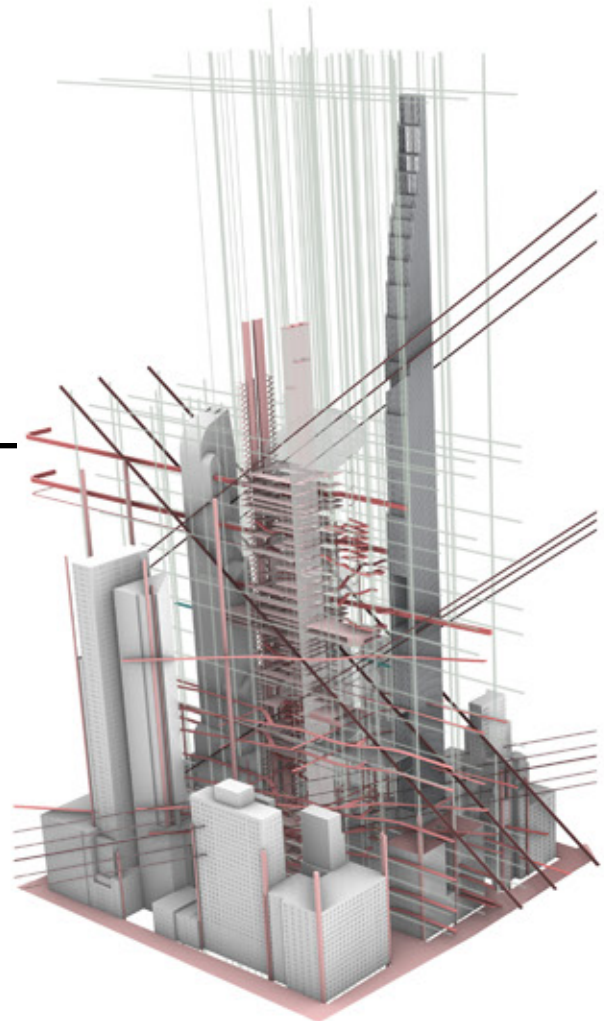


The Bubbles

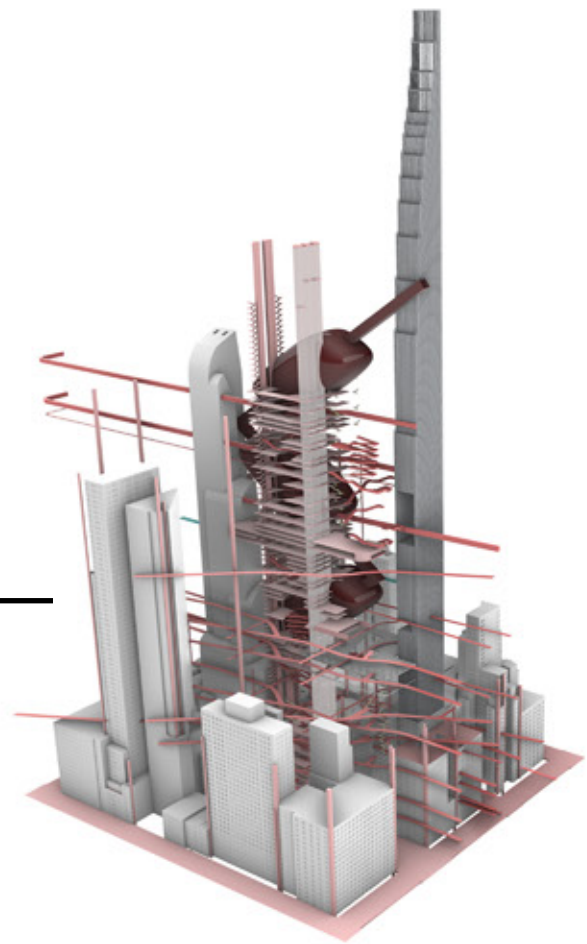
The bubbles : The intersectional space connecting the two vertical sky structures

As we consider increasing building density, it’s interesting to recognize how the connection between two vertical structures in the sky is formed through intersecting spaces, creating an intriguing intersection. Instead of focusing only on vertical expansion, it’s worth exploring the possibilities of diagonal or horizontal growth to increase density. By embracing these alternative directions, we can encourage innovative architectural design and create a dynamic urban fabric beyond traditional growth patterns. This approach leads to a more diverse and interconnected built environment, forging sectional relationships between the interiors, exteriors, and floors of the buildings. As the city grows vertically, these interconnected relationships contribute to a more integrated and cohesive urban fabric.

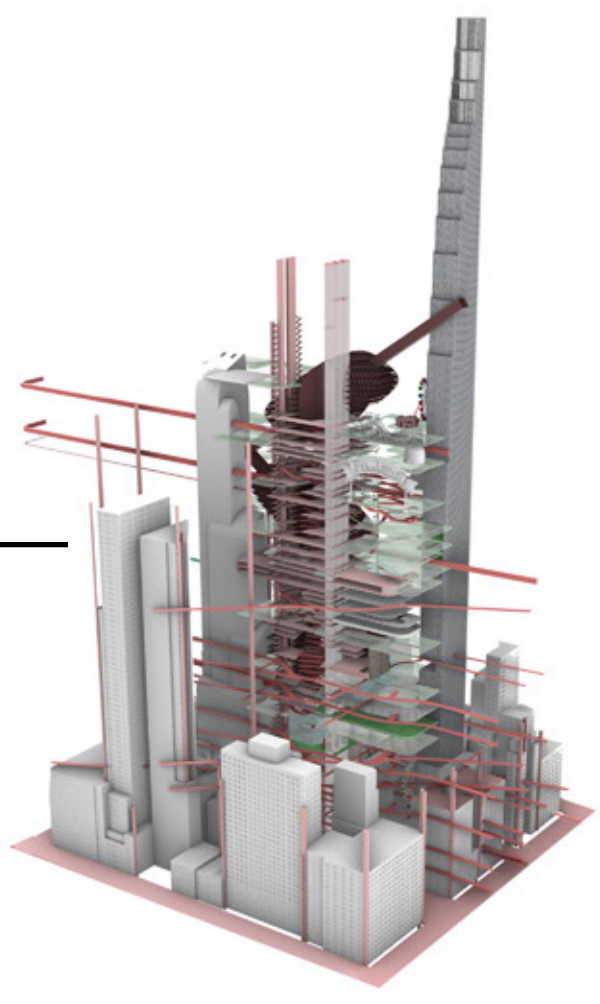
Instead of solely focusing on vertical growth, it is worth exploring alternative possibilities such as diagonal

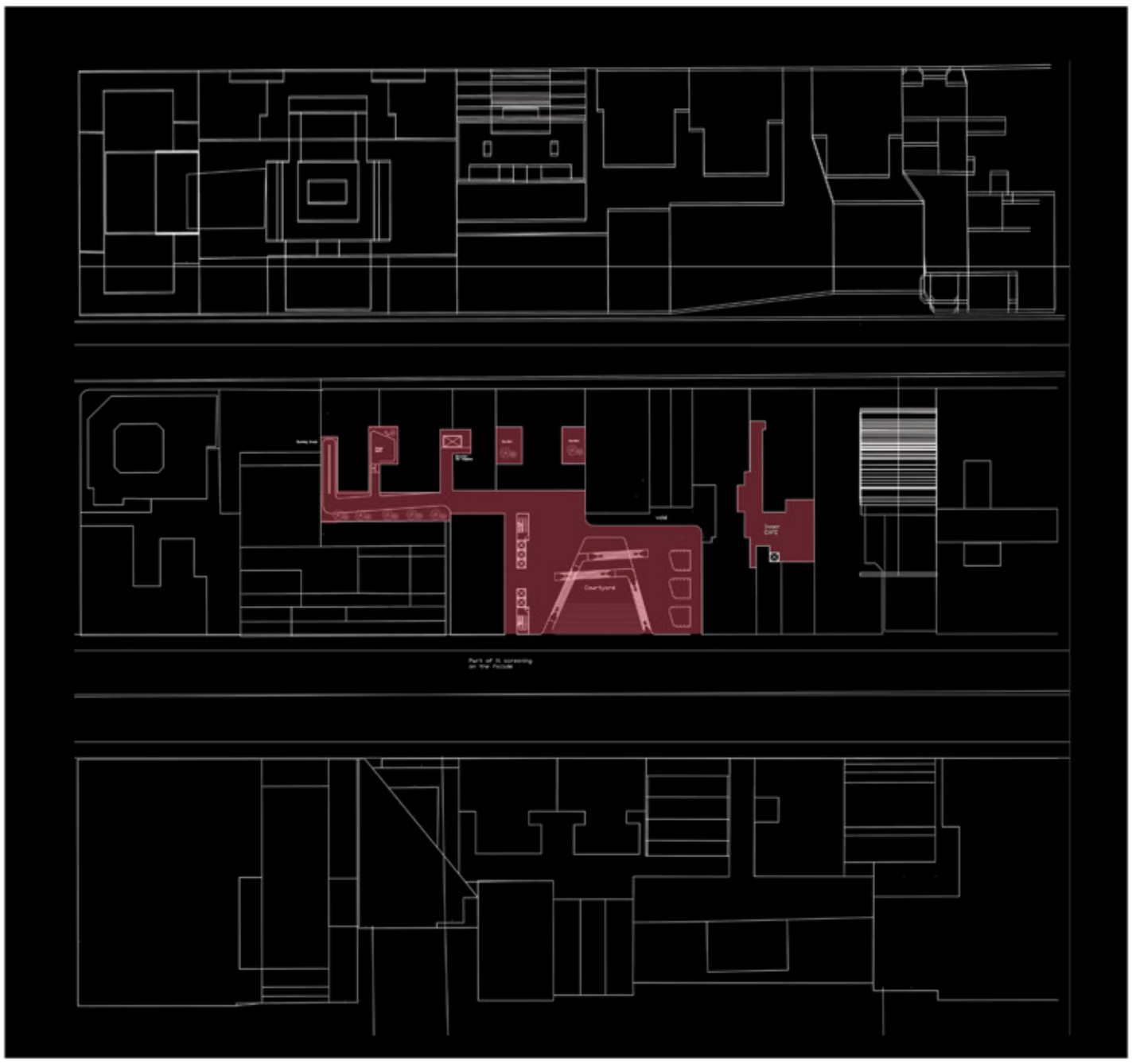


bubble serves as an intersectional space that connects the two vertical structures in the sky, forming an intriguing intersecting area

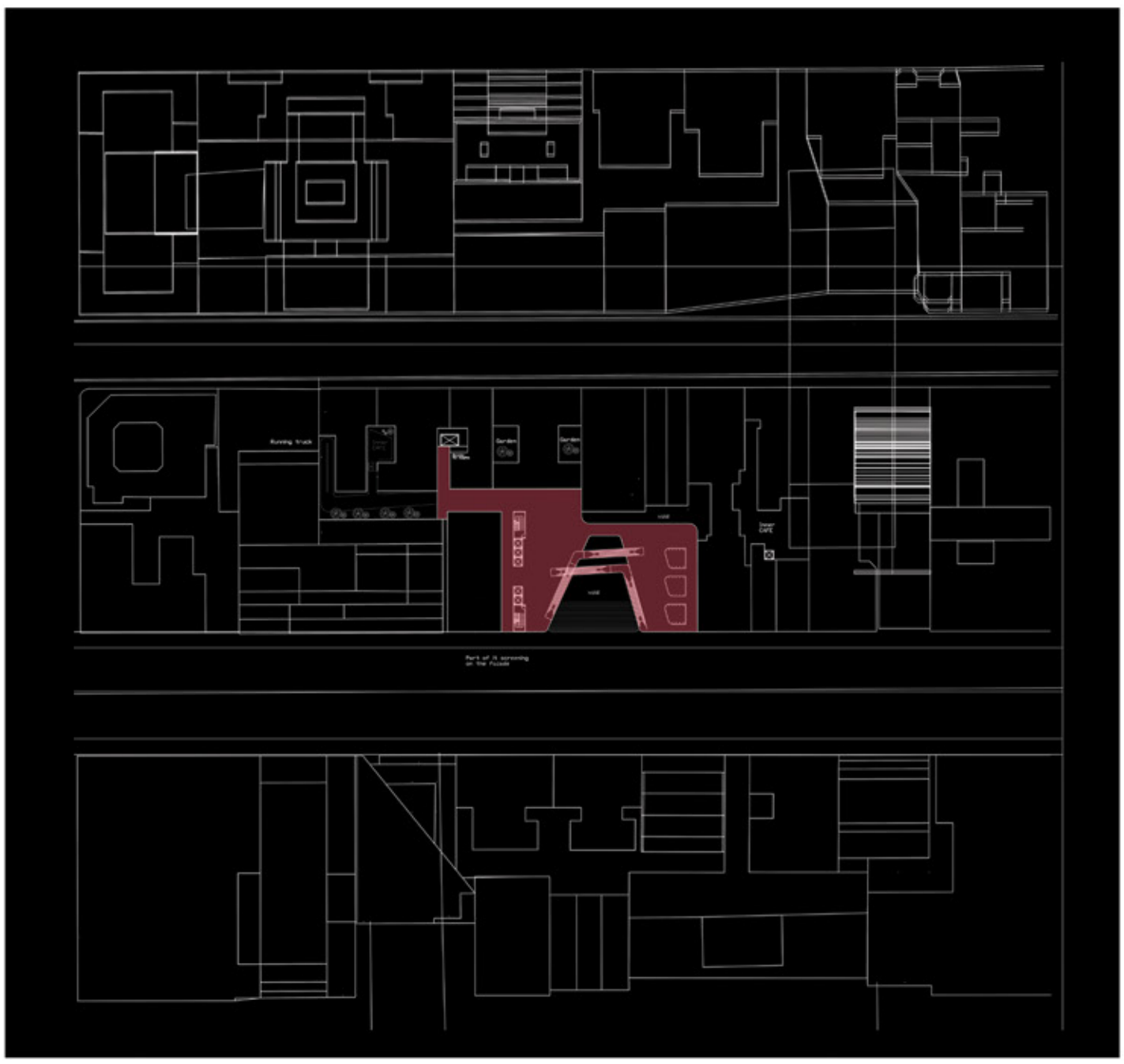


Introducing a diagonal circulation system, resembling a cable car, that seamlessly connects Wes 111, 3 bubbles, and One 57 together

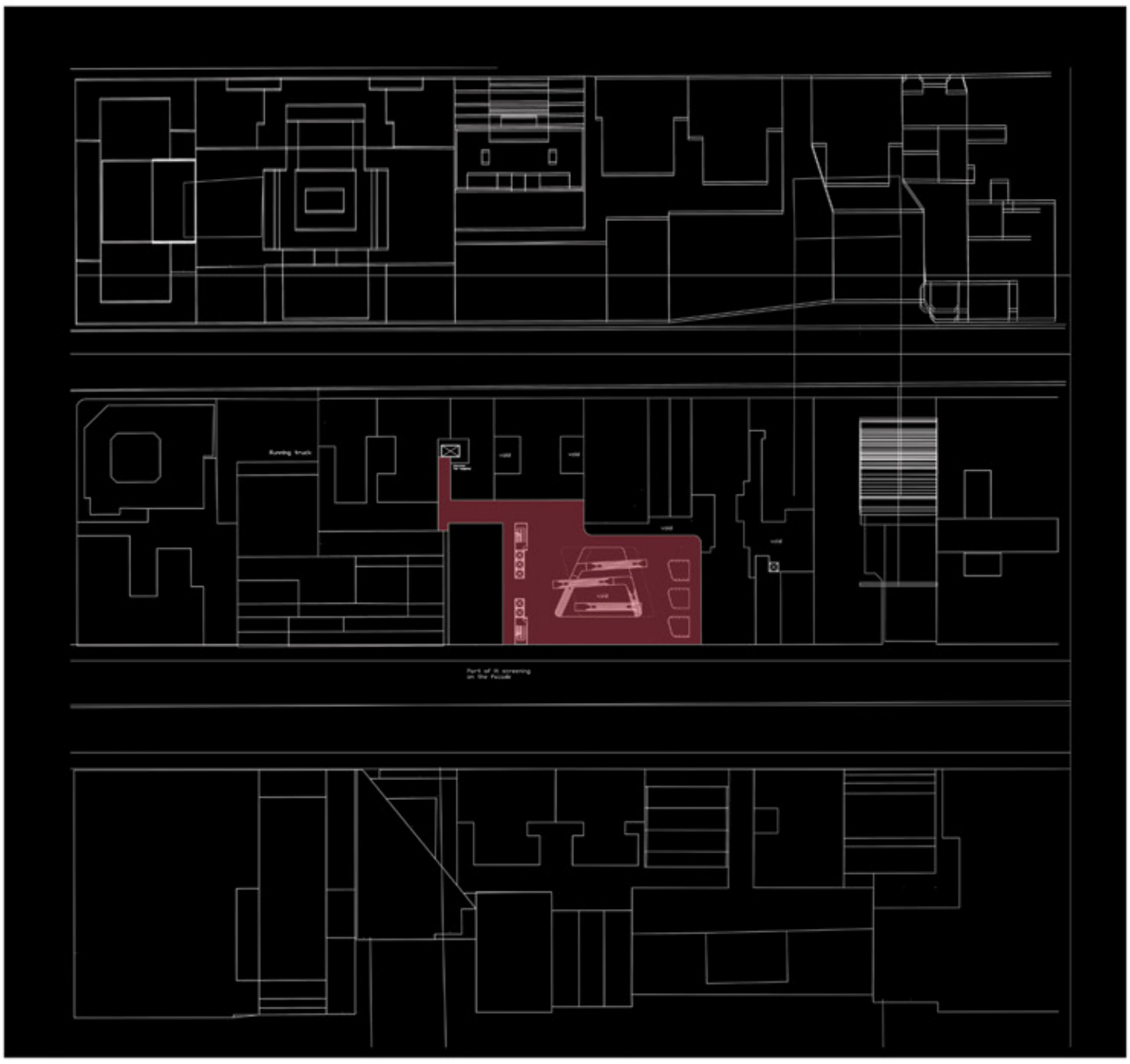




Diagrammatic floor plan for the ground floor.



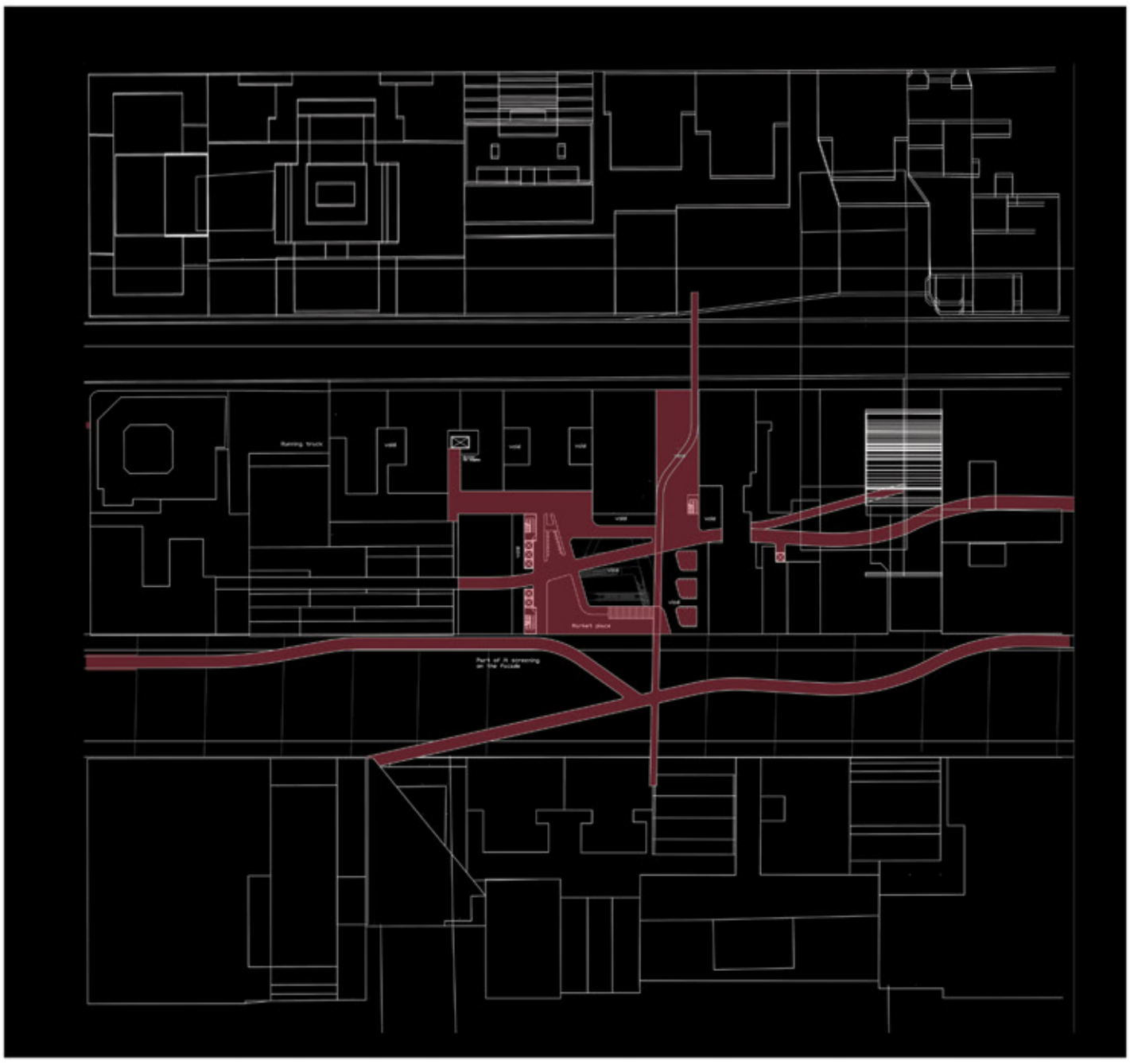
Diagrammatic floor plan for the first floor.



Diagrammatic floor plan for the 4th floor.



Diagrammatic floor plan for the 6th floor.



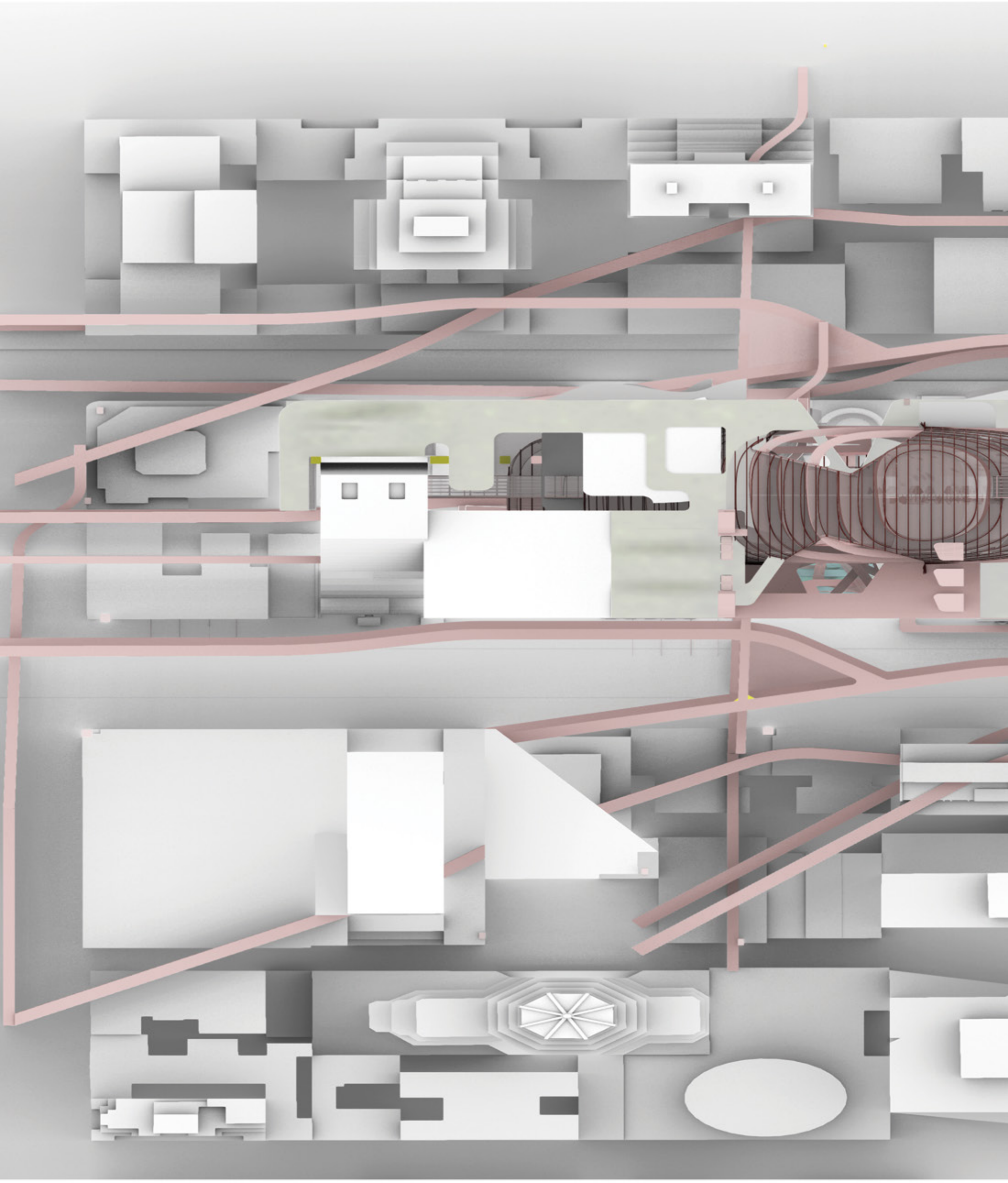
Diagrammatic floor plan for the 9th floor.



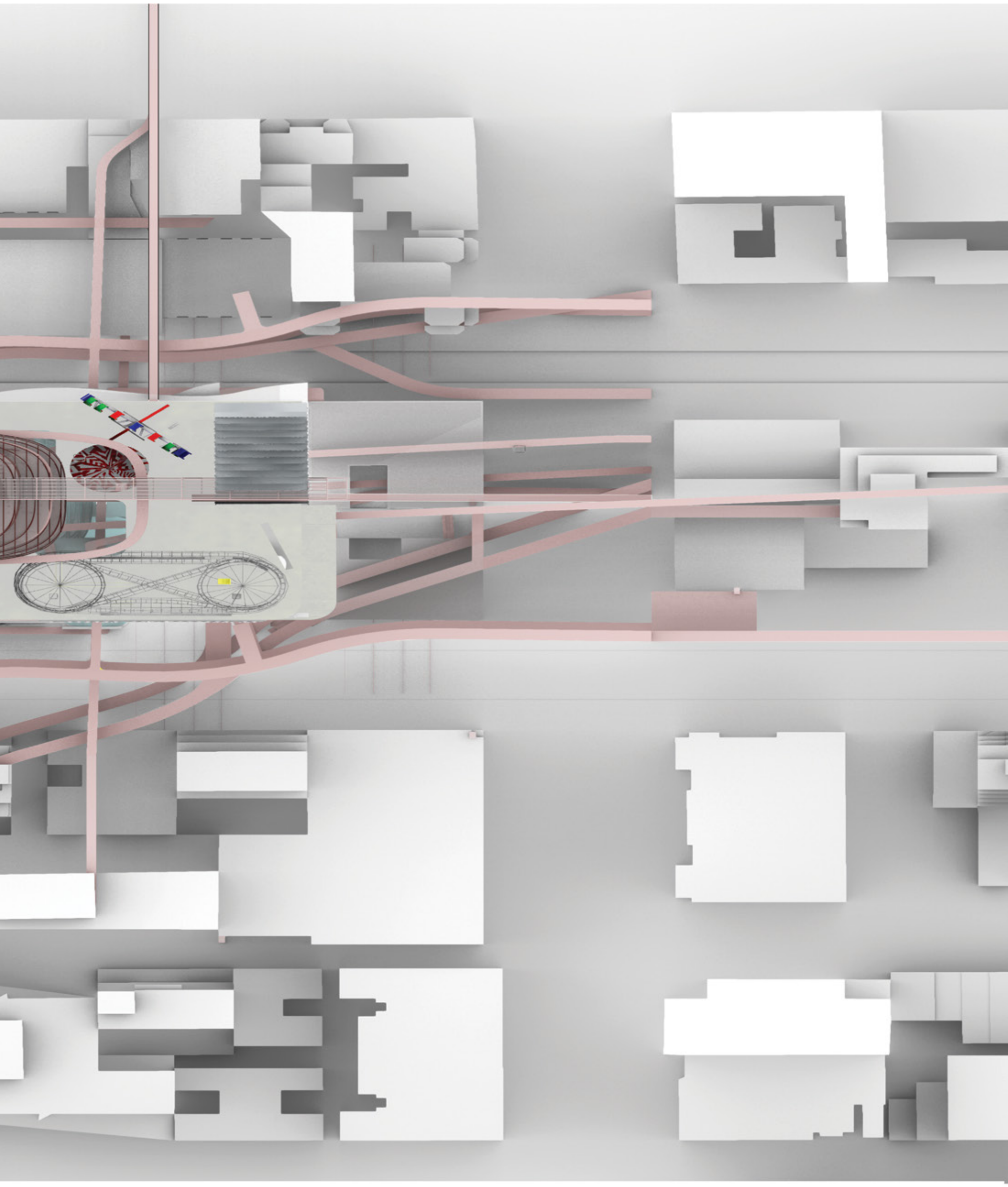
Diagrammatic floor plan for the upper terraces.

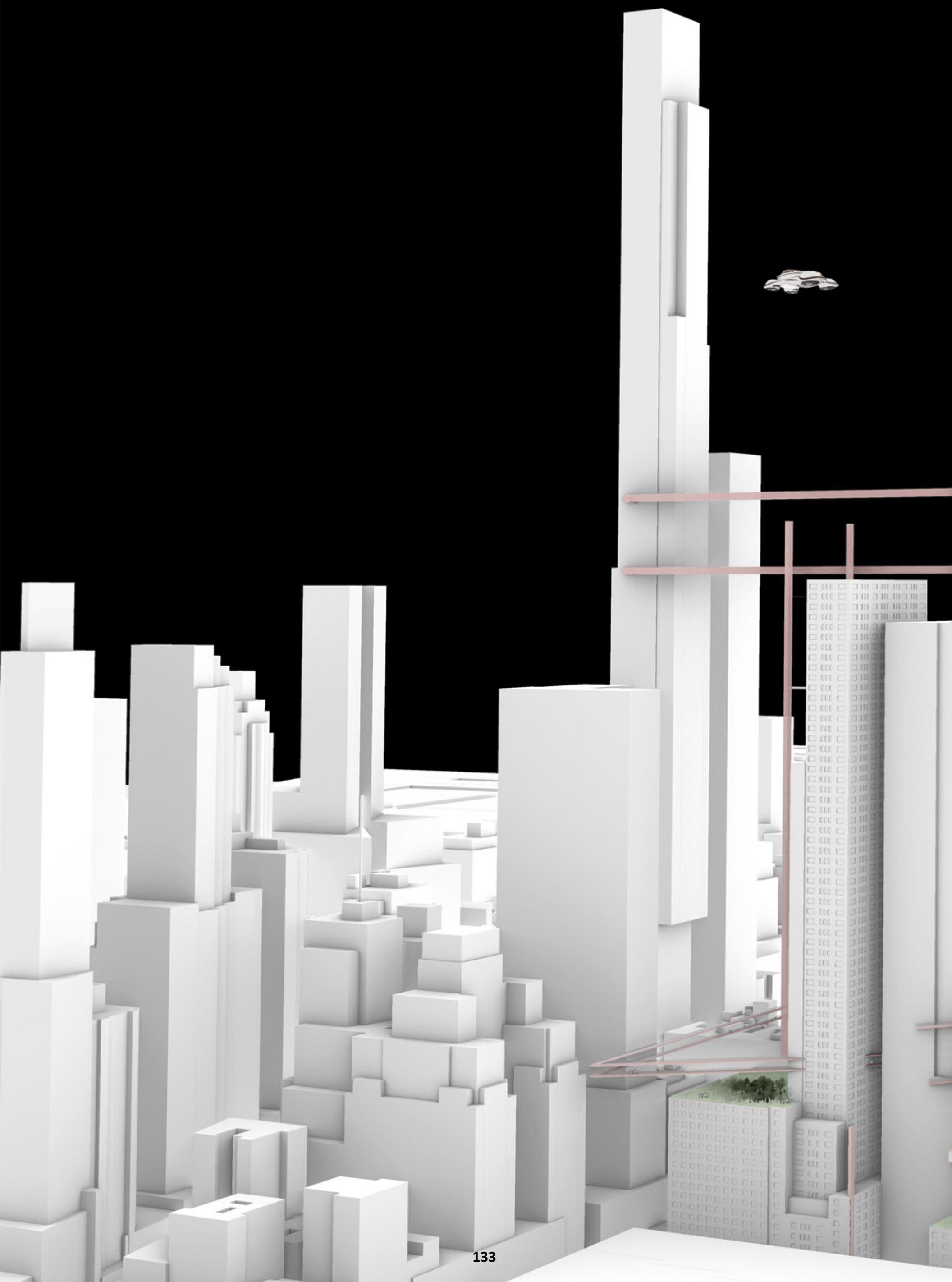
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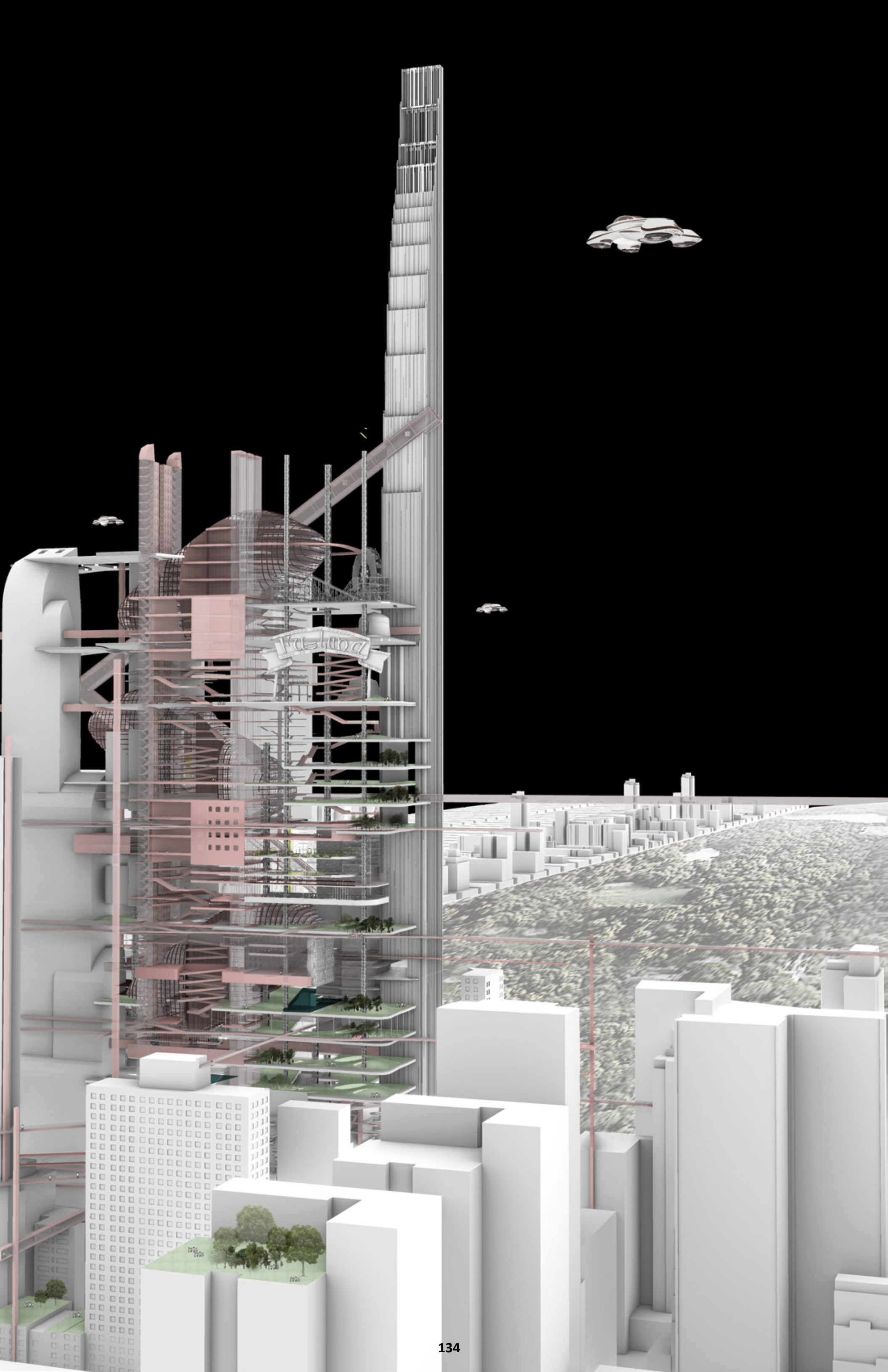
Site Plan of F

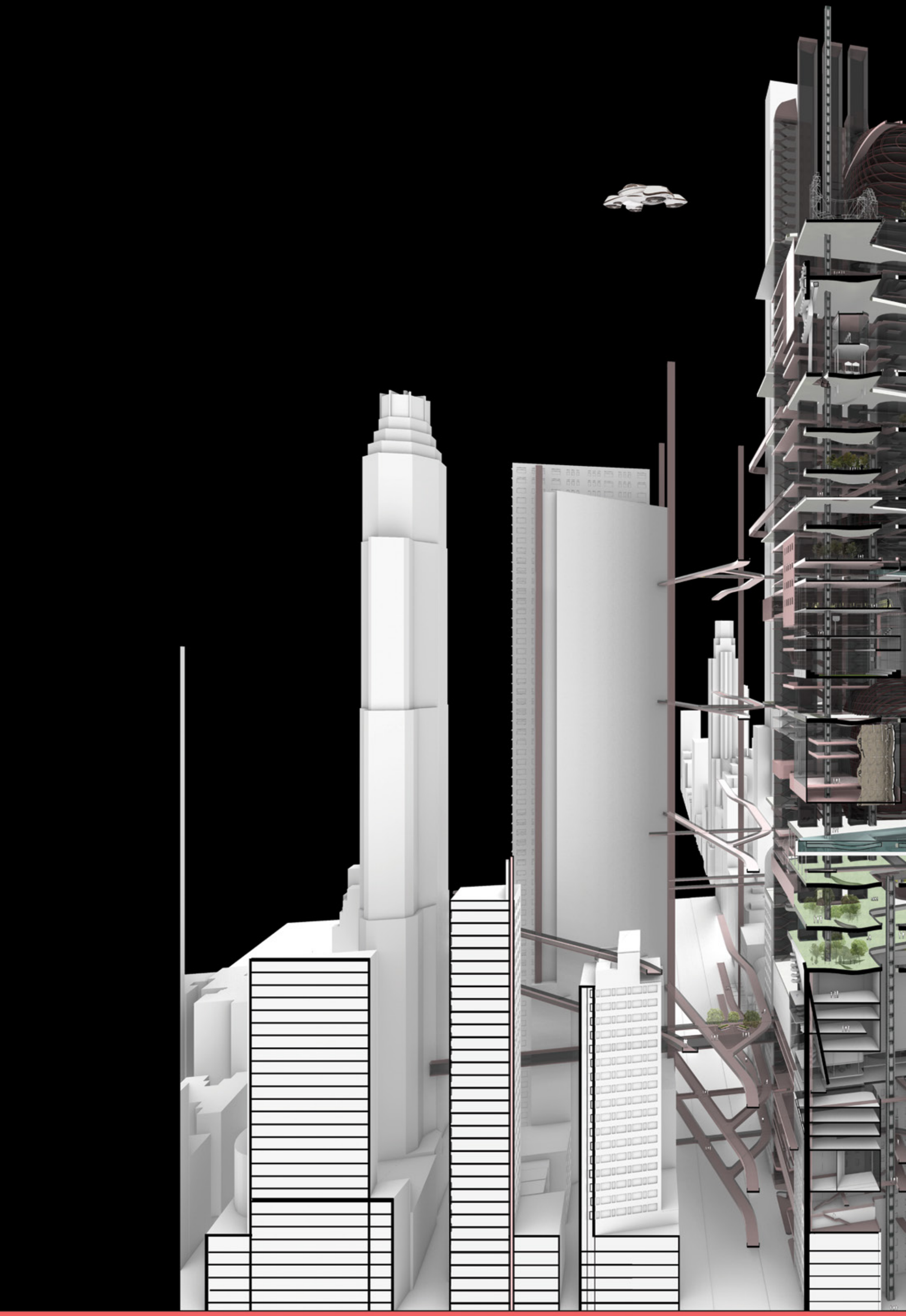


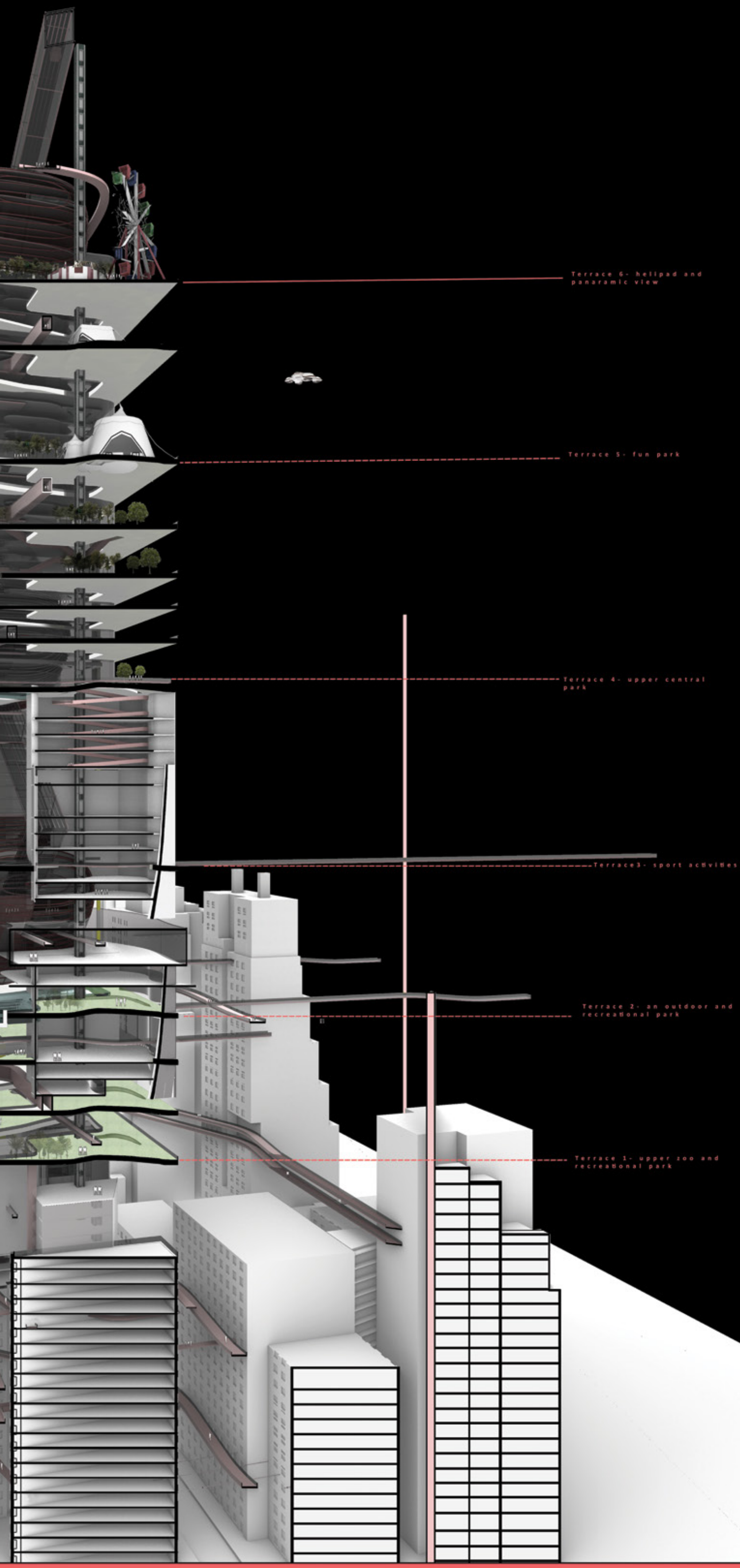
i n a l P r o p o s a l



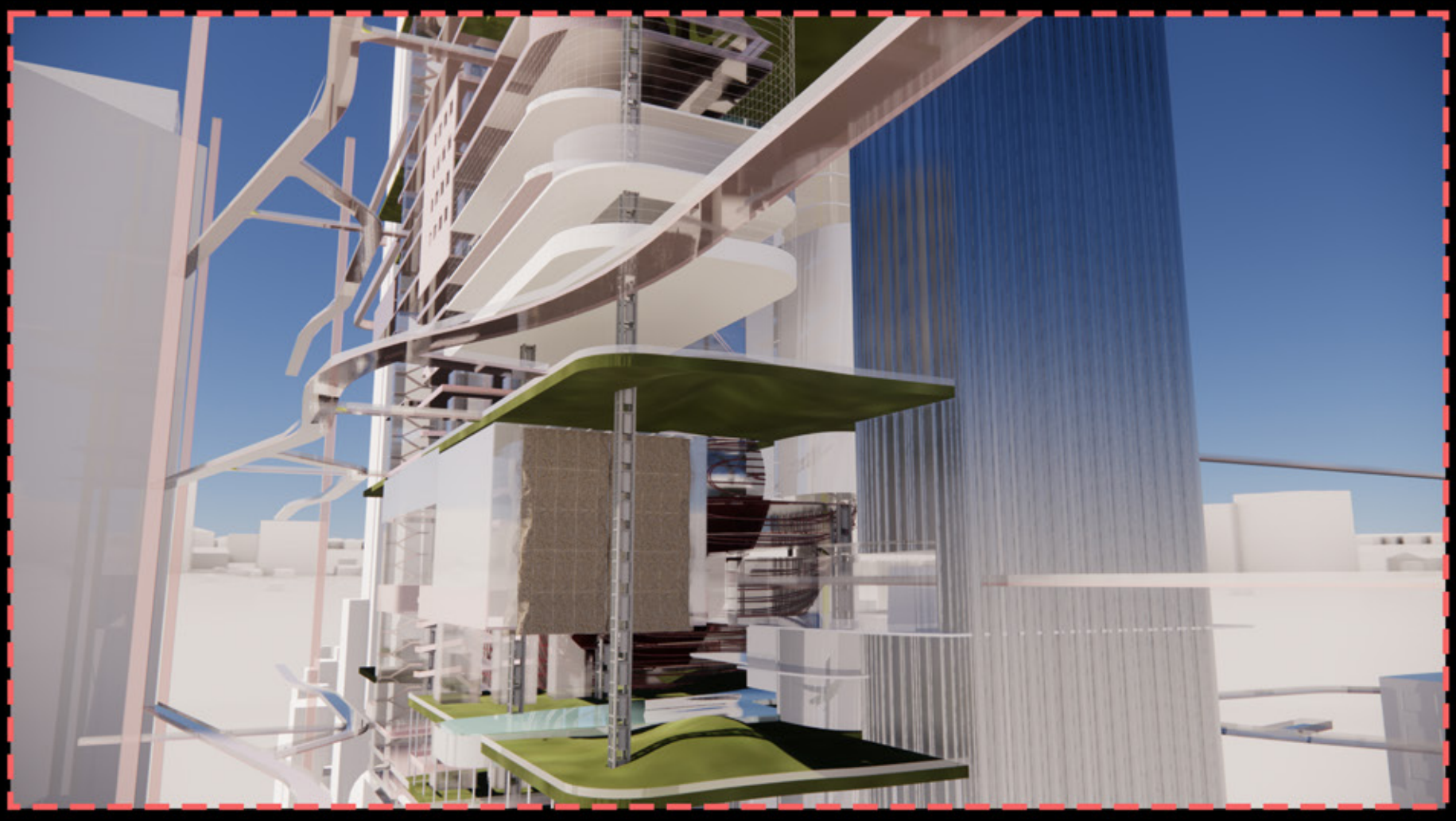




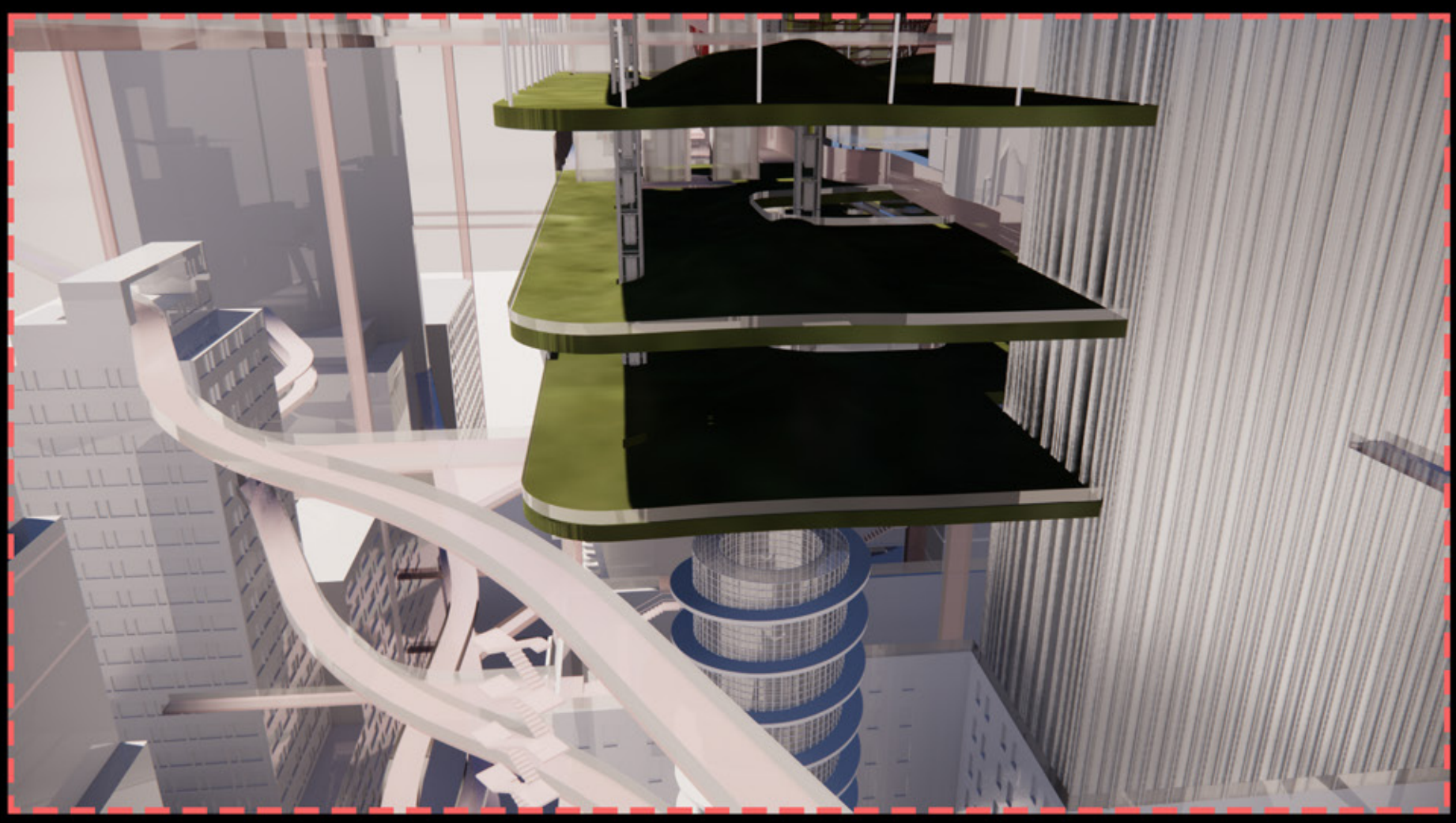



Terrace 6- helipad and panaramic view
Terrace 5- fun park
Terrace 4- upper central park
Terrace3- sport activities
Terrace 2- an outdoor and recreational park
Terrace 1- upper zoo and recreational park

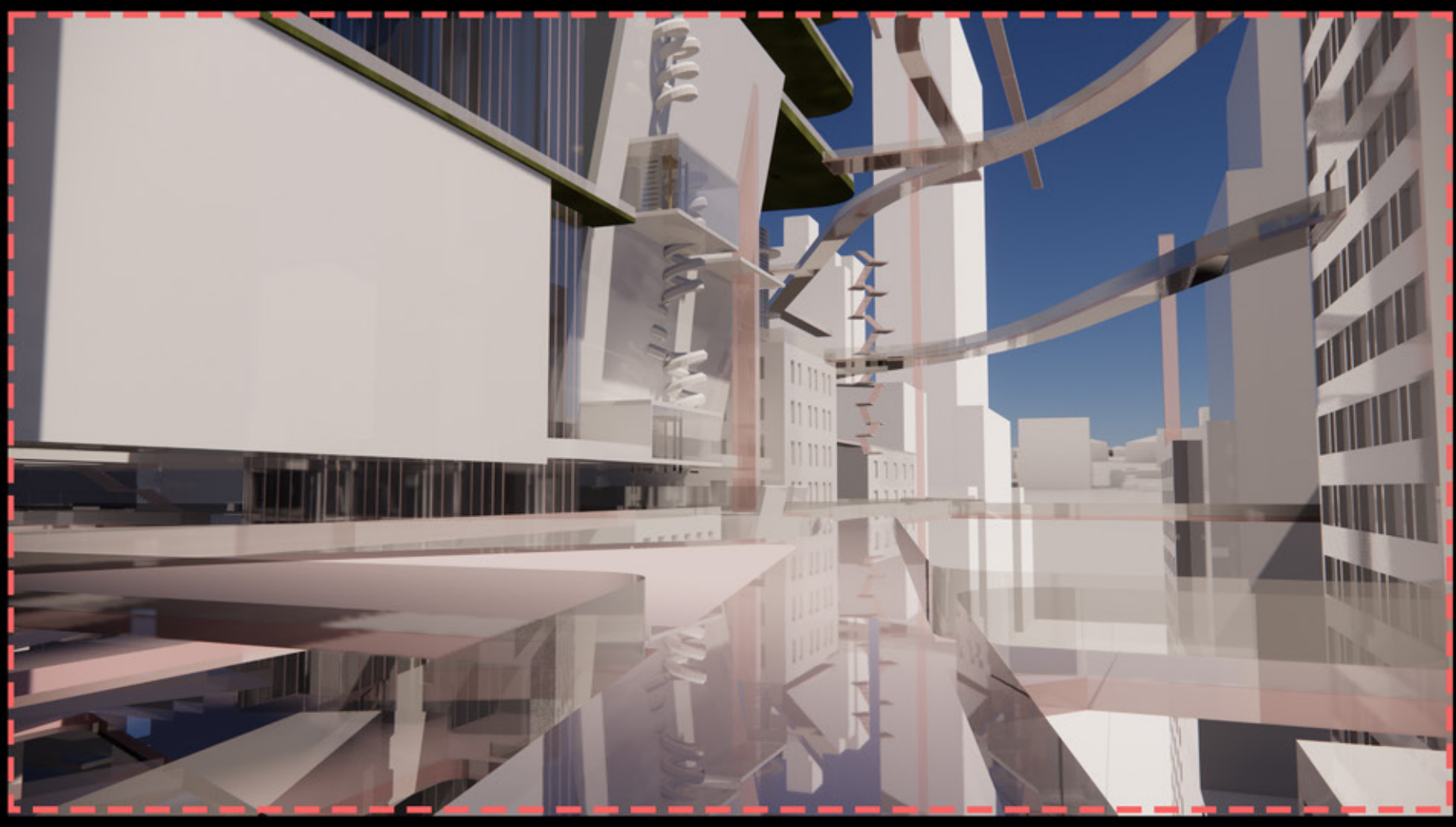
01 **Narrative through the spaces: Interior perspectives**



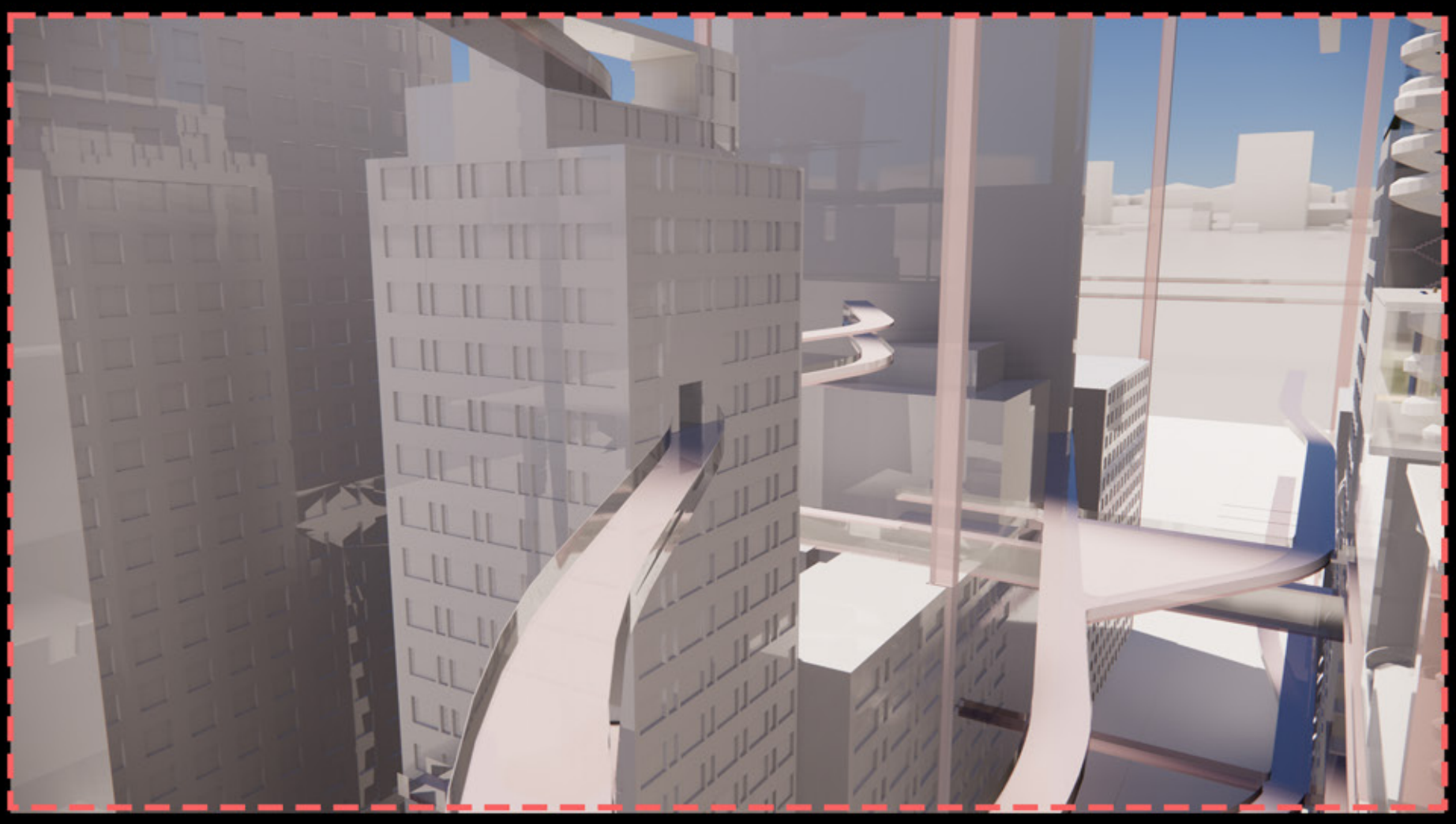
Outdoor and Recreational park



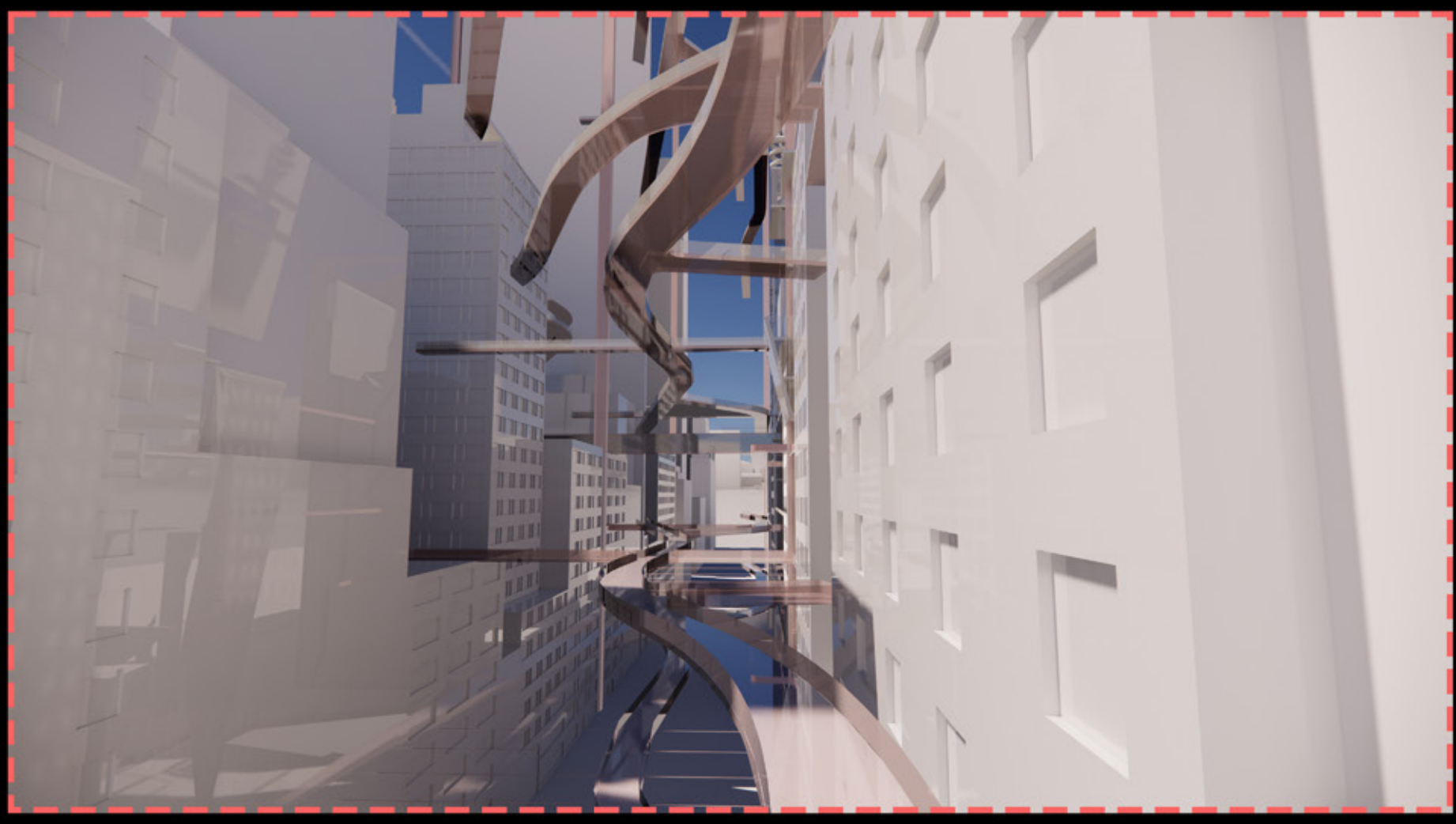
Upper Central Park



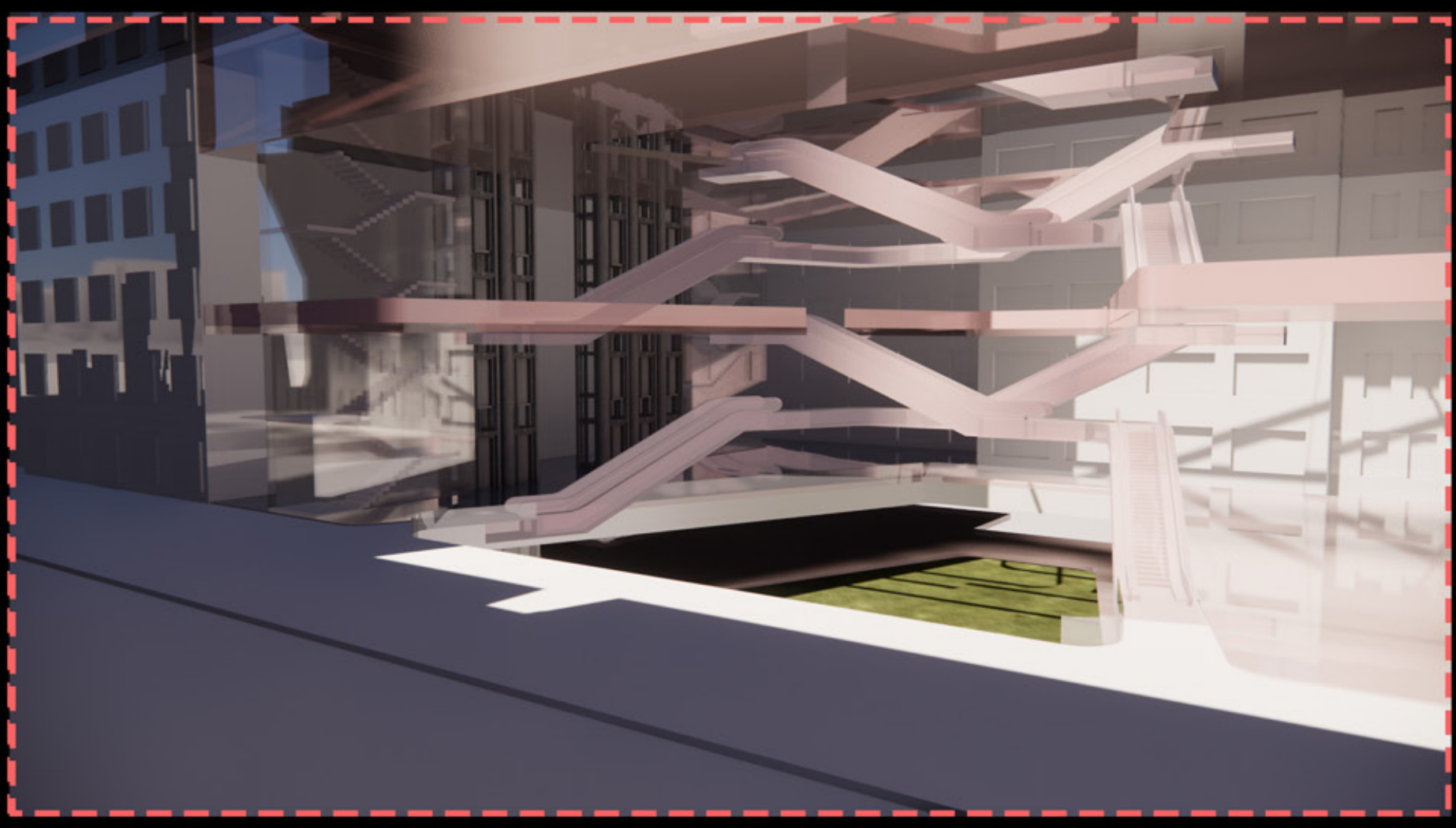
Elevated pathways that connect the hub of the upper city to the surrounding existing



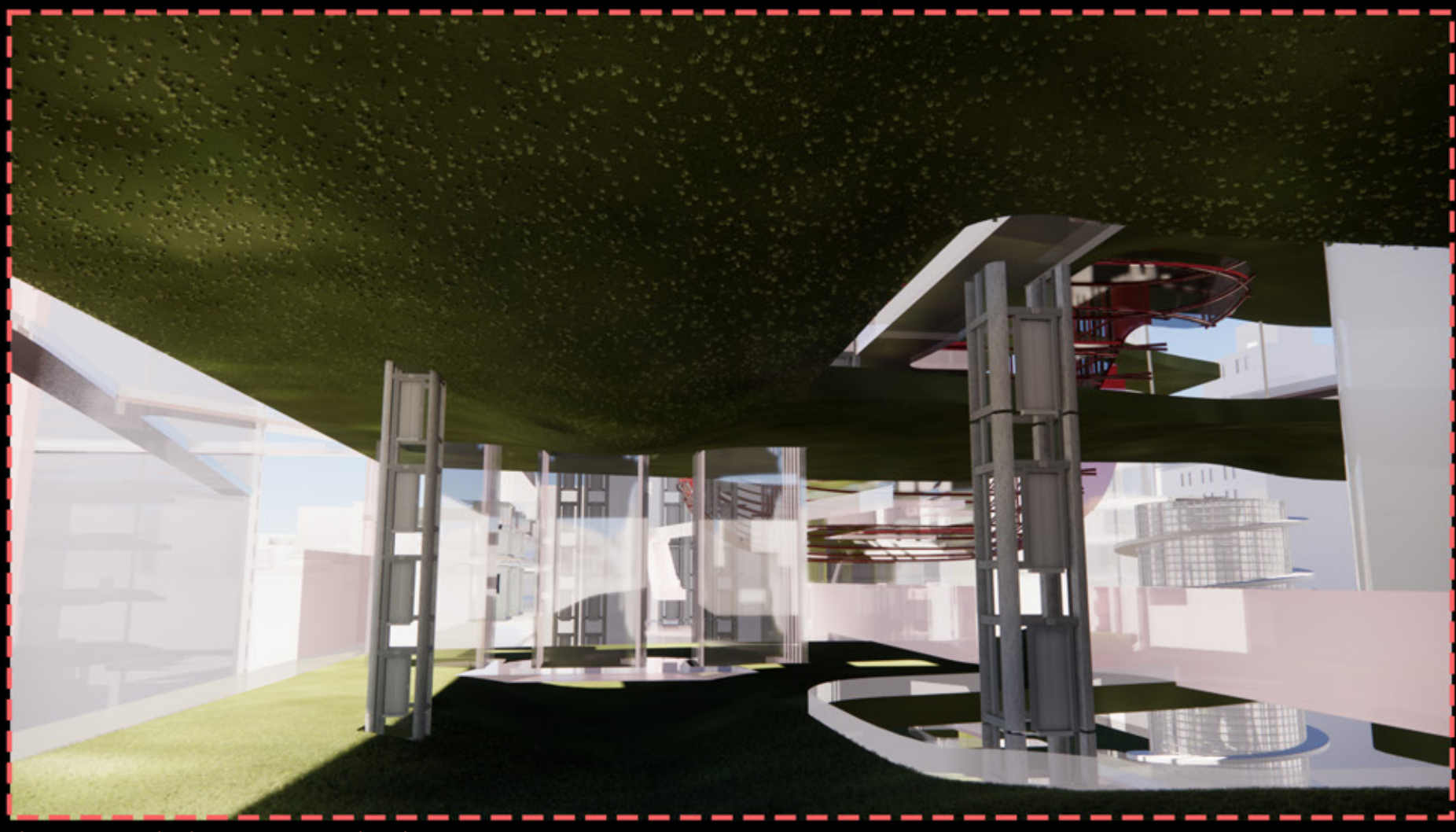
Elevated pathways that traverse through the existing city.



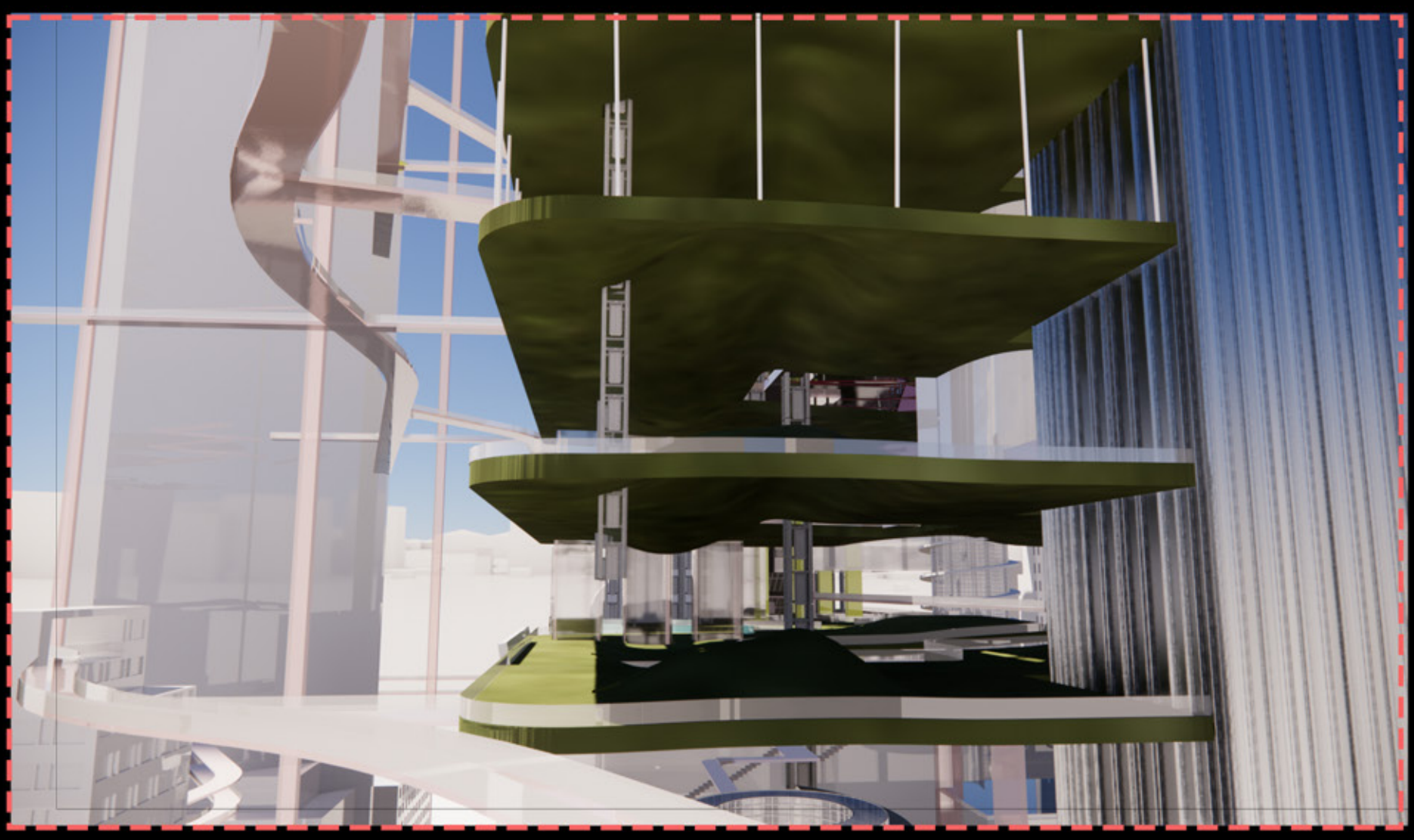
Elevated pathways that link the central hub of the upper city to the surrounding existing areas



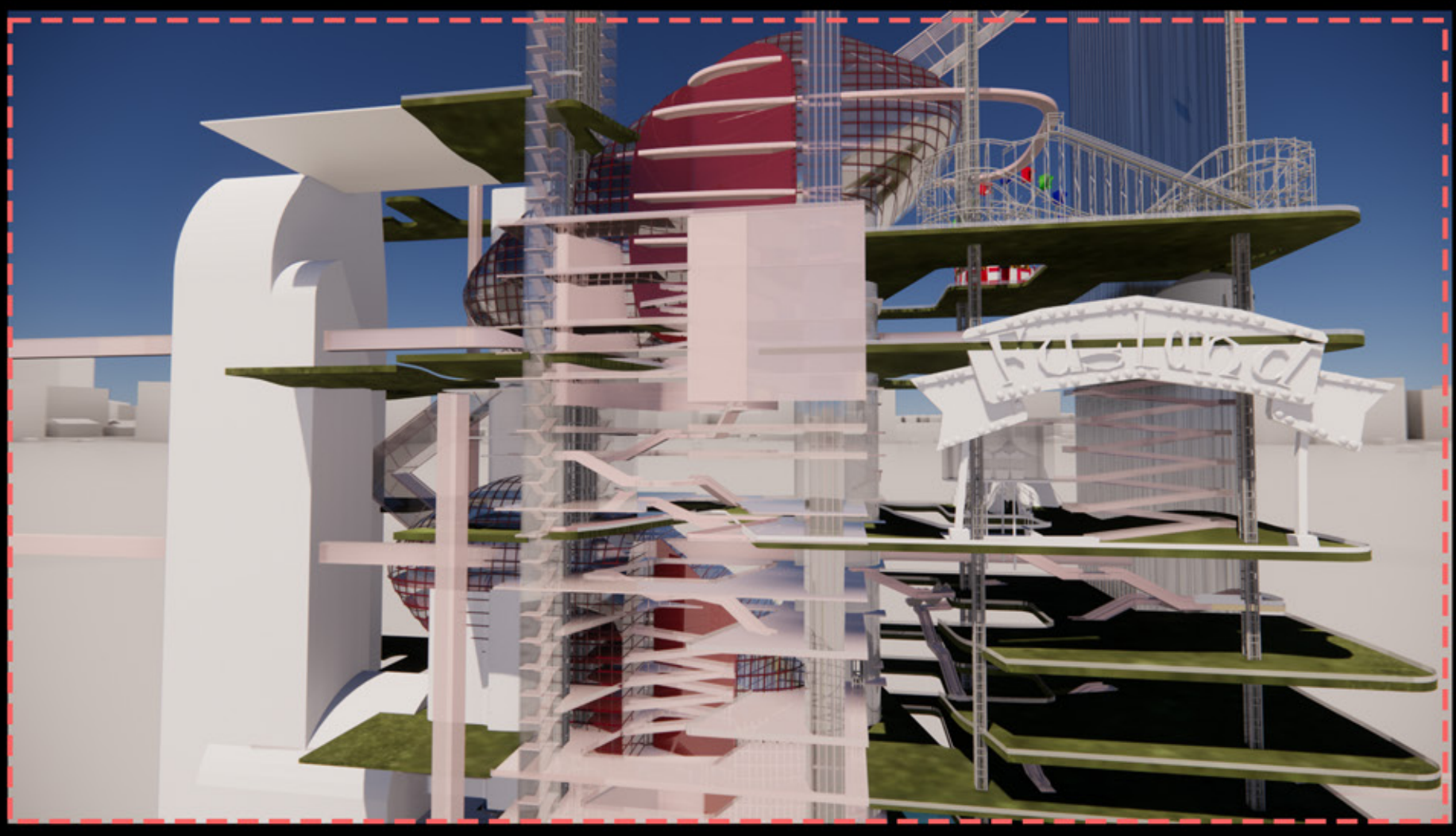
The main entrance of the upper city



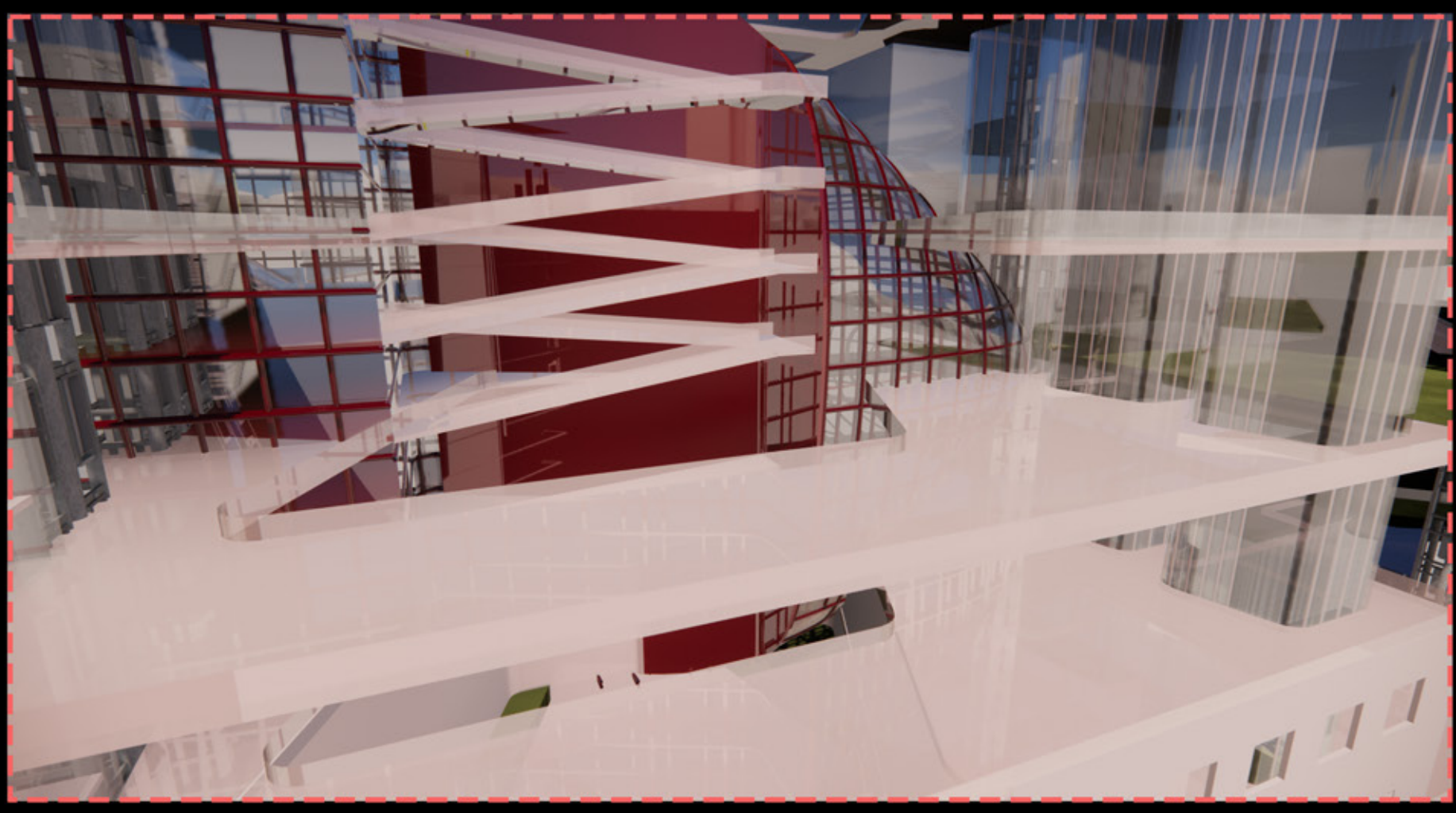
The space inside the Upper Central Park



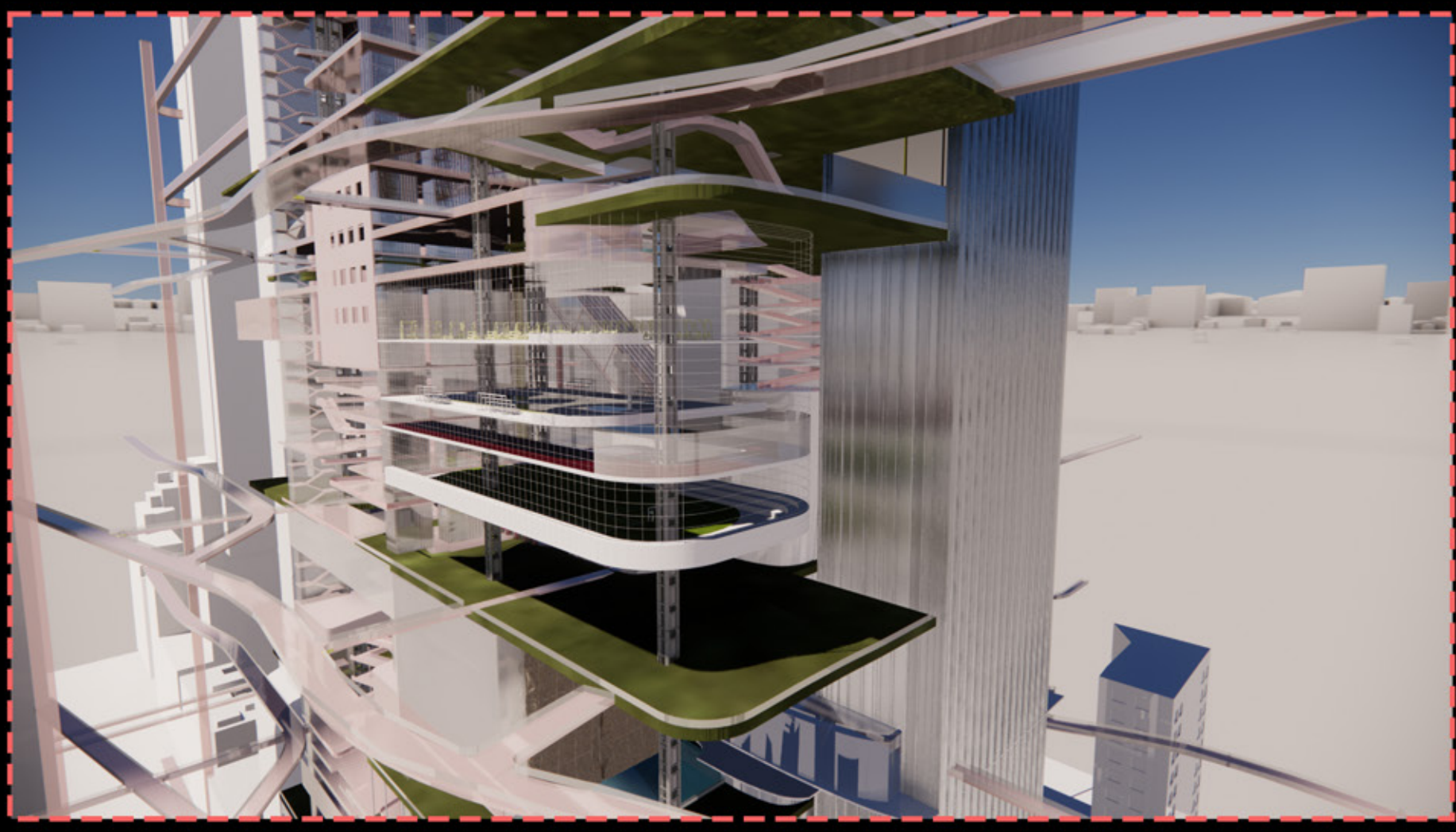
Upper Central Park



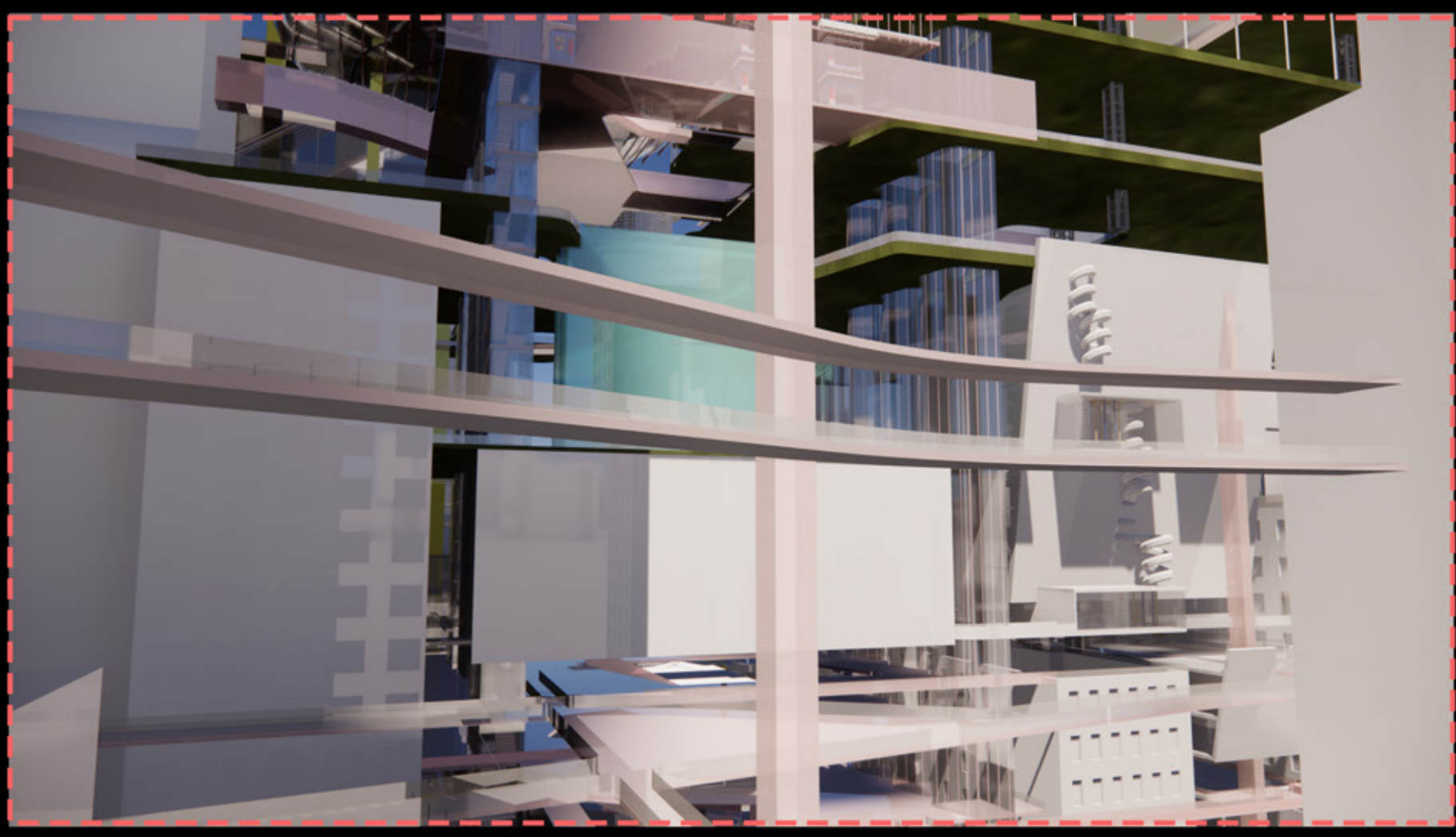
The vertical street serves as a connection between various activities within the upper city hub, linking the upper central park, amusement park, and bubble to one another



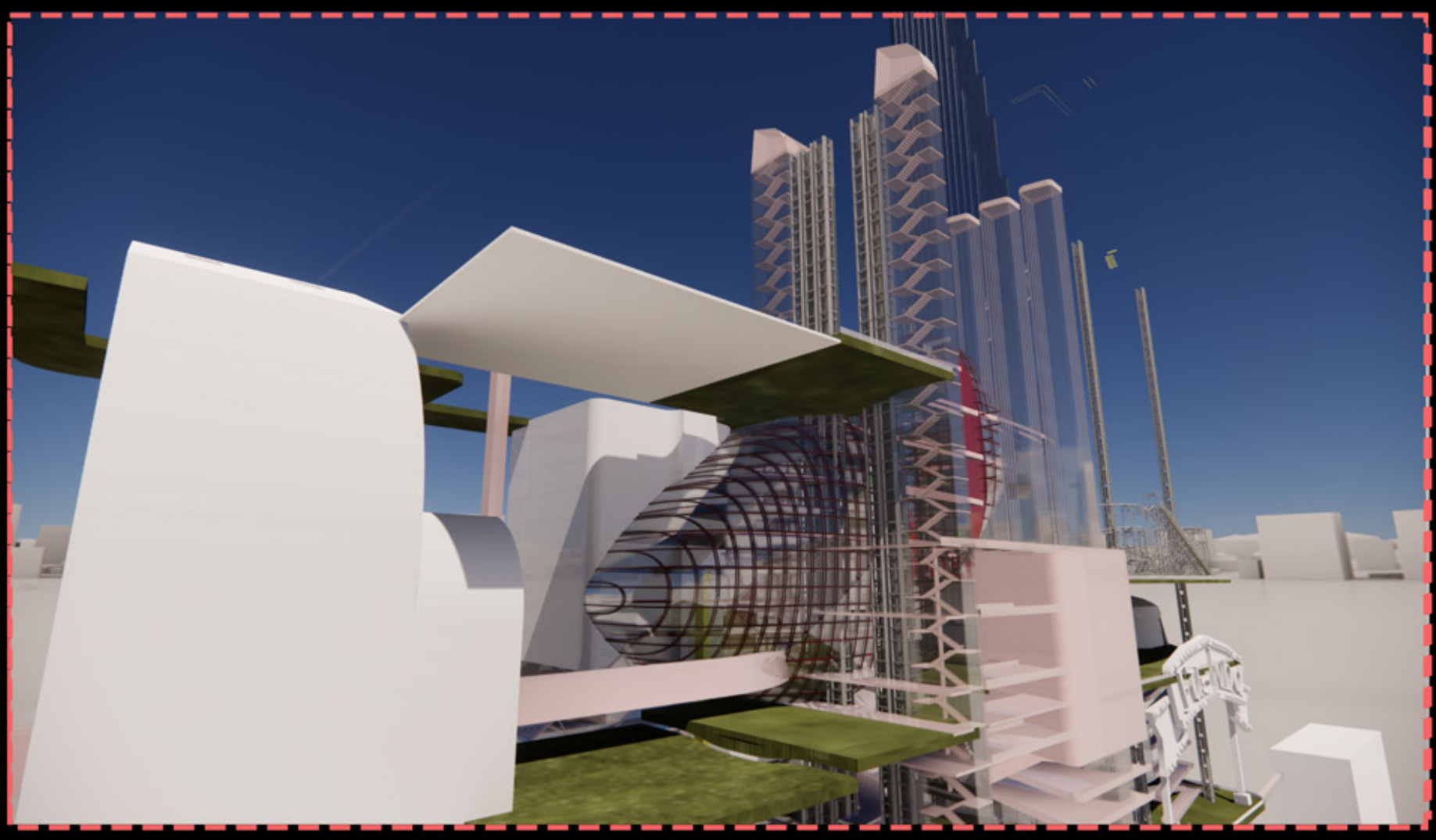
The interactive surfaces inside the Vertical street



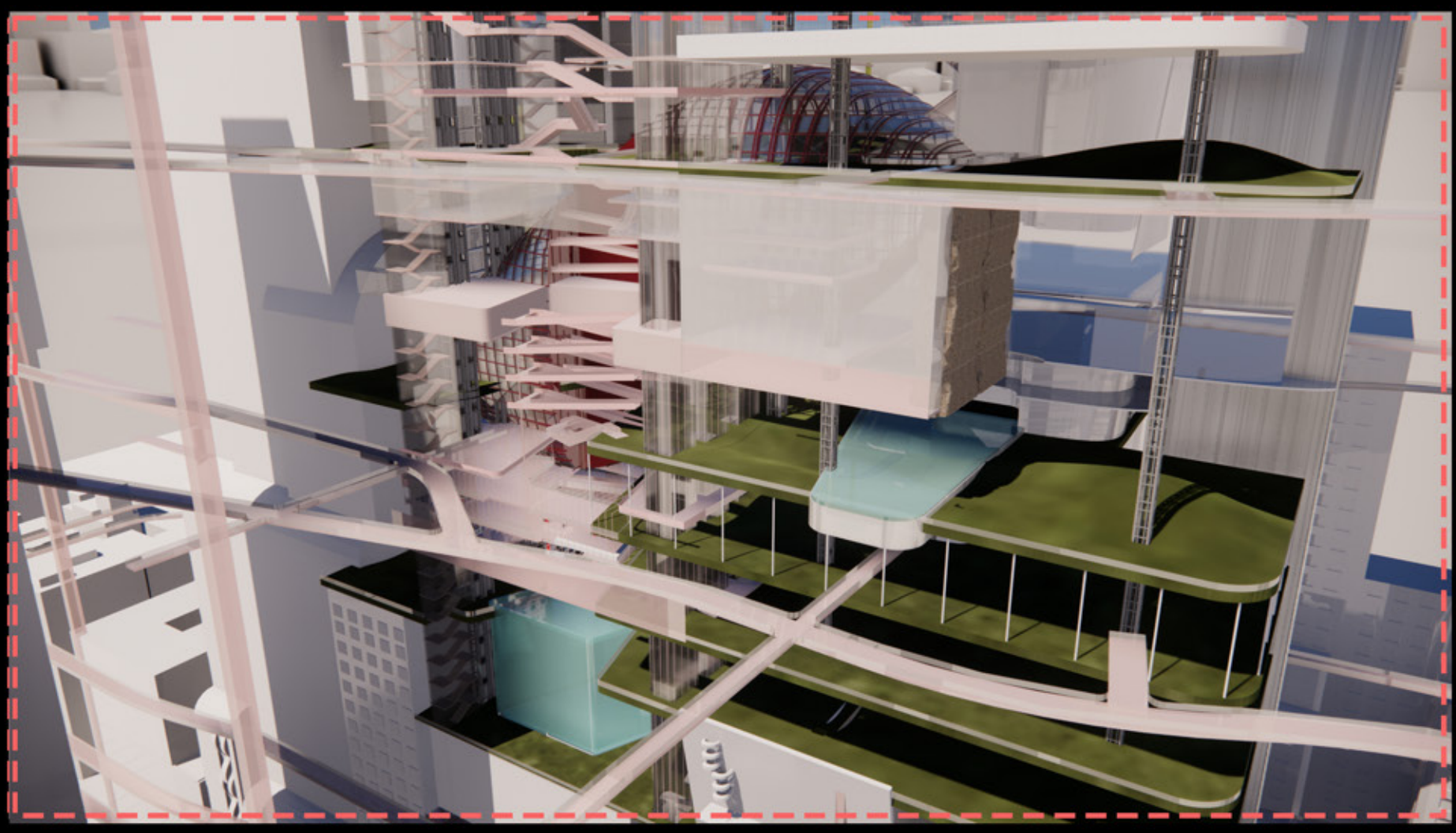
Upper terrace 3 sports activities.



The elevated pathways span across both the new and existing city, facilitating connections and contributing to the creation of social interactive points.

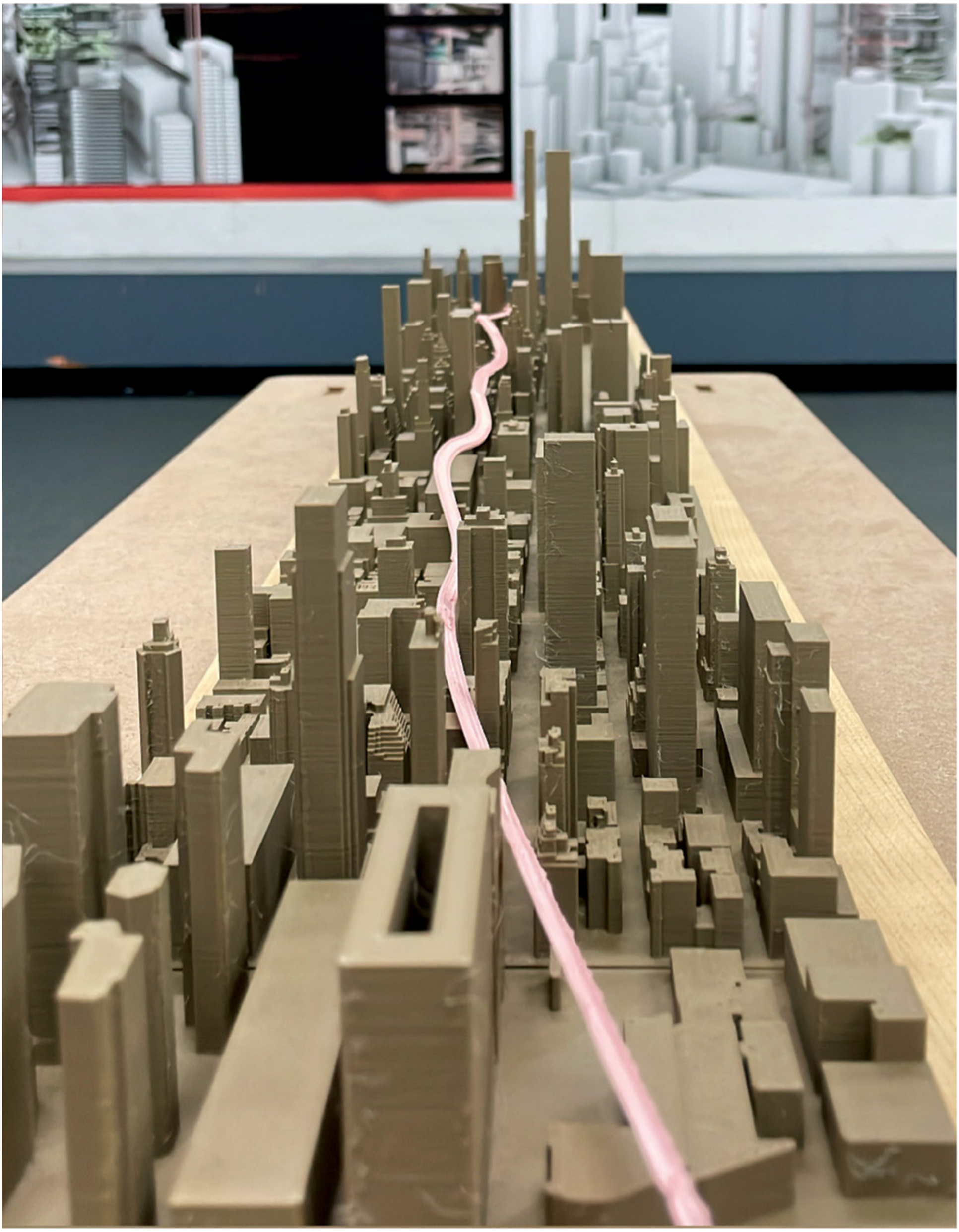


The vertical circulation, which extends all the way from the ground to the upper city, serves to connect the ground and upper levels. This pathway passes through the bubbles along its route



The aerial view showcases how the vertical street acts as a link between diverse activities in the upper city hub, connecting the upper central park, amusement park, and bubble with each other

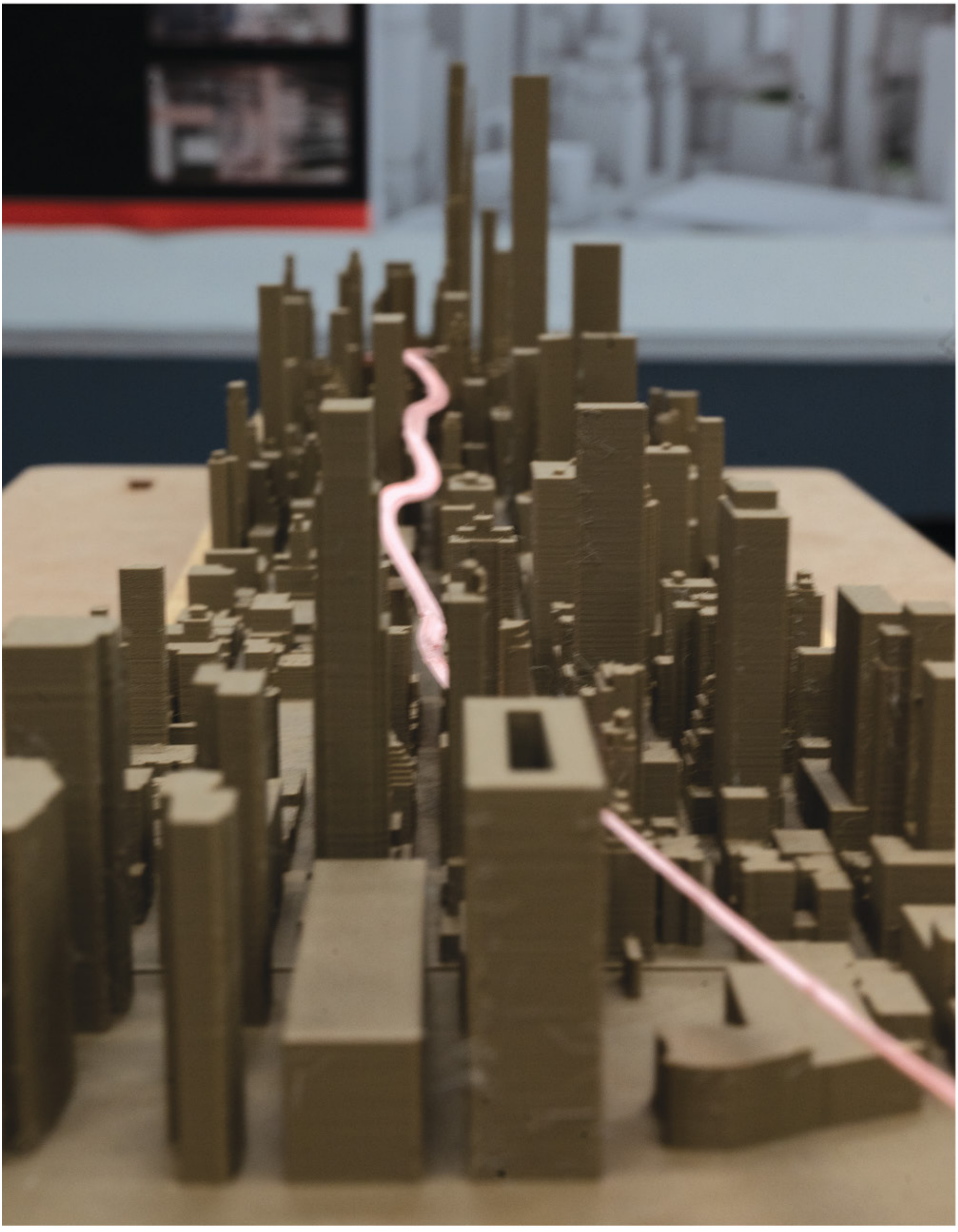
5.3 3D Models of the Site and Final Model of the Zoomed-In Site Proposal



3D printed site model depicting a cross-section of the site in Manhattan.



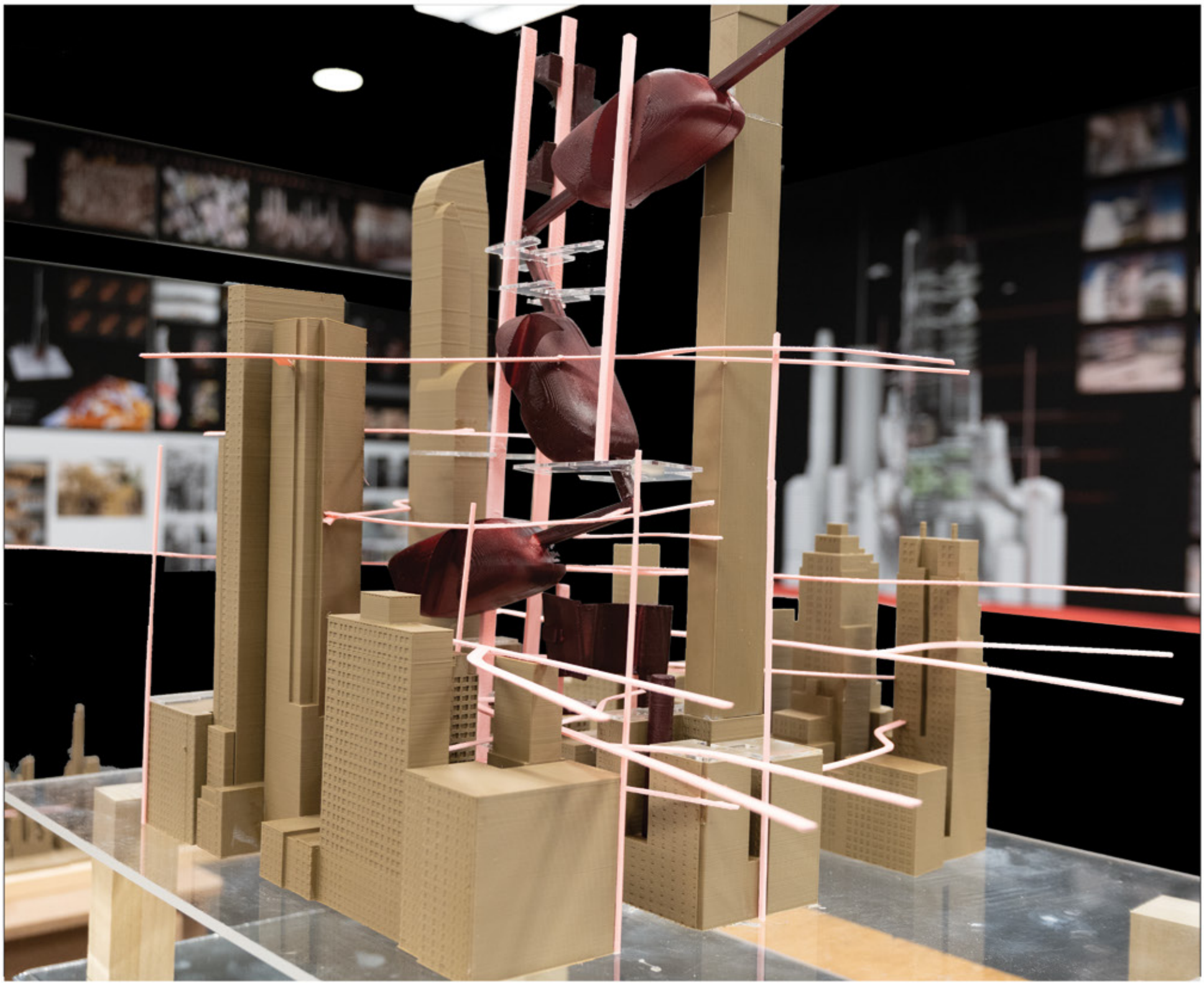
3D printed site model depicting a cross-section of the site in Manhattan. The pink elevated pathway illustrates the elevated streets connecting two blocks.



A close-up photograph highlighting intricate details. 3D printed site model depicting a cross-section of the site in Manhattan. The pink elevated pathway illustrates the elevated streets connecting two blocks.



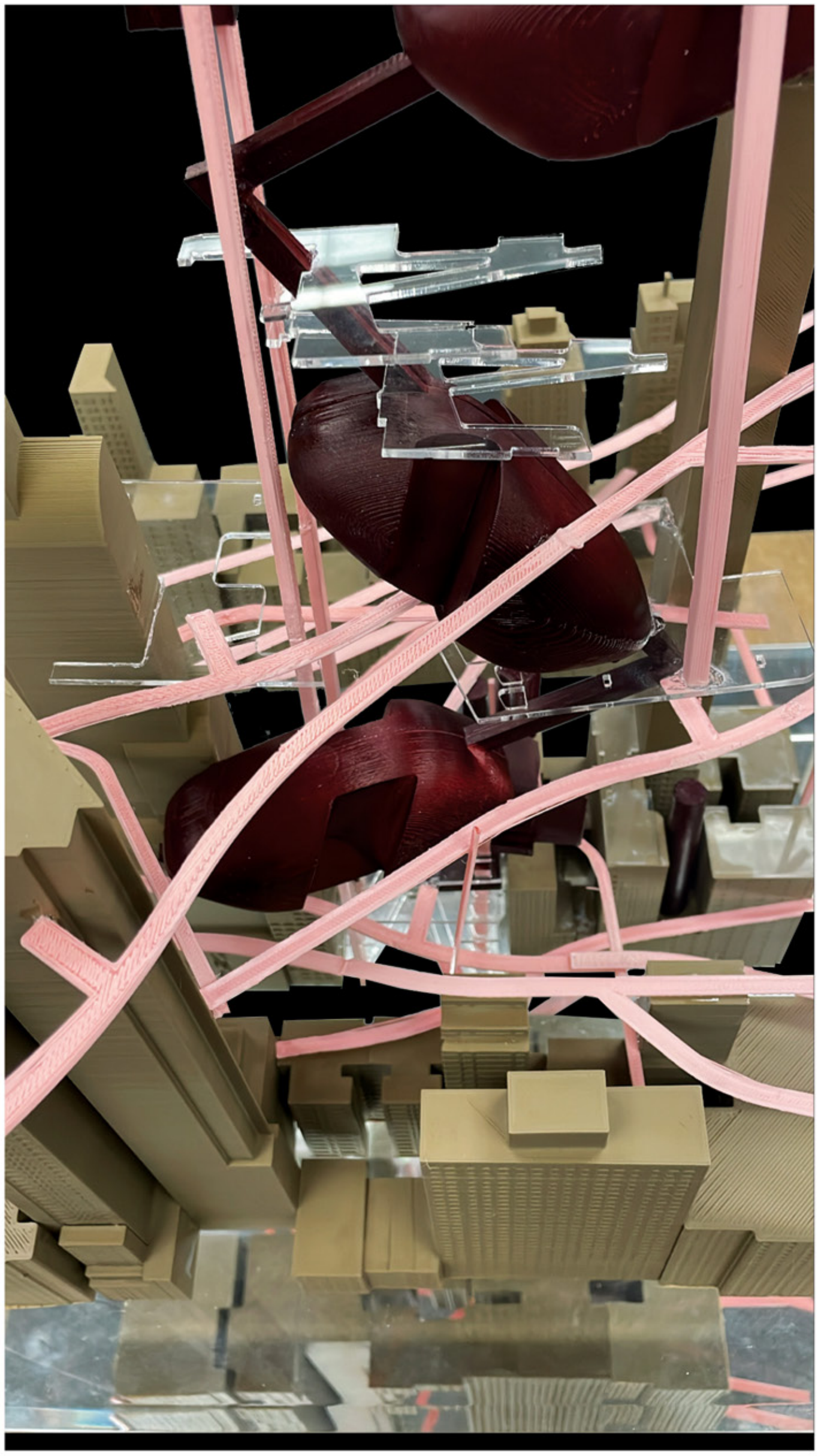
Diagrammatic Conceptual Model of the Final Proposal for the Zoomed-In Site.



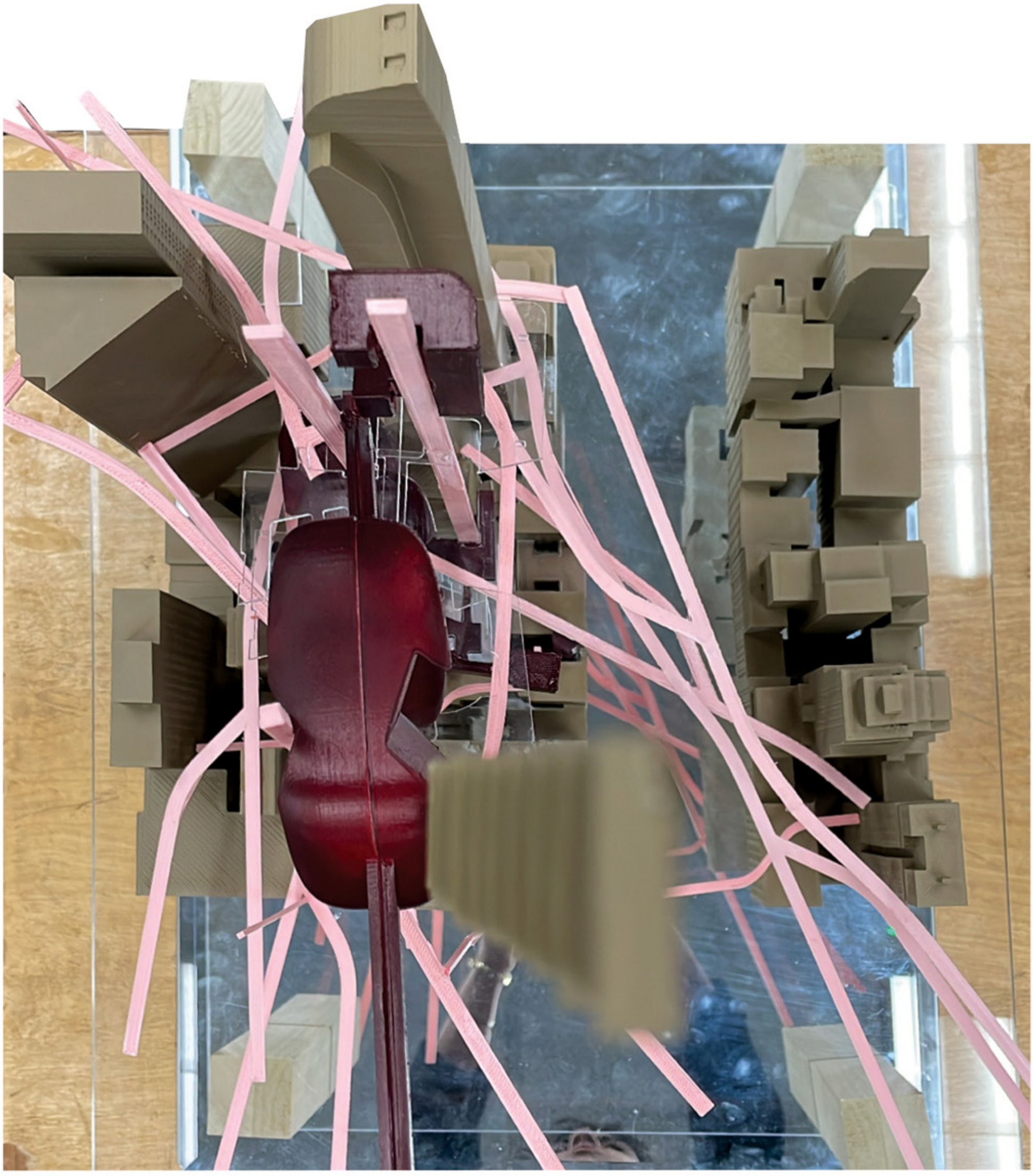
Close-up photograph showcasing intricate details of the Diagrammatic Conceptual Model of the Final Proposal for the Zoomed-In Site.



The brown color reflects the existing site's historical context, while vibrant pink represents new elevated paths connecting the new and existing city areas, fostering a sense of continuity and accessibility. Maroon elements signify proposed activities in the upper city, embodying a vision for urban growth. Acrylic surfaces represent interactive elements on the upper streets, fostering engagement and social interactions.



By overlaying the diagrammatic model onto a mirror, an intriguing interplay of reflections is achieved. This not only emphasizes the integration of the upper city concept with the existing city but also highlights the dynamic relationship between the two.



The mirror’s reflective properties add a layer of depth and dimension to the composition, inviting viewers to contemplate the harmonious coexistence of the envisioned future and the present reality



This model demonstrates the transformative potential of urban design, envisioning a harmonious fusion of past, present, and future to meet the needs of a thriving community.



The overall composition captures the models and presentation boards showcased on Defense Day

FINAL PROPOSAL/ CONCLUSION

The question is still ongoing" What does the future hold for metropolitan cities...?"

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