

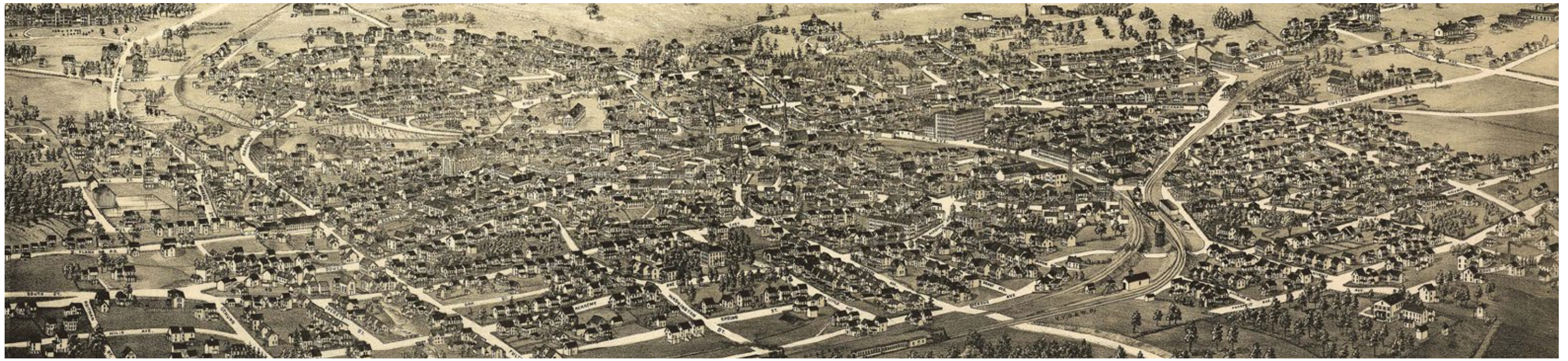
NY WONDERLAND

Reconstruction of Farley Building, New York Manhattan



Zhuyan Shan
4924215
P5.0 Jun 2021







1776



1836



1776



1836



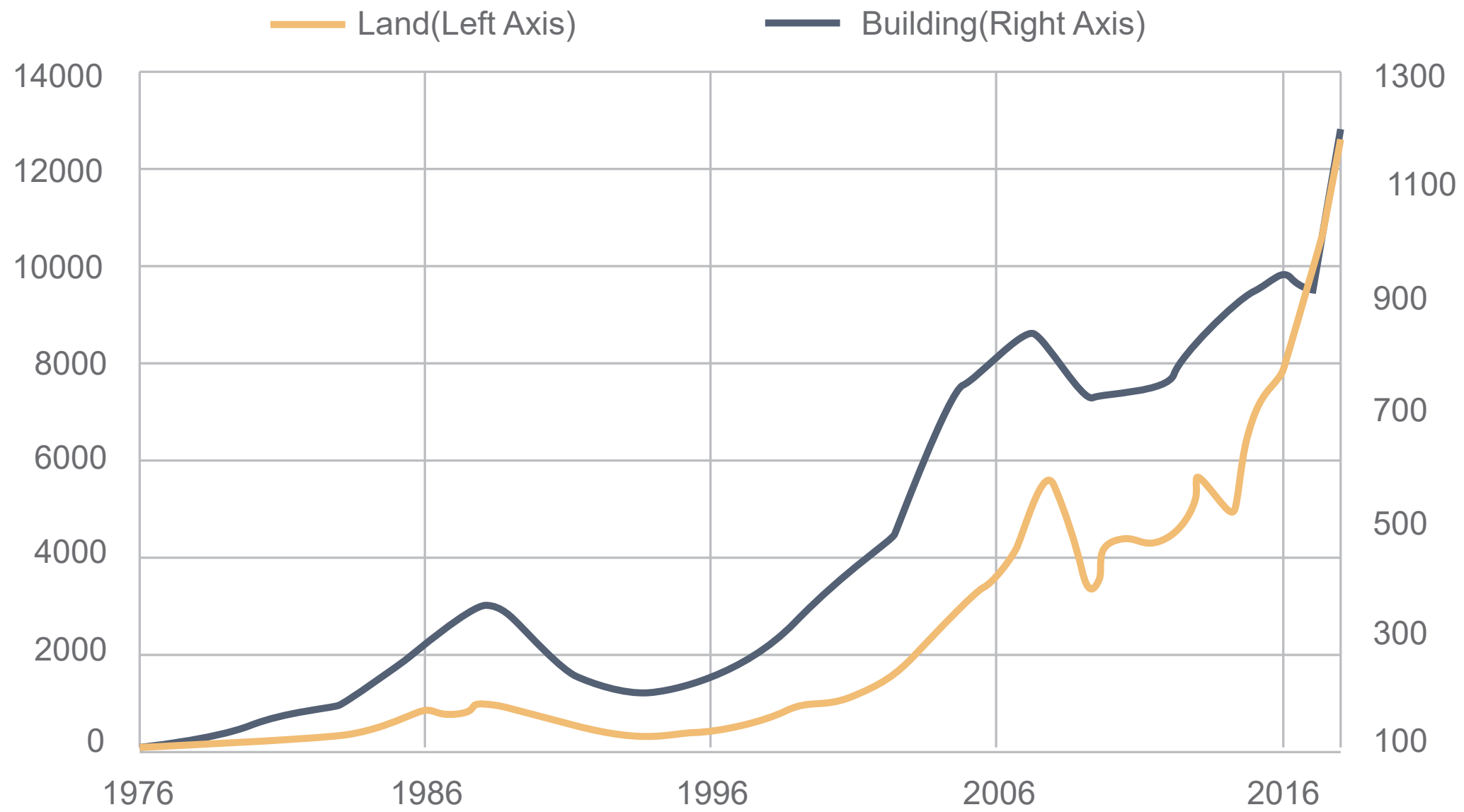
2019



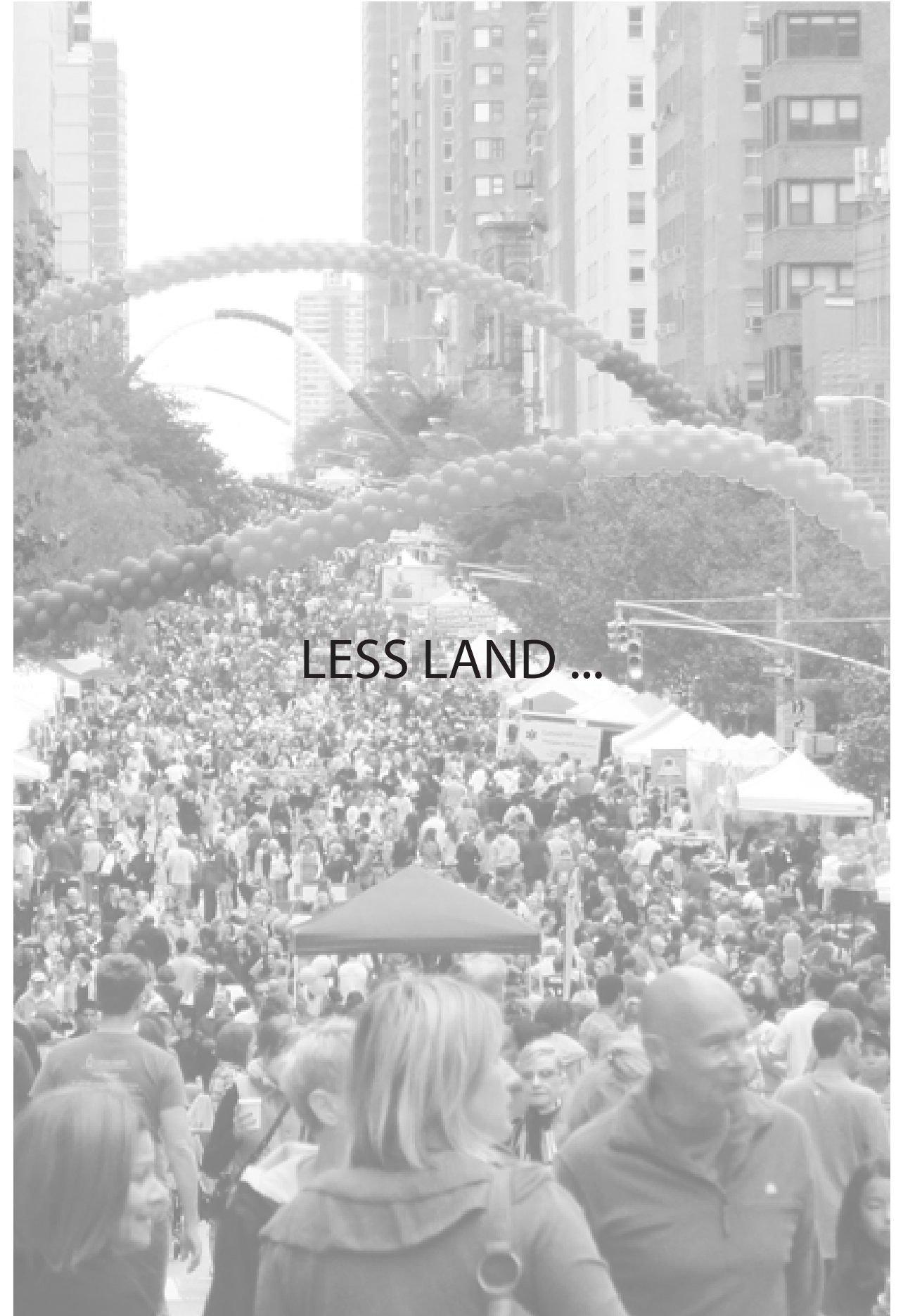
1776



CITY IS GROWING MORE DENSIFIED..



LAND VALUE AND BUILDING VALUE IN NY



LESS LAND ...



MORE ACTIVITIES ...



Research Question

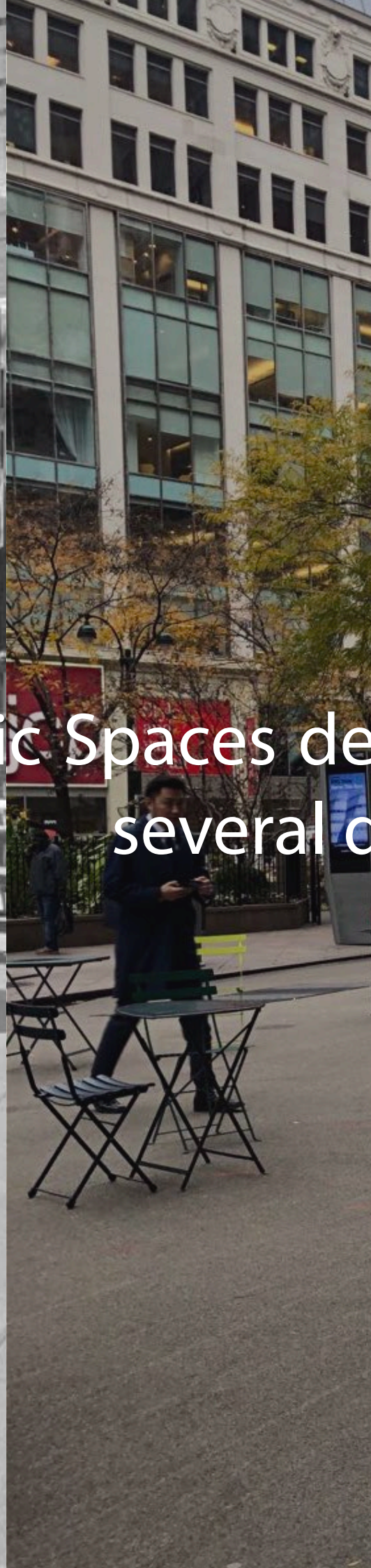
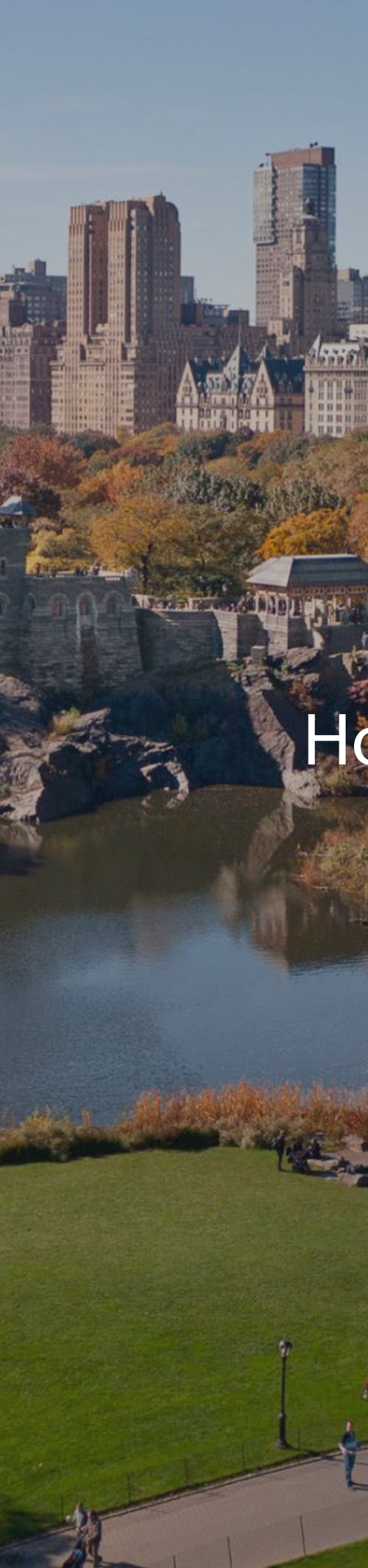
How and where can public spaces be integrated in the future city, considering the highly densified urban environment such as New York?

RESEARCH & ANALYSIS

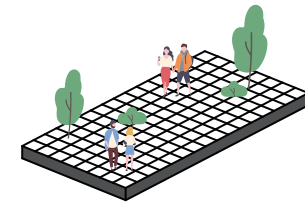
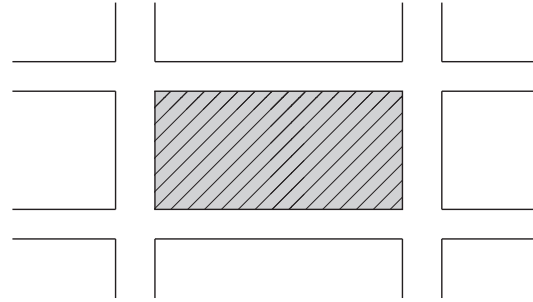
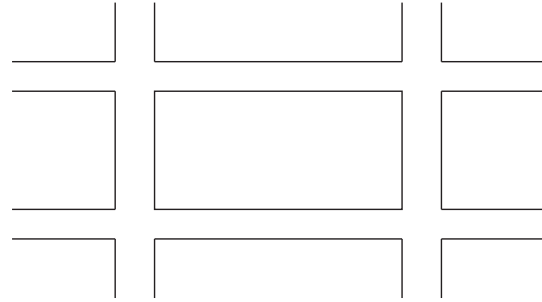


PUBLIC SPACE

How did Public Spaces develop in New York in past several decades?



1811-1960
Grid

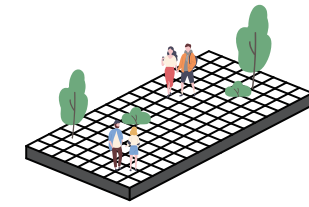
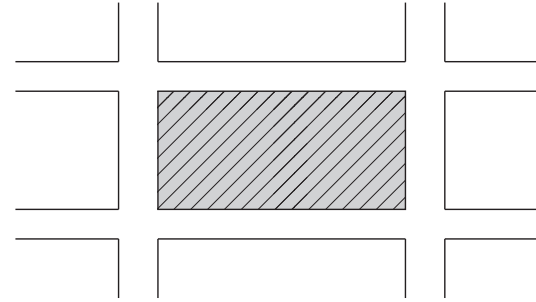
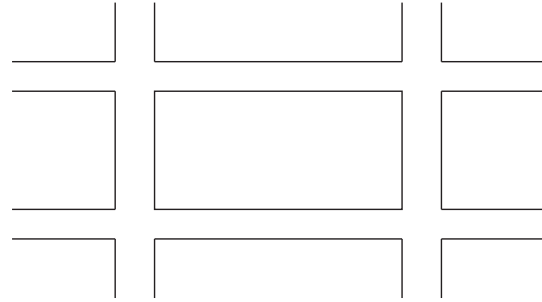


Design Follows Grid

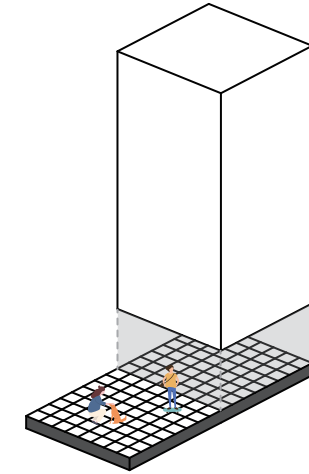
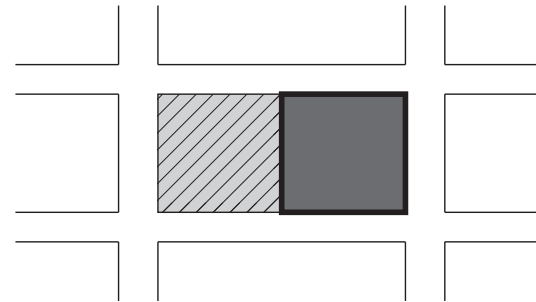
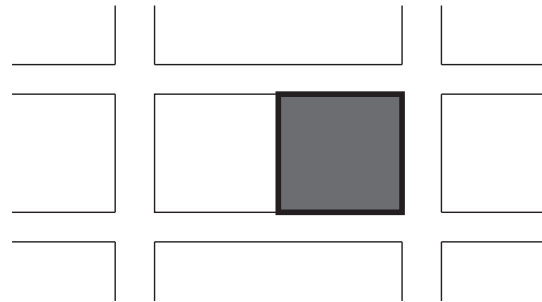


Central Park
1850

1811-1960
Grid



1961-1980
Building

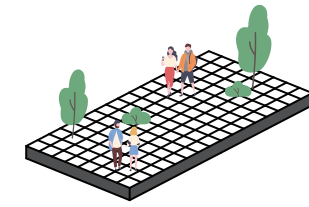
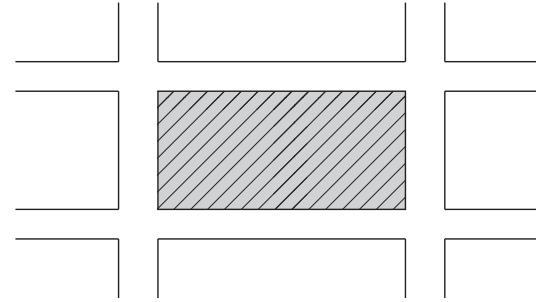
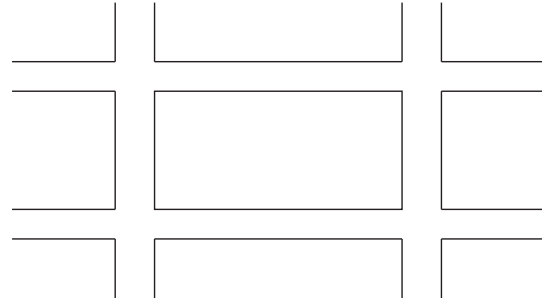


Design Follows Building

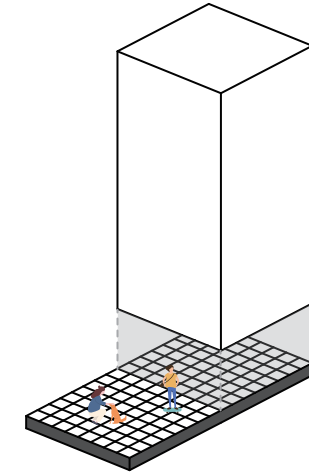
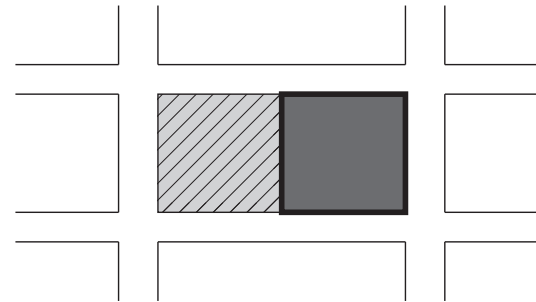
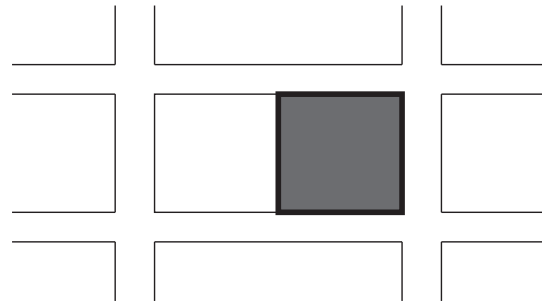


Seagram Building Square
1958

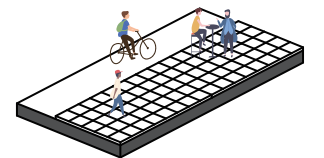
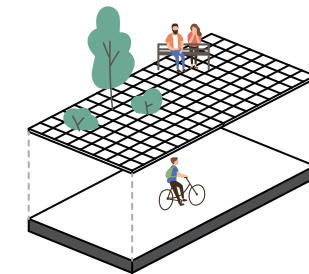
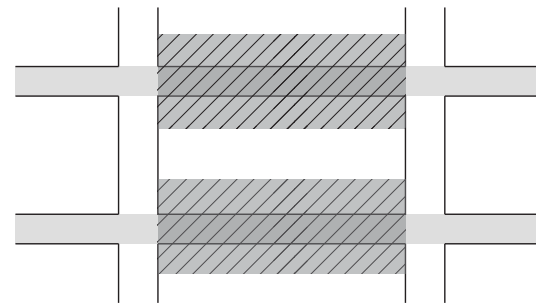
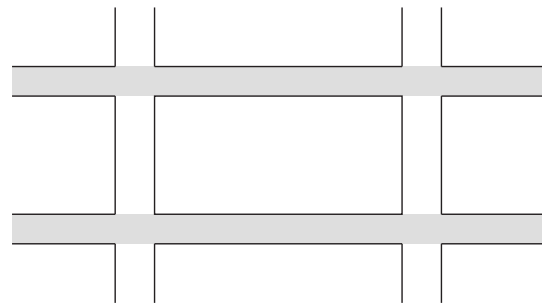
1811-1960
Grid



1961-1980
Building



1981-2020
Requirement



Design Follows Requirement

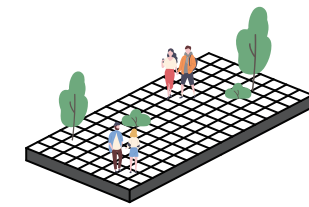
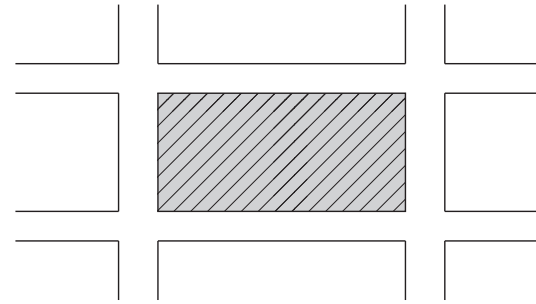
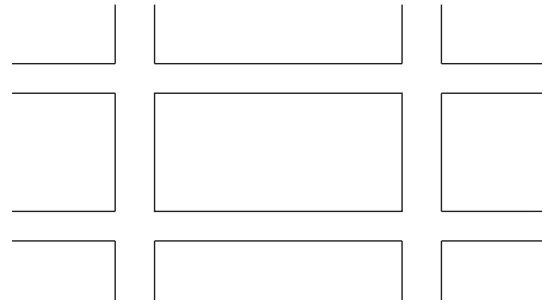


High Line Before Renovation
1985

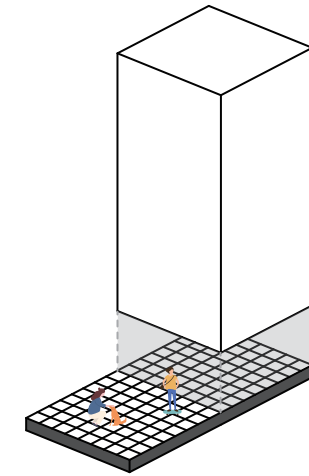
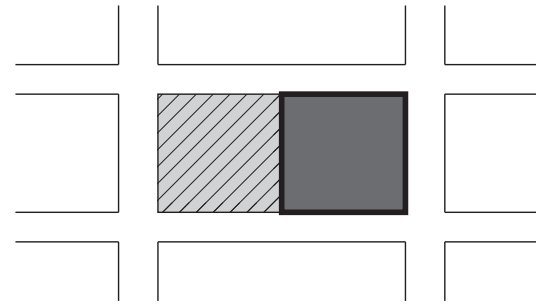
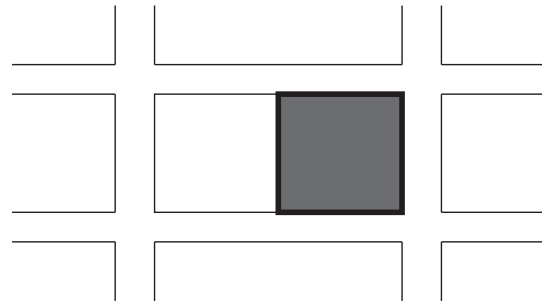


High Line After Renovation
2012

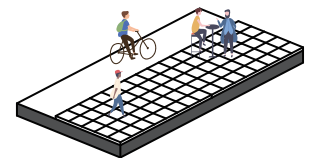
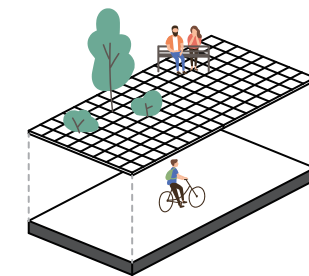
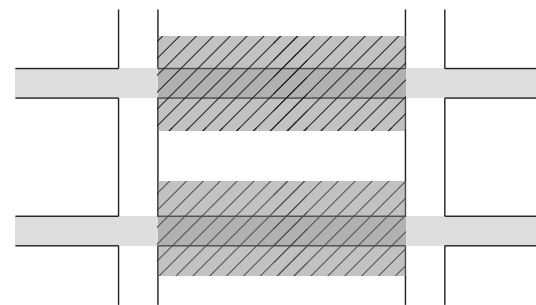
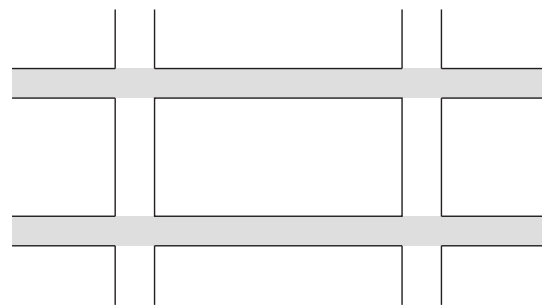
1811-1960
Grid



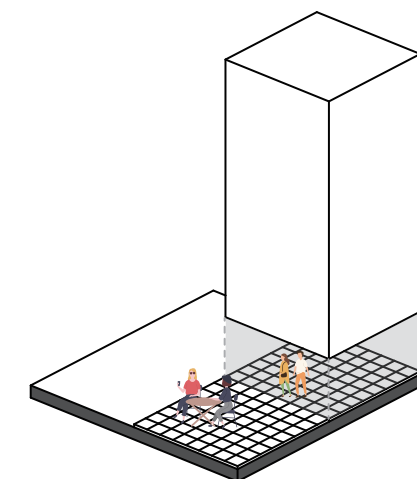
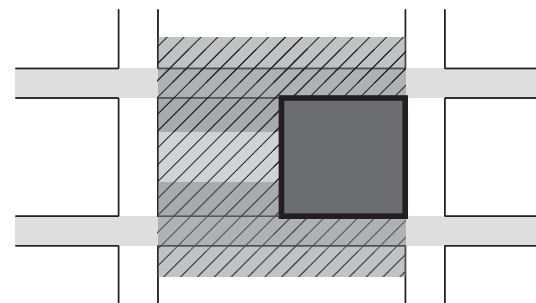
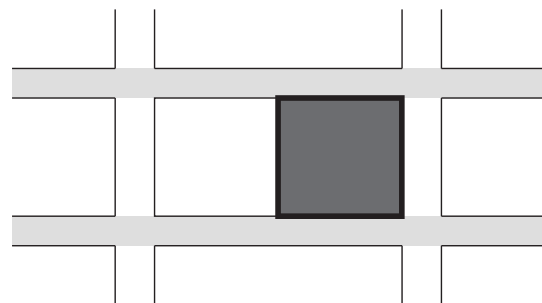
1961-1980
Building



1981-2020
Requirement



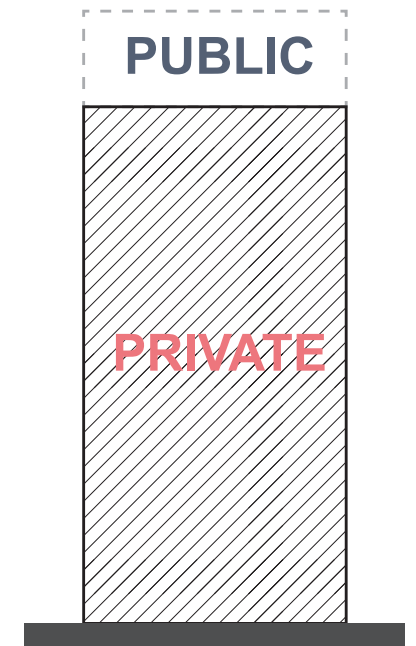
2020-
Planning



Design Follows Planning

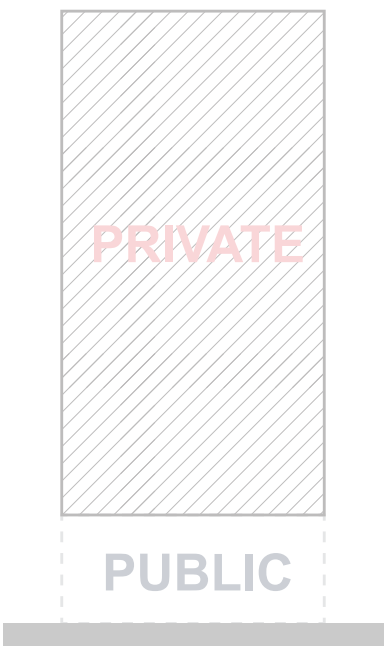


ROCKFELLER CENTER

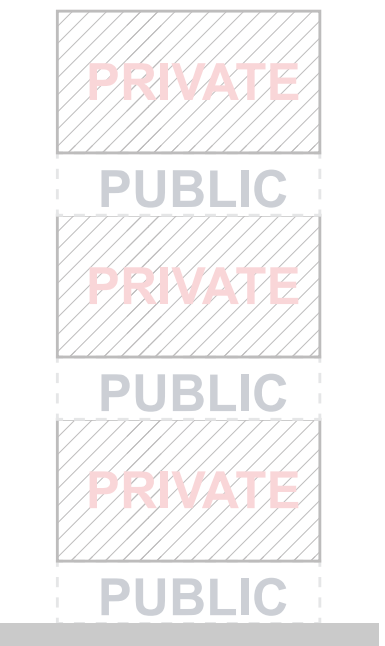


OBSERVATION DECK

Since Skyscraper



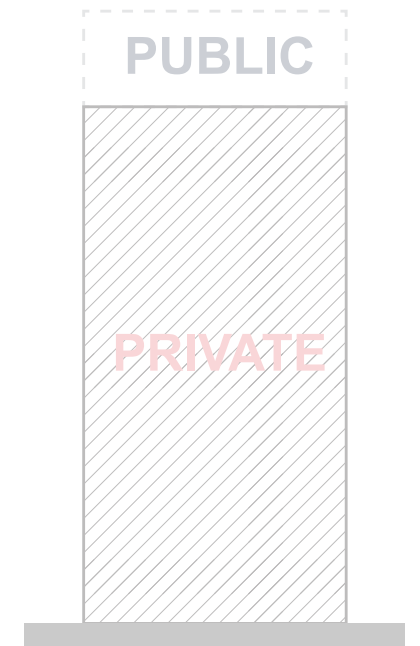
OPENNING ATRIUM



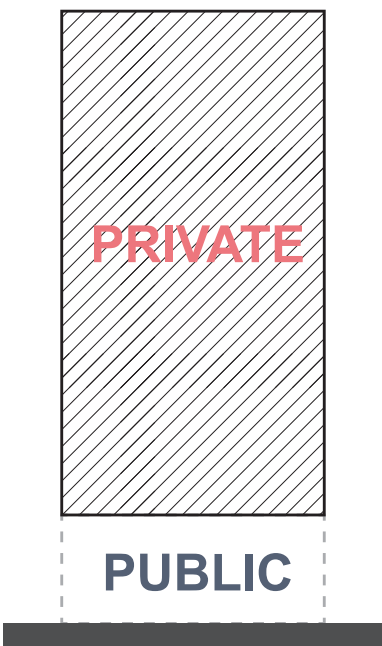
STEPPING TERRACE



FORD FOUNDATION BUILDING

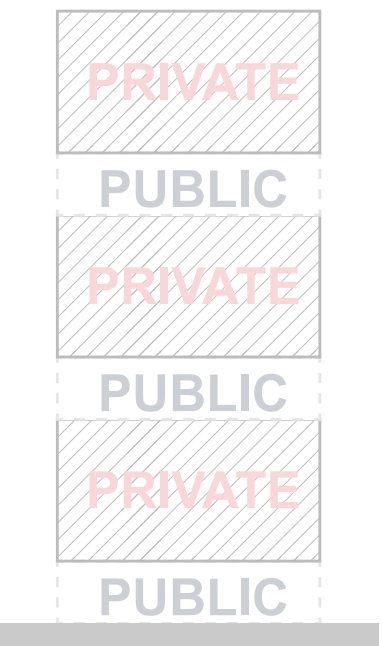


OBSERVATION DECK



OPENNING ATRIUM

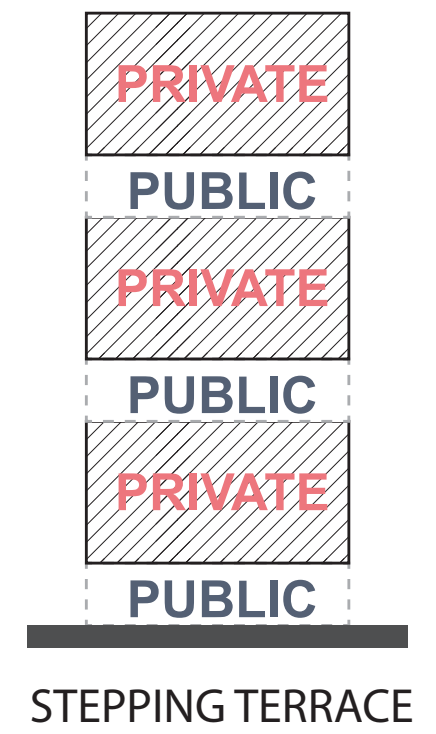
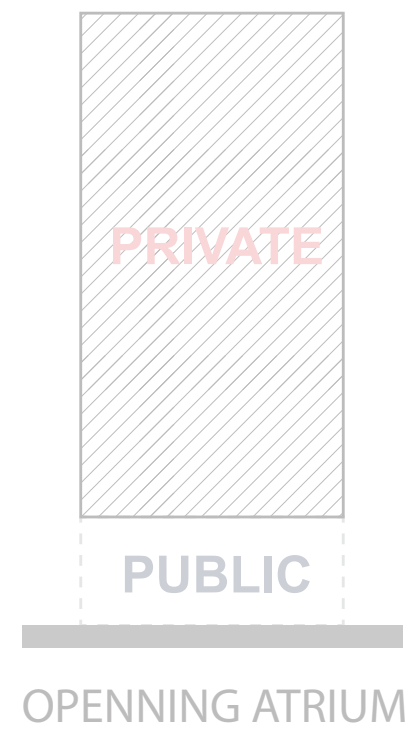
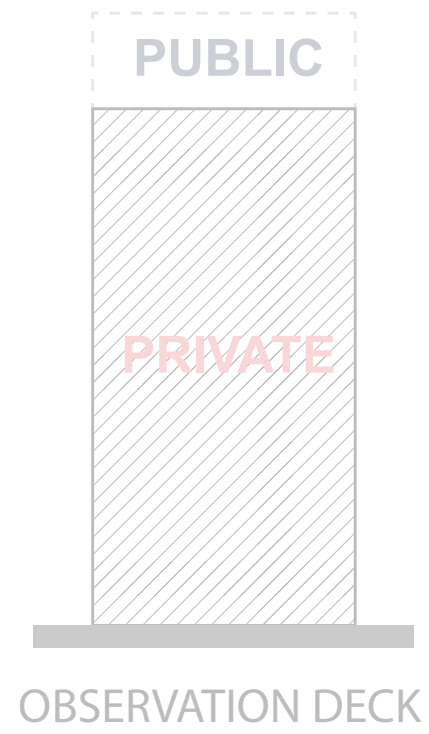
Since 1960

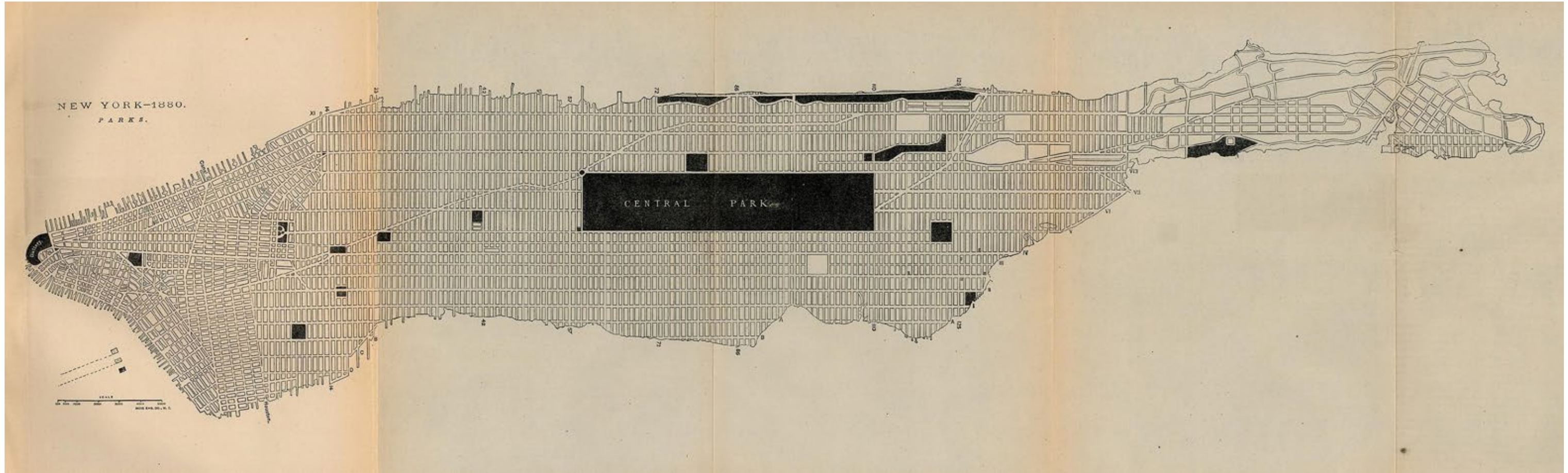


STEPPING TERRACE

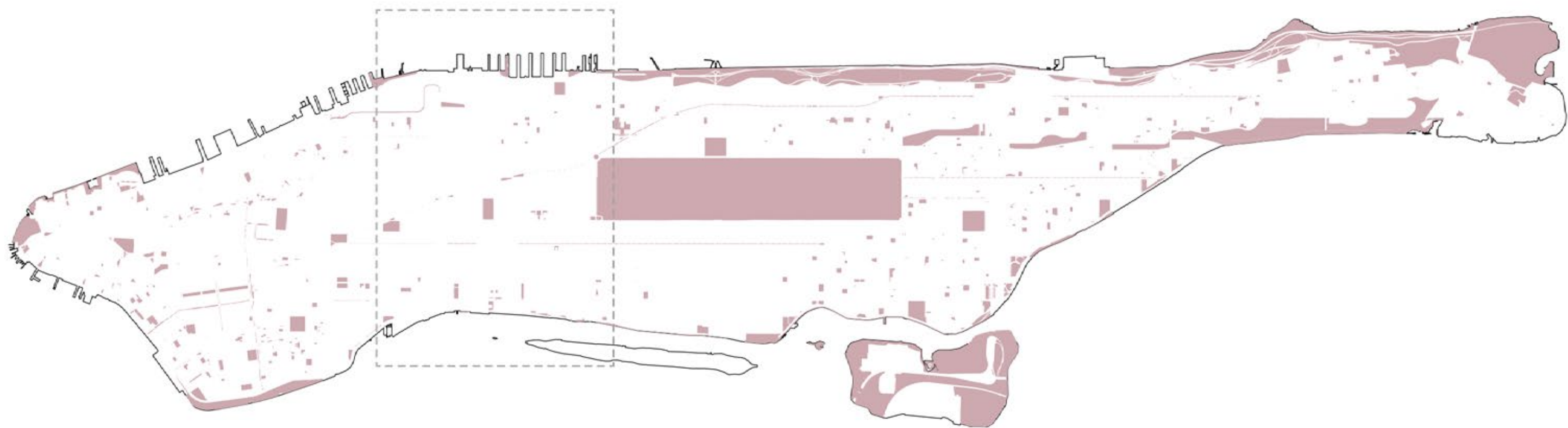


2 WORLD TRADE CENTER, BIG

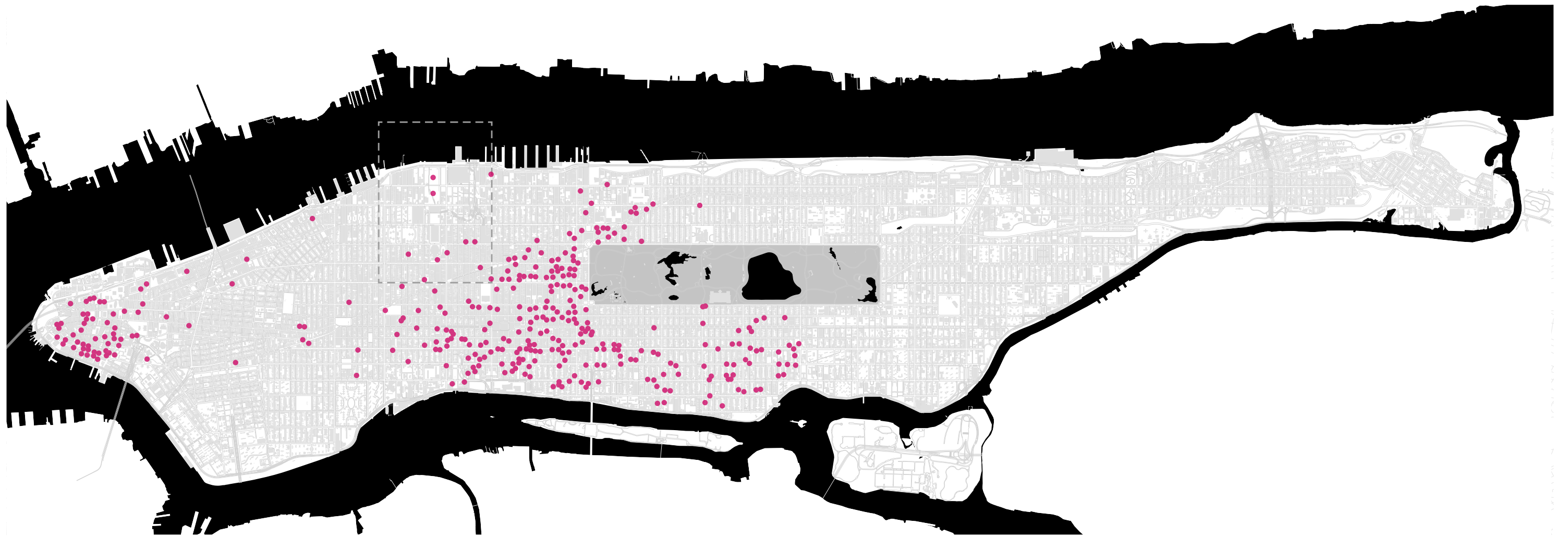




New York Parks Mapping
1880



New York Public Space Mapping
2019



New York POPS Mapping
2019

Conclusion

POPS will be the the most important type of public spaces in future New York.



POPS



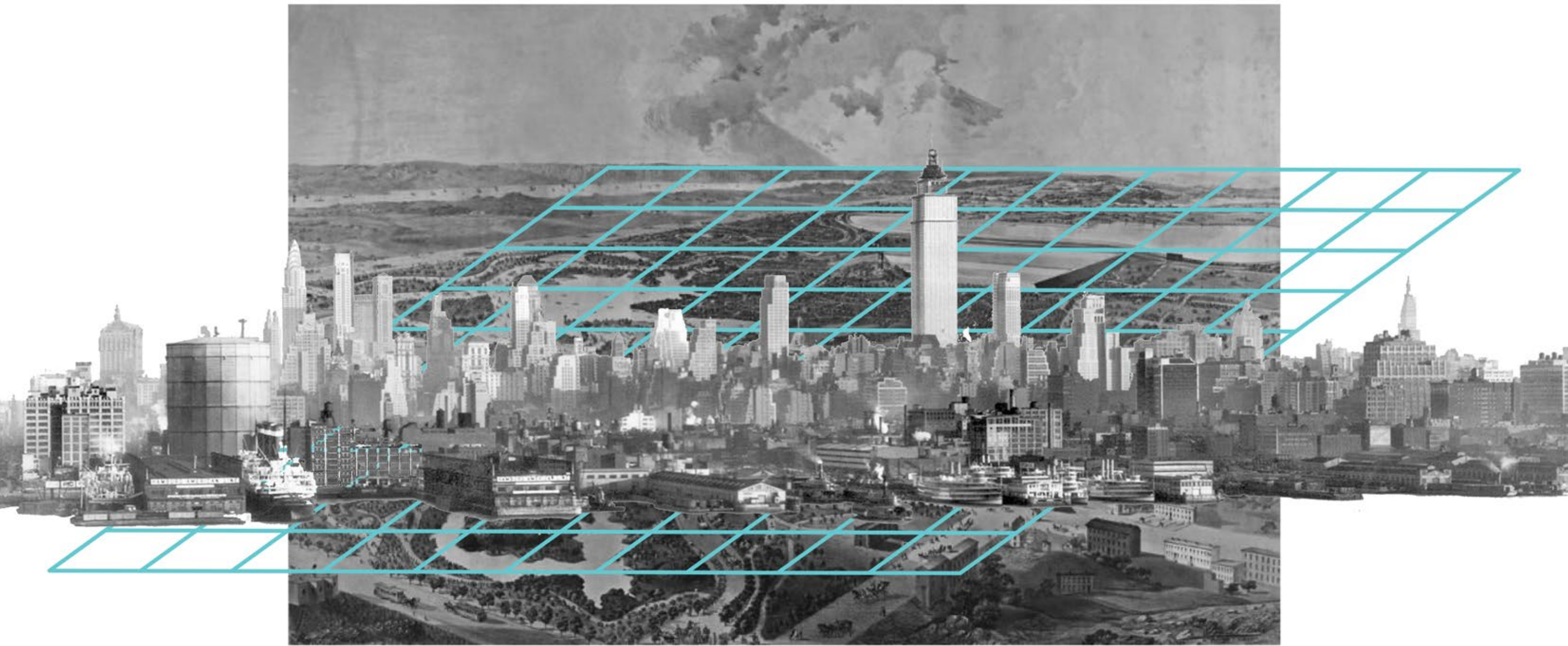


POPS

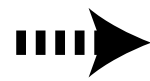
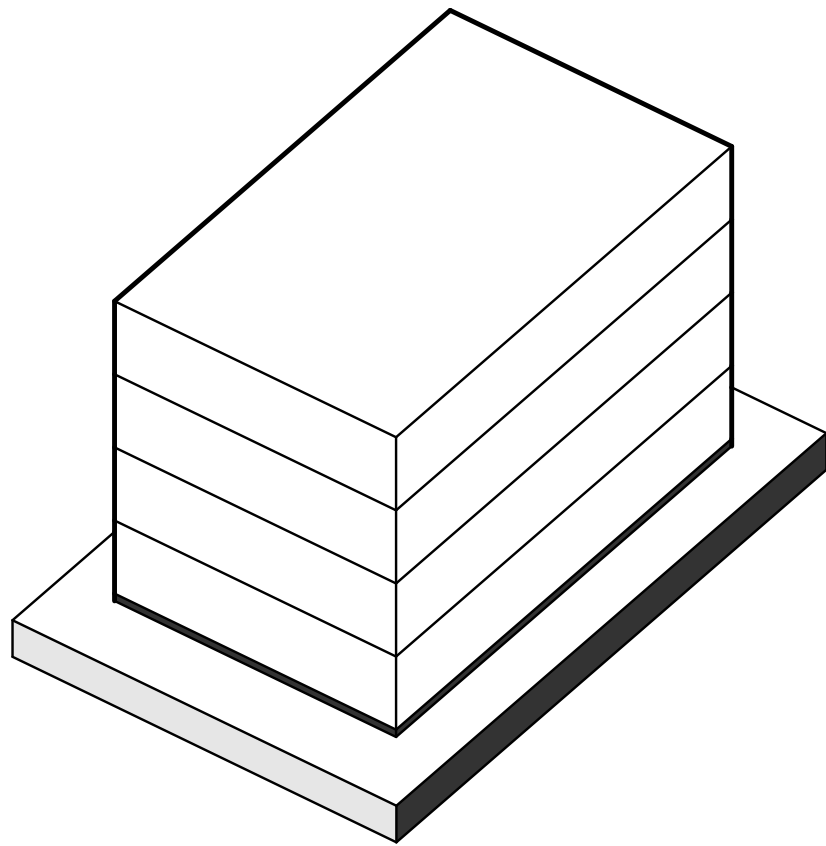
PRIVATELY OWNED PUBLIC SPACE



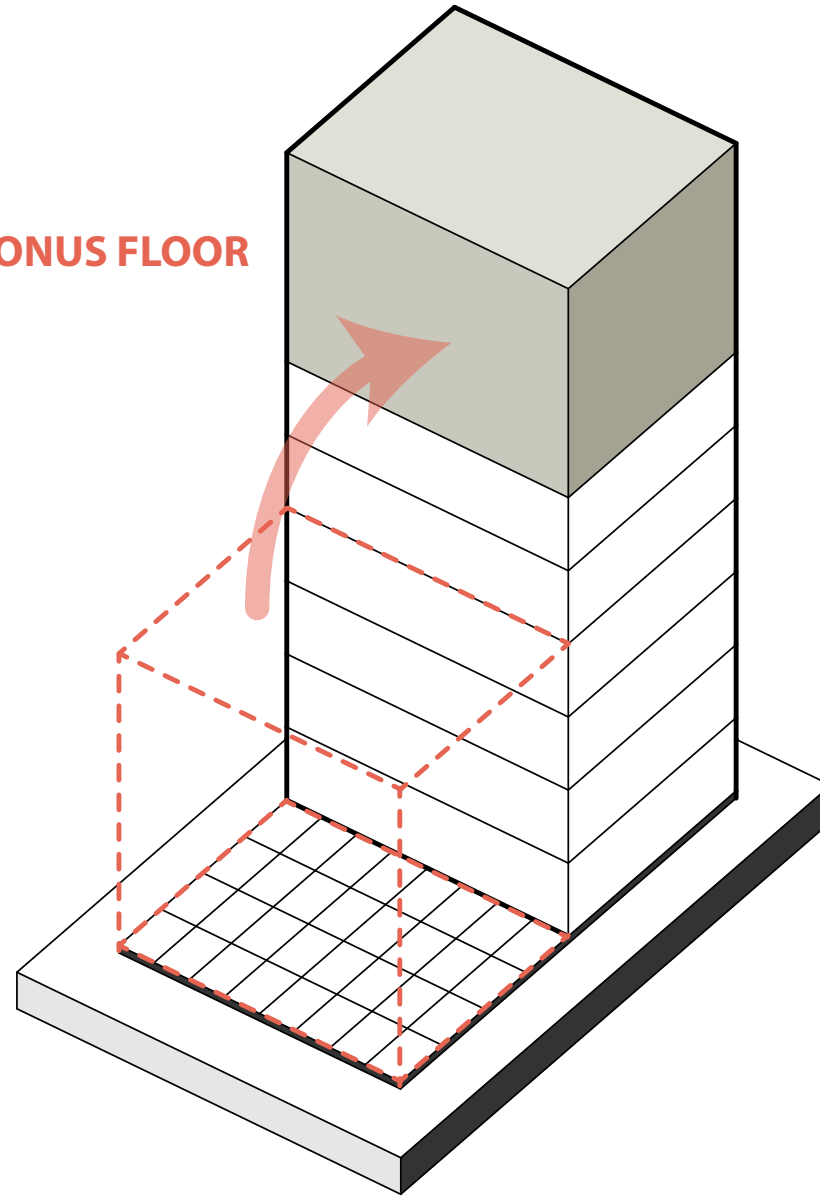
How did POPS appear?



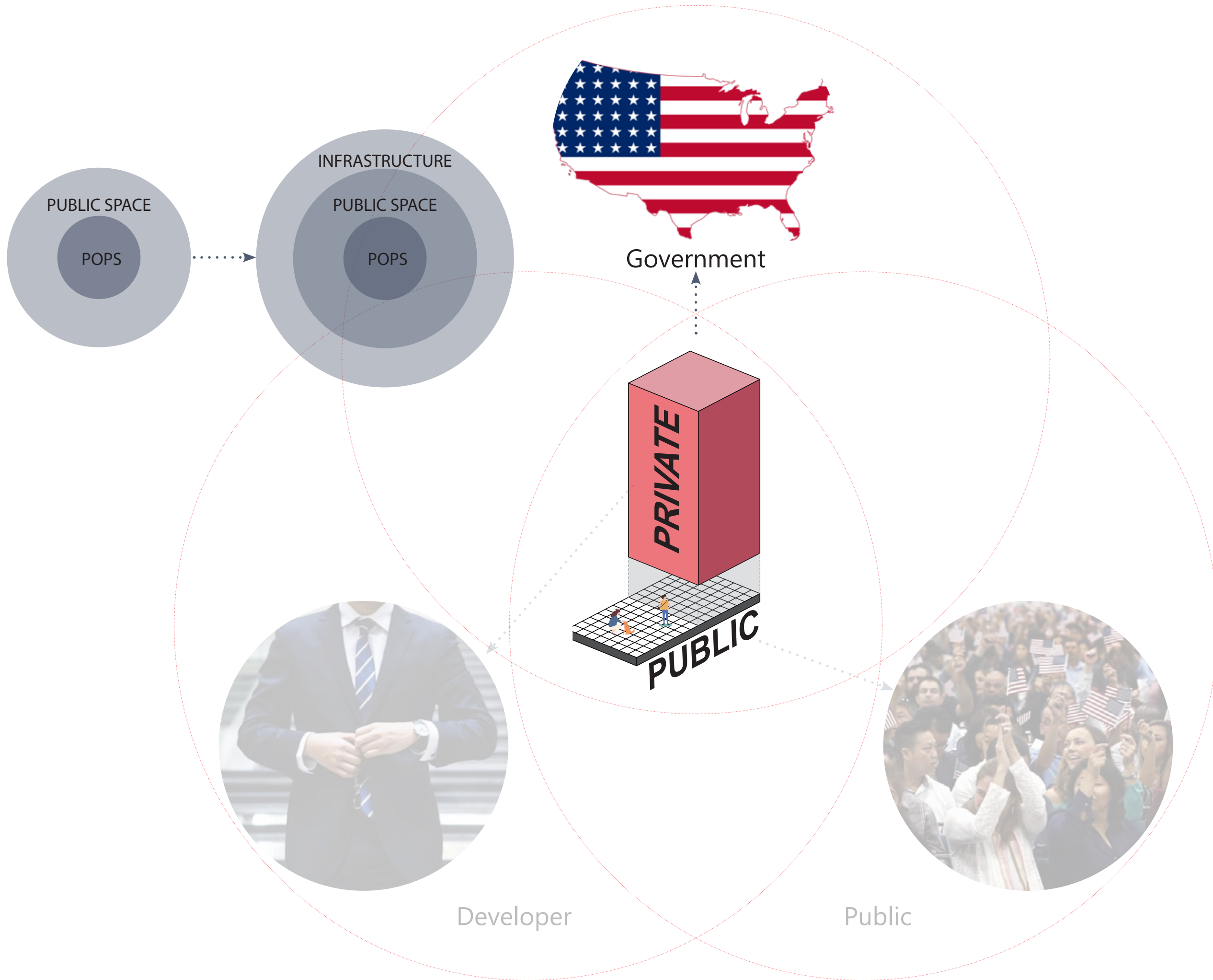
Urban Planning+Privatization



BONUS FLOOR

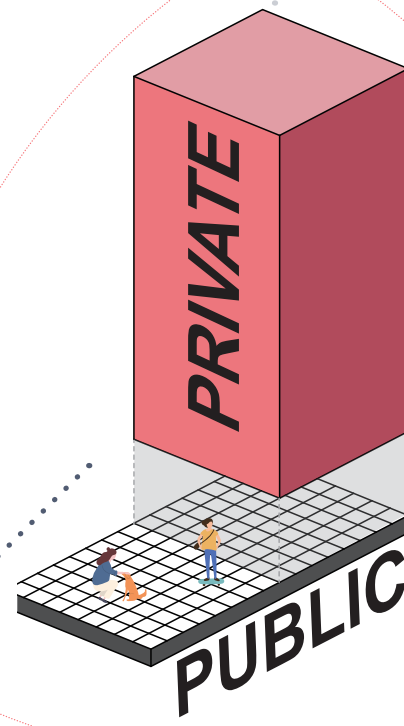


Zoning





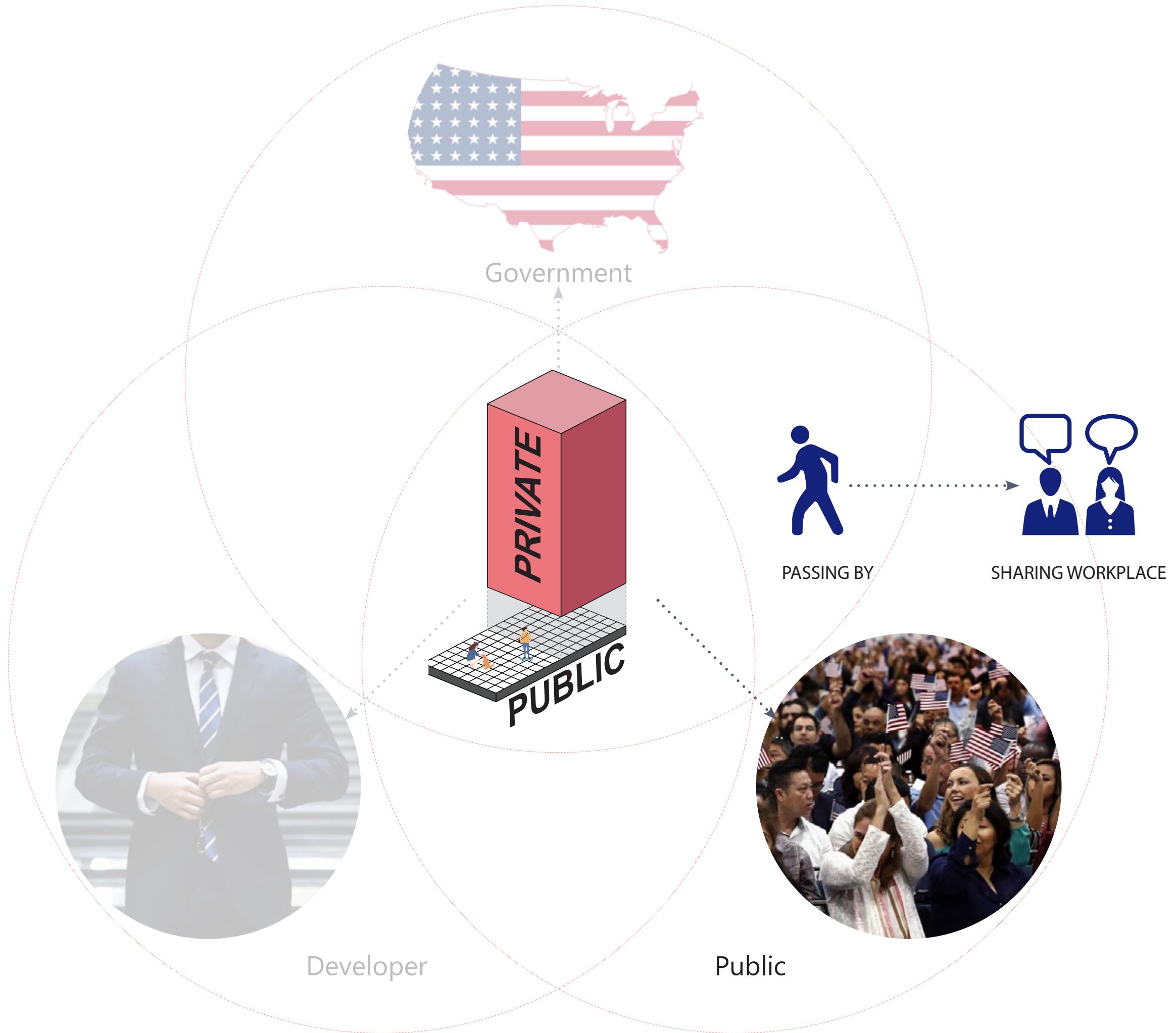
Developer



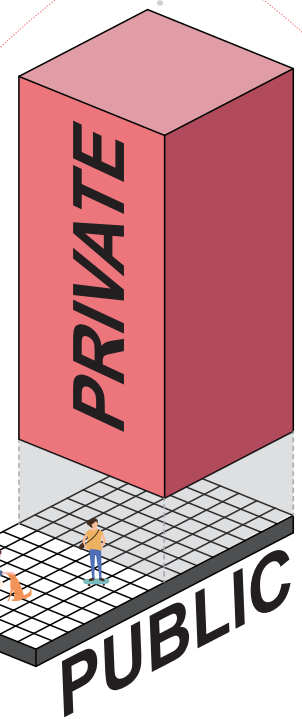
Government



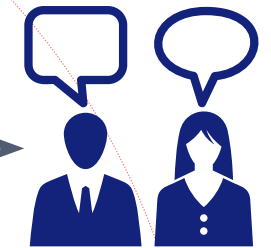
Public



Government



PASSING BY



SHARING WORKPLACE



Developer



Public



New York Plaza: An as-of-right plaza

permitted elements such as flagpoles, driveways, and garage entrances.

1961

1968-1975

1975-1977

1980-1990

2000



240 East 47th Street: Residential plaza, built in 1982 and modified in 2003

open air concourse, sidewalk widening, and the residential plaza



Spruce St: An urban plaza, built in 2006 and modified in 2010 in greater accordance with the current standards

new design standards (called "public plaza" standards) facilitate the design and construction of high quality public spaces



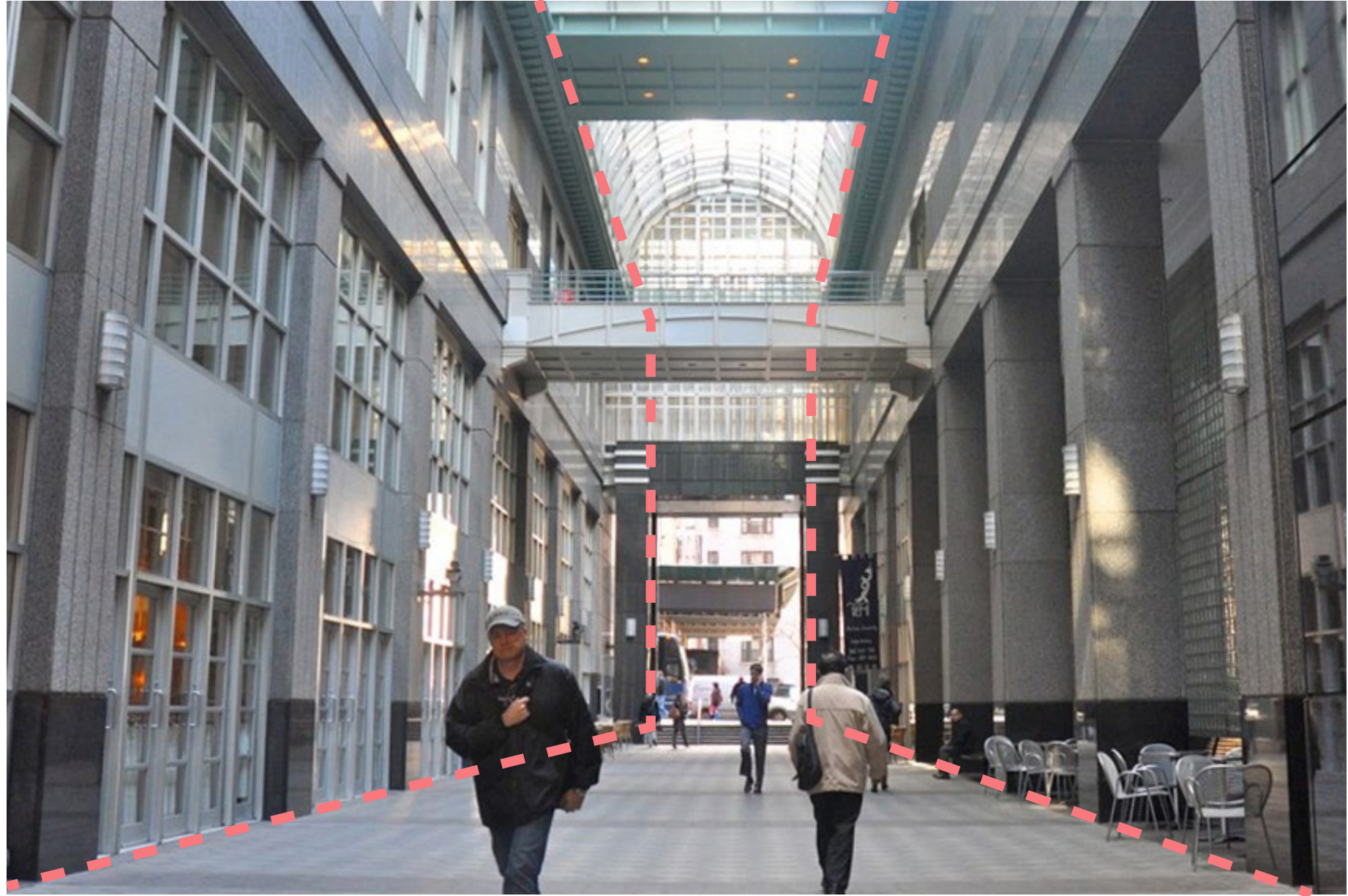
Madison Avenue: A covered pedestrian space originally built in 1982 and modified in 1995

elevated and sunken plazas, through block arcades; covered pedestrian spaces; and open-air concourses



Astor Place: An open space required by special permit, built in 2012

Special Midtown District



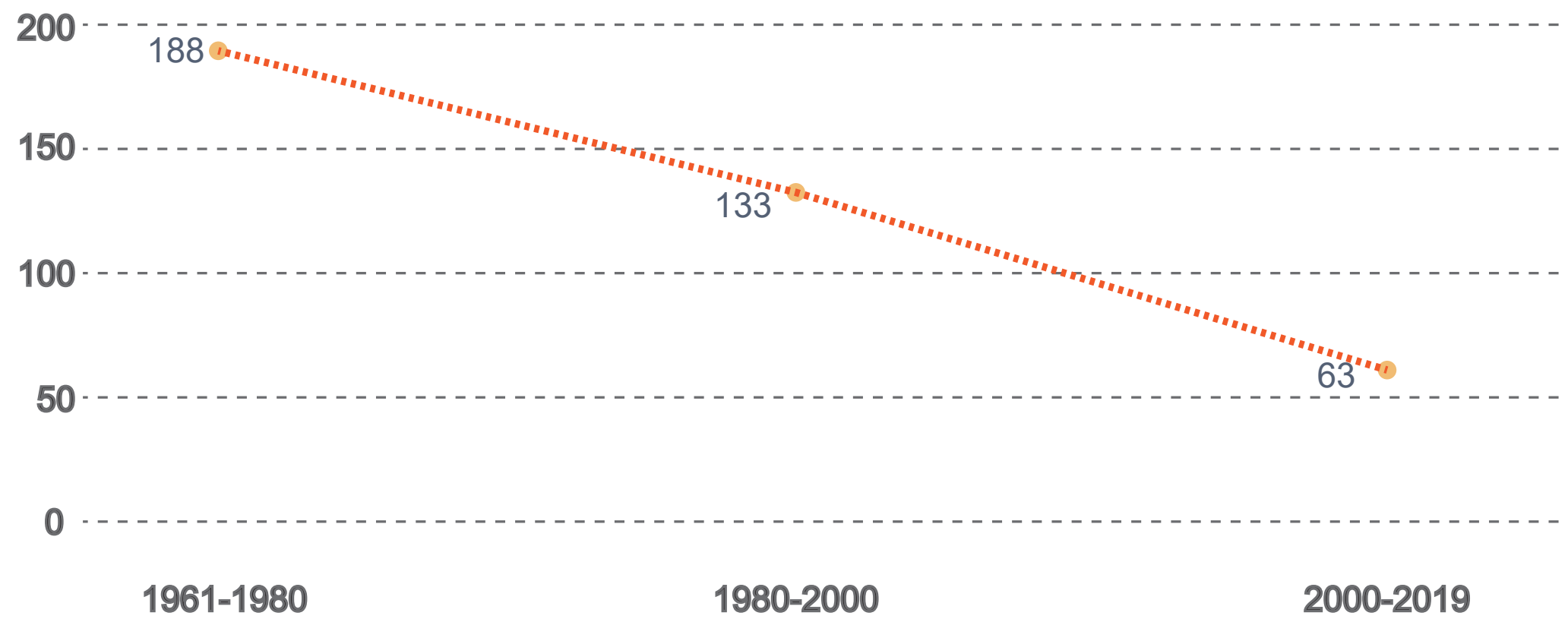
BOUNDARY



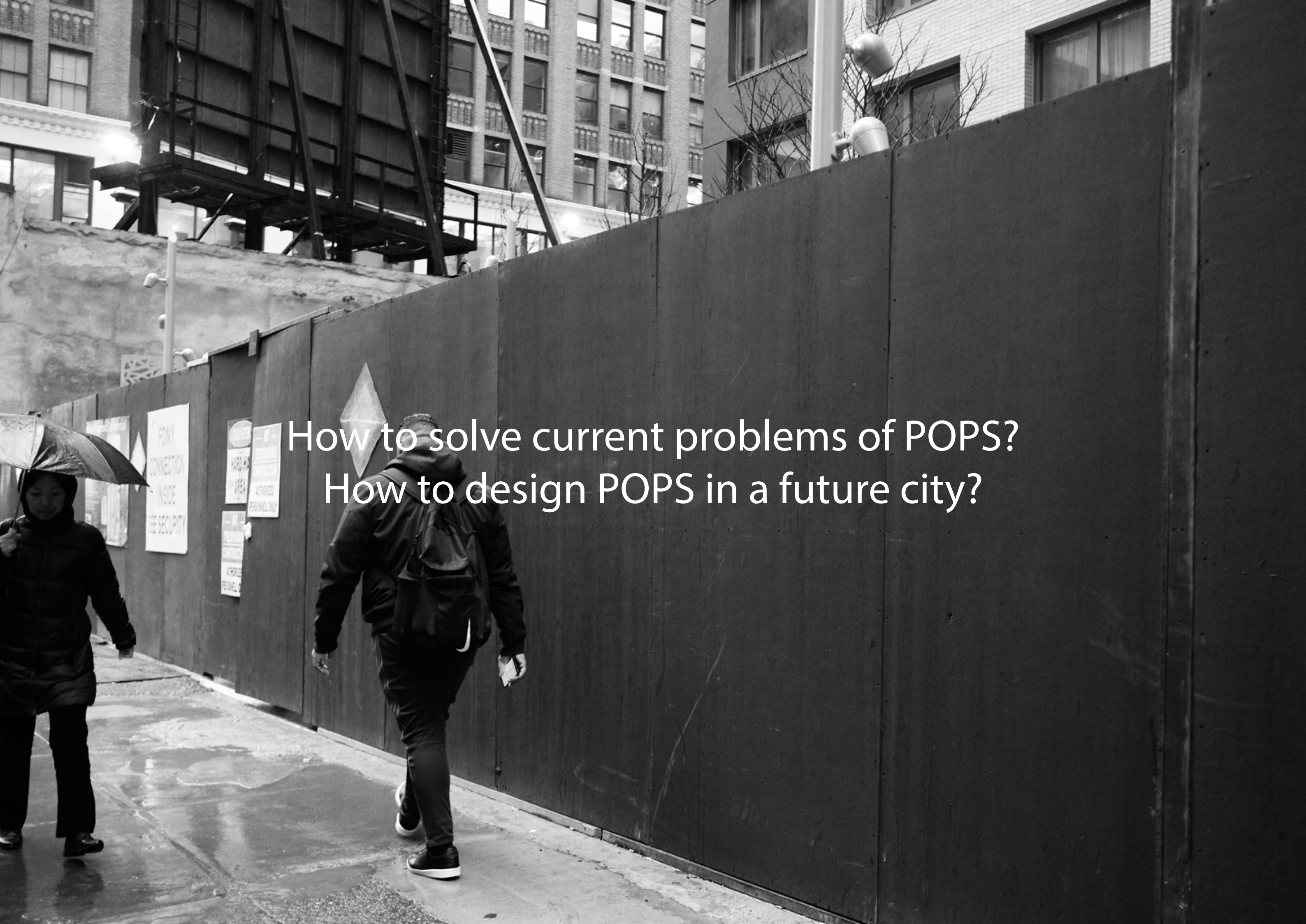
Vacant



No Extra Land



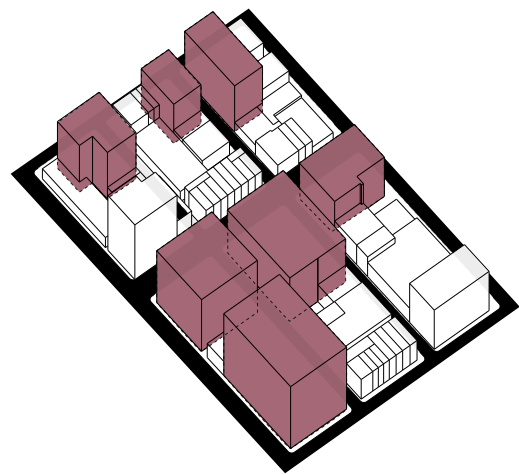
COMPLETED POPS IN NY



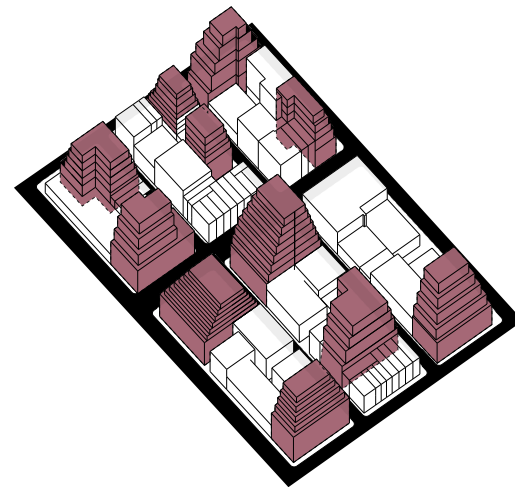
How to solve current problems of POPS?
How to design POPS in a future city?



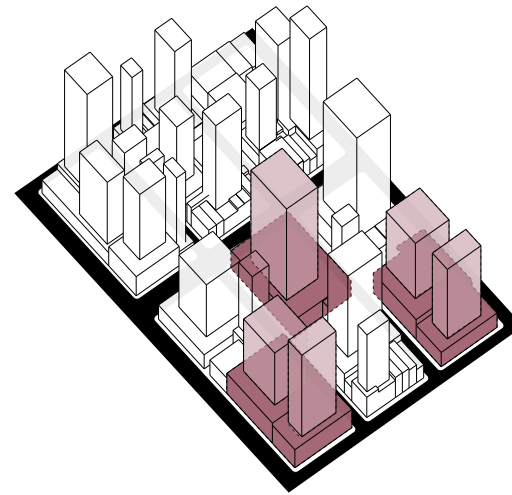
CITY



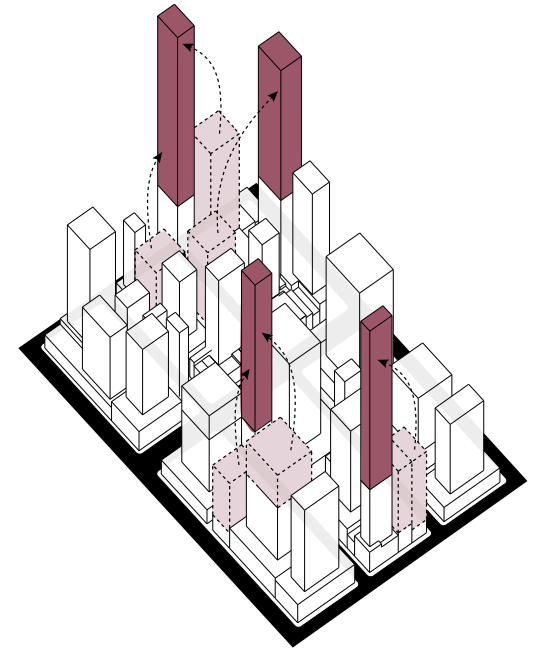
1900



Zoning 1916



Rezoning 1960

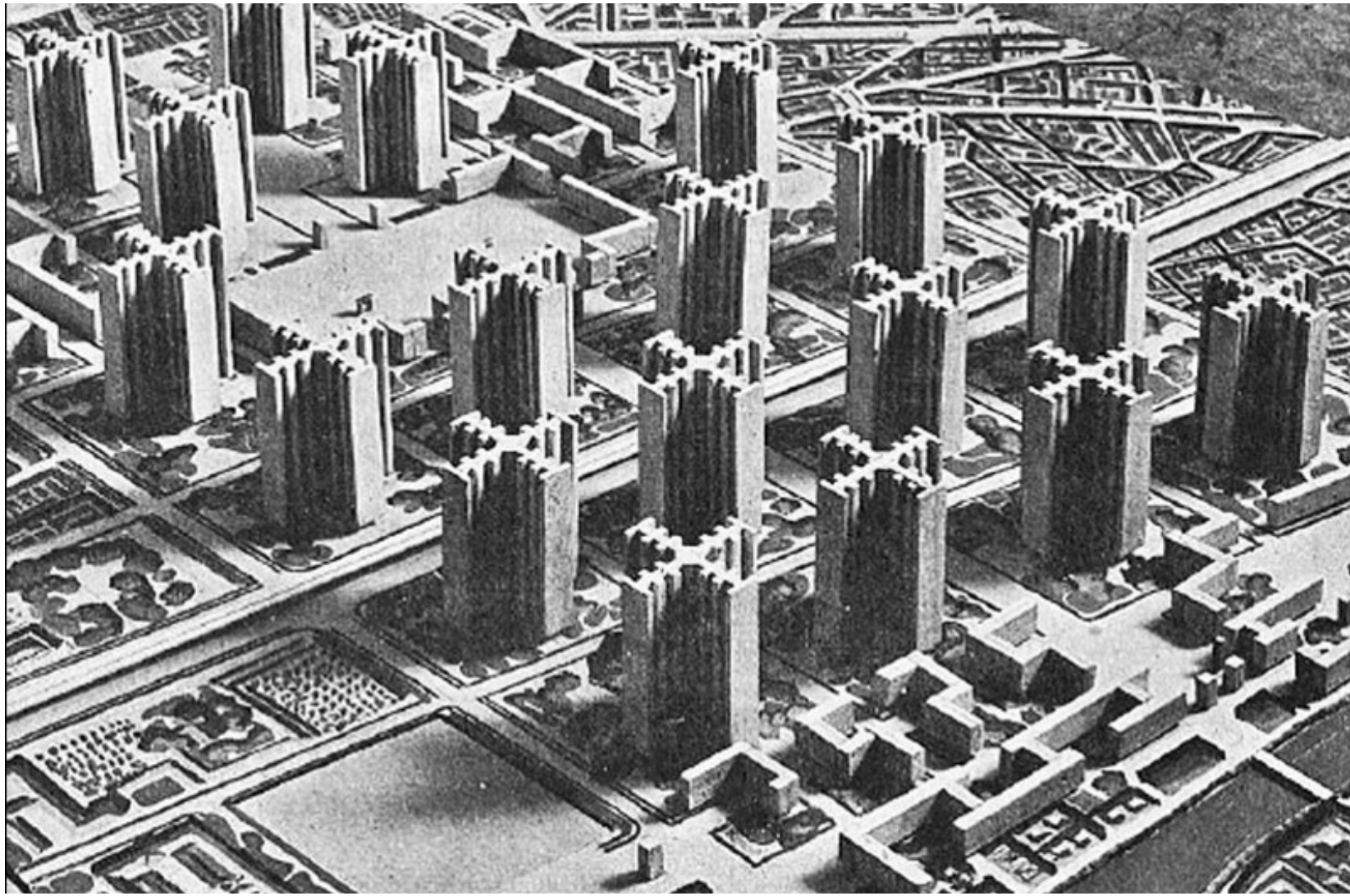


Midtown Special District 1980

Building Morphology

A grayscale, high-angle view of a futuristic city. The city is densely packed with buildings of various heights and shapes. A prominent feature is a very tall, slender skyscraper on the right side. In the center, there is a large, spherical dome structure. The sky is filled with a grid of small, dark, rectangular shapes, possibly representing a data network or a futuristic transportation system. The overall atmosphere is one of advanced technology and urban development.

What will be a future city look like?



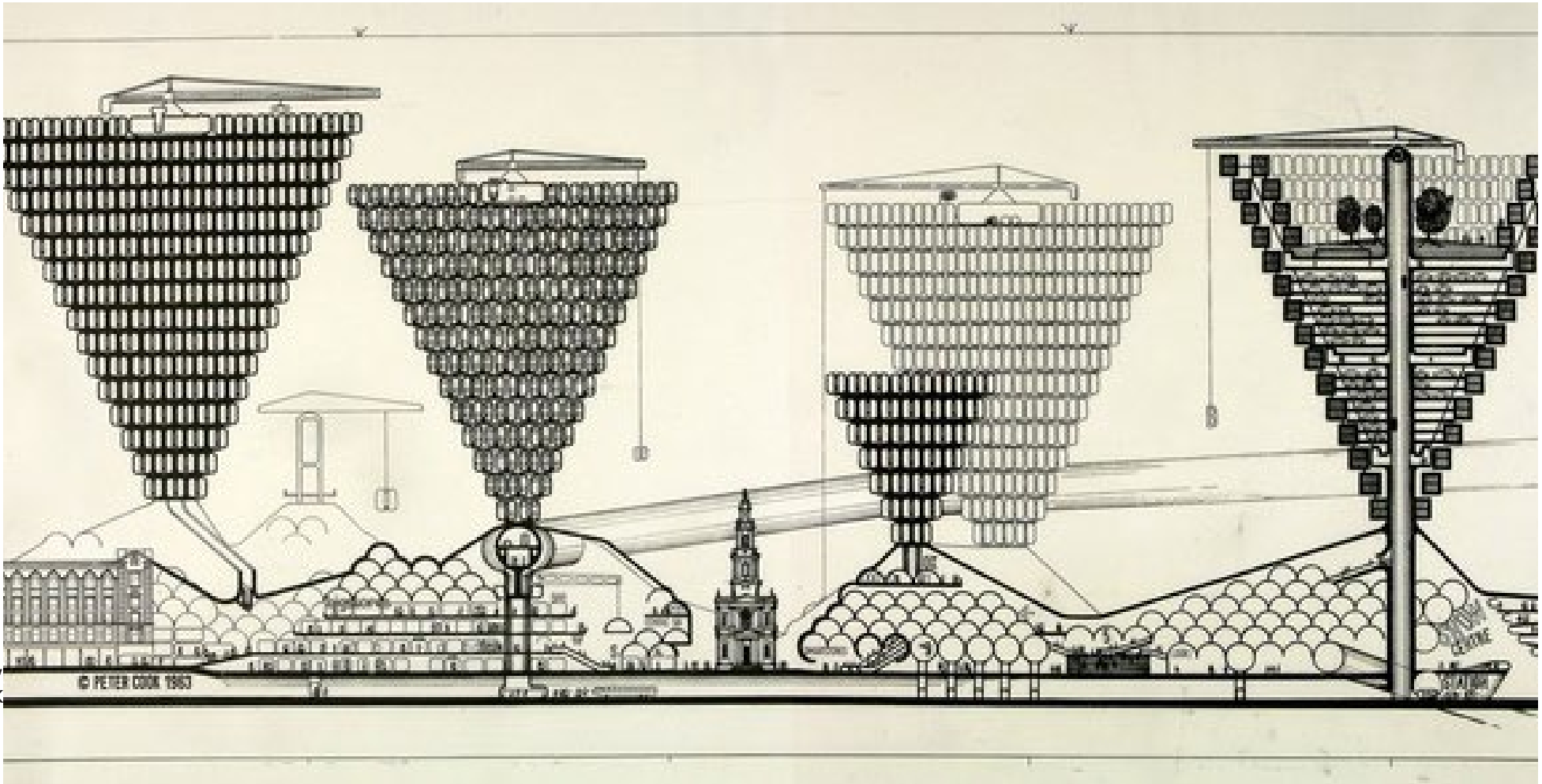
Ville Radieuse,
Le Corbusier



Metabolism,
Metabolists



City of the future,
H.W. Corbett



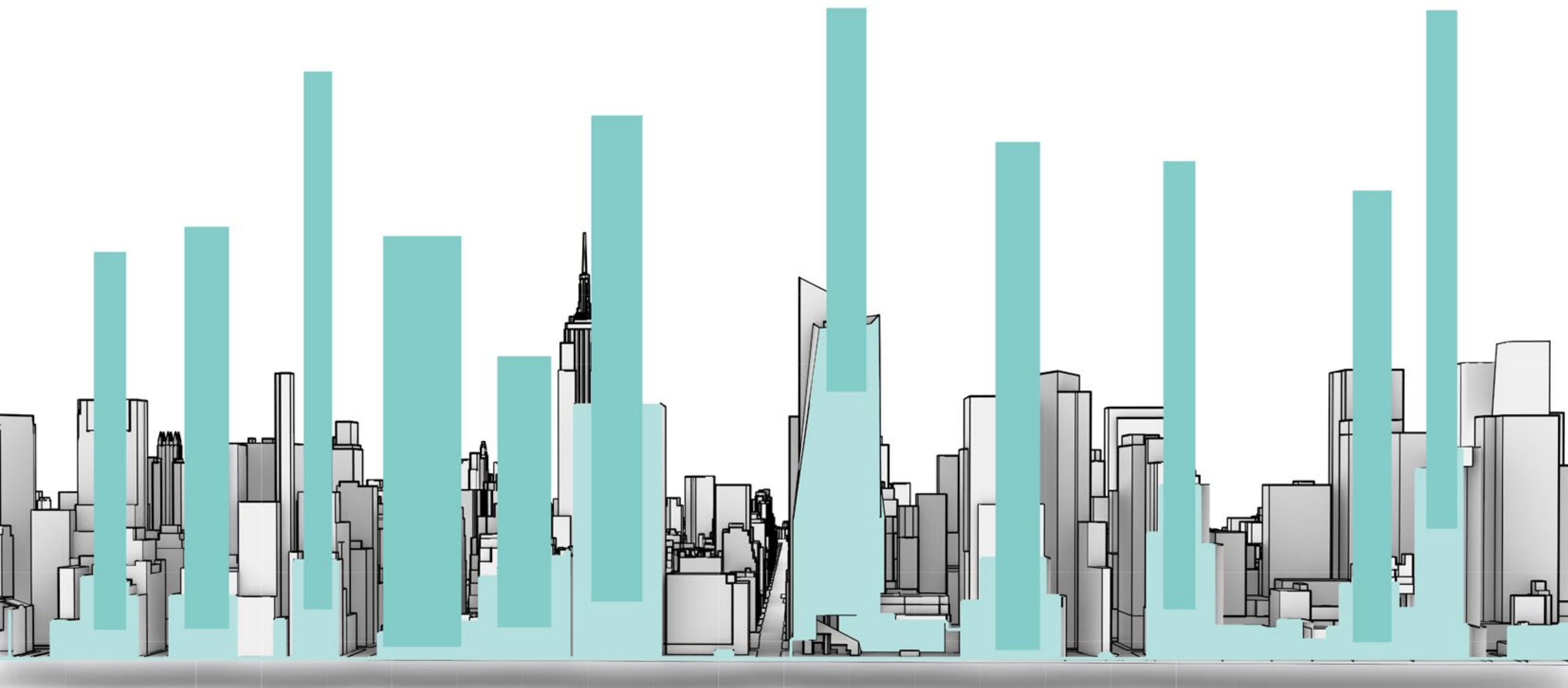
Plug-in City,
Peter Cook

Re-organise



Re-novate





How to create POPS in such a city and how to use POPS to implement such assumption?

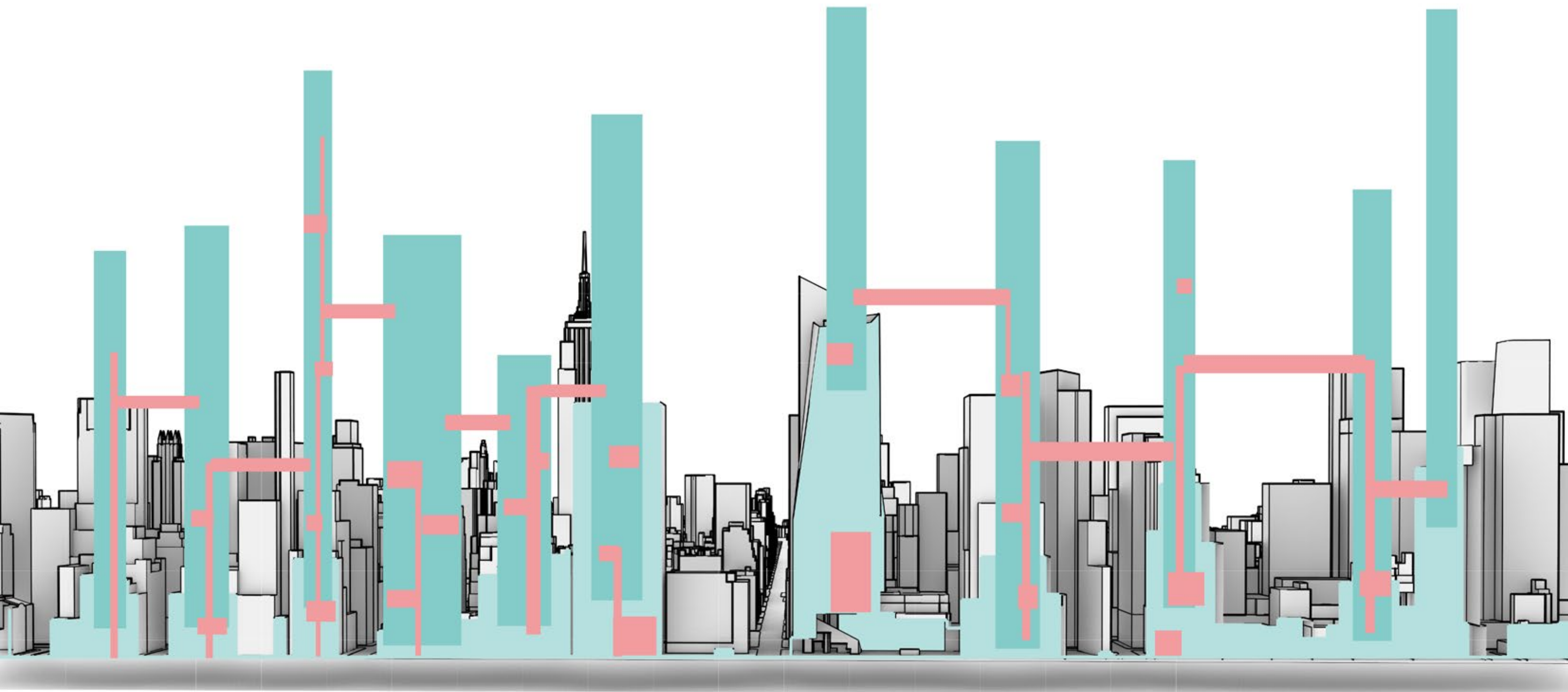
CITY PEDESTRIAN

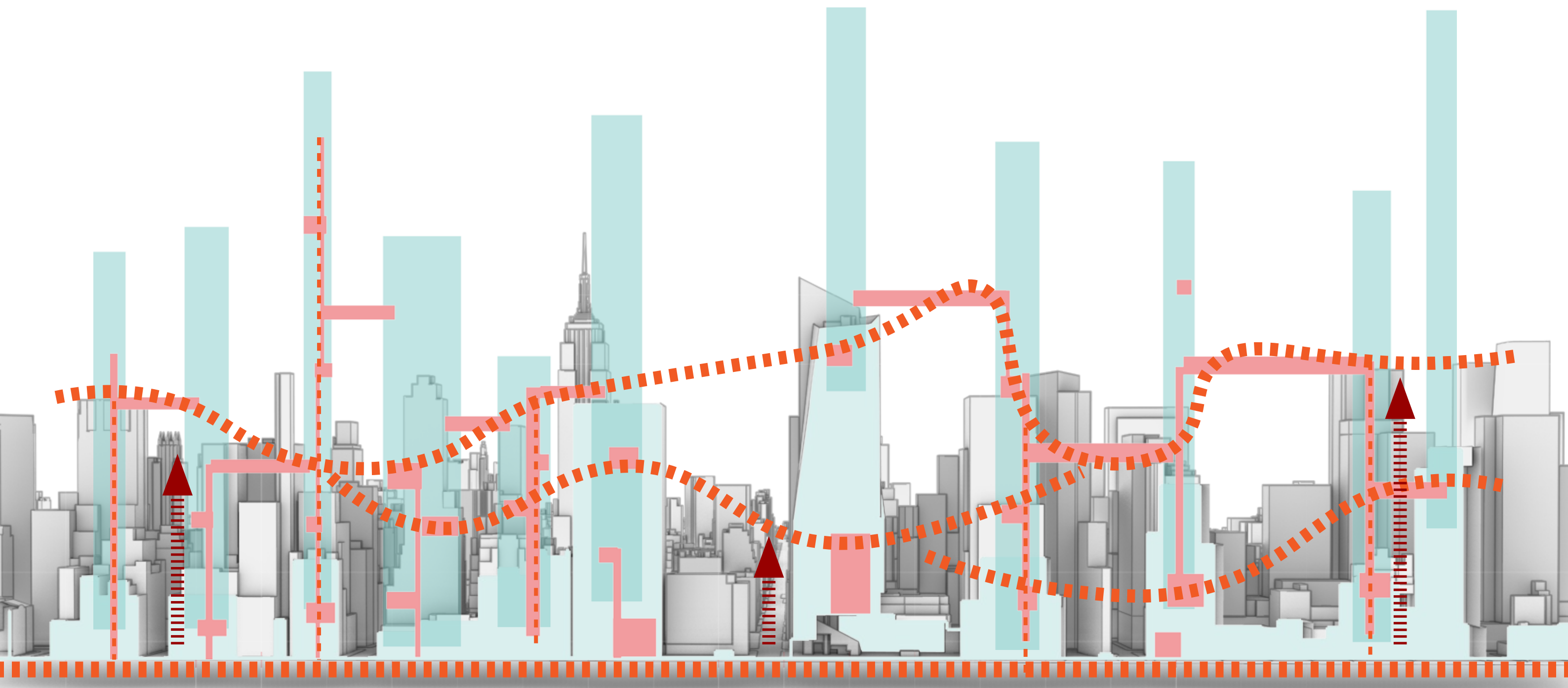
POPS

TRANSPORTATION

WEAVER WINE
MECHANICAL CONTRACTORS
718-628-1002

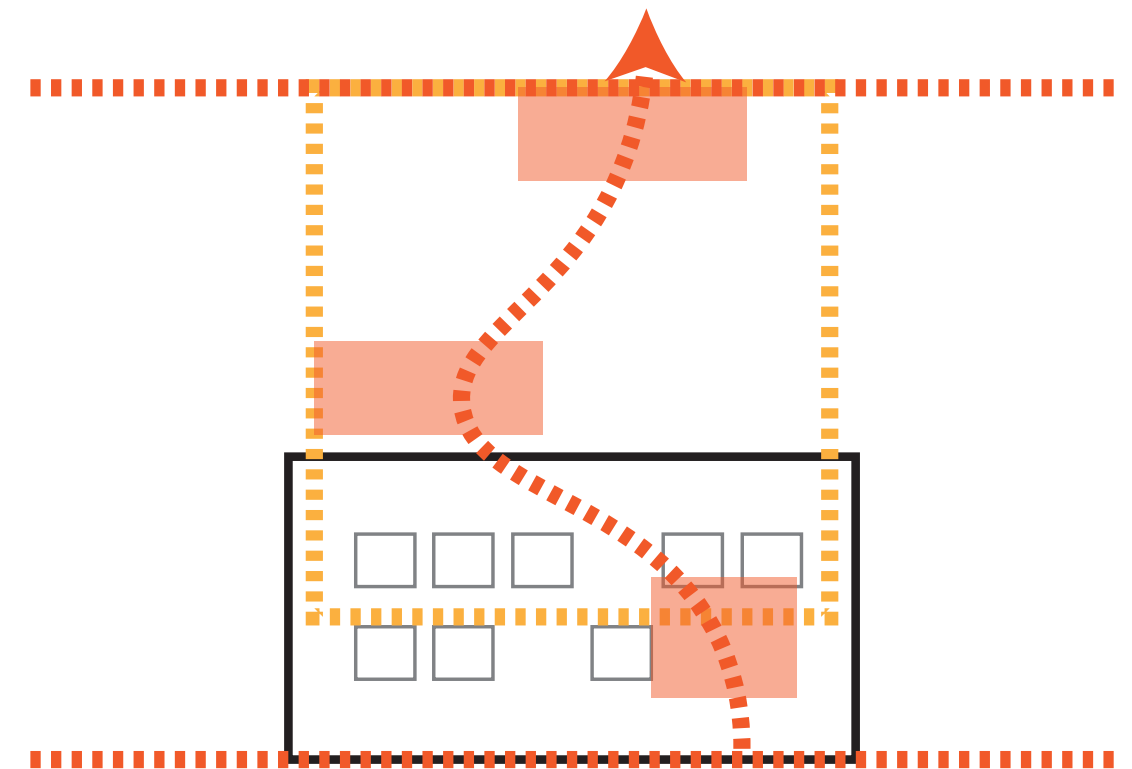






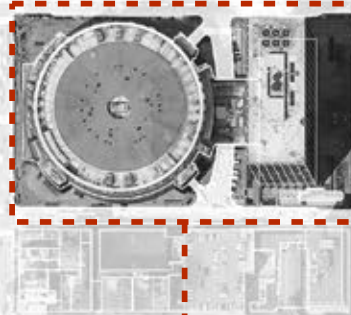
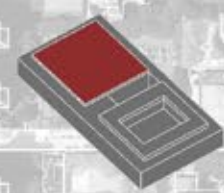
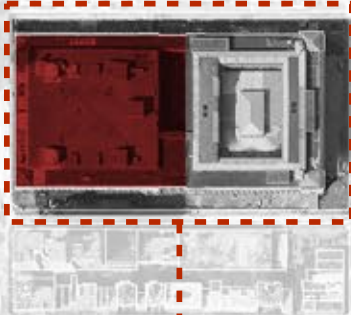
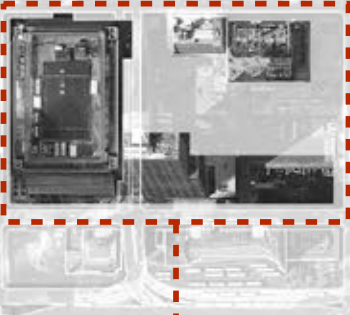
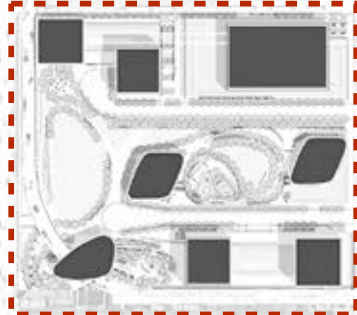
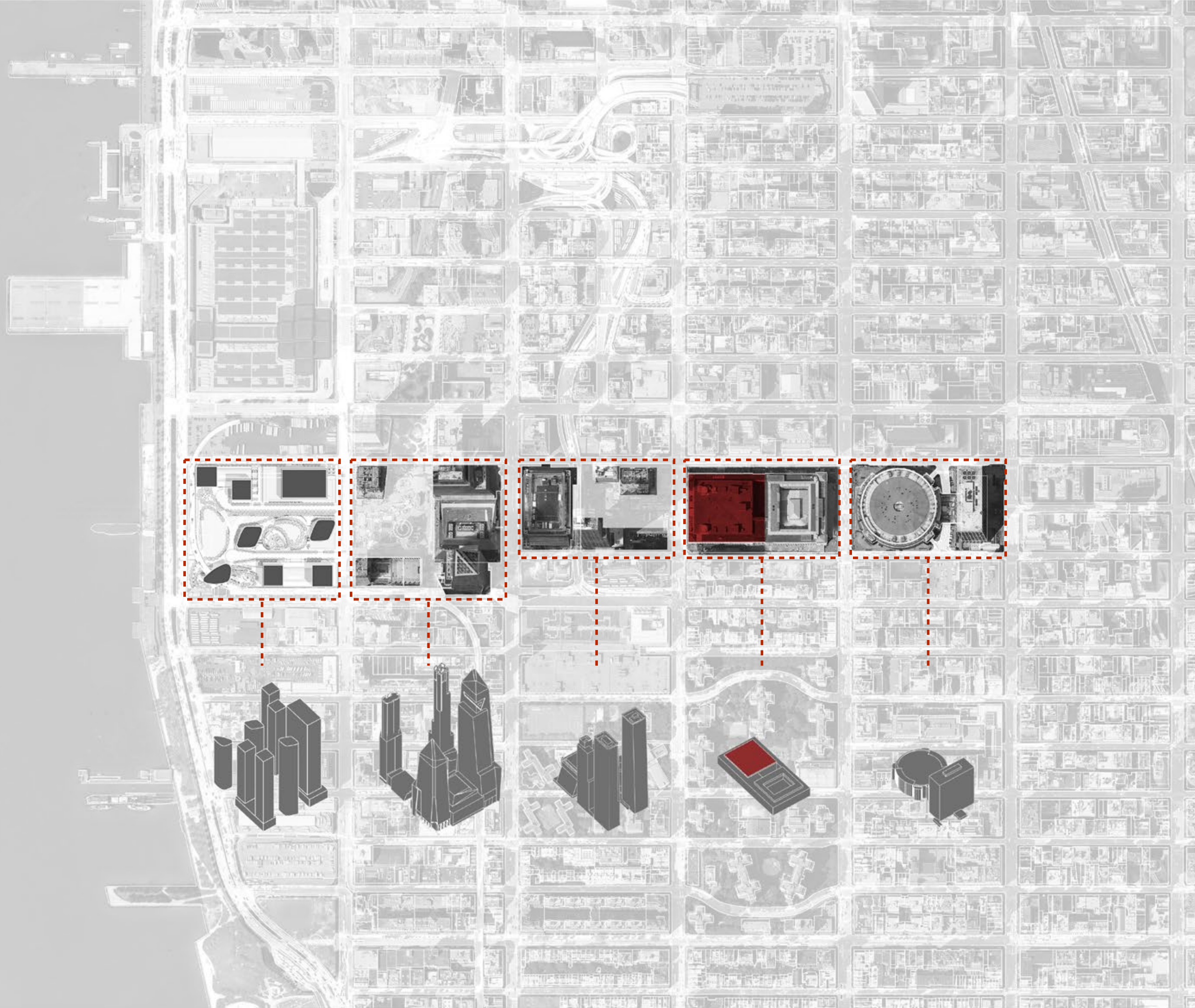
"Plug-in Typology"

- Renovation
- Public & Mixed-used
- Connect with existing public space system

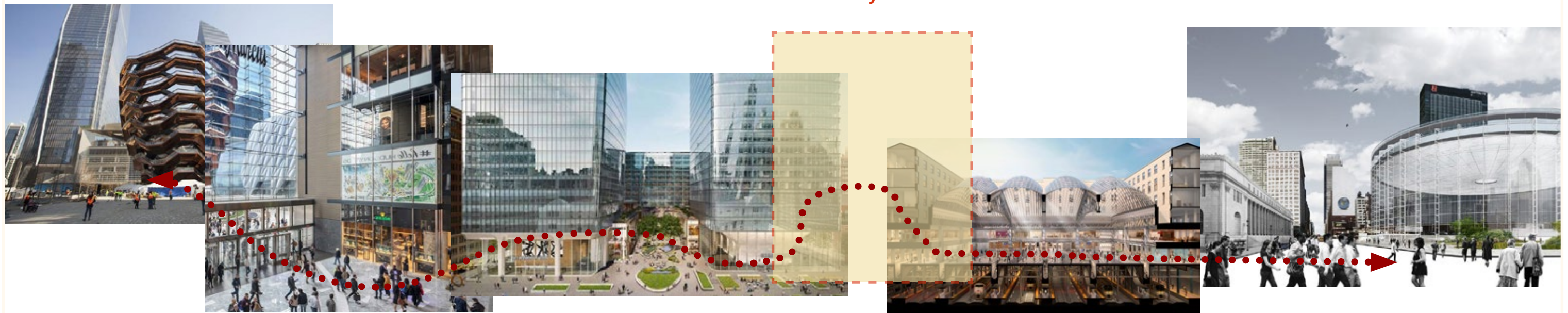


SITE





Project



Hudson Yards

West Manhattan

Moynihan Station

Penn Station

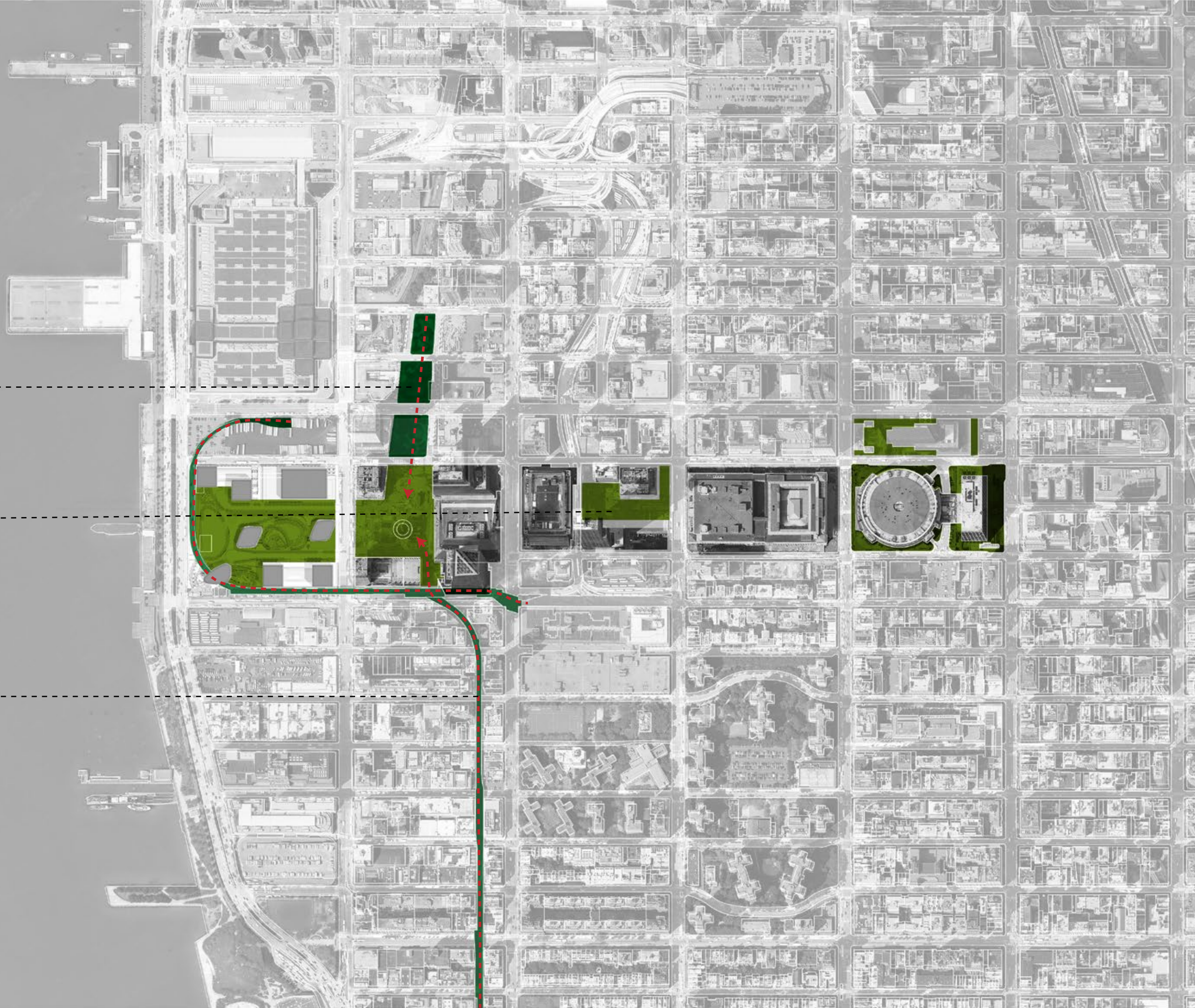


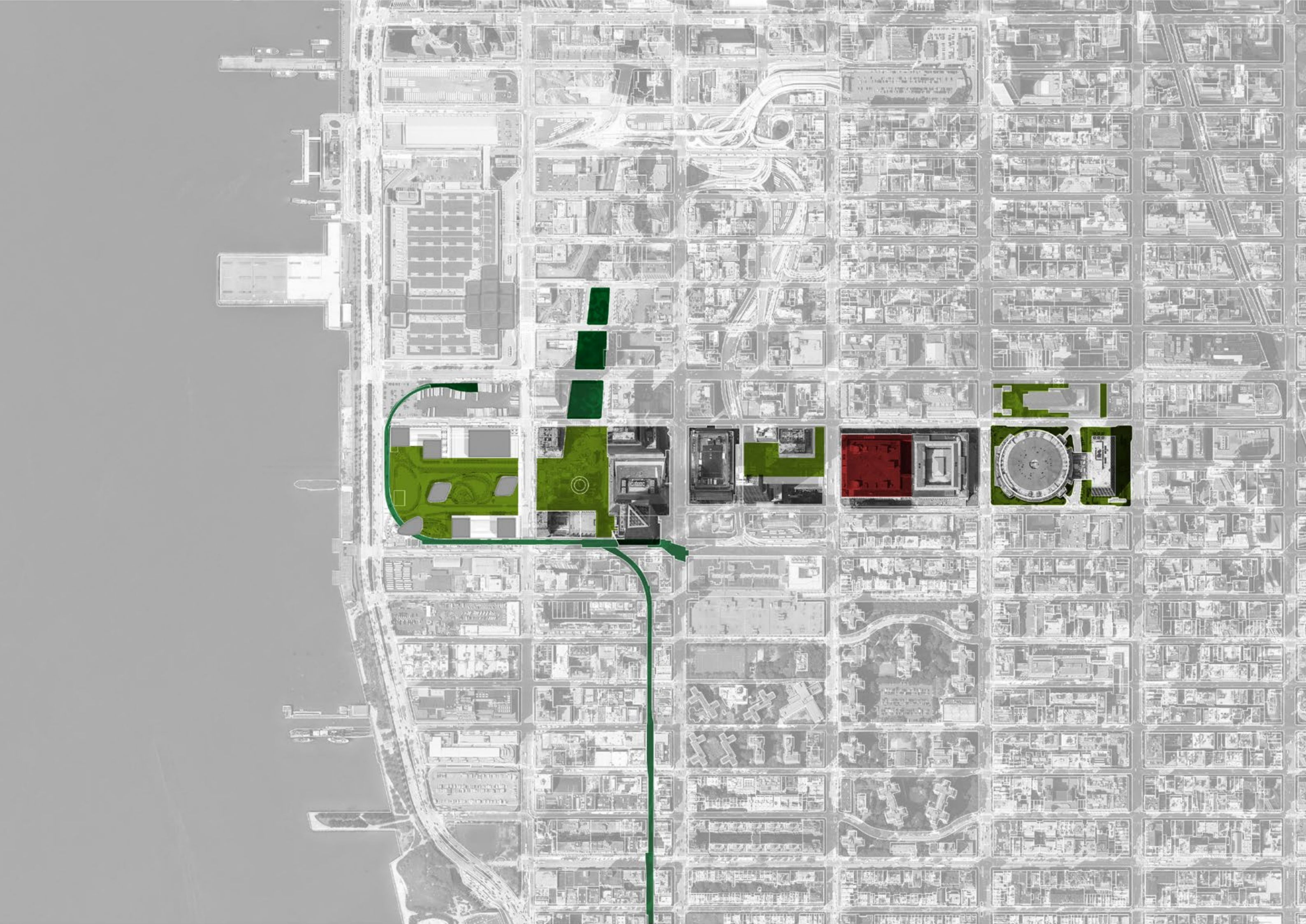
CITY PUBLIC SPACE SYSTEM

Bella Abzug Park

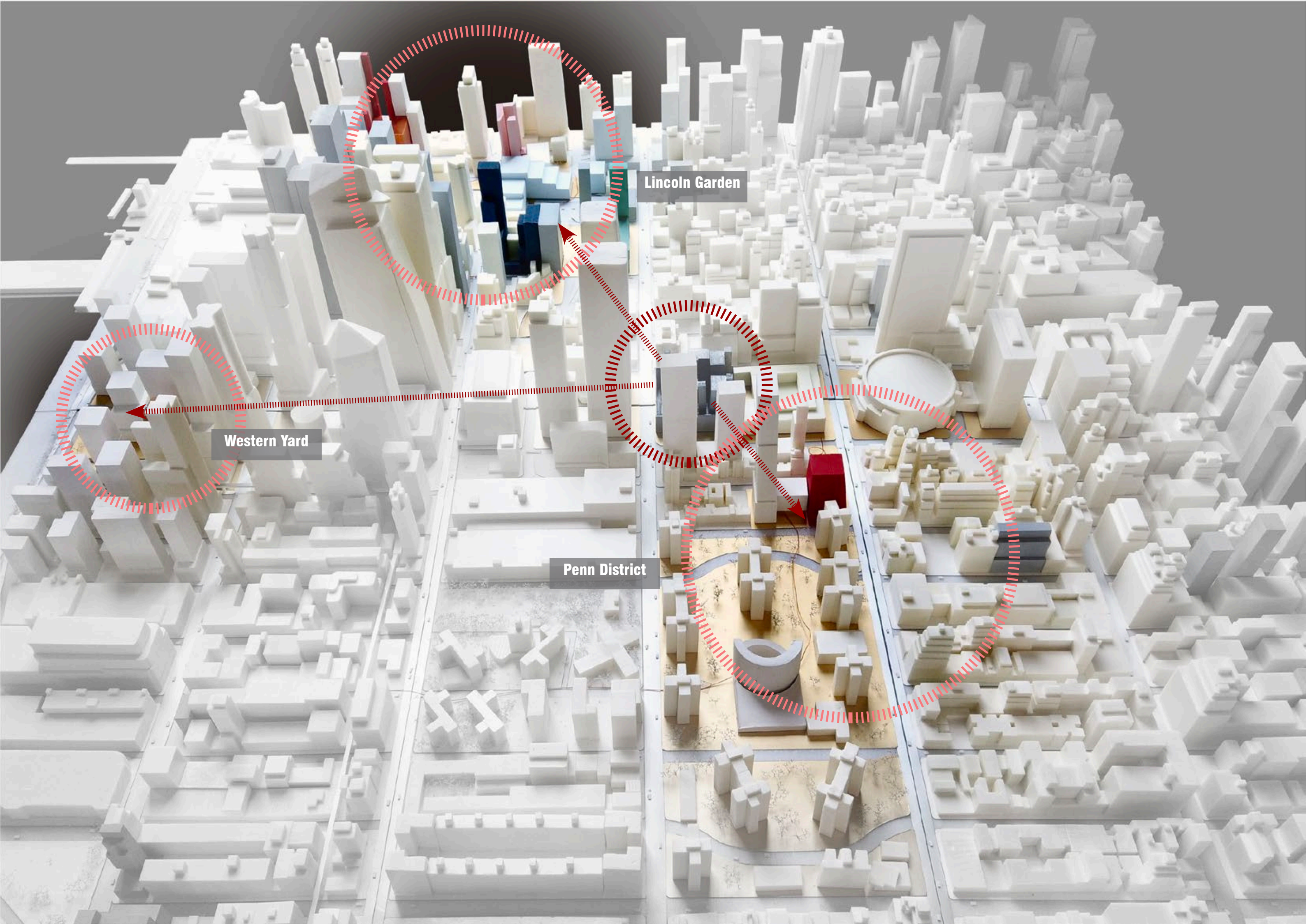
Hudson Yards
Manhattan West

High Line









Lincoln Garden

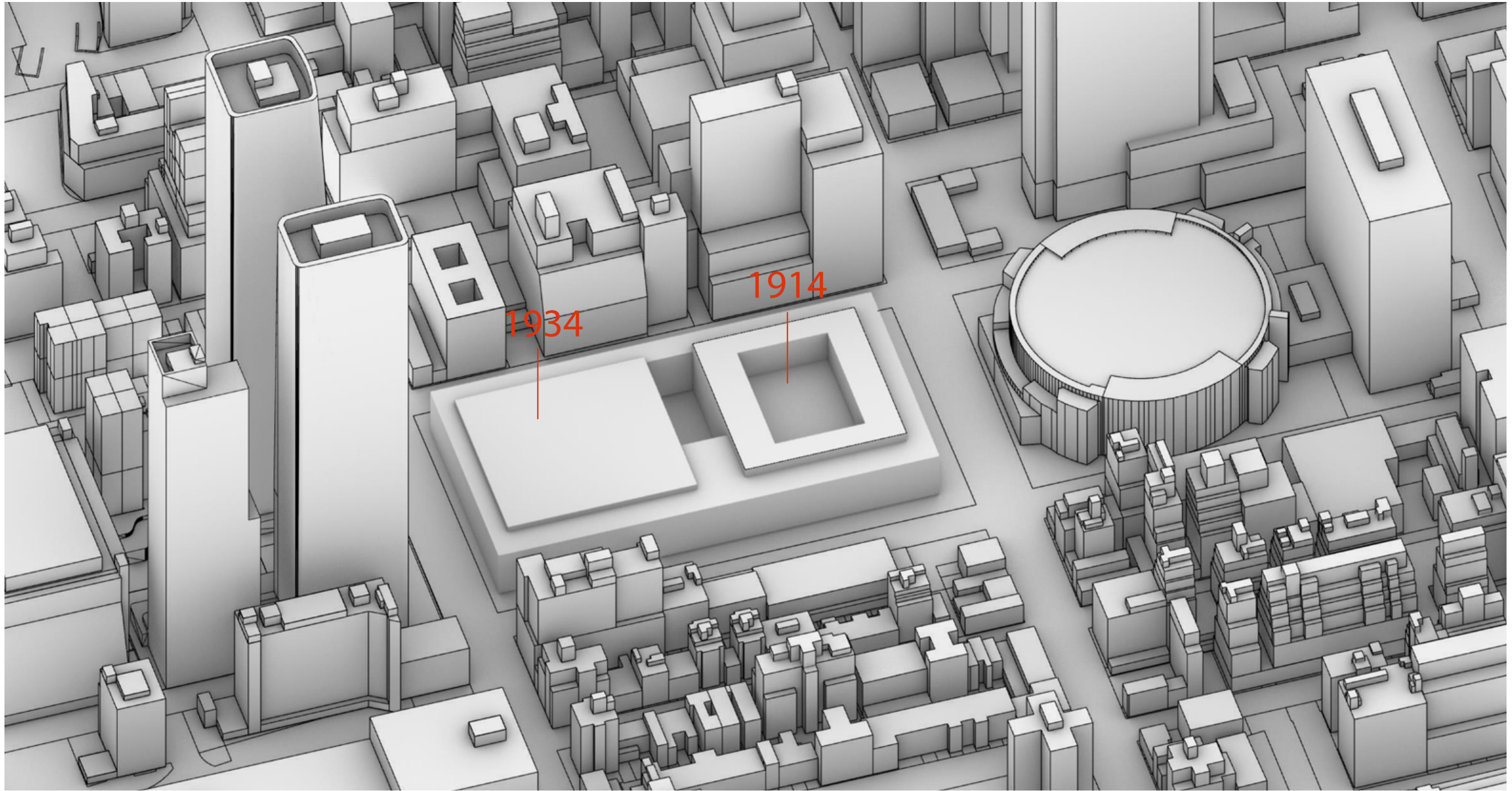
Western Yard

Penn District

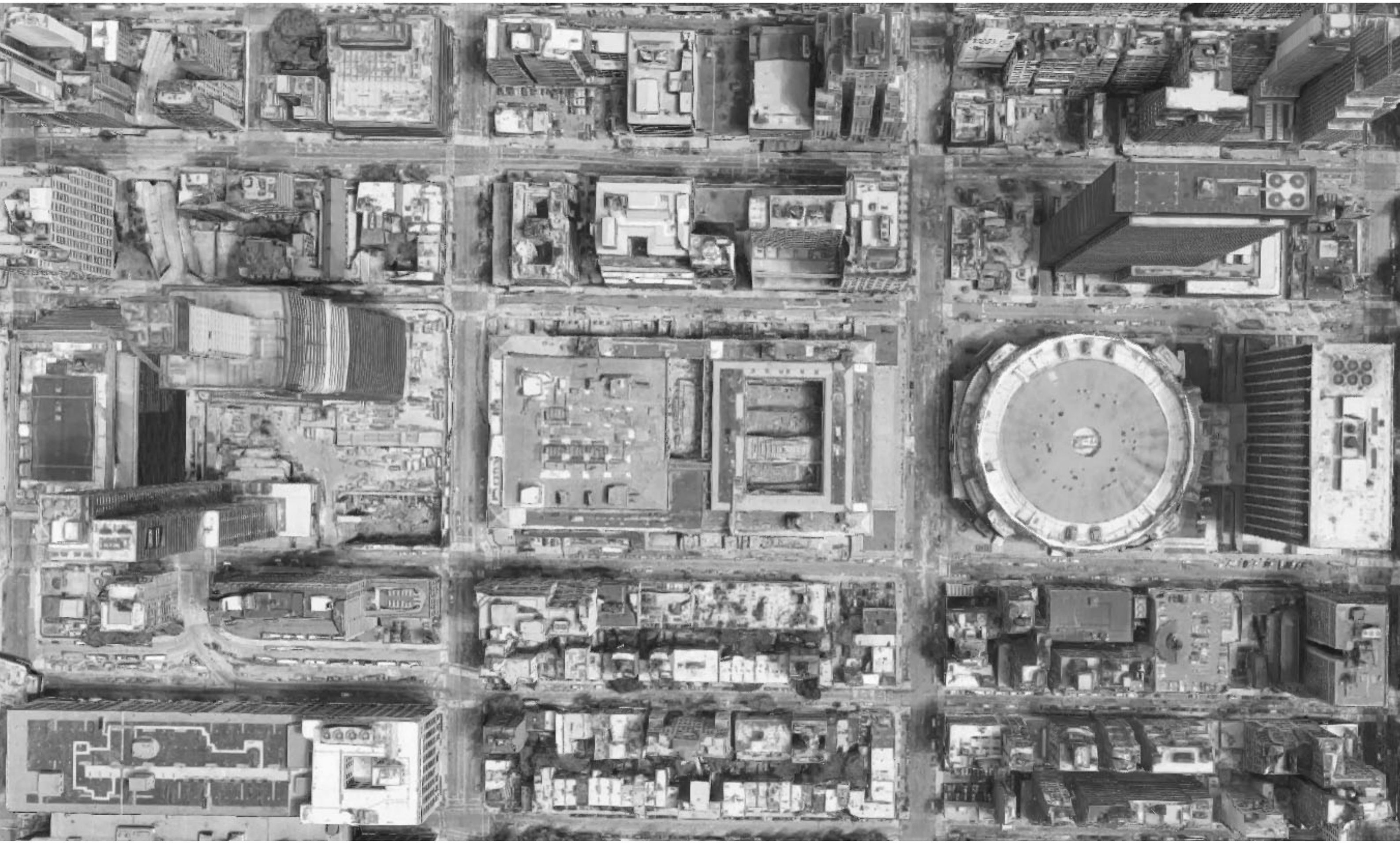


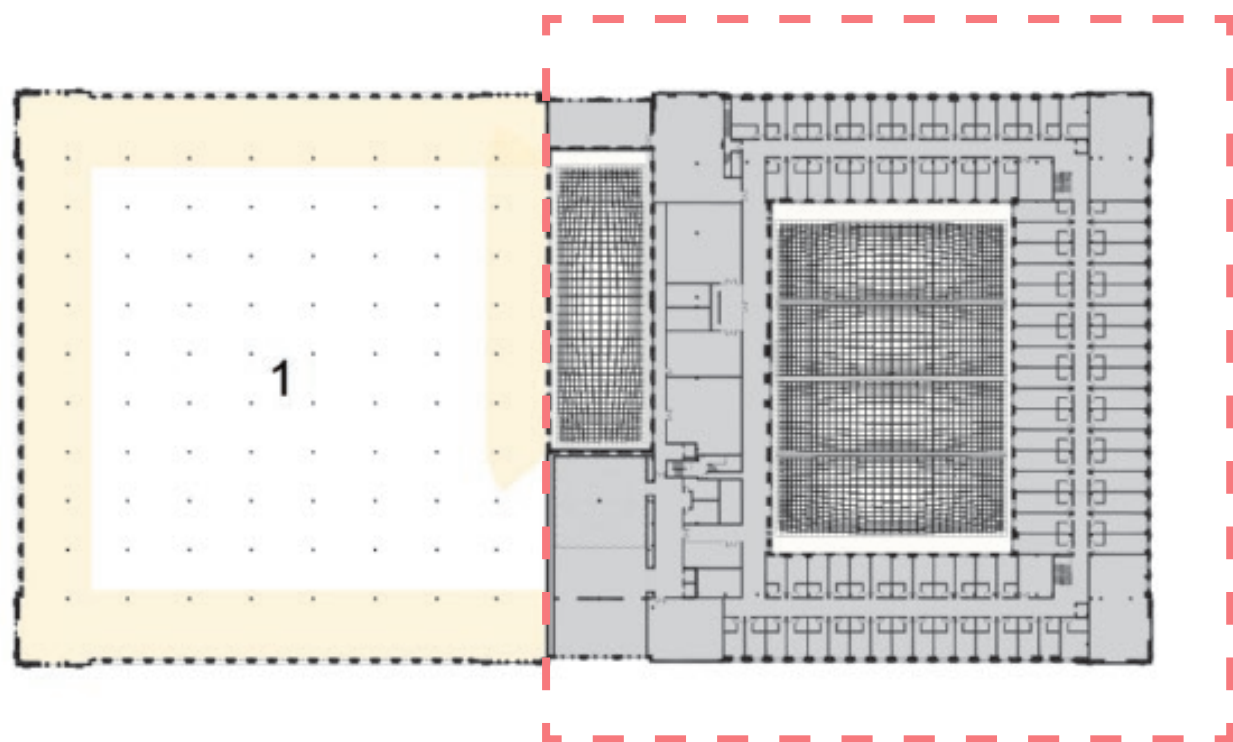


Farley Post Office (1970S)

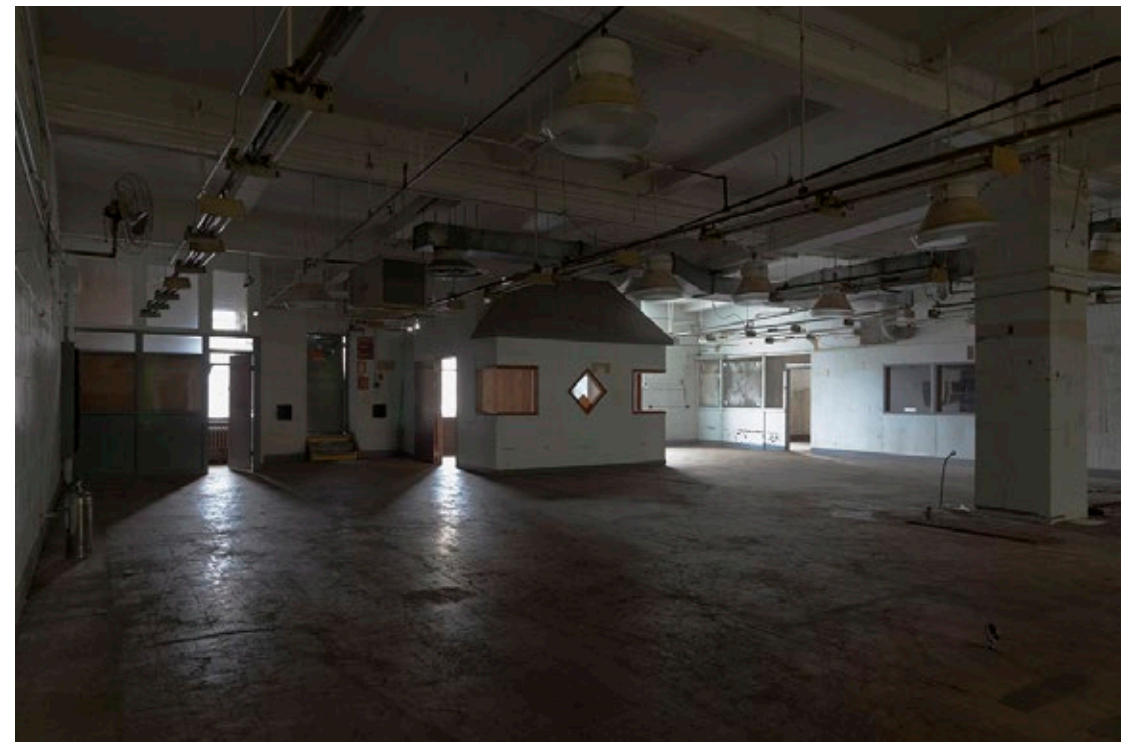


Original Situation

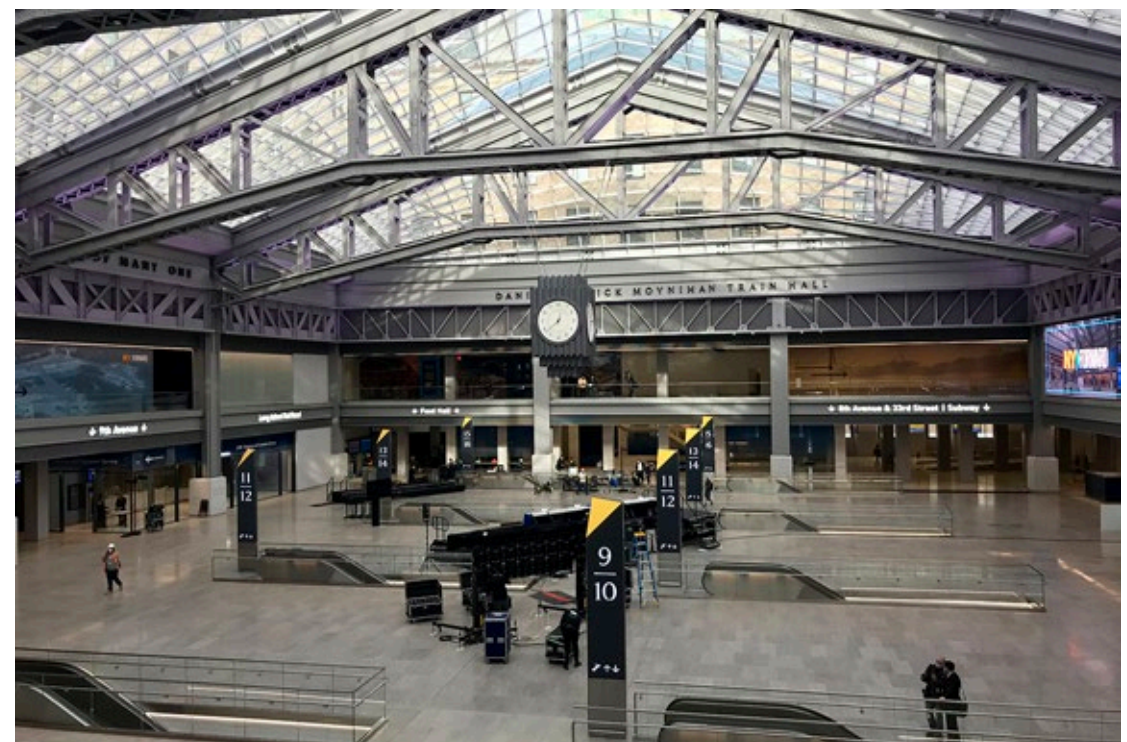




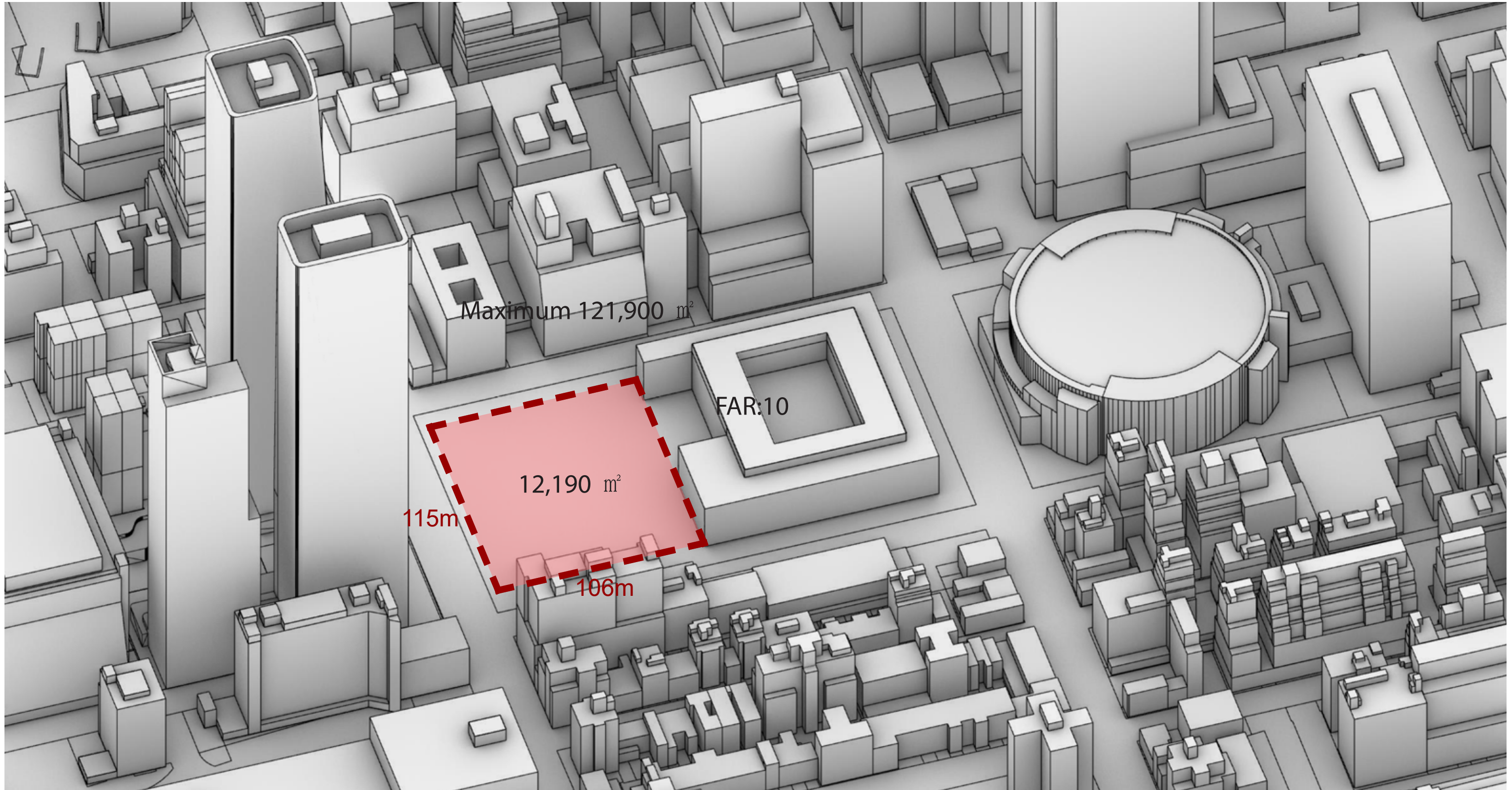
EAST WING



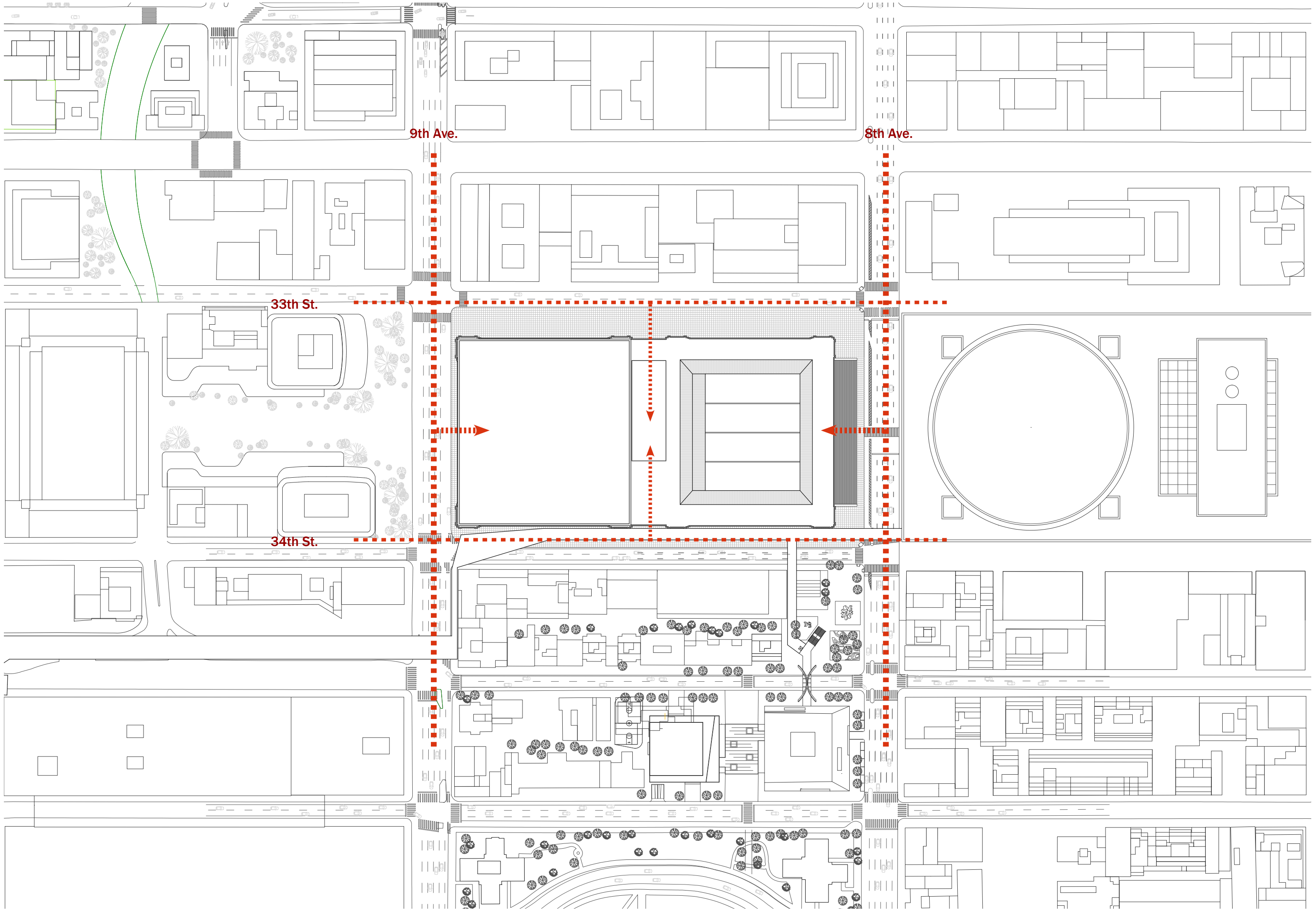
BEFORE

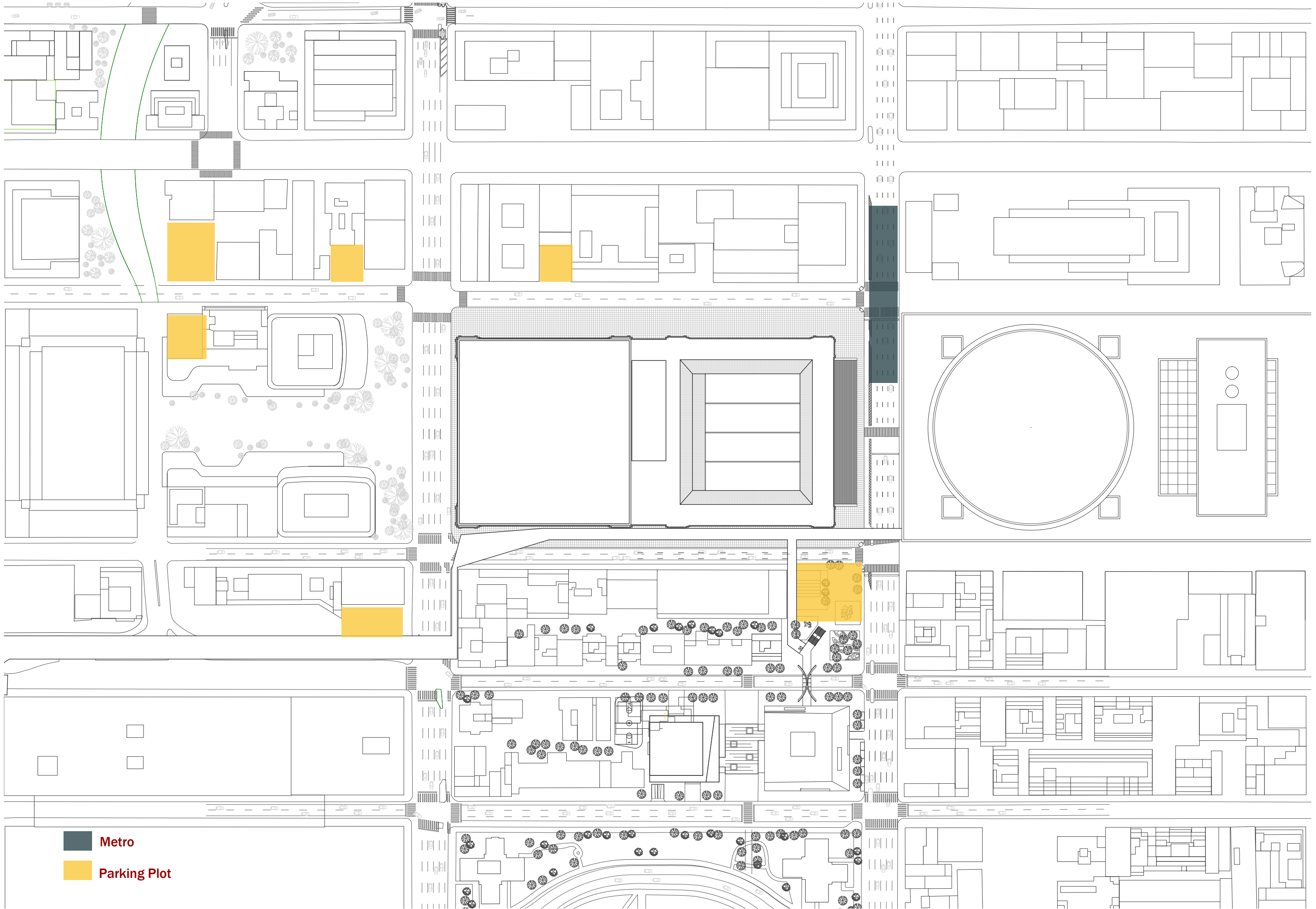


AFTER(Moynihan Station)
Jan.2021

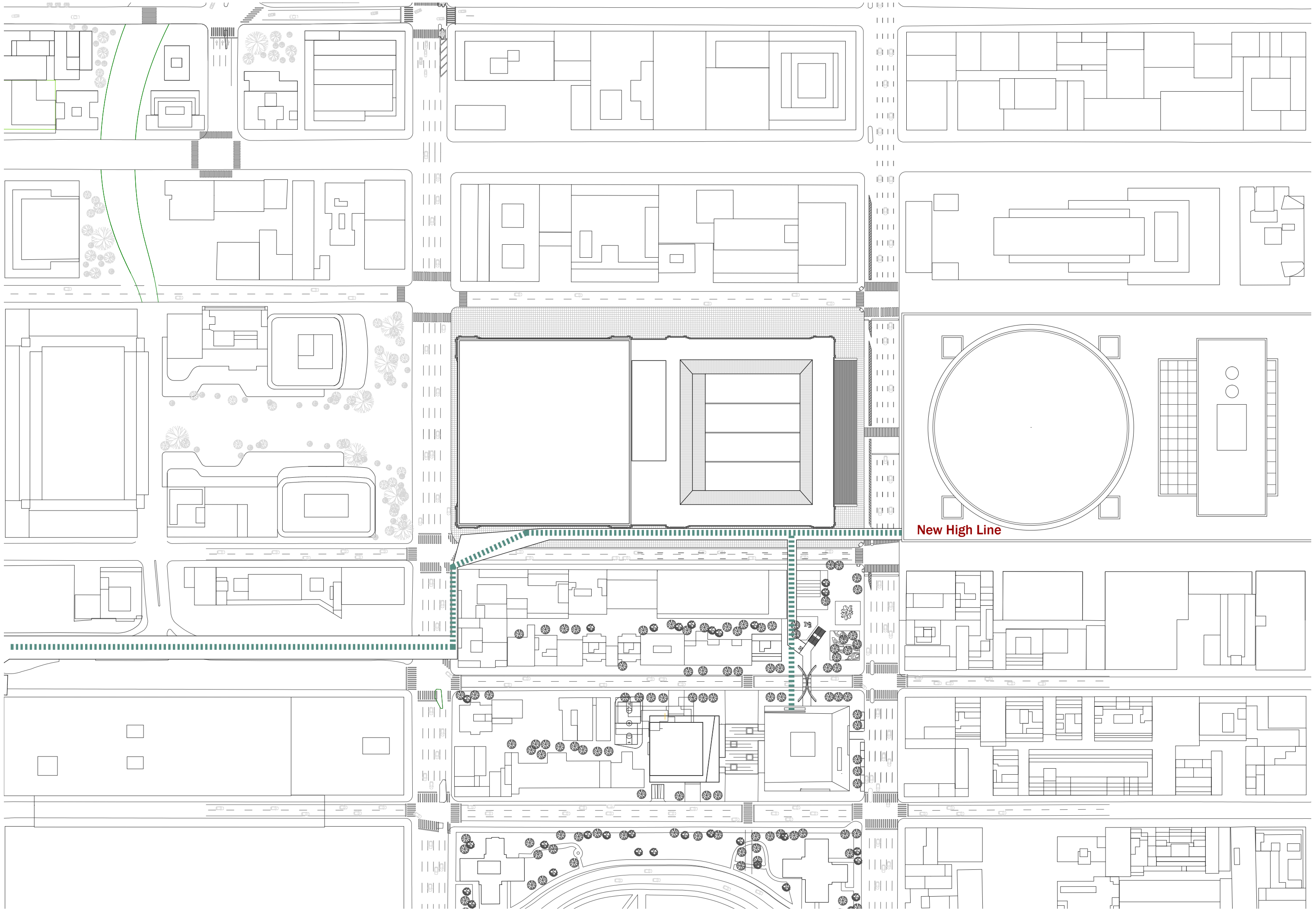


Building Area





 Metro
 Parking Plot



New High Line



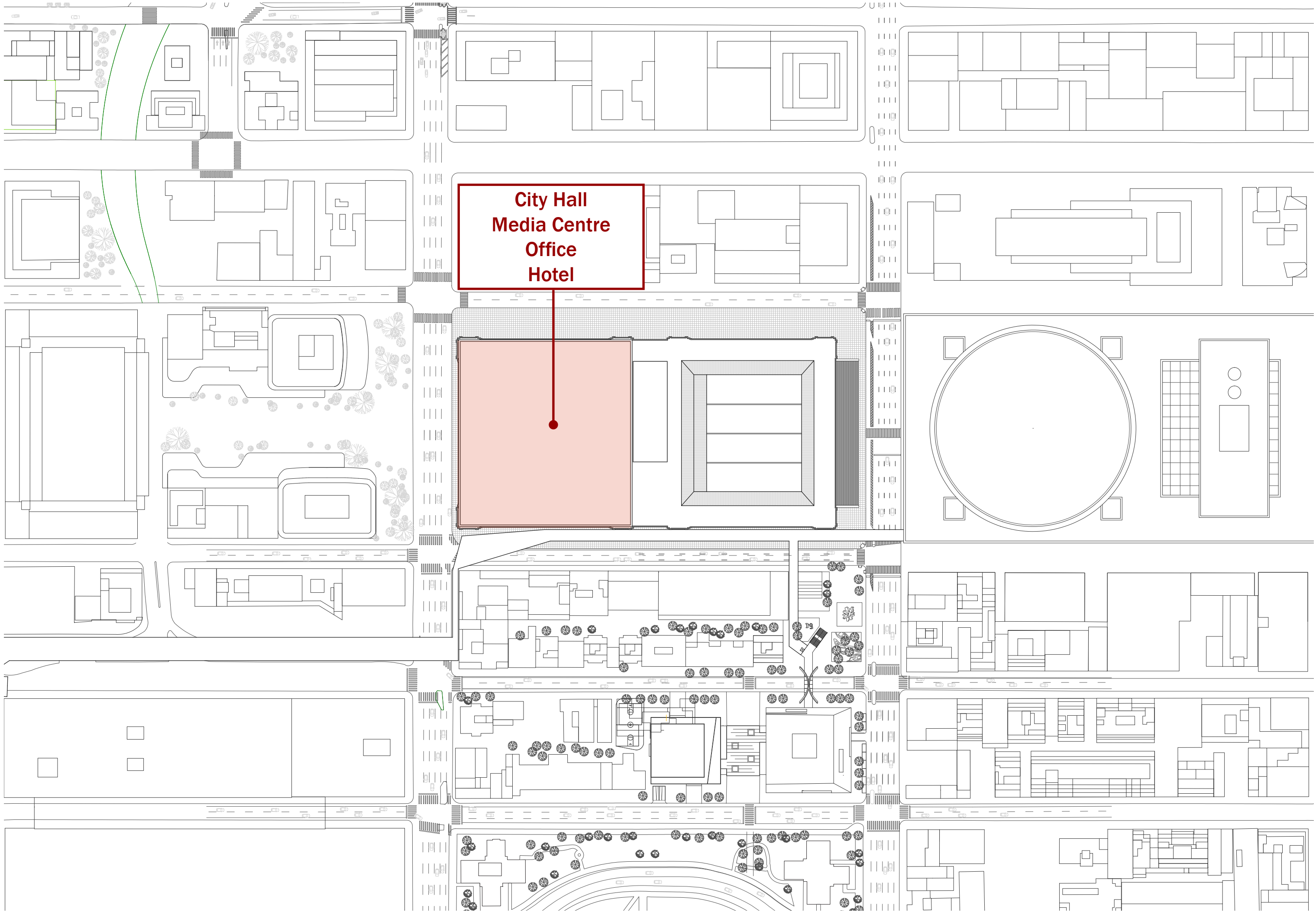
Shopping Centre

Office

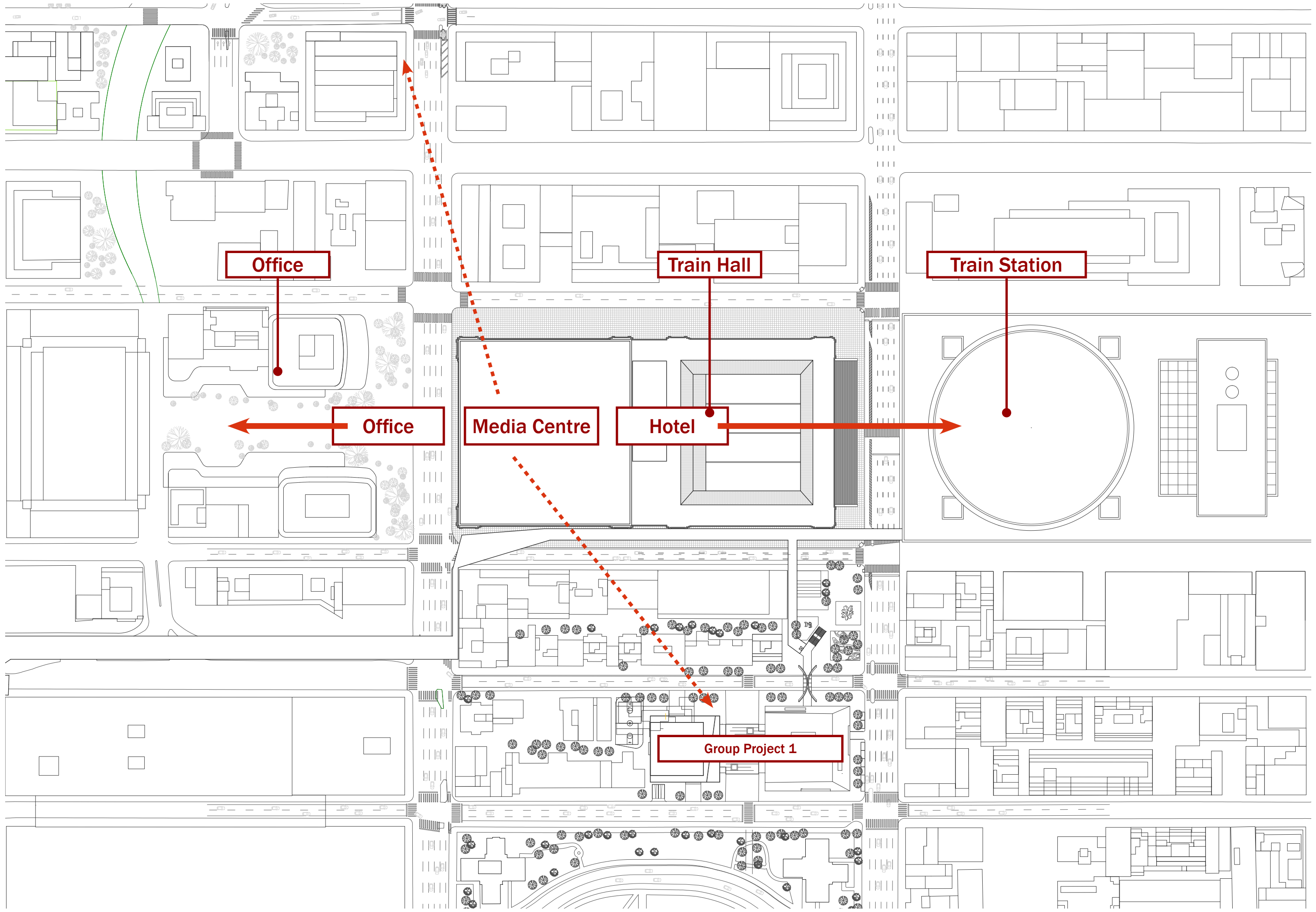
Train Hall

Post Office

Train Station



**City Hall
Media Centre
Office
Hotel**



Office

Train Hall

Train Station

Office

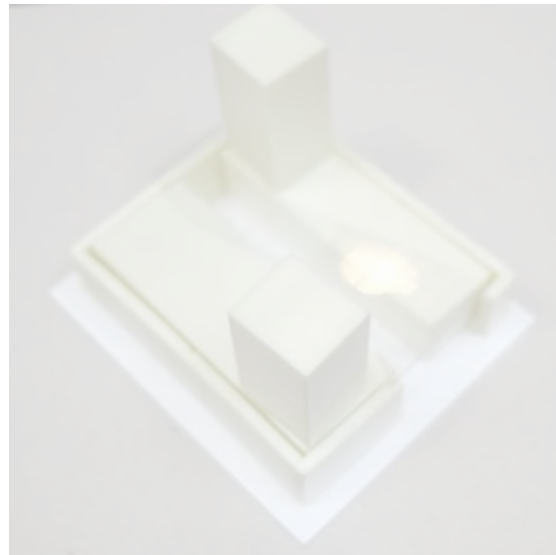
Media Centre

Hotel

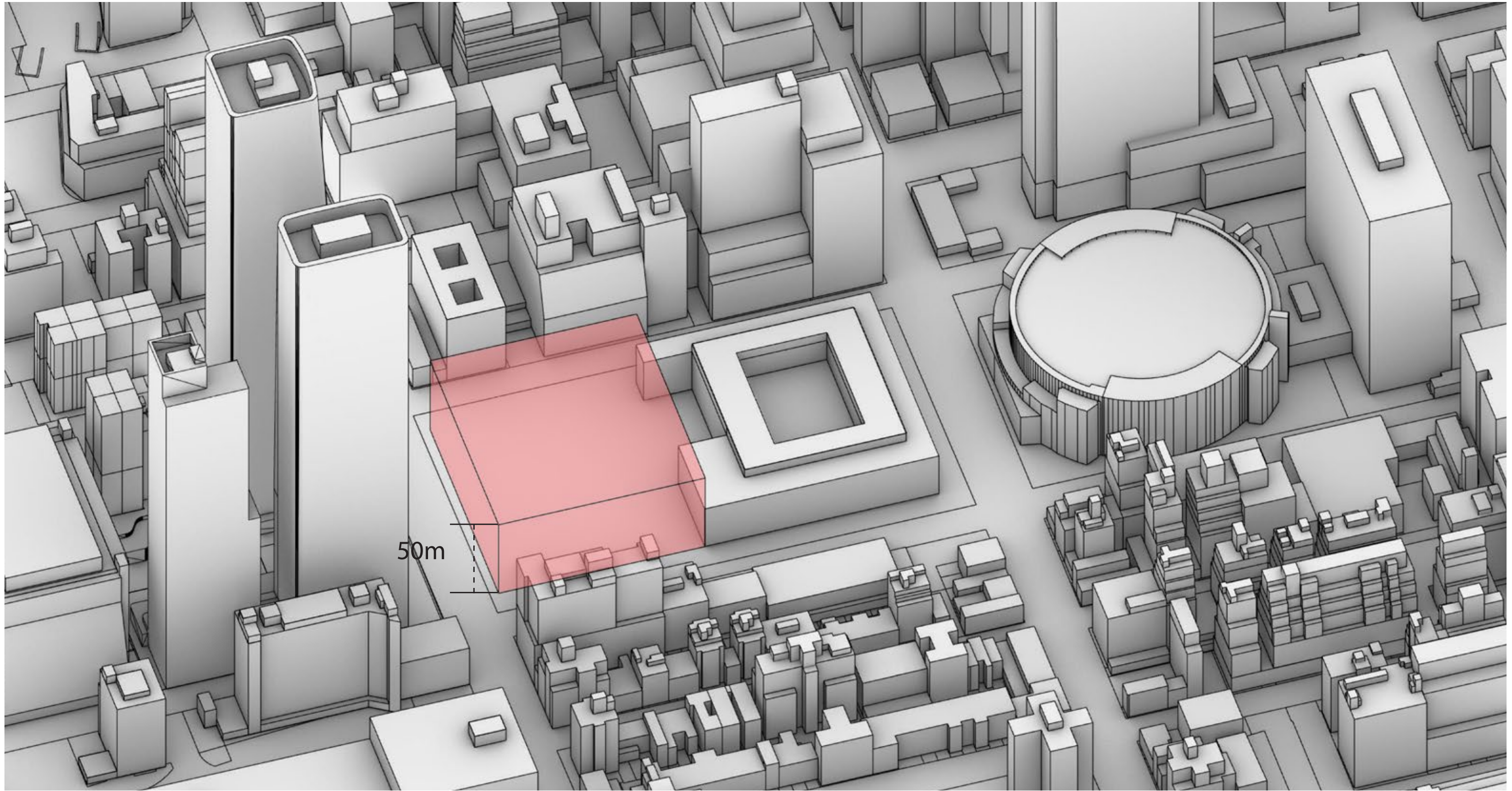
Group Project 1



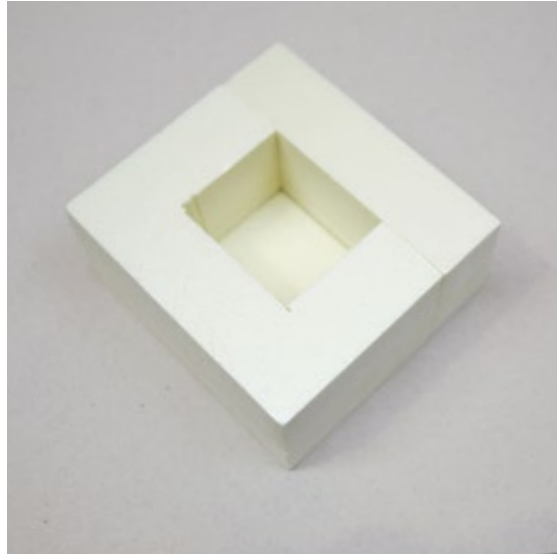
Design



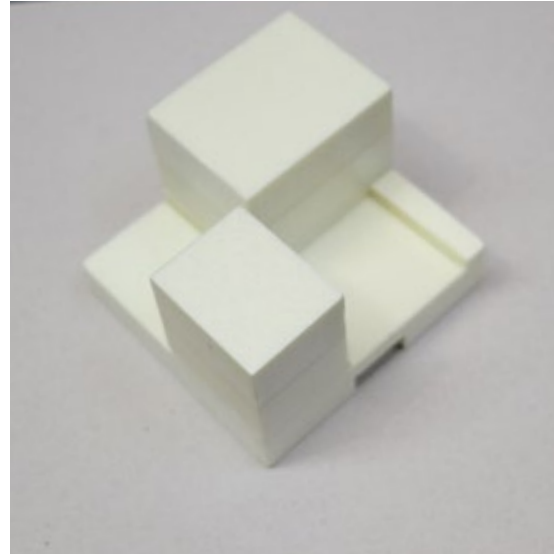
Massing Exploration



Maximum Envelope



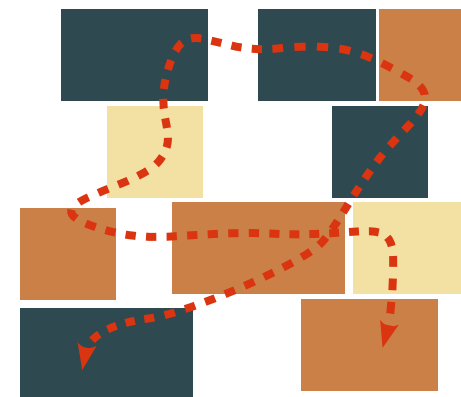
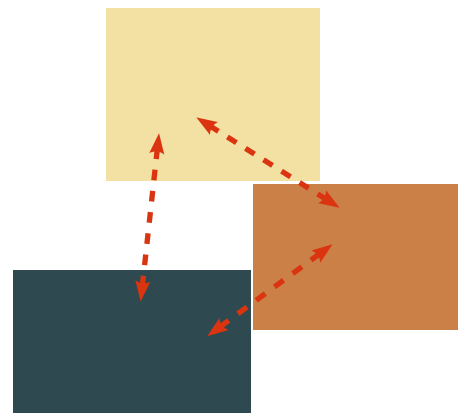
Bulk



Boxes



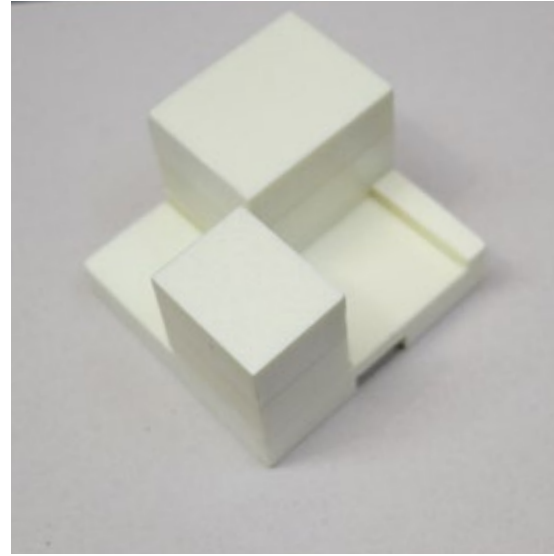
Pieces



Massing Research



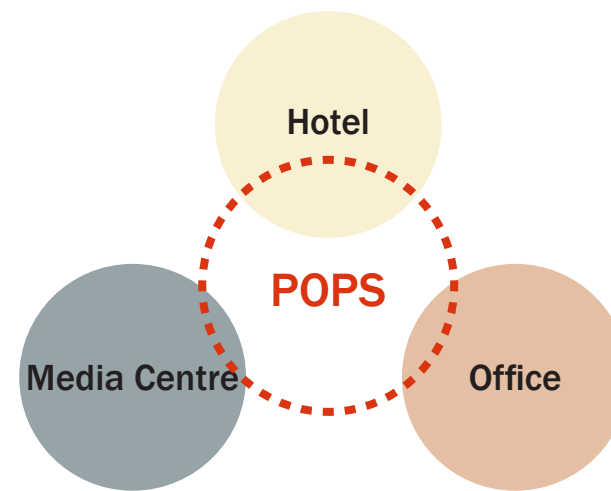
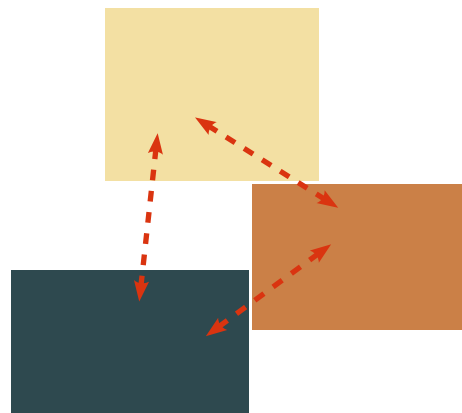
Bulk



Boxes

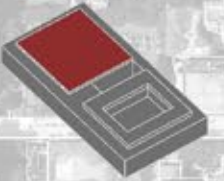
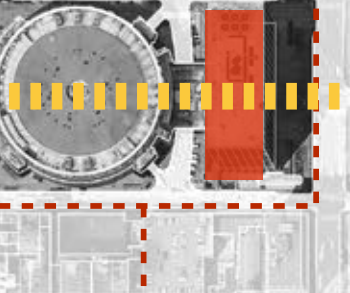
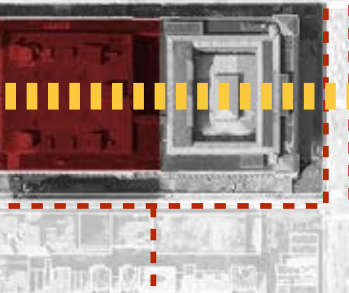
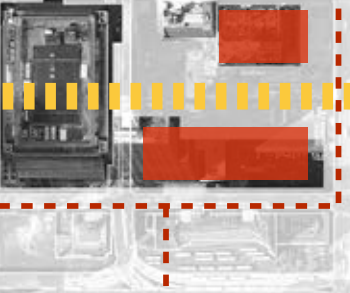
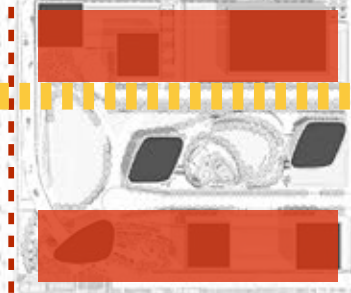
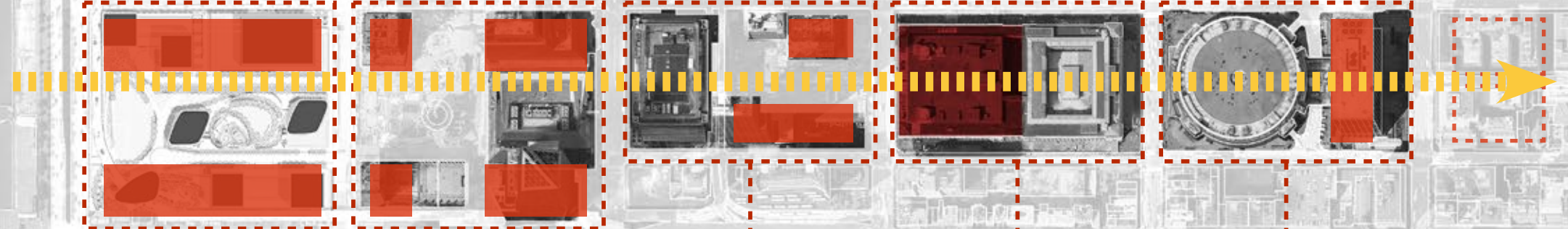


Pieces

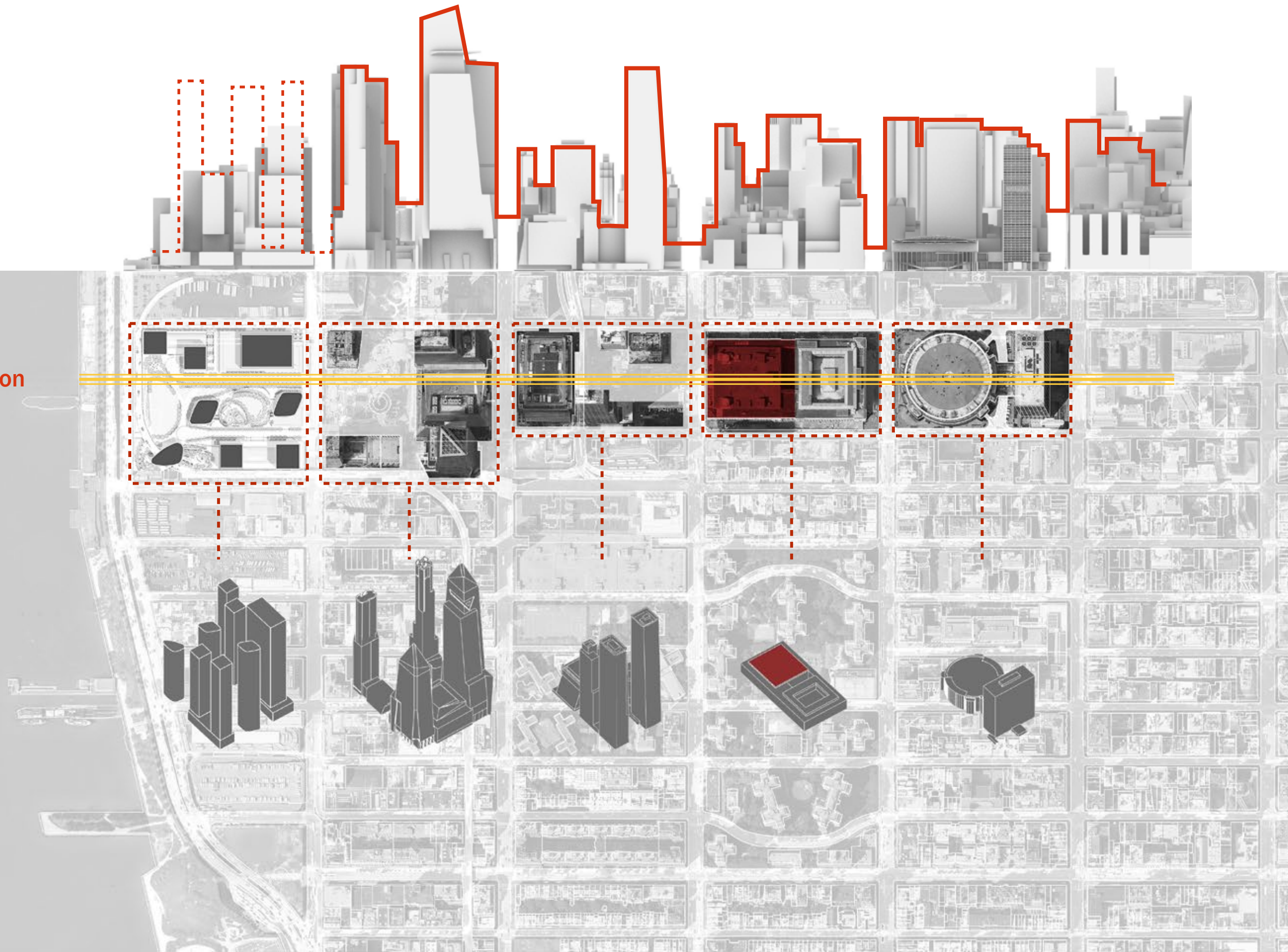


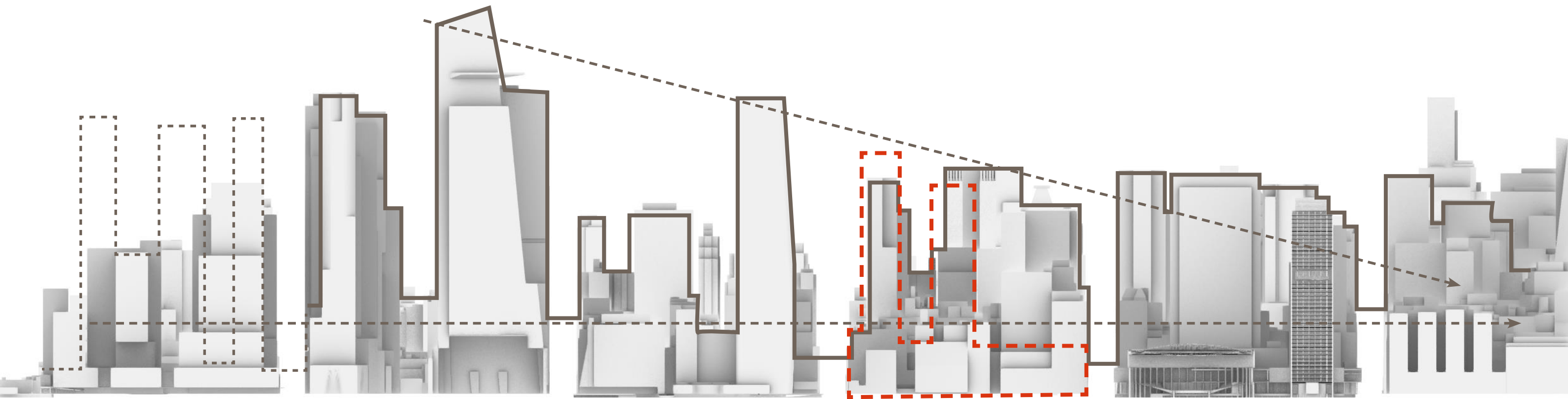
Massing Research

Urban Axis

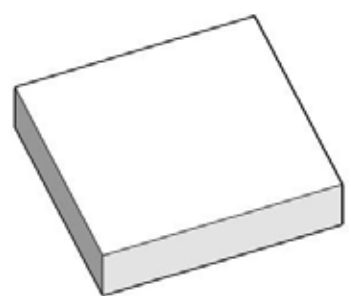
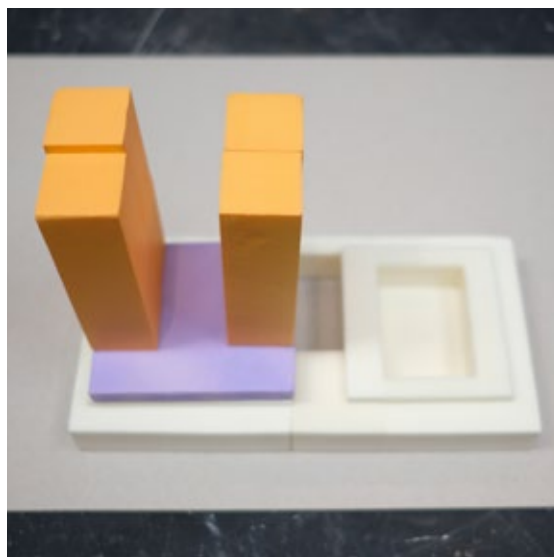


City Section



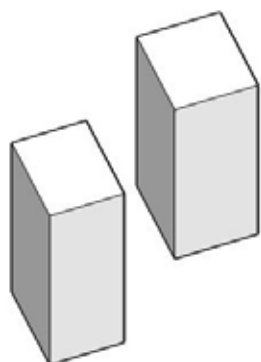


City Section



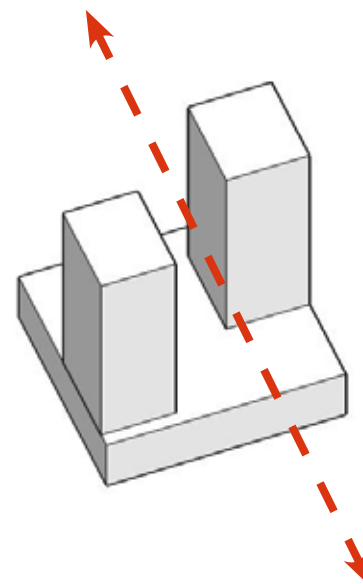
Lower volumn

+

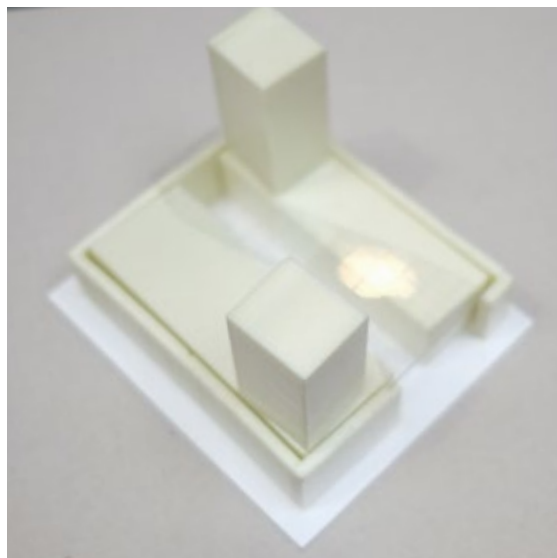
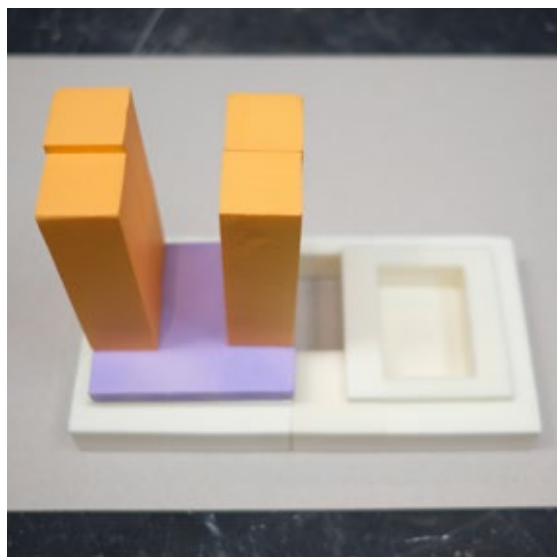


Towers

=



Axis

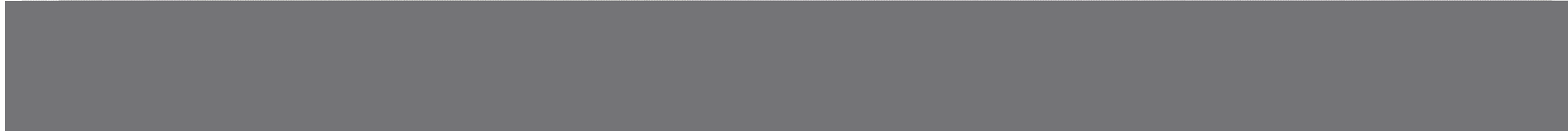
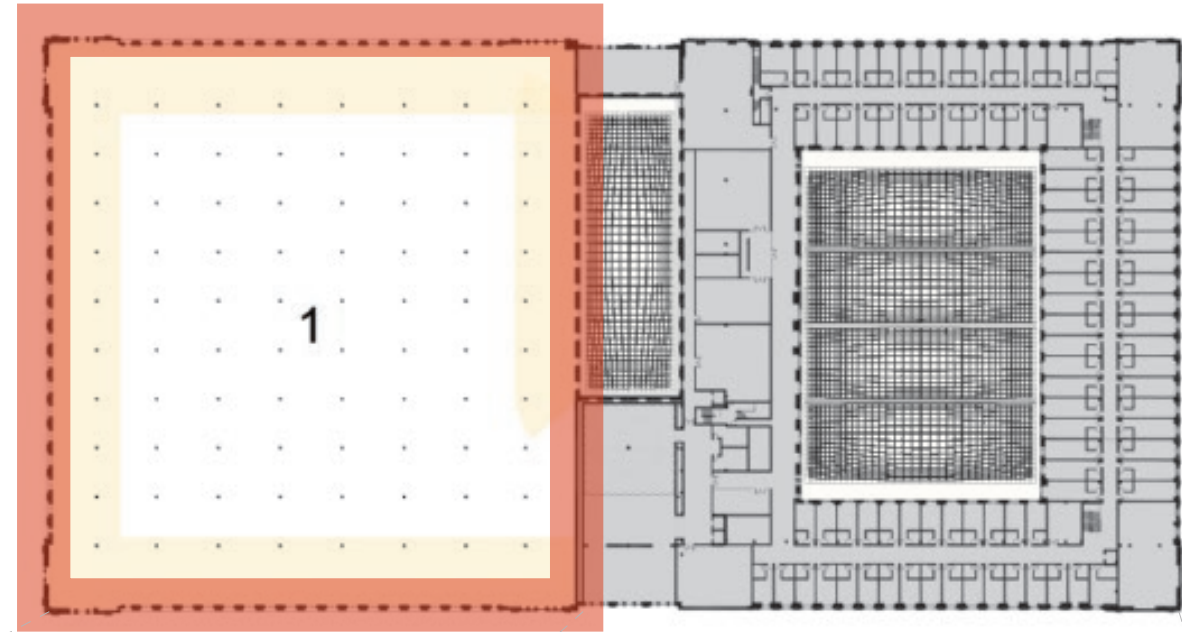


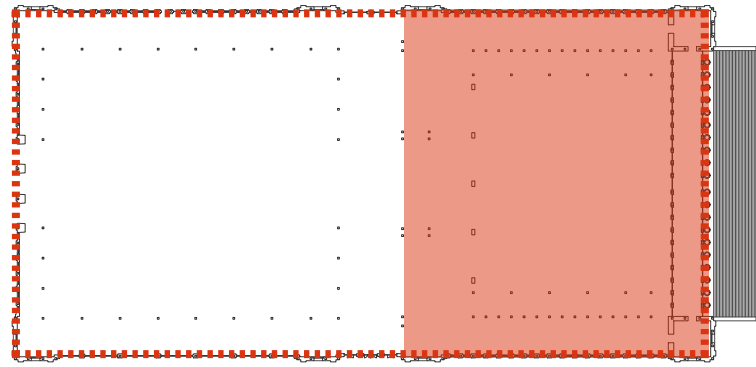
Massing Research



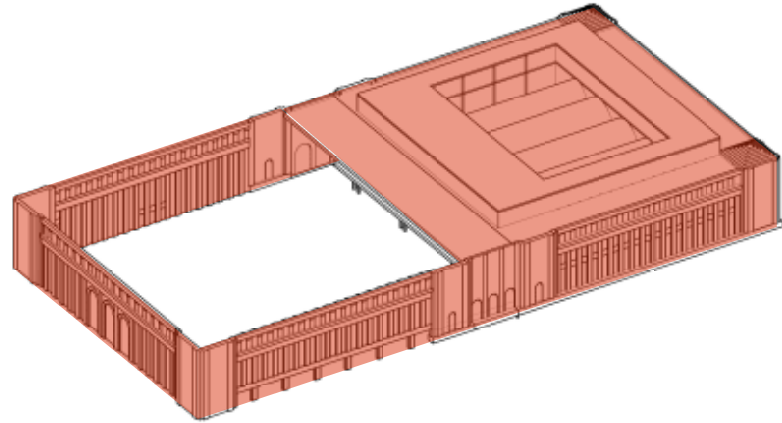
Building Approach

1. Keep character

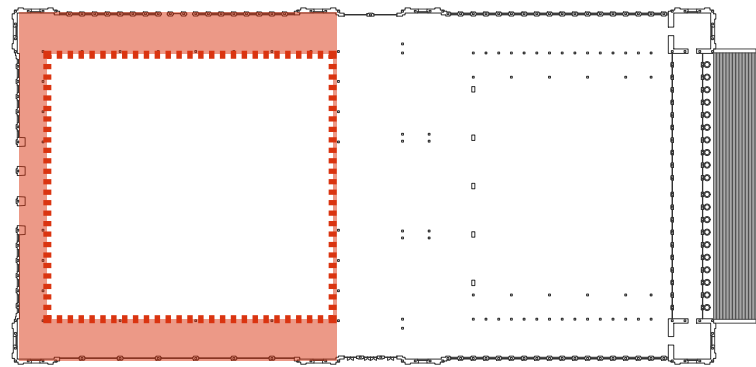




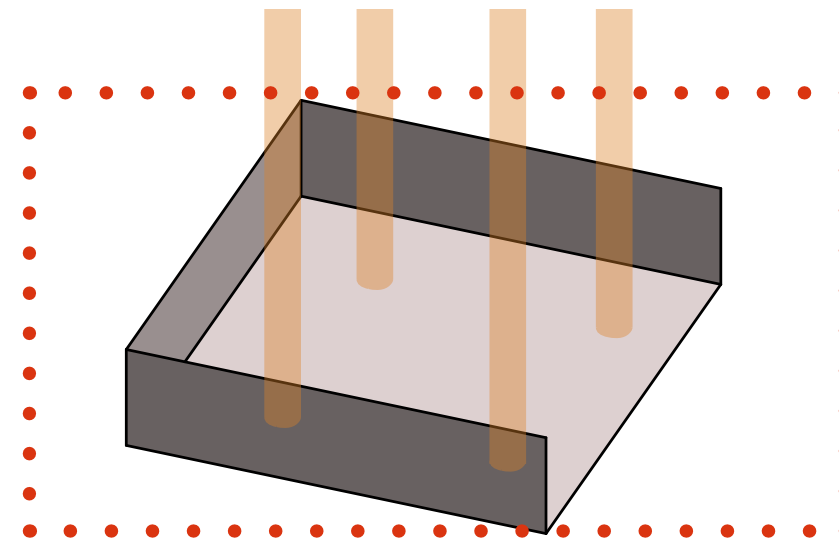
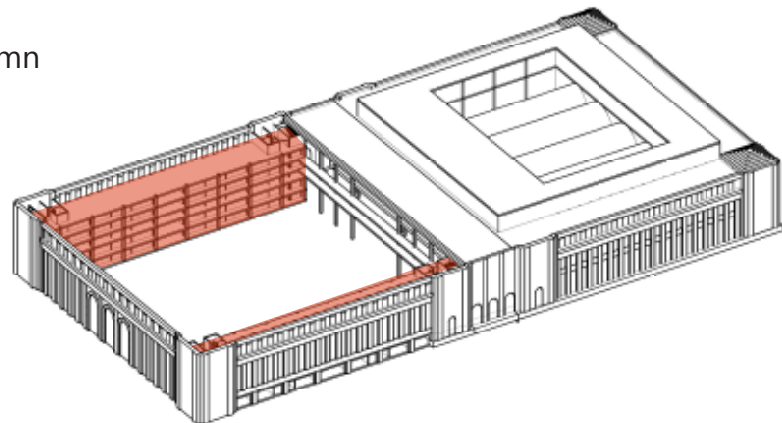
Facade



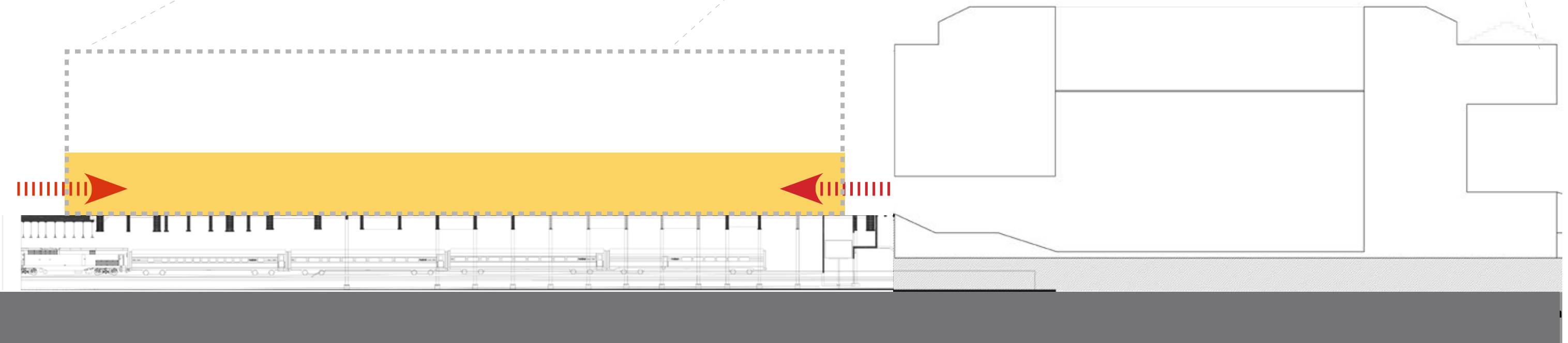
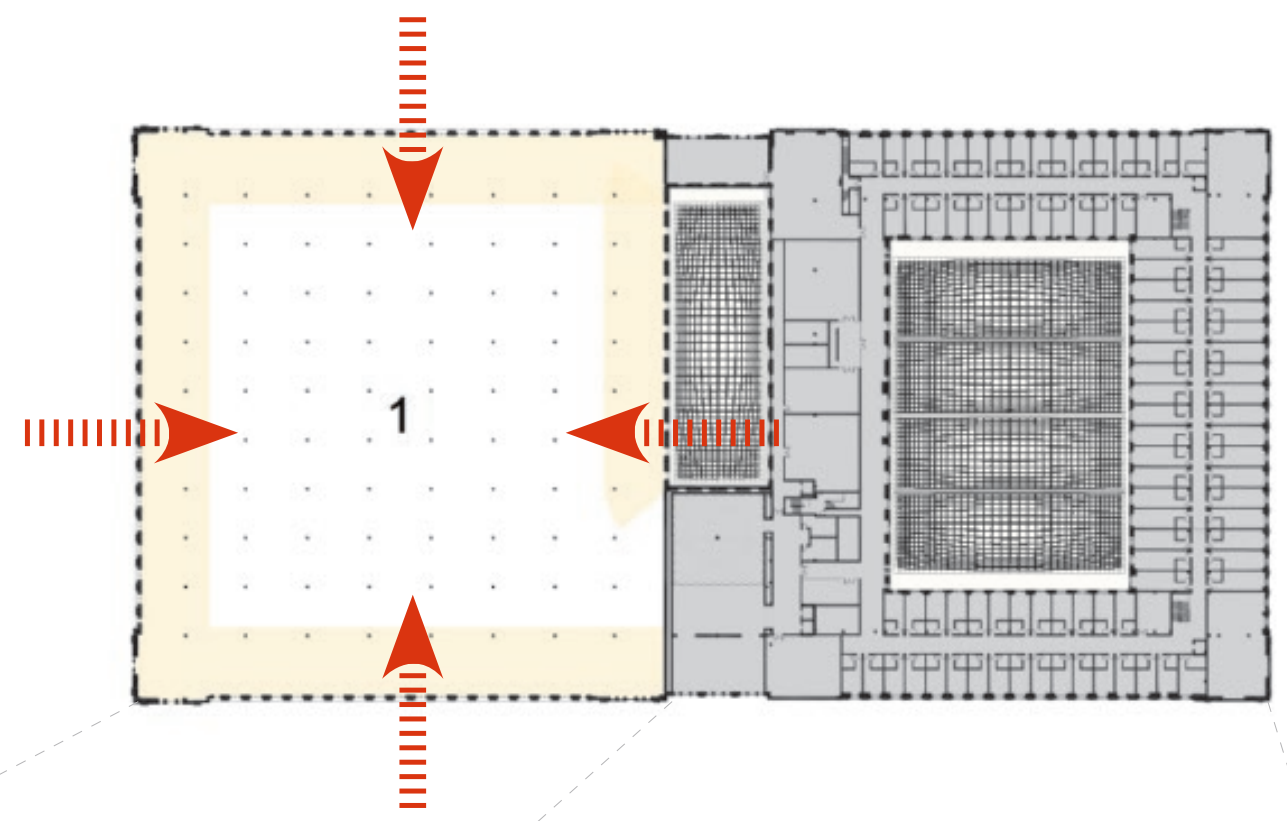
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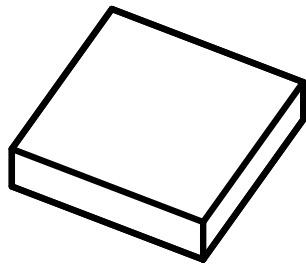


Support column

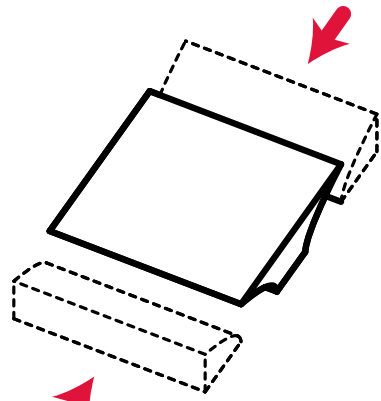


- 1. Keep character
- 2. Open ground floor

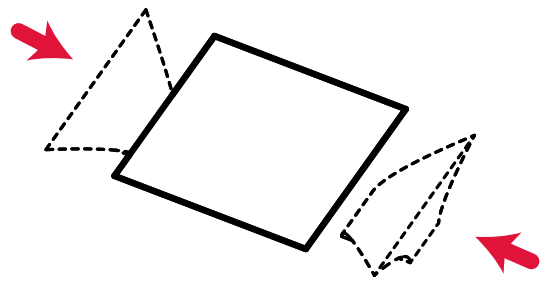




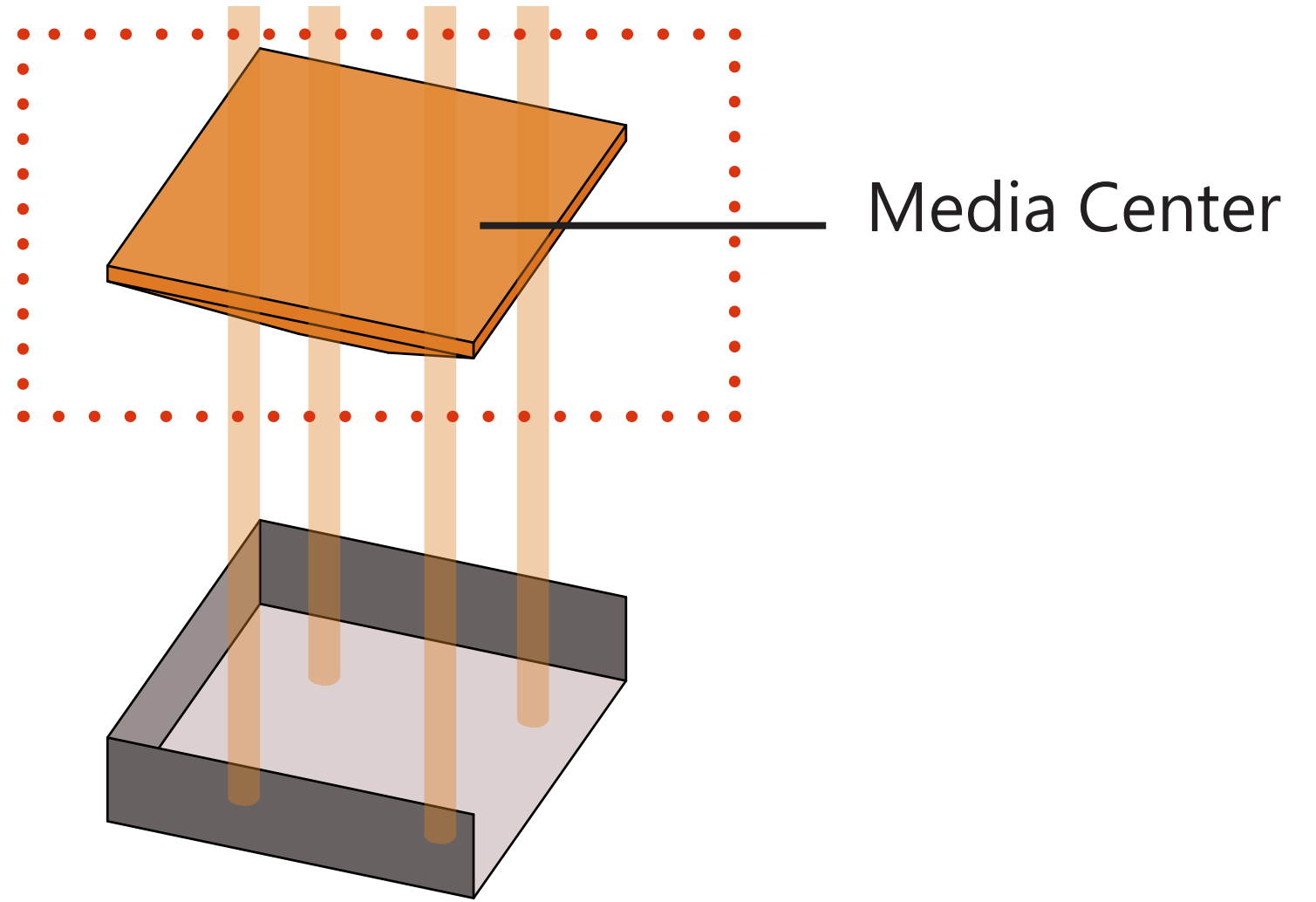
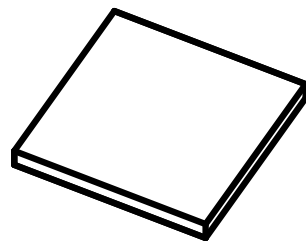
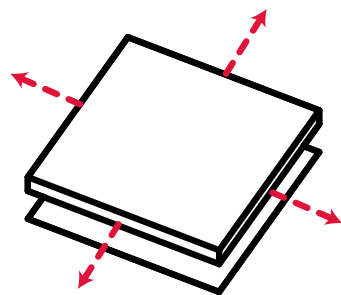
Entrance



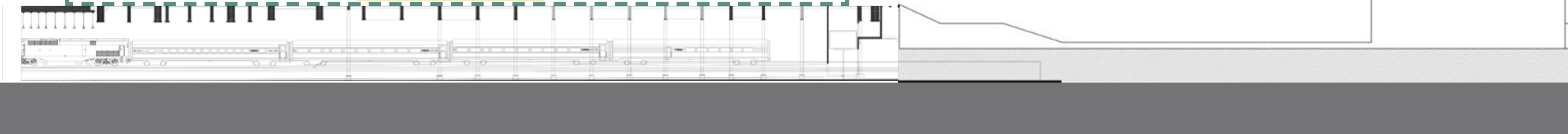
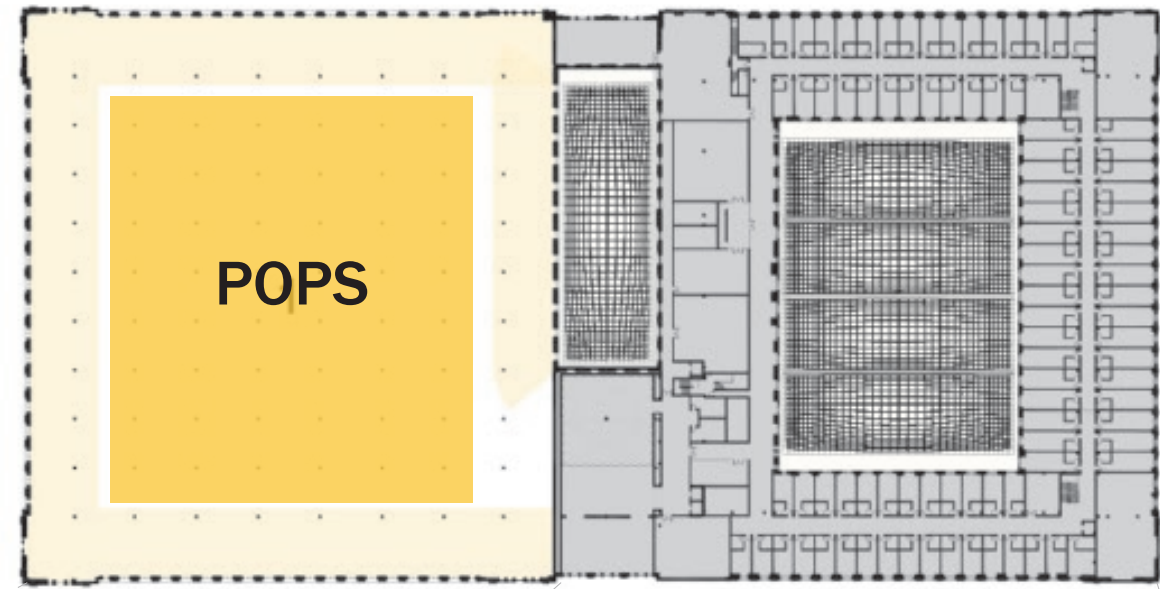
Entrance

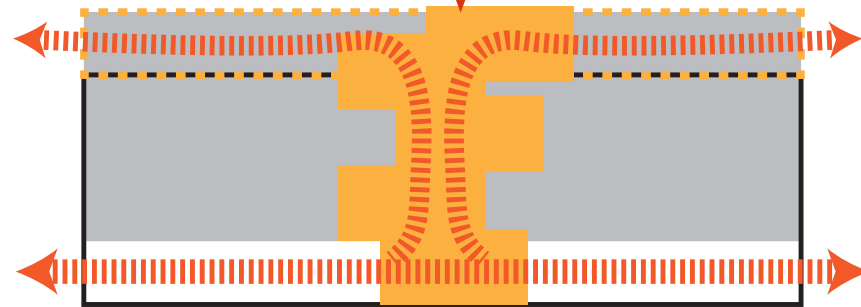
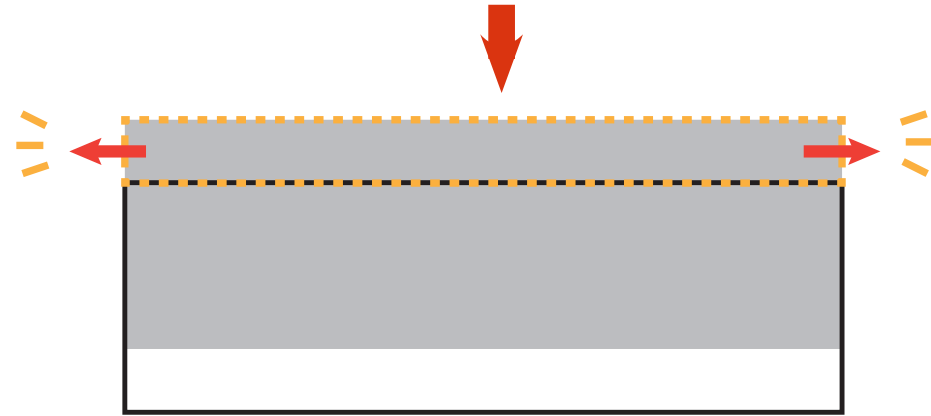
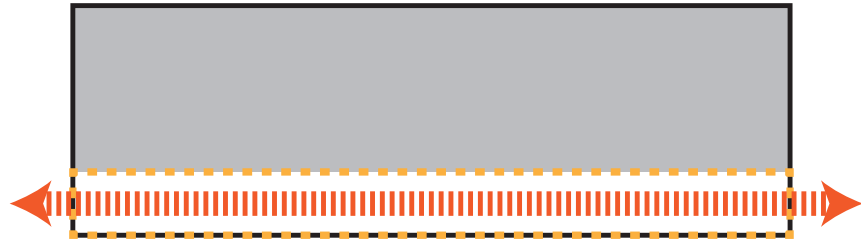
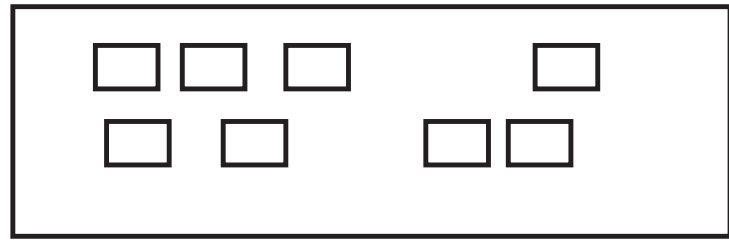


Views

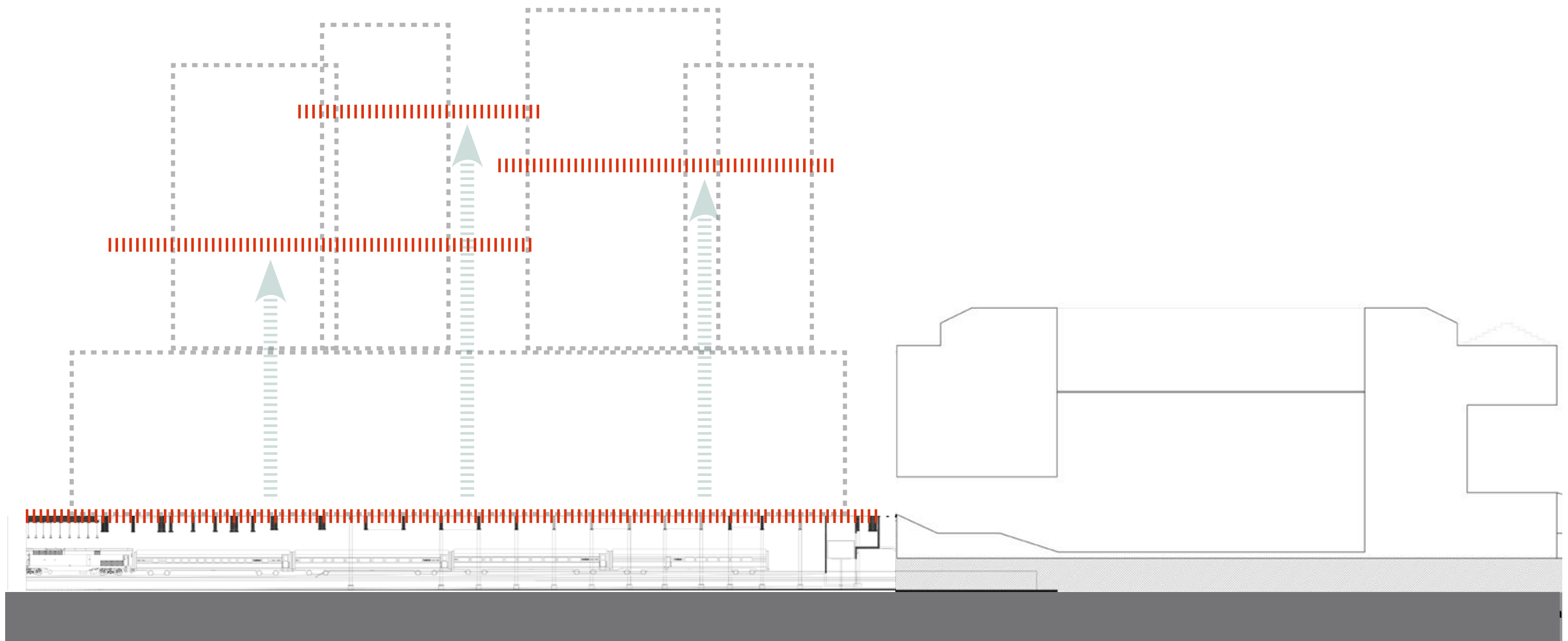


1. Keep character
2. Open ground floor
3. POPS connect private space with uraban environment

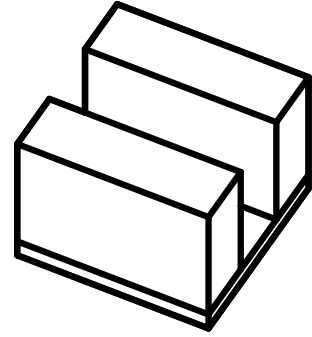




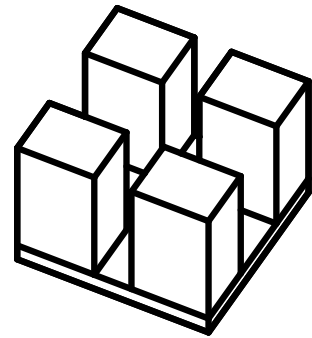
1. Keep character
2. Open ground floor
3. POPS connect private space with uraban environment
4. Extend city ground



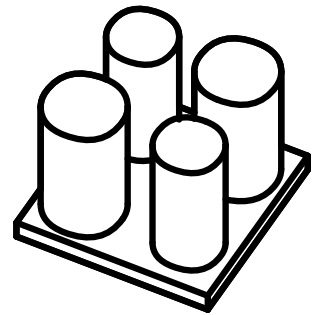
Axis



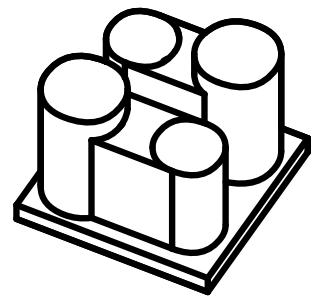
Flexible



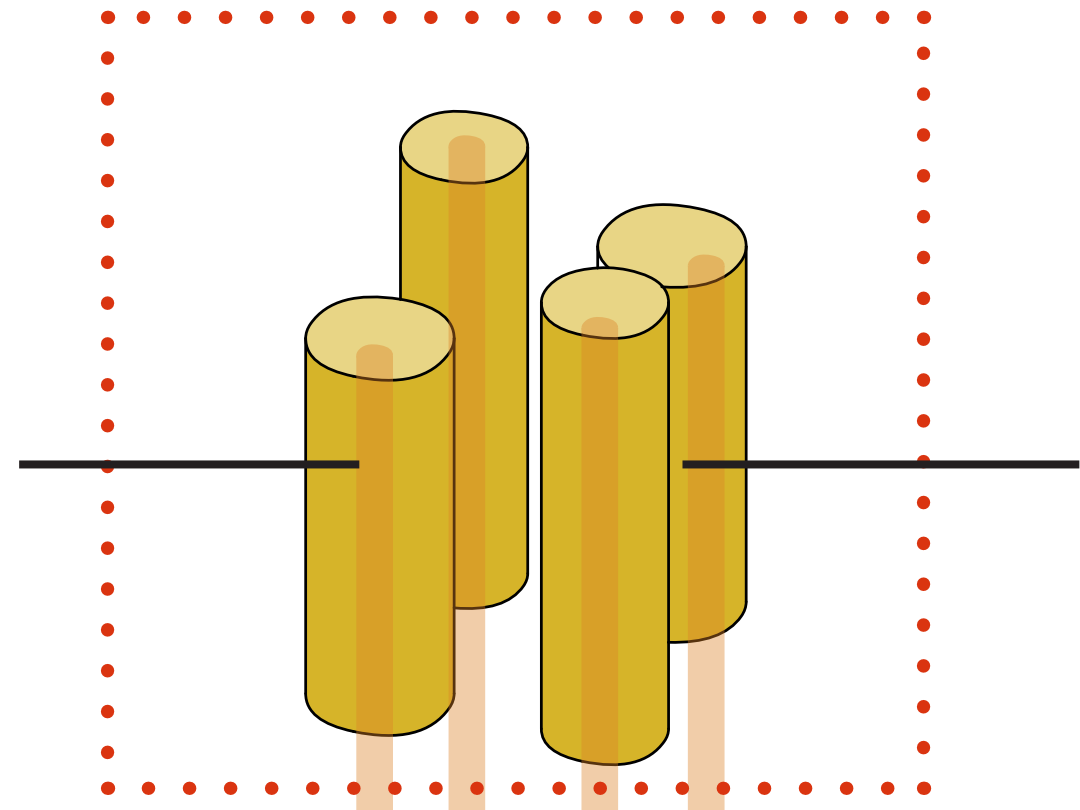
Cylinder



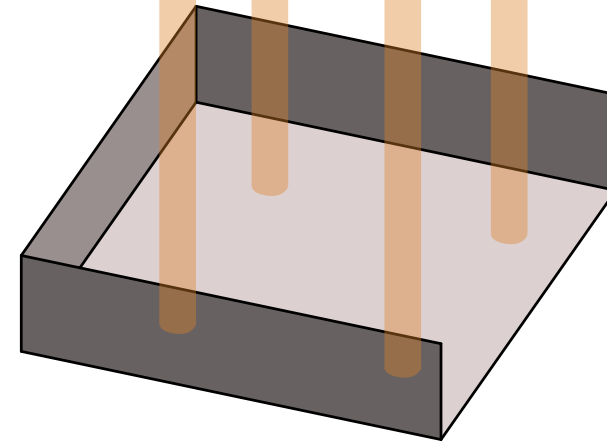
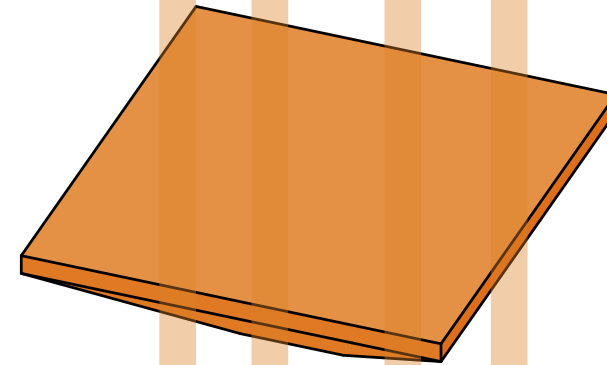
Connection

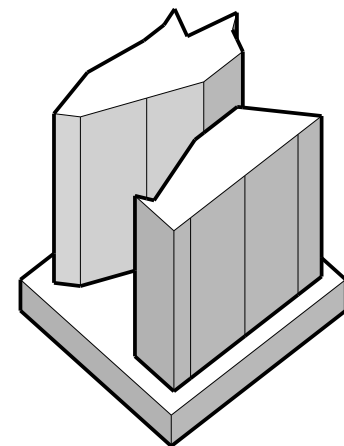
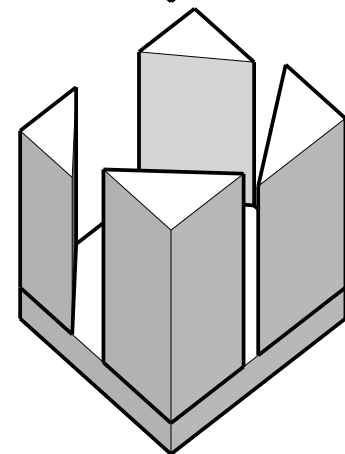
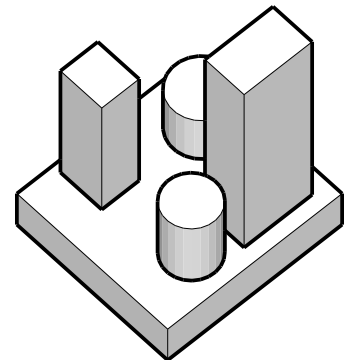
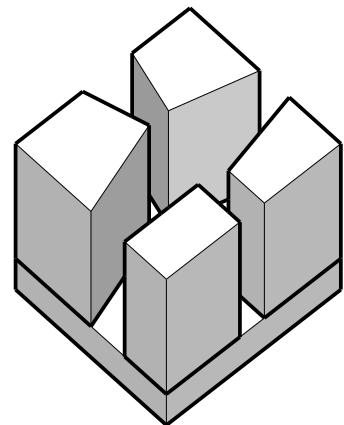
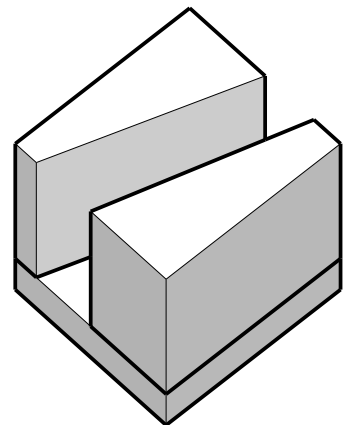
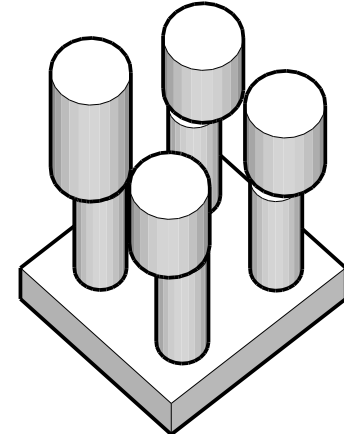
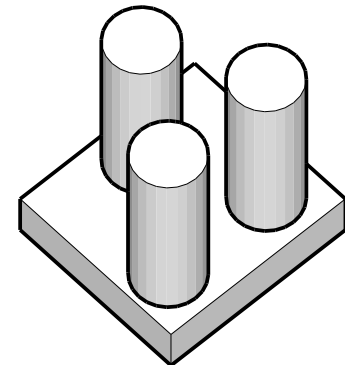
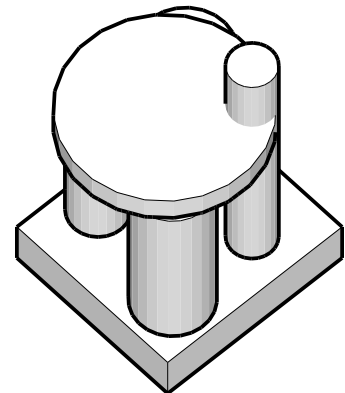
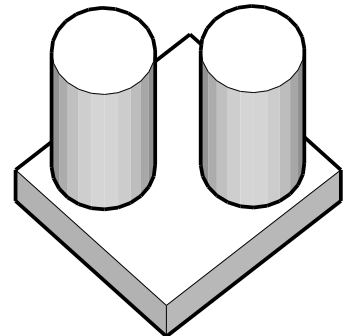
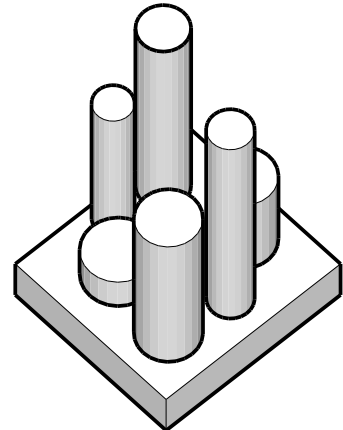
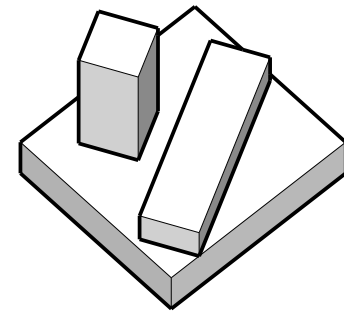
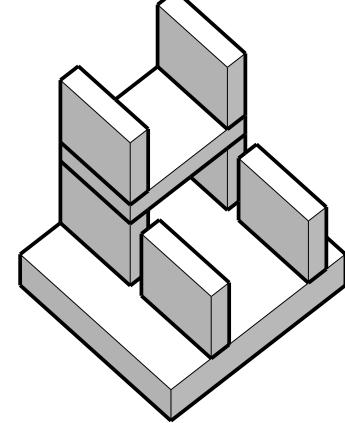
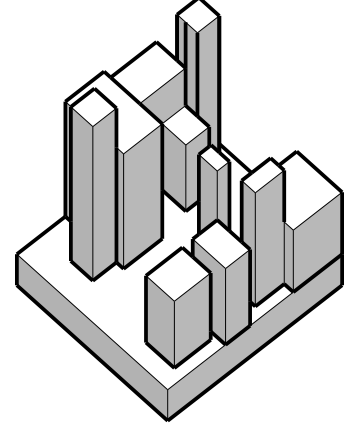
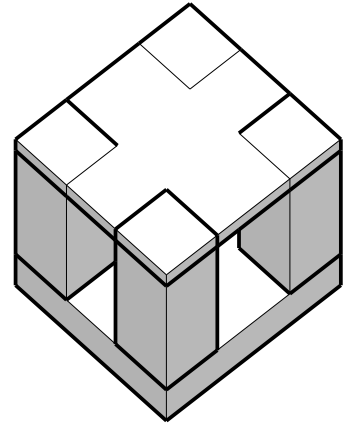
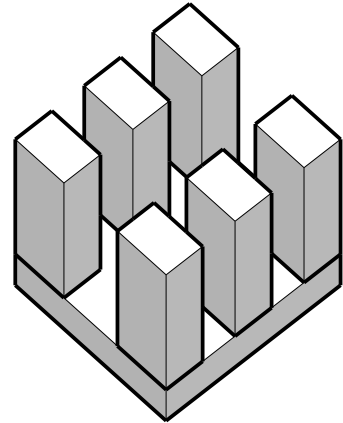
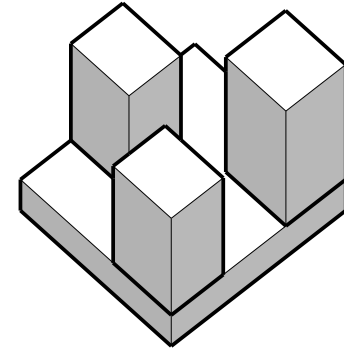
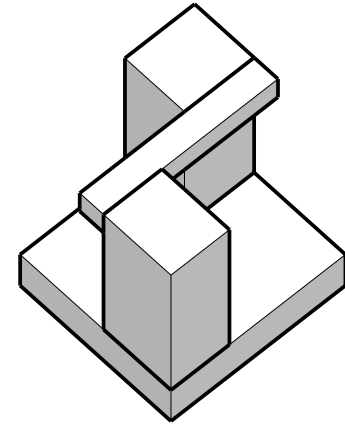
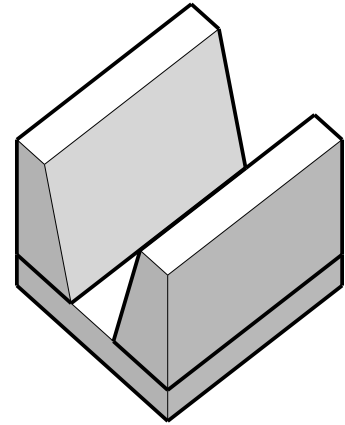
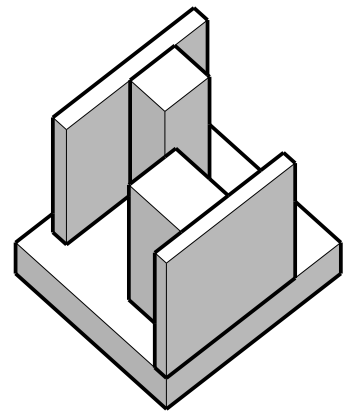
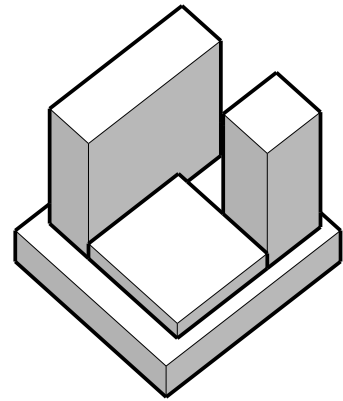


Office

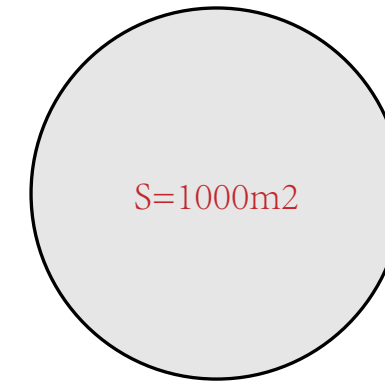
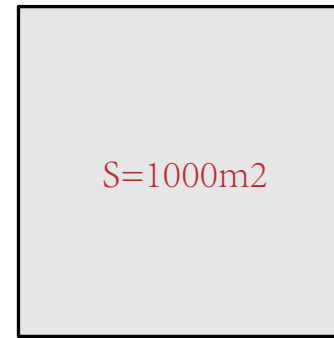


Hotel





Min Material



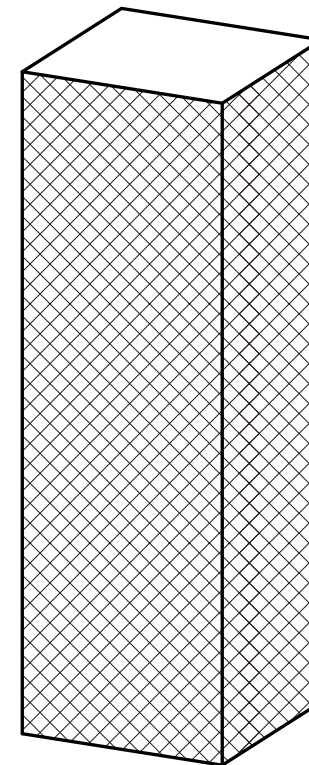
Why

Sight

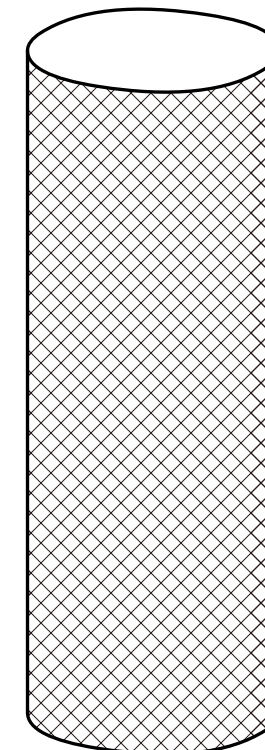
Cylinder

No direction

Landmark



material cost
>



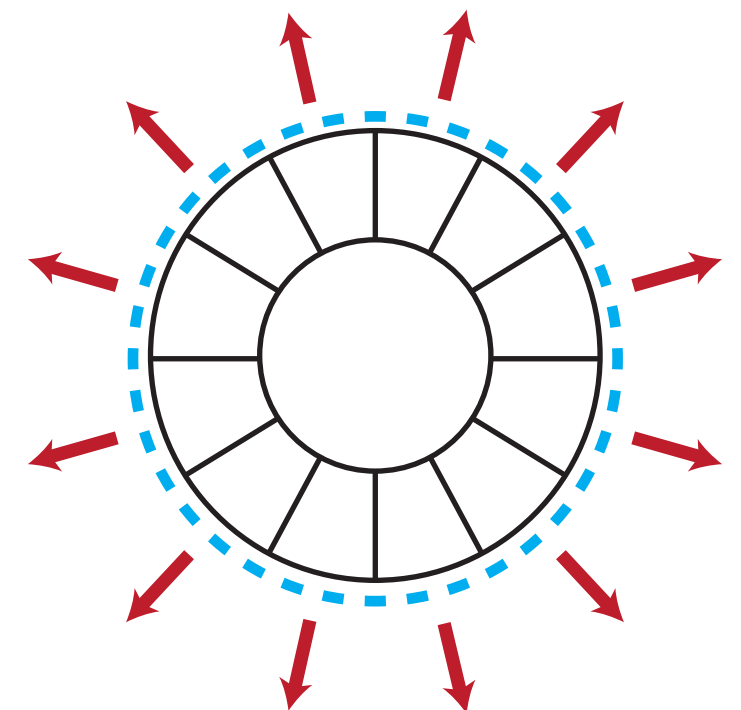
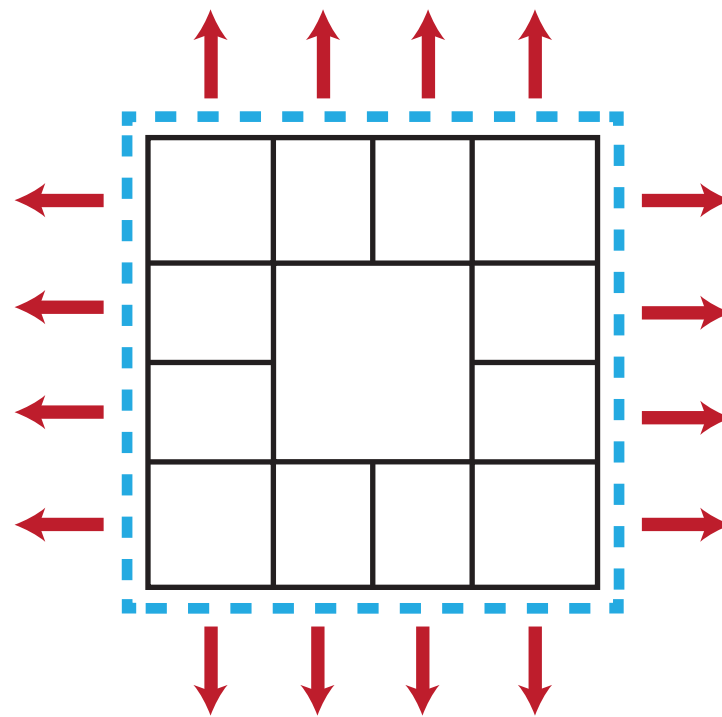
**Why
Cylinder**

Min Material

Sight

No direction

Landmark



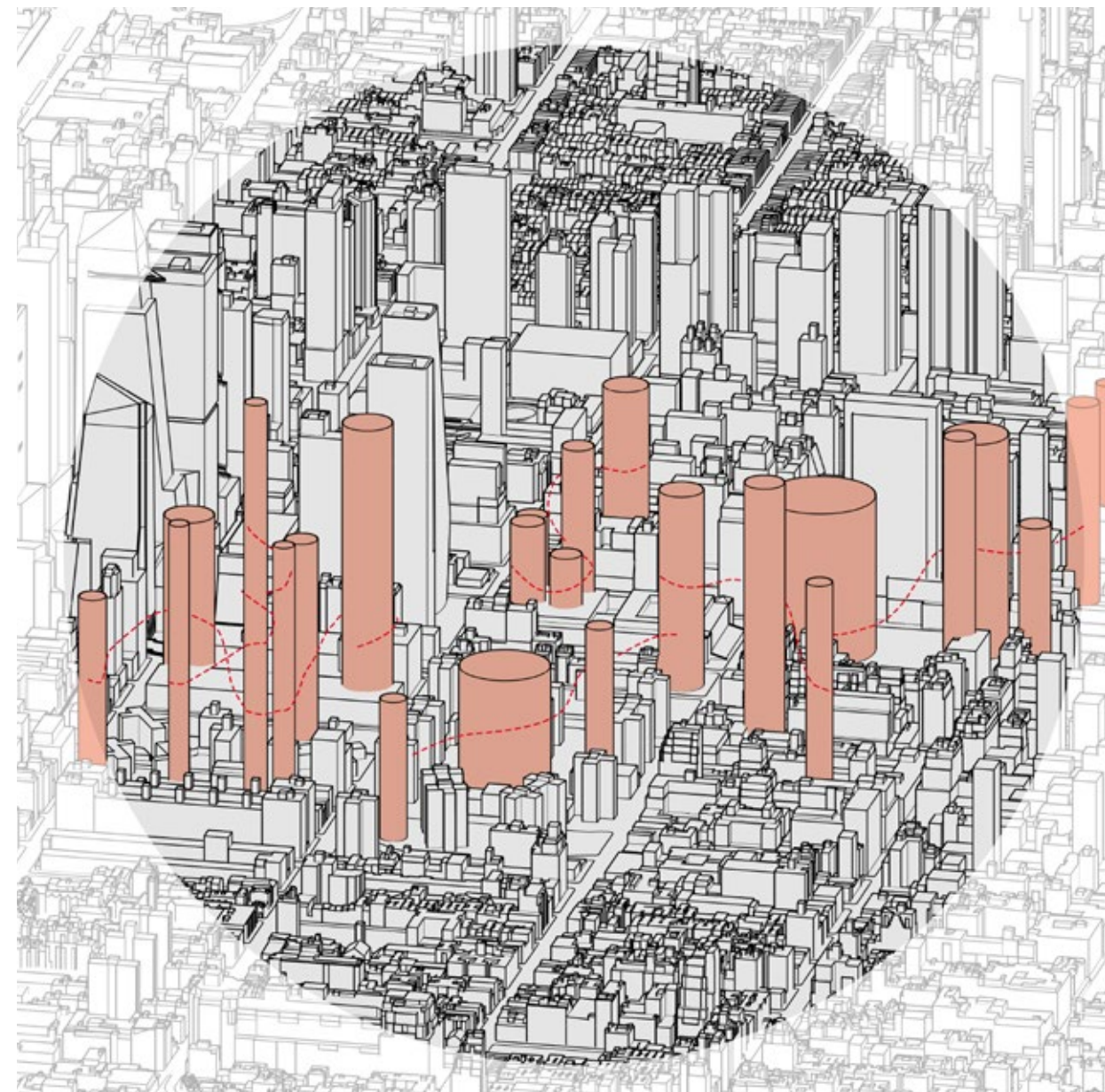
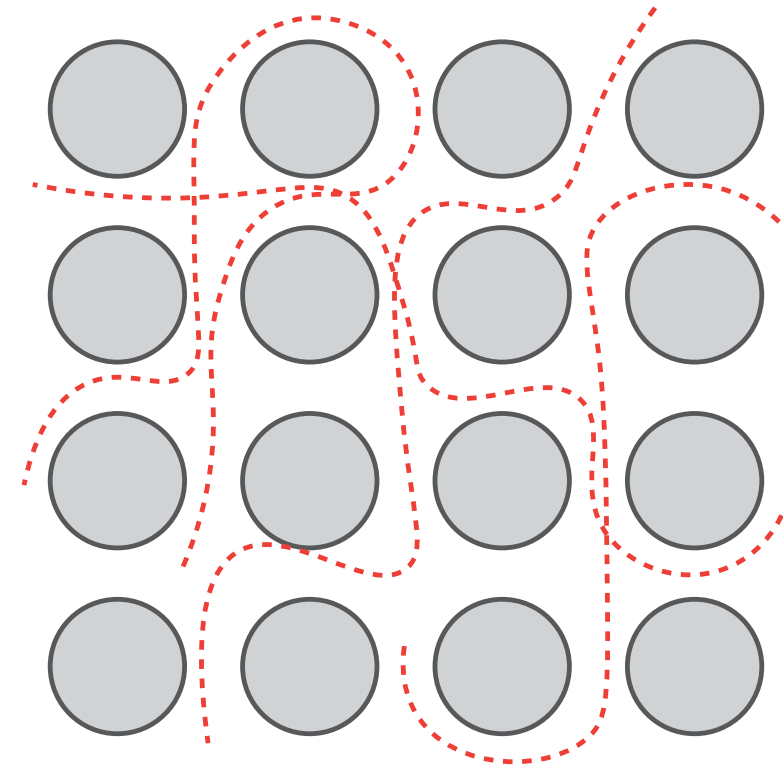
**Why
Cylinder**

Min Material

Sight

No direction

Landmark



Why

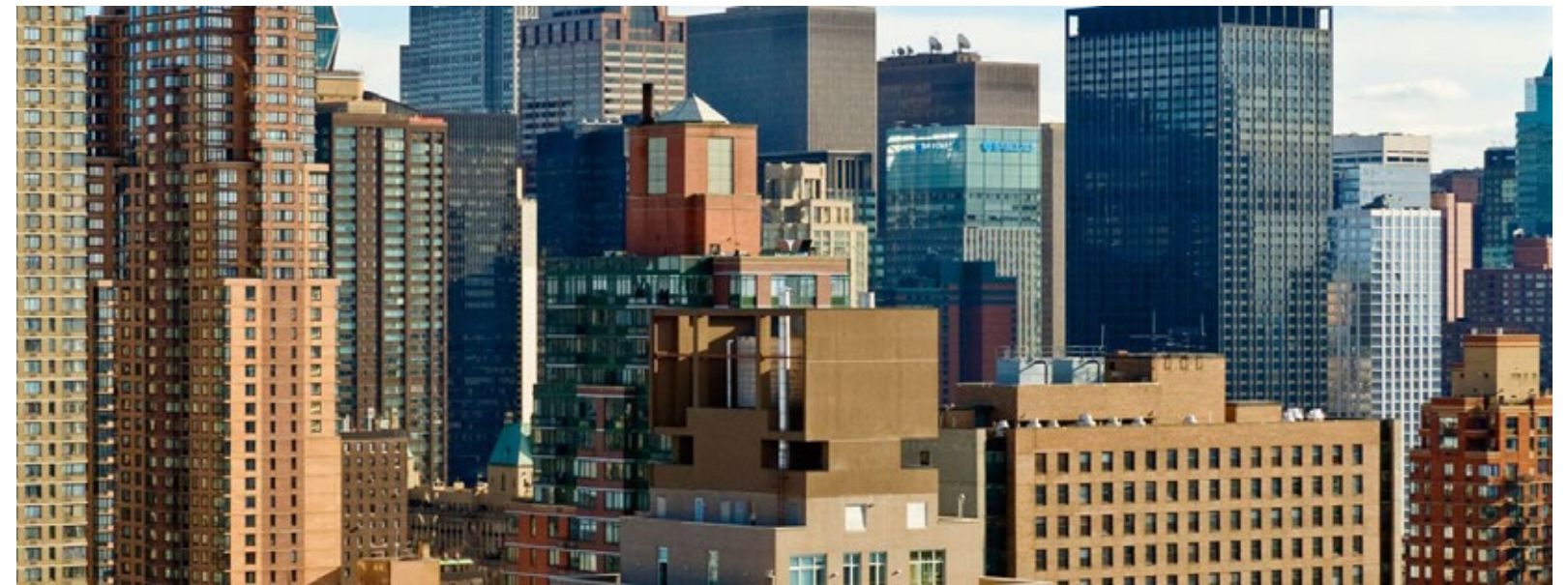
Cylinder

Min Material

Sight

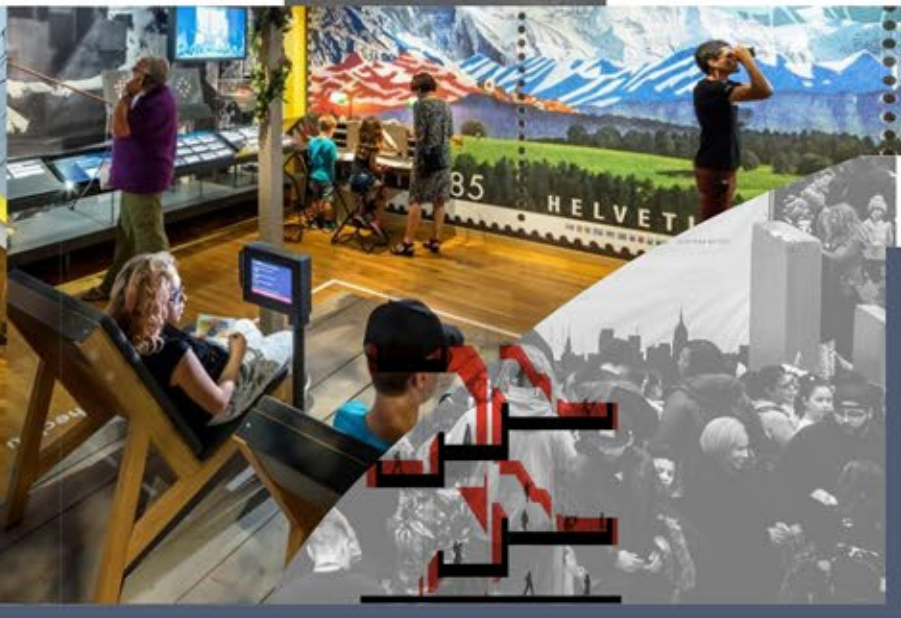
No direction

Landmark

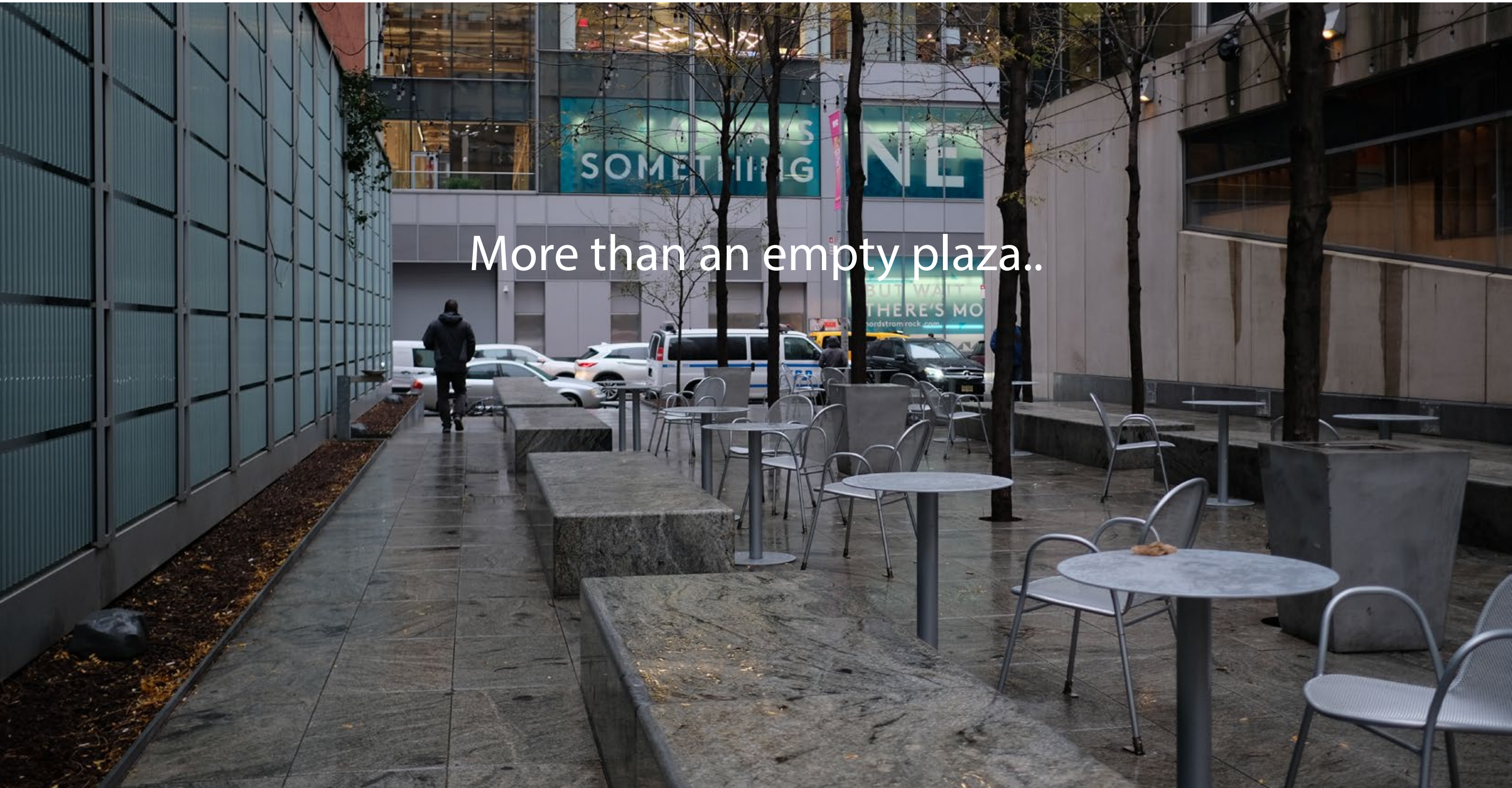




Space



What POPS can be?



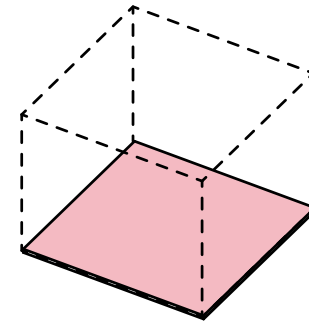
More than an empty plaza..



City Plaza



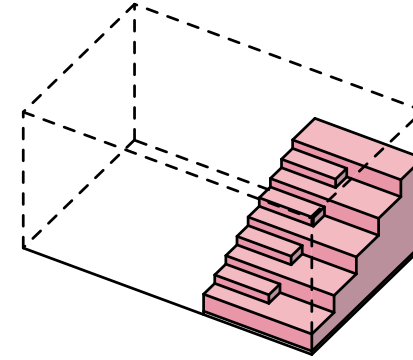
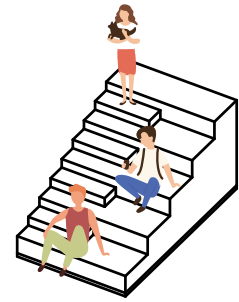
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Library



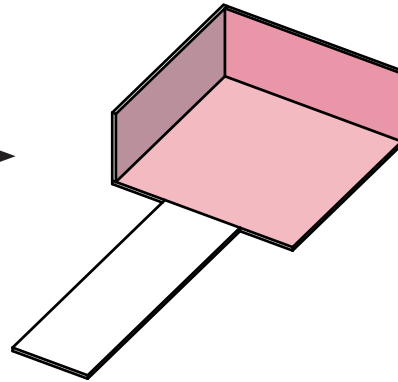
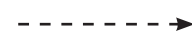
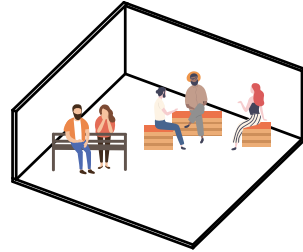
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High Line



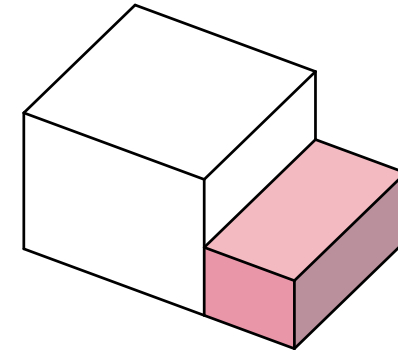
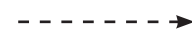
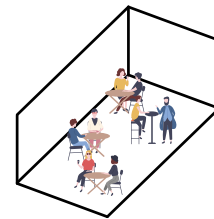
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Auditorium



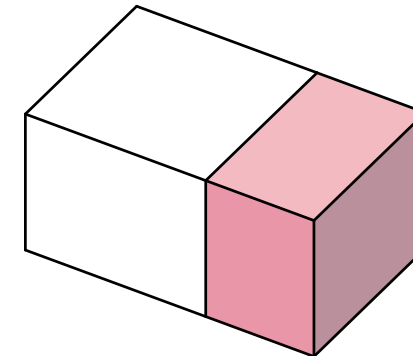
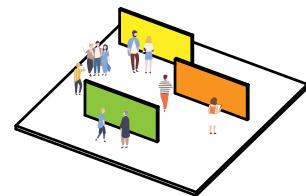
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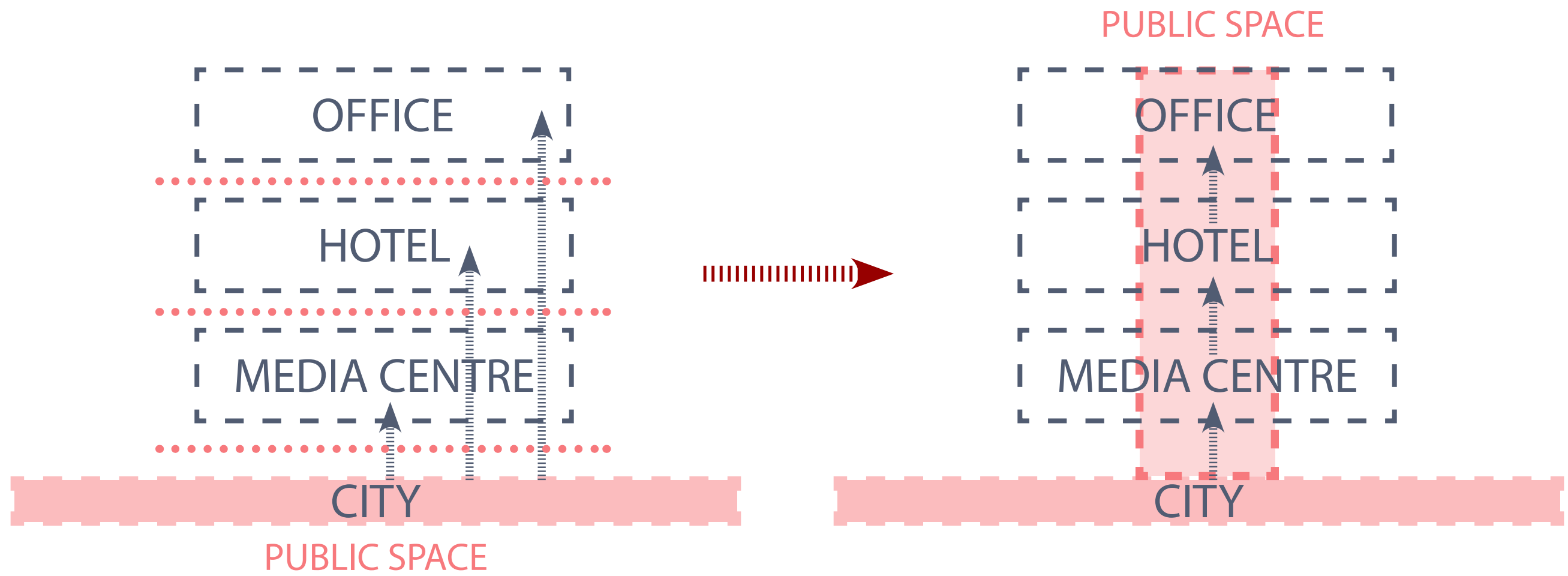
Exhibition



+



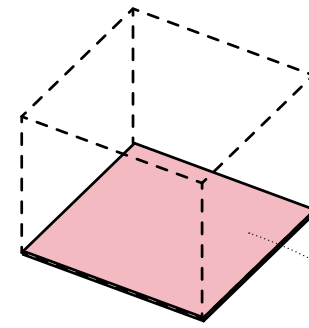
Where POPS can be?



City Plaza



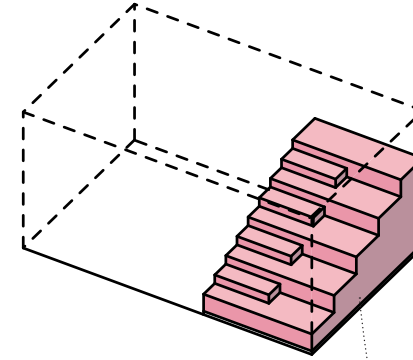
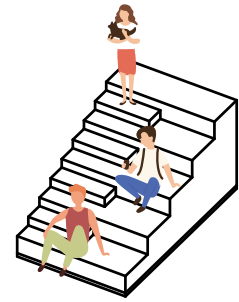
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Library



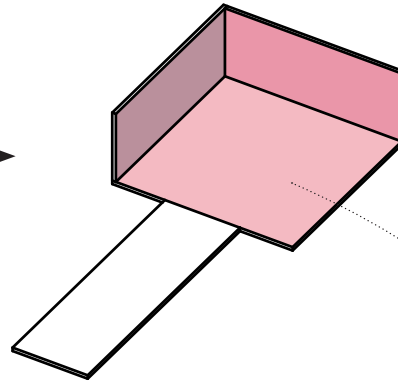
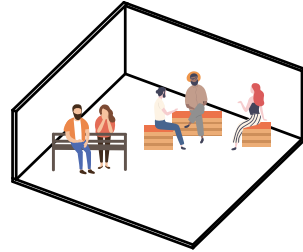
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High Line



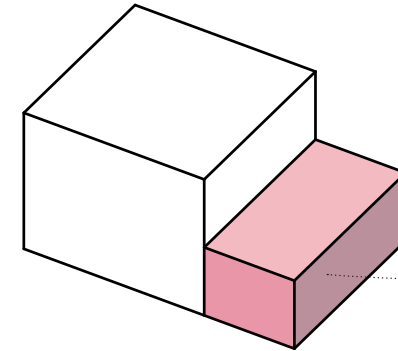
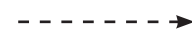
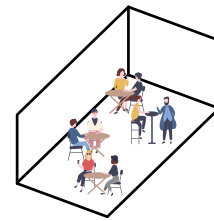
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Auditorium



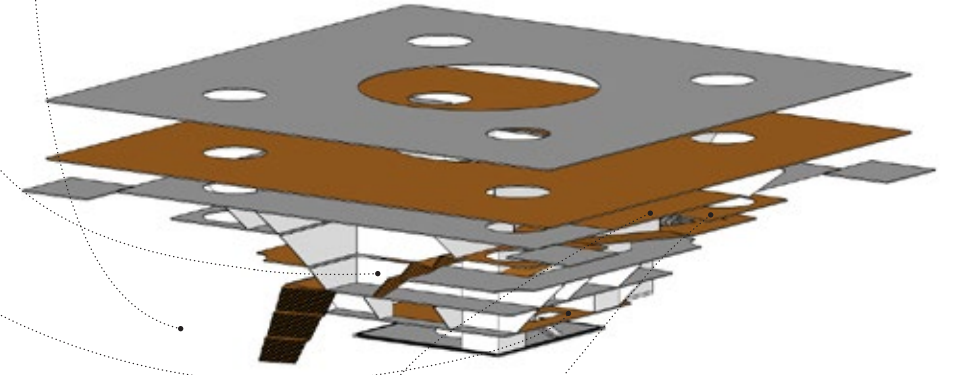
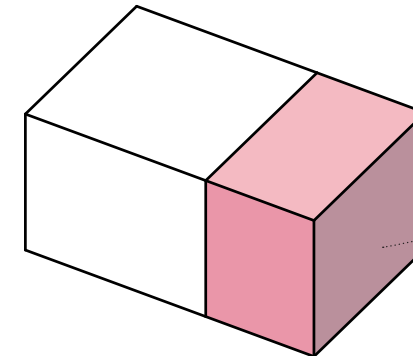
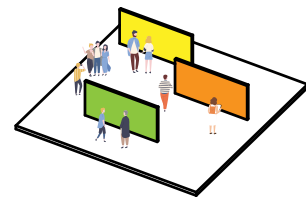
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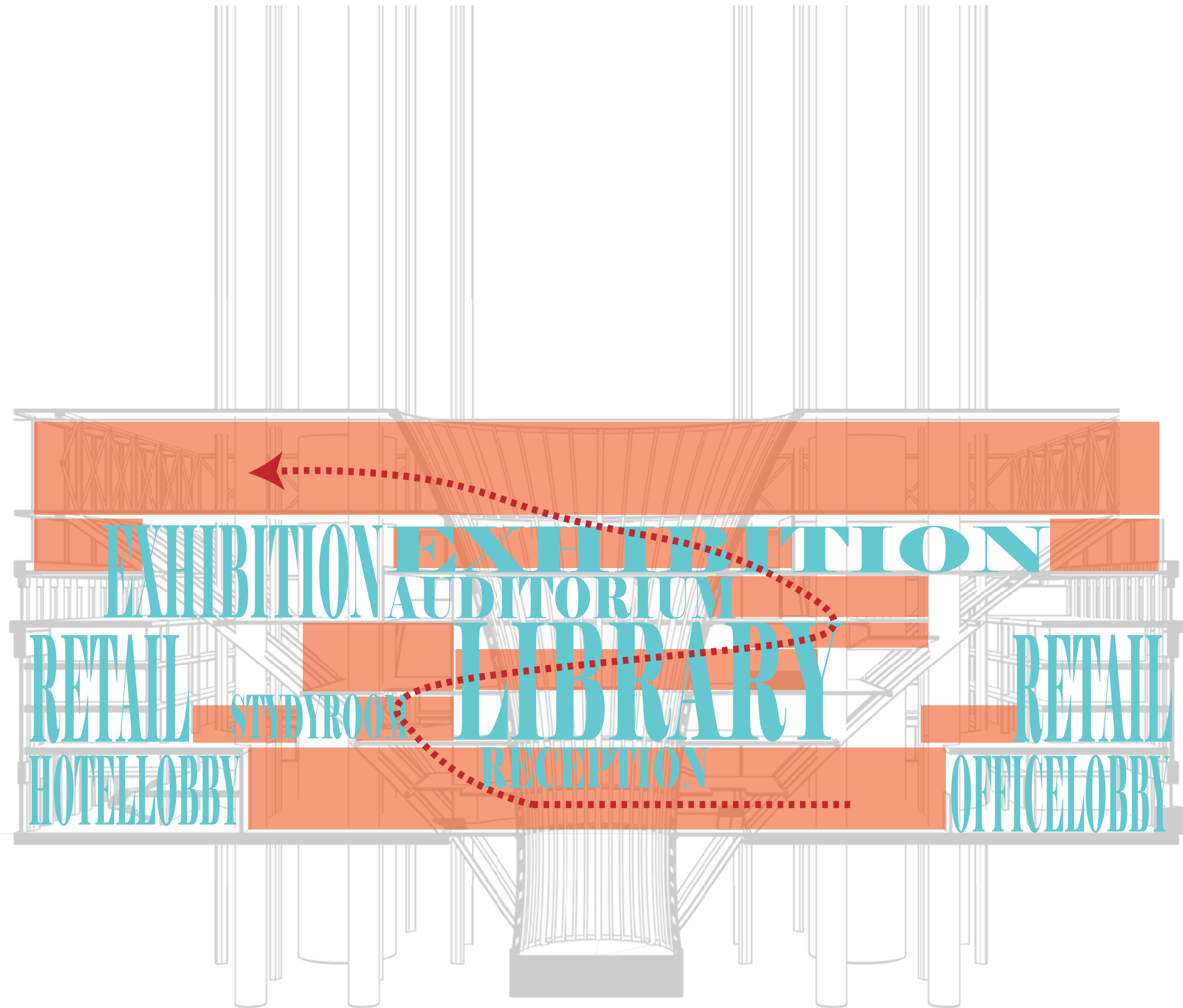


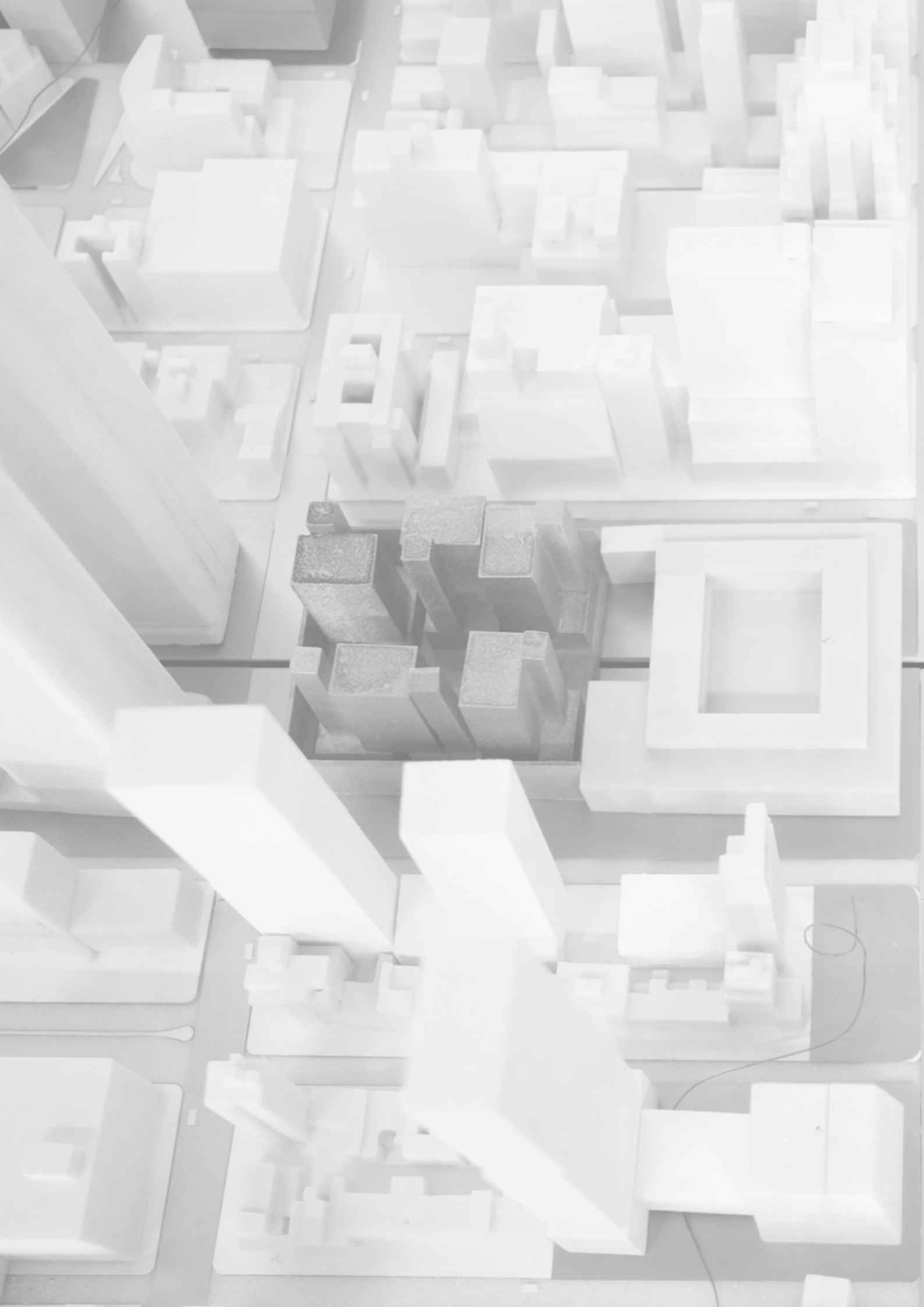
Exhibition



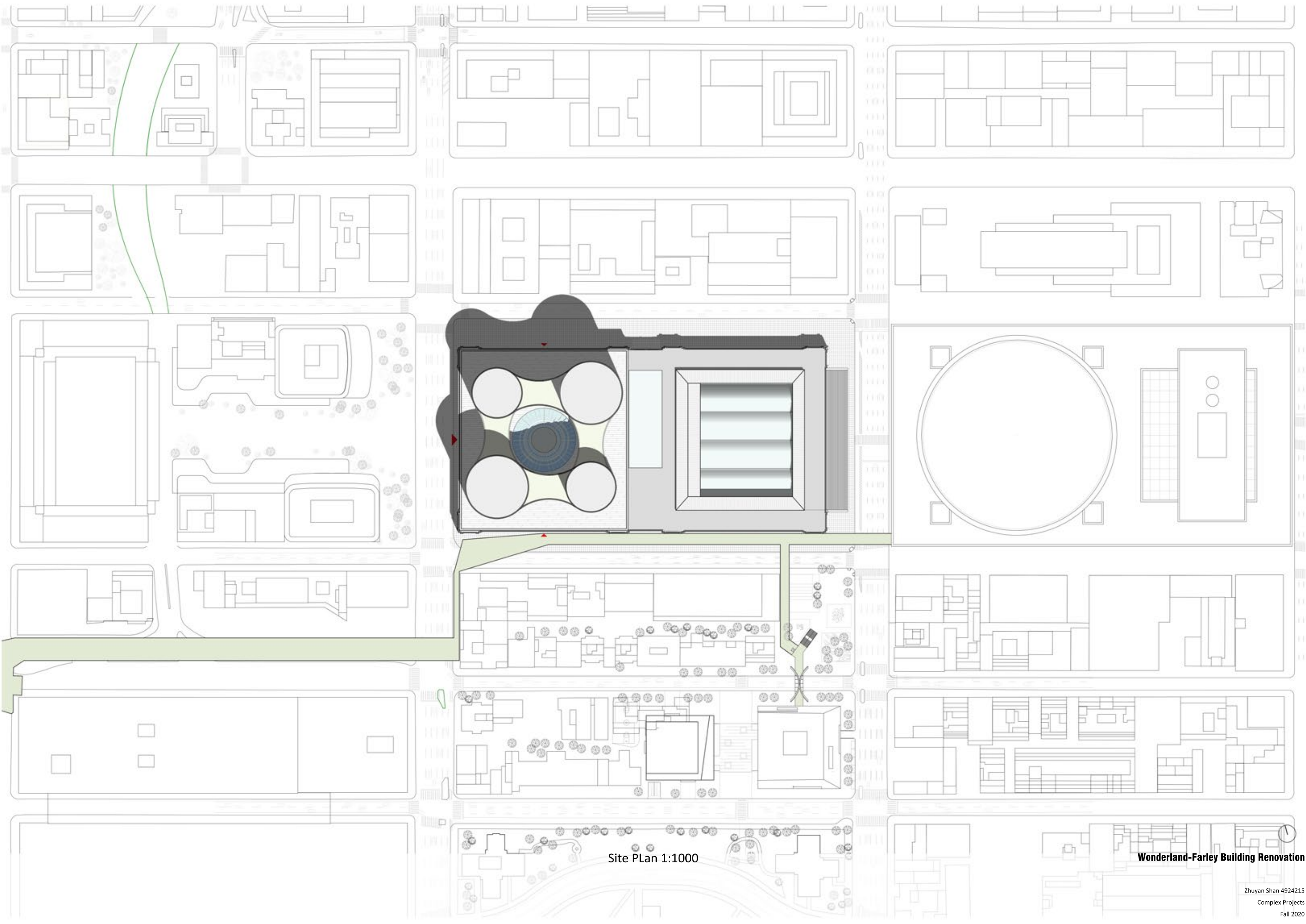
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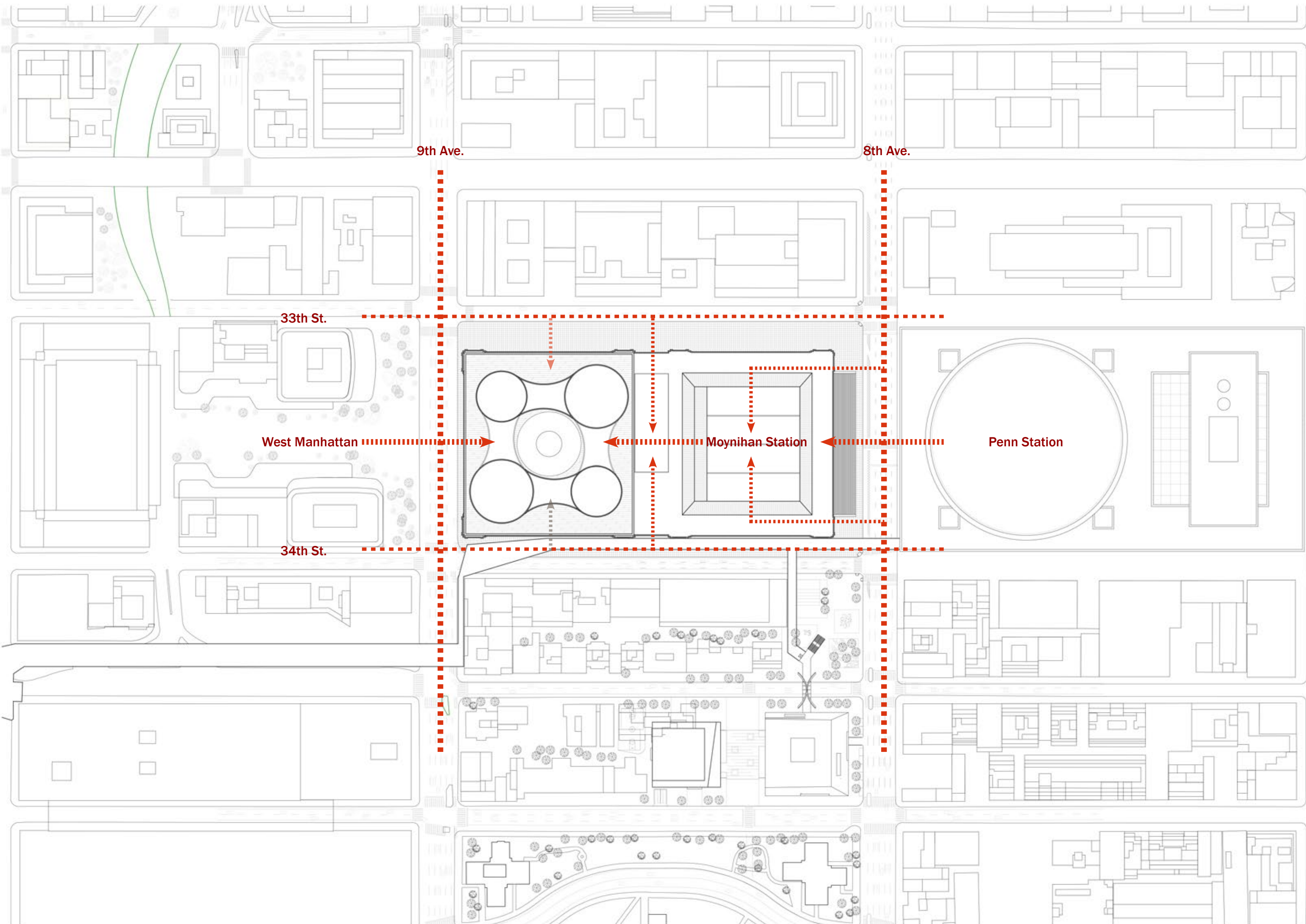


Urban Strategy



Site Plan 1:1000

Wonderland-Farley Building Renovation



9th Ave.

8th Ave.

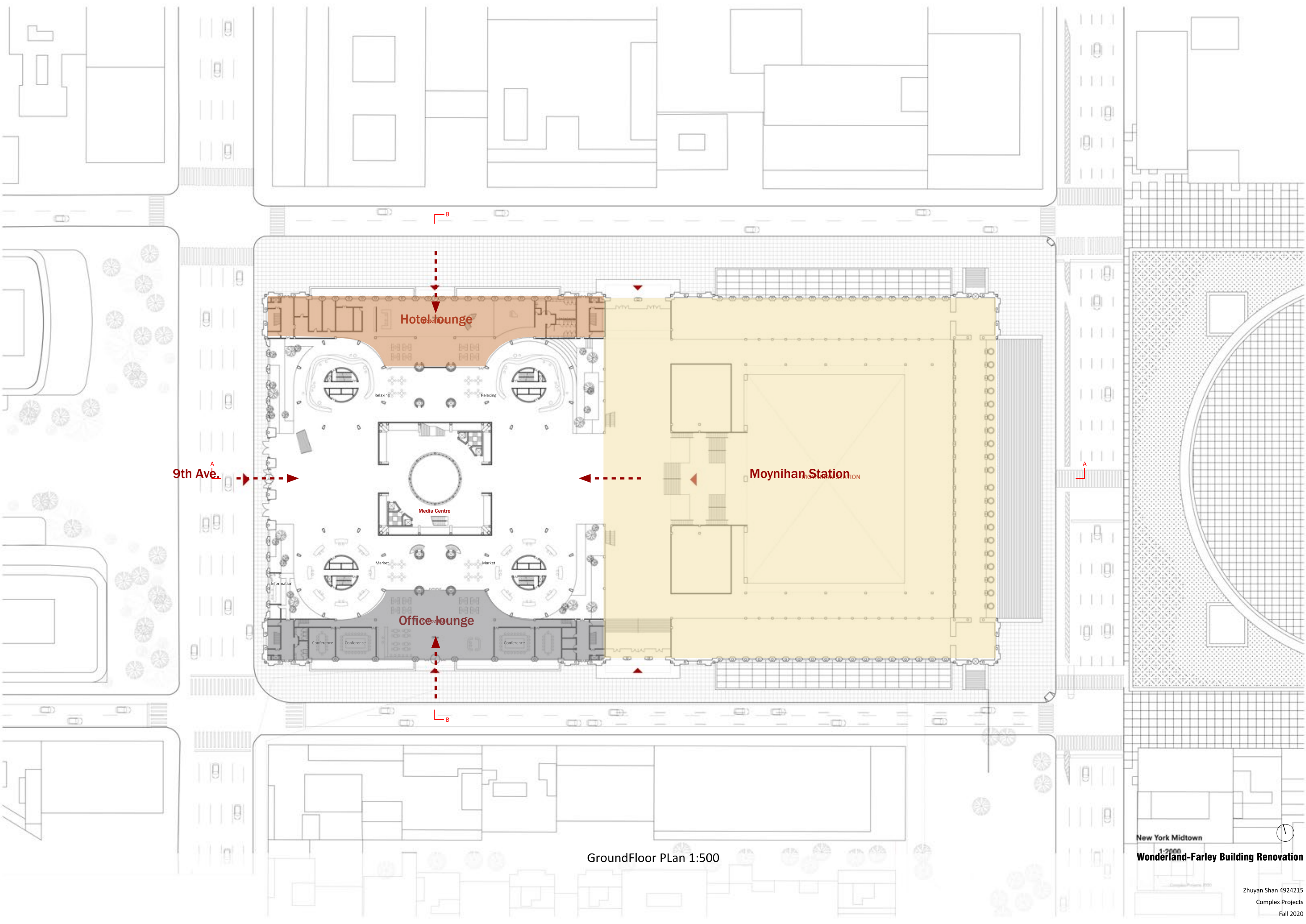
33th St.

West Manhattan

Moynihan Station

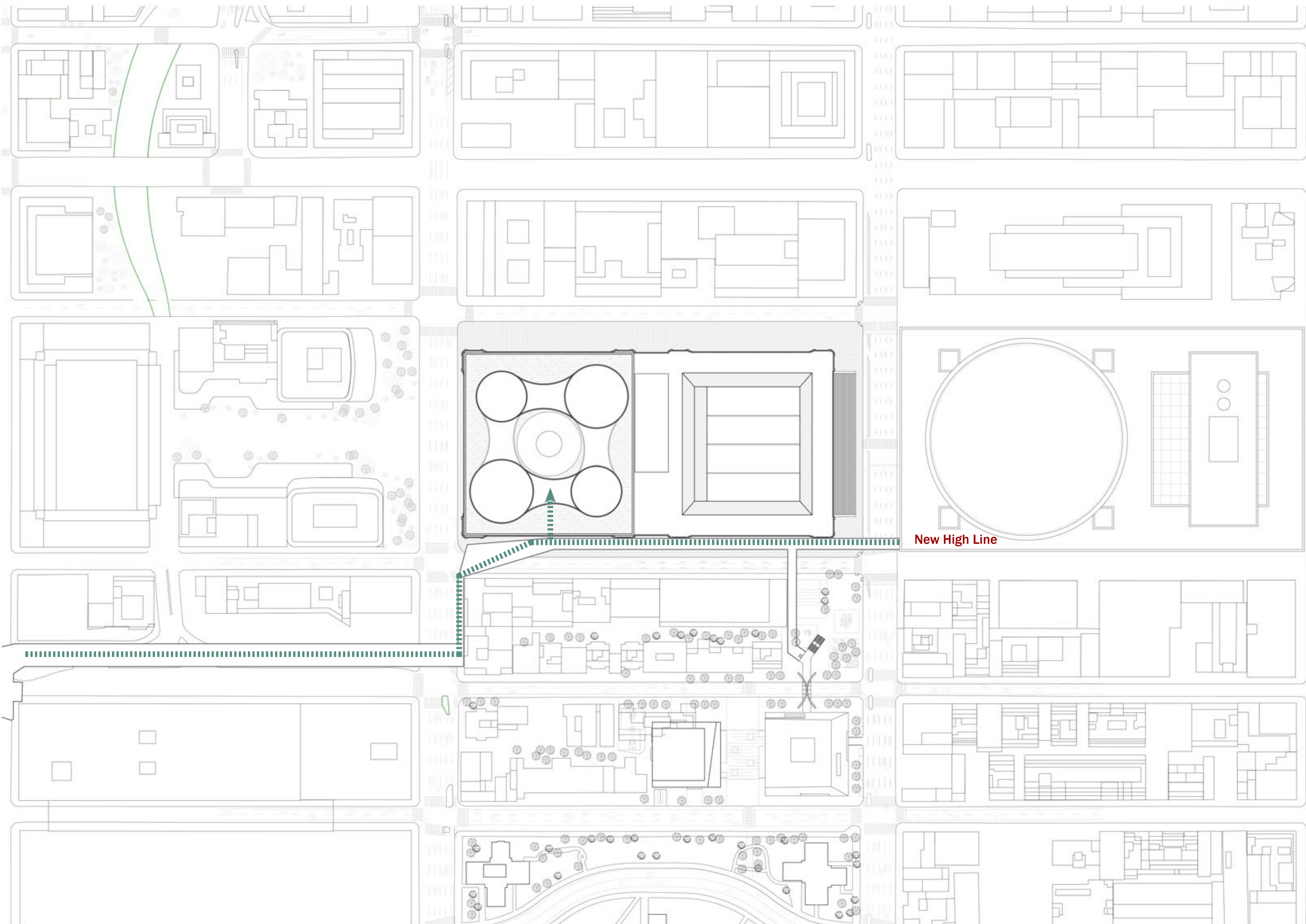
Penn Station

34th St.

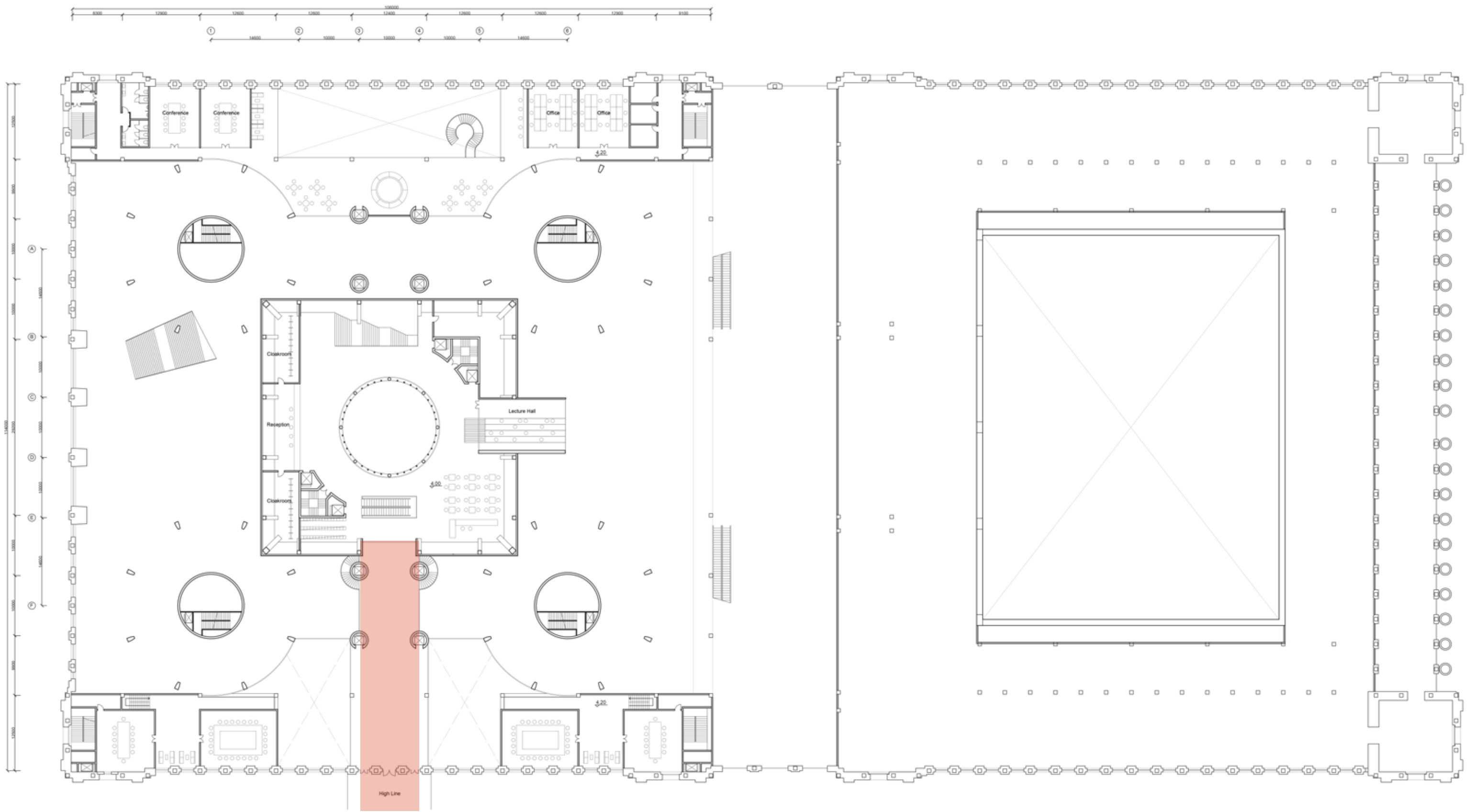


GroundFloor Plan 1:500

New York Midtown
1:2000
Wonderland-Farley Building Renovation



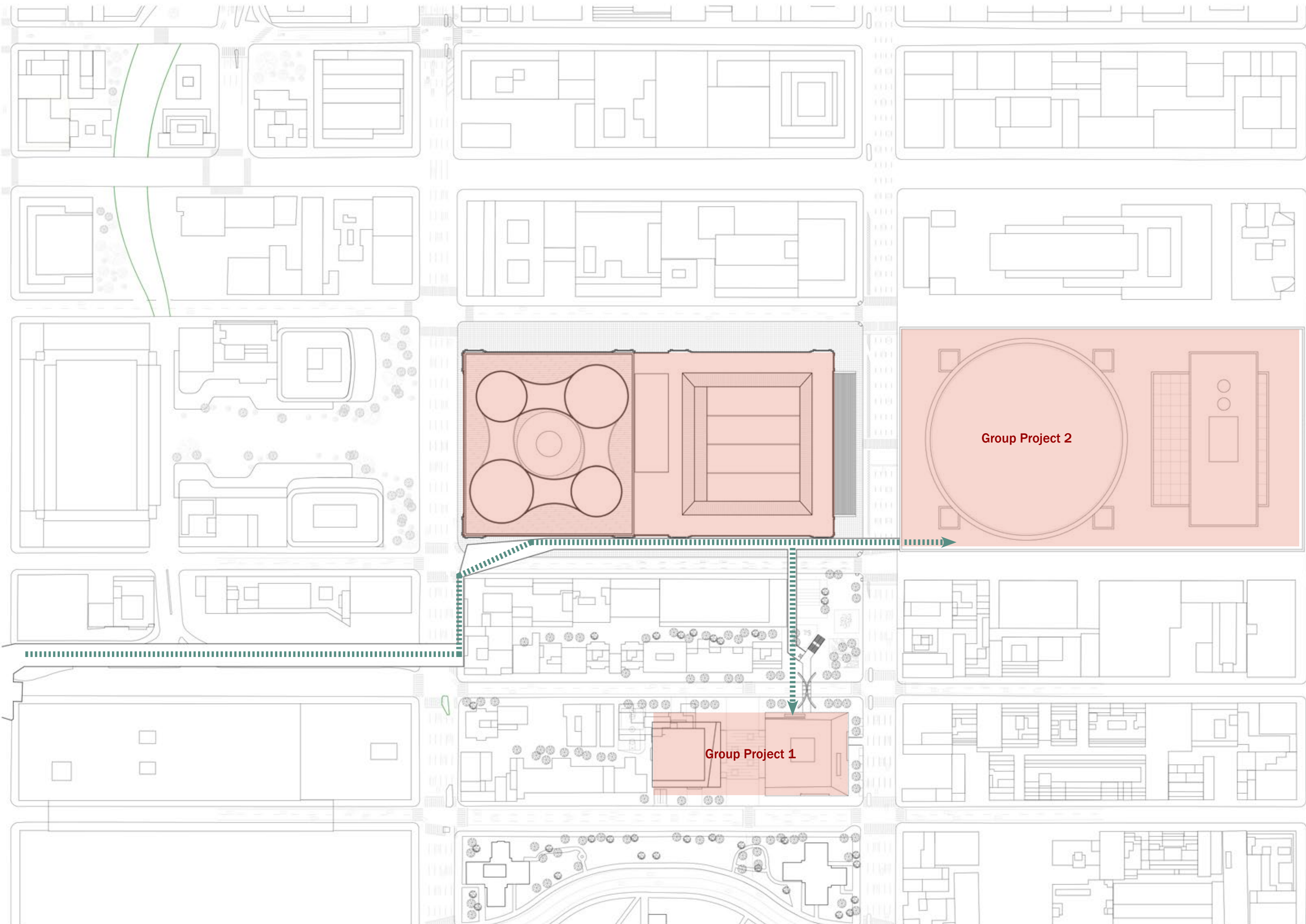
New High Line



High Line

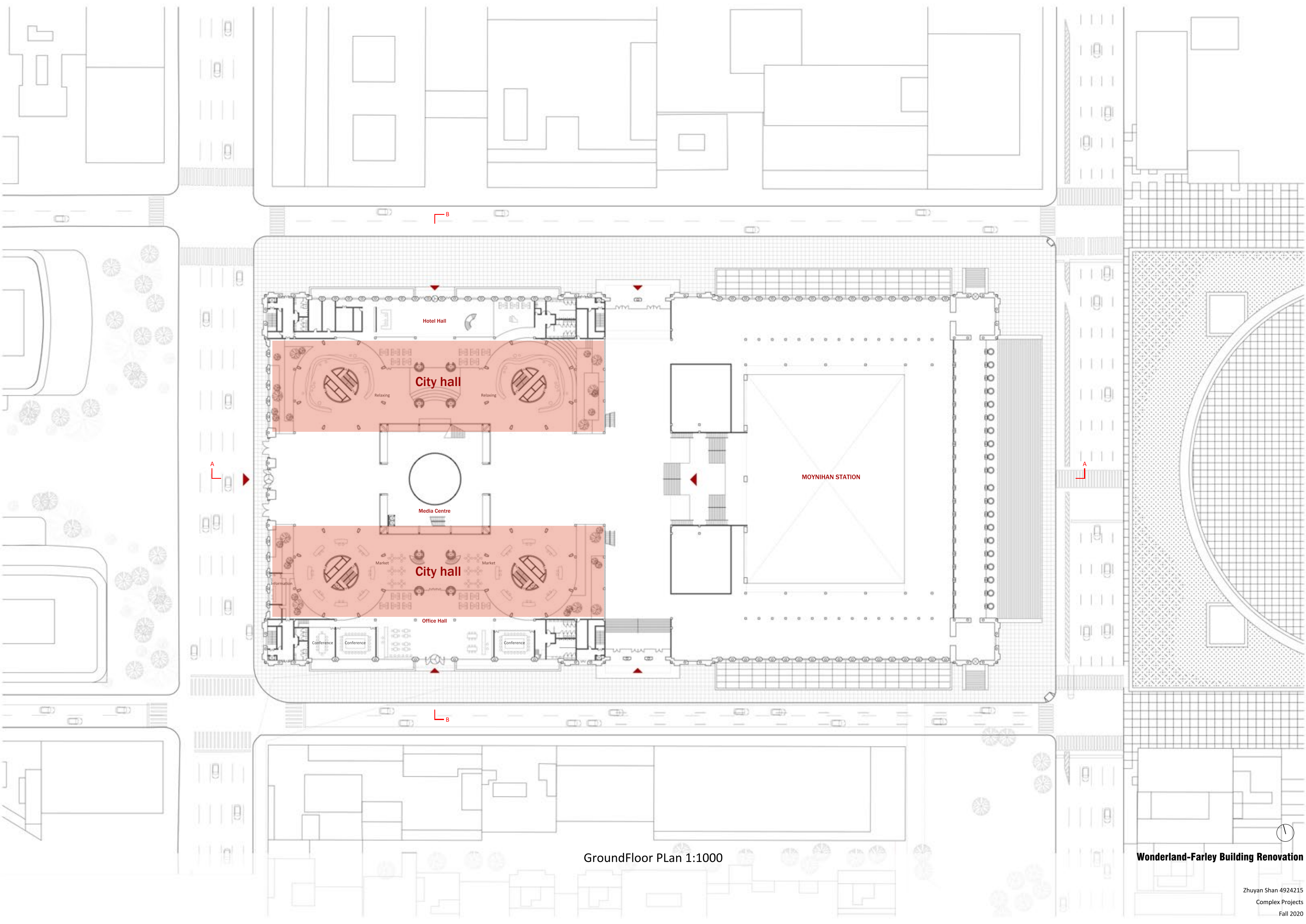
1F Plan 1:300

Wonderland-Farley Building Renovation



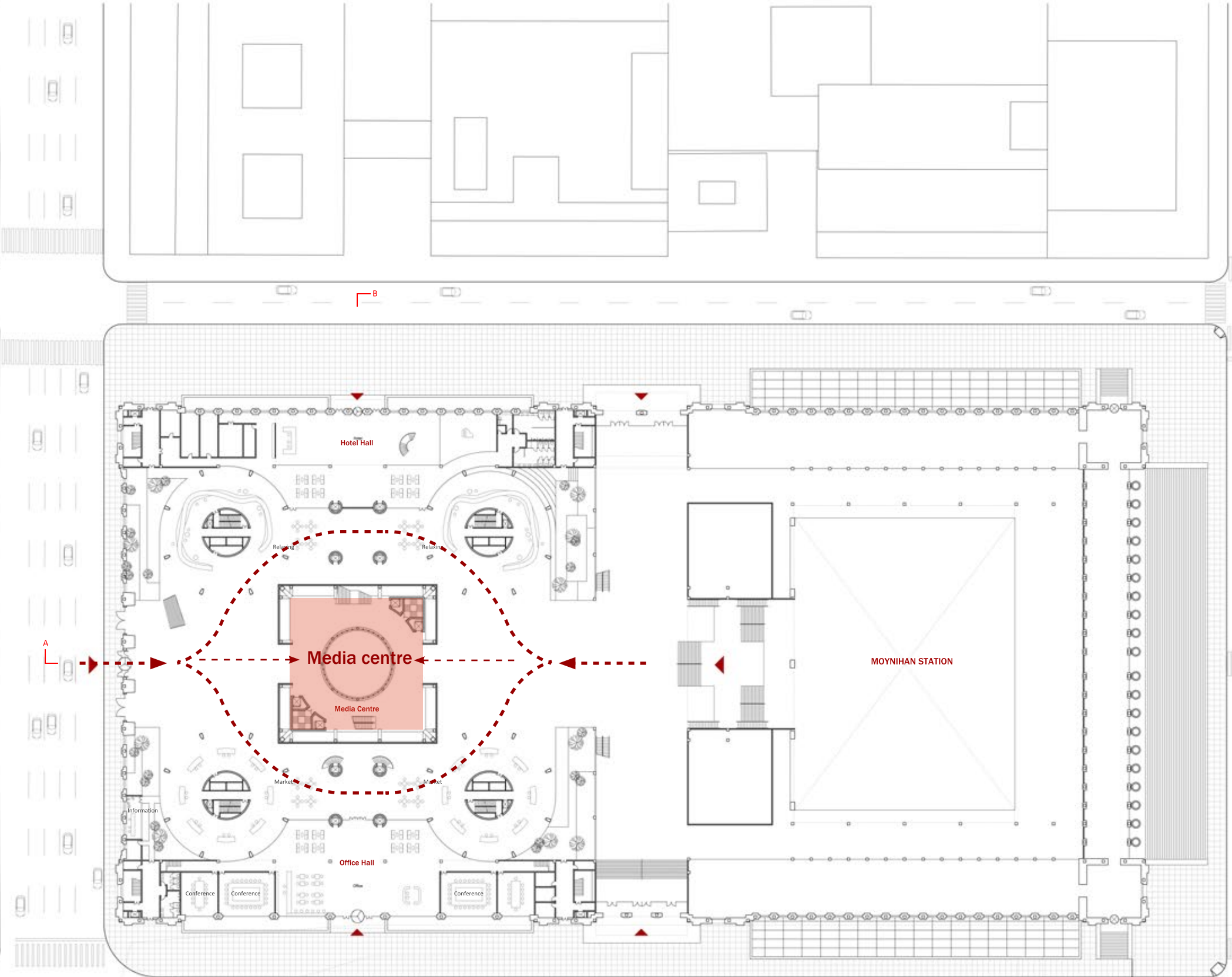
Group Project 1

Group Project 2



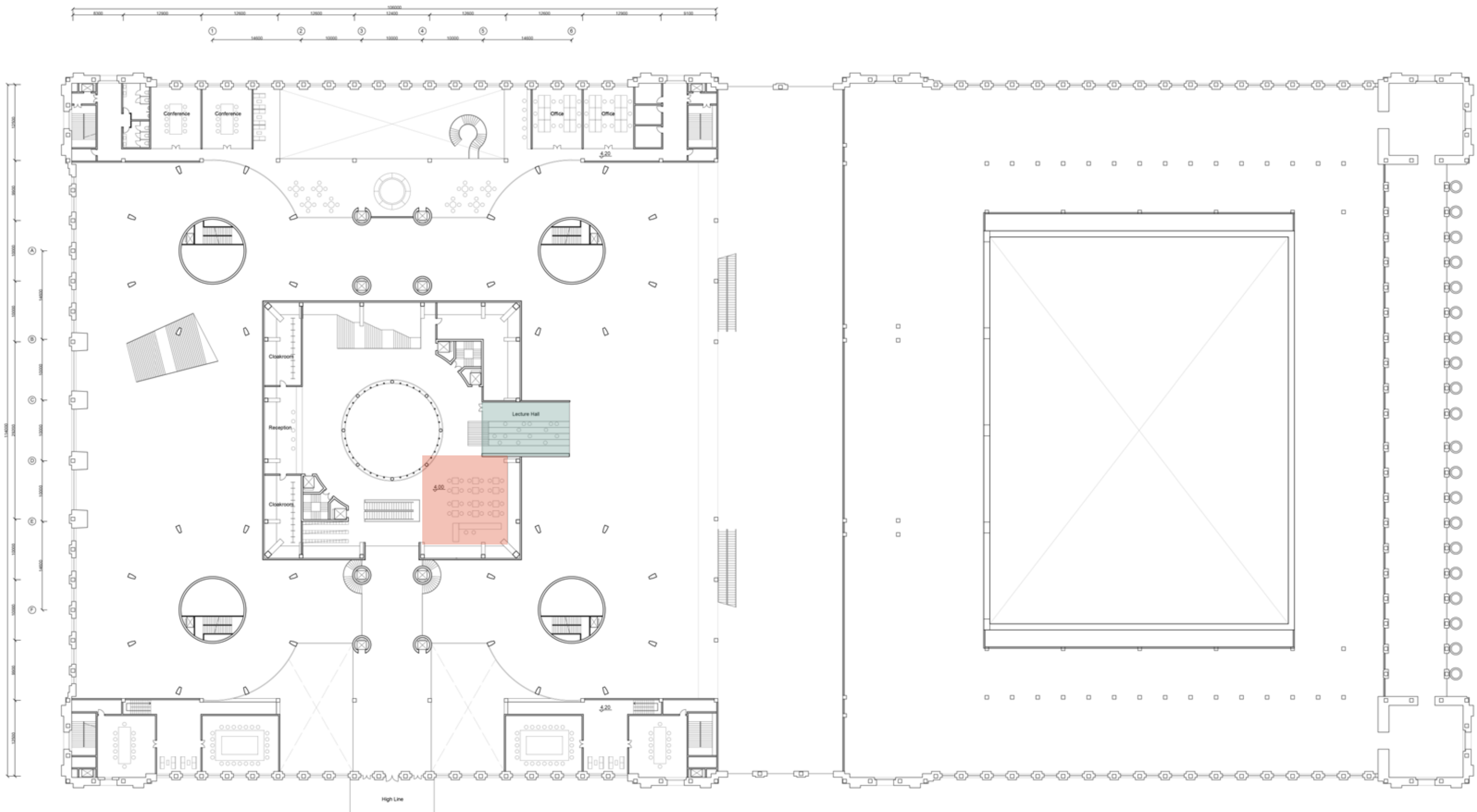
GroundFloor Plan 1:1000

Wonderland-Farley Building Renovation

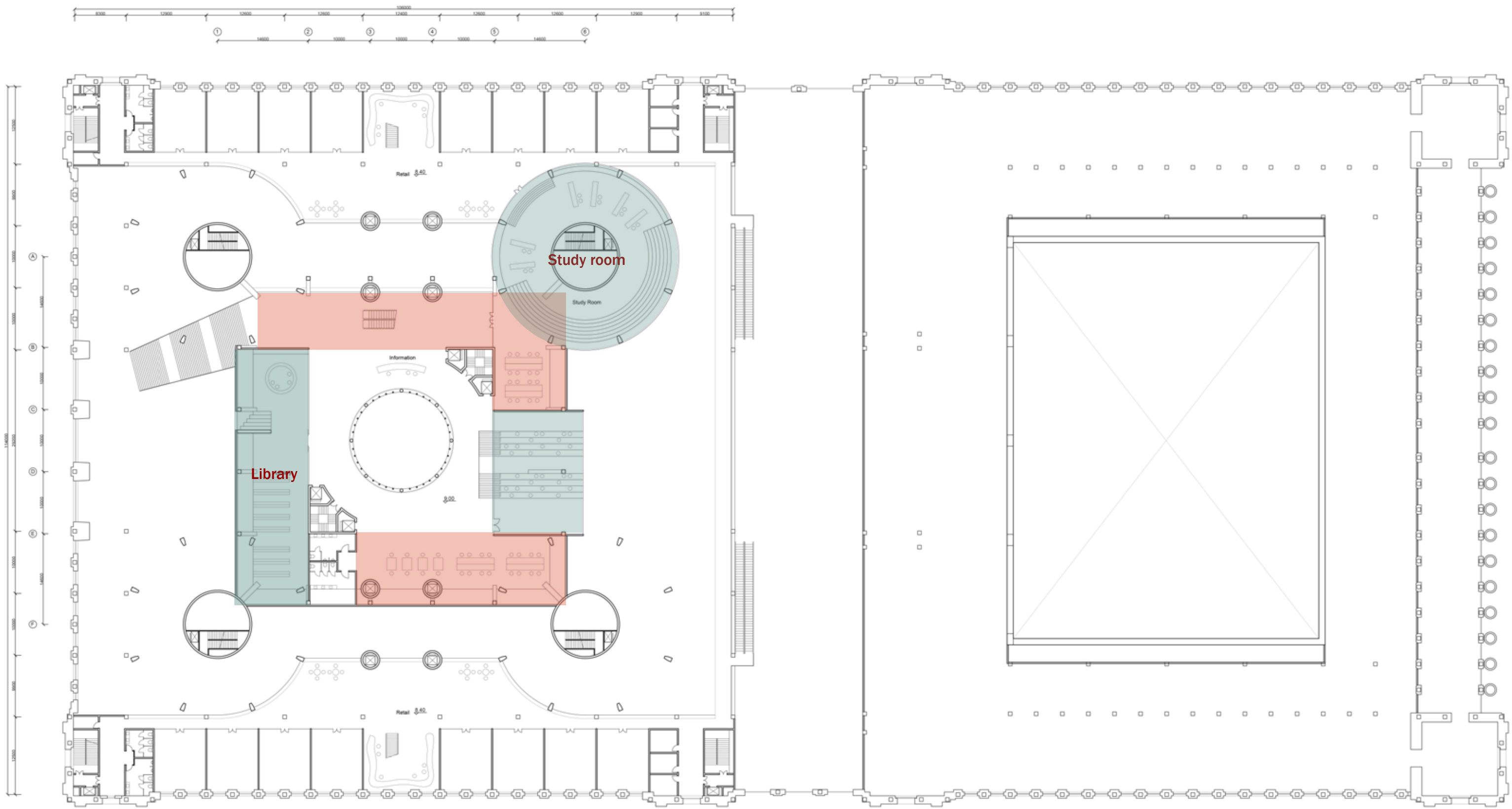


GroundFloor Plan 1:500

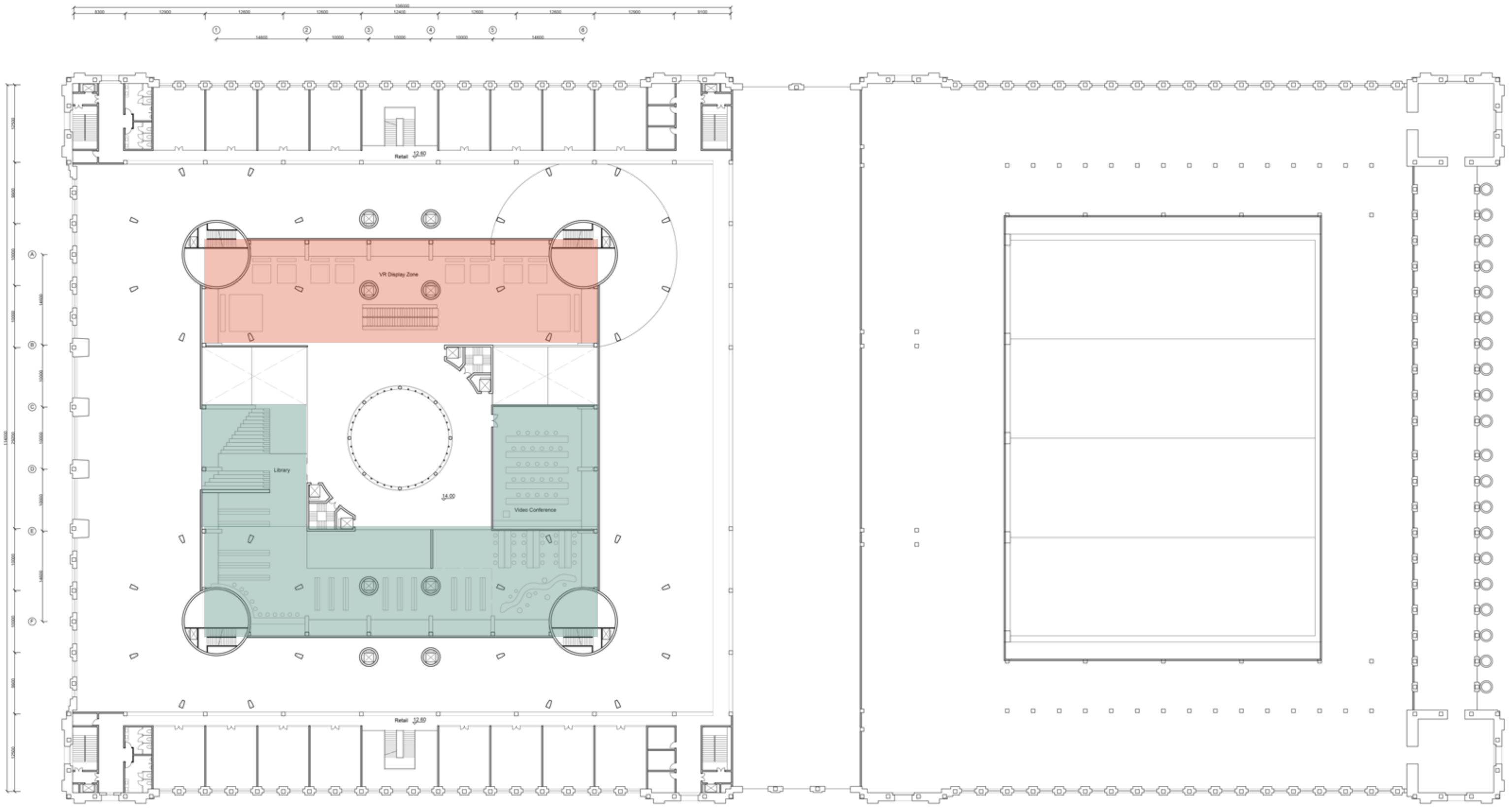
New York Midtown
 1:2000
Wonderland-Farley Building Renovation



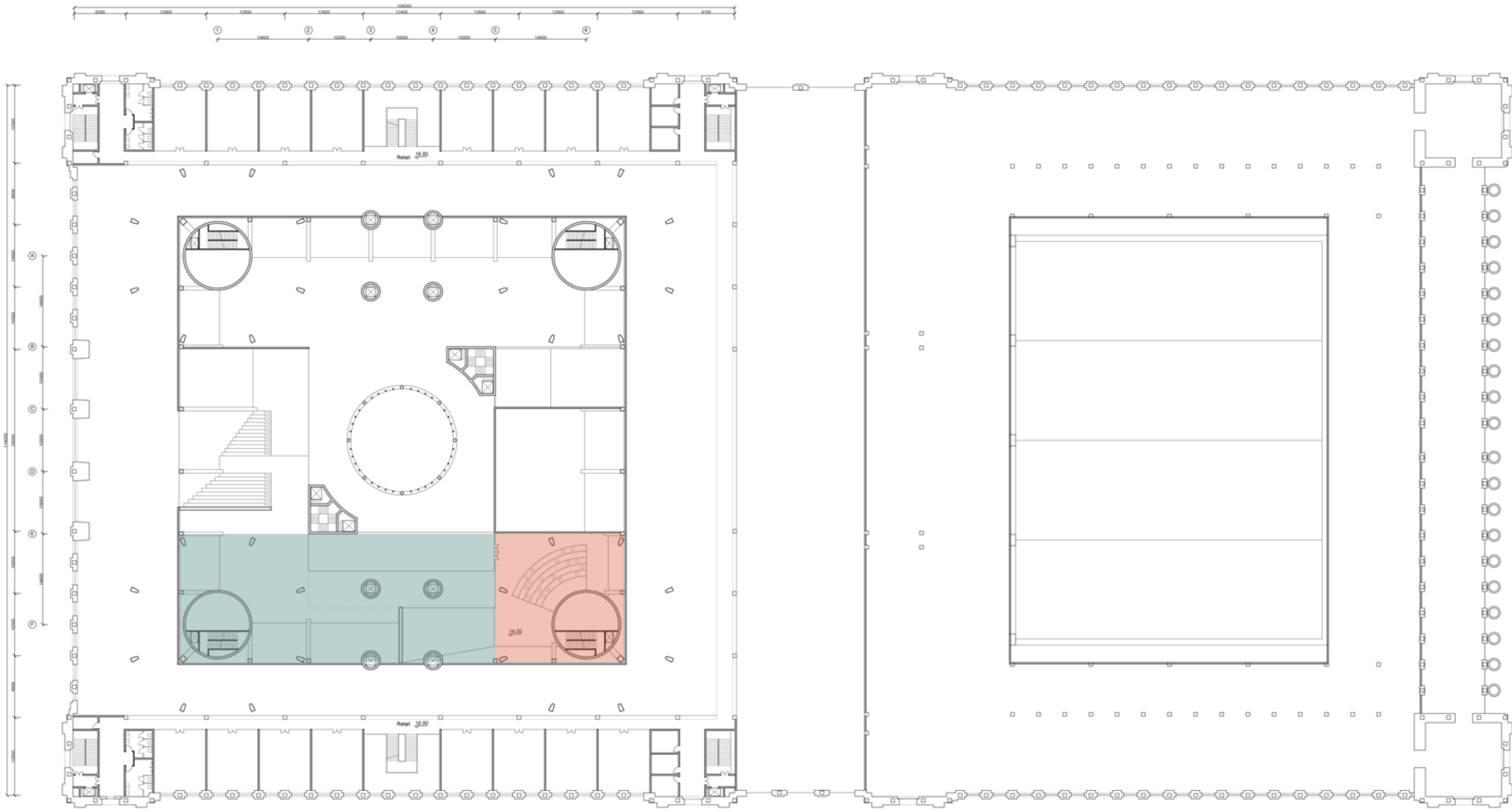
1F Plan 1:300



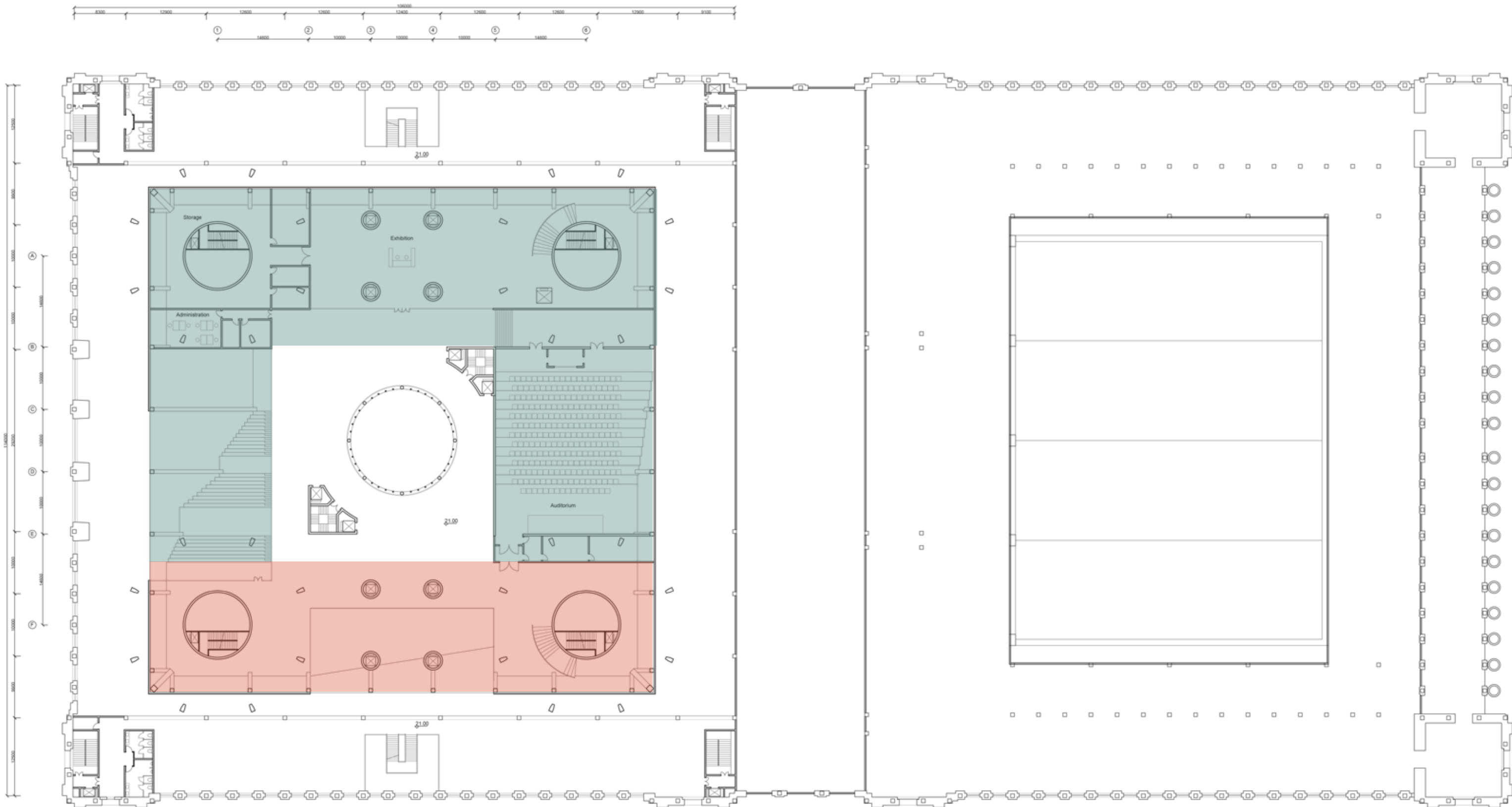
2F Plan 1:300



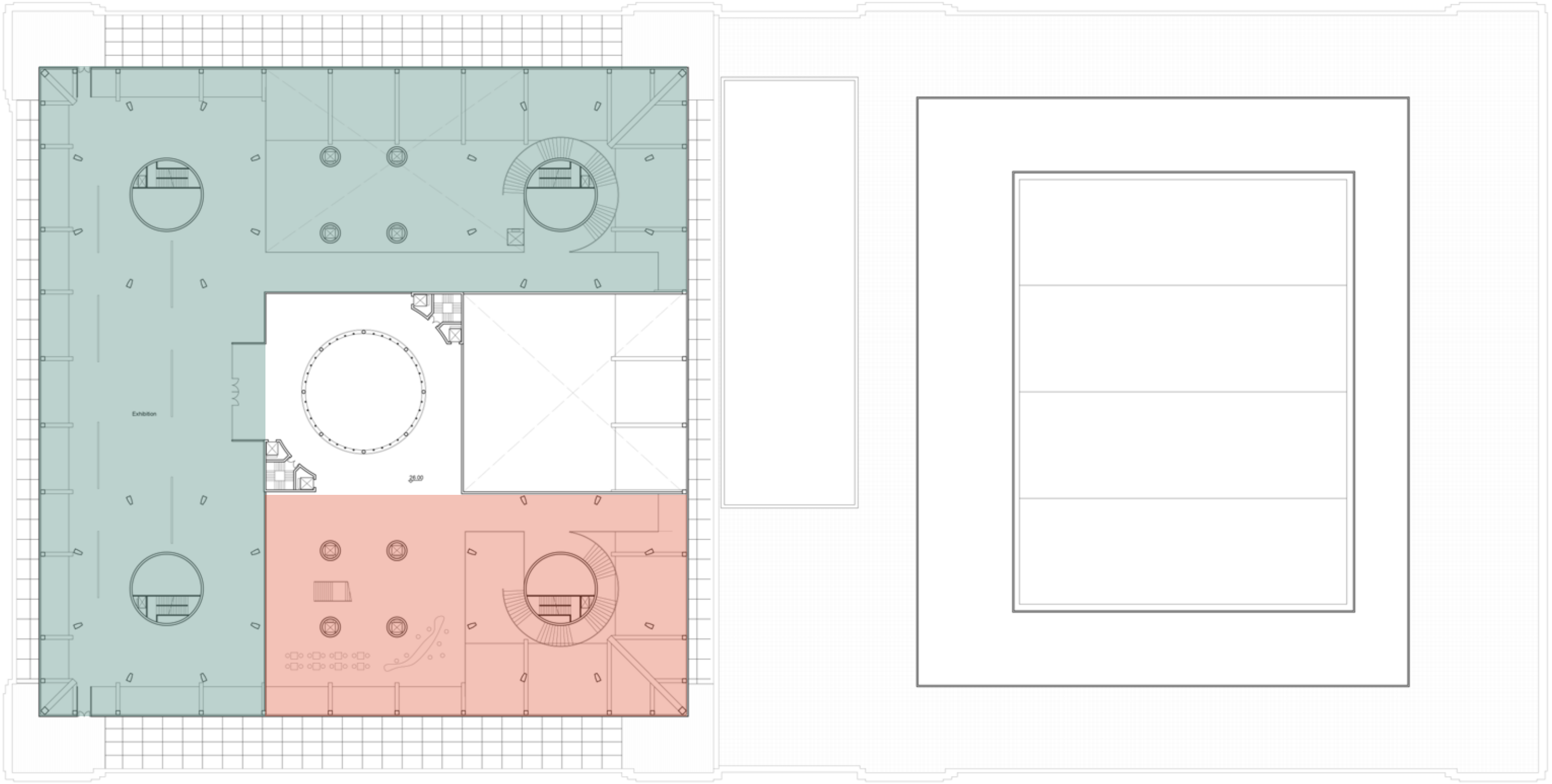
3F Plan 1:300



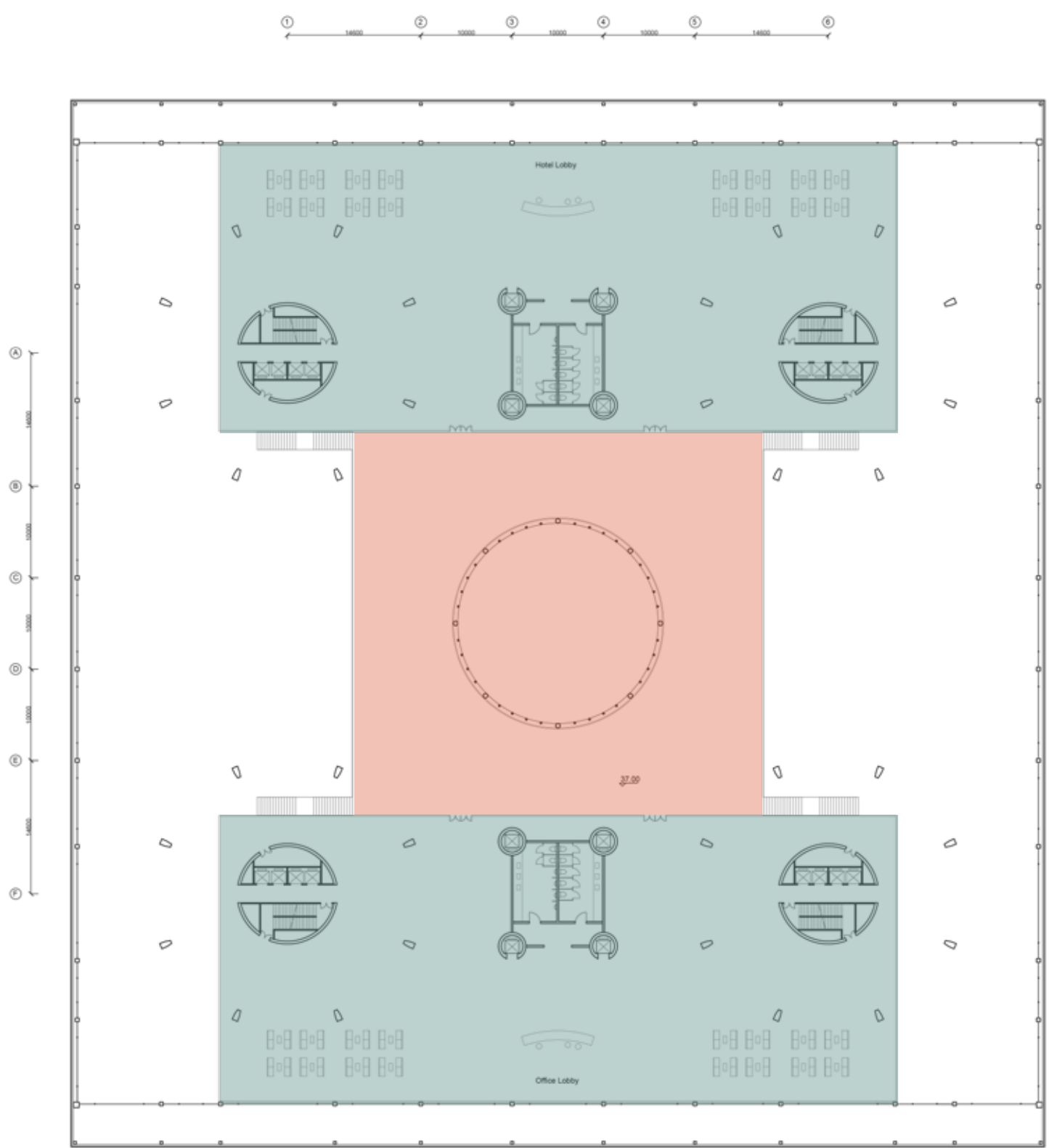
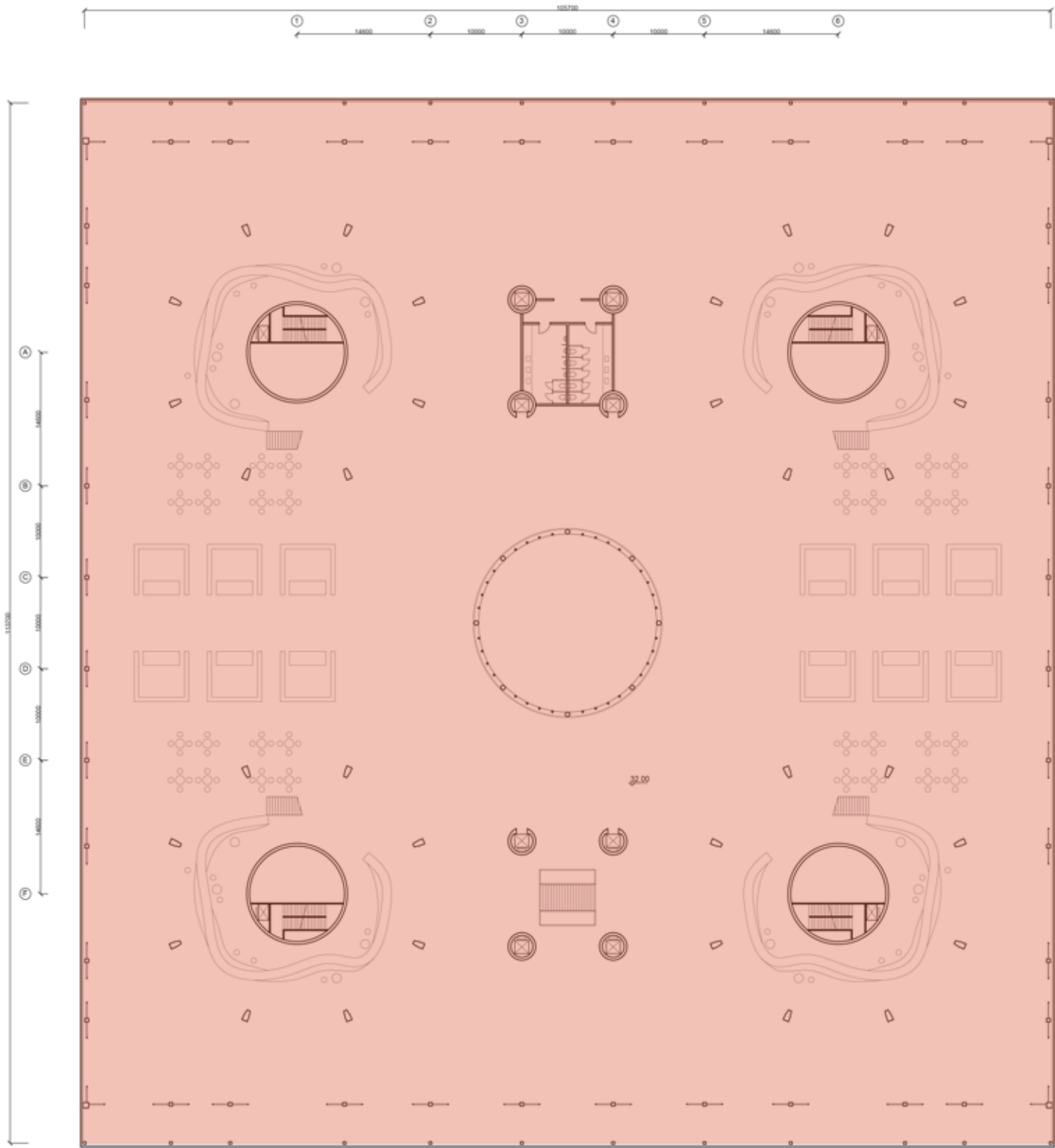
3.5F Plan 1:300



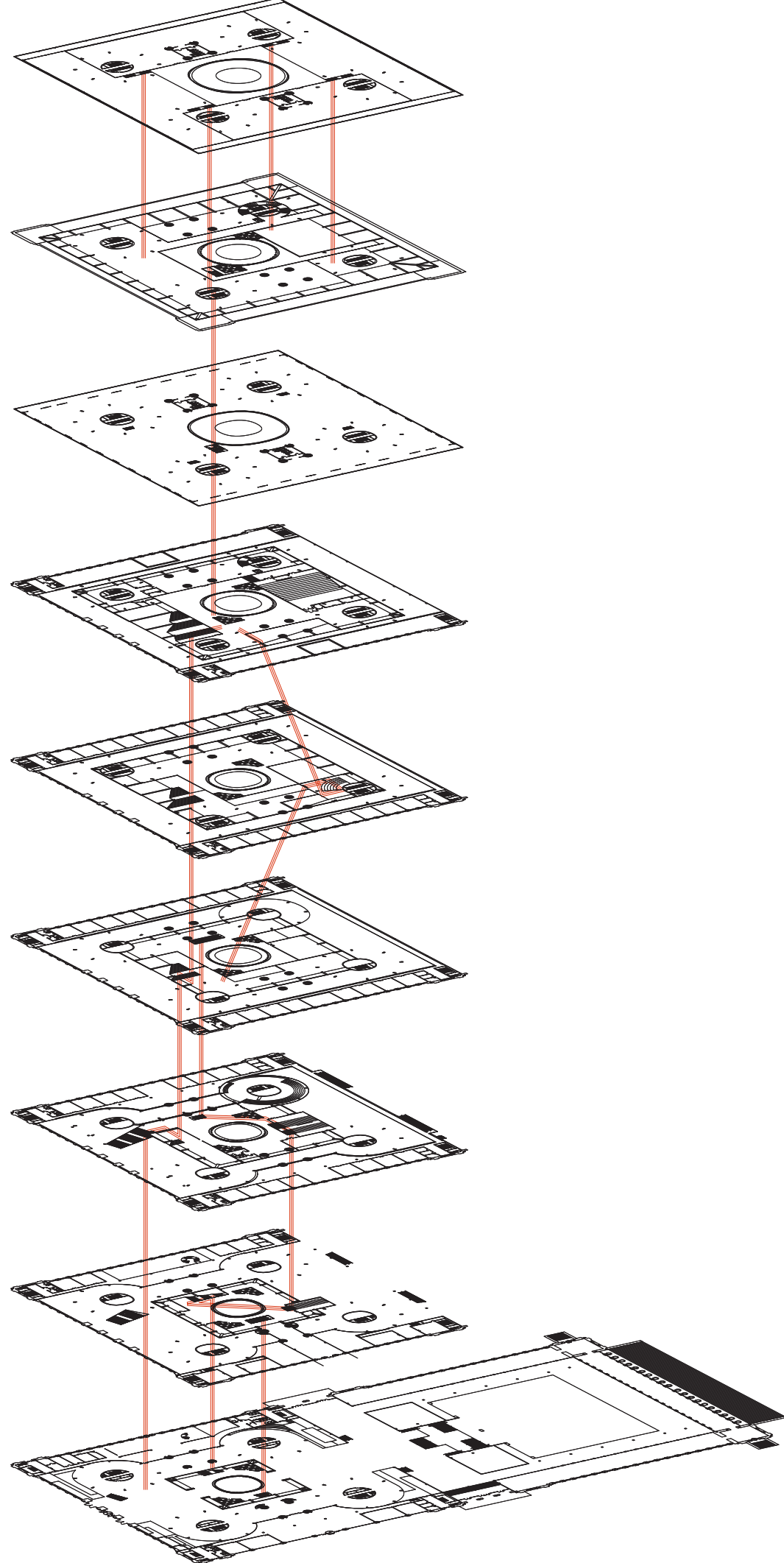
4F Plan 1:300



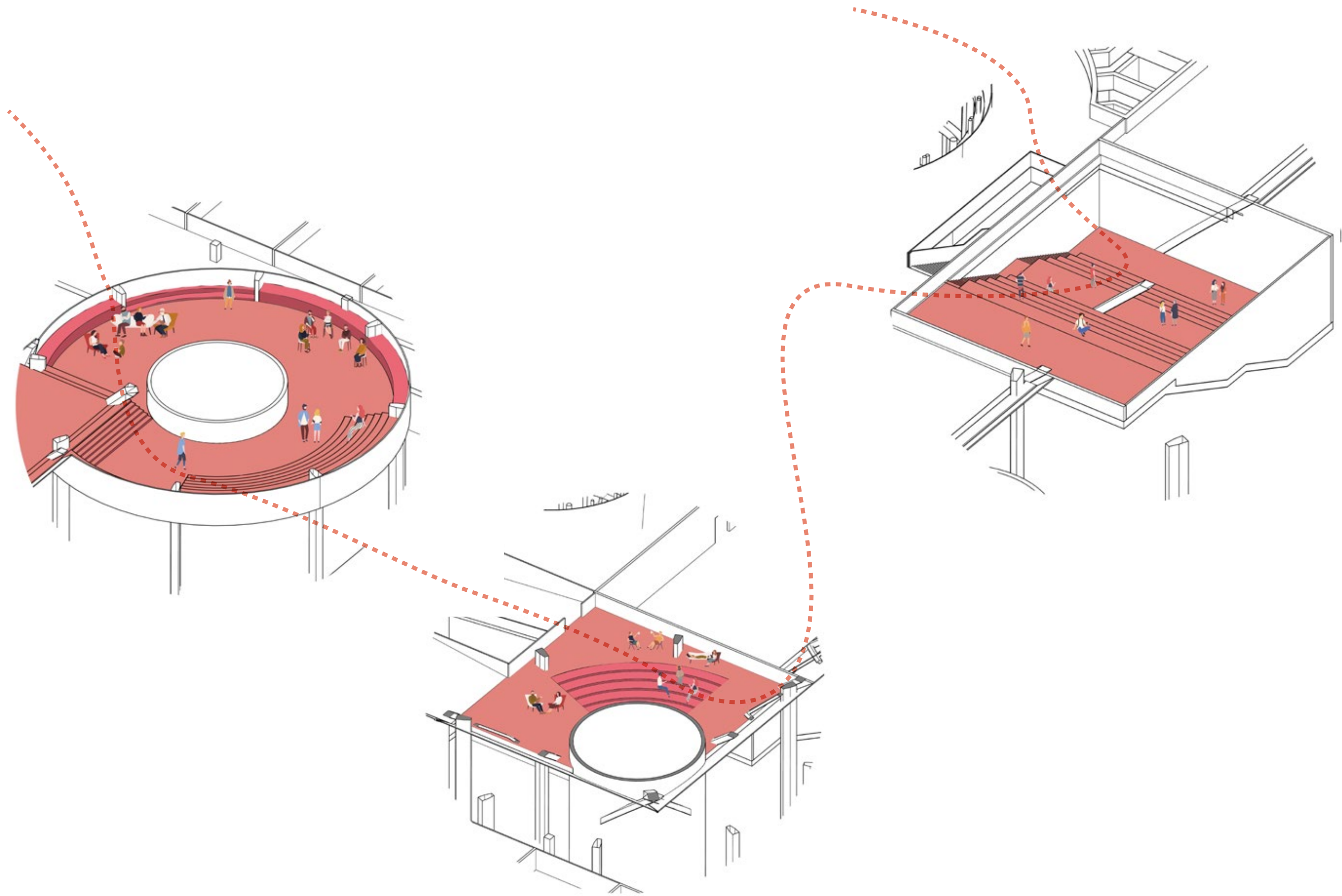
5F Plan 1:300

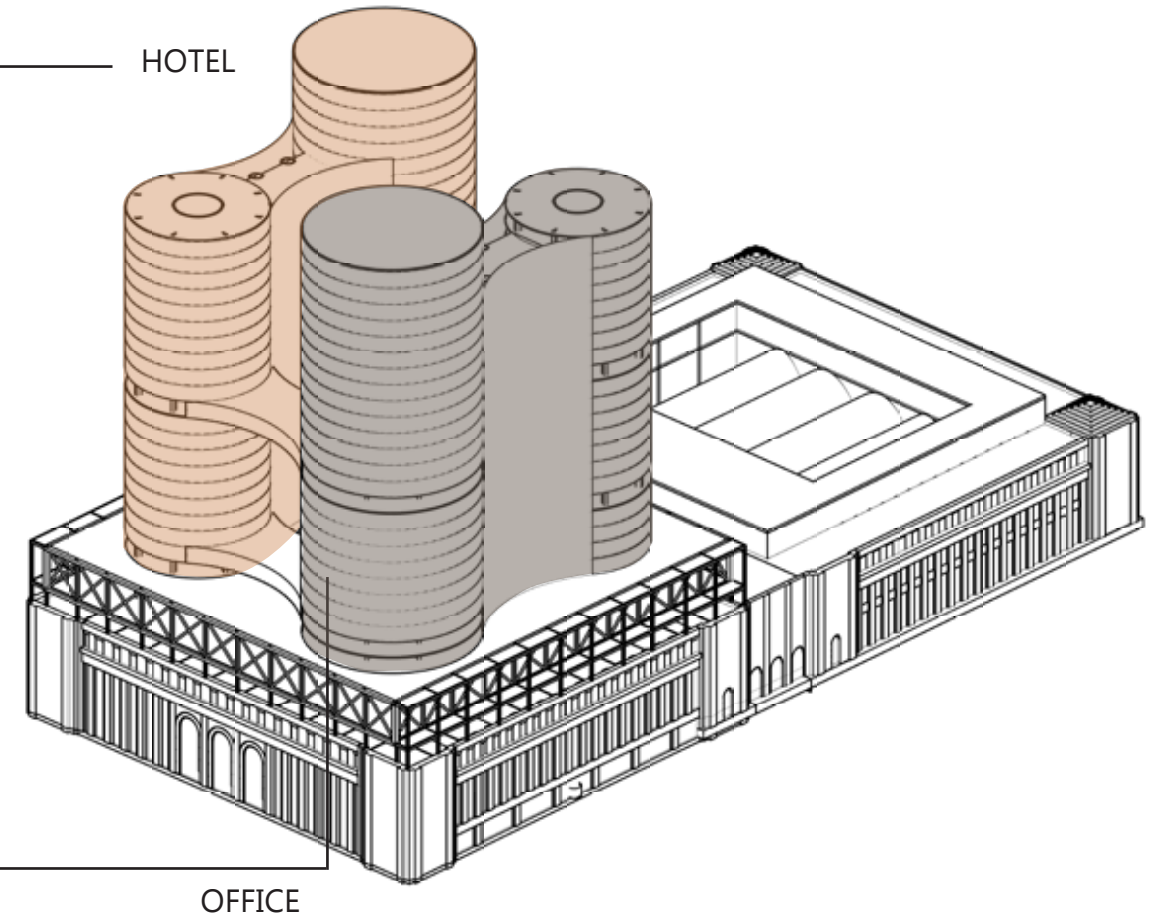
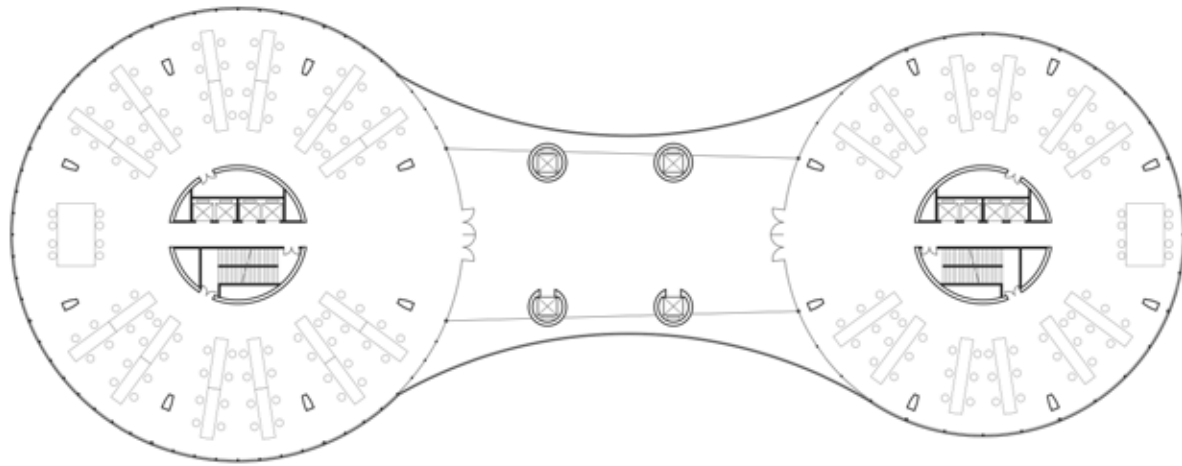
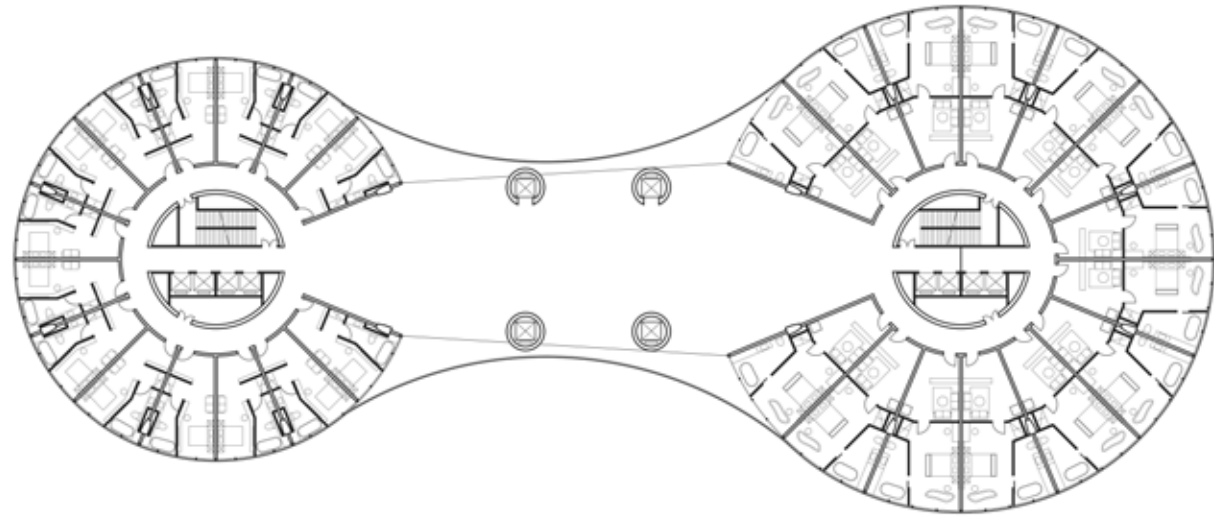


6F Plan 1:300



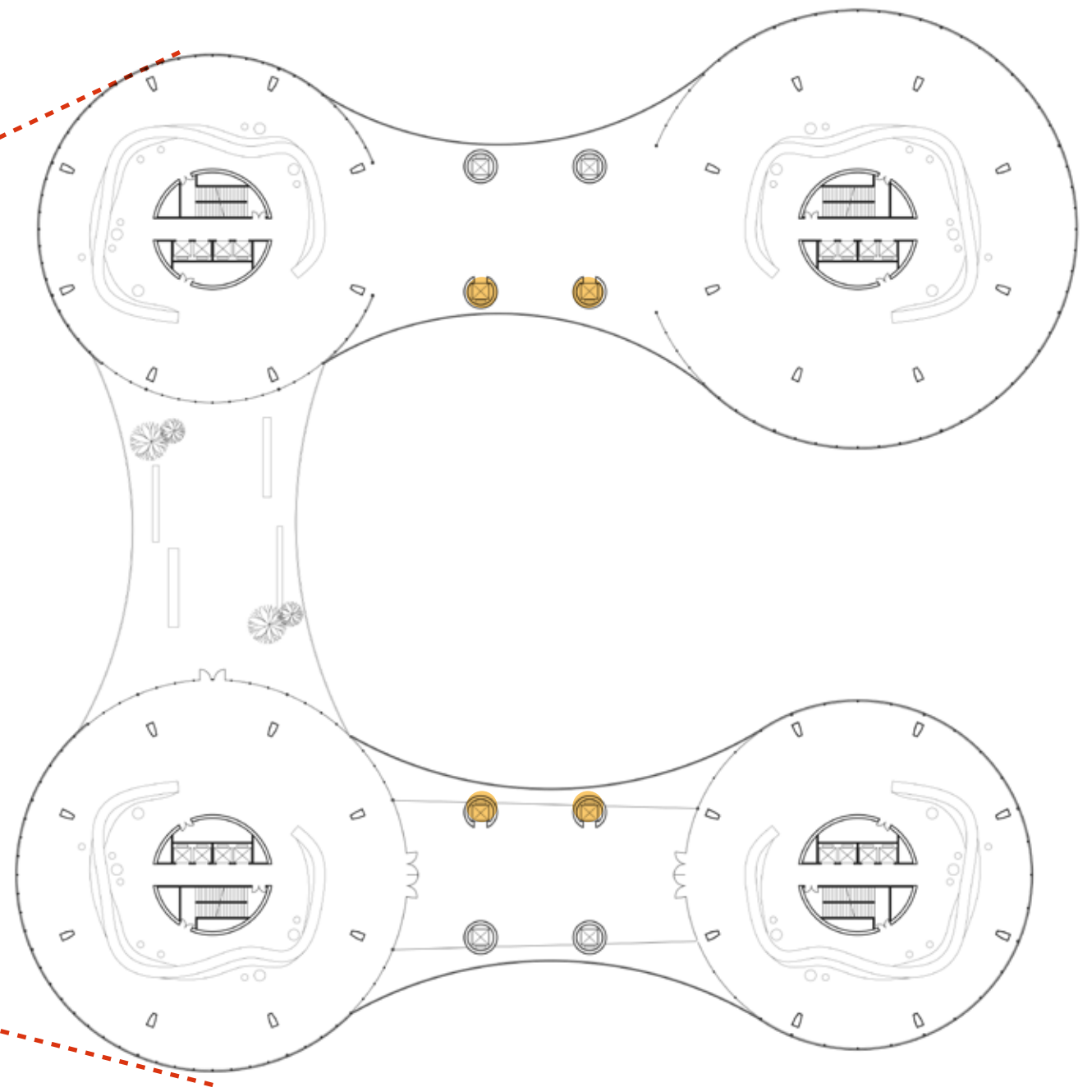
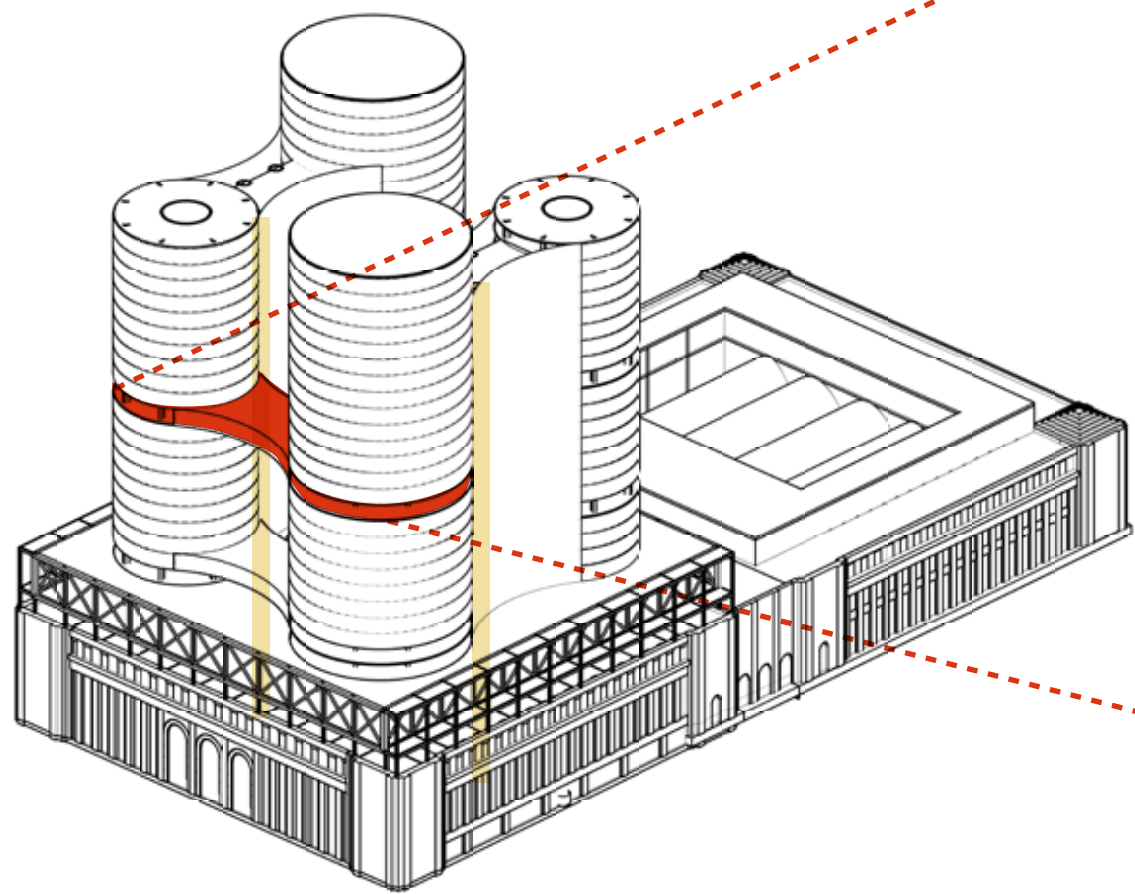
"wandering system"

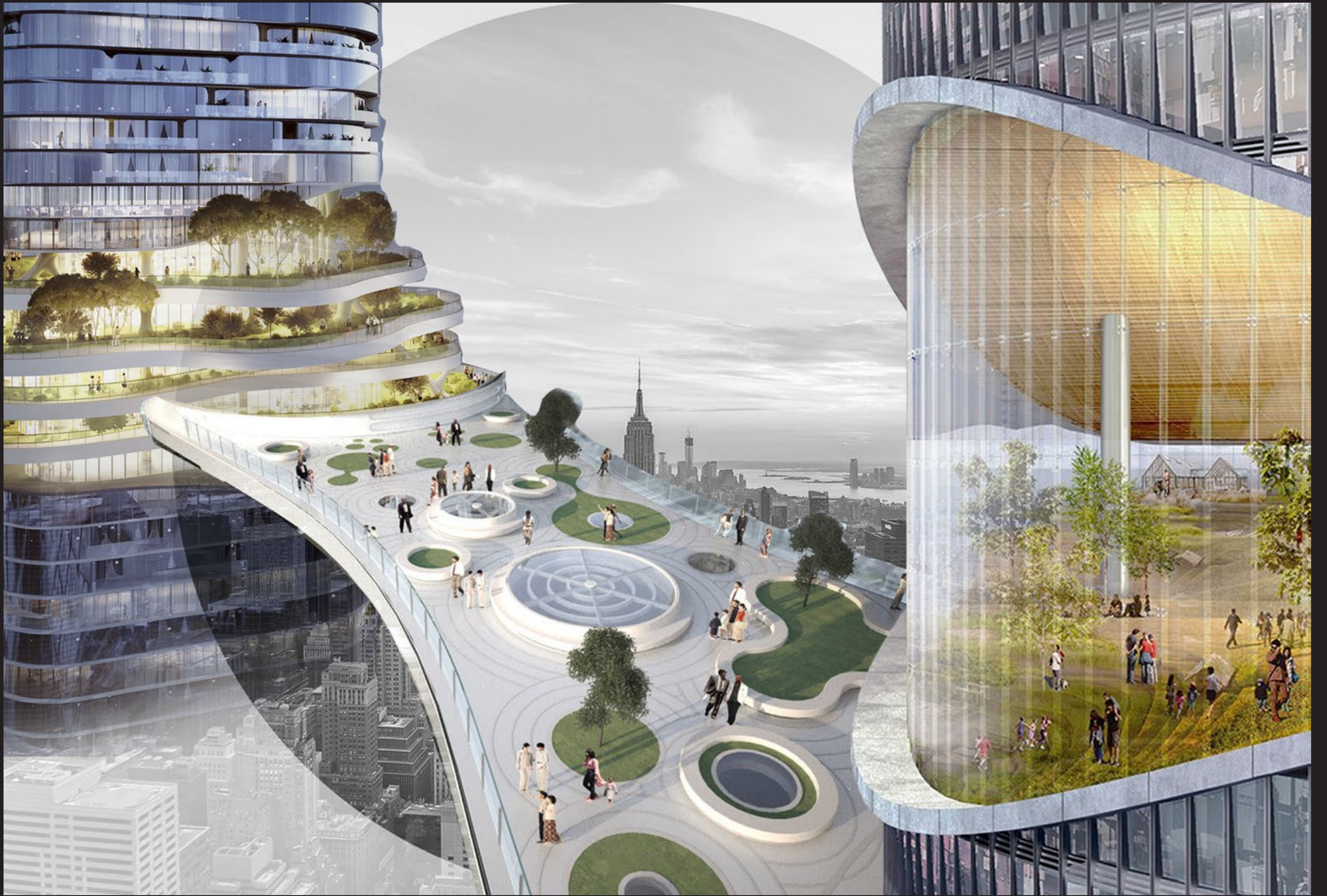




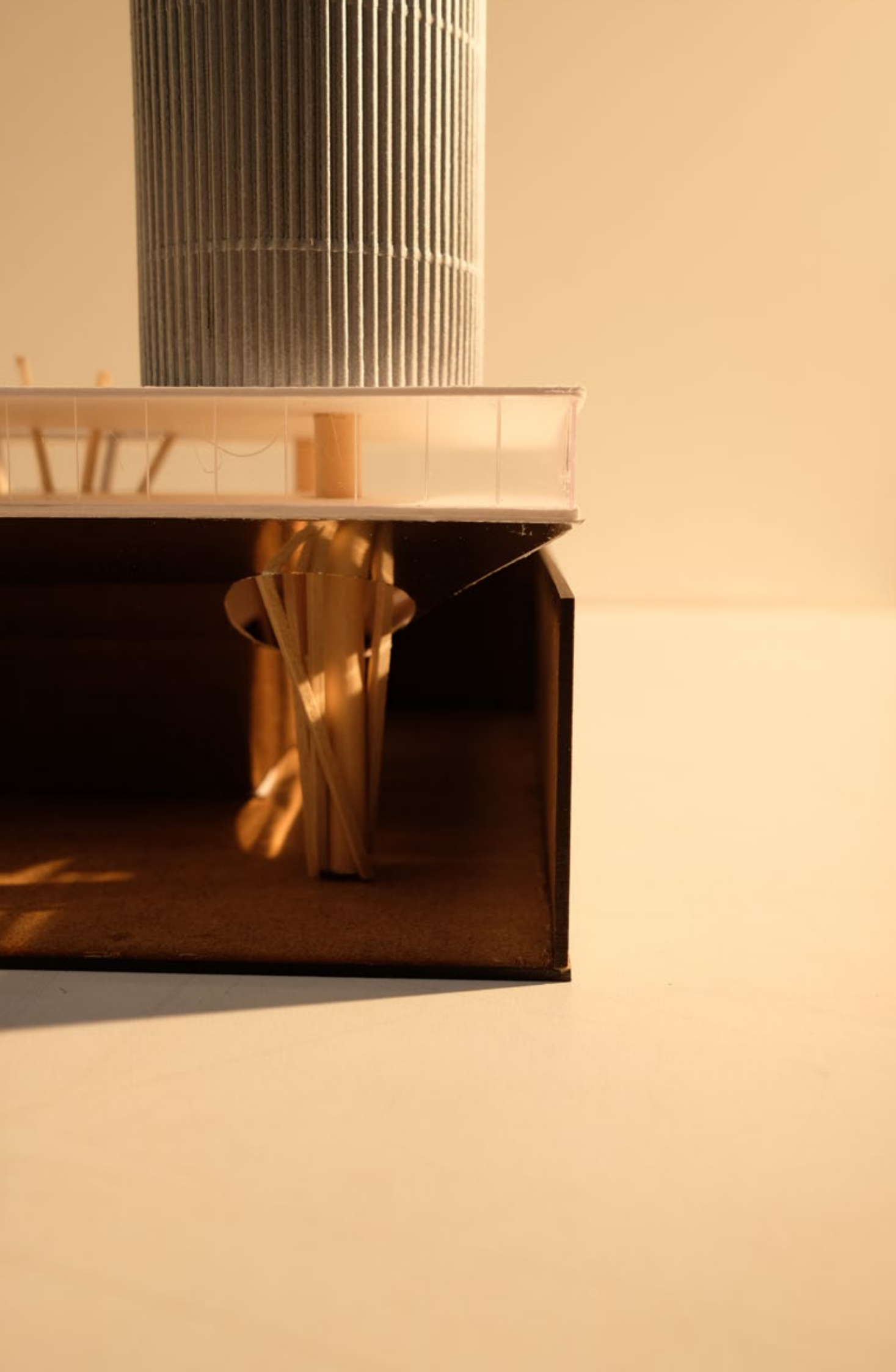
Tower Standard Floor Plan 1:300



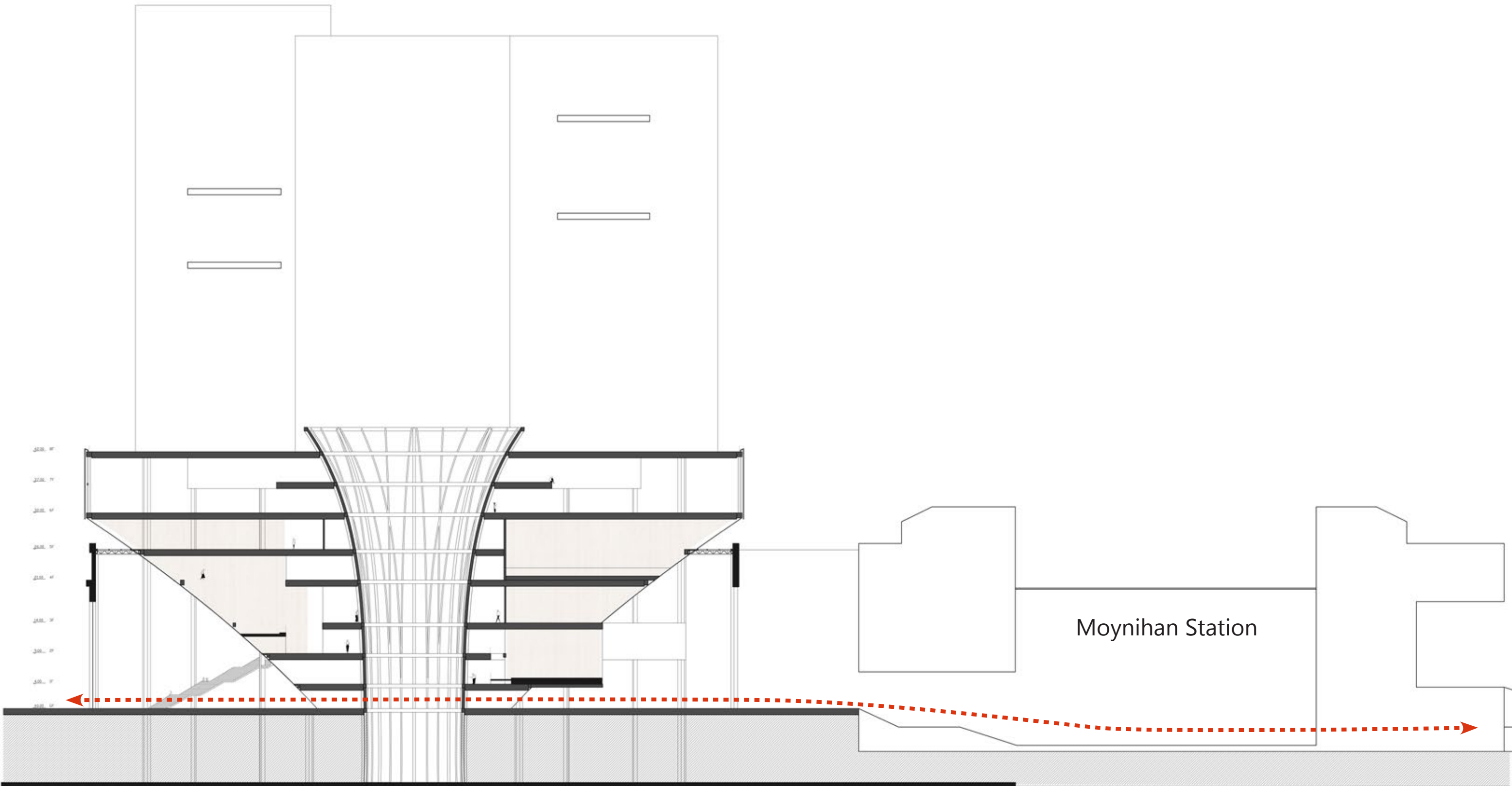








Reconstruction

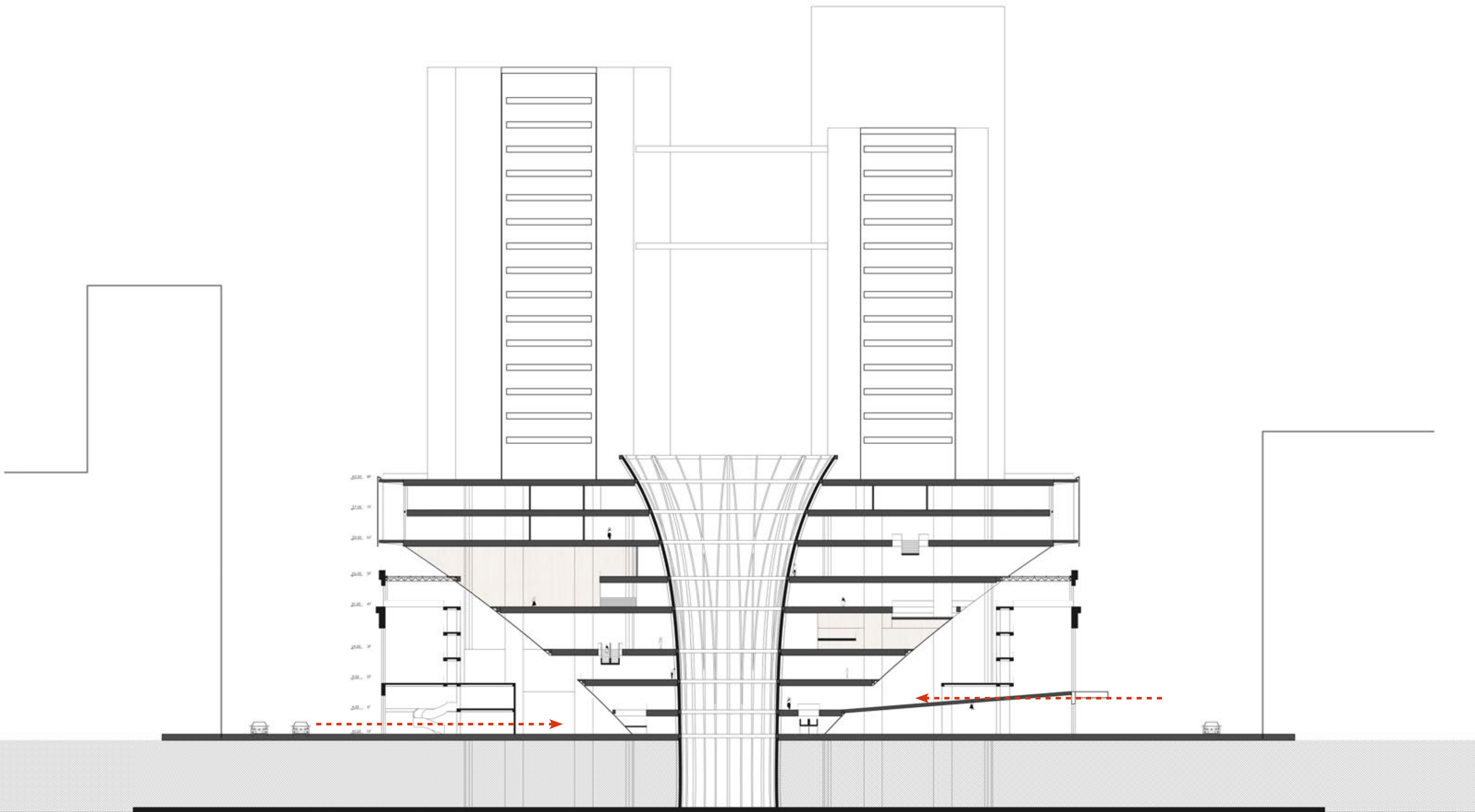


242.0' W
222.0' W
202.0' W
182.0' W
162.0' W
142.0' W
122.0' W
102.0' W
82.0' W
62.0' W

Moynihan Station

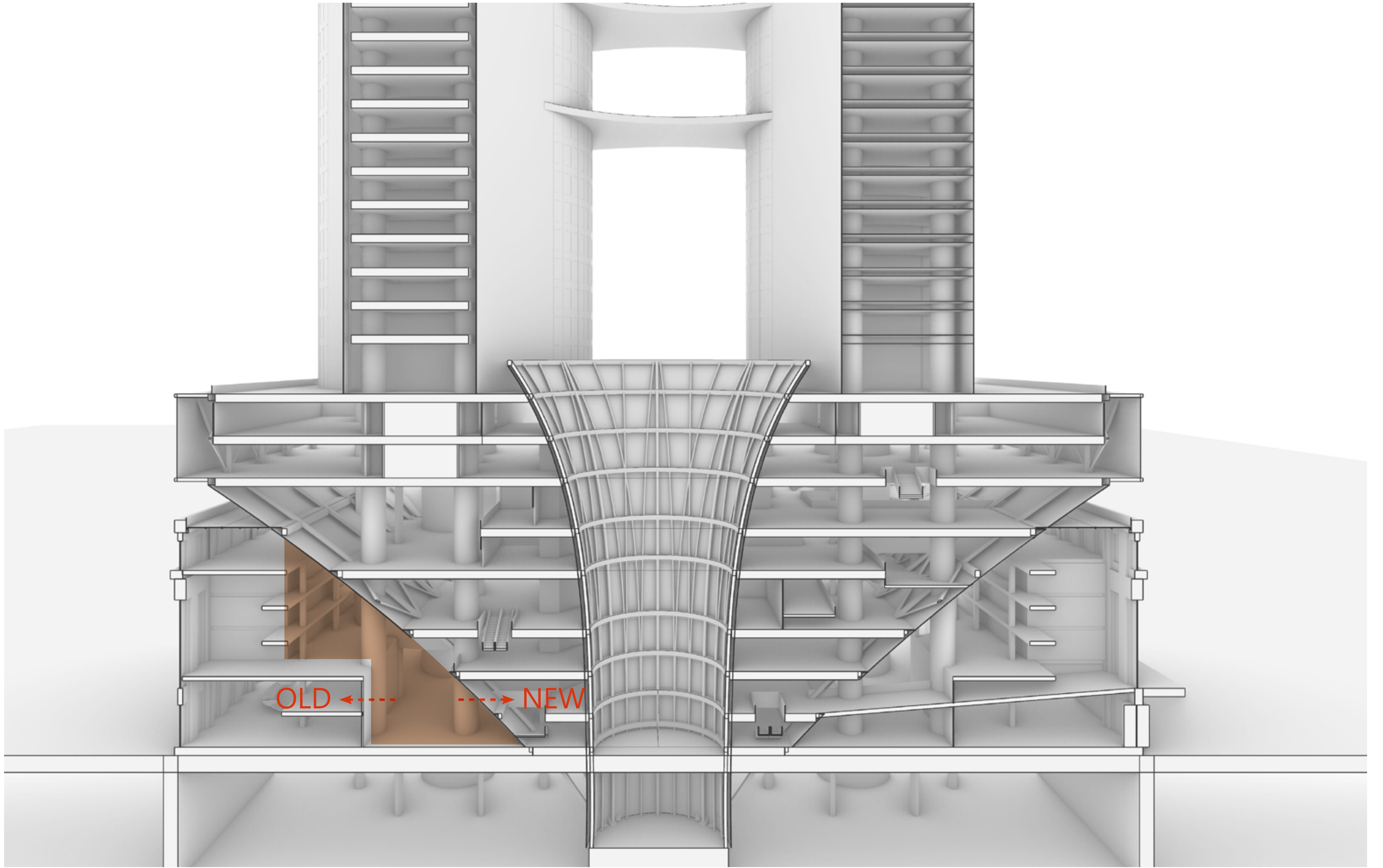
A-A Section 1:300

Wonderland-Farley Building Renovation

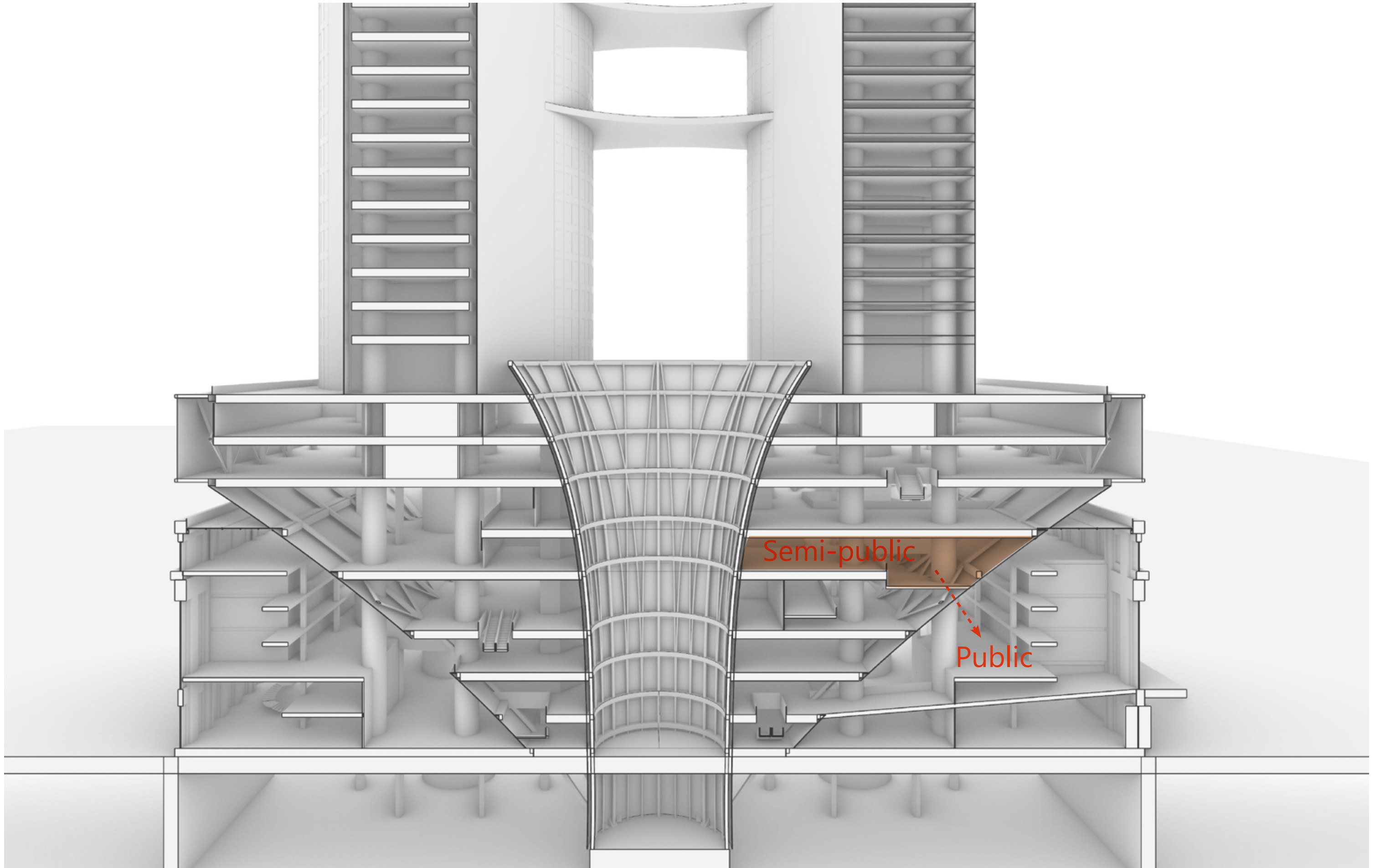


B-B Section 1:300

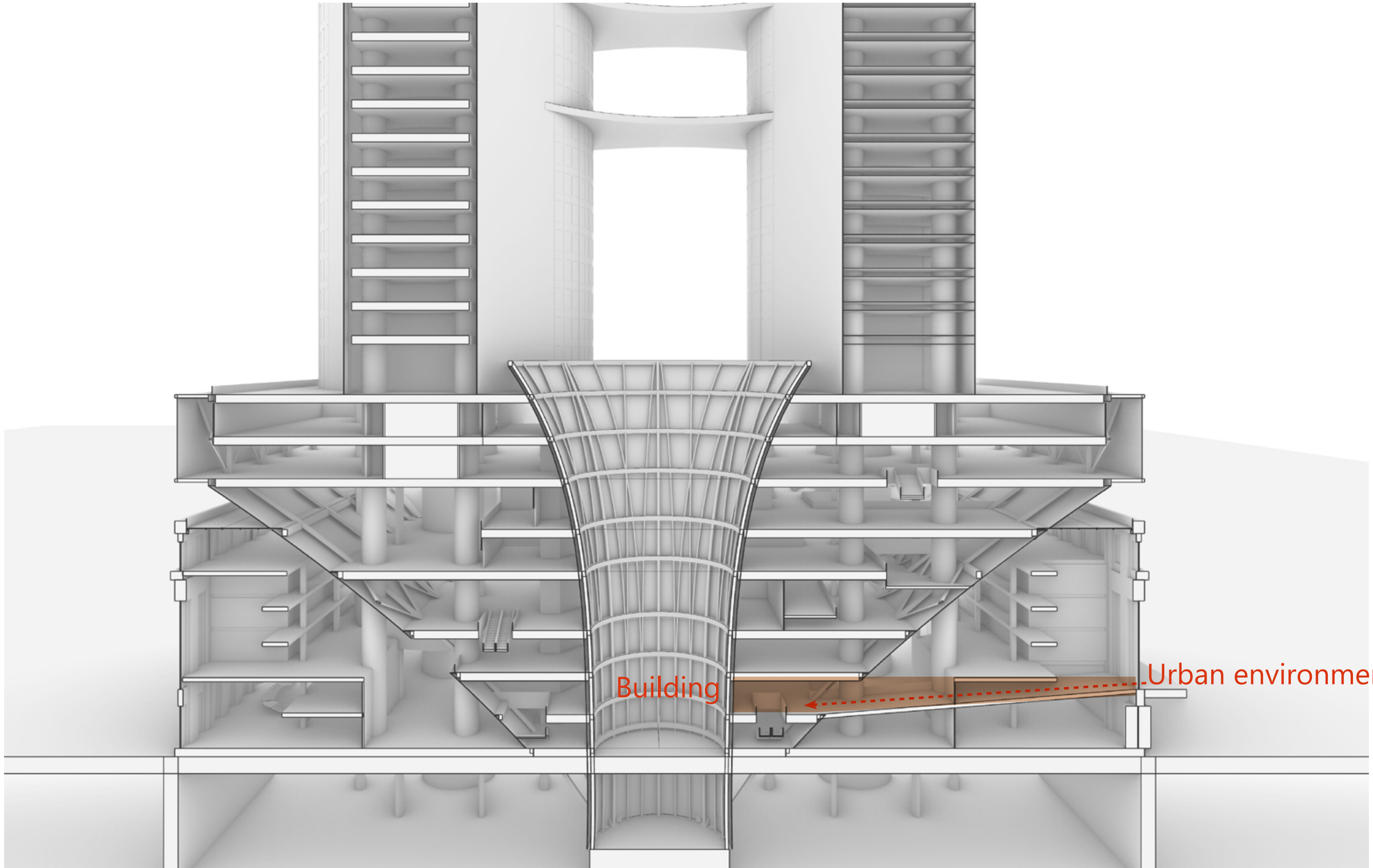
Wonderland-Farley Building Renovation







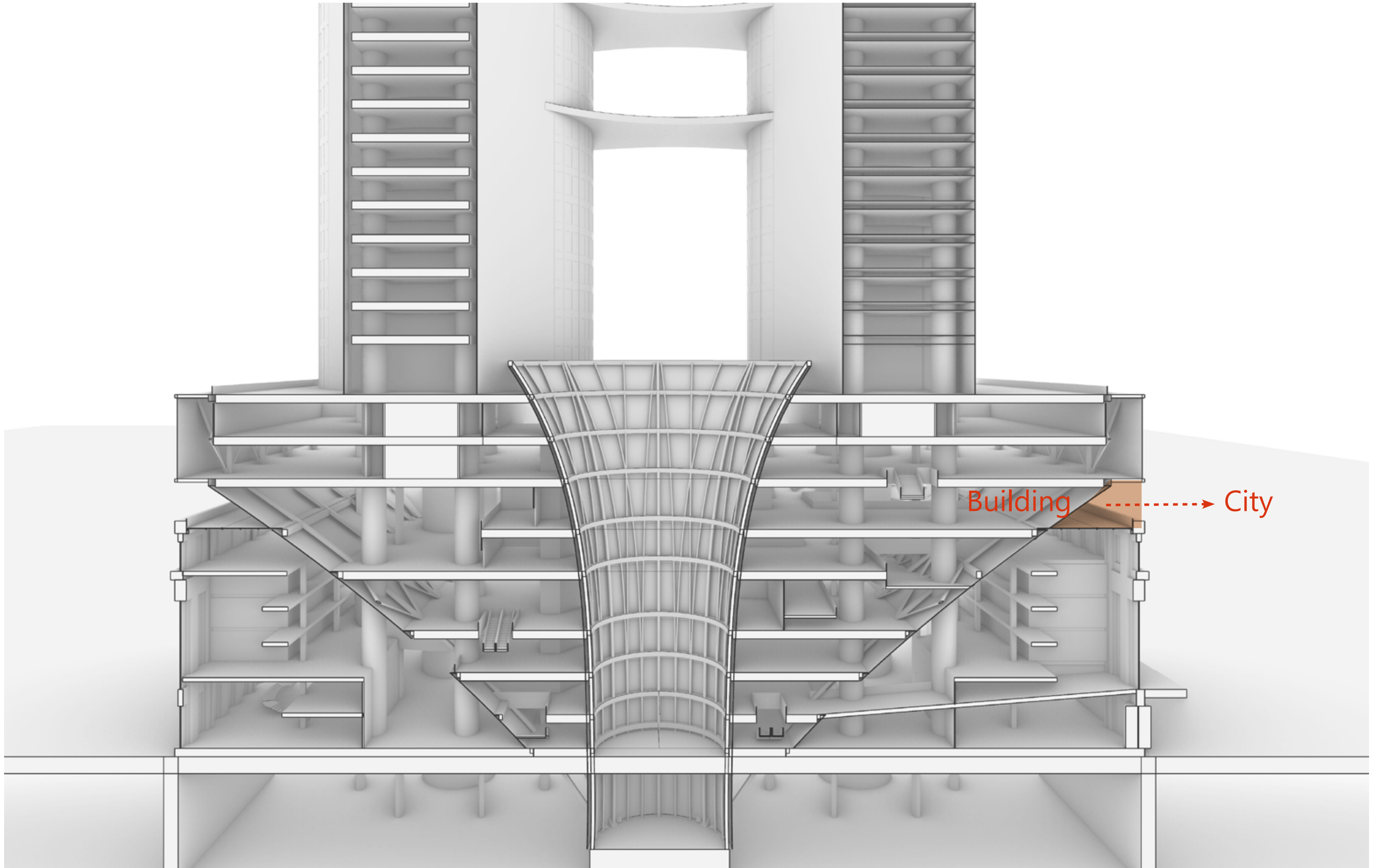




Building

Urban environment

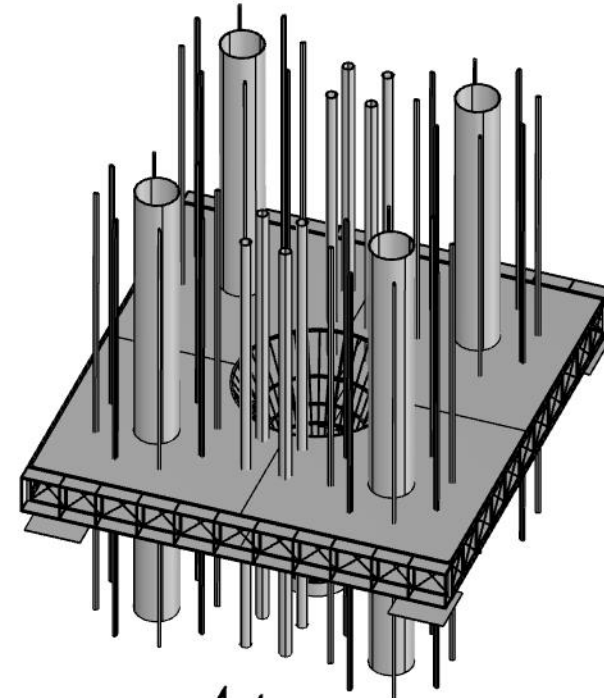




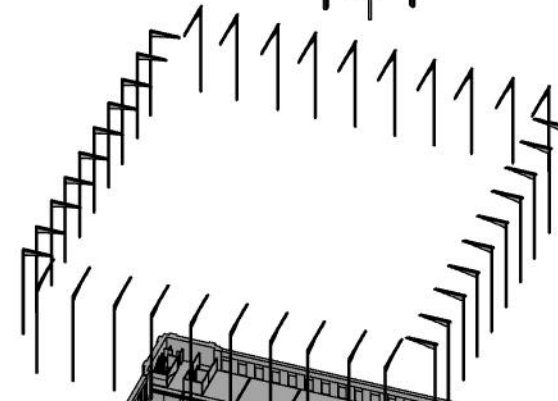


Structure

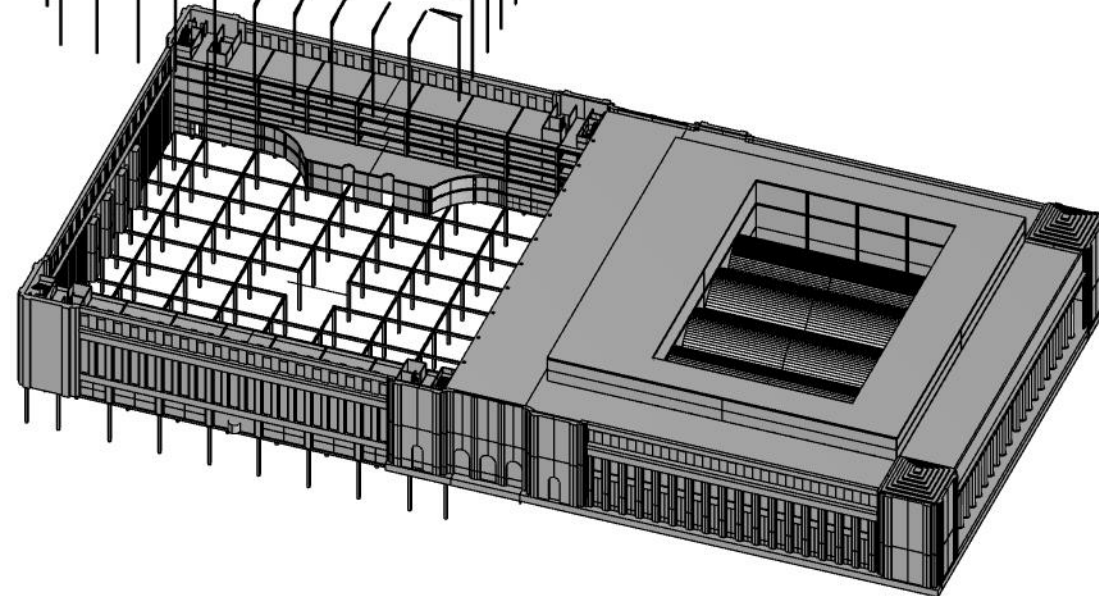
NEW STRUCTURE



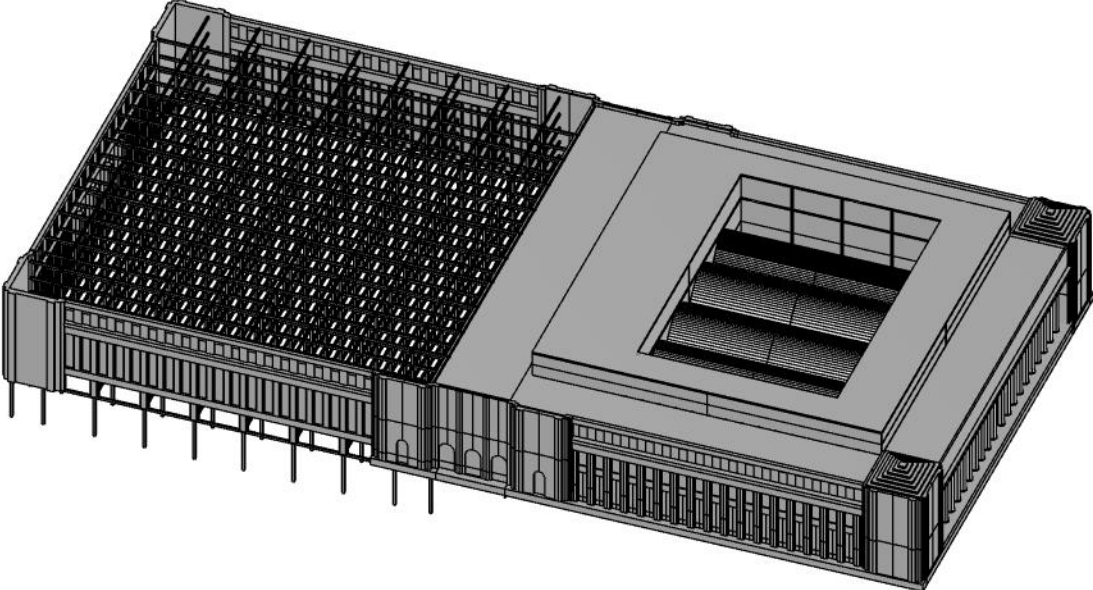
CONNECTION STRUCTURE



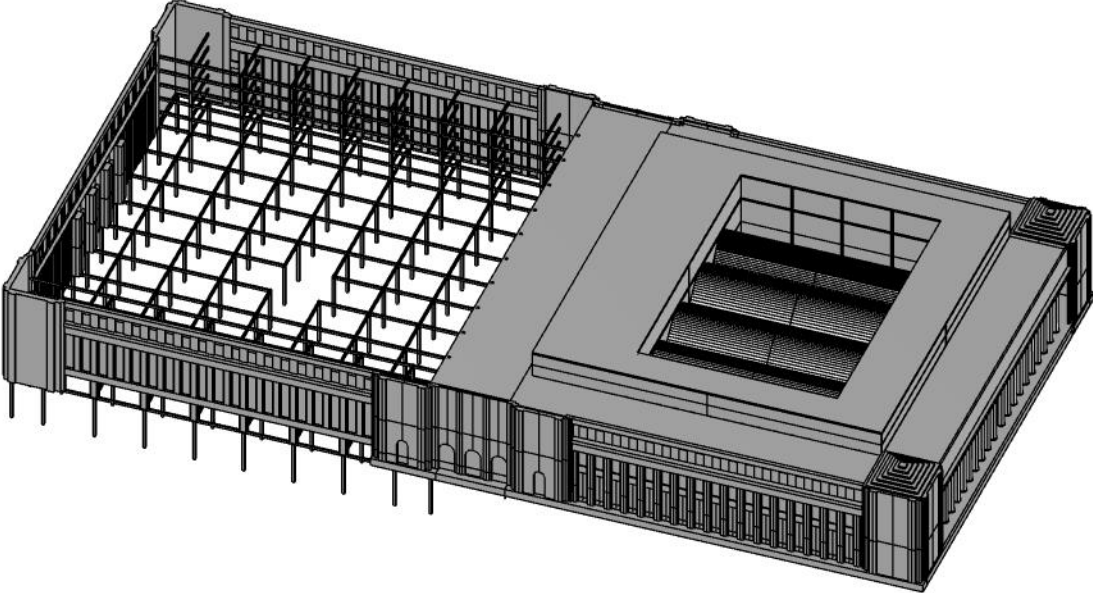
OLD STRUCTURE



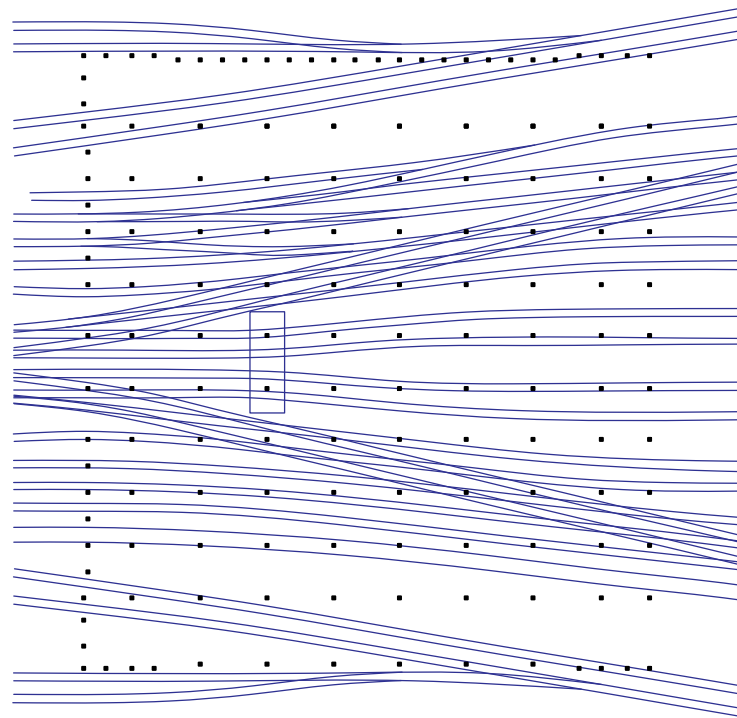
Old structure system



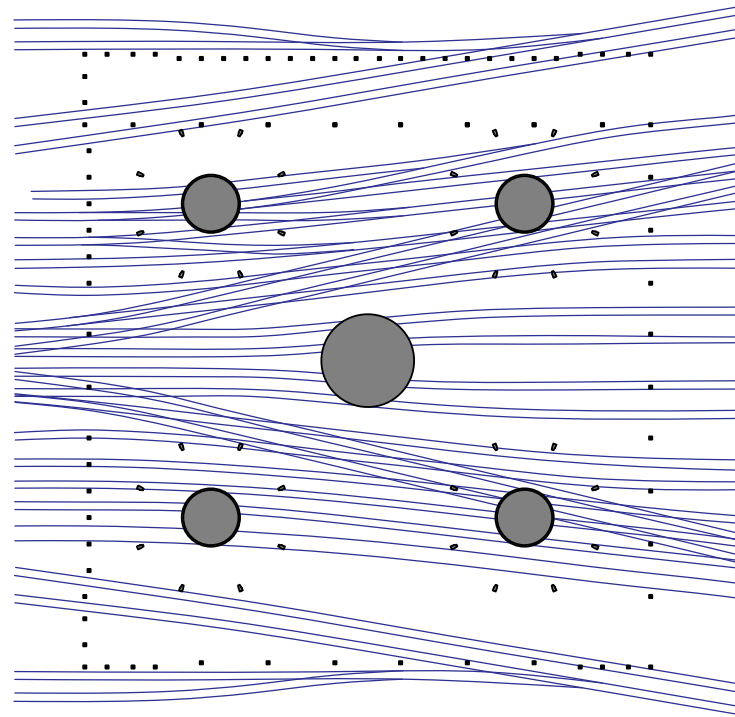
Remove



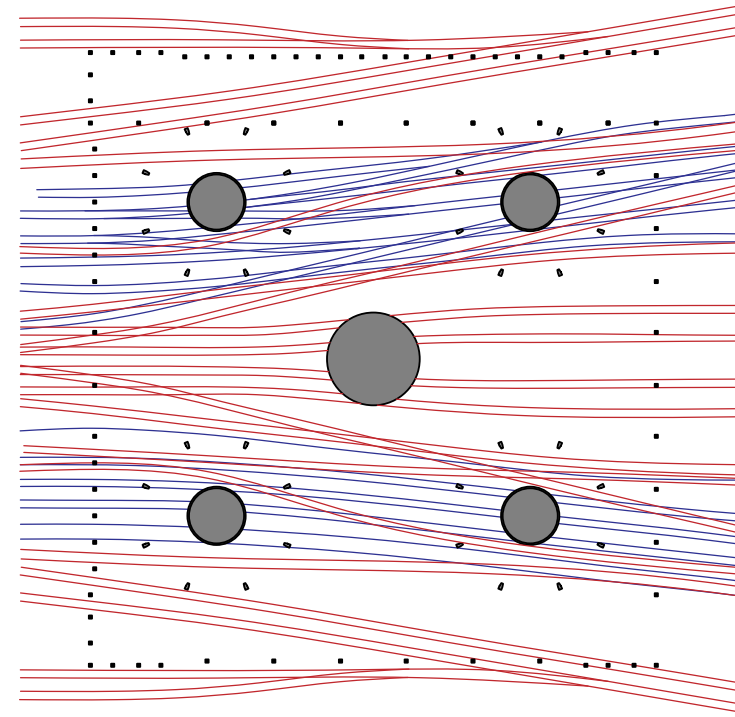
Proposal for underground train tracks



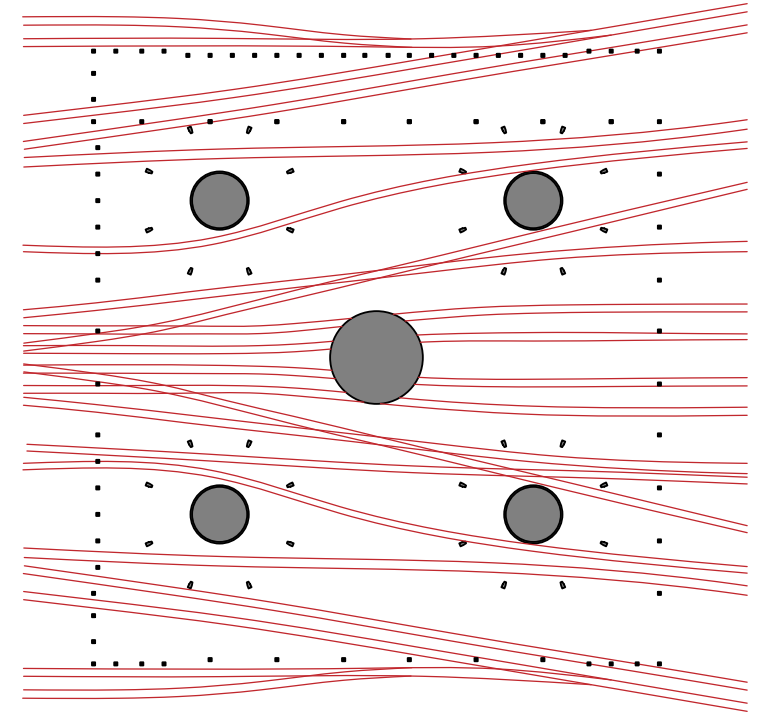
a.old system



b.reserved column + new structure



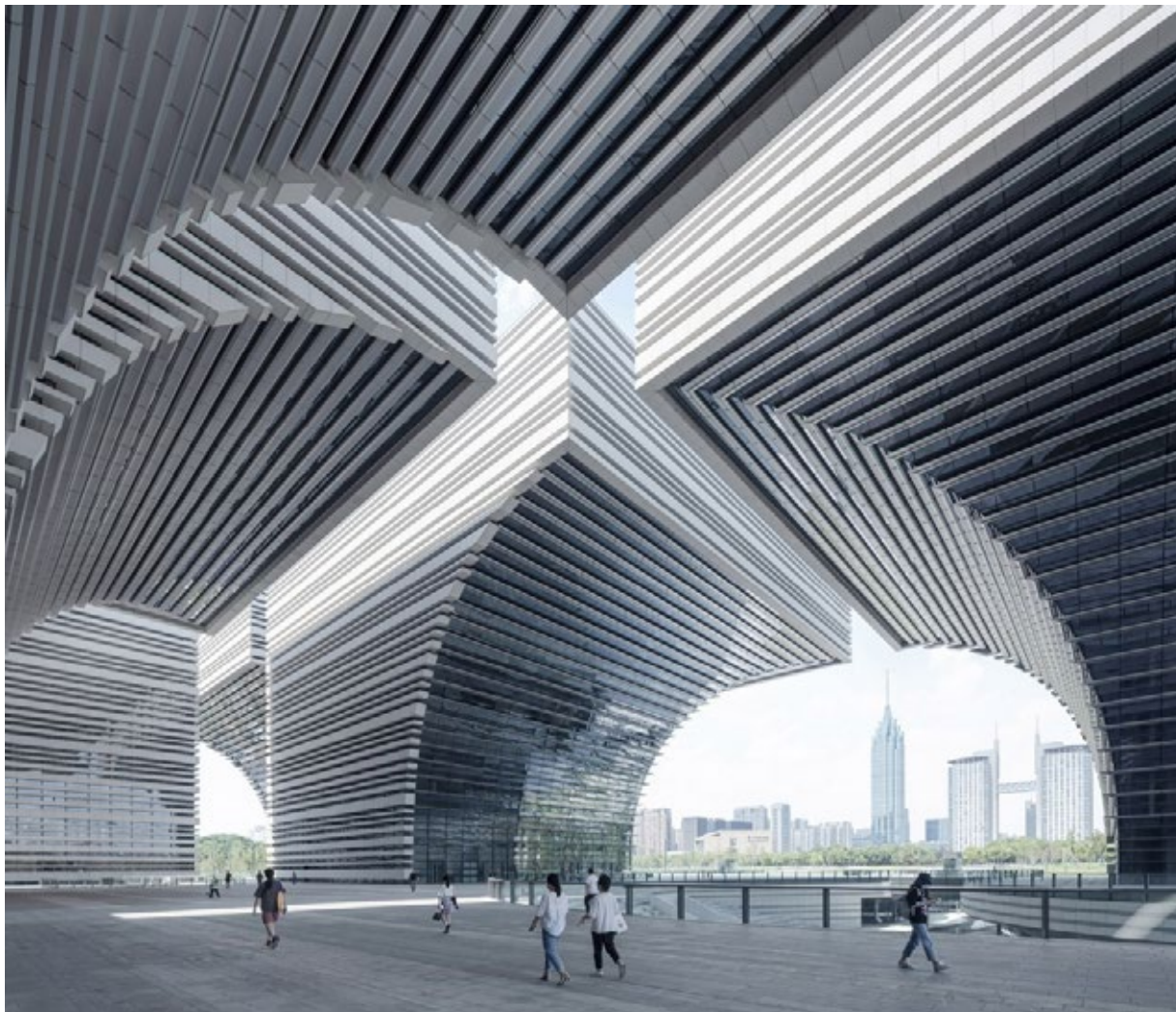
c.adjusted train tracks



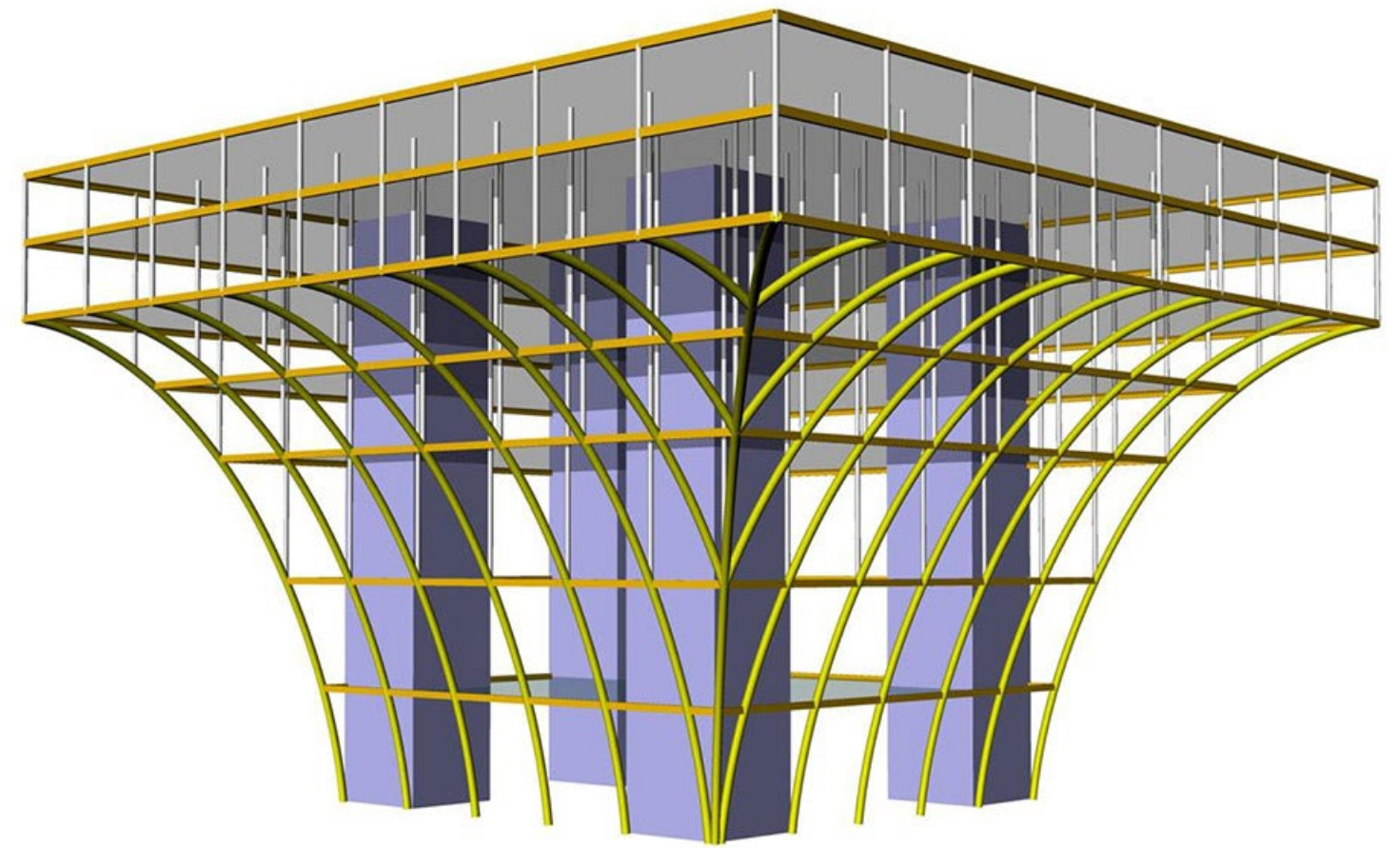
d.new proposal

New structure system

Reference

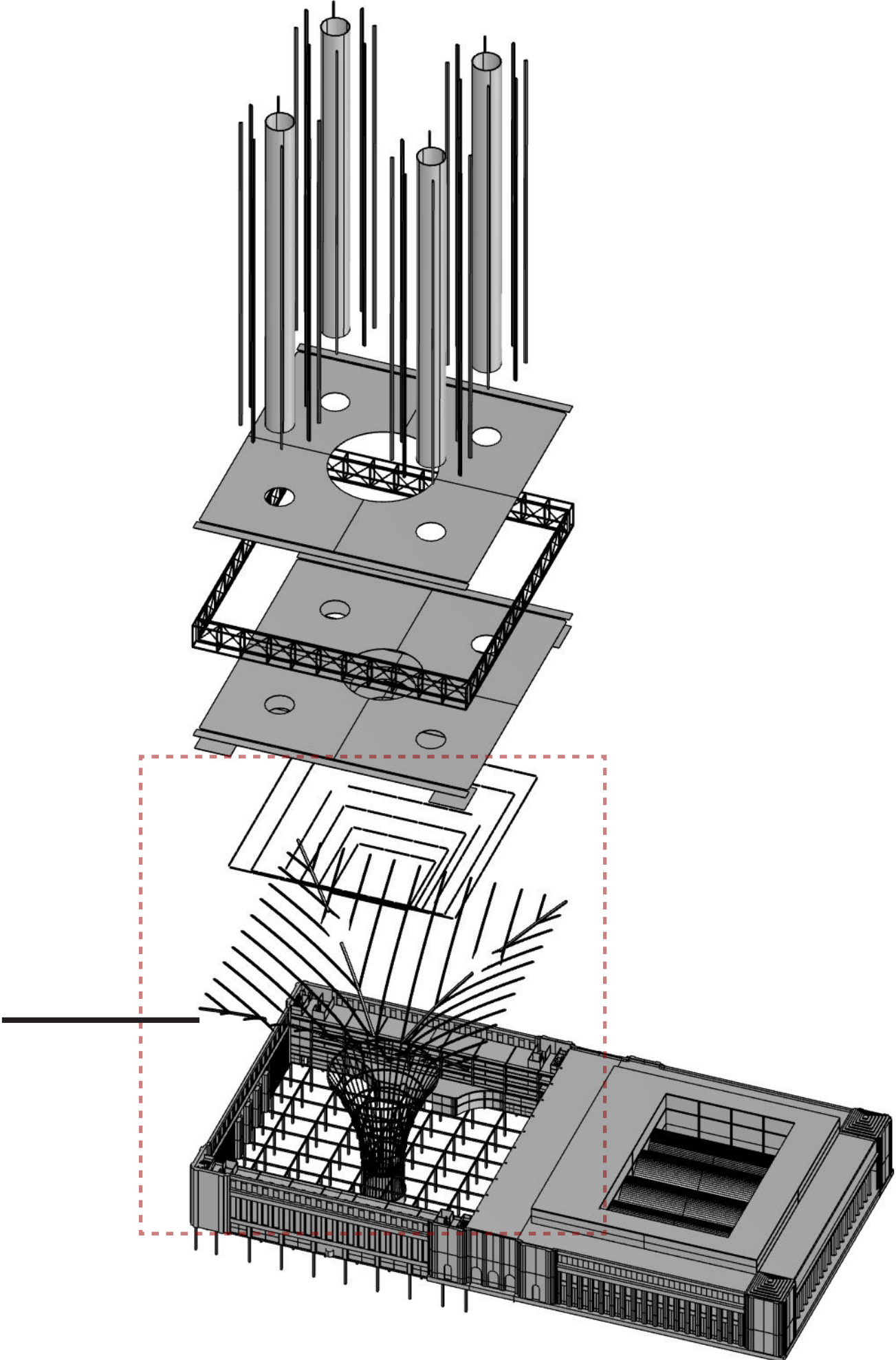


Changzhou Culture Plaza



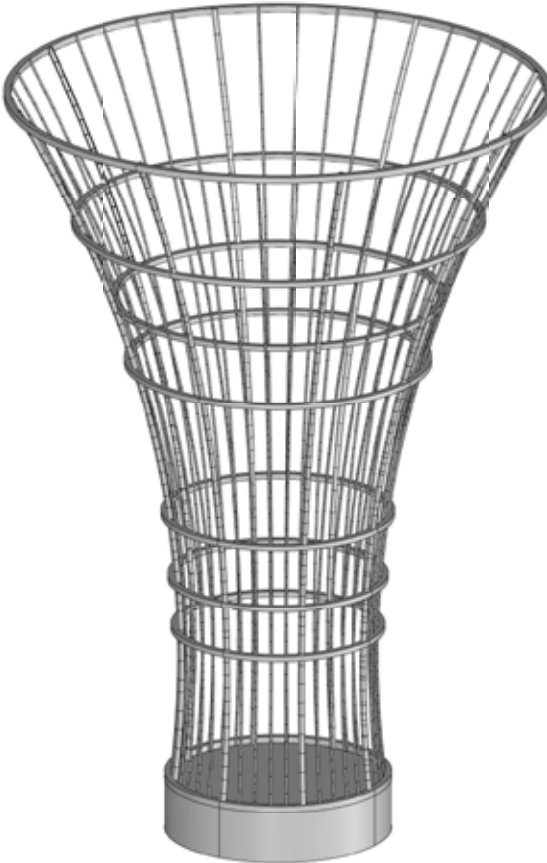
Structural System

New structure system



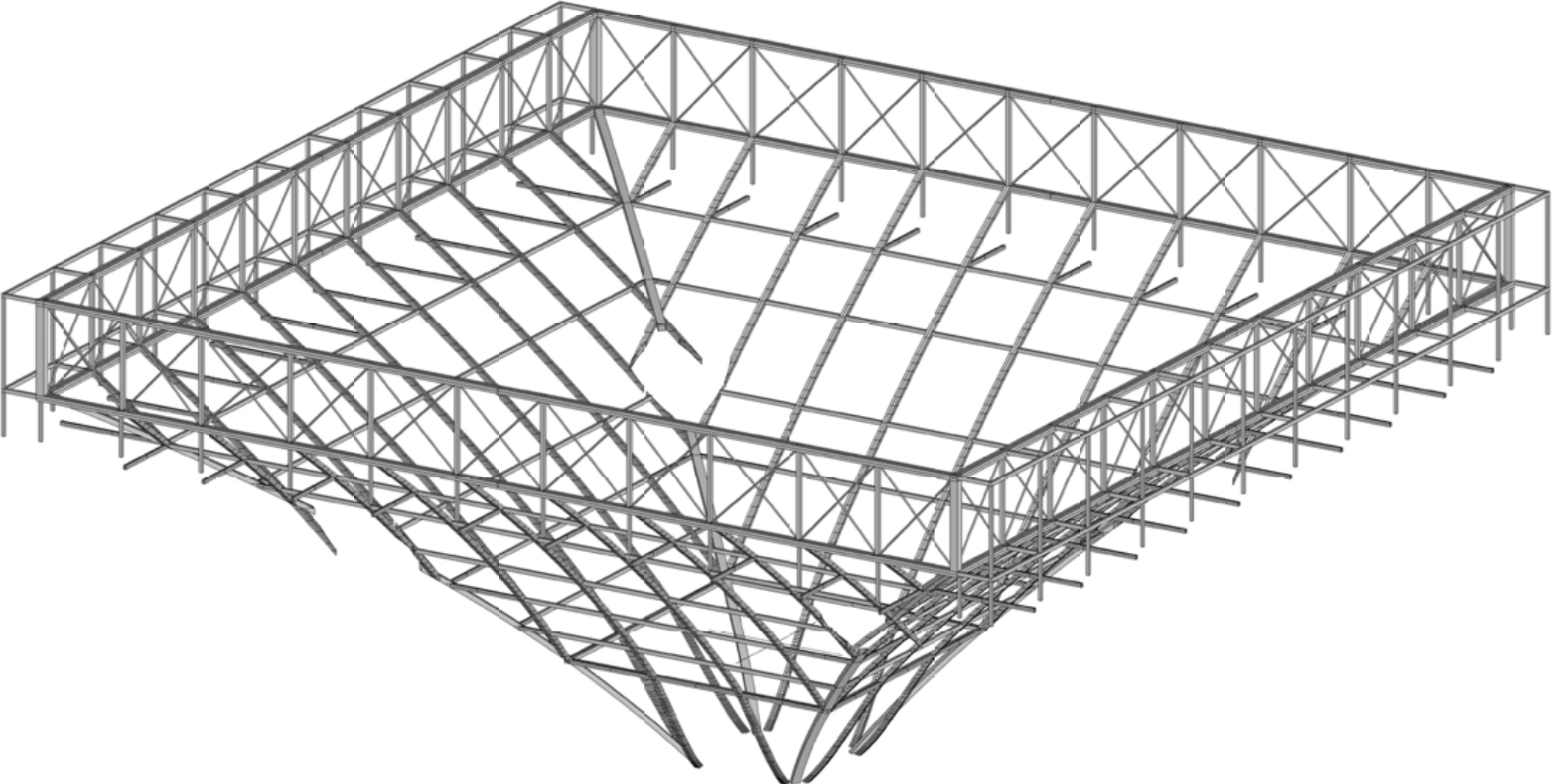
Vertical system

New structure system



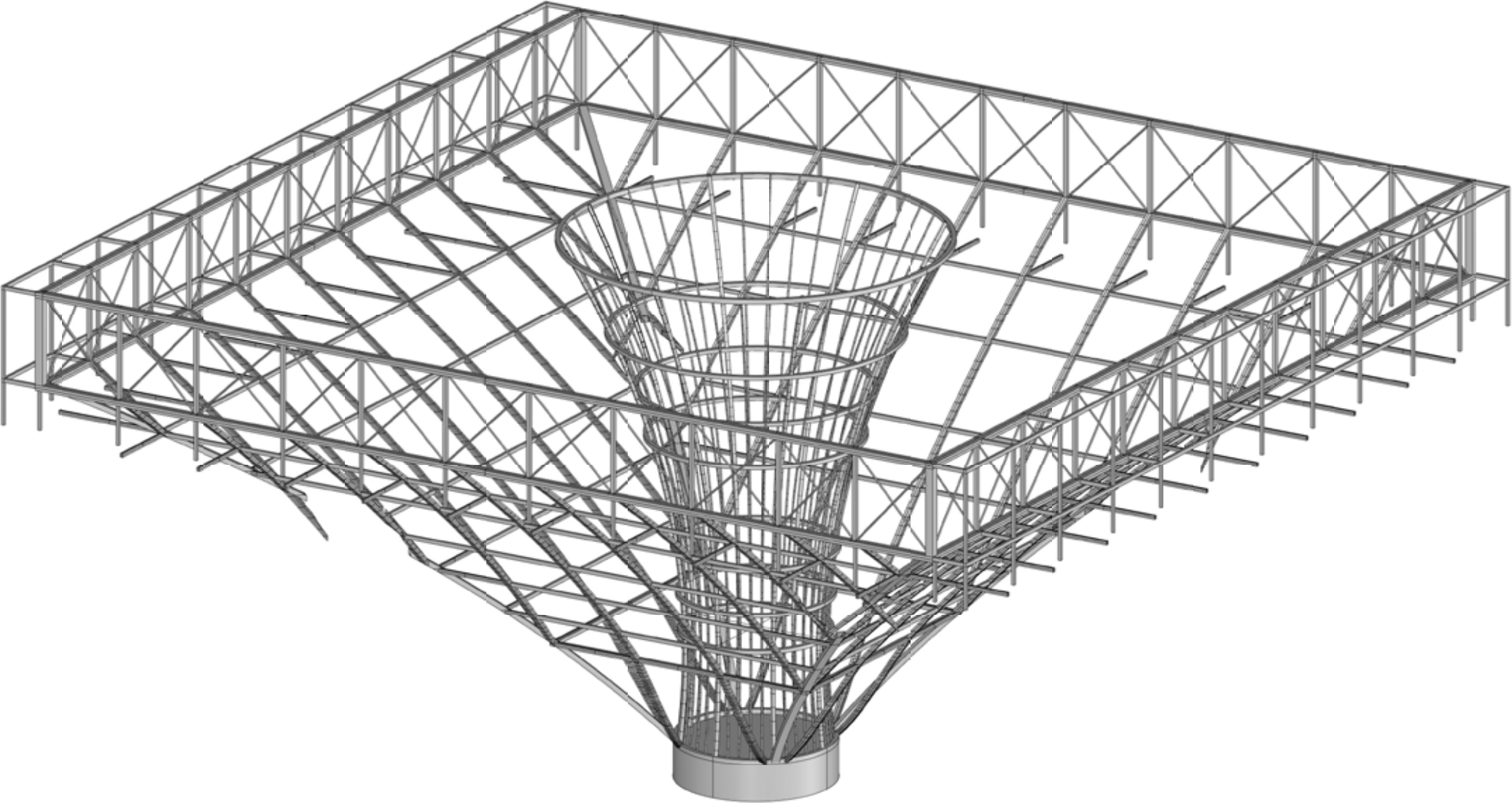
Internal System

New structure system



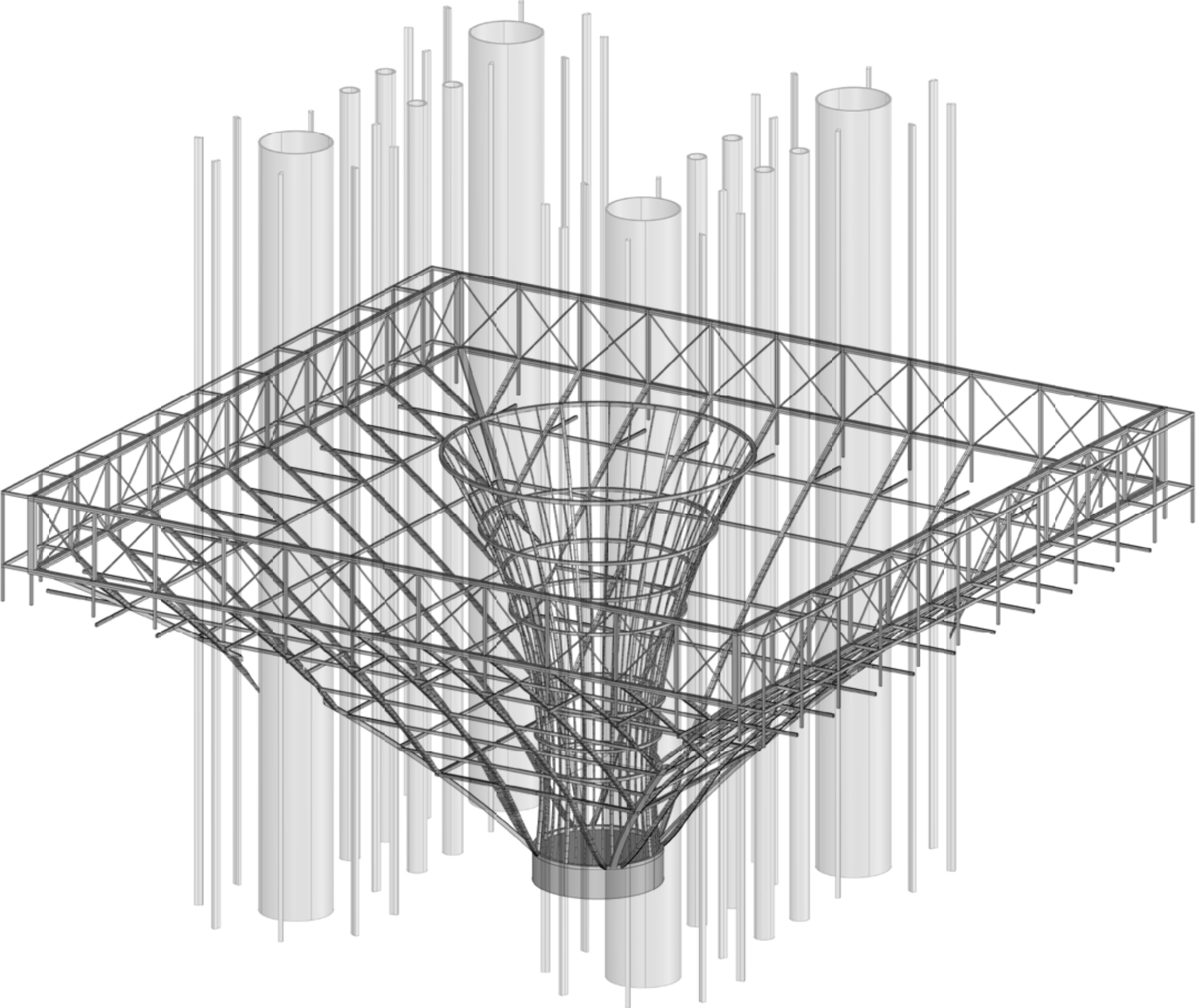
External System

New structure system



Vertical Structure

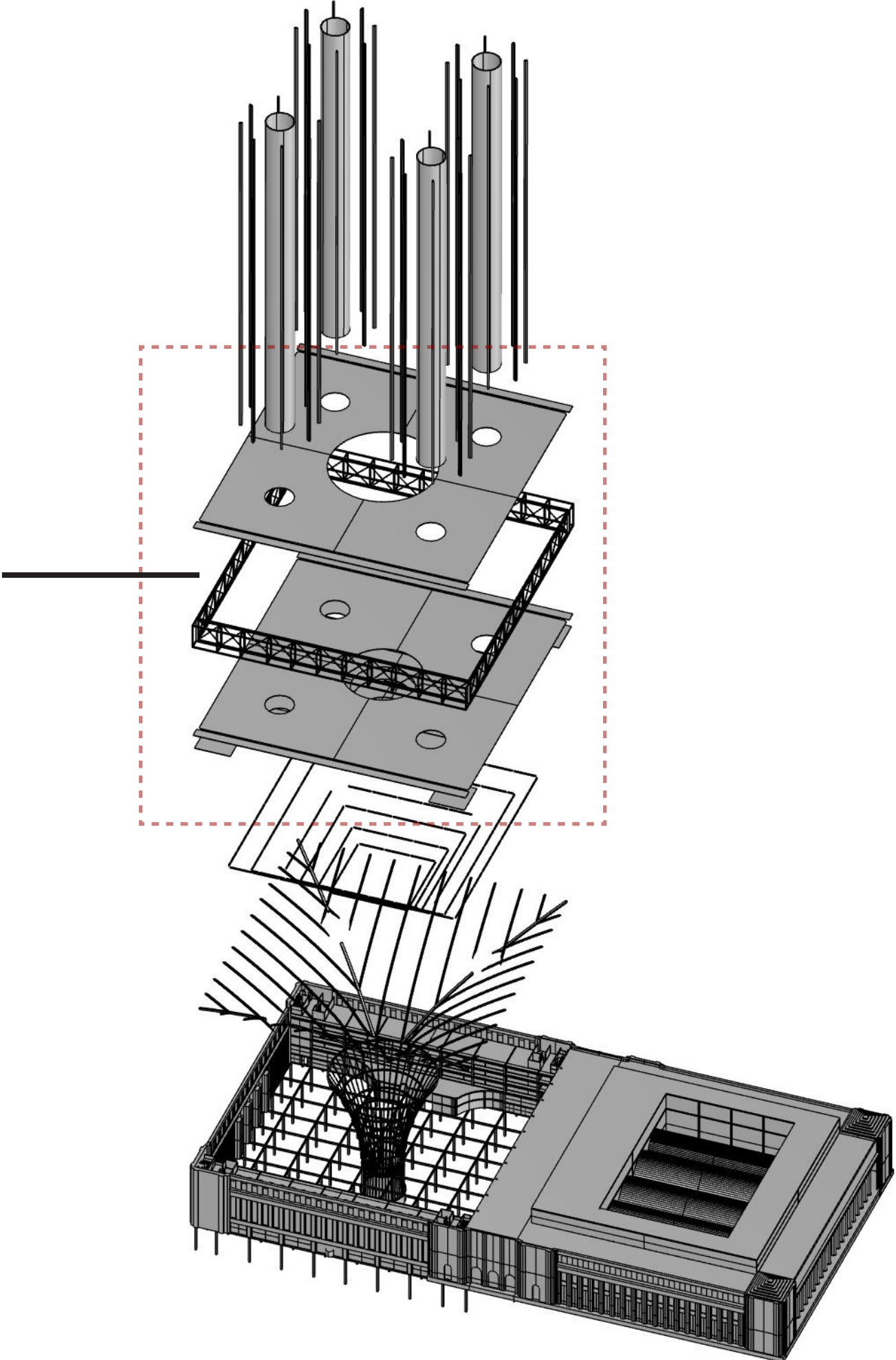
New structure system



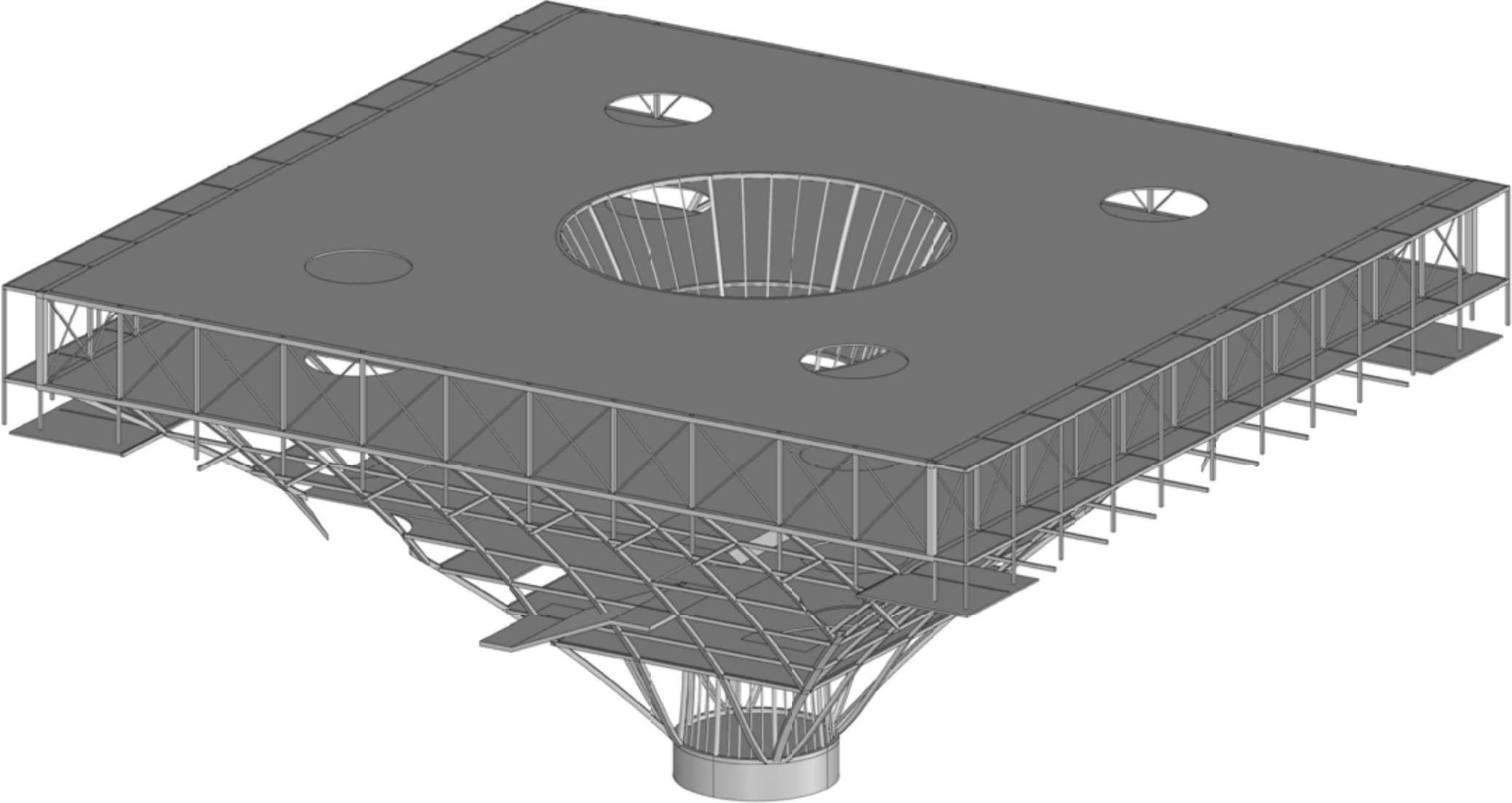
Vertical Structure

New structure system

Horizontal system



New structure system

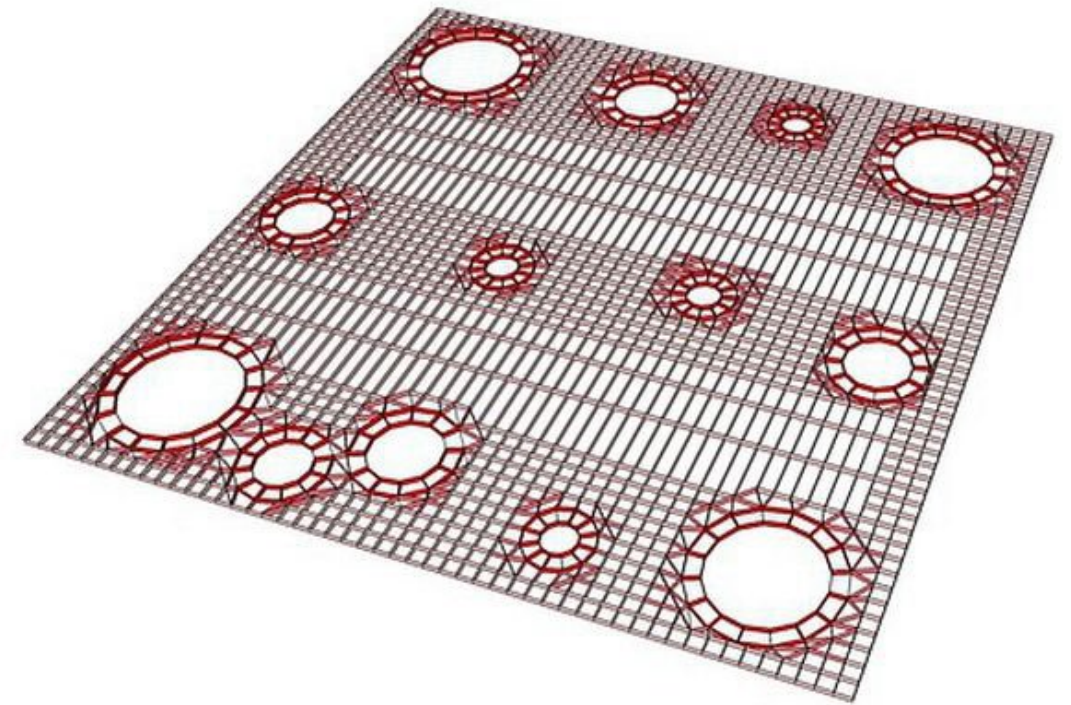


Horizontal Structure

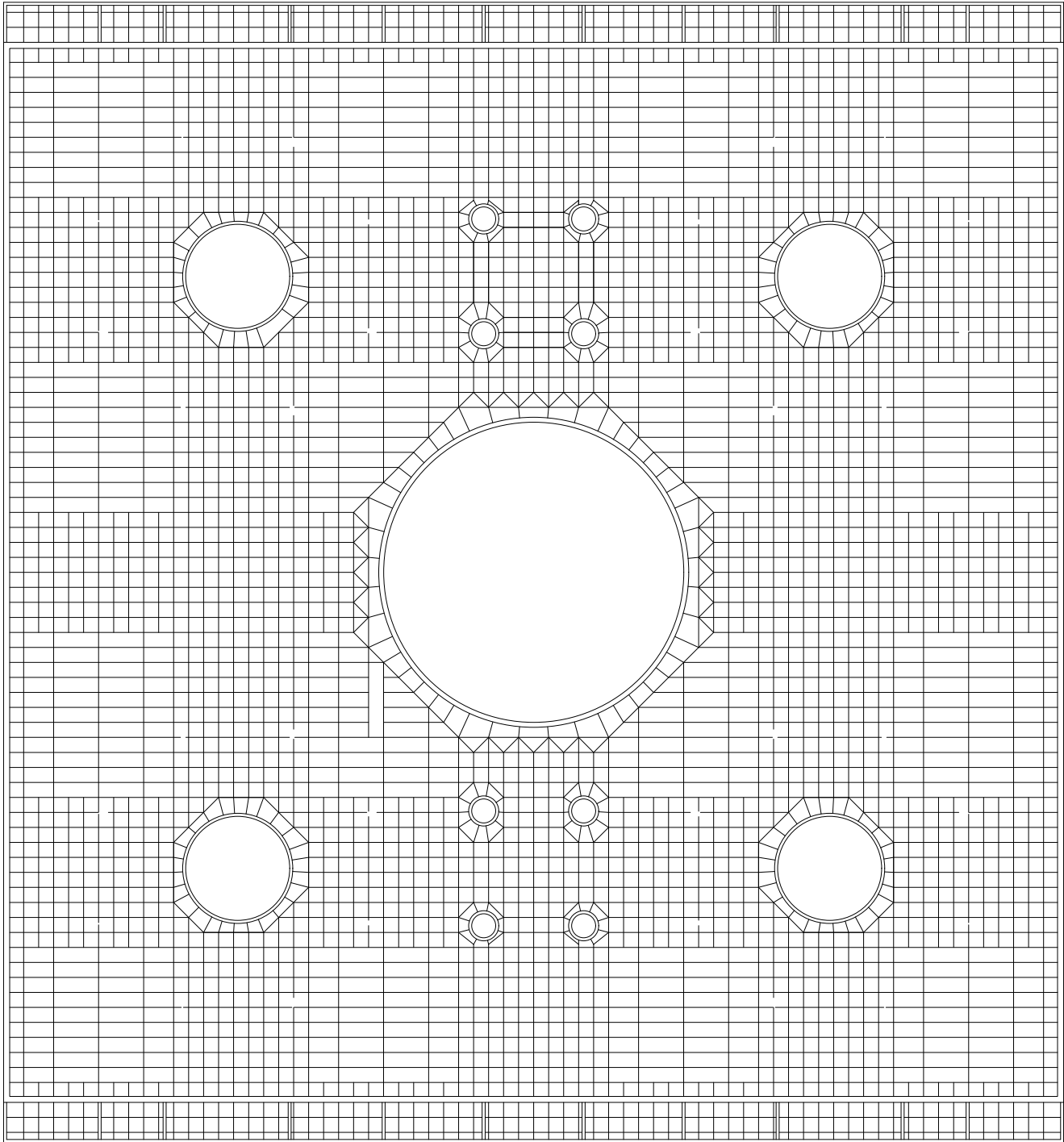
Reference



sendai mediatheque



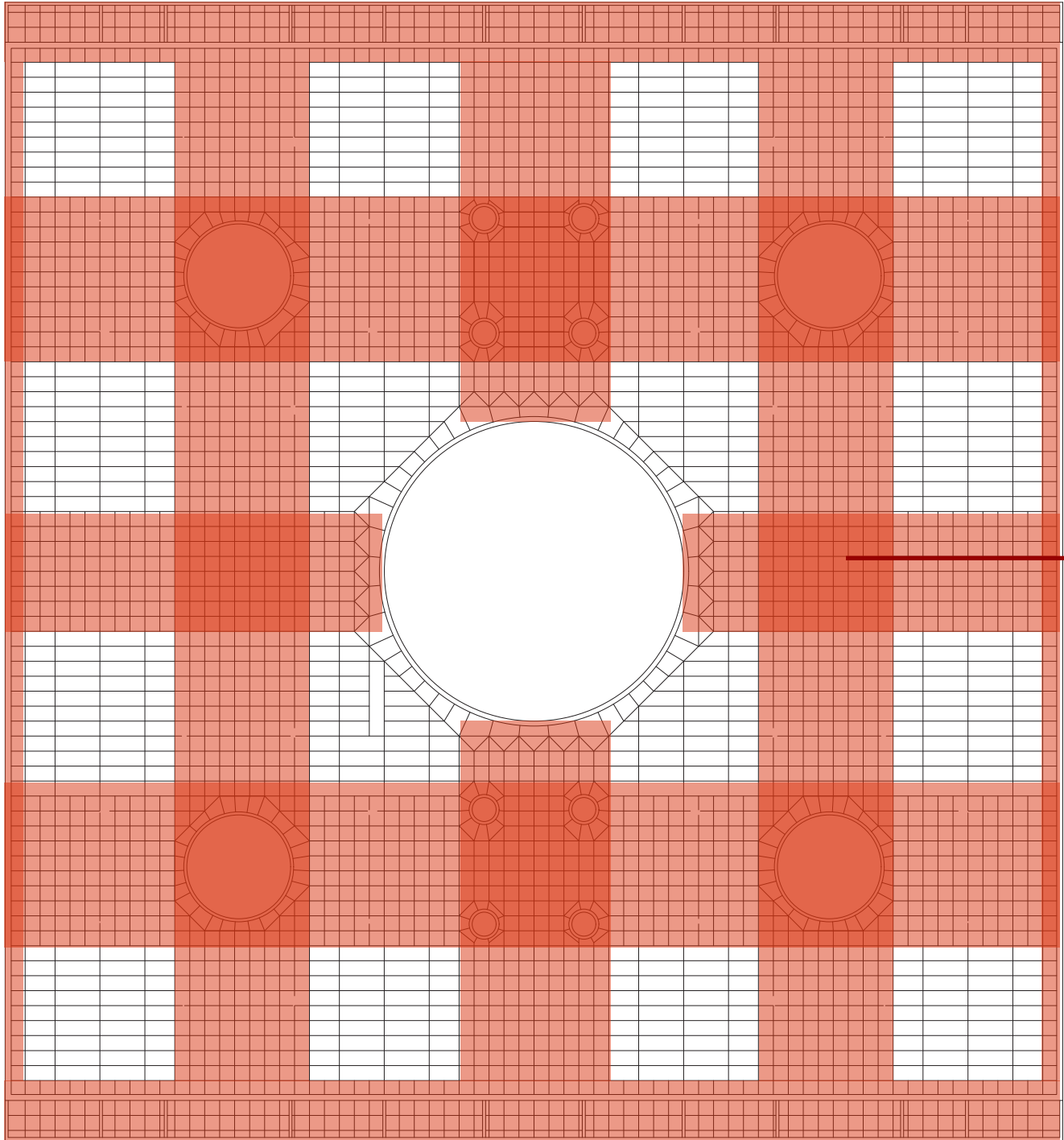
New structure system



6F Grid Beam

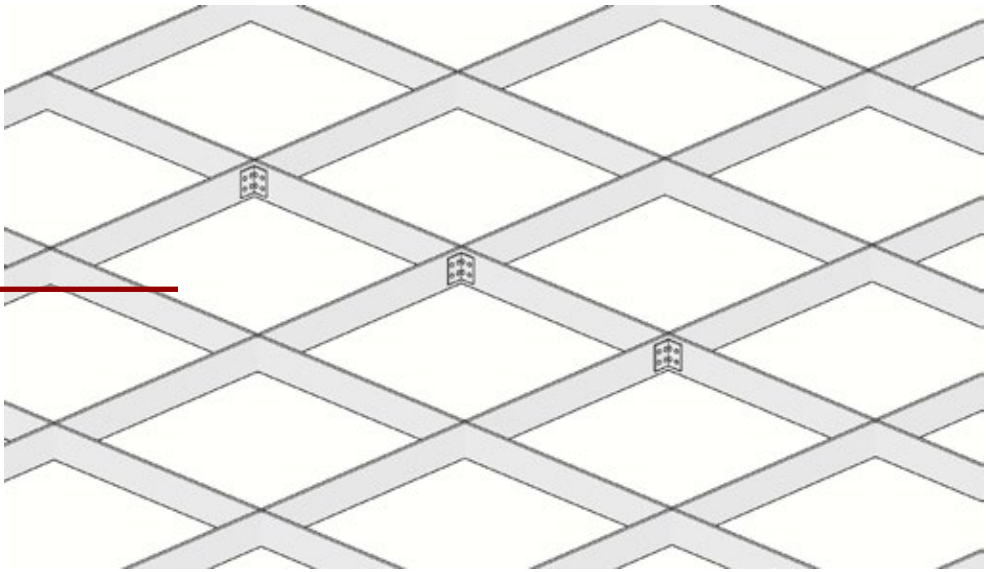
Grid Beam System

New structure system



6F Grid Beam

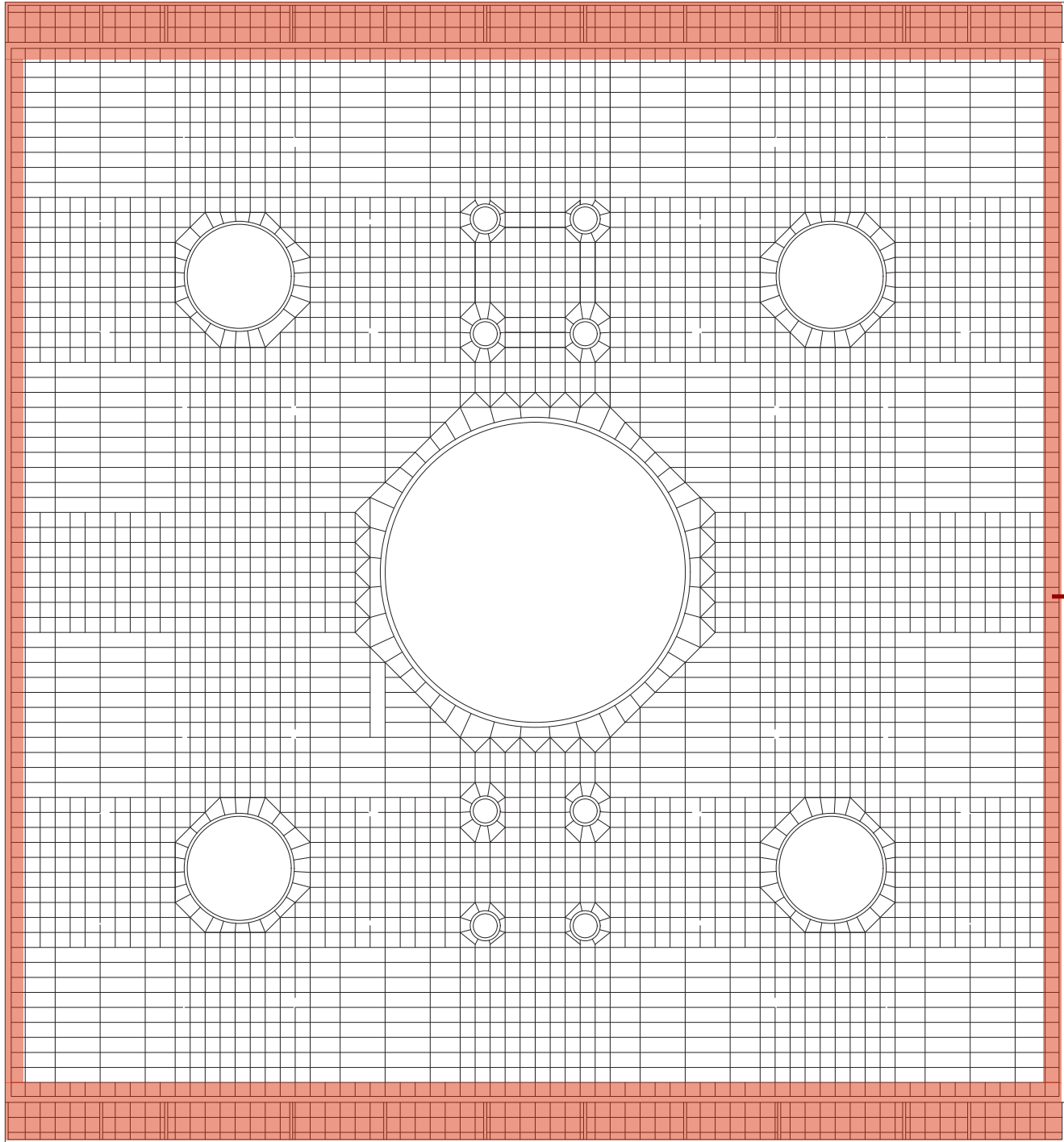
Grid Beam



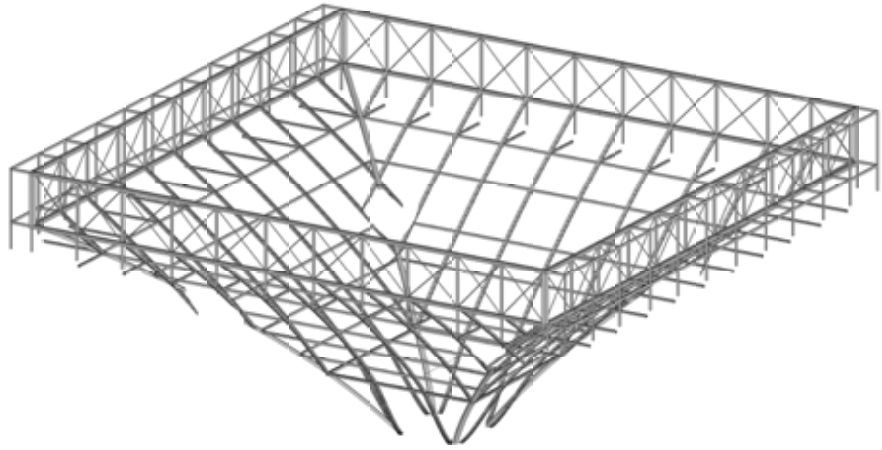
Reinforced Area

1500*1500 Grid

New structure system

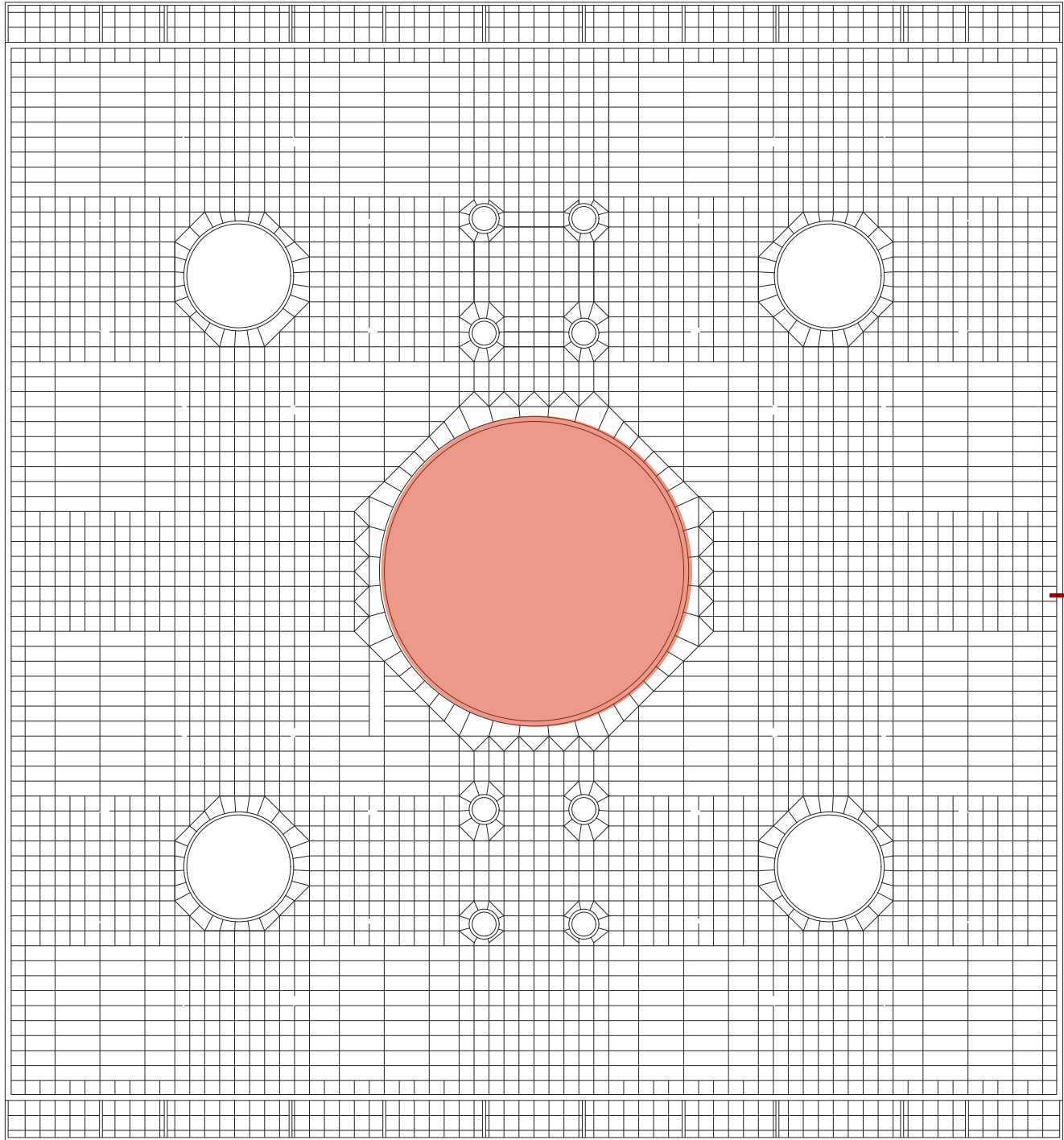


6F Grid Beam

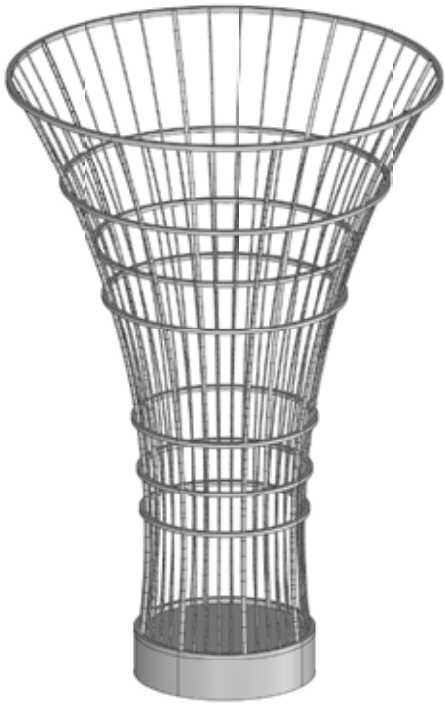


Grid Beam and Vertical System

New structure system

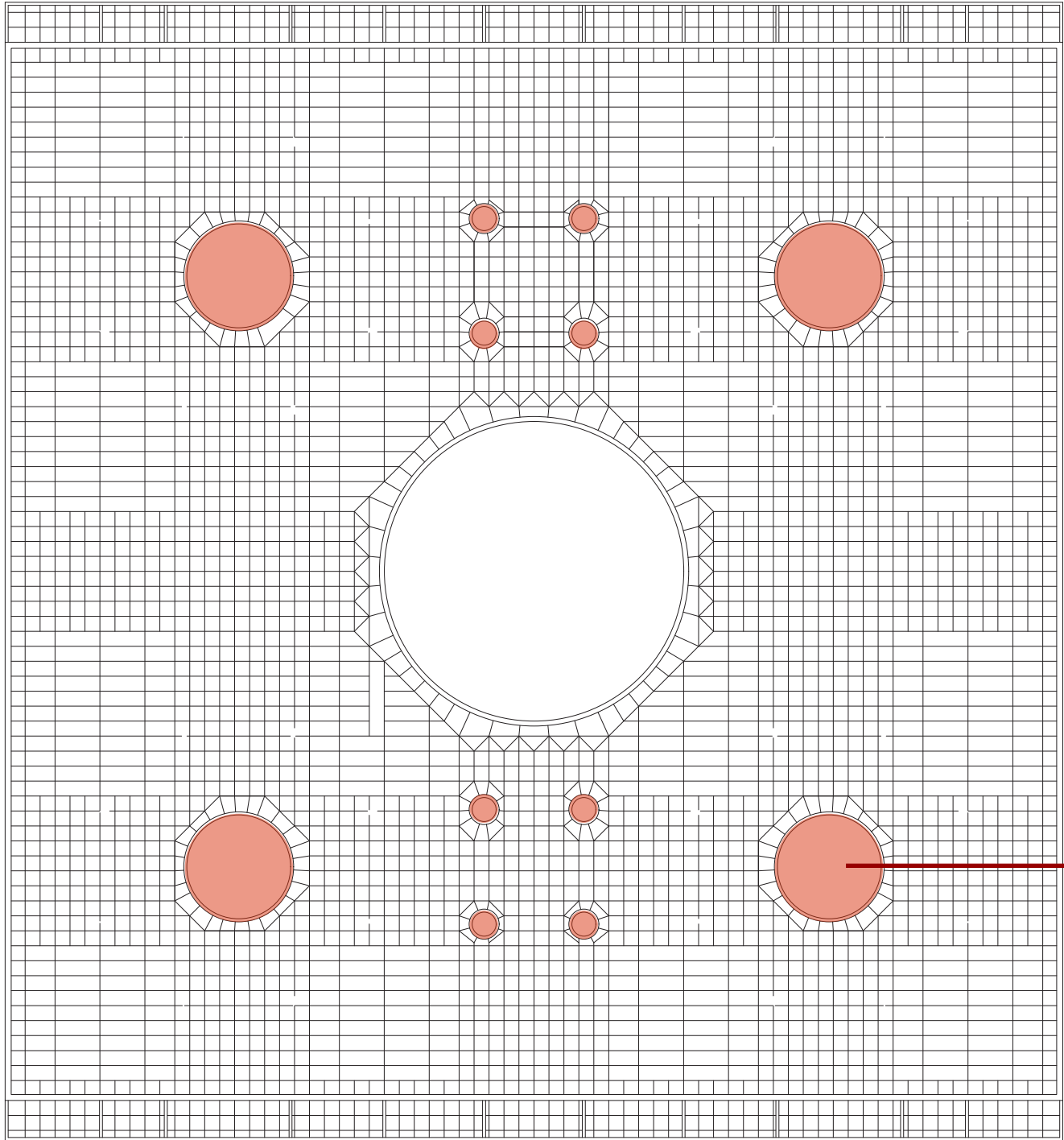


6F Grid Beam

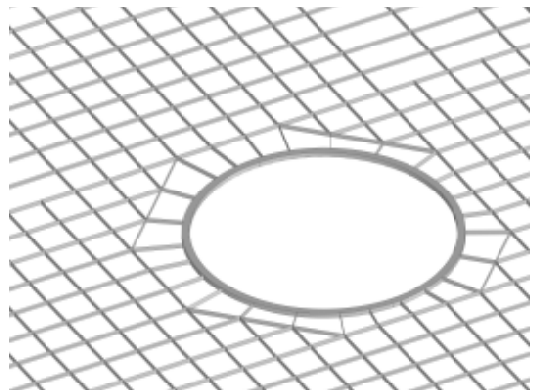
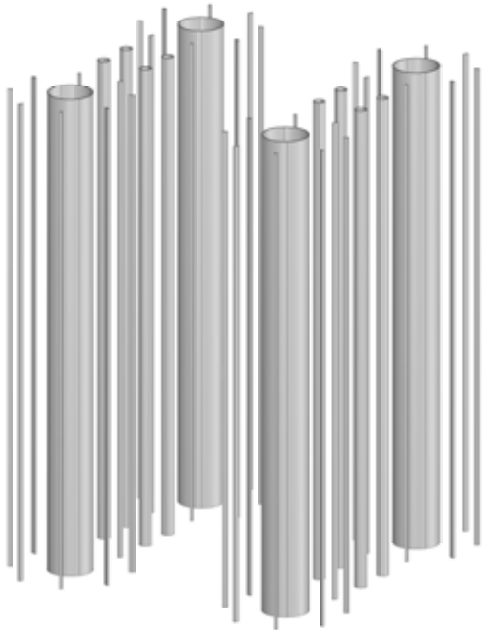


Grid Beam and Vertical System

New structure system

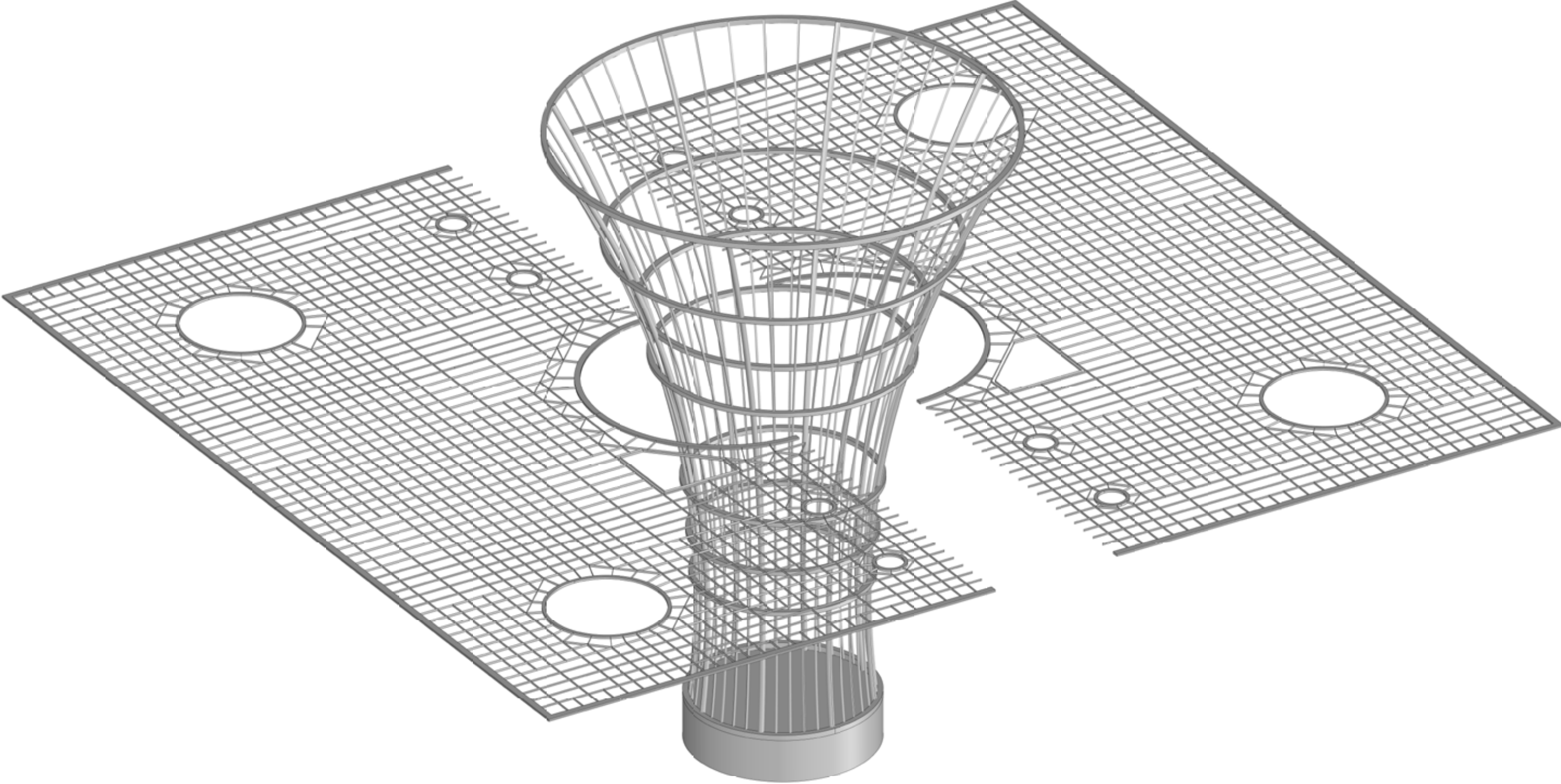


6F Grid Beam



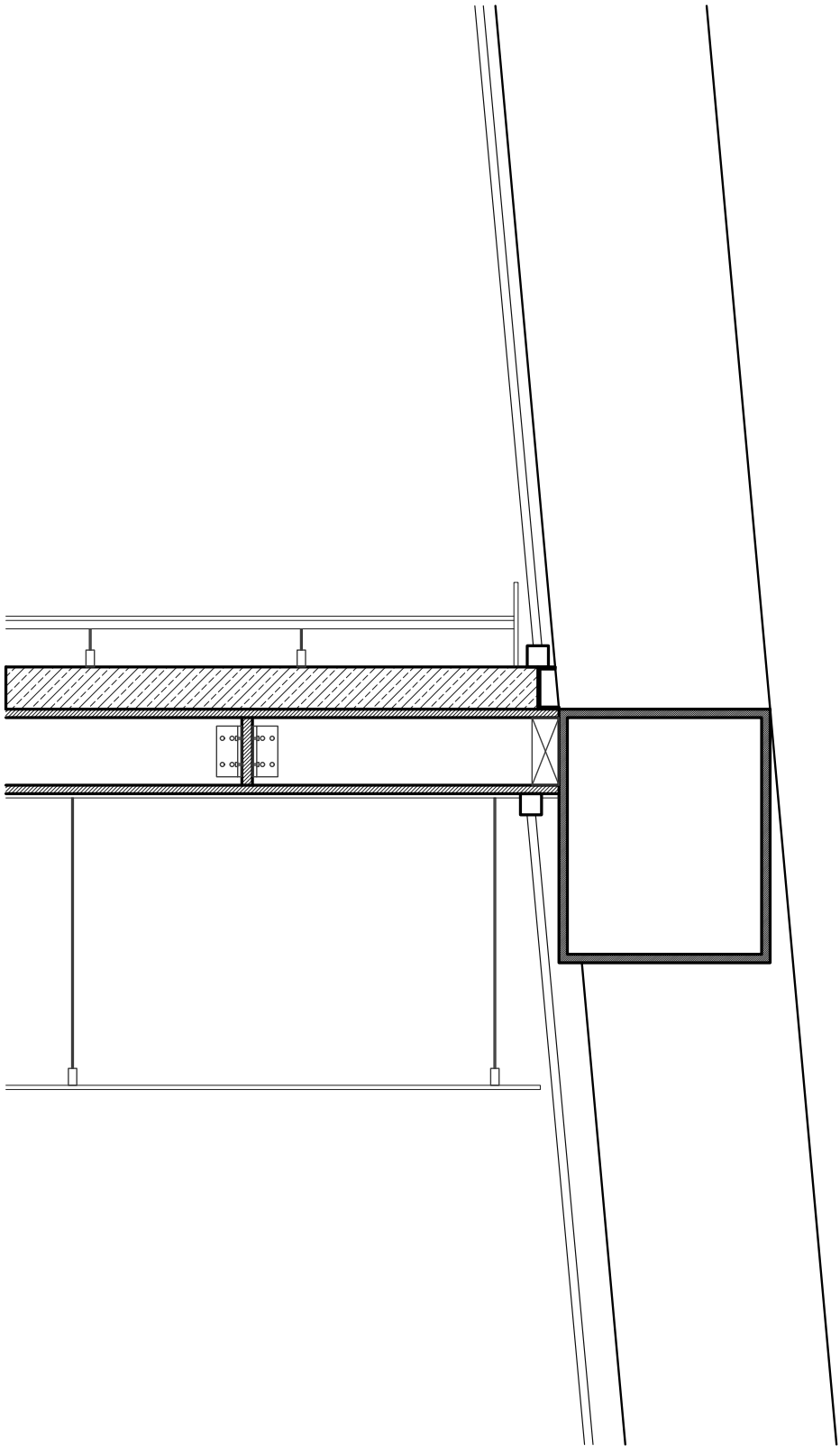
Grid Beam and Vertical System

New structure system



Grid Beam and Vertical System

New structure system

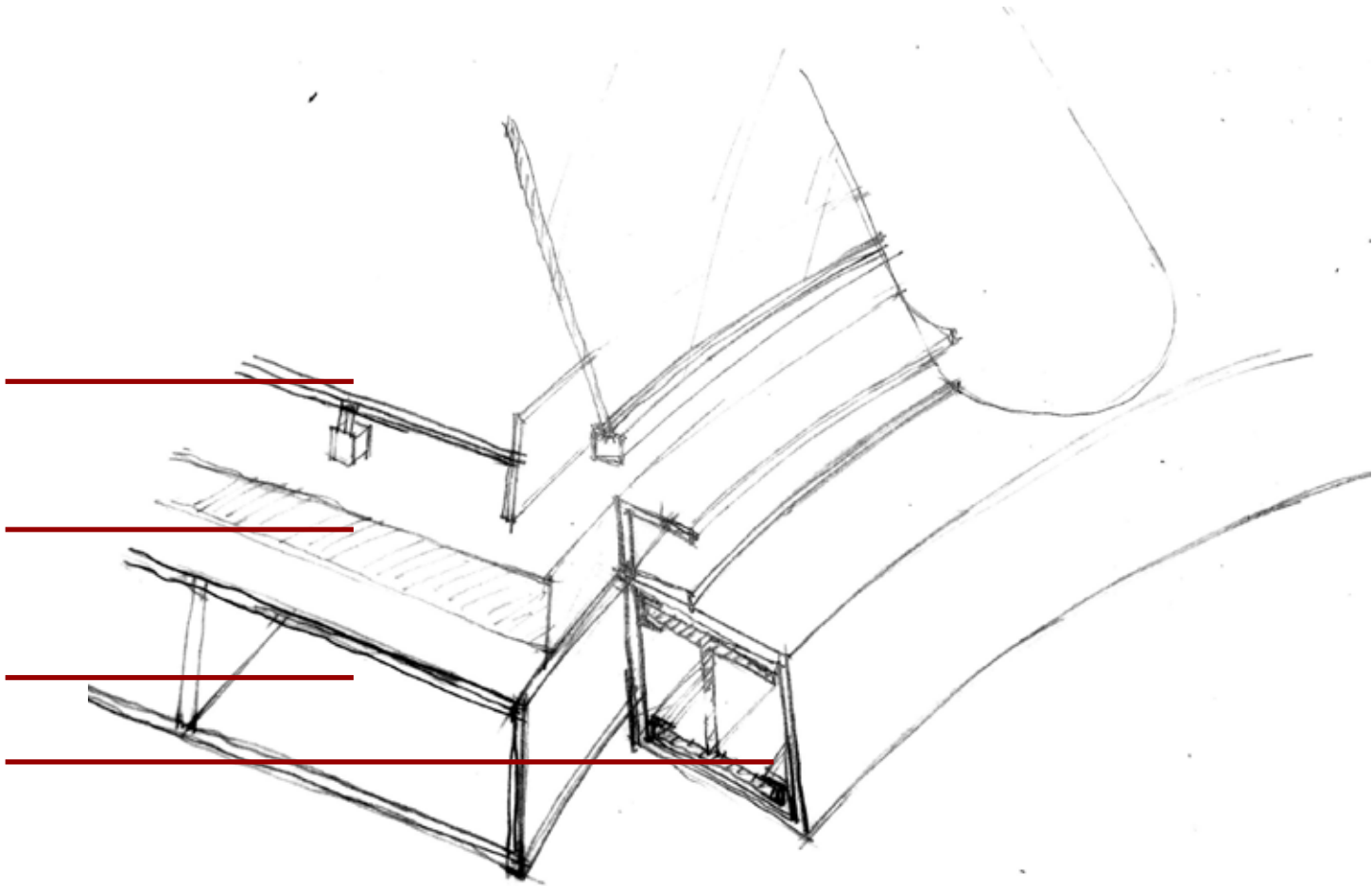


wooden floor

concrete slab

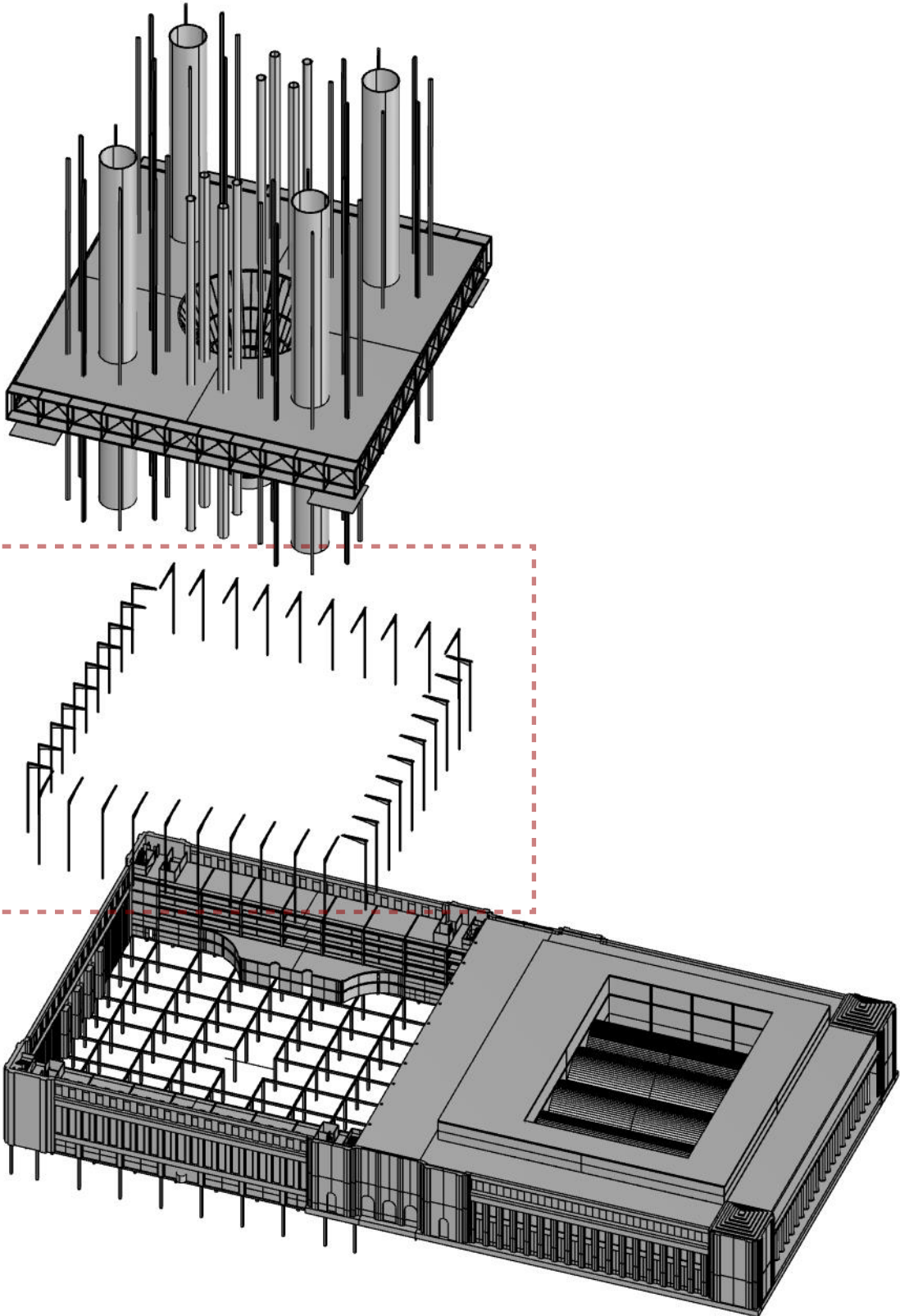
grid beam

steel beam

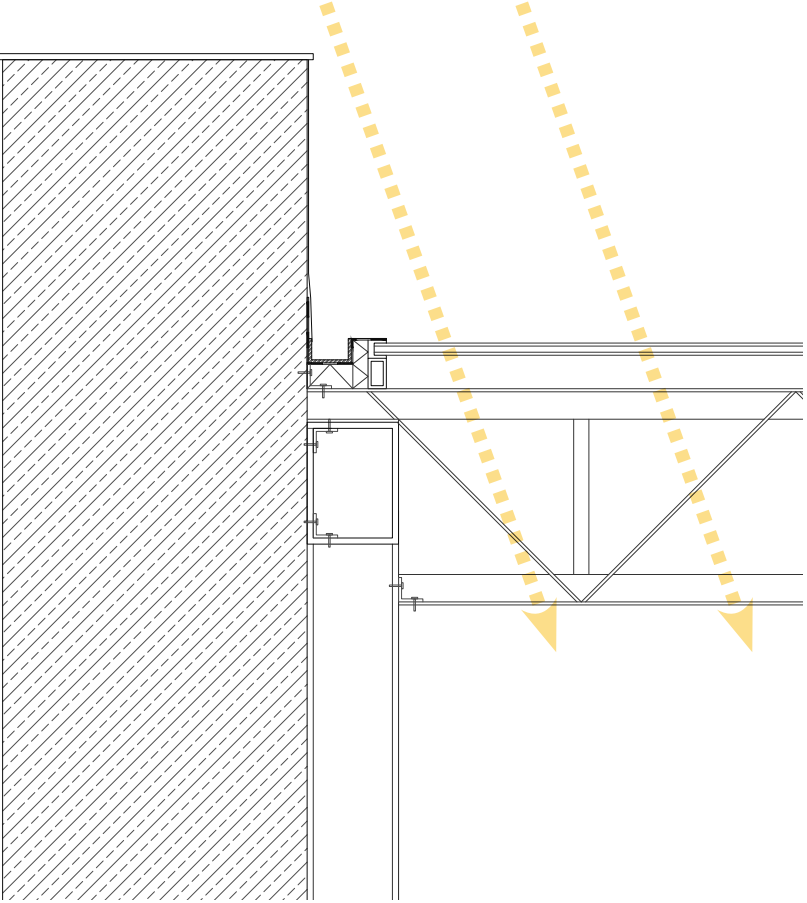
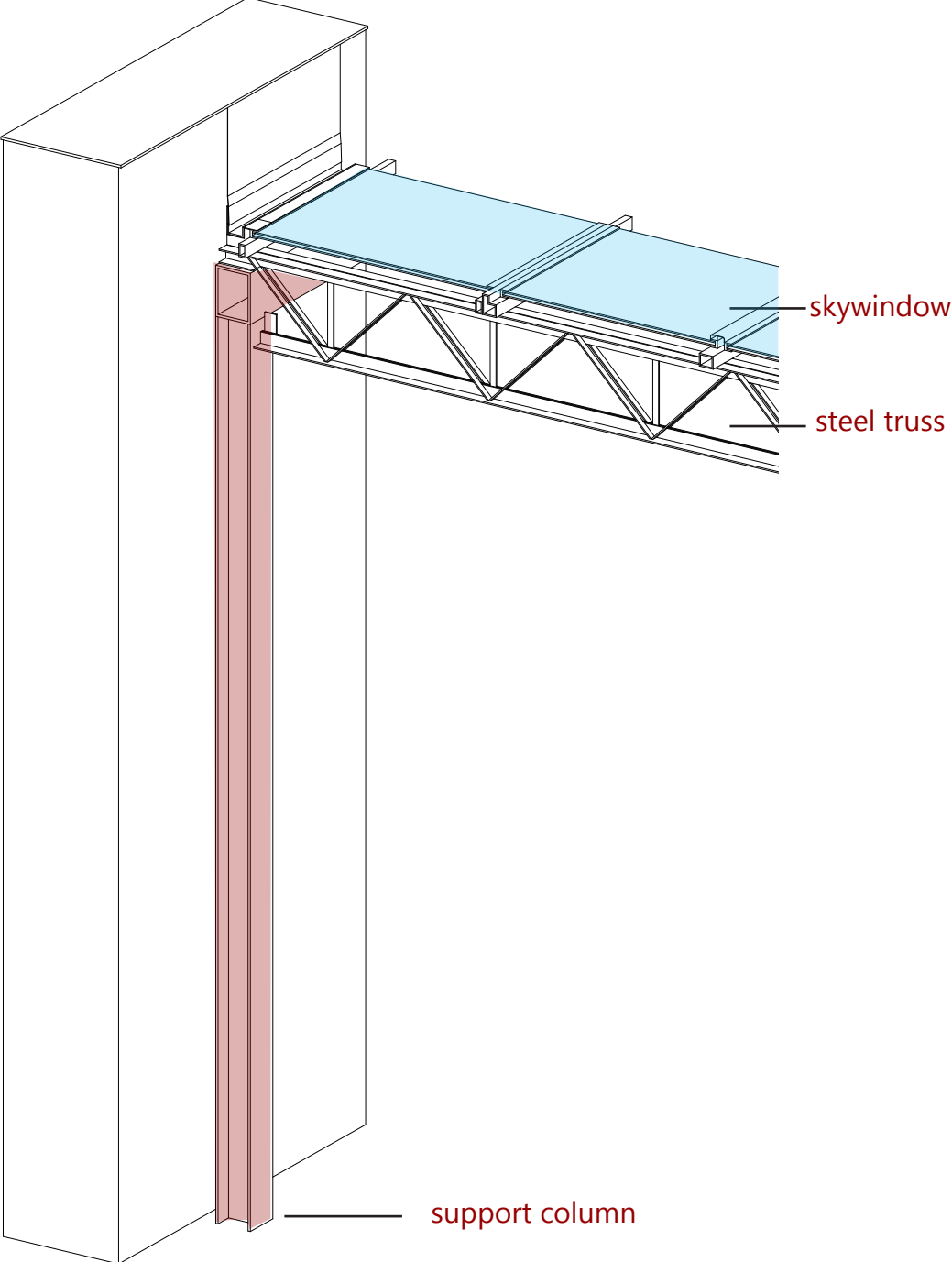


Grid Beam and Vertical System

CONNECTION STRUCTURE



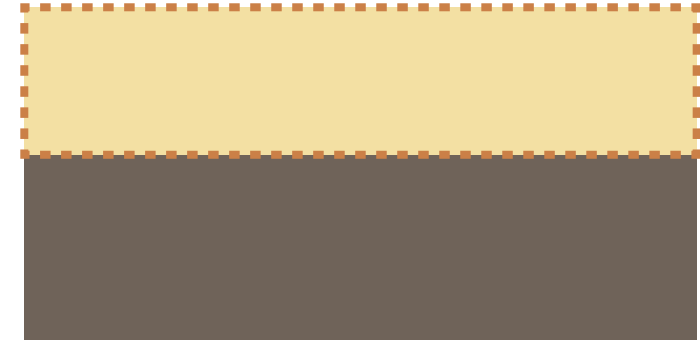
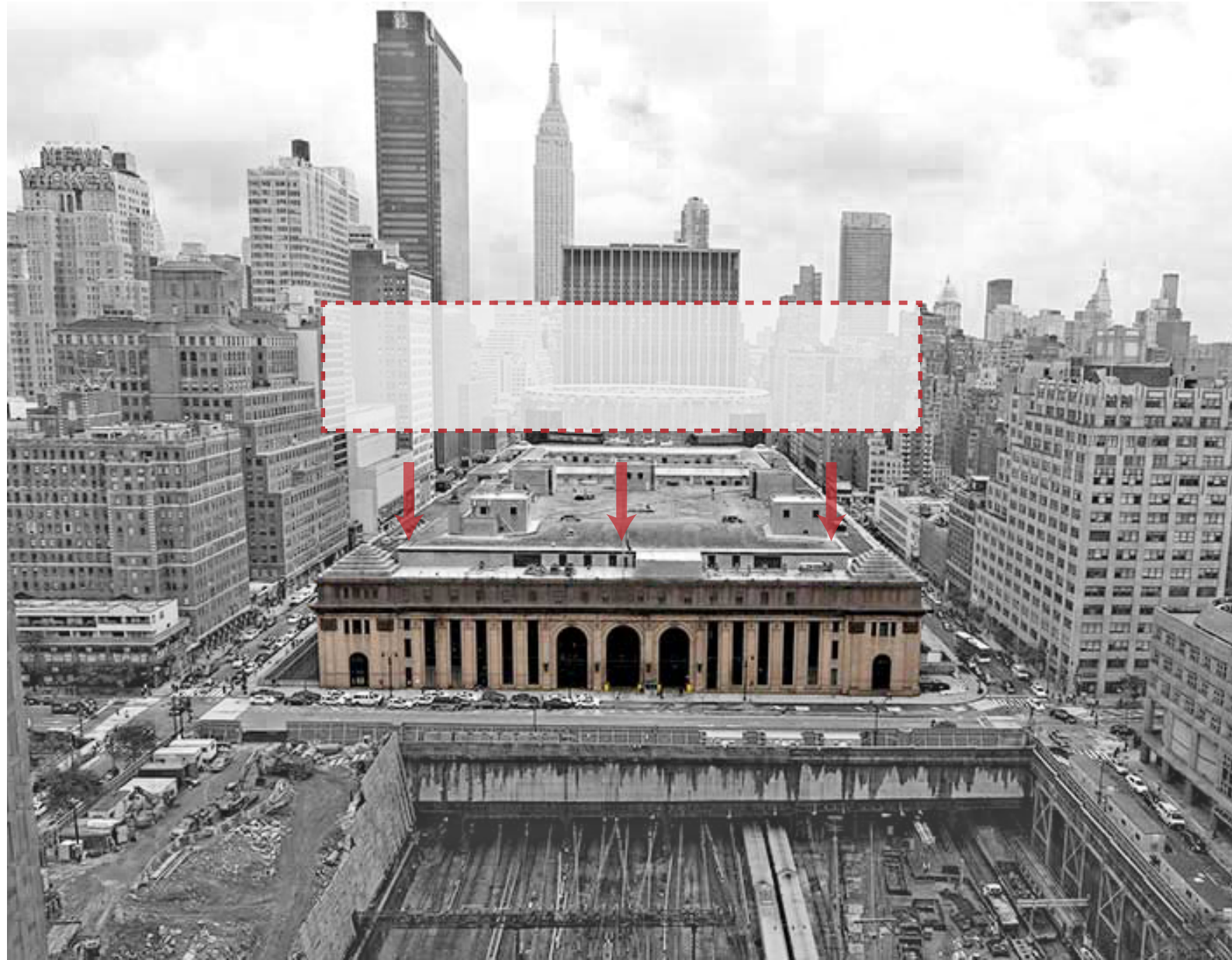
Connection structure system



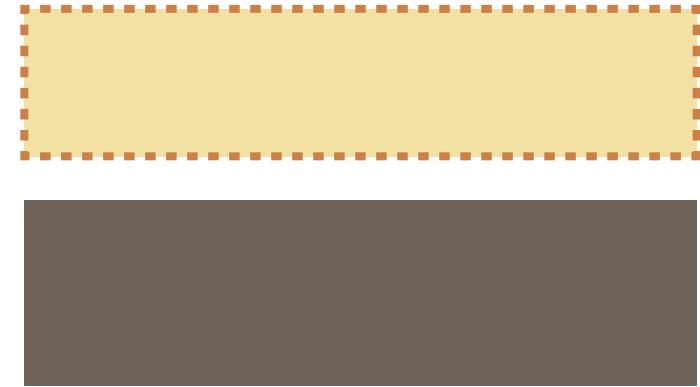
DETAIL D



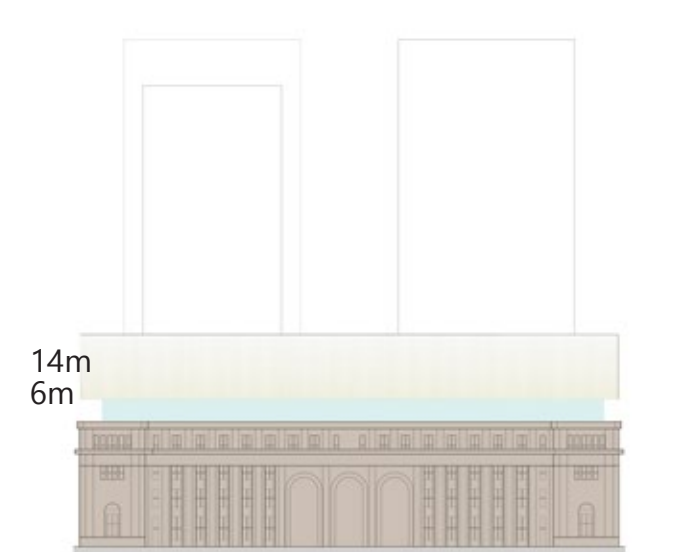
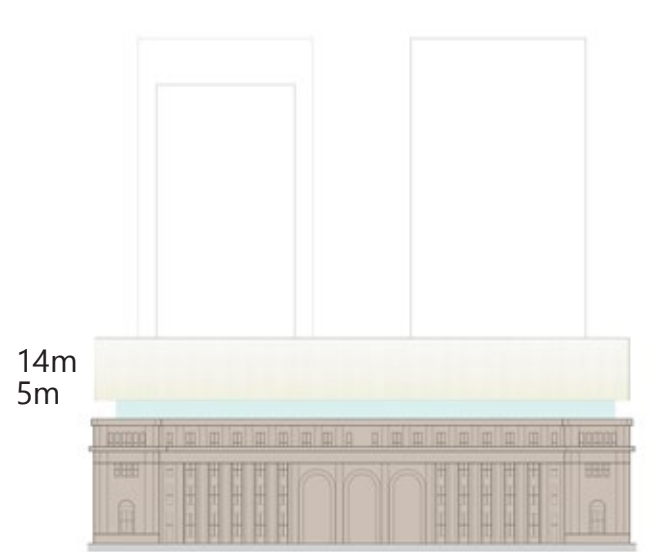
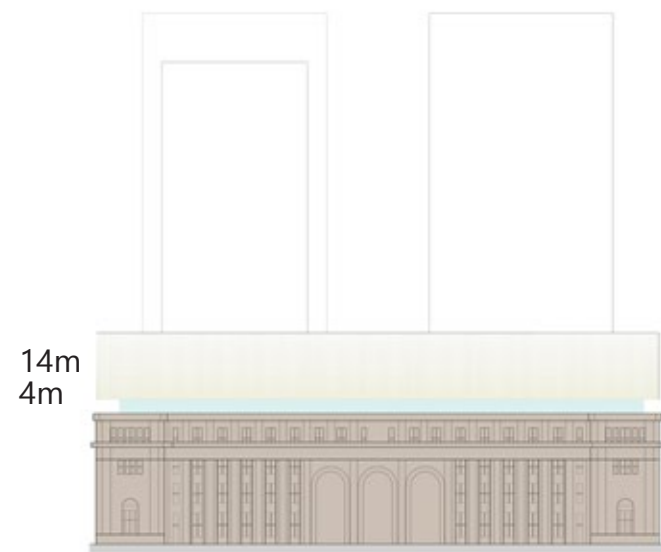
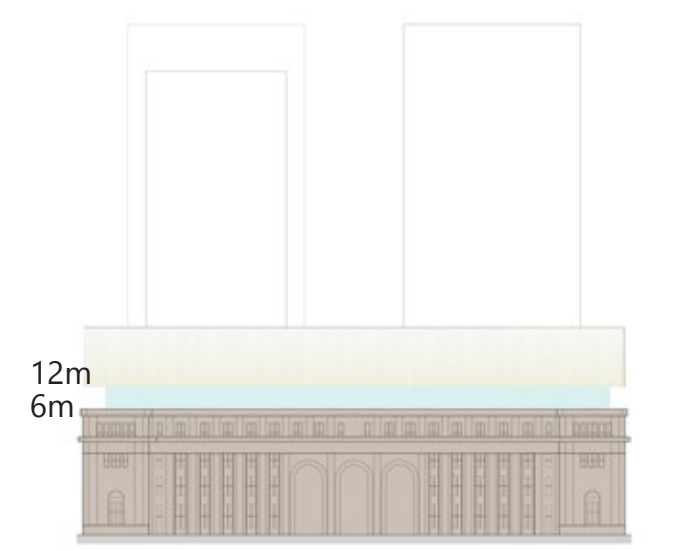
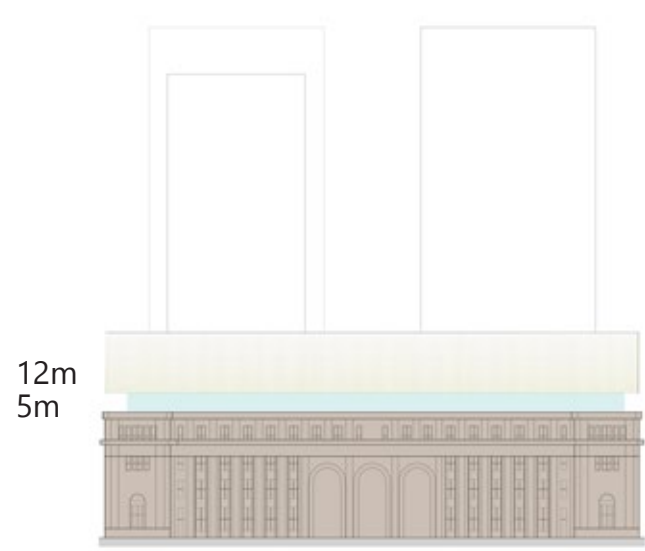
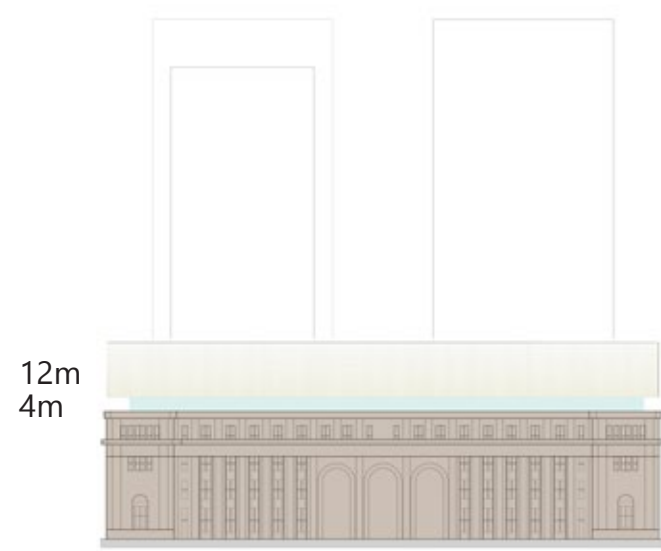
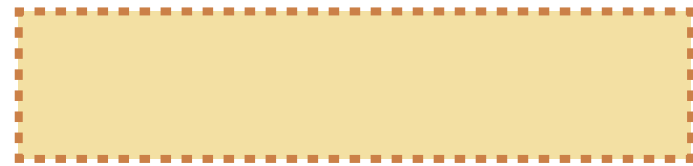
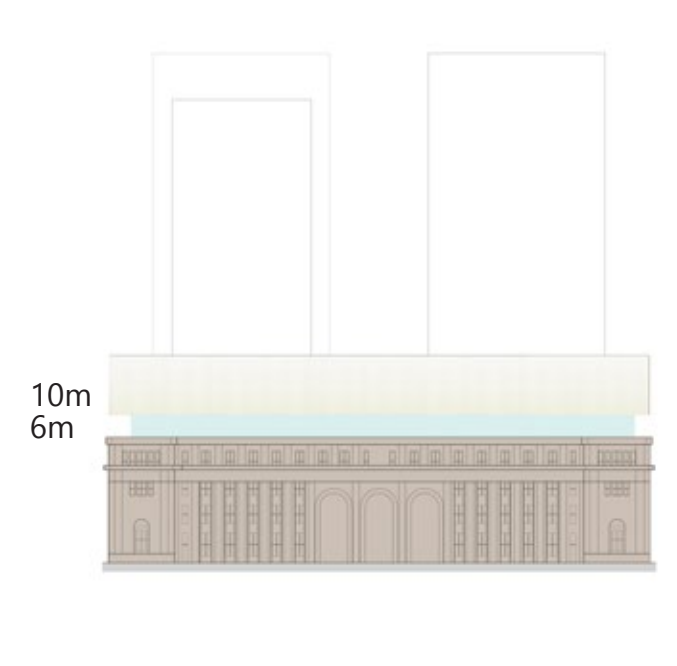
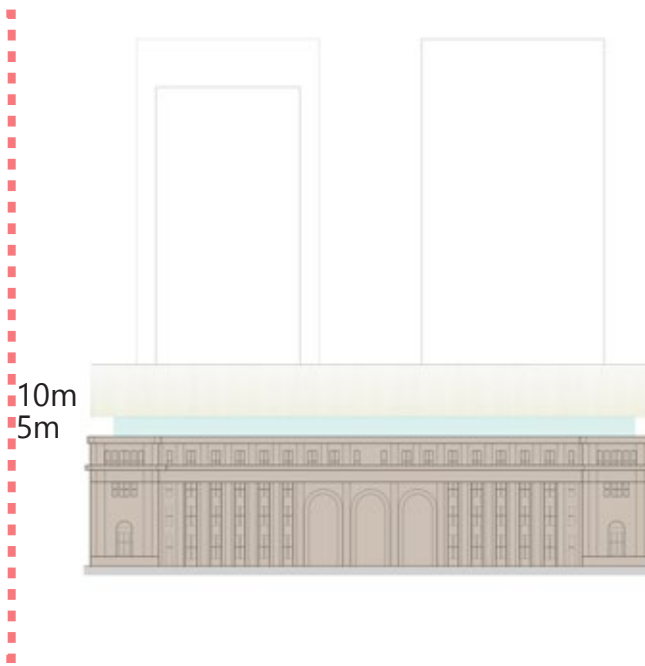
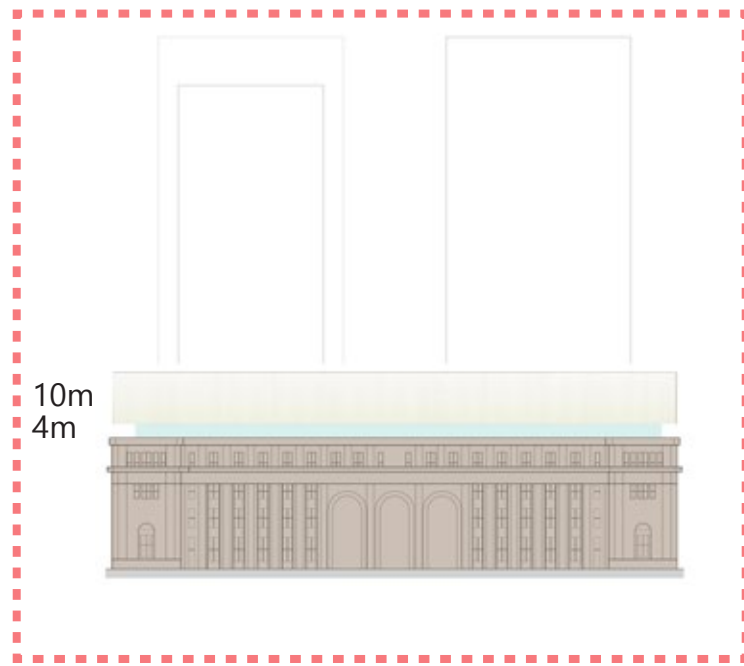
Facade & Materials

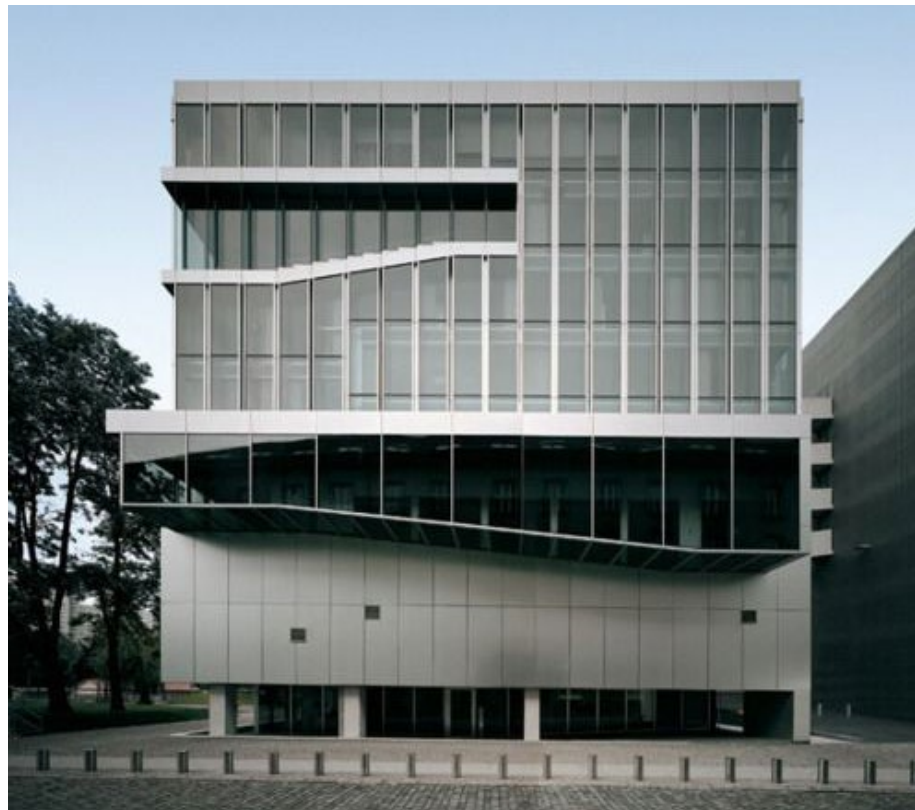
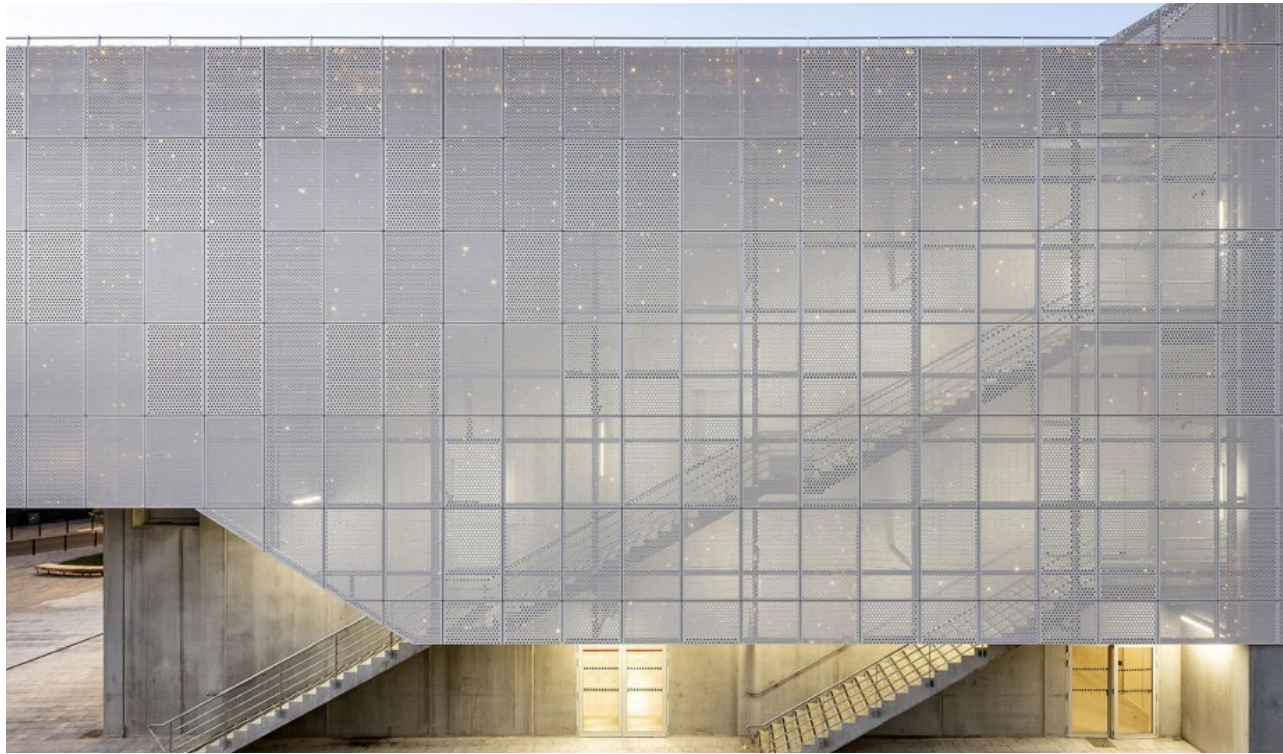


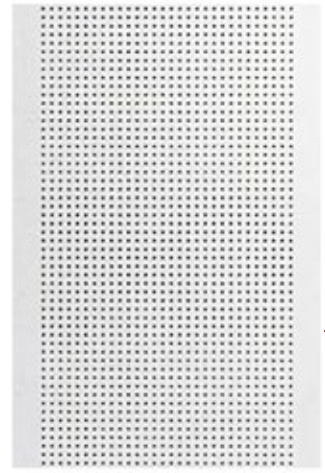
a



b







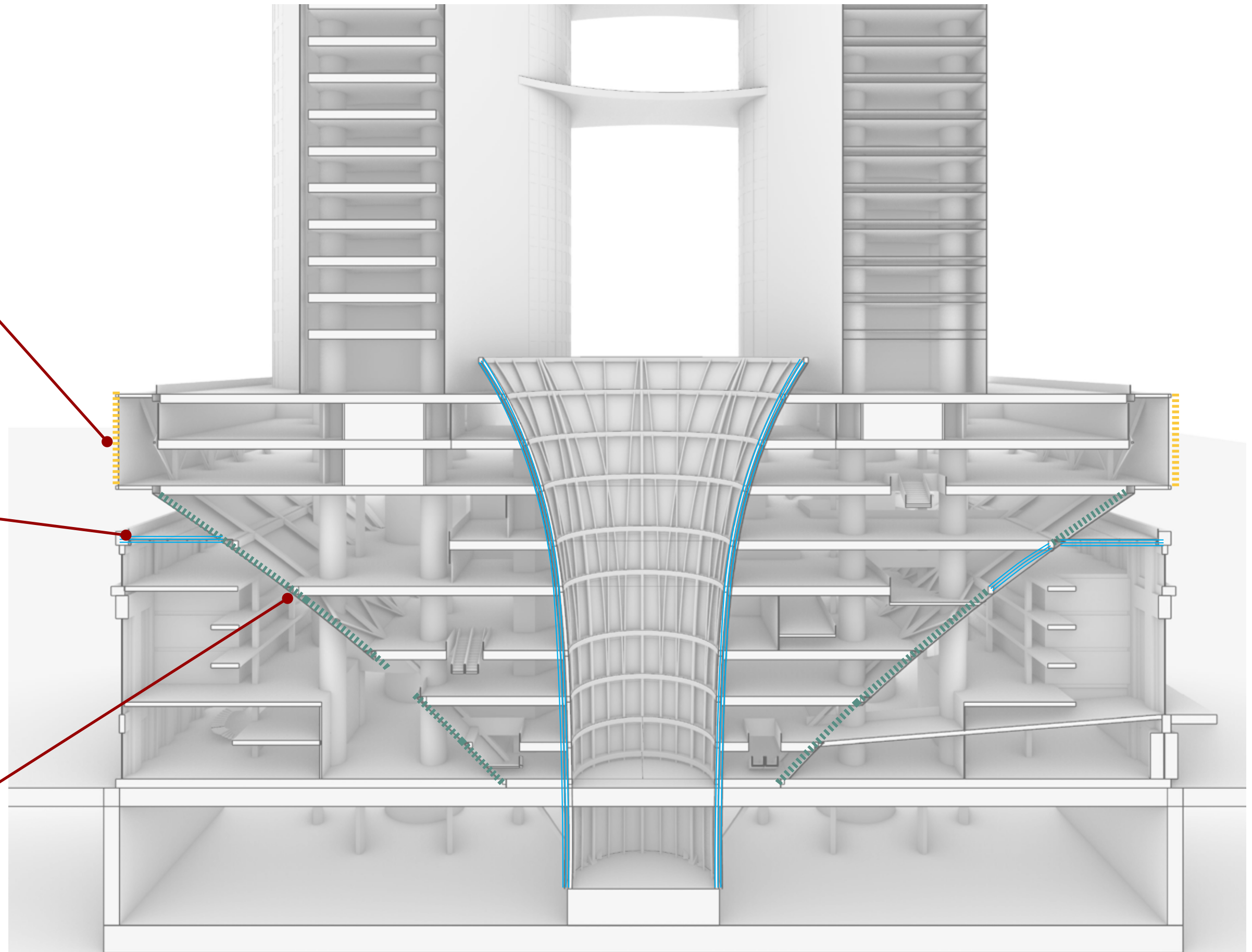
Perforated Aluminium



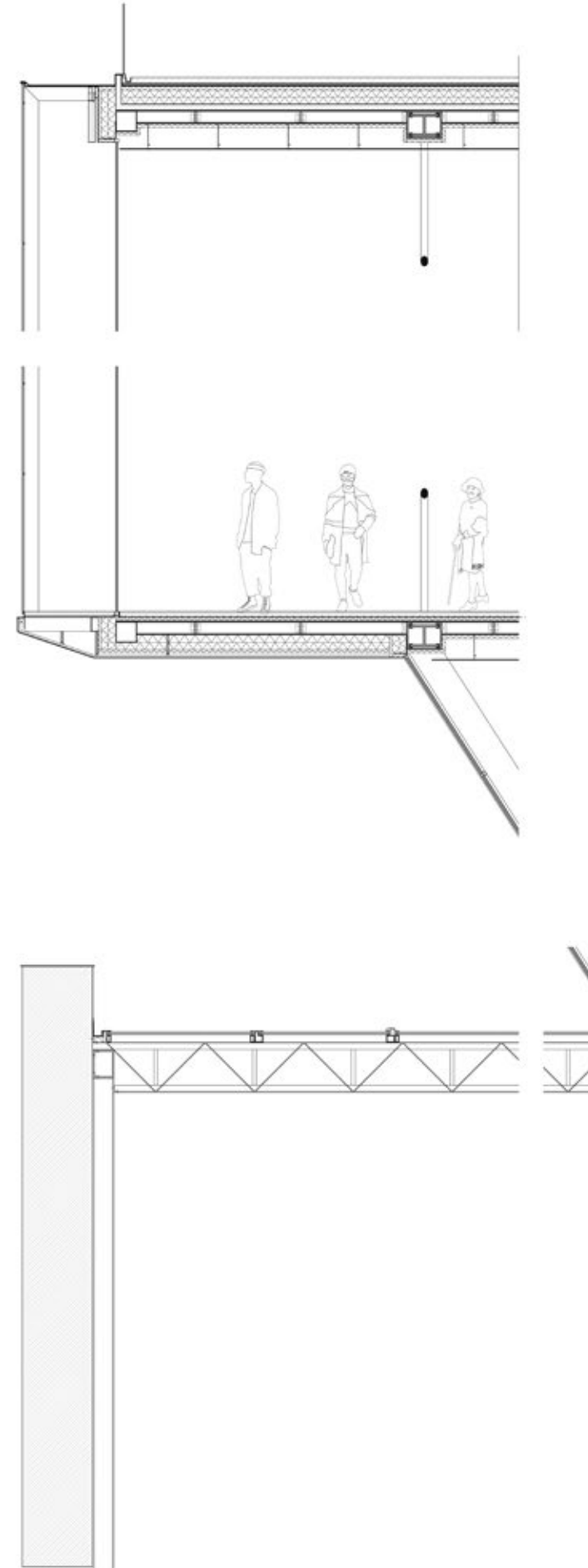
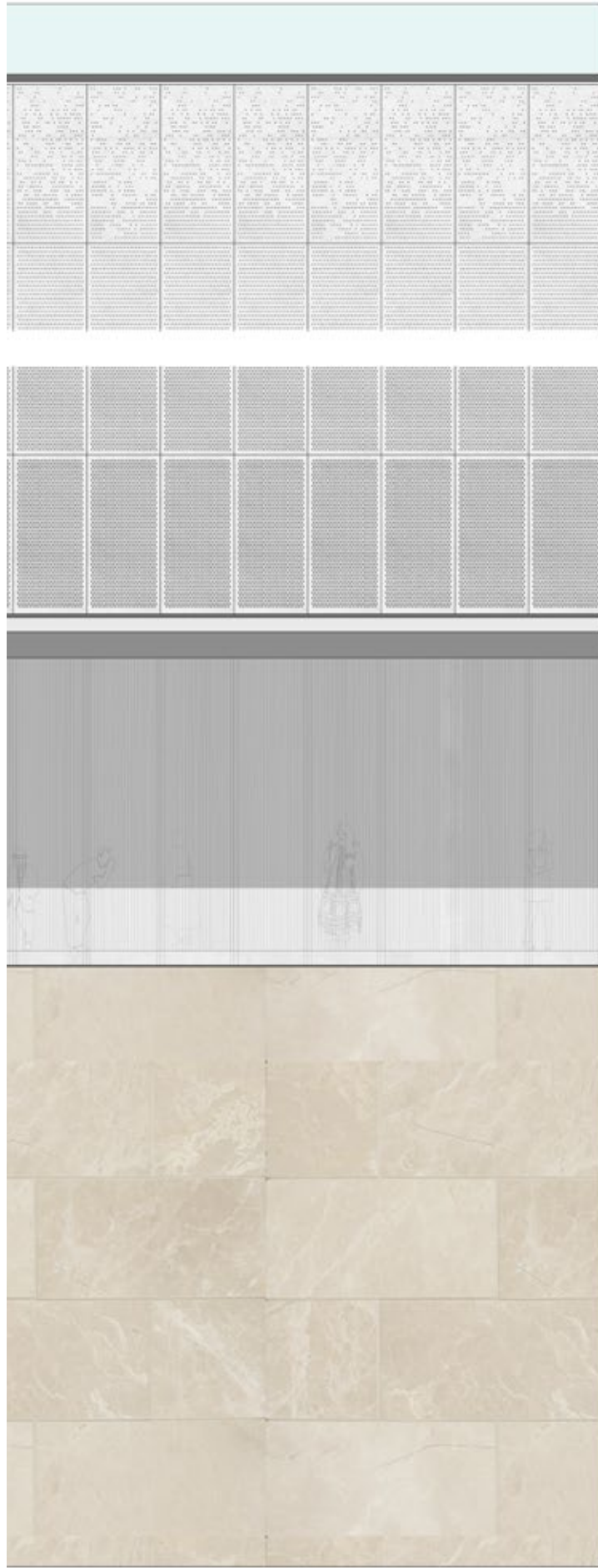
Glass



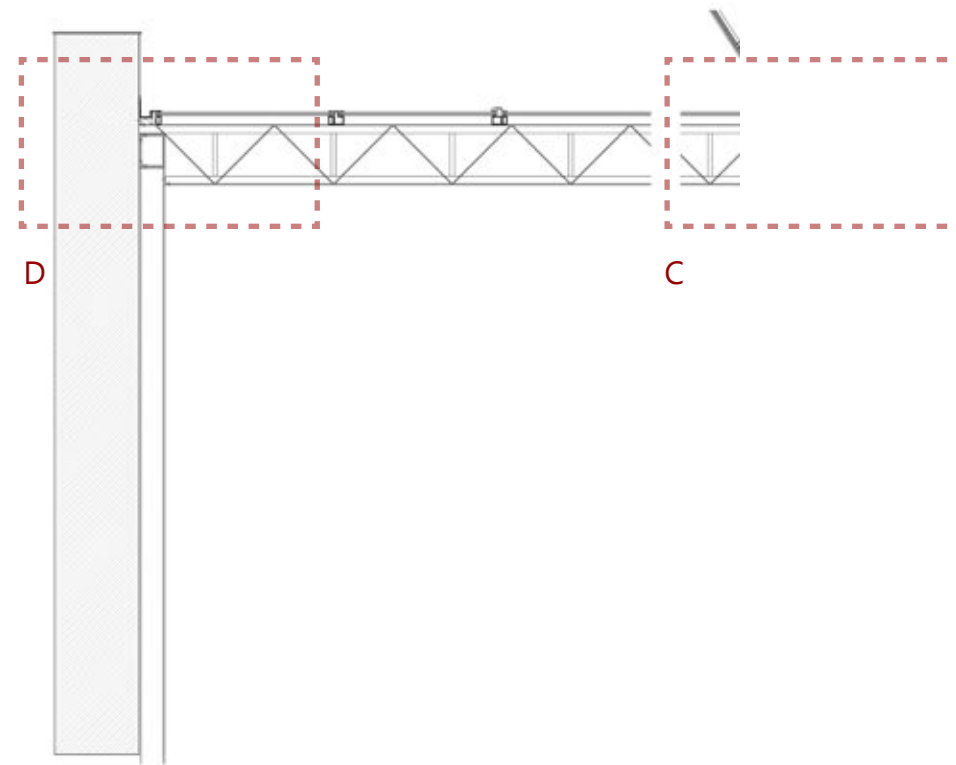
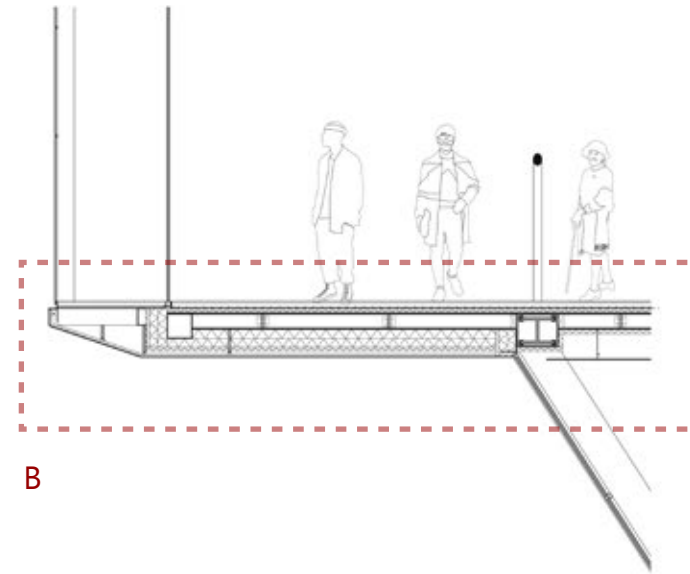
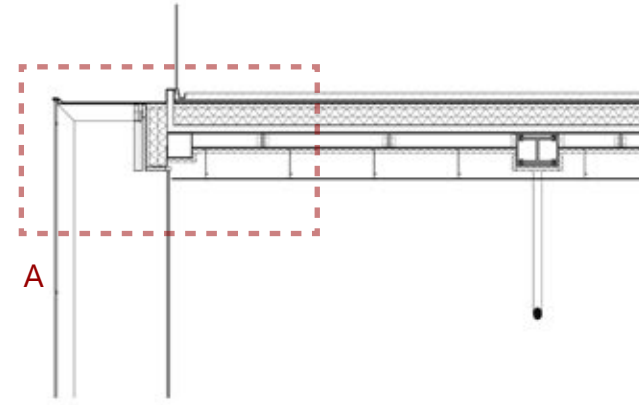
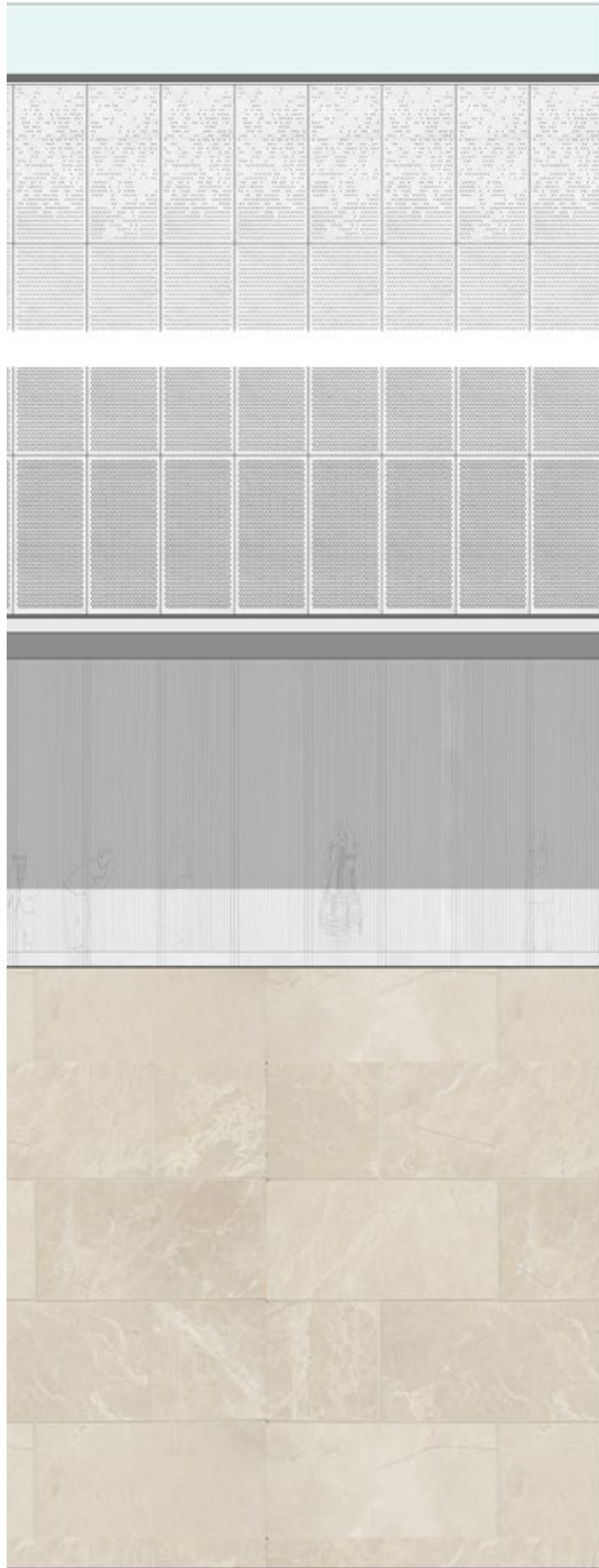
Polycarbonate Sheet



Envelope System

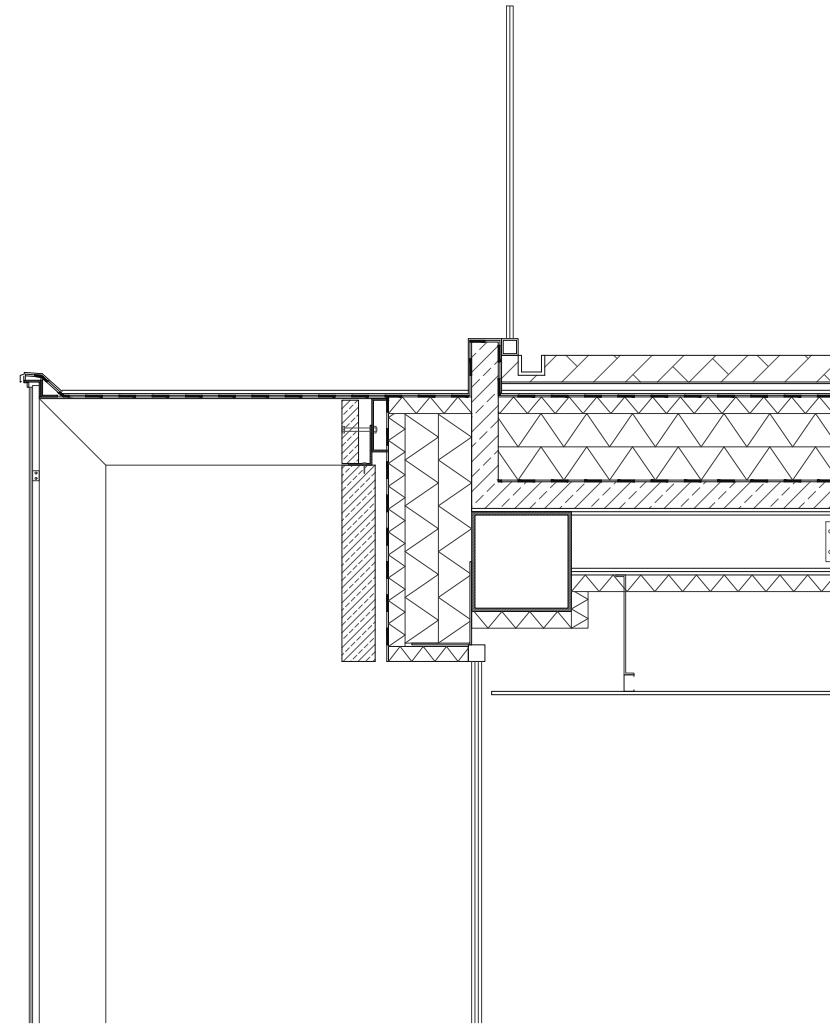
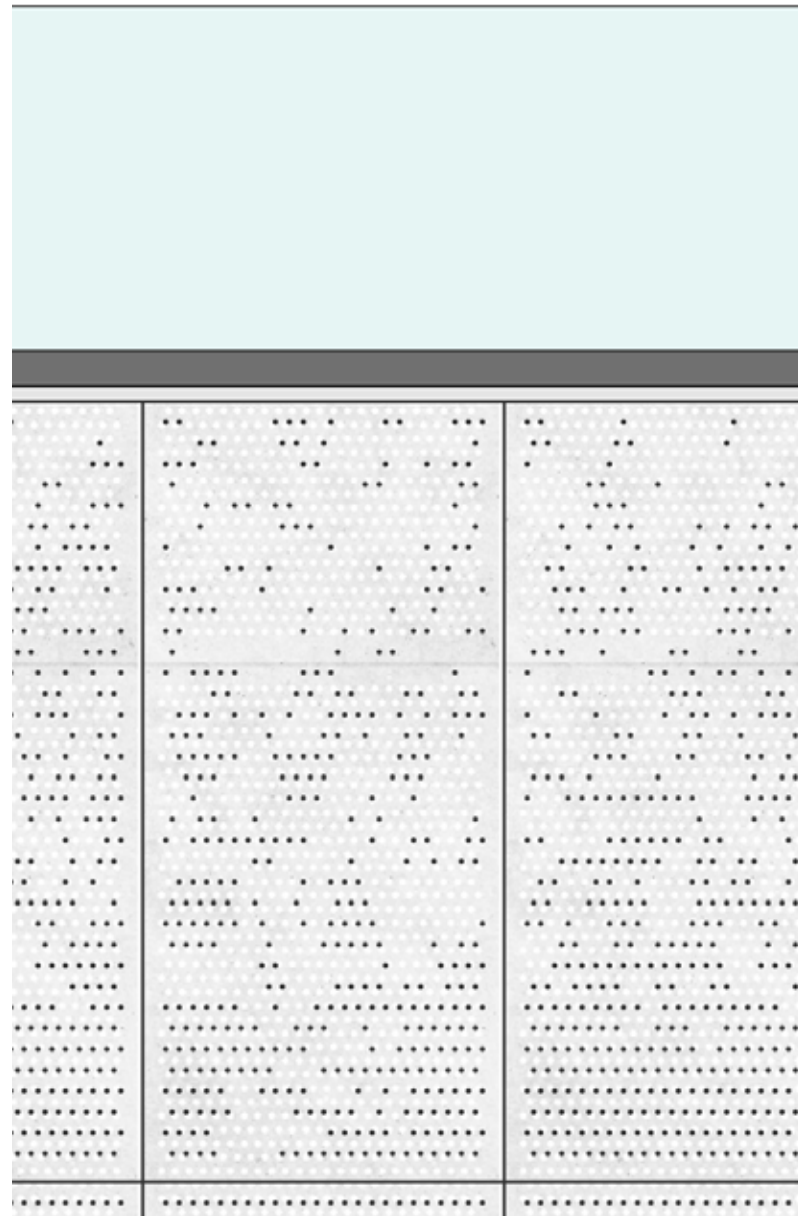


Facade Section 1:40

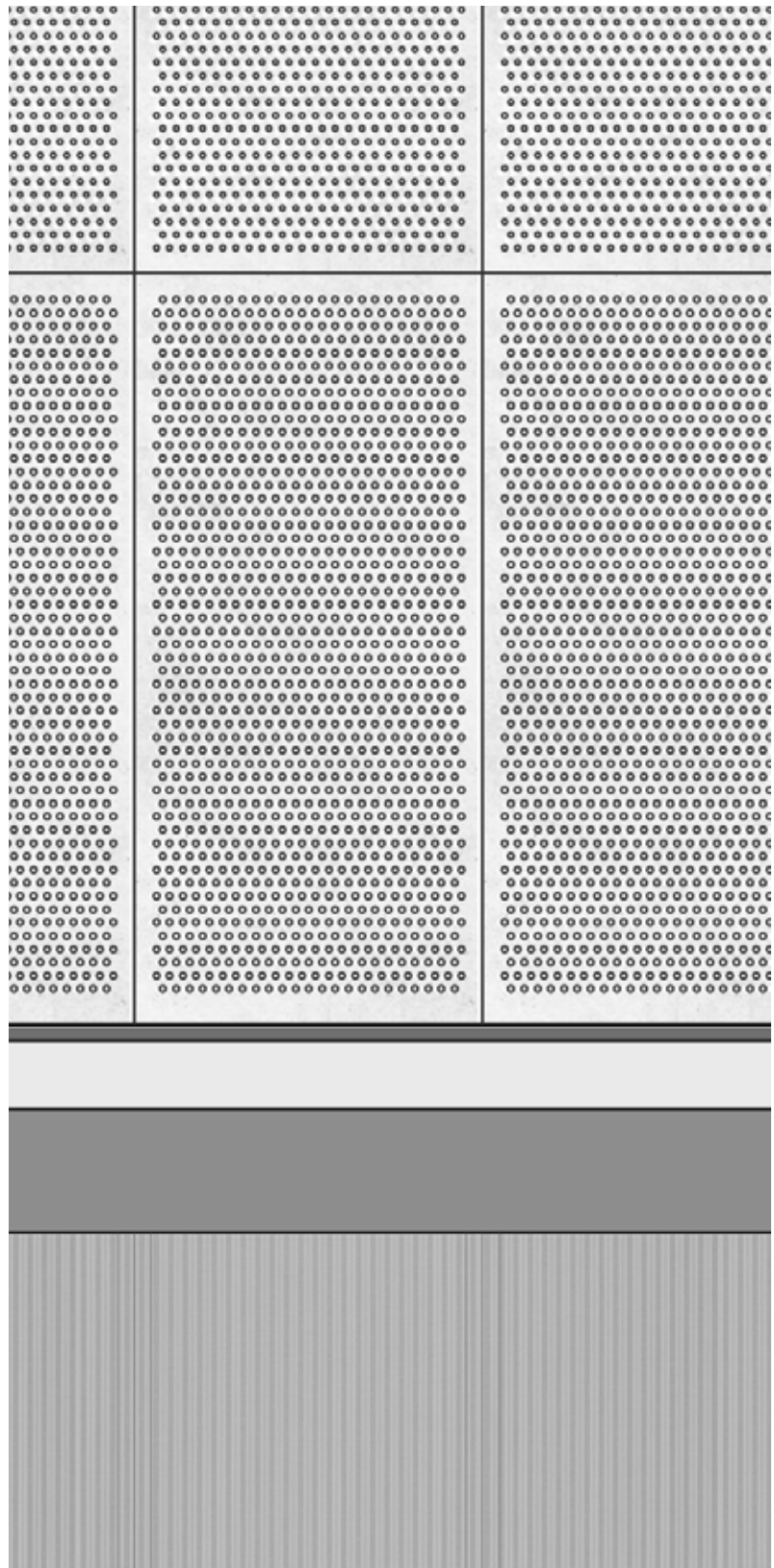


Facade Section 1:40

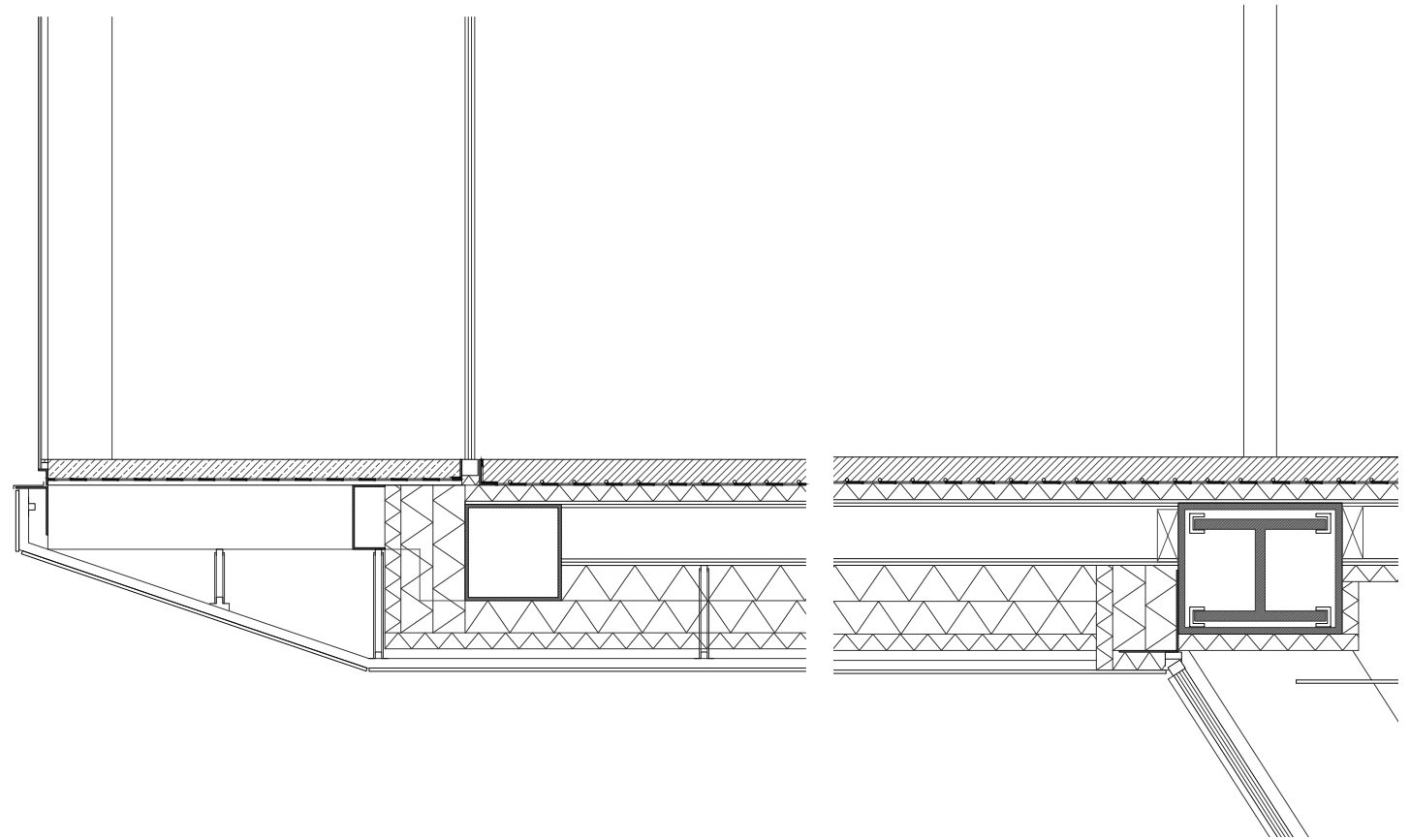
Perforated Aluminium



DETAIL A

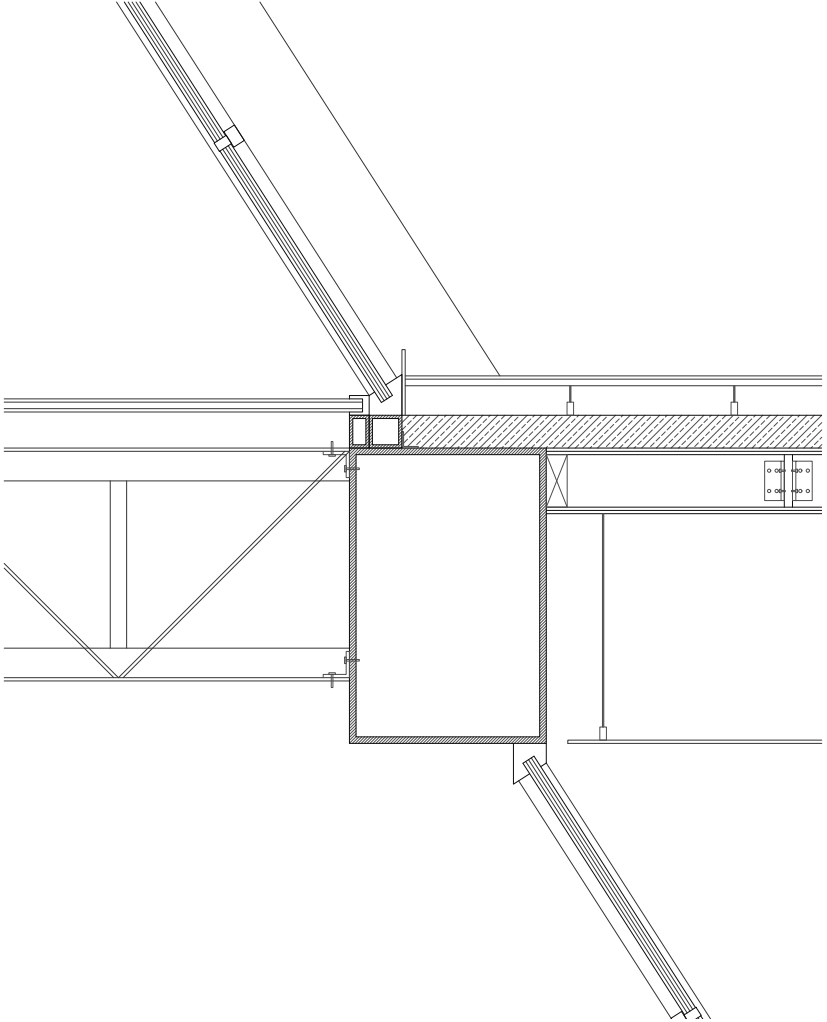
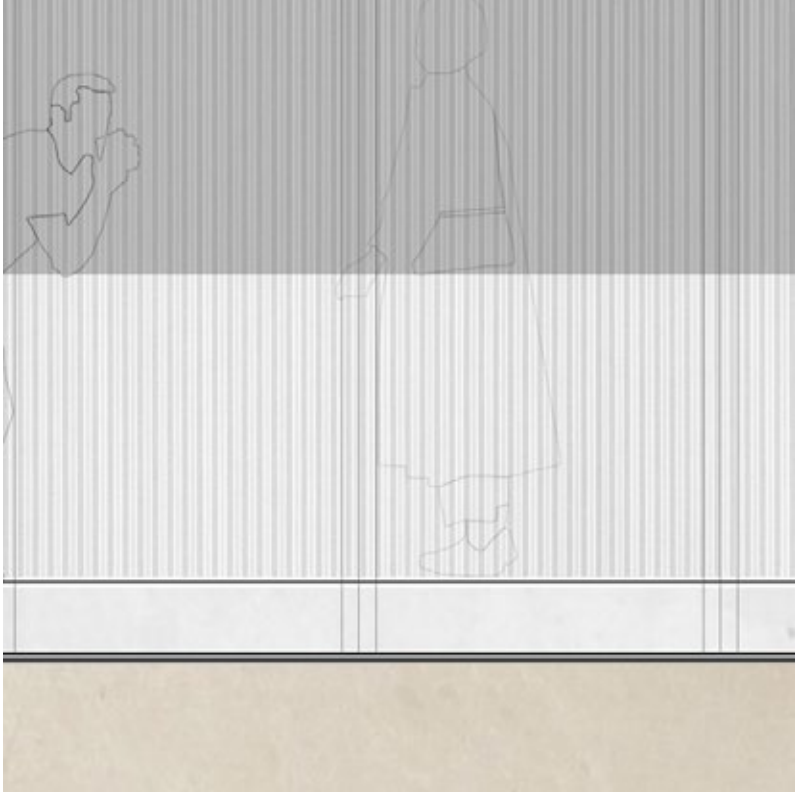


Paint Plate

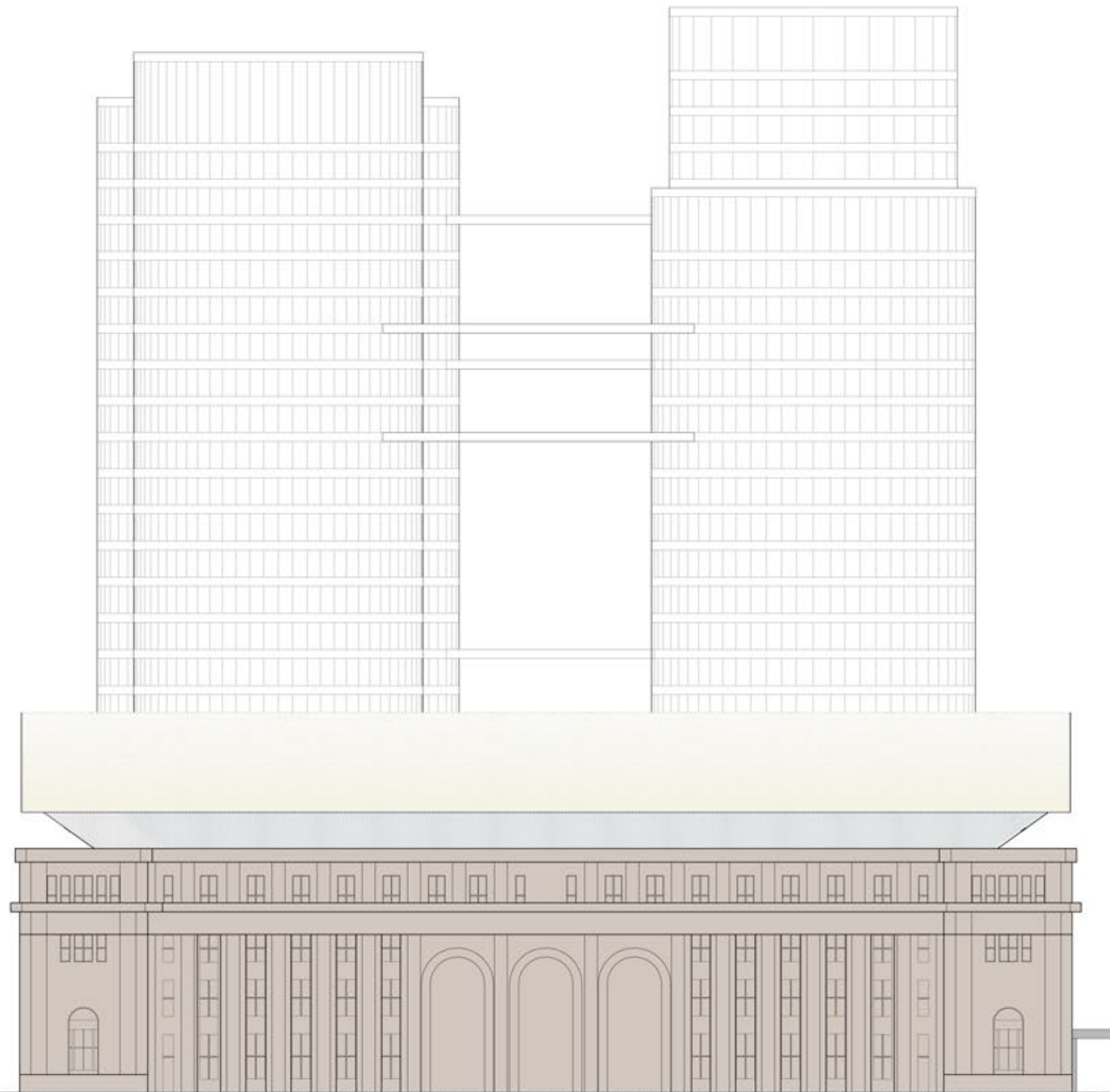


DETAIL B

Polycarbonate Sheet

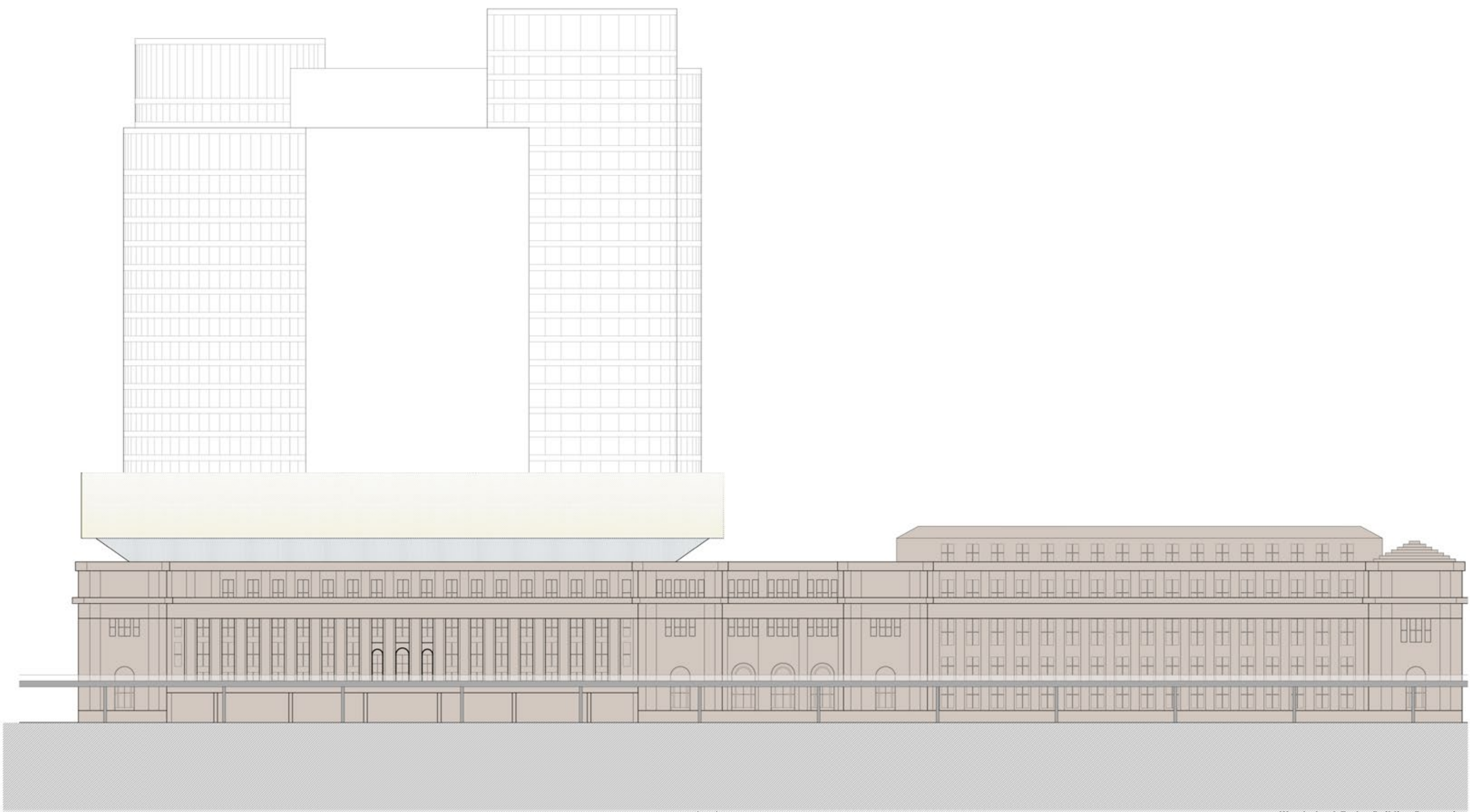


DETAIL C



North Elevation 1:300

Wonderland-Farley Building Renovation



North Elevation 1:300

Wonderland-Farley Building Renovation





EUGENE
EUGENE REALTY
The Eugene Office
949.902.6000

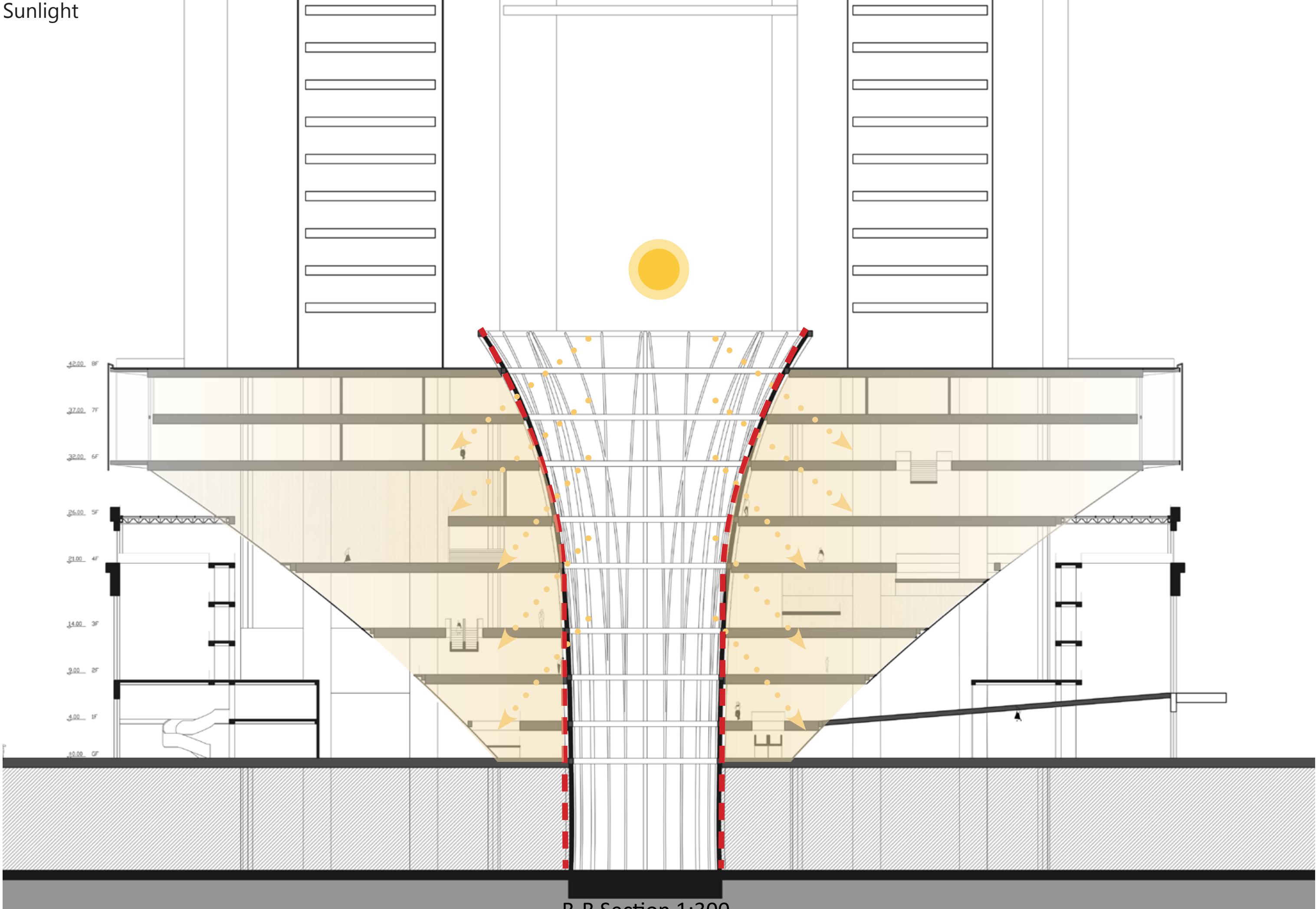
WONDER

COLLEGE

WE'RE BUILDING

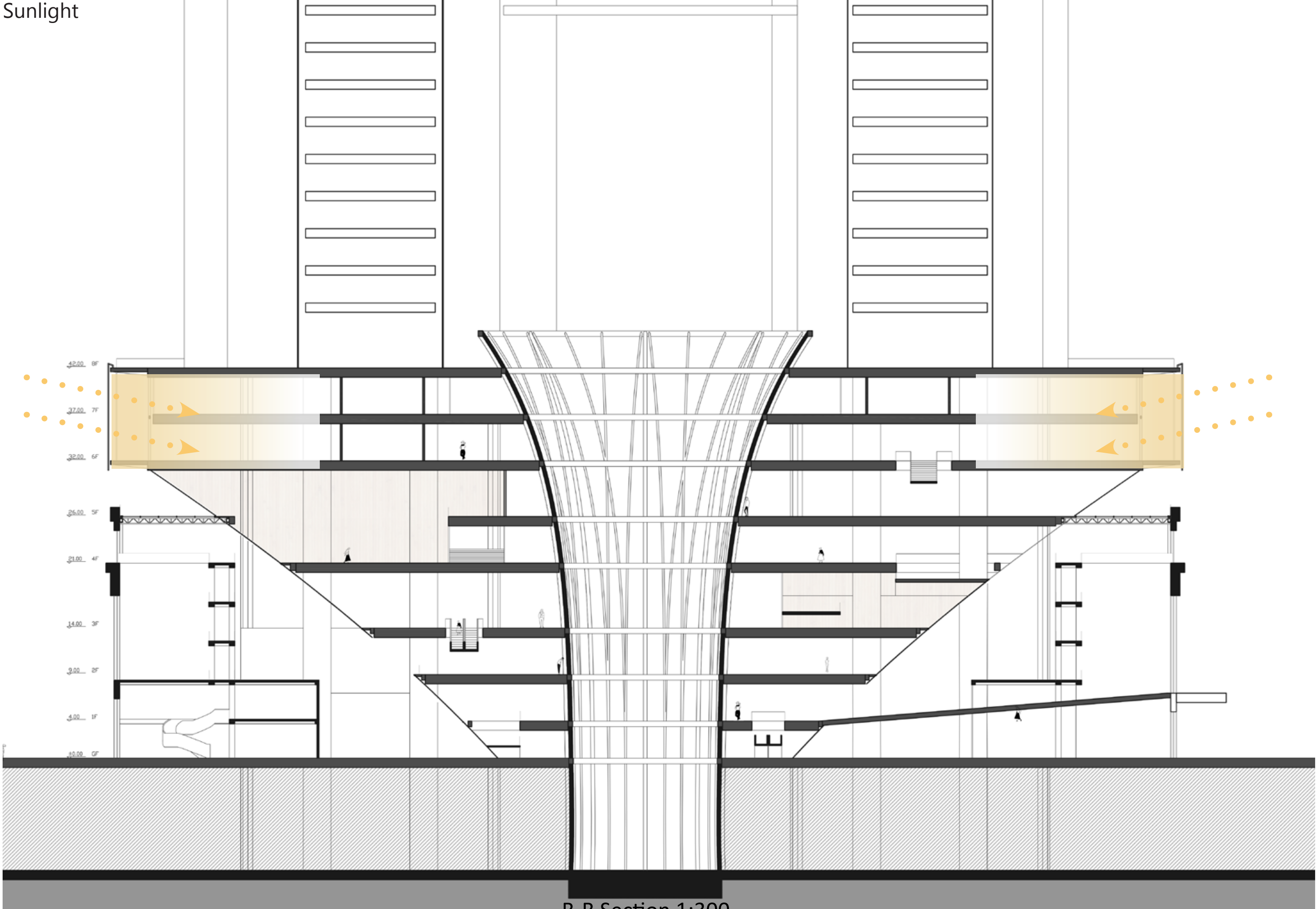
Environment

Sunlight



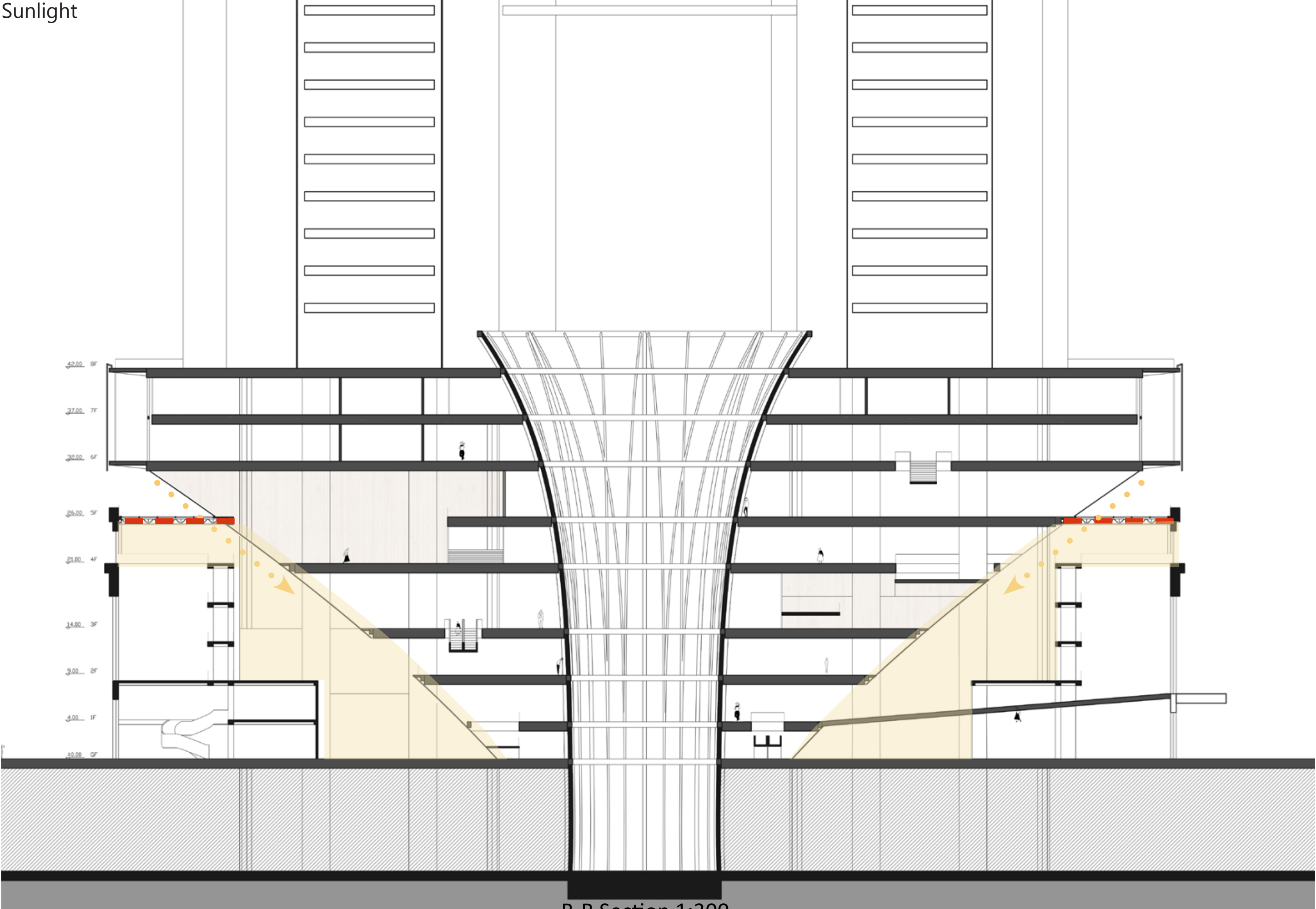
P.P Section 1:200

Sunlight



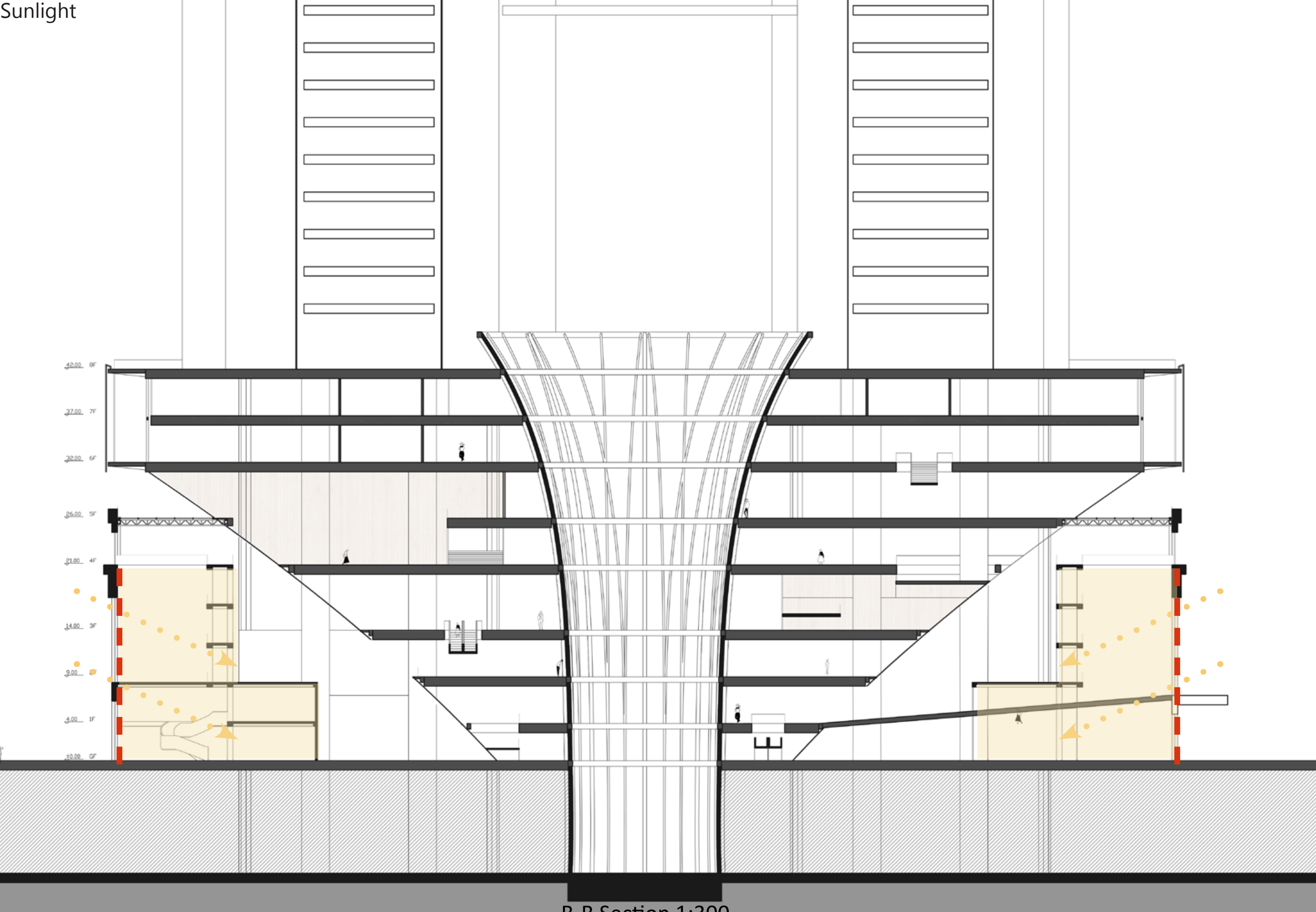
P.P. Section 1:200

Sunlight



P.P. Section 1:200

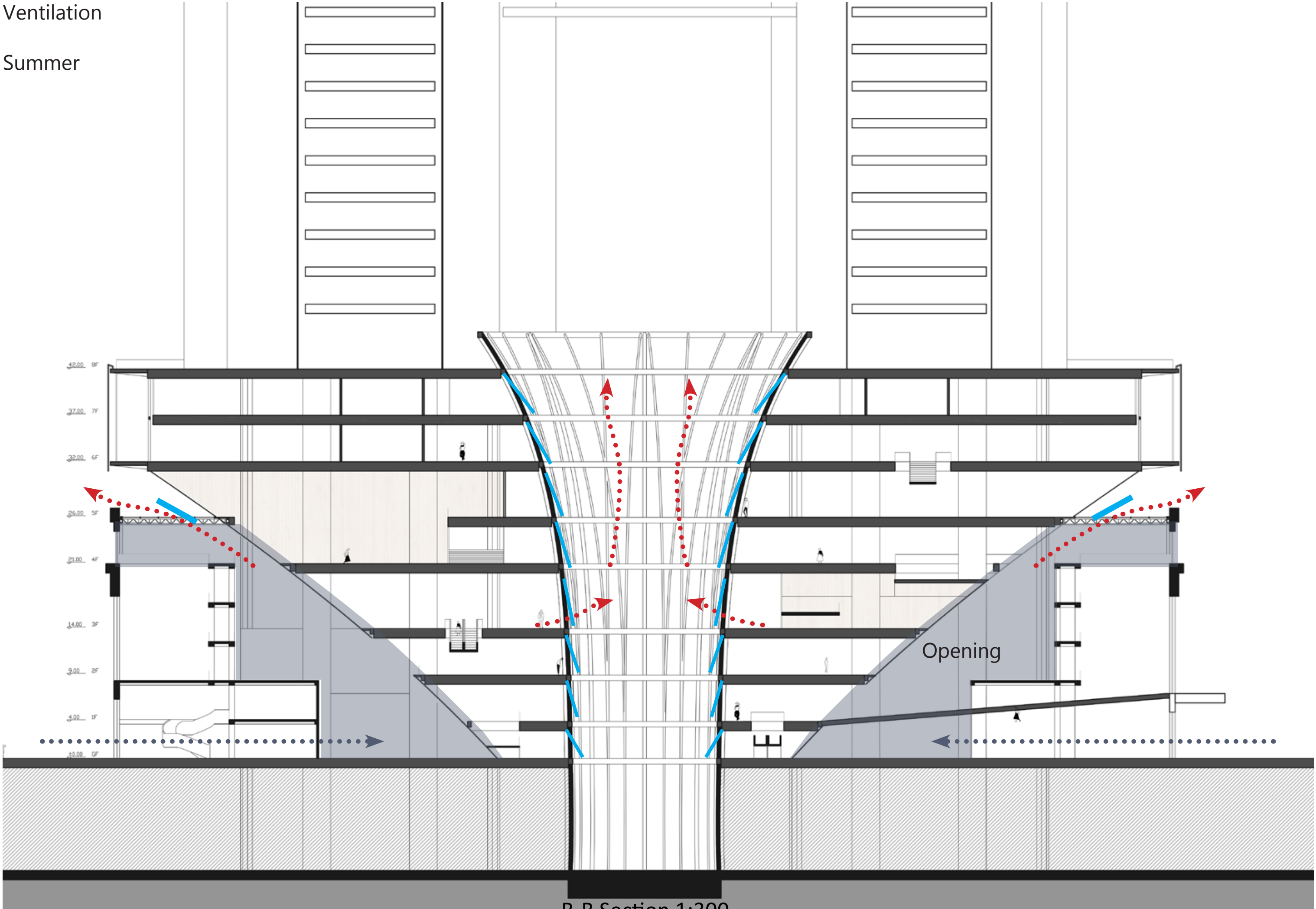
Sunlight



P.P. Section 1:200

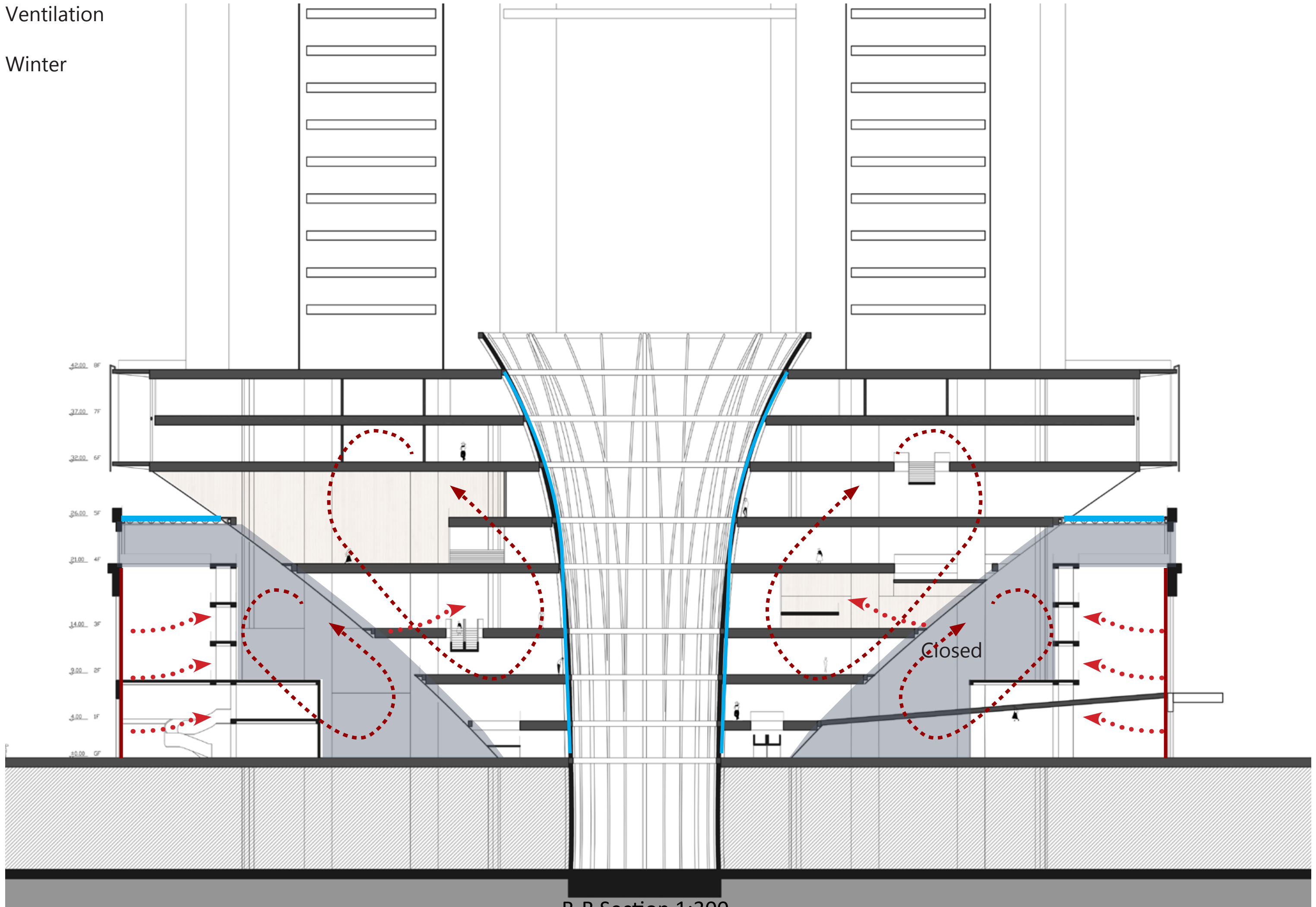
Ventilation

Summer



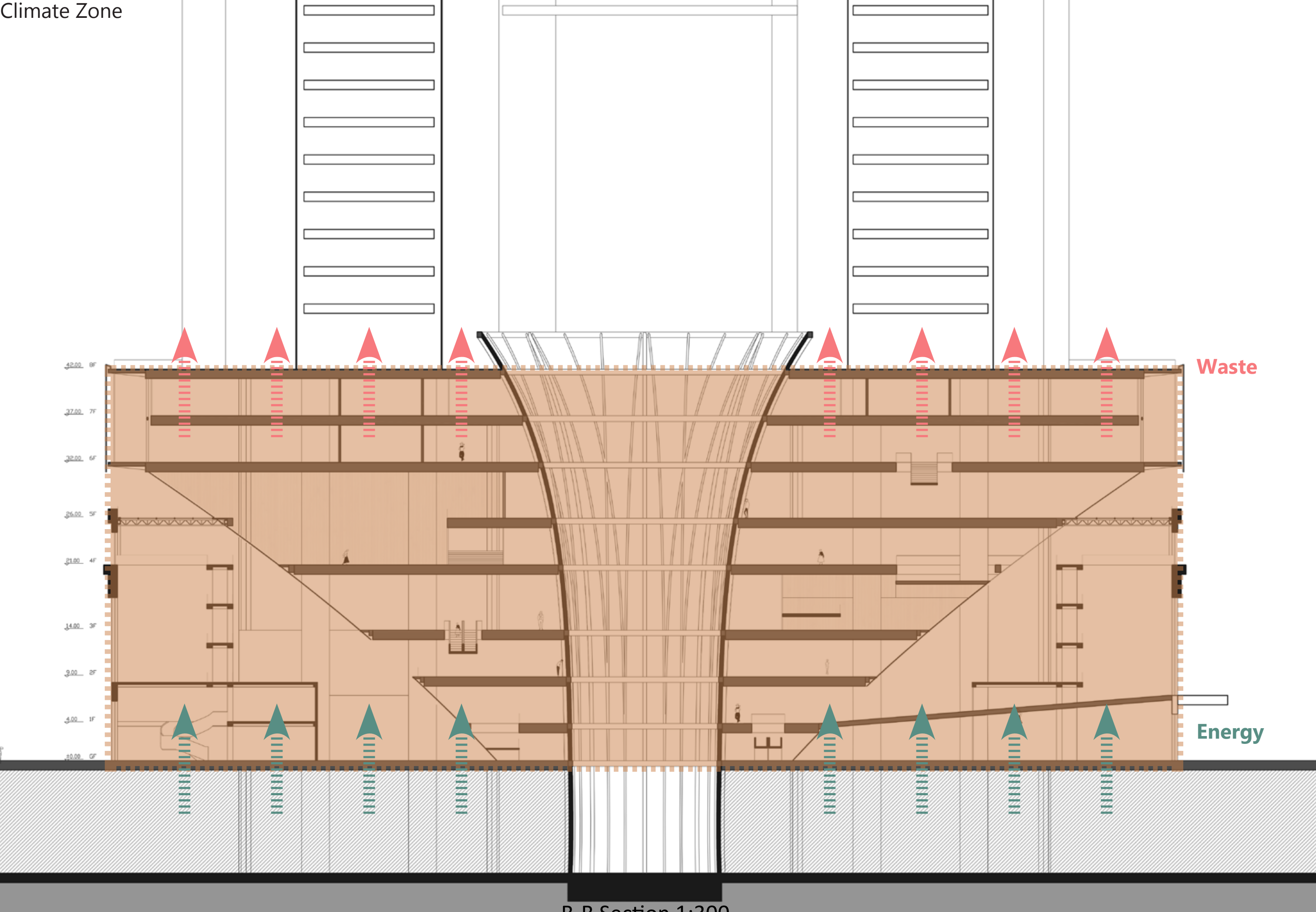
Ventilation

Winter



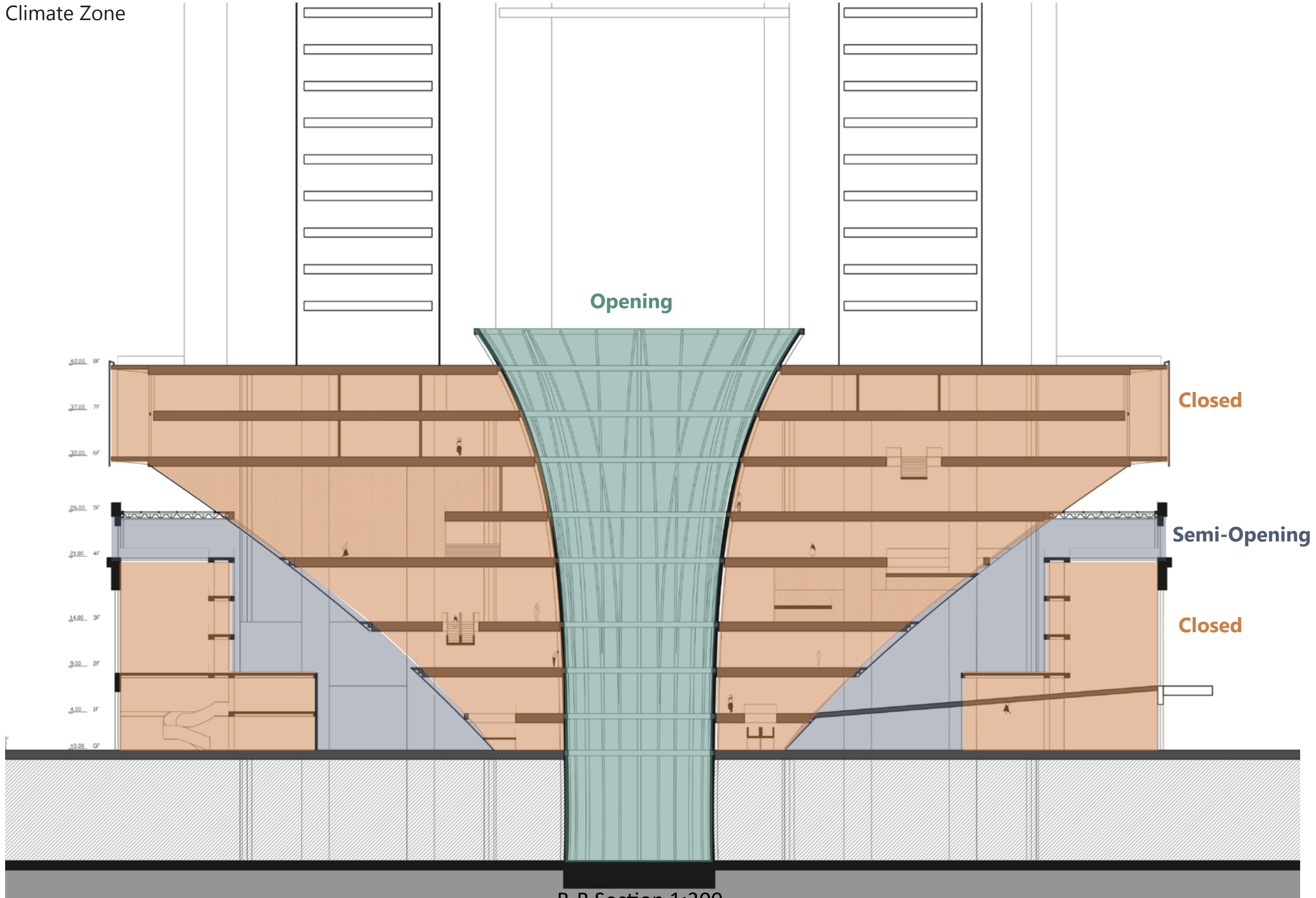
P.P Section 1:200

Climate Zone



P.P. Section 1:200

Climate Zone



Opening

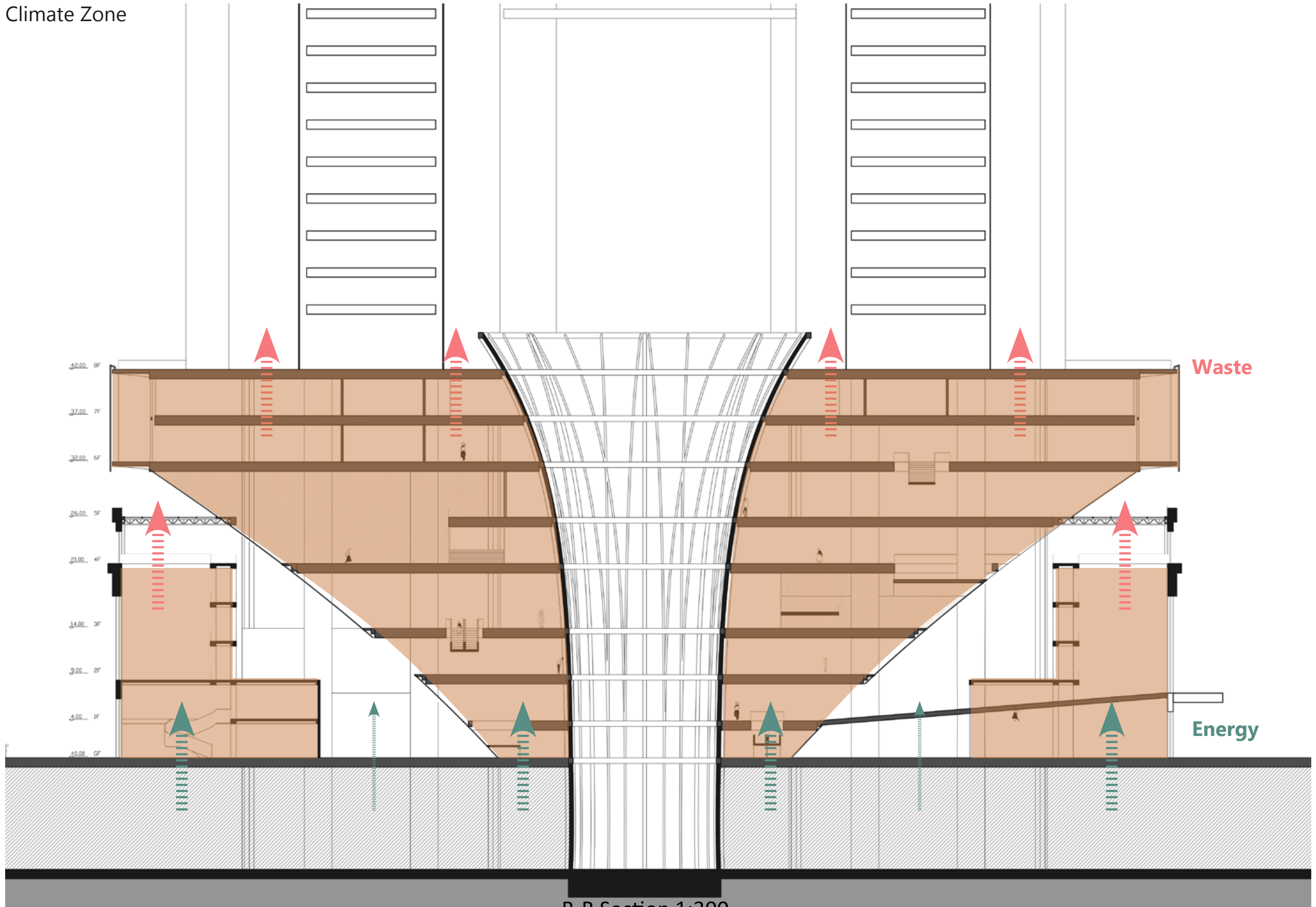
Closed

Semi-Opening

Closed

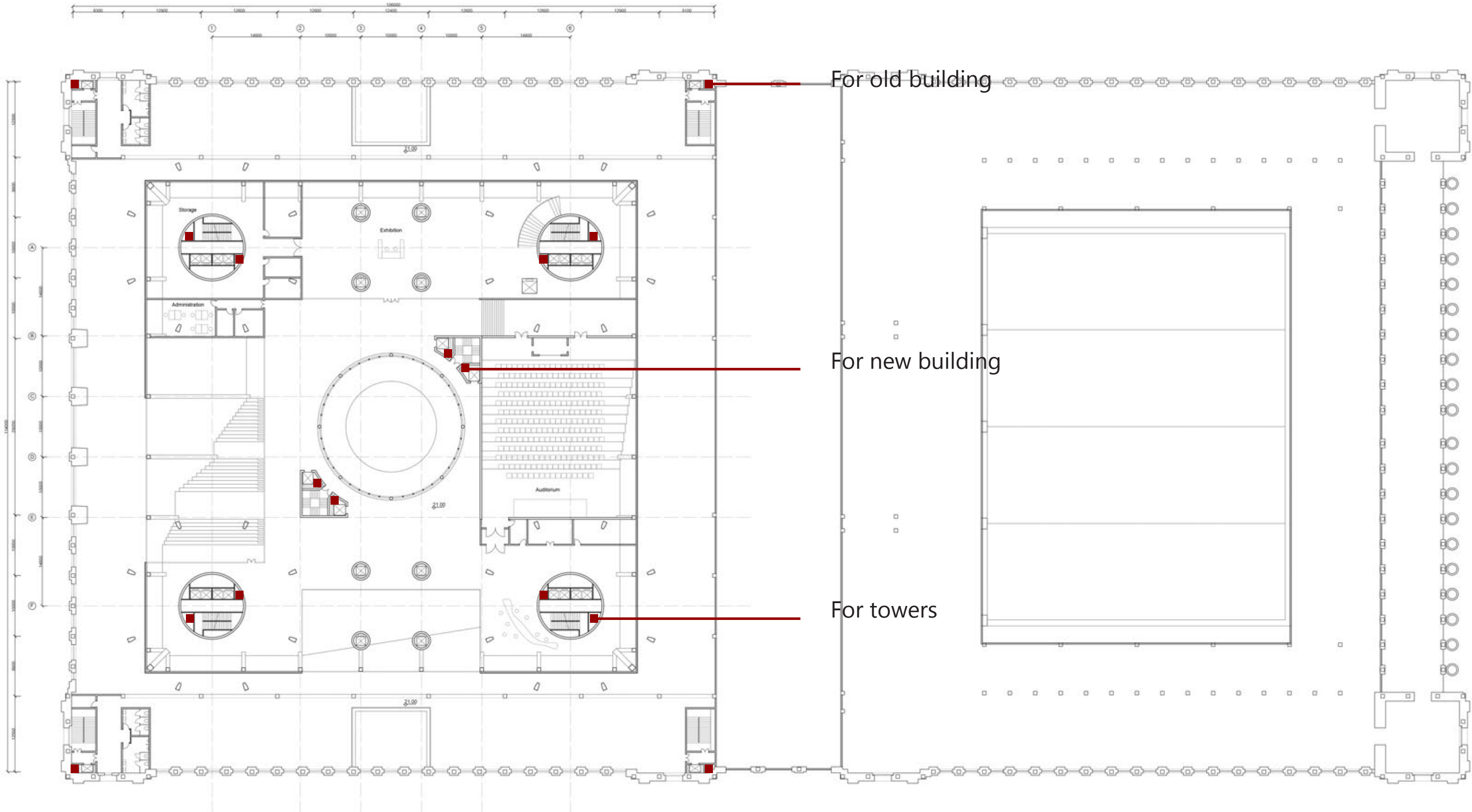
P.P. Section 1:200

Climate Zone



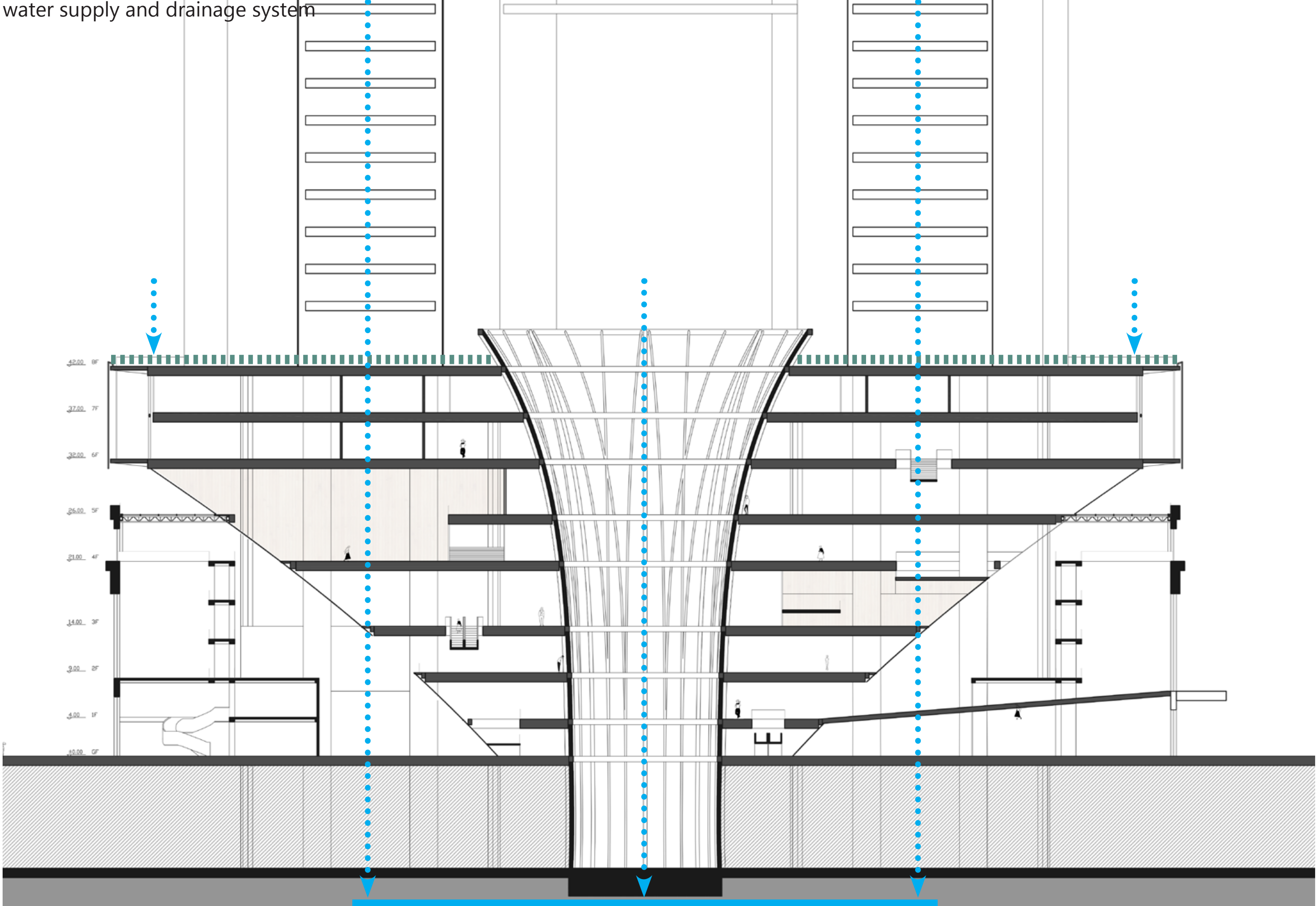
P.P. Section 1:200

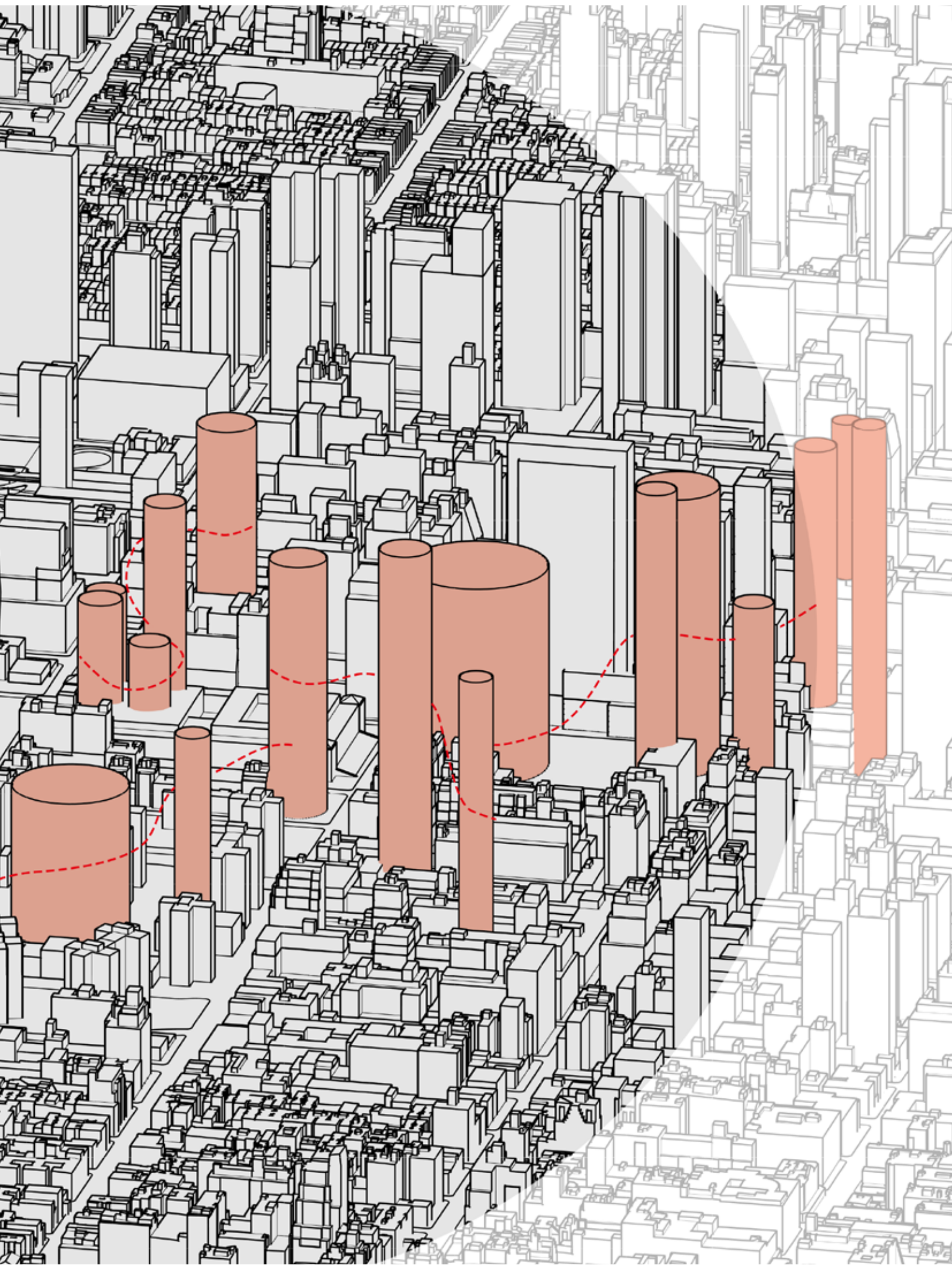
water supply and drainage system



4F Plan 1:300

water supply and drainage system





City Proposal





Reconstruction for a Future City

Thanks!