PORTFOLIO

SEOKHYUN KIM

Columbia University Msaad · 2015 - 2021

HYUN (SEOKHYUN KIM)

sk4810@columbia.edu
+1 646.589.1518 / +82 10.8920.8289
125 W 109th St, New York, NY 10025
English, Korean(native)

Education

SungKyunKwan University - Seoul, Republic of Korea — 2011 - 2017
Bachelor of Architecture (Major GPA : 4.0 / 4.5)

Columbia University — 2020 Fall, 2021 Fall, 2022 Spring
Master of Science in Advanced Architectural Design

Awards

International Architectural Competiiton for Post-COVID19 Era — 2020
The 2nd Prize, Team Leader of 3 members

Skyscraper Design Competition 2018 - Council Tall Building and Urban Habitat Korea — 2018
Grand Prize(1st), Team Leader of 4 members

Korea Remodeling Architectural Competition - SH & Korea Remodeling Association — 2018
The 2nd Prize, Individual Work

Kyeonggi Architecture Cultural Competition - Gyeonggi-do Provincial Government — 2018
The 3rd Prize (Governor Prize), Team Work

SAN Museum Pavillion Competition for Pyenchang Olympic — 2017
Prize Winner (1st), Team Work

Kyeonggi Architecture Cultural Competition - Gyeonggi-do Provincial Government — 2017
The 3rd Prize (Governor Prize), Individual Work

Work Experience

Feeeld (Startup that runs an design community)- Seoul, Korea / feeeld.com — 07, 2020 -
Co-founder

STUDIO 2105 - Seoul, Republic of Korea / 2105.co.kr — 2018 - 2019
Junior Designer in Design Department

Feeeldstudy - Seoul, Republic of Korea / feeeldstudy.com — 02, 2019 -
Representative Instructor - Rhino, V-ray, Photoshop, Illustrator

Exhibition

SAN Meseum Pavillion — 02, 2018 - 03,2018
For PyeongChang Olympic in Seoul Station

Software Skills

Rhino, V-Ray, Grasshopper, SketchUp, Auto CAD, Lumion
Adobe - Photoshop, Illustrator, Indesign, Premiere Pro, After Effect

Contents

WHO OWNS THE AIR
[JPMorgan Headquarters]

LABYRINTH IN EAST HARLEM
[Renovation project of NYCHA in East Harlem]

UNDER ONE ROOF
[Factory Project in Bush Terminal]

RE - PACKAGE
[Bangsan Market Project]
The 3rd Prize (Governor Prize) Kyeonggi Architecture Cultural CompetitionDomestic Competition

Multi-unit Dwelling for Young Entrepreneurs
[Government-provided housing proposals to support young entrepreneurs]

SCHOOL ZONE
[Public school as temporary refugee for social incidents]
The 2nd Prize International Architectural Competiiton for Post-COVID19 Era Cultural Competition

THE PACKAGE CITY
[Skyscraper to solve overpopulation problem]
Grand Prize (1st) Skyscraper Design Competition 2018

S S S A A A N N N
[SAN Museum Pavillion]
Grand Prize (1st) SAN Museum Pavillion Competition

Professional Work & Other work

Project I - Gsaap Msaad Work fall 2020

WHO OWNS THE AIR

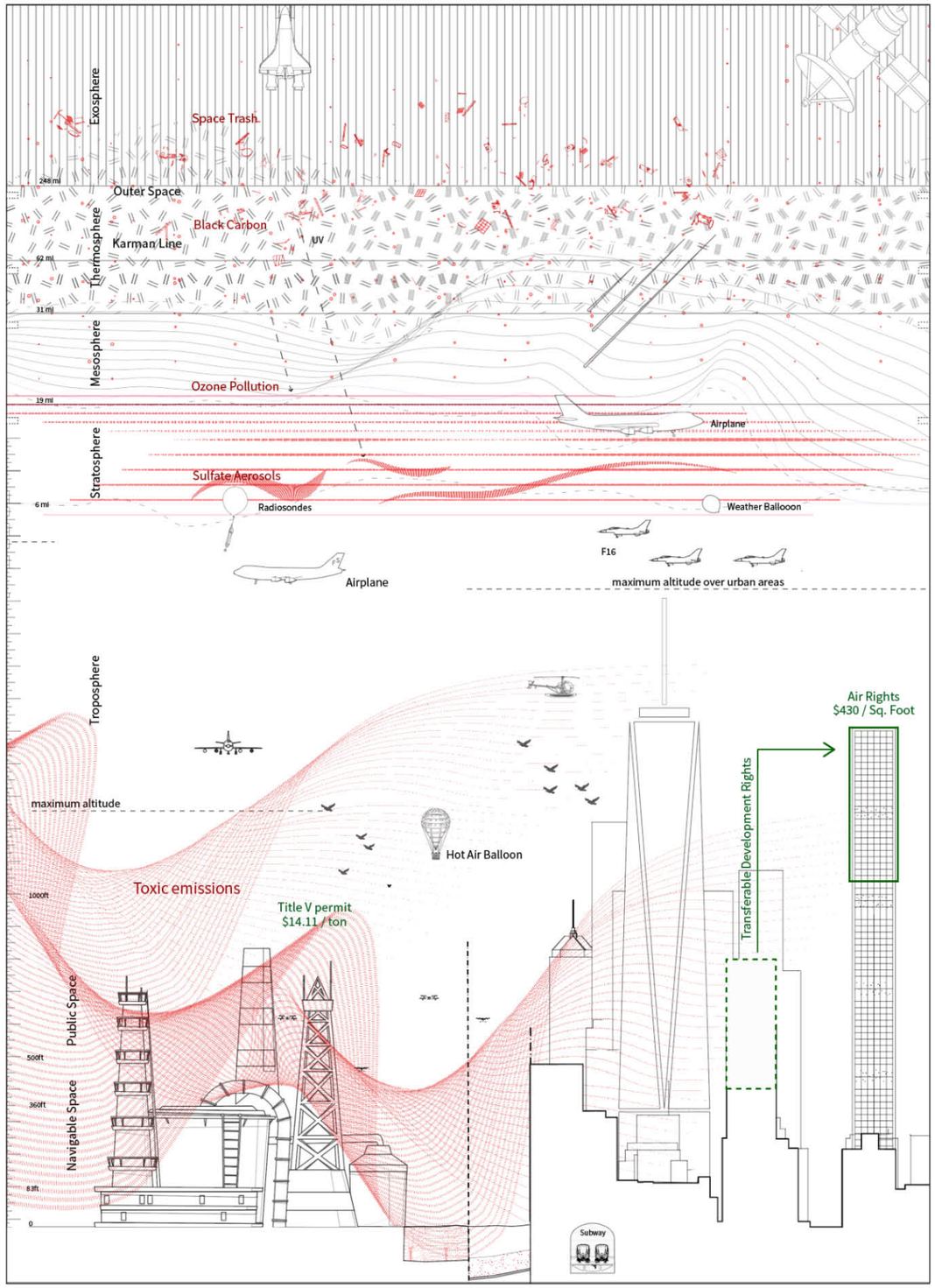
[Monetized Air]

Year	Fall, 2020
Location	270 Park Ave, New York, NY 10172
Type	Skyscraper
Role	Pair Work_Research, Idea, Drawing, 3D modeling, Visualization
Prof.	Nahyun Hwang (NHDM Archtects)

Companies often try to own the air through trade practices such as the purchase of air rights and the right to pollute carbon credits. The amount of air pollution produced by companies is greater than any other private figure.

Numerous companies are constantly developing and producing the air pollution in their major industrial sites, such as cancer alley, paying the penalty for the pollution. These companies are headquartered in major cities like Manhattan. An example is the current Jp Morgan Chase Building, the former Union Carbide headquarters at 270 Park Avenue. To that end, the new rules we've created put the cost of air pollution into their brag, Headquarters, with new rules intervening.

Depending on their level of contamination, the lobby, elevators, offices, meeting spaces, and observation decks in the headquarters are occupied. These spaces are used by public organizations and the public to prevent air pollution. The starting point for this rule, which will apply throughout Manhattan, is JP Morgan's new headquarters.

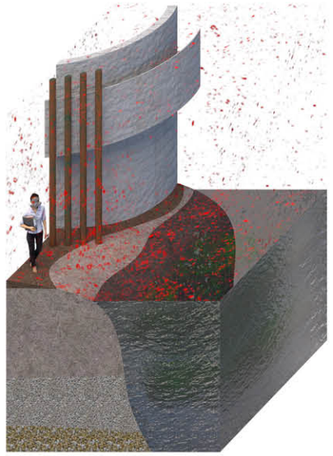


Vertical Analysis

Vertical analysis drawing shows the analysis of the air in the vertical axis and air pollution at different levels as well as the different types of ownerships of air: the development of air rights and the right to pollute in carbon pollution markets

Factories

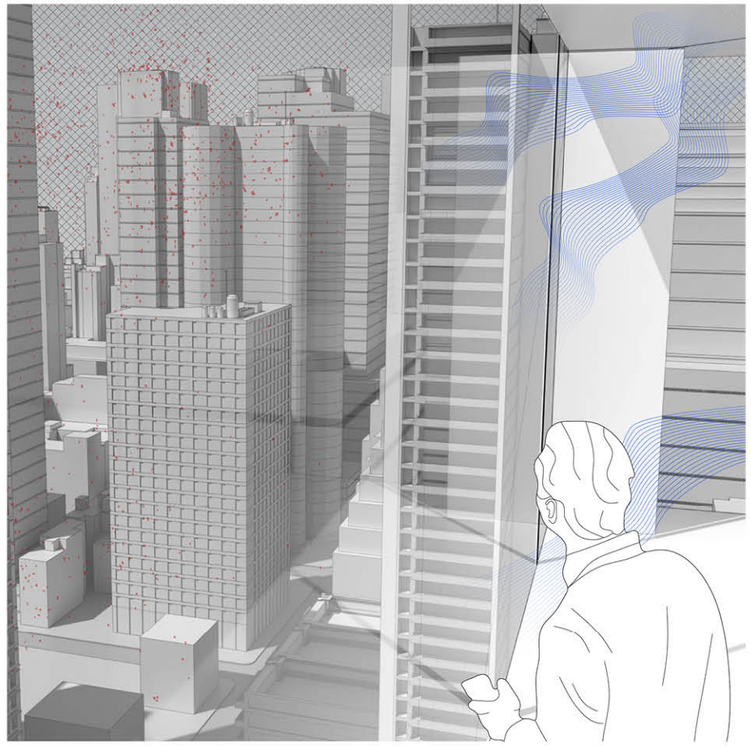
It shows the difference in air quality between factories and headquarters owned by the same company. Factory areas, including cancer alley, are constantly causing air pollution.



Factories

Headquaters

Apart from the factory area, headquarters which are located in major cities of each country including Manhattan has a clean and controlled indoor environment.



Headquarters

NYC PLANNING

Press Releases

CITY PLANNING BEGINS PUBLIC REVIEW ON MUCH ANTICIPATED ZONING CHANGES FOR GREATER EAST MIDTOWN

The current East Midtown zoning proposal is designed to remedy the fact that existing zoning in the area hinders development of the type of new modern office buildings that many commercial tenants desire.

The new zoning plan will offer 6.5 million square feet of office space in the area.It also would facilitate the preservation of landmarks that have been unable to monetize landlocked development rights by permitting transfers of their unused air rights district wide. It would enable owners of older buildings that are larger than current zoning permits to rebuild them to modern standards.

1) New Earned As –of-right Framework for Qualifying Sites

The new East Midtown Subdistrict is established within the Special Midtown District. The proposed subdistrict would supersede the existing Grand Central Subdistrict, and would allow for increased floor area ratios (FARs) between 18.0 and 27.0. New commercial buildings on Qualifying Sites could exceed the base 15 FAR in exchange for contributions of $250 per square foot to a proposed District Improvement Fund.

The development framework would provide greater opportunity for landmarked properties to transfer unused development rights throughout the Subdistrict and would provide district-wide public realm improvements.

2) Historic Preservation

The zoning proposal would permit property owners to purchase unused development rights from landmarks throughout the district on an as-of-right basis, a departure from current regulations under which a landmark may only transfer floor area to adjacent purchasing sites, or directly across the street via special permit. Acknowledging the importance of the broader area's historic character, this greater flexibility would increase the market for area landmarked buildings to sell their unused development rights, and thereby raise funds for their continued maintenance.

Under the Midtown East rezoning plan, owners are allowed to build a larger building as long as it contributes to a "public realm improvement fund." This includes buying the air rights from various neighboring institutions in order to assist them in carrying out their own structural work.

Greater East Midtown On The Numbers

The Greater East Midtown zoning is expected to facilitate roughly 16 new office buildings over the next 20 years to refresh the outdated office stock and reverse anticipated declines in office and retail space as well as employment, according to the proposal's Draft Environmental Impact Statement. Without the action, despite the growth of population and jobs elsewhere in the city, East Midtown's employment growth could stagnate. The proposed action could create up to 28,000 new permanent jobs and over 23,000 construction jobs in the next two decades.

Greater East Midtown represents the second phase of a two-track strategy to strengthen the nation's largest and economically most significant central business district, following the 2015 approval of the Vanderbilt Corridor, which is already bearing fruit. That five block initiative has so far enabled the development of One Vanderbilt, a 57-story office tower under construction across from Grand Central Terminal that is contributing more than $220 million in transit and pedestrian enhancements and will add nearly $50 million in real estate taxes alone annually to the city's coffers.

New proposal is based on a new regulation to update the East Midtown Rezoning plan that allows owners to buy more air rights and build higher skyscrapers.The new regulation has changed the old regulation: paying money to buy pollution rights.

Existing

In place of the existing regulations that are related to money, the new regulation takes into account pollution. If one corporation is causing air pollution in Manhattan or other areas, regulation has an effect on its headquarters with a loss of

NYC PLANNING

Press Releases

REVISED REVISED 05/03/21

CITY PLANNING ON ZONING CHANGES FOR GREATER EAST MIDTOWN

The current East Midtown zoning proposal is designed to achieve net-zero Greenhouse Gas Emissions in East Midtown Manhattan on the occasion of New York City's commitment to net-zero carbon emissions by 2050 as well as reduce toxic emissions caused by the corporations with headquarters in Park Avenue. It also would facilitate the preservation of air. Existing glass-walled buildings will be equired to dramatically improve performance and all-glass facades will not be allowed in new construction. These actions will make inefficient glass-heavy building designs a relic of the past. At the same time, the corporations will be responsible for the air pollution their power plants cause.

1) New Carbon Credit System

The new East Midtown sets harsh limits on carbon emissions for buildings over 25,000 sq.f. The proposal would supersede the existing Grand Central Subdistrict, and would allow for increased responsibility of carbon emissions. New corporations that want to have their headquarters in Park Avenue will have to lose space (sq.feet) if their carbon emissions exceed the limit in East Midtown Area or in another site, related to direct or indirect air pollution.

The development framework would provide greater opportunity for less air pollution in vulnerable environments and more net zero carbon building in Park Av. and would provide district-wide public realm improvements.

2) Air Preservation

The zoning proposal would permit the preservation of air as part of the basic public goods.

New York's tallest towers are doing the most harm to the environment. For this reason, the transfer of development and Landmark rights will not be allowed for East Midtown District C5-3. Acknowledging the importance of the broader area's historic character, this measure will only allow the construction of buildings shorter than 500 feet.

The air above 500f is defined as "public" according to Federal Aviation Agency and to the Air Commerce Act, signed in 1926, that established federal air regulations. As a result, spaces above 500 feet will be transformed into spaces for public use.

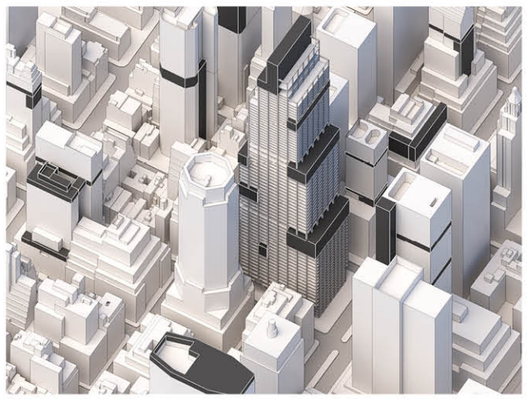
Greater East Midtown On The Numbers

The Greater East Midtown zoning is expected to reduce drastically air pollution in the next 20 years.

The law creates " space" fines for two types of violations. For example, a 50,000 square-foot multifamily residential building emitting or embeding 350 metric tons of carbon would be 12.5 metric tons over its 2024-2029 limit and would have to give more than 3,350 sq. feet of public space. If a corporation is polluting with its power plants in Cancer Alley or elsewhere and exceeds the limits of the area will also have to give equal sq. feet of its headquarter for the pollution.

Greater East Midtown represents the first phase of a two-track strategy to meet the nation's goals of the Paris Climate Agreement. Although all buildings must be net zero carbon by 2050 to meet the goals of the Paris Agreement, not even 1 percent of buildings are considered net zero carbon today. A net-zero carbon building, including embodied carbon, means that the building produces enough renewable energy to meet operations annually and offset the carbon emitted from construction.

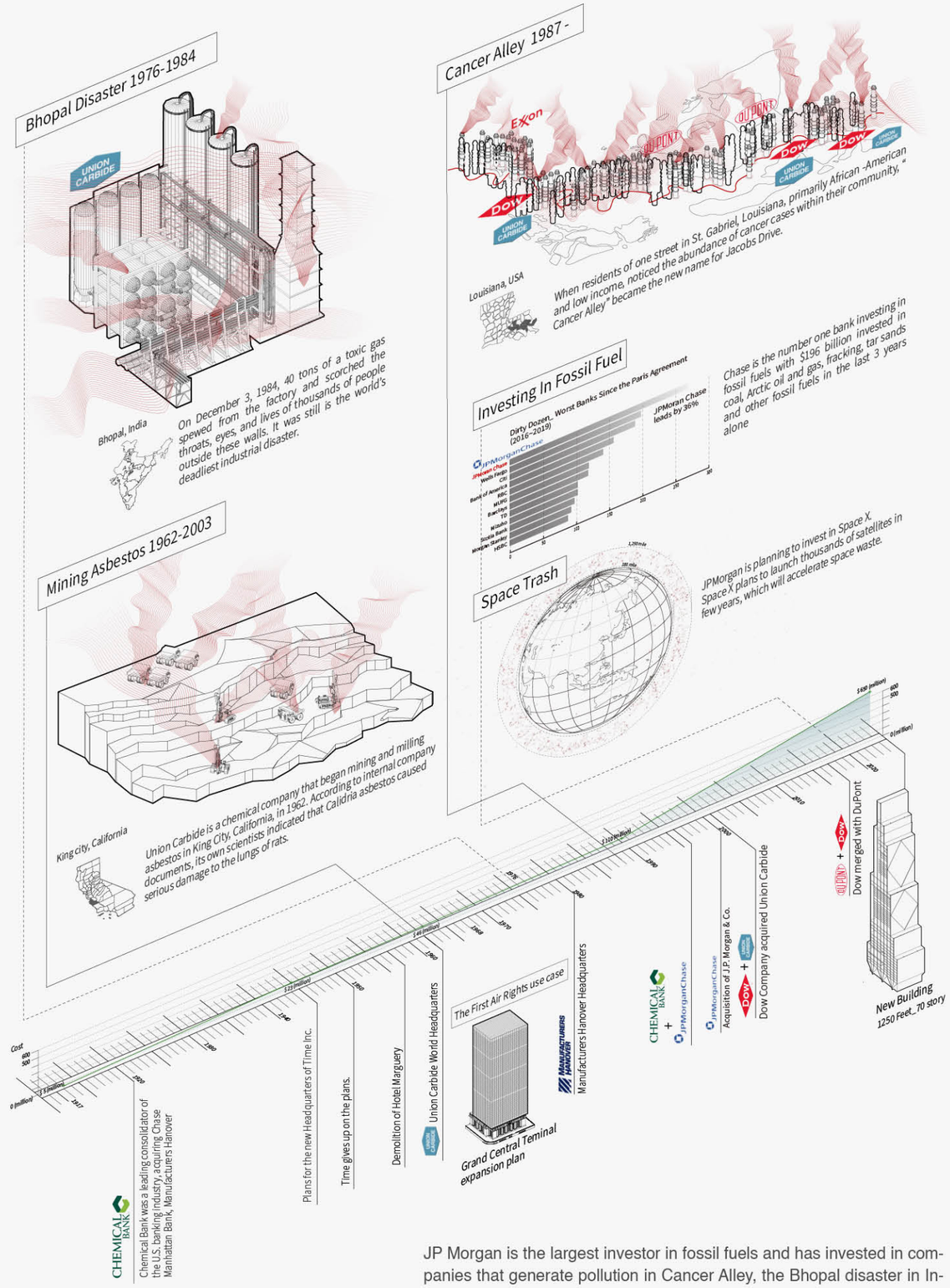
New proposal of regulation is connected to a new regulation that is based on the net-zero Carbon New York plan for 2050 and suggests a new carbon credit system that takes into account air pollution and air preservation.



Revised

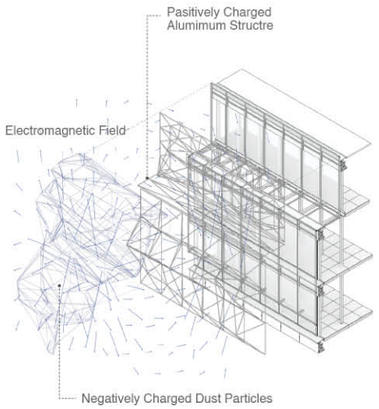
spaces. Depending on the amount of air pollutant emissions, all corporate headquarters located in Manhattan must provide their space to the public or environmental protection organizations.

Timeline of pollution of the enterprise.



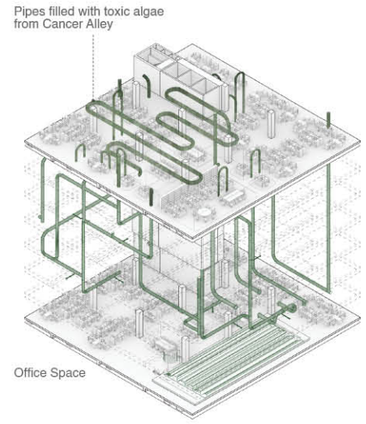
JP Morgan is the largest investor in fossil fuels and has invested in companies that generate pollution in Cancer Alley, the Bhopal disaster in India, Asbestos Mines in California, and space junk.

Exterior Dust Collector - Observatory/ Facade



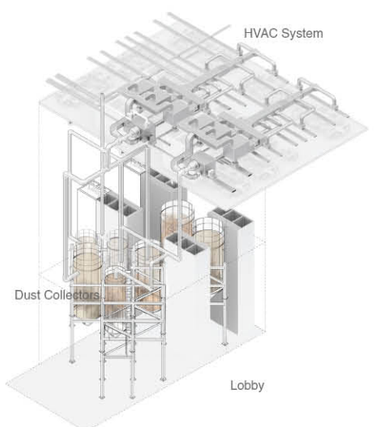
Toxic Algae - Office Space

Area : 174,800 / 2,439,635 square feet (total building)



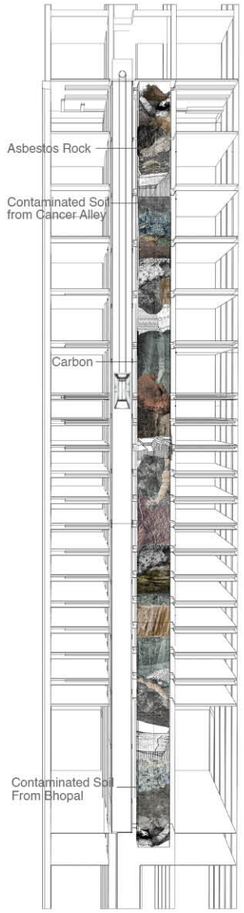
Lobby - Dust Collectors

Area : 18,200 / 2,439,635 square feet (total building)



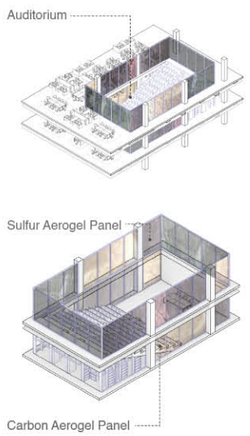
Earth Samples - Elevator

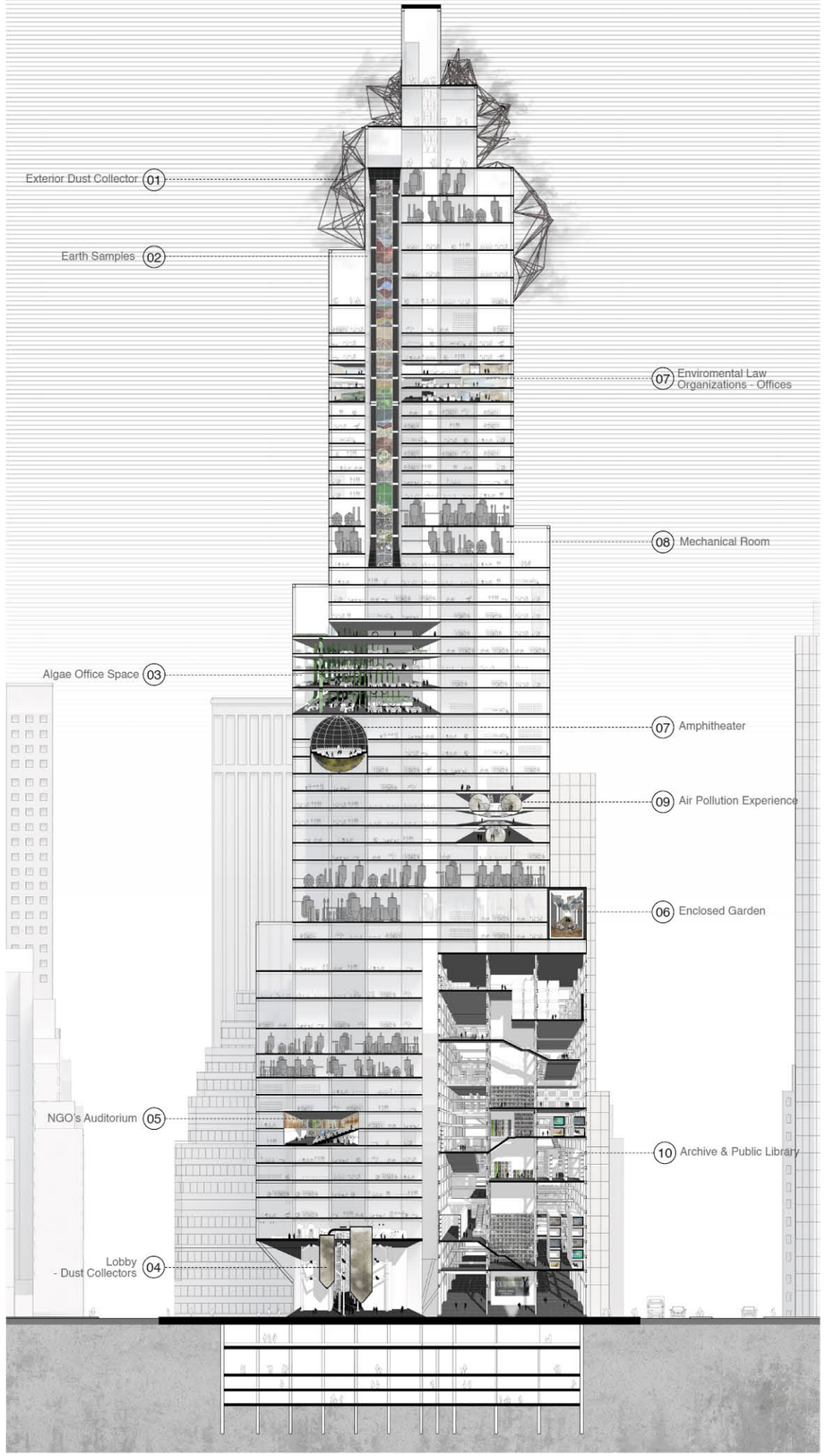
Area : 4,878 / 2,439,635 square feet (total building)



NGO's Auditorium

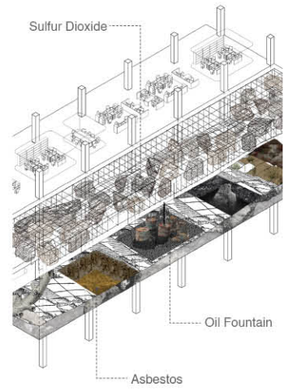
Area : 3,500 / 2,439,635 square feet





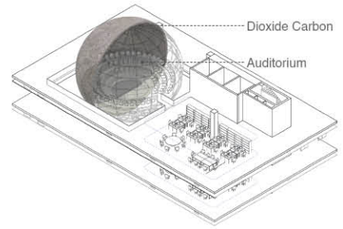
Enclosed Garden

Area : 7,178/ 2,439,635 square feet (total building)



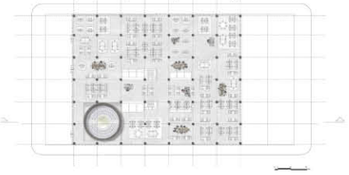
Amphitheater

Area : 2,500 / 2,439,635 square feet (total building)



Enviromental Law Organizations - Offices

Area : 3,010 / 2,439,635 square feet (total building)

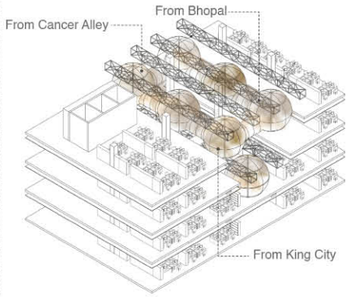


Mechanical Room

Operational Emissions

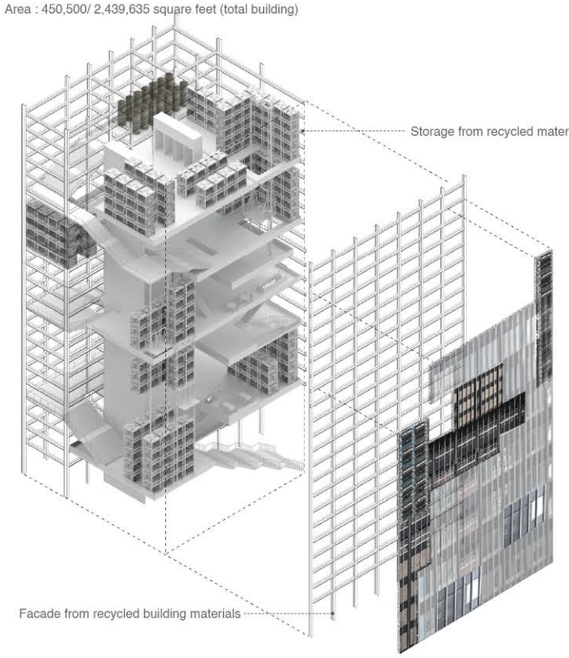
Air Pollution Experience

Area : 7,500/ 2,439,635 square feet (total building)



Archive & Public Library

Area : 450,500/ 2,439,635 square feet (total building)



Interventions

Union Carbide is linked to many air pollution disasters in Cancer Alley, in Bhopal in India and Asbestos Mines in Califonia.
JP Morgan is the largest investor in forsil fuels and is an investor to many companies which cause a lot of pollution, including Union Carbide.

1. Instragram

It shows how these interventions spread through SNS Instagram

2. Lobby

In the second phase, the new Lobby exposes the mechanical system of the interior of the building that filters the air with the use of dust collectors above.

3. Auditorium

For the auditorium, aerogel panels are porous ultralight materials derived from gels, in which the liquid component for the gel has been replaced with a gas.

4. Archive

The existing state of the building in demolition will be reused to create storage spaces and the facade of the structure

5. Enclosed garden

The enclosed garden is transformed into a garden containing materials from polluted areas such as asbestos and sulfur dioxide rocks and an oil fountain.

6. Observatory

On the facade of the building is inserted an aluminum structure positively charged that creates an electromagnetic system and attracts the negatively charged dust particles of the exterior.

7. Earth sample

arth Samples from contaminated soil from polluted areas are inserted vertically along with the movement of the elevator so that the people can look at them.

8. Algae

In the office spaces, a pipe system of toxic algae will be inserted. When they are toxic such as the algae in cancer alley they consume the oxygen from the space.

9. Final

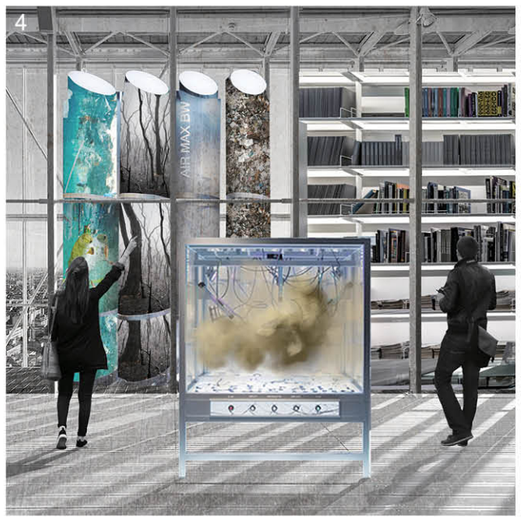
Ultimately, it will take up space in every building that pollutes Manhattan

1

2

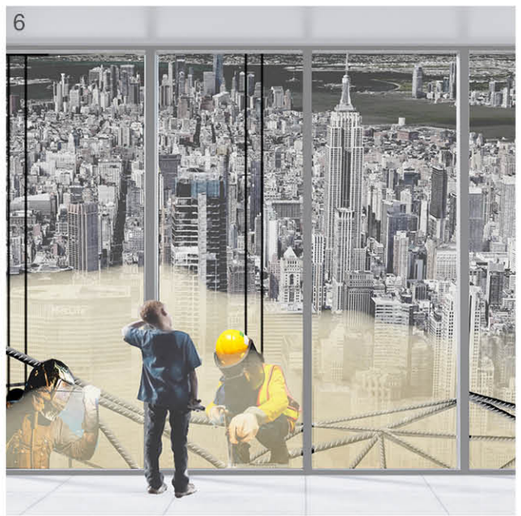
3

4



5

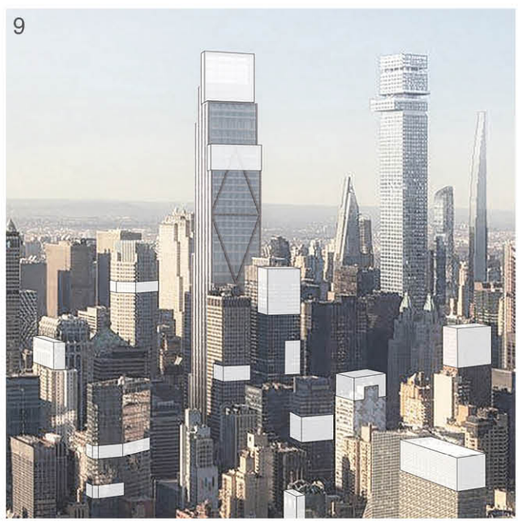
6



7

8

9



Project II - Gsaap Msaad Work fall 2021

LABYRINTH IN EAST HARLEM

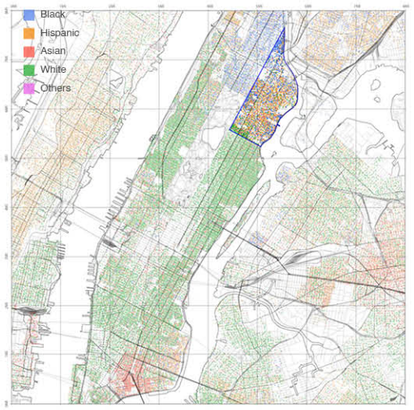
[Renovation project of NYCHA in East Harlem]

Year	Fall, 2021
Location	404 E 105th St, New York, NY 10029
Type	Apartment
Role	Pair Work_Research, Idea, Drawing, 3D modeling, CG Visualization
Prof.	Juan Herreros (estudio)

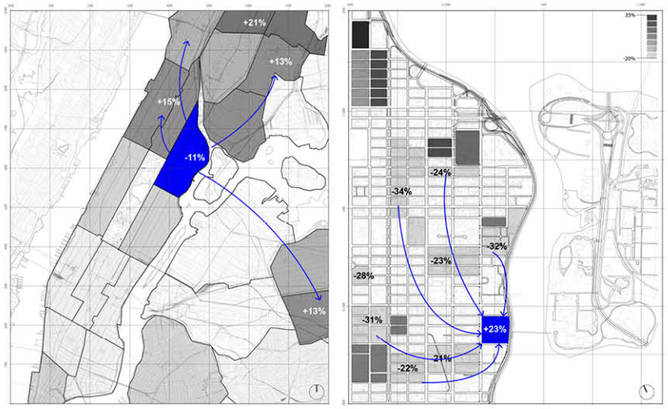
New York is a ‘Capitalism City’ and ‘Segregation City’. New York has always been a city of extremes. East Harlem is where it faces the effects of gentrification from southern Manhattan and blocks further access to the upper areas. Currently, rents in the East Harlem district continue to rise, causing East Harlem residents to either leave the area or enter the NYCHA (which provides decent, affordable housing for low- and moderate-income New Yorkers). In this project, we propose improvement plans for NYCHA as a defense against gentrification and to improve the lives of residents.

8

Racial dots map of manhattan

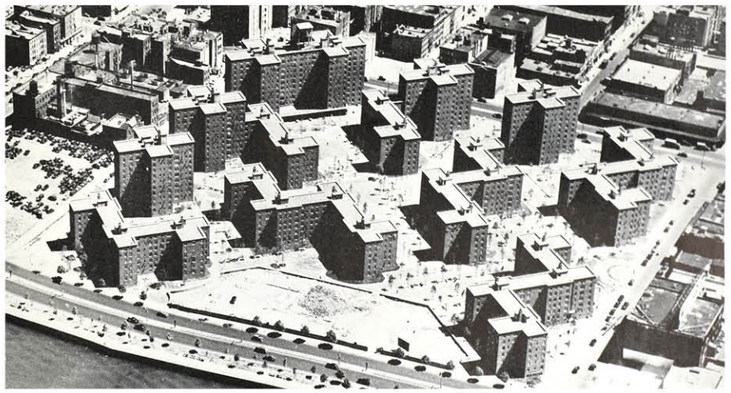


Demographic Change (since 2000)



East Harlem is where it faces the effects of gentrification from southern Manhattan and blocks further access to the upper areas. Currently, rents in the East Harlem district continue to rise, causing East Harlem residents to either leave the area or enter the NYCHA.

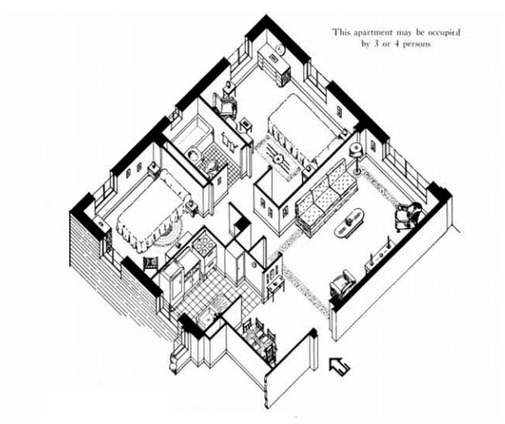
East River House (NYCHA)



East River Houses have ten buildings, 6, 10 and 11-stories tall with 1,157 apartments. Completed May 20, 1941. Since the completion of this building, repairs have been continued only to solve the inconvenience of living. Due to the effects of floods such as Hurricane Sandy, there are many problems, such as the failure of the building's power plant, which is currently temporarily installed on the ground.

Typical Unit Floor Plan

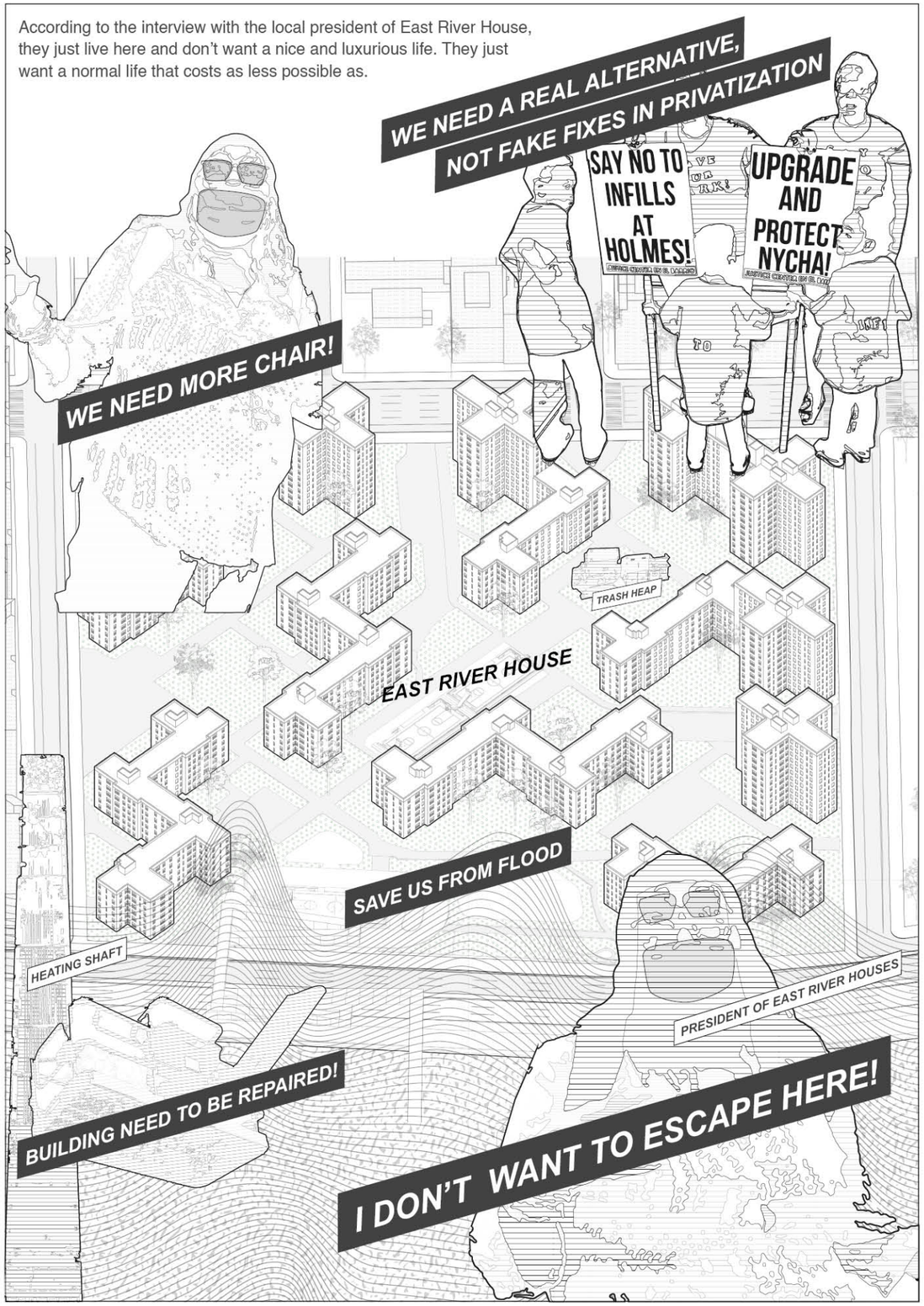
Typical Room Apartment

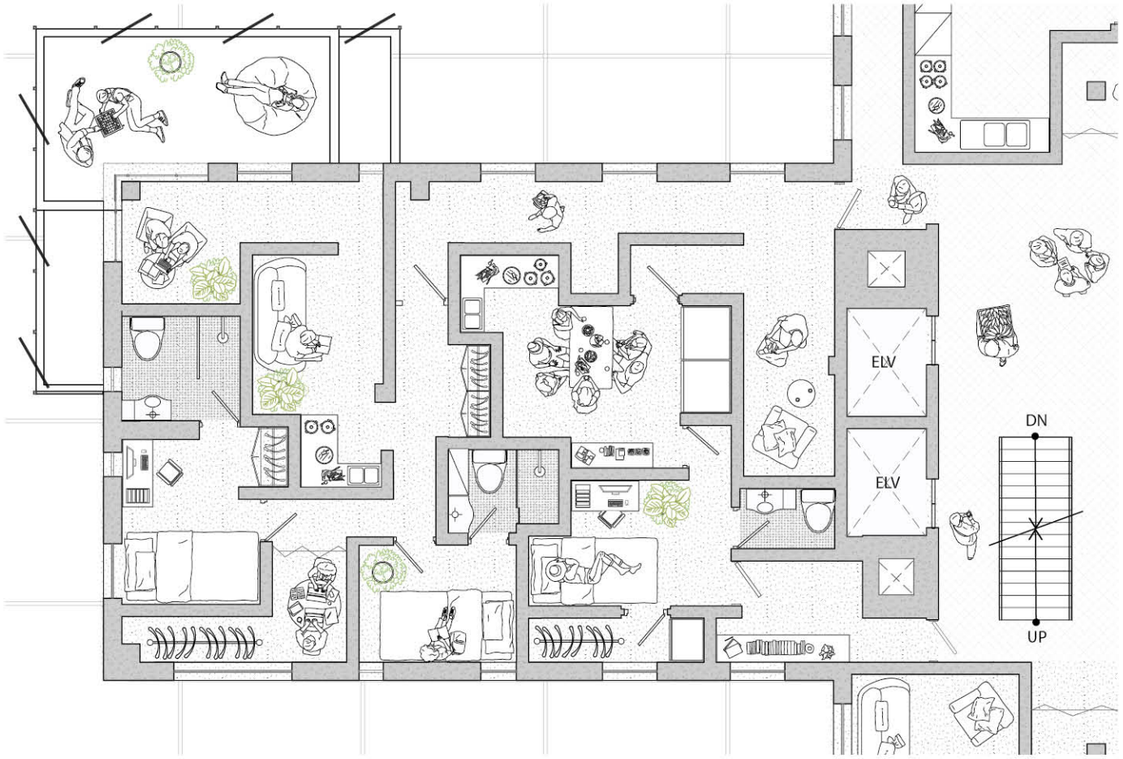


NYCHA housing buildings follow this type of floor plan and are usually composed of three or four person households. NYCHA is helping low-income families with low rents, including gas and electricity.

Site Condition

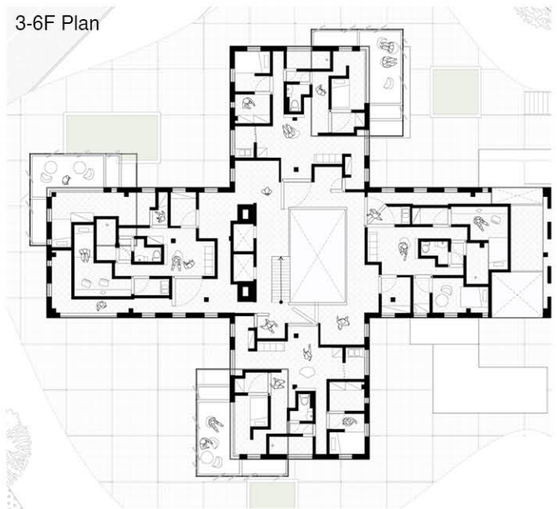
According to the interview with the local president of East River House, they just live here and don't want a nice and luxurious life. They just want a normal life that costs as less possible as.

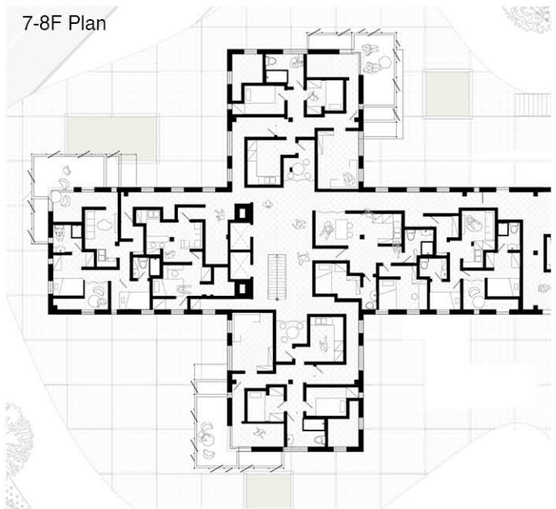




3-6F Typical Type Plan

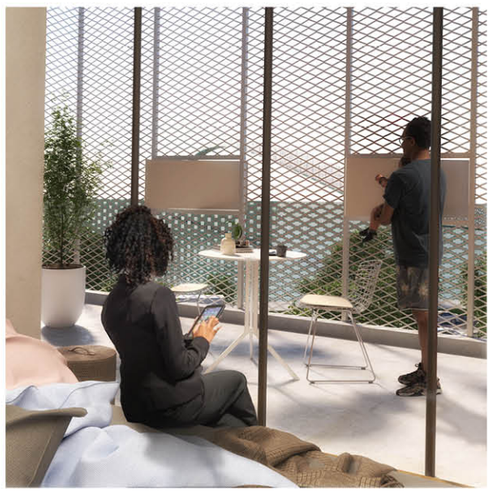
What they need is not a spacious and extravagant space. The house has been renovated with rooms and common spaces of a suitable size for living. Every single house on this floor has many interlocked spaces, which give them corridors like a labyrinth, residents sometimes detour to get to their rooms. So that residents can explore the corridor as a continuation of the domestic place, occupying the corridor, living here, considering the corridors a prolongation of domestic space.



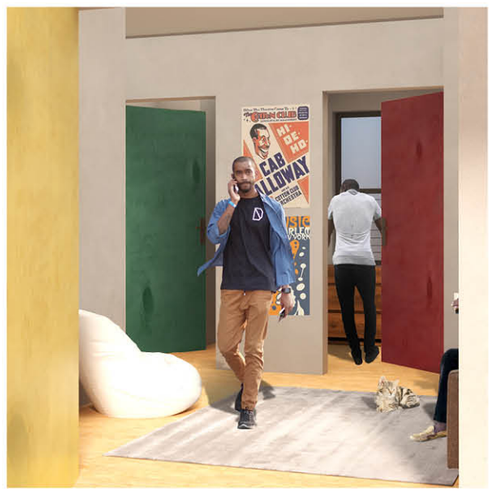


The existing 3rd to 6th floors are residential spaces for 3-4 people for family members. The space on the 7th and 8th floors to be extended is composed of a space where single-person households can live together.

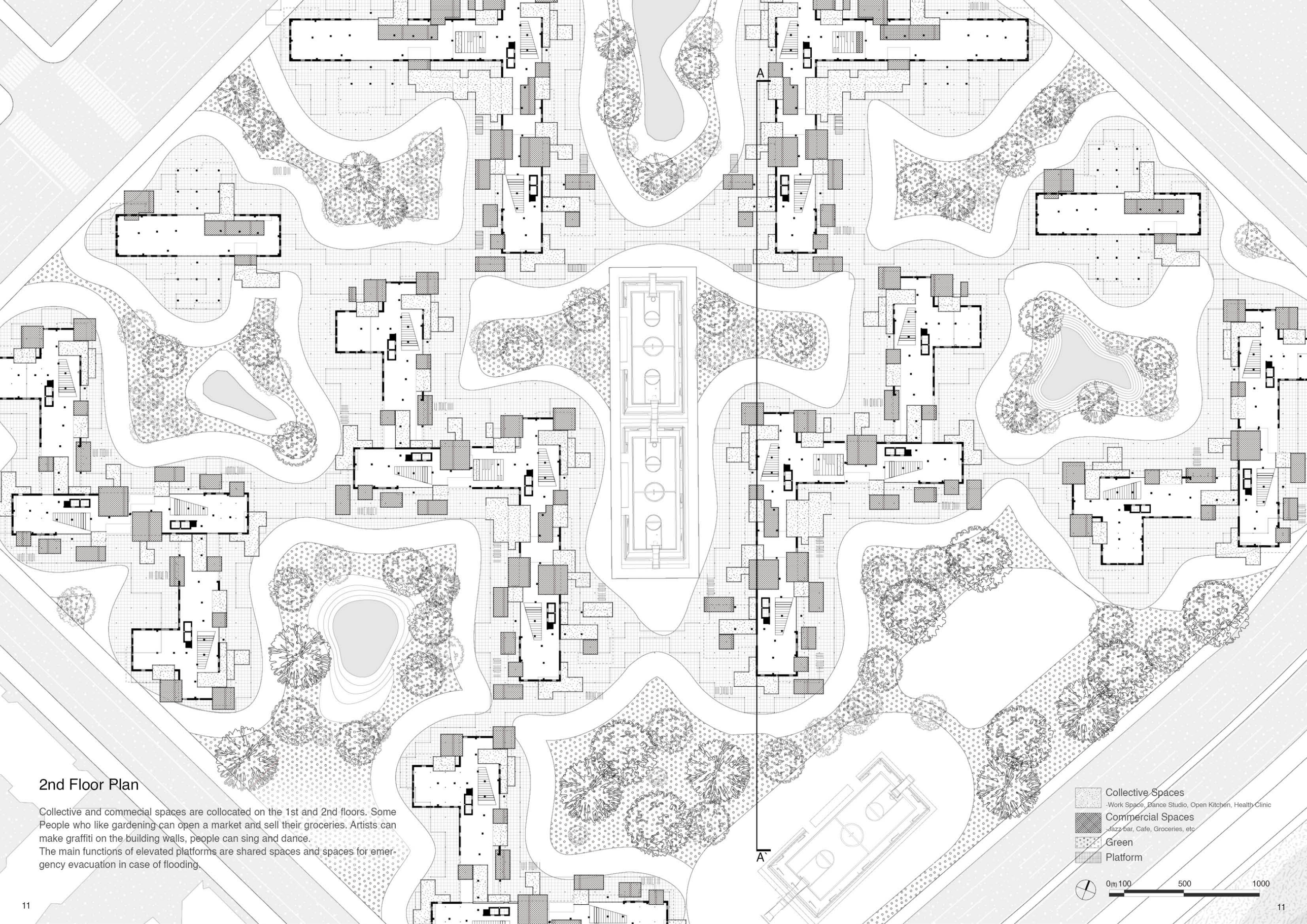
1-2F collective spaces



Residential Interior 1

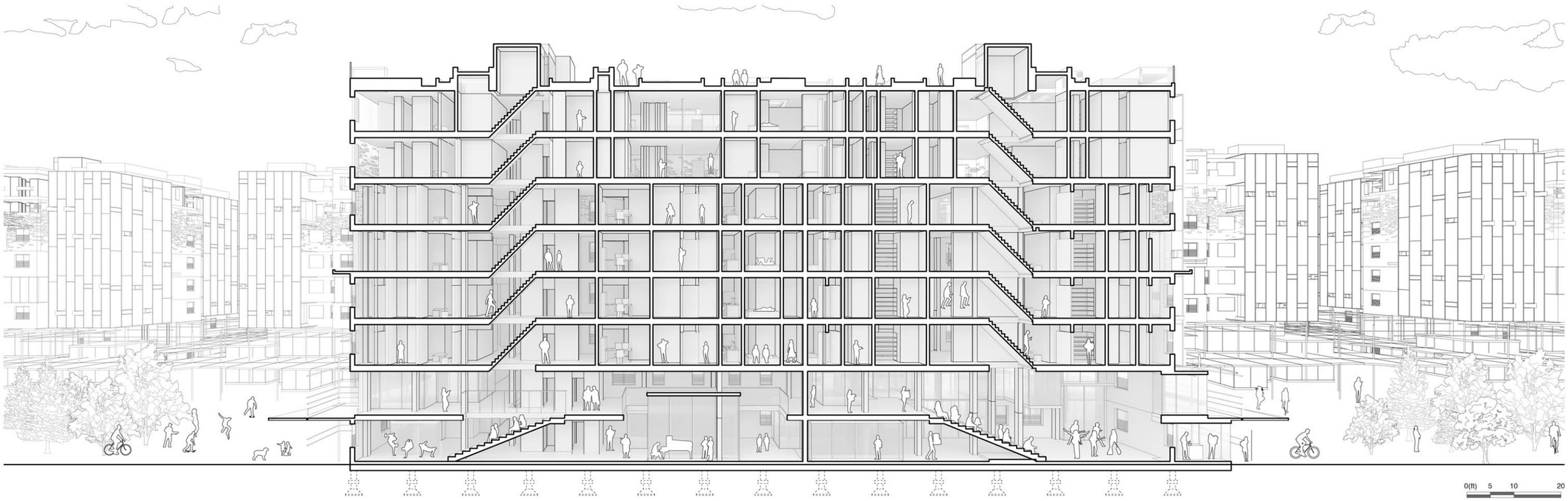


Residential Interior 2



2nd Floor Plan

Collective and commecial spaces are collocated on the 1st and 2nd floors. Some People who like gardening can open a market and sell their groceries. Artists can make graffiti on the building walls, people can sing and dance.
The main functions of elevated platforms are shared spaces and spaces for emergency evacuation in case of flooding.



AA' Section

It consists of a shared space on the 1st and 2nd floors, a family living space on the 3rd and 6th floors, and a space for single-person residence on the 7th and 8th floors. The roof space is used as a green space.

Project III - Gsaap Msaad Work spring 2022

UNDER ONE ROOF

[Renovation project of NYCHA in East Harlem]

Year	Spring, 2022
Location	Bush Terminal, New York, NY 11232
Type	Factory
Role	Individual Project + Group research
Prof.	Mimi Hoang (nARCHITECTS)

This project is for improving the working environment for workers and is inspired by William Morris's text, A Factory As It Might Be, which called for a "Socialistic factory" where divisions between workplace, home, and leisure space are diminished. This project doesn't follow all his opinions, but it is clear that workers at Bush Terminal need a space other than their workspace.
This is because after closing the piers, Interactions between them have disappeared, and facilities for workers account for less than 1% of the total area of the Bush Terminal. The 20,000 workers are working in harsh conditions, paied per part wages.

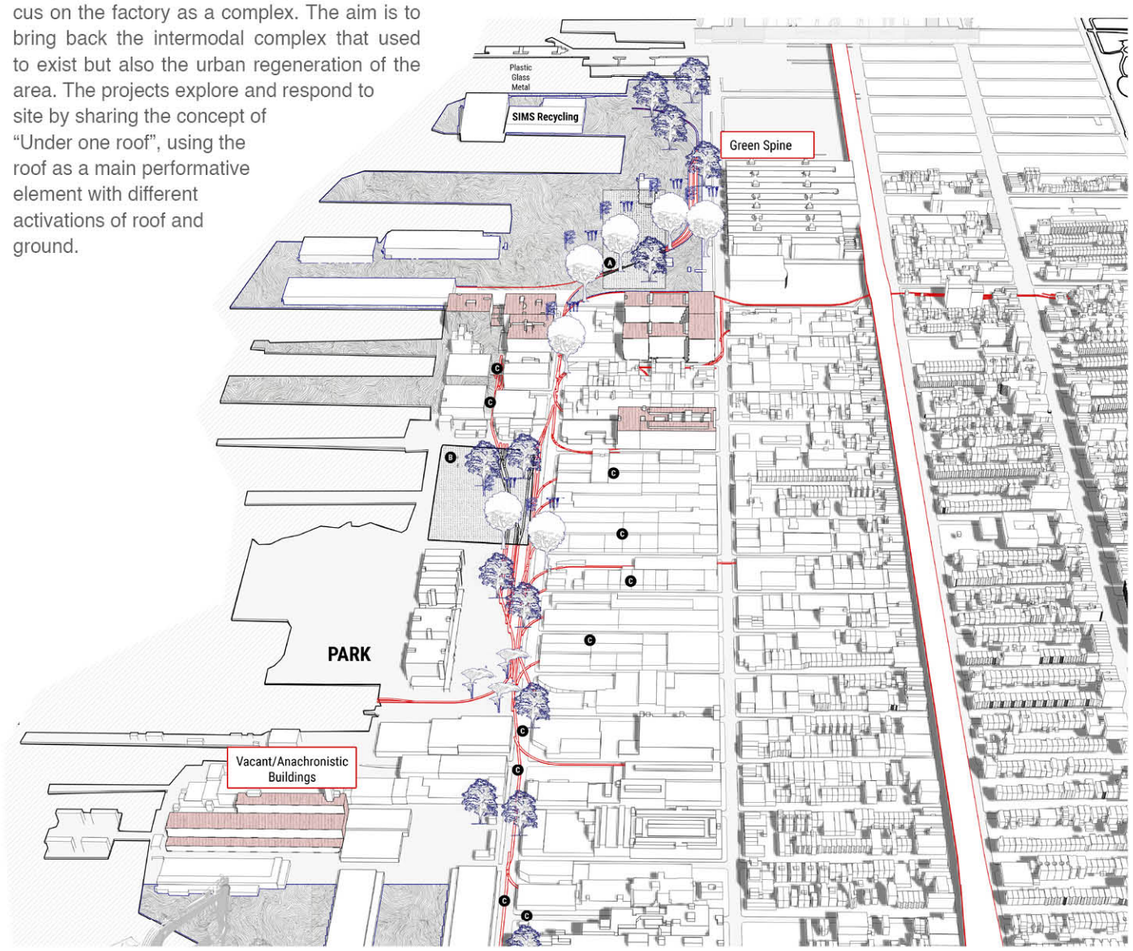
13

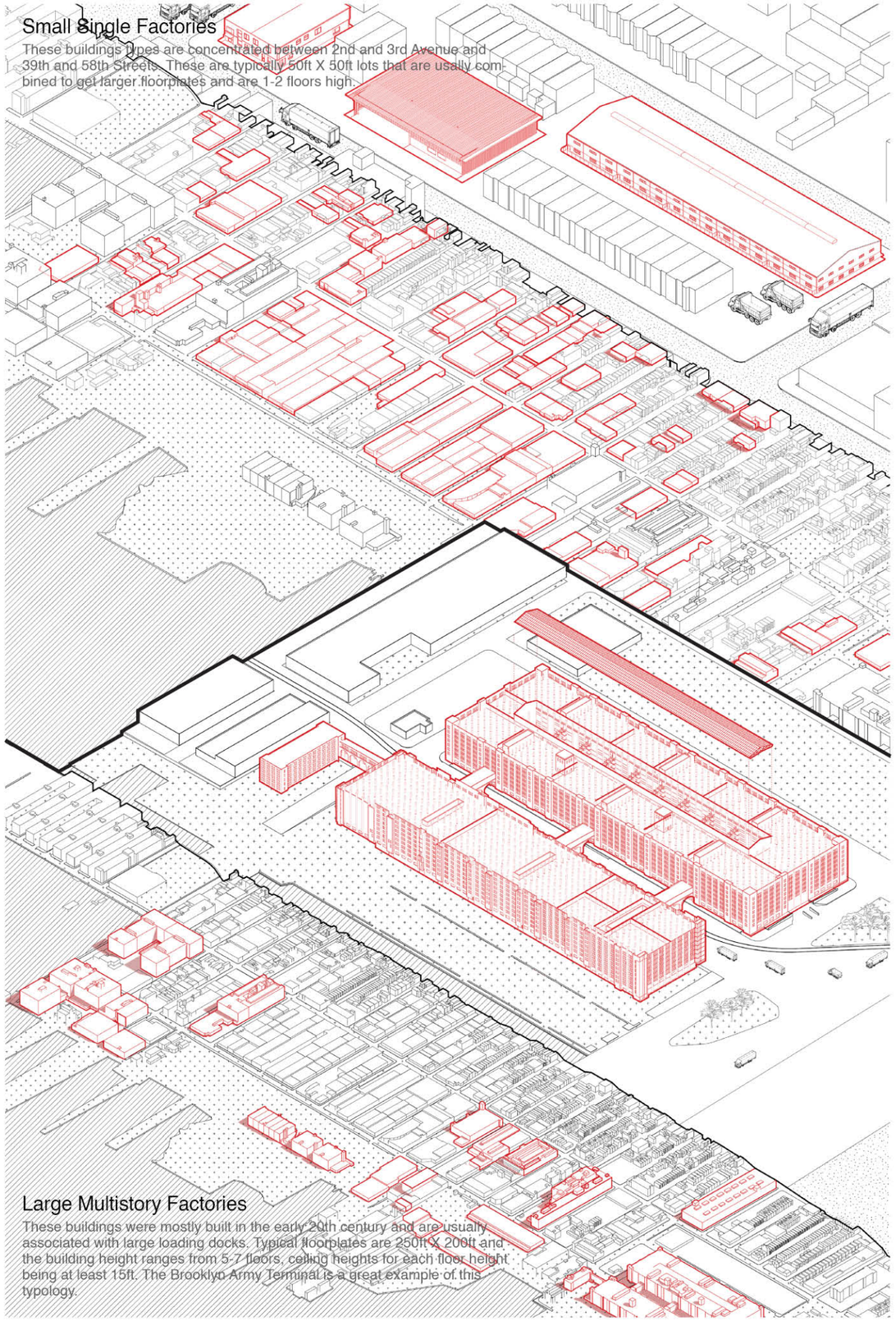
Bush Terminal

A historic intermodal shipping, warehousing, and manufacturing complex that prospered at one point due to its proximity to the water. In the 1970s, Shipping activity at Bush Terminal had gradually declined after World War II due to the introduction of containerized shipping and the construction of the Marine Terminal in New Jersey. Eventually, in 1974, the Bush Terminal closed.

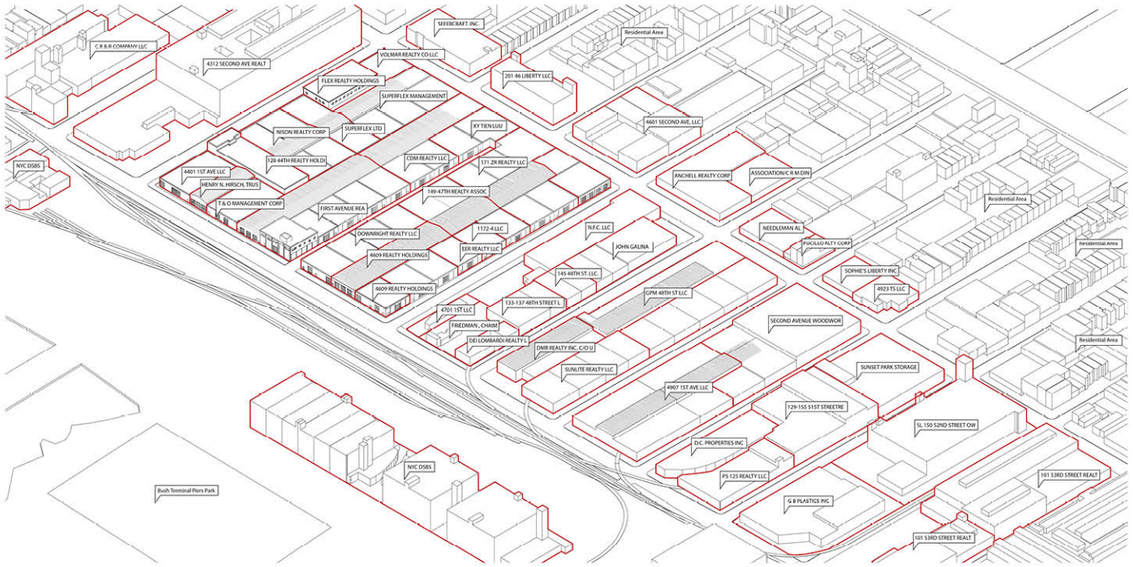
Master Plan

The proposal consists of three projects that focus on the factory as a complex. The aim is to bring back the intermodal complex that used to exist but also the urban regeneration of the area. The projects explore and respond to site by sharing the concept of “Under one roof”, using the roof as a main performative element with different activations of roof and ground.



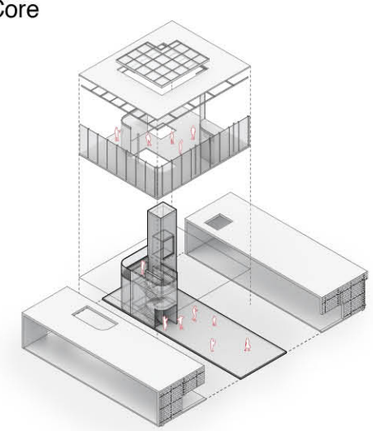


Property Map

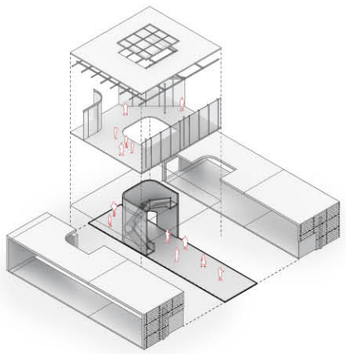


In the bush terminal, Almost 70% of factories are low single-story buildings. The roofs of these low buildings are not being used for any purpose. By utilizing the rooftops of low buildings, it will be a new social complex for workers.
The rooftop space is connected to the existing factory by cores. The core spaces were laid out according to the property ownership.

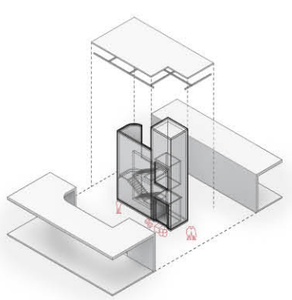
Passage Core



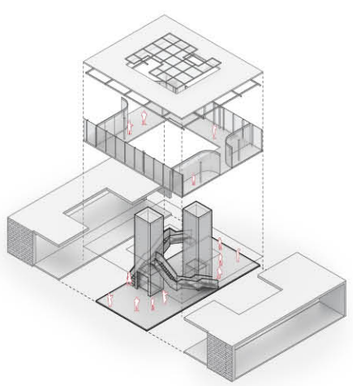
Lobby Core



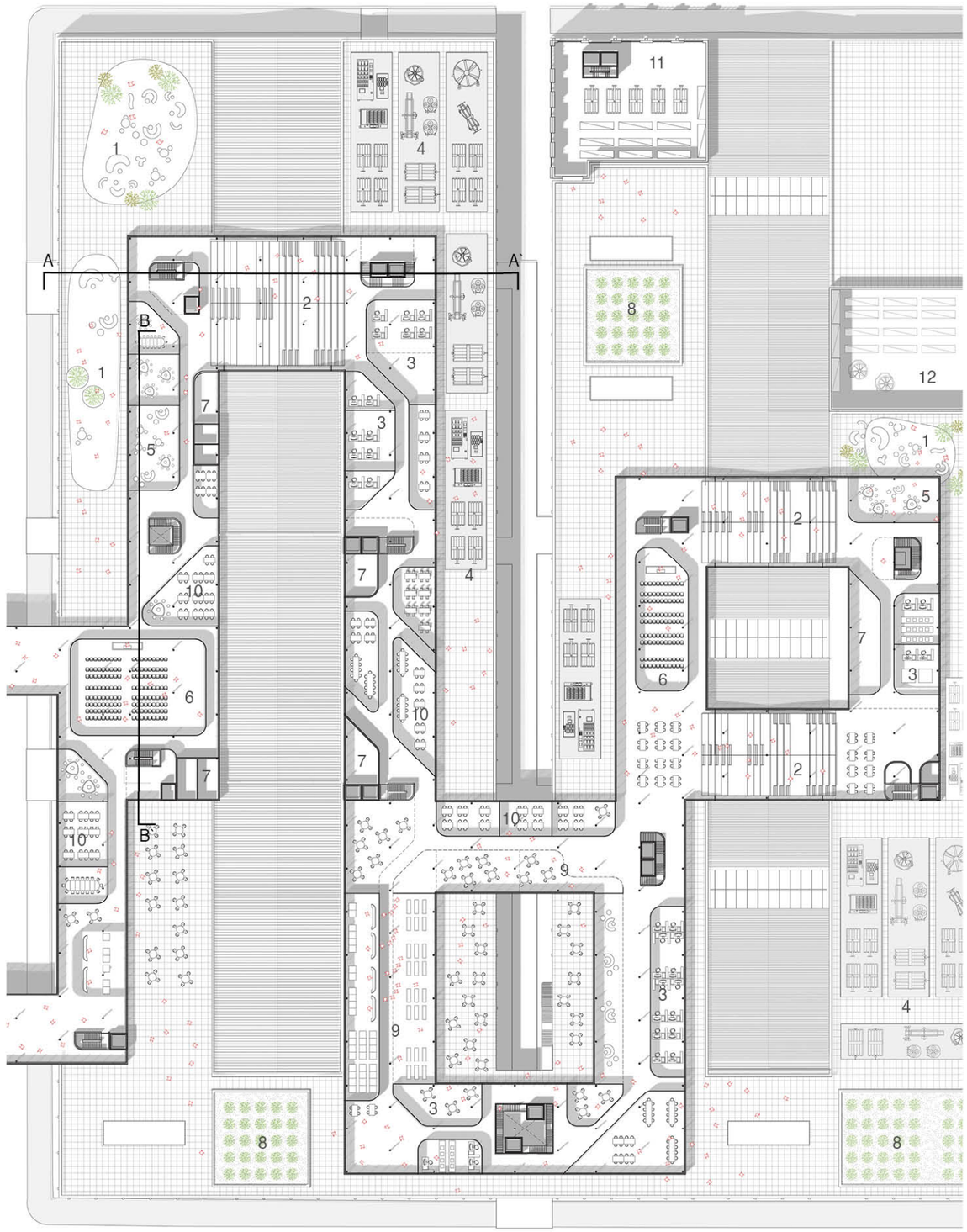
Freight Core



Bridging Core



Plan +25ft

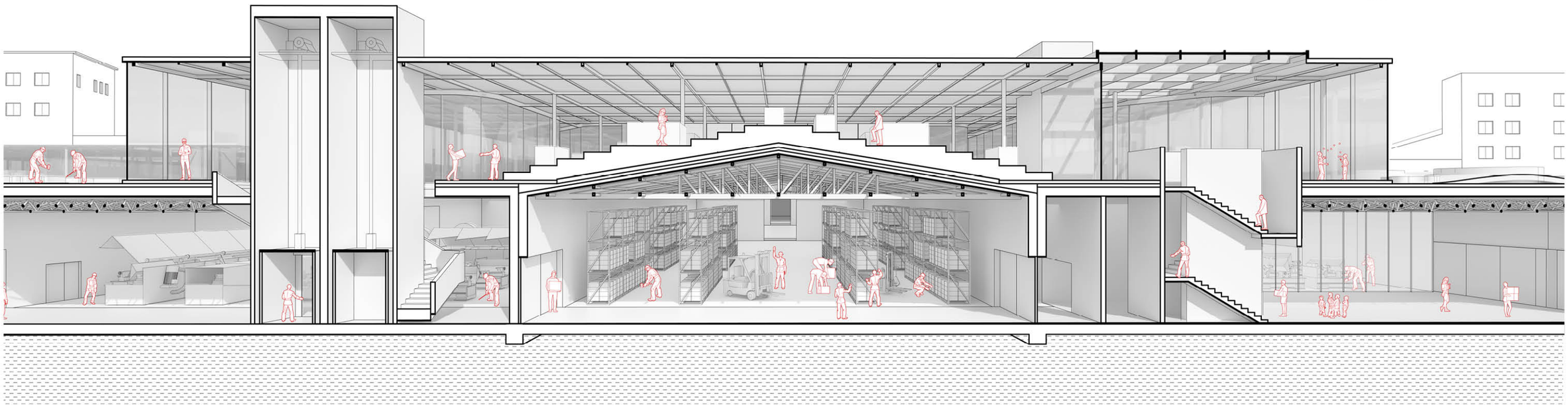


1. Playground
2. Material Library
3. Maker Space
4. Outdoor Factory Space
5. Daycare Center
6. Safty Training
7. Restroom
8. Farming
9. Cafeteria
10. Meeting Room
11. Paskesz Candy
12. Steel Fabricator

15

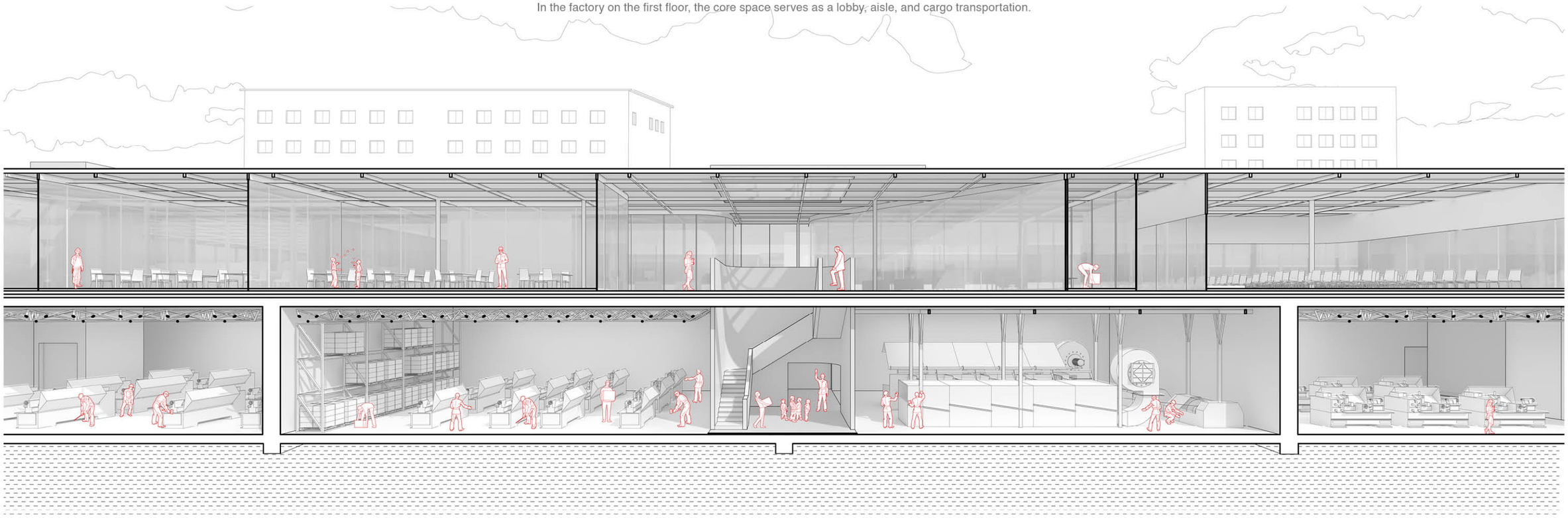
AA' Section

A core space connecting the factory on the first floor and the complex on the roof



BB' Section

In the factory on the first floor, the core space serves as a lobby, aisle, and cargo transportation.



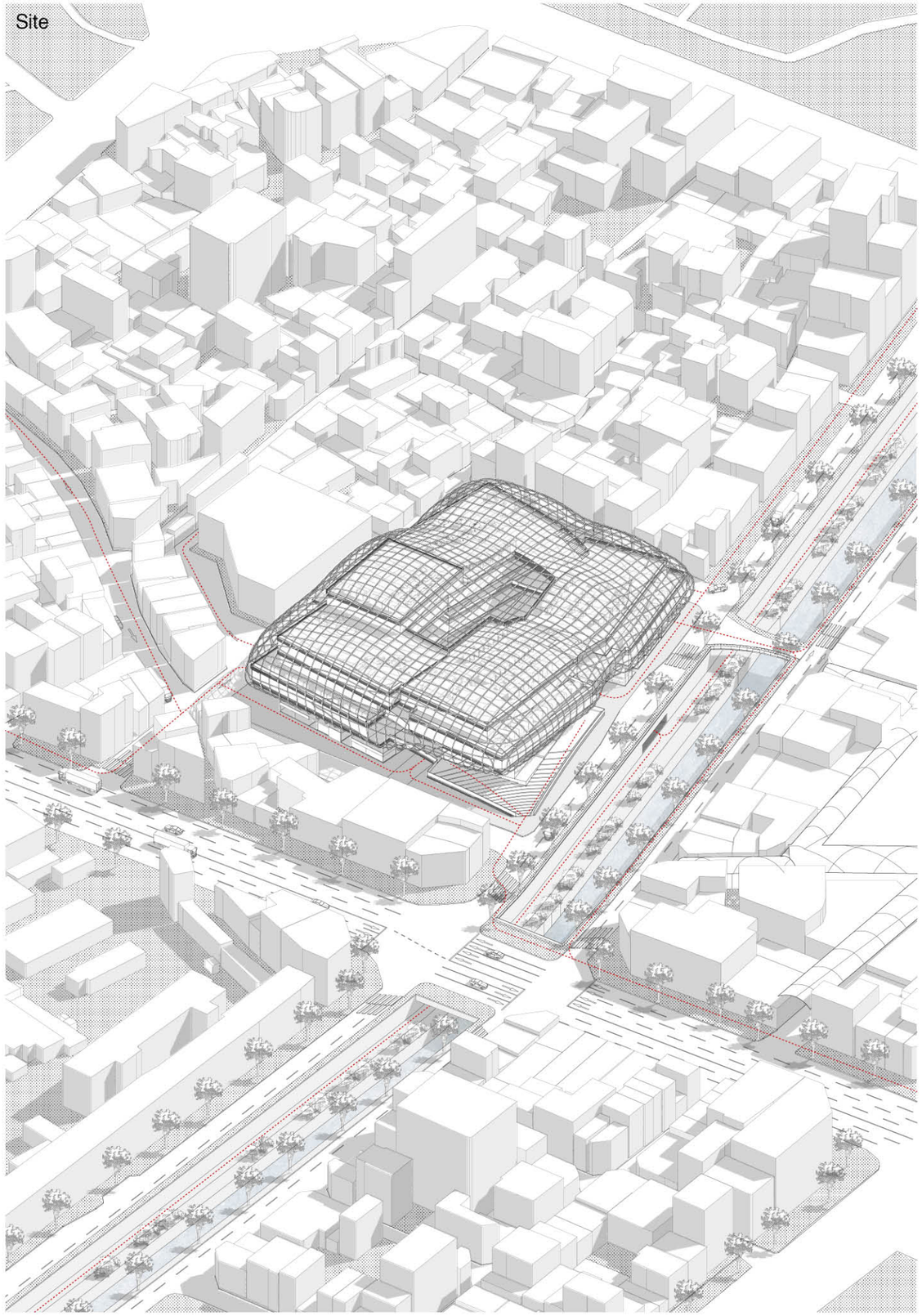
16

Project III - SKKU B.arch

RE - PACKAGE [Bangsan Market Project]

Year	Spring, 2017
Location	Bangsan Market in Seoul, Korea
Type	Traditional manufacture market
Category	B.arch individual work
Professor	Hanjong Lee (Studio 2105)

The traditional defense market mainly consists of manufacturing industries such as packaging, printing, video media, and daily necessities. Among them, the defense multi-shop built in 1976 has a very low utilization rate due to its aging and closed structure, and is scheduled to be demolished. Adapting new spaces and designs to this building will bring positive changes to the entire market, including its surroundings.



Existing Bangsan Market

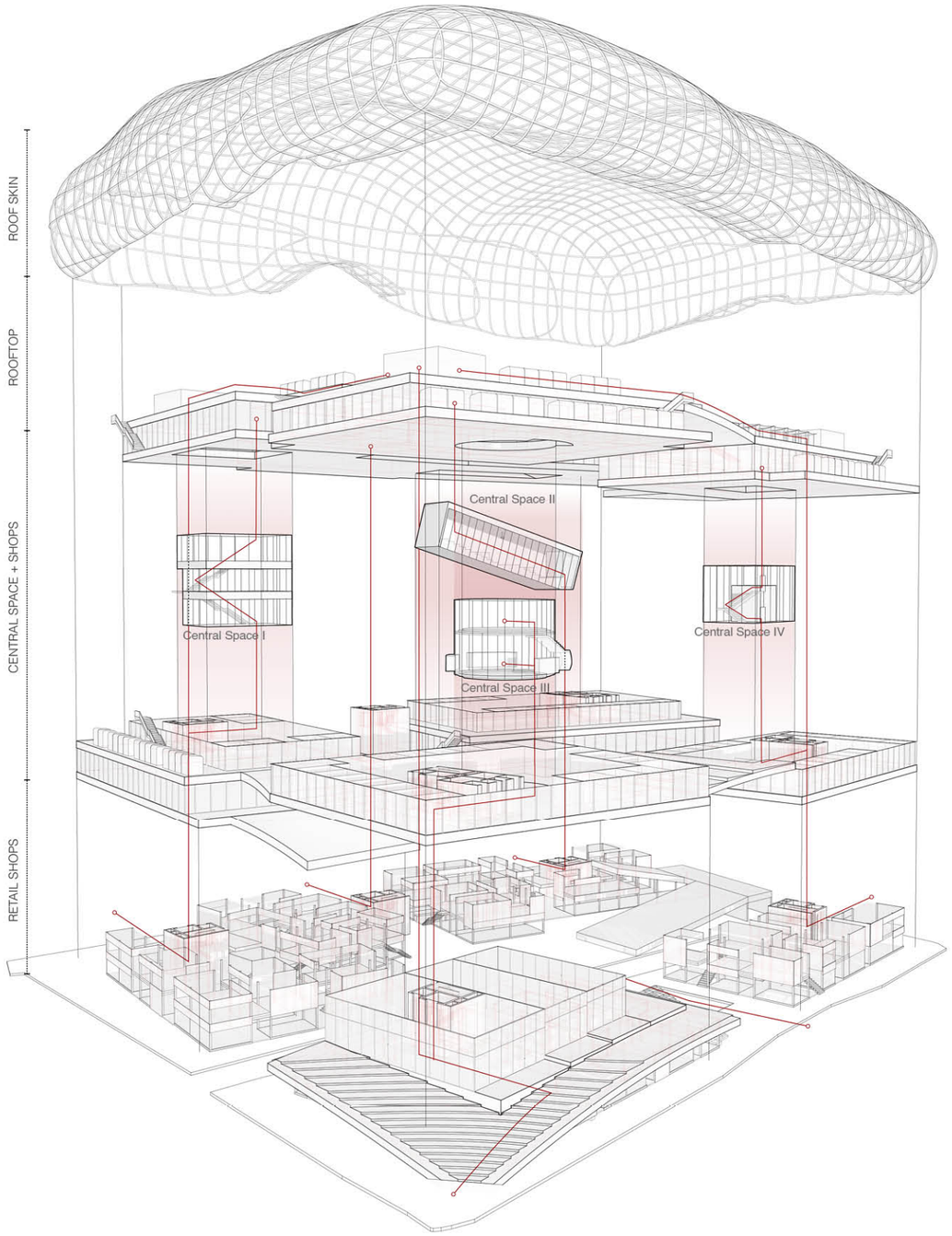
Bangsan Market is a huge market that sells technologies and special materials. There are mainly stores that sell paper, projectors, special materials, provide printing technology and plastic molding. Currently, the building of the Bangsan General Market in the center is in danger of being demolished due to its aging and increasing vacancy.

Process

Exisiting Store Type						
Indoor 01	02	03	04	Outdoor 05	06	07
Exisiting Building						
01	Printing Store 02	Material Store 03	Paper Store 04	Projector Store 05	Plastic Forming 06	Others 07
Exisiting Volume						
Exisiting Building 01	Printing Store 02	Material Store 03	Paper Store 04	Projector Store 05	Plastic Forming 06	Others 07
Mass						
01	02	03	04	05	06	Selected 07
Experience Space						
01	02	03	04	Outdoor 05	06	Application
Bridge			Outdoor Space			
01	02	03	01	02	03	04
Roof						
None 01	02	03	04	Outdoor 05	06	Selected 07

Circulation

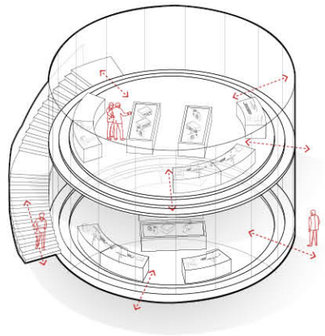
One of the most important aspects of the in-building market is the way goods are moved. Five cores allow fast horizontal movement of people and cargo. It's also important to lead people upstairs so they can browse more shops. The four central spaces and the flea market on the rooftop play the role of drawing people into the store on the upper floors.



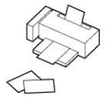
Central Space I

Printing Showcase

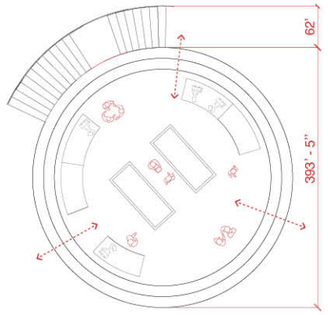
A space to show and use the printing technology of the market



Display



Massing



Openness

Height

131 ft

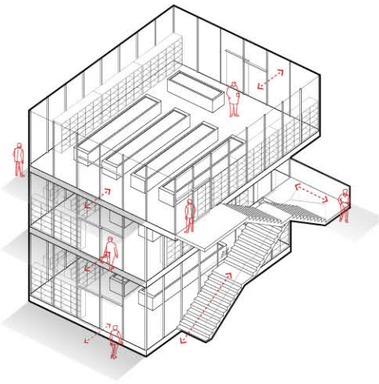
Area

2,432 ft²

Central Space II

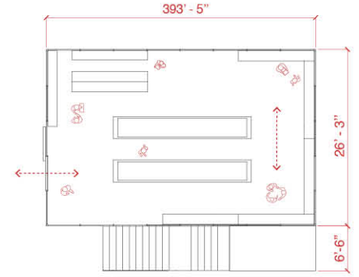
Paper Showcase

A collective space that all kinds of papers from nearby shopping malls and view them at once



Display

Massing



Openness

Height

114 ft

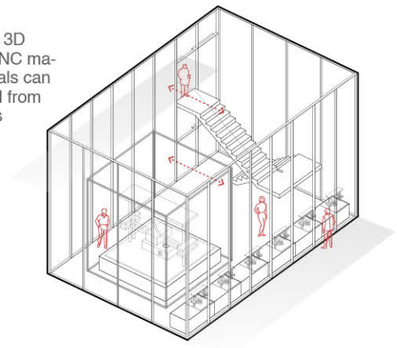
Area

3,444 ft²

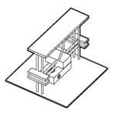
Central Space III

Maker Space

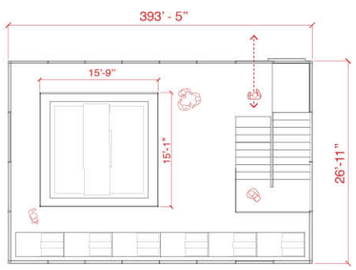
Space to use 3D printer and CNC machine, materials can be purchased from nearby stores



Display



Massing



Openness

Height

262 ft

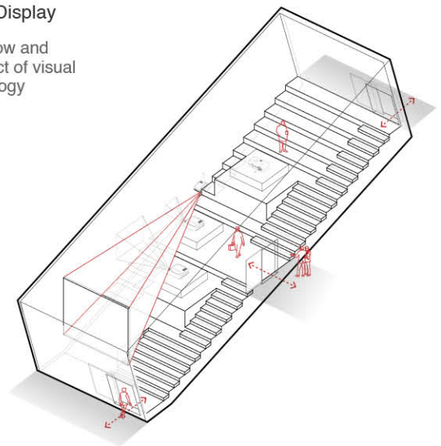
Area

1,033 ft²

Central Space IV

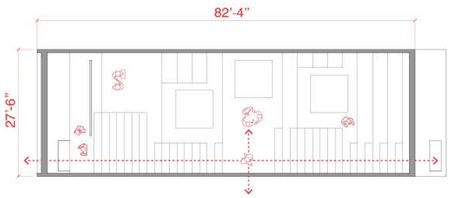
Visual Media Display

A space to show and use the product of visual media technology



Display

Massing



Openness

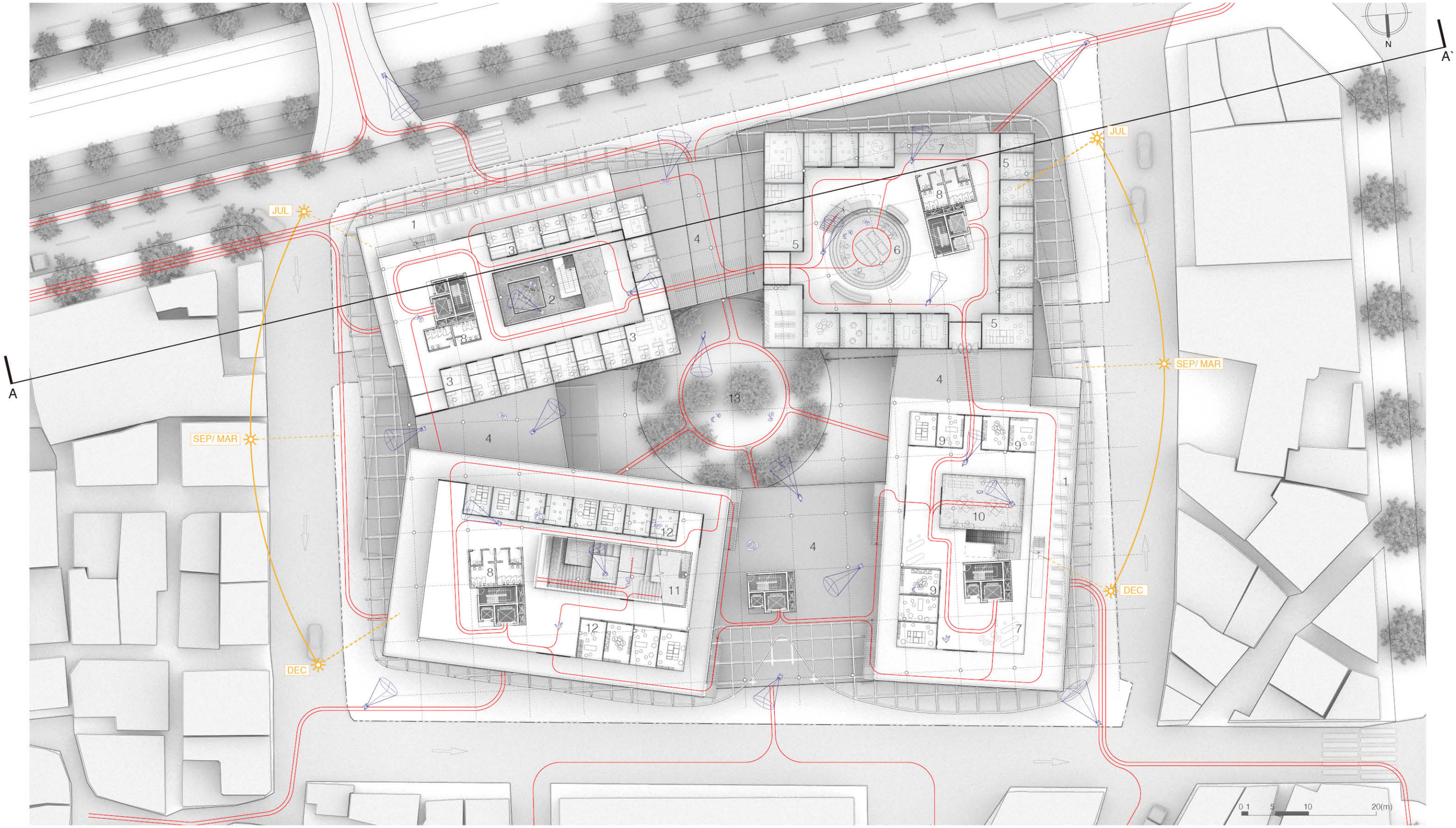
Height

190 ft

Area

2217 ft²

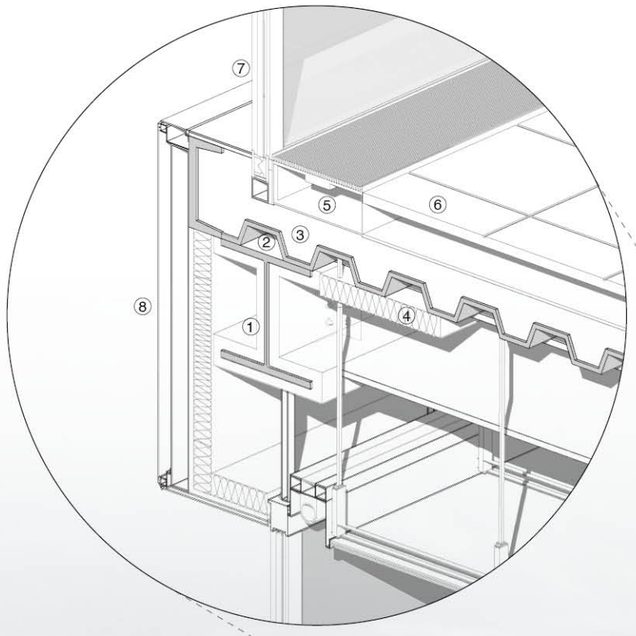
Plan G.L +7,500



Circulation

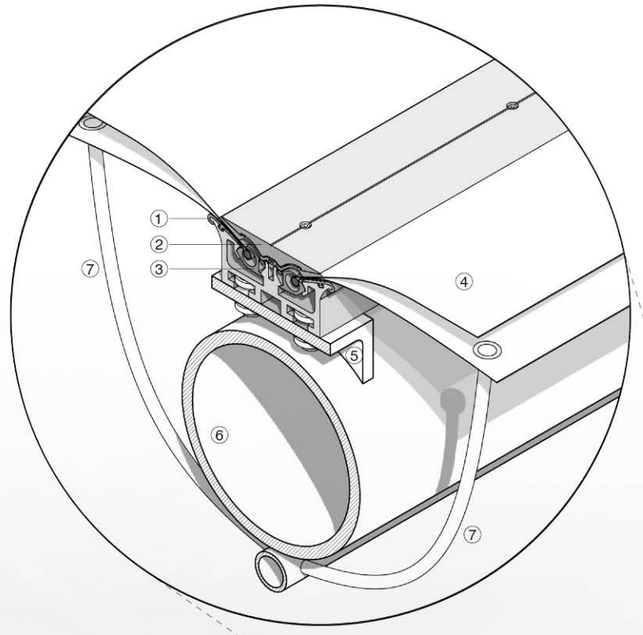
There are many small alleys around, and there are buildings with various shops. Therefore, the entrance of this building was designed to allow easy access to the inside from all directions other than the 5 places that can enter the core.The main entrance of the building is accessible to all floors and rooftops through a total of five cores. It is also possible to move between floors or buildings through extended floors and experience spaces between the buildings.

1. Outdoor Kiosk
2. Central Space II
3. Material Store
4. Bridge
5. 3D Printer Store
6. Central Space I
7. Snack Bar
8. Rest-room
9. Paper Store
10. Central Space III
11. Central Space IV
12. Film Store
13. Center Square



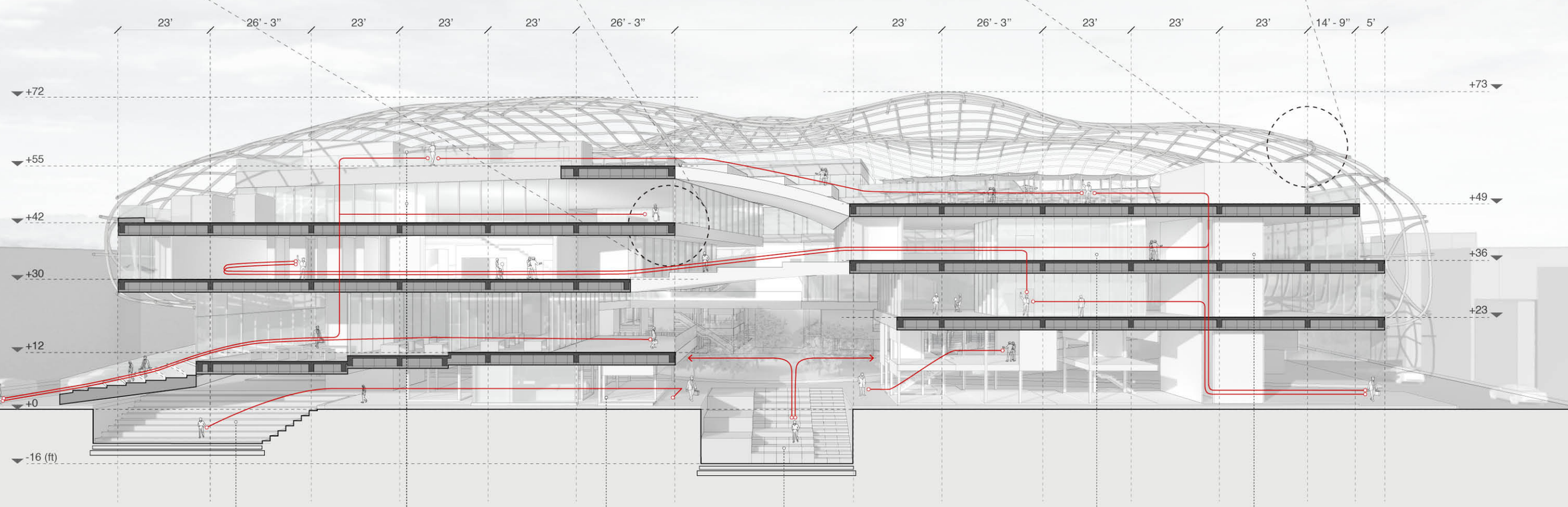
Slab Detail

1. H-beam
2. Deck Plate
   Steel
3. Reinforced Concrete
   Thk 175
4. Extruded polystyrene
   Isopink
5. Ventilation Grill
6. Acess Flooor
   Thk 150
7. Pair Low-E Coating Glass
   Thk 24
8. Aluminum Panel
   Thk 4



ETFE Roof Detail

1. Base Seal
2. Cap Seal
3. Lid Profile
4. ETFE Membrane
5. Steel Support
   Thk 1/2”
6. Steel Structure
   Thk 1/2”
7. Air Supply Tube
   ø 1”
8. Air Inlet



AA’ Section

Rest Area
- Space for visitors who wants to rest or eat food

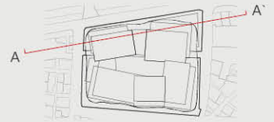
Outdoor Flea Market
- Various markets utilizing outdoor spaces

Retail Store
- Lower levels store for visitors

Underground Entrance
- Entrance to the Cheonggye stream

Experience Space
- Maker Space
A space where you can experience and use the product

Core Structure
Core for movement of people and cargo between floors



21

4th Floor Plan

0 (ft) 5 10 20

Project IV - SKKU B.arch

Multi-unit Dwelling for Young Entrepreneurs

[Government-provided housing proposals to support young entrepreneurs]

Year	Fall, 2016
Location	Mapo-gu in Korea
Type	Residential building
Category	B.arch individual work
Professor	Kijung Kim (KARO Architects)

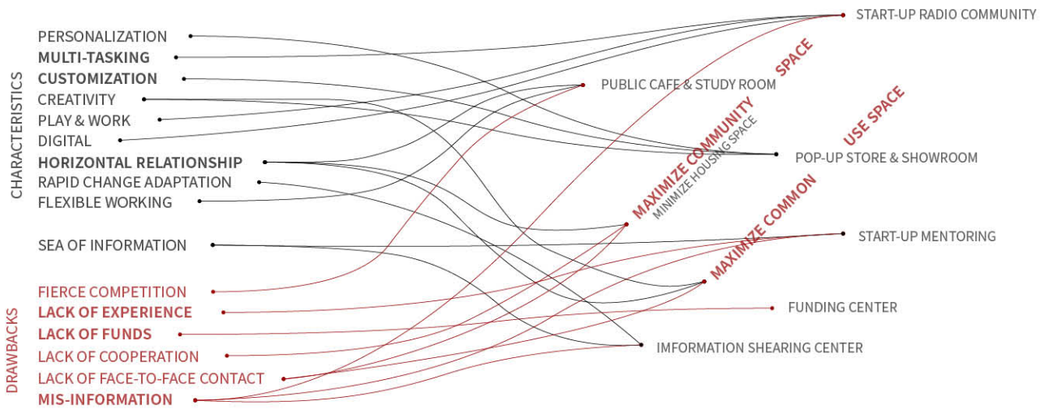
Currently, youth entrepreneurship is attracting attention as a way to solve Korea's job problems. One of the main industries of the Korean government is a space support project for young entrepreneurs that combines housing, work, and rest. This project proposes a space where young entrepreneurs can live together and maximize synergy through mutual cooperation.

Key map

22

User Analysis

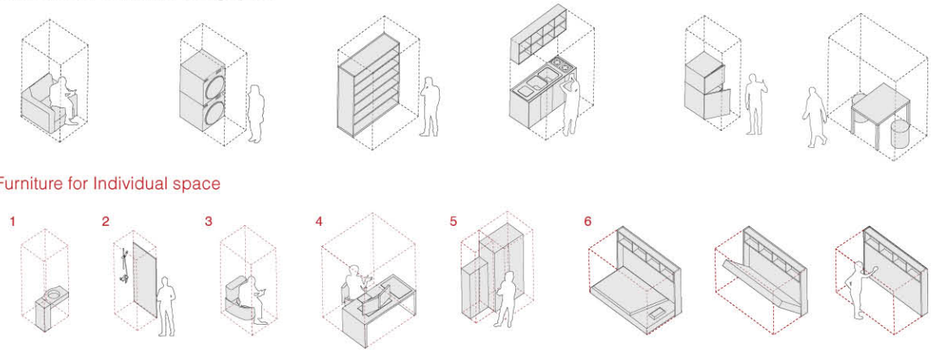
Today, young entrepreneurs have come up with a program that combines the cause of the high failure rates of early entrepreneurs with their needs depends on the stages of their growth. The key point is space for the community.



Dwelling Unit

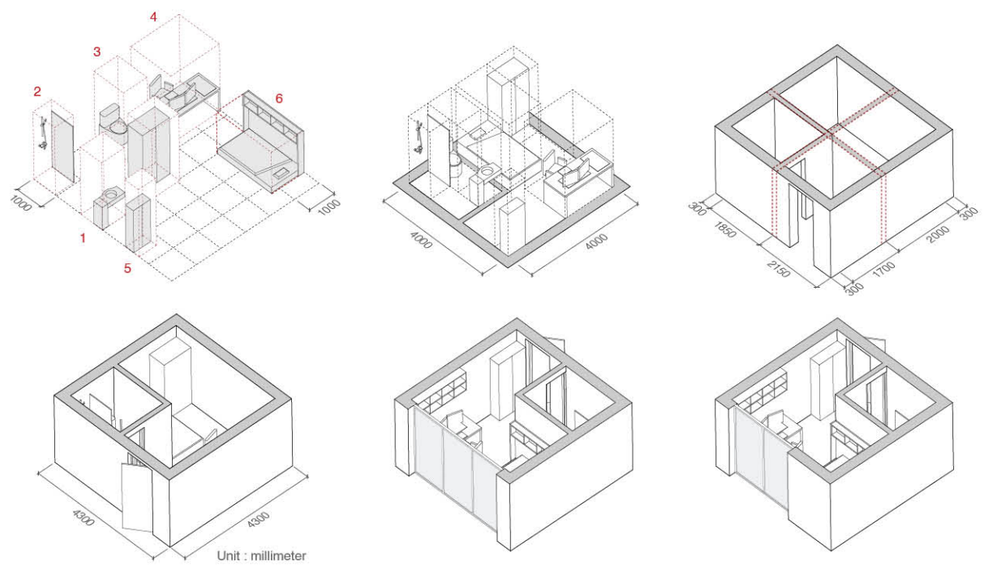
- Minimize Dwelling Unit to Maximize Community Space

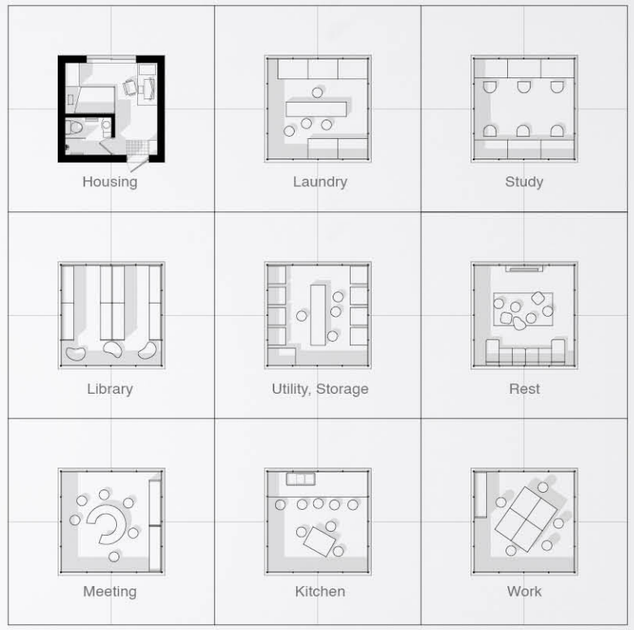
Furniture for Common living space



Furniture for Individual space

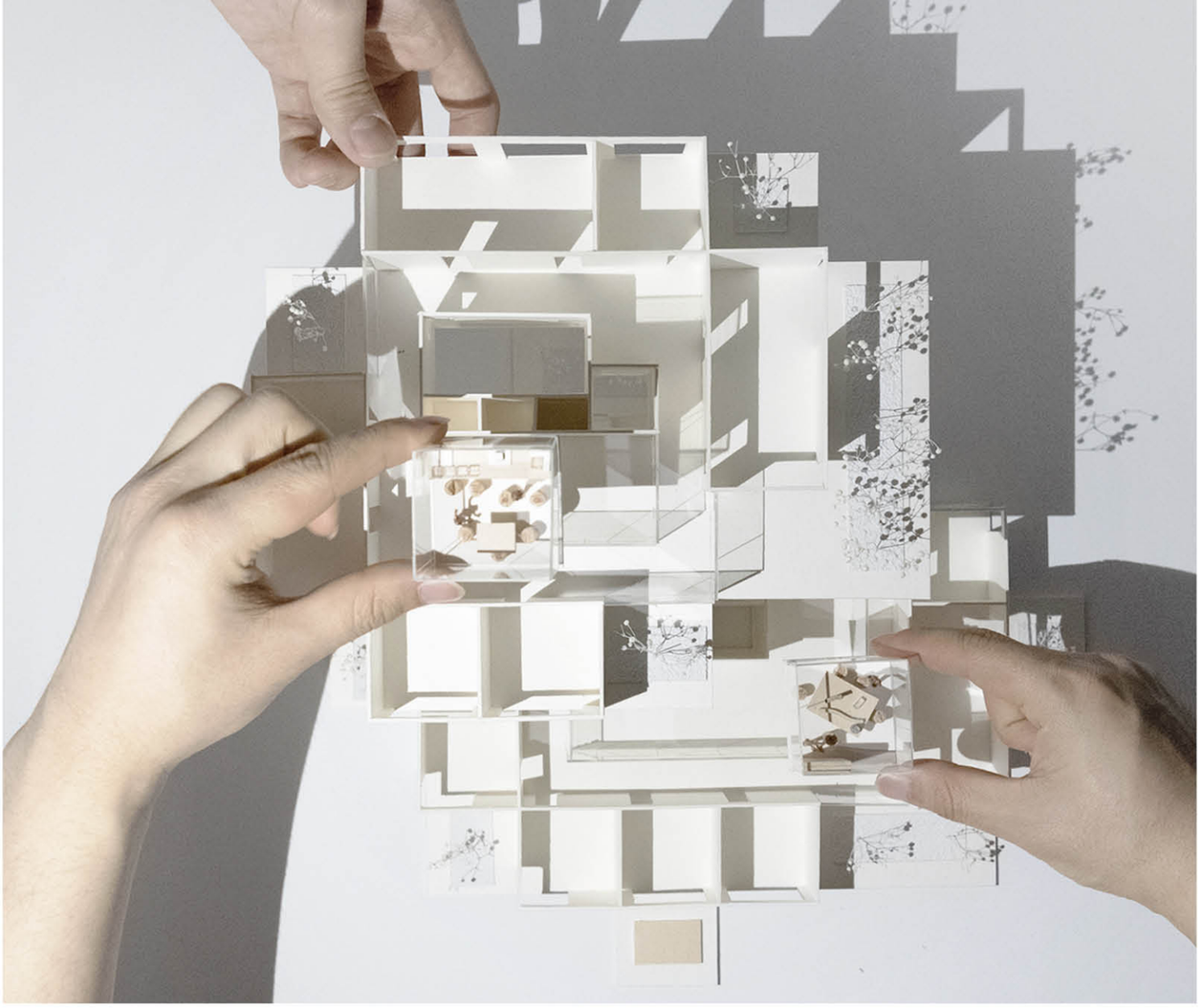
Minimize Dwelling Unit



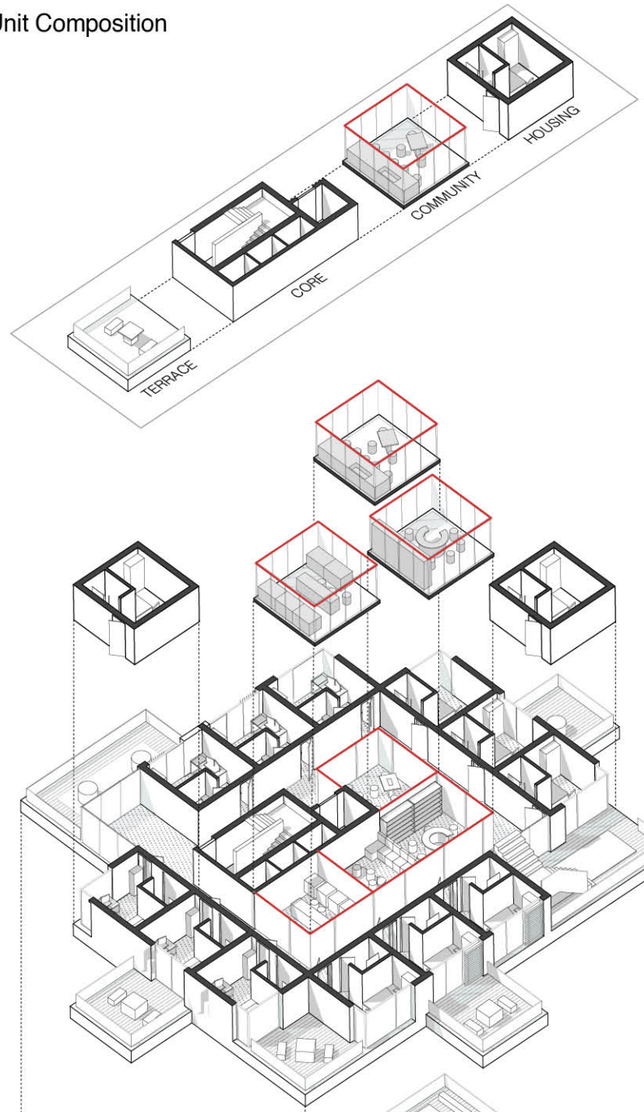


Units

1 minimum dwelling unit and 8 common and community units for a living are located on the residential floor.

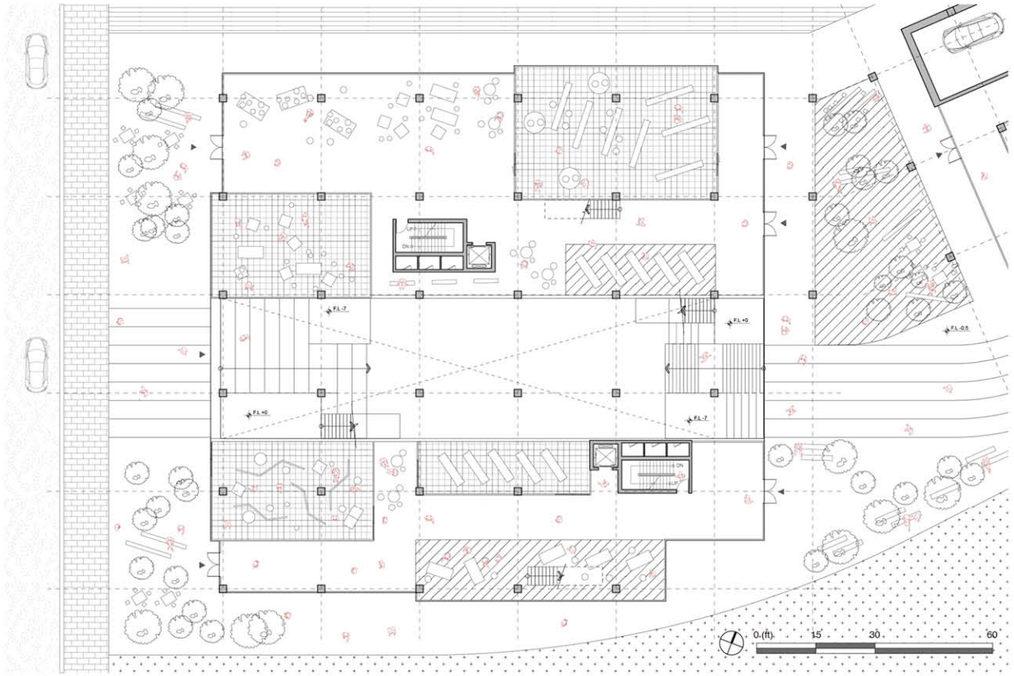


Unit Composition



Common and community units were placed around the core and made the natural movements into the next dwelling unit to ensure that the user passed through the community space.

Going to the further downstairs, the wider floors appeared with a private or shared terrace.
This composition influences to enable a lot of intentional or unintentional communication between residential entrepreneurs, thereby learning and cooperating with each other.



1F Plan

The first-floor space consists of many open spaces that can be easily accessed from the outside. The interior space consists of a showroom where entrepreneurs can demonstrate or exhibit their products, providing visitors with a space to introduce their new ideas.

3F Plan

The third floor is a residential floor that connects the two buildings to the outside. The residential space is located outside to receive sunlight, and the common space and core are located inside.

Interior Perspective

The view of the shared space from the private space on 3rd floor

Competition Work I - International Architectural Competition for the Post - COVID19 Era

SCHOOL ZONE

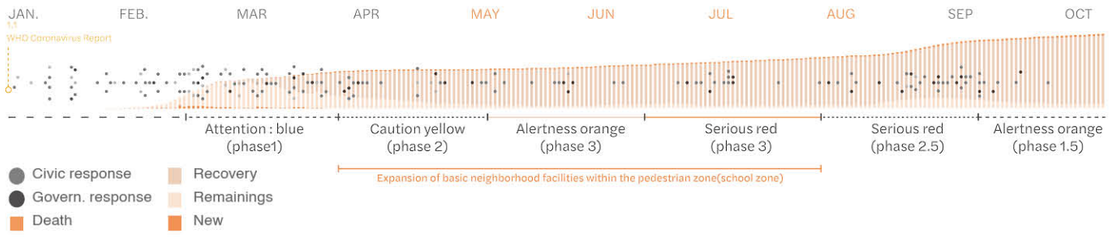
[Public school as temporary refugee for social incidents]

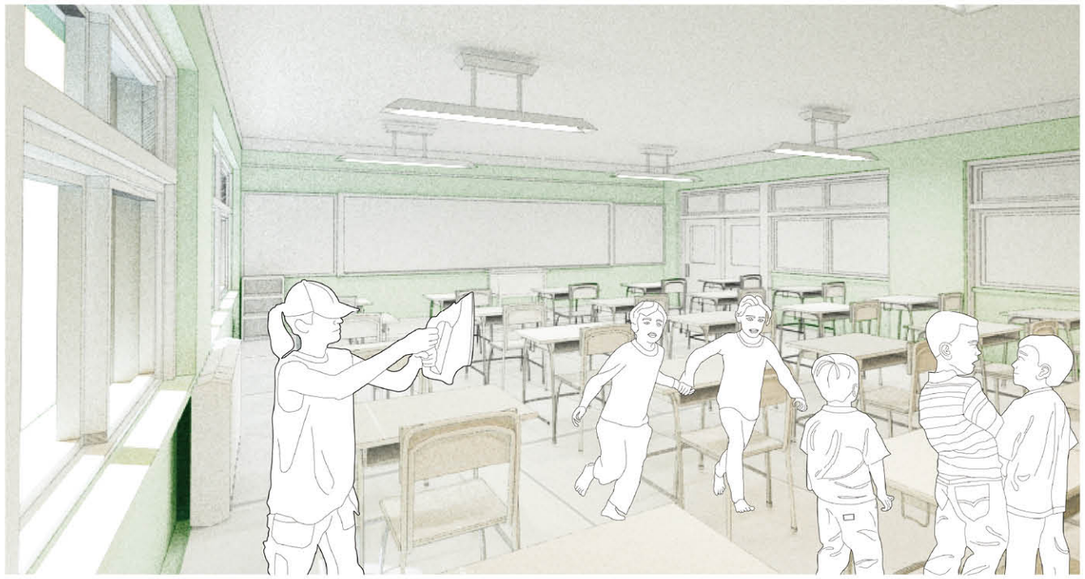
Year	2020
Location	Any public school in Korea
Type	Public school-temporary facility
Category	Idea Competition - 2nd Prize
Role	Team leader of 3 members_ Concept Drawing, 3D modeling, Visualization
Jury	Yunkyu Jang, Hyunjoon Yoo, Jinbok Wi, Soonjung Kwon, Eunyeong Heo, Daniel Valle, Laurent Pereira

The global pandemic Coronavirus began spreading in Korea on January 20, 2020, and the government and civil society immediately responded. Local governments disclosed relevant indicators and information, delivering scale gatherings", COVID-19 affects society as a whole. In May, when civil society immediately responded. COVID-19 is making a lot of changes in our lives. Especially people left in political blind spots suffer more damage because they lack a particularly social safety net. In the project, we propose a public school, based on its own distinct characteristics, as a facility where citizens can gradually accommodate social changes in safety.

26

Social crisis and flexible response with school

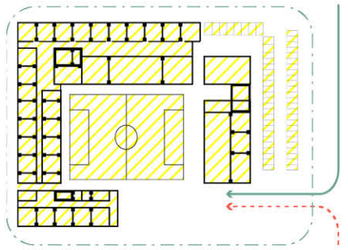




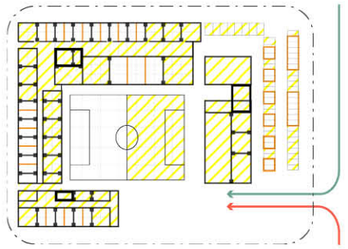
Classroom in ordinary days

Classroom in Pandemic era

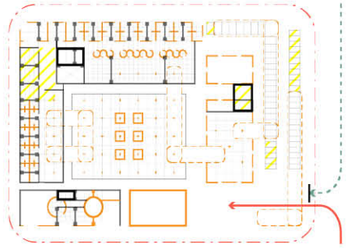
School zone : Neighborhood Basic Unit Facilities Responding to Social Crisis



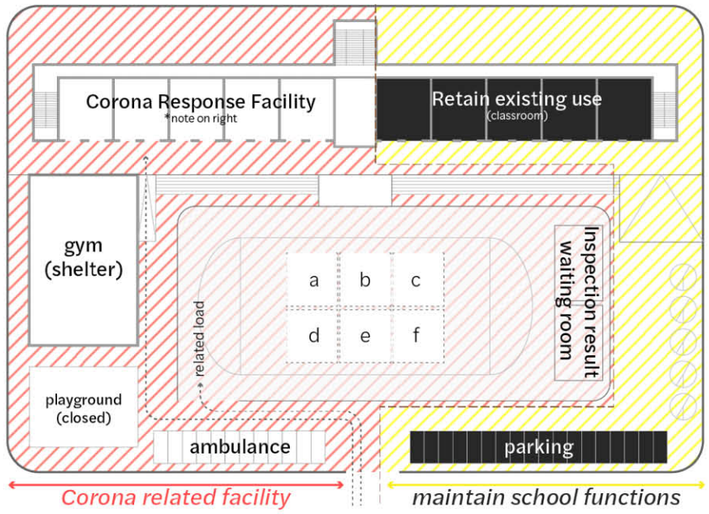
Phase 1
entirely use as a School



Phase 2
use part of school as related facilities



Phase 3
use most part as related facilities

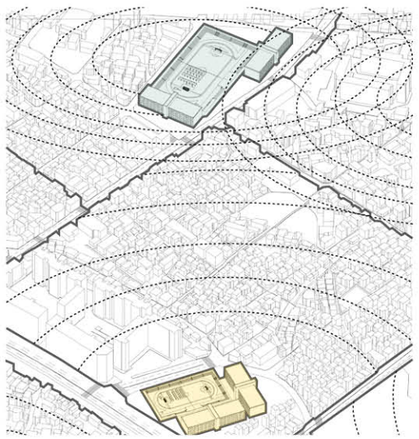


The unprecedented Pandemics revealed various political blind spots. In overpopulated cities, it is difficult to rapidly supply more space than expected. In a sparsely populated province, it is difficult to find suitable spatial facilities to accommodate patients.

'Village Ward' focuses on the spatial value of public schools that allows cities to easily solve the problems by utilizing empty hours of classrooms when students selectively go to school.

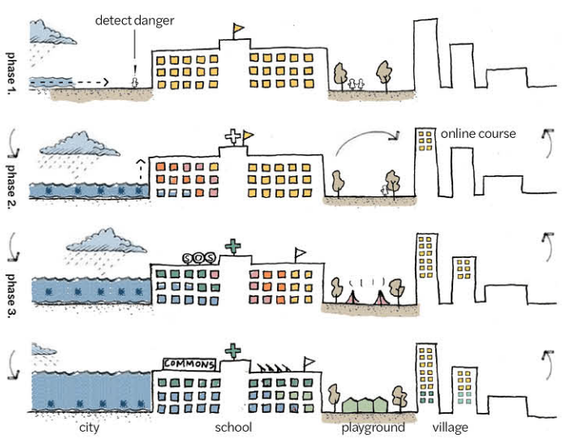
The spatial value of a school as a Corona Response Facility: No one left behind

Based on C.Perry's neighborhood theory, public schools in South Korea are located based on the population and distance to the residential area.



equally distributed school

These Step-by-step strategies are flexibly formulated and applied according to the severity of the infection. The school serves as a breakwater, complementing major policies and functioning for local aid.

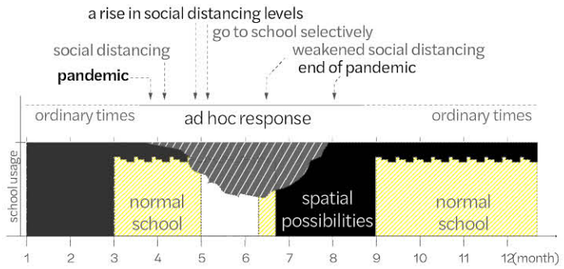


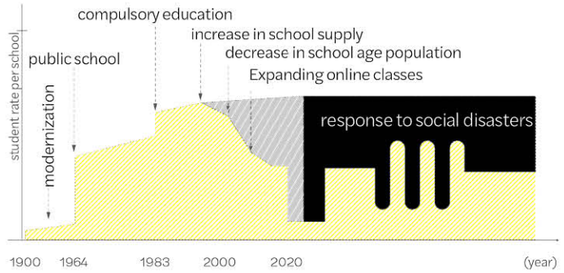
breakwater for social dangers

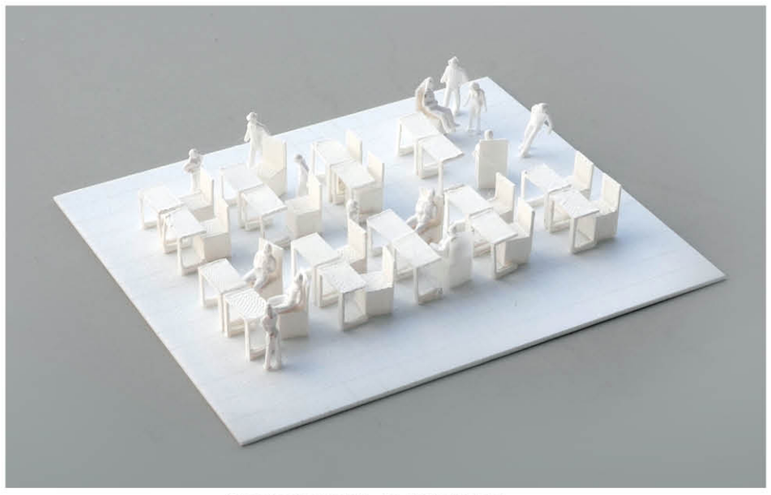
Tempral Potentialities : Vacancy

As a result of the rapid increase in the number of schools compared to the decrease in the school-age population after the enactment of public education, schools have less burden of accepting students than before. In particular, there is a possibility that schools can be actively utilized at the selective schooling stage during the Pandemic period.

Schools are characterized by morphological simplicity and distributed repeatability. The typical form of an elementary school (playground, classrooms, average 19.3% building coverage ratio) has consistent spatial characteristics. The modular spaces have the possibility of infinite expansion and rapid application of different functions.







Classroom module - in ordinary days

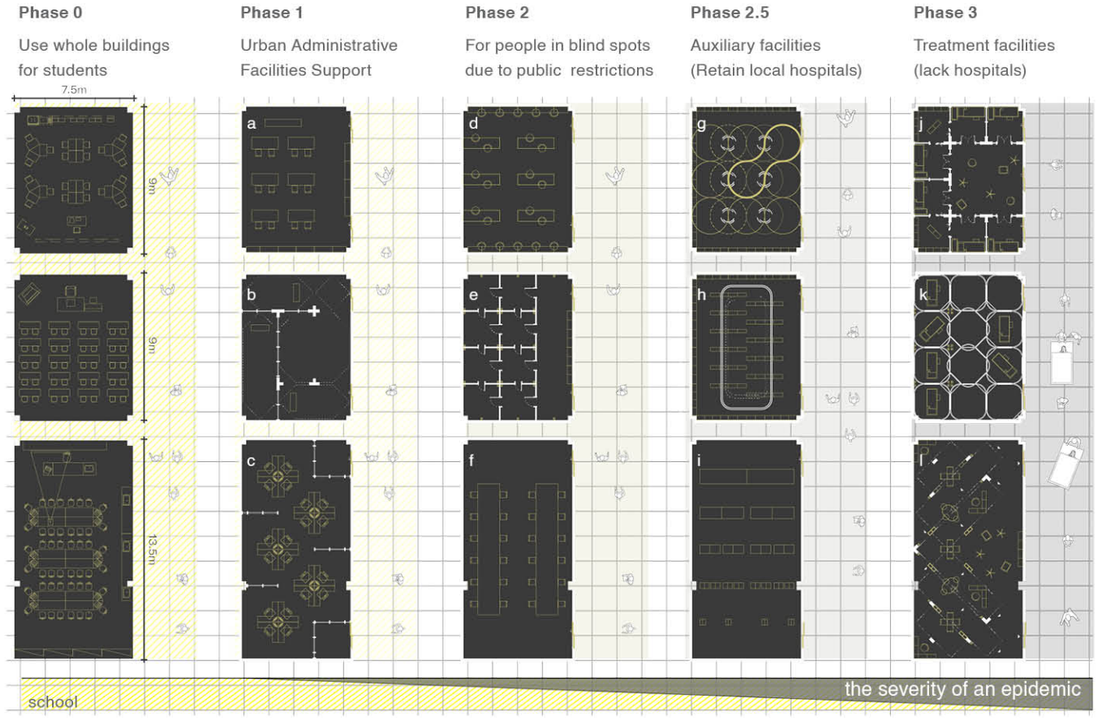
Classroom module - in Pandemic era

Classroom module

Many classrooms have country-specific standards. In particular, classrooms in most schools in Korea are standardized with the same size. It is evaluated as not good for education, but it can be seen that it is optimized for use as corona response facility.

As shown in the image, the classroom has an appropriate size when installing a standardized temporary ward.

Ephemeral School programs changes against social hazard : standardized classroom space



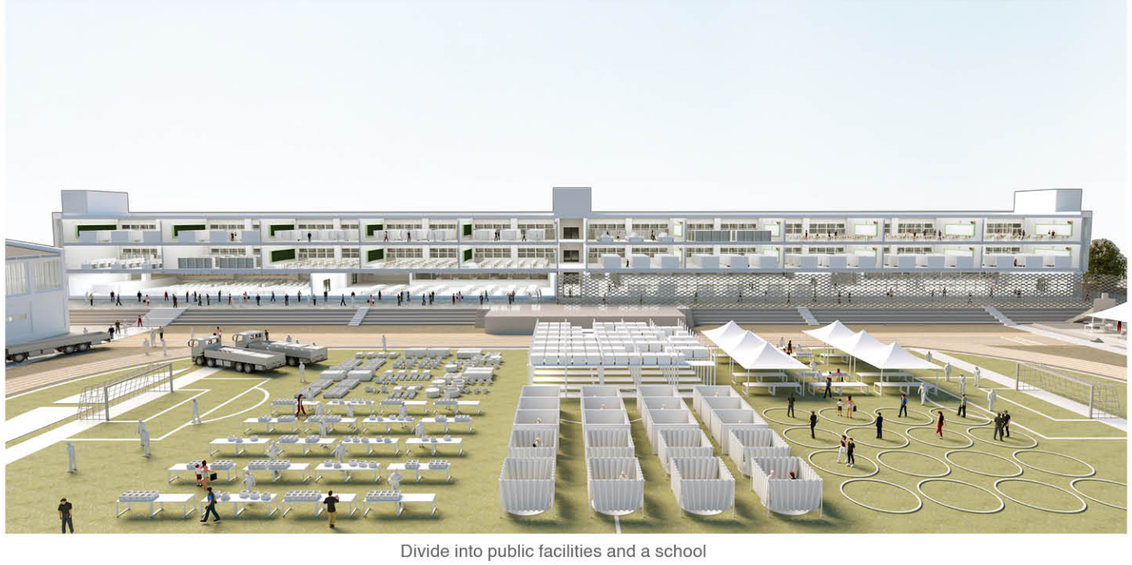
- classroom A
- classroom B
- special classroom

a. job education
b. public nursery
c. corona control center

d. pc room
e. shower booth
f. study room

d. Laboratory
e. Sample Storage
f. Inspection waiting room

j. emergency room
k. recovery room
l. family quarantine



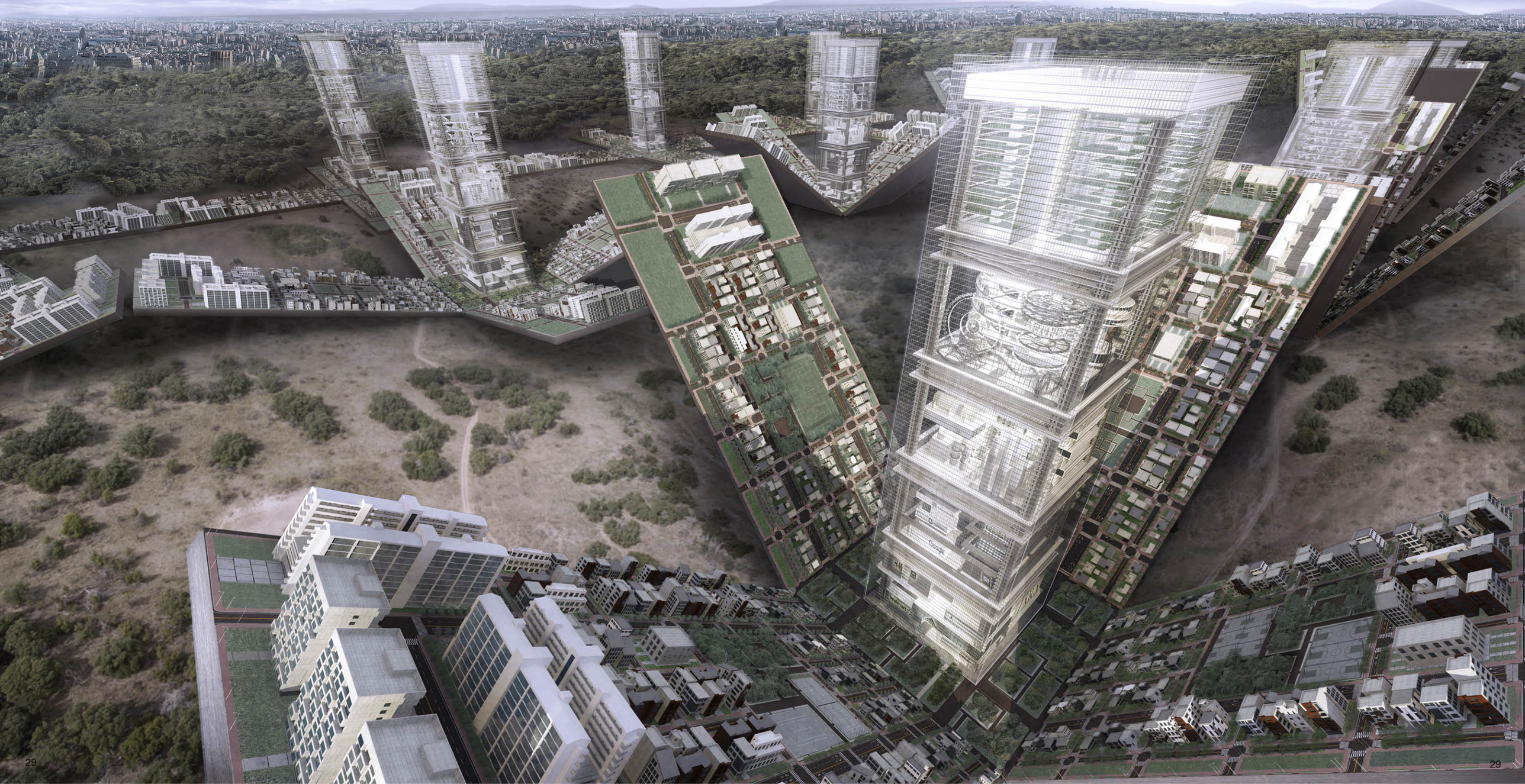
Divide into public facilities and a school

Competition Work II

THE PACKAGE CITY [Skyscraper]

Year	2018
Location	Anywhere
Category	Sky Scraper Idea Competition_ 1st Prize
Role	Team Leader of 4 Member_Idea, Render, Drawing
Jury	Concil of Tall Building and Urban Habitat Korea

The majority of the world population is concentrated in cities mainly because of infrastructure. To accommodate this population demand, the city has been constructing high-rise buildings.
This phenomenon has caused overpopulation. This is causing more and more intense regional unbalanced development, physical and social problems including urban transportation, environment, and housing. We propose new and futuristic alternatives to this problem.



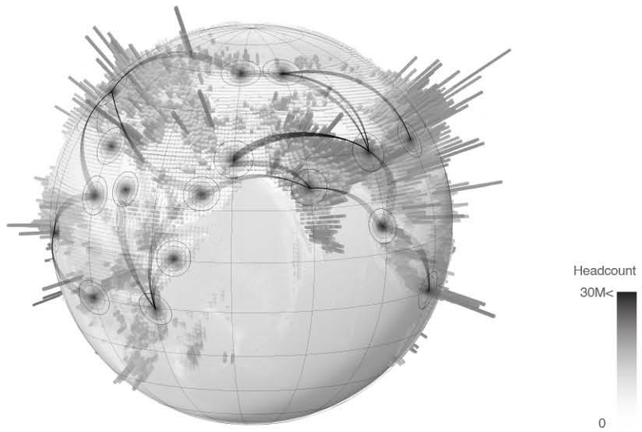
29

Urban Overpopulation : Problems around the world

Currently, big cities have a population density of at least 10,000 people per square kilometer, and density is still rising. According to the United Nations report, they predict that the world's population will increase to 10.9 billion by 2050, especially in the world's 49 poorest countries. In the process of development, the poor countries will follow the problems of the existing big cities if the speed of infrastructure construction does not develop dramatically.



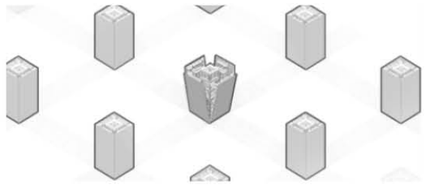
World Population



Package City functions as one small city. This will quickly make city infrastructure without cities. These huge buildings are constructed in nearby megacities with infrastructure and then move to sparsely populated areas. There are several ways to get around, including ships and drones.

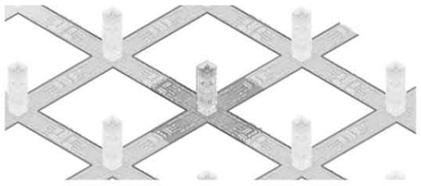
Urban Setting

They are moved to a place that is necessary. After moving, the City Package Skyscrapers start to transform. Each skyscraper is placed at the calculated location, and each city side unfolds as it unpacks.

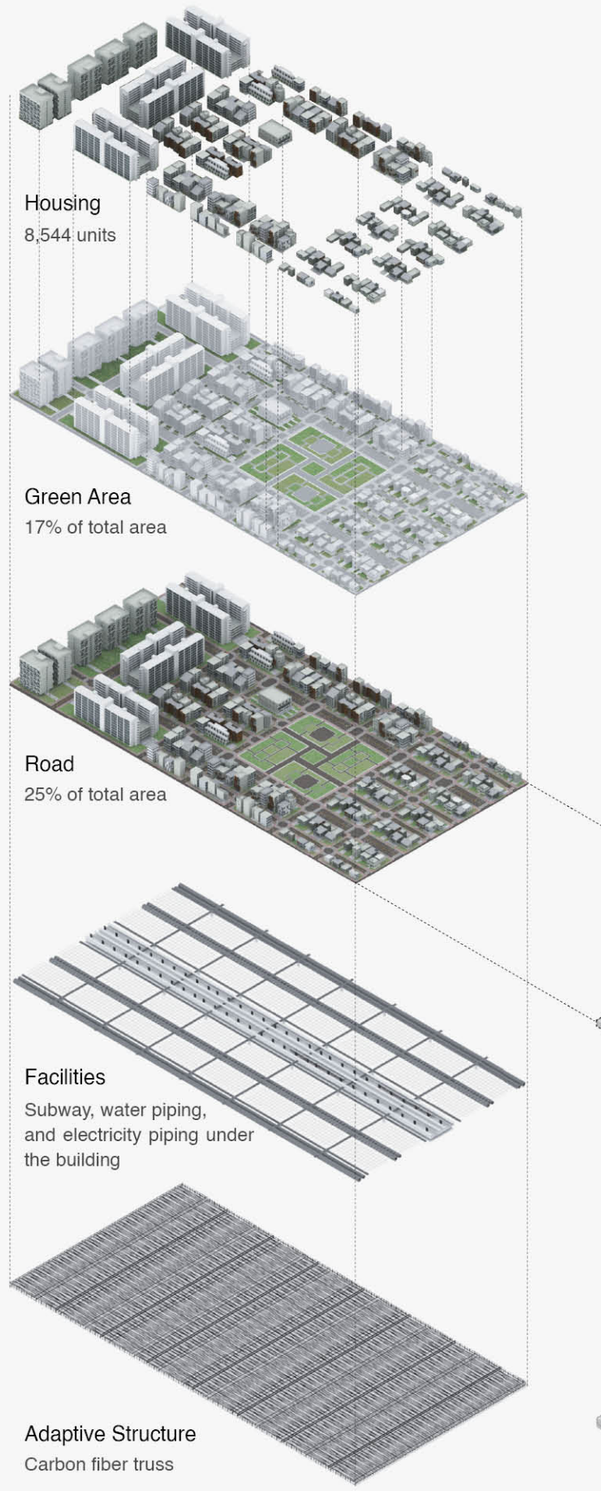


Connecting Infra

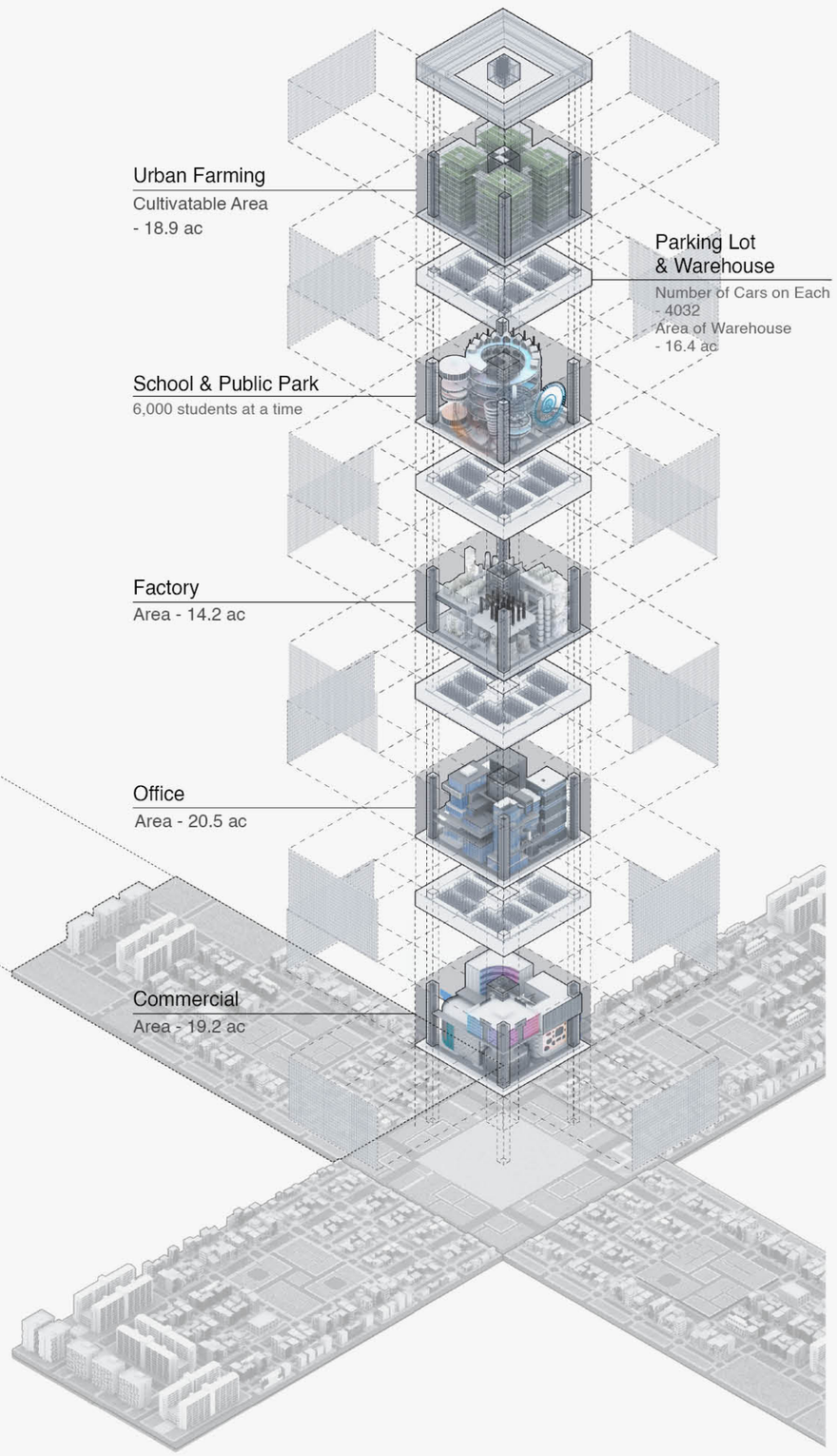
Once the transformation is over, they connect each other's infrastructures to create a completed city. The infrastructure of water, electricity and transportation will be connected to establish a city system.



Housing Strategy

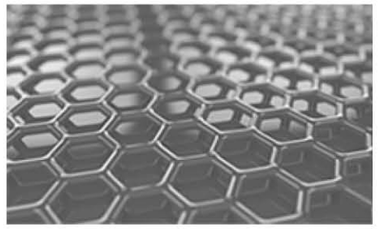


Tower Strategy



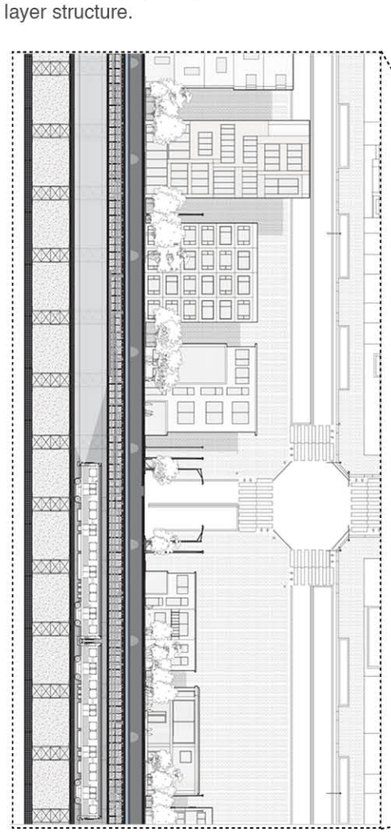
Main Material : Carbon Fiber

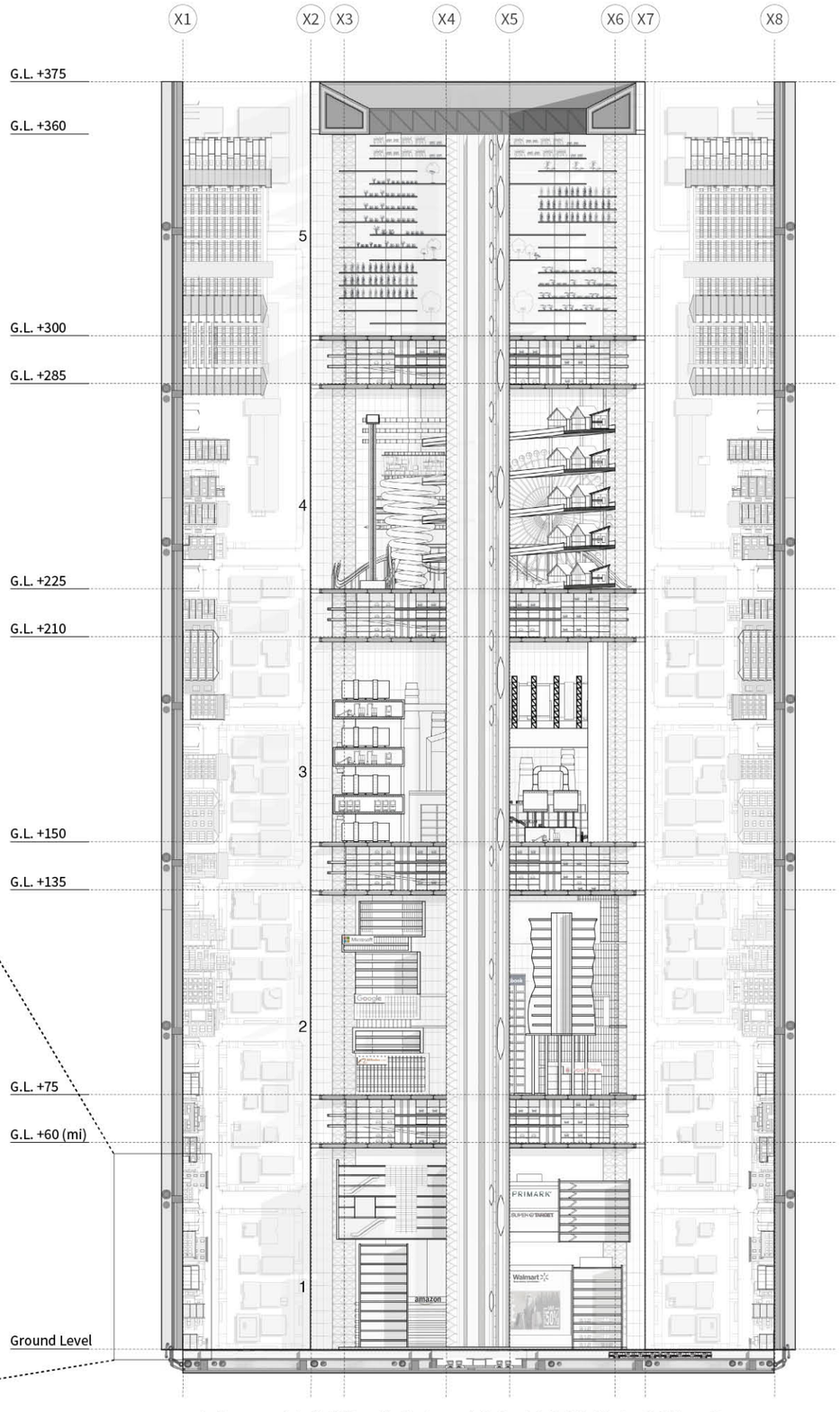
Carbon fiber, which is ten times stronger than steel, is used as the main material of the building. It is also three times more elastic and one-fifth the weight of iron. This can be used to reduce weight when moving high-rise buildings.



Section Detail

There is a waterway for life and a subway for fast transportation In the underground. The bottom of the skyscraper is made of a buffer layer structure.





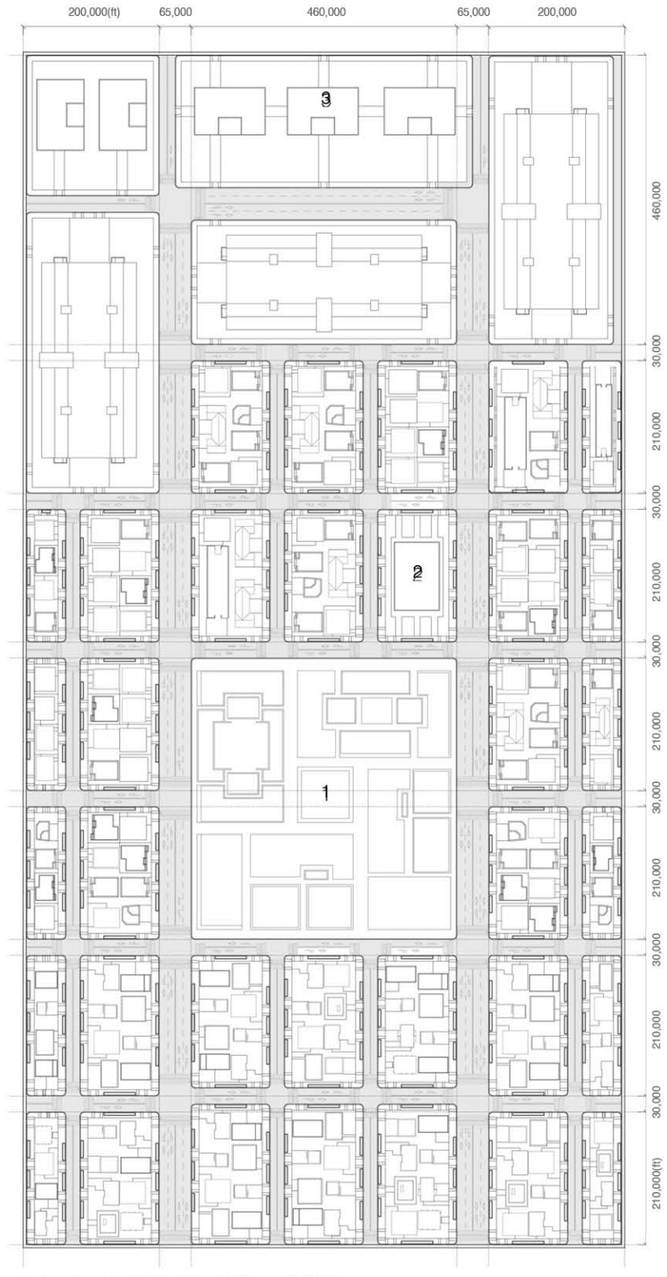
1. Commercial 2. Office 3. Factory 4. School & Public Park 5. Urban Farm

The City Package Component

The four-sided district serves as a residence, while the main tower and central part serve as infrastructure and cultural facilities. Infrastructure for living is placed under the ground, and public transportation is provided as well.

Also, solar glass was used in all buildings for a sustainable city. It has enlarged the area to obtain environment-friendly energy, and it can satisfy energy necessary per population by itself.

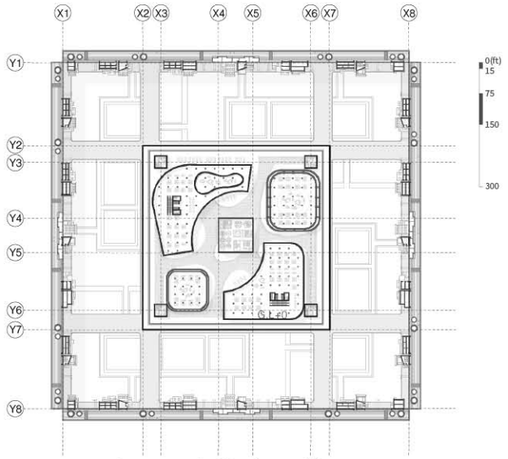
Residential Plan - Type A



1. Apartment 2. Residential Area 3. Park

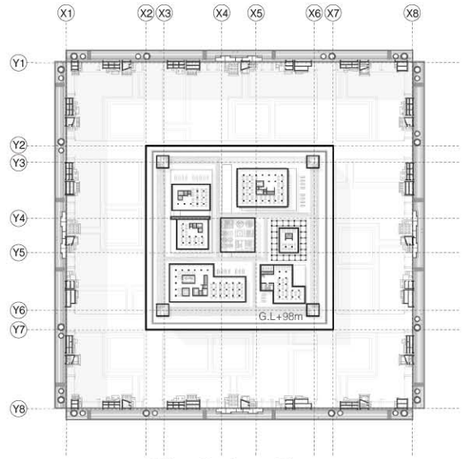
Installation Process

Residential part after installation completed



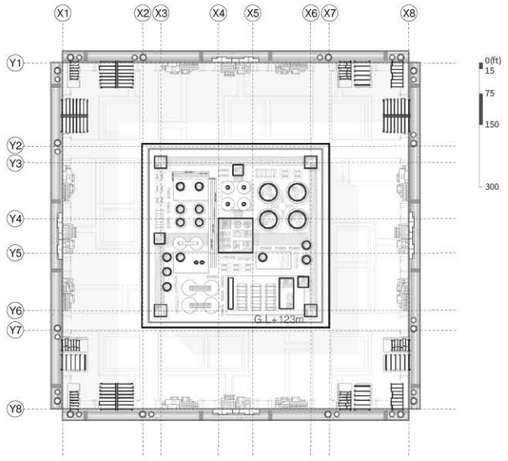
Commercial Package Plan

A Total Of 900 Shops including Grocery & Daily Necessity Store



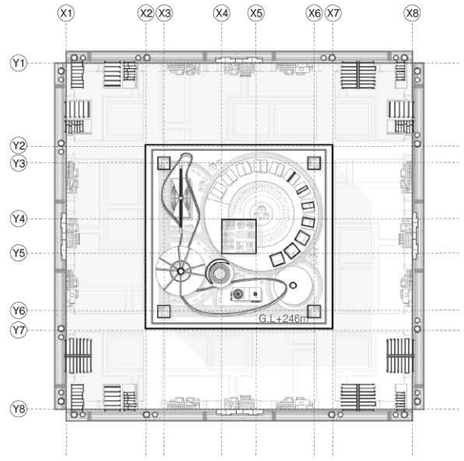
Office Package Plan

Office Complex Where Residents Can Work



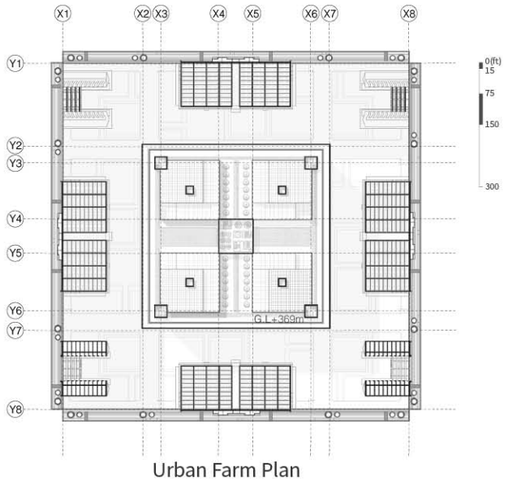
Factory Package Plan

Factory That Porduces Food/ Clothing/ Electronic Etc



School & Public Park Package Plan

School and Public Park For Accomodate Residents



Urban Farm Plan

Cultivate Cabbage/ Onion/ Carrot/ Tomato Etc

Plan

The plan can be divided into five types. From the bottom, the order is Commercial, Office, Factory, Public Park, School and Urban Farm.
Vertical movement of the tower is possible through 4 huge core structures.

Application of City Package

The city package can be installed in any area where urban infrastructure is required. To show the application process, an arbitrary region was selected. It is divided into three main processes, phase I, phase II, phase III.
It will drastically reduce the time it takes to build a new city and quickly solve the problem of overpopulated cities.

Investigation

Find areas where urban infrastructure is needed and survey the terrain. Check the installable area and spacing and move the city package for installation. Then, the moving process proceeds.

Phase I

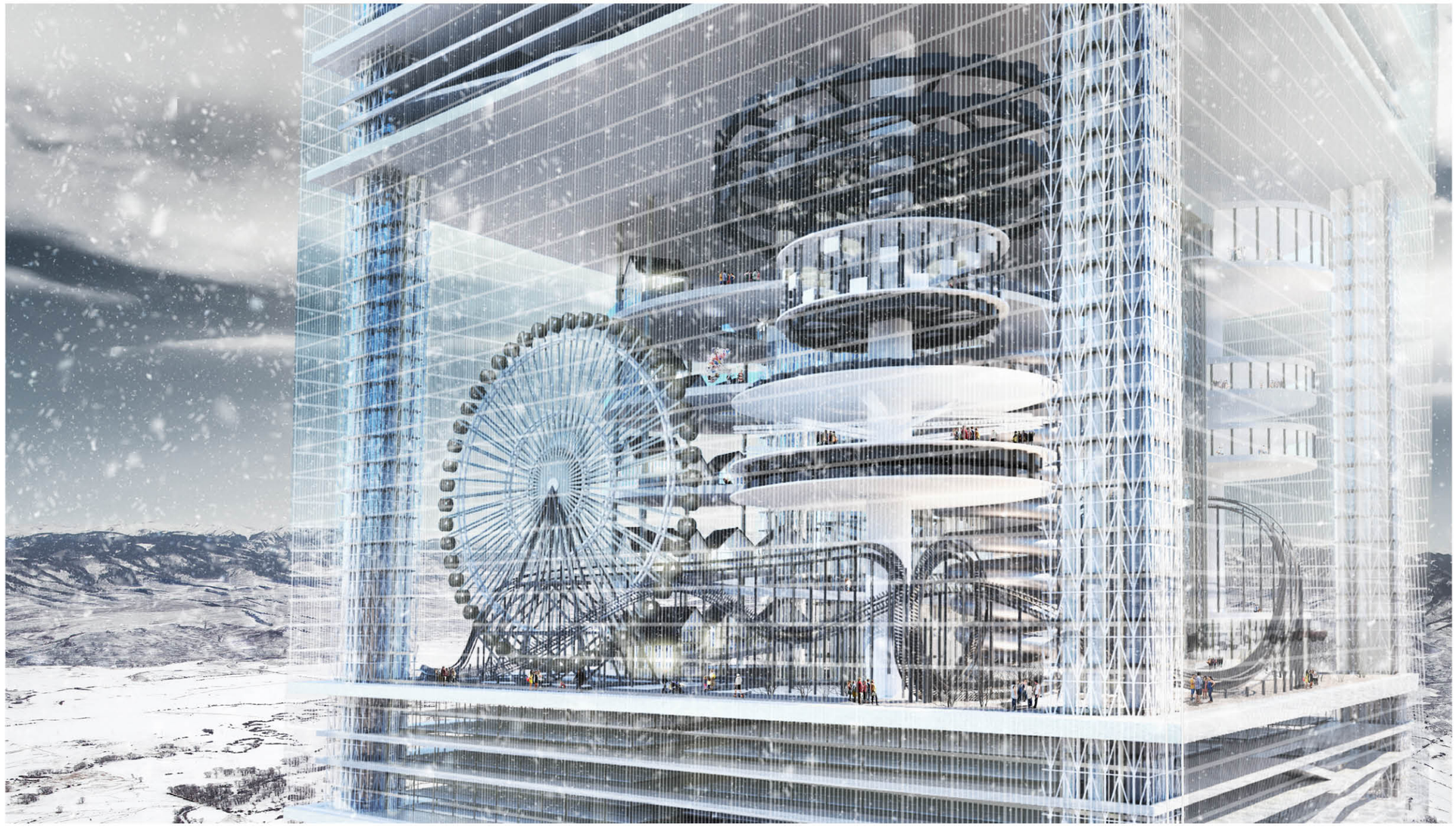
After arranging the moved buildings according to the layout, the opening process begins in earnest.

Phase II

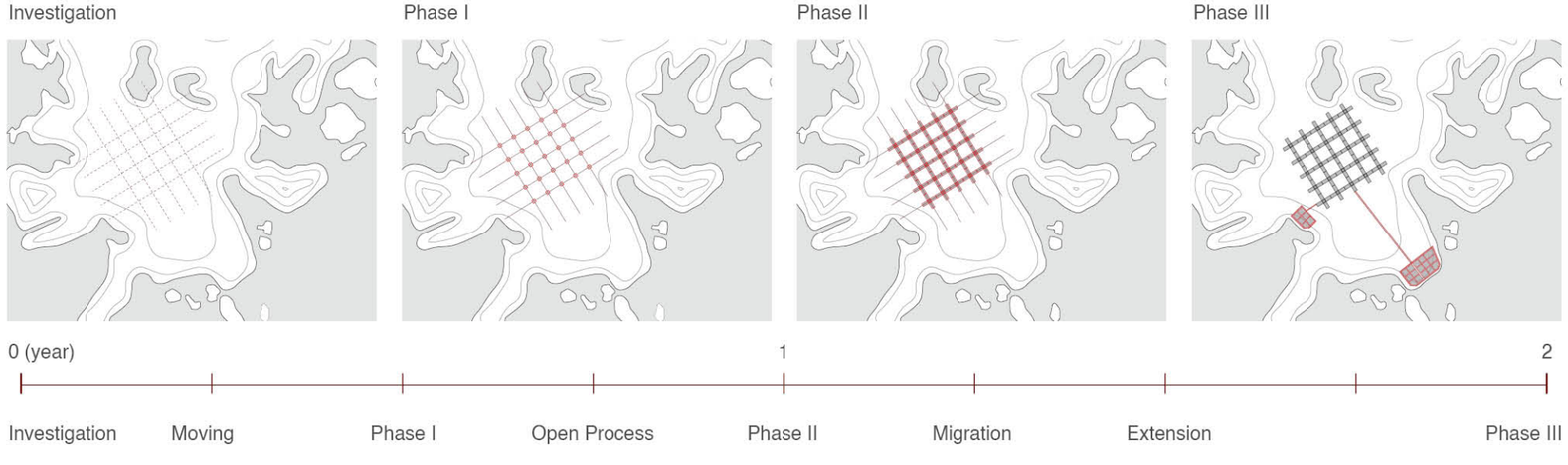
After the completion of the installation, connect the living spaces through the opening. Next, migration from the surrounding overpopulated area begins.

Phase III

Due to the new city, expansion occurred to the surrounding where the city for the supply of goods. After that, this is expected continued expansion.



Target Place



33

Competition Work III

S S S A A A N N N [SAN Museum Pavillion]

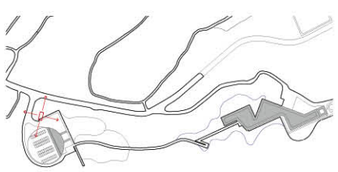
Year	02. 2017 - 03.2018
Location	SAN museum, Seoul Station
Category	SAN Museum Pavillion Competition for Pyenchang Olympic_ 1st Prize
Role	Team member_Idea, Render, Drawing
Jury	Tadao Ando, SAN museum

This project is a pavilion contest for the promotion of the Museum SAN for the 2018 Pyeongchang Olympics. The pavilion was designed to contain the composition of the museum as much as possible while keeping the area according to the competition regulations. It took about two years to build after winning.

Site I

SAN Museum Entrance Graden

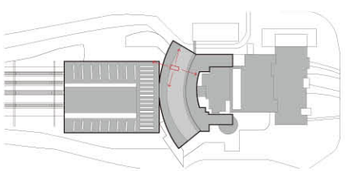
The existing public relations hall was built near the entrance to the museum. The design was done with the Museum SAN in mind.



Site II

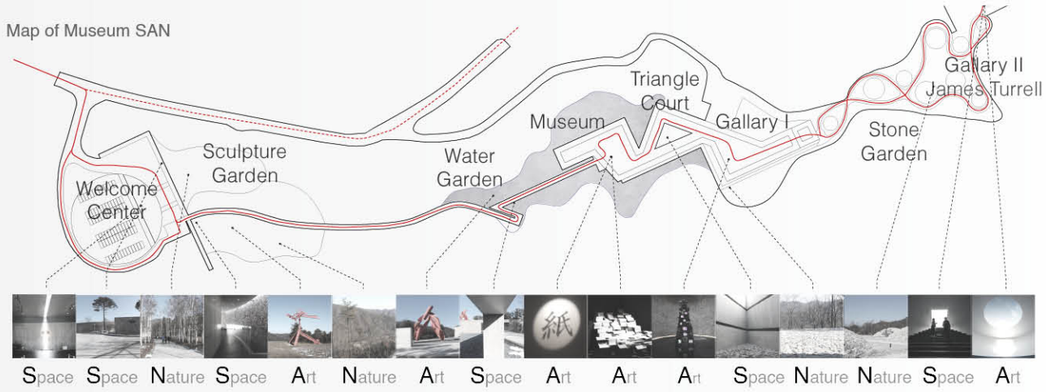
Seoul Station Main Hall

Moved the pavilion to Seoul Station with a lot of floating population in line with the Olympic promotion



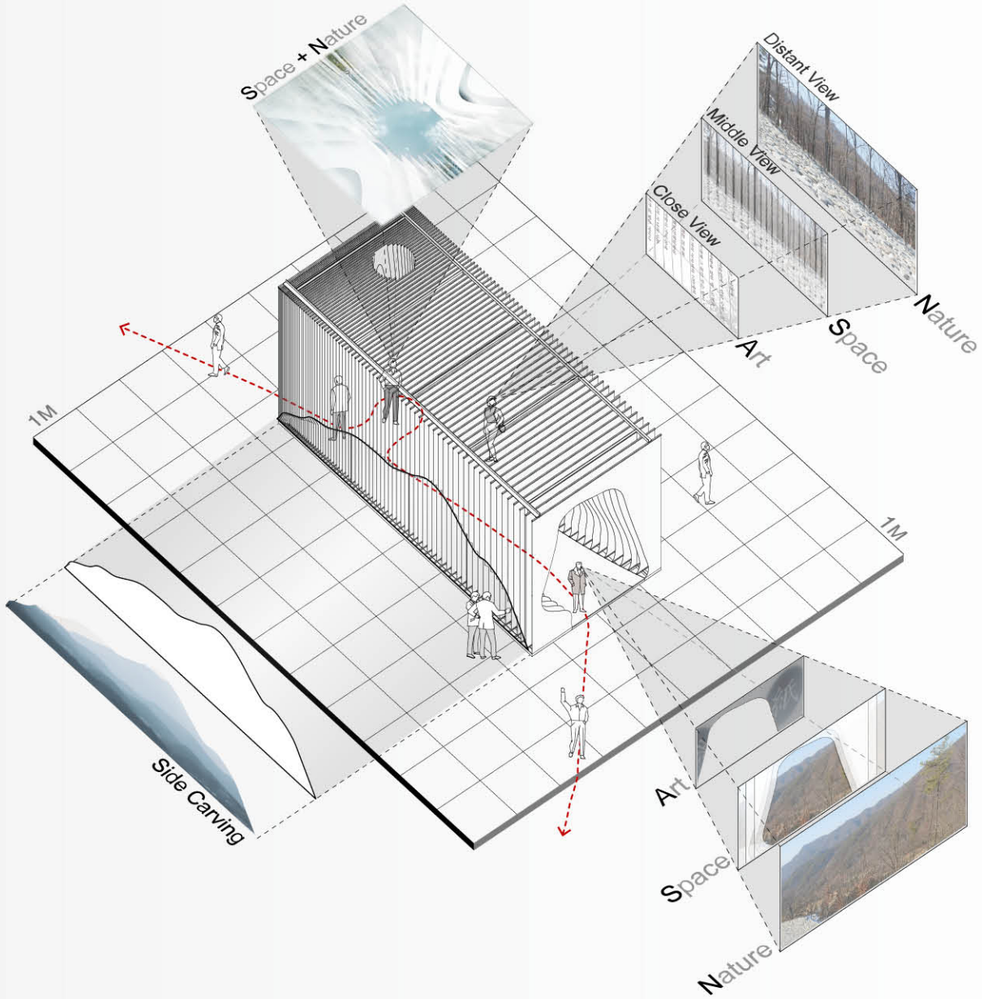
Pavilion Concept

SAN means mountain in Korean. SAN museum uses this as the meaning of the abbreviation ; Space Art Nature. These are the largest component of a museum SAN, can be seen in the museum's master plan.



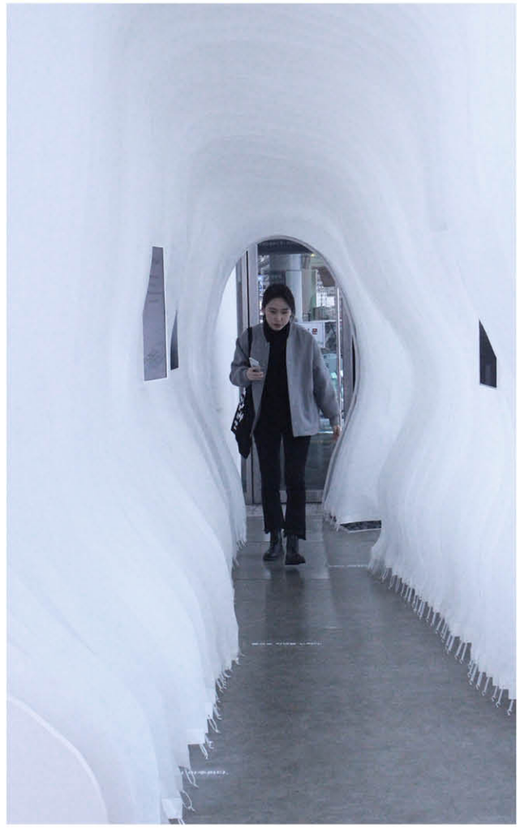
Proposal of SSSAAANNN

- Repetition and intersection of Space, Nature and Art.



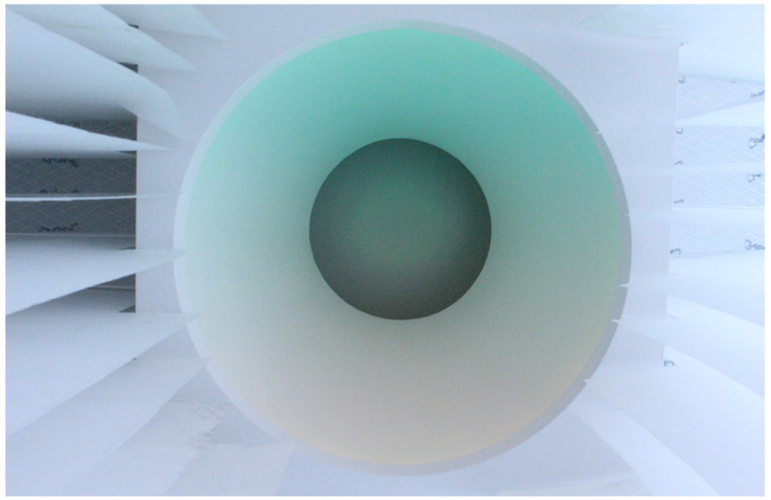
Layers

Through this arrangement of thin layers repeatedly, we tried to construct small SAN to recreate the impression of space inside the pavilion(Space), the art engraved in the layers(Art), and the nature seen between the layers(Nature).

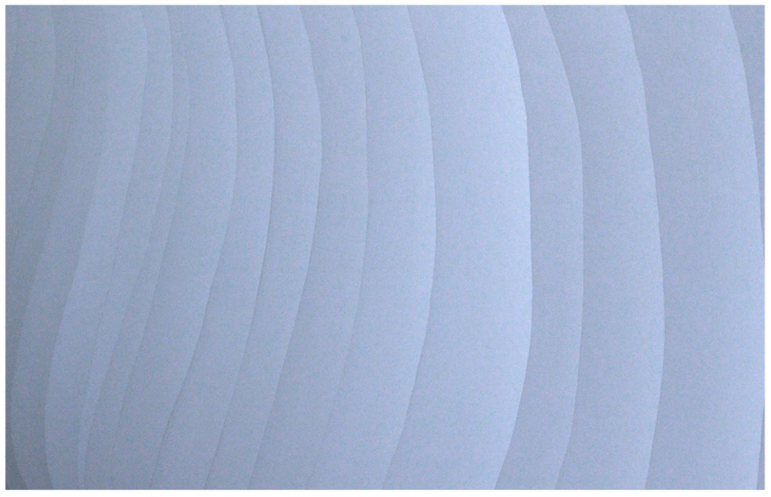


Entrance and Exit

As you go from the entrance to the exit, the size of the opening decreases and you can see the space that expands again when you go outside.



Ceiling Material

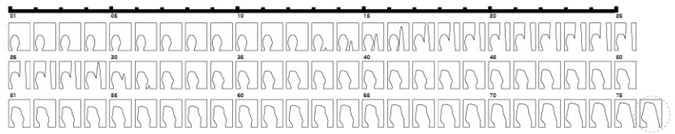


Layers Material

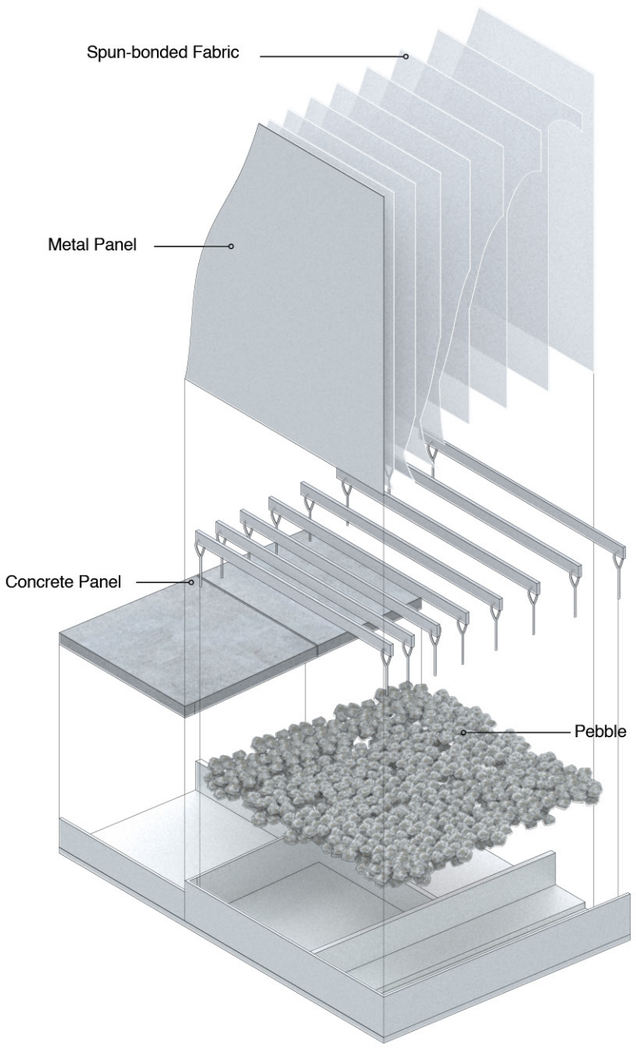
Floor Material

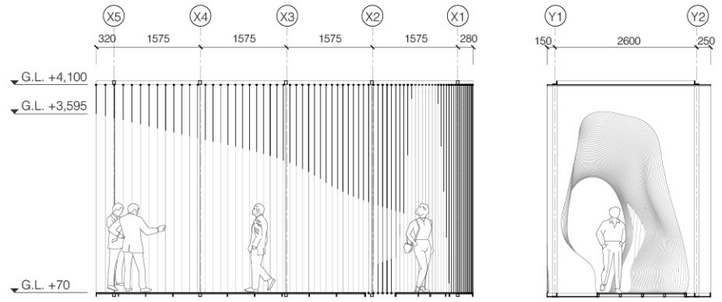
Material - Layer

When choosing a material for layer, we chose a material that does not torn well and does not get dirty in practical terms. The more important feature that we considered was the selection of translucent materials that can make people see the overlay of the layers. This would give the user a new sense of space.

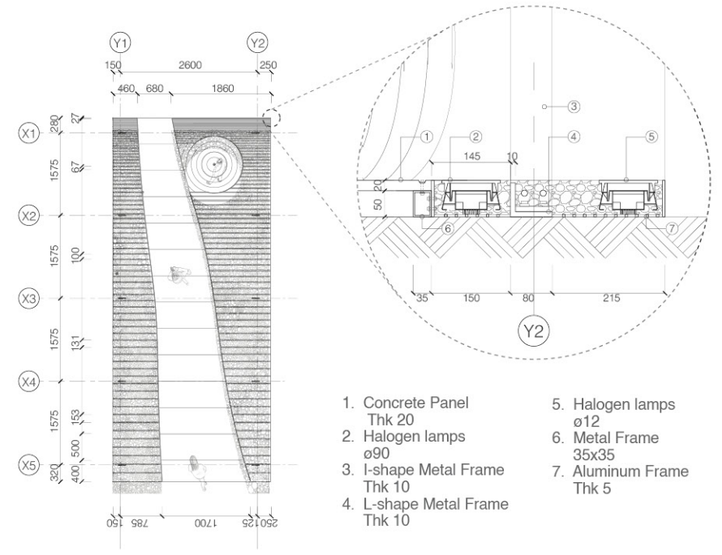


Layers Order



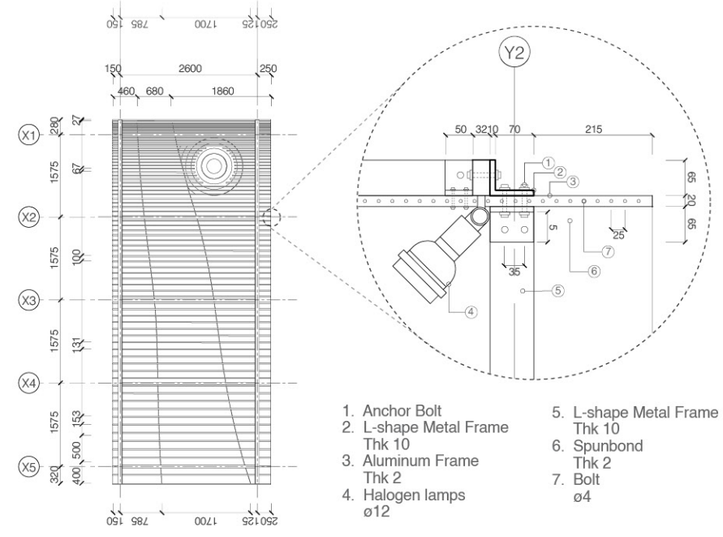


Elevation



1. Concrete Panel Thk 20
2. Halogen lamps ø90
3. I-shape Metal Frame Thk 10
4. L-shape Metal Frame Thk 10
5. Halogen lamps ø12
6. Metal Frame 35x35
7. Aluminum Frame Thk 5

Plan F.L+ 5ft



1. Anchor Bolt
2. L-shape Metal Frame Thk 10
3. Aluminum Frame Thk 2
4. Halogen lamps ø12
5. L-shape Metal Frame Thk 10
6. Spunbond Thk 2
7. Bolt ø4

Plan - Roof

Professional Work I

House in Naegok-dong

[3-story house for a family]

Year	2018.01-2018.11
Location	Naegok-dong in Korea
Type	House
Category	Professional work
Company	2105 Desing Studio

This project is a housing project where I worked as a junior architect in a design studio and assisted from the initial design stage to drawings, construction, and supervision. It is a three-story house including a basement for a family of 8 people in 3 generations. One senior architect and I oversaw all aspects of the building design, detailing, and completion.

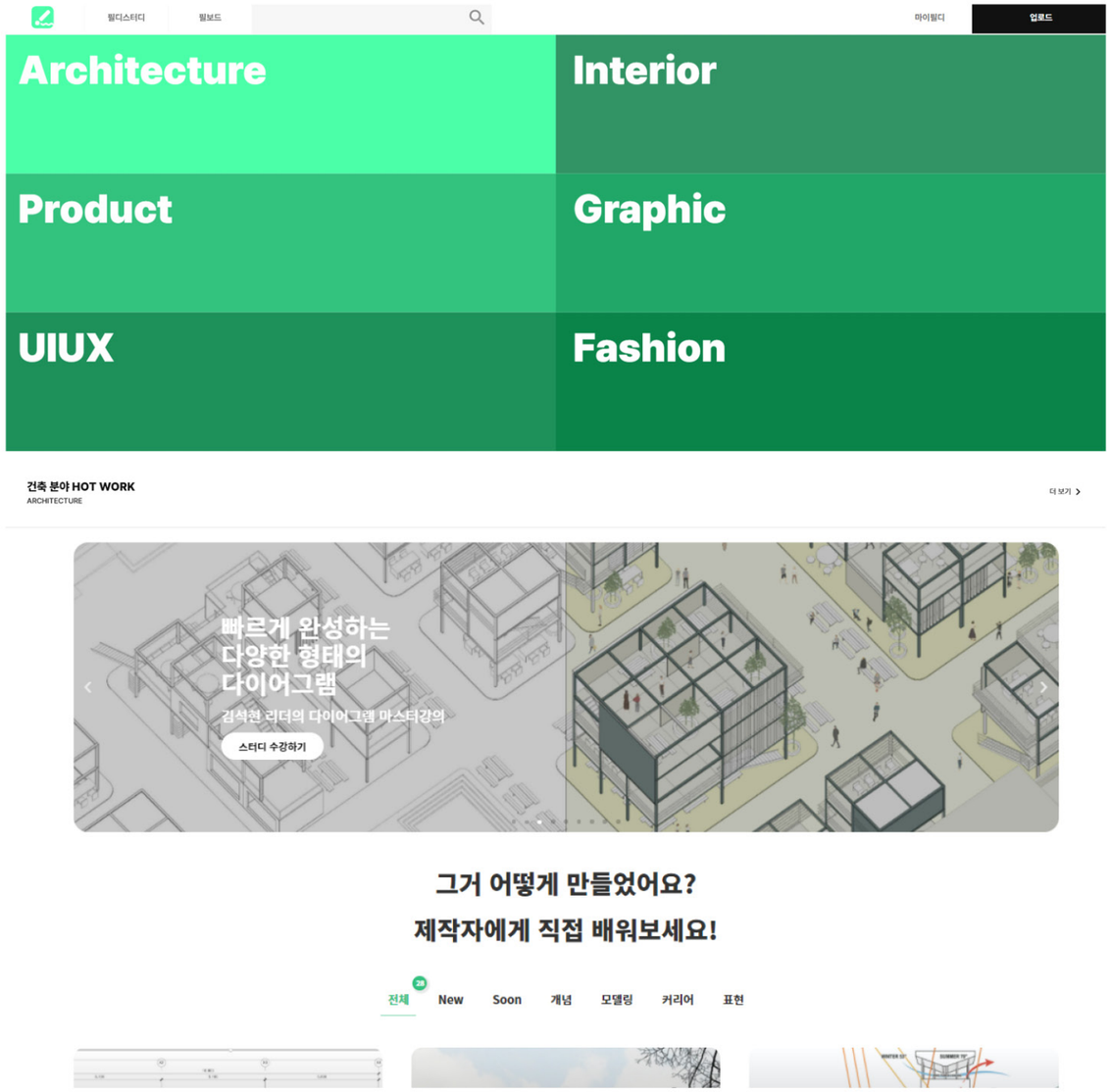
Professional Work II

Townhouse In Bundang

[A townhouse consisting of 19 households.]

Year	2018.04-2020.11
Location	Bundang in Korea
Type	Townhouse
Category	Professional work
Company	2105 Desing Studio

The project took part in the early stages of designing a townhouse for 19 households. It was carried out through design collaboration with Keisuke Maeda of Japan and worked together on the project until the design was finalized and construction began. I participated from the initial design stage, drawing drawings, and proceeded with the initial process of building construction. The picture is after completion.



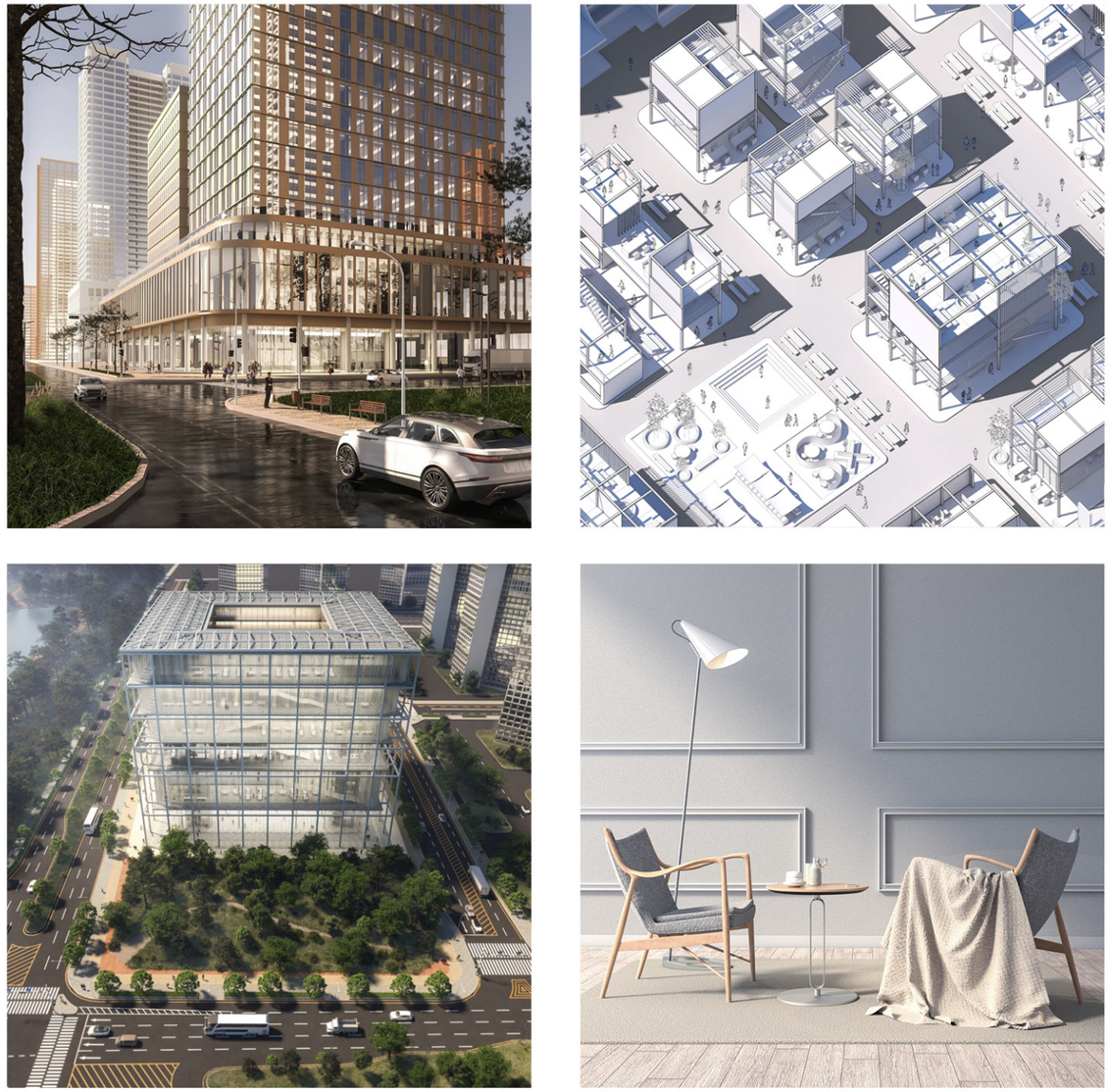
Other Work I

Feeel:D

[Start-up Company]

Year	2020.03-2021.12
Role	Director
Category	Other work
Company	Feeel:D

Feeeld is both an online and offline platform where people in the architecture field can not only freely build networks but also share information and project content. I co-founded this startup company with 2 people in 2020. Feeeld has become one of the largest online architectural community sites in South Korea. I have stepped down from the position of chief executive and am currently focusing on pursuing my academic career.



Other Work II

Software Instructor

[Rhino, V-ray, Sketchup, Ilustrator, Photoshop, Cad]

Year	2019.01-2021.12
Type	Teaching
Category	Other work
Company	Lectus, Taling, feeeldstudy

Since 2019, I have been teaching architecture-related software through various educational platforms. I mainly taught how to effectively use architectural software such as Rhino, Cad, V-ray, Photoshop, and Illustrator for students and junior architects. After Corona, lectures at all companies have been changed to online recorded lectures, and now I am only participating in Q&A.